NM2 - ___12____

ANNUAL REPORT

___2019____

Jones, Brad A., EMNRD

From: Enviro, OCD, EMNRD

Sent: Tuesday, September 1, 2020 2:44 PM

To: Jones, Brad A., EMNRD

Subject: Fw: Jal Landfarm Annual Report - Final

Attachments: Jal Landfarm 2019 Annual Report_2020.07.27 Reduced.pdf

From: Rice, Steve <Steve.Rice@arcadis.com> **Sent:** Tuesday, September 1, 2020 12:18 PM

To: Enviro, OCD, EMNRD

Subject: [EXT] Jal Landfarm Annual Report - Final

Good Afternoon,

Attached please find the final version of the 2019 Jal Landfarm (NM-02-0012) annual report.

Thank you

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Chevron Environmental Management Company

2019 ANNUAL REPORT

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

July 27, 2020

Alison Schaffer

Assistant Project Manager

Steve Rice

Project Manager

MA

2019 ANNUAL REPORT

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

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July 27, 2020

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Appendix A 2019 Site Activity Photographic Log

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ACRONYMS AND ABBREVIATIONS

amsl above mean sea level

Arcadis U.S., Inc.

Background SAP Draft Landfarm Background Sampling and Analysis Plan

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

cell landfarm cell

CEMC Chevron Environmental Management Company

DRO diesel range organics

GRO gasoline range organics

mg/kg milligram per kilogram

NMAC New Mexico Administrative Code

NMOCD New Mexico Oil Conservation Division

ORO oil range organics

PQL practical quantitation limit

SAP Draft Landfarm Operations, Sampling and Analysis Plan

SDL sample detection limit

Site Jal Landfarm (NM-02-0012), a centralized surface waste management facility

located in Lea County, New Mexico

Stantec Stantec Consulting Services Inc.

TestAmerica Laboratories, Inc.

TPH total petroleum hydrocarbons

Transitional Provisions provision 19.15.36.20 of New Mexico Administrative Code 19.15.36 (Part 36)

USEPA United States Environmental Protection Agency

WQCC Water Quality Control Commission

1 INTRODUCTION

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis) prepared this 2019 Annual Report for the Jal Landfarm (NM-02-0012), a centralized surface waste management facility located in Lea County, New Mexico (Site; Figure 1).

On August 2, 1999, the New Mexico Oil Conservation Division (NMOCD) issued Texaco Exploration & Production, Inc. (a legacy company of Chevron North America Exploration & Production Company) 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; February 14, 2007, as amended through June 30, 2016), commonly referred to as Part 36. Field activities performed in 2019 were conducted in accordance with the requirements of permit NM-02-0012 and provision 19.15.36.20 of Part 36 (Transitional Provisions).

1.1 Purpose and Objectives

As specified in provision 19.15.36.15 NMAC, active landfarms require routine operation, maintenance, and monitoring activities to remediate impacted soils and verify that impacts do not migrate into the vadose zone. In 2019, field activities were performed at the Site to meet the following objectives:

- Maintain berms around each active landfarm cell (cell) to prevent rainwater run-on and run-off
- Perform weekly site inspections to assess site conditions
- Perform biweekly (i.e., every two weeks) tilling of select cells to enhance bioremediation of impacted soils
- Remove standing water from active cells within 24 hours
- Perform quarterly vadose zone monitoring and semiannual treatment zone monitoring
- Perform release response soil sampling if a potential release is identified, as defined by provision 19.15.36.15.E(5) NMAC
- Perform 5-year vadose zone monitoring
- Maintain records of the site remediation activities and monitoring reports.

This 2019 Annual Report summarizes the 2019 field activities performed at the Site and the associated monitoring results.

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, which comprises fluvial sand, silt, clay, and localized gravel. A caliche layer, approximately 9 to 21 feet thick, forms a hard, erosion-resistant pedogenic calcrete

approximately 4 feet below ground surface (bgs). Caliche has been observed as shallow at 1½ to 3 feet bgs at the Site. The Ogallala Formation is underlain by the Chinle Formation, which comprises clay, silty clay, shale, and sandstone. The nearest freshwater 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 approximately 0.8 mile northeast of the Site. According to the New Mexico Office of the State Engineer, the well was drilled to 198 feet bgs and groundwater was encountered at approximately 180 feet bgs. The ground surface elevation of CP-00970 is approximately 3,396 feet above mean sea level (amsl). The ground surface elevation of the landfarm ranges from approximately 3,364 feet amsl at the eastern boundary to approximately 3,390 feet amsl at the western boundary. Based on the groundwater elevation at CP-00970 and ground surface elevation data from the landfarm, the depth to water beneath the landfarm is expected to range from 148 to 174 feet bgs. Regional groundwater flows from northwest to southeast (Stantec Consulting Services Inc. [Stantec] 2017b).

The Site was originally approved for 56 cells to be constructed over 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 soil was treated to 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; however, no soil has been added to these cells since 2007.

In September 2017, Stantec (on behalf of CEMC) submitted a Draft Landfarm Background Sampling and Analysis Plan (Background SAP; Stantec 2017a) and a Draft Landfarm Operations, Sampling and Analysis Plan (SAP; Stantec 2017b) to the NMOCD. The Background SAP (Stantec 2017a) presents a sampling and analysis plan for establishing site background soil concentrations in accordance with provision 19.15.26.15(B) NMAC. The SAP (Stantec 2017b) presents the ongoing sampling and analysis plan for the Site in accordance with provision 19.15.36.15 NMAC, including the 5-year vadose zone monitoring program.

On February 2, 2019, representatives from the NMOCD, CEMC, and Arcadis met to discuss the current status of the Site. During the meeting, the NMOCD provided comments on the Background SAP and the SAP (Stantec 2017a,b). In addition, the NMOCD required CEMC to submit a minor permit modification to request that all future site activities be conducted in accordance with Part 36 requirements in lieu of requirements of the Transitional Provisions. On March 12 and June 27, 2019, Arcadis (on behalf of CEMC) submitted a Background SAP (Arcadis 2019a) and a Minor Permit Modification Request (Arcadis 2019c) to the NMOCD, respectively. The NMOCD provided additional comments on the Background SAP (Arcadis 2019a) in May 2020. Following a teleconference with the NMOCD, Arcadis addressed the Background SAP comments and resubmitted a revised version for regulatory review June 15, 2020 (Arcadis 2020b). The documents are pending approval.

2 2019 OPERATION AND MAINTENANCE ACTIVITIES

Operation and maintenance activities performed at the Site in 2019 consisted of weekly site inspections, removal of standing water (as needed), and biweekly tilling of the active cells. These activities are consistent with those required by permit NM-02-0012 and the Transitional Provisions.

Weekly inspections were performed at the Site to assess conditions and verify the integrity of the following site features and equipment:

- Entrance gate, signage, and site fence
- Intact berms around each active cell
- · Presence of standing water within the active cells
- Maintenance equipment.

Results of the weekly site inspections indicated that site features and equipment remained intact and in good working order throughout the year. To prevent potential pooling of surface water in active cells, precipitation forecasts and actual precipitation accumulation measurements were tracked daily. Following large precipitation events, field staff were sent onsite to verify whether standing water was present in active cells. If recoverable water was observed, vacuum trucks were brought onsite to remove the water to the extent practicable.

In addition to performing weekly site inspections, active cells 17, 18, 19, 20, 21, 25, and 26 were tilled biweekly. A photographic log depicting 2019 site activities is included in Appendix A.

3 2019 MONITORING ACTIVITIES

Monitoring activities performed at the Site in 2019 consisted of the following soil sampling events:

- First quarter 2019. Vadose zone sampling (March 2019) and release response sampling (May 2019).
- Second quarter 2019. Vadose zone sampling (June 2019), treatment zone sampling (June 2019), and release response sampling (July 2019).
- Third quarter 2019. Vadose zone sampling (September 2019).
- Fourth quarter 2019. Vadose zone sampling (December 2019), treatment zone sampling (December 2019), release response sampling (January 2020), and 5-year vadose zone sampling (December 2019).

The vadose zone, treatment zone, release response, and 5-year vadose zone sampling events, including sampling methods and associated laboratory methods, are described in the following subsections and summarized in Table 1, below. In addition, discrepancies between the 2019 monitoring activities and those activities required by permit NM-02-0012 and the Transitional Provisions are also described below, if applicable. The treatment zone is defined as surface soils (0 to 12 inches bgs) within a cell that were originally impacted by petroleum hydrocarbons and placed in the landfarm for treatment via bioremediation. The vadose zone is defined as native unimpacted subsurface soils that underlie treatment zone soils.

Table 1. Summary of 2019 Soil Sampling Events

Task	Vadose Zone Sampling	Treatment Zone Sampling	Release Response Sampling	5-Year Vadose Zone Sampling
Sampling frequency	Quarterly	Semiannually	Quarterly (if a potential release is identified)	Every 5 years
Number of samples collected	1 discrete sample per active cell	1 composite sample (consisting of 4 discrete samples) per active cell	4 discrete vadose zone samples per active cell (only in those active cells where a potential release is identified)	4 discrete vadose zone samples per developed cell (cells 1 through 26)
Sample depth	2 to 3 feet below native ground surface	0 to 1 foot bgs	2 to 3 feet below native ground surface	2 to 3 feet below native ground surface
Analyses performed	Quarterly: TPH, BTEX Semiannually: Chloride Annually: Major cations/anions, WQCC metals	Semiannually: TPH, chloride	Quarterly: TPH, BTEX, chloride, WQCC metals*	WQCC metals from Subsections A and B of 20.6.2.3103 NMAC

Notes:

BTEX = benzene, toluene, ethylbenzene, and xylenes

TPH = total petroleum hydrocarbons

WQCC = Water Quality Control Commission

3.1 Vadose Zone Sampling

Quarterly vadose zone sampling was performed on March 26 (first quarter 2019), June 18 and 19 (second quarter 2019), September 3 (third quarter 2019), and December 3 and 4 (fourth quarter 2019). During each sampling event, one randomly selected discrete soil sample was collected from the vadose zone of each active cell (cells 17, 18, 19, 20, 21, 25, and 26). Samples were collected at a depth of approximately 2 to 3 feet below native ground surface. The vadose zone sample locations for each quarter are shown on Figures 2, 3, 4, and 5.

Prior to sample collection, an approximate 5- by 5-foot area of treatment zone soil was removed using a backhoe to minimize the potential for cross-contamination. The backhoe was then used to remove an additional 2½ feet of native soil, comprised primarily of clayey sands and caprock caliche, from the sample location. Once the desired sample depth was achieved, the backhoe was used to collect representative soil from the vadose zone and the soil sample was then collected from this representative vadose zone soil. Soil samples were placed into 4-ounce laboratory-supplied sample jars, which were labelled and shipped on ice to TestAmerica Laboratories, Inc. (TestAmerica), located in Houston, Texas, for laboratory analysis.

^{*} In a conversation with the NMOCD on April 9, 2020, Arcadis confirmed that all constituents in Subsections A and B of provision 20.6.2.3103 NMAC should be analyzed during release response sampling, not just WQCC metals. These additional constituents will be included in analyses for future release response sampling events.

After each discrete sample was collected, the sample location was backfilled with the excavated soil in the order in which it was removed. The backhoe bucket was decontaminated between collection of each discrete sample using a pressure washer.

Soil samples were analyzed for the following constituents:

- Quarterly:
 - TPH as diesel range organics (DRO), gasoline range organics (GRO), and oil range organics (ORO) by United States Environmental Protection Agency (USEPA) Method 8015B. TPH was represented as the sum of the DRO, GRO, and ORO fractions.¹
 - o BTEX by USEPA Method 8260B.
- Semiannually (second and fourth quarters 2019):
 - o Chloride by USEPA Method 300.0.
- Annually (fourth quarter 2019):
 - Cations (calcium, magnesium, potassium, and sodium) and anions (cyanide, fluoride, nitrate, and sulfate) by USEPA Methods 6010B, 300.0, and 9012B.
 - WQCC metals listed in Subsections A and B of provision 20.6.2.3103 NMAC by USEPA Method 6020A (mercury was analyzed by USEPA Method 7471A).

3.2 Treatment Zone Sampling

Semiannual treatment zone sampling was performed on June 19 (second quarter 2019) and December 4 (fourth quarter 2019). During each sampling event, one composite soil sample, consisting of four randomly selected discrete samples, was collected from the treatment zone of each active cell (cells 17, 18, 19, 20, 21, 25, and 26). Samples were collected at a depth of approximately 6 inches bgs. The treatment zone sample locations for second and fourth quarters 2019 are shown on Figures 3 and 5, respectively.

Discrete samples were collected using a stainless-steel hand auger. For each cell, the four discrete samples were homogenized in a stainless-steel bowl and placed into a 4-ounce laboratory-supplied sample jar. The sample jars were labelled and shipped on ice to TestAmerica, located in Houston, Texas, for laboratory analysis. The stainless-steel bowl and auger were decontaminated after each use using Alconox® and deionized water.

Soil samples were analyzed for the following constituents:

- TPH as DRO, GRO, and ORO by USEPA Method 8015B. TPH was represented as the sum of the DRO, GRO, and ORO fractions.
- Chloride by USEPA Method 300.0.

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¹ During the February 2, 2019 meeting, representatives from the NMOCD, CEMC, and Arcadis agreed that TPH can be represented as the sum of the DRO, GRO, and ORO fractions.

3.3 Release Response Sampling

Release response sampling events were initiated in response to potential releases of TPH, BTEX, and/or chloride into the vadose zone of active cells (cells 17, 18, 19, 20, 21, 25, and 26). According to provision 19.15.36.E(5) NMAC, a release is defined as "concentrations of TPH, BTEX, or chlorides [that] exceed the higher of the practical quantitation limit (PQL) or the background soil concentrations". Following each quarterly vadose zone sampling event in 2019, TPH and BTEX analytical results were compared to the PQL (i.e., reporting limit) and chloride results were compared to historical concentrations to determine whether a release occurred². However, during a follow-up meeting between representatives from the NMOCD and Arcadis on July 7, 2020, the NMOCD provided information about a background soil sample that was collected in June 1998 (Texaco Exploration & Production, Inc. 1998) and stated that the quarterly vadose zone analytical results should be compared to the 1998 background soil concentrations (listed in Table 2 below), or the sample detection limits (SDLs) (not the reporting limit) to determine whether a release has occurred. In this 2019 Annual Report, the vadose zone analytical results are compared to the 1998 background soil concentrations and the SDLs, but decisions about whether a cell was required to be re-sampled were based on comparisons to the reporting limit and/or historical chloride concentrations.

Table 2. Background Soil Concentrations

TPH and BTEX	Concentration (mg/kg)	Cations/Anions	Concentration (mg/kg)	Total Metals	Concentration (mg/kg)
TPH (GRO)	< 5.00	Potassium	39.0	Arsenic	< 5.0
Benzene	< 0.05	Magnesium	49.0	Selenium	< 5.0
Toluene	< 0.05	Calcium	800.0	Cadmium	< 2.0
Ethylbenzene	< 0.05	Sodium	5.1	Chromium	6.1
Xylene	< 0.05	Fluoride	1.7	Lead	< 5.0
		Chloride	10.0	Silver	< 5.0
		Nitrate	2.2	Barium	45.0
		Sulfate	15.0	Mercury	< 0.25
		Bicarbonate	3,500		
		Carbonate	80.0		

Note:

mg/kg = milligram(s) per kilogram

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² During the meeting on February 2, 2019 between representatives from the NMOCD, CEMC, and Arcadis, the NMOCD clarified how to identify a release in the vadose zone in the interim of background soil concentrations and site-specific PQLs being established.

Once the Background Sampling and Analysis Plan (Background SAP; Arcadis 2020b) is approved and implemented, representative background soil concentrations and laboratory-specific SDLs will be established and applied to determine potential releases.

If a release is identified, "then the operator shall notify the division's environmental bureau of the exceedance, and shall immediately collect and analyze a minimum of four randomly selected, independent samples for TPH, BTEX, chlorides, and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a release action plan for the division's approval within 45 days of the initial notification. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediating existing contamination" (19.15.36.15.E(5) NMAC).

Results of the vadose zone sampling in the first, second, and fourth quarters of 2019 showed that TPH and/or BTEX were detected at concentrations greater than the reporting limit; therefore, the release response process was initiated. CEMC notified the NMOCD of the exceedances, and release response sampling events were performed in May and July 2019, and January 2020. Table 3, below, shows the dates of the vadose zone and release response sampling events and the cells where potential releases were identified each quarter.

During each release response sampling event, four randomly selected discrete soil samples were collected from the vadose zone of cells where the potential release was identified. Samples were collected using the same methodology as described in Section 3.1 The release response sampling locations for first, second, and fourth quarters of 2019 are shown on Figures 2, 3, and 5, respectively.

Release response soil samples were analyzed for the following constituents:

- TPH as DRO, GRO, and ORO by USEPA Method 8015B. TPH was represented as the sum of the DRO, GRO, and ORO fractions.
- BTEX by USEPA Method 8260B.
- Chloride by USEPA Method 300.0.
- WQCC metals listed in Subsections A and B of 20.6.2.3103 NMAC by USEPA Method 6020; (mercury was analyzed by USEPA Method 7471A).

Due to a misinterpretation of the Part 36 regulations, only a subset of WQCC metals from Subsections A and B of provision 20.6.2.3103 NMAC were analyzed during 2019 release response sampling events (refer to Table 1). Moving forward, the entire list of constituents from Subsections A and B of provision 20.6.2.3103 NMAC will be analyzed for during release response events.

Table 3. Summary of Vadose Zone and Release Response Sampling Events

Quarter	Vadose Zone Sampling Event	Potential Releases (TPH, BTEX, or chloride detections that exceeded the background soil concentrations or SDL)	Release Response Sampling Event			
First quarter 2019	March 26, 2019	Cell 18 (DRO) Cell 20 (DRO, ORO) Cell 21* (DRO) Cell 25 (DRO) Cell 26* (DRO)	May 6, 2019			
Second quarter 2019	June 18 and 19, 2019	Cell 17* (chloride) Cell 18* (DRO, ORO) Cell 19 (DRO, ORO) Cell 20 (DRO, ORO) Cell 21* (DRO) Cell 25 (DRO, ORO)	July 23 and 24, 2019			
Third quarter 2019	September 3, 2019	Cell 17* (DRO) Cell 18* (DRO) Cell 19* (DRO) Cell 20* (DRO, ORO) Cell 21* (DRO) Cell 25* (DRO, ORO) Cell 26* (DRO, ORO)	Not applicable			
Fourth quarter 2019	December 2 and 3, 2019	Cell 17 (DRO, chloride) Cell 18 (DRO, ORO) Cell 19 (DRO, ORO) Cell 20* (chloride) Cell 21* (ORO)	January 14 and 15, 2020			

Notes:

3.4 Five-Year Vadose Zone Sampling

In accordance with provision 19.15.36.15(E)(2) NMAC, 5-year vadose zone sampling was performed in December 2019. Four randomly selected discrete soil samples were collected from the vadose zone of each developed cell (cells 1 through 26). Samples were collected using the same methodology as described in Section 3.1 The sample locations are shown on Figure 6.

Soil samples were analyzed for the following constituents:

 WQCC metals listed in Subsections A and B of 20.6.2.3103 NMAC by USEPA Method 6010B; (mercury was analyzed by USEPA Method 7471A).

^{*} In 2019, vadose zone analytical results for TPH and BTEX were compared to the reporting limit and chloride results were compared to historical chloride concentrations. Because the TPH and BTEX analytical results were below the reporting limit and chloride results were within the range of historical concentrations, the cell was not re-sampled during the release response sampling event.

4 2019 MONITORING RESULTS

This section discusses the results of the 2019 vadose zone, treatment zone, release response, and 5-year vadose zone soil sampling events.

4.1 Vadose Zone Sampling Results

Analytical results from the quarterly vadose zone sampling events are provided in Tables 4, 5, 6, and 7. Laboratory reports are provided in Appendix B.

As discussed in Section 3.3 and specified in provision 19.15.36.15(E)(5) NMAC, vadose zone analytical results were compared to the higher of the SDL or the 1998 background soil concentrations. The 2019 results are summarized in Table 3 and the list below.

- TPH. DRO and/or ORO were detected at concentrations greater than the SDL in cells 17, 18, 19, 20, 21, 25, and 26. GRO concentrations were less than the background soil concentration in all cells.
- BTEX. BTEX concentrations were less than the background soil concentrations in all cells.
- Chloride. Chloride was detected at concentrations greater than the background soil concentration in cells 17 and 20.
- Cations and anions (fourth quarter 2019). Calcium, magnesium, potassium, sodium, fluoride, nitrate, and sulfate were detected at concentrations greater than the background soil concentrations in all cells, except the nitrate concentration in cell 20 and the sulfate concentration in cell 25. Cyanide concentrations were greater than the SDL in cells 17, 18, 19, and 25.
- WQCC metals (fourth quarter 2019). Barium, beryllium, copper, iron, manganese, and zinc were detected at concentrations greater than the background soil concentrations or SDL in all cells. Chromium was detected at concentrations greater than the background soil concentration in cells 17, 18, and 25. Lead was detected at concentrations greater than the background soil concentration in cells 17, 18, 19, 20, 21, and 25. Thallium was detected at concentrations greater than the SDL in cells 18, 19, 21, and 26. Antimony, arsenic, cadmium, mercury, selenium, and silver concentrations were less than the background soil concentrations or SDL in all cells.

4.2 Treatment Zone Sampling Results

Analytical results from the semiannual treatment zone sampling events are provided in Tables 8 and 9. Laboratory reports are provided in Appendix B.

In accordance with provision 19.15.36.15(F) NMAC, treatment of impacted soil is required to continue until the soil has been remediated to the greater of the background soil concentrations or the treatment zone closure performance standards specified in Table 10, below.

During the June (second quarter 2019) and December (fourth quarter 2019) sampling events, treatment zone analytical results were less than the closure performance standards for GRO and DRO combined fractions, TPH, and chloride. Benzene and BTEX are not required to be analyzed during semiannual events. In 2018, benzene and BTEX were analyzed in treatment zone samples and the analytical results were less than the applicable closure performance standards.

Table 10. Treatment Zone Closure Performance Standards

Constituent	Treatment Zone Closure Performance Standard
GRO + DRO	500 mg/kg
TPH	2,500 mg/kg
Benzene	0.2 mg/kg
Total BTEX	50 mg/kg
Chloride	1,000 mg/kg

4.3 Release Response Sampling Results

Analytical results from the release response sampling events are provided in Tables 11 through 16. Laboratory reports are provided in Appendix B.

In accordance with provision 19.15.36.15.E(5) NMAC, analytical results for TPH, BTEX, chloride, and metals were compared to the higher of the 1998 background soil concentrations or SDL. The 2019 results are summarized below and in Table 17, below.

- TPH. DRO and/or ORO were detected at concentrations greater than the SDL in cells 17, 18, 19, 20, 25, and 26. GRO concentrations were less than the background soil concentration in all cells.
- BTEX. Benzene was detected at concentrations greater than the background soil concentration in cell 19. Toluene, ethylbenzene, and xylene concentrations were less than the background soil concentrations in all cells.
- *Chloride*. Chloride was detected at concentrations greater than the background soil concentration in cells 17, 18, 19, 20, and 25.
- WQCC metals. Antimony, barium, beryllium, copper, iron, manganese, and zinc were detected at concentrations greater than the background soil concentrations or SDL in cells 17, 18, 19, 20, 25, and 26. Arsenic was detected at concentrations greater than the background soil concentration in cells 17, 18, 19, and 20. Chromium was detected at concentrations greater than the background soil concentration in cell 25. Lead was detected at concentrations greater than the background soil concentration in cells 25 and 26. Thallium was detected at concentrations greater than the SDL in cells 17, 18, 19, and 25.

Arcadis (on behalf of CEMC) submitted a Release Response Sampling Results and Action Plan to the NMOCD on June 4 and August 28, 2019, and February 14, 2020 (Arcadis 2019b, 2019d, 2020a). Each report summarized the vadose zone and release response sampling events and associated results, and provided a release response action plan to address the potential release of petroleum-related impacts in the vadose zone of the Site.

Table 17. Summary of Release Response Analytical Results

Quarter	Cell	TPH, BTEX, Chloride Exceedances	WQCC Metals Exceedances							
	Cell 18	DRO, ORO, chloride	Barium, beryllium, copper, iron, manganese, zinc							
First guarter	Cell 20	DRO, ORO, chloride	Barium, beryllium, copper, iron, manganese, zinc							
2019	Cell 25	DRO, chloride	Barium, beryllium, chromium, copper, iron, lead, manganese, thallium, zinc							
	Cell 19	DRO, ORO	Antimony, barium, beryllium, copper, iron, manganese, zinc							
Second	Cell 20	DRO, ORO, chloride	Antimony, arsenic, barium, beryllium, copper, iron, manganese, zinc							
quarter 2019	Cell 25	DRO	Antimony, barium, beryllium, chromium, copper, iron, lead, manganese, zinc							
	Cell 26	DRO	Antimony, barium, beryllium, copper, iron, lead, manganese, zinc							
	Cell 17	DRO, ORO, chloride	Antimony, arsenic, barium, beryllium, copper, iron, manganese, thallium, zinc							
Fourth quarter 2019	Cell 18	DRO	Antimony, arsenic, barium, beryllium, copper, iron, manganese, thallium, zinc							
	Cell 19	DRO, benzene, chloride	Antimony, arsenic, barium, beryllium, copper, iron, manganese, thallium, zinc							

4.4 Five-Year Vadose Zone Sampling Results

Analytical results from the 5-year vadose sampling event are provided in Table 18. Laboratory reports are provided in Appendix B.

In accordance with provision 19.15.36.15.E(3) NMAC, analytical results were compared to the greater of the 1998 background soil concentrations or SDL. The results are summarized below and in Table 19, below.

• WQCC metals. Beryllium, copper, iron, manganese, and zinc were detected at concentrations greater than the background soil concentrations or SDL in all cells. Antimony was detected at concentrations greater than the SDL in cells 5, 13, 22, 23, and 24. Barium was detected at concentrations greater than the background soil concentration in cells 1, 2, 5, 6, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26. Chromium was detected at concentrations greater than the background soil concentration in cells 2, 3, 4, 10, 11, 12, 14, 17, 18, 22, 23, and 25. Lead was detected at concentrations greater than the background soil concentration in cells 8, 9, 14, 17, 18, 19, 20, 21, 22, 23, and 25. Thallium was detected at concentrations greater than the SDL in cells 2, 3, 5, 6, 7, 9, 11, 13, 16, 18, 19, 21, 22, and 26.

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Table 19. Summary of Five-Year Vadose Zone Analytical Results

Cell	WQCC Metals PQL Exceedances
Cell 1	Barium, beryllium, copper, iron, manganese, zinc
Cell 2	Barium, beryllium, chromium, copper, iron, manganese, thallium, zinc
Cell 3	Beryllium, chromium, copper, iron, manganese, thallium, zinc
Cell 4	Beryllium, chromium, copper, iron, manganese, zinc
Cell 5	Antimony, barium, beryllium, copper, iron, manganese, thallium, zinc
Cell 6	Barium, beryllium, copper, iron, manganese, thallium, zinc
Cell 7	Beryllium, copper, iron, manganese, thallium, zinc
Cell 8	Barium, beryllium, copper, iron, lead, manganese, zinc
Cell 9	Barium, beryllium, copper, iron, lead, manganese, thallium, zinc
Cell 10	Barium, beryllium, chromium, copper, iron, manganese, zinc
Cell 11	Barium, beryllium, chromium, copper, iron, manganese, thallium, zinc
Cell 12	Barium, beryllium, chromium, copper, iron, manganese, zinc
Cell 13	Antimony, barium, beryllium, copper, iron, manganese, thallium, zinc
Cell 14	Barium, beryllium, chromium, copper, iron, lead, manganese, zinc
Cell 15	Beryllium, copper, iron, manganese, zinc
Cell 16	Beryllium, copper, iron, manganese, thallium, zinc
Cell 17	Barium, beryllium, chromium, copper, iron, lead, manganese, zinc
Cell 18	Barium, beryllium, chromium, copper, iron, lead, manganese, thallium, zinc
Cell 19	Barium, beryllium, copper, iron, lead, manganese, thallium, zinc
Cell 20	Barium, beryllium, copper, iron, lead, manganese, zinc
Cell 21	Barium, beryllium, copper, iron, lead, manganese, thallium, zinc
Cell 22	Antimony, barium, beryllium, chromium, copper, iron, lead, manganese, thallium, zinc
Cell 23	Antimony, barium, beryllium, chromium, copper, iron, lead, manganese, zinc
Cell 24	Antimony, Barium, beryllium, copper, iron, manganese, zinc
Cell 25	Barium, beryllium, chromium, copper, iron, lead, manganese, zinc
Cell 26	Barium, beryllium, copper, iron, manganese, thallium, zinc

5 **SUMMARY**

Field activities performed in 2019 were conducted in accordance with the requirements of permit NM-02-0012 and provision 19.15.36.20 of Part 36 (Transitional Provisions). Field activities consisted of weekly site inspections, removal of standing water (as needed), biweekly tilling of the active cells, quarterly vadose zone monitoring, semiannual treatment zone monitoring, release response sampling, and 5-year vadose zone sampling.

Vadose zone analytical results from first, second, and fourth quarters of 2019 indicated a potential release of TPH and/or chloride into the vadose zone of active cells 17, 18, 19, 20, 25, and/or 26; therefore, release response sampling events were subsequently performed in May and July 2019, and January 2020. After each release response sampling event, Arcadis (on behalf of CEMC) submitted a Release Response Sampling Results and Action Plan (Arcadis 2019b, 2019d, 2020a) to the NMOCD, summarizing the vadose zone and release response sampling results, and the release response action plan to address the potential release.

Treatment zone analytical results were less than the closure performance standards for GRO and DRO combined fractions, TPH, and chloride.

A 5-year vadose zone sampling event was performed in December 2020, which involved sampling each developed cell (cells 1 through 26) for WQCC metals. In each cell, several constituents exceeded the 1998 background soil concentrations or SDL, including antimony, barium, beryllium, chromium, copper, iron, lead, manganese, thallium, and zinc.

On June 15, 2020, Arcadis (on behalf of CEMC) submitted a revised Background Sampling and Analysis Plan (Arcadis 2020b) to the NMOCD, which is pending approval. Once approved and implemented, representative background soil concentrations will be established for the Site. Historical vadose zone results will be compared to representative background soil concentrations to inform the future site management strategy. On June 27, 2019, Arcadis (on behalf of CEMC) submitted a Minor Permit Modification Request (Arcadis 2019c) to the NMOCD, which is also pending approval. Once approved, future site activities will be performed in accordance with Part 36 requirements in lieu of the Transitional Provisions.

6 REFERENCES

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TABLES



Table 4
March 2019 Vadose Zone Soil Analytical Results – First Quarter 2019
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Lea County, New Mexico

	80)RO)15B g/kg	GRO 8015B mg/kg		ORO 8015B mg/kg		TPH ^a 8015B mg/kg		Benzene 8260B mg/kg		Toluene 8260B mg/kg		Ethylbenzene 8260B mg/kg		82	enes 60B g/kg			
	Background Soil Concentration					< 5.00						< 0.05		< 0.05		< 0.05		< (0.05
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	C17-Square 167-S-2-3	03/26/2019	1.99	U	1.30	U	1.99	U	5.28		0.000546	U	0.00306	J	0.000883	U	0.000979	U
Cell 18	Vadose	C18-Square 120-S-2-3	03/26/2019	2.07	J	1.22	U	1.97	U	5.26		0.000598	U	0.00670		0.000968	U	0.001070	U
Cell 19	Vadose	C19-Square 183-S-2-3	03/26/2019	1.99	U	1.34	U	1.99	U	5.32		0.000609	U	0.00277	J	0.000986	U	0.001090	U
Cell 20	Vadose	C20-Square 157-S-2-3	03/26/2019	32.0		1.32	U	14.7		48.0		0.000598	U	0.00131	U	0.000968	U	0.001070	U
Cell 21	Vadose	C21-Square 115-S-2-3	03/26/2019	2.44	J	1.37	U	1.98	U	5.79		0.000592	U	0.00387	J	0.000958	U	0.001060	U
Cell 25	Vadose	C25-Square 3-S-2-3	03/26/2019	2.48	J	1.30	U	1.96	U	5.74		0.000567	U	0.00611		0.000918	U	0.001020	U
Cell 26	Vadose	C26-Square 100-S-2-3	03/26/2019	1.99	J	1.14	U	1.96	U	5.09		0.000539	U	0.00118	U	0.000872	U	0.000966	U

Notes:

- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentrations.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

ID = identification

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics
ORO = oil range organics

mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

RL = reporting limit

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.

U = Indicates the analyte was analyzed for but not detected.

^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).



June 2019 Vadose Zone Soil Analytical Results – Second Quarter 2019 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

		Constituent Method Units	80	DRO D15B lg/kg	GRO ORO 8015B 8015B mg/kg mg/kg		5B	TPH ^a 8015B mg/kg		Benzene 8260B mg/kg		Toluene 8260B mg/kg		Ethylbenzene 8260B mg/kg		Xylenes 8260B mg/kg		Chloride 300.0 mg/kg			
		Background Se	oil Concentration			< 5	5.00			< 0.05			.05	< 0	.05	< 0.05		< 0.05			0.0
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	Cell 17-square131-S-2-3-190618	06/18/2019	1.95	U	1.19	U	1.95	U	5.09		0.000729	U	0.0016	U	0.00118	U	0.00131	U	32.4	
Cell 18	Vadose	Cell 18-square82-S-2-3-190618	06/18/2019	3.41	J	1.32	U	2.0	J	6.73		0.000816	U	0.00179	U	0.00132	U	0.00146	U	0.534	U
Cell 19	Vadose	Cell 19-square173-S-2-3-190618	06/18/2019	2.80	J	1.09	U	5.16		9.05		0.000711	U	0.00156	U	0.00115	U	0.00128	U	1.76	J
Cell 20	Vadose	Cell 20-square79-S-2-3-190618	06/18/2019	3.05	J	1.10	U	6.05		10.20		0.000495	U	0.00108	U	0.000801	U	0.000887	U	9.78	
Cell 21	Vadose	Cell 21-square196-S-2-3-190618	06/18/2019	2.05	J	1.29	U	1.96	U	5.30		0.000724	U	0.00159	U	0.00117	U	0.0013	U	4.33	
Cell 25	Vadose	Cell25-square39-S-2-3-190619	06/19/2019	3.00	JB	1.18	U	3.65	J	7.83		0.000615	U	0.0067		0.000996	U	0.00345	J	0.53	U
Cell 26	Vadose	Cell26-square26-S-2-3-190619	06/19/2019	2.00	U	2.90	U	2.00	U	6.90		0.000722	U	0.022		0.00117	U	0.00807		2.32	J

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- Nondetect values are reported to the SDL specified in the laboratory reports.
 In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentrations.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

ID = identification

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes DRO = diesel range organics

GRO = gasoline range organics

mg/kg = milligrams per kilogram
NMAC = New Mexico Administrative Code

ORO = oil range organics

RL = reporting limit

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

- B = Compound was found in the blank and sample.
- J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.
- U = Indicates the analyte was analyzed for but not detected.



Table 6
September 2019 Vadose Zone Soil Analytical Results – Third Quarter 2019
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

	Constituent Method Units il Concentration	80 m	DRO GRO 8015B 8015B mg/kg mg/kg < 5.00		ORO 8015B mg/kg 		TPH ^a 8015B mg/kg 		Benzene 8260B mg/kg < 0.05		Toluene 8260B mg/kg < 0.05		Ethylbenzene 8260B mg/kg < 0.05		Xyle 826 mg/ < 0.	/kg			
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	Cell 17-Square 49-S-2-3-190903	09/03/2019	3.46	J	1.43	U	1.99	U	6.88		0.000358	U	0.000534	U	0.000326	U	0.00101	U
Cell 18	Vadose	Cell 18-Square 20-S-2-3-190903	09/03/2019	3.03	J	1.24	U	1.91	U	6.18		0.000321	U	0.00048	U	0.000293	U	0.000912	U
Cell 19	Vadose	Cell 19-Square 197-S-2-3-190903	09/03/2019	2.52	J	1.26	U	1.98	U	5.76		0.00032	U	0.000478	U	0.000291	U	0.000908	U
Cell 20	Vadose	Cell 20-Square 85-S-2-3-190903	09/03/2019	4.80	J	1.20	U	3.44	J	9.44		0.000309	U	0.000462	U	0.000282	U	0.000877	U
Cell 21	Vadose	Cell 21-Square 1-S-2-3-190903	09/03/2019	3.52	J	1.31	U	1.99	U	6.82		0.000317	U	0.000473	U	0.000289	U	0.0009	U
Cell 25	Vadose	Cell 25-Square 42-S-2-3-190903	09/03/2019	3.46	J	1.07	U	2.46	J	6.99		0.000267	U	0.000398	U	0.000243	U	0.000756	U
Cell 26	Vadose	Cell 26-Square 18-S-2-3-190903	09/03/2019	3.43	J	1.26	U	1.98	U	6.67		0.000317	U	0.000473	U	0.000289	U	0.000899	U

Notes:

^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).

1. Nondetect values are reported to the SDL specified in the laboratory reports.

2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.

3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

ORO = oil range organics

SDL = sample detection limit

TPH = total petroleum hydrocarbon

Qualifiers:

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.

U = Indicates the analyte was analyzed for but not detected.



December 2019 Vadose Zone Soil Analytical Results – Fourth Quarter 2019 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

			Constituent Method Units	80	DRO 015B ig/kg	80	RO 15B g/kg	OR 801 mg	5B	TPH 8015 mg/k	В	826 mg	/kg	Tolu 826 mg.	0B	Ethylbe 826 mg/	0B	826 mg	enes 60B j/kg	30	oride 00.0 g/kg	Calciı 6010 mg/k	0B kg
		Background S	oil Concentration			< !	5.00		-			< 0	.05	< 0	.05	< 0.	05	< 0	.05	1	0.0	800.	.0
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	Cell17-Square204-S-2-191202	12/02/2019	138		0.0638	U	34.2	U	172		0.000630	UH	0.00138	UH	0.00102	UH	0.00113	UH	110	В	9,190	
Cell 18	Vadose	Cell18-Square179-S-2-191202	12/02/2019	66.4		0.0645	U	71.1		138		0.000619	UH	0.00136	UH	0.00100	UH	0.00111	UH	3.74	JB	137,000	
Cell 19	Vadose	Cell19-Square83-S-2-191202	12/02/2019	224		0.0641	U	270		494		0.000571	UH	0.00125	UH	0.000925	UH	0.00102	UH	4.46	В	16,900	
Cell 20	Vadose	Cell20-Square 42-S-2-3-191202	12/02/2019	34.5	U	0.0650	U	34.5	U	69.1		0.000630	UH	0.00138	UH	0.00102	UH	0.00113	UH	16.5	В	45,400	
Cell 21	Vadose	Cell21-Square107-S-2-191203	12/03/2019	33.5	U	0.0637	U	44.0	J	77.6		0.000611	U	0.00134	U	0.00099	U	0.00110	U	2.70	JB	53,400	
Cell 25	Vadose	Cell25-Square108-S-2-191203	12/03/2019	34.1	U	0.0646	U	34.1	U	68.3		0.000527	U	0.00115	U	0.000853	U	0.000945	U	2.27	JB	7,470	
Cell 26	Vadose	Cell26-Square207-S-2-191203	12/03/2019	33.7	U	0.0631	U	33.7	U	67.5		0.000699	U	0.00153	U	0.00113	U	0.00125	U	3.48	JB	106,000	

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- Nondetect values are reported to the SDL specified in the laboratory reports.
 In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

MQL = method quantitation limit
NMAC = New Mexico Administrative Code

ORO = oil range organics

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

- B = Compound was found in the blank and sample.
- 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.



December 2019 Vadose Zone Soil Analytical Results – Fourth Quarter 2019 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

		Background Sc	Constituent Method Units il Concentration	60 m	nesium 10B g/kg 9.0	60 mg	ssium 10B g/kg 9.0	60 m	dium 10B g/kg 5.1	90 m	anide)12B g/kg 	3(oride 00.0 g/kg 1.7	3 m	trate 00.0 g/kg 2.2	3 m	ılfate 00.0 g/kg 15.0
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier				Qualifier
Cell 17	Vadose	Cell17-Square204-S-2-191202	12/02/2019	1,330		1,850		1,000	В	0.0885	J	4.91		92.1	ΗВ	120	
Cell 18	Vadose	Cell18-Square179-S-2-191202	12/02/2019	1,830		909		65.9	JB	0.0356	J	3.87		4.57	НВ	22.4	
Cell 19	Vadose	Cell19-Square83-S-2-191202	12/02/2019	982		927		22.5	JB	0.0360	J	2.43		5.22	Н	28.3	
Cell 20	Vadose	Cell20-Square 42-S-2-3-191202	12/02/2019	1,880		859		24.0	J	0.0206	U	4.21		2.15	JH	21.1	
Cell 21	Vadose	Cell21-Square107-S-2-191203	12/03/2019	1,970		1,230		47.2	JB	0.0178	U	10.5		14.0		148	
Cell 25	Vadose	Cell25-Square108-S-2-191203	12/03/2019	993		1,380		16.0	JΒ	0.0369	J	3.80		5.80		10.4	
Cell 26	Vadose	Cell26-Square207-S-2-191203	12/03/2019	2,050		1,150		56.2	JB	0.0196	U	5.14		5.97		55.8	

Notes:

- a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation ϵ
- Nondetect values are reported to the SDL specified in the laboratory reports.
 In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SE.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram
MQL = method quantitation limit
NMAC = New Mexico Administrative Code

ORO = oil range organics

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

- B = Compound was found in the blank and sample.
- 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.



Table 8
June 2019 Treatment Zone Soil Analytical Results – Second Quarter 2019
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

			Constituent Method Units	80 m	DRO D15B g/kg	80 mg	RO 15B g/kg	OR 801 mg/	5B	TPH 8015 mg/k	B (g	3 m	loride 00.0 g/kg
Law Manne Call	1	Treatment Zone Closure Perform				mg/kg	0			2,500 m			mg/kg
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Treatment	Cell 17-treatment-S-6-190619	06/19/2019	52.5	В	1.11	U	71.2		124.81		38.1	
Cell 18	Treatment	Cell 18-treatment-S-6-190619	06/19/2019	37.6	В	1.24	U	69.4		108.24		0.5280	U
Cell 19	Treatment	Cell 19-treatment-S-6-190619	06/19/2019	16.2	JB	1.14	U	49.8		67.14		0.5290	U
Cell 20	Treatment	Cell 20-treatment-S-6-190619	06/19/2019	9.72	U	1.25	U	17.3	J	28.27		0.5320	U
Cell 21	Treatment	Cell 21-treatment-S-6-190619	06/19/2019	31.4	JB	1.26	U	86.3		118.96		0.5300	U
Cell 25	Treatment	Cell25-treatment-S-6-190619	06/19/2019	48.9	В	1.08	U	73.5		123.48		0.5280	U
Cell 26	Treatment	Cell26-treatment-S-6-190619	06/19/2019	37.2	В	0.976	U	65.4		103.576		0.5300	U

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(F) NMAC, treatment zone analytical results are compared to the treatment zone closure performance standards.

Acronyms and Abbreviations:

-- = not applicable

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

ORO = oil range organics

RL = reporting limit

SDL = sample detection limit

TPH = total petroleum hydrocarbon

Qualifiers:

B = Compound was found in the blank and sample.

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an estimated value.

U = Indicates the analyte was analyzed for but not detected.



Table 9
December 2019 Treatment Zone Soil Analytical Results – Fourth Quarter 2019
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

		Treatment Zone Closure Perforn	Constituent Method Units nance Standards	8) m	DRO 015B 1g/kg 500	80	RO 15B g/kg	OR 801! mg/ 	5B kg	TPH 8015 mg/k 2,500 m	B (g	3 m	loride 800.0 ng/kg 0 mg/kg
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	
Cell 17	Treatment	Cell17-Treatment-5-6-191204	12/04/2019	35.1	U	0.0629	U	65.0	1	100		3.05	J
Cell 18	Treatment	Cell18-Treatment-5-6-191204	12/04/2019	173		0.0639	U	219		392		3.13	J
Cell 19	Treatment	Cell19-Treatment-5-6-191204	12/04/2019	60.6		0.0636	U	86.2		147		5.79	
Cell 20	Treatment	Cell20-Treatment-5-6-191204	12/04/2019	33.9	U	0.0636	U	42.5	J	76.5		5.35	
Cell 21	Treatment	Cell21-Treatment-5-6-191204	12/04/2019	48.2	J	0.0654	U	68.5		117		19.3	
Cell 25	Treatment	Cell25-Treatment-5-6-191204	12/04/2019	33.4	U	0.0632	U	37.4	J	70.9		19.2	
Cell 26	Treatment	Cell26-Treatment-5-6-191204	12/04/2019	240		0.0636	U	259		499		15.00	

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(F) NMAC, treatment zone analytical results are compared to the treatment zone closure performance standards.

Acronyms and Abbreviations:

ID = identification

-- = not applicable

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

ORO = oil range organics

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

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.



Table 11 May 2019 Release Response Soil Analytical Results - TPH, BTEX, and Chloride 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

		Background Coll	Constituent Method Units	80	RO 15B g/kg	80 mg	RO 15B g/kg 5.00	80 mį	RO 15B g/kg	80°	PH ^a 15B g/kg	820 mg	zene 60B /kg .05	826 mg	iene 60B /kg .05	Ethylbe 8260 mg/l)B kg	mg	enes 60B /kg	30 mg	oride)0.0 g/kg 10
	_	Background Soil	1														Jo				
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 18	Vadose	Cell18-Square133-S-2-3-190506	5/6/2019	18.5	В	0.0459	U	25.5		44.0459	-	0.000512	U	0.00112	U	0.000829	U	0.000918	U	33.2	
Cell 18	Vadose	Cell18-Square194-S-2-3-190506	5/6/2019	4.30	JB	0.0474	U	1.98	U	6.3274	-	0.000607	U	0.00133	U	0.000983	U	0.00109	U	0.533	U
Cell 18	Vadose	Cell18-Square2-S-2-3-190506	5/6/2019	3.56	JB	0.0474	U	1.98	U	5.5874		0.000539	U	0.00118	U	0.000873	U	0.000968	U	0.528	U
Cell 18	Vadose	Cell18-Square56-S-2-3-190506	5/6/2019	2.68	J	0.0531	U	2.00	U	4.7331		0.000533	UΗ	0.00117	UH	0.000863	UH	0.000956	UΗ	31.2	
Cell 20	Vadose	Cell20-Square166-S-2-3-190506	5/6/2019	41.9	В	0.0496	U	61.5		103.4496	-	0.000578	U	0.00127	U	0.000935	U	0.00104	U	0.534	U
Cell 20	Vadose	Cell20-Square3-S-2-3-190506	5/6/2019	4.04	JB	0.0478	U	1.97	U	6.0578	-	0.000568	U	0.00124	U	0.00092	U	0.00102	U	5.06	
Cell 20	Vadose	Cell20-Square102-S-2-3-190506	5/6/2019	1.98	U	0.0547	U	1.98	U	4.0147	-	0.000594	U	0.0013	U	0.000962	U	0.00107	U	14.4	
Cell 20	Vadose	Cell20-Square19-S-2-3-190506	5/6/2019	2.43	J	0.0491	U	1.97	U	4.4491	-	0.000606	U	0.00133	U	0.000981	U	0.00109	U	3.09	J
Cell 25	Vadose	Cell25-Square126-S-2-3-190506	5/6/2019	2.67	J	0.0439	U	1.98	U	4.6939	-	0.000468	UH	0.00102	UH	0.000757	UH	0.000839	UH	167	
Cell 25	Vadose	Cell25-Square20-S-2-3-190506	5/6/2019	3.71	J	0.0471	U	1.98	U	5.7371	-	0.000461	UН	0.00101	UH	0.000747	UH	0.000828	UH	92.3	
Cell 25	Vadose	Cell25-Square107-S-2-3-190506	5/6/2019	4.02	J	0.0464	U	1.97	U	6.0364	-	0.000583	UН	0.00128	UH	0.000944	UH	0.00105	UH	0.528	U
Cell 25	Vadose	Cell25-Square98-S-2-3-190506	5/6/2019	2.68	JB	0.0486	U	1.94	U	4.6686	-	0.000496	U	0.00109	U	0.000803	U	0.000889	U	148	

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration for TPH, BTEX, and chloride.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

ID = identification

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

ORO = oil range organics

RL = reporting limit

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

- B = Compound was found in the blank and sample.
- H = Sample was prepped or analyzed beyond the specified holding time.
- J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.
- U = Indicates the analyte was analyzed for but not detected.



Table 12 May 2019 Release Response Soil Analytical Results – Metals 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

			Constituent	t Anti	mony	Arse	nic	Bar	ium	Bery	lium	Cadr	nium	Chro	mium	Со	pper	li	on	ļ I	Lead	Mang	anese	Mer	cury	Sele	nium	Si	lver	Thalli	ium	Zi	inc
			Method	60	020	602	20	60	20	60	20	60	20	60	20	60	20	6	020		6020	60	20	747	1A	60	20	6	020	602	20	60	020
			Units	, mọ	g/kg	mg/	kg	mg	/kg	mg	/kg	mg	/kg	mç	/kg	mç	g/kg	m	g/kg	n	ng/kg	mg	/kg	mg	/kg	mg	/kg	m	g/kg	mg/l	kg	mg	g/kg
		Background So	il Concentrations	;		< 5	.0	45	.0	-		< 2	2.0	6	.1						< 5.0		-	< 0	.25	< !	5.0	<	5.0				
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifie	r Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie	Result	Qualifier	Result	Qualifie	Result	Qualifier	Result	Qualifier	Result	Qualifier								
Cell 18	Vadose	Cell18-Square133-S-2-3-190506	5/6/2019	0.123	U	2.51		121		0.184	J	0.205	U	3.36		1.98	-	2,540		2.20		50.4	-	0.016		0.0708	U	0.0195	U	0.0923	U	6.17	
Cell 18	Vadose	Cell18-Square194-S-2-3-190506	5/6/2019	0.112	U	3.46		372		0.104	J	0.186	U	2.17		1.15	-	1,740		1.14		13.9	-	0.0168		0.0643	U	0.0177	U	0.0839	U	4.13	
Cell 18	Vadose	Cell18-Square2-S-2-3-190506	5/6/2019	0.130	U	3.79		257		0.122	J	0.217	U	2.27		1.18		2,270		1.29		15.8		0.0110	J	0.0749	U	0.0206	U	0.0977	U	4.70	
Cell 18	Vadose	Cell18-Square56-S-2-3-190506	5/6/2019	0.126	U	3.08		194		0.204	J	0.209	U	4.47	-	1.65		3,860		2.30		30.5		0.0139		0.0722	U	0.0199	U	0.0942	U	8.80	
Cell 20	Vadose	Cell20-Square166-S-2-3-190506	5/6/2019	0.122	U	2.89		186		0.119	J	0.203	U	2.29	-	2.06		1,640		2.60		23.7		0.0178		0.0701	U	0.0193	U	0.0914	U	5.15	
Cell 20	Vadose	Cell20-Square3-S-2-3-190506	5/6/2019	0.116	U	3.25		279		0.089	J	0.193	U	1.73	-	1.07		1,780		0.867		13.7		0.0302		0.0668	U	0.0184	U	0.0871	U	3.37	J
Cell 20	Vadose	Cell20-Square102-S-2-3-190506	5/6/2019	0.127	U	4.22		345		0.0749	J	0.211	U	1.77		1.42	-	1,420		0.805		12.5		0.0158		0.0728	U	0.0200	U	0.0949	U	3.25	J
Cell 20	Vadose	Cell20-Square19-S-2-3-190506	5/6/2019	0.126	U	2.85		535		0.163	J	0.211	U	2.70	-	1.26		2,330		1.47		20.0		0.00797	U	0.0727	U	0.0200	U	0.0948	U	5.02	
Cell 25	Vadose	Cell25-Square126-S-2-3-190506	5/6/2019	0.125	U	3.20		51.3		0.512	J	0.209	U	9.65		2.46		9,040		5.35	^	43.7		0.0155		0.0720	U	0.0198	U	0.1160		18.7	
Cell 25	Vadose	Cell25-Square20-S-2-3-190506	5/6/2019	0.126	U	2.56		79.4		0.454	J	0.209	U	8.61		2.28		7,930		4.89	٨	40.0	-	0.0101	J	0.0722	U	0.0199	U	0.0994	J	16.3	
Cell 25	Vadose	Cell25-Square107-S-2-3-190506	5/6/2019	0.118	U	3.16		399		0.067	J	0.197	U	1.52		1.3		1,160		0.784		13.1		0.0109	J	0.0680	U	0.0187	U	0.0887	U	2.89	J
Cell 25	Vadose	Cell25-Square98-S-2-3-190506	5/6/2019	0.122	U	2.06		52.1		0.389	J	0.204	U	6.74		2.07		6,300		4.24		39.5	-	0.0106	J	0.0703	U	0.0194	U	0.0917	U	12.8	

1. Nondetect values are reported to the SDL specified in the laboratory reports.

2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.

3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations: ID = identification

-- = not applicable mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

QC = quality control

RL = reporting limit

SDL = sample detection limit

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.

^ = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC is outside acceptance limits.

U = Analyte was not detected at or above the SDL.



Table 13
July 2019 Release Response Soil Analytical Results – TPH, BTEX, and Chloride
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

			Constituent		DRO	_	RO	_	RO	-	PH ^a	Benz		Tolu			enzene	Xyle			oride
			Method	~ .	015B		15B		15B	_	015B	826		826		826		826			0.0
			Units		ıg/kg		g/kg	m	g/kg	n	ıg/kg	mg/		mg		mg		mg			g/kg
	,	Background So	oil Concentrations				5.00					< 0.	.05	< 0	.05	< 0	.05	< 0.	.05		10
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 19	Vadose	Cell19-Square132-S-2-3-190723	07/23/2019	16.6	В	0.0174	U	25.0		41.6		0.000574	U	0.00126	U	0.000929	U	0.00103	U	3.46	J
Cell 19	Vadose	Cell 19-Square156-S-2-3-190723	07/23/2019	2.29	J	0.0248	U	2.67	J	4.98		0.000453	U	0.000991	U	0.000733	U	0.000812	U	0.535	U
Cell 19	Vadose	Cell 19-Square184-S-2-3-190723	07/23/2019	2.00	U F1 F2	0.0274	U	2.00	U	4.03		0.000516	U	0.00113	U	0.000836	U	0.000926	U	4.41	
Cell 19	Vadose	Cell19-Square23-S-2-3-1907233	07/23/2019	2.94	J	0.0187	U	2.00	U	4.96		0.000507	UΗ	0.00111	UH	0.000821	UH	0.00091	UH	0.53	U
Cell 20	Vadose	Cell20-Square102-S-2-3-190723	07/23/2019	1.95	U	0.026	U	1.95	U	3.93		0.000631	U H H3	0.00138	U H H3	0.00102	U H H3	0.00113	U H H3	1.58	J
Cell 20	Vadose	Cell20-Square179-S-2-3-190723	07/23/2019	2.97	J	0.029	U	1.97	U	4.97		0.000666	UH	0.00146	UH	0.00108	UH	0.00119	UH	2.27	J
Cell 20	Vadose	Cell20-Square193-S-2-3-190723	07/23/2019	3.07	J	0.0273	U	2.14	J	5.24		0.000597	UH	0.00131	UH	0.000966	UH	0.00107	UH	22.9	
Cell 20	Vadose	Cell20-Square96-S-2-3-190723	07/23/2019	2.84	J	0.0241	U	1.99	U	4.85		0.000355	UH	0.000777	UH	0.000574	UH	0.000636	UH	0.531	U
Cell 25	Vadose	Cell25-Square-6-S-2-3-190724	07/24/2019	2.71	J	0.0268	U	1.97	U	4.71		0.000677	U	0.00148	U	0.0011	U	0.00122	U	1.21	J
Cell 25	Vadose	Cell25-Square-64-S-2-3-190724	07/24/2019	2.00	U	0.028	U	2.00	U	4.03		0.000677	U	0.00148	U	0.0011	U	0.00122	U	0.532	U
Cell 25	Vadose	Cell25-Square-85-S-2-3-190724	07/24/2019	2.00	U	0.0277	U	2.00	U	4.03		0.000806	U	0.00176	U	0.0013	U	0.00145	U	1.51	J
Cell 25	Vadose	Cell25-Square-93-S-2-3-190724	07/24/2019	2.56	J	0.0267	U	1.95	U	4.54		0.000521	U	0.00114	U	0.000843	U	0.000934	U	0.946	J F2
Cell 26	Vadose	Cell26-Square115-S-2-3-190724	07/24/2019	1.97	U	0.0302	U	1.97	U	3.97		0.000808	U	0.00177	U	0.00131	U	0.00145	U	2.01	J
Cell 26	Vadose	Cell 26-Square169-S-2-3-190723	07/23/2019	1.99	U	0.0239	U	1.99	U	4.00		0.00059	U	0.00129	U	0.000955	U	0.00106	U	2.05	J
Cell 26	Vadose	Cell26-Square198-S-2-3-190724	07/24/2019	2.07	J	0.0291	U	1.98	U	4.08		0.000702	U	0.00154	U	0.00114	U	0.00126	U	0.805	J
Cell 26	Vadose	Cell 26-Square69-S-2-3-190723	07/23/2019	2.00	U	0.0194	U	2.00	Ū	4.02		0.000424	U	0.000929	U	0.000686	U	0.00076	U	0.531	U

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration for TPH, BTEX, and chloride.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

MS = matrix spike

MSD = matrix spike duplicate

NMAC = New Mexico Administrative Code

ORO = oil range organics

RL = reporting limit

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

B = Compound was found in the blank and sample.

F1 = MS and/or MSD recovery is outside acceptance limits.

F2 = MS/MSD relative percent difference exceeds control limits.

H = Sample was prepped or analyzed beyond the specified holding time.

H3 = Sample was received and analyzed past holding time.

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.

U = Indicates the analyte was analyzed for but not detected.



Table 14 July 2019 Release Response Soil Analytical Results – Metals 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

			Constituent	Ant	imony	Arse	nic	Bari	um	Beryl	lium	Cadı	mium	Chro	omium	Co	pper	lr Ir	on	Le	ead	Mang	anese	Merc	ury	Sele	nium	Si	lver	Thal	llium	Zir	ic
			Method	ε	6020	602	20	60	20	60	20	60	020	6	020	6	020	6	020	60	020	60	20	747	1A	6	020	6	020	60	20	602	20
			Units	m	ıg/kg	mg	kg	mg	/kg	mg	/kg	mç	g/kg	m	g/kg	m	g/kg	m	g/kg	me	g/kg	mç	/kg	mg	kg	m	g/ kg	m	g/kg	mg	J/kg	mg/	kg
		Background Soil (Concentrations			< 5	.0	45	.0			< :	2.0	(6.1					<	5.0		-	< 0.	25	<	5.0	<	5.0			4	-
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result C	Qualifier I	Result	Qualifier	Result	Qualifie	er Result	Qualifie	r Result	Qualifie	Result	Qualifie	r Result	Qualifie	Result	Qualifie	Result	Qualifier	Result	Qualifier	Result	Qualifie	er Result	Qualifie	Result	Qualifier	Result C	Qualifier
Cell 19	Vadose	Cell19-Square132-S-2-3-190723	07/23/2019	0.225	U	2.06		39.2		0.209	J	0.102	J	4.13		2.76	В	3,840		3.81		60.9		0.00352	U	0.251	U	0.116	U	0.269	U	10.1	
Cell 19	Vadose	Cell 19-Square156-S-2-3-190723	07/23/2019	0.223	U	1.70		30.0		0.197	J	0.0817	J	4.21		2.87	В	3,890		3.32		47.5		0.00330	U	0.249	U	0.114	U	0.266	U	7.66	
Cell 19	Vadose	Cell 19-Square184-S-2-3-190723	07/23/2019	0.515	J	3.08		274		0.272		0.153	J	2.60		2.2	В	2,480		1.88	J	24.9		0.00358	U	0.256	U	0.118	U	0.274	U	8.71	
Cell 19	Vadose	Cell19-Square23-S-2-3-1907233	07/23/2019	0.221	U	2.04		42.1		0.338		0.0905	J	5.20		3.16	В	5,390		4.72		83.3		0.00427	J	0.247	U	0.113	U	0.264	U	12.5	
Cell 20	Vadose	Cell20-Square102-S-2-3-190723	07/23/2019	0.356	J	4.32		424		0.0817	J	0.0337	J	1.56		1.39	В	1,340		1.20	J	14.0		0.00321	U	0.249	U	0.114	U	0.266	U	5.19	J
Cell 20	Vadose	Cell20-Square179-S-2-3-190723	07/23/2019	0.519	J	5.58		271		0.0680	J	0.0249	U	1.03		1.71	В	921		0.631	J	7.66		0.00358	U F1	0.251	U	0.116	U	0.269	U	4.34	J
Cell 20	Vadose	Cell20-Square193-S-2-3-190723	07/23/2019	0.227	U	2.81		152		0.152	J	0.0441	J	2.36		2.08	В	2,260		2.65		21.9		0.00352	U	0.254	U	0.117	U	0.272	U	7.08	J
Cell 20	Vadose	Cell20-Square96-S-2-3-190723	07/23/2019	0.225	U	1.48		22.9		0.180	J	0.068	J	3.97		2.26	В	3,620		3.04		43.8		0.00352	U	0.251	U	0.116	U	0.269	U	7.00	
Cell 25	Vadose	Cell25-Square-6-S-2-3-190724	07/24/2019	0.230	U	2.04		35.5	В	0.312		0.0792	J	4.90		2.06		4,750		4.31		30.8		0.00358	U	0.256	U	0.118	U	0.274	U	10.7	
Cell 25	Vadose	Cell25-Square-64-S-2-3-190724	07/24/2019	0.282	J	2.37		125	В	0.257		0.117	J	3.82		2.18		3,910		4.44		76.2		0.00341	U	0.251	U	0.116	U	0.269	U	12.6	
Cell 25	Vadose	Cell25-Square-85-S-2-3-190724	07/24/2019	0.230	U	2.65		39.4	В	0.381		0.114	J	6.35		3.58		6,660		5.33		72.0		0.00346	U	0.256	U	0.118	U	0.274	U	17.1	
Cell 25	Vadose	Cell25-Square-93-S-2-3-190724	07/24/2019	0.485	J F1	2.25		80.2	В	0.230	J	0.11	J	3.27		1.78		3,300		3.40		25.7		0.00341	U	0.259	U	0.119	U	0.277	U	9.73	F1
Cell 26	Vadose	Cell26-Square115-S-2-3-190724	07/24/2019	0.238	J	4.68		475	В	0.119	J	0.0297	J	1.83		1.66		1,700		1.24	J	13.4		0.00346	U	0.256	U	0.118	U	0.274	U	7.03	J
Cell 26	Vadose	Cell 26-Square169-S-2-3-190723	07/23/2019	0.375	J	3.81		291		0.130	J	0.07	J	1.81		1.29	В	1,720		1.58	J	18.4		0.00341	U	0.259	U	0.119	U	0.277	U	6.55	J
Cell 26	Vadose	Cell26-Square198-S-2-3-190724	07/24/2019	0.385	J	4.43		374	В	0.130	J	0.045	J	2.32		1.73		2,180		1.55	J	17.6		0.00346	U F1	0.259	U	0.119	U	0.277	U	8.93	
Cell 26	Vadose	Cell 26-Square69-S-2-3-190723	07/23/2019	0.232	U	2.44		73.1		0.355		0.13	J	5.60		4.78	В	5,690		5.30		106		0.00325	U	0.259	U	0.119	U	0.277	U	15.0	

- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
 2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.

3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

ID = identification

mg/kg = milligrams per kilogram MS = matrix spike

MSD = matrix spike duplicate

NMAC = New Mexico Administrative Code

RL = reporting limit

SDL = sample detection limit

Qualifiers:

B = Compound was found in the blank and sample.

F1 = MS and/or MSD recovery is outside acceptance limits.

J = Result is less than the RL but greater than or equal to the SDL and the concentration is an approximate value.

U = Indicates the analyte was analyzed for but not detected.



Table 15
January 2020 Release Response Soil Analytical Results – TPH, BTEX, and Chloride
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

		Background So	Constituent Method Units oil Concentrations	80 m	DRO 015B ng/kg 	80 m	iRO 115B g/kg 5.00	80	DRO D15B lg/kg 	8	PH ^a 015B g/kg 	Benz 826 mg/ < 0.	0B ′kg	820	uene 60B n/kg 1.05	-		-		30 m	loride 00.0 g/kg 10
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	Cell17-Square 113-S-3-4-200114	01/14/2020	5.67	J	0.59	U	7.27	J	13.53		0.000631	UΗ	0.00138	UH	0.00102	UH	0.00113	UH	28.4	В
Cell 17	Vadose	Cell17-Square 175-S-3-4-200114	01/14/2020	1.70	U	0.585	U	4.98	U	7.265		0.000714	UΗ	0.00156	UH	0.00116	UH	0.00128	UH	2.54	JB
Cell 17	Vadose	Cell17-Square 207-S-3-4-200114	01/14/2020	1.70	U	0.585	U	4.98	U	7.265		0.000692	UΗ	0.00152	UH	0.00112	UH	0.00124	UH	2.30	JB
Cell 17	Vadose	Cell17-Square 45-S-3-4-200114	01/14/2020	1.71	U	0.581	U	4.99	U	7.281		0.000556	UΗ	0.00122	UH	0.0009	UH	0.000997	UH	25.9	JB
Cell 18	Vadose	Cell18-Square 133-S-3-4-200114	01/14/2020	1.71	U	0.591	U	4.99	U	7.291		0.000661	UΗ	0.00145	UH	0.00107	UH	0.00119	UH	2.90	JB
Cell 18	Vadose	Cell18-Square 181-S-3-4-200114	01/14/2020	1.70	U	0.576	U	4.97	U	7.246		0.000662	UΗ	0.00145	UH	0.00107	UH	0.00119	UH	3.89	JB
Cell 18	Vadose	Cell18-Square 83-S-3-4-200114	01/14/2020	7.29	J	0.59	U	4.98	U	12.86		0.000697	UΗ	0.00153	UH	0.00113	UH	0.00125	UH	3.47	JB
Cell 18	Vadose	Cell18-Square 92-S-3-4-200114	01/14/2020	1.71	U	0.591	U	4.99	U	7.291		0.000777	UН	0.0017	UH	0.00126	UH	0.00139	UH	2.01	JB
Cell 19	Vadose	Cell19-Square-105-S-3-4-200115	01/15/2020	1.71	U	0.584	U	4.99	U	7.284		0.0655	Н	0.0017	UH	0.00126	UH	0.00139	UH	3.50	JB
Cell 19	Vadose	Cell19-Square-204-S-3-4-200115	01/15/2020	1.71	U	0.558	U	4.99	U	7.258		0.0496	Н	0.00158	UH	0.00117	UН	0.00129	UH	5.41	В
Cell 19	Vadose	Cell19-Square-82-S-3-4-200115	01/15/2020	1.70	U	0.593	U	4.97	U	7.263		0.0591	Н	0.00191	UH	0.00141	UH	0.00157	UH	8.90	В
Cell 19	Vadose	Cell19-Square-93-S-3-4-200115	01/15/2020	6.58	J	0.561	U	4.98	U	12.121		0.0216	Н	0.00151	UH	0.00111	UH	0.00123	UH	22.9	В

Notes:

- ^a TPH is the sum of the DRO, GRO, and ORO fractions (note that nondetect values are included in the summation at the SDL).
- 1. Nondetect values are reported to the reporting limits (i.e., the SDL) specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration for TPH, BTEX, and chloride.
- 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations:

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = diesel range organics

GRO = gasoline range organics

ID = identification

mg/kg = milligrams per kilogram

MQL = method quantitation limit

NMAC = New Mexico Administrative Code

ORO = oil range organics

SDL = sample detection limit

TPH = total petroleum hydrocarbons

Qualifiers:

- B = Compound was found in the blank and sample.
- 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.



Table 16 January 2020 Release Response Soil Analytical Results - Metals 2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico

			Constituent Method Units	60	mony 10B g/kg	60	enic 10B g/kg	60	rium 10B g/kg	Beryl 601 mg.	0B	Cadn 601 mg	0B	601	mium 10B _I /kg	60	pper 10B g/kg	60	ron)10B g/kg	60	ead 10B _J /kg	Mang 601 mg	0B	Merc 747 mg.		Seler 601 mg		60	lver 10B g/kg	601	llium 10B ı/kg		nc 10B _J /kg
		Background Soil (Concentrations		-	<	5.0	4	5.0	-		< 2	.0	6	.1					<	5.0		-	< 0.	.25	< !	5.0	<	5.0	i i			
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie	r Result (Qualifie	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie	r Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Vadose	Cell17-Square 113-S-3-4-200114	01/14/2020	0.667	J	3.89		312		0.164	J	0.138	J	2.49		1.75		2,240		1.14	J	25.5		0.00388	U	0.274	U	0.126	U	1.14	J	9.00	
Cell 17	Vadose	Cell17-Square 175-S-3-4-200114	01/14/2020	0.511	J	4.00		281		0.0852	J	0.0532	J	1.45		1.62		1,170		0.112	U	11.8		0.00373	U	0.276	U	0.127	U	0.295	U	6.63	J
Cell 17	Vadose	Cell17-Square 207-S-3-4-200114	01/14/2020	0.396	J	3.90		191		0.185	J	0.141	J	2.82		2.27		2,580		1.36	J	37.5		0.00384	U	0.281	U	0.129	U	0.301	U	11.9	
Cell 17	Vadose	Cell17-Square45-S-3-4-200114	01/14/2020	0.320	J	6.15		469		0.109	J	0.0922	J	2.09		2.48		1,730		0.114	U	14.1		0.00387	U	0.281	U	0.129	U	2.220		36.2	
Cell 18	Vadose	Cell18-Square 133-S-3-4-200114	01/14/2020	0.404	J	4.97		212		0.146	J	0.107	J	2.28		1.42		2,000		0.813	J	17.9		0.00372	U	0.29	U	0.133	U	2.580		9.78	
Cell 18	Vadose	Cell18-Square 181-S-3-4-200114	01/14/2020	0.481	J	4.45		150		0.134	J	0.101	J	2.36		2.18		2,020		0.727	J	19.7		0.00379	U	0.29	U	0.133	U	0.310	U	8.64	
Cell 18	Vadose	Cell18-Square 83-S-3-4-200114	01/14/2020	0.253	U	5.18		350		0.131	J	0.0764	J	2.26		1.96		2,010		1.04	J	20.5		0.00364	U	0.283	U	0.130	U	0.302	U	11.7	
Cell 18	Vadose	Cell18-Square 92-S-3-4-200114	01/14/2020	0.641	J	5.53		274		0.104	J	0.0602	J	1.57		1.51		1,380		0.115	U	13.9		0.00382	U	0.284	U	0.130	U	0.303	U	7.72	J
Cell 19	Vadose	Cell19-Square-105-S-3-4-200115	01/15/2020	0.658	J	2.66		116		0.137	J	0.104	J	2.29		1.13		2,070		1.73		15.2		0.00913	J	0.337	U	0.155	U	0.361	U	9.73	
Cell 19	Vadose	Cell19-Square-204-S-3-4-200115	01/15/2020	0.483	J	4.96		308		0.139	J	0.115	J	1.92		1.56		1,710		1.57	J	19.4		0.00438	U	0.313	U	0.144	U	0.335	U	41.2	
Cell 19	Vadose	Cell19-Square-82-S-3-4-200115	01/15/2020	0.323	U	4.78		328		0.167	J	0.0836	J	1.96		1.29		1,800		2.12	J	14.3		0.00492	U	0.361	U	0.166	U	0.386	U	10.0	J
Cell 19	Vadose	Cell19-Square-93-S-3-4-200115	01/15/2020	0.638	J	5.36		350		0.124	J	0.0887	J	1.86		1.53		1,630		2.45	J	15.5		0.00392	U	0.306	U	0.141	U	1.310	J	10.6	

Notes:
1. Nondetect values are reported to the SDL specified in the laboratory reports.

2. In accordance with 19.15.36.15(E)(2) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.

3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and Abbreviations: -- = not applicable

ID = identification

mg/kg = milligrams per kilogram

MQL = method quantitation limit

NMAC = New Mexico Administrative Code

SDL = practical quantitation limit

Qualifiers:

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.



Table 18
Five-Year Vadose Zone Soil Analytical Results
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

			Constituent Method		mony 10B	Arsen 6010I		arium 6010B	Beryl 601		Cadn 601	nium I0B		omium 010B		pper 10B		on 10B		ead 10B	Mang 601	anese 10B	Mero 747			nium 10B	Silv 601		Thalli 6010		Zinc 6010I	
			Wethod Units		10B g/kg	mg/k		ng/kg	mg/		mg			g/kg		J/kg		ив g/kg		g/kg	mg		mg			ivis j/kg	mg.		mg/k		mg/k	
		Background Soil	1.			< 5.0		45.0	-		< 2			6.1				-	<	5.0	-		< 0		<	5.0	< 5	5.0	-			
Cell 1	Zone Vadose	Sample ID Cell1-Square35-S-2-3-191204	12/04/2019	Result 0.283	Qualifier Re	sult Qu .62	alifier Resul	t Qualifier	Result 0.201	Qualifier	0.104	Qualifier J	Result 4.14	Qualifier	Result 2.61	Qualifier	3,640	Qualifier	Result 3.09	Qualifier	Result (Qualifier	0.0146	Qualifier J B	0.316	Qualifier U	0.145		0.338	Qualifier U	Result 9.46	Qualifier
Cell 1	Vadose	Cell1-Square10-S-2-3-191204	12/04/2019	0.307		.24	60.9		0.324	J	0.104	J	5.58		4.98	-	5,290		4.19		87.6		0.0218	В	0.342	U	0.143		0.366	Ü	14.5	-
Cell 1	Vadose	Cell1-Square88-S-2-3-191204	12/04/2019	0.288		.66	41.4		0.291	J	0.124	J	5.51		3.24		5,070		4.08		74.5		0.0042	U	0.321	U	0.148		0.343	U	12.5	
Cell 1	Vadose	Cell1-Square155-S-2-3-191204	12/04/2019	0.235		.51	29.4		0.187	J	0.086	J	4.32		2.41		3,510		3.23		52.8		0.00581	J B	0.262	U	0.120		0.280	U	9.28	
Cell 2 Cell 2	Vadose Vadose	Cell2-Square147-S-2-3-191205 Cell2-Square10-S-2-3-191205	12/05/2019 12/05/2019	0.3		.20	55.2 35.0		0.337	.l	0.149	J	6.68 4.79		4.23 2.74		5,990 3,960		4.80 2.95		104 56.2		0.0154	.l	0.335 0.345	U	0.154	U	0.359 1.64	U J	15.6 9.77	
Cell 2	Vadose	Cell2-Square39-S-2-3-191205	12/05/2019	0.224		.53	38.1		0.198	J	0.102	J	4.90		3.07		3,890		3.27		56.0		0.00548	J	0.250	U	0.115	_	0.469	J	10.9	
Cell 2	Vadose	Cell2-Square64-S-2-3-191205	12/05/2019	0.263		.01	J 27.4		0.113	J	0.0623	J	3.14		1.82		2,360		2.01		29.3		0.00374	U	0.293	U	0.135		0.314	U	5.52	
Cell 3	Vadose	Cell3-Square130-S-2-3-191205	12/05/2019	0.228		.89	27.0		0.206	J	0.0932	J	4.88		2.08		4,000		3.46		46.0	В	0.00455	J	0.254	U	0.117	U	1.16	J	9.28	
Cell 3 Cell 3	Vadose Vadose	Cell3-Square153-S-2-3-191205 Cell3-Square77-S-2-3-191205	12/05/2019 12/05/2019	0.224		.85 .29	23.2 33.7		0.217	J J	0.0772	.I	5.09 7.55		1.95 3.04		4,330 6,340		3.35 4.80		45.6 56.5	B 	0.00409	 В	0.250 0.341	U	0.115		0.267	U	9.63 12.7	
Cell 3	Vadose	Cell3-Square120-S-2-3-191205	12/05/2019	0.248		.39	19.3		0.171	J	0.0803	J	4.45		1.93		3,670		2.79		34.9		0.0468	В	0.277	U	0.127		0.296	U	7.60	-
Cell 4	Vadose	Cell4-Square129-S-2-3-191205	12/05/2019	0.278		.39	27.9		0.311		0.108	J	6.33		2.22		5,550		3.93		48.2	В	0.00437	U	0.310	U	0.143		0.332	U	13.4	
Cell 4	Vadose	Cell4-Square114-S-2-3-191205	12/05/2019	0.291		.04	44.1		0.232	J	0.107	J	5.58		2.34		4,730		3.78		49.1	В	0.00797	J	0.325	U	0.149		0.347	U	11.2	
Cell 4	Vadose Vadose	Cell4-Square201-S-2-3-191205 Cell4-Square37-S-2-3-191205	12/05/2019 12/05/2019	0.277		.24	32.0 24.8		0.256 0.213	J	0.101	J	5.72 5.17		2.13		4,990 4,320		3.72		50.2 53.4	B B	0.0076	J	0.309	U	0.142		0.330	U	11.7 12.0	
Cell 5	Vadose	Cell5-Square209-S-2-3-191205	12/05/2019	0.288		.35	128		0.213	J	0.0691	J	5.36		4.07		5,010		3.67		72.6		0.00463	U	0.00449		0.118		0.274	U	14.7	В
Cell 5	Vadose	Cell5-Square188-S-2-3-191205	12/05/2019	0.367		.68	183		0.271	J	0.169	J	4.69		4.39		4,470		4.09		70.9		0.00444	U	0.00444		0.143		0.999	JB	14.7	В
Cell 5	Vadose	Cell5-Square120-S-2-3-191205	12/05/2019	0.292		.35	78.4		0.252	J	0.183	J	4.36		3.65		4,260		3.87		66.8		0.00460	J	0.0046		0.150		0.624	JB	12.7	В
Cell 5	Vadose	Cell5-Square13-S-2-3-191205	12/05/2019	0.276		.64	47.5		0.226	J	0.107	J	4.29		3.12		4,100		3.14		63.5		0.00428	U	0.00428		0.142		0.330	U	10.5	В
Cell 6 Cell 6	Vadose Vadose	Cell6-Square206-S-2-3-191205 Cell6-Square202-S-2-3-191205	12/05/2019 12/05/2019	0.245		.46	32.7 J 28.1		0.248 0.189	J J	0.106	J .l	4.91 4.34		2.94		4,620 3.840		3.55 2.87		70.3 52.3		0.00366	U	0.00366		0.126		0.292	J B	11.2 8.83	B
Cell 6	Vadose	Cell6-Square110-S-2-3-191205	12/05/2019	0.292		.66	41.8		0.264	J	0.104	J	5.03		2.79	-	4,840		3.53		63.4	-	0.00758	U	0.00758	J	0.15		0.348	U	12.1	В
Cell 6	Vadose	Cell6-Square24-S-2-3-191205	12/05/2019	0.283	U 2	.02	124		0.183	J	0.0977	J	3.66		2.18		3,350		2.67		40.7		0.00446	U	0.00446	U	0.145	U	0.338	U	8.63	В
Cell 7	Vadose	Cell7-Square22-S-2-3-191205	12/05/2019	0.285		.48	44.5		0.166	J	0.0799	J	4.20		2.00		3,340		3.01		41.8	В	0.0201		0.318		0.146	U	1.41	J	8.60	
Cell 7 Cell 7	Vadose	Cell7-Square58-S-2-3-191205 Cell7-Square34-S-2-3-191205	12/05/2019	0.258		.53 .71	29.7 33.1		0.25 0.282	J	0.111	J	4.94 5.6		2.72		4,680 5.100		3.74		68.7		0.00418	J	0.00418	J	0.132		0.308	U	11.5 11.9	В
Cell 7	Vadose Vadose	Cell7-Square34-5-2-3-191205	12/05/2019 12/05/2019	0.257	-	.42	33.1 23.6		0.262	 J	0.111	J	3.67		1.56		3,430		2.59		65.0 32.5		0.00704	U	0.00704	-	0.132		0.358	U	8.27	В
Cell 8	Vadose	Cell8-Square122-S-2-3-191205	12/05/2019	0.301		.07	34.7		0.214	J	0.104	J	5.39		2.42		4,340		5.09		53.5	В	0.00626	J	0.336	U	0.154		0.359	U	10.9	
Cell 8	Vadose	Cell8-Square161-S-2-3-191205	12/05/2019	0.297		.11	28.1		0.268	J	0.109	J	5.76		2.96		5,070		3.74		60.0	В	0.0104	J	0.297	U	0.152		0.354	U	11.3	
Cell 8	Vadose	Cell8-Square90-S-2-3-191205	12/05/2019	0.273		.68	36.2		0.212	J	0.0825	J	4.66		2.32		3,840		3.46		42.3	В	0.0205	U	0.305		0.140		0.326	U	9.66	
Cell 8 Cell 9	Vadose Vadose	Cell8-Square170-S-2-3-191205 Cell9-Square134-S-2-3-191203	12/05/2019 12/03/2019	0.298		.08	45.1 45.1		0.199	J	0.103	J	4.35 5.33		1.95 3.76		3,670 4.400		3.18		52.8 68.1	В	0.00445	U JB	0.333	U	0.153		0.356	U	8.98 12.6	
Cell 9	Vadose	Cell9-Square118-S-2-3-191203	12/03/2019	0.296		.15	J 56.2		0.179	J	0.102	J	3.54		2.5		3,210		3.01		50.9		0.00728	JB	0.331	_	0.152		0.421	JB	10.3	
Cell 9	Vadose	Cell9-Square185-S-2-3-191203	12/03/2019	0.303	U 1	.50	52.8	-	0.203	J	0.111	J	4.06		2.51	-	3,790		3.24		48.4	-	0.00455	U	0.339		0.156	U	0.536	JB	10.2	
Cell 9	Vadose	Cell9-Square189-S-2-3-191203	12/03/2019	0.315		.86	53.4		0.319	J	0.136	J	5.54		3.58		5,350		5.63		85.2		0.0732	B	0.352		0.162		0.377	U	13.1	
Cell 10 Cell 10	Vadose Vadose	Cell10-Square149-S-2-3-191205 Cell10-Square12-S-2-3-191205	12/05/2019 12/05/2019	0.297		.17 .94	49.3 56.1		0.326 0.223		0.141	J	6.80 5.40		4.46 4.61		5,910 4.410		4.63 3.85		91.2 68.9		0.0146	J J B	0.332	U	0.152		0.355	U	13.6 12.3	
Cell 10	Vadose	Cell10-Square84-S-2-3-191205	12/05/2019	0.246		.56	41.3		0.212	J	0.122	J	5.07		3.64		4,240		3.52		67.1		0.0353	В	0.331	U	0.126		0.294	U	10.7	
Cell 10	Vadose	Cell10-Square163-S-2-3-191205	12/05/2019	0.282		.50	33.6		0.213	J	0.103	J	4.79		3.33		4,110		3.15		56.3		0.0762	В	0.315	U	0.145		0.337	U	9.56	
Cell 11	Vadose	Cell11-Square134-S-2-3-191206	12/06/2019	0.258		.27	53.0		0.284	В	0.139	J	6.15		3.55		5,210		4.59		71.0		0.0233		0.0233		0.133		0.401	J	14.7	
Cell 11	Vadose	Cell11-Square93-S-2-3-191206 Cell11-Square90-S-2-3-191206	12/06/2019	0.304		.78	33.8 45.5		0.229	J B J B	0.111	J	5.46 5.35		2.84 3.06		4,450 4.330		3.42		56.8 57.7		0.00863	J	0.00863	J	0.156	U	1.63 0.508	J	9.98 11.4	
Cell 11 Cell 11	Vadose Vadose	Cell11-Square65-S-2-3-191206	12/06/2019 12/06/2019	0.291		.81 .66	45.5 41.0		0.22	JB	0.113	J	5.57		3.28		4,950		3.41		73.6		0.00736	.J	0.00606	-	0.149		0.367	U	11.4	
Cell 12	Vadose	Cell12-Square84-S-2-3-191206	12/06/2019	0.315		.94	100		0.163	JB	0.102	J	4.08		2.16		3,350		2.90		37.4		0.00657	J	0.00657	J	0.161		0.376	U	8.51	
Cell 12	Vadose	Cell12-Square37-S-2-3-191206	12/06/2019	0.299		.45	36.2		0.36	В	0.142	J	7.62		3.37		6,910		4.93		67.5		0.00965	J	0.00965	J	0.153		0.357	U	14.4	
Cell 12 Cell 12	Vadose Vadose	Cell12-Square14-S-2-3-191206 Cell12-Square27-S-2-3-191206	12/06/2019 12/06/2019	0.232 0.265		.69 .68	31.3 30.5		0.22 0.211	J B J B	0.0998	J J	5.13 5.06		2.44		4,360 4,220		3.65		51.9 45.1		0.00680	J	0.0068	J	0.119		0.277	U	9.14 9.24	
Cell 13	Vadose	Cell13-Square45-S-2-3-191203	12/03/2019			00	48.2		0.321	J	0.097	J	5.46		3.92		5,140		4.27				0.00505				0.170		0.997	JB	13.3	
Cell 13	Vadose	Cell13-Square190-S-2-3-191203	12/03/2019		J 2	.33	70.9		0.301	J	0.147	J	4.93		3.68		4,760		4.19		73.5		0.00482	U	0.312		0.159		0.371	U	12.6	В
Cell 13	Vadose	Cell13-Square105-S-2-3-191203	12/03/2019			.73	58.3		0.236	J	0.118	J	4.28		2.81		4,060		3.47		56.9		0.00402	U	0.347		0.141		0.327	U	12.8	В
Cell 13 Cell 14	Vadose	Cell13-Square186-S-2-3-191203 Cell14-Square46-S-2-3-191206	12/03/2019 12/06/2019	0.338		.14 .88	68.5 66.4		0.278 0.455	J	0.121 0.145	J	4.47 8.38		2.98 5.42		4,300 7,490		3.52 6.10		56.7 136	 B	0.00398	U	0.306		0.144		0.929	J B U	11.9 21.2	
Cell 14	Vadose Vadose	Cell14-Square49-S-2-3-191206 Cell14-Square49-S-2-3-191206	12/06/2019			.09	66.4 43.3		0.455		0.145	J	5.80		3.80		4,680		4.17		77.5	В	0.0300		0.0691		0.127		0.297	U	13.8	
Cell 14	Vadose	Cell14-Square20-S-2-3-191206	12/06/2019			.18	46.5		0.289	J	0.128	J	6.38		4.27		5,370		4.77		93.5	В	0.0207		0.0207		0.153		0.356	U	16.3	
Cell 14	Vadose	Cell14-Square19-S-2-3-191206	12/06/2019	0.246	U 2	.66	70.7		0.323		0.143	J	6.4		4.07		5,580		5.15		95.4	В	0.0257		0.0257		0.126	U	0.294	U	15.8	
Cell 15	Vadose	Cell15-Square152-S-2-3-191206	12/06/2019			.59	23.0		0.194	J	0.0815	J	5.04		2.56		3,920		3.19		52.7	В	0.0527		0.0527		0.149		0.347	U	9.07	
Cell 15 Cell 15	Vadose Vadose	Cell15-Square75-S-2-3-191206 Cell15-Square145-S-2-3-191206	12/06/2019 12/06/2019			.72 .81	33.3 33.5		0.234 0.208	J J	0.0949	J	5.26 5.07		3.09 3.24		4,220 4,040		3.63		65.4 60.6	B B	0.0278 0.0188		0.0278		0.151		0.351	U	10.8 11.3	
Cell 15	Vadose	Cell15-Square21-S-2-3-191206	12/06/2019	0.248		.28	J 27.4		0.208	J	0.0909	J	4.30		2.69		3,340		2.69		56.8	В	0.0188	J	0.0188		0.127		0.290	U	10.9	
Cell 16	Vadose	Cell16-Square87-S-2-3-191206	12/06/2019	0.318	U 1	.81	30.5		0.281	JВ	0.144	J	5.32		3.10		4,730		4.68		66.4		0.00474	Ū	0.00474	U	0.163	U	1.27	J	11.7	
Cell 16	Vadose	Cell16-Square94-S-2-3-191206	12/06/2019			.45	20.6		0.195	JB	0.0899	J	4.54		2.28		3,770		3.04		42.9		0.00340	U	0.0034		0.119		0.345	J	8.18	
Cell 16	Vadose	Cell16-Square134-S-2-3-191206	12/06/2019			.58	25.2 21.1		0.241	J B J	0.0944	J	5.27		2.43 2.45		4,550 3,690		3.85		50.1 44.7	 B	0.00358	J	0.00358		0.125	U	0.29	U	9.69	
Cell 16 Cell 17	Vadose Vadose	Cell16-Square12-S-2-3-191206 Cell17-Square204-S-2-3-191202	12/06/2019 12/02/2019			.51 .88	21.1 65.7		0.187 0.466	J	0.0837	J	4.63 8.27		5.60		7,730		3.20 6.83		132		0.0229	 J	0.0229		0.153		0.357	U	10.1 20.9	
Cell 17	Vadose	Cell17-Square157-S-2-3-191202	12/02/2019			.45	58.1		0.423		0.146	J	7.34		4.21		6,830		5.39		76.9		0.00819	J	0.292		0.134		0.312	U	17.1	-
Cell 17	Vadose	Cell17-Square111-S-2-3-191202	12/02/2019	0.287	U 1	.92	41.2		0.272	J	0.105	J	4.97		2.85	-	4,480		3.92		58.2		0.00775	J	0.320		0.147	U	0.342	U	11.3	
Cell 17	Vadose	Cell17-Square14-S-2-3-191202	12/02/2019	0.238	U 3	.03	164		0.324		0.205	J	5.81		4.37		5,540		9.5		152		0.0109	J	0.266	U	0.122	U	0.285	U	19.0	



Table 18
Five-Year Vadose Zone Soil Analytical Results
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

			Constituent	Antin	nony	Aı	senic	Bai	rium	Beryl	lium	Cadı	nium	Chr	omium	Со	per	Irc	n	L	ead	Mang	janese	Merci	ıry	Seler	ium	S	ilver	Tha	llium	Zino	С
			Method	601	0B	6	010B	60	10B	601	0B	60 ⁻	10B	6	010B	60	10B	601	0B	60	10B	60	10B	7471	A	601	0B	60	010B	60	10B	6010	В
			Units	mg	/kg	n	ıg/kg	mg	g/kg	mg/	kg	mg	/kg	m	ıg/kg	mg	/kg	mg	/kg	m	g/kg	mg	g/kg	mg/l	g	mg	kg	m	ıg/kg	mg	g/kg	mg/k	kg
		Background Soil	Concentrations	-	-	•	< 5.0	4	5.0	-		< 2	2.0		6.1		-	-	-	<	5.0			< 0.2	5	< 5	.0	<	< 5.0				
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	r Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifie	r Result	Qualifie	r Result	Qualifie	Result C	Qualifier	Result	Qualifier	Result	Qualifier	Result C	ualifier	Result	Qualifie	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 18	Vadose	Cell18-Square179-S-2-3-191202	12/02/2019	0.289	U	3.45		253		0.212	J	0.143	J	4.01		3.33		3,480		6.07		44.5		0.0124	J	0.322	U	0.148	U	1.79	J	13.9	
Cell 18	Vadose	Cell18-Square118-S-2-3-191202	12/02/2019	0.287	U	2.83		97.1		0.396		0.179	J	6.75		4.66		6,350		6.52		93.1		0.0142	J	0.320	U	0.147	U	0.343	U	20.3	
Cell 18	Vadose	Cell18-Square176-S-2-3-191202	12/02/2019	0.272	U	2.12		49.5		0.252	J	0.123	J	4.84		3.46		4,600		3.93		65.1		0.0103	J	0.304	U	0.14	U	0.325	U	12.3	
Cell 18	Vadose	Cell18-Square22-S-2-3-191202	12/02/2019	0.239	U	2.91		166		0.196	J	0.108	J	3.89		2.81		3,650		3.44		46.3		0.00637	J	0.267	U	0.123	U	0.285	U	11.3	
Cell 19	Vadose	Cell19-Square83-S-2-3-191202	12/02/2019	0.244	U	2.13		46.5		0.231	J	0.105	J	4.72		2.82		4,350		3.63		58.1		0.0073	J	0.272	U	0.125	U	0.291	U	11.1	
Cell 19	Vadose	Cell19-Square29-S-2-3-191202	12/02/2019	0.238	U	2.32		52.9		0.298		0.113	J	5.38		2.75		5,560		4.00		60.8		0.00787	J	0.266	U	0.122	U	0.285	U	13.1	
Cell 19	Vadose	Cell19-Square70-S-2-3-191202	12/02/2019	0.236	U	1.84		43.6		0.249	J	0.107	J	5.00		2.82		4,890		5.1		58.9		0.00754	J	0.264	U	0.121	U	0.282	U	11.6	
Cell 19	Vadose	Cell19-Square180-S-2-3-191202	12/02/2019	0.246	U	1.96		81.3		0.228	J	0.127	J	5.23		3.55		4,510		5.59		53.5	В	0.00473	J	0.275	U	0.126	U	0.297	JB	12.9	
Cell 20	Vadose	Cell20-Square112-S-2-3-191203	12/03/2019	0.268	U	2.09		63.0		0.225	J	0.110	J	4.94		2.26		4,380		3.58		43.9		0.0041	U	0.299	U	0.138	U	0.32	U	11.6	
Cell 20	Vadose	Cell20-Square42-S-2-3-191202	12/02/2019	0.277	U	1.53		52.0		0.179	J	0.131	J	4.5		2.67		3,870		6.09		51.5	В	0.00391	U	0.309	U	0.142	U	0.331	U	10.2	
Cell 20	Vadose	Cell20-Square20-S-2-3-191202	12/02/2019	0.284	U	2.08		192		0.189	J	0.141	J	4.14		2.86		3,600		7.00		49.3	В	0.00445	U	0.317	U	0.145	U	0.339	U	12.5	
Cell 20	Vadose	Cell20-Square88-S-2-3-191202	12/02/2019	0.263	U	1.34		29.4		0.182	J	0.114	J	4.47		2.21		3,800		5.62		45.7	В	0.00492	J	0.294	U	0.135	U	0.315	U	9.28	
Cell 21	Vadose	Cell21-Square107-S-2-3-191203	12/03/2019	0.245	U	3.22		89.4		0.291		0.222	J	5.61		6.02		5,210		13.3		57.4		0.0119	J	0.274	U	0.126	U	0.293	U	27.0	
Cell 21	Vadose	Cell21-Square48-S-2-3-191203	12/03/2019	0.246	U	2.27		44.3		0.254	J	0.148	J	5.3		3.85		4,550		4.88		61.9		0.115	В	0.275	U	0.126	U	0.604	JB	14.2	В
Cell 21	Vadose	Cell21-Square169-S-2-3-191203	12/03/2019	0.303	U	3.92		336		0.196	J	0.137	J	3.73		4.33		3,340		7.97		41.4		0.00435	U	0.338	U	0.155	U	1.43	JB	15.3	В
Cell 21	Vadose	Cell21-Square204-S-2-3-191203	12/03/2019	0.27	U	2.33		81.3		0.314		0.163	J	5.36		3.92		5,110		4.64		78.1		0.00392	U	0.301	U	0.138	U	0.322	U	16.9	В
Cell 22	Vadose	Cell22-Square39-S-2-3-191203	12/03/2019	0.238	U	2.33		264		0.292		0.128	J	4.87		3.01		4,660		4.10		59.9		0.00361	U	0.265	U	0.122	U	0.284	U	15.3	
Cell 22	Vadose	Cell22-Square48-S-2-3-191217	12/17/2019	0.314	J	2.77		51.9		0.424		0.175	J	7.01		4.88		6,950		5.77		115		0.00690	J	0.0069	J	0.119	U	0.699	J	19.3	
Cell 22	Vadose	Cell22-Square157-S-2-3-191217	12/17/2019	0.403	J	2.34		66.2		0.294		0.129	J	5.92		3.63		5,100		4.35		71.4		0.00404	J	0.00404	J	0.118	U	1.05	J	13.3	
Cell 22	Vadose	Cell22-Square190-S-2-3-191217	12/17/2019	0.231	U	1.96		42.1		0.199	J	0.105	J	4.37		2.85		4,030		3.49		55.9		0.00332	U	0.00332	U	0.119	U	0.276	U	10.7	
Cell 23	Vadose	Cell23-Square208-S-2-3-191217	12/17/2019	0.238	U	2.22		41.8		0.247	J	0.103	J	5.15		3.15		4,650		3.93		62.8		0.00369	U	0.00369	U	0.122	U	0.285	U	11.0	
Cell 23	Vadose	Cell23-Square132-S-2-3-191217	12/17/2019	0.226	U	2.19		88.8		0.239	J	0.107	J	4.7		2.50		4,260		4.23		53.0		0.00503	J	0.00503	J	0.116	U	0.27	U	11.9	
Cell 23	Vadose	Cell23-Square111-S-2-3-191217	12/17/2019	0.295	U	2.53		115		0.254	J	0.146	J	5.86		2.81		5,380		4.15		59.2		0.00457	U	0.00457	U	0.151	U	0.352	U	13.4	
Cell 23	Vadose	Cell23-Square87-S-2-3-191217	12/17/2019	0.404	J	4.16		91.6		0.358		0.159	J	7.18		4.05		7,420		5.22		60.5		0.00428	U	0.00428	U	0.135	U	0.315	U	32.6	
Cell 24	Vadose	Cell24-Square168-S-2-3-191217	12/17/2019	0.257	U	2.21		148		0.233	J	0.0998	J	4.15		1.75		3,640		3.02		30.4		0.00365	U	0.00365	U	0.132	U	0.307	U	11.3	
Cell 24	Vadose	Cell24-Square24-S-2-3-191217	12/17/2019	0.48	J	2.71		159		0.302		0.124	J	5.05		2.47		4,760		3.89		45.3		0.00406	J	0.00406	J	0.141	U	0.328	U	12	
Cell 24	Vadose	Cell24-Square44-S-2-3-191217	12/17/2019	0.412	J	2.97		147		0.327		0.106	J	5.33		2.70		4,960		4.04		54.2		0.0120	J	0.012	J	0.126	U	0.292	U	12.2	
Cell 24	Vadose	Cell24-Square178-S-2-3-191217	12/17/2019	0.295	J	2.24		64.6		0.236	J	0.124	J	4.99		2.99		4,470		3.71		56.4		0.00442	J	0.00442	J	0.14	U	0.327	U	11.0	
Cell 25	Vadose	Cell25-Square108-S-2-3-191203	12/03/2019	0.243	U	2.63		46.5		0.357		0.142	J	6.21		3.71		6,270		5.89		93.8		0.0111	J	0.272	U	0.125	U	0.291	U	15.0	
Cell 25	Vadose	Cell25-Square199-S-2-3-191203	12/03/2019	0.295	U	3.04		73.1		0.470		0.184	J	7.35		4.05		7,340		5.48		106		0.071	В	0.329	U	0.151	U	0.352	U	16.8	В
Cell 25	Vadose	Cell25-Square181-S-2-3-191203	12/03/2019	0.259	U	2.73		50.7		0.452		0.145	J	7.36		3.49		7,600		5.33		77.4		0.0714	В	0.289	U	0.133	U	0.309	U	16.8	В
Cell 25	Vadose	Cell25-Square207-S-2-3-191203	12/03/2019	0.288	U	2.75		49.3		0.441		0.130	J	7.31		2.85		7,460		4.61		63.0		0.00454	U	0.321	U	0.148	U	0.344	U	16.4	В
Cell 26	Vadose	Cell26-Square207-S-2-3-191203	12/03/2019	0.271	U	2.91		401		0.240	J	0.135	J	4.12		3.45	-	4,070		3.24		57.1		0.0079	J	0.303	U	0.139	U	1.13	J	13.1	
Cell 26	Vadose	Cell26-Square181-S-2-3-191203	12/03/2019	0.299	U	2.64		139		0.193	J	0.148	J	3.35		2.53		3,500		3.40		47.3		0.00467	U	0.334	U	0.153	U	0.357	U	12.3	В
Cell 26	Vadose	Cell26-Square199-S-2-3-191203	12/03/2019	0.3	U	1.84		45.0		0.259	J	0.136	J	4.99		3.73		4,700		3.79		77.9		0.00433	U	0.335	U	0.154	U	0.358	U	12.8	В
Cell 26	Vadose	Cell26-Square108-S-2-3-191203	12/03/2019	0.309	U	3.67		520	-	0.0998	J	0.0799	J	1.81		1.70	-	1,490		1.66	J	15.9		0.0062	JB	0.345	U	0.158	U	0.369	U	5.72	JB

- 1. Nondetect values are reported to the SDL specified in the laboratory reports.
- 2. In accordance with 19.15.36.15(E)(3) NMAC, vadose zone analytical results are compared to the higher of the SDL or the background soil concentration.

 3. Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and ABBreviations: -- = not applicable

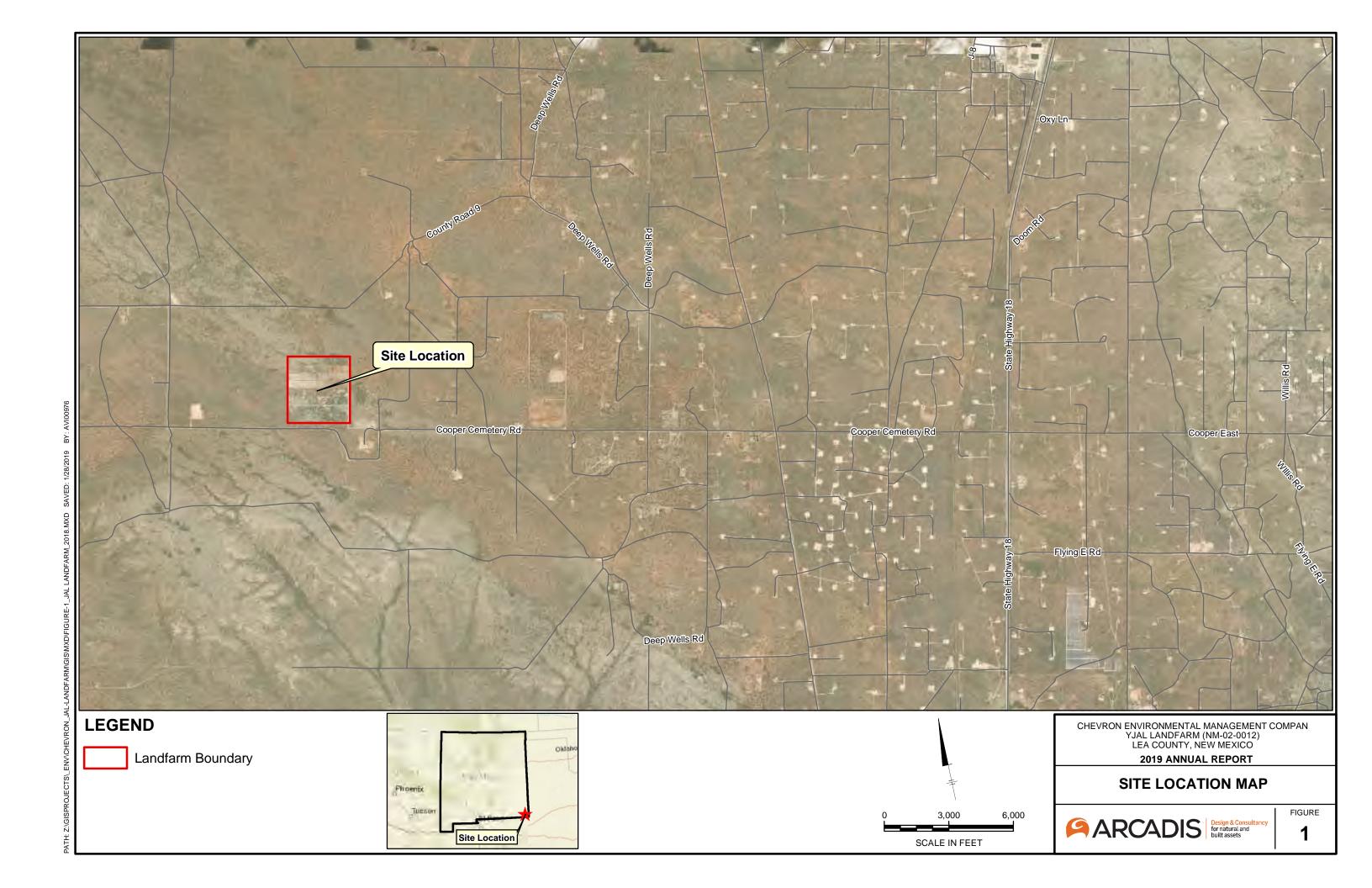
ID = identification

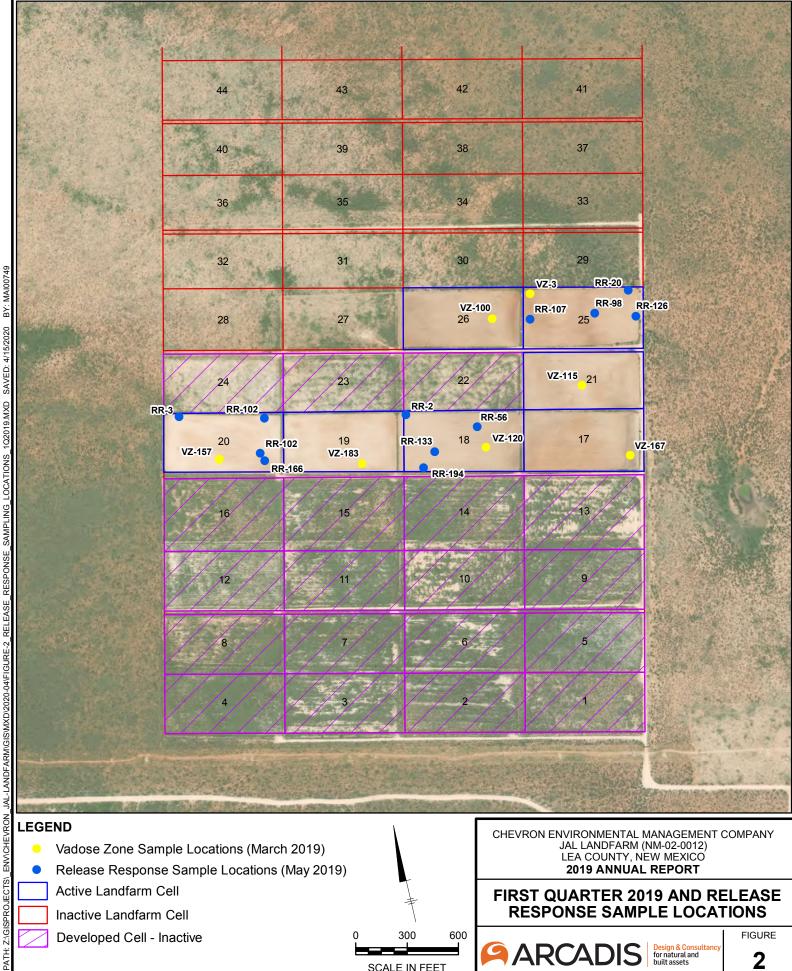
mg/kg = milligrams per kilogram
NMAC = New Mexico Administrative Code

SDL = sample detection limit

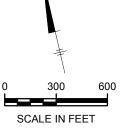
- B = The compound was found in the blank and sample.
- J = Result is less than the MQL But greater than or equal to the SDL and the concentration is an estimated value.
- U = Analyte was not detected at or above the SDL.

FIGURES





- Release Response Sample Locations (May 2019)
- Active Landfarm Cell
- Inactive Landfarm Cell
 - Developed Cell Inactive



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

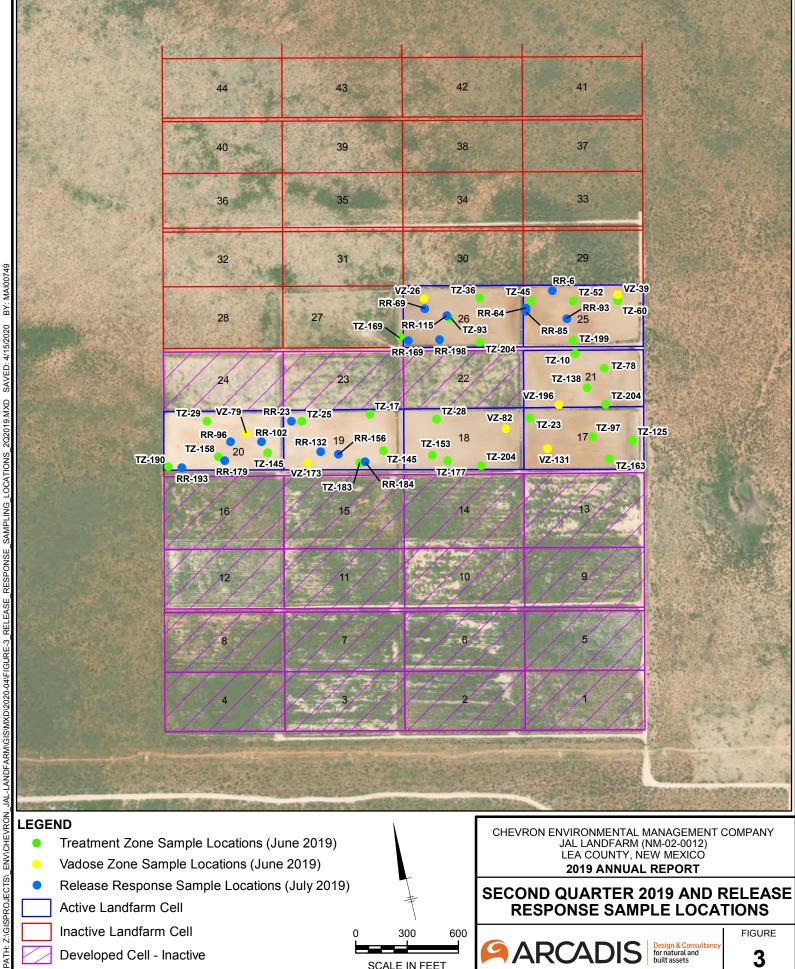
2019 ANNUAL REPORT

FIRST QUARTER 2019 AND RELEASE RESPONSE SAMPLE LOCATIONS



FIGURE

2



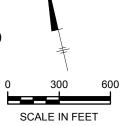
Vadose Zone Sample Locations (June 2019)

Release Response Sample Locations (July 2019)

Active Landfarm Cell

Inactive Landfarm Cell

Developed Cell - Inactive



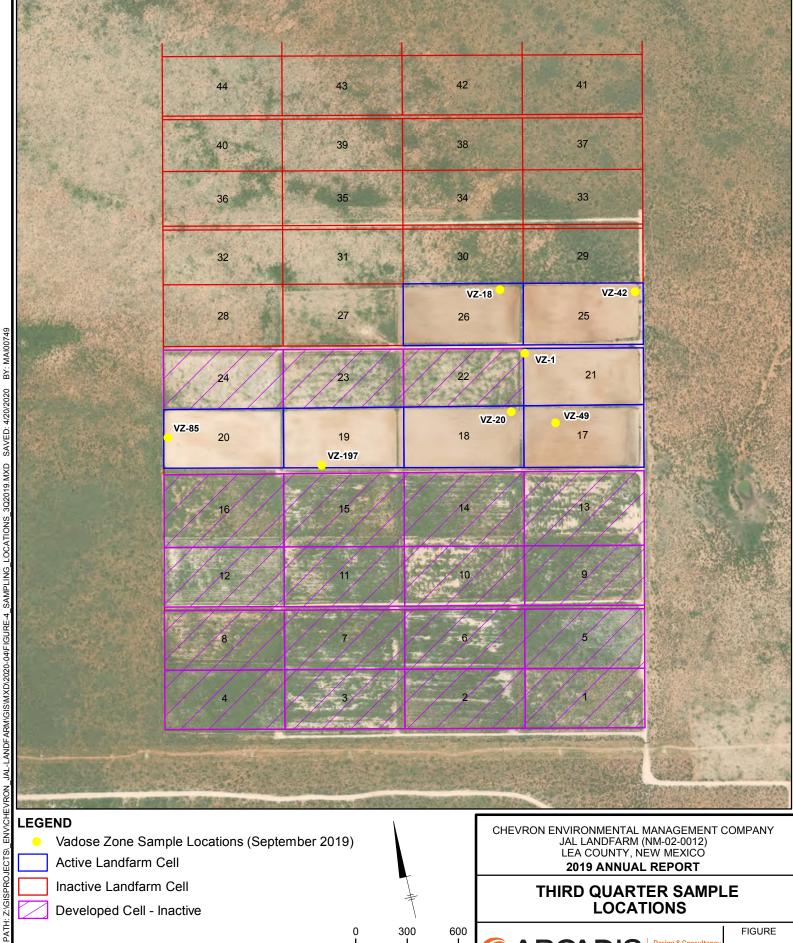
2019 ANNUAL REPORT

SECOND QUARTER 2019 AND RELEASE RESPONSE SAMPLE LOCATIONS



FIGURE

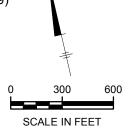




Active Landfarm Cell

Inactive Landfarm Cell

Developed Cell - Inactive



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

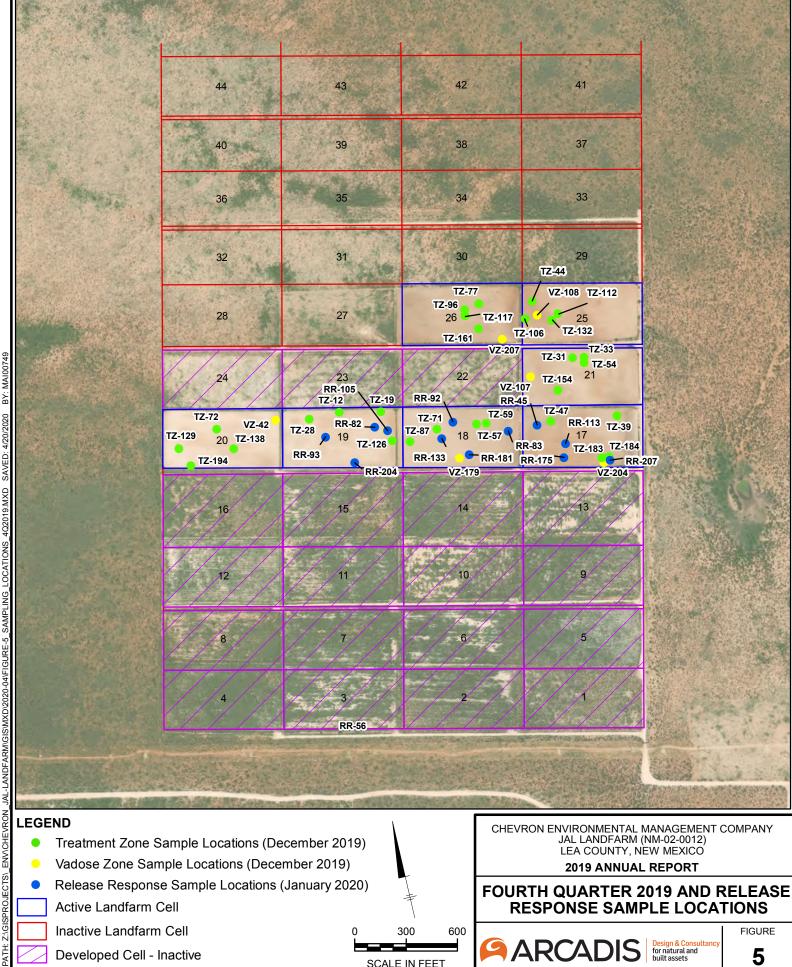
2019 ANNUAL REPORT

THIRD QUARTER SAMPLE LOCATIONS

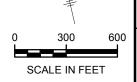


FIGURE





- Vadose Zone Sample Locations (December 2019)
- Release Response Sample Locations (January 2020)
- Active Landfarm Cell
 - Inactive Landfarm Cell
 - Developed Cell Inactive



LEA COUNTY, NEW MEXICO

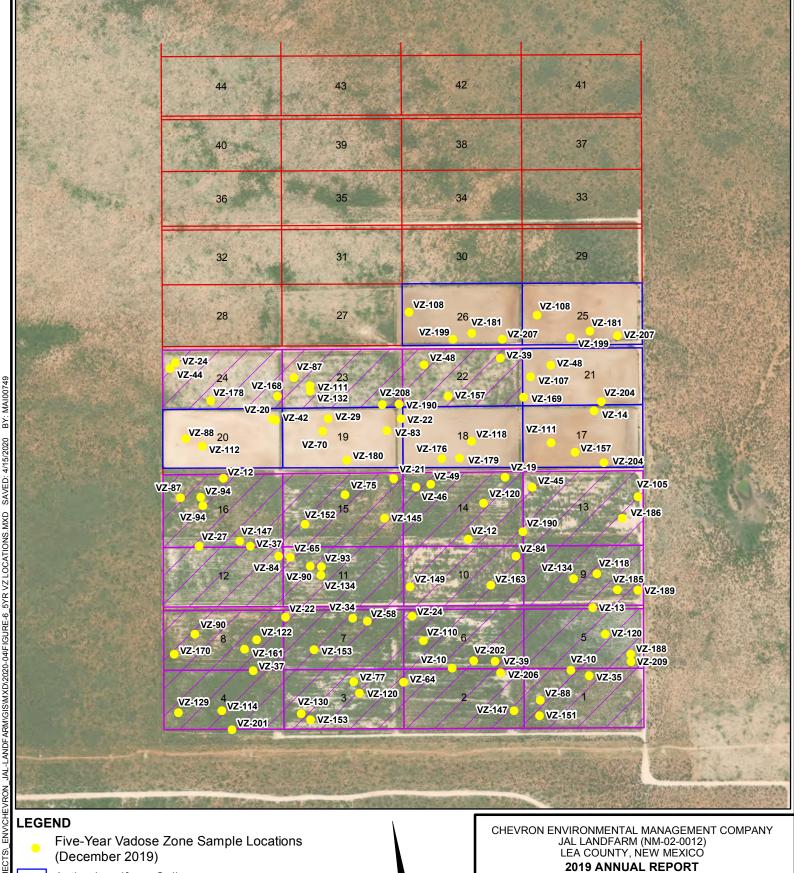
2019 ANNUAL REPORT

FOURTH QUARTER 2019 AND RELEASE RESPONSE SAMPLE LOCATIONS



FIGURE

5



600

SCALE IN FEET

FIVE-YEAR VADOSE ZONE

MONITORING SAMPLE LOCATIONS

FIGURE 6

PATH: Z:\GISPROJECTS\

Active Landfarm Cell

Inactive Landfarm Cell

Developed Cell - Inactive

APPENDIX A 2019 Site Activity Photographic Log



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 1

Description:

Subcontractor backhoe being offloaded.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



Photograph: 2

Description:

Vadose zone sampling: Cell 25, Square 3.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 3

Description:

Vadose zone sampling: Cell 20, Square 157.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



Photograph: 4

Description:

Contractor decontaminating backhoe bucket with pressure washer between locations.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 5

Description:

Cell 18, Square 133 Vadose zone sample: Note from 2 to 3.7 feet below ground surface caprock caliche encountered.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



Photograph: 6

Description:

Cell 25, Square 107 Vadose zone sample: Note from 1.2 to 4 feet below ground surface caprock caliche encountered.

Location:

Jal Landfarm

Photograph taken by:

Justin Steinmann



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 7

Description: Cell 26 tilling.

Location: Jal Landfarm

Photograph taken by: Ryan Nanny



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 8

Description:

Cell 20 tilling partially complete.

Location:

Jal Landfarm

Photograph taken by:

Cory Rodriguez



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 9

Description:

Cell 17 standing water removal.

Location:

Jal Landfarm

Photograph taken by:

Jerry Longwell



Photograph: 10

Description:

Cell 21 standing water removal.

Location:

Jal Landfarm

Photograph taken by:

Jerry Longwell



2019 Annual Report Jal Landfarm (NM-02-0012) Lea County, New Mexico



Photograph: 11

Description:

Cell 20 standing water removal (two trucks operating)

Location:

Jal Landfarm

Photograph taken by: Justin Steinmann

APPENDIX B

Laboratory Reports



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-5

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14



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-182577-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

For:

🔅 eurofins

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice



Authorized for release by: 4/10/2019 8:30:37 AM

Taylor Bruzzio, Project Management Assistant I (361)289-2673

taylor.bruzzio@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-182577-1

Comments

No additional comments.

Receipt

The samples were received on 3/27/2019 10:32 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: Cell 25 - Square 3-S-2-3-190326 (600-182577-7). This sample did not contain any target analytes associated with surrogate 1,2-Dichloroethane-d4 (Surr); therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following samples were outside the upper control limit: Cell 19 - Square 183-S-2-3-190326 (600-182577-1), Cell 18 - Square 120-S-2-3-190326 (600-182577-2), Cell 17 - Square 167-S-2-3-190326 (600-182577-5) and Cell 21 - Square 115-S-2-3-190326 (600-182577-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

GC VOA

Method(s) 8015B: The following samples were diluted because the base dilution for methanol preserved soil analysis is 1:50: Cell 19 - Square 183-S-2-3-190326 (600-182577-1), Cell 18 - Square 120-S-2-3-190326 (600-182577-2), Cell 20 - Square 157-S-2-3-190326 (600-182577-3), Cell 26 - Square 100-S-2-3-190326 (600-182577-4), Cell 17 - Square 167-S-2-3-190326 (600-182577-5), Cell 21 - Square 115-S-2-3-190326 (600-182577-6) and Cell 25 - Square 3-S-2-3-190326 (600-182577-7).

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

GC Semi VOA

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

General Chemistry

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

Organic Prep

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

Job ID: 600-182577-1

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory Method **Method Description** Protocol 8260B Volatile Organic Compounds (GC/MS) SW846 TAL HOU Gasoline Range Organics - (GC) 8015B SW846 TAL PEN 8015B Diesel Range Organics (DRO) (GC) SW846 TAL PEN 2540B Percent Moisture SM20 TAL HOU 3546 Microwave Extraction SW846 TAL PEN 5035 Closed System Purge & Trap/Laboratory Preservation SW846 TAL HOU 5035 Closed System Purge and Trap SW846 TAL PEN

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

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4/10/2019

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Solid	03/26/19 14:10	03/27/19 10:32
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Solid	03/26/19 13:25	03/27/19 10:32
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Solid	03/26/19 14:55	03/27/19 10:32
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Solid	03/26/19 11:20	03/27/19 10:32
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Solid	03/26/19 13:00	03/27/19 10:32
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Solid	03/26/19 12:25	03/27/19 10:32
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Solid	03/26/19 11:45	03/27/19 10:32

Job ID: 600-182577-1

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Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Lab Sample ID: 600-182577-1 Date Collected: 03/26/19 14:10 Matrix: Solid

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.609	U	4.83	0.609	ug/Kg		03/27/19 13:30	04/04/19 16:45	1
Ethylbenzene	0.986	U	4.83	0.986	ug/Kg		03/27/19 13:30	04/04/19 16:45	1
Toluene	2.77	J	4.83	1.33	ug/Kg		03/27/19 13:30	04/04/19 16:45	1
Xylenes, Total	1.09	U	4.83	1.09	ug/Kg		03/27/19 13:30	04/04/19 16:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	133	X	61 - 130				03/27/19 13:30	04/04/19 16:45	1
Dibromofluoromethane	118		68 - 140				03/27/19 13:30	04/04/19 16:45	1
Toluene-d8 (Surr)	110		50 - 130				03/27/19 13:30	04/04/19 16:45	1
4-Bromofluorobenzene	121		57 - 140				03/27/19 13:30	04/04/19 16:45	1
Method: 8015B - Gasoline Rang	e Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1340	U	2680	1340	ug/Kg		03/28/19 15:30	03/28/19 16:17	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101	-	65 - 125				03/28/19 15:30	03/28/19 16:17	50
Method: 8015B - Diesel Range C	Organics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.99	U	4.98	1.99	mg/Kg		03/29/19 08:14	03/30/19 00:06	1
Oil Range Organics (C28-C35)	1.99	U	4.98	1.99	mg/Kg		03/29/19 08:14	03/30/19 00:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		27 - 151				03/29/19 08:14	03/30/19 00:06	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.5		1.0	1.0	%			03/28/19 11:30	1
Percent Solids	88.5		1.0	1.0	0.4			03/28/19 11:30	1

Client Sample ID: Cell 18 - Square 120-S-2-3-190326

Lab Sample ID: 600-182577-2 Date Collected: 03/26/19 13:25 Matrix: Solid

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.598	U	4.75	0.598	ug/Kg		03/27/19 13:30	04/04/19 17:11	1
Ethylbenzene	0.968	U	4.75	0.968	ug/Kg		03/27/19 13:30	04/04/19 17:11	1
Toluene	6.70		4.75	1.31	ug/Kg		03/27/19 13:30	04/04/19 17:11	1
Xylenes, Total	1.07	U	4.75	1.07	ug/Kg		03/27/19 13:30	04/04/19 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	139	X	61 - 130				03/27/19 13:30	04/04/19 17:11	1
Dibromofluoromethane	118		68 - 140				03/27/19 13:30	04/04/19 17:11	1
Toluene-d8 (Surr)	109		50 - 130				03/27/19 13:30	04/04/19 17:11	1
4-Bromofluorobenzene	122		57 - 140				03/27/19 13:30	04/04/19 17:11	1
Method: 8015B - Gasoline Rai	nge Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1220	U	2440	1220	ug/Kg		03/28/19 15:30	03/28/19 16:43	50

Eurofins TestAmerica, Houston

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 18 - Square 120-S-2-3-190326

Date Collected: 03/26/19 13:25 Date Received: 03/27/19 10:32

Lab Sample ID: 600-182577-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	96		65 - 125				03/28/19 15:30	03/28/19 16:43	50
- Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	2.07	J	4.92	1.97	mg/Kg		03/29/19 08:14	03/30/19 00:19	1
Oil Range Organics (C28-C35)	1.97	U	4.92	1.97	mg/Kg		03/29/19 08:14	03/30/19 00:19	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	81		27 - 151				03/29/19 08:14	03/30/19 00:19	
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.2		1.0	1.0	%			03/28/19 11:30	-
Percent Solids	88.8		1.0	1.0	%			03/28/19 11:30	

Client Sample ID: Cell 20 - Square 157-S-2-3-190326

Date Collected: 03/26/19 14:55

Date Received: 03/27/19 10:32

Lab Sample ID: 600-182577-3

Prepared

Matrix: Solid

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

Motifica: 0200D Volutile Organie C	ompounds (00/1110/							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.598	U	4.75	0.598	ug/Kg		03/27/19 13:30	04/05/19 16:58	1
Ethylbenzene	0.968	U	4.75	0.968	ug/Kg		03/27/19 13:30	04/05/19 16:58	1
Toluene	1.31	U	4.75	1.31	ug/Kg		03/27/19 13:30	04/05/19 16:58	1
Xylenes, Total	1.07	U	4.75	1.07	ug/Kg		03/27/19 13:30	04/05/19 16:58	1

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109	61 - 130	03/27/19 13:30	04/05/19 16:58	1
Dibromofluoromethane	108	68 - 140	03/27/19 13:30	04/05/19 16:58	1
Toluene-d8 (Surr)	105	50 - 130	03/27/19 13:30	04/05/19 16:58	1
4-Bromofluorobenzene	121	57 - 140	03/27/19 13:30	04/05/19 16:58	1

Method: 8015B - Gasoline	Range Organics - (G	C)
Analyte	Result	Qualifier

C6-C10	1320	U	2640	1320 ug/Kg	03/28/19 15:30	03/28/19 17:09	50
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125		03/28/19 15:30	03/28/19 17:09	50

SDL Unit

MQL (Adj)

Method: 8015B - Diesel Rang	e Organics (DRC	(GC)
-----------------------------	-----------------	------

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	32.0		4.99	2.00	mg/Kg		03/29/19 08:14	03/30/19 11:30	1
Oil Range Organics (C28-C35)	14.7		4.99	2.00	mg/Kg		03/29/19 08:14	03/30/19 11:30	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	76	27 - 151	03/29/19 08:14	03/30/19 11:30	1

Conoral	Chemistry

Ocheral Olichinstry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3	1.0	1.0 %			03/28/19 11:30	1
Percent Solids	85.7	1.0	1.0 %			03/28/19 11:30	1

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Analyzed

Dil Fac

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Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 26 - Square 100-S-2-3-190326

Lab Sample ID: 600-182577-4 Date Collected: 03/26/19 11:20 Matrix: Solid

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.539	U	4.27	0.539	ug/Kg		03/27/19 13:30	04/05/19 17:22	1
Ethylbenzene	0.872	U	4.27	0.872	ug/Kg		03/27/19 13:30	04/05/19 17:22	1
Toluene	1.18	U	4.27	1.18	ug/Kg		03/27/19 13:30	04/05/19 17:22	1
Xylenes, Total	0.966	U	4.27	0.966	ug/Kg		03/27/19 13:30	04/05/19 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		61 - 130				03/27/19 13:30	04/05/19 17:22	1
Dibromofluoromethane	113		68 - 140				03/27/19 13:30	04/05/19 17:22	1
Toluene-d8 (Surr)	111		50 - 130				03/27/19 13:30	04/05/19 17:22	1
4-Bromofluorobenzene	114		57 - 140				03/27/19 13:30	04/05/19 17:22	1
- Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1140	U	2290	1140	ug/Kg		03/28/19 15:30	03/28/19 17:35	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	98		65 - 125				03/28/19 15:30	03/28/19 17:35	50
Method: 8015B - Diesel Range O	ganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.99	J	4.89	1.96	mg/Kg		03/29/19 08:14	03/30/19 11:42	1
Oil Range Organics (C28-C35)	1.96	U	4.89	1.96	mg/Kg		03/29/19 08:14	03/30/19 11:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		27 - 151				03/29/19 08:14	03/30/19 11:42	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte									
Percent Moisture	13.4		1.0	1.0	%			03/28/19 11:30	1

Client Sample ID: Cell 17 - Square 167-S-2-3-190326

Lab Sample ID: 600-182577-5 Date Collected: 03/26/19 13:00 **Matrix: Solid**

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.546	U	4.33	0.546	ug/Kg		03/27/19 13:30	04/04/19 18:28	1
Ethylbenzene	0.883	U	4.33	0.883	ug/Kg		03/27/19 13:30	04/04/19 18:28	1
Toluene	3.06	J	4.33	1.20	ug/Kg		03/27/19 13:30	04/04/19 18:28	1
Xylenes, Total	0.979	U	4.33	0.979	ug/Kg		03/27/19 13:30	04/04/19 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	143	X	61 - 130				03/27/19 13:30	04/04/19 18:28	1
Dibromofluoromethane	120		68 - 140				03/27/19 13:30	04/04/19 18:28	1
Toluene-d8 (Surr)	105		50 - 130				03/27/19 13:30	04/04/19 18:28	1
4-Bromofluorobenzene	103		57 - 140				03/27/19 13:30	04/04/19 18:28	1
Method: 8015B - Gasoline Ra	nge Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10		U	2590	1300	ug/Kg		03/28/19 15:30	03/28/19 18:01	50

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 17 - Square 167-S-2-3-190326

Date Collected: 03/26/19 13:00 Date Received: 03/27/19 10:32 Lab Sample ID: 600-182577-5

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	98		65 - 125				03/28/19 15:30	03/28/19 18:01	50
- Method: 8015B - Diesel Range C	Organics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.99	U	4.97	1.99	mg/Kg		03/29/19 08:14	03/30/19 11:54	1
Oil Range Organics (C28-C35)	1.99	U	4.97	1.99	mg/Kg		03/29/19 08:14	03/30/19 11:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	28		27 - 151				03/29/19 08:14	03/30/19 11:54	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.5		1.0	1.0	%			03/28/19 11:30	1
Percent Solids	84.5		1.0	1.0	%			03/28/19 11:30	1

Client Sample ID: Cell 21 - Square 115-S-2-3-190326 Lab Sample ID: 600-182577-6

Date Collected: 03/26/19 12:25

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.592	U	4.69	0.592	ug/Kg		03/27/19 13:30	04/04/19 18:53	1
Ethylbenzene	0.958	U	4.69	0.958	ug/Kg		03/27/19 13:30	04/04/19 18:53	1
Toluene	3.87	J	4.69	1.30	ug/Kg		03/27/19 13:30	04/04/19 18:53	1
Xylenes, Total	1.06	U	4.69	1.06	ug/Kg		03/27/19 13:30	04/04/19 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	132	X	61 - 130				03/27/19 13:30	04/04/19 18:53	1
Dibromofluoromethane	116		68 - 140				03/27/19 13:30	04/04/19 18:53	1
Toluene-d8 (Surr)	104		50 - 130				03/27/19 13:30	04/04/19 18:53	1
4-Bromofluorobenzene	104		57 - 140				03/27/19 13:30	04/04/19 18:53	1
Method: 8015B - Gasoline Range Analyte C6-C10		Qualifier	MQL (Adj) 2750	SDL 1370	Unit ug/Kg	D	Prepared 03/28/19 15:30	Analyzed 03/28/19 18:27	Dil Fac
	%Recovery	Qualifier	Limits				Prepared	Analyzed	
Surrogate a,a,a-Trifluorotoluene (fid)	%Recovery	Qualifier	65 ₋ 125				Prepared 03/28/19 15:30	Analyzed 03/28/19 18:27	
a,a,a-Trifluorotoluene (fid)	99 Organics (DRO)	(GC)							50
	99 Organics (DRO)	· ·		SDL	Unit	D		03/28/19 18:27 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C	99 Organics (DRO)	(GC) Qualifier	65 - 125	SDL 1.98	Unit mg/Kg	<u>D</u>	03/28/19 15:30	03/28/19 18:27	50
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C Analyte	99 Organics (DRO) Result	(GC) Qualifier	65 ₋ 125	1.98		D_	03/28/19 15:30 Prepared	03/28/19 18:27 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C Analyte Diesel Range Organics [C10-C28]	Organics (DRO) Result 2.44	(GC) Qualifier J	65 - 125 MQL (Adj) 4.95	1.98	mg/Kg	<u>D</u>	03/28/19 15:30 Prepared 03/29/19 08:14	03/28/19 18:27 Analyzed 03/30/19 12:06	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate	Organics (DRO) Result 2.44 1.98	(GC) Qualifier J	65 - 125 MQL (Adj) 4.95 4.95	1.98	mg/Kg	<u>D</u>	03/28/19 15:30 Prepared 03/29/19 08:14 03/29/19 08:14	03/28/19 18:27 Analyzed 03/30/19 12:06 03/30/19 12:06	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	Organics (DRO) Result 2.44 1.98 %Recovery	(GC) Qualifier J	65 - 125 MQL (Adj) 4.95 4.95 Limits	1.98	mg/Kg	<u>D</u>	03/28/19 15:30 Prepared 03/29/19 08:14 03/29/19 08:14 Prepared	03/28/19 18:27 Analyzed 03/30/19 12:06 03/30/19 12:06 Analyzed	50
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	Organics (DRO) Result 2.44 1.98 %Recovery 75	(GC) Qualifier J	65 - 125 MQL (Adj) 4.95 4.95 Limits	1.98 1.98	mg/Kg	D_	03/28/19 15:30 Prepared 03/29/19 08:14 03/29/19 08:14 Prepared	03/28/19 18:27 Analyzed 03/30/19 12:06 03/30/19 12:06 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range C Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl General Chemistry	Organics (DRO) Result 2.44 1.98 %Recovery 75	(GC) Qualifier J U	MQL (Adj) 4.95 4.95 Limits 27 - 151	1.98 1.98	mg/Kg mg/Kg		03/28/19 15:30 Prepared 03/29/19 08:14 03/29/19 08:14 Prepared 03/29/19 08:14	03/28/19 18:27 Analyzed 03/30/19 12:06 03/30/19 12:06 Analyzed 03/30/19 12:06	Dil Face

Matrix: Solid

4/10/2019

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 25 - Square 3-S-2-3-190326

Lab Sample ID: 600-182577-7 Date Collected: 03/26/19 11:45 Matrix: Solid

Date Received: 03/27/19 10:32

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.567	U	4.50	0.567	ug/Kg		03/27/19 13:30	04/04/19 19:19	
Ethylbenzene	0.918	U	4.50	0.918	ug/Kg		03/27/19 13:30	04/04/19 19:19	
Toluene	6.11		4.50	1.24	ug/Kg		03/27/19 13:30	04/04/19 19:19	
Xylenes, Total	1.02	U	4.50	1.02	ug/Kg		03/27/19 13:30	04/04/19 19:19	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	134	X	61 - 130				03/27/19 13:30	04/04/19 19:19	
Dibromofluoromethane	115		68 - 140				03/27/19 13:30	04/04/19 19:19	
Toluene-d8 (Surr)	105		50 - 130				03/27/19 13:30	04/04/19 19:19	
4-Bromofluorobenzene	109		57 - 140				03/27/19 13:30	04/04/19 19:19	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	1300	U	2600	1300	ug/Kg		03/28/19 15:30	03/28/19 18:55	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	99		65 - 125				03/28/19 15:30	03/28/19 18:55	5
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	2.48	J	4.91	1.96	mg/Kg		03/29/19 08:14	03/30/19 12:30	
Oil Range Organics (C28-C35)	1.96	U	4.91	1.96	mg/Kg		03/29/19 08:14	03/30/19 12:30	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	72		27 - 151				03/29/19 08:14	03/30/19 12:30	
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Percent Moisture	13.5		1.0	1.0	%			03/28/19 11:30	

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

	IS		

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Χ Surrogate is outside control limits

Qualifier Description

GC VOA

Qualifier

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

Percent Recovery %R CFL Contains Free Liquid CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dilution Factor Dil Fac

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) Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDI Method Detection Limit MLMinimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Practical Quantitation Limit PQL

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RΙ

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

				Percent Sur	rogate Reco
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-182577-1	Cell 19 - Square 183-S-2-3-190326	133 X	118	110	121
600-182577-2	Cell 18 - Square	139 X	118	109	122
600-182577-3	120-S-2-3-190326 Cell 20 - Square 157-S-2-3-190326	109	108	105	121
600-182577-4	Cell 26 - Square 100-S-2-3-190326	112	113	111	114
600-182577-5	Cell 17 - Square 167-S-2-3-190326	143 X	120	105	103
600-182577-6	Cell 21 - Square 115-S-2-3-190326	132 X	116	104	104
600-182577-7	Cell 25 - Square 3-S-2-3-190326	134 X	115	105	109
LCS 600-261988/4	Lab Control Sample	88	87	87	96
LCS 600-262121/4	Lab Control Sample	89	94	88	106
LCSD 600-261988/5	Lab Control Sample Dup	90	86	84	95
LCSD 600-262121/5	Lab Control Sample Dup	92	94	90	107
MB 600-261988/7	Method Blank	103	109	111	110
MB 600-262121/7	Method Blank	102	111	112	124

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
600-182577-1	Cell 19 - Square 183-S-2-3-190326	101	
600-182577-1 MS	Cell 19 - Square	93	
	183-S-2-3-190326		
600-182577-1 MSD	Cell 19 - Square	94	
	183-S-2-3-190326		
600-182577-2	Cell 18 - Square	96	
	120-S-2-3-190326		
600-182577-3	Cell 20 - Square	99	
	157-S-2-3-190326		
600-182577-4	Cell 26 - Square	98	
	100-S-2-3-190326		
600-182577-5	Cell 17 - Square	98	
	167-S-2-3-190326		
600-182577-6	Cell 21 - Square	99	
	115-S-2-3-190326		
600-182577-7	Cell 25 - Square	99	
	3-S-2-3-190326		
LCS 400-435100/1-A	Lab Control Sample	99	
MB 400-435100/2-A	Method Blank	102	
Surrogate Legend			

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

		ОТРН1	Percent Surrogate Recovery (Acceptance Limits)
_ab Sample ID	Client Sample ID	(27-151)	
600-182577-1	Cell 19 - Square 183-S-2-3-190326	66	
600-182577-1 MS	Cell 19 - Square	72	
	183-S-2-3-190326		
600-182577-1 MSD	Cell 19 - Square	68	
	183-S-2-3-190326		
600-182577-2	Cell 18 - Square	81	
	120-S-2-3-190326		
600-182577-3	Cell 20 - Square	76	
	157-S-2-3-190326		
600-182577-4	Cell 26 - Square	74	
	100-S-2-3-190326		
600-182577-5	Cell 17 - Square	28	
	167-S-2-3-190326		
600-182577-6	Cell 21 - Square	75	
	115-S-2-3-190326		
600-182577-7	Cell 25 - Square	72	
	3-S-2-3-190326		
_CS 400-435122/2-A	Lab Control Sample	82	
MB 400-435122/1-A	Method Blank	88	
Surrogate Legend			

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-261988/7

Matrix: Solid

Analysis Batch: 261988

Client Sample	e ID:	Meth	od Blank	
P	rep	Type:	Total/NA	

	ME	B MB	В						
Aı	nalyte Resul	t Qua	ualifier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Be	enzene 0.630	Ū	5.00	0.630	ug/Kg			04/04/19 15:05	1
Et	hylbenzene 1.02	2 U	5.00	1.02	ug/Kg			04/04/19 15:05	1
To	luene 1.38	3 U	5.00	1.38	ug/Kg			04/04/19 15:05	1
Xy	rlenes, Total 1.13	3 U	5.00	1.13	ug/Kg			04/04/19 15:05	1

MB MB

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	61 - 130		04/04/19 15:05	1
Dibromofluoromethane	109	68 - 140		04/04/19 15:05	1
Toluene-d8 (Surr)	111	50 - 130		04/04/19 15:05	1
4-Bromofluorobenzene	110	57 - 140		04/04/19 15:05	1

Lab Sample ID: LCS 600-261988/4

Matrix: Solid

Analysis Batch: 261988

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	38.83		ug/Kg		78	70 - 131	
Ethylbenzene	50.0	43.90		ug/Kg		88	66 - 130	
Toluene	50.0	42.95		ug/Kg		86	67 - 130	
Xylenes, Total	100	89.44		ug/Kg		89	63 - 130	
m-Xylene & p-Xylene	50.0	44.82		ug/Kg		90	64 - 130	
o-Xylene	50.0	44.62		ug/Kg		89	62 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88	-	61 - 130
Dibromofluoromethane	87		68 - 140
Toluene-d8 (Surr)	87		50 - 130
4-Bromofluorobenzene	96		57 ₋ 140

Lab Sample ID: LCSD 600-261988/5

Matrix: Solid

Analysis Batch: 261988

Client Sample ID: I	_ab Control Sample Dup
	Prep Type: Total/NA

•	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	38.91	ug/Kg		78	70 - 131	0	30
Ethylbenzene	50.0	42.97	ug/Kg		86	66 - 130	2	30
Toluene	50.0	40.21	ug/Kg		80	67 - 130	7	30
Xylenes, Total	100	87.38	ug/Kg		87	63 - 130	2	30
m-Xylene & p-Xylene	50.0	43.59	ug/Kg		87	64 - 130	3	30
o-Xylene	50.0	43.79	ug/Kg		88	62 _ 130	2	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		61 - 130
Dibromofluoromethane	86		68 - 140
Toluene-d8 (Surr)	84		50 ₋ 130
4-Bromofluorobenzene	95		57 ₋ 140

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4/10/2019

Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-262121/7

Matrix: Solid

Analysis Batch: 262121

Client: ARCADIS U.S. Inc

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

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			04/05/19 15:46	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			04/05/19 15:46	1
Toluene	1.38	U	5.00	1.38	ug/Kg			04/05/19 15:46	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			04/05/19 15:46	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		61 - 130		04/05/19 15:46	1
Dibromofluoromethane	111		68 - 140		04/05/19 15:46	1
Toluene-d8 (Surr)	112		50 - 130		04/05/19 15:46	1
4-Bromofluorobenzene	124		57 - 140		04/05/19 15:46	1

Lab Sample ID: LCS 600-262121/4

Matrix: Solid

Analysis Batch: 262121

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	41.19		ug/Kg	_	82	70 - 131	
Ethylbenzene	50.0	44.43		ug/Kg		89	66 - 130	
Toluene	50.0	43.75		ug/Kg		88	67 - 130	
Xylenes, Total	100	89.31		ug/Kg		89	63 - 130	
m-Xylene & p-Xylene	50.0	44.03		ug/Kg		88	64 - 130	
o-Xylene	50.0	45.28		ug/Kg		91	62 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		61 - 130
Dibromofluoromethane	94		68 - 140
Toluene-d8 (Surr)	88		50 - 130
4-Bromofluorobenzene	106		57 - 140

Lab Sample ID: LCSD 600-262121/5

Matrix: Solid

Analysis Batch: 262121

Client Sam	ple ID: L	ab Contro	l Sampl	e Dup
		Prep T	ype: To	tal/NA

•	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	41.11	ug/Kg		82	70 - 131	0	30
Ethylbenzene	50.0	44.66	ug/Kg		89	66 - 130	1	30
Toluene	50.0	44.09	ug/Kg		88	67 - 130	1	30
Xylenes, Total	100	91.96	ug/Kg		92	63 - 130	3	30
m-Xylene & p-Xylene	50.0	46.24	ug/Kg		92	64 - 130	5	30
o-Xylene	50.0	45.72	ug/Kg		91	62 - 130	1	30

	LUSD	LUSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		61 - 130
Dibromofluoromethane	94		68 - 140
Toluene-d8 (Surr)	90		50 - 130
4-Bromofluorobenzene	107		57 ₋ 140

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4/10/2019

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-435100/2-A

Matrix: Solid

Analyte

C6-C10

Analysis Batch: 435015

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435100

мв мв Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 03/28/19 11:00 50.0 U 03/28/19 12:21 100 50.0 ug/Kg

937.7

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 03/28/19 11:00 a,a,a-Trifluorotoluene (fid) 102 65 - 125 03/28/19 12:21

Lab Sample ID: LCS 400-435100/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 435015

Prep Type: Total/NA

62 - 141

Prep Batch: 435100

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec C6-C10

1000

LCS LCS

%Recovery Qualifier Limits Surrogate a,a,a-Trifluorotoluene (fid) 99 65 - 125

Lab Sample ID: 600-182577-1 MS

Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Matrix: Solid

Analysis Batch: 435015

Prep Batch: 435100 MS MS %Rec.

ug/Kg

Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits C6-C10 1340 Ū 26800 107 10 - 150 28660 ug/Kg

MS MS

%Recovery Qualifier Limits Surrogate

65 - 125 a,a,a-Trifluorotoluene (fid) 93

Lab Sample ID: 600-182577-1 MSD

Matrix: Solid

Analysis Batch: 435015

Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Prep Type: Total/NA **Prep Batch: 435100**

Prep Type: Total/NA

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Analyte Result Qualifier Unit Limits RPD Limit D %Rec 26800 C6-C10 1340 U 28900 ug/Kg 108 10 - 150 32

MSD MSD

Surrogate %Recovery Qualifier Limits 65 - 125 a,a,a-Trifluorotoluene (fid) 94

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

Lab Sample ID: MB 400-435122/1-A

Matrix: Solid

Surrogate

o-Terphenyl

Analysis Batch: 435252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435122

	IVID	IVID							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U	5.00	2.00	mg/Kg		03/29/19 08:14	03/29/19 23:03	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		03/29/19 08:14	03/29/19 23:03	1
	MB	MB							

%Recovery Qualifier Limits 27 - 151 88

Prepared Analyzed Dil Fac 03/29/19 08:14 03/29/19 23:03

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Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: LCS 400-435122/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 435252							Prep	Batch: 4351	22
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics	276	229.4		mg/Kg		83	63 - 153		

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 82 27 - 151

Lab Sample ID: 600-182577-1 MS Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Matrix: Solid

Analysis Batch: 435252

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics	1.99	U	273	199.0		mg/Kg		73	62 - 204	

[C10-C28]

MS MS Surrogate %Recovery Qualifier Limits o-Terphenyl 72 27 - 151

Lab Sample ID: 600-182577-1 MSD Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Matrix: Solid

Analysis Batch: 435252

Prep Batch: 435122 Sample Sample Spike MSD MSD %Rec. Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits RPD Limit 272 66 **Diesel Range Organics** 1.99 U 178.6 mg/Kg 62 _ 204 11

[C10-C28] MSD MSD

Surrogate %Recovery Qualifier Limits 27 - 151 o-Terphenyl 68

Method: 2540B - Percent Moisture

Lab Sample ID: 600-182595-B-1 DU **Client Sample ID: Duplicate Matrix: Solid** Prep Type: Total/NA

Analysis Ratch: 261416

Analysis Batch: 201410										
	Sample	Sample	DU	DU					RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit	
Percent Moisture	0.0		0.0		%		<u> </u>	NC	20	
Percent Solids	100.0		100.0		%			0	20	

Prep Type: Total/NA

Prep Type: Total/NA **Prep Batch: 435122**

Prep Type: Total/NA

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

nalyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg	
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg	

General Chemistry

Analyte	MQL	MDL	Units	
Percent Moisture	1.0	1.0	%	
Percent Solids	1.0	1.0	%	

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Prep Batch: 261563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	5035	
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	5035	
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	5035	
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	5035	
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	5035	
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	5035	
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	5035	

Analysis Batch: 261988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8260B	261563
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	8260B	261563
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	8260B	261563
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	8260B	261563
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	8260B	261563
MB 600-261988/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-261988/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-261988/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 262121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	8260B	261563
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	8260B	261563
MB 600-262121/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-262121/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-262121/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC VOA

Analysis Batch: 435015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	8015B	435100
MB 400-435100/2-A	Method Blank	Total/NA	Solid	8015B	435100
LCS 400-435100/1-A	Lab Control Sample	Total/NA	Solid	8015B	435100
600-182577-1 MS	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435100
600-182577-1 MSD	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435100

Prep Batch: 435100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	5035	-
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	5035	
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	5035	
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	5035	
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	5035	
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	5035	

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC VOA (Continued)

Prep Batch: 435100 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	5035	
MB 400-435100/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-435100/1-A	Lab Control Sample	Total/NA	Solid	5035	
600-182577-1 MS	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	5035	
600-182577-1 MSD	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 435122

Prep Batc	Method	Matrix	Prep Type	Client Sample ID	Lab Sample ID
_	3546	Solid	Total/NA	Cell 19 - Square 183-S-2-3-190326	600-182577-1
	3546	Solid	Total/NA	Cell 18 - Square 120-S-2-3-190326	600-182577-2
	3546	Solid	Total/NA	Cell 20 - Square 157-S-2-3-190326	600-182577-3
	3546	Solid	Total/NA	Cell 26 - Square 100-S-2-3-190326	600-182577-4
	3546	Solid	Total/NA	Cell 17 - Square 167-S-2-3-190326	600-182577-5
	3546	Solid	Total/NA	Cell 21 - Square 115-S-2-3-190326	600-182577-6
	3546	Solid	Total/NA	Cell 25 - Square 3-S-2-3-190326	600-182577-7
	3546	Solid	Total/NA	Method Blank	MB 400-435122/1-A
	3546	Solid	Total/NA	Lab Control Sample	LCS 400-435122/2-A
	3546	Solid	Total/NA	Cell 19 - Square 183-S-2-3-190326	600-182577-1 MS
	3546	Solid	Total/NA	Cell 19 - Square 183-S-2-3-190326	600-182577-1 MSD

Analysis Batch: 435252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	8015B	435122
MB 400-435122/1-A	Method Blank	Total/NA	Solid	8015B	435122
LCS 400-435122/2-A	Lab Control Sample	Total/NA	Solid	8015B	435122
600-182577-1 MS	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435122
600-182577-1 MSD	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	8015B	435122

General Chemistry

Analysis Batch: 261416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-182577-1	Cell 19 - Square 183-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-2	Cell 18 - Square 120-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-3	Cell 20 - Square 157-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-4	Cell 26 - Square 100-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-5	Cell 17 - Square 167-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-6	Cell 21 - Square 115-S-2-3-190326	Total/NA	Solid	2540B	
600-182577-7	Cell 25 - Square 3-S-2-3-190326	Total/NA	Solid	2540B	
600-182595-B-1 DU	Duplicate	Total/NA	Solid	2540B	

Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19 - Square 183-S-2-3-190326

Lab Sample ID: 600-182577-1 Date Collected: 03/26/19 14:10 Matrix: Solid

Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.173 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	261988	04/04/19 16:45	KLV	TAL HOU
Total/NA	Prep	5035			9.33 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 16:17	GRK	TAL PEN
Total/NA	Prep	3546			15.05 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 00:06	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Client Sample ID: Cell 18 - Square 120-S-2-3-190326

Lab Sample ID: 600-182577-2 Date Collected: 03/26/19 13:25 **Matrix: Solid**

Date Received: 03/27/19 10:32

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.268 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	261988	04/04/19 17:11	KLV	TAL HOU
Total/NA	Prep	5035			10.26 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 16:43	GRK	TAL PEN
Total/NA	Prep	3546			15.25 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 00:19	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Client Sample ID: Cell 20 - Square 157-S-2-3-190326

Date Collected: 03/26/19 14:55 Matrix: Solid

Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.266 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	262121	04/05/19 16:58	KLV	TAL HOU
Total/NA	Prep	5035			9.47 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 17:09	GRK	TAL PEN
Total/NA	Prep	3546			15.02 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 11:30	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Client Sample ID: Cell 26 - Square 100-S-2-3-190326

Date Collected: 03/26/19 11:20 **Matrix: Solid**

Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.848 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	262121	04/05/19 17:22	KLV	TAL HOU
Total/NA	Prep	5035			10.94 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 17:35	GRK	TAL PEN
Total/NA	Prep	3546			15.34 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 11:42	JAW	TAL PEN

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Lab Sample ID: 600-182577-3

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Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 26 - Square 100-S-2-3-190326

Lab Sample ID: 600-182577-4

Date Collected: 03/26/19 11:20 Matrix: Solid

Date Received: 03/27/19 10:32

Client Sample ID: Cell 17 - Square 167-S-2-3-190326 Lab Sample ID: 600-182577-5

Date Collected: 03/26/19 13:00 **Matrix: Solid**

Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.773 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	261988	04/04/19 18:28	KLV	TAL HOU
Total/NA	Prep	5035			9.65 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 18:01	GRK	TAL PEN
Total/NA	Prep	3546			15.09 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 11:54	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Client Sample ID: Cell 21 - Square 115-S-2-3-190326 Lab Sample ID: 600-182577-6

Matrix: Solid Date Collected: 03/26/19 12:25

Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.325 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	261988	04/04/19 18:53	KLV	TAL HOU
Total/NA	Prep	5035			9.1 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 18:27	GRK	TAL PEN
Total/NA	Prep	3546			15.15 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 12:06	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Client Sample ID: Cell 25 - Square 3-S-2-3-190326 Lab Sample ID: 600-182577-7

Date Collected: 03/26/19 11:45 **Matrix: Solid** Date Received: 03/27/19 10:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.557 g	5 mL	261563	03/27/19 13:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	261988	04/04/19 19:19	KLV	TAL HOU
Total/NA	Prep	5035			9.6 g	5.0 g	435100	03/28/19 15:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	435015	03/28/19 18:55	GRK	TAL PEN
Total/NA	Prep	3546			15.29 g	1.0 mL	435122	03/29/19 08:14	KLR	TAL PEN
Total/NA	Analysis	8015B		1			435252	03/30/19 12:30	JAW	TAL PEN
Total/NA	Analysis	2540B		1			261416	03/28/19 11:30	KPB	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-182577-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
exas	NELAP		6	T104704223-18-23	10-31-19
The feller deal are all deal	are included in this report by	t the leberatory is not as			
the agency does not o	fer certification.	,	, ,	ng authority. This list may incl	ude analytes for whic
the agency does not o	•	Matrix	Analyt	е	ude analytes for whic
the agency does not o	fer certification.	,	Analyt		ude analytes for whic

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Ilinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Гехаѕ	NELAP	6	T104704286-18-15	09-30-19
JS Fish & Wildlife	Federal		LE058448-0	07-31-19
JSDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	07-31-19

4/10/2019

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ceipt Checklist

182577

	/ N / N / N / N / N	Trip Blank Y / N Y / N Y / N Y / N Y / N	CLIENT: CARRIER/DRIVER: Number of Coolers R Observed Temp		readis Ex Them CF +0.1	Corrected Temp
Cooler ID Y Y Y Y Y Y Y Y Y Y Y	Temp Blank / N / N / N / N / N / N	Trip Blank Y / N Y / N Y / N Y / N Y / N	CARRIER/DRIVER: Number of Coolers R Observed Temp	eceived: Therm ID	/ Them CF	Corrected Temp
Cooler ID Y Y Y Y Y Y Y Y Y	Temp Blank / N / N / N / N / N / N	Trip Blank Y / N Y / N Y / N Y / N Y / N	Number of Coolers R Observed Temp	eceived: Therm ID	/ Them CF	Corrected Temp
Cooler ID BW Y Y Y Y Y Y Y Y Y	Temp Blank / N / N / N / N / N / N	Trip Blank Y / N Y / N Y / N Y / N Y / N	Observed Temp	Therm ID	CF	(℃)
Cooler ID B Y Y Y Y Y Y Y Y Y Y	Blank	Y / N Y / N Y / N Y / N		ID	CF	(℃)
BW YY YY YY YY YY	/ N / N / N / N / N / N	Y / N Y / N Y / N Y / N	7.13			
Y Y Y Y Y	/ N / N / N / N / N	Y / N Y / N Y / N Y / N	7.13			
Y Y Y Y	/ N / N / N / N	Y / N Y / N Y / N	9.13			
Y Y Y Y	/ N / N / N / N	Y / N Y / N	9.13			
Y Y Y	/ N / N / N	Y / N	9.13			
Y	/ N			27-19		
Y	1 N	YIN	V			
Y		YIN				
	/ N	Y / N				
		YIN		-		
CF = correction factor						
ase samples are>pH 12:	YES [□NO .	Acid preserved are <p< th=""><th>H 2: [</th><th>YES [</th><th>□NO</th></p<>	H 2: [YES [□NO
H paper Lot#						
			10.			
OA headspace acceptable (8	5-6mm):	☐ YES ☐ N	AND DANA			
						YES NO
Did samples meet the laborate	ory's stand	ard conditions of	of sample acceptability u	pon receipt?		
COMMENTS:						
5	T	1. 3-7	7-19			
, 0	/					
	/					
	1					

HS-SA-WI-013

Rev. 3; 07/01/2014

600-182577 Wayt

ORIGIN ID:LBBA (806) 543-1945 ARCADIS RYAN NANNY 3013 108TH ST

LUBBOCK, TX 79423 UNITED STATES US

TO SAMPLE RECEIVING **TEST AMERICA** 6310 ROTHWAY ST

HOUSTON TX 77040



SHIP DATE: 26MAR19 6 ACTUGT: 54.10 LB CAD: 006994405/SSFE002 DIMS: 27x14x14 IN

BILL THIRD PARTY

TRK# 7862 7236 6663

WED - 27 MAR 10:30A PRIORITY OVERNIGHT

AB LKSA

77040 TX-US IAY

FedEx



Chain of Custody Record

TestAmerica Houston

6310 Rothway Street

TestAmerica

Phone (713) 690-4444 Fax (713) 690-5646											
Client Information (Sub Contract Lab)	Sampler			Lab PM Kudch	Lab PM: Kudchadkar, Sachin G	Sachin	9.	Carrier Tracking No(s):	COC No.	COC No: 600-38602.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail sachi	ii. iin.kudch	adkar	E-Mail: sachin.kudchadkar@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1	1 of 1	
Company: TestAmerica Laboratories, Inc.					Accreditations Requ	- Texa	Accreditations Required (See note): NELAP - Texas		Job #: 600-1	Job #: 600-182577-1	
Address: 3355 McLemore Drive,	Due Date Requested: 4/8/2019						Analysis Requested	aduested	Prese	ion Code	
City: Pensacola State, Zip.	TAT Requested (days):	::							B - NaOH C - Zn Aceta D - Nitric Aci	tate cid	
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO#;				(0				G - Amchlor H - Ascorbic	F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate	ahvdrate
Email:	WO#:								_	Vater	
Project Name: Cheyron - Jal Land Farm Soils 2018	Project #: 60009563						0):5 :-		K - EDTA	TA W - pH 4-5 A Z - other (specify)	(Á)
Site:	SSOW#:						Omy c		oo to		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oll, BT=Tissue, A=Air	Field Filtered MiSM mrofred	8015B_GRO/503	+coloria_color		Total Number	Special Instructions/Note:	ote:
		X	Preserva	Preservation Code:	X				X		
Cell 19 - Square 183-5-2-3-190326 (600-182577-1)	3/26/19	14:10 Central		Solid		×	×		2		
Cell 18 - Square 120-5-2-3-190326 (600-182577-2)	3/26/19	13:25 Central		Solid		×	×		22		
Cell 20 - Square 157-5-2-3-190326 (600-182577-3)	3/26/19	14:55 Central		Solid		×	×		2		
Cell 26 - Square 100-5-2-3-190326 (600-182577-4)	3/26/19	11:20 Central		Solid		×	×		S		
Cell 17 - Square 167-5-2-3-190326 (600-182577-5)	3/26/19	13:00 Central		Solid		×	×		2		
Cell 21 - Square 115-5-2-3-190326 (600-182577-6)	3/26/19	12:25 Central		Solid		×	×		S		
Cell 25 - Square 3-5-2-3-190326 (600-182577-7)	3/26/19	11:45 Central		Solid		×	×		5		

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc. Possible Hazard Identification

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:	rements:		
Empty Kit Relinquished by:	Date:	_	Time:	Method of Shipment	ment	
Relinquished by: FAMM	100 1 FC	N Company	Received by:	Date	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	S S	Date/Time: 5-28-18 9:07	7 Company
Custody Seals Intact: Custody Seal No.: A Yes A No	*		Cooler Temperature(s) °C and Other Remarks:		0.90	47

DUITZAT, IATMAMNORIVNA NI RACIAA I AHT 159469-434 RIT2 EXP 12/19 ..

BEW

35214

FL-US

THOINABYO ORAGNATS 900:8 AAM 8S - UHT

ASN9 HX

OSOI 4840 5805 4724

PENSACOLA FL 32514
(850) 474 - 1001
PENSACOLA FL 32514

THE LEADER IN ENVIRONMENTAL TESTING
731022

Page 28 of 30

Client: ARCADIS U.S. Inc Job Number: 600-182577-1

Login Number: 182577 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey neter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
cooler Temperature is recorded.	True	1.4
OC is present.	True	
OC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
ample containers have legible labels.	True	
Containers are not broken or leaking.	True	
ample collection date/times are provided.	True	
ppropriate 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	
lultiphasic 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.

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Client: ARCADIS U.S. Inc Job Number: 600-182577-1

Login Number: 182577 List Source: Eurofins TestAmerica, Pensacola List Number: 2

List Creation: 03/28/19 01:33 PM

Creator: Shannon, Jonathon W

Question Answer Comment
Radioactivity wasn't checked or is = background as measured by a survey N/A meter.</td
The cooler's custody seal, if present, is intact.
Sample custody seals, if present, are intact. N/A
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. True 0.9°C IR8
COC is present. True
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. True
Samples are received within Holding Time (excluding tests with immediate True HTs)
Sample containers have legible labels.
Containers are not broken or leaking.
Sample collection date/times are provided. True
Appropriate sample containers are used. True
Sample bottles are completely filled. True
Sample Preservation Verified.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs True
Containers requiring zero headspace have no headspace or bubble is True <6mm (1/4").
Multiphasic samples are not present.
Samples do not require splitting or compositing.



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-184934-1

Client Project/Site: Chevron - Jal Land Farm Soils 2018

Revision: 1

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Skudchadker

Authorized for release by: 5/23/2019 11:01:31 AM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

1 Tojectione. Chevion - Jai Land I ann John 2010

Job ID: 600-184934-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-184934-1

Comments

The report was revised on 05/23/19 to include the case narrative.

Receipt

The samples were received on 5/7/2019 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described 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(s) 8015B, 8015C: The following sample was diluted due to color and odor: Cell20-Square166-S-2'-3'-190506 (600-184934-6). Elevated reporting limits (RL) are provided.

Method(s) 8015B: The method blank for preparation batch 400-440614 and analytical batch 400-440875 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-440619 and analytical batch 400-440795 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

VOA Prep

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

Job ID: 600-184934-1

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6020	Metals (ICP/MS)	SW846	TAL PEN
471A	Mercury (CVAA)	SW846	TAL PEN
8050B	Preparation, Metals	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
'471A	Preparation, Mercury	SW846	TAL PEN
Ol Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Job ID: 600-184934-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Assest ID
600-184934-1	Cell18-Square194-S-2'-3'-190506	Solid	05/06/19 15:00	05/07/19 09:50	
600-184934-2	Cell18-Square2-S-2'-3'-190506	Solid	05/06/19 13:21	05/07/19 09:50	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Solid	05/06/19 14:20	05/07/19 09:50	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Solid	05/06/19 12:55	05/07/19 09:50	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Solid	05/06/19 15:25	05/07/19 09:50	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Solid	05/06/19 16:40	05/07/19 09:50	

Job ID: 600-184934-1

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Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Lab Sample ID: 600-184934-1

Job ID: 600-184934-1

Client Sample ID: Cell18-Square194-S-2'-3'-190506 Date Collected: 05/06/19 15:00 **Matrix: Solid**

Date Received: 05/07/19 09:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.607	U	4.82	0.607	ug/Kg		05/08/19 07:55	05/08/19 16:10	
Ethylbenzene	0.983	U	4.82		ug/Kg		05/08/19 07:55	05/08/19 16:10	
Toluene	1.33	U	4.82		ug/Kg		05/08/19 07:55	05/08/19 16:10	
Xylenes, Total	1.09	U	4.82		ug/Kg		05/08/19 07:55	05/08/19 16:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	96		61 - 130				05/08/19 07:55	05/08/19 16:10	
Dibromofluoromethane	93		68 - 140				05/08/19 07:55	05/08/19 16:10	
Toluene-d8 (Surr)	90		50 - 130				05/08/19 07:55	05/08/19 16:10	
4-Bromofluorobenzene	96		57 - 140				05/08/19 07:55	05/08/19 16:10	
Method: 8015B - Gasoline Rar	nge Organio	s - (GC)							
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) -C6-C10	47.4	Ū	94.9	47.4	ug/Kg		05/10/19 12:00	05/10/19 21:37	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	86		65 - 125				05/10/19 12:00	05/10/19 21:37	
Method: 8015B - Diesel Range	Organics (DRO) (GC							
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil F
Diesel Range Organics [C10-C28]	4.30	JB	4.94	1.98	mg/Kg		05/13/19 10:47	05/15/19 02:43	
Oil Range Organics (C28-C35)	1.98	U	4.94	1.98	mg/Kg		05/13/19 10:47	05/15/19 02:43	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
p-Terphenyl	83		27 - 151				05/13/19 10:47	05/15/19 02:43	
Method: 300.0 - Anions, Ion Cl	_					_			
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fa
Chloride	0.533	U	3.99	0.533	mg/Kg			05/17/19 03:41	
Method: 6020 - Metals (ICP/MS	•	O	MOL (Adi)	en.	11	_	Dunnanad	Aalad	Dil E
Analyte		Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil F
Barium	372		0.466		mg/Kg		05/13/19 12:15	05/13/19 16:45	
Cadmium	0.186		0.466		mg/Kg			05/13/19 16:45	
Antimony	0.112		0.466		mg/Kg			05/13/19 16:45	
Thallium	0.0839	U	0.0932		mg/Kg			05/13/19 16:45	
ron	1740		23.3		mg/Kg		05/13/19 12:15		
Silver	0.0177		0.0932	0.0177				05/13/19 16:45	
Arsenic	3.46		0.466		mg/Kg			05/13/19 16:45	
Copper	1.15		0.932		mg/Kg			05/13/19 16:45	
_ead	1.14		0.233	0.0690				05/13/19 16:45	
Zinc Solonium	4.13	11	3.73		mg/Kg			05/13/19 16:45	
Selenium	0.0643	U	0.466	0.0643				05/13/19 16:45	
Manganese	13.9		2.33		mg/Kg			05/13/19 16:45	
Chromium	2.17		0.466		mg/Kg			05/13/19 16:45	
Beryllium	0.104	J	0.466	0.0280	mg/Kg		05/13/19 12:15	05/13/19 16:45	
Method: 7471A - Mercury (CV/ Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	0.0168		0.0126	0.00757				05/15/19 12:58	

Client: ARCADIS U.S. Inc

Silver

Arsenic

Copper

Selenium

Manganese

Chromium

Lead

Zinc

Date Received: 05/07/19 09:50

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell18-Square2-S-2'-3'-190506 Date Collected: 05/06/19 13:21

Lab Sample ID: 600-184934-2

Matrix: Solid

Job ID: 600-184934-1

Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.539	U	4.28	0.539	ug/Kg		05/08/19 07:55	05/08/19 16:33	
Ethylbenzene	0.873	U	4.28	0.873	ug/Kg		05/08/19 07:55	05/08/19 16:33	
Toluene	1.18	U	4.28	1.18	ug/Kg		05/08/19 07:55	05/08/19 16:33	
Xylenes, Total	0.968	U	4.28	0.968	ug/Kg		05/08/19 07:55	05/08/19 16:33	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	96		61 - 130				05/08/19 07:55	05/08/19 16:33	
Dibromofluoromethane	94		68 - 140				05/08/19 07:55	05/08/19 16:33	
Toluene-d8 (Surr)	92		50 - 130				05/08/19 07:55	05/08/19 16:33	
4-Bromofluorobenzene	97		57 - 140				05/08/19 07:55	05/08/19 16:33	
Method: 8015B - Gasoline Rai	nge Organio	s - (GC)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) -C6-C10	47.4	U	94.9	47.4	ug/Kg		05/10/19 12:00	05/10/19 22:12	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	85		65 - 125				05/10/19 12:00	05/10/19 22:12	
Method: 8015B - Diesel Range	Organics ((DRO) (GC	;)						
Analyte		Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	3.56	JB	4.95	1.98	mg/Kg		05/13/19 10:47	05/15/19 02:55	
Oil Range Organics (C28-C35)	1.98	U	4.95	1.98	mg/Kg		05/13/19 10:47	05/15/19 02:55	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	88		27 - 151				05/13/19 10:47	05/15/19 02:55	
Method: 300.0 - Anions, Ion C	hromatogra	phy - Sol	uble						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
, and y to								05/47/40 00:00	
Chloride	0.528	U	3.95	0.528	mg/Kg			05/17/19 02:30	
Chloride Method: 6020 - Metals (ICP/MS	5)							05/17/19 02:30	
Chloride Method: 6020 - Metals (ICP/MS	Result	U Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride Method: 6020 - Metals (ICP/MS Analyte	Result 257	Qualifier		SDL 0.119	Unit mg/Kg	D 	05/13/19 12:15	Analyzed 05/13/19 17:05	Dil Fa
Chloride Method: 6020 - Metals (ICP/MS Analyte Barium	Result	Qualifier	MQL (Adj)	SDL 0.119	Unit	<u>D</u>	05/13/19 12:15	Analyzed	
Chloride	Result 257	Qualifier U	MQL (Adj) 0.543	SDL 0.119 0.217	Unit mg/Kg	<u>D</u>	05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 17:05	1
Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium	Result 257 0.217	Qualifier U	MQL (Adj) 0.543 0.543	SDL 0.119 0.217	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 17:05 05/13/19 17:05	

Beryllium	0.122	J	0.543	0.0326	mg/Kg		05/13/19 12:15	05/13/19 17:05	10
Method: 7471A - Mercury (CVAA) Analyte Mercury	Result 0.0110	Qualifier J	MQL (Adj) 0.0132	SDL 0.00794		<u>D</u>	Prepared 05/14/19 16:18	Analyzed 05/15/19 13:00	Dil Fac

0.109

0.543

1.09

4.34

0.271

0.543

0.543

2.71

0.0206 mg/Kg

0.119 mg/Kg

0.434 mg/Kg

0.0803 mg/Kg

0.0749 mg/Kg

0.684 mg/Kg

0.206 mg/Kg

2.17 mg/Kg

0.0206 U

3.79

1.18

1.29

4.70

0.0749 U

15.8

2.27

Eurofins TestAmerica, Houston

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

05/13/19 12:15 05/13/19 17:05

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Job ID: 600-184934-1

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell18-Square133-S-2'-3'-190506

Lab Sample ID: 600-184934-3 Date Collected: 05/06/19 14:20 **Matrix: Solid**

Date Received: 05/07/19 09:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.512	U	4.06	0.512	ug/Kg		05/08/19 07:55	05/08/19 17:22	1
Ethylbenzene	0.829	U	4.06	0.829	ug/Kg		05/08/19 07:55	05/08/19 17:22	1
Toluene	1.12	U	4.06	1.12	ug/Kg		05/08/19 07:55	05/08/19 17:22	1
Xylenes, Total	0.918	U	4.06	0.918	ug/Kg		05/08/19 07:55	05/08/19 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	89		61 - 130				05/08/19 07:55	05/08/19 17:22	
Dibromofluoromethane	90		68 ₋ 140				05/08/19 07:55	05/08/19 17:22	
Toluene-d8 (Surr)	92		50 - 130				05/08/19 07:55	05/08/19 17:22	
4-Bromofluorobenzene	90		57 - 140				05/08/19 07:55	05/08/19 17:22	
Method: 8015B - Gasoline Rai Analyte	_	cs - (GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	45.9	Ū	91.7	45.9	ug/Kg		05/10/19 12:00	05/10/19 22:48	
	0/5	0	1				Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	Qualifier	Limits				Frepareu	•	Dii i u
Surrogate a,a,a-Trifluorotoluene (fid)	%Recovery 86	Qualifier	65 - 125				05/10/19 12:00	05/10/19 22:48	
a,a,a-Trifluorotoluene (fid)	86		65 - 125					•	
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range	86 Organics (65 - 125	SDL	Unit	D		05/10/19 22:48	
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte	86 Organics (Result	(DRO) (GO	65 - 125	_		D_	05/10/19 12:00 Prepared	05/10/19 22:48 Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range	86 Organics ((DRO) (GO	65 - 125 MQL (Adj)	1.97	Unit mg/Kg mg/Kg	<u>D</u>	05/10/19 12:00 Prepared	05/10/19 22:48 Analyzed 05/15/19 03:08	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	86 Organics (Result 18.5 25.5	(DRO) (GC Qualifier B	65 - 125 MQL (Adj) 4.93	1.97	mg/Kg	<u>D</u>	05/10/19 12:00 Prepared 05/13/19 10:47	05/10/19 22:48 Analyzed 05/15/19 03:08	
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	P Organics (Result 18.5	(DRO) (GC Qualifier B	65 - 125 MQL (Adj) 4.93 4.93	1.97	mg/Kg	<u>D</u>	O5/10/19 12:00 Prepared 05/13/19 10:47 05/13/19 10:47	05/10/19 22:48 Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	86 Period	(DRO) (GC Qualifier B	65 - 125 MQL (Adj) 4.93 4.93 Limits 27 - 151	1.97	mg/Kg	<u>D</u>	Prepared 05/13/19 10:47 05/13/19 10:47 05/13/19 10:47 Prepared	05/10/19 22:48 Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C	Result 18.5 25.5 **Recovery 91	(DRO) (GC Qualifier B	65 - 125 MQL (Adj) 4.93 4.93 Limits 27 - 151	1.97 1.97	mg/Kg	D_	Prepared 05/13/19 10:47 05/13/19 10:47 05/13/19 10:47 Prepared	05/10/19 22:48 Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	Result 18.5 25.5 **Recovery 91	(DRO) (GO Qualifier B Qualifier	65 - 125 MQL (Adj) 4.93 4.93 Limits 27 - 151	1.97 1.97	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47	Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed 05/15/19 03:08	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte Chloride	Result 18.5 25.5 **Recovery 91 hromatogra Result 33.2	(DRO) (GO Qualifier B Qualifier	65 - 125 MQL (Adj) 4.93 4.93 Limits 27 - 151 Uble MQL (Adj)	1.97 1.97	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47	Analyzed 05/10/19 22:48 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte Chloride Method: 6020 - Metals (ICP/MS	Result 18.5 25.5 **Recovery 91 hromatogra Result 33.2	(DRO) (GO Qualifier B Qualifier	65 - 125 MQL (Adj) 4.93 4.93 Limits 27 - 151 Uble MQL (Adj)	1.97 1.97 SDL 0.530	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47	Analyzed 05/10/19 22:48 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte	Result 18.5 25.5 **Recovery 91 hromatogra Result 33.2	Qualifier Qualifier Qualifier Aphy - Solit Qualifier	MQL (Adj) 4.93 4.93 Limits 27 - 151 uble MQL (Adj) 3.97	1.97 1.97 SDL 0.530	mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared	Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:23 Analyzed	Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium	Result 18.5 25.5 **Recovery 91 hromatogra Result 33.2 S) Result	Qualifier Qualifier Aphy - Solution Qualifier Qualifier	MQL (Adj) 4.93 4.93 Limits 27 - 151 Uble MQL (Adj) 3.97 MQL (Adj)	1.97 1.97 SDL 0.530	mg/Kg mg/Kg Wnit mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared Prepared	Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:23 Analyzed 05/17/19 03:23	Dil Fa Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium	Result 18.5 25.5 **Recovery 91 hromatogra Result 33.2 Result 121	Qualifier Qualifier Qualifier Qualifier Qualifier	MQL (Adj) 4.93 4.93 4.93 Limits 27 - 151 Lible MQL (Adj) 3.97 MQL (Adj) 0.513	1.97 1.97 SDL 0.530 SDL 0.113 0.205	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared Prepared Prepared 05/13/19 12:15	Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:23 Analyzed 05/17/19 03:23	Dil Fa Dil Fa Dil Fa
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C Analyte	## Result 18.5 25.5 ## Recovery 91 ## Result 33.2 ## Result 121 0.205	Qualifier Qualifier Qualifier Qualifier Qualifier U U	MQL (Adj) 4.93 4.93 4.93 Limits 27 - 151 Uble MQL (Adj) 3.97 MQL (Adj) 0.513 0.513	1.97 1.97 SDL 0.530 SDL 0.113 0.205	mg/Kg mg/Kg Wnit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15	Analyzed 05/15/19 03:08 05/15/19 03:08 Analyzed 05/15/19 03:08 Analyzed 05/15/19 03:23 Analyzed 05/17/19 03:23 Analyzed 05/13/19 17:09 05/13/19 17:09 05/13/19 17:09	Dil Fa

Method:	7471A - I	Mercury	(CVAA)
Analyte		_	

Silver

Arsenic

Copper

Selenium Manganese

Chromium

Beryllium

Lead

Zinc

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0160	0.0127	0.00764 mg/Kg		05/14/19 16:18	05/15/19 13:02	1

0.103

0.513

1.03

4.10

0.256

0.513

0.513

0.513

2.56

0.0195 mg/Kg

0.113 mg/Kg

0.410 mg/Kg

0.0759 mg/Kg

0.0708 mg/Kg

0.646 mg/Kg

0.195 mg/Kg

0.0308 mg/Kg

2.05 mg/Kg

0.0195 U

2.51

1.98

2.20

6.17 0.0708 U

50.4

3.36

0.184 J

Eurofins TestAmerica, Houston

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

05/13/19 12:15 05/13/19 17:09

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Job ID: 600-184934-1

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell25-Square98-S-2'-3'-190506

Lab Sample ID: 600-184934-4 Date Collected: 05/06/19 12:55

Date Received: 05/07/19 09:50

Method: 7471A - Mercury (CVAA)

Analyte

Mercury

Analyte	Result	Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.496	U	3.94	0.496	ug/Kg		05/08/19 07:55	05/08/19 17:46	1
Ethylbenzene	0.803	U	3.94	0.803	ug/Kg		05/08/19 07:55	05/08/19 17:46	1
Toluene	1.09	U	3.94	1.09	ug/Kg		05/08/19 07:55	05/08/19 17:46	1
Xylenes, Total	0.889	U	3.94	0.889	ug/Kg		05/08/19 07:55	05/08/19 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		61 - 130				05/08/19 07:55	05/08/19 17:46	
Dibromofluoromethane	90		68 - 140				05/08/19 07:55	05/08/19 17:46	
Toluene-d8 (Surr)	86		50 - 130				05/08/19 07:55	05/08/19 17:46	1
4-Bromofluorobenzene	97		57 - 140				05/08/19 07:55	05/08/19 17:46	· · · · · · · · · · · · · · · · · · ·
Method: 8015B - Gasoline Rar Analyte		s - (GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	48.6	Ū	97.3	48.6	ug/Kg		05/10/19 12:00	05/10/19 23:23	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
_		-•	_,,,,,,,					•	
a,a,a-Trifluorotoluene (fid)	85		65 - 125				05/10/19 12:00	05/10/19 23:23	
a,a,a-Trifluorotoluene (fid)	85		65 - 125						
	85 Organics (65 - 125	SDL	Unit	D			
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte	85 Organics (DRO) (GC Qualifier	65 - 125	SDL 1.94		D	05/10/19 12:00	05/10/19 23:23	Dil Fa
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range	85 Organics (Result	DRO) (GO Qualifier J B	65 - 125 MQL (Adj)	1.94		<u>D</u>	05/10/19 12:00 Prepared 05/13/19 10:47	05/10/19 23:23 Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	85 Organics (Result 2.68	DRO) (GC Qualifier JB	65 - 125 MQL (Adj) 4.86	1.94	mg/Kg	<u>D</u>	05/10/19 12:00 Prepared 05/13/19 10:47	05/10/19 23:23 Analyzed 05/15/19 03:20	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	85 Organics (Result 2.68 1.94	DRO) (GC Qualifier JB	65 - 125 MQL (Adj) 4.86 4.86	1.94	mg/Kg	<u>D</u>	Prepared 05/13/19 10:47 05/13/19 10:47	05/10/19 23:23 Analyzed 05/15/19 03:20 05/15/19 03:20 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate	Result 2.68 1.94 %Recovery 84	DRO) (GO Qualifier JB U	65 - 125 MQL (Adj) 4.86 4.86 Limits 27 - 151	1.94	mg/Kg	<u>D</u>	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared	05/10/19 23:23 Analyzed 05/15/19 03:20 05/15/19 03:20 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	Result 2.68 1.94 **Recovery 84 hromatogra	DRO) (GO Qualifier JB U	65 - 125 MQL (Adj) 4.86 4.86 Limits 27 - 151	1.94 1.94 SDL	mg/Kg mg/Kg	<u>D</u>	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion C	Result 2.68 1.94 **Recovery 84 hromatogra	DRO) (GC Qualifier JB U Qualifier	65 - 125 MQL (Adj) 4.86 4.86 Limits 27 - 151	1.94 1.94 SDL	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47	Analyzed 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Canalyte	Result 2.68 1.94 %Recovery 84 hromatogra Result 148	Qualifier Qualifier Qualifier Qualifier Qualifier	MQL (Adj) 4.86 4.86 Limits 27 - 151 Able MQL (Adj) 3.97	1.94 1.94 SDL 0.530	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Canalyte Chloride	Result 2.68 1.94 **Recovery 84 hromatogra Result 148 S) Result	DRO) (GC Qualifier JB U Qualifier	MQL (Adj) 4.86 4.86 Limits 27 - 151 Able MQL (Adj) 3.97 MQL (Adj)	1.94 1.94 SDL 0.530	mg/Kg mg/Kg		Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared Prepared	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/15/19 16:12 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Canalyte Chloride Method: 6020 - Metals (ICP/MS	Result 2.68 1.94 **Recovery 84 hromatogra Result 148 5) Result 52.1	Qualifier Qualifier Qualifier Qualifier Qualifier Qualifier	MQL (Adj) 4.86 4.86 Limits 27 - 151 Able MQL (Adj) 3.97	1.94 1.94 SDL 0.530	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared Prepared	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/15/19 16:12	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MSAnalyte	## Result 2.68 1.94 ## Result 148	DRO) (GO Qualifier JB U Qualifier phy - Solu Qualifier Qualifier U	MQL (Adj) 4.86 4.86 Limits 27 - 151 ADDE MQL (Adj) 3.97 MQL (Adj) 0.510 0.510	1.94 1.94 SDL 0.530 SDL 0.112 0.204	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/15/19 16:12 Analyzed 05/13/19 17:13 05/13/19 17:13	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MSAnalyte Barium	Result 2.68 1.94 **Recovery 84 hromatogra Result 148 5) Result 52.1	DRO) (GO Qualifier JB U Qualifier phy - Solu Qualifier Qualifier U	MQL (Adj) 4.86 4.86 Limits 27 - 151 Able MQL (Adj) 3.97 MQL (Adj) 0.510	1.94 1.94 1.94 SDL 0.530 SDL 0.112 0.204 0.122	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/17/19 16:12 Analyzed 05/13/19 17:13	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Canalyte Chloride Method: 6020 - Metals (ICP/MSAnalyte Barium Cadmium	## Result 2.68 1.94 ## Result 148	DRO) (GO Qualifier JB U Qualifier phy - Solu Qualifier Qualifier U U	MQL (Adj) 4.86 4.86 Limits 27 - 151 ADDE MQL (Adj) 3.97 MQL (Adj) 0.510 0.510	1.94 1.94 SDL 0.530 SDL 0.112 0.204	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/15/19 16:12 Analyzed 05/13/19 17:13 05/13/19 17:13	Dil Fac
a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MSAnalyte Barium Cadmium Antimony	## Result 2.68 1.94 ## Recovery 84 ## Result 148	DRO) (GO Qualifier JB U Qualifier phy - Solu Qualifier Qualifier U U	MQL (Adj) 4.86 4.86 Limits 27 - 151 Jble MQL (Adj) 3.97 MQL (Adj) 0.510 0.510 0.510	1.94 1.94 1.94 SDL 0.530 SDL 0.112 0.204 0.122 0.0917	mg/Kg mg/Kg Unit mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared 05/13/19 10:47 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/15/19 03:20 05/15/19 03:20 05/15/19 03:20 Analyzed 05/15/19 03:20 Analyzed 05/15/19 16:12 Analyzed 05/13/19 17:13 05/13/19 17:13	Dil Fac

itcount	Qualifier	WQL (Adj)	JDL	Unit	ט	Prepared	Anaiyzea	DII Fac
52.1		0.510	0.112	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.204	U	0.510	0.204	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.122	U	0.510	0.122	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.0917	U	0.102	0.0917	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
6300		25.5	4.08	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.0194	U	0.102	0.0194	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
2.06		0.510	0.112	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
2.07		1.02	0.408	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
4.24		0.255	0.0754	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
12.8		4.08	2.04	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.0703	U	0.510	0.0703	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
39.5		2.55	0.642	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
6.74		0.510	0.194	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
0.389	J	0.510	0.0306	mg/Kg		05/13/19 12:15	05/13/19 17:13	10
	52.1 0.204 0.122 0.0917 6300 0.0194 2.06 2.07 4.24 12.8 0.0703 39.5 6.74	52.1 0.204 U 0.122 U 0.0917 U 6300 0.0194 U 2.06 2.07 4.24 12.8 0.0703 U 39.5	52.1 0.510 0.204 U 0.510 0.122 U 0.510 0.0917 U 0.102 6300 25.5 0.0194 U 0.102 2.06 0.510 2.07 1.02 4.24 0.255 12.8 4.08 0.0703 U 0.510 39.5 2.55 6.74 0.510	52.1 0.510 0.112 0.204 U 0.510 0.204 0.122 U 0.510 0.122 0.0917 U 0.102 0.0917 6300 25.5 4.08 0.0194 U 0.102 0.0194 2.06 0.510 0.112 2.07 1.02 0.408 4.24 0.255 0.0754 12.8 4.08 2.04 0.0703 U 0.510 0.0703 39.5 2.55 0.642 6.74 0.510 0.194	52.1 0.510 0.112 mg/Kg 0.204 U 0.510 0.204 mg/Kg 0.122 U 0.510 0.122 mg/Kg 0.0917 U 0.102 0.0917 mg/Kg 6300 25.5 4.08 mg/Kg 0.0194 U 0.102 0.0194 mg/Kg 2.06 0.510 0.112 mg/Kg 2.07 1.02 0.408 mg/Kg 4.24 0.255 0.0754 mg/Kg 12.8 4.08 2.04 mg/Kg 0.0703 U 0.510 0.0703 mg/Kg 39.5 2.55 0.642 mg/Kg 6.74 0.510 0.194 mg/Kg	52.1 0.510 0.112 mg/Kg 0.204 U 0.510 0.204 mg/Kg 0.122 U 0.510 0.122 mg/Kg 0.0917 U 0.102 0.0917 mg/Kg 6300 25.5 4.08 mg/Kg 0.0194 U 0.102 0.0194 mg/Kg 2.06 0.510 0.112 mg/Kg 2.07 1.02 0.408 mg/Kg 4.24 0.255 0.0754 mg/Kg 12.8 4.08 2.04 mg/Kg 0.0703 U 0.510 0.0703 mg/Kg 39.5 2.55 0.642 mg/Kg 6.74 0.510 0.194 mg/Kg	52.1 0.510 0.112 mg/Kg 05/13/19 12:15 0.204 U 0.510 0.204 mg/Kg 05/13/19 12:15 0.122 U 0.510 0.122 mg/Kg 05/13/19 12:15 0.0917 U 0.102 0.0917 mg/Kg 05/13/19 12:15 6300 25.5 4.08 mg/Kg 05/13/19 12:15 0.0194 U 0.102 0.0194 mg/Kg 05/13/19 12:15 2.06 0.510 0.112 mg/Kg 05/13/19 12:15 2.07 1.02 0.408 mg/Kg 05/13/19 12:15 4.24 0.255 0.0754 mg/Kg 05/13/19 12:15 12.8 4.08 2.04 mg/Kg 05/13/19 12:15 0.0703 U 0.510 0.0703 mg/Kg 05/13/19 12:15 39.5 2.55 0.642 mg/Kg 05/13/19 12:15 6.74 0.510 0.194 mg/Kg 05/13/19 12:15	52.1 0.510 0.112 mg/Kg 05/13/19 12:15 05/13/19 17:13 0.204 U 0.510 0.204 mg/Kg 05/13/19 12:15 05/13/19 17:13 0.122 U 0.510 0.122 mg/Kg 05/13/19 12:15 05/13/19 17:13 0.0917 U 0.102 0.0917 mg/Kg 05/13/19 12:15 05/13/19 17:13 6300 25.5 4.08 mg/Kg 05/13/19 12:15 05/13/19 17:13 0.0194 U 0.102 0.0194 mg/Kg 05/13/19 12:15 05/13/19 17:13 2.06 0.510 0.112 mg/Kg 05/13/19 12:15 05/13/19 17:13 2.07 1.02 0.408 mg/Kg 05/13/19 12:15 05/13/19 17:13 4.24 0.255 0.0754 mg/Kg 05/13/19 12:15 05/13/19 17:13 12.8 4.08 2.04 mg/Kg 05/13/19 12:15 05/13/19 17:13 0.0703 U 0.510 0.0703 mg/Kg 05/13/19 12:15 05/13/19 17:13 39.5 2.55 0.642 mg/Kg 05/13/19 12:15 05/13/19 17:13 6.74 0.510 0.194 mg/Kg 05/13/19 12:15

Eurofins TestAmerica, Houston

Analyzed

<u>05/14/19 16:18</u> <u>05/15/19 13:04</u>

Prepared

MQL (Adj)

0.0125

SDL Unit

0.00749 mg/Kg

Result Qualifier

0.0106 J

Dil Fac

Job ID: 600-184934-1

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell20-Square3-S-2'-3'-190506

Lab Sample ID: 600-184934-5 Date Collected: 05/06/19 15:25

Date Received: 05/07/19 09:50

Client: ARCADIS U.S. Inc

Analyte

Mercury

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.568	U	4.51	0.568	ug/Kg		05/08/19 07:55	05/08/19 18:10	
Ethylbenzene	0.920	U	4.51	0.920	ug/Kg		05/08/19 07:55	05/08/19 18:10	
Toluene	1.24	U	4.51	1.24	ug/Kg		05/08/19 07:55	05/08/19 18:10	
Kylenes, Total	1.02	U	4.51	1.02	ug/Kg		05/08/19 07:55	05/08/19 18:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
,2-Dichloroethane-d4 (Surr)	86		61 - 130				05/08/19 07:55	05/08/19 18:10	
Dibromofluoromethane	89		68 - 140				05/08/19 07:55	05/08/19 18:10	
Toluene-d8 (Surr)	91		50 - 130				05/08/19 07:55	05/08/19 18:10	
l-Bromofluorobenzene	100		57 - 140				05/08/19 07:55	05/08/19 18:10	
Method: 8015B - Gasoline Ran	ige Organio	cs - (GC)							
Analyte	•	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics (GRO) C6-C10	47.8	Ū	95.6	47.8	ug/Kg		05/10/19 12:00	05/10/19 23:58	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
a,a,a-Trifluorotoluene (fid)	86		65 - 125				05/10/19 12:00	05/10/19 23:58	
Method: 8015B - Diesel Range		(DRO) (GC Qualifier	•	en.	Unit	D	Dranarad	Analyzed	Dil F
Analyte Diesel Range Organics [C10-C28]	4.04		MQL (Adj) 4.93		mg/Kg		Prepared 05/13/19 10:47	05/15/19 03:32	
Dil Range Organics (C28-C35)	1.97		4.93		mg/Kg			05/15/19 03:32	
on range organics (G20-G33)	1.97	O	4.33	1.51	mg/rtg		03/13/13 10.4/	03/13/19 03.32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
Surrogate p-Terphenyl	%Recovery 84	Qualifier	27 - 151				Prepared 05/13/19 10:47		Dil I
p-Terphenyl	84		27 - 151						Dil F
o-Terphenyl Method: 300.0 - Anions, Ion Cl	84 hromatogra		27 - 151	SDL	Unit	D			
o-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte	84 hromatogra	nphy - Soli	27 - 151 uble		Unit mg/Kg	<u>D</u>	05/13/19 10:47	05/15/19 03:32	Dil I
o-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride	84 hromatogra Result 5.06	nphy - Soli	27 - 151 uble MQL (Adj)			<u>D</u>	05/13/19 10:47	05/15/19 03:32 Analyzed	
Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS	nromatogra Result 5.06	nphy - Soli	27 - 151 uble MQL (Adj)	0.533 SDL	mg/Kg Unit	D D	05/13/19 10:47	05/15/19 03:32 Analyzed	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte	nromatogra Result 5.06	nphy - Soli Qualifier	27 - 151 uble MQL (Adj) 3.99	0.533 SDL 0.106	mg/Kg Unit mg/Kg		05/13/19 10:47 Prepared	05/15/19 03:32 Analyzed 05/17/19 01:18	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium	nromatogra Result 5.06 Result	uphy - Solo Qualifier Qualifier	27 - 151 uble	0.533 SDL 0.106	mg/Kg Unit		Prepared Prepared 05/13/19 10:47	05/15/19 03:32 Analyzed 05/17/19 01:18 Analyzed	Dill
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium	nromatogra Result 5.06 Result 279	Qualifier Qualifier U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484	0.533 SDL 0.106 0.193	mg/Kg Unit mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15	Analyzed O5/13/19 03:32 Analyzed Analyzed O5/13/19 17:17	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium	84 hromatogra Result 5.06 8) Result 279 0.193	Qualifier Qualifier U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967	0.533 SDL 0.106 0.193 0.116 0.0871	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dill
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony	84 hromatogra Result 5.06 Result 279 0.193 0.116	Qualifier Qualifier U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484	0.533 SDL 0.106 0.193 0.116 0.0871	mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium	84 hromatogra Result 5.06 Result 279 0.193 0.116 0.0871	Qualifier Qualifier U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967	0.533 SDL 0.106 0.193 0.116 0.0871 3.87	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron	84 hromatogra Result 5.06 Result 279 0.193 0.116 0.0871 1780	Qualifier Qualifier U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967 24.2	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil F
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium Fron Silver	84 hromatogra Result 5.06 Result 279 0.193 0.116 0.0871 1780 0.0184	Qualifier Qualifier U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967 24.2 0.0967	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 01:18 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil F
Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper	84 hromatogra Result 5.06 6) Result 279 0.193 0.116 0.0871 1780 0.0184 3.25	Qualifier Qualifier U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967 24.2 0.0967 0.484	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106 0.387	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper Lead	84 hromatogra Result 5.06 6) Result 279 0.193 0.116 0.0871 1780 0.0184 3.25 1.07	Qualifier Qualifier U U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.0967 24.2 0.0967 0.484 0.967	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106 0.387 0.0716	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil F
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper Lead Zinc	Result 5.06 6) Result 279 0.193 0.116 0.0871 1780 0.0184 3.25 1.07 0.867	Qualifier U U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.0967 24.2 0.0967 0.484 0.967 0.242	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106 0.387 0.0716 1.93	mg/Kg Unit mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed O5/13/19 03:32 Analyzed O5/17/19 01:18 Analyzed O5/13/19 17:17	Dil I
Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper Lead	Result 5.06 Result 279 0.193 0.116 0.0871 1780 0.0184 3.25 1.07 0.867 3.37	Qualifier U U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.484 0.0967 24.2 0.0967 0.484 0.967 0.242 3.87	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106 0.387 0.0716 1.93 0.0668	mg/Kg Unit mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 01:18 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil F
	84 hromatogra Result 5.06 Result 279 0.193 0.116 0.0871 1780 0.0184 3.25 1.07 0.867 3.37 0.0668	Qualifier U U U	27 - 151 uble MQL (Adj) 3.99 MQL (Adj) 0.484 0.484 0.0967 24.2 0.0967 0.484 0.967 0.242 3.87 0.484	0.533 SDL 0.106 0.193 0.116 0.0871 3.87 0.0184 0.106 0.387 0.0716 1.93 0.0668 0.610	mg/Kg Unit mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:32 Analyzed 05/17/19 01:18 Analyzed 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17 05/13/19 17:17	Dil F

Eurofins TestAmerica, Houston

Analyzed

<u>05/14/19 16:18</u> <u>05/15/19 13:06</u>

Prepared

MQL (Adj)

0.0131

SDL Unit

0.00790 mg/Kg

Result Qualifier

0.0302

Dil Fac

Client: ARCADIS U.S. Inc

Beryllium

Analyte

Mercury

Method: 7471A - Mercury (CVAA)

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell20-Square166-S-2'-3'-190506

Date Collected: 05/06/19 16:40 Date Received: 05/07/19 09:50

Lab Sample ID: 600-184934-6

Matrix: Solid

Job ID: 600-184934-1

Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.578	U	4.58	0.578	ug/Kg		05/08/19 07:55	05/08/19 19:07	1
Ethylbenzene	0.935	U	4.58	0.935	ug/Kg		05/08/19 07:55	05/08/19 19:07	1
Toluene	1.27	U	4.58	1.27	ug/Kg		05/08/19 07:55	05/08/19 19:07	1
Xylenes, Total	1.04	U	4.58	1.04	ug/Kg		05/08/19 07:55	05/08/19 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	89		61 - 130				05/08/19 07:55	05/08/19 19:07	
Dibromofluoromethane	94		68 - 140				05/08/19 07:55	05/08/19 19:07	
Toluene-d8 (Surr)	91		50 - 130				05/08/19 07:55	05/08/19 19:07	
4-Bromofluorobenzene	102		57 - 140				05/08/19 07:55	05/08/19 19:07	
Method: 8015B - Gasoline Ran Analyte		S - (GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)	49.6	U	99.2	49.6	ug/Kg		05/10/19 12:00	05/11/19 00:32	
-C6-C10									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	86		65 - 125				05/10/19 12:00	05/11/19 00:32	
Diesel Range Organics [C10-C28] Dil Range Organics (C28-C35)	41.9 61.5	В	MQL (Adj) 24.3 24.3		mg/Kg mg/Kg			Analyzed 05/15/19 03:57 05/15/19 03:57	
		В							:
on rungo organico (ozo oco)	••								
		Qualifier	Limits				Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	Qualifier	Limits 27 - 151				Prepared 05/13/19 10:47	Analyzed 05/15/19 03:57	Dil Fa
Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Cl	%Recovery 82 nromatogra	iphy - Sol	27 - 151 uble		Unit	D	05/13/19 10:47	05/15/19 03:57	
Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte	%Recovery 82 nromatogra Result	iphy - Sol Qualifier	27 - 151 uble MQL (Adj)	SDL	Unit ma/Ka	<u>D</u>		05/15/19 03:57 Analyzed	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS	%Recovery 82 nromatogra Result 0.534	uphy - Sol Qualifier	27 - 151 uble MQL (Adj) 4.00	SDL 0.534	mg/Kg		05/13/19 10:47 Prepared	05/15/19 03:57 Analyzed 05/17/19 03:05	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte	%Recovery 82 nromatogra Result 0.534 6) Result	iphy - Sol Qualifier	27 - 151 uble	SDL 0.534 SDL	mg/Kg Unit	<u>D</u>	05/13/19 10:47 Prepared Prepared	05/15/19 03:57 Analyzed 05/17/19 03:05 Analyzed	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium	%Recovery 82 nromatogra Result 0.534 6) Result 186	Qualifier	27 - 151 uble	SDL 0.534 SDL 0.112	mg/Kg Unit mg/Kg		Prepared Prepared 05/13/19 10:47	05/15/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21	Dil Fa
Surrogate D-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium	## ## ## ## ## ## ## ## ## ## ## ## ##	Qualifier Qualifier U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508	SDL 0.534 SDL 0.112 0.203	mg/Kg Unit mg/Kg mg/Kg		Prepared Prepared 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony	### Recovery 82	Qualifier Qualifier U Qualifier U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508	SDL 0.534 SDL 0.112 0.203 0.122	mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Fhallium	### Recovery 82	Qualifier Qualifier U Qualifier U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102	SDL 0.534 SDL 0.112 0.203 0.122 0.0914	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg		Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron	##Recovery 82	Qualifier U Qualifier U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate D-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS) Analyte Barium Cadmium Antimony Thallium ron Silver	### Recovery 82	Qualifier U Qualifier U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate Distriction of the content	### Recovery 82	Qualifier U Qualifier U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate D-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper	### Recovery ### Result	Qualifier U Qualifier U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate D-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium ron Silver Arsenic Copper Lead	### Recovery 82	Qualifier U Qualifier U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02 0.254	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406 0.0751	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/13/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium Iron Silver Arsenic Copper Lead Zinc	### Result 186 0.0914 1640 0.0193 2.89 2.06 2.60 5.15	Qualifier U Qualifier U U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02 0.254 4.06	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406 0.0751 2.03	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate p-Terphenyl Method: 300.0 - Anions, Ion Clanalyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium Iron Silver Arsenic Copper Lead Zinc	### Recovery ### 82 ### Result ### 0.534 Result 186 0.203 0.122 0.0914 1640 0.0193 2.89 2.06 2.60 5.15 0.0701	Qualifier U Qualifier U U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02 0.254 4.06 0.508	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406 0.0751 2.03 0.0701	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate D-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium Iron Silver Arsenic Copper Lead Zinc Selenium	### Recovery ### 82 ### Result 0.534 186 0.203 0.122 0.0914 1640 0.0193 2.89 2.06 2.60 5.15 0.0701 23.7	Qualifier U Qualifier U U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02 0.254 4.06 0.508 2.54	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406 0.0751 2.03 0.0701 0.640	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa
Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Cl Analyte Chloride Method: 6020 - Metals (ICP/MS Analyte Barium Cadmium Antimony Thallium Iron Silver Arsenic Copper Lead Zinc Selenium Manganese Chromium	### Recovery ### 82 ### Result ### 0.534 Result 186 0.203 0.122 0.0914 1640 0.0193 2.89 2.06 2.60 5.15 0.0701	Qualifier U Qualifier U U U U	27 - 151 uble MQL (Adj) 4.00 MQL (Adj) 0.508 0.508 0.508 0.102 25.4 0.102 0.508 1.02 0.254 4.06 0.508	SDL 0.534 SDL 0.112 0.203 0.122 0.0914 4.06 0.0193 0.112 0.406 0.0751 2.03 0.0701 0.640	mg/Kg		Prepared Prepared 05/13/19 10:47 Prepared 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15 05/13/19 12:15	Analyzed 05/17/19 03:57 Analyzed 05/17/19 03:05 Analyzed 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21 05/13/19 17:21	Dil Fa

Analyzed

05/13/19 12:15 05/13/19 17:21

<u>05/14/19 16:18</u> <u>05/15/19 13:08</u>

Prepared

0.508

0.0125

MQL (Adj)

0.0305 mg/Kg

SDL Unit

0.00749 mg/Kg

0.119 J

0.0178

Result Qualifier

10

Dil Fac

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

R Compound was found in the blank and sample.

Ε Result exceeded calibration range.

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. .I

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

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.

Ε Result exceeded calibration range.

F1 MS and/or MSD Recovery is outside acceptance limits.

J. Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

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 **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

Quality Control QC

RER Relative Error Ratio (Radiochemistry)

RI 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)

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5/23/2019 (Rev. 1)

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery					
		DCA	DBFM	TOL	BFB			
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)			
600-184934-1	Cell18-Square194-S-2'-3'-19050	96	93	90	96			
600-184934-2	Cell18-Square2-S-2'-3'-190506	96	94	92	97			
600-184934-3	Cell18-Square133-S-2'-3'-1905 06	89	90	92	90			
600-184934-4	Cell25-Square98-S-2'-3'-19050 6	82	90	86	97			
600-184934-5	Cell20-Square3-S-2'-3'-190506	86	89	91	100			
600-184934-6	Cell20-Square166-S-2'-3'-1905 06	89	94	91	102			
LCS 600-264586/3	Lab Control Sample	84	92	100	105			
LCSD 600-264586/4	Lab Control Sample Dup	79	90	99	109			
MB 600-264586/6	Method Blank	96	95	93	103			

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Pren Type: Total/NA

watrix: Solid			Prep Type: Total/NA
_			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
400-169945-A-3-D MS	Matrix Spike	89	
400-169945-A-3-E MSD	Matrix Spike Duplicate	90	
600-184934-1	Cell18-Square194-S-2'-3'-1905 06	86	
600-184934-2	Cell18-Square2-S-2'-3'-190506	85	
600-184934-3	Cell18-Square133-S-2'-3'-1905 06	86	
600-184934-4	Cell25-Square98-S-2'-3'-19050	85	
600-184934-5	Cell20-Square3-S-2'-3'-190506	86	
600-184934-6	Cell20-Square166-S-2'-3'-1905 06	86	
LCS 400-440460/1-A	Lab Control Sample	89	
MB 400-440460/2-A	Method Blank	87	
Surrogate Legend			

TFT-F = a,a,a-Trifluorotoluene (fid)

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

Matrix: Solid Prep Type: Total/NA

		OTPH1
Lab Sample ID	Client Sample ID	(27-151)
400-170069-A-	1-A MS Matrix Spike	36
400-170069-A-	1-B MSD Matrix Spike Duplicate	e 35
600-184934-1	Cell18-Square194-S-2	2'-3'-1905 83

Eurofins TestAmerica, Houston

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (27-151)	
600-184934-2	Cell18-Square2-S-2'-3'-190506	88	
600-184934-3	Cell18-Square133-S-2'-3'-1905 06	91	
600-184934-4	Cell25-Square98-S-2'-3'-19050 6	84	
600-184934-5	Cell20-Square3-S-2'-3'-190506	84	
600-184934-6	Cell20-Square166-S-2'-3'-1905 06	82	
LCS 400-440614/2-A	Lab Control Sample	110	
MB 400-440614/1-A	Method Blank	99	
Surrogate Legend			
OTPH = o-Terphenyl			

Eurofins TestAmerica, Houston

5

9

TU

12

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Lab Sample ID: MB 600-264586/6

Matrix: Solid

Analysis Batch: 264586

Client Sample	e ID:	Metho	od Blank
P	rep T	ype:	Total/NA

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			05/08/19 14:03	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			05/08/19 14:03	1
Toluene	1.38	U	5.00	1.38	ug/Kg			05/08/19 14:03	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			05/08/19 14:03	1

	MB N	ИВ				
Surrogate	%Recovery G	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130		05/08/19 14:03	1
Dibromofluoromethane	95		68 - 140		05/08/19 14:03	1
Toluene-d8 (Surr)	93		50 - 130		05/08/19 14:03	1
4-Bromofluorobenzene	103		57 - 140		05/08/19 14:03	1
	1,2-Dichloroethane-d4 (Surr) Dibromofluoromethane Toluene-d8 (Surr)	Surrogate %Recovery 1,2-Dichloroethane-d4 (Surr) 96 Dibromofluoromethane 95 Toluene-d8 (Surr) 93	1,2-Dichloroethane-d4 (Surr) 96 Dibromofluoromethane 95 Toluene-d8 (Surr) 93	Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 96 61 - 130 Dibromofluoromethane 95 68 - 140 Toluene-d8 (Surr) 93 50 - 130	Surrogate %Recovery Qualifier Limits Prepared 1,2-Dichloroethane-d4 (Surr) 96 61 - 130 Dibromofluoromethane 95 68 - 140 Toluene-d8 (Surr) 93 50 - 130	Surrogate %Recovery Qualifier Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 96 61 - 130 05/08/19 14:03 Dibromofluoromethane 95 68 - 140 05/08/19 14:03 Toluene-d8 (Surr) 93 50 - 130 05/08/19 14:03

Lab Sample ID: LCS 600-264586/3

Matrix: Solid

Analysis Batch: 264586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier U	nit [D %Rec	Limits	
Benzene	50.0	44.97	u	g/Kg	90	70 - 131	
Ethylbenzene	50.0	43.80	uç	g/Kg	88	66 - 130	
Toluene	50.0	43.32	uç	g/Kg	87	67 - 130	
Xylenes, Total	100	85.08	uç	g/Kg	85	63 - 130	
m-Xylene & p-Xylene	50.0	43.39	uç	g/Kg	87	64 - 130	
o-Xylene	50.0	41.69	uç	g/Kg	83	62 - 130	

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 61 - 130 84 Dibromofluoromethane 92 68 - 140 Toluene-d8 (Surr) 50 - 130 100 4-Bromofluorobenzene 105 57 - 140

Lab Sample ID: LCSD 600-264586/4

Matrix: Solid

Analysis Batch: 264586

Client Sample ID: Lab	Control Sample Dup
	Prep Type: Total/NA

7 , 0.0 0 .000	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	45.70		ug/Kg		91	70 - 131	2	30
Ethylbenzene	50.0	45.19		ug/Kg		90	66 - 130	3	30
Toluene	50.0	45.67		ug/Kg		91	67 - 130	5	30
Xylenes, Total	100	91.55		ug/Kg		92	63 - 130	7	30
m-Xylene & p-Xylene	50.0	47.42		ug/Kg		95	64 - 130	9	30
o-Xylene	50.0	44.13		ug/Kg		88	62 - 130	6	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	79		61 - 130
Dibromofluoromethane	90		68 ₋ 140
Toluene-d8 (Surr)	99		50 - 130
4-Bromofluorobenzene	109		57 - 140

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-440460/2-A

Matrix: Solid

Analysis Batch: 440434

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 440460

MR MR

Result Qualifier SDL Unit Prepared Analyzed Dil Fac Analyte MQL (Adj) 100 50.0 ug/Kg 05/10/19 12:00 05/10/19 13:20 50.0 U Gasoline Range Organics (GRO)

-C6-C10

MR MR

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 87 65 - 125

LCS LCS

MS MS

MSD MSD

05/10/19 12:00 05/10/19 13:20

Lab Sample ID: LCS 400-440460/1-A

Matrix: Solid

Analysis Batch: 440434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 440460**

%Rec.

Analyte Added Result Qualifier Unit %Rec Limits 1000 863.0 86 62 - 141 Gasoline Range Organics (GRO) ug/Kg

Spike

-C6-C10

LCS LCS

Sample Sample

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 89

Lab Sample ID: 400-169945-A-3-D MS

Matrix: Solid

Analysis Batch: 440434

Client Sample ID: Matrix Spike

Prep Type: Total/NA **Prep Batch: 440460**

%Rec.

Result Qualifier Added Result Qualifier Unit D %Rec Limits **Analyte**

Spike

Spike

904 45.7 U 921.7 102 10 - 150 Gasoline Range Organics (GRO) ug/Kg

-C6-C10

MS MS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 89

Lab Sample ID: 400-169945-A-3-E MSD

Matrix: Solid

Analysis Batch: 440434

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440460

%Rec. **RPD**

Added **Analyte** Result Qualifier Result Qualifier Unit %Rec Limits RPD Limit 45.7 U Gasoline Range Organics (GRO) 923 955.2 ug/Kg 104 10 - 150 32

-C6-C10

MSD MSD

Sample Sample

Surrogate %Recovery Qualifier I imits 65 - 125 a,a,a-Trifluorotoluene (fid) 90

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

Lab Sample ID: MB 400-440614/1-A

Matrix: Solid

Analysis Batch: 440875

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 440614

MR MR

Analyte	Result Qu	ıalifier MQL (Adj)	SDL Unit	D Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.847 J	5.00	2.00 mg/Kg	05/13/19 10:47	05/15/19 01:29	1
Oil Range Organics (C28-C35)	2.00 U	5.00	2.00 mg/Kg	05/13/19 10:47	05/15/19 01:29	1

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

Lab Sample ID: MB 400-440614/1-A

Matrix: Solid

Analysis Batch: 440875

Client: ARCADIS U.S. Inc

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 440614

Prep Type: Total/NA

Prep Batch: 440614

Prep Type: Total/NA

Prep Batch: 440614

RPD

RPD

Limit

30

Prep Batch: 440614

MB MB

Limits Dil Fac Surrogate %Recovery Qualifier Prepared Analyzed o-Terphenyl 99 27 - 151 05/13/19 10:47 05/15/19 01:29

Lab Sample ID: LCS 400-440614/2-A

Matrix: Solid

Analysis Batch: 440875

Spike

Added

Limits 27 - 151

Spike

Added

271

Spike

Added

Limits

27 - 151

272

272

268.8

LCS LCS

MS MS

22210 E 4

MSD MSD

21900 E 4

Result Qualifier

Result Qualifier

Result Qualifier Unit mg/Kg

Unit

Unit

mg/Kg

mg/Kg

D %Rec

Limits 63 - 153

Client Sample ID: Lab Control Sample

%Rec.

Client Sample ID: Method Blank

gg

Client Sample ID: Matrix Spike

%Rec.

Limits

Client Sample ID: Matrix Spike Duplicate

%Rec.

Limits

62 - 204

62 - 204

%Rec

D %Rec

910

1027

Diesel Range Organics [C10-C28]

Analyte

Surrogate

o-Terphenyl

LCS LCS %Recovery Qualifier

110

Lab Sample ID: 400-170069-A-1-A MS **Matrix: Solid**

Analysis Batch: 440875

Analyte Diesel Range Organics

[C10-C28]

MS MS

Sample Sample

19400 EB

Result Qualifier

Sample Sample

19400 EB

Result Qualifier

Limits Surrogate %Recovery Qualifier o-Terphenyl 36 27 - 151

Lab Sample ID: 400-170069-A-1-B MSD

Matrix: Solid

Analysis Batch: 440875

Analyte Diesel Range Organics [C10-C28]

Surrogate o-Terphenyl

MSD MSD %Recovery Qualifier

35

Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-265274/1-A

Matrix: Solid

Analysis Batch: 265212

Result Qualifier Analyte Chloride

0.534 U

MB MB

MQL (Adj) 4.00

SDL Unit 0.534 mg/Kg

Prepared

05/16/19 20:31

Client Sample ID: Method Blank

Prep Type: Soluble

Dil Fac Analyzed

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 265212

Lab Sample ID: LCS 600-265274/2-A

/ illuly old Datolli 2002 12								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 200	198.0		mg/Kg		99	90 - 110	

Lab Sample ID: 600-185474-A-1-B MS **Client Sample ID: Matrix Spike Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265212

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 80 - 120 Chloride 46.0 99.8 126.3 mg/Kg 80

Lab Sample ID: 600-185474-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265212

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit Limits RPD Limit D %Rec Chloride 80 46.0 99.8 126.0 mg/Kg 80 - 120

Lab Sample ID: MB 600-265362/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265337

MB MB Dil Fac Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Chloride 0.534 U 4.00 0.534 mg/Kg 05/17/19 15:36

Lab Sample ID: LCS 600-265362/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265337

Spike LCS LCS %Rec **Analyte** Added Result Qualifier Unit %Rec Limits Chloride 200 97 194.9 mg/Kg 90 - 110

Lab Sample ID: 600-184934-4 MS Client Sample ID: Cell25-Square98-S-2'-3'-190506 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265337

Spike MS MS Sample Sample %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 148 99.2 229.7 mg/Kg 82 80 - 120

Client Sample ID: Cell25-Square98-S-2'-3'-190506 Lab Sample ID: 600-184934-4 MSD **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 265337

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 148 99.2 239.6 92 mg/Kg 80 - 120

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-440619/1-A ^10

Matrix: Solid

Analysis Batch: 440795

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 440619

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.117	U	0.530	0.117	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Cadmium	0.212	U	0.530	0.212	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Antimony	0.127	U	0.530	0.127	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Thallium	0.0954	U	0.106	0.0954	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Iron	4.24	U	26.5	4.24	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Silver	0.0201	U	0.106	0.0201	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Arsenic	0.117	U	0.530	0.117	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Copper	0.424	U	1.06	0.424	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Lead	0.0784	U	0.265	0.0784	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Zinc	2.12	U	4.24	2.12	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Selenium	0.0731	U	0.530	0.0731	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Manganese	0.668	U	2.65	0.668	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Chromium	0.201	U	0.530	0.201	mg/Kg		05/13/19 12:15	05/13/19 16:09	10
Beryllium	0.0318	U	0.530	0.0318	mg/Kg		05/13/19 12:15	05/13/19 16:09	10

Lab Sample ID: LCS 400-440619/2-A ^10

Matrix: Solid

Analysis Batch: 440795

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

Prep Batch: 440619

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Barium 10.2 10.26 mg/Kg 101 80 - 120 Cadmium 10.2 9.668 mg/Kg 95 80 - 120 Antimony 10.2 9.331 mg/Kg 92 80 - 120 Thallium 2.04 1.964 mg/Kg 96 80 - 120 Iron 1020 984.4 mg/Kg 97 80 - 120 Silver 10.2 9.959 mg/Kg 98 80 - 120 10.2 9.236 91 80 - 120 Arsenic mg/Kg Copper 10.2 10.04 mg/Kg 99 80 - 120 Lead 10.2 9.944 mg/Kg 98 80 - 120Zinc 10.2 9.880 97 80 - 120 mg/Kg Selenium 10.2 9.122 mg/Kg 90 80 - 120 102 102 80 - 120 Manganese 103.6 mg/Kg

10.2

10.2

9.558

10.11

mg/Kg

mg/Kg

Lab Sample ID: 400-169652-F-1-C MS ^10

Matrix: Solid

Chromium

Beryllium

Analysis Batch: 440795

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 440619

80 - 120

80 - 120

94

99

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Barium	3.04		5.34	8.557		mg/Kg		103	75 - 125	
Cadmium	0.214	U	5.34	4.823		mg/Kg		90	75 - 125	
Antimony	0.128	U F1	5.34	4.106		mg/Kg		77	75 - 125	
Thallium	0.0963	U	1.07	1.072		mg/Kg		100	75 - 125	
Iron	87.1		534	570.2		mg/Kg		91	75 - 125	
Silver	0.0203	U	5.34	5.290		mg/Kg		99	75 - 125	
Arsenic	1.66		5.34	6.323		mg/Kg		87	75 - 125	
Copper	2.39		5.34	7.146		mg/Kg		89	75 - 125	
Lead	4.93		5.34	10.26		mg/Kg		100	75 - 125	

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Analysis Batch: 440795

Lab Sample ID: 400-169652-F-1-C MS ^10 **Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA Prep Batch: 440619 Sample Sample Spike MS MS %Rec.

	Gampio	oup.o	Opino						70.100.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Zinc	235	E	5.34	239.2	E 4	mg/Kg		71	75 - 125	
Selenium	0.368	J	5.34	5.305		mg/Kg		93	75 - 125	
Manganese	12.2		53.4	61.39		mg/Kg		92	75 - 125	
Chromium	1.19		5.34	5.757		mg/Kg		86	75 - 125	
Beryllium	0.138	J	5.34	5.112		mg/Kg		93	75 - 125	

Lab Sample ID: 400-169652-F-1-D MSD ^10

Matrix: Solid

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Prep Batch: 440619 Analysis Batch: 440795 %Rec. Sample Sample Spike MSD MSD **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit 8.163 Barium 3.04 5.17 mg/Kg 75 - 125 5 20 Cadmium 0.214 U 5.17 4.550 mg/Kg 88 75 - 125 6 20 Antimony 0.128 UF1 5.17 3.452 F1 mg/Kg 67 75 - 125 17 20 Thallium 100 75 - 125 3 20 0.0963 U 1.03 1.037 mg/Kg 20 Iron 87.1 517 551.1 mg/Kg 90 75 - 125 3 Silver 97 75 - 125 20 0.0203 U 5.17 5.005 mg/Kg 6 5.17 6.274 89 75 - 125 Arsenic 1.66 mq/Kq 20 5.17 20 2 39 7 074 91 75 - 125 Copper mg/Kg Lead 4.93 5.17 10 10 mg/Kg 100 75 - 12520 7inc 235 E 5 17 237.6 E 4 mg/Kg 41 75 - 125 20 Selenium 0.368 5.17 5.038 mg/Kg 90 75 - 125 5 20 51.7 94 75 - 125 20 Manganese 12 2 60.72 mg/Kg Chromium 1.19 5.17 5.740 mg/Kg 88 75 - 125 0 20 Beryllium 0.138 J 75 - 125 2 5.17 5.241 mg/Kg 20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 400-440867/14-A

Matrix: Solid

Analysis Batch: 440969

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

Prep Batch: 440867

Prep Type: Total/NA

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.00778 U 0.0129 05/14/19 16:18 05/15/19 12:29 Mercury 0.00778 mg/Kg

Lab Sample ID: LCS 400-440867/15-A Client Sample ID: Lab Control Sample

Matrix: Solid Analysis Batch: 440969

Prep Batch: 440867 Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec

Analyte Limits 0.0655 103 Mercury 0.06781 80 - 120 mg/Kg

MB MB

Lab Sample ID: 600-185019-B-1-D MS

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 440969 Prep Batch: 440867** MS MS Sample Sample Spike %Rec. Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits 0.0158 0.132 92 80 - 120 Mercury 0.1371 mg/Kg

Eurofins TestAmerica, Houston

Client Sample ID: Matrix Spike

QC Sample Results

Job ID: 600-184934-1 Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Lab Sample ID: 600-185019-B-1-E MSD

Matrix: Solid

Analyte

Mercury

Analysis Batch: 440969

Sample Sample Result Qualifier 0.0158

Spike Added 0.132

MSD MSD Result Qualifier 0.1367

Unit mg/Kg

D %Rec 92

Client Sample ID: Matrix Spike Duplicate

%Rec.

Limits RPD Limit 80 - 120 0

Prep Type: Total/NA

Prep Batch: 440867

20

RPD

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
Gasoline Range Organics (GRO)-C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg	
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6020 - Metals (ICP/MS)

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	0.500	0.120	mg/Kg
Arsenic	0.500	0.110	mg/Kg
Barium	0.500	0.110	mg/Kg
Beryllium	0.500	0.0300	mg/Kg
Cadmium	0.500	0.200	mg/Kg
Chromium	0.500	0.190	mg/Kg
Copper	1.00	0.400	mg/Kg
Iron	25.0	4.00	mg/Kg
Lead	0.250	0.0740	mg/Kg
Manganese	2.50	0.630	mg/Kg
Selenium	0.500	0.0690	mg/Kg
Silver	0.100	0.0190	mg/Kg
Thallium	0.100	0.0900	mg/Kg
Zinc	4.00	2.00	mg/Kg

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0133	0.00800	mg/Kg

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

GC/MS VOA

Analysis Batch: 264586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	8260B	264635
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	8260B	264635
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	8260B	264635
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	8260B	264635
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	8260B	264635
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	8260B	264635
MB 600-264586/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-264586/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-264586/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 264635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	5035	_
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 440434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	8015B	440460
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	8015B	440460
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	8015B	440460
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	8015B	440460
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	8015B	440460
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	8015B	440460
MB 400-440460/2-A	Method Blank	Total/NA	Solid	8015B	440460
LCS 400-440460/1-A	Lab Control Sample	Total/NA	Solid	8015B	440460
400-169945-A-3-D MS	Matrix Spike	Total/NA	Solid	8015B	440460
400-169945-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	440460

Prep Batch: 440460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	5035	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	5035	
MB 400-440460/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-440460/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-169945-A-3-D MS	Matrix Spike	Total/NA	Solid	5035	
400-169945-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 440614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	3546	

Eurofins TestAmerica, Houston

Job ID: 600-184934-1

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

GC Semi VOA (Continued)

Prep Batch: 440614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	3546	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	3546	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	3546	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	3546	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	3546	
MB 400-440614/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-440614/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-170069-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-170069-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 440875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	8015B	440614
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	8015B	440614
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	8015B	440614
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	8015B	440614
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	8015B	440614
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	8015B	440614
MB 400-440614/1-A	Method Blank	Total/NA	Solid	8015B	440614
LCS 400-440614/2-A	Lab Control Sample	Total/NA	Solid	8015B	440614
400-170069-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	440614
400-170069-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	440614

HPLC/IC

Analysis Batch: 265212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-184934-2	Cell18-Square2-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-184934-3	Cell18-Square133-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-184934-5	Cell20-Square3-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-184934-6	Cell20-Square166-S-2'-3'-190506	Soluble	Solid	300.0	265274
MB 600-265274/1-A	Method Blank	Soluble	Solid	300.0	265274
LCS 600-265274/2-A	Lab Control Sample	Soluble	Solid	300.0	265274
600-185474-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	265274
600-185474-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	265274

Leach Batch: 265274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-184934-2	Cell18-Square2-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Soluble	Solid	DI Leach	
MB 600-265274/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-265274/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-185474-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
600-185474-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

HPLC/IC

Analysis Batch: 265337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-4	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	300.0	265362
MB 600-265362/1-A	Method Blank	Soluble	Solid	300.0	265362
LCS 600-265362/2-A	Lab Control Sample	Soluble	Solid	300.0	265362
600-184934-4 MS	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	300.0	265362
600-184934-4 MSD	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	300.0	265362

Leach Batch: 265362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-4	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	DI Leach	
MB 600-265362/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-265362/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-184934-4 MS	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-184934-4 MSD	Cell25-Square98-S-2'-3'-190506	Soluble	Solid	DI Leach	

Metals

Prep Batch: 440619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	3050B	
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	3050B	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	3050B	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	3050B	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	3050B	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	3050B	
MB 400-440619/1-A ^10	Method Blank	Total/NA	Solid	3050B	
LCS 400-440619/2-A ^10	Lab Control Sample	Total/NA	Solid	3050B	
400-169652-F-1-C MS ^10	Matrix Spike	Total/NA	Solid	3050B	
400-169652-F-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 440795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	6020	440619
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	6020	440619
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	6020	440619
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	6020	440619
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	6020	440619
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	6020	440619
MB 400-440619/1-A ^10	Method Blank	Total/NA	Solid	6020	440619
LCS 400-440619/2-A ^10	Lab Control Sample	Total/NA	Solid	6020	440619
400-169652-F-1-C MS ^10	Matrix Spike	Total/NA	Solid	6020	440619
400-169652-F-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	6020	440619

Prep Batch: 440867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	7471A	
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	7471A	
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	7471A	
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	7471A	
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	7471A	
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	7471A	
MB 400-440867/14-A	Method Blank	Total/NA	Solid	7471A	

Eurofins TestAmerica, Houston

Job ID: 600-184934-1

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Metals (Continued)

Prep Batch: 440867 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-440867/15-A	Lab Control Sample	Total/NA	Solid	7471A	
600-185019-B-1-D MS	Matrix Spike	Total/NA	Solid	7471A	
600-185019-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 440969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-184934-1	Cell18-Square194-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-184934-2	Cell18-Square2-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-184934-3	Cell18-Square133-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-184934-4	Cell25-Square98-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-184934-5	Cell20-Square3-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-184934-6	Cell20-Square166-S-2'-3'-190506	Total/NA	Solid	7471A	440867
MB 400-440867/14-A	Method Blank	Total/NA	Solid	7471A	440867
LCS 400-440867/15-A	Lab Control Sample	Total/NA	Solid	7471A	440867
600-185019-B-1-D MS	Matrix Spike	Total/NA	Solid	7471A	440867
600-185019-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	440867

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Client: ARCADIS U.S. Inc

Date Received: 05/07/19 09:50

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell18-Square194-S-2'-3'-190506

Date Collected: 05/06/19 15:00

Lab Sample ID: 600-184934-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.187 g	5 mL	264635	05/08/19 07:55	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264586	05/08/19 16:10	PXS	TAL HOU
Total/NA	Prep	5035			5.27 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/10/19 21:37	GRK	TAL PEN
Total/NA	Prep	3546			15.18 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440875	05/15/19 02:43	JAW	TAL PEN
Soluble	Leach	DI Leach			5.01 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 03:41	SKR	TAL HOU
Total/NA	Prep	3050B			0.5364 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 16:45	DRE	TAL PEN
Total/NA	Prep	7471A			0.6344 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:58	JAP	TAL PEN

Client Sample ID: Cell18-Square2-S-2'-3'-190506

Date Collected: 05/06/19 13:21

Lab Sample ID: 600-184934-2

Matrix: Solid

Date Received: 05/07/19 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.839 g	5 mL	264635	05/08/19 07:55	WS1	TAL HOL
Total/NA	Analysis	8260B		1	5 g	5 g	264586	05/08/19 16:33	PXS	TAL HOL
Total/NA	Prep	5035			5.27 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/10/19 22:12	GRK	TAL PEN
Total/NA	Prep	3546			15.16 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440875	05/15/19 02:55	JAW	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	265274	05/16/19 17:17	SKR	TAL HOL
Soluble	Analysis	300.0		1			265212	05/17/19 02:30	SKR	TAL HOU
Total/NA	Prep	3050B			0.4606 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 17:05	DRE	TAL PEN
Total/NA	Prep	7471A			0.6045 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 13:00	JAP	TAL PEN

Date Received: 05/07/19 09:50

Lab Sample ID: 600-184934-3 Client Sample ID: Cell18-Square133-S-2'-3'-190506 Date Collected: 05/06/19 14:20 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.154 g	5 mL	264635	05/08/19 07:55	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264586	05/08/19 17:22	PXS	TAL HOU
Total/NA	Prep	5035			5.45 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/10/19 22:48	GRK	TAL PEN
Total/NA	Prep	3546			15.21 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440875	05/15/19 03:08	JAW	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 03:23	SKR	TAL HOU

Client Sample ID: Cell18-Square133-S-2'-3'-190506

Lab Sample ID: 600-184934-3 Date Collected: 05/06/19 14:20 **Matrix: Solid**

Date Received: 05/07/19 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.4876 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 17:09	DRE	TAL PEN
Total/NA	Prep	7471A			0.6283 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 13:02	JAP	TAL PEN

Client Sample ID: Cell25-Square98-S-2'-3'-190506

Lab Sample ID: 600-184934-4 Date Collected: 05/06/19 12:55 **Matrix: Solid**

Date Received: 05/07/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	Kuii	-actor	6.353 q	5 mL	264635	05/08/19 07:55		TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 m.c.	264586	05/08/19 17:46		TAL HOU
Total/NA	Prep	5035			5.14 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/10/19 23:23	GRK	TAL PEN
Total/NA	Prep	3546			15.43 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440875	05/15/19 03:20	JAW	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	265362	05/17/19 15:18	SKR	TAL HOU
Soluble	Analysis	300.0		1			265337	05/17/19 16:12	SKR	TAL HOU
Total/NA	Prep	3050B			0.4906 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 17:13	DRE	TAL PEN
Total/NA	Prep	7471A			0.6407 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1	-		440969	05/15/19 13:04	JAP	TAL PEN

Client Sample ID: Cell20-Square3-S-2'-3'-190506

Date Collected: 05/06/19 15:25

Date Received: 05/07/19 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.545 g	5 mL	264635	05/08/19 07:55	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264586	05/08/19 18:10	PXS	TAL HOU
Total/NA	Prep	5035			5.23 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/10/19 23:58	GRK	TAL PEN
Total/NA	Prep	3546			15.21 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440875	05/15/19 03:32	JAW	TAL PEN
Soluble	Leach	DI Leach			5.01 g	50 mL	265274	05/16/19 17:17	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 01:18	SKR	TAL HOU
Total/NA	Prep	3050B			0.5168 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 17:17	DRE	TAL PEN
Total/NA	Prep	7471A			0.6073 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 13:06	JAP	TAL PEN

Eurofins TestAmerica, Houston

Lab Sample ID: 600-184934-5

Matrix: Solid

Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell20-Square166-S-2'-3'-190506

Lab Sample ID: 600-184934-6

Date Collected: 05/06/19 16:40 **Matrix: Solid** Date Received: 05/07/19 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.454 g	5 mL	264635	05/08/19 07:55	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264586	05/08/19 19:07	PXS	TAL HOU
Total/NA	Prep	5035			5.04 g	5.0 g	440460	05/10/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440434	05/11/19 00:32	GRK	TAL PEN
Total/NA	Prep	3546			15.45 g	1.0 mL	440614	05/13/19 10:47	KLR	TAL PEN
Total/NA	Analysis	8015B		5			440875	05/15/19 03:57	JAW	TAL PEN
Soluble	Leach	DI Leach			5.00 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 03:05	SKR	TAL HOU
Total/NA	Prep	3050B			0.4924 g	50 mL	440619	05/13/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			440795	05/13/19 17:21	DRE	TAL PEN
Total/NA	Prep	7471A			0.6406 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 13:08	JAP	TAL PEN

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444 TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-184934-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas	Program NELAP		EPA Region 6	T104704223-18-23	Expiration Date 10-31-19
The following analyte the agency does not o	•	rt, but the laboratory	s not certified by the	e governing authority. This	s list may include analytes for wh

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

The second and the se		A	ANALYSIS REQUEST FORM	RM Page Lor	
10. Square 18.5-2-3-1 18.56 56-19 16.10 16	Steve Richard Name	303-710-7537	وساواد		Keys Preservation Keys Container Information Key; A H SO 1 40 rd Vial
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Condition/Cooler Term: Date/Time	10		francis Francis	FemCount	Funt
56.9/2013 20-093		Condition/Cooler Temp:	161	19438 Deenma	Date/Time

Nanny, Ryan

From:

Rice, Steve

Sent:

Wednesday, May 1, 2019 5:44 PM

To:

Nanny, Ryan

Subject:

FW: Jal Sample Markout

Attachments:

Q12019 Re-Sample Locations.xlsx

Follow Up Flag:

Follow up Flagged

Flag Status:

Ryan,

I asked Cory to stake the sample locations at Jal. We have to collect 4 random vadose zone samples (2-3') from cells 18, 20, and 25 – so 12 total. The areas to be sampled are marked on the attached. I'm hoping Cory remembered to stake today.

Each of the soil samples will be analyzed for the following:

- TPH GRO 8015B
- TPH DRO 8015B
- TPH ORO 8015B
- BTEX by 8260B
- Chlorides by 300.1
- · And the following metals:

Metals	Method	
Antimony	6020A	
Arsenic	6020A	
Barium	6020A	
Beryllium	6020A	
Cadmium	6020A	
Chromium	6020A	
Copper	6020A	
Iron	6020A	
Lead	6020A	
Manganese	6020A	
Mercury	7471A	
Selenium	6020A	
Silver	6020A	
Thallium	6020A	
Zinc	6020A	

Make sure they scrape off all treatment zone soil, as we want to get some clean samples. I doubt we will, but wishful thinking.

Lcc: 600 184934

Sample Receipt Checklist

THE LEADER IN ENVIRONMENTAL TESTING

			Date/Time Received:			719 MAY	7 9
OR NUMBER			CLIENT:	AR	CADI	S	
OB NUMBER:	WEL	E	OLILINI.		dox	1	
NPACKED BY:	XK-	2	CARRIER/DRIVER:		uxx		
ustody Seal Present:	YES	□ NO	Number of Coolers R	eceived:			
Carles ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm	Them CF	Corrected Temp (℃)	
Cooler ID	X / N	Y / N	2.1	10/210	-0.2	1.0	1
740	YIN	YIN	-	010			1
	YIN	Y / N					1
	Y / N	Y / N					
	YAN	Y / N			•	\	1
/	YIN	YTAL				11	4
	Y / N	Y / N			/	17	-
	Y / N	Y / N				5010	Н
	Y / N	YIN				01111	
ase samples are>pH 1	2: YES [NO	Acid preserved are <p< th=""><th>oH 2:</th><th>YES</th><th>□NO</th><th></th></p<>	oH 2:	YES	□NO	
DA headspace accepta	able (5-6mm):	YES	NO DINA				
Did samples meet the la	boratory's stand	lard conditions	of sample acceptability u	upon receipt?		YES NO	
COMMENTS:							1
							-
					1		
						1-	
					/ '	=12/10	1
						21111]



600-184934 Waybill



TUE - 07 MAY 10:30A PRIORITY OVERNIGHT

77040 TX-US 1A'i



Eurofins TestAmerica, Houston

Chain of Custody Record

eurofins Environment Testing TestAmerica

6310 Rothway Street

Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646

Client Information (Sub Contract Lab)	Sampler:			Lab PM: Kudch	Lab PM: Kudchadkar, Sachin G	Sachi	9			Carrier Tracking No(s):	COC No: 600-39386.1	
Client Contact:	Phone:			E-Mail:	ile.					State of Origin:	Page:	
Shipping/Receiving				sac	hin.kudch	adkar	@tests	sachin.kudchadkar@testamericainc.com		Texas	Page 1 of 1	
Company: TestAmerica Laboratories, Inc.					Accreditations Requ	tions Re-	quired (Accreditations Required (See note): NELAP - Texas			Job #: 600-184934-1	
Address:	Due Date Requested:										Preservation Codes:	odes:
3355 McLemore Drive,	5/17/2019							Analysis Requested	s Red	nested	I DI	N
City. Pensacola	TAT Requested (days):	s):					1s				B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip. FL, 32514						-	id elst				D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	#OO#:				(0	_	-				G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate
Email:	#OM					_					_	
Project Name: Chevron - Jal Land Farm Soils 2018	Project #: 60009563										K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:					_		də.			of cor	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air	Field Filtered S MSM mShPerform	8015B_GRO/503	8015B_DRO/354	19_A1747\A1747			Total Number of the state of th	Special Instructions/Note:
	X	X	Preserv		X							
Cell18-Square194-S-2'-3'-190506 (600-184934-1)	5/6/19	15:00 Central		Solid		×	×	×			9	
Cell18-Square2-S-2'-3'-190506 (600-184934-2)	5/6/19	13:21 Central		Solid		×	×	×			9	
Cell18-Square133-S-2'-3'-190506 (600-184934-3)	5/6/19	14:20 Central		Solid		×	×	×			9	
Cell25-Square98-S-2'-3'-190506 (600-184934-4)	5/6/19	12:55 Central		Solid		×	×	×			9	
Cell20-Square3-S-2'-3'-190506 (600-184934-5)	5/6/19	15:25 Central		Solid		×	×	×			9	
Cell20-Square166-S-2'-3'-190506 (600-184934-6)	5/6/19	16:40 Central		Solid		×	×	×			9	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory expensions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Oustody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification		Sa	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	samples are retained longer than	1 month)
Unconfirmed			Return To Client Disposal By Lab	Lab Archive For	Months
Deliverable Requested: I, III, IV, Other (specify)	Primary Deliverable Rank: 2	ds	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	Date:	Time:	Metho	Method of Shipment:	
Relinquished by: 770M. X	Soll Sulves	Company	Received by Clevery	Date/Time: 5 5 8 5 8	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.: A Yes A No			Cooler Temperature(s) °C and Other Remarks:	1.9°C TR7	

Ver: 01/16/2019

Job Number: 600-184934-1

Client: ARCADIS U.S. Inc

Login Number: 184934 List Number: 1

Creator: Taylor, Jacquelyn R

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey neter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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

Client: ARCADIS U.S. Inc

Job Number: 600-184934-1

Login Number: 184934

List Number: 2

Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola

List Creation: 05/09/19 05:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
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	1.9°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	
s 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").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-185019-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

Revision: 1

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Skudchadker

Authorized for release by: 5/23/2019 3:59:04 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-185019-1

Comments

The report was revised on 05/23/19 to correct the sample IDs per the chain of custody.

Receipt

The samples were received on 5/8/2019 9:33 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

Receipt Exceptions

The Fed Ex label on this cooler is dated for delivery 05/07/19. It was received 05/08/19. The containers for BTEX were not placed in the freezer until 15:00

Cell25-Square102-S-2'-3'-190506 (600-185019-1), Cell25-Square126-S-2'-3'-190506 (600-185019-2), Cell25-Square56-S-2'-3'-190506 (600-185019-3), Cell25-Square20-S-2'-3'-190506 (600-185019-4), Cell25-Square19-S-2'-3'-190506 (600-185019-5) and Cell25-Square107-S-2'-3'-190506 (600-185019-6)

GC/MS VOA

Method(s) 8260B:

The sample preparation time is the same as shown on the freezer door.

 $Cell 25-Square 126-S-2'-3'-190506 \ (600-185019-2), \ Cell 25-Square 56-S-2'-3'-190506 \ (600-185019-3), \ Cell 25-Square 20-S-2'-3'-190506 \ (600-185019-4) \ and \ Cell 25-Square 107-S-2'-3'-190506 \ (600-185019-6)$

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

GC VOA

Method(s) 8015B: The continuing calibration verification (CCV) associated with batch 400-440659 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; 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.

GC Semi VOA

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

Metals

Method(s) 200.8, 6020: The continuing calibration blank (CCB) for analytical batch 400-441084 contained Lead above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-440955 and analytical batch 400-441084 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6020: The post digestion spike % recovery for Barium associated with batch 400-441084 was outside of control limits. The following sample is impacted: (600-185019-B-6-D PDS ^10).

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

General Chemistry

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

Industrial Hygiene

Job ID: 600-185019-1

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Job ID: 600-185019-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

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

Organic Prep

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

VOA Prep

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6020	Metals (ICP/MS)	SW846	TAL PEN
7471A	Mercury (CVAA)	SW846	TAL PEN
3050B	Preparation, Metals	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
'471A	Preparation, Mercury	SW846	TAL PEN
Ol Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Job ID: 600-185019-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-185019-1	Cell20-Square102-S-2'-3'-190506	Solid	05/06/19 16:20	05/08/19 09:33	
600-185019-2	Cell25-Square126-S-2'-3'-190506	Solid	05/06/19 12:25	05/08/19 09:33	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Solid	05/06/19 13:50	05/08/19 09:33	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Solid	05/06/19 11:55	05/08/19 09:33	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Solid	05/06/19 15:55	05/08/19 09:33	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Solid	05/06/19 11:25	05/08/19 09:33	

Job ID: 600-185019-1

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Job ID: 600-185019-1

Client: ARCADIS U.S. Inc

Analyte

Lead

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell20-Square102-S-2'-3'-190506

Lab Sample ID: 600-185019-1 Date Collected: 05/06/19 16:20 **Matrix: Solid**

Date Received: 05/08/19 09:33

Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.594	U	4.72	0.594	ug/Kg		05/08/19 15:00	05/09/19 11:56	•
Ethylbenzene	0.962	U	4.72	0.962	ug/Kg		05/08/19 15:00	05/09/19 11:56	
Toluene	1.30	U	4.72	1.30	ug/Kg		05/08/19 15:00	05/09/19 11:56	
Xylenes, Total	1.07	U	4.72	1.07	ug/Kg		05/08/19 15:00	05/09/19 11:56	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	85		61 - 130				05/08/19 15:00	05/09/19 11:56	
Dibromofluoromethane	90		68 - 140				05/08/19 15:00	05/09/19 11:56	
Toluene-d8 (Surr)	96		50 - 130				05/08/19 15:00	05/09/19 11:56	
4-Bromofluorobenzene	97		57 - 140				05/08/19 15:00	05/09/19 11:56	
Method: 8015B - Gasoline R	ange Organio	cs - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) -C6-C10	54.7	Ū	109	54.7	ug/Kg		05/13/19 12:00	05/13/19 21:24	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	82		65 - 125				05/13/19 12:00	05/13/19 21:24	
Method: 8015B - Diesel Rang	ge Organics ((DRO) (GC	:)						
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	1.98	U	4.94	1.98	mg/Kg		05/13/19 12:51	05/15/19 08:18	
Oil Range Organics (C28-C35)	1.98	U	4.94		mg/Kg		05/13/19 12:51	05/15/19 08:18	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	68		27 - 151				05/13/19 12:51	05/15/19 08:18	
Method: 300.0 - Anions, Ion	Chromatogra	phy - Sol	uble						
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	14.4		3.97	0.530	mg/Kg			05/17/19 00:42	
Method: 6020 - Metals (ICP/I	MS)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Barium	345		0.527	0.116	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Cadmium	0.211	U	0.527	0.211	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Antimony	0.127	U	0.527	0.127	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Thallium	0.0949	U	0.105	0.0949	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Iron	1420		26.4	4.22	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Silver	0.0200	U	0.105		mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Arsenic	4.22		0.527	0.116	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Copper	1.42		1.05	0.422	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Zinc	3.25	J	4.22		mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Selenium	0.0728	U	0.527	0.0728	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Manganese	12.5		2.64	0.664	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Chromium	1.77		0.527	0.200	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Beryllium	0.0749	J	0.527	0.0316	mg/Kg		05/15/19 12:15	05/15/19 23:17	1
Method: 6020 - Metals (ICP/I	MS) - RA								

Analyzed

<u>05/15/19 12:15</u> <u>05/16/19 08:56</u>

Prepared

MQL (Adj)

0.264

SDL Unit

0.0780 mg/Kg

Result Qualifier

0.805

Dil Fac

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell20-Square102-S-2'-3'-190506 Lab Sample ID: 600-185019-1

Date Collected: 05/06/19 16:20 **Matrix: Solid**

Date Received: 05/08/19 09:33

Method: 7471A - Mercury (CVAA)								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0158	0.0129	0.00775	mg/Kg		05/14/19 16:18	05/15/19 12:32	1

Client Sample ID: Cell25-Square126-S-2'-3'-190506

Lab Sample ID: 600-185019-2 Date Collected: 05/06/19 12:25 **Matrix: Solid**

Date Received: 05/08/19 09:33

Method: 8260B - Volatile Orga Analyte		unds (GC) Qualifier	/ <mark>MS)</mark> MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.468	UH	3.71	0.468	ug/Kg		05/08/19 15:00	05/09/19 12:20	-
Ethylbenzene	0.757	UH	3.71	0.757	ug/Kg		05/08/19 15:00	05/09/19 12:20	
Toluene	1.02	UH	3.71	1.02	ug/Kg		05/08/19 15:00	05/09/19 12:20	•
Xylenes, Total	0.839	UH	3.71	0.839	ug/Kg		05/08/19 15:00	05/09/19 12:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	82		61 - 130				05/08/19 15:00	05/09/19 12:20	1
Dibromofluoromethane	91		68 ₋ 140				05/08/19 15:00	05/09/19 12:20	1
Toluene-d8 (Surr)	95		50 - 130				05/08/19 15:00	05/09/19 12:20	1
4-Bromofluorobenzene	103		57 - 140				05/08/19 15:00	05/09/19 12:20	1
Method: 8015B - Gasoline Rar									
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	43.9	U	87.7	43.9	ug/Kg		05/13/19 12:00	05/13/19 22:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	82		65 - 125				05/13/19 12:00	05/13/19 22:00	1
Method: 8015B - Diesel Range	Organics (DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.67	J	4.96		mg/Kg		05/13/19 12:51	05/15/19 08:31	1
Oil Range Organics (C28-C35)	1.98	U	4.96	1.98	mg/Kg		05/13/19 12:51	05/15/19 08:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		27 - 151				05/13/19 12:51	05/15/19 08:31	1
Method: 300.0 - Anions, Ion Cl	hromatogra	phy - Sol	uble						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		3.95	0.528	mg/Kg			05/17/19 03:59	1
Method: 6020 - Metals (ICP/MS	S)								
Analyte	Result	Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fac
Barium	51.3		0.522	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
	0.209		0.522		ma/Ka				

107		3.93	0.020	mg/itg			03/11/19 03.39	
•	O 110		0.01		_			
Result	Qualifier	MQL (Adj)	SDL	Unit	ט	Prepared	Analyzed	Dil Fac
51.3		0.522	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
0.209	U	0.522	0.209	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
0.125	U	0.522	0.125	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
0.116		0.104	0.0940	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
9040		26.1	4.18	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
0.0198	U	0.104	0.0198	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
3.20		0.522	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
2.46		1.04	0.418	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
5.35	^	0.261	0.0773	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
18.7		4.18	2.09	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
0.0720	U	0.522	0.0720	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
	Result 51.3 0.209 0.125 0.116 9040 0.0198 3.20 2.46 5.35 18.7	Result Qualifier 51.3 0.209 U 0.125 U 0.116 9040 0.0198 U 3.20 2.46 5.35 ^	Result Qualifier MQL (Adj) 51.3 0.522 0.209 U 0.522 0.125 U 0.522 0.116 0.104 9040 26.1 0.0198 U 0.104 3.20 0.522 2.46 1.04 5.35 ^ 0.261 18.7 4.18	Result Qualifier MQL (Adj) SDL 51.3 0.522 0.115 0.209 U 0.522 0.209 0.125 U 0.522 0.125 0.116 0.104 0.0940 9040 26.1 4.18 0.0198 U 0.104 0.0198 3.20 0.522 0.115 2.46 1.04 0.418 5.35 ^ 0.261 0.0773 18.7 4.18 2.09	Result Qualifier MQL (Adj) SDL Unit 51.3 0.522 0.115 mg/Kg 0.209 U 0.522 0.209 mg/Kg 0.125 U 0.522 0.125 mg/Kg 0.116 0.104 0.0940 mg/Kg 9040 26.1 4.18 mg/Kg 0.0198 U 0.104 0.0198 mg/Kg 3.20 0.522 0.115 mg/Kg 2.46 1.04 0.418 mg/Kg 5.35 ^ 0.261 0.0773 mg/Kg 18.7 4.18 2.09 mg/Kg	Result Qualifier MQL (Adj) SDL Unit D 51.3 0.522 0.115 mg/Kg 0.209 U 0.522 0.209 mg/Kg 0.125 U 0.522 0.125 mg/Kg 0.116 0.104 0.0940 mg/Kg 9040 26.1 4.18 mg/Kg 0.0198 U 0.104 0.0198 mg/Kg 3.20 0.522 0.115 mg/Kg 2.46 1.04 0.418 mg/Kg 5.35 ^ 0.261 0.0773 mg/Kg 18.7 4.18 2.09 mg/Kg	Result Qualifier MQL (Adj) SDL Unit D 97715/19 12:15 0.209 U 0.522 0.209 mg/Kg 05/15/19 12:15 0.125 U 0.522 0.125 mg/Kg 05/15/19 12:15 0.116 0.104 0.0940 mg/Kg 05/15/19 12:15 9040 26.1 4.18 mg/Kg 05/15/19 12:15 0.0198 U 0.104 0.0198 mg/Kg 05/15/19 12:15 3.20 0.522 0.115 mg/Kg 05/15/19 12:15 3.20 0.522 0.115 mg/Kg 05/15/19 12:15 2.46 1.04 0.418 mg/Kg 05/15/19 12:15 5.35 ^ 0.261 0.0773 mg/Kg 05/15/19 12:15 18.7 4.18 2.09 mg/Kg 05/15/19 12:15	Result Qualifier MQL (Adj) SDL Unit D Prepared 05/15/19 12:15 05/15/19 23:21 0.209 U 0.522 0.209 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.125 U 0.522 0.125 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.125 U 0.522 0.125 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.116 0.104 0.0940 mg/Kg 05/15/19 12:15 05/15/19 23:21 9040 26.1 4.18 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.0198 U 0.104 0.0198 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.0198 U 0.104 0.0198 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.246 1.04 0.418 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.35 ^ 0.261 0.0773 mg/Kg 05/15/19 12:15 05/15/19 23:21 0.373 mg/Kg 05/15/19

Job ID: 600-185019-1

05/14/19 16:18 05/15/19 12:40

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square126-S-2'-3'-190506

Lab Sample ID: 600-185019-2 **Matrix: Solid**

0.00756 mg/Kg

Date Collected: 05/06/19 12:25 Date Received: 05/08/19 09:33

Method: 6020 - Metals (ICP/MS) (Continue	ed)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	43.7		2.61	0.658	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Chromium	9.65		0.522	0.198	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Beryllium	0.512	J	0.522	0.0313	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Method: 7471A - Mercury (CVAA)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

0.0126

Client Sample ID: Cell18-Square56-S-2'-3'-190506

0.0155

Lab Sample ID: 600-185019-3 Date Collected: 05/06/19 13:50 **Matrix: Solid**

Date Received: 05/08/19 09:33

Mercury

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.533	UH	4.23	0.533	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Ethylbenzene	0.863	UH	4.23	0.863	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Toluene	1.17	UH	4.23	1.17	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Xylenes, Total	0.956	UH	4.23	0.956	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		61 - 130				05/08/19 15:00	05/09/19 12:44	1
Dibromofluoromethane	90		68 - 140				05/08/19 15:00	05/09/19 12:44	1
Toluene-d8 (Surr)	95		50 - 130				05/08/19 15:00	05/09/19 12:44	1
4-Bromofluorobenzene	95		57 - 140				05/08/19 15:00	05/09/19 12:44	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	53.1	U	106	53.1	ug/Kg		05/13/19 12:00	05/13/19 22:36	1
-C6-C10									
	a								
Surrogate	%Recovery	Qualitier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	81		65 - 125				05/13/19 12:00	05/13/19 22:36	1

Method: 8015B - Diesel Ran	ge Organics	(DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28	2.68	J	4.99	2.00	mg/Kg		05/13/19 12:51	05/15/19 08:43	1
Oil Range Organics (C28-C35)	2.00	U	4.99	2.00	mg/Kg		05/13/19 12:51	05/15/19 08:43	1
Surrogate o-Terphenyl	%Recovery	Qualifier	27 - 151				Prepared 05/13/19 12:51	Analyzed 05/15/19 08:43	Dil Fac

Method: 300.0 - Anions, Ion Ch	hromatography - Soli	uble						
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.2	3.96	0.529	mg/Kg			05/17/19 01:00	1

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	194		0.523	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Cadmium	0.209	U	0.523	0.209	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Antimony	0.126	U	0.523	0.126	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Thallium	0.0942	U	0.105	0.0942	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Iron	3860		26.2	4.18	mg/Kg		05/15/19 12:15	05/15/19 23:41	10

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell18-Square56-S-2'-3'-190506

Date Collected: 05/06/19 13:50 Date Received: 05/08/19 09:33

Lab Sample ID: 600-185019-3

Lab Sample ID: 600-185019-4

Matrix: Solid

Job ID: 600-185019-1

Analyte	Result Q	ualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0199 U	I	0.105	0.0199	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Arsenic	3.08		0.523	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Copper	1.65		1.05	0.418	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Zinc	8.80		4.18	2.09	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Selenium	0.0722 U	j	0.523	0.0722	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Manganese	30.5		2.62	0.659	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Chromium	4.47		0.523	0.199	mg/Kg		05/15/19 12:15	05/15/19 23:41	10
Beryllium	0.204 J		0.523	0.0314	mg/Kg		05/15/19 12:15	05/15/19 23:41	10

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

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.262 0.0774 mg/Kg 05/15/19 12:15 05/16/19 09:00 Lead 2.30 10

Method: 7471A - Mercury (CVAA)

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Mercury 0.0139 0.0131 0.00791 mg/Kg 05/14/19 16:18 05/15/19 12:42

Client Sample ID: Cell25-Square20-S-2'-3'-190506

Date Collected: 05/06/19 11:55

Date Received: 05/08/19 09:33

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.461	UH	3.66	0.461	ug/Kg		05/08/19 15:00	05/09/19 13:08	1
Ethylbenzene	0.747	UH	3.66	0.747	ug/Kg		05/08/19 15:00	05/09/19 13:08	1
Toluene	1.01	UH	3.66	1.01	ug/Kg		05/08/19 15:00	05/09/19 13:08	1
Xylenes, Total	0.828	UH	3.66	0.828	ug/Kg		05/08/19 15:00	05/09/19 13:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		61 - 130				05/08/19 15:00	05/09/19 13:08	1
Dibromofluoromethane	95		68 - 140				05/08/19 15:00	05/09/19 13:08	1
Toluene-d8 (Surr)	94		50 - 130				05/08/19 15:00	05/09/19 13:08	1
4-Bromofluorobenzene	100		57 - 140				05/08/19 15:00	05/09/19 13:08	1
Method: 8015B - Gasoline R	ange Organio	cs - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Casoline Pange Organics (CPO)	47 1	U	94.2	17.1	ua/Ka		05/13/19 12:00	05/13/19 23:11	

Gasoline Range Organics (GRO) -C6-C10	47.1	Qualifier U	94.2	47.1	ug/Kg	D	Prepared 05/13/19 12:00	Analyzed 05/13/19 23:11	Dil Fac
Surrogate a,a,a-Trifluorotoluene (fid)	%Recovery 82	Qualifier	Limits 65 - 125				Prepared 05/13/19 12:00	Analyzed 05/13/19 23:11	Dil Fac

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.71	J	4.95	1.98	mg/Kg		05/13/19 12:51	05/15/19 08:56	1
Oil Range Organics (C28-C35)	1.98	U	4.95	1.98	mg/Kg		05/13/19 12:51	05/15/19 08:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	88		27 - 151				05/13/19 12:51	05/15/19 08:56	

Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square20-S-2'-3'-190506

Date Collected: 05/06/19 11:55

Date Received: 05/08/19 09:33

Client: ARCADIS U.S. Inc

Lab Sample ID: 600-185019-4

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.3		3.96	0.529	mg/Kg			05/17/19 04:53	1
Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	79.4	-	0.523	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Cadmium	0.209	U	0.523	0.209	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Antimony	0.126	U	0.523	0.126	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Thallium	0.0994	J	0.105	0.0942	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Iron	7930		26.2	4.19	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Silver	0.0199	U	0.105	0.0199	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Arsenic	2.56		0.523	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Copper	2.28		1.05	0.419	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Lead	4.89	٨	0.262	0.0774	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Zinc	16.3		4.19	2.09	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Selenium	0.0722	U	0.523	0.0722	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Manganese	40.0		2.62	0.659	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Chromium	8.61		0.523	0.199	mg/Kg		05/15/19 12:15	05/15/19 23:45	10
Beryllium	0.454	J	0.523	0.0314	mg/Kg		05/15/19 12:15	05/15/19 23:45	10

MQL (Adj)

0.0125

SDL Unit

0.00752 mg/Kg

Client Sample ID: Cell20-Square19-S-2'-3'-190506

Result Qualifier

0.0101 J

2.43 J

1.97 U

Date Collected: 05/06/19 15:55 Date Received: 05/08/19 09:33

Diesel Range Organics [C10-C28]

Oil Range Organics (C28-C35)

Analyte

Mercury

Method: 7471A - Mercury (CVAA)

Lab Sample ID: 600-185019-5

05/14/19 16:18 05/15/19 12:44

Analyzed

Prepared

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.606	U	4.81	0.606	ug/Kg		05/08/19 15:00	05/09/19 13:32	
Ethylbenzene	0.981	U	4.81	0.981	ug/Kg		05/08/19 15:00	05/09/19 13:32	
Toluene	1.33	U	4.81	1.33	ug/Kg		05/08/19 15:00	05/09/19 13:32	•
Xylenes, Total	1.09	U	4.81	1.09	ug/Kg		05/08/19 15:00	05/09/19 13:32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	87		61 - 130				05/08/19 15:00	05/09/19 13:32	-
Dibromofluoromethane	90		68 - 140				05/08/19 15:00	05/09/19 13:32	
Toluene-d8 (Surr)	93		50 - 130				05/08/19 15:00	05/09/19 13:32	
4-Bromofluorobenzene	97		57 - 140				05/08/19 15:00	05/09/19 13:32	
Method: 8015B - Gasoline R	ange Organio	s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) -C6-C10	49.1	Ū	98.2	49.1	ug/Kg		05/13/19 12:00	05/13/19 23:47	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	81		65 - 125				05/13/19 12:00	05/13/19 23:47	
Method: 8015B - Diesel Rang	ge Organics (DRO) (GC	;)						
Analyte		Qualifier	MQL (Adj)	SDI	Unit	D	Prepared	Analyzed	Dil Fa

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05/13/19 12:51 05/15/19 09:08

05/13/19 12:51 05/15/19 09:08

4.93

4.93

1.97 mg/Kg

1.97 mg/Kg

Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell20-Square19-S-2'-3'-190506

Date Collected: 05/06/19 15:55

Client: ARCADIS U.S. Inc

Date Received: 05/08/19 09:33

Lab Sample ID: 600-185019-5

Matrix: Solid

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac

o-Terphenyl 80 27 - 151 05/13/19 12:51 05/15/19 09:08 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result Chloride
 Qualifier 3.09
 MQL (Adj) 3.95
 SDL Unit MQKg
 D Mg/Kg
 Prepared Displayed 05/17/19 02:47
 Dil Fac Displayed 05/17/19 02:47

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	535		0.527	0.116	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Cadmium	0.211	U	0.527	0.211	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Antimony	0.126	U	0.527	0.126	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Thallium	0.0948	U	0.105	0.0948	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Iron	2330		26.3	4.21	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Silver	0.0200	U	0.105	0.0200	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Arsenic	2.85		0.527	0.116	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Copper	1.26		1.05	0.421	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Zinc	5.02		4.21	2.11	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Selenium	0.0727	U	0.527	0.0727	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Manganese	20.0		2.63	0.664	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Chromium	2.70		0.527	0.200	mg/Kg		05/15/19 12:15	05/15/19 23:49	10
Beryllium	0.163	J	0.527	0.0316	mg/Kg		05/15/19 12:15	05/15/19 23:49	10

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

 Analyte
 Result Lead
 Qualifier Qualifier
 MQL (Adj) 0.263
 SDL mg/Kg
 Unit mg/Kg
 D mg/Kg
 Prepared 05/15/19 12:15
 Analyzed 05/16/19 09:04
 Dil Fac 05/16/19 09:04

Method: 7471A - Mercury (CVAA)

 Analyte
 Result
 Qualifier
 MQL (Adj)
 SDL Unit
 D 05/14/19 16:18
 Prepared 05/14/19 16:18
 Analyzed 05/15/19 12:46
 Dil Fac 05/14/19 16:18

Client Sample ID: Cell25-Square107-S-2'-3'-190506

Date Collected: 05/06/19 11:25

Date Received: 05/08/19 09:33

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

Wethou. 0200D - Volatile	Organic Compo	unus (GC	/IVIO)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.583	UH	4.63	0.583	ug/Kg		05/08/19 15:00	05/09/19 13:56	1
Ethylbenzene	0.944	UH	4.63	0.944	ug/Kg		05/08/19 15:00	05/09/19 13:56	1
Toluene	1.28	UH	4.63	1.28	ug/Kg		05/08/19 15:00	05/09/19 13:56	1
Xylenes, Total	1.05	UH	4.63	1.05	ug/Kg		05/08/19 15:00	05/09/19 13:56	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88	61 - 130	05/08/19 15:00	05/09/19 13:56	1
Dibromofluoromethane	89	68 - 140	05/08/19 15:00	05/09/19 13:56	1
Toluene-d8 (Surr)	96	50 - 130	05/08/19 15:00	05/09/19 13:56	1
4-Bromofluorobenzene	93	57 - 140	05/08/19 15:00	05/09/19 13:56	1

Method: 8015B - Gasoline Rar	nge Organics - (GC)							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	46.4 U	92.8	46.4	ug/Kg		05/13/19 12:00	05/14/19 00:22	1
-C6-C10								

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Lab Sample ID: 600-185019-6

Matrix: Solid

A

5

6

8

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square107-S-2'-3'-190506

Lab Sample ID: 600-185019-6 Date Collected: 05/06/19 11:25 **Matrix: Solid**

Date Received: 05/08/19 09:33

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	82		65 - 125				05/13/19 12:00	05/14/19 00:22	1
Method: 8015B - Diesel Range	Organics (DRO) (GC	;)						
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.02	J	4.93	1.97	mg/Kg		05/13/19 12:51	05/15/19 09:33	1
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg		05/13/19 12:51	05/15/19 09:33	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	81		27 - 151				05/13/19 12:51	05/15/19 09:33	1
Method: 300.0 - Anions, Ion C	hromatogra	ıphy - Solı	uble						
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.528	U	3.95	0.528	mg/Kg			05/17/19 02:12	1
Method: 6020 - Metals (ICP/MS	2)								
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	399		0.493	0.108	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Cadmium	0.197	U	0.493	0.197	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Antimony	0.118	U	0.493	0.118	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Thallium	0.0887	U	0.0985	0.0887	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Iron	1160		24.6	3.94	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Silver	0.0187	U	0.0985	0.0187	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Arsenic	3.16		0.493	0.108	mg/Kg		05/15/19 12:15	05/15/19 23:53	1
Copper	1.30		0.985	0.394	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Zinc	2.89	J	3.94	1.97	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Selenium	0.0680	U	0.493	0.0680	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Manganese	13.1		2.46	0.621	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Chromium	1.52		0.493	0.187	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Beryllium	0.0670	J	0.493	0.0296	mg/Kg		05/15/19 12:15	05/15/19 23:53	10
Method: 6020 - Metals (ICP/MS	S) - RA								
Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.784		0.246	0.0729	mg/Kg		05/15/19 12:15	05/16/19 09:08	10
Method: 7471A - Mercury (CV	AA)								
Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0109	J	0.0122	0.00735	mg/Kg		05/14/19 16:18	05/15/19 12:56	1

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

0			0	٠,	$\overline{}$	٨
G	U/	IV	S	v	U	А

Qualifier **Qualifier Description**

Sample was prepped or analyzed beyond the specified holding time

U Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Metals

Qualifier **Qualifier Description**

ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

4 MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

F1 MS and/or MSD Recovery is outside acceptance limits.

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These comm	only used abbreviations	may or may not be presen	it in this report.
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¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery Contains Free Liquid **CFL** CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dilution Factor Dil Fac

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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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5/23/2019 (Rev. 1)

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-185019-1	Cell20-Square102-S-2'-3'-19050	85	90	96	97
600-185019-2	Cell25-Square126-S-2'-3'-1905 06	82	91	95	103
600-185019-3	Cell18-Square56-S-2'-3'-19050	85	90	95	95
600-185019-4	Cell25-Square20-S-2'-3'-19050 6	87	95	94	100
600-185019-5	Cell20-Square19-S-2'-3'-19050 6	87	90	93	97
600-185019-6	Cell25-Square107-S-2'-3'-1905 06	88	89	96	93
LCS 600-264675/3	Lab Control Sample	81	95	101	105
LCSD 600-264675/4	Lab Control Sample Dup	78	94	105	105
MB 600-264675/6	Method Blank	90	93	98	96

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
400-169573-A-24-C MS	Matrix Spike	84	
400-169573-A-24-D MSD	Matrix Spike Duplicate	85	
600-185019-1	Cell20-Square102-S-2'-3'-1905 06	82	
600-185019-2	Cell25-Square126-S-2'-3'-1905 06	82	
600-185019-3	Cell18-Square56-S-2'-3'-19050 6	81	
600-185019-4	Cell25-Square20-S-2'-3'-19050 6	82	
600-185019-5	Cell20-Square19-S-2'-3'-19050 6	81	
600-185019-6	Cell25-Square107-S-2'-3'-1905 06	82	
LCS 400-440727/1-A	Lab Control Sample	84	
MB 400-440727/2-A	Method Blank	83	
Surrogate Legend			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
400-170070-A-1-A MS	Matrix Spike	91	

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Surrogate Summary

Job ID: 600-185019-1 Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

		ОТРН1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(27-151)	
400-170070-A-1-B MSD	Matrix Spike Duplicate	99	
600-185019-1	Cell20-Square102-S-2'-3'-1905 06	68	
600-185019-2	Cell25-Square126-S-2'-3'-1905 06	76	
600-185019-3	Cell18-Square56-S-2'-3'-19050 6	86	
600-185019-4	Cell25-Square20-S-2'-3'-19050 6	88	
00-185019-5	Cell20-Square19-S-2'-3'-19050 6	80	
600-185019-6	Cell25-Square107-S-2'-3'-1905 06	81	
LCS 400-440666/2-A	Lab Control Sample	95	
	Method Blank	85	

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-264675/6

Matrix: Solid

Analysis Batch: 264675

Client Sample ID: Method Blank

Prep Type: Total/NA

	IVID	IVID							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			05/09/19 11:28	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			05/09/19 11:28	1
Toluene	1.38	U	5.00	1.38	ug/Kg			05/09/19 11:28	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			05/09/19 11:28	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 90 61 - 130 05/09/19 11:28 Dibromofluoromethane 93 68 - 140 05/09/19 11:28 50 - 130 Toluene-d8 (Surr) 98 05/09/19 11:28 96 57 - 140 4-Bromofluorobenzene 05/09/19 11:28

Lab Sample ID: LCS 600-264675/3

Matrix: Solid

Analysis Batch: 264675

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	46.01		ug/Kg		92	70 - 131	
Ethylbenzene	50.0	42.29		ug/Kg		85	66 - 130	
Toluene	50.0	43.49		ug/Kg		87	67 - 130	
Xylenes, Total	100	84.02		ug/Kg		84	63 - 130	
m-Xylene & p-Xylene	50.0	41.36		ug/Kg		83	64 - 130	
o-Xylene	50.0	42.66		ug/Kg		85	62 - 130	

LCS LCS %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 81 61 - 130 Dibromofluoromethane 95 68 - 140 Toluene-d8 (Surr) 50 - 130 101 4-Bromofluorobenzene 105 57 - 140

Lab Sample ID: LCSD 600-264675/4

Matrix: Solid

Analysis Batch: 264675

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	44.68		ug/Kg		89	70 - 131	3	30
Ethylbenzene	50.0	42.46		ug/Kg		85	66 - 130	0	30
Toluene	50.0	44.68		ug/Kg		89	67 - 130	3	30
Xylenes, Total	100	85.21		ug/Kg		85	63 - 130	1	30
m-Xylene & p-Xylene	50.0	42.77		ug/Kg		86	64 - 130	3	30
o-Xylene	50.0	42.44		ug/Kg		85	62 - 130	1	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	78		61 - 130
Dibromofluoromethane	94		68 ₋ 140
Toluene-d8 (Surr)	105		50 - 130
4-Bromofluorobenzene	105		57 - 140

Job ID: 600-185019-1

Prep Type: Total/NA

Prep Batch: 440727

RPD

5

RPD

Limit

Dil Fac

32

Analyzed

Analyzed

Client Sample ID: Method Blank

05/13/19 12:00 05/13/19 13:39

05/13/19 12:00 05/13/19 13:39

Client Sample ID: Lab Control Sample

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-440727/2-A

Matrix: Solid Analysis Batch: 440659

MR MR Result Qualifier Analyte

Gasoline Range Organics (GRO) -C6-C10

MR MR

Surrogate a,a,a-Trifluorotoluene (fid)

Lab Sample ID: LCS 400-440727/1-A

%Recovery Qualifier

50.0 U

83

Limits 65 - 125

Spike

Added

MQL (Adj) 100

LCS LCS

Result Qualifier 1118

MS MS

MSD MSD

917.5

Result Qualifier

871.5

Result Qualifier

SDL Unit

50.0 ug/Kg

ug/Kg

Unit

Unit

ug/Kg

Unit

ug/Kg

112

Prepared

Prepared

%Rec

D %Rec

91

%Rec

96

Client Sample ID: Matrix Spike Duplicate

%Rec.

Limits

10 - 150

Client Sample ID: Method Blank

62 - 141

%Rec.

Limits

Client Sample ID: Matrix Spike

%Rec.

Limits

10 - 150

1000 Gasoline Range Organics (GRO)

-C6-C10

Analyte

Matrix: Solid

LCS LCS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 84

Lab Sample ID: 400-169573-A-24-C MS

Matrix: Solid

Analysis Batch: 440659

Analysis Batch: 440659

Analyte Gasoline Range Organics (GRO)

-C6-C10

Surrogate a,a,a-Trifluorotoluene (fid)

MS MS %Recovery Qualifier 84

Sample Sample

47.8 U

Result Qualifier

Sample Sample

47.8 U

Result Qualifier

Limits 65 - 125

Spike

Added

I imits 65 - 125

952

Spike

Added

958

Lab Sample ID: 400-169573-A-24-D MSD

Matrix: Solid

Analysis Batch: 440659

Analyte

Gasoline Range Organics (GRO) -C6-C10

Surrogate a,a,a-Trifluorotoluene (fid)

MSD MSD %Recovery Qualifier

85

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

Lab Sample ID: MB 400-440666/1-A

Matrix: Solid

Analysis Batch: 440876

MB MB Result Qualifier Analyte

Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)

2.00 U 2.00 U

5.00 5.00

MQL (Adj)

SDL Unit 2.00 mg/Kg 2.00 mg/Kg

Prepared

05/13/19 12:51 05/15/19 07:03 05/13/19 12:51 05/15/19 07:03

Prep Type: Total/NA

Prep Batch: 440666

Eurofins TestAmerica, Houston

Analyzed

Dil Fac

Dil Fac

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 400-440666/1-A

Matrix: Solid

Analysis Batch: 440876

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

Prep Batch: 440666

MB MB

Limits Dil Fac Surrogate %Recovery Qualifier Prepared Analyzed o-Terphenyl 85 27 - 151 05/13/19 12:51 05/15/19 07:03

LCS LCS

MS MS

MSD MSD

Lab Sample ID: LCS 400-440666/2-A

Matrix: Solid

Analysis Batch: 440876

Client Sample ID: Lab Control Sample

92

Prep Type: Total/NA **Prep Batch: 440666**

%Rec.

Limits

63 - 153

Added Result Qualifier Unit D %Rec Analyte 272 250.4 mg/Kg Diesel Range Organics

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier o-Terphenyl

Limits

Spike

95 27 - 151

Lab Sample ID: 400-170070-A-1-A MS

Matrix: Solid

Analysis Batch: 440876

Client Sample ID: Matrix Spike

Prep Type: Total/NA

%Rec.

Prep Batch: 440666

Limits

Result Qualifier Added Result Qualifier Analyte Unit %Rec 271 62 - 204 312.1 87 Diesel Range Organics 756 mg/Kg

Spike

[C10-C28]

MS MS

Sample Sample

Limits Surrogate %Recovery Qualifier o-Terphenyl 91 27 - 151

Lab Sample ID: 400-170070-A-1-B MSD

Matrix: Solid

Analysis Batch: 440876

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440666

%Rec.

Client Sample ID: Method Blank

RPD

Result Qualifier Added Analyte Result Qualifier Limits RPD Limit Unit D %Rec 270 103 62 - 204 30 Diesel Range Organics 75.6 353.8 mg/Kg 13

[C10-C28]

MSD MSD

Sample Sample

Surrogate %Recovery Qualifier Limits

o-Terphenyl 99

27 - 151

Spike

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-265274/1-A

Matrix: Solid Analysis Batch: 265212

MB MB

Result Qualifier MQL (Adj) SDL Unit Dil Fac Analyte Prepared Analyzed Chloride 0.534 U 4.00 0.534 mg/Kg 05/16/19 20:31

Prep Type: Soluble

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Matrix Spike

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-265274/2-A

Matrix: Solid

Analysis Batch: 265212

Spike LCS LCS %Rec. Analyte Added Result Qualifier D %Rec Limits Unit Chloride 200 99 90 - 110 198.0 mg/Kg

Lab Sample ID: 600-185474-A-1-B MS

Matrix: Solid

Analysis Batch: 265212

%Rec. Sample Sample Spike MS MS Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits Chloride 46.0 99.8 126.3 mg/Kg 80 80 - 120

Lab Sample ID: 600-185474-A-1-C MSD

Matrix: Solid

Analysis Batch: 265212

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit Limits RPD Limit D %Rec Chloride 46.0 99.8 126.0 mg/Kg 80 80 - 120 0 20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-440955/1-A ^10

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 441084 Prep Batch: 440955** MB MB SDL Unit Analyte Result Qualifier MQL (Adi) D Prepared Analyzed Dil Fac

Allalyte	itesuit	Quanner		ODL	Oilit	 rieparea	Allalyzea	Diriac
Barium	0.106	U	0.482	0.106	mg/Kg	 05/15/19 12:15	05/15/19 23:09	10
Cadmium	0.193	U	0.482	0.193	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Antimony	0.116	U	0.482	0.116	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Thallium	0.0868	U	0.0964	0.0868	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Iron	3.86	U	24.1	3.86	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Silver	0.0183	U	0.0964	0.0183	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Arsenic	0.106	Ü	0.482	0.106	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Copper	0.386	U	0.964	0.386	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Lead	0.0713	U	0.241	0.0713	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Zinc	1.93	U	3.86	1.93	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Selenium	0.0665	U	0.482	0.0665	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Manganese	0.607	U	2.41	0.607	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Chromium	0.183	U	0.482	0.183	mg/Kg	05/15/19 12:15	05/15/19 23:09	10
Beryllium	0.0289	U	0.482	0.0289	mg/Kg	05/15/19 12:15	05/15/19 23:09	10

Matrix: Solid

Lab Sample ID: LCS 400-440955/2-A ^10 **Client Sample ID: Lab Control Sample Prep Type: Total/NA** Analysis Batch: 441084 **Prep Batch: 440955** Chile

	Бріке	LUS	LUS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Barium	9.92	9.643		mg/Kg		97	80 - 120	
Cadmium	9.92	10.54		mg/Kg		106	80 - 120	
Antimony	9.92	8.046		mg/Kg		81	80 - 120	
Thallium	1.98	2.001		mg/Kg		101	80 - 120	
Iron	992	967.2		mg/Kg		97	80 - 120	
Silver	9.92	10.23		mg/Kg		103	80 - 120	
Arsenic	9.92	9.443		mg/Kg		95	80 - 120	

Spike

Added

9.92

9.92

9.92

9.92

99.2

9.92

9.92

9.373

9.025

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

Lab Sample ID: LCS 400-440955/2-A ^10

Matrix: Solid

Analyte

Copper

Selenium Manganese

Chromium

Beryllium

Lead

Zinc

Analysis Batch: 441084

Client: ARCADIS U.S. Inc

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

LCS	LCS				Prep Batch: 4409 %Rec.)55
Result	Qualifier	Unit	D	%Rec	Limits	
9.918		mg/Kg	_	100	80 - 120	
9.873		mg/Kg		99	80 - 120	
9.401		mg/Kg		95	80 - 120	
9.260		mg/Kg		93	80 - 120	
96.33		mg/Kg		97	80 - 120	

94

80 - 120

80 - 120

Lab Sample ID: 600-185019-6 MS

Matrix: Solid

Analysis Batch: 441084

Client Sample ID: Cell25-Square107-S-2'-3'-190506

mg/Kg

mg/Kg

Prep Type: Total/NA

Prep Batch: 440955

Analysis Batch: 441084	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Barium	394		5.04	467.5	4	mg/Kg		1448	75 - 125
Cadmium	0.197	U	5.04	5.519		mg/Kg		109	75 ₋ 125
Antimony	0.118	U F1	5.04	3.006	F1	mg/Kg		60	75 ₋ 125
Thallium	0.0887	Ü	1.01	1.025		mg/Kg		102	75 - 125
Iron	1160		504	1674		mg/Kg		101	75 - 125
Silver	0.0187	U	5.04	5.007		mg/Kg		99	75 ₋ 125
Arsenic	3.23		5.04	8.091		mg/Kg		96	75 - 125
Copper	1.30		5.04	6.161		mg/Kg		97	75 ₋ 125
Lead	0.784		5.04	5.798		mg/Kg		99	75 ₋ 125
Zinc	2.78	J	5.04	7.388		mg/Kg		91	75 ₋ 125
Selenium	0.0680	U	5.04	4.936		mg/Kg		98	75 ₋ 125
Manganese	13.5		50.4	61.35		mg/Kg		95	75 ₋ 125
Chromium	1.46		5.04	6.250		mg/Kg		95	75 - 125
Beryllium	0.0601	J	5.04	4.613		mg/Kg		90	75 ₋ 125

Lab Sample ID: 600-185019-6 MSD

Matrix: Solid

Analysis Batch: 441084

Client Sample ID: Cell25-Square107-S-2'-3'-190506

Prep Type: Total/NA Prep Batch: 440955

Analysis batch: 441004								Prep Da	alcn: 44	+0900	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Barium	394		5.05	489.4	4	mg/Kg		1880	75 - 125	5	20
Cadmium	0.197	U	5.05	5.185		mg/Kg		103	75 - 125	6	20
Antimony	0.118	U F1	5.05	2.877	F1	mg/Kg		57	75 - 125	4	20
Thallium	0.0887	U	1.01	1.016		mg/Kg		101	75 - 125	1	20
Iron	1160		505	1569		mg/Kg		80	75 - 125	7	20
Silver	0.0187	U	5.05	4.952		mg/Kg		98	75 - 125	1	20
Arsenic	3.23		5.05	8.127		mg/Kg		97	75 - 125	0	20
Copper	1.30		5.05	5.989		mg/Kg		93	75 - 125	3	20
Lead	0.784		5.05	5.662		mg/Kg		97	75 - 125	2	20
Zinc	2.78	J	5.05	7.359		mg/Kg		91	75 - 125	0	20
Selenium	0.0680	U	5.05	4.590		mg/Kg		91	75 - 125	7	20
Manganese	13.5		50.5	60.13		mg/Kg		92	75 - 125	2	20
Chromium	1.46		5.05	6.146		mg/Kg		93	75 - 125	2	20
Bervllium	0.0601	J	5.05	4.627		ma/Ka		90	75 ₋ 125	0	20

QC Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 400-440867/14-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Mercury

Analysis Batch: 440969 Prep Batch: 440867 MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.00778 mg/Kg Mercury 0.00778 U 0.0129 05/14/19 16:18 05/15/19 12:29

Lab Sample ID: LCS 400-440867/15-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 440969 Prep Batch: 440867** Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 0.0655 0.06781 103 80 - 120

mg/Kg

Lab Sample ID: 600-185019-1 MS Client Sample ID: Cell20-Square102-S-2'-3'-190506 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 440969** Prep Batch: 440867 Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit Limits D %Rec 0.0158 0.132 92 80 - 120 Mercury 0.1371 mg/Kg

Lab Sample ID: 600-185019-1 MSD Client Sample ID: Cell20-Square102-S-2'-3'-190506 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 440969 Prep Batch: 440867

Sample Sample Spike MSD MSD %Rec. **RPD** Added Limits Limit Analyte Result Qualifier Result Qualifier D %Rec RPD Unit Mercury 0.0158 0.132 0.1367 92 80 - 120 mg/Kg

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units	
Gasoline Range Organics (GRO)-C6-C10	100	50.0	ug/Kg	

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

Prep: 3546

Analyte	MQL	MDL	Units
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6020 - Metals (ICP/MS)

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	0.500	0.120	mg/Kg
Arsenic	0.500	0.110	mg/Kg
Barium	0.500	0.110	mg/Kg
Beryllium	0.500	0.0300	mg/Kg
Cadmium	0.500	0.200	mg/Kg
Chromium	0.500	0.190	mg/Kg
Copper	1.00	0.400	mg/Kg
Iron	25.0	4.00	mg/Kg
Lead	0.250	0.0740	mg/Kg
Manganese	2.50	0.630	mg/Kg
Selenium	0.500	0.0690	mg/Kg
Silver	0.100	0.0190	mg/Kg
Thallium	0.100	0.0900	mg/Kg
Zinc	4.00	2.00	mg/Kg

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0133	0.00800	mg/Kg

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Analysis Batch: 264675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	8260B	264710
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	8260B	264710
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	8260B	264710
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	8260B	264710
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	8260B	264710
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	8260B	264710
MB 600-264675/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-264675/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-264675/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 264710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	5035	_
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 440659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	8015B	440727
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	8015B	440727
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	8015B	440727
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	8015B	440727
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	8015B	440727
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	8015B	440727
MB 400-440727/2-A	Method Blank	Total/NA	Solid	8015B	440727
LCS 400-440727/1-A	Lab Control Sample	Total/NA	Solid	8015B	440727
400-169573-A-24-C MS	Matrix Spike	Total/NA	Solid	8015B	440727
400-169573-A-24-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	440727

Prep Batch: 440727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	5035	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	5035	
MB 400-440727/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-440727/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-169573-A-24-C MS	Matrix Spike	Total/NA	Solid	5035	
400-169573-A-24-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 440666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	3546	

Job ID: 600-185019-1

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC Semi VOA (Continued)

Prep Batch: 440666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	3546	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	3546	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	3546	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	3546	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	3546	
MB 400-440666/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-440666/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-170070-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-170070-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 440876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	8015B	440666
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	8015B	440666
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	8015B	440666
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	8015B	440666
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	8015B	440666
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	8015B	440666
MB 400-440666/1-A	Method Blank	Total/NA	Solid	8015B	440666
LCS 400-440666/2-A	Lab Control Sample	Total/NA	Solid	8015B	440666
400-170070-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	440666
400-170070-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	440666

HPLC/IC

Analysis Batch: 265212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-185019-2	Cell25-Square126-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-185019-3	Cell18-Square56-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-185019-4	Cell25-Square20-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-185019-5	Cell20-Square19-S-2'-3'-190506	Soluble	Solid	300.0	265274
600-185019-6	Cell25-Square107-S-2'-3'-190506	Soluble	Solid	300.0	265274
MB 600-265274/1-A	Method Blank	Soluble	Solid	300.0	265274
LCS 600-265274/2-A	Lab Control Sample	Soluble	Solid	300.0	265274
600-185474-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	265274
600-185474-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	265274

Leach Batch: 265274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Soluble	Solid	DI Leach	_
600-185019-2	Cell25-Square126-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Soluble	Solid	DI Leach	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Soluble	Solid	DI Leach	
MB 600-265274/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-265274/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-185474-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
600-185474-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

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Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Metals

Prep Batch: 440867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	7471A	
MB 400-440867/14-A	Method Blank	Total/NA	Solid	7471A	
LCS 400-440867/15-A	Lab Control Sample	Total/NA	Solid	7471A	
600-185019-1 MS	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	
600-185019-1 MSD	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	

Prep Batch: 440955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1 - RA	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-3 - RA	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-5 - RA	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-6 - RA	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	3050B	
MB 400-440955/1-A ^10	Method Blank	Total/NA	Solid	3050B	
LCS 400-440955/2-A ^10	Lab Control Sample	Total/NA	Solid	3050B	
600-185019-6 MS	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	3050B	
600-185019-6 MSD	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	3050B	

Analysis Batch: 440969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	7471A	440867
MB 400-440867/14-A	Method Blank	Total/NA	Solid	7471A	440867
LCS 400-440867/15-A	Lab Control Sample	Total/NA	Solid	7471A	440867
600-185019-1 MS	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	440867
600-185019-1 MSD	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	7471A	440867

Analysis Batch: 441084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-1	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-1 - RA	Cell20-Square102-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-2	Cell25-Square126-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-3	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-3 - RA	Cell18-Square56-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-4	Cell25-Square20-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-5	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-5 - RA	Cell20-Square19-S-2'-3'-190506	Total/NA	Solid	6020	440955

Eurofins TestAmerica, Houston

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Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Metals (Continued)

Analysis Batch: 441084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-185019-6	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-6 - RA	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	6020	440955
MB 400-440955/1-A ^10	Method Blank	Total/NA	Solid	6020	440955
LCS 400-440955/2-A ^10	Lab Control Sample	Total/NA	Solid	6020	440955
600-185019-6 MS	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	6020	440955
600-185019-6 MSD	Cell25-Square107-S-2'-3'-190506	Total/NA	Solid	6020	440955

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Matrix: Solid

Matrix: Solid

Lab Sample ID: 600-185019-1

Lab Sample ID: 600-185019-2

Lab Sample ID: 600-185019-3

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell20-Square102-S-2'-3'-190506

Date Collected: 05/06/19 16:20

Date Received: 05/08/19 09:33

Γ	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 11:56	WS1	TAL HOU
Total/NA	Prep	5035			4.57 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/13/19 21:24	GRK	TAL PEN
Total/NA	Prep	3546			15.17 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 08:18	JAW	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	265274	05/16/19 17:17	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 00:42	SKR	TAL HOU
Total/NA	Prep	3050B			0.4742 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:17	DRE	TAL PEN
Total/NA	Prep	3050B	RA		0.4742 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020	RA	10			441084	05/16/19 08:56	DRE	TAL PEN
Total/NA	Prep	7471A			0.6197 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:32	JAP	TAL PEN

Client Sample ID: Cell25-Square126-S-2'-3'-190506

Date Collected: 05/06/19 12:25

Date Received: 05/08/19 09:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.735 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 12:20	WS1	TAL HOU
Total/NA	Prep	5035			5.70 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/13/19 22:00	GRK	TAL PEN
Total/NA	Prep	3546			15.12 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 08:31	JAW	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 03:59	SKR	TAL HOU
Total/NA	Prep	3050B			0.4789 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:21	DRE	TAL PEN
Total/NA	Prep	7471A			0.6353 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:40	JAP	TAL PEN

Client Sample ID: Cell18-Square56-S-2'-3'-190506

Date Collected: 05/06/19 13:50

Date Received: 05/08/19 09:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.907 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 12:44	WS1	TAL HOU
Total/NA	Prep	5035			4.71 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/13/19 22:36	GRK	TAL PEN
Total/NA	Prep	3546			15.03 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 08:43	JAW	TAL PEN

Eurofins TestAmerica, Houston

Matrix: Solid

Lab Sample ID: 600-185019-4

Lab Sample ID: 600-185019-5

Client Sample ID: Cell18-Square56-S-2'-3'-190506

Lab Sample ID: 600-185019-3 Date Collected: 05/06/19 13:50 **Matrix: Solid**

Date Received: 05/08/19 09:33

Client: ARCADIS U.S. Inc

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	265274	05/16/19 17:17	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 01:00	SKR	TAL HOU
Total/NA	Prep	3050B			0.4779 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:41	DRE	TAL PEN
Total/NA	Prep	3050B	RA		0.4779 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020	RA	10			441084	05/16/19 09:00	DRE	TAL PEN
Total/NA	Prep	7471A			0.6072 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:42	JAP	TAL PEN

Client Sample ID: Cell25-Square20-S-2'-3'-190506

Date Collected: 05/06/19 11:55

Date Received: 05/08/19 09:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.826 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 13:08	WS1	TAL HOU
Total/NA	Prep	5035			5.31 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/13/19 23:11	GRK	TAL PEN
Total/NA	Prep	3546			15.14 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 08:56	JAW	TAL PEN
Soluble	Leach	DI Leach			5.05 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOL
Soluble	Analysis	300.0		1			265212	05/17/19 04:53	SKR	TAL HOU
Total/NA	Prep	3050B			0.4778 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:45	DRE	TAL PEN
Total/NA	Prep	7471A			0.6383 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:44	JAP	TAL PEN

Client Sample ID: Cell20-Square19-S-2'-3'-190506

Date Collected: 05/06/19 15:55

Date Received: 05/08/19 09:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 13:32	WS1	TAL HOU
Total/NA	Prep	5035			5.09 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/13/19 23:47	GRK	TAL PEN
Total/NA	Prep	3546			15.21 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 09:08	JAW	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	265274	05/16/19 17:30	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 02:47	SKR	TAL HOU
Total/NA	Prep	3050B			0.4745 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:49	DRE	TAL PEN
Total/NA	Prep	3050B	RA		0.4745 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020	RA	10			441084	05/16/19 09:04	DRE	TAL PEN

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Matrix: Solid

Matrix: Solid

Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell20-Square19-S-2'-3'-190506

Lab Sample ID: 600-185019-5 Date Collected: 05/06/19 15:55 **Matrix: Solid**

Date Received: 05/08/19 09:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.6020 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:46	JAP	TAL PEN

Client Sample ID: Cell25-Square107-S-2'-3'-190506

Lab Sample ID: 600-185019-6 Date Collected: 05/06/19 11:25 Matrix: Solid

Date Received: 05/08/19 09:33

Γ	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4 g	5 mL	264710	05/08/19 15:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	264675	05/09/19 13:56	WS1	TAL HOU
Total/NA	Prep	5035			5.39 g	5.0 g	440727	05/13/19 12:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	440659	05/14/19 00:22	GRK	TAL PEN
Total/NA	Prep	3546			15.20 g	1.0 mL	440666	05/13/19 12:51	KLR	TAL PEN
Total/NA	Analysis	8015B		1			440876	05/15/19 09:33	JAW	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	265274	05/16/19 17:17	SKR	TAL HOU
Soluble	Analysis	300.0		1			265212	05/17/19 02:12	SKR	TAL HOU
Total/NA	Prep	3050B			0.5075 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020		10			441084	05/15/19 23:53	DRE	TAL PEN
Total/NA	Prep	3050B	RA		0.5075 g	50 mL	440955	05/15/19 12:15	DRE	TAL PEN
Total/NA	Analysis	6020	RA	10			441084	05/16/19 09:08	DRE	TAL PEN
Total/NA	Prep	7471A			0.65335 g	40 mL	440867	05/14/19 16:18	JAP	TAL PEN
Total/NA	Analysis	7471A		1			440969	05/15/19 12:56	JAP	TAL PEN

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-185019-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Гехаѕ	NELAP		6	T104704223-18-23	10-31-19
The following analytes	are included in this report	but the leberatory is	not cortified by th	a governing outhority. This	liet may include analytee for wh
The following analytes the agency does not do	· ·	but the laboratory is	not certified by the	e governing authority. This	list may include analytes for wh

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

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N

From:

Rice, Steve

Sent:

Wednesday, May 1, 2019 5:44 PM

To:

Nanny, Ryan

Subject:

FW: Jal Sample Markout

Attachments:

Q12019 Re-Sample Locations.xlsx

Follow Up Flag: Flag Status: Follow up Flagged

Ryan,

I asked Cory to stake the sample locations at Jal. We have to collect 4 random vadose zone samples (2-3') from cells 18, 20, and 25 – so 12 total. The areas to be sampled are marked on the attached. I'm hoping Cory remembered to stake today.

Each of the soil samples will be analyzed for the following:

- TPH GRO 8015B
- TPH DRO 8015B
- TPH ORO 8015B
- BTEX by 8260B
- Chlorides by 300.1
- · And the following metals:

Metals	Method	
Antimony	6020A	
Arsenic	6020A	
Barium	6020A	
Beryllium	6020A	
Cadmium	6020A	
Chromium	6020A	
Copper	6020A	
Iron	6020A	
Lead	6020A	
Manganese	6020A	
Mercury	7471A	
Selenium	6020A	
Silver	6020A	
Thallium	6020A	
Zinc	6020A	

Make sure they scrape off all treatment zone soil, as we want to get some clean samples. I doubt we will, but wishful thinking.





2 of 2 MPS# 7870 8561 8877 Mstr# 7870 8561 8866

AB LKSA

TUE - 07 MAY 10:30A PRIORITY OVERNIGHT

0201

77040 TX-US IAH



TestAmerica	Houston
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Loc: 600

Sample Rec 185019 ist



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ate/Time Received: JOB NUMBER: CLIENT: UNPACKED BY: CARRIER/DRIVER: Custody Seal Present: YES NO Number of Coolers Received: Observed Temp Corrected Temp Temp Therm Them Cooler ID Blank Trip Blank CF N. N N N N N N N N N N N CF = correction factor Samples received on ice? YES LABORATORY PRESERVATION OF SAMPLES REQUIRED: NO YES Base samples are>pH 12: YES NO Acid preserved are<pH 2: YES NO pH paper Lot #_ VOA headspace acceptable (5-6mm): YES NO NA YES NO Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? COMMENTS:

Ver: 01/16/2019

Cooler Temperature(s) °C and Other Remarks:

eceived by:

Eurofins TestAmerica, Houston

eurofins Environment Testing TestAmerica **Chain of Custody Record** 6310 Rothway Street Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646

lient Information (Sub Contract Lab)	Sampler			Lab PM Kudch	Lab PM: Kudchadkar, Sachin G	Sachir	O		Carrier T	Carrier Tracking No(s):		COC No:		
	Phone;			E-Mail:	ii: nin.kudch	adkar	Dtestar	E-Mail: sachin.kudchadkar@testamericainc.com	State of Origin:	Origin:		Page:		Г
ompany:					Accreditations Required (See note)	ons Rec	uired (S	ee note):				Job #:		T
estAmerica Laboratories, Inc.					NELAP - Texas	- Texa	S					600-185019-1		
idress: 355 McLemore Drive,	Due Date Requested: 5/20/2019	Ü						Analys	Analysis Requested	p		Preservation Codes:	sepc:	
ty: ensacola	TAT Requested (day	ys):				-	ta					B - NaOH C - Zn Acetate	N - None O - AsNaO2	
ate, Zip. L, 32514							etals Li					D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3	
none. 50-474-1001(Tel) 850-478-2671(Fax)	# Od				(-							G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate	0
mail:	WO#													,
roject Name: Shevron - Jal Land Farm Soils 2018	Project #. 60009563					7,500,000						K - EDTA	W - pH 4-5 Z - other (specify)	
ite.	SSOW#.							də.				other:		
ample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air	Field Filtered S	8015B_DRO/354	OM) 80205/0209	19_A17&1\A17&1				Total Number o	Special Instructions/Note:	
-		\setminus	Preserv	Preservation Code:	X									
Jell25-Square102-S-2'-3'-190506 (600-185019-1)	5/6/19	16:20 Central		Solid		×	×	×				9		
cell25-Square126-S-2'-3'-190506 (600-185019-2)	5/6/19	12:25 Central		Solid		×	×	×				9		
Cell25-Square56-S-2'-3'-190506 (600-185019-3)	5/6/19	13:50 Central		Solid		×	×	×				9		
Cell25-Square20-S-2'-3'-190506 (600-185019-4)	5/6/19	11:55 Central		Solid		×	×	×				9		
Cell25-Square19-S-2'-3'-190506 (600-185019-5)	5/6/19	15:55 Central		Solid		×	×	×				9		
3ell25-Square107-S-2'-3'-190506 (600-185019-6)	5/6/19	11:25 Central		Solid		×	×	×				9		
										+				
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. 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 be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.	ca Laboratories, Inc. places the nalysis/tests/matrix being analy, are current to date, return the s	ownership of zed, the samp signed Chain o	method, analy es must be sh of Custody atte	te & accreditati ipped back to t sting to said co	on compliar he TestAme implicance	nce upor erica lab to TestA	n out sub oratory o merica L	contract labor or other instru- aboratories, l	ratories. This sam ctions will be provi nc.	iple shipment is ded. Any chan	forwarded u	nder chain-of-custody itation status should I	. If the laboratory does not be brought to TestAmerica	
Possible Hazard Identification Unconfirmed					Sai	nple D	le Disposal (At Return To Client	al (A fee r	nay be assess	assessed if sampl Disposal By Lab	es are ret	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For	n 1 month) Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	rable Rank:	2		Spe	ecial In	struction	ons/QC Re	Special Instructions/QC Requirements:					
Empty Kit Relinquished by:	-	Date:			Time:					Method of Shipment:	nent			
Relinquished by: MULL		9	8	Company	工工	Received by:	ed by:	the R	aver	Date	Date/Time: 5-9-1	9 858	Company	
Relinquished by:	Date/Time:			Company		Received by	od by:			Date	Date/Time:		Company	

yd paysinbu

Custody Seal No.:

Custody Seals Intact:

Client: ARCADIS U.S. Inc Job Number: 600-185019-1

Login Number: 185019 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Crafton, Tommie S

oreator. Granton, Tollinine S		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	1.5
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.

Client: ARCADIS U.S. Inc

Job Number: 600-185019-1

Login Number: 185019

List Number: 2

Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola

List Creation: 05/09/19 05:47 PM

Answer Comment

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
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	1.9°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.	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-187283-1 Client Project/Site: Treatment

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Phidchaelkar

Authorized for release by: 7/10/2019 3:29:18 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Client: ARCADIS U.S. Inc Project/Site: Treatment

Laboratory Job ID: 600-187283-1

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Case Narrative

Client: ARCADIS U.S. Inc Job ID: 600-187283-1 Project/Site: Treatment

Job ID: 600-187283-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-187283-1

Comments

No additional comments.

Receipt

The samples were received on 6/19/2019 11:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

GC/MS VOA

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

GC VOA

Method(s) 8015B: The following samples were diluted because the base dilution for methanol preserved soil analysis is 1:50: Cell 20-square79-S-2-3-190618 (600-187283-1), Cell 19-square173-S-2-3-190618 (600-187283-2), Cell 18-square82-S-2-3-190618 (600-187283-3), Cell 17-square131-S-2-3-190618 (600-187283-4) and Cell 21-square196-S-2-3-190618 (600-187283-5)

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

GC Semi VOA

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

General Chemistry

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

Industrial Hygiene

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

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

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Treatment
Job ID: 600-187283-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-187283-1	Cell 20-square79-S-2-3-190618	Solid	06/18/19 09:50	06/19/19 11:50	
600-187283-2	Cell 19-square173-S-2-3-190618	Solid	06/18/19 10:42	06/19/19 11:50	
600-187283-3	Cell 18-square82-S-2-3-190618	Solid	06/18/19 11:23	06/19/19 11:50	
600-187283-4	Cell 17-square131-S-2-3-190618	Solid	06/18/19 12:53	06/19/19 11:50	
600-187283-5	Cell 21-square196-S-2-3-190618	Solid	06/18/19 13:34	06/19/19 11:50	

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Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 20-square79-S-2-3-190618

Lab Sample ID: 600-187283-1 Date Collected: 06/18/19 09:50 Matrix: Solid

Date Received: 06/19/19 11:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.495	U	3.92	0.495	ug/Kg		06/19/19 14:00	06/20/19 15:09	1
Ethylbenzene	0.801	U	3.92	0.801	ug/Kg		06/19/19 14:00	06/20/19 15:09	1
Toluene	1.08	U	3.92	1.08	ug/Kg		06/19/19 14:00	06/20/19 15:09	1
Xylenes, Total	0.887	U	3.92	0.887	ug/Kg		06/19/19 14:00	06/20/19 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		61 - 130				06/19/19 14:00	06/20/19 15:09	1
Dibromofluoromethane	87		68 - 140				06/19/19 14:00	06/20/19 15:09	1
Toluene-d8 (Surr)	84		50 - 130				06/19/19 14:00	06/20/19 15:09	1
4-Bromofluorobenzene	96		57 - 140				06/19/19 14:00	06/20/19 15:09	1
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1100	U	2190	1100	ug/Kg		06/27/19 12:30	06/27/19 16:46	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	106		65 - 125				06/27/19 12:30	06/27/19 16:46	50
Method: 8015B - Diesel Range Org	ganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.05	J	4.91	1.96	mg/Kg		06/24/19 13:26	06/26/19 00:17	1
Oil Range Organics (C28-C35)	6.05		4.91	1.96	mg/Kg		06/24/19 13:26	06/26/19 00:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	96		27 - 151				06/24/19 13:26	06/26/19 00:17	1
Method: 300.0 - Anions, Ion Chror	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.78		3.96	0.529	mg/Kg			07/01/19 12:43	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.4		1.0	1.0	%			06/20/19 17:56	1
Percent Solids	91.6		1.0	1.0	0/2			06/20/19 17:56	1

Client Sample ID: Cell 19-square173-S-2-3-190618

Date Collected: 06/18/19 10:42 **Matrix: Solid**

Date Received: 06/19/19 11:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.711	U	5.64	0.711	ug/Kg		06/19/19 14:00	06/20/19 15:40	1
Ethylbenzene	1.15	U	5.64	1.15	ug/Kg		06/19/19 14:00	06/20/19 15:40	1
Toluene	1.56	U	5.64	1.56	ug/Kg		06/19/19 14:00	06/20/19 15:40	1
Xylenes, Total	1.28	U	5.64	1.28	ug/Kg		06/19/19 14:00	06/20/19 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		61 - 130				06/19/19 14:00	06/20/19 15:40	1
Dibromofluoromethane	93		68 - 140				06/19/19 14:00	06/20/19 15:40	1
Toluene-d8 (Surr)	87		50 - 130				06/19/19 14:00	06/20/19 15:40	1
4-Bromofluorobenzene	100		57 - 140				06/19/19 14:00	06/20/19 15:40	1

Eurofins TestAmerica, Houston

Lab Sample ID: 600-187283-2

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 19-square173-S-2-3-190618

Lab Sample ID: 600-187283-2 Date Collected: 06/18/19 10:42 Matrix: Solid

Date Received: 06/19/19 11:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1090	U	2190	1090	ug/Kg		06/27/19 12:30	06/27/19 17:22	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125				06/27/19 12:30	06/27/19 17:22	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.80	J	4.99	2.00	mg/Kg		06/24/19 13:26	06/26/19 00:44	1
Oil Range Organics (C28-C35)	5.16		4.99	2.00	mg/Kg		06/24/19 13:26	06/26/19 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	96		27 - 151				06/24/19 13:26	06/26/19 00:44	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.76	J	3.97	0.530	mg/Kg			07/01/19 13:36	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.0		1.0	1.0	%			06/20/19 17:56	1
			1.0	1.0				06/20/19 17:56	

Client Sample ID: Cell 18-square82-S-2-3-190618

Date Collected: 06/18/19 11:23

Date Received: 06/19/19 11:50

Lab Sample ID: 600-187283-3

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.816	U	6.48	0.816	ug/Kg		06/19/19 14:00	06/20/19 16:10	1
Ethylbenzene	1.32	U	6.48	1.32	ug/Kg		06/19/19 14:00	06/20/19 16:10	1
Toluene	1.79	U	6.48	1.79	ug/Kg		06/19/19 14:00	06/20/19 16:10	1
Xylenes, Total	1.46	U	6.48	1.46	ug/Kg		06/19/19 14:00	06/20/19 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		61 - 130				06/19/19 14:00	06/20/19 16:10	1
Dibromofluoromethane	90		68 - 140				06/19/19 14:00	06/20/19 16:10	1
Toluene-d8 (Surr)	83		50 - 130				06/19/19 14:00	06/20/19 16:10	1
4-Bromofluorobenzene	95		57 - 140				06/19/19 14:00	06/20/19 16:10	1
- Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1320	U	2650	1320	ug/Kg		06/27/19 12:30	06/27/19 17:58	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125				06/27/19 12:30	06/27/19 17:58	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.41	J	4.91	1.97	mg/Kg		06/24/19 13:26	06/26/19 00:57	1

Eurofins TestAmerica, Houston

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 18-square82-S-2-3-190618

Lab Sample ID: 600-187283-3 Date Collected: 06/18/19 11:23 Matrix: Solid

Date Received: 06/19/19 11:50

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	89		27 _ 151				06/24/19 13:26	06/26/19 00:57	1
_ Method: 300.0 - Anions, lo	n Chromatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			07/01/19 13:54	1
- General Chemistry									
	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte									
Percent Moisture	14.5		1.0	1.0	%			06/20/19 17:56	1

Client Sample ID: Cell 17-square131-S-2-3-190618 Lab Sample ID: 600-187283-4

Date Collected: 06/18/19 12:53 Matrix: Solid

Date Received: 06/19/19 11:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.729	U	5.79	0.729	ug/Kg		06/19/19 14:00	06/20/19 16:35	1
Ethylbenzene	1.18	U	5.79	1.18	ug/Kg		06/19/19 14:00	06/20/19 16:35	1
Toluene	1.60	U	5.79	1.60	ug/Kg		06/19/19 14:00	06/20/19 16:35	1
Xylenes, Total	1.31	U	5.79	1.31	ug/Kg		06/19/19 14:00	06/20/19 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		61 - 130				06/19/19 14:00	06/20/19 16:35	1
Dibromofluoromethane	94		68 - 140				06/19/19 14:00	06/20/19 16:35	1
Toluene-d8 (Surr)	85		50 - 130				06/19/19 14:00	06/20/19 16:35	1
4-Bromofluorobenzene	95		57 - 140				06/19/19 14:00	06/20/19 16:35	1
Method: 8015B - Gasoline Ranç		•							
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1190	U	2380	1190	ug/Kg		06/27/19 12:30	06/27/19 18:34	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125				06/27/19 12:30	06/27/19 18:34	50
Method: 8015B - Diesel Range	Organics (DRO)	(GC)							
Method: 8015B - Diesel Range Analyte		(GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifier	MQL (Adj) 4.88		Unit mg/Kg	<u>D</u>	Prepared 06/24/19 13:26	Analyzed 06/26/19 01:10	Dil Fac
Analyte	Result	Qualifier U		1.95		D			Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result 1.95	Qualifier U U	4.88	1.95	mg/Kg	<u>D</u>	06/24/19 13:26	06/26/19 01:10	Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	1.95	Qualifier U U	4.88	1.95	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26	06/26/19 01:10 06/26/19 01:10	1
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate	Result 1.95 1.95	Qualifier U U Qualifier	4.88 4.88 Limits	1.95	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared	06/26/19 01:10 06/26/19 01:10 Analyzed	1 1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	Result 1.95 1.95 %Recovery 96 romatography -	Qualifier U U Qualifier	4.88 4.88 Limits	1.95 1.95	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared	06/26/19 01:10 06/26/19 01:10 Analyzed	1 1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Ch	Result 1.95 1.95 %Recovery 96 romatography -	Qualifier U Qualifier Soluble	4.88 4.88 Limits 27 - 151	1.95 1.95	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:10 06/26/19 01:10 Analyzed 06/26/19 01:10	1 1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Ch Analyte	Result 1.95 1.95 %Recovery 96 romatography - Result	Qualifier U Qualifier Soluble	4.88 4.88 Limits 27 - 151	1.95 1.95	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:10 06/26/19 01:10 Analyzed 06/26/19 01:10 Analyzed	1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Ch Analyte Chloride	Result 1.95 1.95 %Recovery 96 romatography - Result 32.4	Qualifier U Qualifier Soluble	4.88 4.88 Limits 27 - 151	1.95 1.95 SDL 0.534	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:10 06/26/19 01:10 Analyzed 06/26/19 01:10 Analyzed	1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Ch Analyte Chloride General Chemistry	Result 1.95 1.95 %Recovery 96 romatography - Result 32.4	Qualifier U Qualifier Soluble Qualifier	4.88 4.88 Limits 27 - 151 MQL (Adj) 4.00	1.95 1.95 SDL 0.534	mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26 Prepared	06/26/19 01:10 06/26/19 01:10 Analyzed 06/26/19 01:10 Analyzed 07/01/19 14:12	Dil Fac

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 21-square196-S-2-3-190618

Lab Sample ID: 600-187283-5 Date Collected: 06/18/19 13:34 Matrix: Solid

Date Received: 06/19/19 11:50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.724	U	5.75	0.724	ug/Kg		06/19/19 14:00	06/20/19 16:59	1
Ethylbenzene	1.17	U	5.75	1.17	ug/Kg		06/19/19 14:00	06/20/19 16:59	1
Toluene	1.59	U	5.75	1.59	ug/Kg		06/19/19 14:00	06/20/19 16:59	1
Xylenes, Total	1.30	U	5.75	1.30	ug/Kg		06/19/19 14:00	06/20/19 16:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 130				06/19/19 14:00	06/20/19 16:59	1
Dibromofluoromethane	93		68 - 140				06/19/19 14:00	06/20/19 16:59	1
Toluene-d8 (Surr)	86		50 - 130				06/19/19 14:00	06/20/19 16:59	1
4-Bromofluorobenzene	98		57 - 140				06/19/19 14:00	06/20/19 16:59	1
Method: 8015B - Gasoline Range		•	MOL (A-II)	op.	11-24	_	D d	Austraad	D# F
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1290	U	2580	1290	ug/Kg		06/27/19 12:30	06/27/19 19:10	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	106		65 - 125				06/27/19 12:30	06/27/19 19:10	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
		(GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	MQL (Adj) 4.91	SDL 1.96	Unit mg/Kg	D	Prepared 06/24/19 13:26	Analyzed 06/26/19 01:23	Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result	Qualifier J	<u>` </u>	1.96		D			1
Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate	Result 2.05	Qualifier J U	4.91	1.96	mg/Kg	<u>D</u>	06/24/19 13:26	06/26/19 01:23	1
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate	2.05 1.96	Qualifier J U	4.91 4.91	1.96	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26	06/26/19 01:23 06/26/19 01:23	
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	Result 2.05 1.96 %Recovery 96	Qualifier J U Qualifier	4.91 4.91 Limits	1.96	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared	06/26/19 01:23 06/26/19 01:23 Analyzed	1
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro	Result 2.05 1.96 %Recovery 96 pmatography -	Qualifier J U Qualifier	4.91 4.91 Limits	1.96 1.96	mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared	06/26/19 01:23 06/26/19 01:23 Analyzed	Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	Result 2.05 1.96 %Recovery 96 pmatography -	Qualifier J U Qualifier Soluble	4.91 4.91 Limits 27 - 151	1.96 1.96	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:23 06/26/19 01:23 Analyzed 06/26/19 01:23	Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro	Result 2.05 1.96 %Recovery 96 pmatography - Result	Qualifier J U Qualifier Soluble	4.91 4.91 Limits 27 - 151	1.96 1.96	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:23 06/26/19 01:23 Analyzed 06/26/19 01:23	Dil Fac
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro Analyte Chloride	Result 2.05 1.96 %Recovery 96 comatography - Result 4.33	Qualifier J U Qualifier Soluble	4.91 4.91 Limits 27 - 151	1.96 1.96 SDL 0.533	mg/Kg mg/Kg		06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26	06/26/19 01:23 06/26/19 01:23 Analyzed 06/26/19 01:23	
Analyte Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro Analyte Chloride General Chemistry	Result 2.05 1.96 %Recovery 96 comatography - Result 4.33	Qualifier J U Qualifier Soluble Qualifier	4.91 4.91 Limits 27 - 151 MQL (Adj) 3.99	1.96 1.96 SDL 0.533	mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	06/24/19 13:26 06/24/19 13:26 Prepared 06/24/19 13:26 Prepared	06/26/19 01:23 06/26/19 01:23 Analyzed 06/26/19 01:23 Analyzed 07/01/19 14:30	Dil Fac

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Qualifiers

G	CI	M	IS	V	Ö	A

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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.

Е Result exceeded calibration range.

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

Surrogate is outside control limits

HPLC/IC

Qualifier **Qualifier Description**

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

Glossary

U

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 CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) DER

Dilution Factor Dil Fac

DΙ 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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) Not Calculated

NC

Not Detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit **Quality Control** QC

Relative Error Ratio (Radiochemistry) RER

RI 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)

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

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

Matrix: Solid Prep Type: Total/NA

				Percent Su	rrogate Rec
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-187283-1	Cell 20-square79-S-2-3-190618	98	87	84	96
600-187283-2	Cell	101	93	87	100
	19-square173-S-2-3-190618				
600-187283-3	Cell	101	90	83	95
	18-square82-S-2-3-190618				
600-187283-4	Cell	108	94	85	95
	17-square131-S-2-3-190618				
600-187283-5	Cell	105	93	86	98
	21-square196-S-2-3-190618				
LCS 600-267618/3	Lab Control Sample	98	90	94	104
LCSD 600-267618/4	Lab Control Sample Dup	96	93	93	105
MB 600-267618/6	Method Blank	105	91	87	100
Surrogate Legend					

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Project/Site: Treatment

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
600-187283-1	Cell 20-square79-S-2-3-190618	106	
600-187283-1 MS	Cell	109	
	20-square79-S-2-3-190618		
600-187283-1 MSD	Cell	109	
	20-square79-S-2-3-190618		
600-187283-2	Cell	105	
	19-square173-S-2-3-190618		
600-187283-3	Cell	105	
	18-square82-S-2-3-190618		
600-187283-4	Cell	105	
	17-square131-S-2-3-190618		
600-187283-5	Cell	106	
	21-square196-S-2-3-190618		
LCS 400-445986/2-A	Lab Control Sample	109	
MB 400-445986/1-A	Method Blank	105	
Surrogate Legend			
TFT-F = a,a,a-Trifluorot			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits
		OTPH1	
_ab Sample ID	Client Sample ID	(27-151)	
0-172083-A-1-A MS	Matrix Spike	263 X	
00-172083-A-1-B MSD	Matrix Spike Duplicate	262 X	
00-187283-1	Cell	96	
	20-square79-S-2-3-190618		

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
600-187283-2	Cell 19-square173-S-2-3-190618	96	
600-187283-3	Cell	89	
	18-square82-S-2-3-190618		
600-187283-4	Cell	96	
	17-square131-S-2-3-190618		
600-187283-5	Cell	96	
	21-square196-S-2-3-190618		
LCS 400-445495/2-A	Lab Control Sample	110	
MB 400-445495/1-A	Method Blank	98	
Surrogate Legend			

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Client: ARCADIS U.S. Inc Job ID: 600-187283-1

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

Lab Sample ID: MB 600-267618/6

Matrix: Solid

Analysis Batch: 267618

Project/Site: Treatment

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

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			06/20/19 10:41	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			06/20/19 10:41	1
Toluene	1.38	U	5.00	1.38	ug/Kg			06/20/19 10:41	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			06/20/19 10:41	1

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	61 - 130		06/20/19 10:41	1
Dibromofluoromethane	91	68 - 140		06/20/19 10:41	1
Toluene-d8 (Surr)	87	50 - 130		06/20/19 10:41	1
4-Bromofluorobenzene	100	57 - 140		06/20/19 10:41	1

Lab Sample ID: LCS 600-267618/3

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Analysis Batch: 267618

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

LCS LCS %Rec. Spike Added Result Qualifier Unit %Rec Limits 50.0 47.34 95 70 - 131 ug/Kg 50.0 46.74 ug/Kg 93 66 - 130 50.0 45.26 ug/Kg 91 67 - 130 100 94.58 95 63 - 130 ug/Kg 50.0 46.86 ug/Kg 94 64 - 130 50.0 47.72 ug/Kg 95 62 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		61 - 130
Dibromofluoromethane	90		68 - 140
Toluene-d8 (Surr)	94		50 ₋ 130
4-Bromofluorobenzene	104		57 ₋ 140

Lab Sample ID: LCSD 600-267618/4

Matrix: Solid

Analysis Batch: 267618

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

RPD
Limit
30
30
30
30
30
30
) 5) 7

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		61 - 130
Dibromofluoromethane	93		68 - 140
Toluene-d8 (Surr)	93		50 ₋ 130
4-Bromofluorobenzene	105		57 - 140

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Job ID: 600-187283-1

Client: ARCADIS U.S. Inc Project/Site: Treatment

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-445986/1-A

Matrix: Solid

Analyte

C6-C10

Analysis Batch: 445920

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

Prep Batch: 445986

MR MR Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 06/27/19 12:30 50.0 U 06/27/19 13:16 100 50.0 ug/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 06/27/19 12:30 a,a,a-Trifluorotoluene (fid) 105 65 - 125 06/27/19 13:16

Lab Sample ID: LCS 400-445986/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 445920

Prep Batch: 445986 LCS LCS Spike %Rec Added Result Qualifier Unit %Rec Limits

C6-C10 1000 1095 ug/Kg 109 62 - 141

LCS LCS

%Recovery Qualifier Limits Surrogate a,a,a-Trifluorotoluene (fid) 109 65 - 125

Lab Sample ID: 600-187283-1 MS Client Sample ID: Cell 20-square79-S-2-3-190618

Matrix: Solid

Analysis Batch: 445920 Prep Batch: 445986 Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

C6-C10 1100 Ū 21900 24800 ug/Kg 10 _ 150

MS MS

Surrogate %Recovery Qualifier Limits

65 - 125 a,a,a-Trifluorotoluene (fid) 109

Lab Sample ID: 600-187283-1 MSD

Matrix: Solid

Analysis Batch: 445920

Prep Batch: 445986 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Analyte Result Qualifier Limits RPD Limit Unit D %Rec C6-C10 1100 U 21900 26210 ug/Kg 120 10 - 150 6 32

MSD MSD

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 109 65 - 125

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

Lab Sample ID: MB 400-445495/1-A

Matrix: Solid

Analysis Batch: 445687

Client Sample ID: Method Blank

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 445495

мв мв Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 06/24/19 13:26 06/25/19 22:06 2 00 U 5.00 2.00 mg/Kg Oil Range Organics (C28-C35) 2.00 U 5.00 mg/Kg 06/24/19 13:26 06/25/19 22:06

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 27 - 151 06/24/19 13:26 06/25/19 22:06 o-Terphenyl 98

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Job ID: 600-187283-1

Client: ARCADIS U.S. Inc Project/Site: Treatment

Analysis Batch: 445687

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 445495

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits 276 94 63 - 153 Diesel Range Organics 260.2 mg/Kg

[C10-C28]

[C10-C28]

Matrix: Solid

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 110 27 - 151

Lab Sample ID: 400-172083-A-1-A MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Lab Sample ID: LCS 400-445495/2-A

Analysis Batch: 445687

Prep Batch: 445495 Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Limits Unit D %Rec 6681 E 4 Diesel Range Organics 5480 271 mg/Kg 444 62 - 204

MS MS Surrogate %Recovery Qualifier Limits o-Terphenyl 263 X 27 - 151

Lab Sample ID: 400-172083-A-1-B MSD

Matrix: Solid

[C10-C28]

o-Terphenyl

Analysis Batch: 445687 **Prep Batch: 445495** Sample Sample Spike MSD MSD %Rec. RPD Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits RPD Limit 269 284 30 Diesel Range Organics 5480 6242 4 mg/Kg 62 - 204

MSD MSD %Recovery Qualifier Surrogate Limits

> 262 X

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

27 - 151

Analysis Batch: 268408

мв мв Analyte Result Qualifier MQL (Adj) SDL Unit Analyzed Dil Fac Prepared Chloride 0.534 U 4.00 0.534 mg/Kg 07/01/19 11:49

Lab Sample ID: LCS 600-268411/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 268408

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit Limits %Rec 200 Chloride 197.9 mg/Kg 99 90 - 110

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QC Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Soluble

Analysis Batch: 268408

Matrix: Solid

Lab Sample ID: 600-187283-1 MS

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	9.78		99.0	121.9		mg/Kg		113	80 - 120	

Lab Sample ID: 600-187283-1 MSD Client Sample ID: Cell 20-square79-S-2-3-190618 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 268408

RPD Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Result Qualifier Limits RPD Limit Unit D %Rec Chloride 9.78 99.0 105.5 mg/Kg 97 80 - 120 14 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-187269-B-1 DU **Client Sample ID: Duplicate**

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 267688

Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit D RPD Limit Percent Moisture 16.2 % 20 13.8 16 Percent Solids 83.8 86.2 3 20

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Unadjusted Detection Limits

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

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

Prep: 5035

- Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg	
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units	
Chloride	4.00	0.534	mg/Kg	

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

GC/MS VOA

Analysis Batch: 267618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	8260B	267658
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	8260B	267658
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	8260B	267658
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	8260B	267658
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	8260B	267658
MB 600-267618/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-267618/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-267618/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 267658

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Cell 20-square79-S-2-3-190618	Total/NA	Solid	5035	_
Cell 19-square173-S-2-3-190618	Total/NA	Solid	5035	
Cell 18-square82-S-2-3-190618	Total/NA	Solid	5035	
Cell 17-square131-S-2-3-190618	Total/NA	Solid	5035	
Cell 21-square196-S-2-3-190618	Total/NA	Solid	5035	
	Cell 20-square79-S-2-3-190618 Cell 19-square173-S-2-3-190618 Cell 18-square82-S-2-3-190618 Cell 17-square131-S-2-3-190618	Cell 20-square79-S-2-3-190618 Total/NA Cell 19-square173-S-2-3-190618 Total/NA Cell 18-square82-S-2-3-190618 Total/NA Cell 17-square131-S-2-3-190618 Total/NA	Cell 20-square79-S-2-3-190618 Total/NA Solid Cell 19-square173-S-2-3-190618 Total/NA Solid Cell 18-square82-S-2-3-190618 Total/NA Solid Cell 17-square131-S-2-3-190618 Total/NA Solid	Cell 20-square79-S-2-3-190618 Total/NA Solid 5035 Cell 19-square173-S-2-3-190618 Total/NA Solid 5035 Cell 18-square82-S-2-3-190618 Total/NA Solid 5035 Cell 17-square131-S-2-3-190618 Total/NA Solid 5035

GC VOA

Analysis Batch: 445920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	8015B	445986
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	8015B	445986
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	8015B	445986
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	8015B	445986
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	8015B	445986
MB 400-445986/1-A	Method Blank	Total/NA	Solid	8015B	445986
LCS 400-445986/2-A	Lab Control Sample	Total/NA	Solid	8015B	445986
600-187283-1 MS	Cell 20-square79-S-2-3-190618	Total/NA	Solid	8015B	445986
600-187283-1 MSD	Cell 20-square79-S-2-3-190618	Total/NA	Solid	8015B	445986

Prep Batch: 445986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	5035	 !
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	5035	
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	5035	
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	5035	
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	5035	
MB 400-445986/1-A	Method Blank	Total/NA	Solid	5035	
LCS 400-445986/2-A	Lab Control Sample	Total/NA	Solid	5035	
600-187283-1 MS	Cell 20-square79-S-2-3-190618	Total/NA	Solid	5035	
600-187283-1 MSD	Cell 20-square79-S-2-3-190618	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 445495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	3546	
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	3546	
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	3546	
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	3546	
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	3546	

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Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

GC Semi VOA (Continued)

Prep Batch: 445495 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-445495/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-445495/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-172083-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-172083-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 445687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	8015B	445495
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	8015B	445495
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	8015B	445495
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	8015B	445495
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	8015B	445495
MB 400-445495/1-A	Method Blank	Total/NA	Solid	8015B	445495
LCS 400-445495/2-A	Lab Control Sample	Total/NA	Solid	8015B	445495
400-172083-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	445495
400-172083-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	445495

HPLC/IC

Analysis Batch: 268408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Soluble	Solid	300.0	268411
600-187283-2	Cell 19-square173-S-2-3-190618	Soluble	Solid	300.0	268411
600-187283-3	Cell 18-square82-S-2-3-190618	Soluble	Solid	300.0	268411
600-187283-4	Cell 17-square131-S-2-3-190618	Soluble	Solid	300.0	268411
600-187283-5	Cell 21-square196-S-2-3-190618	Soluble	Solid	300.0	268411
MB 600-268411/1-A	Method Blank	Soluble	Solid	300.0	268411
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	300.0	268411
600-187283-1 MS	Cell 20-square79-S-2-3-190618	Soluble	Solid	300.0	268411
600-187283-1 MSD	Cell 20-square79-S-2-3-190618	Soluble	Solid	300.0	268411

Leach Batch: 268411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
600-187283-1	Cell 20-square79-S-2-3-190618	Soluble	Solid	DI Leach	_
600-187283-2	Cell 19-square173-S-2-3-190618	Soluble	Solid	DI Leach	
600-187283-3	Cell 18-square82-S-2-3-190618	Soluble	Solid	DI Leach	
600-187283-4	Cell 17-square131-S-2-3-190618	Soluble	Solid	DI Leach	
600-187283-5	Cell 21-square196-S-2-3-190618	Soluble	Solid	DI Leach	
MB 600-268411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-187283-1 MS	Cell 20-square79-S-2-3-190618	Soluble	Solid	DI Leach	
600-187283-1 MSD	Cell 20-square79-S-2-3-190618	Soluble	Solid	DI Leach	

General Chemistry

Analysis Batch: 267688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187283-1	Cell 20-square79-S-2-3-190618	Total/NA	Solid	2540B	
600-187283-2	Cell 19-square173-S-2-3-190618	Total/NA	Solid	2540B	
600-187283-3	Cell 18-square82-S-2-3-190618	Total/NA	Solid	2540B	
600-187283-4	Cell 17-square131-S-2-3-190618	Total/NA	Solid	2540B	
600-187283-5	Cell 21-square196-S-2-3-190618	Total/NA	Solid	2540B	

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Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

General Chemistry (Continued)

Analysis Batch: 267688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187269-B-1 DU	Duplicate	Total/NA	Solid	2540B	

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Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 20-square79-S-2-3-190618

Date Collected: 06/18/19 09:50 Date Received: 06/19/19 11:50

Lab Sample ID: 600-187283-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.37 g	5 mL	267658	06/19/19 14:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267618	06/20/19 15:09	WS1	TAL HOU
Total/NA	Prep	5035			11.415 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 16:46	GRK	TAL PEN
Total/NA	Prep	3546			15.28 g	1.0 mL	445495	06/24/19 13:26	KLR	TAL PEN
Total/NA	Analysis	8015B		1			445687	06/26/19 00:17	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.05 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 12:43	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267688	06/20/19 17:56	AP	TAL HOU

Client Sample ID: Cell 19-square173-S-2-3-190618

Date Collected: 06/18/19 10:42

Date Received: 06/19/19 11:50

Lab Sample ID: 600-187283-2

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method Amount Amount Number Prep Type Туре Run Factor or Analyzed Analyst Lab Total/NA Prep 5035 5 mL 267658 06/19/19 14:00 WS1 TAL HOU 4.43 g Total/NA Analysis 8260B 5 g 5 g 267618 06/20/19 15:40 WS1 TAL HOU Total/NA 5035 TAL PEN Prep 11.436 g 5.0 g 445986 GRK 06/27/19 12:30 Total/NA Analysis 8015B 50 5 mL 5 mL 445920 06/27/19 17:22 **GRK** TAL PEN Total/NA 3546 445495 TAL PEN Prep 15.02 g 1.0 mL 06/24/19 13:26 KLR Total/NA Analysis 8015B 445687 06/26/19 00:44 TAJ TAL PEN 50 mL TAL HOU Soluble Leach DI Leach 5.04 g 268411 SKR 07/01/19 10:56 Soluble TAL HOU Analysis 300.0 268408 07/01/19 13:36 SKR 1 267688 TAL HOU Total/NA Analysis 2540B 06/20/19 17:56 ΑP

Client Sample ID: Cell 18-square82-S-2-3-190618

Date Collected: 06/18/19 11:23

Date Received: 06/19/19 11:50

ch	Prepared			
nber	or Analyzed	Analyst	Lab	
	-	_		

Lab Sample ID: 600-187283-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.86 g	5 mL	267658	06/19/19 14:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267618	06/20/19 16:10	WS1	TAL HOU
Total/NA	Prep	5035			9.447 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 17:58	GRK	TAL PEN
Total/NA	Prep	3546			15.26 g	1.0 mL	445495	06/24/19 13:26	KLR	TAL PEN
Total/NA	Analysis	8015B		1			445687	06/26/19 00:57	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.00 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 13:54	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267688	06/20/19 17:56	AP	TAL HOU

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Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-187283-1

Project/Site: Treatment

Client Sample ID: Cell 17-square131-S-2-3-190618

Date Collected: 06/18/19 12:53 Date Received: 06/19/19 11:50

Lab Sample ID: 600-187283-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.32 g	5 mL	267658	06/19/19 14:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267618	06/20/19 16:35	WS1	TAL HOU
Total/NA	Prep	5035			10.522 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 18:34	GRK	TAL PEN
Total/NA	Prep	3546			15.37 g	1.0 mL	445495	06/24/19 13:26	KLR	TAL PEN
Total/NA	Analysis	8015B		1			445687	06/26/19 01:10	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.00 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 14:12	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267688	06/20/19 17:56	AP	TAL HOU

Client Sample ID: Cell 21-square196-S-2-3-190618

Date Collected: 06/18/19 13:34

Date Received: 06/19/19 11:50

Lab Sample ID: 600-187283-5

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.35 g	5 mL	267658	06/19/19 14:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267618	06/20/19 16:59	WS1	TAL HOU
Total/NA	Prep	5035			9.688 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 19:10	GRK	TAL PEN
Total/NA	Prep	3546			15.27 g	1.0 mL	445495	06/24/19 13:26	KLR	TAL PEN
Total/NA	Analysis	8015B		1			445687	06/26/19 01:23	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.01 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 14:30	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267688	06/20/19 17:56	AP	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc

Job ID: 600-187283-1

Project/Site: Treatment

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Гехаs	NELAP		6	T104704223-18-23	10-31-19
The following analytes	are included in this report, bu	t the laboratory is not c	ertified by the governir	ng authority. This list may inc	lude analytes for which
the agency does not off	er certification.				
the agency does not off Analysis Method	er certification. Prep Method	Matrix	Analyt	e	
3 ,		Matrix Solid		e nt Moisture	

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	06-30-19
Alabama	State Program	4	40150	06-30-19 *
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State		2510	06-30-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State Program	5	9912	06-30-19 *
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
JS Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

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

Phone (713) 690-4444 Fax (713) 690-5646		ain of	Chain of Custody Record	Reco	p	- N				THE LEADER IN DIVING SAMENTA	HIST MICHARDINA
Client Information	Sampler Savah Jannson		CallumFransn	Lab PM Sachin Kudchadkar	hadkar			Carrier Tracking No(s)		COC No 600-59019-16898 1	
Client Contact Steve Rice	0	7537		E-Mail sachin kudol	adkar@	testame	E-Mail sachin kudchadkar@testamericainc.com		Page	Page Page 1 of 1	
Company, ARCADIS U.S. Inc						A	Analysis Requested	equested	# gop		
Address: 11001 West 120th Avenue City: Broomfield Sate: CO, 80021	Due Date Requested: Q O U O TAT Requested (days):								Pres.	A - HCL M B - Naclate N C - Zn Acetate O D - Nitro Acid P - Natro Acid D - Natro Acid	- Hexane None AsNaO2 Na2O4S Na2SO3
Phone 303-710-7537(Tel) Email steve rice@arcadis.com	Po# Purchase Order Re WO#	er Requested						60		10	R - Na2S203 S - H2S04 T - TSP Dodecatydrate U - Acetone V - MCAA
Project Name Chevron - Jal Land Farm Soils 2018 Site. TREATMENT	Project # 60009563 SSOW#				DESCRIPTION OF THE PARTY.			00-187283		× ×	W - pH 4-5 Z - other (specify)
Sample Identification	S Sample Date	Sample (Ca	Sample Matrix Type (Winester, Cacomp, Descended)	Fleid Filtered S	8012E_GRO - CE	300_ORGFM_28	BAUTZIOM	Chain of Cust	Total Number	Special Instr	Special Instructions/Note:
	$\langle \rangle$	V	-715	X	z	z	z	tody	X	\bigwedge	V
[61120-594001879-5-2-3-190018	19C618 09	50	5 5		×	X	×		S	**SAMPLES MUST BE	ST BE
[1211 19-50 ware 173-5-2-3-190618	190018	.42	5		X	×	×		REC	CEIVED BY TH	RECEIVED BY THE HOUSTON
5-2-3	40018	23	5 15		X	×	×		EA I	LABORATORY WITHIN	NIHIN
CO117-Square 131-5-2-3-190619		:53			×	×	34	-	48H	48HRS OF COLLECTION	ECTION
(41121-5940×C1910-5-2-3-1901018	190618 13	37	ν 5		×	×	×				
Rossible Hazard Identification Non-Hazard — Flammable Skin Initant Po Deliverable Requested: 1, 11, 111, IV, Other (specify)	□ Роізоп В □ Unknown		Radiological	Spe	Return	le Disposal (A f Return To Client al Instructions/QC	Sample Disposal (A fee may be ass Sample Disposal (A fee may be ass Disposal Instructions/QC Requirements	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	iles are retained long	nger than 1 mc	onth) Months
Empty Kit Relinquished by:	Date	ite.		Time:		1,	(Method of Shipment	ment		١
Relinquished by Relinquished by	Date/Time	1152	Company Company	5172	Received to	Bo	3		Date/Time	1	Company
Reinqushed by	Date/Time		Company		Received by.	1		Dat	Date/Time.	ō	Company
Custody Seals Intact. Custody Seal No.			1		Coaler Ten	perature(s	Coaler Temperature(s) °C and Other Remarks	Remarks			

TestAmerica Houston

Loc: 600

Sample Recei 187283 t



NUMBER: >	XTS =	3	/Time Received: CLIENT:	A.	rcad	119 JUN 19
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PACKED BY:	1		CARRIER/DRIVER:	_()	1cn-	
ody Seal Present:	YES	□ №	Number of Coolers R	eceived:	l	
0 1 10	Temp	T: D= 1	Observed Temp	Therm	Them	Corrected Temp
Cooler ID	Blank Y / N	Trip Brank	(0)	ID	CF	2.5
YUD	YIN	Y/N		616	-0.0	2.2
	Y / N	Y/N				
	Y / N	DVN				
	YIN	(HON				
	Y/N	LKX N				
	YIN	DYON				
	YIN	A ON				
V	YIN	YINI				
ORATORY PRES	ERVATION OF				□YES	□NO
ORATORY PRES	ERVATION OF	SAMPLES RE	EQUIRED: No			□NO
ORATORY PRES samples are>pH aper Lot #	ERVATION OF	SAMPLES RE	Acid preserved are <p< th=""><th></th><th></th><th>□NO</th></p<>			□NO
ORATORY PRES e samples are>pH eaper Lot #	ERVATION OF	SAMPLES RE	Acid preserved are <p< th=""><th></th><th></th><th></th></p<>			
e samples are>pH eaper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td>□ NO YES NO</td></p<>	H 2:	□YES [□ NO YES NO
e samples are>pH eaper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [
e samples are>pH eaper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [
e samples are>pH eaper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [
e samples are>pH eaper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [
oratory presessance are properties a	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [
oratory pres samples are>pH aper Lot # headspace accep	ERVATION OF : 12: YES [table (5-6mm):	SAMPLES RE NO YES	Acid preserved are <p< td=""><td>H 2:</td><td>□YES [</td><td></td></p<>	H 2:	□YES [

HS-SA-WI-013

Rev. 3; 07/01/2014

Chain of Custody Record

eurofins Environment Testing TestAmerica

Eurofins TestAmerica, Houston

6310 Rothway Street Houston, TX 77040 Phone: 713-690-4444 Fax: 713-690-5646

	Sampler:			Lab PM:	:	:		Carrier Tracking No(s):	No(s):	COC No:	
Client Information (Sub Contract Lab)	Č			Kudcr	Kudchadkar, Sachin G	chin G				600-40213.1	
Cilen Contact: Shipping/Receiving	- Huone:			sachir	.kudchad	kar@testarr	E-Mail: sachin.kudchadkar@testamericainc.com	Texas		Page:	
Сомрану: TestAmerica Laboratories, Inc.					Accreditations Requ	Accreditations Required (See note): NELAP - Texas	ee note):			Job #:	
Address: 3355 McLemore Drive,	Due Date Requested: 7/1/2019	#					Analysis Requested	equested		Preservation Codes	des:
City: Pensacola State, Zip: FL, 32514	TAT Requested (days):	::(s/								B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #;					_				F - MeOH G - Amchlor H - Ascorbic Acid	
Email:	,#OM				(0)	_					
Project Name: Chevron - Jal Land Farm Soils 2018	Project #: 60009563				10 se						W - pH 4-5 Z - other (specify)
Site:	SSOW#:				Y) as					of cor	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteloil, BT=Tissue, A=Ar)	Field Filtered S Perform MS/M 8015B_GRO/503	8015B_DRO/354				Total Number o	Special Instructions/Note:
		X	Preserva	Preservation Code:	X					./\ ×	
Cell 20-square79-S-2-3-190618 (600-187283-1)	6/18/19	09:50 Central		Solid	×	×				2	
Cell 19-square173-S-2-3-190618 (600-187283-2)	6/18/19	10:42 Central		Solid	×	×				2	
Cell 18-square82-S-2-3-190618 (600-187283-3)	6/18/19	11:23 Central		Solid	×	×				5	
Cell 17-square131-S-2-3-190618 (600-187283-4)	6/18/19	12:53 Central		Solid	×	×				2	
Cell 21-square196-S-2-3-190618 (600-187283-5)	6/18/19	13:34 Central		Solid	×	×				5	
								+			
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, inc. places the ownership of method, analyte & accreditation our subcontract laboratories. This samples tho change is forwarded under chain-of-custody. If the laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	aboratories, Inc. places the sis/lests/matrix being analyz current to date, return the s	ownership of ced, the samp igned Chain of	method, analyt es must be shi if Custody attes	e & accreditation pped back to the ting to said com	compliance TestAmeric blicance to T	upon out subc a laboratory or estAmerica La	contract laboratori other instructions aboratories, Inc.	es. This sample ship will be provided. An	ment is forwarde y changes to acc	d under chain-of-custod; reditation status should	This sample shipment is forwarded under chain-of-custody. If the laboratory does not it be provided. Any changes to accreditation status should be brought to TestAmerica
Possible Hazard Identification					Samp	le Disposal (A t	I (A fee may	be assessed if san	amples are r	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	in 1 month)
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverabl	able Rank:	2		Speci	al Instruction	Special Instructions/QC Requirements:	ements:	an	Alcilive rol	Monus
Empty Kit Relinquished by:	-	Date:			Time:			Method	Method of Shipment:		
Relinquished by:	Date/Time:		W	Company		Received by:	Fees 178	ANDIA Co.	Date/Time:	101 101	Company
Relinquished by:	Date/Time:		3	Compan	8	Received by:	The same of the sa	Zero E	Date/Time:		Company
Relinquished by:	Date/Time:			Company	ă.	Received by:			Date/Time:		Company
Custody Seals Intact: Custody Seal No.:					8	ooler Temperal	ture(s) °C and Oth	Cooler Temperature(s) $^{\circ}$ C and Other Remarks: \mathcal{H}_{\circ}	5°C #	167	

Client: ARCADIS U.S. Inc Job Number: 600-187283-1

Login Number: 187283 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	2.5
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.

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Client: ARCADIS U.S. Inc

Job Number: 600-187283-1

Login Number: 187283 List Source: Eurofins TestAmerica, Pensacola List Number: 2

List Creation: 06/20/19 03:28 PM

Creator: Hinrichsen, Megan E

Question Answer Comment
Radioactivity wasn't checked or is = background as measured by a survey N/A meter.</td
The cooler's custody seal, if present, is intact.
Sample custody seals, if present, are intact. N/A
The cooler or samples do not appear to have been compromised or tampered with.
Samples were received on ice. True
Cooler Temperature is acceptable. True
Cooler Temperature is recorded. True 4.5°C IR-7
COC is present. True
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. True
Containers are not broken or leaking.
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
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").
Multiphasic samples are not present. True
Samples do not require splitting or compositing.
Residual Chlorine Checked. N/A

Eurofins TestAmerica, Houston



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-187336-1

Client Project/Site: Chevron - Jal Land Farm Soils 2018

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Phidchaelkar

Authorized for release by: 7/10/2019 3:31:06 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-187336-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 10:04 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

GC/MS VOA

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

GC VOA

Method(s) 8015B: The following samples were diluted because the base dilution for methanol preserved soil analysis is 1:50: Cell25-treatment-S-6-190619 (600-187336-1), Cell25-square39-S-2-3-190619 (600-187336-2) and Cell26-treatment-S-6-190619 (600-187336-4)

Method(s) 8015B: The methanol in the voa vial received for sample Cell26-square26-S-2-3-190619 (600-187336-3) was absorbed by the soil. Therefore, 5 mls of methanol was added and the final volume was adjusted to 10 mls in the preparation batch.

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

GC Semi VOA

Method(s) 8015B, 8015C: The matrix spike (MS) recoveries for preparation batch 400-445773 and analytical batch 400-446178 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B, 8015C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-445773 and analytical batch 400-446178 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8015B, 8015C: The following samples were diluted due to the nature of the sample matrix: Cell25-treatment-S-6-190619 (600-187336-1) and Cell26-treatment-S-6-190619 (600-187336-4). Elevated reporting limits (RLs) are provided.

Method(s) 8015B: The method blank for preparation batch 400-445773 and analytical batch 400-446178 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

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Job ID: 600-187336-1

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Eurofins TestAmerica, Houston 7/10/2019

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Method **Method Description** Protocol Laboratory 8260B Volatile Organic Compounds (GC/MS) SW846 TAL HOU 8015B Gasoline Range Organics - (GC) SW846 TAL PEN 8015B Diesel Range Organics (DRO) (GC) SW846 TAL PEN 300.0 Anions, Ion Chromatography MCAWW TAL HOU 2540B Percent Moisture SM20 TAL HOU 3546 Microwave Extraction SW846 TAL PEN Closed System Purge & Trap/Laboratory Preservation 5035 SW846 TAL HOU 5035 Closed System Purge and Trap SW846 TAL PEN DI Leach Deionized Water Leaching Procedure (Routine) ASTM TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Job ID: 600-187336-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-187336-1	Cell25-treatment-S-6-190619	Solid	06/19/19 08:12	06/20/19 10:04
600-187336-2	Cell25-square39-S-2-3-190619	Solid	06/19/19 09:07	06/20/19 10:04
600-187336-3	Cell26-square26-S-2-3-190619	Solid	06/19/19 09:56	06/20/19 10:04
600-187336-4	Cell26-treatment-S-6-190619	Solid	06/19/19 10:38	06/20/19 10:04

Job ID: 600-187336-1

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Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell25-treatment-S-6-190619

Date Collected: 06/19/19 08:12 **Matrix: Solid** Date Received: 06/20/19 10:04

Method: 8015B - Gasoline Range Organics - (GC) Result Qualifier SDL Unit D Dil Fac Analyte MQL (Adj) Prepared Analyzed C6-C10 1080 Ū 2160 1080 ug/Kg 06/27/19 12:30 06/27/19 21:32 50 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 106 65 - 125 06/27/19 12:30 06/27/19 21:32 50 Method: 8015B - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 48.9 24.8 9.91 mg/Kg 06/26/19 12:37 06/29/19 03:52 5 24 8 9.91 mg/Kg 06/26/19 12:37 06/29/19 03:52 5 Oil Range Organics (C28-C35) 73.5 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 96 27 - 151 06/26/19 12:37 06/29/19 03:52 o-Terphenyl Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac Chloride 0.528 U 3.95 0.528 mg/Kg 07/01/19 14:48 **General Chemistry**

MQL (Adj)

1.0

1.0

SDL Unit

%

%

1.0

1.0

D

Prepared

06/26/19 12:37

06/26/19 12:37

Analyzed

06/21/19 15:25

06/21/19 15:25

Lab Sample ID: 600-187336-2

Dil Fac

Matrix: Solid

Client Sample ID: Cell25-square39-S-2-3-190619

Date Collected: 06/19/19 09:07

Result Qualifier

5.1

94.9

3.00 JB

3.65

Date Received: 06/20/19 10:04

Diesel Range Organics [C10-C28]

Oil Range Organics (C28-C35)

Analyte

Percent Moisture

Percent Solids

Method: 8260B - Volatile Organic Compounds (GC/MS) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac Benzene 0.615 U 4.88 0.615 ug/Kg 06/20/19 11:48 06/24/19 14:35 0.996 U 4 88 06/20/19 11:48 06/24/19 14:35 Ethylbenzene 0.996 ug/Kg 4.88 ug/Kg 06/20/19 11:48 06/24/19 14:35 Toluene 6.70 1.35 4.88 1.10 ug/Kg 06/20/19 11:48 06/24/19 14:35 Xylenes, Total 3.45 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 06/20/19 11:48 06/24/19 14:35 1,2-Dichloroethane-d4 (Surr) 105 61 - 130 91 06/20/19 11:48 06/24/19 14:35 Dibromofluoromethane 68 - 140 Toluene-d8 (Surr) 80 50 - 130 06/20/19 11:48 06/24/19 14:35 4-Bromofluorobenzene 95 06/20/19 11:48 06/24/19 14:35 57 - 140 Method: 8015B - Gasoline Range Organics - (GC) Analyte Result Qualifier MQL (Adj) SDL Unit D Dil Fac Prepared Analyzed C6-C10 1180 U 06/27/19 12:30 06/27/19 22:07 2370 1180 ug/Kg 50 %Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 107 65 - 125 06/27/19 12:30 06/27/19 22:07 50 Method: 8015B - Diesel Range Organics (DRO) (GC) Result Qualifier SDL Unit D Dil Fac Analyte MQL (Adj) Prepared Analyzed

Eurofins TestAmerica, Houston

7/10/2019

06/29/19 04:05

06/29/19 04:05

Lab Sample ID: 600-187336-1

6

4.87

4.87

1.95

1.95

mg/Kg

mg/Kg

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell25-square39-S-2-3-190619

Date Collected: 06/19/19 09:07

Lab Sample ID: 600-187336-2 Matrix: Solid

Date Received: 06/20/19 10:04

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		27 - 151				06/26/19 12:37	06/29/19 04:05	1
Method: 300.0 - Anions, Ion C	Chromatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.530	U	3.97	0.530	mg/Kg			07/01/19 15:42	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.4		1.0	1.0	%			06/21/19 15:25	1
Percent Solids	89.6		1.0	1.0	%			06/21/19 15:25	1

Client Sample ID: Cell26-square26-S-2-3-190619 Lab Sample ID: 600-187336-3 Matrix: Solid

Date Collected: 06/19/19 09:56

Date Received: 06/20/19 10:04

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.722	U	5.73	0.722	ug/Kg		06/20/19 11:48	06/24/19 15:01	1
Ethylbenzene	1.17	U	5.73	1.17	ug/Kg		06/20/19 11:48	06/24/19 15:01	1
Toluene	22.0		5.73	1.58	ug/Kg		06/20/19 11:48	06/24/19 15:01	1
Xylenes, Total	8.07		5.73	1.30	ug/Kg		06/20/19 11:48	06/24/19 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1 2-Dichloroethane-d4 (Surr)			61 - 130				06/20/19 11:48	06/24/19 15:01	

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		61 - 130	06/20/19 1	11:48	06/24/19 15:01	1
Dibromofluoromethane	94		68 - 140	06/20/19 1	11:48	06/24/19 15:01	1
Toluene-d8 (Surr)	85		50 - 130	06/20/19 1	11:48	06/24/19 15:01	1
4-Bromofluorobenzene	97		57 - 140	06/20/19 1	11:48	06/24/19 15:01	1

Method: 8015B - Gasoline Range (Organics - (G	C)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	2900	U	5790	2900	ug/Kg		06/27/19 12:30	06/27/19 22:42	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	106		65 - 125				06/27/19 12:30	06/27/19 22:42	50
_									

Method: 8015B - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U	4.99	2.00	mg/Kg		06/26/19 12:37	06/29/19 04:31	1
Oil Range Organics (C28-C35)	2.00	U	4.99	2.00	mg/Kg		06/26/19 12:37	06/29/19 04:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
o-Terphenyl	62		27 - 151	06/26/19 12:37 06/29/19 04:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.32	J	4.00	0.534	mg/Kg			07/01/19 16:35	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.2		1.0	1.0	%			06/21/19 15:25	1
Percent Solids	86.8		1.0	1.0	%			06/21/19 15:25	1

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Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Date Received: 06/20/19 10:04

Client Sample ID: Cell26-treatment-S-6-190619

Lab Sample ID: 600-187336-4 Date Collected: 06/19/19 10:38

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	976	U	1950	976	ug/Kg		06/27/19 12:30	06/27/19 23:18	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	107		65 - 125				06/27/19 12:30	06/27/19 23:18	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37.2	В	24.5	9.82	mg/Kg		06/26/19 12:37	06/29/19 04:43	- 5
Oil Range Organics (C28-C35)	65.4		24.5	9.82	mg/Kg		06/26/19 12:37	06/29/19 04:43	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61		27 - 151				06/26/19 12:37	06/29/19 04:43	5
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
	Pocult	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result								
Analyte Chloride	0.530		3.97	0.530	mg/Kg			07/01/19 16:53	1
Chloride				0.530	mg/Kg			07/01/19 16:53	1
Chloride General Chemistry	0.530				mg/Kg Unit		Prepared	07/01/19 16:53 Analyzed	Dil Fac
	0.530	U	3.97		Unit	D	Prepared		Dil Fac

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Qualifiers

G	\sim		-		_	•
	L :/	w		w		Δ

 Qualifier
 Qualifier Description

 J
 Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

GC VOA

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

B Compound was found in the blank and sample.

F1 MS and/or MSD Recovery is outside acceptance limits.

F2 MS/MSD RPD exceeds control limits

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly	y used abbreviations may	v or mav not be	present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Eurofins TestAmerica, Houston

7/10/2019

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

Matrix: Solid Prep Type: Total/NA

_		Percent Surrogate Recovery (Acceptance Limits)						
		DCA	DBFM	TOL	BFB			
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)			
600-187336-2	Cell25-square39-S-2-3-190619	105	91	80	95			
600-187336-3	Cell26-square26-S-2-3-190619	110	94	85	97			
LCS 600-267801/3	Lab Control Sample	93	91	89	103			
LCSD 600-267801/4	Lab Control Sample Dup	92	91	88	101			
MB 600-267801/6	Method Blank	102	89	84	97			
Surrogate Legend								

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Prep Type: Total/NA **Matrix: Solid**

			Percent Surrogate Recovery (Acceptance Limi
		TFT-F2	
ab Sample ID	Client Sample ID	(65-125)	
00-187283-I-1-C MS	Matrix Spike	109	
00-187283-I-1-D MSD	Matrix Spike Duplicate	109	
00-187336-1	Cell25-treatment-S-6-190619	106	
00-187336-2	Cell25-square39-S-2-3-190619	107	
00-187336-3	Cell26-square26-S-2-3-190619	106	
00-187336-4	Cell26-treatment-S-6-190619	107	
CS 400-445986/2-A	Lab Control Sample	109	
1B 400-445986/1-A	Method Blank	105	
Surrogate Legend			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
400-172183-A-1-A MS	Matrix Spike	145	
400-172183-A-1-B MSD	Matrix Spike Duplicate	150	
600-187336-1	Cell25-treatment-S-6-190619	96	
600-187336-2	Cell25-square39-S-2-3-190619	85	
600-187336-3	Cell26-square26-S-2-3-190619	62	
600-187336-4	Cell26-treatment-S-6-190619	61	
_CS 400-445773/2-A	Lab Control Sample	98	
MB 400-445773/1-A	Method Blank	91	
Surrogate Legend			

Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Lab Sample ID: MB 600-267801/6

Matrix: Solid

Analysis Batch: 267801

Client: ARCADIS U.S. Inc

5	Client Sample ID: Method Blank	
	Prep Type: Total/NA	
		ı

	MB	MR							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			06/24/19 12:06	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			06/24/19 12:06	1
Toluene	1.38	U	5.00	1.38	ug/Kg			06/24/19 12:06	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			06/24/19 12:06	1

	MB	MB					
Surrogate	%Recovery	Qualifier	Limits	Pre	pared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		61 - 130			06/24/19 12:06	1
Dibromofluoromethane	89		68 - 140			06/24/19 12:06	1
Toluene-d8 (Surr)	84		50 - 130			06/24/19 12:06	1
4-Bromofluorobenzene	97		57 ₋ 140			06/24/19 12:06	1

Lab Sample ID: LCS 600-267801/3

Matrix: Solid

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

Analysis Batch: 267801

LCS LCS %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 50.0 48.47 97 70 - 131 ug/Kg Ethylbenzene 50.0 49.74 ug/Kg 99 66 - 130 Toluene 50.0 47.47 ug/Kg 95 67 - 130 Xylenes, Total 89.38 89 63 - 130 100 ug/Kg m-Xylene & p-Xylene 50.0 44.36 ug/Kg 89 64 - 130 50.0 o-Xylene 45.02 ug/Kg 90 62 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93	-	61 - 130
Dibromofluoromethane	91		68 - 140
Toluene-d8 (Surr)	89		50 ₋ 130
4-Bromofluorobenzene	103		57 ₋ 140

Lab Sample ID: LCSD 600-267801/4

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267801

-	Spike	LCSD	LCSD			%Rec.		RPD	
Analyte	Added	Result	Qualifier U	nit	D %Rec	Limits	RPD	Limit	
Benzene	50.0	45.59	u	g/Kg	91	70 - 131	6	30	
Ethylbenzene	50.0	41.25	u	g/Kg	82	66 - 130	19	30	
Toluene	50.0	43.53	u	g/Kg	87	67 - 130	9	30	
Xylenes, Total	100	82.64	u	g/Kg	83	63 - 130	8	30	
m-Xylene & p-Xylene	50.0	40.61	u	g/Kg	81	64 - 130	9	30	
o-Xvlene	50.0	42.03	u	a/Ka	84	62 - 130	7	30	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		61 - 130
Dibromofluoromethane	91		68 - 140
Toluene-d8 (Surr)	88		50 ₋ 130
4-Bromofluorobenzene	101		57 ₋ 140

Eurofins TestAmerica, Houston

7/10/2019

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-445986/1-A

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445986

Analyte Result Qualifier MQL (Adj) SDL Unit

MR MR

Prepared Analyzed Dil Fac 06/27/19 12:30 C6-C10 50.0 U 06/27/19 13:16 100 50.0 ug/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 06/27/19 12:30 a,a,a-Trifluorotoluene (fid) 105 65 - 125 06/27/19 13:16

Lab Sample ID: LCS 400-445986/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 445920

LCS LCS Spike %Rec Added Result Qualifier Unit %Rec Limits

Prep Batch: 445986

C6-C10 1000 1095 ug/Kg 109 62 - 141

LCS LCS

%Recovery Qualifier Limits Surrogate a,a,a-Trifluorotoluene (fid) 109 65 - 125

Lab Sample ID: 600-187283-I-1-C MS

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445986

Sample Sample Spike MS MS %Rec.

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits C6-C10 1100 U 21900 24800 10 - 150 ug/Kg

21900

MS MS

%Recovery Qualifier Limits Surrogate

65 - 125 a,a,a-Trifluorotoluene (fid) 109

Lab Sample ID: 600-187283-I-1-D MSD

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Matrix Spike Duplicate

10 - 150

120

Prep Type: Total/NA

Prep Batch: 445986

32

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Analyte Result Qualifier Unit Limits RPD Limit D %Rec

26210

ug/Kg

MSD MSD

1100 U

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 109 65 - 125

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

Lab Sample ID: MB 400-445773/1-A

Matrix: Solid

C6-C10

Analysis Batch: 446178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445773

мв мв Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 06/26/19 12:37 06/29/19 01:55 3.939 5.00 2.00 mg/Kg Oil Range Organics (C28-C35) 2.00 U 5.00 mg/Kg 06/26/19 12:37 06/29/19 01:55

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 27 - 151 06/26/19 12:37 06/29/19 01:55 o-Terphenyl 91

Eurofins TestAmerica, Houston

Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Lab Sample ID: LCS 400-445773/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 446178

Client: ARCADIS U.S. Inc

Prep Type: Total/NA **Prep Batch: 445773**

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits 276 81 63 - 153 Diesel Range Organics 224.5 mg/Kg

[C10-C28]

o-Terphenyl

LCS LCS Surrogate

%Recovery Qualifier Limits 98 27 - 151

Lab Sample ID: 400-172183-A-1-A MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 446178

Prep Type: Total/NA

Prep Batch: 445773

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec 3830 F1 273 Diesel Range Organics 906 B F1 F2 mg/Kg 1071 62 - 204

[C10-C28]

MS MS

Surrogate %Recovery Qualifier Limits o-Terphenyl 145 27 - 151

Lab Sample ID: 400-172183-A-1-B MSD

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 445773

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit 906 B F1 F2 268 1232 F2 Diesel Range Organics mg/Kg 121 62 - 204 103 30

[C10-C28]

MSD MSD

Surrogate %Recovery Qualifier Limits 27 - 151 o-Terphenyl 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 268408

мв мв

Analyte Result Qualifier MQL (Adj) SDL Unit Analyzed Dil Fac Prepared Chloride 0.534 U 4.00 0.534 mg/Kg 07/01/19 11:49

Lab Sample ID: LCS 600-268411/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 268408

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit Limits %Rec 200 Chloride 197.9 mg/Kg 99 90 - 110

Eurofins TestAmerica, Houston

Prep Type: Soluble

QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-187336-2 MS

Matrix: Solid

Analysis Batch: 268408

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	0.530	U	99.2	87.94		mg/Kg		89	80 - 120	_

Lab Sample ID: 600-187336-2 MSD

Matrix: Solid

Analysis Batch: 268408

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	0.530	U	99.2	87.87		mg/Kg		89	80 - 120	0	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-187336-3 DU Client Sample ID: Cell26-square26-S-2-3-190619

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 267770

Sample Sample DU DU RPD Result Qualifier Analyte Result Qualifier Unit RPD Limit Percent Moisture 13.2 12.9 % 2 20 Percent Solids 86.8 87.1 0.3

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Cell25-square39-S-2-3-190619

Client Sample ID: Cell25-square39-S-2-3-190619

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Unadjusted Detection Limits

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units	
C6-C10	100	50.0	ug/Kg	

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

Prep: 3546

Analyte	MQL	MDL	Units	
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg	
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

GC/MS VOA

Prep Batch: 267736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	5035	
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	5035	

Analysis Batch: 267801

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Cell25-square39-S-2-3-190619	Total/NA	Solid	8260B	267736
Cell26-square26-S-2-3-190619	Total/NA	Solid	8260B	267736
Method Blank	Total/NA	Solid	8260B	
Lab Control Sample	Total/NA	Solid	8260B	
Lab Control Sample Dup	Total/NA	Solid	8260B	
	Cell25-square39-S-2-3-190619 Cell26-square26-S-2-3-190619 Method Blank Lab Control Sample	Cell25-square39-S-2-3-190619 Total/NA Cell26-square26-S-2-3-190619 Total/NA Method Blank Total/NA Lab Control Sample Total/NA	Cell25-square39-S-2-3-190619 Total/NA Solid Cell26-square26-S-2-3-190619 Total/NA Solid Method Blank Total/NA Solid Lab Control Sample Total/NA Solid	Cell25-square39-S-2-3-190619 Total/NA Solid 8260B Cell26-square26-S-2-3-190619 Total/NA Solid 8260B Method Blank Total/NA Solid 8260B Lab Control Sample Total/NA Solid 8260B

GC VOA

Analysis Batch: 445920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-1	Cell25-treatment-S-6-190619	Total/NA	Solid	8015B	445986
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	8015B	445986
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	8015B	445986
600-187336-4	Cell26-treatment-S-6-190619	Total/NA	Solid	8015B	445986
MB 400-445986/1-A	Method Blank	Total/NA	Solid	8015B	445986
LCS 400-445986/2-A	Lab Control Sample	Total/NA	Solid	8015B	445986
600-187283-I-1-C MS	Matrix Spike	Total/NA	Solid	8015B	445986
600-187283-I-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	445986

Prep Batch: 445986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
00-187336-1 Cell25-treatment-S-6-190619		Total/NA	Solid	5035	_
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	5035	
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	5035	
600-187336-4	Cell26-treatment-S-6-190619	Total/NA	Solid	5035	
MB 400-445986/1-A	Method Blank	Total/NA	Solid	5035	
LCS 400-445986/2-A	Lab Control Sample	Total/NA	Solid	5035	
600-187283-I-1-C MS	Matrix Spike	Total/NA	Solid	5035	
600-187283-I-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 445773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-1	Cell25-treatment-S-6-190619	Total/NA	Solid	3546	
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	3546	
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	3546	
600-187336-4	Cell26-treatment-S-6-190619	Total/NA	Solid	3546	
MB 400-445773/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-445773/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-172183-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-172183-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 446178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-1	Cell25-treatment-S-6-190619	Total/NA	Solid	8015B	445773
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	8015B	445773

Eurofins TestAmerica, Houston

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

GC Semi VOA (Continued)

Analysis Batch: 446178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	8015B	445773	
600-187336-4	Cell26-treatment-S-6-190619	Total/NA	Solid	8015B	445773	
MB 400-445773/1-A	Method Blank	Total/NA	Solid	8015B	445773	
LCS 400-445773/2-A	Lab Control Sample	Total/NA	Solid	8015B	445773	
400-172183-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	445773	
400-172183-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	445773	

HPLC/IC

Analysis Batch: 268408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-1	Cell25-treatment-S-6-190619	Soluble	Solid	300.0	268411
600-187336-2	Cell25-square39-S-2-3-190619	Soluble	Solid	300.0	268411
600-187336-3	Cell26-square26-S-2-3-190619	Soluble	Solid	300.0	268411
600-187336-4	Cell26-treatment-S-6-190619	Soluble	Solid	300.0	268411
MB 600-268411/1-A	Method Blank	Soluble	Solid	300.0	268411
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	300.0	268411
600-187336-2 MS	Cell25-square39-S-2-3-190619	Soluble	Solid	300.0	268411
600-187336-2 MSD	Cell25-square39-S-2-3-190619	Soluble	Solid	300.0	268411

Leach Batch: 268411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-187336-1	Cell25-treatment-S-6-190619	Soluble	Solid	DI Leach	
600-187336-2	Cell25-square39-S-2-3-190619	Soluble	Solid	DI Leach	
600-187336-3	Cell26-square26-S-2-3-190619	Soluble	Solid	DI Leach	
600-187336-4	Cell26-treatment-S-6-190619	Soluble	Solid	DI Leach	
MB 600-268411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-187336-2 MS	Cell25-square39-S-2-3-190619	Soluble	Solid	DI Leach	
600-187336-2 MSD	Cell25-square39-S-2-3-190619	Soluble	Solid	DI Leach	

General Chemistry

Analysis Batch: 267770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-1	Cell25-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	2540B	
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	2540B	
600-187336-4	Cell26-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187336-3 DU	Cell26-square26-S-2-3-190619	Total/NA	Solid	2540B	

Job ID: 600-187336-1

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell25-treatment-S-6-190619

Date Collected: 06/19/19 08:12 Date Received: 06/20/19 10:04 Lab Sample ID: 600-187336-1

Matrix: Solid

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11.578 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 21:32	GRK	TAL PEN
Total/NA	Prep	3546			15.13 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 03:52	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 14:48	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell25-square39-S-2-3-190619

Date Collected: 06/19/19 09:07

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187336-2 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.12 g	5 mL	267736	06/20/19 11:48	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267801	06/24/19 14:35	WS1	TAL HOU
Total/NA	Prep	5035			10.568 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 22:07	GRK	TAL PEN
Total/NA	Prep	3546			15.39 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		1			446178	06/29/19 04:05	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 15:42	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell26-square26-S-2-3-190619

Date Collected: 06/19/19 09:56

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187336-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.36 g	5 mL	267736	06/20/19 11:48	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	267801	06/24/19 15:01	WS1	TAL HOU
Total/NA	Prep	5035			8.633 g	10. g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 22:42	GRK	TAL PEN
Total/NA	Prep	3546			15.02 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		1			446178	06/29/19 04:31	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.00 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 16:35	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell26-treatment-S-6-190619

Lab Sample ID: 600-187336-4 Date Collected: 06/19/19 10:38 **Matrix: Solid** Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			12.804 g	5.0 g	445986	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445920	06/27/19 23:18	GRK	TAL PEN

Eurofins TestAmerica, Houston

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7/10/2019

Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell26-treatment-S-6-190619

Lab Sample ID: 600-187336-4 Date Collected: 06/19/19 10:38 Matrix: Solid

Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.28 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 04:43	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 16:53	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-187336-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Гехаѕ	NELAP		6	T104704223-18-23	10-31-19
The following analytes	are included in this report, bu	it the laboratory is not o	ertified by the governing	ng authority. This list may incl	lude analytes for which
the agency does not off	er certification.				
the agency does not off Analysis Method	er certification. Prep Method	Matrix	Analyt	e	
ů ,		Matrix Solid		e nt Moisture	

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	06-30-19
Alabama	State Program	4	40150	06-30-19 *
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State		2510	06-30-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
_ouisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State Program	5	9912	06-30-19 *
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

Eurofins TestAmerica, Houston

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Color Colo	TestAmerica Houston 6310 Rottway Street Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646	Chain o	Chain of Custody Record	y Rec	ord						Test	TestAmerica
Size	Client Information	Sampler Sample De Confall	MARINIEN		udchad	Kar			Carner Tracking	No(s):	COC No 600-59019-16	1 898 1
Strice	Client Contact. Steve Rice	303710 7537			ndchad	kar@te	stame	ncainc com			Page: Page 1 of 1	
1700 Authoring 1700	Company ARCADIS U.S. Inc						4	nalysis Re	quested		Sob #	
1	Address 11001 West 120th Avenue	Due Date Requested:					-				Preservation C	odes:
1 and Fam Sols 2018	Gity Broomfield	TAT Requested (days):		Ī	No.		-				A - HCL B - NaOH	M - Hexane N - None
1 and Fam Sole 2018	State, Zip. CO, 80021										D - Nitric Acid	P - NaZO4S O - NaZSO3
Solite 2016	Phone 303-710-7537(Tel)	Po# Purchase Order Requested		(6		()	(.				G - Amchlor	
Solie 2018 Sonie Proposition Sample Matrix Ma	Email steve.rice@arcadis.com	#OM									1 - loe J - Di Water	
Sample Matrix Sample Matrix Matrix Matrix Matrix Sample Sample Matrix Sample Matrix Sample S	Project Name: Chevron - Jal Land Farm Soils 2018	Project # 60009563									-	W - pH 4-5 Z - other (specify)
Sample Date Tipe Water, Tipe Tipe Water, Tipe Tipe Tipe Water, Tipe	Site: TREATMENT	\$SOW#.										
### Sample Good Grand Gr	Sample Identification	Sample		Field Filtered				SAUTZIOM				instructions/Note:
		X	100	ode.	Z	200	-	z				V
190619 09:07 69 5	(11125-treatment-5-10-190619				×	×	×	×			***SAMPLES	MUST BE
190619 10:36 C S X X X X X X X X X	(11125-Square 39-5-2-3-190619			-	×			×			RECEIVED E	BY THE HOUSTON
14 OLD 4 10:36 C S X X X X X X X X X	all 26- Square 26-5-2-3-40019				×	×	-				LABORATO	RY WITHIN
ain of Custody The Skin Irritant Decreased is samples are retained longer than 1 in Sample Disposal (A fee may be assessed if samples are retained longer than 1 in Disposal By Lab Archive For Special Instructions/OC Requirements. Time Special Instructions/OC Requirements. Time Date: Time Determine Company Received by Received by Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Company Received by Date/Time Da	(111 24-treatment-5-6-1901019		5 7		×		×	×			48HRS OF C	OLLECTION
able Skin Imiant Doison B Unknown Radiological Sample Disposal (A fee may be assessed if samples are retained longer than 1 in able Disposal By Lab Arctirve For Special Instructions/QC Requirements. No other (specify) Date: Time Disposal By Lab Arctirve For Special Instructions/QC Requirements. Date: D	600-187336 Chain of Custody											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 in able Disposal By Lab Disposal							Н					
Date: Time Parament Company Received by Conference Conferenc	ant .	Unknown	adiological		Special	s Dispo	ro Clie	A fee may be	assessed if sa Disposal By La ents:	mples are r	etained longer than Archive For	1 month) Months
Tody Seal No. Date/Time	Empty Kit Relinquished by:	Date:		Tim	16		П	ŀ	Method of	Shipment.	Polis	*
tody Seal No. Conpany Received by Date/Time Date/Time Cooler Temperature(s) "C and Other Remarks	Reinquished by Sax ah Johns on Reinquished by	malle		adis	Reo R	pived by	3	Shall	- 71	Date/Time:	1	
Custody Seal No: Seal No: Seal No: Seal Oner Remarks	Reinqushed by	Date/Time.	Compar	AL.	Rec	eived by	Ш	ł		Date/Time	2	Company
Solder cemporaries can due remarks					2	Town	Just Break	Tanana Cara				
	\neg			1	3		in an	the contract of	ecipeino			

Loc: 600 187336

Sample Receipt Checklist

Te	st/	+n	ne	ric	0
THELE	ADER IN	ENVIR	ONMEN	TAL TES	STING

			Date/Time Received	:		190	UN 20 10:
JOB NUMBER:	187334	0	CLIENT:	A	rac	dis	
UNPACKED BY:	888		CARRIER/DRIVER:		FIS	775	
UNPACKED BY:		-	CARRIER/DRIVER:		10		-
Custody Seal Preser	nt: YES	□NO	Number of Coolers R	Received:	- 1		-
0 1 15	Temp	T : Di- 1	Observed Temp	Therm	Them	Corrected	Temp
Cooler ID	Blank (Y) N	Trip Blank	(0)	66	CF - Q	(0)	
MAD	YIN	X / N	0.0	616	· OL	5.0	
-	YIN	YIN					
	YIN	Y/N					
		-				\rightarrow	111
	Y / N	Y / N				Sa	6/70/1
	Y / N-	YIN				01	12-11
	YIN	Y/N					
	Y / N	Y / N					
	YIN	YIN					
Base samples are>p			Acid preserved are <p< th=""><th></th><th>□YES □YES </th><th>□NO</th><th></th></p<>		□YES □YES	□NO	
pH paper Lot #		_					
VOA headspace acc	eptable (5-6mm):	YES	NO DNA			YES/	ŃΟ
Did samples meet th	ne laboratory's stand	ard conditions	of sample acceptability u	ipon receipt?		12	NO
COMMENTS:							
				>			
						0	20/19
						/	

HS-SA-WI-013

Rev. 3; 07/01/2014





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Chain of Custody Record

Eurofins TestAmerica, Houston

CALL	Environment Testing	TestAmerica		COC No.
				Carrier Tracking No(s)
	Chain of Custody Record	citati of custody record		Sampler
Eurofins TestAmerica, Houston	6310 Rothway Street	Houston, TX 77040	Phone: 713-690-4444 Fax: 713-690-5646	

Client Information (Sub Contract Lab)				Kudch	Kudchadkar, Sachin G	Sachir	91			Carrier Tracking No(s):	09	600-40249.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail: sachi	n.kudch	adkar(E-Mail: sachin.kudchadkar@testamericainc.com	ainc.com	State of Texas	State of Origin: Texas	Page	Page: Page 1 of 1	
Сомралу: TestAmerica Laboratories, Inc.					Accreditations Requ NELAP - Texas	ons Rec	Accreditations Required (See note) NELAP - Texas	te):			Job 60	Job #. 600-187336-1	
Address. 3355 McLemore Drive,	Due Date Requested: 7/2/2019						An	Analysis Requested	sednes	ted	Ę.	Preservation Codes:	des:
City. Pensacola State, Zip:	TAT Requested (days):	:(s									K B O O U	A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO#.				(1						L O I	F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate
Email:	#OM										_	I - Ice J - DI Water	U - Acetone V - MCAA
Project Name. Chevron - Jal Land Farm Soils 2018	Project #: 60009563											K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site	SSOW#:										_	Other:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteloil, BT=Tissue, A=Air)	Field Filtered S MS/M mohae	8015B_GRO/503					19dmuN lstoT	Special	Special Instructions/Note:
	X	\setminus	Preserva	Preservation Code:	X						X	/	
Cell25-treatment-S-6-190619 (600-187336-1)	6/19/19	08:12 Central		Solid		×	~				2		
Cell25-square39-S-2-3-190619 (600-187336-2)	6/19/19	09:07 Central		Solid		×	×				22		
Cell26-square26-S-2-3-190619 (600-187336-3)	6/19/19	09:56 Central		Solid		×	×				2		
Cell26-treatment-S-6-190619 (600-187336-4)	6/19/19	10:38 Central		Solid		×	×				2		

Possible Hazard Identification

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Date/Time: 6-33-19 Disposal By Lab Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Received by: Company Primary Deliverable Rank: 2 Date/Time: Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Empty Kit Relinquished by: Custody Seals Intact:

Δ Yes Δ No nquished by: rquished by: Unconfirmed linquished by:

Ver: 01/16/2019

Company

Client: ARCADIS U.S. Inc

Job Number: 600-187336-1

Login Number: 187336 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Daley, Phoenix 1

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.0
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.

Eurofins TestAmerica, Houston

Job Number: 600-187336-1

Login Number: 187336

Client: ARCADIS U.S. Inc

List Source: Eurofins TestAmerica, Pensacola

List Creation: 06/22/19 11:08 AM

List Number: 2

Creator: Hinrichsen, Megan E		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	947014
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	1.5°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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 TestAmerica, Houston



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-187365-1

Client Project/Site: Chevron - Jal Land Farm Soils 2018

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Skudchadkar

Authorized for release by: 7/10/2019 3:32:43 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-187365-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 10:04 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC VOA

Method(s) 8015B: The following samples were diluted because the base dilution for methanol preserved soil analysis is 1:50: Cell 21-treatment-S-6-190619 (600-187365-1), Cell 17-treatment-S-6-190619 (600-187365-2), Cell 18-treatment-S-6-190619 (600-187365-3), Cell 19-treatment-S-6-190619 (600-187365-4) and Cell 20-treatment-S-6-190619 (600-187365-5)

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

GC Semi VOA

Method(s) 8015B, 8015C: The matrix spike (MS) recoveries for preparation batch 400-445773 and analytical batch 400-446178 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B, 8015C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-445773 and analytical batch 400-446178 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8015B, 8015C: The following samples were diluted due to the nature of the sample matrix: Cell 21-treatment-S-6-190619 (600-187365-1), Cell 17-treatment-S-6-190619 (600-187365-2), Cell 18-treatment-S-6-190619 (600-187365-3), Cell 19-treatment-S-6-190619 (600-187365-4) and Cell 20-treatment-S-6-190619 (600-187365-5). Elevated reporting limits (RLs) are provided.

Method(s) 8015B: The method blank for preparation batch 400-445773 and analytical batch 400-446178 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

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Job ID: 600-187365-1

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Method **Method Description** Protocol Laboratory 8015B Gasoline Range Organics - (GC) SW846 TAL PEN 8015B Diesel Range Organics (DRO) (GC) SW846 TAL PEN 300.0 Anions, Ion Chromatography **MCAWW** TAL HOU 2540B Percent Moisture SM20 TAL HOU 3546 Microwave Extraction SW846 TAL PEN 5035 SW846 TAL PEN Closed System Purge and Trap DI Leach Deionized Water Leaching Procedure (Routine) ASTM TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Job ID: 600-187365-1

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Sample Summary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
00-187365-1	Cell 21-treatment-S-6-190619	Solid	06/19/19 11:16	06/20/19 10:04	
00-187365-2	Cell 17-treatment-S-6-190619	Solid	06/19/19 12:04	06/20/19 10:04	
00-187365-3	Cell 18-treatment-S-6-190619	Solid	06/19/19 12:43	06/20/19 10:04	
00-187365-4	Cell 19-treatment-S-6-190619	Solid	06/19/19 13:21	06/20/19 10:04	
00-187365-5	Cell 20-treatment-S-6-190619	Solid	06/19/19 14:00	06/20/19 10:04	
00-187365-2 00-187365-3 00-187365-4	Cell 17-treatment-S-6-190619 Cell 18-treatment-S-6-190619 Cell 19-treatment-S-6-190619	Solid Solid Solid	06/19/19 12:04 06/19/19 12:43 06/19/19 13:21	06/20/19 10:04 06/20/19 10:04 06/20/19 10:04	

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Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell 21-treatment-S-6-190619

Date Collected: 06/19/19 11:16 Date Received: 06/20/19 10:04

Client: ARCADIS U.S. Inc

Lab Sample ID: 600-187365-1

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1260	U	2520	1260	ug/Kg		06/27/19 12:30	06/27/19 22:47	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	94		65 - 125				06/27/19 12:30	06/27/19 22:47	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	31.4	J B	49.1	19.6	mg/Kg		06/26/19 12:37	06/29/19 04:56	10
Oil Range Organics (C28-C35)	86.3		49.1	19.6	mg/Kg		06/26/19 12:37	06/29/19 04:56	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		27 - 151				06/26/19 12:37	06/29/19 04:56	10
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.530	U	3.97	0.530	mg/Kg			07/01/19 17:11	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.2		1.0	1.0	%			06/21/19 15:25	1
i diddin moloturo									

Client Sample ID: Cell 17-treatment-S-6-190619

Date Collected: 06/19/19 12:04

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187365-2

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	1110	U	2230	1110	ug/Kg		06/27/19 12:30	06/27/19 23:12	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	96		65 - 125				06/27/19 12:30	06/27/19 23:12	5
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	52.5	В	24.9	9.96	mg/Kg		06/26/19 12:37	06/29/19 05:09	
Oil Range Organics (C28-C35)	71.2		24.9	9.96	mg/Kg		06/26/19 12:37	06/29/19 05:09	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	73		27 - 151				06/26/19 12:37	06/29/19 05:09	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	38.1		4.00	0.534	mg/Kg			07/01/19 17:29	
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
			1.0	1.0	%			06/21/19 15:25	
Percent Moisture	6.2		1.0	1.0	70			00/21/19 15.25	

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Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell 18-treatment-S-6-190619

Date Collected: 06/19/19 12:43 Date Received: 06/20/19 10:04

Client: ARCADIS U.S. Inc

Lab Sample ID: 600-187365-3

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1240	U	2490	1240	ug/Kg		06/27/19 12:30	06/27/19 23:39	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	93		65 - 125				06/27/19 12:30	06/27/19 23:39	50
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37.6	В	24.8	9.91	mg/Kg		06/26/19 12:37	06/29/19 05:22	5
Oil Range Organics (C28-C35)	69.4		24.8	9.91	mg/Kg		06/26/19 12:37	06/29/19 05:22	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	102		27 - 151				06/26/19 12:37	06/29/19 05:22	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.528	U	3.95	0.528	mg/Kg			07/01/19 17:47	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.6		1.0	1.0	%			06/21/19 15:25	1
reicent Moisture	•.•								

Client Sample ID: Cell 19-treatment-S-6-190619

Date Collected: 06/19/19 13:21

Date Received: 06/20/19 10:04

Lab Sample ID: 6	600-187365-4
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Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	1140	U	2280	1140	ug/Kg		06/27/19 12:30	06/28/19 00:04	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	95		65 - 125				06/27/19 12:30	06/28/19 00:04	5
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	16.2	J B	24.9	9.97	mg/Kg		06/26/19 12:37	06/29/19 05:35	
Oil Range Organics (C28-C35)	49.8		24.9	9.97	mg/Kg		06/26/19 12:37	06/29/19 05:35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	67		27 - 151				06/26/19 12:37	06/29/19 05:35	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	0.529	U	3.96	0.529	mg/Kg			07/01/19 18:05	
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Percent Moisture	6.3		1.0	1.0	%			06/21/19 15:25	

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Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell 20-treatment-S-6-190619

Date Collected: 06/19/19 14:00 Date Received: 06/20/19 10:04

Lab Sample ID: 600-187365-5

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1250	U	2510	1250	ug/Kg		06/27/19 12:30	06/28/19 00:30	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	92		65 - 125				06/27/19 12:30	06/28/19 00:30	50
Method: 8015B - Diesel Range (Organics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	9.72	U	24.3	9.72	mg/Kg		06/26/19 12:37	06/29/19 05:47	
Oil Range Organics (C28-C35)	17.3	J	24.3	9.72	mg/Kg		06/26/19 12:37	06/29/19 05:47	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	70		27 - 151				06/26/19 12:37	06/29/19 05:47	
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	0.532	U	3.98	0.532	mg/Kg			07/01/19 18:23	
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
					0/			00/04/40 45 05	
Percent Moisture	7.6		1.0	1.0	%			06/21/19 15:25	

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Qualifiers

CC	vic	١л.
u	v L	m

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

B Compound was found in the blank and sample.

F1 MS and/or MSD Recovery is outside acceptance limits.

F2 MS/MSD RPD exceeds control limits

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly	y used abbreviations ma	y or may r	not be i	present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Eurofins TestAmerica, Houston

7/10/2019

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4.0

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Method: 8015B - Gasoline Range Organics - (GC)

Prep Type: Total/NA Matrix: Solid

			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
400-172093-A-5-C MS	Matrix Spike	93	
400-172093-A-5-D MSD	Matrix Spike Duplicate	94	
600-187365-1	Cell 21-treatment-S-6-190619	94	
600-187365-2	Cell 17-treatment-S-6-190619	96	
600-187365-3	Cell 18-treatment-S-6-190619	93	
600-187365-4	Cell 19-treatment-S-6-190619	95	
600-187365-5	Cell 20-treatment-S-6-190619	92	
LCS 400-445940/1-A	Lab Control Sample	95	
MB 400-445940/2-A	Method Blank	97	
Surrogate Legend			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
400-172183-A-1-A MS	Matrix Spike	145	
400-172183-A-1-B MSD	Matrix Spike Duplicate	150	
600-187365-1	Cell 21-treatment-S-6-190619	77	
600-187365-2	Cell 17-treatment-S-6-190619	73	
600-187365-3	Cell 18-treatment-S-6-190619	102	
600-187365-4	Cell 19-treatment-S-6-190619	67	
600-187365-5	Cell 20-treatment-S-6-190619	70	
LCS 400-445773/2-A	Lab Control Sample	98	
	Method Blank	91	

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-445940/2-A

Matrix: Solid

Analyte

C6-C10

Surrogate

C6-C10

Surrogate

Analysis Batch: 445922

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445940

MR MR

50.0 U

97

Result Qualifier

MQL (Adj) 100 SDL Unit 50.0 ug/Kg

Prepared 06/27/19 12:30

Analyzed 06/27/19 13:13

Dil Fac

MB MB

%Recovery Qualifier

Limits 65 - 125

Spike

Added

1000

Prepared 06/27/19 12:30

Analyzed 06/27/19 13:13 Dil Fac

Lab Sample ID: LCS 400-445940/1-A

Matrix: Solid

Analysis Batch: 445922

a,a,a-Trifluorotoluene (fid)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445940 %Rec

LCS LCS

Result Qualifier Unit

%Rec

Limits

1021

MS MS

603.1

Result Qualifier

ug/Kg

D

62 - 141

102

%Rec

a,a,a-Trifluorotoluene (fid)

65 - 125

Lab Sample ID: 400-172093-A-5-C MS

Matrix: Solid

Analysis Batch: 445922

Limits

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445940

%Rec.

Analyte C6-C10

Surrogate

49.0

93

MS MS

Sample Sample

Result Qualifier

Ū

LCS LCS %Recovery Qualifier

95

%Recovery Qualifier

Limits

65 - 125

Spike

Added

967

Lab Sample ID: 400-172093-A-5-D MSD

Matrix: Solid

Analysis Batch: 445922

a,a,a-Trifluorotoluene (fid)

Client Sample ID: Matrix Spike Duplicate

Limits

10 - 150

Prep Type: Total/NA

Prep Batch: 445940

%Rec.

RPD

Analyte

C6-C10

Surrogate

Sample Sample Result Qualifier

Spike Added

978

MSD MSD Result Qualifier

2.00

mg/Kg

680.5

Unit ug/Kg

Unit

ug/Kg

%Rec

70

Limits RPD

Limit

49.0 U

94

MSD MSD

10 - 150 12 32

a,a,a-Trifluorotoluene (fid)

%Recovery Qualifier

Limits 65 - 125

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

Lab Sample ID: MB 400-445773/1-A

Matrix: Solid

Surrogate

o-Terphenyl

Analysis Batch: 446178

Diesel Range Organics [C10-C28]

Oil Range Organics (C28-C35)

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445773

мв мв

3.939

%Recovery

Result Qualifier

2.00 U

91

MQL (Adj) 5.00 5.00 SDL Unit mg/Kg

Prepared 06/26/19 12:37

Analyzed Dil Fac

06/29/19 01:55 06/29/19 01:55

MB MB

Qualifier Limits

Prepared 06/26/19 12:37

06/26/19 12:37

Analyzed

Dil Fac 06/29/19 01:55

Eurofins TestAmerica, Houston

27 - 151

Job ID: 600-187365-1

Prep Batch: 445773

Project/Site: Chevron - Jal Land Farm Soils 2018

Lab Sample ID: LCS 400-445773/2-A			Client Sample ID: Lab Control Sample
Matrix: Solid			Prep Type: Total/NA
Analysis Batch: 446178			Prep Batch: 445773
	Cmiles	100 100	0/ Doc

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics		276	224.5		mg/Kg		81	63 - 153	
[C10-C28]									

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 98 27 - 151

Lab Sample ID: 400-172183-A-1-A MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 446178

Client: ARCADIS U.S. Inc

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec 62 - 204 273 3830 F1 Diesel Range Organics 906 B F1 F2 mg/Kg 1071 [C10-C28]

MS MS Surrogate %Recovery Qualifier Limits o-Terphenyl 145 27 - 151

Lab Sample ID: 400-172183-A-1-B MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

o-Terphenyl

Analysis Batch: 446178

Prep Batch: 445773 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Limits Limit Analyte Result Qualifier Unit D %Rec RPD 268 1232 F2 Diesel Range Organics 906 B F1 F2 mg/Kg 121 62 - 204 103 30

[C10-C28] MSD MSD Surrogate %Recovery Qualifier Limits 27 - 151

150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 268408

мв мв Analyte Result Qualifier MQL (Adj) SDL Unit Analyzed Dil Fac Prepared Chloride 0.534 U 4.00 0.534 mg/Kg 07/01/19 11:49

Lab Sample ID: LCS 600-268411/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 268408

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit Limits %Rec 200 Chloride 197.9 mg/Kg 99 90 - 110

Eurofins TestAmerica, Houston

7/10/2019

QC Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-187336-K-2-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 268408

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 0.530 U 99.2 80 - 120 87.94 mg/Kg 89

Lab Sample ID: 600-187336-K-2-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 268408

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec Chloride 0.530 U 99.2 87.87 mg/Kg 89 80 - 120 0 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-187365-5 DU Client Sample ID: Cell 20-treatment-S-6-190619 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 267770

Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit RPD Limit Percent Moisture % 9 20 7.6 6.9 Percent Solids 92.4 93.1 0.7 20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units	
C6-C10	100	50.0	ug/Kg	

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

Prep: 3546

Analyte	MQL	MDL	Units
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

GC VOA

Analysis Batch: 445922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	8015B	445940
600-187365-2	Cell 17-treatment-S-6-190619	Total/NA	Solid	8015B	445940
600-187365-3	Cell 18-treatment-S-6-190619	Total/NA	Solid	8015B	445940
600-187365-4	Cell 19-treatment-S-6-190619	Total/NA	Solid	8015B	445940
600-187365-5	Cell 20-treatment-S-6-190619	Total/NA	Solid	8015B	445940
MB 400-445940/2-A	Method Blank	Total/NA	Solid	8015B	445940
LCS 400-445940/1-A	Lab Control Sample	Total/NA	Solid	8015B	445940
400-172093-A-5-C MS	Matrix Spike	Total/NA	Solid	8015B	445940
400-172093-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	445940

Prep Batch: 445940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	5035	
600-187365-2	Cell 17-treatment-S-6-190619	Total/NA	Solid	5035	
600-187365-3	Cell 18-treatment-S-6-190619	Total/NA	Solid	5035	
600-187365-4	Cell 19-treatment-S-6-190619	Total/NA	Solid	5035	
600-187365-5	Cell 20-treatment-S-6-190619	Total/NA	Solid	5035	
MB 400-445940/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-445940/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-172093-A-5-C MS	Matrix Spike	Total/NA	Solid	5035	
400-172093-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 445773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	3546	<u> </u>
600-187365-2	Cell 17-treatment-S-6-190619	Total/NA	Solid	3546	
600-187365-3	Cell 18-treatment-S-6-190619	Total/NA	Solid	3546	
600-187365-4	Cell 19-treatment-S-6-190619	Total/NA	Solid	3546	
600-187365-5	Cell 20-treatment-S-6-190619	Total/NA	Solid	3546	
MB 400-445773/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-445773/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-172183-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-172183-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 446178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	8015B	445773
600-187365-2	Cell 17-treatment-S-6-190619	Total/NA	Solid	8015B	445773
600-187365-3	Cell 18-treatment-S-6-190619	Total/NA	Solid	8015B	445773
600-187365-4	Cell 19-treatment-S-6-190619	Total/NA	Solid	8015B	445773
600-187365-5	Cell 20-treatment-S-6-190619	Total/NA	Solid	8015B	445773
MB 400-445773/1-A	Method Blank	Total/NA	Solid	8015B	445773
LCS 400-445773/2-A	Lab Control Sample	Total/NA	Solid	8015B	445773
400-172183-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	445773
400-172183-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	445773

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

HPLC/IC

Analysis Batch: 268408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187365-1	Cell 21-treatment-S-6-190619	Soluble	Solid	300.0	268411
600-187365-2	Cell 17-treatment-S-6-190619	Soluble	Solid	300.0	268411
600-187365-3	Cell 18-treatment-S-6-190619	Soluble	Solid	300.0	268411
600-187365-4	Cell 19-treatment-S-6-190619	Soluble	Solid	300.0	268411
600-187365-5	Cell 20-treatment-S-6-190619	Soluble	Solid	300.0	268411
MB 600-268411/1-A	Method Blank	Soluble	Solid	300.0	268411
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	300.0	268411
600-187336-K-2-B MS	Matrix Spike	Soluble	Solid	300.0	268411
600-187336-K-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	268411

Leach Batch: 268411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187365-1	Cell 21-treatment-S-6-190619	Soluble	Solid	DI Leach	
600-187365-2	Cell 17-treatment-S-6-190619	Soluble	Solid	DI Leach	
600-187365-3	Cell 18-treatment-S-6-190619	Soluble	Solid	DI Leach	
600-187365-4	Cell 19-treatment-S-6-190619	Soluble	Solid	DI Leach	
600-187365-5	Cell 20-treatment-S-6-190619	Soluble	Solid	DI Leach	
MB 600-268411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-268411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-187336-K-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
600-187336-K-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

General Chemistry

Analysis Batch: 267770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	2540B	<u> </u>
600-187365-2	Cell 17-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187365-3	Cell 18-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187365-4	Cell 19-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187365-5	Cell 20-treatment-S-6-190619	Total/NA	Solid	2540B	
600-187365-5 DU	Cell 20-treatment-S-6-190619	Total/NA	Solid	2540B	

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Eurofins TestAmerica, Houston

Client Sample ID: Cell 21-treatment-S-6-190619

Date Collected: 06/19/19 11:16 Date Received: 06/20/19 10:04

Lab Sample ID: 600-187365-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.915 g	5.0 g	445940	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445922	06/27/19 22:47	GRK	TAL PEN
Total/NA	Prep	3546			15.28 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		10			446178	06/29/19 04:56	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 17:11	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell 17-treatment-S-6-190619

Date Collected: 06/19/19 12:04

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187365-2

Matrix: Solid

Dil Initial Batch Batch Final Batch Prepared Method Amount Amount Number Prep Type Туре Run Factor or Analyzed Analyst Lab Total/NA Prep 5035 445940 06/27/19 12:30 GRK TAL PEN 11.216 g 5.0 g Analysis 8015B 50 5 mL 5 mL 445922 06/27/19 23:12 **GRK** TAL PEN

Total/NA Total/NA 3546 445773 TAL PEN Prep 15.06 g 1.0 mL 06/26/19 12:37 KI R Total/NA Analysis 8015B 5 446178 06/29/19 05:09 TAJ TAL PEN TAL HOU Leach DI Leach 268411 SKR Soluble 5.00 g 50 mL 07/01/19 10:56 Soluble Analysis 300.0 268408 07/01/19 17:29 SKR TAL HOU Total/NA 2540B 267770 06/21/19 15:25 AP TAL HOU Analysis 1

Client Sample ID: Cell 18-treatment-S-6-190619

Date Collected: 06/19/19 12:43

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187365-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.058 g	5.0 g	445940	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445922	06/27/19 23:39	GRK	TAL PEN
Total/NA	Prep	3546			15.13 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 05:22	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 17:47	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell 19-treatment-S-6-190619

Date Collected: 06/19/19 13:21

Date Received: 06/20/19 10:04

06/21/19 15:25	AP	TAL HOU
Lab Sample	D:	600-187365-4
		Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.971 g	5.0 g	445940	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445922	06/28/19 00:04	GRK	TAL PEN
Total/NA	Prep	3546			15.04 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 05:35	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.05 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 18:05	SKR	TAL HOU

Eurofins TestAmerica, Houston

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Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Client Sample ID: Cell 19-treatment-S-6-190619

Date Collected: 06/19/19 13:21

Lab Sample ID: 600-187365-4 Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Factor Amount Amount Number or Analyzed Run Analyst Lab Total/NA Analysis 2540B 267770 06/21/19 15:25 AP TAL HOU

Client Sample ID: Cell 20-treatment-S-6-190619

Lab Sample ID: 600-187365-5

Matrix: Solid

Date Collected: 06/19/19 14:00 Date Received: 06/20/19 10:04

Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.962 g	5.0 g	445940	06/27/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	445922	06/28/19 00:30	GRK	TAL PEN
Total/NA	Prep	3546			15.43 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 05:47	TAJ	TAL PEN
Soluble	Leach	DI Leach			5.02 g	50 mL	268411	07/01/19 10:56	SKR	TAL HOU
Soluble	Analysis	300.0		1			268408	07/01/19 18:23	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-187365-1

Project/Site: Chevron - Jal Land Farm Soils 2018

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
exas	NELAP		6	T104704223-18-23	10-31-19
The following analytes	are included in this report, bu	nis report, but the laboratory is not certified		d by the governing authority. This list may inclu	
the agency does not off	er certification.				
the agency does not off Analysis Method	er certification. Prep Method	Matrix	Analyt	e	
3 ,		Matrix Solid		e nt Moisture	

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	06-30-19
Alabama	State Program	4	40150	06-30-19 *
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State		2510	06-30-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State Program	5	9912	06-30-19 *
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

M - Hexane
N - None
O - AsN3O 2
P - Na2O4S
Q - Na2SO3
R - Na2SO3
S - H2SO4
I - TSP Dodscahydrate RECEIVED BY THE HOUSTON Special Instructions/Note: Ver. 08/04/2016 other (specify) **48HRS OF COLLECTION** V - MCAA W - pH 4-5 U - Acetone LABORATORY WITHIN **SAMPLES MUST BE Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 600-59019-16898.1 Preservation Codes: A - HCL B - NaOH C - Zn Acetate C - Zn Acetate E - NaHSO4 F - MeOH G - Amehlor H - Ascorbic Acid Page 1 of 1 I - Ice J - DI Water K - EDTA L - EDA Archive For Total Number of containers fethod of Shipmen Disposal By Lab Analysis Requested ooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements sachin kudchadkar@testamericainc.com × × BAUTSIOM Return To Client 85608 - BTEX Only (SHORT HOLD***) × 300 ORGEM 28D - CHLORIDE eceived b × Sorah John Son (Callun Forguson) Sachin Kudchadkar × Chain of Custody Record 8015B_DRO - C10-C28/ C28-C35 Perform MS/MSD (Yes or No) ime Field Filtered Sample (Yes or No) Preservation Code: (Wewater, Sesolid, Orwanteroll, Matrix Зотрапу 5 Radiological Sample (C=comb, G=grab) 7 1 U U 303 710 7537 Purchase Order Requested 14:00 Sample 1:16 15:01 h:2 13:21 Date Unknown (AT Requested (days): Due Date Requested Date/Time MOUN 19 Sample Date M0619 900 19 9000 190619 190m19 Project # 60009563 SSOW# ataTime NO # Poison B 21-treatment-s-10-190119 211 17 - treatment - S-10-190619 all 19-treatment-su-190619 cell 19-treatment-5-6-190619 20 treatments to 1901019 Skin Imitani beliverable Requested: I, II, III, IV, Other (specify) Custody Seal No Phone (713) 690-4444 Fax (713) 690-5646 Chevron - Jal Land Farm Soils 2018 Flammable Possible Hazard Identification arah Llynson 11001 West 120th Avenue Empty Kit Relinquished by Custody Seals Intact steve.rice@arcadis.com Sample Identification Client Information A Yes A No Houston, 1X 77040 303-710-7537(Tel) ARCADIS U.S. Inc dushed by TREATMENT State, Zip. CO, 80021 Steve Rice Broomfield 110

TestAmerica

TestAmerica Houston

6310 Rothway Street

Loc: 600

Sample Receipt Che 187365



119 JUN 20 10:04

			ceived	:		119 JUN 20
OB NUMBER:	A36	5	CLIENT:	A	rcad	13
NPACKED BY:	1	_	CARRIER/DRIVER:		B	
custody Seal Present:	YES	□ио	Number of Coolers R	Received:	1	
Cooler ID (Temp	Trip Blank	Observed Temp (℃)	Therm , ID	Them CF	Corrected Temp (℃)
MBI	YVN	Y / (N)	3.4	616	2	3-2
	YIN	YIN				
	YLN	YIN		-		
	VIN	YIN				\
	KIN	YIN				
	/Y / N	Y / N				
	YIN	Y / N				
	YIN	Y/N				
ase samples are>pH	12: YES [Пио	Acid preserved are <p< th=""><th>oH 2:</th><th>YES</th><th>□ио</th></p<>	oH 2:	YES	□ио
H paper Lot #		_				
DA headspace accept	table (5-6mm):	☐ YES ☐ I	NO B'NY			
						YES NO
Did samples meet the	aboratory's stand	ard conditions	of sample acceptability u	upon receipt?		
COMMENTS:						
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HS-SA-WI-013

Rev. 3; 07/01/2014





Fec ex TRK: 4840 2906 4666

7040 2500 4000

THU - 20 UN 10:30A PRIORITY OVERNIGHT

AB LKSA

77040 rx-us IAH



Ver: 01/16/2019

Environment Testing

💸 eurofins

Chain of Custody Record

Eurofins TestAmerica, Houston

Phone: 713-690-4444 Fax: 713-690-5646

Houston, TX 77040 6310 Rothway Street

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone Special Instructions/Note: other (specify) W-pH 4-5 Preservation Codes: A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid 600-187365-1 600-40249.1 Page 1 of 1 I - Ice J - DI Water K - EDTA EDTA 2 2 2 2 Total Number of containers 2 Carrier Tracking No(s) State of Origin. **Analysis Requested** Texas sachin.kudchadkar@testamericainc.com Accreditations Required (See note): Lab PM: Kudchadkar, Sachin G × × × NELAP - Texas 8012B_DRO/3546 (MOD) DRO C10-C28 × × × × × × × 015B_GRO/5035A_FP GRO(C6-C10) Perform MS/MSD (Yes or No) BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, Preservation Code Solid Matrix Solid Solid Solid Solid G=qrab) Sample (C=comp, Type Central 12:43 Central 13:21 Central 14:00 Central 12:04 Central 11:16 Time AT Requested (days) Due Date Requested: 7/2/2019 Sample Date 6/19/19 6/19/19 6/19/19 6/19/19 6/19/19 Project #: 60009563 SSOW#: Client Information (Sub Contract Lab) Cell 17-treatment-S-6-190619 (600-187365-2) Cell 18-treatment-S-6-190619 (600-187365-3) Cell 19-treatment-S-6-190619 (600-187365-4) Cell 20-treatment-S-6-190619 (600-187365-5) Cell 21-treatment-S-6-190619 (600-187365-1) Sample Identification - Client ID (Lab ID) 850-474-1001(Tel) 850-478-2671(Fax) Chevron - Jal Land Farm Soils 2018 TestAmerica Laboratories, Inc. 3355 McLemore Drive, Shipping/Receiving State, Zip: FL, 32514 Pensacola

Vote: Since aboratory accreditations are subject to change, TestAmerica Laboratories, Inc. 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 content instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc. Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification

Unconfirmed			Return To Client Disposal By Lab	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:	(ime: Method	Method of Shipment:	
Reimparched by	Med by Minder	1	Received by Child USen	Date/Time: 1-19 9001	Company
Relinduished By	Date/Time:	Company	Received/by:	Date/Time;	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks.	17°C IR8	

Client: ARCADIS U.S. Inc

Job Number: 600-187365-1

Login Number: 187365 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	3.2
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.

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc Job Number: 600-187365-1

Login Number: 187365 List Source: Eurofins TestAmerica, Pensacola List Number: 2

List Creation: 06/21/19 03:23 PM

Creator: Hinrichsen, Megan E

Answer	Comment
N/A	
True	
N/A	
True	
True	
True	
True	1.7°C IR-8
False	Refer to Job Narrative for details.
True	
N/A	
	N/A True N/A True True True True True True True True



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-189168-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

Revision: 1

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Phidchaelkar

Authorized for release by: 8/16/2019 4:05:57 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

.....LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

.,....

Job ID: 600-189168-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-189168-1

Comments

The report was revised on 08/16/19 to report the results for Sb, Be, Tl.

Receipt

The samples were received on 7/25/2019 10:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

GC/MS VOA

No analytical or quality issues were noted, other than those described 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(s) 8015B: The matrix spike (MS) recoveries for preparation batch 400-449874 and analytical batch 400-450125 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-449874 and analytical batch 400-450125 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8015B, 8015C: The continuing calibration verification (CCV) associated with batch 400-451040 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 400-451040/55) and (CCV 400-451040/67).

Method(s) 8015B, 8015C: The method blank for preparation batch 400-450900 and analytical batch 400-451040 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8015B, 8015C: The matrix spike duplicate (MSD) recoveries for preparation batch 400-450900 and analytical batch 400-451040 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B, 8015C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-450900 and analytical batch 400-451040 was outside control limits. Sample matrix interference is suspected.

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

Metals

Method(s) 6010B: The method blank for prep batch 270635 contained Copper above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 600-270736 was outside control limits for Chromium (16%): (600-189168-A-1-A SD ^5)

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: Cell 19-Square184-S-2-3-190723 (600-189168-1), Cell 26-Square169-S-2-3-190723 (600-189168-2), (600-189168-A-1-B DU ^5) and (600-189168-A-1-C MS ^5). Elevated

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Job ID: 600-189168-1

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Job ID: 600-189168-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

reporting limits (RLs) are provided.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

VOA Prep

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

Job ID: 600-189168-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-189168-1	Cell 19-Square184-S-2-3-190723	Solid	07/23/19 12:57	07/25/19 10:11	
600-189168-2	Cell 26-Square169-S-2-3-190723	Solid	07/23/19 13:32	07/25/19 10:11	
600-189168-3	Cell 26-Square69-S-2-3-190723	Solid	07/23/19 13:55	07/25/19 10:11	
600-189168-4	Cell 19-Square156-S-2-3-190723	Solid	07/23/19 12:35	07/25/19 10:11	
600-189168-5	Cell19-Square132-S-2-3-190723	Solid	07/23/19 12:13	07/25/19 10:11	

Job ID: 600-189168-1

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Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19-Square184-S-2-3-190723 Lab Sample ID: 600-189168-1

Date Collected: 07/23/19 12:57

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.516	U	4.10	0.516	ug/Kg		07/25/19 12:05	07/25/19 16:53	1
Ethylbenzene	0.836	U	4.10	0.836	ug/Kg		07/25/19 12:05	07/25/19 16:53	1
Toluene	1.13	U	4.10	1.13	ug/Kg		07/25/19 12:05	07/25/19 16:53	1
Xylenes, Total	0.926	U	4.10	0.926	ug/Kg		07/25/19 12:05	07/25/19 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		61 - 130				07/25/19 12:05	07/25/19 16:53	1
Dibromofluoromethane	88		68 ₋ 140				07/25/19 12:05	07/25/19 16:53	1
Toluene-d8 (Surr)	93		50 ₋ 130				07/25/19 12:05	07/25/19 16:53	1
4-Bromofluorobenzene	107		57 - 140				07/25/19 12:05	07/25/19 16:53	1
- Method: 8015B - Gasoline	Range Organio	:s - (GC)							
Analyte	•	Qualifier	MQL (Adj)	SDI	Unit	D	Prepared	Analyzed	Dil Fac

Method: 8015B - Gasoline Ro Analyte	_	S - (GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	27.4	Ū	54.7	27.4	ug/Kg		07/29/19 09:30	07/29/19 19:12	1
Surrogate a,a,a-Trifluorotoluene (fid)	%Recovery	Qualifier	65 - 125				Prepared 07/29/19 09:30	Analyzed 07/29/19 19:12	Dil Fac

Method: 8015B - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U F1 F2	4.99	2.00	mg/Kg		07/29/19 10:17	07/30/19 22:29	1
Oil Range Organics (C28-C35)	2.00	U	4.99	2.00	mg/Kg		07/29/19 10:17	07/30/19 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	34		27 - 151				07/29/19 10:17	07/30/19 22:29	1

Method: 300.0 - Anions, Id	on Chromatography - Solo	uble					
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.41	3.98	0.531 mg/Kg			08/02/19 17:41	1
Fluoride	2.76	1.99	0.598 mg/Kg			08/02/19 17:41	1
Sulfate	0.951 U	4.97	0.951 mg/Kg			08/02/19 17:41	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Arsenic	3.08		0.990	0.216	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Barium	274		0.990	0.0297	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Cadmium	0.153	J	0.248	0.0253	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Chromium	2.60		0.495	0.0501	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Copper	2.20	В	0.495	0.172	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Iron	2480		19.8	2.50	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Manganese	24.9		1.49	0.0377	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Lead	1.88	J	2.48	0.520	mg/Kg		07/29/19 14:58	07/30/19 13:56	5
Selenium	0.256	U	1.98	0.256	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Zinc	8.71		7.43	0.535	mg/Kg		07/29/19 14:58	07/30/19 13:56	5
Antimony	0.515	J	2.48	0.230	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Beryllium	0.272		0.248	0.0144	mg/Kg		07/29/19 14:58	07/30/19 13:50	1
Thallium	0.274	U	1.49	0.274	mg/Kg		07/29/19 14:58	07/30/19 13:50	1

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19-Square184-S-2-3-190723 Lab Sample ID: 600-189168-1

Date Collected: 07/23/19 12:57 **Matrix: Solid**

Date Received: 07/25/19 10:11

Method: 7471A - Mercury in S	olid or Semisolid Was	ste (Manual C	old Vapor Techn	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.58 []	17.0	3.58 ua/Ka		07/29/19 15:09	07/30/19 13:39	

Client Sample ID: Cell 26-Square169-S-2-3-190723

Lab Sample ID: 600-189168-2 Date Collected: 07/23/19 13:32 **Matrix: Solid**

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.590	U	4.68	0.590	ug/Kg		07/25/19 12:05	07/25/19 17:17	
Ethylbenzene	0.955	U	4.68	0.955	ug/Kg		07/25/19 12:05	07/25/19 17:17	
Toluene	1.29	U	4.68	1.29	ug/Kg		07/25/19 12:05	07/25/19 17:17	
Xylenes, Total	1.06	U	4.68	1.06	ug/Kg		07/25/19 12:05	07/25/19 17:17	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1,2-Dichloroethane-d4 (Surr)	97		61 - 130				07/25/19 12:05	07/25/19 17:17	
Dibromofluoromethane	89		68 - 140				07/25/19 12:05	07/25/19 17:17	
Toluene-d8 (Surr)	93		50 - 130				07/25/19 12:05	07/25/19 17:17	
4-Bromofluorobenzene	108		57 - 140				07/25/19 12:05	07/25/19 17:17	
Method: 8015B - Gasoline R	ange Organio	s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics (GRO)	23.9	U	47.8	23.9	ug/Kg		07/29/19 09:30	07/29/19 19:38	
-C6-C10									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
a,a,a-Trifluorotoluene (fid)	103		65 - 125				07/29/19 09:30	07/29/19 19:38	
Method: 8015B - Diesel Ran	ge Organics (DRO) (GC	3)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
Diesel Range Organics [C10-C28]	1.99	U	4.96	1.99	mg/Kg		07/29/19 10:17	07/30/19 22:42	
Oil Range Organics (C28-C35)	1.99	U	4.96	1.99	mg/Kg		07/29/19 10:17	07/30/19 22:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
o-Terphenyl	84		27 - 151				07/29/19 10:17	07/30/19 22:42	
Method: 300.0 - Anions, Ion	Chromatogra	phy - Soli	uble						
Analyte		Qualifier	MQL (Adj)	SDL		D	Prepared	Analyzed	Dil F
Chloride	2.05	J	3.99	0.533	mg/Kg			08/02/19 17:59	
Fluoride	5.15		2.00	0.600	mg/Kg			08/02/19 17:59	
Sulfate	0.955	U	4.99	0.955	mg/Kg			08/02/19 17:59	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Arsenic	3.81		1.00	0.218	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Barium	291		1.00	0.0300	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Cadmium	0.0700	J	0.250	0.0256	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Chromium	1.81		0.500	0.0506	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Copper	1.29	В	0.500	0.174	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Iron	1720		20.0	2.53	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Manganese	18.4		1.50	0.0381	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Lead	1.58	J	2.50	0.525	mg/Kg		07/29/19 14:58	07/30/19 14:04	5

Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 26-Square169-S-2-3-190723

Lab Sample ID: 600-189168-2 Date Collected: 07/23/19 13:32 **Matrix: Solid**

Date Received: 07/25/19 10:11

Client: ARCADIS U.S. Inc

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.259	U	2.00	0.259	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Zinc	6.55	J	7.50	0.540	mg/Kg		07/29/19 14:58	07/30/19 14:04	5
Antimony	0.375	J	2.50	0.232	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Beryllium	0.130	J	0.250	0.0145	mg/Kg		07/29/19 14:58	07/30/19 14:02	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 14:58	07/30/19 14:02	1

Method: 7471A - Mercury	y in Solid (or Semisolid W	/aste (Manual (Cold Vapor Techi	าique)
Amalasta	_	Descrit Occalities	MOL (A 4:)	ODI II!4	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.41	U	16.2	3.41	ug/Kg		07/29/19 15:09	07/30/19 13:42	1

Client Sample ID: Cell 26-Square69-S-2-3-190723

Date Collected: 07/23/19 13:55

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.424	U	3.36	0.424	ug/Kg		07/25/19 12:05	07/25/19 17:41	1
Ethylbenzene	0.686	U	3.36	0.686	ug/Kg		07/25/19 12:05	07/25/19 17:41	1
Toluene	0.929	U	3.36	0.929	ug/Kg		07/25/19 12:05	07/25/19 17:41	1
Xylenes, Total	0.760	Ü	3.36	0.760	ug/Kg		07/25/19 12:05	07/25/19 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		61 - 130	07/25/19 12:05	07/25/19 17:41	1
Dibromofluoromethane	87		68 - 140	07/25/19 12:05	07/25/19 17:41	1
Toluene-d8 (Surr)	92		50 - 130	07/25/19 12:05	07/25/19 17:41	1
4-Bromofluorobenzene	110		57 - 140	07/25/19 12:05	07/25/19 17:41	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	19.4 U	38.9	19.4 ug/Kg		07/29/19 09:30	07/29/19 20:04	1
-C6-C10							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a a a-Trifluorotoluene (fid)	104		65 125	07/20/10 00:30	07/20/10 20:04	

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

Analyte	Result Quali	ifier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00 U	4.99	2.00	mg/Kg		07/29/19 10:17	07/30/19 22:55	1
Oil Range Organics (C28-C35)	2.00 U	4.99	2.00	mg/Kg		07/29/19 10:17	07/30/19 22:55	1

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66	27 - 151	07/29/19 10:17 0	7/30/19 22:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

,									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.531	U	3.98	0.531	mg/Kg			08/02/19 18:17	1
Fluoride	2.61		1.99	0.598	mg/Kg			08/02/19 18:17	1
Sulfate	0.951	U	4.97	0.951	mg/Kg			08/02/19 18:17	1

Method: 6010B - Inductively Coup	ed Plasma - Atomic Emission Spectrometry
mountain contract made and only coup	ya i lacina yacime zimecien epecaremen,

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119 U	0.400	0.119 mg/Kg	_	07/29/19 14:58	07/30/19 14:12	1

Eurofins TestAmerica, Houston

Lab Sample ID: 600-189168-3

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 26-Square69-S-2-3-190723

Lab Sample ID: 600-189168-3 Date Collected: 07/23/19 13:55 **Matrix: Solid**

Date Received: 07/25/19 10:11

Mathadi CO10D Indirativa	Coupled Plasma - Atomic Emission Spectror	mater (Cantinuad)
Meinoa: bulub - inauciive	/ Coubled Plasma - Alomic Emission Specifor	neiry (Confinued)
moundar out to made in	Toupiou i lucina Titolino Elimoololi opootioi	motify (Gointing Ga)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.44		1.00	0.218	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Barium	73.1		1.00	0.0300	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Cadmium	0.130	J	0.250	0.0256	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Chromium	5.60		0.500	0.0506	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Copper	4.78	В	0.500	0.174	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Iron	5690		20.0	2.53	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Manganese	106		1.50	0.0381	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Lead	5.30		0.500	0.105	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Selenium	0.259	U	2.00	0.259	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Zinc	15.0		1.50	0.108	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Antimony	0.232	U	2.50	0.232	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Beryllium	0.355		0.250	0.0145	mg/Kg		07/29/19 14:58	07/30/19 14:12	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 14:58	07/30/19 14:12	1

Method: 7471A - Mercury	y in Solid or Semisolid Waste ((Manual Cold	Vapor Techniqu	ıe)	
Analyto	Popult Qualifier Mi	OL (V4!)	SDI linit	D.	D۰

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.25 U	15.5	3.25 ug/Kg		07/29/19 15:09	07/30/19 13:44	1

Client Sample ID: Cell 19-Square156-S-2-3-190723

Date Collected: 07/23/19 12:35

Date Received: 07/25/19 10:11

Lab Sample ID: 600-189168-4

Matrix: Solid

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.453	U	3.59	0.453	ug/Kg		07/25/19 12:05	07/26/19 11:29	1
Ethylbenzene	0.733	U	3.59	0.733	ug/Kg		07/25/19 12:05	07/26/19 11:29	1
Toluene	0.991	U	3.59	0.991	ug/Kg		07/25/19 12:05	07/26/19 11:29	1
Xylenes, Total	0.812	U	3.59	0.812	ug/Kg		07/25/19 12:05	07/26/19 11:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		61 - 130	07/25/19 12:05	07/26/19 11:29	1
Dibromofluoromethane	85		68 - 140	07/25/19 12:05	07/26/19 11:29	1
Toluene-d8 (Surr)	94		50 - 130	07/25/19 12:05	07/26/19 11:29	1
4-Bromofluorobenzene	108		57 - 140	07/25/19 12:05	07/26/19 11:29	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	24.8	U	49.6	24.8	ug/Kg		07/29/19 09:30	07/29/19 20:30	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125	07/29/19 09:30	07/29/19 20:30	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.29	J	4.98	1.99	mg/Kg		07/29/19 10:17	07/30/19 23:08	1
Oil Range Organics (C28-C35)	2.67	J	4.98	1.99	mg/Kg		07/29/19 10:17	07/30/19 23:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
o-Terphenyl	81		27 - 151	07/29/19 10:17 07/30/19 23:0	8 1

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19-Square156-S-2-3-190723
Date Collected: 07/23/19 12:35

Lab Sample ID: 600-189168-4

Matrix: Solid

Date Received: 07/25/19 10:11

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	0.535	U	4.01	0.535	mg/Kg			08/02/19 18:35	1
	Fluoride	0.603	U	2.00	0.603	mg/Kg			08/02/19 18:35	1
	Sulfate	0.959	U	5.01	0.959	mg/Kg			08/02/19 18:35	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.114	U	0.385	0.114	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Arsenic	1.70		0.962	0.210	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Barium	30.0		0.962	0.0288	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Cadmium	0.0817	J	0.240	0.0246	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Chromium	4.21		0.481	0.0487	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Copper	2.87	В	0.481	0.167	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Iron	3890		19.2	2.43	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Manganese	47.5		1.44	0.0366	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Lead	3.32		0.481	0.101	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Selenium	0.249	U	1.92	0.249	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Zinc	7.66		1.44	0.104	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Antimony	0.223	U	2.40	0.223	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Beryllium	0.197	J	0.240	0.0139	mg/Kg		07/29/19 14:58	07/30/19 14:14	1
Thallium	0.266	U	1.44	0.266	mg/Kg		07/29/19 14:58	07/30/19 14:14	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	3.30	U	15.7	3.30 ug/Kg		07/29/19 15:09	07/30/19 13:50	1	

Date Collected: 07/23/19 12:13 Matrix: Solid
Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.574	U	4.55	0.574	ug/Kg		07/25/19 12:05	07/26/19 11:53	1
Ethylbenzene	0.929	U	4.55	0.929	ug/Kg		07/25/19 12:05	07/26/19 11:53	1
Toluene	1.26	U	4.55	1.26	ug/Kg		07/25/19 12:05	07/26/19 11:53	1
Xylenes, Total	1.03	U	4.55	1.03	ug/Kg		07/25/19 12:05	07/26/19 11:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		61 - 130				07/25/19 12:05	07/26/19 11:53	1
Dibromofluoromethane	86		68 - 140				07/25/19 12:05	07/26/19 11:53	1
Toluene-d8 (Surr)	95		50 - 130				07/25/19 12:05	07/26/19 11:53	1
4-Bromofluorobenzene	109		57 - 140				07/25/19 12:05	07/26/19 11:53	1
Method: 8015B - Gasoline R	ange Organio	s - (GC)							
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	17.4	Ū	34.9	17.4	ug/Kg		07/29/19 09:30	07/29/19 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125				07/29/19 09:30	07/29/19 20:59	1

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell19-Square132-S-2-3-190723

Lab Sample ID: 600-189168-5 Date Collected: 07/23/19 12:13 **Matrix: Solid**

Date Received: 07/25/19 10:11

Method: 8015B - Diesel Range	Organics ((DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16.6	В	4.98	1.99	mg/Kg		08/05/19 08:31	08/07/19 14:41	1
Oil Range Organics (C28-C35)	25.0		4.98	1.99	mg/Kg		08/05/19 08:31	08/07/19 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		27 - 151				08/05/19 08:31	08/07/19 14:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.46	J	3.98	0.532	mg/Kg			08/02/19 18:53	1
Fluoride	1.23	J	1.99	0.599	mg/Kg			08/02/19 18:53	1
Sulfate	0.953	U	4.98	0.953	mg/Kg			08/02/19 18:53	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116	U	0.388	0.116	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Arsenic	2.06		0.971	0.212	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Barium	39.2		0.971	0.0291	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Cadmium	0.102	J	0.243	0.0249	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Chromium	4.13		0.485	0.0491	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Copper	2.76	В	0.485	0.169	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Iron	3840		19.4	2.46	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Manganese	60.9		1.46	0.0370	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Lead	3.81		0.485	0.102	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Selenium	0.251	U	1.94	0.251	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Zinc	10.1		1.46	0.105	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Antimony	0.225	U	2.43	0.225	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Beryllium	0.209	J	0.243	0.0141	mg/Kg		07/29/19 14:58	07/30/19 14:16	1
Thallium	0.269	U	1.46	0.269	mg/Kg		07/29/19 14:58	07/30/19 14:16	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	3.52	U	16.7	3.52	ug/Kg		07/29/19 15:09	07/30/19 13:52	1

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

	IS		

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier	r Des	cripti	on

Compound was found in the blank and sample. В F1 MS and/or MSD Recovery is outside acceptance limits.

F2 MS/MSD RPD exceeds control limits

J. Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

Metals

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Compound was found in the blank and sample. В

F3 Duplicate RPD exceeds the control limit

F5 Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the

absolute difference is less than the RL

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. J

U Indicates the analyte was analyzed for but not detected.

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 **CNF** Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DΙ

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit ML Minimum Level (Dioxin) NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit

Quality Control Ω C

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

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Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
ADDIEVIALIOII	These confinious used appreviations may of may not be present in this report.	

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

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Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Reco				
		DCA	DBFM	TOL	BFB	
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)	
500-189168-1	Cell 19-Square184-S-2-3-19072	93	88	93	107	
500-189168-2	Cell	97	89	93	108	
	26-Square169-S-2-3-190723					
600-189168-3	Cell	98	87	92	110	
	26-Square69-S-2-3-190723					
500-189168-4	Cell	85	85	94	108	
	19-Square156-S-2-3-190723					
600-189168-5	Cell19-Square132-S-2-3-19072	85	86	95	109	
	3					
_CS 600-270286/3	Lab Control Sample	84	90	99	118	
_CS 600-270407/3	Lab Control Sample	74	84	98	112	
_CSD 600-270286/4	Lab Control Sample Dup	82	86	97	116	
_CSD 600-270407/4	Lab Control Sample Dup	80	88	100	118	
MB 600-270286/6	Method Blank	96	89	96	109	
MB 600-270407/6	Method Blank	86	84	93	105	

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
400-173761-A-1-C MS	Matrix Spike	103	
400-173761-A-1-D MSD	Matrix Spike Duplicate	100	
600-189168-1	Cell	105	
	19-Square184-S-2-3-190723		
600-189168-2	Cell	103	
	26-Square169-S-2-3-190723		
600-189168-3	Cell	104	
	26-Square69-S-2-3-190723		
600-189168-4	Cell	104	
	19-Square156-S-2-3-190723		
600-189168-5	Cell19-Square132-S-2-3-19072	102	
	3		
LCS 400-449881/1-A	Lab Control Sample	102	
	Method Blank	103	

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		OTPH1		
Lab Sample ID	Client Sample ID	(27-151)		
00-174000-A-1-A MS	Matrix Spike	103		
00-174000-A-1-B MSD	Matrix Spike Duplicate	43		

Eurofins TestAmerica, Houston

Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
600-189168-1	Cell 19-Square184-S-2-3-19072	34	
600-189168-1 MS	Cell	27	
	19-Square184-S-2-3-190723		
600-189168-1 MSD	Cell	80	
	19-Square184-S-2-3-190723		
600-189168-2	Cell	84	
	26-Square169-S-2-3-190723		
600-189168-3	Cell	66	
	26-Square69-S-2-3-190723		
600-189168-4	Cell	81	
	19-Square156-S-2-3-190723		
600-189168-5	Cell19-Square132-S-2-3-19072	73	
	3		
LCS 400-449874/2-A	Lab Control Sample	73	
LCS 400-450900/2-A	Lab Control Sample	125	
MB 400-449874/1-A	Method Blank	70	
MB 400-450900/1-A	Method Blank	108	
Surrogate Legend			
OTPH = o-Terphenyl			

Eurofins TestAmerica, Houston

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Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-270286/6

Matrix: Solid

Analysis Batch: 270286

Client Sam	ple ID:	Meth	od Blank	
	Prep '	Type:	Total/NA	

	MB	MR							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			07/25/19 09:45	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			07/25/19 09:45	1
Toluene	1.38	U	5.00	1.38	ug/Kg			07/25/19 09:45	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			07/25/19 09:45	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 96 61 - 130 07/25/19 09:45 Dibromofluoromethane 89 68 - 140 07/25/19 09:45 50 - 130 Toluene-d8 (Surr) 96 07/25/19 09:45 109 57 - 140 07/25/19 09:45 4-Bromofluorobenzene

Lab Sample ID: LCS 600-270286/3

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Benzene	50.0	54.43	ug/Kg	109	70 - 131	
Ethylbenzene	50.0	52.88	ug/Kg	106	66 - 130	
Toluene	50.0	52.93	ug/Kg	106	67 - 130	
Xylenes, Total	100	104.6	ug/Kg	105	63 - 130	
m-Xylene & p-Xylene	50.0	52.10	ug/Kg	104	64 - 130	
o-Xylene	50.0	52.47	ug/Kg	105	62 - 130	

LCS LCS %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 84 61 - 130 Dibromofluoromethane 90 68 - 140 Toluene-d8 (Surr) 50 - 130 99 4-Bromofluorobenzene 57 - 140 118

Lab Sample ID: LCSD 600-270286/4

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	47.02		ug/Kg		94	70 - 131	15	30
Ethylbenzene	50.0	46.53		ug/Kg		93	66 - 130	13	30
Toluene	50.0	46.69		ug/Kg		93	67 - 130	13	30
Xylenes, Total	100	92.91		ug/Kg		93	63 - 130	12	30
m-Xylene & p-Xylene	50.0	45.86		ug/Kg		92	64 - 130	13	30
o-Xylene	50.0	47.05		ug/Kg		94	62 - 130	11	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		61 - 130
Dibromofluoromethane	86		68 ₋ 140
Toluene-d8 (Surr)	97		50 - 130
4-Bromofluorobenzene	116		57 - 140

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-270407/6

Matrix: Solid

Analysis Batch: 270407

Client S	Sample	ID: N	letho	od Bla	nk
	Pre	ep Ty	/pe: ˈ	Total/	NA

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			07/26/19 10:42	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			07/26/19 10:42	1
Toluene	1.38	U	5.00	1.38	ug/Kg			07/26/19 10:42	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			07/26/19 10:42	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		61 - 130		07/26/19 10:42	1
Dibromofluoromethane	84		68 - 140		07/26/19 10:42	1
Toluene-d8 (Surr)	93		50 - 130		07/26/19 10:42	1
4-Bromofluorobenzene	105		57 - 140		07/26/19 10:42	1

Lab Sample ID: LCS 600-270407/3

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS LCS	S		%Rec.	
Analyte	Added	Result Qua	alifier Unit	D %Rec	Limits	
Benzene	50.0	50.58	ug/Kg		70 - 131	
Ethylbenzene	50.0	50.11	ug/Kg	100	66 - 130	
Toluene	50.0	50.35	ug/Kg	101	67 - 130	
Xylenes, Total	100	99.15	ug/Kg	99	63 - 130	
m-Xylene & p-Xylene	50.0	49.69	ug/Kg	99	64 - 130	
o-Xylene	50.0	49.46	ug/Kg	99	62 - 130	

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 61 - 130 74 Dibromofluoromethane 84 68 - 140 Toluene-d8 (Surr) 50 - 130 98 4-Bromofluorobenzene 112 57 - 140

Lab Sample ID: LCSD 600-270407/4

Matrix: Solid

Analysis Batch: 270407

Client Sample ID	: Lab	Contro	Samı	ole Dup
		Prep Ty	/pe: T	otal/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	52.53		ug/Kg		105	70 - 131	4	30
Ethylbenzene	50.0	52.32		ug/Kg		105	66 - 130	4	30
Toluene	50.0	52.16		ug/Kg		104	67 - 130	4	30
Xylenes, Total	100	103.4		ug/Kg		103	63 - 130	4	30
m-Xylene & p-Xylene	50.0	51.40		ug/Kg		103	64 - 130	3	30
o-Xylene	50.0	52.03		ug/Kg		104	62 - 130	5	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	80		61 - 130
Dibromofluoromethane	88		68 ₋ 140
Toluene-d8 (Surr)	100		50 - 130
4-Bromofluorobenzene	118		57 - 140

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-449881/2-A

Matrix: Solid

Analysis Batch: 449860

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 449881

Result Qualifier SDL Unit Analyzed Dil Fac Analyte MQL (Adj) Prepared 100 50.0 ug/Kg 07/29/19 09:30 07/29/19 11:26 50.0 U Gasoline Range Organics (GRO)

-C6-C10

MB MB

MR MR

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 103 65 - 125 07/29/19 09:30 07/29/19 11:26

Lab Sample ID: LCS 400-449881/1-A

Analysis Batch: 449860

Matrix: Solid

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

Prep Batch: 449881

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 1000 1046 105 62 - 141 Gasoline Range Organics (GRO) ug/Kg

-C6-C10

LCS LCS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 102

Lab Sample ID: 400-173761-A-1-C MS

Matrix: Solid

Analysis Batch: 449860

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 449881

MS MS Sample Sample Spike %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits **Analyte** 48300 56900 96 10 - 150 Gasoline Range Organics (GRO) 10600 ug/Kg

-C6-C10

MS MS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 103

Lab Sample ID: 400-173761-A-1-D MSD

Matrix: Solid

Analysis Batch: 449860

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA **Prep Batch: 449881**

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier **Analyte** Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics (GRO) 10600 48300 57990 ug/Kg 98 10 - 150 32

-C6-C10

MSD MSD

Surrogate %Recovery Qualifier I imits 65 - 125 a,a,a-Trifluorotoluene (fid) 100

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

Lab Sample ID: MB 400-449874/1-A

Matrix: Solid

Analysis Batch: 450125

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

Prep Batch: 449874

MB MB

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U	5.00	2.00	mg/Kg		07/29/19 10:17	07/30/19 21:24	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		07/29/19 10:17	07/30/19 21:24	1

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 400-449874/1-A **Matrix: Solid**

Analysis Batch: 450125

Client Sample ID: Method Blank

Unit

Unit

mg/Kg

Prep Type: Total/NA

Prep Batch: 449874

MB MB

Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac o-Terphenyl 70 27 - 151 07/29/19 10:17 07/30/19 21:24

Lab Sample ID: LCS 400-449874/2-A

Matrix: Solid

Analysis Batch: 450524

Client Sample ID: Lab Control Sample

Spike

Added

Prep Type: Total/NA **Prep Batch: 449874**

%Rec.

Limits 63 - 153

276 176.2 mg/Kg Diesel Range Organics

[C10-C28]

Analyte

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 151 73

Client Sample ID: Cell 19-Square184-S-2-3-190723

%Rec

64

D

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 450125

Lab Sample ID: 600-189168-1 MS

Prep Batch: 449874 Sample Sample Spike MS MS %Rec.

Result Qualifier

187.6 F2

LCS LCS

Result Qualifier

Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec 2.00 U F1 F2 276 67.28 F1 62 - 204 24 Diesel Range Organics mg/Kg

[C10-C28]

MS MS

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 27 - 151

Client Sample ID: Cell 19-Square184-S-2-3-190723 Lab Sample ID: 600-189168-1 MSD

Spike

Added

275

Matrix: Solid

Analysis Batch: 450125

Prep Type: Total/NA Prep Batch: 449874 MSD MSD

68

%Rec. **RPD** Limits RPD Limit D %Rec

94

Diesel Range Organics [C10-C28]

Analyte

MSD MSD

Sample Sample

Result Qualifier

2.00 U F1 F2

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 151 80

Lab Sample ID: MB 400-450900/1-A

Matrix: Solid

Analysis Batch: 451040

Client Sample ID: Method Blank

62 - 204

Prep Type: Total/NA

Prep Batch: 450900

MB MB

SDL Unit Analyte Result Qualifier MQL (Adj) Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] 4.277 J 5.00 2.00 mg/Kg 08/05/19 08:31 08/06/19 05:42 2.00 U 5.00 08/05/19 08:31 08/06/19 05:42 Oil Range Organics (C28-C35) 2.00 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed o-Terphenyl 108 27 - 151 08/05/19 08:31 08/06/19 05:42

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Lab Sample ID: LCS 400-450900/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 451040 **Prep Batch: 450900** Spike LCS LCS %Rec.

Analyte Added Result Qualifier %Rec Limits Unit 281 96 63 - 153 268.7 mg/Kg **Diesel Range Organics**

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 125 27 - 151

Lab Sample ID: 400-174000-A-1-A MS **Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 451040 Prep Batch: 450900** Sample Sample Spike MS MS %Rec.

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits 276 4.06 JBF1F2 217.9 62 - 204 **Diesel Range Organics** mg/Kg

[C10-C28]

[C10-C28]

o-Terphenyl

MS MS Limits Surrogate %Recovery Qualifier 27 - 151 o-Terphenyl 103

Lab Sample ID: 400-174000-A-1-B MSD

Matrix: Solid

Prep Type: Total/NA **Prep Batch: 450900** Analysis Batch: 451040 Spike MSD MSD Sample Sample %Rec. **RPD** Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit **Analyte** 4.06 JBF1F2 278 92.17 F1 F2 32 62 - 204 Diesel Range Organics mg/Kg 81

MSD MSD Surrogate %Recovery Qualifier Limits

43

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-271080/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Soluble**

27 - 151

Analysis Batch: 271032

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			08/02/19 16:12	1
Fluoride	0.601	U	2.00	0.601	mg/Kg			08/02/19 16:12	1
Sulfate	0.957	U	5.00	0.957	mg/Kg			08/02/19 16:12	1

Lab Sample ID: LCS 600-271080/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 271032

Analysis Daten. 21 1002							
•	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	
Chloride		192.2		mg/Kg	96	90 - 110	
Fluoride	75.0	74.84		mg/Kg	100	90 - 110	
Sulfate	200	193.3		mg/Kg	97	90 - 110	

Eurofins TestAmerica, Houston

Client Sample ID: Matrix Spike Duplicate

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-189149-A-1-B MS **Client Sample ID: Matrix Spike**

Matrix: Solid						Prep Type: Soluble
Analysis Batch: 271032						
	Sample	Sample	Spike	MS N	MS	%Rec.

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	28.8		99.6	146.0		mg/Kg	_			
Fluoride	0.599	U F1	19.9	40.41		mg/Kg				
Sulfate	60.7	F1	99.6	184.3		mg/Kg				

Lab Sample ID: 600-189149-A-1-C MSD

Matrix: Solid

Analysis Batch: 271032											
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	28.8		99.6	144.6		mg/Kg				1	20

Fluoride 0.599 UF1 19.9 39.83 mg/Kg 20 Sulfate 60.7 F1 99.6 181.9 20 mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-270635/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 270736								Prep Batch:	270635
	MB	MB						•	
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Copper	0.2650	J	0.500	0.174	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Iron	2.53	Ü	20.0	2.53	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Lead	0.105	U	0.500	0.105	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Selenium	0.259	Ü	2.00	0.259	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Zinc	0.108	U	1.50	0.108	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Antimony	0.232	U	2.50	0.232	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		07/29/19 14:58	07/30/19 13:46	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 14:58	07/30/19 13:46	1

Lab Sample ID: LCSSRM 600-270635/2-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270635

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

	Spike	LCSSRM	LCSSRM				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	25.8	20.87		mg/Kg		80.9	67.1 - 106.
Arsenic	69.4	62.63		mg/Kg		90.3	66.6 - 106. 6
Barium	393	321.3		mg/Kg		81.7	64.6 - 106. 6
Cadmium	268	251.3		mg/Kg		93.8	71.3 - 106. 7
Chromium	63.6	50.26		mg/Kg		79.0	71.9 - 106. 6

Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client: ARCADIS U.S. Inc

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-270635/2-A Matrix: Solid Analysis Batch: 270736				Clien	t Sa	mple II	9 50.1 - 106. 8 64.1 - 106. 7 71.3 - 106. 7 65.2 - 106. 5 69.7 - 106. 6 20.0 - 106. 7 72.4 - 106.	
7 many 616 2416 m 21 01 00	Spike	LCSSRM	LCSSRM				-	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Copper	175	160.5		mg/Kg		91.7	72.0 - 106. 9	
Iron	17700	12130		mg/Kg		68.6		
Manganese	616	471.9		mg/Kg		76.6	64.1 - 106. 7	
Lead	164	147.4		mg/Kg		89.9	71.3 - 106. 7	
Selenium	155	135.5		mg/Kg		87.4	65.2 - 106. 5	
Zinc	482	412.2		mg/Kg		85.5	69.7 - 106. 6	
Antimony	120	31.23		mg/Kg		26.0	20.0 - 106. 7	
Beryllium	293	246.8		mg/Kg		84.2	72.4 - 106. 8	
Thallium	81.0	68.31		mg/Kg		84.3	63.2 - 106.	

Lab Sample ID: 600-189168-1 MS

Matrix: Solid

Analysis Ratch: 270726

Client Sample ID: Cell 19-Square184-S-2-3-190723 **Prep Type: Total/NA**

Analysis Batch: 270736	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.118	U	12.4	13.47		mg/Kg		109	75 - 125
Arsenic	3.08		49.5	56.98		mg/Kg		109	75 - 125
Barium	274		49.5	321.1	4	mg/Kg		95	75 - 125
Cadmium	0.153	J	49.5	54.70		mg/Kg		110	75 - 125
Chromium	2.60		49.5	46.97		mg/Kg		90	75 - 125
Copper	2.20	В	49.5	54.36		mg/Kg		105	75 - 125
Iron	2480		495	3588	4	mg/Kg		223	75 - 125
Manganese	24.9		49.5	72.08		mg/Kg		95	75 - 125
Selenium	0.256	U	49.5	52.18		mg/Kg		105	75 - 125
Antimony	0.515	J	49.5	40.73		mg/Kg		81	75 - 125
Beryllium	0.272		49.5	47.01		mg/Kg		94	75 - 125
Thallium	0.274	U	49.5	45.21		mg/Kg		91	75 - 125

Lab Sample ID: 600-189168-1 MS

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell 19-Square184-S-2-3-190723
Prep Type: Total/NA
Prop Ratch: 270635

Analysis Daten. 270730	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.589	U	12.4	13.84		mg/Kg		112	75 - 125
Arsenic	3.94	J	49.5	63.76		mg/Kg		121	75 - 125
Barium	295		49.5	360.6	4	mg/Kg		132	75 - 125
Cadmium	0.173	J	49.5	62.03		mg/Kg		125	75 ₋ 125
Chromium	3.19		49.5	57.25		mg/Kg		109	75 - 125
Copper	2.77	В	49.5	61.46		mg/Kg		119	75 - 125
Iron	2600		495	4064	4	mg/Kg		297	75 - 125
Manganese	27.7		49.5	86.26		mg/Kg		118	75 - 125
Lead	1.88	J	49.5	57.77		mg/Kg		113	75 - 125

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Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Client Sample ID: Cell 19-Square184-S-2-3-190723 Lab Sample ID: 600-189168-1 MS Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 270736 **Prep Batch: 270635**

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Selenium	1.28	U	49.5	58.51		mg/Kg		118	75 - 125	
Zinc	8.71		24.8	36.91		mg/Kg		114	75 - 125	
Antimony	2.38	J	49.5	45.99		mg/Kg		88	75 - 125	
Beryllium	0.396	J	49.5	54.55		mg/Kg		109	75 - 125	
Thallium	1.37	U	49.5	54.33		mg/Kg		110	75 - 125	

Lab Sample ID: 600-189168-1 DU Client Sample ID: Cell 19-Square184-S-2-3-190723

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 270736

Prep Batch: 270635

							op =atom =.	
•	Sample	Sample	DU	DU			•	RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.118	U	0.119	U	mg/Kg		NC	20
Arsenic	3.08		2.905		mg/Kg		6	20
Barium	274		270.1		mg/Kg		2	20
Cadmium	0.153	J	0.09500	J F5	mg/Kg		47	20
Chromium	2.60		2.675		mg/Kg		3	20
Copper	2.20	В	2.000		mg/Kg		10	20
Iron	2480		2599		mg/Kg		5	20
Manganese	24.9		24.90		mg/Kg		0.1	20
Selenium	0.256	U	0.259	U	mg/Kg		NC	20
Antimony	0.515	J	0.2450	J F5	mg/Kg		71	20
Beryllium	0.272		0.1600	J F5	mg/Kg		52	20
Thallium	0.274	U	0.277	U	mg/Kg		NC	20

Lab Sample ID: 600-189168-1 DU Client Sample ID: Cell 19-Square184-S-2-3-190723

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 270736 Prep Batch: 270635

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.589	U	0.595	Ū	mg/Kg		NC NC	20
Arsenic	3.94	J	3.475	J	mg/Kg		12	20
Barium	295		276.8		mg/Kg		6	20
Cadmium	0.173	J	0.128	U	mg/Kg		NC	20
Chromium	3.19		3.150		mg/Kg		1	20
Copper	2.77	В	2.400	J	mg/Kg		14	20
Iron	2600		2610		mg/Kg		0.5	20
Manganese	27.7		26.83		mg/Kg		3	20
Lead	1.88	J	2.450	J F5	mg/Kg		26	20
Selenium	1.28	U	1.30	U	mg/Kg		NC	20
Zinc	8.71		7.325	J	mg/Kg		17	20
Antimony	2.38	J	1.575	J F5	mg/Kg		41	20
Beryllium	0.396	J	0.1250	J F5	mg/Kg		104	20
Thallium	1.37	U	1.39	U	mg/Kg		NC	20

QC Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-270637/7-A Client Sample ID: Method Blank

Matrix: Solid

Analyte

Mercury

Mercury

Analysis Batch: 270749

Prep Type: Total/NA Prep Batch: 270637

114

75 - 125

 MB
 MB

 Result 3.25
 Qualifier U
 MQL (Adj) 15.5
 SDL 3.25
 Unit U ug/Kg
 D 07/29/19 15:09
 Prepared 07/29/19 15:09
 Analyzed 07/30/19 13:01
 Dil Fac 07/29/19 15:09

ug/Kg

Lab Sample ID: LCSSRM 600-270637/8-A

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270637

Spike LCSSRM LCSSRM %Rec.

 Analyte
 Added Mercury
 Result Qualifier
 Unit ug/Kg
 D
 %Rec Limits

 Mercury
 29000
 32390
 ug/Kg
 111.7
 59.7 - 115.

91.3

Lab Sample ID: 600-189195-C-4-G MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 270749

Sample Sample Spike MS MS SRec.

Analyte Result Qualifier Added Result Qualifier Unit D Rec Limits

242

Lab Sample ID: 600-189195-C-4-F DU Client Sample ID: Duplicate

367.8

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 270749

Sample Sample DU DU RPD

 Analyte
 Result Mercury
 Qualifier
 Result Mercury
 Qualifier Mercury
 Unit Ug/Kg
 D
 RPD Limit Wg/Kg
 Limit Wg/Kg

2

6

7

8

9

10

12

13

14

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
Gasoline Range Organics (GRO)-C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units	
Chloride	4.00	0.534	mg/Kg	
Fluoride	2.00	0.601	mg/Kg	
Sulfate	5.00	0.957	mg/Kg	

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units	
Antimony	2.50	0.232	mg/Kg	
Arsenic	1.00	0.218	mg/Kg	
Barium	1.00	0.0300	mg/Kg	
Beryllium	0.250	0.0145	mg/Kg	
Cadmium	0.250	0.0256	mg/Kg	
Chromium	0.500	0.0506	mg/Kg	
Copper	0.500	0.174	mg/Kg	
Iron	20.0	2.53	mg/Kg	
Lead	0.500	0.105	mg/Kg	
Manganese	1.50	0.0381	mg/Kg	
Selenium	2.00	0.259	mg/Kg	
Silver	0.400	0.119	mg/Kg	
Thallium	1.50	0.277	mg/Kg	
Zinc	1.50	0.108	mg/Kg	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Eurofins TestAmerica, Houston

2

3

6

8

9

A A

12

QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Analysis Batch: 270286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	8260B	270367
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	8260B	270367
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	8260B	270367
MB 600-270286/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-270286/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-270286/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 270367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	5035	
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	5035	
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	5035	
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	5035	
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	5035	

Analysis Batch: 270407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	8260B	270367
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	8260B	270367
MB 600-270407/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-270407/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-270407/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC VOA

Analysis Batch: 449860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	8015B	449881
MB 400-449881/2-A	Method Blank	Total/NA	Solid	8015B	449881
LCS 400-449881/1-A	Lab Control Sample	Total/NA	Solid	8015B	449881
400-173761-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B	449881
400-173761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	449881

Prep Batch: 449881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	5035	_
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	5035	
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	5035	
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	5035	
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	5035	
MB 400-449881/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-449881/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-173761-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
400-173761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

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Job ID: 600-189168-1

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC Semi VOA

Prep Batch: 449874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3546	
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	3546	
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	3546	
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	3546	
MB 400-449874/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-449874/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-189168-1 MS	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3546	
600-189168-1 MSD	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3546	

Analysis Batch: 450125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	8015B	449874
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	8015B	449874
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	8015B	449874
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	8015B	449874
MB 400-449874/1-A	Method Blank	Total/NA	Solid	8015B	449874
600-189168-1 MS	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	8015B	449874
600-189168-1 MSD	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	8015B	449874

Analysis Batch: 450524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-449874/2-A	Lab Control Sample	Total/NA	Solid	8015B	449874

Prep Batch: 450900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	3546	
MB 400-450900/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-450900/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-174000-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-174000-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 451040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-450900/1-A	Method Blank	Total/NA	Solid	8015B	450900
LCS 400-450900/2-A	Lab Control Sample	Total/NA	Solid	8015B	450900
400-174000-A-1-A MS	Matrix Spike	Total/NA	Solid	8015B	450900
400-174000-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	450900

Analysis Batch: 451253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	8015B	450900

HPLC/IC

Analysis Batch: 271032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Soluble	Solid	300.0	271080
600-189168-2	Cell 26-Square169-S-2-3-190723	Soluble	Solid	300.0	271080
600-189168-3	Cell 26-Square69-S-2-3-190723	Soluble	Solid	300.0	271080
600-189168-4	Cell 19-Square156-S-2-3-190723	Soluble	Solid	300.0	271080
600-189168-5	Cell19-Square132-S-2-3-190723	Soluble	Solid	300.0	271080

Eurofins TestAmerica, Houston

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QC Association Summary

Client: ARCADIS U.S. Inc

Job ID: 600-189168-1 Project/Site: Chevron - Jal Land Farm Soils 2019

HPLC/IC (Continued)

Analysis Batch: 271032 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-271080/1-A	Method Blank	Soluble	Solid	300.0	271080
LCS 600-271080/2-A	Lab Control Sample	Soluble	Solid	300.0	271080
600-189149-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	271080
600-189149-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	271080

Leach Batch: 271080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Soluble	Solid	DI Leach	
600-189168-2	Cell 26-Square169-S-2-3-190723	Soluble	Solid	DI Leach	
600-189168-3	Cell 26-Square69-S-2-3-190723	Soluble	Solid	DI Leach	
600-189168-4	Cell 19-Square156-S-2-3-190723	Soluble	Solid	DI Leach	
600-189168-5	Cell19-Square132-S-2-3-190723	Soluble	Solid	DI Leach	
MB 600-271080/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-271080/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-189149-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
600-189149-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 270635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3050B	-
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	3050B	
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	3050B	
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	3050B	
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	3050B	
MB 600-270635/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-270635/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-189168-1 MS	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3050B	
600-189168-1 DU	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	3050B	

Prep Batch: 270637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	7471A	
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	7471A	
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	7471A	
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	7471A	
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	7471A	
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-189195-C-4-G MS	Matrix Spike	Total/NA	Solid	7471A	
600-189195-C-4-F DU	Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 270736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	6010B	270635

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Metals (Continued)

Analysis Batch: 270736 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	6010B	270635
MB 600-270635/1-A	Method Blank	Total/NA	Solid	6010B	270635
LCSSRM 600-270635/2-A	Lab Control Sample	Total/NA	Solid	6010B	270635
600-189168-1 MS	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-1 MS	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-1 DU	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189168-1 DU	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	6010B	270635

Analysis Batch: 270749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189168-1	Cell 19-Square184-S-2-3-190723	Total/NA	Solid	7471A	270637
600-189168-2	Cell 26-Square169-S-2-3-190723	Total/NA	Solid	7471A	270637
600-189168-3	Cell 26-Square69-S-2-3-190723	Total/NA	Solid	7471A	270637
600-189168-4	Cell 19-Square156-S-2-3-190723	Total/NA	Solid	7471A	270637
600-189168-5	Cell19-Square132-S-2-3-190723	Total/NA	Solid	7471A	270637
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	270637
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	270637
600-189195-C-4-G MS	Matrix Spike	Total/NA	Solid	7471A	270637
600-189195-C-4-F DU	Duplicate	Total/NA	Solid	7471A	270637

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Date Received: 07/25/19 10:11

Client Sample ID: Cell 19-Square184-S-2-3-190723

Date Collected: 07/23/19 12:57

Lab Sample ID: 600-189168-1

07/30/19 13:39 SOT

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.1 g	5 mL	270367	07/25/19 12:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 16:53	WS1	TAL HOU
Total/NA	Prep	5035			9.134 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 19:12	SAB	TAL PEN
Total/NA	Prep	3546			15.02 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/30/19 22:29	S1S	TAL PEN
Soluble	Leach	DI Leach			5.03 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 17:41	SKR	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 13:50	KP1	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		5	-		270736	07/30/19 13:56	KP1	TAL HOU
Total/NA	Prep	7471A			0.60 q	50 mL	270637	07/29/19 15:09	SOT	TAL HOU

Client Sample ID: Cell 26-Square169-S-2-3-190723

7471A

Date Collected: 07/23/19 13:32 Date Received: 07/25/19 10:11

Analysis

Total/NA

Lab Sample ID: 600-189168-2 **Matrix: Solid**

270749

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.34 g	5 mL	270367	07/25/19 12:05	WS1	TAL HOL
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 17:17	WS1	TAL HOU
Total/NA	Prep	5035			10.461 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 19:38	SAB	TAL PEN
Total/NA	Prep	3546			15.11 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/30/19 22:42	S1S	TAL PEN
Soluble	Leach	DI Leach			5.01 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 17:59	SKR	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:02	KP1	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 14:04	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:42	SOT	TAL HOU

Client Sample ID: Cell 26-Square69-S-2-3-190723

Date Collected: 07/23/19 13:55

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.43 g	5 mL	270367	07/25/19 12:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 17:41	WS1	TAL HOU
Total/NA	Prep	5035			12.857 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 20:04	SAB	TAL PEN

Eurofins TestAmerica, Houston

Lab Sample ID: 600-189168-3

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TAL HOU

Matrix: Solid

Lab Sample ID: 600-189168-4

Lab Sample ID: 600-189168-5

Client Sample ID: Cell 26-Square69-S-2-3-190723

Lab Sample ID: 600-189168-3 Date Collected: 07/23/19 13:55 **Matrix: Solid**

Date Received: 07/25/19 10:11

Client: ARCADIS U.S. Inc

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.03 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/30/19 22:55	S1S	TAL PEN
Soluble	Leach	DI Leach			5.03 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 18:17	SKR	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:12	KP1	TAL HOU
Total/NA	Prep	7471A			0.66 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:44	SOT	TAL HOU

Client Sample ID: Cell 19-Square156-S-2-3-190723

Date Collected: 07/23/19 12:35

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.96 g	5 mL	270367	07/25/19 12:05	WS1	TAL HO
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 11:29	WS1	TAL HO
Total/NA	Prep	5035			10.09 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 20:30	SAB	TAL PE
Total/NA	Prep	3546			15.07 g	1 mL	449874	07/29/19 10:17	SHB	TAL PE
Total/NA	Analysis	8015B		1			450125	07/30/19 23:08	S1S	TAL PE
Soluble	Leach	DI Leach			4.99 g	50 mL	271080	08/02/19 15:26	SKR	TAL HO
Soluble	Analysis	300.0		1			271032	08/02/19 18:35	SKR	TAL HO
Total/NA	Prep	3050B			1.04 g	50 mL	270635	07/29/19 14:58	P1D	TAL HO
Total/NA	Analysis	6010B		1			270736	07/30/19 14:14	KP1	TAL HO
Total/NA	Prep	7471A			0.65 g	50 mL	270637	07/29/19 15:09	SOT	TAL HO
Total/NA	Analysis	7471A		1			270749	07/30/19 13:50	SOT	TAL HO

Client Sample ID: Cell19-Square132-S-2-3-190723

Date Collected: 07/23/19 12:13

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.49 g	5 mL	270367	07/25/19 12:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 11:53	WS1	TAL HOU
Total/NA	Prep	5035			14.337 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 20:59	SAB	TAL PEN
Total/NA	Prep	3546			15.05 g	1 mL	450900	08/05/19 08:31	SHB	TAL PEN
Total/NA	Analysis	8015B		1			451253	08/07/19 14:41	S1S	TAL PEN
Soluble	Leach	DI Leach			5.02 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 18:53	SKR	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:16	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOL
Total/NA	Analysis	7471A		1			270749	07/30/19 13:52	SOT	TAL HOL

Eurofins TestAmerica, Houston

Matrix: Solid

Matrix: Solid

Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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

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Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas	Program NELAP		EPA Region 6	Identification Number T104704223-18-23	Expiration Date 10-31-19
The following analyte the agency does not on	•	rt, but the laboratory	is not certified by the	e governing authority. This	s list may include analytes for wh

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Dat
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-20
Florida	NELAP	4	E81010	06-30-20
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Illinois	NELAP		004586	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-20
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
New Jersey	NELAP		FL006	07-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State		C915	05-15-20
Washington	State Program	10	C915	05-15-20

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

Eurofins TestAmerica, Houston

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1 *1*

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189168-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	136	07-31-19 *

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

Client Information	Sampler	SCALLONVIR	driauz	Lab PM Kudchadkar, Sachin G	(ar, Sach	in G		Carrier Tracking No(s)	ng No(s).	COC No: 600-69887-19077	7.2
Client Contact Steve Rice	9431-4310-0310	10		E-Mail: sachin.ku	dchadkar	@testar	E-Mail: sachin kudchadkar@testamericainc.com			Page. Page	
Company. ARCADIS U.S. Inc							Analysis	Analysis Requested		Job#.	
Address 11001 West 120th Avenue	Due Date Requested:	**		-	240					Preservation Codes	des:
City	TAT Requested (day	:(s		10.00	2000					B - NaOH	N - None
Discontingual State Zip CO, 80021	40 hr Rush	HSh		7115	270					D - Nitric Acid E - NaHSOA	P - Na204S Q - Na2SO3
Phone 303-710-7537(Tel)	Po # Purchase Order Requested	Requested		(0	STIR	-				G - Amchior H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahyd
Email: steve rice@arcadis.com	:# OM			0.007,4150.3	lok						U - Acetone V - MCAA
Project Name Chevron - Jaf Land Farm Soils 2019 Site.	Project # 60009563 SSOW#:			I SCHOOL STATE OF		(010-90)0					W - pH 4-5 Z - other (specify)
Samula Idantification	Sample Date	Sample (C	Sample (Caromp, Caromp, Caromp)	Matrix (W-water, Sasolid, O-wasterold, oil	96108 B3108	A1747,0508	300-CI			o radmuM latoT	Special Instructions/Note:
odnipre identification		1	100	X			201				
(B)119-59uare184-5-2-3-190723	7123/19	12:51	15	Solid	×	×	XX				
(11) 26-59 Sayare 169-51-3-190723	7/123/19	13:32	5	Solid	×	×	×			ISA S	
(81126 Square 69-52-190723	112/19	8:55	5	Solid	×	×	×				
521091-2-1-8-8-1502-81110)	7/29/19	12:35	5	Solid	×	×	×				
61119-5940x0132-5-1-3-196739	7/23/19	12:13	5	Solid	×	×	×				
				Solid							
				Solid		_					
				Solid				9112 			
				Solid							
				Solid		9	0-189168 C	600-189168 Chain of Custody	٨		
				Solid					_		
Rossible Hazard Identification Non-Hazard Flammable Skin Intant Dalisachle Boulested II III IV Other (coords)	Poison B Unkno	um	Radiological		Sample L	Return To Client	Sample Disposal (A fee may be assomed the sample of the s	be assessed if san Disposal By Lab	samples are re	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mor	1 month) Months
Empty Kit Relinquished by:		Date:		Time	9				Method of Shipment		
Retinguished by (COLOR) ON DEATH OF THE RETINGUISHED BY	Date/Time 7/2001/9		55	Company MYCQQ/5	Received by	A hou by	Jack	A	DaleTime	5/19/1011	Company
Reirrquished by	Date/Time		Con	Company	Received by	ed by.	-		Dale/Time:		Company
als Intact. Custody Seal No.:	-				Cooler	Temperat	Cooler Temperature(s) ^o C and Other Remarks	her Remarks:			
A Yes A No	716				4						

Loc: 600 189168

Sample Receipt Checklist

Te	stAn	nerico	
		RONMENTAL TESTIN	Ė

			Date/Time Received:			1900	25 10:1
JOB NUMBER:			CLIENT:	A	Rac	B	
_	and		OLILITY.	av	11/01	W M	
UNPACKED BY:	#	-	CARRIER/DRIVER:	-GIA	MILLER	30110	
Custody Seal Present:	YES I	□NO	Number of Coolers R	eceived: _	2		
Cooler ID	Temp Blank	Trip Blank	Observed Temp	Therm	Them	Corrected Temp	
BN	X I N	X / N	4.0	1078	10.1	4.7	
	YIN	YIN	1.5	010	10.1		
	YIN	Y / N					
	YIN	Y / N					
	YIN	Y / N				, 1	
*	YIN	YIN			25	7/25/10	7
	YIN	YIN			11	1/0-1	1
	YIN	Y / N					
	Y/N	YIN					
H paper Lot # OA headspace accept	able (5-6mm):	_ □YES □			☐ YES	YES NO	7
Did samples meet the is	aboratory's stand	ard conditions	of sample acceptability u	ipon receipt	?		_
COMMENTS:							
							-
					NO	7/25/10	
				(1	1/00/19	
_ <							

HS-SA-WI-013

Rev. 3; 07/01/2014

Ver: 01/16/2019

eurofins Environment Testing TestAmerica

Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street

Propriet	Client Information (Sub Contract Lab)	Sampler:			Lab PM: Kudch	Lab PM: Kudchadkar, Sachin G	Sachin	Ø	Carrier Tracking No(s):	COC No:	
NELAP - Tools NELAP - Tool	Client Contact:	Phone:			E-Mail	n.kudch	dkar@	testamericainc.com	State of Origin: Texas	Page: Page 1 of 1	
Diable Requested (day): TAT Requested (da	Company: TestAmerica Laboratories. Inc.					Accreditati NELAP	Texas	ired (See note):		Job #; 600-189168-	
Trigonested (days):	Address: 3255 Mrl amora Driva	Due Date Requested							Guested	Preservation	Codes:
12 13 13 13 13 13 13 13	ooo macemare prive, , , ooo oo	TAT Requested (day	s):							A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
1-10 1-10	State, Zip: FL, 32514									D - Nitric Acid E - NaHSO4	
Note	74-1001(Tel)	PO #:				(0				G - Amchlor H - Ascorbic Ac	
Proposition	Email:	,#OM					9 11 1 1				
Single Application Application Single Application Applic	Project Name: Chevron - Jal Land Farm Soils 2018	Project #: 60009563				No. of Concession, Name of Street, or other Persons, Name of Street, or ot			-		W - pH 4-5 Z - other (specify)
Sample Identification - Cilent ID (Lab ID) Sample Date Time Gagrab Forms Gagrab Time Time Gagrab Time	Site:	SSOW#:				100000000	Y 100				
6119-Square 184-5-2-3-190723 (600-189168-1) 7/23/19 (21-57) Solid X X X X Solid X X X X Solid X X X X X X Solid X X X X X X X X Solid X X X X X X X X X X X X X X X X X X X	Sample Identification - Client ID (Lab ID)	Sample Date	Sample		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)						al Instructions/Note:
61126-Square184-S-2-3-190723 (600-189168-2) 71/23/19 7			X	Preservat	ion Code:	X					
61126-Square169-S-2-3-190723 (600-189168-2) 7/23/19 13:32 Solid X X X	61119-Square184-S-2-3-190723 (600-189168-1)	7/23/19	12:57 Central		Solid					4	
61126-Square69-S-2-3-190723 (600-189168-3) 7/23/19 Central (13:55 Solid X X X)	61126-Square169-S-2-3-190723 (600-189168-2)	7/23/19	13:32 Central		Solid		-			4	
61119-Square156-S-2-3-190723 (600-189168-4) 7/23/19 12:13 Solid X X X 0	61126-Square69-S-2-3-190723 (600-189168-3)	7/23/19	13:55 Central		Solid					4	
61119-Square132-S-2-3-190723 (600-189168-5) 7/23/19 Central Central Central Solid X X X R R R 4 4 Central Cen	61119-Square156-S-2-3-190723 (600-189168-4)	7/23/19	12:35 Central		Solid					4	
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratory are turn the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.	61119-Square132-S-2-3-190723 (600-189168-5)	7/23/19	12:13 Central		Solid					4	
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. 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/lests/maritx being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.											
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, inc. 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/lests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratories, inc. attention immediately. If all requested accreditation status should be brought to TestAmerica Laboratories, inc.											
Note: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory accreditations are subject to change. This sample subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.											
	Note: Since laboratory accreditations are subject to change. TestAmer currently maintain accreditation in the State of Origin listed above for a Laboratories, Inc. attention immediately. If all requested accreditations	rica Laboratories, Inc. places the analysis/lests/matrix being analyz sere current to date, return the si	ownership of r ed, the sample igned Chain of	nethod, analyte es must be ship f Custody attes	& accreditation sped back to the ting to said con	n compliar e TestAme nplicance t	ce upon rica labor o TestAm	out subcontract laboratorie atory or other instructions erica Laboratories, Inc.	s. This sample shipment is forw will be provided. Any changes to	varded under chain-of-custo o accreditation status shoule	 If the laboratory does not be brought to TestAmerica
	Unconfirmed							-			

erature(s) °C and Other Remarks: sceived by: 4000A

lethod of Shipment

Special Instructions/QC Requirements:

Primary Deliverable Rank: 2

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

Empty Kit Relinquished by:

nquished by:

Custody Seal No.:

Custody Seals Intact: A Yes A No Client: ARCADIS U.S. Inc

Job Number: 600-189168-1

Login Number: 189168

List Number: 1 Creator: Rubio, Yuri List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
camples are received within Holding Time (excluding tests with immediate ITs)	True	
ample containers have legible labels.	True	
Containers are not broken or leaking.	True	
ample collection date/times are provided.	True	
ppropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
sample Preservation Verified.	True	
here 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	
fultiphasic 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

Job Number: 600-189168-1

Client: ARCADIS U.S. Inc

Login Number: 189168

List Number: 2

List Source: Eurofins TestAmerica, Pensacola List Creation: 07/26/19 05:29 PM

Creator: Gore, Beija K

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	962492
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	3.5°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)	False	DI WATERS OUT OF HOLD
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	



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-189171-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

Revision: 1

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Skudchadker

Authorized for release by: 8/16/2019 4:04:12 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-189171-1

Comments

The report was revised on 08/16/19 to report the results for Sb, Be, Tl.

Receipt

The samples were received on 7/25/2019 10:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples: however, it was not listed on the Chain of Custody (COC).

GC/MS VOA

Method(s) 8260B: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: Cell 20-Square102-S-2-3-190723 (600-189171-1), Cell 20- Square96--S-2-3-190723 (600-189171-2), Cell 20-Square179-S-2-3-190723 (600-189171-3), Cell 19-Square23-S-2-3-190723 (600-189171-4) and Cell 20-Square193-S-2-3-190723 (600-189171-5).

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.

Metals

Method(s) 6010B: The method blank for prep batch 270635 contained Copper above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 600-270736 was outside control limits for Chromium (16%): (600-189168-A-1-A SD ^5)

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: Cell 20-Square102-S-2-3-190723 (600-189171-1), Cell 20-Square179-S-2-3-190723 (600-189171-3), Cell 20-Square193-S-2-3-190723 (600-189171-5), (600-189168-A-1-A ^5), (600-189168-A-1-B DU ^5) and (600-189168-A-1-C MS ^5). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

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

Job ID: 600-189171-1

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Job ID: 600-189171-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-189171-1	Cell 20-Square102-S-2-3-190723	Solid	07/23/19 09:53	07/25/19 10:11	
600-189171-2	Cell 20- Square96S-2-3-190723	Solid	07/23/19 10:27	07/25/19 10:11	
600-189171-3	Cell 20-Square179-S-2-3-190723	Solid	07/23/19 10:52	07/25/19 10:11	
600-189171-4	Cell 19-Square23-S-2-3-190723	Solid	07/23/19 11:51	07/25/19 10:11	
600-189171-5	Cell 20-Square193-S-2-3-190723	Solid	07/23/19 11:16	07/25/19 10:11	

Job ID: 600-189171-1

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Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 20-Square102-S-2-3-190723

Lab Sample ID: 600-189171-1 Date Collected: 07/23/19 09:53 **Matrix: Solid**

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.631	U H H3	5.01	0.631	ug/Kg		07/25/19 12:14	07/25/19 14:52	1
Ethylbenzene	1.02	U H H3	5.01	1.02	ug/Kg		07/25/19 12:14	07/25/19 14:52	1
Toluene	1.38	U H H3	5.01	1.38	ug/Kg		07/25/19 12:14	07/25/19 14:52	1
Xylenes, Total	1.13	U H H3	5.01	1.13	ug/Kg		07/25/19 12:14	07/25/19 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
							07/05/40 40 44	07/05/40 44 50	
1,2-Dichloroethane-d4 (Surr)	84		61 - 130				07/25/19 12:14	07/25/19 14:52	7
1,2-Dichloroethane-d4 (Surr) Dibromofluoromethane	84 82		61 - 130 68 - 140					07/25/19 14:52 07/25/19 14:52	1
, ,							07/25/19 12:14		1 1 1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	26.0	U	52.0	26.0	ug/Kg		07/29/19 09:30	07/29/19 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125				07/29/19 09:30	07/29/19 21:23	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.95	U	4.88	1.95	mg/Kg		07/29/19 10:17	07/30/19 23:34	1
Oil Range Organics (C28-C35)	1.95	U	4.88	1.95	mg/Kg		07/29/19 10:17	07/30/19 23:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	51		27 - 151				07/29/19 10:17	07/30/19 23:34	

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	1.58 J	3.96	0.529 mg/Kg			08/02/19 19:46	1		

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.114	U	0.385	0.114	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Arsenic	4.32		0.962	0.210	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Barium	424		0.962	0.0288	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Cadmium	0.0337	J	0.240	0.0246	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Chromium	1.56		0.481	0.0487	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Copper	1.39	В	0.481	0.167	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Iron	1340		19.2	2.43	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Manganese	14.0		1.44	0.0366	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Lead	1.20	J	2.40	0.505	mg/Kg		07/29/19 14:58	07/30/19 14:24	5
Selenium	0.249	U	1.92	0.249	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Zinc	5.19	J	7.21	0.519	mg/Kg		07/29/19 14:58	07/30/19 14:24	5
Antimony	0.356	J	2.40	0.223	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Beryllium	0.0817	J	0.240	0.0139	mg/Kg		07/29/19 14:58	07/30/19 14:22	1
Thallium	0.266	U	1.44	0.266	mg/Kg		07/29/19 14:58	07/30/19 14:22	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	3.21	U	15.2	3.21	ug/Kg		07/29/19 15:09	07/30/19 13:54	1

2

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID: 600-189171-1

Client Sample ID: Cell 20-Square102-S-2-3-190723 Lab Sample Date Collected: 07/23/19 09:53

Matrix: Solid

Job ID: 600-189171-1

Date Received: 07/25/19 10:11

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.8	1.0	1.0 %			07/29/19 09:23	1
Percent Solids	87.2	1.0	1.0 %			07/29/19 09:23	1

Client Sample ID: Cell 20- Square96--S-2-3-190723 Lab Sample ID: 600-189171-2

Date Collected: 07/23/19 10:27

Matrix: Solid

Date Received: 07/25/19 10:11

watrix:	Solia

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.355	UH	2.82	0.355	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Ethylbenzene	0.574	UH	2.82	0.574	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Toluene	0.777	UH	2.82	0.777	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Xylenes, Total	0.636	UH	2.82	0.636	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		61 - 130				07/25/19 12:14	07/25/19 15:16	1
Dibromofluoromethane	86		68 ₋ 140				07/25/19 12:14	07/25/19 15:16	1
Toluene-d8 (Surr)	97		50 - 130				07/25/19 12:14	07/25/19 15:16	1
	110		57 - 140				07/25/19 12:14	07/25/19 15:16	1

	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics (GRO) -C6-C10	24.1	U	48.2	24.1	ug/Kg		07/29/19 09:30	07/29/19 21:49	1
	Surrogate a.a.a-Trifluorotoluene (fid)	%Recovery	Qualifier	Limits 65 - 125				Prepared 07/29/19 09:30	Analyzed	Dil Fac
- 1	a,a,a-i i iliuolololuelle (llu)	104		03-123				01/23/13 03.30	01/23/13 21.43	,

Method: 8015B - Diesel Range Analyte	_	DRO) (GC Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.84	J	4.96	1.99	mg/Kg		07/29/19 10:17	07/31/19 00:01	1
Oil Range Organics (C28-C35)	1.99	U	4.96	1.99	mg/Kg		07/29/19 10:17	07/31/19 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		27 - 151				07/29/19 10:17	07/31/19 00:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualif	ier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	0.531 U	3.98	0.531	mg/Kg			08/02/19 20:40	1	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116	U	0.388	0.116	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Arsenic	1.48		0.971	0.212	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Barium	22.9		0.971	0.0291	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Cadmium	0.0680	J	0.243	0.0249	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Chromium	3.97		0.485	0.0491	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Copper	2.26	В	0.485	0.169	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Iron	3620		19.4	2.46	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Manganese	43.8		1.46	0.0370	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Lead	3.04		0.485	0.102	mg/Kg		07/29/19 14:58	07/30/19 14:26	1
Selenium	0.251	U	1.94	0.251	mg/Kg		07/29/19 14:58	07/30/19 14:26	1

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Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 20- Square96--S-2-3-190723

Lab Sample ID: 600-189171-2 Date Collected: 07/23/19 10:27 **Matrix: Solid**

Date Received: 07/25/19 10:11

Method: 6010B - Inductively	ly Coupled Plasma - Atomic Emission Spectrometry (Continued)									
Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Zinc	7.00		1.46	0.105	mg/Kg		07/29/19 14:58	07/30/19 14:26	1	
Antimony	0.225 l	U	2.43	0.225	mg/Kg		07/29/19 14:58	07/30/19 14:26	1	
Beryllium	0.180	J	0.243	0.0141	mg/Kg		07/29/19 14:58	07/30/19 14:26	1	
Thallium	0.269 ไ	U	1.46	0.269	mg/Kg		07/29/19 14:58	07/30/19 14:26	1	

Method: 7471A - Mercury in So	olid or Semis	solid Was	ste (Manual C	old Vap	or Techr	nique)			
Analyte	Result C	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.52	J	16.7	3.52	ug/Kg		07/29/19 15:09	07/30/19 13:56	1
General Chemistry Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7		1.0	1.0	%			07/29/19 09:23	1
Percent Solids	90.3		1.0	1.0	0/			07/29/19 09:23	4

Lab Sample ID: 600-189171-3 **Client Sample ID: Cell 20-Square179-S-2-3-190723** Date Collected: 07/23/19 10:52 Matrix: Solid

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.666	UH	5.29	0.666	ug/Kg		07/25/19 12:14	07/25/19 15:40	
Ethylbenzene	1.08	UH	5.29	1.08	ug/Kg		07/25/19 12:14	07/25/19 15:40	
Toluene	1.46	UH	5.29	1.46	ug/Kg		07/25/19 12:14	07/25/19 15:40	
Xylenes, Total	1.19	UH	5.29	1.19	ug/Kg		07/25/19 12:14	07/25/19 15:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	91		61 - 130				07/25/19 12:14	07/25/19 15:40	
Dibromofluoromethane	87		68 - 140				07/25/19 12:14	07/25/19 15:40	
Toluene-d8 (Surr)	97		50 - 130				07/25/19 12:14	07/25/19 15:40	
4-Bromofluorobenzene	110		57 - 140				07/25/19 12:14	07/25/19 15:40	
-C6-C10 Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	101		65 - 125				07/29/19 09:30	-	
Method: 8015B - Diesel Range	e Organics ((DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	2.97	J	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 07:02	
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 07:02	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	80		27 - 151				07/29/19 08:21	07/31/19 07:02	
Method: 300.0 - Anions, Ion C									
Method: 300.0 - Anions, Ion C Analyte Chloride		Qualifier	uble - MQL (Adj) - 3.98	_	Unit mg/Kg	D	Prepared	Analyzed 08/02/19 20:58	Dil Fa

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID: 600-189171-3 **Client Sample ID: Cell 20-Square179-S-2-3-190723** Date Collected: 07/23/19 10:52 **Matrix: Solid**

Date Received: 07/25/19 10:11

Method: 6010B - Inductive	•			•	•				
Analyte	Result Qu	ualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116 U		0.388	0.116	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Arsenic	5.58		0.971	0.212	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Barium	271		0.971	0.0291	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Cadmium	0.0249 U		0.243	0.0249	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Chromium	1.03		0.485	0.0491	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Copper	1.71 B		0.485	0.169	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Iron	921		19.4	2.46	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Manganese	7.66		1.46	0.0370	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Lead	0.631 J		2.43	0.510	mg/Kg		07/29/19 14:58	07/30/19 14:33	5
Selenium	0.251 U		1.94	0.251	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Zinc	4.34 J		7.28	0.524	mg/Kg		07/29/19 14:58	07/30/19 14:33	5
Antimony	0.519 J		2.43	0.225	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Beryllium	0.0680 J		0.243	0.0141	mg/Kg		07/29/19 14:58	07/30/19 14:29	1
Thallium	0.269 U		1.46	0.269	mg/Kg		07/29/19 14:58	07/30/19 14:29	1

Method: 7471A - Mercury in Sol	id or Semi	solid Was	ste (Manual)	Cold Vap	or Tec	hnique			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.58	U F1	17.0	3.58	ug/Kg		07/30/19 15:59	07/31/19 12:43	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.3	1.0	1.0 %			07/29/19 09:23	1
Percent Solids	84.7	1.0	1.0 %			07/29/19 09:23	1

Client Sample ID: Cell 19-Square23-S-2-3-190723

Lab Sample ID: 600-189171-4 Date Collected: 07/23/19 11:51 **Matrix: Solid** Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.507	UH	4.03	0.507	ug/Kg		07/25/19 12:14	07/25/19 16:05	1
Ethylbenzene	0.821	UH	4.03	0.821	ug/Kg		07/25/19 12:14	07/25/19 16:05	1
Toluene	1.11	UH	4.03	1.11	ug/Kg		07/25/19 12:14	07/25/19 16:05	1
Xylenes, Total	0.910	UH	4.03	0.910	ug/Kg		07/25/19 12:14	07/25/19 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		61 - 130				07/25/19 12:14	07/25/19 16:05	1
Dibromofluoromethane	88		68 ₋ 140				07/25/19 12:14	07/25/19 16:05	1
	94		50 - 130				07/25/19 12:14	07/25/19 16:05	1
Toluene-d8 (Surr)	J-1		57 - 140				07/05/40 40 44	07/25/19 16:05	

Result	Qualifier	MQL (Adi)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
18.7	U	37.5	18.7	ug/Kg		07/29/19 09:30	07/29/19 23:07	1
Recovery 103	Qualifier	65 - 125				Prepared 07/29/19 09:30	Analyzed 07/29/19 23:07	Dil Fac
	18.7	18.7 U Recovery Qualifier	18.7 U 37.5 Recovery Qualifier Limits	18.7 U 37.5 18.7 Recovery Qualifier Limits	18.7 U 37.5 18.7 ug/Kg Recovery Qualifier Limits	18.7 U 37.5 18.7 ug/Kg Recovery Qualifier Limits	18.7 U 37.5 18.7 ug/Kg 07/29/19 09:30 Recovery Qualifier Limits Prepared	18.7 U 37.5 18.7 ug/Kg 07/29/19 09:30 07/29/19 23:07 Recovery Qualifier Limits Prepared Analyzed

Method: 8015B - Diesei Range	Organics (DRO) (GC	5)					
Analyte	Result Qualifier	MQL (Adj)	SDL Un	nit D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.94 J	5.00	2.00 mg	g/Kg	07/29/19 08:21	07/31/19 06:49	1

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19-Square23-S-2-3-190723

Date Collected: 07/23/19 11:51

Date Received: 07/25/19 10:11

Lab Sample ID: 600-189171-4

Matrix: Solid

Organics ((DRO) (GC) (Continued))					
Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2.00	U	5.00	2.00	mg/Kg		07/29/19 08:21	07/31/19 06:49	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
76		27 - 151				07/29/19 08:21	07/31/19 06:49	1
	Result 2.00 %Recovery	Result Qualifier 2.00 U **Recovery Qualifier*	Result Qualifier MQL (Adj) 2.00 U 5.00 %Recovery Qualifier Limits	2.00 U 5.00 2.00 **Recovery Qualifier Limits*	Result Qualifier MQL (Adj) SDL Unit 2.00 U 5.00 2.00 mg/Kg %Recovery Qualifier Limits	Result Qualifier MQL (Adj) SDL Unit D 2.00 U 5.00 2.00 mg/Kg		Result 2.00 Qualifier U MQL (Adj) 5.00 SDL 2.00 Unit mg/Kg D 0/07/29/19 08:21 Prepared 07/31/19 06:49 Analyzed 07/31/19 06:49 %Recovery Qualifier Limits Limits Prepared Analyzed Analyzed

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier Dil Fac MQL (Adj) SDL Unit Prepared Analyzed 0.530 U 0.530 mg/Kg 08/02/19 21:52 Chloride 3.97

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.113	U	0.381	0.113	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Arsenic	2.04		0.952	0.208	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Barium	42.1		0.952	0.0286	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Cadmium	0.0905	J	0.238	0.0244	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Chromium	5.20		0.476	0.0482	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Copper	3.16	В	0.476	0.166	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Iron	5390		19.0	2.41	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Manganese	83.3		1.43	0.0363	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Lead	4.72		0.476	0.100	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Selenium	0.247	U	1.90	0.247	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Zinc	12.5		1.43	0.103	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Antimony	0.221	U	2.38	0.221	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Beryllium	0.338		0.238	0.0138	mg/Kg		07/29/19 14:58	07/30/19 14:41	1
Thallium	0.264	U	1.43	0.264	mg/Kg		07/29/19 14:58	07/30/19 14:41	1

Method: 7471A - Mercury in So	lid or Sem	isolid Wa	ste (Manual C	Cold Vap	or Tech	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.27	J	16.7	3.52	ug/Kg		07/30/19 15:59	07/31/19 12:49	1
General Chemistry									

Ocheral Onemistry						
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D Prepared	Analyzed	Dil Fac
Percent Moisture	24.1	1.0	1.0 %		07/29/19 09:23	1
Percent Solids	75.9	1.0	1.0 %		07/29/19 09:23	1

Client Sample ID: Cell 20-Square193-S-2-3-190723

0.597 U H

Benzene

Date Collected: 07/23/19 11:16								
Date Received: 07/25/19 10:11								
Method: 8260B - Volatile Organic	Compounds (GC/	MS)						
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac	

4.73

0.597 ug/Kg

Ethylbenzene	0.966	UH	4.73	0.966	ug/Kg	07/25/19 12:14	07/25/19 16:29	1
Toluene	1.31	UH	4.73	1.31	ug/Kg	07/25/19 12:14	07/25/19 16:29	1
Xylenes, Total	1.07	UH	4.73	1.07	ug/Kg	07/25/19 12:14	07/25/19 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		61 - 130			07/25/19 12:14	07/25/19 16:29	1
1,2-Dichloroethane-d4 (Surr) Dibromofluoromethane	91 86		61 - 130 68 - 140			***************************************	07/25/19 16:29 07/25/19 16:29	1 1
, ,	-					07/25/19 12:14		1 1 1

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Lab Sample ID: 600-189171-5

07/25/19 12:14 07/25/19 16:29

Lab Sample ID: 600-189171-5 **Client Sample ID: Cell 20-Square193-S-2-3-190723**

Date Collected: 07/23/19 11:16 **Matrix: Solid**

Date Received: 07/25/19 10:11

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	27.3	U	54.6	27.3	ug/Kg		07/29/19 09:30	07/29/19 23:37	1
-C6-C10									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125				07/29/19 09:30	07/29/19 23:37	1
Method: 8015B - Diesel Range	Organics (DRO) (GC)						
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.07	J	4.98	1.99	mg/Kg		07/29/19 08:21	07/31/19 07:15	1
Oil Range Organics (C28-C35)	2.14	J	4.98	1.99	mg/Kg		07/29/19 08:21	07/31/19 07:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		27 - 151				07/29/19 08:21	07/31/19 07:15	1
Method: 300.0 - Anions, Ion C	nromatogra	phy - Solu	ıble						
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.9		3.95	0.528	mg/Kg		-	08/02/19 21:16	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.117	U	0.392	0.117	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Arsenic	2.81		0.980	0.214	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Barium	152		0.980	0.0294	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Cadmium	0.0441	J	0.245	0.0251	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Chromium	2.36		0.490	0.0496	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Copper	2.08	В	0.490	0.171	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Iron	2260		19.6	2.48	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Manganese	21.9		1.47	0.0374	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Lead	2.65		2.45	0.515	mg/Kg		07/29/19 14:58	07/30/19 14:59	5
Selenium	0.254	Ü	1.96	0.254	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Zinc	7.08	J	7.35	0.529	mg/Kg		07/29/19 14:58	07/30/19 14:59	5
Antimony	0.227	U	2.45	0.227	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Beryllium	0.152	J	0.245	0.0142	mg/Kg		07/29/19 14:58	07/30/19 14:43	1
Thallium	0.272	U	1.47	0.272	mg/Kg		07/29/19 14:58	07/30/19 14:43	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.52	U	16.7	3.52	ug/Kg		07/30/19 15:59	07/31/19 12:51	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.7		1.0	1.0	%			07/29/19 09:23	1
Percent Solids	89.3		1.0	1.0	%			07/29/19 09:23	1

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

G			

Qualifier Description $\overline{\mathsf{H}}$ Sample was prepped or analyzed beyond the specified holding time

Н3 Sample was received and analyzed past holding time.

U Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
Qualifiei	Qualifier Description

F1 MS and/or MSD Recovery is outside acceptance limits.

F2 MS/MSD RPD exceeds control limits

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. J

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Indicates the analyte was analyzed for but not detected.

Metals

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

В Compound was found in the blank and sample.

F1 MS and/or MSD Recovery is outside acceptance limits.

F3 Duplicate RPD exceeds the control limit

F5 Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the

absolute difference is less than the RL

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. J

U Indicates the analyte was analyzed for but not detected.

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 **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Eurofins TestAmerica, Houston

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Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.				
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)				

_

5

7

q

11

16

14

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

			Pe	ercent Surre	ogate Reco
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-189171-1	Cell 20-Square102-S-2-3-19072	84	82	95	109
600-189171-2	Cell 20- Square96- -S-2-3-190723	81	86	97	110
600-189171-3	Cell 20-Square179-S-2-3-190723	91	87	97	110
600-189171-4	Cell 19-Square23-S-2-3-190723	89	88	94	108
600-189171-5	Cell 20-Square193-S-2-3-190723	91	86	93	110
LCS 600-270286/3	Lab Control Sample	84	90	99	118
LCSD 600-270286/4	Lab Control Sample Dup	82	86	97	116
MB 600-270286/6	Method Blank	96	89	96	109
Surrogate Legend					

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

		TFT-F2	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(65-125)	
400-173761-A-1-C MS	Matrix Spike	103	
400-173761-A-1-D MSD	Matrix Spike Duplicate	100	
600-189171-1	Cell 20-Square102-S-2-3-190723	102	
600-189171-2	Cell 20- Square96- -S-2-3-190723	104	
600-189171-3	Cell 20-Square179-S-2-3-190723	101	
600-189171-4	Cell 19-Square23-S-2-3-190723	103	
600-189171-5	Cell 20-Square193-S-2-3-190723	104	
LCS 400-449881/1-A	Lab Control Sample	102	
MB 400-449881/2-A	Method Blank	103	

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
	OTPH1	
Client Sample ID	(27-151)	
Matrix Spike	27	
Matrix Spike Duplicate	80	
Cell	51	
	Matrix Spike Matrix Spike Duplicate	Client Sample ID (27-151) Matrix Spike 27 Matrix Spike Duplicate 80 Cell 51

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

600-189171-2 C 600-189171-3 C 20 600-189171-4 C	lient Sample ID ell 20- Square96S-2-3-19072 ell 0-Square179-S-2-3-190723 ell 9-Square23-S-2-3-190723	OTPH1 (27-151) 76 80 76	 	
600-189171-2 C 600-189171-3 C 600-189171-4 C	ell 20- Square96S-2-3-19072 ell 0-Square179-S-2-3-190723 ell	76 80	 	
600-189171-3 C 20 600-189171-4 C	ell 0-Square179-S-2-3-190723 ell	80	 	
600-189171-4 C	0-Square179-S-2-3-190723 ell			
600-189171-4 C	ell	76		
19		76		
	0 Sauaro23 S 2 3 100723			
600-189171-5 C	9-34ua1623-3-2-3-190123			
	ell	76		
20	0-Square193-S-2-3-190723			
600-189207-B-1-A MS M	latrix Spike	82		
600-189207-B-1-B MSD M	latrix Spike Duplicate	89		
LCS 400-449843/2-A La	ab Control Sample	90		
LCS 400-449874/2-A La	ab Control Sample	73		
MB 400-449843/1-A M	lethod Blank	94		
MB 400-449874/1-A M	lethod Blank	70		

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

MB MB

Lab Sample ID: MB 600-270286/6

Matrix: Solid

Analysis Batch: 270286

Client Sam	ole ID:	Meth	od Blank	
	Prep	Type:	Total/NA	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			07/25/19 09:45	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			07/25/19 09:45	1
Toluene	1.38	U	5.00	1.38	ug/Kg			07/25/19 09:45	1
Xylenes, Total	1.13	Ü	5.00	1.13	ug/Kg			07/25/19 09:45	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 96 61 - 130 07/25/19 09:45 Dibromofluoromethane 89 68 - 140 07/25/19 09:45 Toluene-d8 (Surr) 96 50 - 130 07/25/19 09:45 109 57 - 140 4-Bromofluorobenzene 07/25/19 09:45

Lab Sample ID: LCS 600-270286/3

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	54.43		ug/Kg		109	70 - 131	_
Ethylbenzene	50.0	52.88		ug/Kg		106	66 - 130	
Toluene	50.0	52.93		ug/Kg		106	67 - 130	
Xylenes, Total	100	104.6		ug/Kg		105	63 - 130	
m-Xylene & p-Xylene	50.0	52.10		ug/Kg		104	64 - 130	
o-Xylene	50.0	52.47		ug/Kg		105	62 - 130	

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 84 61 - 130 Dibromofluoromethane 90 68 - 140 Toluene-d8 (Surr) 99 50 - 130 4-Bromofluorobenzene 57 - 140 118

Lab Sample ID: LCSD 600-270286/4

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene 50.0 47.02 ug/Kg 94 70 - 131 15 30 Ethylbenzene 50.0 46.53 ug/Kg 93 66 - 130 13 30 Toluene 50.0 46.69 93 67 - 130 30 ug/Kg 13 Xylenes, Total 100 92.91 ug/Kg 93 63 - 13012 30 m-Xylene & p-Xylene 50.0 45.86 92 64 - 130 30 ug/Kg 13 o-Xylene 50.0 47.05 ug/Kg 94 62 - 130 11 30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		61 - 130
Dibromofluoromethane	86		68 ₋ 140
Toluene-d8 (Surr)	97		50 - 130
4-Bromofluorobenzene	116		57 - 140

Eurofins TestAmerica, Houston

Job ID: 600-189171-1

Dil Fac

Dil Fac

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-449881/2-A

Matrix: Solid Analysis Batch: 449860

Client: ARCADIS U.S. Inc

MR MR

Result Qualifier Analyte

Gasoline Range Organics (GRO) 50.0 U -C6-C10

MR MR

Surrogate %Recovery Qualifier a,a,a-Trifluorotoluene (fid) 103

Lab Sample ID: LCS 400-449881/1-A

Limits 65 - 125

MQL (Adj)

100

Unit

ug/Kg

Unit

ug/Kg

SDL Unit

LCS LCS

MS MS

MSD MSD

57990

Result Qualifier

56900

Result Qualifier

50.0 ug/Kg

07/29/19 09:30 07/29/19 11:26

07/29/19 09:30 07/29/19 11:26

Prepared

Prepared

D %Rec

96

%Rec

98

Client Sample ID: Matrix Spike Duplicate

%Rec.

Limits

10 - 150

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449881

Analyzed

Analyzed

Prep Type: Total/NA **Prep Batch: 449881**

%Rec.

Client Sample ID: Matrix Spike

%Rec.

Limits

10 - 150

Prep Type: Total/NA

Prep Batch: 449881

Prep Type: Total/NA

Prep Batch: 449881

Prep Type: Total/NA

Prep Batch: 449843

RPD

RPD

Limit

32

Client Sample ID: Method Blank

Spike Analyte Added Result Qualifier Unit %Rec Limits 1000 1046 105 62 - 141 Gasoline Range Organics (GRO) ug/Kg

Spike

Added

48300

Limits

65 - 125

Spike

Added

48300

-C6-C10

Matrix: Solid

LCS LCS

Sample Sample

10600

Result Qualifier

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 102

Lab Sample ID: 400-173761-A-1-C MS

Matrix: Solid

Analysis Batch: 449860

Analysis Batch: 449860

Analyte Gasoline Range Organics (GRO)

-C6-C10

MS MS Surrogate a,a,a-Trifluorotoluene (fid) 103

%Recovery Qualifier

Lab Sample ID: 400-173761-A-1-D MSD **Matrix: Solid**

Analysis Batch: 449860

Analyte Gasoline Range Organics (GRO)

Surrogate a,a,a-Trifluorotoluene (fid)

-C6-C10

MSD MSD %Recovery Qualifier

Sample Sample

10600

Result Qualifier

100

I imits 65 - 125

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

Lab Sample ID: MB 400-449843/1-A

Matrix: Solid

Analysis Batch: 450128

MB MB Result Qualifier Analyte

2.00 U Diesel Range Organics [C10-C28]

Oil Range Organics (C28-C35) 2.00 U

5.00 5.00

MQL (Adj)

2.00 mg/Kg 2.00 mg/Kg

SDL Unit

07/29/19 08:21 07/31/19 04:18

Prepared

07/29/19 08:21 07/31/19 04:18

Client Sample ID: Method Blank

Eurofins TestAmerica, Houston

Analyzed

Dil Fac

Job ID: 600-189171-1 Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 400-449843/1-A **Matrix: Solid**

Analysis Batch: 450128

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

Prep Batch: 449843

Prep Type: Total/NA

Prep Batch: 449843

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

MB MB

Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac o-Terphenyl 94 27 - 151 07/29/19 08:21 07/31/19 04:18

Lab Sample ID: LCS 400-449843/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 450128 **Prep Batch: 449843**

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Analyte D 276 196.0 63 - 153 mg/Kg Diesel Range Organics

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 90 27 - 151

Lab Sample ID: 600-189207-B-1-A MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 450128

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec

2.07 J 267 62 - 204 64 Diesel Range Organics 1714 mg/Kg

[C10-C28]

MS MS

Surrogate %Recovery Qualifier Limits o-Terphenyl 82 27 - 151

Lab Sample ID: 600-189207-B-1-B MSD

Matrix: Solid

Analysis Batch: 450128

Prep Batch: 449843 Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Unit Limits RPD Limit Analyte D %Rec 272 2.07 J 62 - 204 30 Diesel Range Organics 195.5 mg/Kg 71 13

[C10-C28]

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 151 89

Lab Sample ID: MB 400-449874/1-A

Analysis Batch: 450125

Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA Prep Batch: 449874

MB MB SDL Unit Result Qualifier MQL (Adj) Prepared Analyzed

Analyte Dil Fac Diesel Range Organics [C10-C28] 2.00 U 5.00 2.00 mg/Kg 07/29/19 10:17 07/30/19 21:24 2.00 U 5.00 07/29/19 10:17 07/30/19 21:24 Oil Range Organics (C28-C35) 2.00 mg/Kg

MB MB

Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed o-Terphenyl 70 27 - 151 07/29/19 10:17 07/30/19 21:24

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

LCS LCS

176.2

Result Qualifier

Spike

Added

Limits

27 - 151

Spike

Added

276

276

Project/Site: Chevron - Jal Land Farm Soils 2019

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

LCS LCS

Sample Sample

MS MS

Sample Sample

MSD MSD

%Recovery Qualifier

80

Result Qualifier

2.00 U F1 F2

MB MB

0.534 U

Result Qualifier

%Recovery Qualifier

27

Result Qualifier

2.00 U F1 F2

%Recovery Qualifier

73

Lab Sample ID: LCS 400-449874/2-A

Matrix: Solid Analysis Batch: 450524

Analyte **Diesel Range Organics**

[C10-C28] Surrogate

o-Terphenyl

Lab Sample ID: 600-189168-G-1-A MS **Matrix: Solid**

Analysis Batch: 450125

Diesel Range Organics [C10-C28]

Surrogate o-Terphenyl

Analyte

Lab Sample ID: 600-189168-G-1-B MSD **Matrix: Solid**

Analysis Batch: 450125

Diesel Range Organics

[C10-C28]

Analyte

Chloride

Analyte

Surrogate o-Terphenyl

Lab Sample ID: MB 600-271080/1-A

Matrix: Solid Analysis Batch: 271032

Lab Sample ID: LCS 600-271080/2-A **Matrix: Solid**

Analysis Batch: 271032

Analyte Chloride

Method: 300.0 - Anions, Ion Chromatography

Added 200

Spike

192.2

LCS LCS

Result Qualifier

SDL Unit

0.534 mg/Kg

Unit mg/Kg D %Rec

Prepared

Limits 96 90 - 110

%Rec.

Client Sample ID: Lab Control Sample Prep Type: Total/NA **Prep Batch: 449874**

%Rec. Limits

%Rec 64 63 - 153

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 449874 %Rec.

MS MS Result Qualifier Unit %Rec Limits 67.28 F1 24 62 - 204 mg/Kg

Unit

mg/Kg

Limits

27 - 151

Spike

Added

Limits

27 - 151

MQL (Adj)

4.00

275

Client Sample ID: Matrix Spike Duplicate

187.6 F2

MSD MSD Result Qualifier Unit

D %Rec mg/Kg

68

Limits 62 - 204

%Rec.

RPD Limit 94

Prep Type: Total/NA

Prep Batch: 449874

Client Sample ID: Method Blank

Prep Type: Soluble

Client Sample ID: Lab Control Sample

Analyzed

08/02/19 16:12

Prep Type: Soluble

Eurofins TestAmerica, Houston

RPD

Dil Fac

Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-189171-1 MS

Client Sample ID: Cell 20-Square102-S-2-3-190723

Prep Type: Soluble

Analysis Batch: 271032

Matrix: Solid

Selenium

Antimony

Bervllium

Thallium

Zinc

Client: ARCADIS U.S. Inc

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits

Chloride 1.58 J 99.0 98.30 98 80 - 120 mg/Kg

Lab Sample ID: 600-189171-1 MSD Client Sample ID: Cell 20-Square102-S-2-3-190723

Matrix: Solid Prep Type: Soluble

Analysis Batch: 271032

RPD MSD MSD %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit 1.58 J 99.0 Chloride 96.87 mg/Kg 80 - 120 20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

0.259 U

0.108 U

0.232 U

0.0145 U

0.277 U

Lab Sample ID: MB 600-270635/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 270736 Prep Batch: 270635 MB MB Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Silver 0.119 U 0.119 mg/Kg 07/29/19 14:58 07/30/19 13:46 0.400 Arsenic 0.218 U 07/29/19 14:58 07/30/19 13:46 1.00 0.218 mg/Kg Barium 0.0300 U 1.00 0.0300 mg/Kg 07/29/19 14:58 07/30/19 13:46 Cadmium 0.0256 U 0.250 0.0256 mg/Kg 07/29/19 14:58 07/30/19 13:46 Chromium 0.0506 U 0.500 0.0506 mg/Kg 07/29/19 14:58 07/30/19 13:46 Copper 0.2650 J 0.500 0.174 mg/Kg 07/29/19 14:58 07/30/19 13:46 07/29/19 14:58 07/30/19 13:46 Iron 2.53 U 20.0 2.53 mg/Kg Manganese 0.0381 U 1.50 0.0381 mg/Kg 07/29/19 14:58 07/30/19 13:46 Lead 0.105 U 0.500 0.105 mg/Kg 07/29/19 14:58 07/30/19 13:46

Lab Sample ID: LCSSRM 600-270635/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

2.00

1.50

2.50

0.250

1.50

0.259 mg/Kg

0.108 mg/Kg

0.232 mg/Kg

0.0145 mg/Kg

0.277 mg/Kg

Analysis Batch: 270736 Prep Batch: 270635

	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	25.8	20.87		mg/Kg		80.9	67.1 - 106. 6	
Arsenic	69.4	62.63		mg/Kg		90.3	66.6 - 106. 6	
Barium	393	321.3		mg/Kg		81.7	64.6 - 106. 6	
Cadmium	268	251.3		mg/Kg		93.8	71.3 ₋ 106. 7	
Chromium	63.6	50.26		mg/Kg		79.0	71.9 - 106. 6	
Copper	175	160.5		mg/Kg		91.7	72.0 - 106. 9	
Iron	17700	12130		mg/Kg		68.6	50.1 - 106. 8	

Eurofins TestAmerica, Houston

07/29/19 14:58 07/30/19 13:46

07/29/19 14:58 07/30/19 13:46

07/29/19 14:58 07/30/19 13:46

07/29/19 14:58 07/30/19 13:46

07/29/19 14:58 07/30/19 13:46

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-270635/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 270736 Prep Batch: 270635** Spike LCSSRM LCSSRM %Rec. Added Result Qualifier **Analyte** Unit D %Rec Limits Manganese 616 471.9 mg/Kg 76.6 64.1 - 106. 7 Lead 164 147.4 71.3 - 106. mg/Kg 89.9 7 Selenium 155 135.5 mg/Kg 65.2 - 106. 5 Zinc 482 412.2 mg/Kg 85.5 69.7 - 106.

7 Lab Sample ID: 600-189168-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

31.23

246.8

68.31

mg/Kg

mg/Kg

mg/Kg

120

293

81.0

Antimony

Beryllium

Thallium

Analysis Batch: 270736	Sample	Sample	Spike	MS	MS				Prep Batch: 270635 %Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.118	U	12.4	13.47		mg/Kg		109	75 - 125
Arsenic	3.08		49.5	56.98		mg/Kg		109	75 - 125
Barium	274		49.5	321.1	4	mg/Kg		95	75 - 125
Cadmium	0.153	J	49.5	54.70		mg/Kg		110	75 ₋ 125
Chromium	2.60		49.5	46.97		mg/Kg		90	75 - 125
Copper	2.20	В	49.5	54.36		mg/Kg		105	75 - 125
Iron	2480		495	3588	4	mg/Kg		223	75 ₋ 125
Manganese	24.9		49.5	72.08		mg/Kg		95	75 - 125
Selenium	0.256	U	49.5	52.18		mg/Kg		105	75 ₋ 125
Antimony	0.515	J	49.5	40.73		mg/Kg		81	75 ₋ 125
Beryllium	0.272		49.5	47.01		mg/Kg		94	75 - 125
Thallium	0.274	U	49.5	45.21		mg/Kg		91	75 ₋ 125

Lab Sample ID: 600-189168-A-1-C MS ^5 **Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 270736

Selenium

Antimony

Beryllium

Zinc

Prep Batch: 270635 Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits **Analyte** 12.4 Silver 0.589 Ū 13.84 mg/Kg 112 75 - 125 mg/Kg Arsenic 3.94 49.5 63.76 121 75 - 125 49.5 360.6 4 132 75 - 125 Barium 295 mg/Kg Cadmium 0.173 49.5 62.03 mg/Kg 125 75 - 125 Chromium 3.19 49.5 57.25 mg/Kg 109 75 - 125 Copper 2.77 B 49.5 61.46 mg/Kg 119 75 - 125 Iron 2600 495 4064 4 mg/Kg 297 75 - 125 49.5 86.26 75 - 125 Manganese 27.7 mg/Kg 118 49.5 Lead 57.77 mg/Kg 113 75 - 125 1.88 J

58.51

36.91

45.99

54.55

49.5

24.8

49.5

49.5

1.28 U

8.71

2.38

0.396 J

Eurofins TestAmerica, Houston

75 - 125

75 - 125

75 - 125

75 - 125

118

114

88

109

mg/Kg

mg/Kg

mg/Kg

mg/Kg

6 20.0 - 106

7

8

72.4 - 106.

63.2 - 106.

26.0

84.2

Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-189168-A-1-C MS ^5

Lab Sample ID: 600-189168-A-1-B DU

Matrix: Solid

Thallium

Client: ARCADIS U.S. Inc

Analysis Batch: 270736 Sample Sample Spike Analyte

Result Qualifier Added 1.37 U 49.5

MS MS Result Qualifier 54.33

Unit

%Rec mg/Kg

Limits 75 ₋ 125 110

Client Sample ID: Duplicate

Client Sample ID: Matrix Spike

%Rec.

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 270635

Matrix: Solid Analysis Batch: 270736 Prep Batch: 270635 Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit RPD Limit Silver 0.118 U 0.119 U NC 20 mg/Kg Arsenic 3.08 2.905 mg/Kg 6 20 Barium 274 270.1 mg/Kg 2 20 Cadmium 0.153 0.09500 JF5 mg/Kg 47 20 mg/Kg Chromium 2.60 2.675 3 20 Copper 2.20 2.000 mg/Kg 10 20 Iron 2480 2599 mg/Kg 5 20 Manganese 24.9 24.90 mg/Kg 0.1 20 Selenium 0.256 U 0.259 U NC 20 mg/Kg 71 20 Antimony 0.515 J 0.2450 JF5 mg/Kg Beryllium mq/Kq 52 0.272 0.1600 JF5 20 Thallium NC 20 0.274 U 0.277 U mg/Kg

Lab Sample ID: 600-189168-A-1-B DU ^5

Matrix: Solid

Client Sample ID: Duplicate Prep Type: Total/NA

Analysis Batch: 270736						Trep Type: Total/14/		
						Prep Batch: 27		
Sample	Sample	DU	DU				RPD	
Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
0.589	U	0.595	U	mg/Kg		NC	20	
3.94	J	3.475	J	mg/Kg		12	20	
295		276.8		mg/Kg		6	20	
0.173	J	0.128	U	mg/Kg		NC	20	
3.19		3.150		mg/Kg		1	20	
2.77	В	2.400	J	mg/Kg		14	20	
2600		2610		mg/Kg		0.5	20	
27.7		26.83		mg/Kg		3	20	
1.88	J	2.450	JF5	mg/Kg		26	20	
1.28	U	1.30	Ü	mg/Kg		NC	20	
8.71		7.325	J	mg/Kg		17	20	
2.38	J	1.575	J F5	mg/Kg		41	20	
0.396	J	0.1250	J F5	mg/Kg		104	20	
1.37	U	1.39	U	mg/Kg		NC	20	
	Result 0.589 3.94 295 0.173 3.19 2.77 2600 27.7 1.88 1.28 8.71 2.38 0.396	0.173 J 3.19 2.77 B 2600 27.7 1.88 J 1.28 U	Result Qualifier Result 0.589 U 0.595 3.94 J 3.475 295 276.8 0.173 J 0.128 3.19 3.150 2.77 B 2.400 2600 2610 27.7 26.83 1.88 J 2.450 1.28 U 1.30 8.71 7.325 2.38 J 1.575 0.396 J 0.1250	Result Qualifier Result Qualifier 0.589 U 0.595 U 3.94 J 3.475 J 295 276.8 U 3.150 U 3.19 3.150 J 2.400 J 2.400 J 2.400 J 2.400 J 2.400 J 2.450 J F5 1.28 U 1.30 U 7.325 J 1.575 J F5 0.396 J 0.1250 J F5 0.1250 0.1250 J F5 0.1250<	Result Qualifier Result Qualifier Unit 0.589 U 0.595 U mg/Kg 3.94 J 3.475 J mg/Kg 295 276.8 mg/Kg 0.173 J 0.128 U mg/Kg 3.19 3.150 mg/Kg 2.77 B 2.400 J mg/Kg 2600 2610 mg/Kg 27.7 26.83 mg/Kg 1.88 J 2.450 J F5 mg/Kg 1.28 U 1.30 U mg/Kg 8.71 7.325 J mg/Kg 2.38 J 1.575 J F5 mg/Kg 0.396 J 0.1250 J F5 mg/Kg	Result 0.589 Qualifier Result 0.595 Qualifier Unit 0.595 D 3.94 J 3.475 J mg/Kg 295 276.8 mg/Kg 0.173 J 0.128 U mg/Kg 3.19 3.150 mg/Kg 2.77 B 2.400 J mg/Kg 2600 2610 mg/Kg 27.7 26.83 mg/Kg 1.88 J 2.450 J F5 mg/Kg 1.28 U 1.30 U mg/Kg 8.71 7.325 J mg/Kg 2.38 J 1.575 J F5 mg/Kg 0.396 J 0.1250 J F5 mg/Kg	Sample Result Qualifier DU DU DU Magnetic Result Qualifier Qualifier Unit D Magnetic D Magnetic RPD Magnetic	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-270637/7-A

Matrix: Solid

Analysis Batch: 270749

MB MB

Analyte Result Qualifier 3.25 U Mercury

MQL (Adj) 15.5

SDL Unit 3.25 ug/Kg

Prepared 07/29/19 15:09 07/30/19 13:01

Analyzed

Prep Type: Total/NA

Prep Batch: 270637

Client Sample ID: Method Blank

Dil Fac

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCSSRM 600-270637/8-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 270749 Prep Batch: 270637 Spike LCSSRM LCSSRM %Rec.

Added Result Qualifier Analyte Unit %Rec Limits 29000 Mercury 32390 ug/Kg 111.7 59.7 - 115. 2

Lab Sample ID: 600-189195-C-4-G MS

Matrix: Solid

Analysis Batch: 270749 Prep Batch: 270637 Sample Sample Spike MS MS %Rec. **Result Qualifier** Added Limits Analyte Result Qualifier Unit D %Rec 75 ₋ 125 Mercury 91.3 242 367.8 ug/Kg 114

Lab Sample ID: 600-189195-C-4-F DU

Matrix: Solid

Analysis Batch: 270749

DU DU Sample Sample **RPD** Analyte Result Qualifier Result Qualifier Unit **RPD** Limit 134.6 F3 Mercury 91.3 ug/Kg

Lab Sample ID: MB 600-270759/7-A

Matrix: Solid

Analysis Batch: 270864

MR MR

Analyte Result Qualifier MQL (Adj) SDL Unit **Prepared** Analyzed 07/30/19 15:59 07/31/19 12:39 Mercury 3.25 U 15.5 3.25 ug/Kg

Lab Sample ID: LCSSRM 600-270759/8-A **Matrix: Solid**

Analysis Batch: 270864

Spike LCSSRM LCSSRM %Rec. Analyte Added Result Qualifier Unit %Rec Limits 29000 Mercury 32910 ug/Kg 113.5 59.7 - 115.

MS MS

152.2 F1

3.58 U

Result Qualifier

Unit

ug/Kg

ug/Kg

Spike

Added

250

Lab Sample ID: 600-189171-3 MS

Matrix: Solid

Mercury

Analysis Batch: 270864

Analyte

Lab Sample ID: 600-189171-3 DU

Analysis Batch: 270864

Matrix: Solid DU DU Sample Sample Result Qualifier Unit

Sample Sample Result Qualifier

3.58 U F1

Analyte Result Qualifier 3.58 U F1 Mercury

Prep Type: Total/NA Prep Batch: 270759

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 270637

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270759

Client Sample ID: Cell 20-Square179-S-2-3-190723 Prep Type: Total/NA

Prep Batch: 270759

%Rec. D %Rec Limits 61 75 - 125

Client Sample ID: Cell 20-Square179-S-2-3-190723

Prep Type: Total/NA Prep Batch: 270759

RPD

RPD Limit NC

QC Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 2540B - Percent Moisture

Lab Sample ID: 600-189171-1 DU Client Sample ID: Cell 20-Square102-S-2-3-190723

Matrix: Solid Prep Type: Total/NA Analysis Batch: 270569

 Sample Analyte
 Result Percent Moisture
 Qualifier
 Result Qualifier
 Qualifier Wesult Fercent Moisture
 Unit Mark
 D
 RPD RPD Limit Moisture

 Percent Moisture
 12.8
 12.5
 %
 3
 20

 Percent Solids
 87.2
 87.5
 %
 0.4
 20

8

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14

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units	
Gasoline Range Organics (GRO)-C6-C10	100	50.0	ug/Kg	

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

Prep: 3546

Analyte	MQL	MDL	Units
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	17.0	3.58	ug/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

Eurofins TestAmerica, Houston

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41

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Analysis Batch: 270286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	8260B	270363
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	8260B	270363
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	8260B	270363
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	8260B	270363
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	8260B	270363
MB 600-270286/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-270286/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-270286/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 270363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	5035	
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	5035	
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	5035	
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	5035	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 449860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	8015B	449881
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	8015B	449881
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	8015B	449881
MB 400-449881/2-A	Method Blank	Total/NA	Solid	8015B	449881
LCS 400-449881/1-A	Lab Control Sample	Total/NA	Solid	8015B	449881
400-173761-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B	449881
400-173761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	449881

Prep Batch: 449881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	5035	_
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	5035	
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	5035	
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	5035	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	5035	
MB 400-449881/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-449881/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-173761-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
400-173761-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 449843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	3546	
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	3546	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	3546	
MB 400-449843/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-449843/2-A	Lab Control Sample	Total/NA	Solid	3546	

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Job ID: 600-189171-1

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

GC Semi VOA (Continued)

Prep Batch: 449843 (Continued)
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-B-1-A MS	Matrix Spike	Total/NA	Solid	3546	
600-189207-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 449874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	3546	
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	3546	
MB 400-449874/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-449874/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-189168-G-1-A MS	Matrix Spike	Total/NA	Solid	3546	
600-189168-G-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 450125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	8015B	449874
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	8015B	449874
MB 400-449874/1-A	Method Blank	Total/NA	Solid	8015B	449874
600-189168-G-1-A MS	Matrix Spike	Total/NA	Solid	8015B	449874
600-189168-G-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	449874

Analysis Batch: 450128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	8015B	449843
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	8015B	449843
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	8015B	449843
MB 400-449843/1-A	Method Blank	Total/NA	Solid	8015B	449843
LCS 400-449843/2-A	Lab Control Sample	Total/NA	Solid	8015B	449843
600-189207-B-1-A MS	Matrix Spike	Total/NA	Solid	8015B	449843
600-189207-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	449843

Analysis Batch: 450524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-449874/2-A	Lab Control Sample	Total/NA	Solid	8015B	449874

HPLC/IC

Analysis Batch: 271032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Soluble	Solid	300.0	271080
600-189171-2	Cell 20- Square96S-2-3-190723	Soluble	Solid	300.0	271080
600-189171-3	Cell 20-Square179-S-2-3-190723	Soluble	Solid	300.0	271080
600-189171-4	Cell 19-Square23-S-2-3-190723	Soluble	Solid	300.0	271080
600-189171-5	Cell 20-Square193-S-2-3-190723	Soluble	Solid	300.0	271080
MB 600-271080/1-A	Method Blank	Soluble	Solid	300.0	271080
LCS 600-271080/2-A	Lab Control Sample	Soluble	Solid	300.0	271080
600-189171-1 MS	Cell 20-Square102-S-2-3-190723	Soluble	Solid	300.0	271080
600-189171-1 MSD	Cell 20-Square102-S-2-3-190723	Soluble	Solid	300.0	271080

Leach Batch: 271080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Soluble	Solid	DI Leach	

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Job ID: 600-189171-1

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

HPLC/IC (Continued)

Leach Batch: 271080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-2	Cell 20- Square96S-2-3-190723	Soluble	Solid	DI Leach	
600-189171-3	Cell 20-Square179-S-2-3-190723	Soluble	Solid	DI Leach	
600-189171-4	Cell 19-Square23-S-2-3-190723	Soluble	Solid	DI Leach	
600-189171-5	Cell 20-Square193-S-2-3-190723	Soluble	Solid	DI Leach	
MB 600-271080/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-271080/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-189171-1 MS	Cell 20-Square102-S-2-3-190723	Soluble	Solid	DI Leach	
600-189171-1 MSD	Cell 20-Square102-S-2-3-190723	Soluble	Solid	DI Leach	

Metals

Prep Batch: 270635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	3050B	
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	3050B	
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	3050B	
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	3050B	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	3050B	
MB 600-270635/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-270635/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-189168-A-1-C MS	Matrix Spike	Total/NA	Solid	3050B	
600-189168-A-1-C MS ^5	Matrix Spike	Total/NA	Solid	3050B	
600-189168-A-1-B DU	Duplicate	Total/NA	Solid	3050B	
600-189168-A-1-B DU ^5	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 270637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	7471A	
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	7471A	
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-189195-C-4-G MS	Matrix Spike	Total/NA	Solid	7471A	
600-189195-C-4-F DU	Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 270736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	6010B	270635
MB 600-270635/1-A	Method Blank	Total/NA	Solid	6010B	270635
LCSSRM 600-270635/2-A	Lab Control Sample	Total/NA	Solid	6010B	270635
600-189168-A-1-C MS	Matrix Spike	Total/NA	Solid	6010B	270635
600-189168-A-1-C MS ^5	Matrix Spike	Total/NA	Solid	6010B	270635
600-189168-A-1-B DU	Duplicate	Total/NA	Solid	6010B	270635
600-189168-A-1-B DU ^5	Duplicate	Total/NA	Solid	6010B	270635

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QC Association Summary

Client: ARCADIS U.S. Inc

Job ID: 600-189171-1 Project/Site: Chevron - Jal Land Farm Soils 2019

Metals

Analysis Batch: 270749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	7471A	270637
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	7471A	270637
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	270637
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	270637
600-189195-C-4-G MS	Matrix Spike	Total/NA	Solid	7471A	270637
600-189195-C-4-F DU	Duplicate	Total/NA	Solid	7471A	270637

Prep Batch: 270759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	_
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	7471A	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	7471A	
MB 600-270759/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-270759/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-189171-3 MS	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	
600-189171-3 DU	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	

Analysis Batch: 270864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	270759
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	7471A	270759
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	7471A	270759
MB 600-270759/7-A	Method Blank	Total/NA	Solid	7471A	270759
LCSSRM 600-270759/8-A	Lab Control Sample	Total/NA	Solid	7471A	270759
600-189171-3 MS	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	270759
600-189171-3 DU	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	7471A	270759

General Chemistry

Analysis Batch: 270569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-1	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	2540B	
600-189171-2	Cell 20- Square96S-2-3-190723	Total/NA	Solid	2540B	
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	2540B	
600-189171-4	Cell 19-Square23-S-2-3-190723	Total/NA	Solid	2540B	
600-189171-5	Cell 20-Square193-S-2-3-190723	Total/NA	Solid	2540B	
600-189171-1 DU	Cell 20-Square102-S-2-3-190723	Total/NA	Solid	2540B	

Eurofins TestAmerica, Houston

Client Sample ID: Cell 20-Square102-S-2-3-190723

Date Collected: 07/23/19 09:53

Lab Sample ID: 600-189171-1

Matrix: Solid

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	270363	07/25/19 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 14:52	WS1	TAL HOU
Total/NA	Prep	5035			9.613 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 21:23	SAB	TAL PEN
Total/NA	Prep	3546			15.38 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/30/19 23:34	S1S	TAL PEN
Soluble	Leach	DI Leach			5.05 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 19:46	SKR	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:22	KP1	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 14:24	KP1	TAL HOU
Total/NA	Prep	7471A			0.67 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:54	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOU

Client Sample ID: Cell 20- Square96--S-2-3-190723

Date Collected: 07/23/19 10:27

Date Received: 07/25/19 10:11

Lab Sample ID: 600-189171-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.88 g	5 mL	270363	07/25/19 12:14	WS1	TAL HOL
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 15:16	WS1	TAL HOL
Total/NA	Prep	5035			10.363 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 21:49	SAB	TAL PEN
Total/NA	Prep	3546			15.11 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/31/19 00:01	S1S	TAL PEN
Soluble	Leach	DI Leach			5.03 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 20:40	SKR	TAL HOL
Total/NA	Prep	3050B			1.03 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:26	KP1	TAL HOL
Total/NA	Prep	7471A			0.61 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOL
Total/NA	Analysis	7471A		1			270749	07/30/19 13:56	SOT	TAL HOL
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOL

Client Sample ID: Cell 20-Square179-S-2-3-190723

Date Collected: 07/23/19 10:52

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.73 g	5 mL	270363	07/25/19 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 15:40	WS1	TAL HOU
Total/NA	Prep	5035			8.626 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 22:41	SAB	TAL PEN

Eurofins TestAmerica, Houston

Lab Sample ID: 600-189171-3

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Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 600-189171-3

Lab Sample ID: 600-189171-4

Lab Sample ID: 600-189171-5

Client Sample ID: Cell 20-Square179-S-2-3-190723

Date Collected: 07/23/19 10:52

Date Received: 07/25/19 10:11

Client: ARCADIS U.S. Inc

Danie Toma	Batch	Batch	5	Dil	Initial	Final	Batch	Prepared	A L 4	Lab
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.22 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 07:02	JAW	TAL PEN
Soluble	Leach	DI Leach			5.02 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 20:58	SKR	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:29	KP1	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 14:33	KP1	TAL HOU
Total/NA	Prep	7471A			0.60 g	50 mL	270759	07/30/19 15:59	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270864	07/31/19 12:43	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOU

Client Sample ID: Cell 19-Square23-S-2-3-190723

Date Collected: 07/23/19 11:51 Data Pacaiyad: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.21 g	5 mL	270363	07/25/19 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 16:05	WS1	TAL HOU
Total/NA	Prep	5035			13.345 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 23:07	SAB	TAL PEN
Total/NA	Prep	3546			15.00 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 06:49	JAW	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 21:52	SKR	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:41	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	270759	07/30/19 15:59	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270864	07/31/19 12:49	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOU

Client Sample ID: Cell 20-Square193-S-2-3-190723

Date Collected: 07/23/19 11:16

Date Received: 07/25/19 10:11

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.28 g	5 mL	270363	07/25/19 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270286	07/25/19 16:29	WS1	TAL HOU
Total/NA	Prep	5035			9.153 g	5.0 g	449881	07/29/19 09:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449860	07/29/19 23:37	SAB	TAL PEN
Total/NA	Prep	3546			15.07 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 07:15	JAW	TAL PEN
Soluble	Leach	DI Leach			5.06 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 21:16	SKR	TAL HOU

Eurofins TestAmerica, Houston

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Lab Chronicle

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 20-Square193-S-2-3-190723

Lab Sample ID: 600-189171-5 Date Collected: 07/23/19 11:16 Matrix: Solid

Date Received: 07/25/19 10:11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 14:43	KP1	TAL HOU
Total/NA	Prep	3050B			1.02 g	50 mL	270635	07/29/19 14:58	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 14:59	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	270759	07/30/19 15:59	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270864	07/31/19 12:51	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444 TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Texas	NELAP		6	T104704223-18-23	10-31-19
The following analytes	s are included in this repo	rt, but the laboratory is	not certified by the	e governing authority. This	list may include analytes for which
the agency does not o	offer certification.				
the agency does not of Analysis Method	offer certification. Prep Method	Matrix	Analyt	e	
0 ,		Matrix Solid		e nt Moisture	

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration D
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-20
Florida	NELAP	4	E81010	06-30-20
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Illinois	NELAP		004586	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-20
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
New Jersey	NELAP		FL006	07-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State		C915	05-15-20

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

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189171-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19 *

D. 000-109171-1

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

Client Contact		-										
	931-436-03	3/6		E-Mail sachin.k	udchadk	ar@tes	stamorio	E-Mail sachin kudchadkar@testamericainc.com		Page. Page		
Company. ARCADIS U.S. Inc							An	Analysis Requested	ested	# qor		
Address. 11001 West 120th Avenue	Due Date Requested:				S III					Pres	Ď	The same
City Broomfield	ed (day	::			A TOU					B-N		N - None O - AsNaO2
State, Zp. CO, 80021	14 Bh	Rush			la Const						E - NaHSO4 0 -	Na2504S Na2503
Phone. 303-710-7537(Tel)	Po # Purchase Order Requested	Requested		(0	136					O I		H2SO4
Email: steve.rice@arcadis.com	#OM			N 10 s	(on							U - Acetone V - MCAA
Project Name Chevron - Jal Land Farm Soils 2019	Project # 60009563			ө <u>(</u> Дө	10 89	1010	/010-					other (specify)
Sile	SSOW#.			lqms	-	93/06				of coi	Ľ	
Samole Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix) ed (Wewater, Sepolid, Dewasteloid, Orwasteloid, De BTATES DE ANAM) Company Company	M/SM mohe9 90 \ 090_82108	A1747,0208	82608 - BTEX O	300-CI		TedmuM lstoT	Special Instructions/Note:	ctions/Note:
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91120 Sayare 102-52-3-190723	7/23/19	9:53	5	Solid	×	×	×	×		(6)		
all 11 - Salvare 96-5-2-3-190723		12:01		Solid	×	×	×	×				
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3 20091- 5-2-3-3-1907 3		1:51		Solid	X	×	×	×				
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				Solid								
				Solid						363		
				Solid								
				Solid								
600-189171 Chain of Custody				Solid								
				Solid								
Possible Hazard Identification Non-Hazard Plammable Skin Irritant Pos	Poison B Unknown		Radiological		Sample	Bispo	le Disposal (A f Retum To Client	fee may be as:	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month	are retained long	onger than 1 mo	nth) Months
Deliverable Requested: I, II, III, IV, Other (specify)					Special	Instruc	tions/Q	Special Instructions/QC Requirements	in			
Empty Kit Relinquished by:		Date:	1.5		Time:	(-		Method of Shipment	nt.		
SULAH WINGS SULAH WINGS Reinquished by	Date/Time 7 (123)/9 Date/Time		0 +0	Prid & S Company		Repeived by.	Salas	1	Sherring DaterTime	1/22/19	00 11:01	Company
Reinquished L _j .	Date/Time			Company	Rec	Received by.			Date/Time	me	CO	Сотрапу
Custody Seals Intact: Custody Seal No. 0					Coo	er Temp	erature(s)	Cooler Temperature(s) °C and Other Remarks.	arks.			

eurofins Environment Testus. Testomenea

Chain of Custody Record

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

COMMENTS:

pH paper Lot #

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	N / A	N/A				1
	N / A	N/A				
	N / A	N/A				
	N / A	N/A				
PM	NIX	NIX	0.4	210	1.01	lib
Cooler ID	Temp Jenk	Trip Blank	gmaT bevneadO (ஜ°)	Тһегт	CF	Corrected Temp

Acid preserved are<ph 2:

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punouh	719
SIDI	HIGO
11:01 97.101	bl.

□ AER □ NO

☐ YES

CARRIER/DRIVER:

CLIENT:

Sample Receipt Checklist

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?

VOA headspace acceptable (5-6mm): TES UO UA

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

Base samples are>pH 12: TYES NO

Samples received on ice? VES

UNPACKED BY:

Date/Time Received:

JOB NUMBER:

THE LEADER IN ENVIRONMENTAL TESTING

121681 Toc: 600

TestAmerica Houston

Environment Testing

Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street Houston, TX 77040

Client Information (Sub Contract Lab)	Sampler		Lab Ku	Lab PM: Kudchadkar, Sachin G	Sachin	9	Carrier Tracking No(s):	COC No: 600-40908.1	1308.1	
Client Contact: Shipping/Receiving	Phone:		E-Mail: sachii	ail: :hin.kudch	adkar@	E-Mail: sachin.kudchadkar@testamericainc.com	State of Origin: Texas	Page: Page 1 of 1	1 of 1	
Company: TestAmerica Laboratories, Inc.				Accredita	Accreditations Requ	Accreditations Required (See note): NELAP - Texas		Job #: 600-18	Job #: 600-189171-1	
Address. 3355 McLemore Drive, ,	Due Date Requested: 8/6/2019					Analysis Requested	equested	Preser	Sode	S N
City. Pensacola State, Zip: FL, 32514	TAT Requested (days):							B-NaC C-Zn/ D-Nim	B - NaCH C - Zn Acetate D - Nitric Acid E - NaHSO4	N - None O - AsNaO2 P - Na2O4S Q - Na2SO3
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	# Od			(0				F - MeG G - Am H - Asc	O	R - Na2S203 S - H2S04 T - TSP Dodecahydrate
Email:	,#OM							1 - Ice		U - Acetone V - MCAA
Project Name: Chevron - Jal Land Farm Soils 2018	Project #: 60009563			e (Yes		ine.		K-EDTA L-EDA		W - pH 4-5 Z - other (specify)
Site:	SSOW#:							of cor		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample (C=comp,	Sample Matrix Type (W=water, S=solid, C=comp, G=grab) BT=Tissue, A=Air)	Field Filtered	8015B_GRO/503			Total Number	Special Ins	Special Instructions/Note:
	/ \	1	Preservation Code:	X	-			X	$\left \right $	
61120-Square102-S-2-3-190723 (600-189171-1)	7/23/19 0	09:53	Pilos	E	×					

to the Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. 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 unrently maintain accreditation in the State of Origin listed above for analysis/lests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratories will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc.

Possible Hazard Identification			ň	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	ed it samples are retained lo	iger than 1 month)
Unconfirmed				Return To Client Disposal By Lab	al By Lab Archive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2	is .	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:		Date:	Time		Method of Shipment:	
Reinquished by: MM	E I	807 R	Company	Received by:	Date/Time:	Company
Relinquished by:	Date	Date/Time:	Company	Received by Mulm Col	Date Time 10	X S Company
Relinquished by:	Date	Date/Time;	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.:	646299 ::ON	Q		Cooler Temperature(s) °C and Other Remarks:	3.5°C I	47

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> × ×

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Solid Solid Solid

Central 10:52 Central 11:51 Central 11:16

7/23/19 7/23/19 7/23/19 7/23/19

7/23/19

61120-Square102-S-2-3-190723 (600-189171-1)

61120-Square179-S-2-3-190723 (600-189171-3) 61121-Square96--S-2-3-190723 (600-189171-2)

61119-Square23-S-2-3-190723 (600-189171-4)

Central

61120-Square193-S-2-3-190723 (600-189171-5)

× ×

Solid

Solid

Job Number: 600-189171-1

Login Number: 189171

Client: ARCADIS U.S. Inc

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Torres, Sandra

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
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.

Job Number: 600-189171-1

Login Number: 189171

Client: ARCADIS U.S. Inc

List Number: 2

Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

List Creation: 07/26/19 05:29 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	962942
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	3.5°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)	False	DI WATERS HELD OUT OF HOLD
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	



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-189207-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

Revision: 1

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

Phidchaelkar

Authorized for release by: 8/16/2019 4:04:42 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-189207-1

Comments

The report was revised on 08/16/19 to report the results for Sb, Be, Tl.

Receipt

The samples were received on 7/25/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described 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.

Metals

Method(s) 6010B: The method blank for prep batch 270650 contained Barium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The post digestion spike % recovery for Iron and Manganese associated with batch 600-270736 was outside of control limits. The following sample is impacted: (600-189076-A-1-B PDS).

Method(s) 6010B: The following samples were diluted due to the nature of the sample matrix: Cell26-Square198-S-2-3-190724 (600-189207-1), Cell26-Square115-S-2-3-190724 (600-189207-2), Cell25-Square-64-S-2-3-190724 (600-189207-4), Cell25-Square-93-S-2-3-190724 (600-189207-6), (600-189076-A-1-B ^10), (600-189076-A-1-C DU ^10), (600-189076-A-1-D MS ^10), (600-189207-G-6-D DU ^5) and (600-189207-G-6-E MS ^5). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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

Industrial Hygiene

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

Organic Prep

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

VOA Prep

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

Lab Admin

clinet changed sample id

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

Job ID: 600-189207-1

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Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
5035	Closed System Purge and Trap	SW846	TAL PEN
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Job ID: 600-189207-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-189207-1	Cell26-Square198-S-2-3-190724	Solid	07/24/19 09:08	07/25/19 09:10	
600-189207-2	Cell26-Square115-S-2-3-190724	Solid	07/24/19 09:43	07/25/19 09:10	
600-189207-3	Cell25-Square-85-S-2-3-190724	Solid	07/24/19 10:16	07/25/19 09:10	
600-189207-4	Cell25-Square-64-S-2-3-190724	Solid	07/24/19 10:46	07/25/19 09:10	
600-189207-5	Cell25-Square-6-S-2-3-190724	Solid	07/24/19 11:14	07/25/19 09:10	
600-189207-6	Cell25-Square-93-S-2-3-190724	Solid	07/24/19 11:43	07/25/19 09:10	

Job ID: 600-189207-1

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Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID: 600-189207-1 Client Sample ID: Cell26-Square198-S-2-3-190724

Date Collected: 07/24/19 09:08 **Matrix: Solid**

Date Received: 07/25/19 09:10

Client: ARCADIS U.S. Inc

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.702	U	5.57	0.702	ug/Kg		07/25/19 18:10	07/26/19 12:16	1
Ethylbenzene	1.14	U	5.57	1.14	ug/Kg		07/25/19 18:10	07/26/19 12:16	1
Toluene	1.54	U	5.57	1.54	ug/Kg		07/25/19 18:10	07/26/19 12:16	1
Xylenes, Total	1.26	U	5.57	1.26	ug/Kg		07/25/19 18:10	07/26/19 12:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	82		61 - 130				07/25/19 18:10	07/26/19 12:16	•
Dibromofluoromethane	86		68 - 140				07/25/19 18:10	07/26/19 12:16	
Toluene-d8 (Surr)	96		50 - 130				07/25/19 18:10	07/26/19 12:16	
4-Bromofluorobenzene	110		57 - 140				07/25/19 18:10	07/26/19 12:16	
Method: 8015B - Gasoline Rar	nge Organio	s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	29.1	U	58.2	29.1	ug/Kg		07/29/19 11:00	07/29/19 13:48	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	91		65 - 125				07/29/19 11:00	07/29/19 13:48	
Method: 8015B - Diesel Range			,						
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.07	J	4.94		mg/Kg		07/29/19 08:21	07/31/19 05:22	•
Oil Range Organics (C28-C35)	1.98	U	4.94	1.98	mg/Kg		07/29/19 08:21	07/31/19 05:22	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	74		27 - 151				07/29/19 08:21	07/31/19 05:22	
Method: 300.0 - Anions, Ion C	hromatogra	phy - Sol							
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fa
Chloride	0.805	J	3.97	0.530	mg/Kg			08/03/19 14:15	•
Method: 6010B - Inductively C				•	•				
Analyte		Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.119	U	0.400		mg/Kg		07/29/19 16:25	07/30/19 10:57	
Arsenic	4.43		1.00		mg/Kg		07/29/19 16:25	07/30/19 10:57	
Barium	374	В	1.00	0.0300	mg/Kg		07/29/19 16:25	07/30/19 10:57	
Cadmium	0.0450	J	0.250	0.0256	mg/Kg		07/29/19 16:25	07/30/19 10:57	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Arsenic	4.43		1.00	0.218	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Barium	374	В	1.00	0.0300	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Cadmium	0.0450	J	0.250	0.0256	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Chromium	2.32		0.500	0.0506	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Copper	1.73		0.500	0.174	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Iron	2180		20.0	2.53	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Manganese	17.6		1.50	0.0381	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Lead	1.55	J	2.50	0.525	mg/Kg		07/29/19 16:25	07/30/19 10:59	5
Selenium	0.259	U	2.00	0.259	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Zinc	8.93		7.50	0.540	mg/Kg		07/29/19 16:25	07/30/19 10:59	5
Antimony	0.385	J	2.50	0.232	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Beryllium	0.130	J	0.250	0.0145	mg/Kg		07/29/19 16:25	07/30/19 10:57	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 16:25	07/30/19 10:57	1

Method: 7471A - Mercury in S	olid or Semisolid Was	te (Manual (Cold Vapor Techni	que)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	3.46 UF1	16.5	3.46 ua/Ka		07/29/19 15:09	07/30/19 13:05		

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell26-Square198-S-2-3-190724 Lab Sample ID: 600-189207-1

Date Collected: 07/24/19 09:08 Date Received: 07/25/19 09:10

Matrix: Solid

Job ID: 600-189207-1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.7	1.0	1.0 %			07/27/19 18:36	1
Percent Solids	87.3	1.0	1.0 %			07/27/19 18:36	1

Lab Sample ID: 600-189207-2 Client Sample ID: Cell26-Square115-S-2-3-190724

Date Collected: 07/24/19 09:43

Matrix: Solid

Date Received: 07/25/19 09:10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.808	U	6.41	0.808	ug/Kg		07/25/19 18:10	07/26/19 12:40	1
Ethylbenzene	1.31	U	6.41	1.31	ug/Kg		07/25/19 18:10	07/26/19 12:40	1
Toluene	1.77	U	6.41	1.77	ug/Kg		07/25/19 18:10	07/26/19 12:40	1
Xylenes, Total	1.45	U	6.41	1.45	ug/Kg		07/25/19 18:10	07/26/19 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		61 - 130				07/25/19 18:10	07/26/19 12:40	1
Dibromofluoromethane	87		68 ₋ 140				07/25/19 18:10	07/26/19 12:40	1
Toluene-d8 (Surr)	95		50 - 130				07/25/19 18:10	07/26/19 12:40	1
			57 - 140				07/25/10 18:10	07/26/19 12:40	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	30.2	Ū	60.3	30.2	ug/Kg		07/29/19 11:00	07/29/19 14:22	1
Surrogate a.a.a-Trifluorotoluene (fid)	%Recovery	Qualifier	Limits 65 - 125				Prepared 07/20/10 11:00	Analyzed 07/29/19 14:22	Dil Fac

Method: 8015B - Diesel Rang	je Organics ((DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.97	U	4.94	1.97	mg/Kg		07/29/19 08:21	07/31/19 05:34	1
Oil Range Organics (C28-C35)	1.97	U	4.94	1.97	mg/Kg		07/29/19 08:21	07/31/19 05:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		27 - 151				07/29/19 08:21	07/31/19 05:34	1

Method: 300.0 - Anions, Ion Cl	nromatography - Solu	uble					
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.01 J	3.98	0.531 mg/Kg			08/03/19 16:56	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Arsenic	4.68		0.990	0.216	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Barium	475	В	0.990	0.0297	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Cadmium	0.0297	J	0.248	0.0253	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Chromium	1.83		0.495	0.0501	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Copper	1.66		0.495	0.172	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Iron	1700		19.8	2.50	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Manganese	13.4		1.49	0.0377	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Lead	1.24	J	2.48	0.520	mg/Kg		07/29/19 16:25	07/30/19 11:24	5
Selenium	0.256	U	1.98	0.256	mg/Kg		07/29/19 16:25	07/30/19 11:22	1

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell26-Square115-S-2-3-190724

Lab Sample ID: 600-189207-2 Date Collected: 07/24/19 09:43 **Matrix: Solid**

Date Received: 07/25/19 09:10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	7.03	J	7.43	0.535	mg/Kg		07/29/19 16:25	07/30/19 11:24	5
Antimony	0.238	J	2.48	0.230	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Beryllium	0.119	J	0.248	0.0144	mg/Kg		07/29/19 16:25	07/30/19 11:22	1
Thallium	0.274	U	1.49	0.274	mg/Kg		07/29/19 16:25	07/30/19 11:22	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.46	U	16.5	3.46	ug/Kg		07/29/19 15:09	07/30/19 13:13	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.7		1.0	1.0	%			07/27/19 18:36	1
Percent Solids	86.3		1.0	1.0	%			07/27/19 18:36	1

Client Sample ID: Cell25-Square-85-S-2-3-190724 Lab Sample ID: 600-189207-3

Date Collected: 07/24/19 10:16

Date Received: 07/25/19 09:10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.806	U	6.39	0.806	ug/Kg		07/25/19 18:10	07/26/19 13:04	1
Ethylbenzene	1.30	U	6.39	1.30	ug/Kg		07/25/19 18:10	07/26/19 13:04	1
Toluene	1.76	U	6.39	1.76	ug/Kg		07/25/19 18:10	07/26/19 13:04	1
Xylenes, Total	1.45	U	6.39	1.45	ug/Kg		07/25/19 18:10	07/26/19 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	89		61 - 130				07/25/19 18:10	07/26/19 13:04	1
Dibromofluoromethane	89		68 - 140				07/25/19 18:10	07/26/19 13:04	1
Toluene-d8 (Surr)	95		50 - 130				07/25/19 18:10	07/26/19 13:04	1
4-Bromofluorobenzene	110		57 - 140				07/25/19 18:10	07/26/19 13:04	
-C6-C10 Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	92		65 - 125				07/29/19 11:00	-	
Method: 8015B - Diesel Rang	ge Organics (DRO) (GC)						
	_	Ouglition	MOL (Adi)	SDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	MQL (Adj)	ODL					
Analyte Diesel Range Organics [C10-C28]	2.00		5.00		mg/Kg		07/29/19 08:21	07/31/19 05:47	1
		U		2.00	mg/Kg mg/Kg	_	07/29/19 08:21 07/29/19 08:21		
Diesel Range Organics [C10-C28]	2.00 2.00 %Recovery	U	5.00 5.00 <i>Limits</i>	2.00			07/29/19 08:21 Prepared	07/31/19 05:47 <i>Analyzed</i>	
Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)	2.00	U	5.00 5.00	2.00			07/29/19 08:21	07/31/19 05:47	Dil Fa
Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl Method: 300.0 - Anions, Ion	2.00 2.00 2.00 %Recovery 64 Chromatogra	Qualifier	5.00 5.00 Limits 27 - 151	2.00	mg/Kg		07/29/19 08:21 Prepared 07/29/19 08:21	07/31/19 05:47 Analyzed 07/31/19 05:47	Dil Fa
Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35) Surrogate o-Terphenyl	2.00 2.00 2.00 %Recovery 64 Chromatogra	Qualifier uphy - Solu Qualifier	5.00 5.00 Limits 27 - 151	2.00 2.00 SDL			07/29/19 08:21 Prepared	07/31/19 05:47 <i>Analyzed</i>	Dil Fa

Matrix: Solid

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square-85-S-2-3-190724

Lab Sample ID: 600-189207-3 Date Collected: 07/24/19 10:16 **Matrix: Solid**

Date Received: 07/25/19 09:10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Arsenic	2.65		0.990	0.216	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Barium	39.4	В	0.990	0.0297	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Cadmium	0.114	J	0.248	0.0253	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Chromium	6.35		0.495	0.0501	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Copper	3.58		0.495	0.172	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Iron	6660		19.8	2.50	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Manganese	72.0		1.49	0.0377	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Lead	5.33		0.495	0.104	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Selenium	0.256	U	1.98	0.256	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Zinc	17.1		1.49	0.107	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Antimony	0.230	U	2.48	0.230	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Beryllium	0.381		0.248	0.0144	mg/Kg		07/29/19 16:25	07/30/19 11:26	1
Thallium	0.274	U	1.49	0.274	mg/Kg		07/29/19 16:25	07/30/19 11:26	1

Method: 7471A - Mercury in So	lid or Sem	isolid Wa	ste (Manual C	old Vap	or Tech	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.46	U	16.5	3.46	ug/Kg		07/29/19 15:09	07/30/19 13:15	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.2	1.0	1.0 %			07/27/19 18:36	1
Percent Solids	90.8	1.0	1.0 %			07/27/19 18:36	1

Lab Sample ID: 600-189207-4 Client Sample ID: Cell25-Square-64-S-2-3-190724

Date Collected: 07/24/19 10:46

Date Received: 07/25/19 09:10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.677	U	5.38	0.677	ug/Kg		07/25/19 18:10	07/26/19 13:28	1
Ethylbenzene	1.10	U	5.38	1.10	ug/Kg		07/25/19 18:10	07/26/19 13:28	1
Toluene	1.48	U	5.38	1.48	ug/Kg		07/25/19 18:10	07/26/19 13:28	1
Xylenes, Total	1.22	U	5.38	1.22	ug/Kg		07/25/19 18:10	07/26/19 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		61 - 130				07/25/19 18:10	07/26/19 13:28	1
Dibromofluoromethane	87		68 - 140				07/25/19 18:10	07/26/19 13:28	1
Toluene-d8 (Surr)	94		50 - 130				07/25/19 18:10	07/26/19 13:28	1
4-Bromofluorobenzene	109		57 - 140				07/25/19 18:10	07/26/19 13:28	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	28.0	Ū	56.1	28.0	ug/Kg		07/29/19 11:00	07/29/19 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	92		65 - 125				07/29/19 11:00	07/29/19 15:32	

Method: 8015B - Diesel Range	∍ Organics (DRO) (GC	·)					
Analyte	Result Qualifier	MQL (Adj)	SDL Un	it D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00 U	5.00	2.00 mg	g/Kg	07/29/19 08:21	07/31/19 05:59	1

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Matrix: Solid

Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square-64-S-2-3-190724

Date Collected: 07/24/19 10:46

Date Received: 07/25/19 09:10

Client: ARCADIS U.S. Inc

Lab Sample ID: 600-189207-4

Matrix: Solid

Method: 8015B - Diesel Ran	ge Organics (DRO) (GC	(Continued)					
Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	it D	Prepared	Analyzed	Dil Fac
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00 mg/l	/Kg	07/29/19 08:21	07/31/19 05:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed 07/31/19 05:59	Dil Fac
o-Terphenyl			27 - 151					

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier SDL Unit Dil Fac MQL (Adj) Prepared Analyzed 0.532 U Chloride 3.98 0.532 mg/Kg 08/03/19 14:33

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116	U	0.388	0.116	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Arsenic	2.37		0.971	0.212	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Barium	125	В	0.971	0.0291	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Cadmium	0.117	J	0.243	0.0249	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Chromium	3.82		0.485	0.0491	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Copper	2.18		0.485	0.169	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Iron	3910		19.4	2.46	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Manganese	76.2		1.46	0.0370	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Lead	4.44		2.43	0.510	mg/Kg		07/29/19 16:25	07/30/19 11:32	5
Selenium	0.251	U	1.94	0.251	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Zinc	12.6		7.28	0.524	mg/Kg		07/29/19 16:25	07/30/19 11:32	5
Antimony	0.282	J	2.43	0.225	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Beryllium	0.257		0.243	0.0141	mg/Kg		07/29/19 16:25	07/30/19 11:30	1
Thallium	0.269	U	1.46	0.269	mg/Kg		07/29/19 16:25	07/30/19 11:30	1

Method: 7471A - Mercury in Sol	id or Sem	isolid Wa	ste (Manual C	old Vap	or Tech	nique))		
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.41	U	16.2	3.41	ug/Kg		07/29/19 15:09	07/30/19 13:17	1
General Chemistry									

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.6	1.0	1.0 %		-	07/27/19 18:36	1
Percent Solids	88.4	1.0	1.0 %			07/27/19 18:36	1

Client Sample ID: Cell25-Square-6-S-2-3-190724 Lab Sample ID: 600-189207-5

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Date Collected: 07/24/19 11:14 Date Received: 07/25/19 09:10

4-Bromofluorobenzene

Method: 8260B - Volatile O	•	•	•						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.677	U	5.38	0.677	ug/Kg		07/25/19 18:10	07/26/19 13:53	1
Ethylbenzene	1.10	U	5.38	1.10	ug/Kg		07/25/19 18:10	07/26/19 13:53	1
Toluene	1.48	U	5.38	1.48	ug/Kg		07/25/19 18:10	07/26/19 13:53	1
Xylenes, Total	1.22	U	5.38	1.22	ug/Kg		07/25/19 18:10	07/26/19 13:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		61 - 130				07/25/19 18:10	07/26/19 13:53	1
Dibromofluoromethane	87		68 - 140				07/25/19 18:10	07/26/19 13:53	1
Toluene-d8 (Surr)	96		50 ₋ 130				07/25/19 18:10	07/26/19 13:53	1

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07/25/19 18:10 07/26/19 13:53

57 - 140

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell25-Square-6-S-2-3-190724

Date Collected: 07/24/19 11:14 Date Received: 07/25/19 09:10

Lab Sample ID: 600-189207-5

Matrix: Solid

Method: 8015B - Gasoline R Analyte		S - (GC) Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	26.8	U	53.7	26.8	ug/Kg		07/29/19 11:00	07/29/19 16:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	91		65 - 125				07/29/19 11:00	07/29/19 16:06	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.71	J	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 06:12	1
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 06:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		27 - 151				07/29/19 08:21	07/31/19 06:12	1

Method: 300.0 - Anions, Ion Ch	romatography - Solu	ıble					
Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit D	Prepared	Analyzed	Dil Fac
Chloride	1.21 J	3.98	0.531 m	ng/Kg		08/03/19 14:50	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Arsenic	2.04		0.990	0.216	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Barium	35.5	В	0.990	0.0297	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Cadmium	0.0792	J	0.248	0.0253	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Chromium	4.90		0.495	0.0501	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Copper	2.06		0.495	0.172	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Iron	4750		19.8	2.50	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Manganese	30.8		1.49	0.0377	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Lead	4.31		0.495	0.104	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Selenium	0.256	U	1.98	0.256	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Zinc	10.7		1.49	0.107	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Antimony	0.230	U	2.48	0.230	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Beryllium	0.312		0.248	0.0144	mg/Kg		07/29/19 16:25	07/30/19 11:34	1
Thallium	0.274	U	1.49	0.274	mg/Kg		07/29/19 16:25	07/30/19 11:34	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	. D	Prepared	Analyzed	Dil Fac
Mercury	3.58	U	17.0	3.58	ug/Kg		07/29/19 15:09	07/30/19 13:19	1
General Chemistry									

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4	1.0	1.0	%			07/27/19 18:36	
Percent Solids	94.6	1.0	1.0	%			07/27/19 18:36	1

Client Sample ID: Cell25-Square-93-S-2-3-190724 Lab Sample ID: 600-189207-6 **Matrix: Solid**

Date Collected: 07/24/19 11:43 Date Received: 07/25/19 09:10

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.521	U	4.13	0.521	ug/Kg		07/25/19 18:10	07/26/19 14:17	1
Ethylbenzene	0.843	U	4.13	0.843	ug/Kg		07/25/19 18:10	07/26/19 14:17	1

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Client Sample ID: Cell25-Square-93-S-2-3-190724

Lab Sample ID: 600-189207-6 Date Collected: 07/24/19 11:43 **Matrix: Solid**

Date Received: 07/25/19 09:10

Analyte

Mercury

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Toluene	1.14		4.13	1.14		— <u> </u>	07/25/19 18:10	•	
Xylenes, Total	0.934	Ü	4.13	0.934	ug/Kg		07/25/19 18:10	07/26/19 14:17	· · · · · · · .
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	88		61 - 130				07/25/19 18:10	07/26/19 14:17	-
Dibromofluoromethane	88		68 - 140				07/25/19 18:10	07/26/19 14:17	
Toluene-d8 (Surr)	94		50 - 130				07/25/19 18:10	07/26/19 14:17	
4-Bromofluorobenzene	107		57 - 140				07/25/19 18:10	07/26/19 14:17	
Method: 8015B - Gasoline Rar	nge Organio	:s - (GC)							
Analyte		Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) -C6-C10	26.7	U	53.4	26.7	ug/Kg		07/29/19 11:00	07/29/19 16:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	91		65 - 125				07/29/19 11:00	07/29/19 16:42	
Method: 8015B - Diesel Range	Organics (DRO) (GC	:)						
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	2.56	J	4.87	1.95	mg/Kg		07/29/19 08:21	07/31/19 06:24	
Oil Range Organics (C28-C35)	1.95	U	4.87	1.95	mg/Kg		07/29/19 08:21	07/31/19 06:24	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	77		27 - 151				07/29/19 08:21	07/31/19 06:24	
Method: 300.0 - Anions, Ion C	hromatogra	phy - Sol	uble						
Analyte	Result	Qualifier	MQL (Adj)	_	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	0.946	J F2	4.00	0.534	mg/Kg			08/03/19 15:44	
Method: 6010B - Inductively C	oupled Pla	sma - Ato	mic Emissior	n Spectre	ometry				
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.119	U	0.400	0.119	mg/Kg		07/29/19 16:25	07/30/19 11:38	
Arsenic	2.25		1.00	0.218	mg/Kg		07/29/19 16:25	07/30/19 11:38	
		_	4.00	0.0000			07/00/40 40:05	07/00/40 44:00	
Barium	80.2	В	1.00	0.0300	mg/Kg		07/29/19 16:25	07/30/19 11:38	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Arsenic	2.25		1.00	0.218	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Barium	80.2	В	1.00	0.0300	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Cadmium	0.110	J	0.250	0.0256	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Chromium	3.27		0.500	0.0506	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Copper	1.78		0.500	0.174	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Iron	3300		20.0	2.53	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Manganese	25.7		1.50	0.0381	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Lead	3.40		2.50	0.525	mg/Kg		07/29/19 16:25	07/30/19 11:40	5
Selenium	0.259	U	2.00	0.259	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Zinc	9.73	F1	7.50	0.540	mg/Kg		07/29/19 16:25	07/30/19 11:40	5
Antimony	0.485	J F1	2.50	0.232	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Beryllium	0.230	J	0.250	0.0145	mg/Kg		07/29/19 16:25	07/30/19 11:38	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 16:25	07/30/19 11:38	1

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Analyzed

Prepared

07/29/19 15:09 07/30/19 13:25

MQL (Adj)

16.2

SDL Unit

3.41 ug/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Result Qualifier

3.41 U

Dil Fac

Client Sample Results

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Date Collected: 07/24/19 11:43

Date Received: 07/25/19 09:10

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.7	1.0	1.0	%			07/27/19 18:36	1
Percent Solids	79.3	1.0	1.0	%			07/27/19 18:36	1

4

5

7

q

10

12

1 1

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

J

F2 MS/MSD RPD exceeds control limits

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Metals

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 Compound was found in the blank and sample.

F1 MS and/or MSD Recovery is outside acceptance limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

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
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

			Pe	ercent Surro	ogate Reco
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-189207-1	Cell26-Square198-S-2-3-190724	82	86	96	110
600-189207-2	Cell26-Square115-S-2-3-19072 4	84	87	95	111
600-189207-3	Cell25-Square-85-S-2-3-19072 4	89	89	95	110
600-189207-4	Cell25-Square-64-S-2-3-19072 4	83	87	94	109
600-189207-5	Cell25-Square-6-S-2-3-190724	87	87	96	113
600-189207-6	Cell25-Square-93-S-2-3-19072 4	88	88	94	107
LCS 600-270407/3	Lab Control Sample	74	84	98	112
LCSD 600-270407/4	Lab Control Sample Dup	80	88	100	118
MB 600-270407/6	Method Blank	86	84	93	105

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limi
		TFT-F2	
Lab Sample ID	Client Sample ID	(65-125)	
400-173703-A-6-B MS	Matrix Spike	94	
00-173703-A-6-C MSD	Matrix Spike Duplicate	92	
00-189207-1	Cell26-Square198-S-2-3-19072 4	91	
00-189207-2	Cell26-Square115-S-2-3-19072 4	91	
00-189207-3	Cell25-Square-85-S-2-3-19072 4	92	
00-189207-4	Cell25-Square-64-S-2-3-19072 4	92	
00-189207-5	Cell25-Square-6-S-2-3-190724	91	
00-189207-6	Cell25-Square-93-S-2-3-19072 4	91	
.CS 400-449884/1-A	Lab Control Sample	94	
1B 400-449884/2-A	Method Blank	91	
Surrogate Legend			

TFT-F = a,a,a-Trifluorotoluene (fid)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
600-189207-1	Cell26-Square198-S-2-3-190724	74	
600-189207-1 MS	Cell26-Square198-S-2-3-19072	82	
	4		

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(27-151)	
600-189207-1 MSD	Cell26-Square198-S-2-3-190724	89	
600-189207-2	Cell26-Square115-S-2-3-19072 4	74	
600-189207-3	Cell25-Square-85-S-2-3-19072 4	64	
600-189207-4	Cell25-Square-64-S-2-3-19072 4	67	
600-189207-5	Cell25-Square-6-S-2-3-190724	69	
600-189207-6	Cell25-Square-93-S-2-3-19072 4	77	
LCS 400-449843/2-A	Lab Control Sample	90	
MB 400-449843/1-A	Method Blank	94	
Surrogate Legend			
OTPH = o-Terphenyl			

0

10

12

13

14

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 600-270407/6

Matrix: Solid

Analyte Benzene Ethylbenzene Toluene Xylenes, Total

Analysis Batch: 270407

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

	MB	MB							
	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	0.630	U	5.00	0.630	ug/Kg			07/26/19 10:42	1
	1.02	U	5.00	1.02	ug/Kg			07/26/19 10:42	1
	1.38	U	5.00	1.38	ug/Kg			07/26/19 10:42	1
İ	1.13	U	5.00	1.13	ug/Kg			07/26/19 10:42	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 86 61 - 130 07/26/19 10:42 Dibromofluoromethane 84 68 - 140 07/26/19 10:42 50 - 130 Toluene-d8 (Surr) 93 07/26/19 10:42 105 57 - 140 4-Bromofluorobenzene 07/26/19 10:42

Lab Sample ID: LCS 600-270407/3

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Benzene	50.0	50.58	ug/Kg	101	70 - 131	
Ethylbenzene	50.0	50.11	ug/Kg	100	66 - 130	
Toluene	50.0	50.35	ug/Kg	101	67 - 130	
Xylenes, Total	100	99.15	ug/Kg	99	63 - 130	
m-Xylene & p-Xylene	50.0	49.69	ug/Kg	99	64 - 130	
o-Xylene	50.0	49.46	ug/Kg	99	62 - 130	
7			3 3			

LCS LCS %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 74 61 - 130 Dibromofluoromethane 68 - 140 84 Toluene-d8 (Surr) 50 - 130 98 4-Bromofluorobenzene 57 - 140 112

Lab Sample ID: LCSD 600-270407/4

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	52.53		ug/Kg	_	105	70 - 131	4	30
Ethylbenzene	50.0	52.32		ug/Kg		105	66 - 130	4	30
Toluene	50.0	52.16		ug/Kg		104	67 - 130	4	30
Xylenes, Total	100	103.4		ug/Kg		103	63 - 130	4	30
m-Xylene & p-Xylene	50.0	51.40		ug/Kg		103	64 - 130	3	30
o-Xylene	50.0	52.03		ug/Kg		104	62 - 130	5	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	80		61 - 130
Dibromofluoromethane	88		68 ₋ 140
Toluene-d8 (Surr)	100		50 - 130
4-Bromofluorobenzene	118		57 - 140

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Job ID: 600-189207-1

Dil Fac

Dil Fac

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-449884/2-A

Analysis Batch: 449856

Analysis Batch: 449856

Gasoline Range Organics (GRO)

Matrix: Solid

Matrix: Solid

-C6-C10

Client: ARCADIS U.S. Inc

MR MR

Result Qualifier Analyte 50.0 U Gasoline Range Organics (GRO)

MR MR

Surrogate %Recovery Qualifier a,a,a-Trifluorotoluene (fid) 91

Lab Sample ID: LCS 400-449884/1-A

Limits 65 - 125

Spike

Added

1000

Spike

Added

Limits

65 - 125

Spike

Added

969

967

MQL (Adj)

100

Unit

ug/Kg

Unit

ug/Kg

Unit

ug/Kg

SDL Unit

LCS LCS

MS MS

MSD MSD

989.2

Result Qualifier

947.3

Result Qualifier

1040

Result Qualifier

50.0 ug/Kg

Client Sample ID: Lab Control Sample

%Rec

D %Rec

%Rec

102

98

Client Sample ID: Matrix Spike Duplicate

%Rec.

Limits

10 - 150

Client Sample ID: Method Blank

Prepared

Prepared

%Rec. Limits 104

07/29/19 11:00 07/29/19 11:53

07/29/19 11:00 07/29/19 11:53

62 - 141

Client Sample ID: Matrix Spike

%Rec.

Limits

10 - 150

Client Sample ID: Method Blank

Analyzed

Analyzed

Prep Type: Total/NA

Prep Batch: 449884

Prep Type: Total/NA

Prep Batch: 449884

Prep Type: Total/NA

Prep Batch: 449884

RPD

RPD

Limit

32

Prep Type: Total/NA

Prep Batch: 449884

-C6-C10

Analyte

LCS LCS

Sample Sample

50.0 U

Result Qualifier

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 94

Lab Sample ID: 400-173703-A-6-B MS

Matrix: Solid

Analysis Batch: 449856

Analyte

Gasoline Range Organics (GRO) -C6-C10

Surrogate a,a,a-Trifluorotoluene (fid)

MS MS %Recovery Qualifier

94

Sample Sample

50.0 U

Result Qualifier

Lab Sample ID: 400-173703-A-6-C MSD

Matrix: Solid

Analysis Batch: 449856

Analyte

Gasoline Range Organics (GRO) -C6-C10

Surrogate a,a,a-Trifluorotoluene (fid)

%Recovery Qualifier 92

MSD MSD

I imits 65 - 125

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

Lab Sample ID: MB 400-449843/1-A

Matrix: Solid

Analysis Batch: 450128

MB MB Result Qualifier Analyte

Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)

2.00 U 2.00 U 5.00 2.00 mg/Kg 5.00 2.00 mg/Kg

SDL Unit

07/29/19 08:21 07/31/19 04:18

Prepared

Analyzed Dil Fac 07/29/19 08:21 07/31/19 04:18

Prep Type: Total/NA

Prep Batch: 449843

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MQL (Adj)

Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 400-449843/1-A

Lab Sample ID: LCS 400-449843/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 450128

Analysis Batch: 450128

Client: ARCADIS U.S. Inc

Client Sample ID: Method Blank

LCS LCS

MS MS

MSD MSD

1714

Result Qualifier

Unit

mg/Kg

Prep Type: Total/NA

Prep Batch: 449843

MB MB

Limits Analyzed Dil Fac Surrogate %Recovery Qualifier Prepared o-Terphenyl 94 27 - 151 07/29/19 08:21 07/31/19 04:18

Spike

Spike

Added

267

Spike

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 449843**

%Rec.

Limits

63 - 153

Analyte Added Result Qualifier Unit 276 196.0 mg/Kg Diesel Range Organics

[C10-C28]

LCS LCS

Surrogate %Recovery Qualifier Limits 27 - 151 o-Terphenyl 90

Client Sample ID: Cell26-Square198-S-2-3-190724

%Rec

Prep Type: Total/NA

Matrix: Solid

Diesel Range Organics

Analysis Batch: 450128

Lab Sample ID: 600-189207-1 MS

Prep Batch: 449843

%Rec.

Limits %Rec

62 - 204 64

[C10-C28]

Analyte

MS MS

Sample Sample

2.07 J

Result Qualifier

Limits Surrogate %Recovery Qualifier o-Terphenyl 82 27 - 151

Client Sample ID: Cell26-Square198-S-2-3-190724

Lab Sample ID: 600-189207-1 MSD **Matrix: Solid**

Analysis Batch: 450128

Prep Type: Total/NA

Prep Batch: 449843

%Rec.

RPD

Result Qualifier Added Analyte Result Qualifier Limits RPD Limit Unit D %Rec 272 2.07 J 195.5 71 62 - 204 30 Diesel Range Organics mg/Kg 13

[C10-C28]

MSD MSD

Sample Sample

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 151 89

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-271100/1-A **Matrix: Solid**

Analysis Batch: 271096

Client Sample ID: Method Blank

Prep Type: Soluble

MB MB

Result Qualifier MQL (Adj) SDL Unit Analyte Prepared Analyzed Dil Fac Chloride 0.534 U 4.00 0.534 mg/Kg 08/03/19 12:10

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Spike

Added

Spike

Added

Spike

100

MQL (Adj)

0.400

1.00

1.00

0.250

0.500

0.500

20.0

1.50

0.500

2.00

1.50

2.50

0.250

1.50

Spike

Added

25.8

268

Added

100

200

LCS LCS

MS MS

191.0

121.2

Job ID: 600-189207-1

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 300.0 - Anions, Ion Chromatography (Continued)

Sample Sample

0.946 J F2

Sample Sample

0.946 J F2

Result Qualifier

0.05500 J

0.0256 U

0.259 U

0.108 U

Result Qualifier

Lab Sample ID: LCS 600-271100/2-A

Analysis Batch: 271096

Analyte

Matrix: Solid

Chloride

Lab Sample ID: 600-189207-6 MS **Matrix: Solid**

Analysis Batch: 271096

Chloride

Analyte

Chloride

Barium

Cadmium

Selenium

7inc

Silver

Lab Sample ID: 600-189207-6 MSD **Matrix: Solid**

Analysis Batch: 271096

Analyte

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-270650/1-A

Matrix: Solid

Analysis Batch: 270736

MB MB

Analyte Result Qualifier Silver 0.119 U Arsenic 0.218 U

Chromium 0.0506 U Copper 0.174 U Iron 2.53 U Manganese 0.0381 U Lead 0.105 U

Antimony 0.232 U Beryllium 0.0145 U Thallium 0.277 U

Lab Sample ID: LCSSRM 600-270650/2-A **Matrix: Solid**

Analysis Batch: 270736

Analyte

Arsenic 69.4 61.95 Barium 393 320.8

Cadmium

Client Sample ID: Lab Control Sample

Prep Type: Soluble

%Rec. Result Qualifier Unit %Rec Limits 90 - 110

mg/Kg

mg/Kg

SDL Unit

0.119 mg/Kg

0.218 mg/Kg

0.0256 mg/Kg

mg/Kg

0.0300

0.232

LCSSRM LCSSRM

18.87

246.8

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client Sample ID: Cell25-Square-93-S-2-3-190724

95

Prep Type: Soluble

Result Qualifier Unit D %Rec Limits 80 - 120 mg/Kg 120

Client Sample ID: Cell25-Square-93-S-2-3-190724

%Rec.

Prep Type: Soluble

23

MSD MSD %Rec. **RPD** Result Qualifier Unit %Rec Limits RPD Limit D 96.05 F2

95

Client Sample ID: Method Blank

07/29/19 16:25 07/30/19 10:39

07/29/19 16:25 07/30/19 10:39

07/29/19 16:25 07/30/19 10:39

07/29/19 16:25 07/30/19 10:39

80 - 120

Prep Type: Total/NA **Prep Batch: 270650** Prepared Analyzed Dil Fac

0.0506 mg/Kg 07/29/19 16:25 07/30/19 10:39 0.174 mg/Kg 07/29/19 16:25 07/30/19 10:39 2.53 mg/Kg 07/29/19 16:25 07/30/19 10:39 0.0381 mg/Kg 07/29/19 16:25 07/30/19 10:39 0.105 mg/Kg 07/29/19 16:25 07/30/19 10:39 0.259 mg/Kg 07/29/19 16:25 07/30/19 10:39 0.108 mg/Kg 07/29/19 16:25 07/30/19 10:39 mg/Kg 07/29/19 16:25 07/30/19 10:39 07/29/19 16:25 07/30/19 10:39 0.0145 mg/Kg 0.277 mg/Kg 07/29/19 16:25 07/30/19 10:39

Client Sample ID: Lab Control Sample

92.1

Prep Type: Total/NA **Prep Batch: 270650**

%Rec. D %Rec Limits 73.1 67.1 - 106. 6 66.6 - 106 89.3 6 81.6 64.6 - 106 6 71.3 - 106.

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7

Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Client: ARCADIS U.S. Inc

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-270650/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 270736 **Prep Batch: 270650** Spike LCSSRM LCSSRM %Rec. Added Result Qualifier Analyte Unit D %Rec Limits Chromium 63.6 53.73 84.5 71.9 - 106. mg/Kg 91.2 72.0 - 106. Copper 175 159.6 mg/Kg Iron 17700 12550 mg/Kg 70.9 50.1 - 106. 8 Manganese 616 486.4 mg/Kg 79.0 64.1 - 106. 7 150.2 Lead 164 mg/Kg 91.6 71.3 - 106. 7 65.2 - 106. Selenium 155 132.6 85.6 mg/Kg 5 Zinc 482 442.6 69.7 - 106. mg/Kg 91.8 6 Antimony 120 27.13 mg/Kg 22.6 20.0 - 106. Beryllium 293 254.1 mg/Kg 86.7 72.4 - 106. 8 Thallium 81.0 69.74 63.2 - 106. mg/Kg 86 1 7

Lab Sample ID: 600-189207-6 MS

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell25-Square-93-S-2-3-190724 Prep Type: Total/NA Prep Batch: 270650 Sample Sample Spike MS MS %Rec.

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.119	U	11.9	12.78	-	mg/Kg		107	75 - 125	
Arsenic	2.25		47.6	53.00		mg/Kg		107	75 - 125	
Barium	80.2	В	47.6	136.7		mg/Kg		119	75 - 125	
Cadmium	0.110	J	47.6	51.71		mg/Kg		108	75 - 125	
Chromium	3.27		47.6	47.18		mg/Kg		92	75 - 125	
Copper	1.78		47.6	52.62		mg/Kg		107	75 - 125	
Iron	3300		476	5119	4	mg/Kg		382	75 - 125	
Manganese	25.7		47.6	74.86		mg/Kg		103	75 - 125	
Selenium	0.259	U	47.6	49.10		mg/Kg		103	75 - 125	
Antimony	0.485	J F1	47.6	31.41	F1	mg/Kg		65	75 - 125	
Beryllium	0.230	J	47.6	44.87		mg/Kg		94	75 - 125	
Thallium	0.277	U	47.6	43.51		mg/Kg		91	75 ₋ 125	

Lab Sample ID: 600-189207-6 MS

Matrix: Solid

Client Sample ID: Cell25-Square-93-S-2-3-190724 Prep Type: Total/NA

Analysis Batch: 270736	Comple	Comple	Spike	Me	MS				Prep Batch: 270650 %Rec.
A waliota	•	Sample	•	_	_	11!4	_	0/ D = =	
Analyte		Qualifier	Added	Result	Qualifier	Unit	_ D	%Rec	Limits
Silver	0.595	U	11.9	13.52		mg/Kg		114	75 - 125
Arsenic	2.83	J	47.6	59.88		mg/Kg		120	75 - 125
Barium	88.0	F1 B	47.6	159.7	F1	mg/Kg		151	75 - 125
Cadmium	0.128	U	47.6	59.21		mg/Kg		124	75 - 125
Chromium	3.80		47.6	58.36		mg/Kg		115	75 - 125
Copper	2.35	J	47.6	60.10		mg/Kg		121	75 - 125
Iron	3550		476	5905	4	mg/Kg		496	75 - 125
Manganese	29.8	F1	47.6	90.62	F1	mg/Kg		128	75 - 125

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Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-189207-6 MS Client Sample ID: Cell25-Square-93-S-2-3-190724 **Matrix: Solid** Prep Type: Total/NA

nits
. 125
- 125
. 125
- 125
. 125
- 125

Lab Sample ID: 600-189207-6 DU

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell25-Square-93-S-2-3-190724

Prep Type: Total/NA

Prep Batch: 270650

Analysis Batch: 270736							Prep Batch: 2	70650
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.119	U	0.117	U	mg/Kg		NC	20
Arsenic	2.25		2.358		mg/Kg		5	20
Barium	80.2	В	82.94		mg/Kg		3	20
Cadmium	0.110	J	0.1078	J	mg/Kg		2	20
Chromium	3.27		3.309		mg/Kg		1	20
Copper	1.78		1.794		mg/Kg		0.8	20
Iron	3300		3353		mg/Kg		2	20
Manganese	25.7		26.89		mg/Kg		4	20
Selenium	0.259	U	0.254	U	mg/Kg		NC	20
Antimony	0.485	JF1	0.227	Ū	mg/Kg		NC	20
Beryllium	0.230	J	0.2353	J	mg/Kg		2	20
Thallium	0.277	U	0.272	U	mg/Kg		NC	20

Lab Sample ID: 600-189207-6 DU

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell25-Square-93-S-2-3-190724

Prep Type: Total/NA

Prep Batch: 270650

DU DU Sample Sample **RPD** Result Qualifier Result Qualifier **Analyte** Unit **RPD** Limit Silver 0.595 U 0.583 U mg/Kg NC 20 Arsenic 2.83 J 2.623 J mg/Kg 7 20 Barium 88.0 F1B 88.85 mg/Kg 0.9 20 Cadmium 0.128 U 0.125 U mg/Kg NC 20 Chromium 3.80 3.725 mg/Kg 2 20 Copper 2.35 J 2.353 J 0.1 20 mg/Kg 3550 Iron 3500 mg/Kg 1 20 Manganese 29.8 F1 29.90 mg/Kg 0.4 20 7 20 Lead 3.40 3.162 mg/Kg 1.30 U 1.27 U NC 20 Selenium mg/Kg Zinc 9.73 F1 9.314 20 mg/Kg Antimony 1.16 U 1.14 U mg/Kg NC 20 Beryllium 2 20 0.275 J 0.2696 J mg/Kg Thallium 1.39 U 1.36 U mg/Kg NC 20

Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-270637/7-A Client Sample ID: Method Blank

Matrix: Solid

Analyte

Mercury

Client: ARCADIS U.S. Inc

Analysis Batch: 270749 MB MB Prep Type: Total/NA Prep Batch: 270637

Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 3.25 ug/Kg 15.5 07/29/19 15:09 07/30/19 13:01 3.25 U

Lab Sample ID: LCSSRM 600-270637/8-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 270749

Prep Type: Total/NA **Prep Batch: 270637**

Spike LCSSRM LCSSRM %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Mercury 29000 32390 ug/Kg 111.7 59.7 - 115. 2

Lab Sample ID: 600-189207-1 MS Client Sample ID: Cell26-Square198-S-2-3-190724

Matrix: Solid

Analysis Batch: 270749

Prep Type: Total/NA

Prep Batch: 270637

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Mercury 3.46 UF1 242 153.0 F1 75 - 125 ug/Kg 63

Lab Sample ID: 600-189207-1 DU Client Sample ID: Cell26-Square198-S-2-3-190724

Matrix: Solid

Analysis Batch: 270749

Prep Type: Total/NA

Prep Batch: 270637

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Limit 3.46 UF1 Mercury 3.46 U ug/Kg NC 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-189207-1 DU Client Sample ID: Cell26-Square198-S-2-3-190724 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 270527

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit RPD Limit Percent Moisture 12.7 13.5 % 20 6 Percent Solids 87.3 86.5 % 0.9 20

Eurofins TestAmerica, Houston

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
Gasoline Range Organics (GRO)-C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte		MQL	MDL	Units
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg
Oil Range Organics (C28-C35)		5.00	2.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	17.0	3.58	ug/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Analysis Batch: 270407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	8260B	270440
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	8260B	270440
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	8260B	270440
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	8260B	270440
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	8260B	270440
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	8260B	270440
MB 600-270407/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-270407/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-270407/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 270440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	5035	
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	5035	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	5035	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	5035	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	5035	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 449856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	8015B	449884
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	8015B	449884
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	8015B	449884
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	8015B	449884
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	8015B	449884
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	8015B	449884
MB 400-449884/2-A	Method Blank	Total/NA	Solid	8015B	449884
LCS 400-449884/1-A	Lab Control Sample	Total/NA	Solid	8015B	449884
400-173703-A-6-B MS	Matrix Spike	Total/NA	Solid	8015B	449884
400-173703-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	449884

Prep Batch: 449884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	5035	
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	5035	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	5035	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	5035	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	5035	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	5035	
MB 400-449884/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-449884/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-173703-A-6-B MS	Matrix Spike	Total/NA	Solid	5035	
400-173703-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 449843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	3546	

Eurofins TestAmerica, Houston

Job ID: 600-189207-1

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC Semi VOA (Continued)

Prep Batch: 449843 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	3546	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	3546	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	3546	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	3546	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	3546	
MB 400-449843/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-449843/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-189207-1 MS	Cell26-Square198-S-2-3-190724	Total/NA	Solid	3546	
600-189207-1 MSD	Cell26-Square198-S-2-3-190724	Total/NA	Solid	3546	

Analysis Batch: 450128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	8015B	449843
MB 400-449843/1-A	Method Blank	Total/NA	Solid	8015B	449843
LCS 400-449843/2-A	Lab Control Sample	Total/NA	Solid	8015B	449843
600-189207-1 MS	Cell26-Square198-S-2-3-190724	Total/NA	Solid	8015B	449843
600-189207-1 MSD	Cell26-Square198-S-2-3-190724	Total/NA	Solid	8015B	449843

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Analysis Batch: 271096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-2	Cell26-Square115-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-3	Cell25-Square-85-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-4	Cell25-Square-64-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-5	Cell25-Square-6-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-6	Cell25-Square-93-S-2-3-190724	Soluble	Solid	300.0	271100
MB 600-271100/1-A	Method Blank	Soluble	Solid	300.0	271100
LCS 600-271100/2-A	Lab Control Sample	Soluble	Solid	300.0	271100
600-189207-6 MS	Cell25-Square-93-S-2-3-190724	Soluble	Solid	300.0	271100
600-189207-6 MSD	Cell25-Square-93-S-2-3-190724	Soluble	Solid	300.0	271100

Leach Batch: 271100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-2	Cell26-Square115-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-3	Cell25-Square-85-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-4	Cell25-Square-64-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-5	Cell25-Square-6-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-6	Cell25-Square-93-S-2-3-190724	Soluble	Solid	DI Leach	
MB 600-271100/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-271100/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-189207-6 MS	Cell25-Square-93-S-2-3-190724	Soluble	Solid	DI Leach	
600-189207-6 MSD	Cell25-Square-93-S-2-3-190724	Soluble	Solid	DI Leach	

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QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Metals

Prep Batch: 270637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	_
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	7471A	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	7471A	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	7471A	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	7471A	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	7471A	
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-189207-1 MS	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	
600-189207-1 DU	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	

Prep Batch: 270650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	3050B	
MB 600-270650/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-270650/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-189207-6 MS	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	3050B	
600-189207-6 DU	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	3050B	

Analysis Batch: 270736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650
MB 600-270650/1-A	Method Blank	Total/NA	Solid	6010B	270650
LCSSRM 600-270650/2-A	Lab Control Sample	Total/NA	Solid	6010B	270650
600-189207-6 MS	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-6 MS	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-6 DU	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650
600-189207-6 DU	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	6010B	270650

Analysis Batch: 270749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	7471A	270637

Eurofins TestAmerica, Houston

Job ID: 600-189207-1

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Metals (Continued)

Analysis Batch: 270749 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-270637/7-A	Method Blank	Total/NA	Solid	7471A	270637
LCSSRM 600-270637/8-A	Lab Control Sample	Total/NA	Solid	7471A	270637
600-189207-1 MS	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	270637
600-189207-1 DU	Cell26-Square198-S-2-3-190724	Total/NA	Solid	7471A	270637

General Chemistry

Analysis Batch: 270527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189207-1	Cell26-Square198-S-2-3-190724	Total/NA	Solid	2540B	_
600-189207-2	Cell26-Square115-S-2-3-190724	Total/NA	Solid	2540B	
600-189207-3	Cell25-Square-85-S-2-3-190724	Total/NA	Solid	2540B	
600-189207-4	Cell25-Square-64-S-2-3-190724	Total/NA	Solid	2540B	
600-189207-5	Cell25-Square-6-S-2-3-190724	Total/NA	Solid	2540B	
600-189207-6	Cell25-Square-93-S-2-3-190724	Total/NA	Solid	2540B	
600-189207-1 DU	Cell26-Square198-S-2-3-190724	Total/NA	Solid	2540B	

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Matrix: Solid

Client Sample ID: Cell26-Square198-S-2-3-190724

Date Collected: 07/24/19 09:08 Date Received: 07/25/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.49 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 12:16	WS1	TAL HOU
Total/NA	Prep	5035			8.589 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 13:48	SAB	TAL PEN
Total/NA	Prep	3546			15.17 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 05:22	JAW	TAL PEN
Soluble	Leach	DI Leach			5.04 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 14:15	SKR	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 10:57	KP1	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 10:59	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1	•		270749	07/30/19 13:05	SOT	TAL HOU

270527

07/27/19 18:36 AP

Lab Sample ID: 600-189207-2

Client Sample ID: Cell26-Square115-S-2-3-190724

2540B

Date Collected: 07/24/19 09:43

Analysis

Date Received: 07/25/19 09:10

Total/NA

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.9 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 12:40	WS1	TAL HOU
Total/NA	Prep	5035			8.289 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 14:22	SAB	TAL PEN
Total/NA	Prep	3546			15.19 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 05:34	JAW	TAL PEN
Soluble	Leach	DI Leach			5.03 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 16:56	SKR	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 11:22	KP1	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 11:24	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:13	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	AP	TAL HOU

Client Sample ID: Cell25-Square-85-S-2-3-190724

Date Collected: 07/24/19 10:16

Date Received: 07/25/19 09:10

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.91 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 13:04	WS1	TAL HOU

Lab Sample ID: 600-189207-1

TAL HOU

Matrix: Solid

Eurofins TestAmerica, Houston

Lab Sample ID: 600-189207-3

Matrix: Solid

Matrix: Solid

Client Sample ID: Cell25-Square-85-S-2-3-190724

Lab Sample ID: 600-189207-3 Date Collected: 07/24/19 10:16

Date Received: 07/25/19 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.037 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 14:56	SAB	TAL PEN
Total/NA	Prep	3546			15.01 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 05:47	JAW	TAL PEN
Soluble	Leach	DI Leach			5.03 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 16:38	SKR	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 11:26	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:15	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	AP	TAL HOU

Client Sample ID: Cell25-Square-64-S-2-3-190724

Date Collected: 07/24/19 10:46 Date Received: 07/25/19 09:10

Lab Sample ID: 600-189207-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.65 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 13:28	WS1	TAL HOU
Total/NA	Prep	5035			8.913 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 15:32	SAB	TAL PEN
Total/NA	Prep	3546			15.01 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 05:59	JAW	TAL PEN
Soluble	Leach	DI Leach			5.02 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 14:33	SKR	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOL
Total/NA	Analysis	6010B		1			270736	07/30/19 11:30	KP1	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 11:32	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:17	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	AP	TAL HOU

Client Sample ID: Cell25-Square-6-S-2-3-190724

Date Collected: 07/24/19 11:14

Date Received: 07/25/19 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.65 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 13:53	WS1	TAL HOU
Total/NA	Prep	5035			9.318 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 16:06	SAB	TAL PEN
Total/NA	Prep	3546			15.21 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 06:12	JAW	TAL PEN

Lab Sample ID: 600-189207-5

Matrix: Solid

Client Sample ID: Cell25-Square-6-S-2-3-190724

Lab Sample ID: 600-189207-5 Date Collected: 07/24/19 11:14 **Matrix: Solid**

Date Received: 07/25/19 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 14:50	SKR	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 11:34	KP1	TAL HOU
Total/NA	Prep	7471A			0.60 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:19	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	AP	TAL HOU

Lab Sample ID: 600-189207-6 Client Sample ID: Cell25-Square-93-S-2-3-190724

Date Collected: 07/24/19 11:43 Date Received: 07/25/19 09:10

Matrix: Solid

07/27/19 18:36 AP

270527

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.05 g	5 mL	270440	07/25/19 18:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	270407	07/26/19 14:17	WS1	TAL HOU
Total/NA	Prep	5035			9.37 g	5.0 g	449884	07/29/19 11:00	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	449856	07/29/19 16:42	SAB	TAL PEN
Total/NA	Prep	3546			15.39 g	1 mL	449843	07/29/19 08:21	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450128	07/31/19 06:24	JAW	TAL PEN
Soluble	Leach	DI Leach			5.00 g	50 mL	271100	08/03/19 11:00	SKR	TAL HOU
Soluble	Analysis	300.0		1			271096	08/03/19 15:44	SKR	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		1			270736	07/30/19 11:38	KP1	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	270650	07/29/19 16:25	P1D	TAL HOU
Total/NA	Analysis	6010B		5			270736	07/30/19 11:40	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:25	SOT	TAL HOU

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Laboratory References:

Total/NA

Analysis

2540B

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444 TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Eurofins TestAmerica, Houston

TAL HOU

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
Texas	NELAP		6	T104704223-18-23	10-31-19
The following analytes	s are included in this repo	rt, but the laboratory is	s not certified by the	e governing authority. This	list may include analytes for which
the agency does not o	offer certification.	•	•	,	,
the agency does not o	offer certification. Prep Method	Matrix	Analyt	e	
0 ,		Matrix Solid		e nt Moisture	

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Dat
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-20
Florida	NELAP	4	E81010	06-30-20
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Illinois	NELAP		004586	10-09-19
lowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-20
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
New Jersey	NELAP		FL006	07-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State	-	C915	05-15-20

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

Eurofins TestAmerica, Houston

8/16/2019 (Rev. 1)

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-189207-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19 *

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

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Client Information	(arah Jo	Inopado	hosol(allun F.		Lab PM Kudchadkar, Sachin G	Sachin	0		3	Camer Tracking No(s)	(s)out	9 9	600-69887-19077	2,770	
Client Contact: Steve Rice	931 4310031 la	316			n kudch	adkar	Diesta	E-Mail sachin kudchadkar@testamericainc.com	com			Page	Page		
Company	200							8		3		Jot	Job #		
ARCADIS U.S. Inc.						-		Analy	Analysis Requested	ested		1			
Address 11001 West 120th Avenue	Due Date Requested	P.										Α.	Preservation Codes	:sepo:	
City Broomfield	TAT Requested (days):	iys):										< to U	B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State Zip CO, 80021	Hehrieush	ush										0 111	D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3	
Phone. 303-710-7537(Tet)	Port Purchase Order Requested	Requested			(0							LOI	F - MeOH G - Amchior H - Ascorbic Acid		hydrale
Email: steve.rice@arcadis.com	# OM					_							J - Di Water		
Project Name Chevron - Jal Land Farm Solls 2019	Project # 60009563					-	(010)						K-EDTA L-EDA	VV - pH 4-5 Z - other (specify)	N.
Site	SSCW#				N as	08	во(се	λju				_	Other		
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (Wewater, Setald, Owesteroll, BTET Mane, A-Ap)	Field Filtered	A1747,0208	9 - 089_B2108	300- CI 8560B - BTEX O				19dmuN IstoT	600-1892 5		<u></u>
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(21125-Solvare 184-5-2-3-190724		10746		Solid									ay		
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MAMONIMA				Solid											
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				Solid											
Possible Hazard Identification	Discount		Radiological		Sam	ple Di	le Disposal (A f	(A fee I	nay be as	assessed if sam	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	a retained long	longer tha	n 1 month)	
V, Other (specify)			no.		Spec	cial Ins	tructio	IS/QC Re	Special Instructions/QC Requirements	is in the second		and a	5	STATE OF THE STATE	
Empty Kit Relinquished by:		Date			Time	1				Method	Method of Shipment				
Rejurdurshed by,	Date/Time	2:12		Pycadis Company	5	georgia de la constanta de la		\$			Date/Time.	2	X	Company	
Reinquished by.	Dale/Типе			Company		Received by	144	1			Date/Time		ľ	Company	
Custody Seals Intact: Custody Seal No. 01.0 (51.5)	75					Cooler T	ambera	ure(s) °C an	Cooler Temperature(s) °C and Other Remarks	arks					
	,					1								Ver. 01/16/2019	610

🔆 eurofins

Chain of Custody Record

ofins TestAmerica, Houston

310 hway Street

Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646 Loc: 600 189207



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Sample	Receipt	Checklis
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			Date/Time Received	Ė		15 JUL
JOB NUMBER:	Q		CLIENT:	1	rca	dis
UNPACKED BY:	2		CARRIER/DRIVER:	FE	dEX	
Custody Seal Present:	YES	□NO	Number of Coolers F	Received: _		
	Temp		Observed Temp	Therm	Them	Corrected Temp
Cooler ID	Blank /	Tria Blank	(C)	ID	CF	(°C)
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pH paper Lot # VOA headspace accept		_ \		5112.	YES	NO YES NO
Did samples meet the	aboratory's stand	dard conditions	of sample acceptability u	upon receipt	?	75 10
COMMENTS:					A	
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HS-SA-WI-013

Rev. 3; 07/01/2014





TRX# 7886 7116 9609

AB LKSA

THU - 25 JUL 10:30A PRIORITY OVERNIGHT

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Page 36 of 39

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ofins TestAmerica, Houston

		Ī		The state of the s
Client Information	Jarah Johnson Kallum F.		Carrier Tracking No(s)	600-69887-19077.2
Client contact Steve Rice	931 4360316	E-Mail sachin kudchadkar@testamericainc.com		Page
Company ARCADIS U.S. Inc		Analysis Requested	quested	Job #
Address 11001 West 120th Avenue	Due Date Requested:			Codes:
City Broomfield	TAT Requested (days):			B - NaOH N - None C - Zn Acetate O - AsNaO2
State Ztp CO, 80021	Henrieusn			
Phone 303-710-7537(Tel)	Po# Purchase Order Requested	(c		G - Americo S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email steve rice@arcadis com	WO#	Lenda 2000		1 - Ice J - Di Water
Project Name Chevron - Jal Land Farm Soils 2019	Project # 60009563	10 88)		
Site	SSOAve	GRO(Ce ORO WSD (Y		Otter.
Samole Identification	Sample Cample (Cacomp, Sample Date Time Gagrab) are	Matrix (Www.alet.)	9dmuN latoT	
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(\$11210-50 uare 198-5-1-3-190724	7124119 9:08 G	Solid K X X X X		Chair
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an25- Square 64-5-2-3-190724	94:01	Solid		dy
(21125 - Square 4-5-2-3-190724	H1:11	Solid		
41125 Savare 43-5-2-3-140724	T 11313 7	Solid X X X X X		
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ant	☐ 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 Mon	Disposal By Lab	Pretained longer than 1 month) Archive For Months
Deliverable Requested, II., IV. Orier (specify) Fmoty Kit Religioushed by	Date	Tallohar Observations and the second	Method of Shipment	
Reprinted by M.	313	Company Received by	Swijdea	100 d
Reinquited by		Comfranty Received A	Date/Time:	Company
Retinquished by	Date/Time	Company Received by Hallan	A HANDER DATETIMES	なか。 と18 91-14
Cuetoda Seale latert Cuetodo Seal No		Cooler Terrographics Of and Other Demande	1	

Job Number: 600-189207-1

Client: ARCADIS U.S. Inc

Login Number: 189207

List Number: 1 Creator: Crafton, Tommie S List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
Γhe 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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
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

Eurofins TestAmerica, Houston

Client: ARCADIS U.S. Inc Job Number: 600-189207-1

Login Number: 189207 List Source: Eurofins TestAmerica, Pensacola

List Number: 2 List Creation: 07/27/19 11:33 AM

Creator:	Hinrichsen,	Megan E
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Answer	Comment
N/A	
True	947053
N/A	
True	
True	
True	
True	1.4°C IR-8
True	
N/A	
	N/A True N/A True True True True True True True True

Eurofins TestAmerica, Houston



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-191317-1

Client Project/Site: Chevron - Jal Land Farm Soils 2019

For:

ARCADIS U.S. Inc 11001 West 120th Avenue Broomfield, Colorado 80021

Attn: Steve Rice

gkudchadkar

Authorized for release by: 9/27/2019 4:08:40 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

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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.

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Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Job ID: 600-191317-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-191317-1

Comments

No additional comments.

Receipt

The samples were received on 9/4/2019 10:34 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA

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

GC VOA

Method(s) 8015B: The following samples were diluted because the base dilution for methanol preserved soil analysis is 1:50: Cell 21-Square 1-s-2'-3'-190903 (600-191317-1), Cell 26-Square 18-s-2'-3'-190903 (600-191317-2), Cell 25-Square 42-s-2'-3'-190903 (600-191317-3), Cell 19-Square 197-s-2'-3'-190903 (600-191317-4), Cell 17-Square 49-s-2'-3'-190903 (600-191317-5), Cell 18-Square 20-s-2'-3'-190903 (600-191317-6) and Cell 20-Square 85-s-2'-3'-190903 (600-191317-7)

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

GC Semi VOA

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

Organic Prep

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

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

Method Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge and Trap	SW846	TAL PEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Job ID: 600-191317-1

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Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Solid		09/04/19 10:34	
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Solid	09/03/19 14:50	09/04/19 10:34	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Solid	09/03/19 15:30	09/04/19 10:34	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Solid	09/03/19 12:15	09/04/19 10:34	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Solid	09/03/19 13:35	09/04/19 10:34	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Solid	09/03/19 12:45	09/04/19 10:34	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Solid	09/03/19 11:45	09/04/19 10:34	

Job ID: 600-191317-1

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Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Date Collected: 09/03/19 14:25

Matrix: Solid

Date Received: 09/04/19 10:34

Client: ARCADIS U.S. Inc

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.317	U	2.37	0.317	ug/Kg		09/13/19 09:44	09/13/19 17:30	-
Ethylbenzene	0.289	U	2.37	0.289	ug/Kg		09/13/19 09:44	09/13/19 17:30	•
Toluene	0.473	U	2.37	0.473	ug/Kg		09/13/19 09:44	09/13/19 17:30	•
Xylenes, Total	0.900	U	4.73	0.900	ug/Kg		09/13/19 09:44	09/13/19 17:30	• • • • • • • • •
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene	95		72 - 122				09/13/19 09:44	09/13/19 17:30	
Dibromofluoromethane	93		79 - 123				09/13/19 09:44	09/13/19 17:30	
Toluene-d8 (Surr)	104		80 - 120				09/13/19 09:44	09/13/19 17:30	
Method: 8015B - Gasoline Rar Analyte	Result	Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	
Analyte C6-C10	Result 1310	Qualifier U	MQL (Adj)	SDL 1310		<u>D</u>	09/11/19 12:30	09/11/19 16:56	50
Analyte	Result	Qualifier U	2610			<u>D</u>		09/11/19 16:56 <i>Analyzed</i>	Dil Fac
Analyte C6-C10 Surrogate a,a,a-Trifluorotoluene (fid)	Result 1310 %Recovery 99	Qualifier U Qualifier	2610 Limits 65 - 125			<u>D</u>	09/11/19 12:30 Prepared	09/11/19 16:56 <i>Analyzed</i>	50 Dil Fa
Analyte C6-C10 Surrogate	Result 1310 %Recovery 99 Organics (Qualifier U Qualifier	2610 Limits 65 - 125	1310		<u>D</u>	09/11/19 12:30 Prepared	09/11/19 16:56 <i>Analyzed</i>	50 Dil Fa
Analyte C6-C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range	Result 1310 %Recovery 99 Organics (Qualifier Qualifier Qualifier DRO) (GC Qualifier	2610 Limits 65 - 125	1310 SDL	ug/Kg	_ =	09/11/19 12:30 Prepared 09/11/19 12:30	09/11/19 16:56 Analyzed 09/11/19 16:56	50 Dil Fa
Analyte C6-C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	Result 1310 %Recovery 99 Organics (Result	Qualifier Qualifier DRO) (GC Qualifier J	2610 Limits 65 - 125 MQL (Adj)	1310 SDL 1.99	ug/Kg Unit mg/Kg	_ =	09/11/19 12:30 Prepared 09/11/19 12:30 Prepared	09/11/19 16:56 Analyzed 09/11/19 16:56 Analyzed	50 Dil Fa
Analyte C6-C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: 8015B - Diesel Range Analyte	Result 1310 %Recovery 99 Organics (Result 3.52	Qualifier Qualifier	2610 Limits 65 - 125 MQL (Adj) 4.97	1310 SDL 1.99	ug/Kg Unit mg/Kg	_ =	09/11/19 12:30 Prepared 09/11/19 12:30 Prepared 09/08/19 18:26	09/11/19 16:56 Analyzed 09/11/19 16:56 Analyzed 09/11/19 02:38	50 Dil Fa

Client Sample ID: Cell 26-Square 18-s-2'-3'-190903

Date Collected: 09/03/19 14:50

Date Received: 09/04/19 10:34

Oil Range Organics (C28-C35)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.317	U	2.37	0.317	ug/Kg		09/13/19 09:44	09/13/19 17:58	1
Ethylbenzene	0.289	U	2.37	0.289	ug/Kg		09/13/19 09:44	09/13/19 17:58	1
Toluene	0.473	U	2.37	0.473	ug/Kg		09/13/19 09:44	09/13/19 17:58	1
Xylenes, Total	0.899	U	4.73	0.899	ug/Kg		09/13/19 09:44	09/13/19 17:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 122				09/13/19 09:44	09/13/19 17:58	1
Dibromofluoromethane	96		79 - 123				09/13/19 09:44	09/13/19 17:58	1
Toluene-d8 (Surr)	103		80 - 120				09/13/19 09:44	09/13/19 17:58	1
Method: 8015B - Gasoline Rar	nge Organio	s - (GC)							
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1260	U	2520	1260	ug/Kg		09/11/19 12:30	09/11/19 17:14	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125				09/11/19 12:30	09/11/19 17:14	50
- Method: 8015B - Diesel Range	Organics (DRO) (GC)						
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.43		4.96	1.00	mg/Kg		09/08/19 18:26	09/11/19 02:51	

Eurofins TestAmerica, Houston

09/08/19 18:26 09/11/19 02:51

Lab Sample ID: 600-191317-2

Matrix: Solid

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4.96

1.98 mg/Kg

1.98 U

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Client Sample ID: Cell 26-Square 18-s-2'-3'-190903

Date Collected: 09/03/19 14:50

Date Received: 09/04/19 10:34

Client: ARCADIS U.S. Inc

Lab	Sampl	e ID:	600-1	9131	7-2

Matrix: Solid

Surrogate Prepared Analyzed %Recovery Qualifier Limits Dil Fac 09/08/19 18:26 09/11/19 02:51 o-Terphenyl 90 27 - 151

Client Sample ID: Cell 25-Square 42-s-2'-3'-190903 Lab Sample ID: 600-191317-3

Date Collected: 09/03/19 15:30 Date Received: 09/04/19 10:34

Matrix: Solid

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

mother of the following of gui		aa. (
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.267	U	1.99	0.267	ug/Kg		09/13/19 09:44	09/13/19 18:26	1
Ethylbenzene	0.243	U	1.99	0.243	ug/Kg		09/13/19 09:44	09/13/19 18:26	1
Toluene	0.398	U	1.99	0.398	ug/Kg		09/13/19 09:44	09/13/19 18:26	1
Xylenes, Total	0.756	U	3.98	0.756	ug/Kg		09/13/19 09:44	09/13/19 18:26	1

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98	72 - 122	09/13/19 09:44	09/13/19 18:26	1
Dibromofluoromethane	96	79 - 123	09/13/19 09:44	09/13/19 18:26	1
Toluene-d8 (Surr)	104	80 - 120	09/13/19 09:44	09/13/19 18:26	1

Method: 8015B - Gasoline Ran	Method: 8015B - Gasoline Range Organics - (GC)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1070	U	2130	1070	ug/Kg		09/11/19 12:30	09/11/19 17:40	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	09/11/19 12:30	09/11/19 17:40	50

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.46	J	4.75	1.90	mg/Kg		09/08/19 18:26	09/11/19 03:03	1
Oil Range Organics (C28-C35)	2.46	J	4.75	1.90	mg/Kg		09/08/19 18:26	09/11/19 03:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		27 - 151				09/08/19 18:26	09/11/19 03:03	

Client Sample ID: Cell 19-Square 197-s-2'-3'-190903 Lab Sample ID: 600-191317-4

Date Collected: 09/03/19 12:15 **Matrix: Solid** Date Received: 09/04/19 10:34

Method: 8260B - Volatile	Organic	Compo	unds ((GC/M	S)
Analyte	_	Result	Qualif	ier	MΩ

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.320	U	2.39	0.320	ug/Kg		09/13/19 09:44	09/13/19 18:54	1
Ethylbenzene	0.291	U	2.39	0.291	ug/Kg		09/13/19 09:44	09/13/19 18:54	1
Toluene	0.478	U	2.39	0.478	ug/Kg		09/13/19 09:44	09/13/19 18:54	1
Xylenes, Total	0.908	U	4.78	0.908	ug/Kg		09/13/19 09:44	09/13/19 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		72 - 122				09/13/19 09:44	09/13/19 18:54	1

ı	Surrogate	%Recovery	Qualitier	Limits	Prepared	Anaiyzea	DII Fac	
	4-Bromofluorobenzene	97		72 - 122	09/13/19 09:44	09/13/19 18:54	1	
	Dibromofluoromethane	94		79 - 123	09/13/19 09:44	09/13/19 18:54	1	
	Toluene-d8 (Surr)	103		80 - 120	09/13/19 09:44	09/13/19 18:54	1	

_			
Method: 801	5B - Gasolin	e Range Org	anics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D)	Prepared	Analyzed	Dil Fac
C6-C10	1260	U	2520	1260	ug/Kg		_ C	09/11/19 12:30	09/11/19 18:06	50

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Client: ARCADIS U.S. Inc

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 19-Square 197-s-2'-3'-190903

Date Collected: 09/03/19 12:15 Date Received: 09/04/19 10:34

Lab Sample ID: 600-191317-4

Matrix: Solid

Job ID: 600-191317-1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101		65 - 125				09/11/19 12:30	09/11/19 18:06	50
_ Method: 8015B - Diesel Range	Organics (DRO) (GC	;)						
Analyte	_	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.52	J	4.96	1.98	mg/Kg		09/08/19 18:26	09/11/19 03:16	1
Oil Range Organics (C28-C35)	1.98	U	4.96	1.98	mg/Kg		09/08/19 18:26	09/11/19 03:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		27 - 151				09/08/19 18:26	09/11/19 03:16	1

Client Sample ID: Cell 17-Square 49-s-2'-3'-190903

Date Collected: 09/03/19 13:35

Date Received: 09/04/19 10:34

Lab Sample	ID:	600-191317-5
_		Matrix: Solid

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

Analyte Result Qualifier MQL (Adi) SDL Unit Prepared Analyzed Dil Fac Benzene 0.358 U 2.67 0.358 ug/Kg 09/13/19 09:44 09/13/19 19:22 Ethylbenzene 0.326 U 2.67 0.326 ug/Kg 09/13/19 09:44 09/13/19 19:22 Toluene 0.534 U 2.67 0.534 ug/Kg 09/13/19 09:44 09/13/19 19:22 09/13/19 09:44 09/13/19 19:22 Xylenes, Total 1.01 U 5.34 1.01 ug/Kg

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 122	09/13/19 09:44	09/13/19 19:22	1
Dibromofluoromethane	93		79 - 123	09/13/19 09:44	09/13/19 19:22	1
Toluene-d8 (Surr)	104		80 - 120	09/13/19 09:44	09/13/19 19:22	1

Method: 8015B - Gasoline Range Organics - (GC) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac C6-C10 1430 U 2870 1430 ug/Kg 09/11/19 12:30 09/11/19 18:33 50 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 101 65 - 125 09/11/19 12:30 09/11/19 18:33

 Method: 8015B - Diesel Range	Organics (DRO) (GC	:)						
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.46	J	4.97	1.99	mg/Kg		09/08/19 18:26	09/11/19 03:29	1
Oil Range Organics (C28-C35)	1.99	U	4.97	1.99	mg/Kg		09/08/19 18:26	09/11/19 03:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		27 - 151				09/08/19 18:26	09/11/19 03:29	1

Lab Sample ID: 600-191317-6 Client Sample ID: Cell 18-Square 20-s-2'-3'-190903

Date Collected: 09/03/19 12:45 Date Received: 09/04/19 10:34

Xylenes, Total

Method: 8260B - Volatile Organic Compounds (GC/MS) Result Qualifier Analyte MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac 0.321 U Benzene 2.40 0.321 ug/Kg 09/13/19 09:44 09/13/19 19:50 Ethylbenzene 0.293 U 2.40 0.293 ug/Kg 09/13/19 09:44 09/13/19 19:50 1 Toluene 0.480 U 2.40 0.480 ug/Kg 09/13/19 09:44 09/13/19 19:50 1

4.80

0.912 ug/Kg

0.912 U

Eurofins TestAmerica, Houston

09/13/19 09:44 09/13/19 19:50

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2019

Client Sample ID: Cell 18-Square 20-s-2'-3'-190903

Date Collected: 09/03/19 12:45 Date Received: 09/04/19 10:34

Lab Sample ID: 600-191317-6

09/13/19 09:44 09/13/19 20:18

Matrix: Solid

Job ID: 600-191317-1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95	72 - 122	09/13/19 09:44	09/13/19 19:50	1
Dibromofluoromethane	94	79 - 123	09/13/19 09:44	09/13/19 19:50	1
Toluene-d8 (Surr)	103	80 - 120	09/13/19 09:44	09/13/19 19:50	1
Mathadi 2045D Gasalina Ba	mara Ormaniaa (CC)				

Method: 8015B - Gasoline Range Organics - (GC) Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac C6-C10 1240 U 2480 09/11/19 12:30 09/11/19 18:59 1240 ug/Kg 50 Surrogate Limits Prepared Analyzed Dil Fac

%Recovery Qualifier a,a,a-Trifluorotoluene (fid) 09/11/19 12:30 09/11/19 18:59 103 65 - 125 50

Method: 8015B - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 09/08/19 18:26 **Diesel Range Organics [C10-C28]** 3.03 J 4.77 1.91 mg/Kg 09/11/19 03:54 Oil Range Organics (C28-C35) 09/08/19 18:26 09/11/19 03:54 1.91 U 4.77 1.91 mg/Kg Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac

o-Terphenyl 78 27 - 151 09/08/19 18:26 09/11/19 03:54

Client Sample ID: Cell 20-Square 85-s-2'-3'-190903 Lab Sample ID: 600-191317-7 Matrix: Solid

Date Collected: 09/03/19 11:45 Date Received: 09/04/19 10:34

Xylenes, Total

a,a,a-Trifluorotoluene (fid)

Method: 8260B - Volatile Organic Compounds (GC/MS) Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Benzene 0.309 U 2.31 0.309 ug/Kg 09/13/19 09:44 09/13/19 20:18 Ethylbenzene 0.282 U 2.31 0.282 ug/Kg 09/13/19 09:44 09/13/19 20:18 Toluene 0.462 U 2.31 0.462 ug/Kg 09/13/19 09:44 09/13/19 20:18

0.877 U

102

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene 96 72 - 122 09/13/19 09:44 09/13/19 20:18 Dibromofluoromethane 95 79 - 123 09/13/19 09:44 09/13/19 20:18 1 Toluene-d8 (Surr) 104 80 - 120 09/13/19 09:44 09/13/19 20:18

4.62

0.877 ug/Kg

Method: 8015B - Gasoline Range Organics - (GC) Analyte Result Qualifier MQL (Adi) SDL Unit Prepared Analyzed Dil Fac C6-C10 1200 U 1200 ug/Kg 09/11/19 12:30 09/11/19 19:29 2410 50 Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 09/11/19 12:30 09/11/19 19:29

Method: 8015B - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier MQL (Adi) SDL Unit Prepared Analyzed Dil Fac mg/Kg **Diesel Range Organics [C10-C28]** 4.85 1.94 09/08/19 18:26 09/11/19 04:07 4.80 J Oil Range Organics (C28-C35) 3.44 J 4.85 1.94 mg/Kg 09/08/19 18:26 09/11/19 04:07

65 - 125

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac o-Terphenyl 77 27 - 151 09/08/19 18:26 09/11/19 04:07

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. J

U Indicates the analyte was analyzed for but not detected.

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 **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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDI Method Detection Limit Minimum Level (Dioxin) ML

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

Relative Percent Difference, a measure of the relative difference between two points **RPD**

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

9/27/2019

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

				ercent Surr
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-122)	(79-123)	(80-120)
400-175831-A-2-C MS	Matrix Spike	99	96	106
400-175831-A-2-D MSD	Matrix Spike Duplicate	99	96	105
600-191317-1	Cell 21-Square	95	93	104
	1-s-2'-3'-190903			
600-191317-2	Cell 26-Square	96	96	103
	18-s-2'-3'-190903			
600-191317-3	Cell 25-Square	98	96	104
	42-s-2'-3'-190903			
600-191317-4	Cell 19-Square	97	94	103
	197-s-2'-3'-190903			
600-191317-5	Cell 17-Square	96	93	104
	49-s-2'-3'-190903			
600-191317-6	Cell 18-Square	95	94	103
000 404047 7	20-s-2'-3'-190903	00	0.5	40.4
600-191317-7	Cell 20-Square	96	95	104
1.00.400.4500.44/4.4	85-s-2'-3'-190903			
LCS 400-456844/1-A	Lab Control Sample	100	99	106
MB 400-456844/2-A	Method Blank	94	98	105
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene			
DBFM = Dibromofluoror	methane			
TOL = Toluene-d8 (Sur	•\			

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

		TFT-F2	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(65-125)	
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	99	
600-191317-1 MS	Cell 21-Square 1-s-2'-3'-190903	101	
600-191317-1 MSD	Cell 21-Square 1-s-2'-3'-190903	102	
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	100	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	100	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	101	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	101	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	103	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	102	
LCS 400-456518/1-A	Lab Control Sample	99	
MB 400-456518/2-A	Method Blank	104	

TFT-F = a,a,a-Trifluorotoluene (fid)

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Surrogate Summary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Matrix: Solid Prep Type: Total/NA

		OTPH1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(27-151)	
400-175869-B-1-A MS	Matrix Spike	86	
400-175869-B-1-B MSD	Matrix Spike Duplicate	82	
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	78	
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	90	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	73	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	69	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	75	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	78	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	77	
LCS 400-455952/2-A	Lab Control Sample	82	
MB 400-455952/1-A	Method Blank	78	
Surrogate Legend			

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Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: MB 400-456844/2-A

Matrix: Solid

Analysis Batch: 456801

Client: ARCADIS U.S. Inc

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456844

•	MB	MB						•	
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.670	U	5.00	0.670	ug/Kg		09/13/19 09:44	09/13/19 12:41	1
Ethylbenzene	0.610	U	5.00	0.610	ug/Kg		09/13/19 09:44	09/13/19 12:41	1
Toluene	1.00	U	5.00	1.00	ug/Kg		09/13/19 09:44	09/13/19 12:41	1
Xylenes, Total	1.90	U	10.0	1.90	ug/Kg		09/13/19 09:44	09/13/19 12:41	1

MB MB

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94	72 - 122	09/13/19 09:44	09/13/19 12:41	1
Dibromofluoromethane	98	79 - 123	09/13/19 09:44	09/13/19 12:41	1
Toluene-d8 (Surr)	105	80 - 120	09/13/19 09:44	09/13/19 12:41	1

Lab Sample ID: LCS 400-456844/1-A

Matrix: Solid

Analysis Batch: 456801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 456844**

%Rec.

Spike LCS LCS Analyte Added Result Qualifier Unit D %Rec Limits 65 - 130 Benzene 50.0 48.58 97 ug/Kg Ethylbenzene 50.0 53.51 ug/Kg 107 70 - 130 70 - 130 Toluene 50.0 ug/Kg 51.18 102 Xylenes, Total 100 106.7 ug/Kg 107 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	100		72 - 122
Dibromofluoromethane	99		79 - 123
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: 400-175831-A-2-C MS

Matrix: Solid

Analysis Batch: 456801

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 456844

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	507		2040	2410		ug/Kg		93	38 - 131	
Ethylbenzene	228		2040	2352		ug/Kg		104	35 - 130	
Toluene	1960		2040	3901		ug/Kg		95	42 - 130	
Xylenes, Total	2230		4080	6406		ug/Kg		103	35 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		72 - 122
Dibromofluoromethane	96		79 - 123
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: 400-175831-A-2-D MSD

Matrix: Solid

Analysis Batch: 456801

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 456844

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	507		2040	2308		ug/Kg		88	38 - 131	4	36
Ethylbenzene	228		2040	2171		ug/Kg		95	35 - 130	8	46
Toluene	1960		2040	3615		ug/Kg		81	42 - 130	8	37

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Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Lab Sample ID: 400-175831-A-2-D MSD						Client Sa	ımp	le ID: N	latrix Spik	ce Dup	licate
Matrix: Solid									Prep Ty	e: Tot	al/NA
Analysis Batch: 456801									Prep Ba	tch: 4	6844
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Xylenes, Total	2230		4080	5938		ug/Kg	_	91	35 - 130	8	39

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		72 - 122
Dibromofluoromethane	96		79 - 123
Toluene-d8 (Surr)	105		80 - 120

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-456518/2-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA **Prep Batch: 456518 Analysis Batch: 456419** MB MB Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac C6-C10 50.0 U 09/11/19 12:30 09/11/19 13:21 100 50.0 ug/Kg MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed a,a,a-Trifluorotoluene (fid) 09/11/19 12:30 09/11/19 13:21 104 65 - 125

Lab Sample ID: LCS 400-456518/1-A **Matrix: Solid**

Analysis Batch: 456419							Prep Ba	Itcn: 45	0516
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
C6-C10	1000	925.0		ug/Kg	_	93	62 - 141		

LCS LCS Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 99 65 - 125

Lab Sample ID: 600-191317-1 MS **Matrix: Solid**

Analysis Batch: 456419

Analysis Batch: 456419									Prep Ba	tch: 456518
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C10	1310	U	26100	26570		ug/Kg		102	10 - 150	

MS MS %Recovery Qualifier Limits Surrogate 65 - 125 a,a,a-Trifluorotoluene (fid) 101

Lab Sample ID: 600-191317-1 MSD

Matrix: Solid

Analysis Batch: 456419									Prep Ba	atch: 4	56518
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C10	1310	U	26100	26220		ug/Kg		100	10 - 150	1	32

Client Sample ID: Lab Control Sample

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 600-191317-1 MSD **Matrix: Solid**

Analysis Batch: 456419

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Prep Type: Total/NA

Prep Batch: 456518

MSD MSD

Limits Surrogate %Recovery Qualifier a,a,a-Trifluorotoluene (fid) 102 65 - 125

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

Lab Sample ID: MB 400-455952/1-A

Lab Sample ID: LCS 400-455952/2-A

Matrix: Solid

Analysis Batch: 456314

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455952

Result Qualifier 2.00 U

Diesel Range Organics [C10-C28] Oil Range Organics (C28-C35)

Analysis Batch: 456314

MQL (Adj) 5.00

SDL Unit 2.00 mg/Kg

Prepared 09/08/19 18:25 09/11/19 01:22

Analyzed Dil Fac

2.00 U 5.00 2.00 mg/Kg 09/08/19 18:25 09/11/19 01:22

MB MB

MB MB

%Recovery Qualifier Limits Surrogate o-Terphenyl 78 27 - 151

Prepared Analyzed Dil Fac 09/08/19 18:25 09/11/19 01:22

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455952 %Rec.

LCS LCS Spike Limits Analyte Added Result Qualifier Unit %Rec 272 81 63 - 153 Diesel Range Organics 221.0 mg/Kg

[C10-C28]

Matrix: Solid

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 151 82

Lab Sample ID: 400-175869-B-1-A MS

Matrix: Solid

Analysis Batch: 456314

Client Sample ID: Matrix Spike

Prep Type: Total/NA **Prep Batch: 455952**

Limits

Result Qualifier Analyte Result Qualifier Added Unit D %Rec 268 62 - 204 **Diesel Range Organics** 9.20 214.9 mg/Kg 77

Spike

MS MS

MSD MSD

[C10-C28]

MS MS

Sample Sample

%Recovery Qualifier Limits Surrogate o-Terphenyl 27 - 151 86

%Rec.

Lab Sample ID: 400-175869-B-1-B MSD

Matrix: Solid

Analysis Batch: 456314

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA **Prep Batch: 455952**

%Rec. **RPD**

Sample Sample Spike Added Result Qualifier %Rec Limits RPD Limit **Analyte** Result Qualifier Unit 9.20 269 210.9 75 62 - 204 30 **Diesel Range Organics** mg/Kg

[C10-C28]

MSD MSD

Surrogate %Recovery Qualifier I imits o-Terphenyl 82 27 - 151

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Unadjusted Detection Limits

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	5.00	0.670	ug/Kg
Ethylbenzene	5.00	0.610	ug/Kg
Toluene	5.00	1.00	ug/Kg
Xylenes, Total	10.0	1.90	ug/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5035

Analyte	MQL	MDL	Units
C6-C10	100	50.0	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
Diesel Range Organics [C10-C28]	5.00	2.00	mg/Kg	_
Oil Range Organics (C28-C35)	5.00	2.00	mg/Kg	

QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC/MS VOA

Analysis Batch: 456801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	8260B	456844
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	8260B	456844
MB 400-456844/2-A	Method Blank	Total/NA	Solid	8260B	456844
LCS 400-456844/1-A	Lab Control Sample	Total/NA	Solid	8260B	456844
400-175831-A-2-C MS	Matrix Spike	Total/NA	Solid	8260B	456844
400-175831-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	456844

Prep Batch: 456844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	5035	_
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	5035	
MB 400-456844/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-456844/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-175831-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
400-175831-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 456419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	8015B	456518
MB 400-456518/2-A	Method Blank	Total/NA	Solid	8015B	456518
LCS 400-456518/1-A	Lab Control Sample	Total/NA	Solid	8015B	456518
600-191317-1 MS	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	8015B	456518
600-191317-1 MSD	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	8015B	456518

Prep Batch: 456518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	5035	

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QC Association Summary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

GC VOA (Continued)

Prep Batch: 456518 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-456518/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-456518/1-A	Lab Control Sample	Total/NA	Solid	5035	
600-191317-1 MS	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	5035	
600-191317-1 MSD	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 455952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	3546	
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	3546	
MB 400-455952/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-455952/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-175869-B-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-175869-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 456314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	Total/NA	Solid	8015B	455952
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	Total/NA	Solid	8015B	455952
MB 400-455952/1-A	Method Blank	Total/NA	Solid	8015B	455952
LCS 400-455952/2-A	Lab Control Sample	Total/NA	Solid	8015B	455952
400-175869-B-1-A MS	Matrix Spike	Total/NA	Solid	8015B	455952
400-175869-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	455952

Lab Sample ID: 600-191317-1

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903 Date Collected: 09/03/19 14:25

Matrix: Solid

Date Received: 09/04/19 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.561 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 17:30	BSW	TAL PEN
Total/NA	Prep	5035			9.569 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 16:56	GRK	TAL PEN
Total/NA	Prep	3546			15.09 g	1 mL	455952	09/08/19 18:26	AH	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 02:38	JAW	TAL PEN

Client Sample ID: Cell 26-Square 18-s-2'-3'-190903

Lab Sample ID: 600-191317-2

Matrix: Solid

Date Collected: 09/03/19 14:50 Date Received: 09/04/19 10:34

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Amount **Amount** Number or Analyzed Analyst Run **Factor** Lab Total/NA 5035 5.00 g 456844 09/13/19 09:44 BSW Prep 10.567 g TAL PEN Total/NA Analysis 8260B 5 mL 5 mL 456801 09/13/19 17:58 BSW TAL PEN 1 Total/NA Prep 5035 9.92 q 5.00 q 456518 09/11/19 12:30 GRK TAL PEN Total/NA Analysis 8015B 50 5 mL 5 mL 456419 09/11/19 17:14 GRK TAL PEN Total/NA Prep 3546 1 mL 455952 09/08/19 18:26 AH TAL PEN 15.13 g 09/11/19 02:51 JAW Total/NA Analysis 8015B 456314 TAL PEN

Client Sample ID: Cell 25-Square 42-s-2'-3'-190903

Lab Sample ID: 600-191317-3

Date Collected: 09/03/19 15:30
Date Received: 09/04/19 10:34

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			12.559 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 18:26	BSW	TAL PEN
Total/NA	Prep	5035			11.715 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 17:40	GRK	TAL PEN
Total/NA	Prep	3546			15.78 g	1 mL	455952	09/08/19 18:26	АН	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 03:03	JAW	TAL PEN

Client Sample ID: Cell 19-Square 197-s-2'-3'-190903

Lab Sample ID: 600-191317-4

Date Collected: 09/03/19 12:15 Matrix: Solid

Date Received: 09/04/19 10:34

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.466 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 18:54	BSW	TAL PEN
Total/NA	Prep	5035			9.933 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 18:06	GRK	TAL PEN
Total/NA	Prep	3546			15.13 g	1 mL	455952	09/08/19 18:26	AH	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 03:16	JAW	TAL PEN

Eurofins TestAmerica, Houston

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Lab Sample ID: 600-191317-5 Client Sample ID: Cell 17-Square 49-s-2'-3'-190903

Date Collected: 09/03/19 13:35 **Matrix: Solid** Date Received: 09/04/19 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.36 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 19:22	BSW	TAL PEN
Total/NA	Prep	5035			8.72 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 18:33	GRK	TAL PEN
Total/NA	Prep	3546			15.08 g	1 mL	455952	09/08/19 18:26	AH	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 03:29	JAW	TAL PEN

Client Sample ID: Cell 18-Square 20-s-2'-3'-190903

Lab Sample ID: 600-191317-6 Date Collected: 09/03/19 12:45 **Matrix: Solid**

Date Received: 09/04/19 10:34

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.422 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 19:50	BSW	TAL PEN
Total/NA	Prep	5035			10.096 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 18:59	GRK	TAL PEN
Total/NA	Prep	3546			15.72 g	1 mL	455952	09/08/19 18:26	AH	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 03:54	JAW	TAL PEN

Client Sample ID: Cell 20-Square 85-s-2'-3'-190903

Lab Sample ID: 600-191317-7 Date Collected: 09/03/19 11:45 **Matrix: Solid**

Date Received: 09/04/19 10:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.831 g	5.00 g	456844	09/13/19 09:44	BSW	TAL PE
Total/NA	Analysis	8260B		1	5 mL	5 mL	456801	09/13/19 20:18	BSW	TAL PE
Total/NA	Prep	5035			10.377 g	5.00 g	456518	09/11/19 12:30	GRK	TAL PE
Total/NA	Analysis	8015B		50	5 mL	5 mL	456419	09/11/19 19:29	GRK	TAL PE
Total/NA	Prep	3546			15.45 g	1 mL	455952	09/08/19 18:26	АН	TAL PE
Total/NA	Analysis	8015B		1			456314	09/11/19 04:07	JAW	TAL PEI

Laboratory References:

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

Job ID: 600-191317-1

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-18-23	10-31-19

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 Dat
Alabama	State	40150	07-01-20
Alabama	State Program	40150	06-30-20
ANAB	ISO/IEC 17025	L2471	02-22-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arizona	State Program	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
Arkansas DEQ	State Program	88-0689	09-01-20
California	State	2510	07-01-20
California	State Program	2510	06-30-20
Florida	NELAP	E81010	06-30-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Georgia	State Program	E81010 (FL)	06-30-20
Illinois	NELAP	200041	10-09-19
Illinois	NELAP	004586	10-09-19
lowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	10-31-19
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	93030	12-30-19
Kentucky (WW)	State Program	98030	12-31-19
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Maryland	State	233	09-30-20
Maryland	State Program	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Massachusetts	State Program	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Michigan	State Program	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	06-30-20
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma , , ,	State	9810-186	08-31-20
Oklahoma	State Program	9810	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Tennessee	State Program	TN02907	06-30-20
Texas	NELAP	T104704286-18-15	09-30-19

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc Job ID: 600-191317-1

Project/Site: Chevron - Jal Land Farm Soils 2019

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704286	09-30-19
US Fish & Wildlife	Federal	LE058448-0	07-31-20
USDA	Federal	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
Washington	State Program	C915	05-15-20
West Virginia DEP	State	136	09-30-19
West Virginia DEP	State Program	136	09-30-19

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Client Information	Fran Nanny		Kudchad	Las PM Kudchadkar, Sachin G	camer tracking No(s).	600-70709-19356.1
Client Contact Steve Rice	Phone 543-1945		E-Mail sachin.ki	E-Mail sachin kudchadkar@testamericainc.com	NA	Page 1 of 1
Company ARCADIS U.S. Inc				Analysis Requested	ssted	Soo 48810.0001
Avenue	Due Date Requested:					ion Cod
	TAT Requested (days):			2000		HCL
Broomiteid State, Zip CO 840021	Strondold	141		slo.		C - Zn Acetale O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 O - Na2SO3
OFITAL	PO#	Ţ	100	pesua		
	WO#	2	L NO)			- Ascorbic Acid
steve, rice@arcadis.com	Propertiti		0 80	0-015		K-EDTA W
Jal Land Farm Soils 2018	60009563		Y) 9I	080		L-EDA
Londasm	SSOWIE NA		dweS	a (aon		Other:
	8	Sample Type (C=comp,	Matrix (weeter Senains, Owested)	2608 - ВТЕХ С 015-СВО (С6-		sedmuń leto
Sample Identification	Sample Date	- m	3	8 Z		Special instructions work
Coll 21-Sunce 1-5-2-3: 190803	9.3-19 1425	9	Solid	XXX		
26-50,012 18-5-7:3: 190903	6		Solid	XXX		
- Source 42-5-2-3-19983	6		Solid			
-	8-3-19 1215	9	Solid	XXX		*
19-5-2-3-190903	3551 61-5-6	9	Solid	KXX VXX		pots
3K - 5mm - 4C	Dr 9-3-19		Solid	>		L Cn
Cell 18-50,10/0 20-5-2:3: 190903	9-3-19 1245	9	Solid	XXX		o nier
190903	8-3-19 1145	9	Solid	XXX		10 ZI
		9	Solid 7			613
	2	411	Bohd	1		L-009
			Solid			9
Possible Hazard Identification	Doeson B Internet	Particlonical		Sample Disposal (A fee may be assessed it samples are retained longer than 1 month)	assessed if samples are reta	tained longer than 1 month)
ested: I, II, III, IV, Other (specify)		Balkoronev		Requireme	nosal by tab	
Empty Kit Relinquished by:	Date		Time		Method of Shipment, FJ	Ex Ay Priorit
Relinquising by	9-3-19 / 2000		Acel's	Received by Received by	2 July 2016	f
	6		la de la constante de la const	In management	Sala Salas	Aueduso
Reinquishad by	Date/Time		Company	Received by	Date/Time	Сотралу
Custody Seals Intact: Custody Seal No.				一十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二		

Seurofins. Even For the Contraction of Table 1

Loc: 600 191317

1317

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Environment Testing. TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'19 SEP 4 10:34

	010	Date/Time Received:		_
JOB NUMBER:	191317	CLIENT:	Arcadis	
UNPACKED BY:	ST	CARRIER/DRIVER:	Fedex	

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm	Corrected Temp (°C)
BUL	AIN	X/N	2.3	678	40.1	2.4
	Y / N	Y/N				
	Y / N	Y/N				b
	YIN	Y / N				ali
	Y / N	Y/N				914
	Y / N	Y / N				57

CF = correction factor

Samples received on ic	e? ØYES	
------------------------	---------	--

LABORATORY PRESERVATION OF SAMPLES F	REQUIRED: ÆÑO □YES	
Base samples are>pH 12: ☐YES ☐NO	Acid preserved are <ph 2:="" th="" □no<="" □yes=""><th></th></ph>	
TX1005 samples <u>frozen</u> upon receipt:	DATE & TIME PUT IN FREEZER:	
pH paper Lot #	VOA headspace acceptable (5-6mm): ☐YES ☐NO	AMD C
Did samples meet the laboratory's standard conditions of s	sample acceptability upon receipt?	HYES NO
COMMENTS:		
COMMENTS:		
COMMENTS:		>
COMMENTS:		9/4/19

HS-SA-WI-013

Rev. 4A: 08/26/2019

Chain of Custody Record

Environment Testing TestAmerica

eurofins

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040

	Sampler:
: 713-690-5646	
.690-4444 Fax:	
Phone: 713-	

Client Information (Sub Contract Lab)	Sampler:			Lab PM: Kudch	Lab PM: Kudchadkar, Sachin G	Sachin	9	Carrier Tracking No(s):	COC No: 600-41620.1	
Client Contact:	Phone:			E-Mail:	30			State of Origin:	Page:	
Shipping/Receiving				sach	in.kudch.	adkar(G	sachin.kudchadkar@testamericainc.com	Texas	Page 1 of 1	
Company: TestAmerica Laboratories, Inc.					Accreditations Requ	ons Red	Accreditations Required (See note): NELAP - Texas		Job #: 600-191317-1	
Address: 3355 McLemore Drive, ,	Due Date Requested: 9/16/2019	Ü					Analysis Requested	quested	Preservation Codes:	Jes:
City: Pensacola	TAT Requested (days):	ys):							B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Ztp: FL, 32514						-			D - Nitric Acid E - NaHSO4	P - Na2048 Q - Na2803
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	# 0d				(0	_			G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate
Email:	WO#:					-			_	U - Acetone V - MCAA
Project Name: Chevron - Jal Land Farm Soils 2018	Project #: 60009563								rtainer L - EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:					_			Other:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered S MS/M	8015B_DRO/354			Total Number o	Special Instructions/Note:
		\bigvee		Preservation Code:	X					
Cell 21-Square 1-s-2'-3'-190903 (600-191317-1)	9/3/19	14:25 Central		Solid		×			5	
Cell 26-Square 18-s-2'-3'-190903 (600-191317-2)	9/3/19	14:50 Central		Solid		×	~		2	
Cell 25-Square 42-s-2'-3'-190903 (600-191317-3)	9/3/19	15:30 Central		Solid		×	~		2	
Cell 19-Square 197-s-2'-3'-190903 (600-191317-4)	9/3/19	12:15 Central		Solid		×	×		22	
Cell 17-Square 49-s-2'-3'-190903 (600-191317-5)	9/3/19	13:35 Central		Solid		×	×		5	
Cell 18-Square 20-s-2'-3'-190903 (600-191317-6)	9/3/19	12:45 Central		Solid		×	×		5	
Cell 20-Square 85-s-2'-3'-190903 (600-191317-7)	9/3/19	11:45 Central		Solid		×	×		2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. 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/lests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratories, will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. Possible Hazard Identification

Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	ssed if samples are retained longe	r than 1 month)
Unconfirmed			Return To Client Disp	Disposal By Lab Archive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Delive	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:		Date;	Time:	Method of Shipment:	
Relinquished by:	Date/Time:	Сотрапу	Received by MICOULD	Paterlime	UC Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Сотрапу
Relinquished by:	Date/Time;	Company	Received by:	Date/Time;	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:	ks: I I Tel	

Ver: 01/16/2019

Job Number: 600-191317-1

List Source: Eurofins TestAmerica, Houston

Login Number: 191317

Client: ARCADIS U.S. Inc

List Number: 1

Creator: Torres, Sandra Answer Comment Question Radioactivity wasn't checked or is </= background as measured by a survey N/A Lab does not accept radioactive samples. meter. The cooler's custody seal, if present, is intact. True

True

True Sample custody seals, if present, are intact. The cooler or samples do not appear to have been compromised or True tampered with. True Samples were received on ice. Cooler Temperature is acceptable. True Cooler Temperature is recorded. True 2.4 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 True HTs)

Sample containers have legible labels. True Containers are not broken or leaking. 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 True MS/MSDs

Containers requiring zero headspace have no headspace or bubble is True <6mm (1/4"). 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.

Eurofins TestAmerica, Houston

Page 26 of 27

Client: ARCADIS U.S. Inc

Job Number: 600-191317-1

Login Number: 191317

List Number: 2

Creator: Brown, Nathan

List Source: Eurofins TestAmerica, Pensacola

List Creation: 09/06/19 05:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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)	False	Refer to Job Narrative for details.
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.	True	



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Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-196845-1

Client Project/Site: Chevron - Jal Land Farm

For:

🔅 eurofins

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



Authorized for release by: 12/24/2019 3:30:05 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

/lethod	Method Description	Protocol	Laboratory
3260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL CAN
015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
00.0	Anions, Ion Chromatography	MCAWW	TAL HOU
)10B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
71A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
40B	Percent Moisture	SM20	TAL HOU
12B	Cyanide, Total andor Amenable	SW846	TAL HOU
50B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
46	Microwave Extraction	SW846	TAL CAN
30A	Purge and Trap	SW846	TAL CAN
35	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
71A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
12B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL HOU
Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Job ID: 600-196845-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-196845-1	Cell17-Square204-S-2-3-191202	Solid	12/02/19 10:10	12/04/19 10:35
600-196845-2	Cell17-Square157-S-2-3-191202	Solid	12/02/19 10:40	12/04/19 10:35
00-196845-3	Cell17-Square111-S-2-3-191202	Solid	12/02/19 10:54	12/04/19 10:35
00-196845-4	Cell17-Square14-S-2-3-191202	Solid	12/02/19 11:09	12/04/19 10:35
600-196845-5	Cell18-Square179-S-2-3-191202	Solid	12/02/19 11:41	12/04/19 10:35
600-196845-6	Cell18-Square118-S-2-3-191202	Solid	12/02/19 12:13	12/04/19 10:35
00-196845-7	Cell18-Square176-S-2-3-191202	Solid	12/02/19 12:35	12/04/19 10:35
00-196845-8	Cell18-Square22-S-2-3-191202	Solid	12/02/19 12:50	12/04/19 10:35
600-196845-9	Cell19-Square83-S-2-3-191202	Solid	12/02/19 13:29	12/04/19 10:35
600-196845-10	Cell19-Square29-S-2-3-191202	Solid	12/02/19 13:46	12/04/19 10:35
00-196845-11	Cell19-Square70-S-2-3-191202	Solid	12/02/19 13:59	12/04/19 10:35

4

5

7

10

111

13

Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

Manganese

Sodium

Antimony

Selenium

Lead

Client Sample ID: Cell17-Square204-S-2-3-191202

Date Collected: 12/02/19 10:10 Date Received: 12/04/19 10:35

Matrix: Solid Percent Solids: 79.9

Lab Sample ID: 600-196845-1

ate Received: 12/04/19 10:35								Percent Sol	ids: 79
Method: 8260B - Volatile Organi	o Compounds	(CC/MS)							
Analyte		Qualifier	MQL (Adj)	SDI	Unit	D	Prepared	Analyzed	Dil F
Benzene	0.000630		0.00500	0.000630		— -	12/04/19 15:40	12/05/19 17:58	
Ethylbenzene	0.00102		0.00500	0.00102		₩	12/04/19 15:40	12/05/19 17:58	
Foluene	0.00138		0.00500	0.00138		₩	12/04/19 15:40	12/05/19 17:58	
(ylenes, Total	0.00113		0.00500	0.00113			12/04/19 15:40	12/05/19 17:58	
,,,					99				
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
,2-Dichloroethane-d4 (Surr)	96		61 - 130				12/04/19 15:40	12/05/19 17:58	
Dibromofluoromethane	98		68 ₋ 140				12/04/19 15:40	12/05/19 17:58	
Coluene-d8 (Surr)	93		50 - 130				12/04/19 15:40	12/05/19 17:58	
l-Bromofluorobenzene	91		57 - 140				12/04/19 15:40	12/05/19 17:58	
Method: 8015B - Gasoline Rang	e Organics - (G	C)							
nalyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics [C6 - C10]	63.8	U	99.4	63.8	ug/Kg		12/07/19 18:04	12/08/19 21:05	
urrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
rifluorotoluene (Surr)	88		20 - 140				12/07/19 18:04	12/08/19 21:05	
lethod: 8015B - Diesel Range C	rasnice (DPA)	(GC)							
nalyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil I
iesel Range Organics [C10 - C28]	138		49.5		mg/Kg		12/09/19 10:03	12/10/19 20:53	
228-C36	34.2	U	49.5		mg/Kg		12/09/19 10:03	12/10/19 20:53	
					0 0				
Gurrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil I
-Terphenyl (Surr)	74		26 - 125				12/09/19 10:03	12/10/19 20:53	
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble							
nalyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
Chloride	110	b	4.97	0.663	mg/Kg	<u> </u>		12/20/19 05:10	
litrate as N	92.1	Нb	2.48	0.312	mg/Kg	₩		12/20/19 05:10	
luoride	4.91		2.48	0.747	mg/Kg	₩		12/20/19 05:10	
ulfate	120		6.21	1.19	mg/Kg	₽		12/20/19 05:10	
Method: 6010B - Inductively Cou	unled Plasma -	Atomic Em	ission Spectr	ometry					
nalyte	•	Qualifier	MQL (Adj)	•	Unit	D	Prepared	Analyzed	Dil F
silver	0.146	U	0.491	0.146	mg/Kg	\	12/07/19 11:54	12/09/19 15:47	
Arsenic	2.88		1.23	0.268	mg/Kg	≎	12/07/19 11:54	12/09/19 15:47	
Barium	65.7		1.23	0.0368	mg/Kg	₽	12/07/19 11:54	12/09/19 15:47	
Beryllium	0.466		0.307	0.0178	mg/Kg	₽	12/07/19 11:54	12/09/19 15:47	
Calcium	9190		123	1.06	mg/Kg	₽	12/07/19 11:54	12/09/19 15:47	
Cadmium	0.203	J	0.307	0.0314	mg/Kg	≎	12/07/19 11:54	12/09/19 15:47	
Chromium	8.27		0.614	0.0621	mg/Kg	\$	12/07/19 11:54	12/09/19 15:47	
Copper	5.60		0.614	0.214	mg/Kg	≎	12/07/19 11:54	12/09/19 15:47	
ron	7730		24.6	3.11	mg/Kg	₽	12/07/19 11:54	12/09/19 15:47	
otassium	1850		123	13.5	mg/Kg	φ	12/07/19 11:54	12/09/19 15:47	
/lagnesium	1330		123	2.36	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	
			4.6.			· ·	10/07/10 11 7 :	10/00/10 15 :-	

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12/09/19 15:47

12/09/19 15:47

12/09/19 15:47

12/09/19 15:47

12/09/19 15:47

12/07/19 11:54

12/07/19 11:54

12/07/19 11:54

12/07/19 11:54

12/07/19 11:54

₽

1.84

123

0.614

3.07

2.46

132

6.83

1000 b

0.285 U

0.318 U

0.0468 mg/Kg

1.09 mg/Kg

0.129 mg/Kg

0.285 mg/Kg

0.318 mg/Kg

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell17-Square204-S-2-3-191202

Date Collected: 12/02/19 10:10 Date Received: 12/04/19 10:35

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-196845-1

Matrix: Solid Percent Solids: 79.9

Method: 6010B - Inductively Couple	ed Plasma	Atomic Em	ission Spectro	metry (Co	ntinued)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.340	U	1.84	0.340	mg/Kg		12/07/19 11:54	12/09/19 15:47	1
Zinc	20.9		1.84	0.133	mg/Kg	₽	12/07/19 11:54	12/09/19 15:47	1

Zinc	20.5		1.04	0.100	mg/rtg		12/07/10 11:04	12/03/13 10.4/	
Method: 7471A - Mercury in S	olid or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0192	J	0.0196	0.00414	mg/Kg	\	12/11/19 14:22	12/12/19 10:29	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	79.9		1.0	1.0	%			12/06/19 11:12	1

0.148

0.0222 mg/Kg

Client Sample ID: Cell17-Square157-S-2-3-191202

0.0885 J

Date Collected: 12/02/19 10:40 Date Received: 12/04/19 10:35

Cyanide, Total

Lab Sample ID: 600-196845-2 **Matrix: Solid**

12/09/19 13:30

‡ 12/09/19 10:56

Percent Solids: 85.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.134	U	0.451	0.134	mg/Kg		12/07/19 11:54	12/09/19 15:49	1
Arsenic	2.45		1.13	0.246	mg/Kg	₩	12/07/19 11:54	12/09/19 15:49	1
Barium	58.1		1.13	0.0338	mg/Kg	₩	12/07/19 11:54	12/09/19 15:49	1
Beryllium	0.423		0.282	0.0163	mg/Kg	*	12/07/19 11:54	12/09/19 15:49	1
Calcium	8110		113	0.974	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Cadmium	0.146	J	0.282	0.0288	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Chromium	7.34		0.563	0.0570	mg/Kg	*	12/07/19 11:54	12/09/19 15:49	1
Copper	4.21		0.563	0.196	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Iron	6830		22.5	2.85	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Potassium	1530		113	12.4	mg/Kg	\$	12/07/19 11:54	12/09/19 15:49	1
Magnesium	1250		113	2.16	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Manganese	76.9		1.69	0.0429	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Sodium	174	b	113	0.998	mg/Kg	\$	12/07/19 11:54	12/09/19 15:49	1
Lead	5.39		0.563	0.118	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Antimony	0.261	U	2.82	0.261	mg/Kg	₩	12/07/19 11:54	12/09/19 15:49	1
Selenium	0.292	U	2.25	0.292	mg/Kg		12/07/19 11:54	12/09/19 15:49	1
Thallium	0.312	U	1.69	0.312	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1
Zinc	17.1		1.69	0.122	mg/Kg	₽	12/07/19 11:54	12/09/19 15:49	1

Method: 7471A - Mercury in Solid	or Semisolid Waste (Mar	nual Cold Vap	or Technique)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00819 J	0.0187	0.00393 ma/Ka	\	12/11/19 14:22	12/12/19 10:35	1

General Chemistry Analyte	Result Qualifie	er MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.7	1.0	1.0	%			12/06/19 11:12	1
Percent Solids	85.3	1.0	1.0	%			12/06/19 11:12	1

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12/24/2019

Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell17-Square111-S-2-3-191202

Date Collected: 12/02/19 10:54 Date Received: 12/04/19 10:35

Lab Sample ID: 600-196845-3 **Matrix: Solid** Percent Solids: 77.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry SDL Unit Analyte Result Qualifier MQL (Adj) D Prepared Analyzed Dil Fac $\overline{\varphi}$ Silver 0.147 Ū 0.494 0.147 mg/Kg 12/07/19 11:54 12/09/19 15:51 12/07/19 11:54 12/09/19 15:51 1.24 0.269 mg/Kg **Arsenic** 1.92 Ö **Barium** 41.2 1.24 0.0371 mg/Kg 12/07/19 11:54 12/09/19 15:51 12/09/19 15:51 0.309 0.0179 mg/Kg 12/07/19 11:54 Beryllium 0.272 J **Calcium** 10600 124 1.07 mg/Kg 12/07/19 11:54 12/09/19 15:51 0.309 0.0316 mg/Kg 12/07/19 11:54 12/09/19 15:51 Cadmium 0.105 J Chromium 4.97 0.618 0.0625 mg/Kg 12/07/19 11:54 12/09/19 15:51 2.85 0.618 0.215 mg/Kg 12/07/19 11:54 12/09/19 15:51 Copper 12/07/19 11:54 4480 24.7 3.13 mg/Kg 12/09/19 15:51 12/07/19 11:54 **Potassium** 1040 124 13.6 mg/Kg 12/09/19 15:51 12/07/19 11:54 12/09/19 15:51 Magnesium 898 124 2.37 mg/Kg 1.85 0.0471 mg/Kg 12/07/19 11:54 12/09/19 15:51 Manganese 58.2 **Sodium** 91.2 Jb 124 1.09 mg/Kg 12/07/19 11:54 12/09/19 15:51 Lead 3.92 0.618 0.130 mg/Kg 12/07/19 11:54 12/09/19 15:51 3.09 0.287 mg/Kg 12/07/19 11:54 Antimony 0.287 U 12/09/19 15:51 Selenium 0.320 U 2.47 0.320 mg/Kg 12/07/19 11:54 12/09/19 15:51 Thallium 0.342 U 1.85 12/07/19 11:54 0.342 mg/Kg 12/09/19 15:51 Zinc 11.3 1.85 0.133 mg/Kg 12/07/19 11:54 12/09/19 15:51

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	nual Cold Vap	or Techniq	jue)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00775	J	0.0199	0.00418	mg/Kg	₩	12/11/19 14:22	12/12/19 10:38	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.2	1.0	1.0 %	6			12/06/19 11:12	1
Percent Solids	77.8	1.0	1.0 %	6			12/06/19 11:12	1

Client Sample ID: Cell17-Square14-S-2-3-191202 Lab Sample ID: 600-196845-4 Date Collected: 12/02/19 11:09 Date Received: 12/04/19 10:35

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.122	U	0.411	0.122	mg/Kg	<u> </u>	12/07/19 11:54	12/09/19 15:53	1
Arsenic	3.03		1.03	0.224	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Barium	164		1.03	0.0308	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Beryllium	0.324		0.257	0.0149	mg/Kg	φ.	12/07/19 11:54	12/09/19 15:53	1
Calcium	48700		103	0.888	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Cadmium	0.205	J	0.257	0.0263	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Chromium	5.81		0.514	0.0520	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Copper	4.37		0.514	0.179	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Iron	5540		20.5	2.60	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Potassium	1290		103	11.3	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Magnesium	1950		103	1.97	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Manganese	152		1.54	0.0391	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Sodium	64.9	J b	103	0.910	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Lead	9.50		0.514	0.108	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Antimony	0.238	U	2.57	0.238	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Selenium	0.266	U	2.05	0.266	mg/Kg		12/07/19 11:54	12/09/19 15:53	1

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Matrix: Solid

Percent Solids: 93.6

Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell17-Square14-S-2-3-191202

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

6.4

93.6

Date Collected: 12/02/19 11:09 Date Received: 12/04/19 10:35

Lab Sample ID: 600-196845-4

Matrix: Solid

Percent Solids: 93.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.285	U	1.54	0.285	mg/Kg		12/07/19 11:54	12/09/19 15:53	1
Zinc	19.0		1.54	0.111	mg/Kg	₽	12/07/19 11:54	12/09/19 15:53	1
Method: 7471A - Mercury in Solid of Analyte		Waste (Mai	nual Cold Vapo MQL (Adj)	or Technic	• /	D	Prepared	Analyzed	Dil Fac
Mercury	0.0109	J	0.0176	0.00370	mg/Kg	<u> </u>	12/11/19 14:22	12/12/19 10:40	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

1.0 Client Sample ID: Cell18-Square179-S-2-3-191202 Lab Sample ID: 600-196845-5

1.0

1.0 %

1.0 %

Date Collected: 12/02/19 11:41

Percent Moisture

Percent Solids

Date Received: 12/04/19 10:35

Matrix: Solid

12/06/19 11:12 12/06/19 11:12

Percent Solids: 75.1

Method: 8260B - Volatile C	Organic Compounds	(GC/MS)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000619	UH	0.00491	0.000619	mg/Kg	*	12/04/19 15:40	12/05/19 18:21	1
Ethylbenzene	0.00100	UH	0.00491	0.00100	mg/Kg	₽	12/04/19 15:40	12/05/19 18:21	1
Toluene	0.00136	UH	0.00491	0.00136	mg/Kg	₽	12/04/19 15:40	12/05/19 18:21	1
Xylenes, Total	0.00111	UH	0.00491	0.00111	mg/Kg	\$	12/04/19 15:40	12/05/19 18:21	1
Surrogate	%Recovery	Qualifier	l imits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95	61 - 130	12/04/19 15:40	12/05/19 18:21	1
Dibromofluoromethane	98	68 - 140	12/04/19 15:40	12/05/19 18:21	1
Toluene-d8 (Surr)	91	50 - 130	12/04/19 15:40	12/05/19 18:21	1
4-Bromofluorobenzene	89	57 - 140	12/04/19 15:40	12/05/19 18:21	1

Method: 8015B - Gasoline Range Organics - (GC)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics [C6 - C10]	64.5	U	100	64.5	ug/Kg		12/07/19 18:04	12/08/19 21:45	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	87	20 - 140	12/07/19 18:04	12/08/19 21:45	1

Method: 8015B - Diesel Range Organics (DRO) (GC)								
	Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
	Diesel Range Organics [C10 - C28]	66.4	48.8	33.7 mg/Kg		12/09/19 10:03	12/10/19 22:13	1
	C28-C36	71.1	48.8	33.7 mg/Kg		12/09/19 10:03	12/10/19 22:13	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	70	26 - 125	12/09/19 10:03	12/10/19 22:13	1

Method: 300.0 - Anions, Id	on Chromatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.74	J b	5.26	0.703	mg/Kg	-		12/20/19 05:30	1
Nitrate as N	4.57	Нb	2.63	0.330	mg/Kg	₩		12/20/19 05:30	1
Fluoride	3.87		2.63	0.791	mg/Kg	₩		12/20/19 05:30	1
Sulfate	22.4		6.58	1.26	mg/Kg			12/20/19 05:30	1

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12/24/2019

Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell18-Square179-S-2-3-191202

Lab Sample ID: 600-196845-5 Date Collected: 12/02/19 11:41 Date Received: 12/04/19 10:35 Percent Solids: 75.1

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.148	U	0.498	0.148	mg/Kg	*	12/07/19 11:54	12/09/19 16:04	1
Arsenic	3.45		1.24	0.271	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Barium	253		1.24	0.0373	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Beryllium	0.212	J	0.311	0.0180	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Calcium	137000		249	2.15	mg/Kg	₽	12/07/19 11:54	12/10/19 12:17	2
Cadmium	0.143	J	0.311	0.0319	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Chromium	4.01		0.622	0.0630	mg/Kg		12/07/19 11:54	12/09/19 16:04	1
Copper	3.33		0.622	0.217	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Iron	3480		24.9	3.15	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Potassium	909		124	13.7	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Magnesium	1830		124	2.39	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Manganese	44.5		1.87	0.0474	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Sodium	65.9	Jb	124	1.10	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:04	1
Lead	6.07		1.24	0.261	mg/Kg	₩	12/07/19 11:54	12/10/19 12:17	2
Antimony	0.289	U	3.11	0.289	mg/Kg	₽	12/07/19 11:54	12/09/19 16:04	1
Selenium	0.322	U	2.49	0.322	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:04	1
Thallium	1.79	J	1.87	0.345	mg/Kg	☼	12/07/19 11:54	12/09/19 16:04	1
Zinc	13.9		3.73	0.269	mg/Kg	₽	12/07/19 11:54	12/10/19 12:17	2

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	nual Cold Vap	or Techniq	jue)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0124	J	0.0206	0.00433	mg/Kg		12/11/19 14:22	12/12/19 10:41	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.9		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	75.1		1.0	1.0	%			12/06/19 11:12	1
Cyanide, Total	0.0356	J	0.141	0.0211	mg/Kg	₩	12/09/19 10:56	12/09/19 13:33	1

Client Sample ID: Cell18-Square118-S-2-3-191202

Date Collected: 12/02/19 12:13 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 78.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.147	U	0.495	0.147	mg/Kg	₽	12/07/19 11:54	12/09/19 16:07	1
Arsenic	2.83		1.24	0.270	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Barium	97.1		1.24	0.0371	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Beryllium	0.396		0.309	0.0179	mg/Kg	₽	12/07/19 11:54	12/09/19 16:07	1
Calcium	31500		124	1.07	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Cadmium	0.179	J	0.309	0.0317	mg/Kg	₽	12/07/19 11:54	12/09/19 16:07	1
Chromium	6.75		0.618	0.0626	mg/Kg	*	12/07/19 11:54	12/09/19 16:07	1
Copper	4.66		0.618	0.215	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Iron	6350		24.7	3.13	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Potassium	1470		124	13.6	mg/Kg	*	12/07/19 11:54	12/09/19 16:07	1
Magnesium	1610		124	2.37	mg/Kg	₽	12/07/19 11:54	12/09/19 16:07	1
Manganese	93.1		1.86	0.0471	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Sodium	405	b	124	1.10	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Lead	6.52		0.618	0.130	mg/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Antimony	0.287	U	3.09	0.287	mg/Kg	₽	12/07/19 11:54	12/09/19 16:07	1

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Lab Sample ID: 600-196845-6

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Client Sample ID: Cell18-Square118-S-2-3-191202

Date Collected: 12/02/19 12:13 Date Received: 12/04/19 10:35 Lab Sample ID: 600-196845-6

Matrix: Solid
Percent Solids: 78.5

Method: 6010B - Inductively Coupl	ed Plasma - Atomic E	mission Spectror	metry (Cont	tinued)				
Analyte	Result Qualifier	MQL (Adj)	SDL U	Init	D	Prepared	Analyzed	Dil Fac
Selenium	0.320 U	2.47	0.320 m	ng/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Thallium	0.343 U	1.86	0.343 m	ng/Kg	₩	12/07/19 11:54	12/09/19 16:07	1
Zinc	20.3	1.86	0.134 m	ng/Kg	₽	12/07/19 11:54	12/09/19 16:07	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	anual Cold Vapo	or Techniqu	e)				
Analyte	Result	Qualifier	MQL (Adj)	SDL U	nit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0142	J	0.0210	0.00441 m	g/Kg	₩	12/11/19 14:22	12/12/19 10:43	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.5		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	78.5		1.0	1.0	%			12/06/19 11:12	1

Client Sample ID: Cell18-Square176-S-2-3-191202

Date Collected: 12/02/19 12:35 Date Received: 12/04/19 10:35

Thallium

Zinc

Lab Sample ID: 600-196845-7 Matrix: Solid

Percent Solids: 80.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.140	U	0.469	0.140	mg/Kg	-	12/07/19 11:54	12/09/19 16:08	1
Arsenic	2.12		1.17	0.256	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Barium	49.5		1.17	0.0352	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Beryllium	0.252	J	0.293	0.0170	mg/Kg	₽	12/07/19 11:54	12/09/19 16:08	1
Calcium	22100		117	1.01	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Cadmium	0.123	J	0.293	0.0300	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Chromium	4.84		0.586	0.0593	mg/Kg	₽	12/07/19 11:54	12/09/19 16:08	1
Copper	3.46		0.586	0.204	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Iron	4600		23.4	2.97	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Potassium	1040		117	12.9	mg/Kg	₽	12/07/19 11:54	12/09/19 16:08	1
Magnesium	1040		117	2.25	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Manganese	65.1		1.76	0.0447	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Sodium	19.6	J b	117	1.04	mg/Kg	₽	12/07/19 11:54	12/09/19 16:08	1
Lead	3.93		0.586	0.123	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Antimony	0.272	U	2.93	0.272	mg/Kg	₩	12/07/19 11:54	12/09/19 16:08	1
Selenium	0.304	U	2.34	0.304	mg/Kg	₽	12/07/19 11:54	12/09/19 16:08	1

Method: 7471A - Mercury in Solid	or Semisolid Waste (Mar	nual Cold Vap	or Technique)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0103 J	0.0208	0.00438 mg/Kg	-	12/11/19 14:22	12/12/19 10:49	

1.76

1.76

0.325 mg/Kg

0.127 mg/Kg

0.325 U

12.3

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.5		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	80.5		1.0	1.0	%			12/06/19 11:12	1

12/09/19 16:08

12/09/19 16:08

‡ 12/07/19 11:54

12/07/19 11:54

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Lab Sample ID: 600-196845-8 Matrix: Solid

Percent Solids: 90.8

Job ID: 600-196845-1

Client Sample ID: Cell18-Square22-S-2-3-191202	
B + B H + I + I + I + I + I + I + I + I + I +	

Date Collected: 12/02/19 12:50 Date Received: 12/04/19 10:35

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.123	U	0.412	0.123	mg/Kg	₩	12/07/19 11:54	12/09/19 16:10	1
Arsenic	2.91		1.03	0.224	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Barium	166		1.03	0.0309	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Beryllium	0.196	J	0.257	0.0149	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Calcium	96800		103	0.890	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Cadmium	0.108	J	0.257	0.0264	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Chromium	3.89		0.515	0.0521	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Copper	2.81		0.515	0.179	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Iron	3650		20.6	2.61	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Potassium	903		103	11.3	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Magnesium	1880		103	1.98	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Manganese	46.3		1.54	0.0392	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Sodium	51.6	J b	103	0.912	mg/Kg	\$	12/07/19 11:54	12/09/19 16:10	1
Lead	3.44		0.515	0.108	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Antimony	0.239	U	2.57	0.239	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Selenium	0.267	U	2.06	0.267	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Thallium	0.285	U	1.54	0.285	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1
Zinc	11.3		1.54	0.111	mg/Kg	₽	12/07/19 11:54	12/09/19 16:10	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00637	J	0.0176	0.00370	mg/Kg	₩	12/11/19 14:22	12/12/19 10:51	1
General Chemistry									

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.2		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	90.8		1.0	1.0	%			12/06/19 11:12	1

Lab Sample ID: 600-196845-9 Client Sample ID: Cell19-Square83-S-2-3-191202 Date Collected: 12/02/19 13:29 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 94.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000571	UH	0.00453	0.000571	mg/Kg		12/04/19 15:40	12/05/19 18:43	1
Ethylbenzene	0.000925	UH	0.00453	0.000925	mg/Kg	₩	12/04/19 15:40	12/05/19 18:43	1
Toluene	0.00125	UH	0.00453	0.00125	mg/Kg	₩	12/04/19 15:40	12/05/19 18:43	1
Xylenes, Total	0.00102	UH	0.00453	0.00102	mg/Kg	φ.	12/04/19 15:40	12/05/19 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99	-	61 - 130				12/04/19 15:40	12/05/19 18:43	1
Dibromofluoromethane	102		68 - 140				12/04/19 15:40	12/05/19 18:43	1
Toluene-d8 (Surr)	93		50 - 130				12/04/19 15:40	12/05/19 18:43	1
4-Bromofluorobenzene	87		57 - 140				12/04/19 15:40	12/05/19 18:43	1
- Method: 8015B - Gasoline Ra	nge Organics - (G	C)							
Analyte	• • •	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

Analyte Gasoline Range Organics [C6 - C10]	•	Qualifier	MQL (Adj) 99.8	 Unit ug/Kg	<u>D</u>	Prepared 12/07/19 18:04	Analyzed 12/08/19 22:24	Dil Fac
Surrogate Trifluorotoluene (Surr)	%Recovery	Qualifier	20 - 140			Prepared 12/07/19 18:04	Analyzed 12/08/19 22:24	Dil Fac

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Job ID: 600-196845-1

Client Sample ID: Cell19-Square83-S-2-3-191202

Date Collected: 12/02/19 13:29 Date Received: 12/04/19 10:35 Lab Sample ID: 600-196845-9

Matrix: Solid
Percent Solids: 94.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	224		50.0	34.6	mg/Kg		12/09/19 10:03	12/10/19 22:40	1
C28-C36	270		50.0	34.6	mg/Kg		12/09/19 10:03	12/10/19 22:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	72	-	26 - 125				12/09/19 10:03	12/10/19 22:40	1

Method: 300.0 - Anions, Io Analyte	•	Soluble Qualifier	MQL (Adj)	SDI	Unit	D	Prepared	Analyzed	Dil Fac
							Frepareu		Dirrac
Chloride	4.46	b	4.24	0.566	mg/Kg	₽		12/20/19 13:06	1
Nitrate as N	5.22	H	2.12	0.266	mg/Kg	₽		12/20/19 13:06	1
Fluoride	2.43		2.12	0.638	mg/Kg	₩		12/20/19 13:06	1
Sulfate	28.3		5.30	1.01	mg/Kg	*		12/20/19 13:06	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.125	U	0.420	0.125	mg/Kg		12/07/19 11:54	12/09/19 16:12	1
Arsenic	2.13		1.05	0.229	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Barium	46.5		1.05	0.0315	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Beryllium	0.231	J	0.262	0.0152	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Calcium	16900		105	0.907	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Cadmium	0.105	J	0.262	0.0269	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Chromium	4.72		0.525	0.0531	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Copper	2.82		0.525	0.183	mg/Kg	₩	12/07/19 11:54	12/09/19 16:12	1
Iron	4350		21.0	2.66	mg/Kg	₩	12/07/19 11:54	12/09/19 16:12	1
Potassium	927		105	11.5	mg/Kg	*	12/07/19 11:54	12/09/19 16:12	1
Magnesium	982		105	2.02	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Manganese	58.1		1.57	0.0400	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Sodium	22.5	J b	105	0.930	mg/Kg	*	12/07/19 11:54	12/09/19 16:12	1
Lead	3.63		0.525	0.110	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Antimony	0.244	U	2.62	0.244	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Selenium	0.272	U	2.10	0.272	mg/Kg	*	12/07/19 11:54	12/09/19 16:12	1
Thallium	0.291	U	1.57	0.291	mg/Kg	₽	12/07/19 11:54	12/09/19 16:12	1
Zinc	11.1		1.57	0.113	mg/Kg	₩	12/07/19 11:54	12/09/19 16:12	1

Method: 7471A - Mercury in S	olid or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00730	J	0.0174	0.00367	mg/Kg	-	12/11/19 14:22	12/12/19 10:53	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Porcont Moieturo	5.7		10	1.0	0/0			12/06/19 11:12	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.7		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	94.3		1.0	1.0	%			12/06/19 11:12	1
Cyanide, Total	0.0360	J	0.119	0.0178	mg/Kg	‡	12/09/19 10:56	12/09/19 13:34	1

 Date Collected: 12/02/19 13:46
 Matrix: Solid

 Date Received: 12/04/19 10:35
 Percent Solids: 93.6

Method: 6010B - Inductively Coupl	led Plasma -	Atomic Emi	ssion Spectro	ometry					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.122	U	0.411	0.122	mg/Kg	-	12/07/19 11:54	12/09/19 16:14	1

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Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell19-Square29-S-2-3-191202

Lab Sample ID: 600-196845-10 Date Collected: 12/02/19 13:46 Matrix: Solid Date Received: 12/04/19 10:35

Percent Solids: 93.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.32		1.03	0.224	mg/Kg	<u> </u>	12/07/19 11:54	12/09/19 16:14	1
Barium	52.9		1.03	0.0308	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Beryllium	0.298		0.257	0.0149	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Calcium	27000		103	0.888	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Cadmium	0.113	J	0.257	0.0263	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Chromium	5.38		0.514	0.0520	mg/Kg	\$	12/07/19 11:54	12/09/19 16:14	1
Copper	2.75		0.514	0.179	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Iron	5560		20.6	2.60	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Potassium	1150		103	11.3	mg/Kg	\$	12/07/19 11:54	12/09/19 16:14	1
Magnesium	994		103	1.97	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Manganese	60.8		1.54	0.0391	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Sodium	73.4	J b	103	0.910	mg/Kg		12/07/19 11:54	12/09/19 16:14	1
Lead	4.00		0.514	0.108	mg/Kg	₩	12/07/19 11:54	12/09/19 16:14	1
Antimony	0.238	U	2.57	0.238	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1
Selenium	0.266	U	2.06	0.266	mg/Kg		12/07/19 11:54	12/09/19 16:14	1
Thallium	0.285	U	1.54	0.285	mg/Kg	₩	12/07/19 11:54	12/09/19 16:14	1
Zinc	13.1		1.54	0.111	mg/Kg	₽	12/07/19 11:54	12/09/19 16:14	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	anual Cold Va	por Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00787	J	0.0176	0.00370	mg/Kg	\	12/11/19 14:22	12/12/19 10:55	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.4		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	93.6		1.0	1.0	%			12/06/19 11:12	1

Client Sample ID: Cell19-Square70-S-2-3-191202 Lab Sample ID: 600-196845-11

Date Collected: 12/02/19 13:59 Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 95.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.121	U	0.407	0.121	mg/Kg	*	12/07/19 11:54	12/09/19 16:16	1
Arsenic	1.84		1.02	0.222	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Barium	43.6		1.02	0.0305	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Beryllium	0.249	J	0.255	0.0148	mg/Kg	₽	12/07/19 11:54	12/09/19 16:16	1
Calcium	10600		102	0.880	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Cadmium	0.107	J	0.255	0.0261	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Chromium	5.00		0.509	0.0515	mg/Kg	\$	12/07/19 11:54	12/09/19 16:16	1
Copper	2.82		0.509	0.177	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Iron	4890		20.4	2.58	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Potassium	962		102	11.2	mg/Kg	\$	12/07/19 11:54	12/09/19 16:16	1
Magnesium	871		102	1.96	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Manganese	58.9		1.53	0.0388	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Sodium	21.8	Jb	102	0.902	mg/Kg	₽	12/07/19 11:54	12/09/19 16:16	1
Lead	5.10		0.509	0.107	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Antimony	0.236	U	2.55	0.236	mg/Kg	₩	12/07/19 11:54	12/09/19 16:16	1
Selenium	0.264	U	2.04	0.264	mg/Kg	₽	12/07/19 11:54	12/09/19 16:16	1
Thallium	0.282	U	1.53	0.282	mg/Kg	₽	12/07/19 11:54	12/09/19 16:16	1

Eurofins TestAmerica, Houston

12/24/2019

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell19-Square70-S-2-3-191202

Date Collected: 12/02/19 13:59

Lab Sample ID: 600-196845-11

Matrix: Solid

Percent Solids: 95.3

Date Received: 12/04/19 10:35

Method: 6010B - Inductively Coup	led Plasma	Atomic Em	ission Spectr	ometry (Co	ontinued)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	11.6		1.53	0.110	mg/Kg	*	12/07/19 11:54	12/09/19 16:16	1

	- Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Var	or Technic	que)				
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Mercury	0.00754	J	0.0173	0.00363	mg/Kg	\$	12/11/19 14:22	12/12/19 10:57	1

General Che Analyte	mistry	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moistu	ire	4.7		1.0	1.0	%			12/06/19 11:12	1
Percent Solids		95.3		1.0	1.0	%			12/06/19 11:12	1

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Qualifiers

G			

Qualifier Description Sample was prepped or analyzed beyond the specified holding time

Analyte was not detected at or above the SDL. U

GC VOA

Qualifier

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**

N1 MS, MSD: Spike recovery exceeds upper or lower control limits.

Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description

b The compound was found in the blank and sample

Н Sample was prepped or analyzed beyond the specified holding time

Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

MS, MSD: Spike recovery exceeds upper or lower control limits.

N2 RPD of the MS and MSD exceeds the control limits Analyte was not detected at or above the SDL.

Metals

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable

The compound was found in the blank and sample b

Duplicate RPD exceeds the control limit

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.

Analyte was not detected at or above the SDL.

General Chemistry

Qualifier **Qualifier Description**

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DΙ

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) Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

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Definitions/Glossary

Client: ARCADIS U.S., Inc.

Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

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Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

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

Matrix: Solid Prep Type: Total/NA

				Percent Su	rrogate Rec
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-196845-1	Cell17-Square204-S-2-3-191202	96	98	93	91
600-196845-5	Cell18-Square179-S-2-3-19120	95	98	91	89
	2				
600-196845-9	Cell19-Square83-S-2-3-191202	99	102	93	87
LCS 600-282157/3	Lab Control Sample	103	111	97	90
LCSD 600-282157/4	Lab Control Sample Dup	98	107	100	92
MB 600-282157/6	Method Blank	105	106	100	93
Surrogate Legend					

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		TFT2	TFT2	
Lab Sample ID	Client Sample ID	(20-140)	(20-140)	
600-196845-1	Cell17-Square204-S-2-3-191202	88	88	
600-196845-5	Cell18-Square179-S-2-3-19120 2	87	87	
600-196845-9	Cell19-Square83-S-2-3-191202	88	88	
LCS 240-414323/2-A	Lab Control Sample	87	87	
MB 240-414323/1-A	Method Blank	93	93	

TFT = Trifluorotoluene (Surr)

OTPH = o-Terphenyl (Surr)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(26-125)	
600-196845-1	Cell17-Square204-S-2-3-191202	74	
600-196845-1 MS	Cell17-Square204-S-2-3-19120 2	90	
600-196845-1 MSD	Cell17-Square204-S-2-3-19120 2	75	
600-196845-5	Cell18-Square179-S-2-3-19120 2	70	
600-196845-9	Cell19-Square83-S-2-3-191202	72	
LCS 240-414439/2-A	Lab Control Sample	86	
MB 240-414439/1-A	Method Blank	75	

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Job ID: 600-196845-1

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

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

Lab Sample ID: MB 600-282157/6

Matrix: Solid

Analysis Batch: 282157

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

мв мв Result Qualifier SDL Unit Dil Fac Analyte MQL (Adj) Prepared Analyzed Benzene 0.000630 U 0.00500 0.000630 mg/Kg 12/05/19 11:30 Ethylbenzene 0.00102 U 0.00500 0.00102 mg/Kg 12/05/19 11:30 Toluene 0.00138 U 0.00500 0.00138 mg/Kg 12/05/19 11:30 Xylenes, Total 0.00113 U 0.00500 0.00113 mg/Kg 12/05/19 11:30

MB MB

Surrogate	%Recovery Qualifier	Limits	1	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	61 - 130			12/05/19 11:30	1
Dibromofluoromethane	106	68 - 140			12/05/19 11:30	1
Toluene-d8 (Surr)	100	50 - 130			12/05/19 11:30	1
4-Bromofluorobenzene	93	57 ₋ 140			12/05/19 11:30	1

Lab Sample ID: LCS 600-282157/3

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Analysis Batch: 282157

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

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits 0.0500 0.05323 106 70 - 131 mg/Kg 0.0500 0.05637 mg/Kg 113 66 - 130 0.0500 0.05362 mg/Kg 107 67 - 130 0.100 0.1096 mg/Kg 110 63 - 130 0.0500 0.05360 mg/Kg 107 64 - 130 0.0500 0.05599 mg/Kg 112 62 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103	-	61 - 130
Dibromofluoromethane	111		68 - 140
Toluene-d8 (Surr)	97		50 - 130
4-Bromofluorobenzene	90		57 ₋ 140

Lab Sample ID: LCSD 600-282157/4

Matrix: Solid

Analysis Batch: 282157

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier U	Jnit D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05062	n	ng/Kg	101	70 - 131	5	30
Ethylbenzene	0.0500	0.05624	n	ng/Kg	112	66 - 130	0	30
Toluene	0.0500	0.05285	n	ng/Kg	106	67 - 130	1	30
Xylenes, Total	0.100	0.1104	n	ng/Kg	110	63 - 130	1	30
m-Xylene & p-Xylene	0.0500	0.05388	n	ng/Kg	108	64 - 130	1	30
o-Xylene	0.0500	0.05654	n	ng/Kg	113	62 - 130	1	30

ogate	%Recovery	Qualifier
	LUSD	LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		61 - 130
Dibromofluoromethane	107		68 - 140
Toluene-d8 (Surr)	100		50 - 130
4-Bromofluorobenzene	92		57 - 140

Eurofins TestAmerica, Houston

12/24/2019

Job ID: 600-196845-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-414323/1-A **Matrix: Solid**

Analysis Batch: 414326

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

Prep Batch: 414323

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 12/07/19 18:04 Gasoline Range Organics [C6 - C10] 12/08/19 15:48 65.61 100 64.2 ug/Kg Gasoline Range Organics [C6 - C10] 65.61 J 100 64.2 ug/Kg 12/07/19 18:04 12/08/19 15:48

MB MB

MR MR

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac Trifluorotoluene (Surr) 93 20 - 140 12/07/19 18:04 12/08/19 15:48 Trifluorotoluene (Surr) 93 20 - 140 12/07/19 18:04 12/08/19 15:48

Lab Sample ID: LCS 240-414323/2-A

Matrix: Solid

Analysis Batch: 414326

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

Prep Batch: 414323

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits 800 720.9 ug/Kg 75 - 126 Gasoline Range Organics [C6 -800 720.9 90 Gasoline Range Organics [C6 ug/Kg 75 - 126 C10]

LCS LCS

%Recovery Qualifier Limits Surrogate Trifluorotoluene (Surr) 87 20 - 140

Trifluorotoluene (Surr) 87 20 - 140

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

Lab Sample ID: MB 240-414439/1-A

Matrix: Solid

Analysis Batch: 414744

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 414439

MR MR Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10 - C28] 34.6 U 50.0 34.6 mg/Kg 12/09/19 10:02 12/10/19 17:44 12/10/19 17:44 C28-C36 34.6 U 50.0 34.6 mg/Kg 12/09/19 10:02

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac o-Terphenyl (Surr) 75 26 - 125 12/09/19 10:02 12/10/19 17:44

LCS LCS

Lab Sample ID: LCS 240-414439/2-A

Matrix: Solid

Analysis Batch: 414744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 414439

%Rec. %Rec Limits

Added Result Qualifier Analyte Unit 250 Diesel Range Organics [C10 -209.3 mg/Kg 45 - 120

Spike

C28]

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 86 26 - 125

Eurofins TestAmerica, Houston

12/24/2019

Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Lab Sample ID: 600-196845-1 MS

Analysis Batch: 414744

Client: ARCADIS U.S., Inc.

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

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 414439

Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Unit %Rec Limits 249 34 27 - 120 Diesel Range Organics [C10 -138 222.7 mg/Kg

C28]

Analyte

Matrix: Solid

MS MS Qualifier Surrogate %Recovery Limits o-Terphenyl (Surr) 90 26 - 125

Lab Sample ID: 600-196845-1 MSD Client Sample ID: Cell17-Square204-S-2-3-191202

Matrix: Solid

Analysis Batch: 414744 Prep Batch: 414439 MSD MSD Sample Sample Spike

RPD Analyte Result Qualifier Added Result Qualifier RPD Limit Unit %Rec Limits 27 - 120 Diesel Range Organics [C10 -138 243 186.7 N1 mg/Kg 20 18 40

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 75 26 - 125

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-283597/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 283465

мв мв Analyte Result Qualifier MQL (Adj) SDL Unit D Dil Fac Prepared Analyzed Chloride 4.00 0.534 mg/Kg 2.286 J 12/20/19 02:27 Fluoride 0.601 U 2.00 0.601 mg/Kg 12/20/19 02:27 0.957 U 5.00 12/20/19 02:27 Sulfate 0.957 mg/Kg

Lab Sample ID: LCS 600-283597/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 283465

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 200	202.4		mg/Kg		101	90 - 110	
Fluoride	75.0	72.16		mg/Kg		96	90 - 110	
Sulfate	200	196 1		ma/Ka		98	90 - 110	

Lab Sample ID: MB 600-283597/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 283466

MB MB Result Qualifier MQL (Adj) SDL Unit Analyte D

Dil Fac Prepared Analyzed 12/20/19 02:27 Nitrate as N 1.748 J 2.00 0.251 mg/Kg

Eurofins TestAmerica, Houston

Prep Type: Soluble

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Job ID: 600-196845-1

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Cell19-Square83-S-2-3-191202

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-283597/2-A

Matrix: Solid

Analysis Batch: 283466

LCS LCS Spike %Rec. Added Result Qualifier Analyte Unit %Rec Limits Nitrate as N 100 101.7 90 - 110 mg/Kg 102

Lab Sample ID: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283605

MR MR

ı		IVID	11.10							
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2.471	J	4.00	0.534	mg/Kg			12/20/19 12:25	1
	Fluoride	0.601	U	2.00	0.601	mg/Kg			12/20/19 12:25	1
	Sulfate	0.957	U	5.00	0.957	mg/Kg			12/20/19 12:25	1

Lab Sample ID: LCS 600-283603/2-A

Matrix: Solid

Analysis Batch: 283605

ı		Spike	LCS	LCS				%Rec.	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Chloride	200	205.8		mg/Kg		103	90 - 110	
	Fluoride	75.0	74.04		mg/Kg		99	90 - 110	
	Sulfate	200	194.0		mg/Kg		97	90 - 110	

Lab Sample ID: 600-196845-9 MS

Matrix: Solid

Analysis Batch: 283605

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	4.46	b	106	132.8	N1	mg/Kg	<u> </u>	121	80 - 120	
Fluoride	2.43		21.2	22.33		mg/Kg	₩	94	80 - 120	
Sulfate	28.3		106	119.5		mg/Kg	₽	86	80 - 120	

Lab Sample ID: 600-196845-9 MSD

Matrix: Solid

Analysis Batch: 283605

i many one Battern Bootes											
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	4.46	b	106	104.0	N2	mg/Kg	₩	94	80 - 120	24	20
Fluoride	2.43		21.2	21.47		mg/Kg	₽	90	80 - 120	4	20
Sulfate	28.3		106	118.2		mg/Kg	₩	85	80 - 120	1	20

Lab Sample ID: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283606

мв мв

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/Kg			12/20/19 12:25	1

Eurofins TestAmerica, Houston

Client Sample ID: Method Blank

Client Sample ID: Cell19-Square83-S-2-3-191202

Prep Type: Soluble

Prep Type: Soluble

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Lab Sample ID: LCS 600-283603/2-A

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Lab Control Sample Prep Type: Soluble

Matrix: Solid

Analysis Batch: 283606

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Nitrate as N		100	100.3		mg/Kg	_	100	90 - 110	

Lab Sample ID: 600-196845-9 MS Client Sample ID: Cell19-Square83-S-2-3-191202 **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 283606

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Nitrate as N	5.22	Н	21.2	22.73	-	mg/Kg	₩	83	80 - 120	

Lab Sample ID: 600-196845-9 MSD Client Sample ID: Cell19-Square83-S-2-3-191202 **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 283606

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nitrate as N	5.22	H	21.2	23.11		mg/Kg	- -	84	80 - 120	2	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282394/1-A Client Sample ID: Method Blank

Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 282489	Prep Batch: 282394
MB MB	

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Calcium	0.864	U	100	0.864	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Potassium	11.0	U	100	11.0	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Sodium	1.305	J	100	0.886	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Thallium	0.277	U	1.50	0.277	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/07/19 11:54	12/09/19 15:37	1

Lab Sample ID: LCSSRM 600-282394/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 282489 LCSSRM LCSSRM Spike

%Rec. Result Qualifier Analyte Added Limits Unit %Rec Silver 34.8 28.23 mg/Kg 81.1 58.3 - 112. 9

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Prep Type: Total/NA

Prep Batch: 282394

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282394/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA** Analysis Batch: 282489 **Prep Batch: 282394**

,	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	319	283.1		mg/Kg		88.8	60.2 - 111.	
							6	
Barium	299	234.9		mg/Kg		78.6	59.2 - 110.	
Dan Illiano							0	
Beryllium	190	165.1		mg/Kg		86.9	64.2 - 110. 0	
Calcium	16000	13630		mg/Kg		85.2	61.8 ₋ 110.	
Calolatti	10000	10000		mg/rtg		00.2	0	
Cadmium	182	151.0		mg/Kg		83.0	65.4 ₋ 109.	
				0 0			9	
Chromium	189	159.3		mg/Kg		84.3	59.8 - 110.	
							6	
Copper	107	96.20		mg/Kg		89.9	61.6 - 110.	
	4000	40000				- 0.0	3	
Iron	18600	13080		mg/Kg		70.3	24.7 - 121.	
Potassium	11600	9922		mg/Kg		85.5	5 59.0 - 110.	
1 Otassium	11000	3322		mg/rtg		05.5	39.0 - 110.	
Magnesium	13600	10840		mg/Kg		79.7	62.5 ₋ 110.	
				0 0			3	
Manganese	1390	1032		mg/Kg		74.3	66.1 - 110.	
							1	
Sodium	14200	11540		mg/Kg		81.3	58.7 - 113.	
							4	
Lead	148	129.6		mg/Kg		87.6	61.0 - 110.	
Antimony	118	32.94		mg/Kg		27.9	1 10.0 - 110.	
Anumony	110	32.94		mg/rtg		21.5	10.0 - 110.	
Selenium	322	281.6		mg/Kg		87.4	57.8 ₋ 109.	
				3 3			9	
Thallium	253	224.8		mg/Kg		88.9	59.7 - 109.	
							9	
Zinc	498	439.9		mg/Kg		88.3	58.8 - 110.	
							0	

Lab Sample ID: 600-196845-4 MS Client Sample ID: Cell17-Square14-S-2-3-191202 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 282489									Prep Batch: 282394
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.122	U	12.6	11.21		mg/Kg	<u></u>	89	75 - 125
Arsenic	3.03		50.4	48.65		mg/Kg	₩	91	75 ₋ 125
Barium	164		50.4	170.7	N1	mg/Kg	₩	13	75 - 125
Beryllium	0.324		50.4	46.72		mg/Kg	₩.	92	75 ₋ 125
Calcium	48700		504	20850	4	mg/Kg	₩	-5518	75 - 125
Cadmium	0.205	J	50.4	46.85		mg/Kg	₩	93	75 ₋ 125
Chromium	5.81		50.4	53.57		mg/Kg	₽	95	75 ₋ 125
Copper	4.37		50.4	53.72		mg/Kg	₩	98	75 - 125
Iron	5540		504	7559	4	mg/Kg	₩	400	75 ₋ 125
Potassium	1290		504	2577	N1	mg/Kg	₩	255	75 - 125
Magnesium	1950		504	2804	N1	mg/Kg	₩	170	75 ₋ 125
Manganese	152		50.4	130.5	N1	mg/Kg	₩	-43	75 - 125
Sodium	64.9	Jb	504	566.4		mg/Kg	₩	100	75 ₋ 125

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Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-196845-4 MS

Analysis Batch: 282489

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell17-Square14-S-2-3-191202 **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 282394

Sample Sample MS MS Spike %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits 55.08 mg/Kg Ö Lead 9.50 50.4 90 75 - 125 75.6 ₩ Antimony 0.238 U 40.23 N1 mg/Kg 53 75 - 125 Selenium 0.266 Ü 50.4 45.49 mg/Kg ₩ 90 75 - 125 Thallium ₽ 0.285 U 50.4 44.21 88 75 - 125 mg/Kg 25.2 ₩ Zinc 19.0 46.85 mg/Kg 111 75 - 125

Lab Sample ID: 600-196845-4 DU Client Sample ID: Cell17-Square14-S-2-3-191202

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 282489							Prep Batch: 2	82394
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.122	U	0.123	U	mg/Kg	<u> </u>	NC	20
Arsenic	3.03		2.329	F	mg/Kg	☼	26	20
Barium	164		109.6	F	mg/Kg	☼	40	20
Beryllium	0.324		0.3164		mg/Kg	₽	2	20
Calcium	48700		17870	F	mg/Kg	₽	93	20
Cadmium	0.205	J	0.1452	JF	mg/Kg	☼	34	20
Chromium	5.81		6.161		mg/Kg	₽	6	20
Copper	4.37		4.268		mg/Kg	☼	2	20
Iron	5540		5409		mg/Kg	₽	2	20
Potassium	1290		1293		mg/Kg	₽	0.09	20
Magnesium	1950		1744		mg/Kg	☼	11	20
Manganese	152		81.32	F	mg/Kg	₽	61	20
Sodium	64.9	Jb	57.83	J	mg/Kg	\$	11	20
Lead	9.50		7.053	F	mg/Kg	₩	30	20
Antimony	0.238	U	0.241	U	mg/Kg	₩	NC	20
Selenium	0.266	U	0.269	U	mg/Kg	₩	NC	20
Thallium	0.285	U	0.287	U	mg/Kg	₩	NC	20
Zinc	19.0		16.48		mg/Kg	₽	14	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

мв мв

Lab Sample ID: MB 600-282758/7-B

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282758

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.00325 U 0.0155 0.00325 mg/Kg 12/11/19 14:22 12/12/19 10:26 Mercury

Lab Sample ID: LCS 600-282758/8-B

Matrix: Solid

Analysis Batch: 282867

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

Prep Batch: 282758

Spike LCS LCS %Rec. Analyte Added Result Unit %Rec Mercury 0.224 0.2270 101 70 - 130 mg/Kg

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Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-196845-1 MS Client Sample ID: Cell17-Square204-S-2-3-191202

Matrix: Solid

Analysis Batch: 282867

Prep Type: Total/NA Prep Batch: 282758

Prep Batch: 282758

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec 0.0192 J 0.289 104 75 - 125 Mercury 0.3184 mg/Kg

Lab Sample ID: 600-196845-11 MS Client Sample ID: Cell19-Square70-S-2-3-191202 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 282867

Sample Sample Spike MS MS

%Rec. Result Qualifier Added Result Qualifier Limits Analyte D %Rec 0.00754 J 0.254 75 - 125 Mercury 0.2703

Lab Sample ID: 600-196845-1 DU Client Sample ID: Cell17-Square204-S-2-3-191202

Analysis Batch: 282867

Matrix: Solid Prep Type: Total/NA

Prep Batch: 282758 Sample Sample DU DU Result Qualifier Result Qualifier Limit Analyte RPD Unit

Mercury 0.0192 J 0.01395 JF mg/Kg

Lab Sample ID: 600-196845-11 DU Client Sample ID: Cell19-Square70-S-2-3-191202

Matrix: Solid

Analysis Batch: 282867

Prep Batch: 282758 DU DU Sample Sample RPD Analyte Result Qualifier Result Qualifier Unit D Limit

0.00754 J 0.007342 J Mercury mq/Kq 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-196845-1 DU Client Sample ID: Cell17-Square204-S-2-3-191202

Matrix: Solid

Analysis Batch: 282312

DU DU RPD Sample Sample Result Qualifier Analyte Result Qualifier Unit RPD Limit Percent Moisture 20.1 19.7 % 20 Percent Solids 79.9 80.3 0.6 20

Lab Sample ID: 600-196845-11 DU Client Sample ID: Cell19-Square70-S-2-3-191202

Matrix: Solid

Analysis Batch: 282312

Sample Sample DU DU RPD Result Qualifier Result Qualifier RPD Limit Analyte Unit % Percent Moisture 4.7 4.2 20 Percent Solids 95.3 95.8 20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 600-282467/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 282510 Prep Batch: 282467 мв мв

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Cyanide, Total 0.00150 U 0.0100 0.00150 mg/Kg 12/09/19 10:56 12/09/19 13:29

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12/24/2019

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

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

Lab Sample ID: LCS 600-282467/2-A			Client Sample ID: Lab Control Sample
Matrix: Solid			Prep Type: Total/NA
Analysis Batch: 282510			Prep Batch: 282467
	Spike	LCS LCS	%Rec.

	Spike	LUS	LUS				70Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cyanide, Total	 0.100	0.1005		mg/Kg		101	90 - 110	

Lab Sample ID: 600-196845-1 MS Client Sample ID: Cell17-Square204-S-2-3-191202 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 282510 Prep Batch: 282467

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Limits Unit D %Rec ₩ Cyanide, Total 0.0885 J 1.33 1.329 93 90 - 110

Lab Sample ID: 600-196845-1 MSD Client Sample ID: Cell17-Square204-S-2-3-191202 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 282510 Prep Batch: 282467 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits Limit Analyte Unit D %Rec RPD

Cyanide, Total 0.0885 J 1.37 ₩ 96 5 20 1.396 mg/Kg 90 - 110

Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Client: ARCADIS U.S., Inc.

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	0.00500	0.000630	mg/Kg
Ethylbenzene	0.00500	0.00102	mg/Kg
Toluene	0.00500	0.00138	mg/Kg
Xylenes, Total	0.00500	0.00113	mg/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030A

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	100	64.2	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
C28-C36	50.0	34.6	mg/Kg	
Diesel Range Organics [C10 - C28]	50.0	34.6	mg/Kg	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg
Fluoride	2.00	0.601	mg/Kg
Nitrate as N	2.00	0.251	mg/Kg
Sulfate	5.00	0.957	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units	
Mercury	0.0170	0.00358	ma/Ka	

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Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

General Chemistry

Analy	te	MQL	MDL	Units
Perce	nt Moisture	1.0	1.0	%
Perce	nt Solids	1.0	1.0	%

General Chemistry

Prep: 9012B

Analyte	MQL	MDL	Units
Cyanide, Total	0.500	0.0751	mg/Kg

D 000 400045 4

3

Δ

5

6

0

9

10

12

13

Job ID: 600-196845-1

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

GC/MS VOA

Analysis Batch: 282157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	8260B	282242
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	8260B	282242
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	8260B	282242
MB 600-282157/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-282157/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-282157/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 282242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	5035	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	5035	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	5035	

GC VOA

Prep Batch: 414323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	5030A	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	5030A	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	5030A	
MB 240-414323/1-A	Method Blank	Total/NA	Solid	5030A	
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	5030A	

Analysis Batch: 414326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	8015B	414323
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	8015B	414323
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	8015B	414323
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

Analysis Batch: 414327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

GC Semi VOA

Prep Batch: 414439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	3546	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	3546	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	3546	
MB 240-414439/1-A	Method Blank	Total/NA	Solid	3546	
LCS 240-414439/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	3546	
600-196845-1 MSD	Cell17-Square204-S-2-3-191202	Total/NA	Solid	3546	

Analysis Batch: 414744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	8015B	414439
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	8015B	414439

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

GC Semi VOA (Continued)

Analysis Batch: 414744 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	8015B	414439
MB 240-414439/1-A	Method Blank	Total/NA	Solid	8015B	414439
LCS 240-414439/2-A	Lab Control Sample	Total/NA	Solid	8015B	414439
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	8015B	414439
600-196845-1 MSD	Cell17-Square204-S-2-3-191202	Total/NA	Solid	8015B	414439

HPLC/IC

Analysis Batch: 283465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Soluble	Solid	300.0	283597
600-196845-5	Cell18-Square179-S-2-3-191202	Soluble	Solid	300.0	283597
MB 600-283597/1-A	Method Blank	Soluble	Solid	300.0	283597
LCS 600-283597/2-A	Lab Control Sample	Soluble	Solid	300.0	283597

Analysis Batch: 283466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Soluble	Solid	300.0	283597
600-196845-5	Cell18-Square179-S-2-3-191202	Soluble	Solid	300.0	283597
MB 600-283597/1-A	Method Blank	Soluble	Solid	300.0	283597
LCS 600-283597/2-A	Lab Control Sample	Soluble	Solid	300.0	283597

Leach Batch: 283597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Soluble	Solid	DI Leach	
600-196845-5	Cell18-Square179-S-2-3-191202	Soluble	Solid	DI Leach	
MB 600-283597/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-283597/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Leach Batch: 283603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-9	Cell19-Square83-S-2-3-191202	Soluble	Solid	DI Leach	
MB 600-283603/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-196845-9 MS	Cell19-Square83-S-2-3-191202	Soluble	Solid	DI Leach	
600-196845-9 MSD	Cell19-Square83-S-2-3-191202	Soluble	Solid	DI Leach	

Analysis Batch: 283605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-9	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603
MB 600-283603/1-A	Method Blank	Soluble	Solid	300.0	283603
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	300.0	283603
600-196845-9 MS	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603
600-196845-9 MSD	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603

Analysis Batch: 283606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-9	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603
MB 600-283603/1-A	Method Blank	Soluble	Solid	300.0	283603
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	300.0	283603
600-196845-9 MS	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

HPLC/IC (Continued)

Analysis Batch: 283606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-9 MSD	Cell19-Square83-S-2-3-191202	Soluble	Solid	300.0	283603

Metals

Prep Batch: 282394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	3050B	 !
600-196845-2	Cell17-Square157-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-3	Cell17-Square111-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-4	Cell17-Square14-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-6	Cell18-Square118-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-7	Cell18-Square176-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-8	Cell18-Square22-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-10	Cell19-Square29-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-11	Cell19-Square70-S-2-3-191202	Total/NA	Solid	3050B	
MB 600-282394/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282394/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-196845-4 MS	Cell17-Square14-S-2-3-191202	Total/NA	Solid	3050B	
600-196845-4 DU	Cell17-Square14-S-2-3-191202	Total/NA	Solid	3050B	

Analysis Batch: 282489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-2	Cell17-Square157-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-3	Cell17-Square111-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-4	Cell17-Square14-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-6	Cell18-Square118-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-7	Cell18-Square176-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-8	Cell18-Square22-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-10	Cell19-Square29-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-11	Cell19-Square70-S-2-3-191202	Total/NA	Solid	6010B	282394
MB 600-282394/1-A	Method Blank	Total/NA	Solid	6010B	282394
LCSSRM 600-282394/2-A	Lab Control Sample	Total/NA	Solid	6010B	282394
600-196845-4 MS	Cell17-Square14-S-2-3-191202	Total/NA	Solid	6010B	282394
600-196845-4 DU	Cell17-Square14-S-2-3-191202	Total/NA	Solid	6010B	282394

Analysis Batch: 282599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	6010B	282394

Prep Batch: 282758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-2	Cell17-Square157-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-3	Cell17-Square111-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-4	Cell17-Square14-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	7471A	

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Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Metals (Continued)

Prep Batch: 282758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-6	Cell18-Square118-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-7	Cell18-Square176-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-8	Cell18-Square22-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-10	Cell19-Square29-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-11	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	
MB 600-282758/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-282758/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-11 MS	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-1 DU	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	
600-196845-11 DU	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	

Analysis Batch: 282867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-2	Cell17-Square157-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-3	Cell17-Square111-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-4	Cell17-Square14-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-6	Cell18-Square118-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-7	Cell18-Square176-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-8	Cell18-Square22-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-10	Cell19-Square29-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-11	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	282758
MB 600-282758/7-B	Method Blank	Total/NA	Solid	7471A	282758
LCS 600-282758/8-B	Lab Control Sample	Total/NA	Solid	7471A	282758
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-11 MS	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-1 DU	Cell17-Square204-S-2-3-191202	Total/NA	Solid	7471A	282758
600-196845-11 DU	Cell19-Square70-S-2-3-191202	Total/NA	Solid	7471A	282758

General Chemistry

Analysis Batch: 282312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	2540B	_
600-196845-2	Cell17-Square157-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-3	Cell17-Square111-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-4	Cell17-Square14-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-6	Cell18-Square118-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-7	Cell18-Square176-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-8	Cell18-Square22-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-10	Cell19-Square29-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-11	Cell19-Square70-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-1 DU	Cell17-Square204-S-2-3-191202	Total/NA	Solid	2540B	
600-196845-11 DU	Cell19-Square70-S-2-3-191202	Total/NA	Solid	2540B	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

General Chemistry

Prep Batch: 282467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	9012B	
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	9012B	
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	
600-196845-1 MSD	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	

Analysis Batch: 282510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196845-1	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	282467
600-196845-5	Cell18-Square179-S-2-3-191202	Total/NA	Solid	9012B	282467
600-196845-9	Cell19-Square83-S-2-3-191202	Total/NA	Solid	9012B	282467
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	282467
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	282467
600-196845-1 MS	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	282467
600-196845-1 MSD	Cell17-Square204-S-2-3-191202	Total/NA	Solid	9012B	282467

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Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Date Received: 12/04/19 10:35

Date Collected: 12/02/19 10:10

Date Received: 12/04/19 10:35

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1 Date Collected: 12/02/19 10:10 Matrix: Solid

Batch Batch Dilution Batch Prepared Prep Type Method Run Factor or Analyzed Type Number Analyst Lab Total/NA Prep 5030A 414323 12/07/19 18:04 MBB TAL CAN Total/NA 8015B 414326 Analysis 12/08/19 21:05 MBB TAL CAN 1 Total/NA Prep 3546 414439 12/09/19 10:03 TAL CAN Total/NA 414744 DFR TAL CAN Analysis 8015B 12/10/19 20:53 Total/NA Analysis 2540B 282312 12/06/19 11:12 ANP TAL HOU

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1

Matrix: Solid

Percent Solids: 79.9

Batch Dilution Batch Batch Prepared Prep Type Method Number Type Run Factor or Analyzed Analyst Lab Prep Total/NA 5035 282242 WS1 TAL HOU 12/04/19 15:40 Total/NA Analysis 8260B 282157 12/05/19 17:58 WS1 TAL HOU TAL HOU Leach DI Leach 283597 SKR Soluble 12/19/19 17:18 Soluble Analysis 300.0 283465 12/20/19 05:10 KP1 TAL HOU 283597 TAL HOU Soluble Leach DI Leach 12/19/19 17:18 SKR Soluble Analysis 300.0 283466 12/20/19 05:10 KP1 TAL HOU TAL HOU Total/NA 3050B Prep 282394 12/07/19 11:54 CLD Total/NA Analysis 6010B 282489 12/09/19 15:47 KP1 TAL HOU Prep 7471A TAL HOU Total/NA 282758 SOT 12/11/19 14:22 Total/NA 282867 12/12/19 10:29 TAL HOU Analysis 7471A SOT Total/NA TAL HOU Prep 9012B 282467 12/09/19 10:56 AMI

Client Sample ID: Cell17-Square157-S-2-3-191202

9012B

Analysis

Lab Sample ID: 600-196845-2

TAL HOU

Matrix: Solid

Date Collected: 12/02/19 10:40 Date Received: 12/04/19 10:35

Total/NA

	_	Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
ı	Total/NA	Analysis	2540B			282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell17-Square157-S-2-3-191202

Lab Sample ID: 600-196845-2

Date Collected: 12/02/19 10:40 Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 85.3

282510

12/09/19 13:30

AML

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 15:49	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:35	SOT	TAL HOU

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Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell17-Square111-S-2-3-191202

Lab Sample ID: 600-196845-3 Date Collected: 12/02/19 10:54 Matrix: Solid

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell17-Square111-S-2-3-191202

Lab Sample ID: 600-196845-3 Date Collected: 12/02/19 10:54 **Matrix: Solid** Percent Solids: 77.8

Date Received: 12/04/19 10:35

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 15:51	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:38	SOT	TAL HOU

Client Sample ID: Cell17-Square14-S-2-3-191202

Lab Sample ID: 600-196845-4 Date Collected: 12/02/19 11:09 Matrix: Solid

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell17-Square14-S-2-3-191202

Lab Sample ID: 600-196845-4 Date Collected: 12/02/19 11:09 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 93.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 15:53	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:40	SOT	TAL HOU

Client Sample ID: Cell18-Square179-S-2-3-191202

Date Collected: 12/02/19 11:41 **Matrix: Solid**

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A	-		414323	12/07/19 18:04	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/08/19 21:45	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/10/19 22:13	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

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Lab Sample ID: 600-196845-5

Percent Solids: 75.1

Matrix: Solid

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell18-Square179-S-2-3-191202

Lab Sample ID: 600-196845-5 Date Collected: 12/02/19 11:41 Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282242	12/04/19 15:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 18:21	WS1	TAL HOU
Soluble	Leach	DI Leach			283597	12/19/19 17:18	SKR	TAL HOU
Soluble	Analysis	300.0		1	283465	12/20/19 05:30	KP1	TAL HOU
Soluble	Leach	DI Leach			283597	12/19/19 17:18	SKR	TAL HOU
Soluble	Analysis	300.0		1	283466	12/20/19 05:30	KP1	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:04	KP1	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		2	282599	12/10/19 12:17	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:41	SOT	TAL HOU
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:33	AML	TAL HOU

Client Sample ID: Cell18-Square118-S-2-3-191202

Date Collected: 12/02/19 12:13 Date Received: 12/04/19 10:35

Batch Batch Dilution Batch Prepared Method Prep Type or Analyzed Type Run Factor Number Analyst Lab TAL HOU Total/NA Analysis 2540B 282312 12/06/19 11:12 ANP

Client Sample ID: Cell18-Square118-S-2-3-191202

Date Collected: 12/02/19 12:13 Date Received: 12/04/19 10:35

Batch Batch Dilution Batch Prepared Prep Type Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 3050B 282394 12/07/19 11:54 CLD TAL HOU Total/NA Analysis 6010B 282489 12/09/19 16:07 KP1 TAL HOU Total/NA Prep 7471A SOT TAL HOU 282758 12/11/19 14:22 Total/NA Analysis 7471A 1 282867 12/12/19 10:43 SOT TAL HOU

Client Sample ID: Cell18-Square176-S-2-3-191202

Date Collected: 12/02/19 12:35 Date Received: 12/04/19 10:35

Batch Batch Dilution Batch Prepared Prep Type Method Factor Number or Analyzed Туре Run Analyst Lab 2540B TAL HOU Total/NA Analysis 282312 12/06/19 11:12 ANP

Client Sample ID: Cell18-Square176-S-2-3-191202

Date Collected: 12/02/19 12:35

Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 80.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:08	KP1	TAL HOU

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Lab Sample ID: 600-196845-6

Lab Sample ID: 600-196845-6

Lab Sample ID: 600-196845-7

Lab Sample ID: 600-196845-7

Matrix: Solid

Matrix: Solid Percent Solids: 78.5

Matrix: Solid

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell18-Square176-S-2-3-191202

Lab Sample ID: 600-196845-7 Date Collected: 12/02/19 12:35 Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 80.5

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 7471A 282758 12/11/19 14:22 SOT TAL HOU Total/NA Analysis 7471A 282867 12/12/19 10:49 SOT TAL HOU 1

Client Sample ID: Cell18-Square22-S-2-3-191202

Lab Sample ID: 600-196845-8 Date Collected: 12/02/19 12:50 **Matrix: Solid**

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell18-Square22-S-2-3-191202

Lab Sample ID: 600-196845-8 Date Collected: 12/02/19 12:50 **Matrix: Solid**

Percent Solids: 90.8 Date Received: 12/04/19 10:35

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA 3050B Prep 282394 12/07/19 11:54 CLD TAL HOU Total/NA Analysis 6010B 1 282489 12/09/19 16:10 KP1 TAL HOU Total/NA 7471A TAL HOU Prep 282758 12/11/19 14:22 SOT Total/NA Analysis 7471A 282867 12/12/19 10:51 SOT TAL HOU

Client Sample ID: Cell19-Square83-S-2-3-191202

Date Collected: 12/02/19 13:29 **Matrix: Solid**

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A	-		414323	12/07/19 18:04	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/08/19 22:24	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/10/19 22:40	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell19-Square83-S-2-3-191202 Lab Sample ID: 600-196845-9

Date Collected: 12/02/19 13:29 Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 94.3

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282242	12/04/19 15:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 18:43	WS1	TAL HOU
Soluble	Leach	DI Leach			283603	12/19/19 17:49	SKR	TAL HOU
Soluble	Analysis	300.0		1	283605	12/20/19 13:06	SKR	TAL HOU
Soluble	Leach	DI Leach			283603	12/19/19 17:49	SKR	TAL HOU
Soluble	Analysis	300.0		1	283606	12/20/19 13:06	SKR	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:12	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:53	SOT	TAL HOU

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Lab Sample ID: 600-196845-9

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Client Sample ID: Cell19-Square83-S-2-3-191202

Lab Sample ID: 600-196845-9 Date Collected: 12/02/19 13:29 Matrix: Solid Date Received: 12/04/19 10:35 Percent Solids: 94.3

Batch Batch Dilution Batch Prepared Prep Type Туре Method Factor Number or Analyzed Run Analyst Lab Total/NA Prep 9012B 282467 12/09/19 10:56 AML TAL HOU Total/NA 9012B 282510 TAL HOU Analysis 12/09/19 13:34 AMI 1

Client Sample ID: Cell19-Square29-S-2-3-191202 Lab Sample ID: 600-196845-10

Date Collected: 12/02/19 13:46 **Matrix: Solid**

Date Received: 12/04/19 10:35

Batch Batch Dilution Batch Prepared Method Number Prep Type Туре Run Factor or Analyzed Analyst Lab Total/NA 2540B 282312 ANP TAL HOU Analysis 12/06/19 11:12

Client Sample ID: Cell19-Square29-S-2-3-191202 Lab Sample ID: 600-196845-10

Date Collected: 12/02/19 13:46 **Matrix: Solid**

Percent Solids: 93.6 Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:14	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:55	SOT	TAL HOU

Lab Sample ID: 600-196845-11 Client Sample ID: Cell19-Square70-S-2-3-191202

Date Collected: 12/02/19 13:59 Matrix: Solid

Date Received: 12/04/19 10:35

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell19-Square70-S-2-3-191202 Lab Sample ID: 600-196845-11

Date Collected: 12/02/19 13:59 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 95.3

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:16	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:57	SOT	TAL HOU

Laboratory References:

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

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196845-1

Project/Site: Chevron - Jal Land Farm

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

ıthority		Program	Identification Number	Expiration Date
exas		NELAP	T104704223-19-25	10-31-20
the agency does not off	•	, but the laboratory is not certif Matrix	ied by the governing authority. This list ma	y include analytes for w
Analysis iviethod	riep Melliou			
Analysis Method 2540B	Frep Metriod	Solid	Percent Moisture	
	Fieh Metilog			

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

Eurofins TestAmerica, Houston

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Chain of Custody Record

Client Information Client Centact Sarah Johnson													
	Sample 25 CF			Kudch	nadkar,	Sachin G			Camer Tracking No(s)	'(s)oN B	600-7259	COC No 600-72593-19936.10	
mparty	Phone (19 85)	8793		E-Mail sachi	in kudchai	dkar@tes	E-Mail sachin kudchadkar@testamericainc.com	TIC. COTT			Page Page		
ACADIS U.S. INC.							Anal	Analysis Rec	Requested		Job #		
4	Due Date Requested:						40				Preservat	Preservation Codes:	
Morth Big Spring Suite 121					8	1.0	W'q				A-HCL		kane
Midland	AT Requested (days)				iotna		d '0 I				B - NaOH	N - None	VaO2
Zhake Zip TX 79701	SA				D -18[n' Ct'l				D - Nitric Acid E - NaHSO4		2503
	# Od				20 1	-					F - MeOH		25203
227-0266(Tel)					03	-					H-Ascorb	Acid	Dodecah
Email sarah johnson@arcadis.com	WO #:				(ON	-		-					U - Acetore V - MCAA
Project Name Chevron - Jal Land Farm Soils 2020	Project #. 60011732				10 8						talne L-EDA		W - pH 4-5 Z - other (specify)
	SSOW				sp (Ye	-					of con		
Samulo Identification	Sample Date	Se S	Sample Type (C=comp, G=crab)	Matrix (Weweler: Smolid, O-westalof,	benefild blaid MISM unohed ROVORG_Baros	32608-BTEX	300- Chloride/ F	5e, Ag, TI, Zn 2471- Hg 3012- Cyanide			Total Mumber	Special Instructions Mote	toN/soc
	1	1	177	n Code:	X	Z	Z	z	0.000			and man and and and and and and and and and a	New York
Cell 11-Sauge 204-5-2-191302	191202 16	0101	5	Solid	777	/	1//	1			Ø		_
	1912.02 10	04:01	5	Solid	2		>	1			a		
5-2-3-191202			4	Solid	5		7	1			2		7 9
	191302 11	1109	9	Solid	2		>	1			4		
1-5-2-3-191203	191203	141	(1)	Solid	7	1	1	1			8		(bota
3-5-2-3-19120A	-7	313	9	Solid	2 7.		>	1			K		of Cu
X		1235	9	Solid	2		2	>			N		nisr
5-3-3-191203	-	250	5	Solid	2		>	>			3		10 St
	-	329	৬	Solid	2	7	1	7			80		b896
n		1346	5	Solid	1 2		>	1			~		1-00
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osio	п В П Илкпомп		Radiological		Samp	Heturn To Client	sal (A fee	e may be	assessed if san Disposal By Lab	samples are	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Mon	r than 1 month	nth) Months
ssted 1, II, III, IV, Other (specify)					Specia	al Instruc	ions/QC F	Special Instructions/QC Requirements	ints.				
inquished by.	Date	te:			Time				Method	Method of Shipment.	FEDEX		
Relinquished by Coll UM CO SON DO Relinquished by	Date/Time (2/3,	119 18	8 578	Company ACC	Arced is Re	Received by	3	R	and	Date/Time	119 10:	:35 Company #	47
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de eurofins

Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

JOB NUMBER: _	196845 ST		te/Time Received:		adis	
UNPACKED BY: _	ST	CA	RRIER/DRIVER:	FedE	X	
Custody Seal Present:	PYES DI	NO Nu	mber of Coolers Recei		/	
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm	Therm CF	Corrected Temp (°C)
2021	Y / N	Y / M	41	676	to.1	4.7
004	Y/N	Y / N	1-6	4	1	18/
	Y/N	Y/N				
	YIN	YIN				1 1
	Y/N	Y / N				12/4/19
	Y/N	Y / N				ST
Samples received on in LABORATORY PRES Base samples are>pH	ERVATION OF S		IIRED: ÞÑO d preserved are <ph 2:<="" th=""><th>□YES</th><th>□NO</th><th></th></ph>	□YES	□NO	
LABORATORY PRES	ERVATION OF S 12: YES n upon receipt:	AMPLES REQUING Acid		: □YES		O INA
LABORATORY PRES Base samples are>pH TX1005 samples froze	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2:="" f<="" in="" put="" te="" th="" time=""><th>REEZER:</th><th></th><th>O DNA PYES D NO</th></ph>	REEZER:		O DNA PYES D NO
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot #	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2:="" f<="" in="" put="" td="" te="" time=""><td>REEZER:</td><td></td><td></td></ph>	REEZER:		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # iid samples meet the labo	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2:="" f<="" in="" put="" td="" te="" time=""><td>REEZER:</td><td></td><td></td></ph>	REEZER:		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # iid samples meet the labo	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2:="" f<="" in="" put="" td="" te="" time=""><td>REEZER:</td><td></td><td></td></ph>	REEZER:		

HS-SA-W1-013

Rev. 4A; 08/26/2019

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Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Phone: 713-990-4444 Fax; 713-690-5646	7.11.0	Chain	of Cus	tody F	Chain of Custody Record		Seurofins Seurofins	Environment Testing TestAmerica
Client Information (Sub Contract Lab)	Sampler			Lab PM Kudch	Lab PM Kudchadkar, Sachin G	Carrier Tracking No(s)	o(s) COC No. 600-42921.1	
	Phone:			E-Mail sachi	E-Mait: sachin.kudchadkar@testamericainc.com	State of Origin: Texas	Page Page 1 of 1	
Company TestAmerica Laboratories, Inc.					Accreditations Required (See note) NELAP - Texas	ee note);	Job # 600-196845-1	
Address. 4101 Shuffel Street NW.	Due Date Requeste 12/11/2019	:paj				Analysis Requested	Preservation Codes	Ü
City North Canton	TAT Requested (days):	3)s):			:58]/		B - NaOH	N - Hexans N - None O - AsNaO2
State, Zip OH., 44720							D - Nifric Acid	
Phone. 330-497-9396(Tel) 330-497-0772(Fax)	# Od				ine Ra		G - Ametion H - Ascorbic Act	S - H2SO4 T - TSP Dodecahydrate
	#OM				(o) Gaso			
Project Name Chevron - Jal Land Farm	Project #:				DVNP!		Sainer K-EDTA	VV - pH 4-5 Z - other (specify)
Site	#WOSS				00 800 00 200 00 200		of con	
	o de Carte	Sample	Sample Type (C=comp.	Matrix (Wewster, S=BOHd, O=Waste/off	ield Filtered S verform MSIMS veronice (C6-C1 vers DRO/3544 verc36		otal Number o	22
Sample Identification - Circli ID (Lad ID)	Sample Date	X	Preserva	Preservation Code:	8 0 8 4 X			Special instructions/Note:
Cell17-Square204-S-2-3-191202 (600-196845-1)	12/2/19	10:10 Central		Solid	×		2 Diesel Range	Diesel Range Organics (C10-C28)/ C28-
Cell18-Square179-S-2-3-191202 (600-196845-5)	12/2/19	11:41 Central		Solid	×		2 , Diesel Range	Diesel Range Organics (C10-C28)/ C28-
Celi19-Square83-S-2-3-191202 (600-196845-9)	12/2/19	13:29 Central		Solid	×		2 , Diesel Range	, Diesel Range Organics (C10-C28)/ C28- C36
Nate Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under channel-custody. If the laboratory does not consistent the State of Origin lated above for analysis selection in the sample shipment is analysed, the samples must be stripted back to the TestAmerica belocatory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica.	aboratones, inc. placos the	ownership of r	method, analyte	s accreditation ped back to the	n compliance upon out subco	ontract laboratories. This sample shipme	nt is forwarded under chain-of-cushody hanges to accreditation status should t	/ If the laboratory does not be brought to TestAmenta
Possible Hazard Identification	The state of the s		in the second		Sample Disposal (At	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	nples are retained longer tha	n 1 month)
oncomment Deliverable Requested: 1, II, III, IV, Other (specify)	Primary Deliverable Rank; 2	able Rank:	2		Special Instruction	Requirem		MORITIS
Empty Kit Relinquished by:		Date:			Time;	Method of Shipment	hpment	
Reinsquisted by Audio John	Date/Time	61)		Company	Received by, Received by.	200	12-6-19 930 Date/Time	Company ETH Company
Reimquished by:	Date/Time			Company	Received by.		DateTime	Company
Custody Seals Intact: Custody Seal No.: A Yes A No					Cooler Temperatu	Cooler Temperaturels) *C and Other Remarks		

17. CHAIN OF CUST	ODY & SAMPLE DISCREPANCIES	Samples processed by:
18. SAMPLE CONDI	TION	
Sample(s)		nended holding time had expired.
Sample(s)	W	vere received in a broken container.
Sample(s)		oble >6 mm in diameter. (Notify PM)
19. SAMPLE PRESER	RVATION	
Sample(s)		were further preserved in the laboratory.
	Preservative(s) added/Lot number(s):	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 600-196845-1

Login Number: 196845 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Torres, Sandra

Sreator: Torres, Sandra		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey neter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate ltTs)	True	
ample containers have legible labels.	True	
Containers are not broken or leaking.	True	
ample collection date/times are provided.	True	
ppropriate sample containers are used.	True	
sample bottles are completely filled.	True	
sample Preservation Verified.	True	
here 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	
Iultiphasic 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.

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-196853-1

Client Project/Site: Chevron - Jal Land Farm Soils

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadkar

Authorized for release by: 4/10/2020 2:33:28 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
9012B	Cyanide, Total andor Amenable	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-196853-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
600-196853-1	Cell20-Square112-S-2-191203	Solid	12/03/19 08:50	12/04/19 10:35	
600-196853-2	Cell21-Square107-S-2-191203	Solid	12/03/19 09:15	12/04/19 10:35	
600-196853-3	Cell25-Square108-S-2-191203	Solid	12/03/19 09:45	12/04/19 10:35	
600-196853-4	Cell26-Square207-S-2-191203	Solid	12/03/19 10:00	12/04/19 10:35	

Job ID: 600-196853-1

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Client Sample ID: Cell20-Square112-S-2-191203

Lab Sample ID: 600-196853-1

Date Collected: 12/03/19 08:50 Date Received: 12/04/19 10:35

Matrix: Solid Percent Solids: 83.2

Job ID: 600-196853-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.138	U	0.462	0.138	mg/Kg	<u> </u>	12/07/19 11:54	12/09/19 16:28	1
Arsenic	2.09		1.16	0.252	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Barium	63.0		1.16	0.0347	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Beryllium	0.225	J	0.289	0.0168	mg/Kg		12/07/19 11:54	12/09/19 16:28	1
Calcium	33300		116	0.998	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Cadmium	0.110	J	0.289	0.0296	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Chromium	4.94		0.578	0.0585	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:28	1
Copper	2.26		0.578	0.201	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Iron	4380		23.1	2.92	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Potassium	972		116	12.7	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Magnesium	1330		116	2.22	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Manganese	43.9		1.73	0.0440	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Sodium	29.9	J b	116	1.02	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Lead	3.58		0.578	0.121	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Antimony	0.268	U	2.89	0.268	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Selenium	0.299	U	2.31	0.299	mg/Kg	₩	12/07/19 11:54	12/09/19 16:28	1
Thallium	0.320	U	1.73	0.320	mg/Kg	☼	12/07/19 11:54	12/09/19 16:28	1
Zinc	11.6		1.73	0.125	mg/Kg	≎	12/07/19 11:54	12/09/19 16:28	1

Method: 7471A - Mercury in Sc	olid or Semi	isolid Wa	ste (Manual	Cold Vap	or Techi	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00410	U	0.0195	0.00410	mg/Kg	₩	12/11/19 14:22	12/12/19 11:03	1
General Chemistry	Result	Qualifier	MQL (Adi)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.8	1.0	1.0	%			12/06/19 11:12	1
Percent Solids	83.2	1.0	1.0	%			12/06/19 11:12	1

Client Sample ID: Cell21-Square107-S-2-191203 Lab Sample ID: 600-196853-2 Date Collected: 12/03/19 09:15 **Matrix: Solid** Percent Solids: 91.0 Date Received: 12/04/19 10:35

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000611	U	0.00485	0.000611	mg/Kg	<u> </u>	12/04/19 15:40	12/05/19 16:50	1
Ethylbenzene	0.000990	U	0.00485	0.000990	mg/Kg	☼	12/04/19 15:40	12/05/19 16:50	1
Toluene	0.00134	U	0.00485	0.00134	mg/Kg	☼	12/04/19 15:40	12/05/19 16:50	1
Xylenes, Total	0.00110	U	0.00485	0.00110	mg/Kg		12/04/19 15:40	12/05/19 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		61 - 130				12/04/19 15:40	12/05/19 16:50	1
Dibromofluoromethane	101		68 - 140				12/04/19 15:40	12/05/19 16:50	1
Toluene-d8 (Surr)	95		50 - 130				12/04/19 15:40	12/05/19 16:50	1
4-Bromofluorobenzene	88		57 - 140				12/04/19 15:40	12/05/19 16:50	1

Method: 8015B - Gasoline Range Organics - (GC)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	63.7	U	99.2	63.7	ug/Kg		12/07/19 18:04	12/08/19 23:04	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Trifluorotoluene (Surr)	84		20 - 140				12/07/19 18:04	12/08/19 23:04	1	

Eurofins TestAmerica, Houston

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell21-Square107-S-2-191203

Date Collected: 12/03/19 09:15 Date Received: 12/04/19 10:35

Lab Sample ID: 600-196853-2

Matrix: Solid

Job ID: 600-196853-1

Percent Solids: 91.0

Method: 8015B - Diesel Rang	e Organics (DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.5	U	48.4	33.5	mg/Kg		12/09/19 10:03	12/10/19 23:07	1
C28-C36	44.0	J	48.4	33.5	mg/Kg		12/09/19 10:03	12/10/19 23:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		26 - 125				12/09/19 10:03	12/10/19 23:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2.70 J b	4.40	0.587	mg/Kg	<u> </u>		12/11/19 20:00	1	
Nitrate as N	14.0	2.20	0.276	mg/Kg	₽		12/11/19 20:00	1	
Fluoride	10.5	2.20	0.661	mg/Kg	☼		12/12/19 21:14	1	
Sulfate	148	5.50	1.05	mg/Kg			12/12/19 21:14	1	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.423	0.126	mg/Kg	<u> </u>	12/07/19 11:54	12/09/19 16:30	1
Arsenic	3.22		1.06	0.230	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Barium	89.4		1.06	0.0317	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Beryllium	0.291		0.264	0.0153	mg/Kg	₽	12/07/19 11:54	12/09/19 16:30	1
Calcium	53400		106	0.913	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Cadmium	0.222	J	0.264	0.0271	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Chromium	5.61		0.528	0.0535	mg/Kg	₽	12/07/19 11:54	12/09/19 16:30	1
Copper	6.02		0.528	0.184	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Iron	5210		21.1	2.67	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Potassium	1230		106	11.6	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:30	1
Magnesium	1970		106	2.03	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Manganese	57.4		1.59	0.0403	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Sodium	47.2	J b	106	0.936	mg/Kg	₩	12/07/19 11:54	12/09/19 16:30	1
Lead	13.3		0.528	0.111	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Antimony	0.245	U	2.64	0.245	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Selenium	0.274	U	2.11	0.274	mg/Kg	₩	12/07/19 11:54	12/09/19 16:30	1
Thallium	0.293	U	1.59	0.293	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1
Zinc	27.0		1.59	0.114	mg/Kg	☼	12/07/19 11:54	12/09/19 16:30	1

Method: 7471A - Mercury i	n Solid or Sem	isolid Wa	ste (Manual	Cold Vap	or Techr	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0119	J	0.0187	0.00393	mg/Kg	<u> </u>	12/11/19 14:22	12/12/19 11:05	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.0		1.0	1.0	%			12/06/19 11:12	1
Percent Solids	91.0		1.0	1.0	%			12/06/19 11:12	1
Cvanide, Total	0.0178	U	0.119	0.0178	ma/Ka	₽	12/09/19 10:56	12/09/19 13:35	1

Client Sample ID: Cell25-Square108-S-2-191203	Lab Sample ID: 600-196853-3
Date Collected: 12/03/19 09:45	Matrix: Solid
Date Received: 12/04/19 10:35	Percent Solids: 93 5

Method: 8260B - Volatile Organic Compounds (GC/MS)								
	Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	0.000527 U	0.00418	0.000527 mg/Kg		12/04/19 15:40	12/05/19 17:13	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell25-Square108-S-2-191203 Lab Sample ID: 600-196853-3

Date Collected: 12/03/19 09:45 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 93.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Ethylbenzene	0.000853	U	0.00418	0.000853	mg/Kg	₩	12/04/19 15:40	12/05/19 17:13	
Toluene	0.00115	U	0.00418	0.00115	mg/Kg	₩	12/04/19 15:40	12/05/19 17:13	
Xylenes, Total	0.000945	U	0.00418	0.000945	mg/Kg	₩	12/04/19 15:40	12/05/19 17:13	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	93		61 - 130				12/04/19 15:40	12/05/19 17:13	
Dibromofluoromethane	101		68 ₋ 140				12/04/19 15:40	12/05/19 17:13	
Foluene-d8 (Surr)	96		50 ₋ 130				12/04/19 15:40	12/05/19 17:13	
1-Bromofluorobenzene	88		57 - 140				12/04/19 15:40	12/05/19 17:13	
Method: 8015B - Gasoline Rai	nge Organio	:s - (GC)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	64.6	U	101	64.6	ug/Kg		12/07/19 18:04	12/08/19 23:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Trifluorotoluene (Surr)	84		20 - 140				12/07/19 18:04	12/08/19 23:44	
Method: 8015B - Diesel Range	Organics (DRO) (GC	3)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10 - C28]	34.1	U	49.3	34.1	mg/Kg		12/09/19 10:03	12/10/19 23:34	
C28-C36	34.1	U	49.3	34.1	mg/Kg		12/09/19 10:03	12/10/19 23:34	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
p-Terphenyl (Surr)	82		26 - 125				12/09/19 10:03	12/10/19 23:34	
Method: 300.0 - Anions, Ion C	hromatogra	phy - Soli	uble						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	2.27	J b	4.28	0.571	mg/Kg	<u>₩</u>		12/11/19 20:20	
Nitrate as N	5.80		2.14	0.269	mg/Kg	₩		12/11/19 20:20	
Fluoride	3.80		2.14	0.643	mg/Kg	₩		12/12/19 21:34	
Sulfate	10.4		5.35	1.02	mg/Kg	₩		12/12/19 21:34	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.125	U	0.419	0.125	mg/Kg	<u> </u>	12/07/19 11:54	12/09/19 16:32	1
Arsenic	2.63		1.05	0.229	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Barium	46.5		1.05	0.0315	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Beryllium	0.357		0.262	0.0152	mg/Kg	φ.	12/07/19 11:54	12/09/19 16:32	1
Calcium	7470		105	0.906	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Cadmium	0.142	J	0.262	0.0268	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Chromium	6.21		0.524	0.0531	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:32	1
Copper	3.71		0.524	0.182	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Iron	6270		21.0	2.65	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Potassium	1380		105	11.5	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:32	1
Magnesium	993		105	2.01	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Manganese	93.8		1.57	0.0400	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Sodium	16.0	J b	105	0.929	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:32	1
Lead	5.89		0.524	0.110	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Antimony	0.243	U	2.62	0.243	mg/Kg	₩	12/07/19 11:54	12/09/19 16:32	1
Selenium	0.272	U	2.10	0.272	mg/Kg	₩.	12/07/19 11:54	12/09/19 16:32	1
Thallium	0.291	U	1.57	0.291	mg/Kg	≎	12/07/19 11:54	12/09/19 16:32	1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell25-Square108-S-2-191203

Date Collected: 12/03/19 09:45

Date Received: 12/04/19 10:35

4-Bromofluorobenzene

Lab Sample ID: 600-196853-3

12/04/19 15:40 12/05/19 17:35

Matrix: Solid

Job ID: 600-196853-1

Percent Solids: 93.5

Method: 6010B - Inductively C	oupied Plasma - Atol	mic Emission	i Spectrometry (C	ontir	iuea)		
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Zinc	15.0	1.57	0.113 mg/Kg		12/07/19 11:54	12/09/19 16:32	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.0176 0.0111 J 0.00371 mg/Kg
 T2/11/19 14:22
 12/12/19 11:07
 Mercury

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.5	1.0	1.0	%			12/06/19 11:12	1
Percent Solids	93.5	1.0	1.0	%			12/06/19 11:12	1
Cyanide, Total	0.0369 J	0.122	0.0183	mg/Kg	☼	12/09/19 10:56	12/09/19 13:35	1

Client Sample ID: Cell26-Square207-S-2-191203

Lab Sample ID: 600-196853-4 Date Collected: 12/03/19 10:00 **Matrix: Solid**

Date Received: 12/04/19 10:35 Percent Solids: 79.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000699	U	0.00555	0.000699	mg/Kg	☼	12/04/19 15:40	12/05/19 17:35	1
Ethylbenzene	0.00113	U	0.00555	0.00113	mg/Kg	☼	12/04/19 15:40	12/05/19 17:35	1
Toluene	0.00153	U	0.00555	0.00153	mg/Kg	☼	12/04/19 15:40	12/05/19 17:35	1
Xylenes, Total	0.00125	U	0.00555	0.00125	mg/Kg	☼	12/04/19 15:40	12/05/19 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		61 - 130				12/04/19 15:40	12/05/19 17:35	1
Dibromofluoromethane	100		68 ₋ 140				12/04/19 15:40	12/05/19 17:35	1
Toluene-d8 (Surr)	97		50 - 130				12/04/10 15:40	12/05/19 17:35	1

Method: 8015B - Gasoline Rar	nge Organics - (GC)						
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.1 U	98.2	63.1 ug/Kg		12/07/19 18:04	12/09/19 00:23	1
Surrogate	%Recovery Qualifier	Limits			Prepared	Analvzed	Dil Fac
	qualifier						
Trifluorotoluene (Surr)	85	20 ₋ 140			12/07/19 18:04	12/09/19 00:23	1

57 - 140

Method: 8015B - Diesel Rang	e Organics ((DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.7	U	48.8	33.7	mg/Kg		12/09/19 10:03	12/11/19 00:00	1
C28-C36	33.7	U	48.8	33.7	mg/Kg		12/09/19 10:03	12/11/19 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	83	-	26 - 125				12/09/19 10:03	12/11/19 00:00	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.48	J b	5.00	0.667	mg/Kg			12/11/19 20:41	1
Nitrate as N	5.97		2.50	0.314	mg/Kg	₩		12/11/19 20:41	1
Fluoride	5.14		2.50	0.751	mg/Kg	₩		12/12/19 21:55	1
Sulfate	55.8		6.25	1.20	mg/Kg			12/12/19 21:55	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Date Collected: 12/03/19 10:00

Matrix: Solid
Date Received: 12/04/19 10:35

Matrix: Solid
Percent Solids: 79.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.139	U	0.468	0.139	mg/Kg	<u> </u>	12/07/19 12:05	12/09/19 16:38	1
Arsenic	2.91		1.17	0.255	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Barium	401		1.17	0.0351	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Beryllium	0.240	J	0.292	0.0170	mg/Kg	φ.	12/07/19 12:05	12/09/19 16:38	1
Calcium	106000		117	1.01	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Cadmium	0.135	J	0.292	0.0299	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Chromium	4.12		0.585	0.0592	mg/Kg	₩.	12/07/19 12:05	12/09/19 16:38	1
Copper	3.45		0.585	0.204	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Iron	4070		23.4	2.96	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Potassium	1150		117	12.9	mg/Kg	₩.	12/07/19 12:05	12/09/19 16:38	1
Magnesium	2050		117	2.25	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Manganese	57.1		1.75	0.0446	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Sodium	56.2	J b	117	1.04	mg/Kg	₩.	12/07/19 12:05	12/09/19 16:38	1
Lead	3.24		0.585	0.123	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Antimony	0.271	U	2.92	0.271	mg/Kg	₩	12/07/19 12:05	12/09/19 16:38	1
Selenium	0.303	U	2.34	0.303	mg/Kg	₩.	12/07/19 12:05	12/09/19 16:38	1
Thallium	1.13	J	1.75	0.324	mg/Kg	☼	12/07/19 12:05	12/09/19 16:38	1
Zinc	13.1		1.75	0.126	mg/Kg	₽	12/07/19 12:05	12/09/19 16:38	1

Method: 7471A - Mercury in So	olid or Semisolid Was	ste (Manual	Cold Vapor Techn	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00790 J	0.0188	0.00395 mg/Kg	\	12/11/19 14:22	12/12/19 11:13	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1	1.0	1.0	%			12/06/19 11:12	1
Percent Solids	79.9	1.0	1.0	%			12/06/19 11:12	1
Cyanide, Total	0.0196 U	0.131	0.0196	mg/Kg	≎	12/09/19 10:56	12/09/19 13:36	1

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

U Analyte was not detected at or above the SDL.

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

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.

HPLC/IC

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.

Metals

Qualifier Qualifier Description

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

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.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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Definitions/Glossary

Client: ARCADIS U.S., Inc.

Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Glossary (Continued)

Toxicity Equivalent Quotient (Dioxin)

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

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Project/Site: Chevron - Jal Land Farm Soils

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

Matrix: Solid Prep Type: Total/NA

_			Pe	ercent Surre	ogate Reco
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-196853-2	Cell21-Square107-S-2-191203	91	101	95	88
600-196853-3	Cell25-Square108-S-2-191203	93	101	96	88
600-196853-4	Cell26-Square207-S-2-191203	95	100	97	88
LCS 600-282157/3	Lab Control Sample	103	111	97	90
LCSD 600-282157/4	Lab Control Sample Dup	98	107	100	92
MB 600-282157/6	Method Blank	105	106	100	93
Surrogate Legend					

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Perce	nt Surrogate Recovery (Acceptance Limits)
		TFT1	TFT1	
Lab Sample ID	Client Sample ID	(20-140)	(20-140)	
600-196853-2	Cell21-Square107-S-2-191203	84	84	
600-196853-3	Cell25-Square108-S-2-191203	84	84	
600-196853-4	Cell26-Square207-S-2-191203	85	85	
LCS 240-414323/2-A	Lab Control Sample	87	87	
MB 240-414323/1-A	Method Blank	93	93	

TFT = Trifluorotoluene (Surr)

OTPH = o-Terphenyl (Surr)

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(26-125)	
600-196853-2	Cell21-Square107-S-2-191203	75	
600-196853-3	Cell25-Square108-S-2-191203	82	
600-196853-4	Cell26-Square207-S-2-191203	83	
LCS 240-414439/2-A	Lab Control Sample	86	
MB 240-414439/1-A	Method Blank	75	

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

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

Lab Sample ID: MB 600-282157/6

Matrix: Solid

Analysis Batch: 282157

Client Sample ID: Method Blank

Prep Type: Total/NA

	MR	MR							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			12/05/19 11:30	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			12/05/19 11:30	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			12/05/19 11:30	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			12/05/19 11:30	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 105 61 - 130 12/05/19 11:30 Dibromofluoromethane 106 68 - 140 12/05/19 11:30 100 50 - 130 Toluene-d8 (Surr) 12/05/19 11:30 93 57 - 140 4-Bromofluorobenzene 12/05/19 11:30

Lab Sample ID: LCS 600-282157/3

Matrix: Solid

Analysis Batch: 282157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LUJ	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05323		mg/Kg		106	70 - 131	
Ethylbenzene	0.0500	0.05637		mg/Kg		113	66 - 130	
Toluene	0.0500	0.05362		mg/Kg		107	67 - 130	
Xylenes, Total	0.100	0.1096		mg/Kg		110	63 - 130	
m-Xylene & p-Xylene	0.0500	0.05360		mg/Kg		107	64 - 130	
o-Xylene	0.0500	0.05599		mg/Kg		112	62 - 130	

LCS LCS %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 103 61 - 130 Dibromofluoromethane 111 68 - 140 Toluene-d8 (Surr) 50 - 130 97 4-Bromofluorobenzene 90 57 - 140

Lab Sample ID: LCSD 600-282157/4

Matrix: Solid

Analysis Batch: 282157

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05062		mg/Kg		101	70 - 131	5	30
Ethylbenzene	0.0500	0.05624		mg/Kg		112	66 - 130	0	30
Toluene	0.0500	0.05285		mg/Kg		106	67 - 130	1	30
Xylenes, Total	0.100	0.1104		mg/Kg		110	63 - 130	1	30
m-Xylene & p-Xylene	0.0500	0.05388		mg/Kg		108	64 - 130	1	30
o-Xylene	0.0500	0.05654		mg/Kg		113	62 - 130	1	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		61 - 130
Dibromofluoromethane	107		68 ₋ 140
Toluene-d8 (Surr)	100		50 - 130
4-Bromofluorobenzene	92		57 - 140

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-414323/1-A **Matrix: Solid**

Analysis Batch: 414326

MB MB

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 414323**

Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Analyte Gasoline Range Organics [C6 - C10] <u>12/07/19 18:04</u> <u>12/08/19 15:48</u> 65.61 J 100 64.2 ug/Kg Gasoline Range Organics [C6 - C10] 65.61 J 100 64.2 ug/Kg 12/07/19 18:04 12/08/19 15:48

MB MB

Surrogate Qualifier Limits Dil Fac %Recovery Prepared Analyzed 93 20 - 140 Trifluorotoluene (Surr) 12/07/19 18:04 12/08/19 15:48 Trifluorotoluene (Surr) 93 20 - 140 12/07/19 18:04 12/08/19 15:48

Lab Sample ID: LCS 240-414323/2-A

Matrix: Solid

Analysis Batch: 414326

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 414323**

Spike LCS LCS %Rec. Added Result Qualifier Limits Unit %Rec

Analyte 800 720.9 90 75 - 126 ug/Kg Gasoline Range Organics [C6 -C101 800 720.9 ug/Kg 90 75 - 126 Gasoline Range Organics [C6 -

C10]

LCS LCS

Surrogate %Recovery Qualifier I imits Trifluorotoluene (Surr) 87 20 - 140 Trifluorotoluene (Surr) 87 20 - 140

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

Lab Sample ID: MB 240-414439/1-A

Matrix: Solid

Analysis Batch: 414744

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

Prep Batch: 414439

MR MR Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 34.6 mg/Kg Diesel Range Organics [C10 - C28] 34.6 U 50.0 12/09/19 10:02 12/10/19 17:44 C28-C36 34.6 U 50.0 34.6 mg/Kg 12/09/19 10:02 12/10/19 17:44

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac o-Terphenyl (Surr) 75 26 - 125 12/09/19 10:02 12/10/19 17:44

Lab Sample ID: LCS 240-414439/2-A

Matrix: Solid

Analysis Batch: 414744

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

Prep Batch: 414439 %Rec.

LCS LCS Spike Added Analyte Result Qualifier Unit D %Rec Limits 250 209.3 45 - 120 Diesel Range Organics [C10 mg/Kg

C28]

LCS LCS

Surrogate %Recovery Qualifier Limits 26 - 125 o-Terphenyl (Surr) 86

Job ID: 600-196853-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-282739/1-A

Client Sample ID: Method Blank Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282645

MB MB

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.322 J	4.00	0.534 mg/Kg			12/11/19 14:33	1

206.8

mg/Kg

Lab Sample ID: LCS 600-282739/2-A

Client Sample ID: Lab Control Sample

103

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282645

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 200

Lab Sample ID: MB 600-282739/1-A

Client Sample ID: Method Blank

90 - 110

Prep Type: Soluble

Matrix: Solid

Chloride

Analysis Batch: 282646

MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Analyzed Dil Fac Prepared Nitrate as N 0.251 U 12/11/19 14:33 2.00 0.251 mg/Kg

Lab Sample ID: LCS 600-282739/2-A

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282646

-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Nitrate as N	100	100.9		mg/Kg		101	90 - 110	

Lab Sample ID: MB 600-282739/1-A

Client Sample ID: Method Blank Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282793

MB MB

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.080	J	4.00	0.534	mg/Kg			12/12/19 15:47	1
Fluoride	0.601	U	2.00	0.601	mg/Kg			12/12/19 15:47	1
Sulfate	0.957	U	5.00	0.957	mg/Kg			12/12/19 15:47	1

Lab Sample ID: LCS 600-282739/2-A

Client Sample ID: Lab Control Sample Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282793

	Spike	LCS L	.cs			%Rec.	
Analyte	Added	Result Q	Qualifier	Unit D	%Rec	Limits	
Chloride	200	205.8	i	mg/Kg	103	90 - 110	
Fluoride	75.0	74.34	1	mg/Kg	99	90 - 110	
Sulfate	200	201.3	1	mg/Kg	101	90 - 110	

Lab Sample ID: MB 600-282739/1-A

Client Sample ID: Method Blank

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 282794

	IVID	IVID							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	ma/Ka			12/12/19 15:47	

100

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-196853-1

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-282739/2-A

Matrix: Solid

Analyte

Nitrate as N

Analysis Batch: 282794

Spike LCS LCS %Rec. Added Result Qualifier Unit D %Rec Limits

mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282394/1-A

Matrix: Solid

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

90 - 110

Client Sample ID: Lab Control Sample

102

Analysis Batch: 282489 Prep Batch: 282394 мв мв 1

101.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Calcium	0.864	U	100	0.864	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Potassium	11.0	U	100	11.0	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Sodium	1.305	J	100	0.886	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Thallium	0.277	U	1.50	0.277	mg/Kg		12/07/19 11:54	12/09/19 15:37	1
Zinc	0.108	U	1.50	0.108	ma/Ka		12/07/19 11:54	12/09/19 15:37	1

Lab Sample ID: LCSSRM 600-282394/2-A

Matrix: Solid

Analysis Patch, 202400

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

Analysis Batch: 282489	Spike	LCSSRM	LCSSRM				Prep Batch: 282394 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	34.8	28.23		mg/Kg		81.1	58.3 - 112. 9
Arsenic	319	283.1		mg/Kg		88.8	60.2 - 111. 6
Barium	299	234.9		mg/Kg		78.6	59.2 - 110. 0
Beryllium	190	165.1		mg/Kg			64.2 - 110. 0
Calcium	16000	13630		mg/Kg			61.8 ₋ 110. 0
Cadmium	182	151.0		mg/Kg		83.0	65.4 - 109. 9
Chromium	189	159.3		mg/Kg		84.3	59.8 - 110. 6
Copper	107	96.20		mg/Kg		89.9	61.6 - 110. 3
Iron	18600	13080		mg/Kg		70.3	24.7 - 121.

Job ID: 600-196853-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282394/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Analysis Batch: 282489** Prep Batch: 282394

	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Potassium	11600	9922		mg/Kg		85.5	59.0 - 110.	
							3	
Magnesium	13600	10840		mg/Kg		79.7	62.5 - 110.	
							3	
Manganese	1390	1032		mg/Kg		74.3	66.1 - 110.	
							<u></u> <u>1</u>	
Sodium	14200	11540		mg/Kg		81.3	58.7 - 113.	
							4	
Lead	148	129.6		mg/Kg		87.6	61.0 - 110.	
							1	
Antimony	118	32.94		mg/Kg		27.9	10.0 - 110.	
Q. 1								
Selenium	322	281.6		mg/Kg		87.4	57.8 - 109.	
The all Process	050	004.0				00.0	9	
Thallium	253	224.8		mg/Kg		88.9	59.7 - 109.	
7:	400	420.0				00.0	9	
Zinc	498	439.9		mg/Kg		88.3	58.8 - 110.	
							0	

Lab Sample ID: 600-196853-3 MS Client Sample ID: Cell25-Square108-S-2-191203

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 282489 Prep Batch: 282394

Analysis batch: 202409	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.125	U	13.1	10.78		mg/Kg	<u> </u>	82	75 - 125
Arsenic	2.63		52.4	49.02		mg/Kg	☼	88	75 - 125
Barium	46.5		52.4	104.0		mg/Kg	☼	110	75 - 125
Beryllium	0.357		52.4	47.09		mg/Kg	₩.	89	75 - 125
Calcium	7470		524	9150	4	mg/Kg	☼	321	75 - 125
Cadmium	0.142	J	52.4	46.94		mg/Kg	☼	89	75 - 125
Chromium	6.21		52.4	53.17		mg/Kg	₩.	90	75 - 125
Copper	3.71		52.4	52.22		mg/Kg	₩	92	75 - 125
Iron	6270		524	8678	4	mg/Kg	₩	460	75 - 125
Potassium	1380		524	2779	N1	mg/Kg		267	75 - 125
Magnesium	993		524	2048	N1	mg/Kg	₩	201	75 - 125
Manganese	93.8		52.4	148.5		mg/Kg	₩	104	75 - 125
Sodium	16.0	Jb	524	532.2		mg/Kg		98	75 - 125
Lead	5.89		52.4	54.17		mg/Kg	☼	92	75 - 125
Antimony	0.243	U	78.7	36.93	N1	mg/Kg	₩	47	75 - 125
Selenium	0.272	U	52.4	45.34		mg/Kg		86	75 - 125
Thallium	0.291	U	52.4	45.45		mg/Kg	☼	87	75 - 125
Zinc	15.0		26.2	48.02	N1	mg/Kg	☼	126	75 ₋ 125

Lab Sample ID: 600-196853-3 DU Client Sample ID: Cell25-Square108-S-2-191203 Matrix: Solid **Prep Type: Total/NA**

Analysis Batch: 282489 **Prep Batch: 282394**

	Sample	Sample	DU	DU			•		RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Silver	0.125	U	0.120	U	mg/Kg	₩		NC	20
Arsenic	2.63		2.583		mg/Kg	₩		2	20
Barium	46.5		43.14		mg/Kg	☼		7	20

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-196853-3 DU Client Sample ID: Cell25-Square108-S-2-191203 **Matrix: Solid** Prep Type: Total/NA Analysis Bataly 202400

Analysis Batch: 282489							Prep Batch: 28	82394
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Beryllium	0.357		0.3532		mg/Kg	-	0.9	20
Calcium	7470		7564		mg/Kg	₩	1	20
Cadmium	0.142	J	0.1514	J	mg/Kg	₩	7	20
Chromium	6.21		5.989		mg/Kg		4	20
Copper	3.71		3.699		mg/Kg	₽	0.4	20
Iron	6270		6136		mg/Kg	₩	2	20
Potassium	1380		1350		mg/Kg	₩	2	20
Magnesium	993		999.1		mg/Kg	₩	0.6	20
Manganese	93.8		91.53		mg/Kg	₩	2	20
Sodium	16.0	J b	15.74	j	mg/Kg	₩	1	20
Lead	5.89		5.480		mg/Kg	₩	7	20
Antimony	0.243	U	0.234	U	mg/Kg	₩	NC	20
Selenium	0.272	U	0.261	U	mg/Kg		NC	20
Thallium	0.291	U	0.280	U	mg/Kg	₩	NC	20
Zinc	15.0		16.57		mg/Kg	₩	10	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-282758/7-B Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 282867

MB MB Analyte Result Qualifier MQL (Adi) SDL Unit Prepared Analyzed Dil Fac <u>12/11/19 14:22</u> <u>12/12/19 10:26</u> 0.00325 U 0.0155 0.00325 mg/Kg Mercury

Lab Sample ID: LCS 600-282758/8-B **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 282867

Spike LCS LCS %Rec. Added Result Qualifier Limits Unit

Analyte D %Rec 0.224 0.2270 Mercury mg/Kg 101 70 - 130

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 600-282467/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 282510** Prep Batch: 282467 MB MB

SDL Unit Analyte Result Qualifier MQL (Adj) Prepared Analyzed Dil Fac 12/09/19 10:56 12/09/19 13:29 Cyanide, Total 0.00150 U 0.0100 0.00150 mg/Kg

Lab Sample ID: LCS 600-282467/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 282510

Prep Batch: 282467 LCS LCS Spike %Rec. Analyte Added Result Qualifier Limits Unit D %Rec Cyanide, Total 0.100 0.1005 mg/Kg 101 90 - 110

Eurofins TestAmerica, Houston

Prep Batch: 282758

Prep Batch: 282758

Project/Site: Chevron - Jal Land Farm Soils

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	0.00500	0.000630	mg/Kg
Ethylbenzene	0.00500	0.00102	mg/Kg
Toluene	0.00500	0.00138	mg/Kg
Xylenes, Total	0.00500	0.00113	mg/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030A

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	100	64.2	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units	
C28-C36	50.0	34.6	mg/Kg	_
Diesel Range Organics [C10 - C28]	50.0	34.6	mg/Kg	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Γ	Analyte	MQL	MDL	Units
	Chloride	4.00	0.534	mg/Kg
	Fluoride	2.00	0.601	mg/Kg
	Nitrate as N	2.00	0.251	mg/Kg
	Sulfate	5.00	0.957	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

Eurofins TestAmerica, Houston

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Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

General Chemistry

Prep: 9012B

Analyte	MQL	MDL	Units
Cyanide, Total	0.500	0.0751	mg/Kg

3

Δ

5

6

0

9

10

12

13

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

GC/MS VOA

Analysis Batch: 282157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	8260B	282242
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	8260B	282242
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	8260B	282242
MB 600-282157/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-282157/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-282157/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 282242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	5035	<u> </u>
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	5035	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	5035	

GC VOA

Prep Batch: 414323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	5030A	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	5030A	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	5030A	
MB 240-414323/1-A	Method Blank	Total/NA	Solid	5030A	
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	5030A	

Analysis Batch: 414326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	8015B	414323
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	8015B	414323
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	8015B	414323
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

Analysis Batch: 414327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

GC Semi VOA

Prep Batch: 414439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	3546	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	3546	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	3546	
MB 240-414439/1-A	Method Blank	Total/NA	Solid	3546	
LCS 240-414439/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 414744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	8015B	414439
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	8015B	414439
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	8015B	414439
MB 240-414439/1-A	Method Blank	Total/NA	Solid	8015B	414439

QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

GC Semi VOA (Continued)

Analysis Batch: 414744 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-414439/2-A	Lab Control Sample	Total/NA	Solid	8015B	414439

HPLC/IC

Analysis Batch: 282645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Soluble	Solid	300.0	282739
600-196853-3	Cell25-Square108-S-2-191203	Soluble	Solid	300.0	282739
600-196853-4	Cell26-Square207-S-2-191203	Soluble	Solid	300.0	282739
MB 600-282739/1-A	Method Blank	Soluble	Solid	300.0	282739
LCS 600-282739/2-A	Lab Control Sample	Soluble	Solid	300.0	282739

Analysis Batch: 282646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Soluble	Solid	300.0	282739
600-196853-3	Cell25-Square108-S-2-191203	Soluble	Solid	300.0	282739
600-196853-4	Cell26-Square207-S-2-191203	Soluble	Solid	300.0	282739
MB 600-282739/1-A	Method Blank	Soluble	Solid	300.0	282739
LCS 600-282739/2-A	Lab Control Sample	Soluble	Solid	300.0	282739

Leach Batch: 282739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Soluble	Solid	DI Leach	
600-196853-3	Cell25-Square108-S-2-191203	Soluble	Solid	DI Leach	
600-196853-4	Cell26-Square207-S-2-191203	Soluble	Solid	DI Leach	
MB 600-282739/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-282739/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 282793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Soluble	Solid	300.0	282739
600-196853-3	Cell25-Square108-S-2-191203	Soluble	Solid	300.0	282739
600-196853-4	Cell26-Square207-S-2-191203	Soluble	Solid	300.0	282739
MB 600-282739/1-A	Method Blank	Soluble	Solid	300.0	282739
LCS 600-282739/2-A	Lab Control Sample	Soluble	Solid	300.0	282739

Analysis Batch: 282794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-282739/1-A	Method Blank	Soluble	Solid	300.0	282739
LCS 600-282739/2-A	Lab Control Sample	Soluble	Solid	300.0	282739

Metals

Prep Batch: 282394

Lab Cample ID	Olicant Communic ID	Duan Tama	B.C. a.t.ui	Madlaad	Duan Datah
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-1	Cell20-Square112-S-2-191203	Total/NA	Solid	3050B	
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	3050B	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	3050B	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	3050B	
MB 600-282394/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282394/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-196853-3 MS	Cell25-Square108-S-2-191203	Total/NA	Solid	3050B	

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Job ID: 600-196853-1

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Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Metals (Continued)

Prep Batch: 282394 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-3 DU	Cell25-Square108-S-2-191203	Total/NA	Solid	3050B	

Analysis Batch: 282489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-1	Cell20-Square112-S-2-191203	Total/NA	Solid	6010B	282394
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	6010B	282394
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	6010B	282394
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	6010B	282394
MB 600-282394/1-A	Method Blank	Total/NA	Solid	6010B	282394
LCSSRM 600-282394/2-A	Lab Control Sample	Total/NA	Solid	6010B	282394
600-196853-3 MS	Cell25-Square108-S-2-191203	Total/NA	Solid	6010B	282394
600-196853-3 DU	Cell25-Square108-S-2-191203	Total/NA	Solid	6010B	282394

Prep Batch: 282758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-1	Cell20-Square112-S-2-191203	Total/NA	Solid	7471A	
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	7471A	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	7471A	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	7471A	
MB 600-282758/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-282758/8-B	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 282867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-1	Cell20-Square112-S-2-191203	Total/NA	Solid	7471A	282758
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	7471A	282758
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	7471A	282758
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	7471A	282758
MB 600-282758/7-B	Method Blank	Total/NA	Solid	7471A	282758
LCS 600-282758/8-B	Lab Control Sample	Total/NA	Solid	7471A	282758

General Chemistry

Analysis Batch: 282312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-1	Cell20-Square112-S-2-191203	Total/NA	Solid	2540B	
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	2540B	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	2540B	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	2540B	

Prep Batch: 282467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	9012B	
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	9012B	
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	9012B	
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	

Analysis Batch: 282510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-2	Cell21-Square107-S-2-191203	Total/NA	Solid	9012B	282467

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry (Continued)

Analysis Batch: 282510 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196853-3	Cell25-Square108-S-2-191203	Total/NA	Solid	9012B	282467
600-196853-4	Cell26-Square207-S-2-191203	Total/NA	Solid	9012B	282467
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	282467
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	282467

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell20-Square112-S-2-191203

Lab Sample ID: 600-196853-1 Date Collected: 12/03/19 08:50

Matrix: Solid

Date Received: 12/04/19 10:35

Date Collected: 12/03/19 08:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell20-Square112-S-2-191203

Lab Sample ID: 600-196853-1

Matrix: Solid

Date Received: 12/04/19 10:35 Percent Solids: 83.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:28	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 11:03	SOT	TAL HOU

Client Sample ID: Cell21-Square107-S-2-191203

Lab Sample ID: 600-196853-2

Matrix: Solid

Date Collected: 12/03/19 09:15 Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			414323	12/07/19 18:04	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/08/19 23:04	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/10/19 23:07	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell21-Square107-S-2-191203

Lab Sample ID: 600-196853-2

Date Collected: 12/03/19 09:15

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 91.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282242	12/04/19 15:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 16:50	WS1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282645	12/11/19 20:00	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282646	12/11/19 20:00	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282793	12/12/19 21:14	KP1	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:30	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 11:05	SOT	TAL HOU
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:35	AML	TAL HOU

Matrix: Solid

Client Sample ID: Cell25-Square108-S-2-191203

Date Collected: 12/03/19 09:45

Date Received: 12/04/19 10:35

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			414323	12/07/19 18:04	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/08/19 23:44	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/10/19 23:34	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell25-Square108-S-2-191203

Date Collected: 12/03/19 09:45

Matrix: Solid Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282242	12/04/19 15:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 17:13	WS1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282645	12/11/19 20:20	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282646	12/11/19 20:20	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282793	12/12/19 21:34	KP1	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 11:54	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:32	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 11:07	SOT	TAL HOU
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:35	AML	TAL HOU

Client Sample ID: Cell26-Square207-S-2-191203

Date Collected: 12/03/19 10:00

Date Received: 12/04/19 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			414323	12/07/19 18:04	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/09/19 00:23	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/11/19 00:00	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell26-Square207-S-2-191203

Date Collected: 12/03/19 10:00

Date Received: 12/04/19 10:35

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282242	12/04/19 15:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 17:35	WS1	TAL HOU

Lab Sample ID: 600-196853-3

Lab Sample ID: 600-196853-3

Percent Solids: 93.5

Lab Sample ID: 600-196853-4 **Matrix: Solid**

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Lab Sample ID: 600-196853-4

Matrix: Solid

Percent Solids: 79.9

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell26-Square207-S-2-191203 Lab Sample ID: 600-196853-4

Date Collected: 12/03/19 10:00 **Matrix: Solid** Date Received: 12/04/19 10:35 Percent Solids: 79.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282645	12/11/19 20:41	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282646	12/11/19 20:41	KP1	TAL HOU
Soluble	Leach	DI Leach			282739	12/11/19 13:03	SKR	TAL HOU
Soluble	Analysis	300.0		1	282793	12/12/19 21:55	KP1	TAL HOU
Total/NA	Prep	3050B			282394	12/07/19 12:05	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282489	12/09/19 16:38	KP1	TAL HOU
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 11:13	SOT	TAL HOU
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:36	AML	TAL HOU

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196853-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	F	Program	Identification Number	Expiration Date
Texas	<u> </u>	IELAP	T104704223-19-25	10-31-20
The following analytes the agency does not do		port, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Mothod	Prop Mothod	Matrix	Analyta	
Analysis Method 2540B	Prep Method	Matrix Solid	Analyte Percent Moisture	
	Prep Method			

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
lowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

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Chain of Custody Record

Eurofins TestAmerica, Houston

Phone (713) 690-4444 Fax (713) 690-5646

6310 Rothway Street Houston, TX 77040

Enuronment Testing

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Special Instructions/Note: Ver. 01/16/2019 N - None

N - None

- Ashaos

P - Na204S

Q - Na2503

R - Na2503

S - H2504

I - TSP Dodecanyd

V - MCAA

W - PH 4-5

Z - other (specify) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Mon COC No: 600-72593-19936.10 1035 reservation Codes G - Amehlor H - Ascorbic Acid C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH 1 - Ice J - DI Water Page 12/4/19 Date Time Total Number of containers 40000 Analysis Requested Cooler Temperature(s) °C and Other Remarks 600-196853 Chain of Custody Special Instructions/QC Requirements 9012- Cyanide sachin kudchadkar@testamericainc.com 8260B-BTEX aived by Lab PM. Kudchadkar, Sachin G 10158_GRO -C6-C10 - 202 Jar Canton 80158_DRO/ORO -C10-C28/ C28-C36- 4 oz jar- Canton 2 2 Perform MS/MSD (Yes or No) 2 E-Mad Arcadis Preservation Code Matrix Solid ompany Radiological (C=comp, Sample G=grab) Type 9 9 5 0 0945 0680 2115 Sample Time 1000 Unknown TAT Requested (days) Due Date Requested: 191203 Sample Date 191303 171203 12/3/f9 Date/Time 191203 Project # 60011732 Sate/Time Poison B ell 26-5quare207-5-2-3-191203 21125-Square 108-5-2-191203 ell 21-Sygue 107-5-2-3-191203 -1120 Squarella-5-2-191203 Skin Imtant Deliverable Requested: I, II, III, IV, Other (specify Custody Seal No Chevron - Jal Land Farm Soils 2020 Flammable Possible Hazard Identification 1004 North Big Spring Suite 121 sarah.johnson@arcadis.com mpty Kit Relinquished by Custody Seals Intact: A Yes A No Client Information Sample Identification 432-227-0266(Tel) Non-Hazard ARCADIS U.S., Sarah Johnson yd badsiupr idushed by State, Zip. TX, 79701 Midland

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Eurofins TestAmerica Houston

Loc: 600 196853

Sample Receipt Checklist

		Dat	te/Time Received:	1.	10	
JOB NUMBER:		CLI	ENT:	HVCao	115	
UNPACKED BY:	ZHR	CAI	RRIER/DRIVER:	F	lis ed Ex	
Custody Seal Present:	DIVES D	NO Nur	mber of Coolers Recei	ved:	1	
	Temp		Observed Temp	Therm	Therm	Corrected Temp
Cooler ID	Blank	Trip Blank	(°C)	10	10.1	(°C)
86700	X/N	Y/N	1.0	676	10.1	1-1
	Y / N	Y/N				
	Y/N	Y/N				
	Y/N	Y/N			12	14/19
	Y/N	Y/N			100/	7/11
-	CF = correction factor					
		NO Acid	IRED: \(\int\)NO d preserved are <ph 2:<="" th=""><th>□YES</th><th>□NO</th><th></th></ph>	□YES	□NO	
Base samples are>pH TX1005 samples frozer	12: □YES □I	NO Acid	d preserved are <ph 2:<="" th=""><th>□YES</th><th></th><th></th></ph>	□YES		
Base samples are>pH	12: □YES □I	NO Acid	d preserved are <ph 2:<="" td=""><td>□YES</td><td></td><td>O MNA</td></ph>	□YES		O MNA
Base samples are>pH TX1005 samples frozer	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ble (5-6mm):		O ØNA
Base samples are>pH TX1005 samples frozer pH paper Lot #	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ble (5-6mm):		,
Base samples are>pH TX1005 samples frozer pH paper Lot # Did samples meet the labor	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ble (5-6mm):		,
Base samples are>pH TX1005 samples frozer pH paper Lot # Did samples meet the labor	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ble (5-6mm):		,
Base samples are>pH TX1005 samples frozer pH paper Lot # Did samples meet the labor	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ble (5-6mm):		,
Base samples are>pH TX1005 samples frozer pH paper Lot # Did samples meet the labor	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ple (5-6mm):		,
Base samples are>pH TX1005 samples frozer pH paper Lot # Did samples meet the labor	12: □YES □lt	NO Acid □ YES DA' □ VO	d preserved are <ph 2:<br="">TE & TIME PUT IN F</ph>	□YES REEZER: ple (5-6mm):		,

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Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street Houston, TX 77040

Phone: 713-690-4444 Fax: 713-690-5646

T - TSP Dodecahydrate U - Acefone V - MCAA 2 (236 2 (236) C28 (C10-C28) (C28-2 (236) Diesel Range Organics [C10-C28]/ C28 Diesel Range Organics [C10-C28]/ C28 Special Instructions/Note: W - pH 4-5 Z - other (specify) P - Na204S Q - Na2SO3 R - Na2S2O3 S - H2SO4 N - None O - AsNaO2 Preservation Codes: G - Amchior H - Ascorbic Acid 600-196853-A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH 600-42921.1 Page: Page 1 of 1 1 - Ice J - Di Water K-EDTA - EDA Total Number of containers Carrier Tracking No(s) State of Origin. Texas Analysis Requested sachin, kudchadkar@testamericainc.com Accreditations Required [See note] NELAP - Texas Kudchadkar, Sachin G Organics [C6-C10]
80158_DR0/3546 Diesel Range Organics [C10-C28]/ × × × × 8012B CKO/2030B SOUGNAC GREO Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) E-Mail BT=Tissue, AcAle (Wewater, Sesolid, Onwastefoll, Preservation Code: Matrix Solid Solid Solid G=grab) Sample (C=comp, Type Sample Central 09:45 Central 10:00 Central Time 09:15 TAT Requested (days): Due Date Requested: 12/11/2019 Sample Date 12/3/19 12/3/19 12/3/19 60011732 (Sub Contract Lab) Cell21-Square107-5-2-3-191203 (600-196853-2) Cell25-Square108-5-2-3-191203 (600-196853-3) Cell26-Square207-5-2-3-191203 (600-196853-4) Sample Identification - Client ID (Lab ID) 330-497-9396(Tel) 330-497-0772(Fax) FestAmerica Laboratories, Inc. Chevron - Jal Land Farm Soils 4101 Shuffel Street NW, Client Information Shipping/Receiving North Canton OH, 44720

vote: Since laboratory acceditations are subject to change. TestAmerica Laboratories, inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample stip contract laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica aboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc. Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Disposal By Lab Possible Hazard Identification Inconfirmed

ETY Ver: 01/16/2019 Company 8 0 12-6-19 lethod of Shipment Cooler Temperature(s) "C and Other Remarks. Special Instructions/QC Requirements: Received by: sceived by: Ime: THE THE Сотрану (700 Primary Deliverable Rank: 2 Jate/Time. Deliverable Requested: I. II, III, IV, Other (specify) Custody Seal No. mpty Kit Relinquished by Custody Seals Intact: A Yes A No ushed by:

Eurofins TestAmerica Ca Canton Facility	nton Sample Receipt Form/Narrat	ive	Login # : 196953
Client ETA - Houston	Site Name		Cooler unpacked by:
Cooler Received on [2-6-		- 7-19	Kyan Crubley
	S FAS Clipper Client Drop Off		Other
Receipt After-hours: Drop-		Storage Location	Silvi
	Foam Box Client Cooler		
	Bubble Wrap Foam Plastic Ba		
COOLANT: W	et Ice Blue Ice Dry Ice Wa	ter None	
	0.7 °C) Observed Cooler Temp. O. 0.9 °C) Observed Cooler Temp.	°C Corrected Cooler	Temp. /. / °C Temp. °C
-Were the seals on the -Were tamper/custody -Were tamper/custody 3. Shippers' packing slip at 4. Did custody papers acco 5. Were the custody papers 6. Was/were the person(s) 7. Did all bottles arrive in g 8. Could all bottle labels be 9. Were correct bottle(s) us 10. Sufficient quantity recei 11. Are these work share san If yes, Questions 12-16 l 12. Were all preserved samp 13. Were VOAs on the COC 14. Were air bubbles >6 mm	relinquished & signed in the appropri who collected the samples clearly iden good condition (Unbroken)? reconciled with the COC? ed for the test(s) indicated? wed to perform indicated analyses? nples? have been checked at the originating la le(s) at the correct pH upon receipt? in any VOA vials? Large resent in the cooler(s)? Trip Blank Lo	d? Yes Hg/MeHg)? Yes Yes Yes ate place? Yes	No No NA No
La a la	Date by	via Verbal V	oice Mail Other
Concerning			
17. CHAIN OF CUSTODY	& SAMPLE DISCREPANCIES		Samples processed by:
18. SAMPLE CONDITION		N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S. A. L. A. March, A
Sample(s)	were received at	ter the recommended hold	ing time had expired. I in a broken container.
Sample(s)	Wate rec	eived with bubble >6 mm	
		cived with bubble 20 min	m diameter. (190thy Pivi)
19. SAMPLE PRESERVA	HUN		
Sample(s)		were fu	rther preserved in the laboratory.
Time preserved:	Preservative(s) added/Lot number	(s):	
	Date/Time VOAs Frozen:		

Client: ARCADIS U.S., Inc.

Job Number: 600-196853-1

Login Number: 196853

List Source: Eurofins TestAmerica, Houston

List Number: 1 Creator: Rubio, Yuri

	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	1.1
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.



TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-196905-1

Client Project/Site: Chevron - Jal Land Farm Soils

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 12/26/2019 10:42:12 AM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
9012B	Cyanide, Total andor Amenable	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3546	Microwave Extraction	SW846	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-196905-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset II
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Solid	12/02/19 14:12	12/04/19 15:07	
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Solid	12/02/19 14:30	12/04/19 15:07	
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Solid	12/02/19 14:50	12/04/19 15:07	
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Solid	12/02/19 15:15	12/04/19 15:07	

Job ID: 600-196905-1

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Project/Site: Chevron - Jal Land Farm Soils

Date Collected: 12/02/19 14:12

Matrix: Solid
Date Received: 12/04/19 15:07

Matrix: Solid
Percent Solids: 92.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	<u> </u>	12/09/19 16:20	12/10/19 10:07	1
Arsenic	1.96		1.06	0.231	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Barium	81.3		1.06	0.0318	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Beryllium	0.228	J	0.265	0.0154	mg/Kg	φ.	12/09/19 16:20	12/10/19 10:07	1
Calcium	35400		106	0.917	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Cadmium	0.127	J	0.265	0.0272	mg/Kg	₩	12/09/19 16:20	12/10/19 10:07	1
Chromium	5.23		0.531	0.0537	mg/Kg	φ.	12/09/19 16:20	12/10/19 10:07	1
Copper	3.55		0.531	0.185	mg/Kg	₩	12/09/19 16:20	12/10/19 10:07	1
Iron	4510		21.2	2.68	mg/Kg	₩	12/09/19 16:20	12/10/19 10:07	1
Potassium	1060		106	11.7	mg/Kg	₩.	12/09/19 16:20	12/10/19 10:07	1
Magnesium	1380		106	2.04	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Manganese	53.5	b	1.59	0.0404	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Sodium	34.1	J	106	0.940	mg/Kg	₩.	12/09/19 16:20	12/10/19 10:07	1
Lead	5.59		0.531	0.111	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Antimony	0.246	U	2.65	0.246	mg/Kg	₩	12/09/19 16:20	12/10/19 10:07	1
Selenium	0.275	U	2.12	0.275	mg/Kg	₩	12/09/19 16:20	12/10/19 10:07	1
Thallium	0.297	J b	1.59	0.294	mg/Kg	☼	12/09/19 16:20	12/10/19 10:07	1
Zinc	12.9		1.59	0.115	mg/Kg	≎	12/09/19 16:20	12/10/19 10:07	1

Method: 7471A - Mercury in Sc	olid or Semisolid Was	ste (Manual	Cold Vap	or Tech	nique)			
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00473 J	0.0170	0.00358	mg/Kg	₩	12/12/19 11:06	12/12/19 16:05	1
General Chemistry								

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.6	1.0	1.0 %			12/09/19 08:11	1
Percent Solids	92.4	1.0	1.0 %			12/09/19 08:11	1

 Client Sample ID: CELL20-SQUARE 42-S-2-3-191202
 Lab Sample ID: 600-196905-2

 Date Collected: 12/02/19 14:30
 Matrix: Solid

 Date Received: 12/04/19 15:07
 Percent Solids: 82.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	UH	0.00500	0.000630	mg/Kg	<u></u>	12/04/19 16:03	12/05/19 15:41	1
Ethylbenzene	0.00102	UH	0.00500	0.00102	mg/Kg	☆	12/04/19 16:03	12/05/19 15:41	1
Toluene	0.00138	UH	0.00500	0.00138	mg/Kg	≎	12/04/19 16:03	12/05/19 15:41	1
Xylenes, Total	0.00113	UH	0.00500	0.00113	mg/Kg	\$	12/04/19 16:03	12/05/19 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		61 - 130				12/04/19 16:03	12/05/19 15:41	1
Dibromofluoromethane	101		68 - 140				12/04/19 16:03	12/05/19 15:41	1
Toluene-d8 (Surr)	94		50 - 130				12/04/19 16:03	12/05/19 15:41	1
4-Bromofluorobenzene	87		57 - 140				12/04/19 16:03	12/05/19 15:41	1

Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.0 l	U	101	65.0	ug/Kg		12/07/19 18:50	12/09/19 01:03	1
Surrogate	%Recovery (Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	86		20 - 140				12/07/19 18:50	12/09/19 01:03	

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: CELL20-SQUARE 42-S-2-3-191202

Date Collected: 12/02/19 14:30

Da

Lab Sample ID: 600-196905-2

Matrix: Solid

Date Received: 12/04/19 15:07								Percent Soli	ds: 82.1
_ Method: 8015B - Diesel Range Org	ganics (DRO) (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

Diesel Range Organics [C10 - C28] C28-C36	34.5 34.5		49.9 49.9	mg/Kg mg/Kg			12/11/19 00:53 12/11/19 00:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

o-Terphenyl (Surr) 68 26 - 125 <u>12/09/19 10:03</u> <u>12/11/19 00:53</u>

Method: 300.0 - Anions, Ion Chromatography - Soluble

Method: 500.0 - Allions, foll on	omatogra	ipily - coll	abic						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.5	b	4.84	0.647	mg/Kg			12/20/19 14:07	1
Nitrate as N	2.15	JH	2.42	0.304	mg/Kg	₽		12/20/19 14:07	1
Fluoride	4.21		2.42	0.728	mg/Kg	≎		12/20/19 14:07	1
Sulfate	21.1		6.06	1.16	mg/Kg	≎		12/20/19 14:07	1

Method: 6010R - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.142	U	0.478	0.142	mg/Kg	<u> </u>	12/09/19 16:20	12/10/19 10:09	1
Arsenic	1.53		1.19	0.260	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Barium	52.0		1.19	0.0358	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Beryllium	0.179	J	0.299	0.0173	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Calcium	45400		119	1.03	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Cadmium	0.131	J	0.299	0.0306	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Chromium	4.50		0.597	0.0604	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Copper	2.67		0.597	0.208	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Iron	3870		23.9	3.02	mg/Kg	☼	12/09/19 16:20	12/10/19 10:09	1
Potassium	859		119	13.1	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Magnesium	1880		119	2.29	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Manganese	51.5	b	1.79	0.0455	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Sodium	24.0	J	119	1.06	mg/Kg	ф	12/09/19 16:20	12/10/19 10:09	1
Lead	6.09		0.597	0.125	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Antimony	0.277	U	2.99	0.277	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Selenium	0.309	Ü	2.39	0.309	mg/Kg	ф.	12/09/19 16:20	12/10/19 10:09	1
Thallium	0.331	U	1.79	0.331	mg/Kg	₩	12/09/19 16:20	12/10/19 10:09	1
Zinc	10.2		1.79	0.129	mg/Kg	☼	12/09/19 16:20	12/10/19 10:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00391 U	0.0185	0.00391 mg/Kg	<u> </u>	12/12/19 11:06	12/12/19 16:07	1

General Chemistry

Ochoral Onchingary								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.9	1.0	1.0	%			12/09/19 08:11	1
Percent Solids	82.1	1.0	1.0	%			12/09/19 08:11	1
Cvanide Total	0.0206 U	0.137	0.0206	ma/Ka	₩	12/09/19 10:56	12/09/19 13:39	1

Client Sample ID: CELL20-SQUARE 20-S-2-3-191202 Lab Sample ID: 600-196905-3

Date Collected: 12/02/19 14:50 **Matrix: Solid** Date Received: 12/04/19 15:07 Percent Solids: 77.9

Method: 6010B - Inductively C	oupled Plasma - Ator	nic Emissio	n Spectrometry				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.145 U	0.489	0.145 mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1

Job ID: 600-196905-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: CELL20-SQUARE 20-S-2-3-191202 Lab Sample ID: 600-196905-3

Date Collected: 12/02/19 14:50

Matrix: Solid
Date Received: 12/04/19 15:07

Matrix: Solid
Percent Solids: 77.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.08		1.22	0.266	mg/Kg	<u> </u>	12/09/19 16:20	12/10/19 10:11	1
Barium	192		1.22	0.0367	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Beryllium	0.189	J	0.306	0.0177	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Calcium	102000		122	1.06	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Cadmium	0.141	J	0.306	0.0313	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Chromium	4.14		0.611	0.0618	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Copper	2.86		0.611	0.213	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Iron	3600		24.4	3.09	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Potassium	923		122	13.4	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Magnesium	1680		122	2.35	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Manganese	49.3	b	1.83	0.0466	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Sodium	48.2	J	122	1.08	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Lead	7.00		0.611	0.128	mg/Kg	☼	12/09/19 16:20	12/10/19 10:11	1
Antimony	0.284	U	3.06	0.284	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1
Selenium	0.317	U	2.44	0.317	mg/Kg	₩.	12/09/19 16:20	12/10/19 10:11	1
Thallium	0.339	U	1.83	0.339	mg/Kg	☼	12/09/19 16:20	12/10/19 10:11	1
Zinc	12.5		1.83	0.132	mg/Kg	₩	12/09/19 16:20	12/10/19 10:11	1

Method: 7471A - Mercury in Sc	lid or Sem	isolid Wa	ste (Manual	Cold Vap	or Tech	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00445	U	0.0211	0.00445	mg/Kg	\	12/12/19 11:06	12/12/19 16:09	1
Goneral Chemistry									

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.1	1.0	1.0 %			12/09/19 08:11	1
Percent Solids	77.9	1.0	1.0 %			12/09/19 08:11	1

Client Sample ID: CELL20-SQUARE 88-S-2-3-191202

Date Collected: 12/02/19 15:15

Date Received: 12/04/19 15:07

Lab Sample ID: 600-196905-4

Matrix: Solid

Percent Solids: 87.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.135	U	0.454	0.135	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Arsenic	1.34		1.14	0.248	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Barium	29.4		1.14	0.0341	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Beryllium	0.182	J	0.284	0.0165	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Calcium	10600		114	0.981	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Cadmium	0.114	J	0.284	0.0291	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Chromium	4.47		0.568	0.0575	mg/Kg	ф	12/09/19 16:20	12/10/19 10:19	1
Copper	2.21		0.568	0.198	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Iron	3800		22.7	2.87	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Potassium	728		114	12.5	mg/Kg	ф.	12/09/19 16:20	12/10/19 10:19	1
Magnesium	597		114	2.18	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Manganese	45.7	b	1.70	0.0433	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Sodium	20.7	J	114	1.01	mg/Kg	₽	12/09/19 16:20	12/10/19 10:19	1
Lead	5.62		0.568	0.119	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Antimony	0.263	U	2.84	0.263	mg/Kg	₩	12/09/19 16:20	12/10/19 10:19	1
Selenium	0.294	U	2.27	0.294	mg/Kg		12/09/19 16:20	12/10/19 10:19	1
Thallium	0.315	U	1.70	0.315	mg/Kg	☼	12/09/19 16:20	12/10/19 10:19	1

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Date Collected: 12/02/19 15:15

Matrix: Solid
Pare Propried: 42/04/19 45:07

Date Received: 12/04/19 15:07 Percent Solids: 87.2

Method: 6010B - Inductively C	Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Zinc	9.28		1.70	0.123	mg/Kg		12/09/19 16:20	12/10/19 10:19	1	

Method: 7471A - Mercury in So	Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac			
Mercury	0.00492 J	0.0186	0.00391 mg/Kg	\	12/12/19 11:06	12/12/19 15:39	1			

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.8	1.0	1.0 %			12/09/19 08:11	1
Percent Solids	87.2	1.0	1.0 %			12/09/19 08:11	1

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

G			

Qualifier Qualifier Description

H Sample was prepped or analyzed beyond the specified holding time

U Analyte was not detected at or above the SDL.

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

b The compound was found in the blank and sample

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.

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 Description

U Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly	y used abbreviations ma	v or may	not be	present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

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

Matrix: Solid Prep Type: Total/NA

Lab Sample ID Client Sample ID (61-130) (68-140) (50-130) (57-140) 600-196905-2 CELL20-SQUARE 42-S-2-3-191 97 101 94 87 LCS 600-282157/3 Lab Control Sample Dup 103 111 97 90 LCSD 600-282157/4 Lab Control Sample Dup 98 107 100 92	_			Pe	rcent Surro	ogate Reco
600-196905-2 CELL20-SQUARE 42-S-2-3-191 97 101 94 87 LCS 600-282157/3 Lab Control Sample 103 111 97 90			DCA	DBFM	TOL	BFB
LCS 600-282157/3 Lab Control Sample 103 111 97 90	Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
•	600-196905-2	CELL20-SQUARE 42-S-2-3-191	97	101	94	87
LCSD 600-282157/4 Lab Control Sample Dup 98 107 100 92	LCS 600-282157/3	Lab Control Sample	103	111	97	90
	LCSD 600-282157/4	Lab Control Sample Dup	98	107	100	92
MB 600-282157/6 Method Blank 105 106 100 93	MB 600-282157/6	Method Blank	105	106	100	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Per	cent Surrogate	Recovery (A	cceptance L
		TFT2	TFT2			
Lab Sample ID	Client Sample ID	(20-140)	(20-140)			
600-196905-2	CELL20-SQUARE 42-S-2-3-191	86	86			
LCS 240-414323/2-A	Lab Control Sample	87	87			
MB 240-414323/1-A	Method Blank	93	93			
Surrogate Legend						
TFT = Trifluorotoluene	(Surr)					

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(26-125)	
600-196905-2	CELL20-SQUARE 42-S-2-3-191	68	
LCS 240-414439/2-A	Lab Control Sample	86	
MB 240-414439/1-A	Method Blank	75	
Surrogate Legend			

Eurofins TestAmerica, Houston

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Job ID: 600-196905-1

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Project/Site: Chevron - Jal Land Farm Soils

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

Lab Sample ID: MB 600-282157/6

Matrix: Solid

Analysis Batch: 282157

Client Sam	ple ID: M	lethod Blani	K
	Prep Ty	pe: Total/N	4

	IVID	IVID							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			12/05/19 11:30	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			12/05/19 11:30	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			12/05/19 11:30	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			12/05/19 11:30	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 105 61 - 130 12/05/19 11:30 Dibromofluoromethane 106 68 - 140 12/05/19 11:30 100 Toluene-d8 (Surr) 50 - 130 12/05/19 11:30 93 57 - 140 4-Bromofluorobenzene 12/05/19 11:30

Lab Sample ID: LCS 600-282157/3

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Analysis Batch: 282157

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

Spike LCS LCS %Rec. Added Result Qualifier Limits Unit %Rec 0.0500 0.05323 106 70 - 131 mg/Kg 0.0500 0.05637 mg/Kg 113 66 - 130 0.0500 0.05362 mg/Kg 107 67 - 130110 63 - 130 0.100 0.1096 mg/Kg 0.0500 0.05360 mg/Kg 107 64 - 1300.0500 0.05599 mg/Kg 112 62 - 130

LCS LCS Qualifier Surrogate %Recovery I imits 1,2-Dichloroethane-d4 (Surr) 103 61 - 130 Dibromofluoromethane 111 68 - 140 Toluene-d8 (Surr) 97 50 - 130 4-Bromofluorobenzene 57 - 140 90

Lab Sample ID: LCSD 600-282157/4

Matrix: Solid

Analysis Batch: 282157

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene 0.0500 0.05062 mg/Kg 101 70 - 131 5 30 Ethylbenzene 0.0500 0.05624 mg/Kg 112 66 - 130 30 Toluene 0.0500 0.05285 106 67 - 130 30 mg/Kg Xylenes, Total 0.100 0.1104 mg/Kg 110 63 - 13030 m-Xylene & p-Xylene 0.0500 0.05388 108 64 - 130 30 mg/Kg o-Xylene 0.0500 0.05654 mg/Kg 113 62 - 130 30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		61 - 130
Dibromofluoromethane	107		68 ₋ 140
Toluene-d8 (Surr)	100		50 - 130
4-Bromofluorobenzene	92		57 - 140

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-414323/1-A **Matrix: Solid**

Analysis Batch: 414326

Gasoline Range Organics [C6 - C10] Gasoline Range Organics [C6 - C10]

							Prep Batch:	
MB	MB						•	
Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
65.61	J	100	64.2	ug/Kg		12/07/19 18:04	12/08/19 15:48	1

64.2 ug/Kg

MD MD

65.61 J

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	93		20 - 140	12/07/19 18:04	12/08/19 15:48	1
Trifluorotoluene (Surr)	93		20 - 140	12/07/19 18:04	12/08/19 15:48	1

100

Lab Sample ID: LCS 240-414323/2-A

Matrix: Solid

Analyte

Analysis Batch: 414326							Prep Ba	tch: 414323
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics [C6 -	800	720.9		ug/Kg		90	75 - 126	
C10]								
Gasoline Range Organics [C6 -	800	720.9		ug/Kg		90	75 - 126	
C10]								

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	87		20 - 140
Trifluorotoluene (Surr)	87		20 - 140

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

Lab Sample ID: MB 240-414439/1-A **Matrix: Solid**

Analysis Batch: 414744

	MR	MR							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		12/09/19 10:02	12/10/19 17:44	1
C28-C36	34.6	U	50.0	34.6	mg/Kg		12/09/19 10:02	12/10/19 17:44	1
	МВ	МВ							

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 26 - 125 12/09/19 10:02 12/10/19 17:44 o-Terphenyl (Surr)

Lab Sample ID: LCS 240-414439/2-A

Matrix: Solid Analysis Batch: 414744							Prep Type: Total/NA Prep Batch: 414439
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10 -	250	209.3		mg/Kg		84	45 - 120

C28]

LCS LCS

Limits Surrogate %Recovery Qualifier 26 - 125 o-Terphenyl (Surr) 86

Client Sample ID: Method Blank

12/07/19 18:04 12/08/19 15:48

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 414439

Prep Type: Total/NA

Prep Type: Total/NA

Job ID: 600-196905-1

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283605

Client Sample ID: Method Blank **Prep Type: Soluble**

MB MB Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Chloride 0.534 mg/Kg 12/20/19 12:25 2.471 J 4.00 Fluoride 0.601 U 2.00 0.601 mg/Kg 12/20/19 12:25 Sulfate 0.957 U 5.00 0.957 mg/Kg 12/20/19 12:25

Lab Sample ID: LCS 600-283603/2-A

Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble Analysis Batch: 283605

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit D %Rec Chloride 200 205.8 103 90 - 110 mg/Kg Fluoride 75.0 74.04 mg/Kg 99 90 - 110 200 Sulfate 194.0 mg/Kg 97 90 - 110

Lab Sample ID: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283606

MB MB MQL (Adj) Result Qualifier SDL Unit Analyte **Prepared** Analyzed Dil Fac 12/20/19 12:25 Nitrate as N 0.251 U 2.00 0.251 mg/Kg

Lab Sample ID: LCS 600-283603/2-A

Matrix: Solid

Analysis Batch: 283606 Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits Nitrate as N 100 100.3 mg/Kg 100 90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282524/1-A

Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA Analysis Batch: 282599 Prep Batch: 282524

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Calcium	0.864	U	100	0.864	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Potassium	11.0	U	100	11.0	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Manganese	0.1150	J	1.50	0.0381	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Sodium	0.886	U	100	0.886	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/09/19 16:20	12/10/19 09:53	1

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Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Prep Type: Soluble

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-282524/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 282599** Prep Batch: 282524 MR MR

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.3700	J	1.50	0.277	mg/Kg		12/09/19 16:20	12/10/19 09:53	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/09/19 16:20	12/10/19 09:53	1

Lab Sample ID: LCS 600-282524/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Analysis Batch: 282599** Prep Batch: 282524 Spike LCS LCS %Rec. **Analyte** Added Result Qualifier Unit %Rec Limits D 12.5 Silver 11.29 mg/Kg 90 66 - 134 Arsenic 50.0 48.56 mg/Kg 97 78 - 122 Barium 50.0 50.85 mg/Kg 102 80 - 12050.0 50.85 102 83 - 117

mg/Kg Beryllium Calcium 500 499.5 mg/Kg 100 79 - 121 Cadmium 50.0 48.78 mg/Kg 98 81 - 119 Chromium 50.0 50.95 mg/Kg 102 81 - 119 50.0 102 Copper 50.85 mg/Kg 84 - 116 500 100 51 - 149 Iron 500.5 mg/Kg 500 503.5 101 74 - 126 Potassium mq/Kq 500 497.4 99 73 - 127 Magnesium mg/Kg Manganese 50.0 52.20 mg/Kg 104 81 - 119Sodium 500 509.0 mg/Kg 102 74 - 126 Lead 50.0 48.80 mg/Kg 98 79 - 121 Antimony 75.0 73.00 mg/Kg 97 50 - 150 50.0 97 Selenium 48.31 mg/Kg 80 - 120 Thallium 50.0 50.80 mg/Kg 102 79 - 120 25.0 23.78 79 - 121 Zinc mg/Kg 95

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-282839/7-B **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 282902 Prep Batch: 282839**

MB MB Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.00336 mg/Kg 12/12/19 11:06 12/12/19 15:15 Mercury 0.00336 U 0.0159

Lab Sample ID: LCS 600-282839/8-B **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 282902 Prep Batch: 282839 Spike LCS LCS %Rec. Added Unit **Analyte** Result Qualifier Limits D %Rec 0.231 Mercury 0.2374 mg/Kg 103 70 - 130

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QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 600-282467/1-A **Client Sample ID: Method Blank Prep Type: Total/NA**

Matrix: Solid Analysis Batch: 282510

Prep Batch: 282467 MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.0100 <u>12/09/19 10:56</u> <u>12/09/19 13:29</u> Cyanide, Total 0.00150 U 0.00150 mg/Kg

Lab Sample ID: LCS 600-282467/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 282510 **Prep Batch: 282467**

LCS LCS Spike %Rec. Added Limits Result Qualifier Unit D %Rec

Analyte 0.100 0.1005 90 - 110 Cyanide, Total mg/Kg 101

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	0.00500	0.000630	mg/Kg
Ethylbenzene	0.00500	0.00102	mg/Kg
Toluene	0.00500	0.00138	mg/Kg
Xylenes, Total	0.00500	0.00113	mg/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030A

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	100	64.2	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
C28-C36	50.0	34.6	mg/Kg
Diesel Range Organics [C10 - C28]	50.0	34.6	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg
Fluoride	2.00	0.601	mg/Kg
Nitrate as N	2.00	0.251	mg/Kg
Sulfate	5.00	0.957	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

. op. 00002			
 Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

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12/26/2019 (Rev. 1)

Unadjusted Detection Limits

Job ID: 600-196905-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

General Chemistry

Prep: 9012B

Analyte	MQL	MDL	Units
Cyanide, Total	0.500	0.0751	mg/Kg

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

GC/MS VOA

Analysis Batch: 282157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	8260B	282233
MB 600-282157/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-282157/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-282157/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 282233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	5035	

GC VOA

Prep Batch: 414323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	5030A	<u> </u>
MB 240-414323/1-A	Method Blank	Total/NA	Solid	5030A	
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	5030A	

Analysis Batch: 414326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	8015B	414323
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

Analysis Batch: 414327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-414323/1-A	Method Blank	Total/NA	Solid	8015B	414323
LCS 240-414323/2-A	Lab Control Sample	Total/NA	Solid	8015B	414323

GC Semi VOA

Prep Batch: 414439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	3546	
MB 240-414439	1-A Method Blank	Total/NA	Solid	3546	
LCS 240-414439	0/2-A Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 414744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	8015B	414439
MB 240-414439/1-A	Method Blank	Total/NA	Solid	8015B	414439
LCS 240-414439/2-A	Lab Control Sample	Total/NA	Solid	8015B	414439

HPLC/IC

Leach Batch: 283603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Soluble	Solid	DI Leach	
MB 600-283603/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Eurofins TestAmerica, Houston

Job ID: 600-196905-1

QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-196905-1

HPLC/IC

Analysis Batch: 283605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Soluble	Solid	300.0	283603
MB 600-283603/1-A	Method Blank	Soluble	Solid	300.0	283603
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	300.0	283603

Analysis Batch: 283606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Soluble	Solid	300.0	283603
MB 600-283603/1-A	Method Blank	Soluble	Solid	300.0	283603
LCS 600-283603/2-A	Lab Control Sample	Soluble	Solid	300.0	283603

Metals

Prep Batch: 282524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Total/NA	Solid	3050B	
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	3050B	
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Total/NA	Solid	3050B	
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Total/NA	Solid	3050B	
MB 600-282524/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-282524/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 282599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Total/NA	Solid	6010B	282524
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	6010B	282524
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Total/NA	Solid	6010B	282524
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Total/NA	Solid	6010B	282524
MB 600-282524/1-A	Method Blank	Total/NA	Solid	6010B	282524
LCS 600-282524/2-A	Lab Control Sample	Total/NA	Solid	6010B	282524

Prep Batch: 282839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Total/NA	Solid	7471A	
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	7471A	
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Total/NA	Solid	7471A	
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Total/NA	Solid	7471A	
MB 600-282839/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-282839/8-B	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 282902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Total/NA	Solid	7471A	282839
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	7471A	282839
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Total/NA	Solid	7471A	282839
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Total/NA	Solid	7471A	282839
MB 600-282839/7-B	Method Blank	Total/NA	Solid	7471A	282839
LCS 600-282839/8-B	Lab Control Sample	Total/NA	Solid	7471A	282839

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QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry

Analysis Batch: 282439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-1	CELL19-SQUARE 180-S-2-3-191202	Total/NA	Solid	2540B	
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	2540B	
600-196905-3	CELL20-SQUARE 20-S-2-3-191202	Total/NA	Solid	2540B	
600-196905-4	CELL20-SQUARE 88-S-2-3-191202	Total/NA	Solid	2540B	

Prep Batch: 282467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	9012B	
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	

Analysis Batch: 282510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196905-2	CELL20-SQUARE 42-S-2-3-191202	Total/NA	Solid	9012B	282467
MB 600-282467/1-A	Method Blank	Total/NA	Solid	9012B	282467
LCS 600-282467/2-A	Lab Control Sample	Total/NA	Solid	9012B	282467

Job ID: 600-196905-1

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: CELL19-SQUARE 180-S-2-3-191202

Lab Sample ID: 600-196905-1

Date Collected: 12/02/19 14:12 Date Received: 12/04/19 15:07 Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282439	12/09/19 08:11	ANP	TAL HOU

Client Sample ID: CELL19-SQUARE 180-S-2-3-191202

Lab Sample ID: 600-196905-1

Date Collected: 12/02/19 14:12 Matrix: Solid
Date Received: 12/04/19 15:07 Percent Solids: 92.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282524	12/09/19 16:20	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282599	12/10/19 10:07	KP1	TAL HOU
Total/NA	Prep	7471A			282839	12/12/19 11:06	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282902	12/12/19 16:05	SOT	TAL HOU

Date Collected: 12/02/19 14:30 Matrix: Solid

Date Received: 12/04/19 15:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			414323	12/07/19 18:50	MBB	TAL CAN
Total/NA	Analysis	8015B		1	414326	12/09/19 01:03	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/11/19 00:53	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282439	12/09/19 08:11	ANP	TAL HOU

Date Collected: 12/02/19 14:30 Matrix: Solid
Date Received: 12/04/19 15:07 Percent Solids: 82.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			282233	12/04/19 16:03	WS1	TAL HOU
Total/NA	Analysis	8260B		1	282157	12/05/19 15:41	WS1	TAL HOU
Soluble	Leach	DI Leach			283603	12/19/19 17:49	SKR	TAL HOU
Soluble	Analysis	300.0		1	283605	12/20/19 14:07	SKR	TAL HOU
Soluble	Leach	DI Leach			283603	12/19/19 17:49	SKR	TAL HOU
Soluble	Analysis	300.0		1	283606	12/20/19 14:07	SKR	TAL HOU
Total/NA	Prep	3050B			282524	12/09/19 16:20	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282599	12/10/19 10:09	KP1	TAL HOU
Total/NA	Prep	7471A			282839	12/12/19 11:06	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282902	12/12/19 16:07	SOT	TAL HOU
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:39	AML	TAL HOU

Client Sample ID: CELL20-SQUARE 20-S-2-3-191202

Lab Sample ID: 600-196905-3 Date Collected: 12/02/19 14:50 **Matrix: Solid**

Date Received: 12/04/19 15:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282439	12/09/19 08:11	ANP	TAL HOU

Client Sample ID: CELL20-SQUARE 20-S-2-3-191202

Lab Sample ID: 600-196905-3 Date Collected: 12/02/19 14:50 Matrix: Solid

Date Received: 12/04/19 15:07 Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282524	12/09/19 16:20	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282599	12/10/19 10:11	KP1	TAL HOU
Total/NA	Prep	7471A			282839	12/12/19 11:06	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282902	12/12/19 16:09	SOT	TAL HOU

Client Sample ID: CELL20-SQUARE 88-S-2-3-191202 Lab Sample ID: 600-196905-4

Date Collected: 12/02/19 15:15 **Matrix: Solid**

Date Received: 12/04/19 15:07

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 2540B 282439 12/09/19 08:11 ANP TAL HOU

Lab Sample ID: 600-196905-4 Client Sample ID: CELL20-SQUARE 88-S-2-3-191202

Date Collected: 12/02/19 15:15 **Matrix: Solid** Date Received: 12/04/19 15:07 Percent Solids: 87.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282524	12/09/19 16:20	CLD	TAL HOU
Total/NA	Analysis	6010B		1	282599	12/10/19 10:19	KP1	TAL HOU
Total/NA	Prep	7471A			282839	12/12/19 11:06	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282902	12/12/19 15:39	SOT	TAL HOU

Laboratory References:

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

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-196905-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	1	Program	Identification Number	Expiration Date
exas		NELAP	T104704223-19-25	10-31-20
the agency does not o	offer certification.		not certified by the governing authority.	This list may include analytes for which
Analysis Method	Pren Method	Matrix	Δηαίντο	
Analysis Method 2540B	Prep Method	Matrix Solid	Analyte Percent Moisture	
	Prep Method			

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
lowa	State	421	06-01-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

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Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

		Dat	te/Time Received:			
JOB NUMBER:			ENT:	Arcad	is	
JOB ROMBER.			_	T	6.	
UNPACKED BY:		CA	RRIER/DRIVER:	red	EX	
Custody Seal Present:	□YES □	NO Nur	mber of Coolers Receiv	/ed:	1	
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm	Therm GF	Corrected Temp (°C)
9710	Y / N	Y/N	3.1	676	+0.1	72
1110	Y/N	Y / N		10	1	3,0
	YIN	Y/N				
	Y / N	Y / N				
	Y / N	X/N				
7	Y / N	Y/N				
TX1005 samples frozen pH paper Lot #	upon receipt:	□ YES DA	d preserved are <ph &="" 2:="" a="" acceptab<="" ff="" headspace="" in="" put="" te="" th="" time=""><th>REEZER: _</th><th></th><th>O</th></ph>	REEZER: _		O
Did samples meet the labora						☐YES ☐ NO
	iony o otanical o	ondinente of parriph	acceptation, approved			
COMMENTS:		-			_	

HS-SA-WI-013

Rev. 4A: 08/26/2019

coler Temperature(s) °C and Other Remarks

Received by

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Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street

Environment Testing TestAmerica

eurofins

Client Information (Sub Contract Lab)	Sampler			Kudch Kudch	Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s)	00	COC No: 600-42921.1
Client Confact	Phone:			E-Mail	Mil.		State of Origin:	Page	ab
Shipping/Receiving				Sac	sacnin.kudchadkar@testamericainc.com	nericainc.com	lexas	La La	Page 1 of 1
Company TestAmerica Laboratories, Inc.					Accreditations Required (See note) NELAP - Texas	ee nole).		# qor	Job # 600-196905-1
Address. 4101 Shuffel Street NW.	Due Date Requested 12/12/2019	Ť				Analysis Requested	quested	Pre	ion Code
City North Canton	TAT Requested (days):	(s):			/[82			ż 'n ú	A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2
State, 2/p OH, 44720								0 111	
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	#0d				sA anil			iói	G-Amchlor S-H2SO4 H-Ascorbic Acid T-TSP Dodecanydrate
Email:	WO#.				(0)				
Project Name: Chevron - Jal Land Farm Soils	Project# 60011732				DANDII			_	
Site	SSOW#:				(V) ds				Other;
On the It of the Its	ober Colomb	Sample	Sample Type (C=comp,	Matrix (w=water. S=solid, O=waste/oil,	ield Filtered S Perform MS/MS Pranics [C6-C1 O15B_DRO/3546 S2-C36			otal Number o	30,02
Sample Identification - Cheff ID (cap ID)	Compre Date	X	- 07	Preservation Code:		S. Action of the State of the S		×	Special instructions/note:
CELL 42-SQUARE 180-S-2-3-191202 (600-196905-2)	12/2/19	14:30 Central		Solid	×			2 , Die	, Diesel Range Organics [C10-C28]/ C28- C36
Note: Since isboratory accreditations are subject to charge. TestAmerica Laboratories, inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. attention in mediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	Laboratones, Inc. places the or lysis/lests/matrix being analyzer re current to date, return the sig	whership of n id, the sample med Chain of	nethod, analyte is must be ship Custody attest	& accreditalk ped back to the ng to said cor	n compliance upon out subco e TestAmerica laboratory or o nplicance to TestAmerica Lab	ontract laboratories. other instructions will boratories, Inc.	This sample shipment is for be provided. Any changes	warded under cha to accreditation si	am-of-custody. If the laboratory does not talks should be brought to TestAmerica
Possible Hazard Identification					Sample Disposal	(A fee may be	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	are retained l	longer than 1 month)
Unconfirmed					Return To Client	Slient	Disposal By Lab	Archive For	For Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	ble Rank:	0"		Special Instructions/QC Requirements	s/QC Requireme	ents:		

Custody Seal No.

Custody Seals Intact:
A Yes A No

Eurofins TestAmeric	a Canton Sample Rec	eipt Form/Narrat	ive	Login #:	196905
Client FTA - Houst	àid	Site Name		Cooler un	packed by:
		Opened on /2-	7-19	Kyan 1	Cribley
Cooler Received on (7) FedEx: 1st Grd Exp			TestAmerica Courie	1-1	C / 10/12/
Receipt After-hours: D		Chem Drop Off	Storage Location		
TestAmerica Cooler #		ox Client Cooler		-	
	sed: Bubble Wrap				
	Wet Ice Blue Ice	Dry Ice Wate			
IR GUN #IR-11 (C Were tamper/custod -Were the seals of -Were tamper/cus -Were tamper/cus -Were tamper/cus Shippers' packing sl Did custody papers Were the custody pa Was/were the perso Did all bottles arrive Could all bottle labe Were correct bottle Sufficient quantity in Are these work shar If yes, Questions 12 Were all preserved in	CF +0.7 °C) Observed of F +0.9 °C) Observed of the outside of the coole tody seals on the bottle (tody seals intact and undip attached to the cooler accompany the sample (apers relinquished & sign(s) who collected the see in good condition (Unitels be reconciled with the (s) used for the test(s) in received to perform indice samples? -16 have been checked sample(s) at the correct	f the cooler(s)? If Y er(s) signed & dated s) or bottle kits (LL) compromised? r(s)? s)? med in the appropria amples clearly ident broken)? e COC? dicated? cated analyses? at the originating lab	°C Corrected Cool 'es Quantity	er Temp. er Temp. er Temp. er Temp. es No es N	Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC
 Were VOAs on the Were air bubbles >6 	mm in any VOA vials?		than this.	es No No NA	
 Was a VOA trip bla Was a LL Hg or Me 		(s)? Trip Blank Lot		les No les No	
Contacted PM	Date	by	via Verbal	Voice Mail Oth	ner
Concerning					
17. CHAIN OF CUST	ODY & SAMPLE DIS	CREPANCIES		Sample	s processed by:
				1 1 1 2 1	
18. SAMPLE CONDIT			1.11	1.85 characterists	
Sample(s)		were received aft	er the recommended ho	olding time had e ved in a broken c	xpired.
Sample(s)		Tuoro roma			
		were rece	ived with bubble -0 in	in in diameter. (1	omy i wij
19. SAMPLE PRESER	RVATION				
Complete			wara	further presented	in the laboratory.
Sample(s) Time preserved:	Preservative(s)	added/Lot number(s	were	ruriner preserved	in the laboratory.
VOA Sample Preservation					



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197147-1

Client Project/Site: Chevron - Jal Land Farm Soils

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 1/9/2020 5:50:21 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197147-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
600-197147-1	Cell7-Square22-S-2-3-191205	Solid	12/05/19 10:40	12/10/19 10:38	
600-197147-2	Cell8-Square122-S-2-3-191205	Solid	12/05/19 10:52	12/10/19 10:38	
600-197147-3	Cell8-Square161-S-2-3-191205	Solid	12/05/19 11:08	12/10/19 10:38	
600-197147-4	Cell8-Square90-S-2-3-191205	Solid	12/05/19 11:19	12/10/19 10:38	
600-197147-5	Cell8-Square170-S-2-3-191205	Solid	12/05/19 14:05	12/10/19 10:38	
600-197147-6	Cell4-Square129-S-2-3-191205	Solid	12/05/19 14:14	12/10/19 10:38	
600-197147-7	Cell4-Square114-S-2-3-191205	Solid	12/05/19 14:23	12/10/19 10:38	
600-197147-8	Cell4-Square201-S-2-3-191205	Solid	12/05/19 14:33	12/10/19 10:38	
600-197147-9	Cell4-Square37-S-2-3-191205	Solid	12/05/19 14:42	12/10/19 10:38	
600-197147-10	Cell3-Square130-S-2-3-191205	Solid	12/05/19 14:52	12/10/19 10:38	
600-197147-11	Cell3-Square153-S-2-3-191205	Solid	12/05/19 14:59	12/10/19 10:38	

Job ID: 600-197147-1

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Lab Sample ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell7-Square22-S-2-3-191205

Date Collected: 12/05/19 10:40

Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 78.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.146	U	0.492	0.146	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:13	1
Arsenic	1.48		1.23	0.268	mg/Kg	☼	12/12/19 19:01	12/17/19 15:02	1
Barium	44.5		1.23	0.0369	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Beryllium	0.166	J	0.307	0.0178	mg/Kg	₩	12/12/19 19:01	12/16/19 16:13	1
Calcium	13800	b	123	1.06	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Cadmium	0.0799	J	0.307	0.0315	mg/Kg	☼	12/12/19 19:01	12/17/19 15:02	1
Chromium	4.20		0.615	0.0622	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Copper	2.00		0.615	0.214	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Iron	3340		24.6	3.11	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Potassium	650		123	13.5	mg/Kg	₽	12/12/19 19:01	12/16/19 16:13	1
Magnesium	627		123	2.36	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Manganese	41.8	b	1.84	0.0468	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Sodium	105	J b	123	1.09	mg/Kg	₽	12/12/19 19:01	12/16/19 16:13	1
Lead	3.01		0.615	0.129	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Antimony	0.285	U	3.07	0.285	mg/Kg	☼	12/12/19 19:01	12/16/19 16:13	1
Selenium	0.318	U	2.46	0.318	mg/Kg	₽	12/12/19 19:01	12/17/19 15:02	1
Thallium	1.41	J	1.84	0.340	mg/Kg	☼	12/12/19 19:01	12/17/19 15:02	1
Zinc	8.60		1.84	0.133	mg/Kg	₩	12/12/19 19:01	12/16/19 16:13	1

Method: 7471A - Mercury in So	olid or Semisolid Was	ste (Manual (Cold Vapor Techr	nique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0201	0.0195	0.00410 mg/Kg	\	12/21/19 12:00	12/22/19 11:13	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.8	1.0	1.0	%			12/11/19 13:54	1
Percent Solids	78.2	1.0	1.0	%			12/11/19 13:54	1

Client Sample ID: Cell8-Square122-S-2-3-191205 Lab Sample ID: 600-197147-2 Date Collected: 12/05/19 10:52 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 75.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:15	1
Arsenic	2.07		1.30	0.282	mg/Kg	☼	12/12/19 19:01	12/17/19 15:04	1
Barium	34.7		1.30	0.0389	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Beryllium	0.214	J	0.324	0.0188	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:15	1
Calcium	11800	b	130	1.12	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Cadmium	0.104	J	0.324	0.0332	mg/Kg	☼	12/12/19 19:01	12/17/19 15:04	1
Chromium	5.39		0.648	0.0656	mg/Kg	₽	12/12/19 19:01	12/16/19 16:15	1
Copper	2.42		0.648	0.225	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Iron	4340		25.9	3.28	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Potassium	774		130	14.3	mg/Kg	₽	12/12/19 19:01	12/16/19 16:15	1
Magnesium	554		130	2.49	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Manganese	53.5	b	1.94	0.0494	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Sodium	25.4	J b	130	1.15	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:15	1
Lead	5.09		0.648	0.136	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Antimony	0.301	U	3.24	0.301	mg/Kg	☼	12/12/19 19:01	12/16/19 16:15	1
Selenium	0.336	U	2.59	0.336	mg/Kg		12/12/19 19:01	12/17/19 15:04	1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell8-Square122-S-2-3-191205

Lab Sample ID: 600-197147-2

Date Collected: 12/05/19 10:52

Matrix: Solid Percent Solids: 75.7

Date Received: 12/10/19 10:38

Method: 6010B - Inductively Coup	led	Plasma	a - A	tomic Emission	Spectr	ometry	/ (Continued)	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.359	U	1.94	0.359	mg/Kg	₩	12/12/19 19:01	12/17/19 15:04	1
Zinc	10.9		1.94	0.140	mg/Kg	₩	12/12/19 19:01	12/16/19 16:15	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00626 J	0.0198	0.00417 mg/Kg	_ ☆	12/21/19 12:00	12/22/19 11:19	1

General Chemistry	
Analyte	

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.3	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	75.7	1.0	1.0 %			12/11/19 13:54	1

Client Sample ID: Cell8-Square161-S-2-3-191205

Lab Sample ID: 600-197147-3

Date Collected: 12/05/19 11:08 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.8

Method: 6010B - Inductively	Coupled Plasma	- Atomic Emission	Spectrometry

Method: 6010B - Induc	ethod: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.152	U	0.511	0.152	mg/Kg	<u></u>	12/12/19 19:01	12/16/19 16:17	1
Arsenic	2.11		1.28	0.279	mg/Kg	☼	12/12/19 19:01	12/17/19 15:12	1
Barium	28.1		1.28	0.0384	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Beryllium	0.268	J	0.320	0.0185	mg/Kg	\$	12/12/19 19:01	12/16/19 16:17	1
Calcium	1630	b	128	1.10	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Cadmium	0.109	J	0.320	0.0327	mg/Kg	☼	12/12/19 19:01	12/17/19 15:12	1
Chromium	5.76		0.639	0.0647	mg/Kg	₽	12/12/19 19:01	12/16/19 16:17	1
Copper	2.96		0.639	0.222	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Iron	5070		25.6	3.23	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Potassium	952		128	14.1	mg/Kg	₽	12/12/19 19:01	12/16/19 16:17	1
Magnesium	674		128	2.45	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Manganese	60.0	b	1.92	0.0487	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Sodium	28.5	Jb	128	1.13	mg/Kg	₽	12/12/19 19:01	12/16/19 16:17	1
Lead	3.74		0.639	0.134	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Antimony	0.297	U	3.20	0.297	mg/Kg	☼	12/12/19 19:01	12/16/19 16:17	1
Selenium	0.331	U	2.56	0.331	mg/Kg	\$	12/12/19 19:01	12/17/19 15:12	1
Thallium	0.354	U	1.92	0.354	mg/Kg	☼	12/12/19 19:01	12/17/19 15:12	1
Zinc	11.3		1.92	0.138	mg/Kg	≎	12/12/19 19:01	12/16/19 16:17	1

ı			
ı	Mothod: 7471A - Marcin	ry in Solid or Somisolid Wasto	(Manual Cold Vapor Technique)
ı	Michiga, 1711A - Michiga	ry in cond or cermsond waste	(Maridai Oola Vapor recinique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D D	Prepared	Analyzed	Dil Fac
Mercury	0.0104 J	0.0213	0.00448 mg/Kg	-	12/21/19 12:00	12/22/19 11:21	1

Genera	Chem	istry
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Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.2	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	73.8	1.0	1.0 %			12/11/19 13:54	1

Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell8-Square90-S-2-3-191205

Lab Sample ID: 600-197147-4 Date Collected: 12/05/19 11:19 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 83.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.140	U	0.471	0.140	mg/Kg	₩	12/12/19 19:01	12/16/19 16:19	1
Arsenic	1.68		1.18	0.257	mg/Kg	₩	12/12/19 19:01	12/17/19 15:14	1
Barium	36.2		1.18	0.0354	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Beryllium	0.212	J	0.295	0.0171	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:19	1
Calcium	9850	b	118	1.02	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Cadmium	0.0825	J	0.295	0.0302	mg/Kg	☼	12/12/19 19:01	12/17/19 15:14	1
Chromium	4.66		0.589	0.0596	mg/Kg	₽	12/12/19 19:01	12/16/19 16:19	1
Copper	2.32		0.589	0.205	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Iron	3840		23.6	2.98	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Potassium	714		118	13.0	mg/Kg	₽	12/12/19 19:01	12/16/19 16:19	1
Magnesium	724		118	2.26	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Manganese	42.3	b	1.77	0.0449	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Sodium	19.0	J b	118	1.04	mg/Kg	₽	12/12/19 19:01	12/16/19 16:19	1
Lead	3.46		0.589	0.124	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Antimony	0.273	U	2.95	0.273	mg/Kg	☼	12/12/19 19:01	12/16/19 16:19	1
Selenium	0.305	U	2.36	0.305	mg/Kg	☼	12/12/19 19:01	12/17/19 15:14	1
Thallium	0.326	U	1.77	0.326	mg/Kg	☼	12/12/19 19:01	12/17/19 15:14	1
Zinc	9.66		1.77	0.127	mg/Kg	₩	12/12/19 19:01	12/16/19 16:19	1

Method: /4/1A - Mercury in Sc	olid or Semisolid Waste (Manual Cold Vapor Technique)							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0205 U	0.0973	0.0205	mg/Kg	₩	12/21/19 12:00	12/22/19 12:11	5
General Chemistry								

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.8	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	83.2	1.0	1.0 %			12/11/19 13:54	1

Client Sample ID: Cell8-Square170-S-2-3-191205 Lab Sample ID: 600-197147-5 Date Collected: 12/05/19 14:05 **Matrix: Solid** Percent Solids: 72.0 Date Received: 12/10/19 10:38

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.514	0.153	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:27	1
Arsenic	2.08		1.29	0.280	mg/Kg	₩	12/12/19 19:01	12/17/19 15:16	1
Barium	45.1		1.29	0.0386	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Beryllium	0.199	J	0.321	0.0186	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:27	1
Calcium	41700	b	129	1.11	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Cadmium	0.103	J	0.321	0.0329	mg/Kg	₩	12/12/19 19:01	12/17/19 15:16	1
Chromium	4.35		0.643	0.0650	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Copper	1.95		0.643	0.224	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Iron	3670		25.7	3.25	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Potassium	713		129	14.1	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:27	1
Magnesium	606		129	2.47	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Manganese	52.8	b	1.93	0.0490	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Sodium	117	J b	129	1.14	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:27	1
Lead	3.18		0.643	0.135	mg/Kg	₩	12/12/19 19:01	12/16/19 16:27	1
Antimony	0.298	U	3.21	0.298	mg/Kg	☆	12/12/19 19:01	12/16/19 16:27	1
Selenium	0.333	U	2.57	0.333	mg/Kg	ф	12/12/19 19:01	12/17/19 15:16	1

General Chemistry

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell8-Square170-S-2-3-191205

Date Collected: 12/05/19 14:05

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-5

Matrix: Solid Percent Solids: 72.0

Job ID: 600-197147-1

Method: 6010B - Inductively	Coupled Plasma - Ator	mic Emission	Spectrometry (Continu	ued)
Analyte	Result Qualifier	MQL (Adi)	SDL Unit	D	Prepa

Analyte	Result	Qualifier	WQL (Adj)	SDL	Unit	ט	Prepared	Anaiyzed	DII Fac
Thallium	0.356	U	1.93	0.356	mg/Kg		12/12/19 19:01	12/17/19 15:16	1
Zinc	8.98		1.93	0.139	mg/Kg	☼	12/12/19 19:01	12/16/19 16:27	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00445 U	0.0211	0.00445 mg/Kg	<u>∓</u>	12/21/19 12:00	12/22/19 11:25	1

Analyte	Result	Qualifier MQL	(Adj) SDL	_ Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.0		1.0 1.0	%			12/11/19 13:54	1
Percent Solids	72.0		1.0 1.0) %			12/11/19 13:54	1

Client Sample ID: Cell4-Square129-S-2-3-191205

Lab Sample ID: 600-197147-6 Date Collected: 12/05/19 14:14 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 81.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.143	U	0.479	0.143	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:29	1
Arsenic	2.39		1.20	0.261	mg/Kg	₩	12/12/19 19:01	12/17/19 15:18	1
Barium	27.9		1.20	0.0359	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Beryllium	0.311		0.299	0.0174	mg/Kg		12/12/19 19:01	12/16/19 16:29	1
Calcium	1790	b	120	1.04	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Cadmium	0.108	J	0.299	0.0307	mg/Kg	₩	12/12/19 19:01	12/17/19 15:18	1
Chromium	6.33		0.599	0.0606	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:29	1
Copper	2.22		0.599	0.208	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Iron	5550		24.0	3.03	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Potassium	1120		120	13.2	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:29	1
Magnesium	756		120	2.30	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Manganese	48.2	b	1.80	0.0456	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Sodium	20.6	J b	120	1.06	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:29	1
Lead	3.93		0.599	0.126	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Antimony	0.278	U	2.99	0.278	mg/Kg	₩	12/12/19 19:01	12/16/19 16:29	1
Selenium	0.310	Ū	2.40	0.310	mg/Kg		12/12/19 19:01	12/17/19 15:18	1

Method: 7471A - Mercury in Solid or Semisolid Wa	eto (Manual Cold Vapor Tochnique)
Method. 141 IA - Mercury III Sond of Serinsond Wa	iste (manuai colu vapoi recinnique)

0.332 U

13.4

Welliou. 141 IA - Welcury III 30	uliu di SelliiSuliu Was	ite (iviailuai	Colu vapor recini	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00437 U	0.0208	0.00437 mg/Kg	<u></u>	12/21/19 12:00	12/22/19 11:27	

1.80

1.80

0.332 mg/Kg

0.129 mg/Kg

General	Chemistry

Thallium

Zinc

Analyte	Result Qualif	ier MQL (Adj)	SDL	Unit	D Prepare	ed Analyzed	Dil Fac
Percent Moisture	18.2	1.0	1.0	%		12/11/19 13:54	1
Percent Solids	81.8	1.0	1.0	%		12/11/19 13:54	1

12/12/19 19:01 12/17/19 15:18

‡ 12/12/19 19:01 12/16/19 16:29

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell4-Square114-S-2-3-191205

Lab Sample ID: 600-197147-7 Date Collected: 12/05/19 14:23 **Matrix: Solid** Date Received: 12/10/19 10:38 **Percent Solids: 74.5**

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.149	U	0.502	0.149	mg/Kg	<u>₩</u>	12/12/19 19:01	12/16/19 16:31	1
Arsenic	2.04		1.25	0.273	mg/Kg	☼	12/12/19 19:01	12/17/19 15:20	1
Barium	44.1		1.25	0.0376	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Beryllium	0.232	J	0.314	0.0182	mg/Kg	₽	12/12/19 19:01	12/16/19 16:31	1
Calcium	13400	b	125	1.08	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Cadmium	0.107	J	0.314	0.0321	mg/Kg	☼	12/12/19 19:01	12/17/19 15:20	1
Chromium	5.58		0.627	0.0635	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:31	1
Copper	2.34		0.627	0.218	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Iron	4730		25.1	3.17	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Potassium	990		125	13.8	mg/Kg	₩	12/12/19 19:01	12/16/19 16:31	1
Magnesium	1070		125	2.41	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Manganese	49.1	b	1.88	0.0478	mg/Kg	₩	12/12/19 19:01	12/16/19 16:31	1
Sodium	96.5	J b	125	1.11	mg/Kg	₩	12/12/19 19:01	12/16/19 16:31	1
Lead	3.78		0.627	0.132	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Antimony	0.291	U	3.14	0.291	mg/Kg	☼	12/12/19 19:01	12/16/19 16:31	1
Selenium	0.325	U	2.51	0.325	mg/Kg		12/12/19 19:01	12/17/19 15:20	1
Thallium	0.347	U	1.88	0.347	mg/Kg	₩	12/12/19 19:01	12/17/19 15:20	1
Zinc	11.2		1.88	0.135	mg/Kg	≎	12/12/19 19:01	12/16/19 16:31	1

Analyte		Qualifier	MQL (Adj)	Unit	nique) D	Prepared	Analyzed	Dil Fac	
Mercury	0.00797	J	0.0214	0.00451	mg/Kg	\	12/21/19 12:00	12/22/19 11:33	1
Ganaral Chamistry									

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.5	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	74.5	1.0	1.0 %			12/11/19 13:54	1

Client Sample ID: Cell4-Square201-S-2-3-191205 Lab Sample ID: 600-197147-8 Date Collected: 12/05/19 14:33 **Matrix: Solid** Percent Solids: 81.4 Date Received: 12/10/19 10:38

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.142	U	0.477	0.142	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:32	1
Arsenic	2.24		1.19	0.260	mg/Kg	☼	12/12/19 19:01	12/17/19 15:22	1
Barium	32.0		1.19	0.0358	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Beryllium	0.256	J	0.298	0.0173	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:32	1
Calcium	5470	b	119	1.03	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Cadmium	0.101	J	0.298	0.0305	mg/Kg	☼	12/12/19 19:01	12/17/19 15:22	1
Chromium	5.72		0.596	0.0603	mg/Kg	₽	12/12/19 19:01	12/16/19 16:32	1
Copper	2.13		0.596	0.208	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Iron	4990		23.9	3.02	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Potassium	936		119	13.1	mg/Kg	₽	12/12/19 19:01	12/16/19 16:32	1
Magnesium	804		119	2.29	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Manganese	50.2	b	1.79	0.0454	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Sodium	62.9	J b	119	1.06	mg/Kg	φ.	12/12/19 19:01	12/16/19 16:32	1
Lead	3.72		0.596	0.125	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Antimony	0.277	U	2.98	0.277	mg/Kg	☼	12/12/19 19:01	12/16/19 16:32	1
Selenium	0.309	U	2.39	0.309	mg/Kg		12/12/19 19:01	12/17/19 15:22	1

Dil Fac

Lab Sample ID: 600-197147-8

Client Sample ID: Cell4-Square201-S-2-3-191205 Date Collected: 12/05/19 14:33

Matrix: Solid Percent Solids: 81.4

Analyzed

Date Received: 12/10/19 10:38

Method: 6010B - Inductively C	oupled Plasma - Ato	mic Emissior	n Spectrometry (C	Contin	iued)
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared
Thallium	0.330 11	1 70	0.330 ma/Ka	- 77	12/12/10 10:01

Thallium	0.330 U	1.79	0.330 mg/Kg	-	12/12/19 19:01	12/17/19 15:22	1
Zinc	11.7	1.79	0.129 mg/Kg	₩	12/12/19 19:01	12/16/19 16:32	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00760	J	0.0190	0.00400 mg/Kg	<u>₩</u>	12/21/19 12:00	12/22/19 11:35	1

General Chemistry

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.6	1.0	1.0	%			12/11/19 13:54	1
Percent Solids	81.4	1.0	1.0	%			12/11/19 13:54	1

Client Sample ID: Cell4-Square37-S-2-3-191205

Lab Sample ID: 600-197147-9 Date Collected: 12/05/19 14:42 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 98.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg	<u> </u>	12/12/19 19:01	12/16/19 16:34	1
Arsenic	1.80		0.990	0.216	mg/Kg	☼	12/12/19 19:01	12/17/19 15:24	1
Barium	24.8		0.990	0.0297	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Beryllium	0.213	J	0.247	0.0144	mg/Kg	₩	12/12/19 19:01	12/16/19 16:34	1
Calcium	2970	b	99.0	0.855	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Cadmium	0.0891	J	0.247	0.0253	mg/Kg	☼	12/12/19 19:01	12/17/19 15:24	1
Chromium	5.17		0.495	0.0501	mg/Kg	.	12/12/19 19:01	12/16/19 16:34	1
Copper	2.15		0.495	0.172	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Iron	4320		19.8	2.50	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Potassium	743		99.0	10.9	mg/Kg	₩	12/12/19 19:01	12/16/19 16:34	1
Magnesium	556		99.0	1.90	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Manganese	53.4	b	1.48	0.0377	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Sodium	144	b	99.0	0.877	mg/Kg		12/12/19 19:01	12/16/19 16:34	1
Lead	3.71		0.495	0.104	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Antimony	0.230	U	2.47	0.230	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	1
Selenium	0.256	U	1.98	0.256	mg/Kg	φ.	12/12/19 19:01	12/17/19 15:24	1
Thallium	0.274	U	1.48	0.274	mg/Kg	☼	12/12/19 19:01	12/17/19 15:24	1
Zinc	12.0		1.48		mg/Kg	₩	12/12/19 19:01	12/16/19 16:34	1

Analyte		MQL (Adj)	SDL Unit	• •	Prepared	Analyzed	Dil Fac
Mercury	0.00463 J	0.0160	0.00337 mg/Kg	₩	12/21/19 12:00	12/22/19 11:37	1

General	Chemistry

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.9	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	98.1	1.0	1.0 %			12/11/19 13:54	1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell3-Square130-S-2-3-191205

Lab Sample ID: 600-197147-10

Date Collected: 12/05/19 14:52
Date Received: 12/10/19 10:38
Perceived: 12/10/19 10:38

Matrix: Solid Percent Solids: 97.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.117	U	0.392	0.117	mg/Kg	<u>₩</u>	12/12/19 19:01	12/16/19 16:40	1
Arsenic	1.89		0.981	0.214	mg/Kg	₩	12/12/19 19:01	12/17/19 15:29	1
Barium	27.0		0.981	0.0294	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Beryllium	0.206	J	0.245	0.0142	mg/Kg	₩	12/12/19 19:01	12/16/19 16:40	1
Calcium	6950	b	98.1	0.848	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Cadmium	0.0932	J	0.245	0.0251	mg/Kg	☼	12/12/19 19:01	12/17/19 15:29	1
Chromium	4.88		0.490	0.0496	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:40	1
Copper	2.08		0.490	0.171	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Iron	4000		19.6	2.48	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Potassium	756		98.1	10.8	mg/Kg	₩.	12/12/19 19:01	12/16/19 16:40	1
Magnesium	630		98.1	1.88	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Manganese	46.0	b	1.47	0.0374	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Sodium	11.6	J b	98.1	0.869	mg/Kg	₩	12/12/19 19:01	12/16/19 16:40	1
Lead	3.46		0.490	0.103	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Antimony	0.228	U	2.45	0.228	mg/Kg	☼	12/12/19 19:01	12/16/19 16:40	1
Selenium	0.254	U	1.96	0.254	mg/Kg		12/12/19 19:01	12/17/19 15:29	1
Thallium	1.16	J	1.47	0.272	mg/Kg	☼	12/12/19 19:01	12/17/19 15:29	1
Zinc	9.28		1.47	0.106	mg/Kg	≎	12/12/19 19:01	12/16/19 16:40	1

Method: 7471A - Mercury in So	olid or Semisolid Was	te (Manual	Cold Vapor Techn	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00455 J	0.0164	0.00346 mg/Kg	₩	12/21/19 12:00	12/22/19 11:39	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Uni	it [D Prepared	Analyzed	Dil Fac
Percent Moisture	2.9	1.0	1.0 %		_	12/11/19 13:54	1
Percent Solids	97.1	1.0	10 %			12/11/19 13:54	1

Client Sample ID: Cell3-Square153-S-2-3-191205

Date Collected: 12/05/19 14:59

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-11

Matrix: Solid
Percent Solids: 97.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.115	U	0.386	0.115	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Arsenic	1.85		0.965	0.210	mg/Kg	₩	12/12/19 19:01	12/17/19 15:37	1
Barium	23.2		0.965	0.0289	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Beryllium	0.217	J	0.241	0.0140	mg/Kg		12/12/19 19:01	12/16/19 16:42	1
Calcium	1620	b	96.5	0.834	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Cadmium	0.0772	J	0.241	0.0247	mg/Kg	₩	12/12/19 19:01	12/17/19 15:37	1
Chromium	5.09		0.482	0.0488	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Copper	1.95		0.482	0.168	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Iron	4330		19.3	2.44	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Potassium	749		96.5	10.6	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Magnesium	538		96.5	1.85	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Manganese	45.6	b	1.45	0.0368	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Sodium	26.9	J b	96.5	0.855	mg/Kg	ф.	12/12/19 19:01	12/16/19 16:42	1
Lead	3.35		0.482	0.101	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Antimony	0.224	U	2.41	0.224	mg/Kg	₩	12/12/19 19:01	12/16/19 16:42	1
Selenium	0.250	Ū	1.93	0.250	mg/Kg	₩.	12/12/19 19:01	12/17/19 15:37	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Percent Solids

Client Sample ID: Cell3-Square153-S-2-3-191205

97.8

Lab Sample ID: 600-197147-11

12/11/19 13:54

Date Received: 12/10/19 10:38

Date Collected: 12/05/19 14:59 **Matrix: Solid Percent Solids: 97.8**

1.0 %

Method: 6010B - Inductively Co	oupled Plas	sma - Atol	mic Emission	Spectro	ometry (Contir	iued)		
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.267	U	1.45	0.267	mg/Kg		12/12/19 19:01	12/17/19 15:37	1
Zinc	9.63		1.45	0.104	mg/Kg	≎	12/12/19 19:01	12/16/19 16:42	1

Method: 7471A - Mercury ir	Solid or Sem	isolid Wa	ste (Manual	Cold Vap	or Techi	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00409	J	0.0153	0.00323	mg/Kg	<u> </u>	12/21/19 12:00	12/22/19 11:41	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	2.2		1.0	1.0	%			12/11/19 13:54	1

1.0

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

Qualifier Description
MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
The compound was found in the blank and sample
Duplicate RPD exceeds the control limit
Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
MS, MSD: Spike recovery exceeds upper or lower control limits.
Analyte was not detected at or above the SDL.
_

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Client: ARCADIS U.S., Inc.

Job ID: 600-197147-1 Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282928/1-A

Matrix: Solid

Analysis Batch: 283187

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

Prep Batch: 282928

,									
	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Calcium	1.190	J	100	0.864	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Potassium	11.0	U	100	11.0	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Manganese	0.04500	J	1.50	0.0381	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Sodium	4.460	J	100	0.886	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/12/19 19:01	12/16/19 16:01	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/12/19 19:01	12/16/19 16:01	1

Lab Sample ID: MB 600-282928/1-A

Matrix: Solid

Analysis Batch: 283285

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

Prep Batch: 282928

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/12/19 19:01	12/17/19 14:45	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/12/19 19:01	12/17/19 14:45	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/12/19 19:01	12/17/19 14:45	1
Thallium	0.277	Ü	1.50	0.277	mg/Kg		12/12/19 19:01	12/17/19 14:45	1

Lab Sample ID: LCSSRM 600-282928/2-A

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Lab Control Sample Prep Type: Total/NA **Prep Batch: 282928**

Analysis Batch. 200107	Spike	LCSSRM	LCSSRM				%Rec.
Analyte	Added	Result	Qualifier	Unit	D %	6Rec	Limits
Silver	25.8	22.17		mg/Kg		85.9	67.1 - 106.
							6
Barium	393	310.1		mg/Kg		78.9	64.6 - 106.
Des West	000	000.4				00.0	6
Beryllium	293	262.4		mg/Kg		89.6	72.4 - 106.
Calcium	19300	17290		mg/Kg		80.6	8 70.5 - 106.
Galdiani	10000	17230		mg/rtg		00.0	70.0 - 100.
Chromium	63.6	58.15		mg/Kg		91.4	71.9 - 106.
				0 0			6
Copper	175	163.5		mg/Kg		93.4	72.0 - 106.
							9
Iron	17700	13510		mg/Kg		76.3	
Determina	5740	4754		/I/		00.0	8
Potassium	5740	4751		mg/Kg		82.8	64.6 - 106.
Magnesium	5390	4110		mg/Kg		76.3	6 64.2 - 106.
Magnosiani	0000	1110		mg/rtg		7 0.0	7
Manganese	616	514.8		mg/Kg		83.6	64.1 - 106.
5				- 0			7
Sodium	9070	7457		mg/Kg		82.2	70.5 - 106.
							6

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Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID: LCSSRM 600-282928/2-A

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 283187** Prep Batch: 282928 Spike LCSSRM LCSSRM %Rec. Added Result Qualifier **Analyte** Unit %Rec Limits Lead 164 161.5 mg/Kg 98.5 71.3 - 106. 7 120 26.49 20.0 - 106 Antimony mg/Kg 22.1 7 69.7 - 106 Zinc 482 503.0 mg/Kg 104.4

Lab Sample ID: LCSSRM 600-282928/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Thallium

Analysis Batch: 283285 Prep Batch: 282928 Spike LCSSRM LCSSRM %Rec. Analyte Added Result Qualifier Unit %Rec Limits 66.6 - 106. Arsenic 69.4 61.09 mg/Kg 88.0 6 Cadmium 268 237.4 mg/Kg 88.6 71.3 - 106. Selenium 155 129.9 mg/Kg 65.2 - 106. 5 69.90 63.2 - 106.

81.0

Lab Sample ID: 600-197147-9 MS Client Sample ID: Cell4-Square37-S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA

mg/Kg

86.3

Analysis Batch: 283187 Prep Batch: 282928 MS MS Sample Sample Spike %Rec. **Analyte** Result Qualifier Added Result Qualifier Unit D %Rec Limits ₩ 10.09 Silver 0.118 U 12.0 mq/Kq 84 75 - 125 Barium 48.1 79.27 ₩ 75 - 125 24.8 mg/Kg 113 ₿ Bervllium 0.213 J 48.1 46.43 mg/Kg 96 75 - 125 ₩ Calcium 2970 481 3834 4 mg/Kg 179 75 - 125Chromium 5.17 48.1 56.52 mg/Kg ₩ 107 75 - 125 Ö 102 75 - 125 Copper 2.15 48.1 51.32 mg/Kg Ö 4320 481 6690 4 494 75 - 125 Iron mg/Kg ₩ 481 271 Potassium 743 2047 N1 mg/Kg 75 - 125Ö Magnesium 556 481 1508 N1 mg/Kg 198 75 - 125 . ₩ 75 - 125 53.4 b Manganese 48.1 110.9 mg/Kg 119 Sodium 144 b 481 657.5 mg/Kg ₩ 107 75 - 125 Lead 3 71 48.1 51.95 mg/Kg ₿ 100 75 - 125 . . Antimony 0.230 U 72 1 34.82 N1 mg/Kg 48 75 - 125 Zinc 12.0 24.0 43.88 N1 mg/Kg 133 75 - 125

Lab Sample ID: 600-197147-9 MS Client Sample ID: Cell4-Square37-S-2-3-191205 Prep Type: Total/NA

Matrix: Solid

Prep Batch: 282928 **Analysis Batch: 283285**

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.118	U	12.0	9.903		mg/Kg	<u> </u>	82	75 - 125	_
Arsenic	1.80		48.1	46.35		mg/Kg	☼	93	75 - 125	
Barium	24.5		48.1	80.04		mg/Kg	☼	116	75 - 125	
Beryllium	0.198	J	48.1	46.88		mg/Kg	₩.	97	75 - 125	
Calcium	2970		481	3988	4	mg/Kg	₩	211	75 ₋ 125	

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1/9/2020 (Rev. 1)

Client Sample ID: Lab Control Sample

Job ID: 600-197147-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197147-9 MS Client Sample ID: Cell4-Square37-S-2-3-191205

Matrix: Solid

Analysis Batch: 283285

Prep Type: Total/NA Prep Batch: 282928

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cadmium	0.0891	J	48.1	45.74		mg/Kg	<u></u>	95	75 - 125
Chromium	4.96		48.1	55.41		mg/Kg	₩.	105	75 - 125
Copper	1.87		48.1	48.77		mg/Kg	☼	98	75 - 125
Iron	4330		481	6974	4	mg/Kg	☼	551	75 - 125
Potassium	744		481	2087	N1	mg/Kg	₩.	279	75 - 125
Magnesium	591		481	1608	N1	mg/Kg	☼	211	75 - 125
Manganese	51.0		48.1	107.2		mg/Kg	☼	117	75 - 125
Sodium	141		481	663.8		mg/Kg		109	75 - 125
Lead	3.82		48.1	50.50		mg/Kg	☼	97	75 - 125
Antimony	0.230	U	72.1	39.88	N1	mg/Kg	☼	55	75 - 125
Selenium	0.256	U	48.1	43.36		mg/Kg		90	75 - 125
Thallium	0.274	U	48.1	44.26		mg/Kg	☼	92	75 - 125
Zinc	10.5		24.0	41.84	N1	mg/Kg	☼	130	75 ₋ 125

Lab Sample ID: 600-197147-9 DU Client Sample ID: Cell4-Square37-S-2-3-191205

Matrix: Solid

Prep Type: Total/NA

Prep Batch: 282928

Analysis Batch: 283187 Sample Sample DU DU **RPD** Result Qualifier Result Qualifier **Analyte** Unit D **RPD** Limit ₩ Silver 0.118 U 0.119 U mg/Kg NC 20 ₩ Barium 24.8 27.47 mg/Kg 10 20 ₩ Beryllium 0.213 0.2199 mg/Kg 3 20 Calcium 2970 b 3783 F mg/Kg ₩ 24 20 ₩ 2 Chromium 5.17 5.283 mg/Kg 20 ₿ 2 Copper 2.15 2.194 mg/Kg 20 4320 4450 20 Iron mg/Kg ₿ Potassium 743 778.3 mg/Kg 20 Magnesium 556 607.3 mg/Kg 20 Ö Manganese 53.4 b 52.33 mg/Kg 20 155.9 20 Sodium 144 mg/Kg 8 b ť 3.71 3.669 mg/Kg 20 Lead ₩ 0.230 0.232 U NC 20 Antimony Ü mg/Kg Ö Zinc 12.0 9.587 F mg/Kg 23 20

Lab Sample ID: 600-197147-9 DU Client Sample ID: Cell4-Square37-S-2-3-191205 **Matrix: Solid**

Prep Type: Total/NA Prep Batch: 282928

Analysis Batch: 283285 DU DU Sample Sample **RPD** Result Qualifier Result Qualifier Limit Analyte Unit D **RPD** Ø Silver 0.118 U 0.119 U NC 20 mg/Kg ₩ 1.80 Arsenic 2.049 mg/Kg 13 20 Barium 24.5 27.19 mg/Kg ť 20 ₩ Beryllium 0.2099 J 6 20 0.198 mg/Kg Ö Calcium 2970 3810 F mg/Kg 25 20 Cadmium 0.09997 J 20 0.0891 J mg/Kg 11 Chromium 4.96 5.123 mg/Kg 3 20 ₩ 1.87 1.959 mg/Kg 5 20 Copper ₩ Iron 4330 4500 mg/Kg 20 Potassium 744 773.3 mg/Kg 20

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Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197147-9 DU Client Sample ID: Cell4-Square37-S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 283285** Prep Batch: 282928

Sample	Sample	DU	DU			•	RPD
Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
591		642.8		mg/Kg	- -		20
51.0		50.68		mg/Kg	☼	0.7	20
141		152.8		mg/Kg		8	20
3.82		3.844		mg/Kg	₩	0.6	20
0.230	U	0.232	U	mg/Kg	₽	NC	20
0.256	U	0.259	U	mg/Kg		NC	20
0.274	U	0.277	U	mg/Kg	☼	NC	20
10.5		9.192		mg/Kg	₩	13	20
	Result 591 51.0 141 3.82 0.230 0.256 0.274	51.0 141 3.82 0.230 U 0.256 U 0.274 U	Result Qualifier Result 591 642.8 51.0 50.68 141 152.8 3.82 3.844 0.230 U 0.232 0.256 U 0.259 0.274 U 0.277	Result Qualifier Result Qualifier 591 642.8 642.8 51.0 50.68 141 152.8 3.82 3.844 0.230 U 0.232 U 0.256 U 0.259 U 0.274 U 0.277 U	Result Qualifier Result Qualifier Unit 591 642.8 mg/Kg 51.0 50.68 mg/Kg 141 152.8 mg/Kg 3.82 3.844 mg/Kg 0.230 U 0.232 U mg/Kg 0.256 U 0.259 U mg/Kg 0.274 U 0.277 U mg/Kg	Result Description Qualifier Result Qualifier Unit Description Description 591 642.8 mg/Kg \$\frac{1}{2}\$ 51.0 50.68 mg/Kg \$\frac{1}{2}\$ 141 152.8 mg/Kg \$\frac{1}{2}\$ 3.82 3.844 mg/Kg \$\frac{1}{2}\$ 0.230 U 0.232 U mg/Kg \$\frac{1}{2}\$ 0.256 U 0.259 U mg/Kg \$\frac{1}{2}\$ 0.274 U 0.277 U mg/Kg \$\frac{1}{2}\$	Sample Result Qualifier Result Result Qualifier Unit D mg/Kg RPD 591 642.8 mg/Kg 58 51.0 50.68 mg/Kg 50.7 141 152.8 mg/Kg 50.6 3.82 3.844 mg/Kg 50.6 0.230 U 0.232 U mg/Kg 50.6 0.230 U 0.232 U mg/Kg 50.6 0.256 U 0.259 U mg/Kg 50.6 0.274 U 0.277 U mg/Kg 50.6

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-283743/7-B **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 283798

MB MB

Result Qualifier MQL (Adi) SDL Unit Analyte Prepared Analyzed Dil Fac Mercury 0.00346 U 0.0165 0.00346 mg/Kg 12/21/19 12:00 12/22/19 11:09

Lab Sample ID: LCS 600-283743/8-B **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 283743 Analysis Batch: 283798** LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits 0.234 0.2422 mg/Kg 103 70 - 130 Mercury

Lab Sample ID: 600-197147-1 MS Client Sample ID: Cell7-Square22-S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA **Prep Batch: 283743 Analysis Batch: 283798** Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Limits Unit D %Rec ₩ 0.286 Mercury 0.0201 0.3327 mg/Kg 109

Lab Sample ID: 600-197147-11 MS Client Sample ID: Cell3-Square153-S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 283798** Prep Batch: 283743 Sample Sample Spike MS MS %Rec. **Result Qualifier** Added Result Qualifier Limits **Analyte** Unit D %Rec 0.226 ₹7 Mercury 0.00409 J 0.2673 mg/Kg 117 75 - 125

Lab Sample ID: 600-197147-1 DU Client Sample ID: Cell7-Square22-S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 283798 Prep Batch: 283743 DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Limit ₩ 0.0201 Mercury 0.00410 U mg/Kg

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75 - 125

Prep Batch: 283743

QC Sample Results

Job ID: 600-197147-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-197147-11 DU Client Sample ID: Cell3-Square153-S-2-3-191205

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 283798** Prep Batch: 283743

DU DU Sample Sample **RPD** Analyte **Result Qualifier** Result Qualifier Unit D RPD Limit ₩ Mercury 0.00409 J 0.005753 JF 20 mg/Kg

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197147-8 DU Client Sample ID: Cell4-Square201-S-2-3-191205

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 282754

DU DU RPD Sample Sample Result Qualifier Result Qualifier Unit RPD Limit 18.6 20.0 %

Percent Moisture 20 Percent Solids 81.4 80.0 % 2 20

Client: ARCADIS U.S., Inc.

Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 282928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	3050B	
MB 600-282928/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197147-9 MS	Cell4-Square37-S-2-3-191205	Total/NA	Solid	3050B	
600-197147-9 DU	Cell4-Square37-S-2-3-191205	Total/NA	Solid	3050B	

Analysis Batch: 283187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	6010B	282928
MB 600-282928/1-A	Method Blank	Total/NA	Solid	6010B	282928
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	6010B	282928
600-197147-9 MS	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-9 DU	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928

Analysis Batch: 283285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	6010B	282928
MB 600-282928/1-A	Method Blank	Total/NA	Solid	6010B	282928
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	6010B	282928
600-197147-9 MS	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928
600-197147-9 DU	Cell4-Square37-S-2-3-191205	Total/NA	Solid	6010B	282928

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Client: ARCADIS U.S., Inc.

Job ID: 600-197147-1 Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 283743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	
MB 600-283743/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-283743/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-197147-1 MS	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-11 MS	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-1 DU	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	
600-197147-11 DU	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	

Analysis Batch: 283798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	283743
MB 600-283743/7-B	Method Blank	Total/NA	Solid	7471A	283743
LCS 600-283743/8-B	Lab Control Sample	Total/NA	Solid	7471A	283743
600-197147-1 MS	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-11 MS	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-1 DU	Cell7-Square22-S-2-3-191205	Total/NA	Solid	7471A	283743
600-197147-11 DU	Cell3-Square153-S-2-3-191205	Total/NA	Solid	7471A	283743

General Chemistry

Analysis Batch: 282754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-1	Cell7-Square22-S-2-3-191205	Total/NA	Solid	2540B	_
600-197147-2	Cell8-Square122-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-3	Cell8-Square161-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-4	Cell8-Square90-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-5	Cell8-Square170-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-6	Cell4-Square129-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-7	Cell4-Square114-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-8	Cell4-Square201-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-9	Cell4-Square37-S-2-3-191205	Total/NA	Solid	2540B	

Eurofins TestAmerica, Houston

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry (Continued)

Analysis Batch: 282754 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197147-10	Cell3-Square130-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-11	Cell3-Square153-S-2-3-191205	Total/NA	Solid	2540B	
600-197147-8 DU	Cell4-Square201-S-2-3-191205	Total/NA	Solid	2540B	

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Client Sample ID: Cell7-Square22-S-2-3-191205

Date Collected: 12/05/19 10:40

Lab Sample ID: 600-197147-1

Matrix: Solid

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell7-Square22-S-2-3-191205 Lab Sample ID: 600-197147-1

Date Collected: 12/05/19 10:40

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 78.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:13	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:02	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:13	SOT	TAL HOU

Date Collected: 12/05/19 10:52 Matrix: Solid

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell8-Square122-S-2-3-191205 Lab Sample ID: 600-197147-2

 Date Collected: 12/05/19 10:52
 Matrix: Solid

 Date Received: 12/10/19 10:38
 Percent Solids: 75.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:15	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:04	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:19	SOT	TAL HOU

Date Collected: 12/05/19 11:08 Date Received: 12/10/19 10:38

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282754	12/11/19 13:54	ANP	TAL HOU

Matrix: Solid

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

Client Sample ID: Cell8-Square161-S-2-3-191205

Date Collected: 12/05/19 11:08 Date Received: 12/10/19 10:38 Lab Sample ID: 600-197147-3

Matrix: Solid Percent Solids: 73.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:17	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:12	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:21	SOT	TAL HOU

Client Sample ID: Cell8-Square90-S-2-3-191205

Date Collected: 12/05/19 11:19 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-4 **Matrix: Solid**

Batch **Batch** Dilution Batch Prepared Method Factor Number or Analyzed Analyst **Prep Type** Type Run Lab 2540B TAL HOU Total/NA Analysis 282754 12/11/19 13:54 ANP

Client Sample ID: Cell8-Square90-S-2-3-191205

Date Collected: 12/05/19 11:19 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-4

Matrix: Solid Percent Solids: 83.2

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:19	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:14	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		5	283798	12/22/19 12:11	SOT	TAL HOU

Client Sample ID: Cell8-Square170-S-2-3-191205

Date Collected: 12/05/19 14:05

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-5 **Matrix: Solid**

Analyst Lab

Batch Batch Dilution Batch Prepared Method Type **Factor** Number or Analyzed **Prep Type** Run Total/NA Analysis 2540B 282754 12/11/19 13:54 ANP TAL HOU

Client Sample ID: Cell8-Square170-S-2-3-191205

Date Collected: 12/05/19 14:05 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-5 Matrix: Solid

Percent Solids: 72.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:27	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:16	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:25	SOT	TAL HOU

Client Sample ID: Cell4-Square129-S-2-3-191205

Date Collected: 12/05/19 14:14

Lab Sample ID: 600-197147-6

Matrix: Solid

Batch Dilution Batch Prepared Method or Analyzed Analyst **Prep Type** Type Run **Factor** Number Lab Total/NA 2540B 282754 12/11/19 13:54 ANP TAL HOU Analysis

Client Sample ID: Cell4-Square129-S-2-3-191205

Lab Sample ID: 600-197147-6

Matrix: Solid Percent Solids: 81.8

Date Collected: 12/05/19 14:14 Date Received: 12/10/19 10:38

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:29	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:18	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:27	SOT	TAL HOU

Client Sample ID: Cell4-Square114-S-2-3-191205

Lab Sample ID: 600-197147-7

Matrix: Solid

Date Collected: 12/05/19 14:23 Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell4-Square114-S-2-3-191205

Lab Sample ID: 600-197147-7

Matrix: Solid

Date Collected: 12/05/19 14:23 Date Received: 12/10/19 10:38 Percent Solids: 74.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:31	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:20	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:33	SOT	TAL HOU

Client Sample ID: Cell4-Square201-S-2-3-191205

Lab Sample ID: 600-197147-8

Matrix: Solid

Date Collected: 12/05/19 14:33 Date Received: 12/10/19 10:38

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282754	12/11/19 13:54	ANP	TAL HOU

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Client Sample ID: Cell4-Square201-S-2-3-191205

Date Collected: 12/05/19 14:33

Lab Sample ID: 600-197147-8 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 81.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:32	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:22	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:35	SOT	TAL HOU

Client Sample ID: Cell4-Square37-S-2-3-191205

Date Collected: 12/05/19 14:42 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-9 Matrix: Solid

Batch **Batch** Dilution Batch Prepared Method Factor Number or Analyzed Analyst **Prep Type** Type Run Lab 2540B TAL HOU Total/NA Analysis 282754 12/11/19 13:54 ANP

Client Sample ID: Cell4-Square37-S-2-3-191205

Date Collected: 12/05/19 14:42 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-9 **Matrix: Solid**

Percent Solids: 98.1

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:34	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:24	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:37	SOT	TAL HOU

Client Sample ID: Cell3-Square130-S-2-3-191205

Date Collected: 12/05/19 14:52 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-10

Matrix: Solid

Batch Batch Dilution Batch Prepared Method Type **Factor** Number or Analyzed Analyst **Prep Type** Run Lab Total/NA Analysis 2540B 282754 12/11/19 13:54 ANP TAL HOU

Client Sample ID: Cell3-Square130-S-2-3-191205

Date Collected: 12/05/19 14:52 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197147-10 **Matrix: Solid**

Percent Solids: 97.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:40	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:29	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:39	SOT	TAL HOU

Lab Chronicle

Job ID: 600-197147-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell3-Square153-S-2-3-191205

Lab Sample ID: 600-197147-11 Date Collected: 12/05/19 14:59 **Matrix: Solid**

Date Received: 12/10/19 10:38

Batch Dilution **Batch** Prepared Method **Factor** or Analyzed Analyst **Prep Type** Type Run Number Lab Total/NA 2540B 12/11/19 13:54 ANP TAL HOU Analysis 282754

Client Sample ID: Cell3-Square153-S-2-3-191205

Lab Sample ID: 600-197147-11 Date Collected: 12/05/19 14:59 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 97.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:42	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:37	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:41	SOT	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197147-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pro	ogram	Identification Number	Expiration Date
Texas	NE	LAP	T104704223-19-25	10-31-20
The following analyte:	s are included in this repo	rt, but the laboratory is r	T104704223-19-25 10 e laboratory is not certified by the governing authority. This latrix Analyte	This list may include analytes for which
the agency does not o	offer certification.	·	, ,	,
the agency does not on the Analysis Method	offer certification. Prep Method	Matrix	Analyte	,
0 ,		Matrix Solid		

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Jooler Temperature(s) °C and Other Remarks

Special Instructions/Note: V - MCAA W - pH 4-5 Z - other (specify) N - None O - AsNaO2 P - Na2O4S O - Na2SO3 R - Na2S2O3 H2SO4 TSP Dodec Months Acetone 600-197147 Chain of Custody Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 600-72593-19936,10 1039 reservation Codes Ascorbio Acid 8 - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 Di Water MeOH Archive For 10/ Total Number of containers the state of Disposal By Lab Analysis Requested Special Instructions/QC Requirements 9012-Cyanide sachin kudchadkar@testamericainc.com nZ ,IT ,gA ,eS Return To Client 200- Chloride/ Fluoride/ Vitrate / Sultate Kudchadkar, Sachin G 80158_GRO -C6-C10 - 202 jar Canton 2 Z 2 2 2 2 2 2 Z 2 Z 7 Fleid Filtered Sample (Yes or No) Arcadio E-Mail Company Segolid. Preservation Code Solid Solid Solid Solid Solid Matrix Solid Solid Solid Solid Solid Solid Radiological (C=comp, G=grab) Sample Type 9 5 5 5 0 1230 0 GP18 128 P192 1083 91305 1040 19120S 1433 191205 1442 Steinman. Sample SOH 111 1912S 1423 119 Time 191205 14SA Standard 108 el13-Square 130-5-2-3-191205 191205 1452 Date Unknown (AT Requested (days): Due Date Requested: 191205 191205 Sample Date 191205 30816 12/9/19 191205 Project #: 60011732 Poison B e118-Square 90-5-2-3-191205 2118-Square 170-5-2-3-191205 2114-Square 114-5-2-3-191205 Cell4-Square 37-5-2-3-191205 Cell4-Square 129-5-2-191205 Zell 3-5quare 153-5-2-3-191205 Cell4 - Square 201-5-2-191205 16118-59 yave 161-5-2-3-19120S ell8-Square 122-5-2-191205 Skin Irritant 2117-Square 22-5-2-191205 Jeliverable Requested. I, III, III, IV, Other (specify) Houston, TX 77040 Phone (713) 690-444 Fax (713) 690-5646 Chevron - Jal Land Farm Soils 2020 Chavren Landfaim Non-Hazard Flammable Possible Hazard Identification Suite 121 sarah, johnson@arcadis.com Empty Kit Relinquished by 1004 North Big Spring Sample Identification Client Information ARCADIS U.S. Inc 432-227-0266(Tel) Sarah Johnson quished by TX, 79701 Midland state, Zip.

Environment Tenting

S eurofins

Midland

#264

Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Cothway Street

Custody Seal No.

Custody Seals Intact
A Yes A No

Loc: 600 197147

Eurofins TestAmerica Houston

Environment Testing TestAmerica

Sample Receipt Checklist

'19DEC 10 10:38

JOB NUMBER:	1971	41	le/Time Received:	Arcae	lis	
UNPACKED BY:	ST		RRIER/DRIVER:	Fled	EX	
Custody Seal Present:	YES DI	NO Nur	mber of Coolers Recei			
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm	Therm CF	Corrected Temp (°C)
)30/L	Y / W	Y / N	16	678	-03	13
2009	Y / N	Y/N	1.0	010	0.2	1.0
	Y/N	Y/N		-		
	YIN	Y/N				12/1
	YIN	Y/N				12/10
	Y / N	Y/N				57
Base samples are>pH TX1005 samples frozer	upon receipt:	□ YES DA	d preserved are <ph 2:<="" th=""><th>REEZER:</th><th>□NO</th><th></th></ph>	REEZER:	□NO	
pH paper Lot #		_ VO	A headspace acceptat	ole (5-6mm): [YES NO	
Did samples meet the labor	atory's standard co	onditions of sample	acceptability upon recei	ipt?		PYES NO
COMMENTS:						
						12/10/19
						St

HS-SA-WI-013

Rev. 4A: 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197147-1

Login Number: 197147 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Torres, Sandra

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	1.3
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.



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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197216-1

Client Project/Site: Chevron - Jal Land Farm Soils

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



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

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method Description Method Protocol Laboratory 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) SW846 TAL HOU 7471A 2540B Percent Moisture SM20 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils SW846 TAL HOU 7471A Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation SW846 TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197216-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197216-1

ab Sample ID	Client Sample ID	Matrix	Collected	Received
600-197216-1	Cell22- Square 48-S-2-3-191204	Solid	12/04/19 10:21	12/10/19 17:33
600-197216-2	Cell22- Square 157-S-2-3-191204	Solid	12/04/19 10:44	12/10/19 17:33
00-197216-3	Cell22- Square 190-S-2-3-191204	Solid	12/04/19 10:57	12/10/19 17:33
0-197216-4	Cell23- Square 208-S-2-3-191204	Solid	12/04/19 11:07	12/10/19 17:33
00-197216-5	Cell23- Square 132-S-2-3-191204	Solid	12/04/19 11:22	12/10/19 17:33
00-197216-6	Cell23- Square 111-S-2-3-191204	Solid	12/04/19 11:34	12/10/19 17:33
)-197216-7	Cell23- Square 87-S-2-3-191204	Solid	12/04/19 11:53	12/10/19 17:33
-197216-8	Cell24- Square 168-S-2-3-191204	Solid	12/04/19 12:10	12/10/19 17:33
0-197216-9	Cell24- Square 24-S-2-3-191204	Solid	12/04/19 12:23	12/10/19 17:33
00-197216-10	Cell24- Square 44-S-2-3-191204	Solid	12/04/19 12:37	12/10/19 17:33
00-197216-11	Cell24- Square 178-S-2-3-191204	Solid	12/04/19 12:50	12/10/19 17:33

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Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell22- Square 48-S-2-3-191204

Lab Sample ID: 600-197216-1 Date Collected: 12/04/19 10:21 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 90.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Result Qualifier SDL Unit D Prepared Analyzed Dil Fac Analyte MQL (Adj) Silver 0.129 0.129 12/26/19 14:26 12/27/19 11:04 0.433 mg/Kg 12/26/19 14:26 1 08 12/27/19 11:04 **Arsenic** 2.04 0.236 mg/Kg ä **Barium** 48.9 1.08 0.0325 mg/Kg 12/26/19 14:26 12/27/19 11:04 φ 0.271 0.0157 mg/Kg 12/26/19 14:26 12/27/19 11:04 **Beryllium** 0.320 ₩ 108 0.936 mg/Kg 12/26/19 14:26 12/27/19 11:04 Calcium 11400 ₽ 0.271 12/26/19 14:26 12/27/19 11:04 Cadmium 0.146 0.0277 mg/Kg À Chromium 0.542 0.0548 mg/Kg 12/26/19 14:26 12/27/19 11:04 5.87 0.542 0.189 12/26/19 14:26 12/27/19 11:04 3.82 mg/Kg Copper ä 5300 21.7 2.74 mg/Kg 12/26/19 14:26 12/27/19 11:04 ġ **Potassium** 1170 108 11.9 mg/Kg 12/26/19 14:26 12/27/19 11:04 ŭ Magnesium 1010 108 2.08 mg/Kg 12/26/19 14:26 12/27/19 11:04 ä 12/26/19 14:26 Manganese 80.8 1.63 0.0413 mg/Kg 12/27/19 11:04 **Sodium** 19.5 Jb 108 0.960 ma/Ka 12/26/19 14:26 12/27/19 11:04 Lead 4.92 0.542 0.114 mg/Kg 12/26/19 14:26 12/27/19 11:04 ₩ Antimony 0 251 271 0.251 mg/Kg 12/26/19 14:26 12/27/19 11:04 à Selenium 0.281 2.17 0.281 mg/Kg 12/26/19 14:26 12/27/19 11:04 12/26/19 14:26 **Thallium** 1.63 0.300 mg/Kg 12/27/19 11:04 1.30 J b Zinc 1.63 0.117 mg/Kg 12/26/19 14:26 12/27/19 11:04 13.7

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
Analyte	Result	Qualifier	MQL (Adj)	SDL Ur	nit	D	Prepared	Analyzed	Dil Fac	
Mercury	0.00344	U	0.0163	0.00344 m	g/Kg	₩	12/30/19 13:23	12/31/19 09:35	1	

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D Prepared	Analyzed	Dil Fac
Percent Moisture	9.5	1.0	1.0 %		12/12/19 17:09	1
Percent Solids	90.5	1.0	1.0 %		12/12/19 17:09	1

Client Sample ID: Cell22- Square 157-S-2-3-191204 Lab Sample ID: 600-197216-2 Date Collected: 12/04/19 10:44 Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 90.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac Silver 0.124 77 12/26/19 14:26 0.416 0.124 mg/Kg 12/27/19 11:10 0.227 mg/Kg **Arsenic** 2.04 1 04 12/26/19 14:26 12/27/19 11:10 ₩ 12/26/19 14:26 1.04 0.0312 mg/Kg 12/27/19 11:10 Barium 52.7 0.260 12/27/19 11:10 0.0151 12/26/19 14:26 **Beryllium** 0.343 mg/Kg ť 12/26/19 14:26 **Calcium** 3980 104 0.899 mg/Kg 12/27/19 11:10 12/27/19 11:10 0.260 0.0266 mg/Kg 12/26/19 14:26 Cadmium 0.130 0.520 0.0526 à 12/26/19 14:26 12/27/19 11:10 Chromium 6.10 mg/Kg 12/26/19 14:26 12/27/19 11:10 Copper 3.74 0.520 0.181 mg/Kg ₩ Iron 5610 20.8 2.63 mg/Kg 12/26/19 14:26 12/27/19 11:10 104 12/26/19 14:26 11.4 12/27/19 11:10 mg/Kg **Potassium** 1060 ġ 104 2.00 mg/Kg 12/26/19 14:26 12/27/19 11:10 Magnesium 1130 # 1.56 0.0396 12/26/19 14:26 12/27/19 11:10 Manganese 88.5 mg/Kg φ **Sodium** 23.2 Jb 104 0.922 mg/Kg 12/26/19 14:26 12/27/19 11:10 0.520 0.109 mg/Kg 12/26/19 14:26 12/27/19 11:10 Lead 4.47 ŭ Antimony 0.241 U 2.60 0.241 mg/Kg 12/26/19 14:26 12/27/19 11:10 Selenium 0.269 U 2.08 12/26/19 14:26 12/27/19 11:10 0.269 mg/Kg

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID: 600-197216-2

Client Sample ID: Cell22- Square 157-S-2-3-191204
Date Collected: 12/04/19 10:44

Matrix: Solid
Percent Solids: 90.7

Date Received: 12/10/19 17:33

Method: 6010B - Inductively Coup	ed Piasma -	Atomic Emi	ission Spectro	ometry (Co	ontinuea)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac			
Thallium	1.27	J b	1.56	0.288	mg/Kg		12/26/19 14:26	12/27/19 11:10	1			
Zinc	14.4		1.56	0.112	mg/Kg	₽	12/26/19 14:26	12/27/19 11:10	1			
Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)												
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac			
Mercury	0.00370	U	0.0176	0.00370	ma/Ka	<u> </u>	12/30/19 13:23	12/31/19 09:41	1			

General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Dil Fac Analyzed **Percent Moisture** 9.3 1.0 1.0 % 12/12/19 17:09 **Percent Solids** 1.0 1.0 % 12/12/19 17:09 90.7

Client Sample ID: Cell22- Square 190-S-2-3-191204

Lab Sample ID: 600-197216-3

Date Collected: 12/04/19 10:57 Date Received: 12/10/19 17:33

Zinc

Matrix: Solid Percent Solids: 72.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	*	12/26/19 14:26	12/27/19 11:12	1
Arsenic	1.86		1.29	0.282	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Barium	66.5		1.29	0.0388	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Beryllium	0.214	J	0.324	0.0188	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Calcium	45700		129	1.12	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Cadmium	0.136	J	0.324	0.0331	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Chromium	4.56		0.647	0.0655	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Copper	3.04		0.647	0.225	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Iron	3900		25.9	3.28	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Potassium	923		129	14.2	mg/Kg	\$	12/26/19 14:26	12/27/19 11:12	1
Magnesium	1230		129	2.49	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Manganese	49.8		1.94	0.0493	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Sodium	40.3	J b	129	1.15	mg/Kg		12/26/19 14:26	12/27/19 11:12	1
Lead	4.69		0.647	0.136	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Antimony	0.300	U	3.24	0.300	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Selenium	0.335	U	2.59	0.335	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1
Thallium	0.359	U	1.94	0.359	mg/Kg	₽	12/26/19 14:26	12/27/19 11:12	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D									Dil Fac	
	Mercury	0.0187	J b	0.0215	0.00454	mg/Kg	\	12/30/19 13:23	12/31/19 09:43	1

1.94

0.140 mg/Kg

12.8

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.1	1.0	1.0 %			12/12/19 17:09	1
Percent Solids	72.9	1.0	1.0 %			12/12/19 17:09	1

12/27/19 11:12

12/26/19 14:26

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell23- Square 208-S-2-3-191204

Lab Sample ID: 600-197216-4 Date Collected: 12/04/19 11:07 Matrix: Solid Date Received: 12/10/19 17:33

Percent Solids: 76.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.148	U	0.497	0.148	mg/Kg	-	12/26/19 14:26	12/27/19 11:14	1
Arsenic	1.94		1.24	0.271	mg/Kg	₩	12/26/19 14:26	12/27/19 11:14	1
Barium	65.4		1.24	0.0372	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Beryllium	0.242	J	0.310	0.0180	mg/Kg	φ.	12/26/19 14:26	12/27/19 11:14	1
Calcium	22900		124	1.07	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Cadmium	0.124	J	0.310	0.0318	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Chromium	5.00		0.621	0.0628	mg/Kg	\$	12/26/19 14:26	12/27/19 11:14	1
Copper	2.87		0.621	0.216	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Iron	4510		24.8	3.14	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Potassium	1120		124	13.7	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Magnesium	1240		124	2.38	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Manganese	55.5		1.86	0.0473	mg/Kg	₩	12/26/19 14:26	12/27/19 11:14	1
Sodium	23.8	J b	124	1.10	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Lead	3.60		0.621	0.130	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Antimony	0.288	U	3.10	0.288	mg/Kg	₩	12/26/19 14:26	12/27/19 11:14	1
Selenium	0.322	U	2.48	0.322	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Thallium	0.344	U	1.86	0.344	mg/Kg	₽	12/26/19 14:26	12/27/19 11:14	1
Zinc	13.0		1.86	0.134	mg/Kg	≎	12/26/19 14:26	12/27/19 11:14	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vapo	or Technique)				
Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0467	b	0.0218	0.00459 mg/Kg	\	12/30/19 13:23	12/31/19 09:45	1

General Chemistry Analyte	Result Qual	lifier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.3	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	76.7	1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell23- Square 132-S-2-3-191204 Lab Sample ID: 600-197216-5 Date Collected: 12/04/19 11:22 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 95.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.124	U	0.415	0.124	mg/Kg	<u> </u>	12/26/19 14:26	12/27/19 11:16	1
Arsenic	2.11		1.04	0.226	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Barium	121		1.04	0.0312	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Beryllium	0.270		0.260	0.0151	mg/Kg	φ.	12/26/19 14:26	12/27/19 11:16	1
Calcium	38400		104	0.897	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Cadmium	0.119	J	0.260	0.0266	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Chromium	4.91		0.519	0.0526	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Copper	2.58		0.519	0.181	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Iron	4460		20.8	2.63	mg/Kg	☼	12/26/19 14:26	12/27/19 11:16	1
Potassium	1240		104	11.4	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Magnesium	1770		104	1.99	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Manganese	50.2		1.56	0.0396	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Sodium	46.9	J b	104	0.920	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Lead	3.79		0.519	0.109	mg/Kg	☼	12/26/19 14:26	12/27/19 11:16	1
Antimony	0.241	U	2.60	0.241	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1
Selenium	0.269	U	2.08	0.269	mg/Kg		12/26/19 14:26	12/27/19 11:16	1

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Client Sample ID: Cell23- Square 132-S-2-3-191204

Date Collected: 12/04/19 11:22 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197216-5

Matrix: Solid Percent Solids: 95.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.288	U	1.56	0.288	mg/Kg	\	12/26/19 14:26	12/27/19 11:16	1
Zinc	12.5		1.56	0.112	mg/Kg	₽	12/26/19 14:26	12/27/19 11:16	1

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Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0318	b	0.0162	0.00341	mg/Kg		12/30/19 13:23	12/31/19 09:47	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.7		1.0	1.0	%			12/12/19 17:09	1

1.0

1.0 %

Client Sample ID: Cell23- Square 111-S-2-3-191204

95.3

Date Collected: 12/04/19 11:34

Date Received: 12/10/19 17:33

Percent Solids

Lab Sample ID: 600-197216-6

12/12/19 17:09

Matrix: Solid Percent Solids: 79.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.146	U	0.490	0.146	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Arsenic	1.92		1.23	0.267	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Barium	93.9		1.23	0.0368	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Beryllium	0.239	J	0.306	0.0178	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Calcium	46400		123	1.06	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Cadmium	0.110	J	0.306	0.0314	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Chromium	4.51		0.613	0.0620	mg/Kg	≎	12/26/19 14:26	12/27/19 11:26	1
Copper	2.43		0.613	0.213	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Iron	4200		24.5	3.10	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Potassium	1100		123	13.5	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Magnesium	1670		123	2.35	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Manganese	50.3		1.84	0.0467	mg/Kg	₩	12/26/19 14:26	12/27/19 11:26	1
Sodium	62.3	Jb	123	1.09	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Lead	3.76		0.613	0.129	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Antimony	0.284	U	3.06	0.284	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Selenium	0.317	U	2.45	0.317	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Thallium	0.340	U	1.84	0.340	mg/Kg	₽	12/26/19 14:26	12/27/19 11:26	1
Zinc	11.9		1.84	0.132	mg/Kg	≎	12/26/19 14:26	12/27/19 11:26	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	ual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00417	U	0.0198	0.00417	mg/Kg	₽	12/30/19 13:23	12/31/19 09:49	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	. D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.8	1.0	1.0 %			12/12/19 17:09	1
Percent Solids	79.2	1.0	1.0 %			12/12/19 17:09	1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell23- Square 87-S-2-3-191204

Lab Sample ID: 600-197216-7 Date Collected: 12/04/19 11:53 Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 80.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.138	U	0.463	0.138	mg/Kg	<u> </u>	12/26/19 14:26	12/27/19 11:28	1
Arsenic	2.57		1.16	0.252	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Barium	95.9		1.16	0.0347	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Beryllium	0.295		0.289	0.0168	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Calcium	30600		116	0.999	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Cadmium	0.173	J	0.289	0.0296	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Chromium	5.18		0.578	0.0585	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Copper	2.65		0.578	0.201	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Iron	4940		23.1	2.93	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Potassium	1100		116	12.7	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Magnesium	1270		116	2.22	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Manganese	46.2		1.73	0.0441	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Sodium	72.3	J b	116	1.02	mg/Kg	\$	12/26/19 14:26	12/27/19 11:28	1
Lead	5.24		0.578	0.121	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Antimony	0.268	U	2.89	0.268	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Selenium	0.300	U	2.31	0.300	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Thallium	0.320	U	1.73	0.320	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1
Zinc	50.7		1.73	0.125	mg/Kg	₽	12/26/19 14:26	12/27/19 11:28	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.122	b	0.0207	0.00436	mg/Kg	#	12/30/19 13:23	12/31/19 09:51	1

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.2		1.0	1.0	%			12/12/19 17:09	1
Percent Solids	80.8		1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell24- Square 168-S-2-3-191204 Lab Sample ID: 600-197216-8 Date Collected: 12/04/19 12:10 **Matrix: Solid** Date Received: 12/10/19 17:33

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.159	U	0.535	0.159	mg/Kg	*	12/26/19 14:26	12/27/19 11:30	1
Arsenic	2.10		1.34	0.291	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Barium	109		1.34	0.0401	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Beryllium	0.221	J	0.334	0.0194	mg/Kg	*	12/26/19 14:26	12/27/19 11:30	1
Calcium	56300		134	1.15	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Cadmium	0.154	J	0.334	0.0342	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Chromium	4.99		0.668	0.0676	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Copper	2.40		0.668	0.233	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Iron	4400		26.7	3.38	mg/Kg	₩	12/26/19 14:26	12/27/19 11:30	1
Potassium	1060		134	14.7	mg/Kg	*	12/26/19 14:26	12/27/19 11:30	1
Magnesium	4380		134	2.57	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Manganese	52.0		2.00	0.0509	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Sodium	45.7	J b	134	1.18	mg/Kg	*	12/26/19 14:26	12/27/19 11:30	1
Lead	3.30		0.668	0.140	mg/Kg	₩	12/26/19 14:26	12/27/19 11:30	1
Antimony	0.310	U	3.34	0.310	mg/Kg	₽	12/26/19 14:26	12/27/19 11:30	1
Selenium	0.346	U	2.67	0.346	mg/Kg		12/26/19 14:26	12/27/19 11:30	1

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Percent Solids: 72.6

Client: ARCADIS U.S., Inc.

Percent Solids

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell24- Square 168-S-2-3-191204 Lab Sample ID: 600-197216-8

Date Collected: 12/04/19 12:10

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 72.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Thallium	0.370	U	2.00	0.370	mg/Kg		12/26/19 14:26	12/27/19 11:30	1
	Zinc	11.1		2.00	0.144	mg/Kg	₩	12/26/19 14:26	12/27/19 11:30	1
	-									

Mothod: 7474A Moroum in Solid	ar Camicalid	Wasta (Ma	nual Cold Van	or Toobnie	~a\				
Method: 7471A - Mercury in Solid (Analyte		Qualifier	MQL (Adj)		ue) Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00477	U	0.0226	0.00477	mg/Kg		12/30/19 13:23	12/31/19 09:53	1
General Chemistry Analyte Percent Moisture	Result	Qualifier	MQL (Adj)		Unit %	D	Prepared	Analyzed 12/12/19 17:09	Dil Fac

Client Sample ID: Cell24- Square 24-S-2-3-191204

Date Collected: 12/04/19 12:23

Lab Sample ID: 600-197216-9

Matrix: Solid

1.0

72.6

1.0 %

Date Received: 12/10/19 17:33 Matrix: Solid Percent Solids: 78.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.144	U	0.484	0.144	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Arsenic	2.78		1.21	0.264	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Barium	175		1.21	0.0363	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Beryllium	0.254	J	0.303	0.0176	mg/Kg	\$	12/26/19 14:26	12/27/19 11:32	1
Calcium	114000		121	1.05	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Cadmium	0.115	J	0.303	0.0310	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Chromium	4.09		0.606	0.0613	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Copper	2.16		0.606	0.211	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Iron	3820		24.2	3.06	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Potassium	1170		121	13.3	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Magnesium	2330		121	2.33	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Manganese	36.0		1.82	0.0461	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Sodium	70.6	J b	121	1.07	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Lead	3.03		0.606	0.127	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Antimony	0.281	U	3.03	0.281	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Selenium	0.314	U	2.42	0.314	mg/Kg	₩	12/26/19 14:26	12/27/19 11:32	1
Thallium	0.335	U	1.82	0.335	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1
Zinc	9.92		1.82	0.131	mg/Kg	₽	12/26/19 14:26	12/27/19 11:32	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)											
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac				
Mercury	0.127 b	0.0203	0.00427 mg/Kg	*	12/30/19 13:23	12/31/19 09:59	1				

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Un	nit D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.4	1.0	1.0 %			12/12/19 17:09	1
Percent Solids	78.6	1.0	1.0 %			12/12/19 17:09	1

12/12/19 17:09

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell24- Square 44-S-2-3-191204

Date Collected: 12/04/19 12:37 Date Received: 12/10/19 17:33

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197216-10

Matrix: Solid Percent Solids: 71.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Arsenic	2.40		1.29	0.282	mg/Kg	₩	12/26/19 14:26	12/27/19 11:34	1
Barium	147		1.29	0.0388	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Beryllium	0.330		0.324	0.0188	mg/Kg	φ.	12/26/19 14:26	12/27/19 11:34	1
Calcium	65800		129	1.12	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Cadmium	0.129	J	0.324	0.0331	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Chromium	5.13		0.647	0.0655	mg/Kg	\$	12/26/19 14:26	12/27/19 11:34	1
Copper	2.76		0.647	0.225	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Iron	5020		25.9	3.27	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Potassium	1420		129	14.2	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Magnesium	2210		129	2.48	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Manganese	54.9		1.94	0.0493	mg/Kg	₩	12/26/19 14:26	12/27/19 11:34	1
Sodium	70.2	Jb	129	1.15	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Lead	3.81		0.647	0.136	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Antimony	0.300	U	3.24	0.300	mg/Kg	₩	12/26/19 14:26	12/27/19 11:34	1
Selenium	0.335	U	2.59	0.335	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Thallium	0.359	U	1.94	0.359	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1
Zinc	12.3		1.94	0.140	mg/Kg	₽	12/26/19 14:26	12/27/19 11:34	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	0.00953	J b	0.0234	0.00492	mg/Kg	₩	12/30/19 13:23	12/31/19 10:01	1	

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.5	1.0	1.0 %			12/12/19 17:09	1
Percent Solids	71.5	1.0	1.0 %			12/12/19 17:09	1

Client Sample ID: Cell24- Square 178-S-2-3-191204 Lab Sample ID: 600-197216-11 Date Collected: 12/04/19 12:50

Date Received: 12/10/19 17:33 Percent Solids: 95.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/26/19 14:26	12/27/19 11:36	1
Arsenic	1.87		0.999	0.218	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Barium	67.9		0.999	0.0300	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Beryllium	0.225	J	0.250	0.0145	mg/Kg	\$	12/26/19 14:26	12/27/19 11:36	1
Calcium	30000		99.9	0.863	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Cadmium	0.125	J	0.250	0.0256	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Chromium	4.49		0.500	0.0506	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Copper	2.90		0.500	0.174	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Iron	4090		20.0	2.53	mg/Kg	₩	12/26/19 14:26	12/27/19 11:36	1
Potassium	915		99.9	11.0	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Magnesium	1190		99.9	1.92	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Manganese	53.8		1.50	0.0381	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Sodium	28.3	J b	99.9	0.885	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Lead	3.86		0.500	0.105	mg/Kg	₩	12/26/19 14:26	12/27/19 11:36	1
Antimony	0.232	U	2.50	0.232	mg/Kg	₽	12/26/19 14:26	12/27/19 11:36	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/26/19 14:26	12/27/19 11:36	

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Matrix: Solid

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell24- Square 178-S-2-3-191204

Date Collected: 12/04/19 12:50 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197216-11

Matrix: Solid Percent Solids: 95.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)											
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Thallium	0.277	U	1.50	0.277	mg/Kg	₩	12/26/19 14:26	12/27/19 11:36	1		
Zinc	11.9		1.50	0.108	mg/Kg	₩	12/26/19 14:26	12/27/19 11:36	1		

	_ Method: 7471A - Mercury in Solid (or Semisolid	Waste (Man	ual Cold Vap	or Technic	que)				
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Mercury	0.00347	U	0.0165	0.00347	mg/Kg		12/30/19 13:23	12/31/19 10:03	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.7		1.0	1.0	%			12/12/19 17:09	1
Percent Solids	95.3		1.0	1.0	%			12/12/19 17:09	1

5

7

8

3

4 4

12

1.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

QC

RER RL

RPD

TEF TEQ **Quality Control**

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

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
F	Duplicate RPD exceeds the control limit
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.
Glossary	

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284102/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA**

Prep Batch: 284102 Analysis Batch: 284156 MB MB

	III D	1410							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Calcium	0.864	U	100	0.864	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Potassium	11.0	U	100	11.0	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Sodium	3.065	J	100	0.886	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Thallium	0.4150	J	1.50	0.277	mg/Kg		12/26/19 14:26	12/27/19 11:00	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/26/19 14:26	12/27/19 11:00	1

Lab Sample ID: LCSSRM 600-284102/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Total/NA Analysis Batch: 284156 **Prep Batch: 284102**

7 maryoro Batom 201100	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	
Silver		23.04		mg/Kg		89.3	67.1 - 106.	
							6	
Arsenic	69.4	65.95		mg/Kg		95.0	66.6 - 106.	
							6	
Barium	393	345.0		mg/Kg		87.8	64.6 - 106.	
_ · · · · · · · · · · · · · · · · ·								
Beryllium	293	273.7		mg/Kg		93.4	72.4 - 106.	
Calcium	19300	19120		mg/Kg		00.1	8 70.5 - 106.	
Calcium	19300	19120		mg/rkg		99.1	70.3 - 106. 7	
Cadmium	268	257.8		mg/Kg		96.2	71.3 - 106.	
				3 3			7	
Chromium	63.6	57.47		mg/Kg		90.4	71.9 - 106.	
							6	
Copper	175	165.1		mg/Kg		94.3	72.0 - 106.	
							9	
Iron	17700	14160		mg/Kg		80.0	50.1 - 106.	
Potassium	5740	5141		ma/l/a		00.6	8	
Potassium	5740	5141		mg/Kg		69.6	64.6 - 106.	
Magnesium	5390	4280		mg/Kg		79 4	6 64.2 - 106.	
Magricolani	5555	1200		mgmg		70.1	7	
Manganese	616	512.7		mg/Kg		83.2	64.1 ₋ 106.	
•							7	
Sodium	9070	8221		mg/Kg		90.6	70.5 - 106.	
							6	
Lead	164	161.3		mg/Kg		98.3	71.3 - 106.	
							7	

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12/31/2019

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Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284102/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 284102** Analysis Batch: 284156 LCSSRM LCSSRM

	Spike	LUSSKIN	LUSSKIN				76Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	120	32.77		mg/Kg		27.3	20.0 - 106. 7	
Selenium	155	143.5		mg/Kg		92.6	65.2 ₋ 106. 5	
Thallium	81.0	76.79		mg/Kg		94.8	63.2 - 106. 7	
Zinc	482	480.6		mg/Kg		99.7	69.7 - 106. 6	

Lab Sample ID: 600-197216-1 MS Client Sample ID: Cell22- Square 48-S-2-3-191204

Matrix: Solid

13.7

Analysis Batch: 284156	Sample	Sample	Spike	ме	MS				Prep Batch: 284102 %Rec.
Analysis	•	•	-			l lmi4	D	0/ Dag	
Analyte		Qualifier	Added		Qualifier	Unit		%Rec	Limits
Silver	0.129	U	12.9	12.82		mg/Kg	-	99	75 ₋ 125
Arsenic	2.04		51.6	49.31		mg/Kg	₩	92	75 ₋ 125
Barium	48.9		51.6	102.8		mg/Kg	₩	104	75 - 125
Beryllium	0.320		51.6	48.56		mg/Kg	₽	93	75 - 125
Calcium	11400		516	7344	4	mg/Kg	₩	-791	75 - 125
Cadmium	0.146	J	51.6	48.02		mg/Kg	₩	93	75 ₋ 125
Chromium	5.87		51.6	55.93		mg/Kg	₽	97	75 ₋ 125
Copper	3.82		51.6	53.60		mg/Kg	₩	96	75 ₋ 125
Iron	5300		516	8263	4	mg/Kg	₩	573	75 _ 125
Potassium	1170		516	2598	N1	mg/Kg	₽	277	75 - 125
Magnesium	1010		516	2112	N1	mg/Kg	₩	213	75 ₋ 125
Manganese	80.8		51.6	145.8	N1	mg/Kg	₩	126	75 ₋ 125
Sodium	19.5	Jb	516	525.2		mg/Kg	₽	98	75 ₋ 125
Lead	4.92		51.6	53.04		mg/Kg	₽	93	75 ₋ 125
Antimony	0.251	U	77.5	40.69	N1	mg/Kg	₽	53	75 - 125
Selenium	0.281	U	51.6	45.84		mg/Kg	₽	89	75 ₋ 125
Thallium	1.30	Jb	51.6	47.69		mg/Kg	₩	90	75 ₋ 125

Lab Sample ID: 600-197216-11 MS Client Sample ID: Cell24- Square 178-S-2-3-191204 Prep Type: Total/NA

47.30 N1

mg/Kg

130

75 - 125

25.8

Matrix: Solid

Zinc

Analysis Batch: 284156	Sample	Sample	Spike	MS	MS				Prep Batch: 284102 %Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Silver	0.119	U	12.1	13.12	-	mg/Kg	₽	108	75 - 125		
Arsenic	1.87		48.6	51.82		mg/Kg	₽	103	75 - 125		
Barium	67.9		48.6	124.6		mg/Kg	₽	117	75 ₋ 125		
Beryllium	0.225	J	48.6	49.10		mg/Kg	₽	101	75 - 125		
Calcium	30000		486	44110	4	mg/Kg	₽	2915	75 ₋ 125		
Cadmium	0.125	J	48.6	49.74		mg/Kg	₽	102	75 ₋ 125		
Chromium	4.49		48.6	51.78		mg/Kg	₽	97	75 ₋ 125		
Copper	2.90		48.6	53.18		mg/Kg	₩	104	75 ₋ 125		
Iron	4090		486	5707	4	mg/Kg	₽	332	75 - 125		
Potassium	915		486	2099	N1	mg/Kg	Φ.	244	75 ₋ 125		
Magnesium	1190		486	2063	N1	mg/Kg	₽	181	75 ₋ 125		
Manganese	53.8		48.6	101.9		mg/Kg	₽	99	75 - 125		

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Prep Type: Total/NA

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197216-11 MS

Client Sample ID: Cell24- Square 178-S-2-3-191204

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 284156

Prep Batch: 284102

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Sodium	28.3	J b	486	562.4		mg/Kg	<u></u>	110	75 - 125
Lead	3.86		48.6	52.02		mg/Kg	₽	99	75 - 125
Antimony	0.232	U	72.9	48.91	N1	mg/Kg	₩	67	75 _ 125
Selenium	0.259	U	48.6	48.47		mg/Kg	\$	100	75 _ 125
Thallium	0.277	U	48.6	46.69		mg/Kg	₩	96	75 _ 125
Zinc	11.9		24.3	39.25		mg/Kg	₽	113	75 - 125

Lab Sample ID: 600-197216-1 DU Client Sample ID: Cell22- Square 48-S-2-3-191204

Matrix: Solid

Prep Type: Total/NA
Analysis Ratch: 284156

Analysis Batch: 284156							Prep Batch: 2	84102
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.129	U	0.128	U	mg/Kg	*	NC NC	20
Arsenic	2.04		2.124		mg/Kg	₽	4	20
Barium	48.9		50.35		mg/Kg	₽	3	20
Beryllium	0.320		0.3487		mg/Kg	\$	9	20
Calcium	11400		6625	F	mg/Kg	₽	53	20
Cadmium	0.146	J	0.1556	J	mg/Kg	₽	6	20
Chromium	5.87		6.336		mg/Kg	\$	8	20
Copper	3.82		4.335		mg/Kg	₽	13	20
Iron	5300		5842		mg/Kg	₽	10	20
Potassium	1170		1254		mg/Kg	₽	7	20
Magnesium	1010		1131		mg/Kg	₽	11	20
Manganese	80.8		93.78		mg/Kg	₽	15	20
Sodium	19.5	Jb	16.26	J	mg/Kg	₽	18	20
Lead	4.92		4.936		mg/Kg	₽	0.2	20
Antimony	0.251	U	0.249	U	mg/Kg	₩	NC	20
Selenium	0.281	U	0.278	U	mg/Kg		NC	20
Thallium	1.30	Jb	0.4453	JF	mg/Kg	₽	98	20
Zinc	13.7		15.08		mg/Kg	₩	10	20

Lab Sample ID: 600-197216-11 DU Client Sample ID: Cell24- Square 178-S-2-3-191204

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284156 Prep Batch: 284102

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.119	U	0.119	U	mg/Kg	*	NC	20
Arsenic	1.87		2.008		mg/Kg	‡	7	20
Barium	67.9		62.55		mg/Kg	‡	8	20
Beryllium	0.225	J	0.2248	J	mg/Kg	*	0	20
Calcium	30000		31580		mg/Kg	‡	5	20
Cadmium	0.125	J	0.1249	J	mg/Kg	‡	0	20
Chromium	4.49		4.686		mg/Kg	*	4	20
Copper	2.90		2.888		mg/Kg	‡	0.3	20
Iron	4090		4246		mg/Kg	‡	4	20
Potassium	915		942.2		mg/Kg	*	3	20
Magnesium	1190		1198		mg/Kg	‡	1	20
Manganese	53.8		55.00		mg/Kg	‡	2	20
Sodium	28.3	Jb	29.57	J	mg/Kg	₩	4	20

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12/31/2019

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197216-11 DU Client Sample ID: Cell24- Square 178-S-2-3-191204 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 284156 **Prep Batch: 284102**

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Lead	3.86		3.952		mg/Kg	\(\frac{\pi}{\pi}\)		20
Antimony	0.232	U	0.232	U	mg/Kg	≎	NC	20
Selenium	0.259	U	0.259	U	mg/Kg	₽	NC	20
Thallium	0.277	U	0.277	U	mg/Kg	₽	NC	20
Zinc	11.9		10.39		mg/Kg	₩	14	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284342/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 **Prep Batch: 284342** мв мв

SDL Unit Analyte Result Qualifier MQL (Adj) D Prepared Analyzed Dil Fac Mercury 0.003738 J 0.0157 0.00330 mg/Kg 12/30/19 13:23 12/31/19 09:27

Lab Sample ID: LCS 600-284342/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444 **Prep Batch: 284342** LCS LCS %Rec. Spike

Result Qualifier Added Limits Mercury 0.224 0.2253 mg/Kg 101 70 - 130

Lab Sample ID: 600-197216-1 MS Client Sample ID: Cell22- Square 48-S-2-3-191204

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 **Prep Batch: 284342**

Spike MS MS Sample Sample %Rec. Analyte Result Qualifier Added Result Qualifier D Limits Unit %Rec 0.00344 U 0.247 0.2772 112 75 - 125 Mercury mg/Kg

Lab Sample ID: 600-197216-1 DU Client Sample ID: Cell22- Square 48-S-2-3-191204

Matrix: Solid

Analysis Batch: 284444 Prep Batch: 284342 Sample Sample DU DU **RPD**

Analyte Result Qualifier Result Qualifier Unit Limit Mercury 0.00344 U 0.00365 U mg/Kg 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197216-6 DU Client Sample ID: Cell23- Square 111-S-2-3-191204 **Matrix: Solid**

Analysis Batch: 282911

Analysis Batch. 2023 i i									
	Sample	Sample	DU	DU				RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
Percent Moisture	20.8		21.6		%		 4	20	
Percent Solids	79.2		78 4		%		1	20	

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Prep Type: Total/NA

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

_ Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 284102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197216-1	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-2	Cell22- Square 157-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-3	Cell22- Square 190-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-4	Cell23- Square 208-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-5	Cell23- Square 132-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-6	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-7	Cell23- Square 87-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-8	Cell24- Square 168-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-9	Cell24- Square 24-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-10	Cell24- Square 44-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-11	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	3050B	
MB 600-284102/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-284102/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197216-1 MS	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-11 MS	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-1 DU	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	3050B	
600-197216-11 DU	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	3050B	

Analysis Batch: 284156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197216-1	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-2	Cell22- Square 157-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-3	Cell22- Square 190-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-4	Cell23- Square 208-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-5	Cell23- Square 132-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-6	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-7	Cell23- Square 87-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-8	Cell24- Square 168-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-9	Cell24- Square 24-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-10	Cell24- Square 44-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-11	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	6010B	284102
MB 600-284102/1-A	Method Blank	Total/NA	Solid	6010B	284102
LCSSRM 600-284102/2-A	Lab Control Sample	Total/NA	Solid	6010B	284102
600-197216-1 MS	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-11 MS	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-1 DU	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	6010B	284102
600-197216-11 DU	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	6010B	284102

Prep Batch: 284342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197216-1 Cell22- Square 48-S-2-3-191204		Total/NA	Solid	7471A	
600-197216-2	Cell22- Square 157-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-3	Cell22- Square 190-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-4	Cell23- Square 208-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-5	Cell23- Square 132-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-6	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-7	Cell23- Square 87-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-8	Cell24- Square 168-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-9	Cell24- Square 24-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-10	Cell24- Square 44-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-11	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	7471A	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Metals (Continued)

Prep Batch: 284342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	
600-197216-1 MS	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	7471A	
600-197216-1 DU	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197216-1	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-2	Cell22- Square 157-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-3	Cell22- Square 190-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-4	Cell23- Square 208-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-5	Cell23- Square 132-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-6	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-7	Cell23- Square 87-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-8	Cell24- Square 168-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-9	Cell24- Square 24-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-10	Cell24- Square 44-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-11	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	7471A	284342
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	284342
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	284342
600-197216-1 MS	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	7471A	284342
600-197216-1 DU	Cell22- Square 48-S-2-3-191204	Total/NA	Solid	7471A	284342

General Chemistry

Analysis Batch: 282911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197216-1 Cell22- Square 48-S-2-3-191204		Total/NA	Solid	2540B	
00-197216-2 Cell22- Square 157-S-2-3-191204		Total/NA	Solid	2540B	
600-197216-3	Cell22- Square 190-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-4	Cell23- Square 208-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-5	Cell23- Square 132-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-6	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-7	Cell23- Square 87-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-8	Cell24- Square 168-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-9	Cell24- Square 24-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-10	Cell24- Square 44-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-11	Cell24- Square 178-S-2-3-191204	Total/NA	Solid	2540B	
600-197216-6 DU	Cell23- Square 111-S-2-3-191204	Total/NA	Solid	2540B	

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Date Received: 12/10/19 17:33

Client Sample ID: Cell22- Square 48-S-2-3-191204

Lab Sample ID: 600-197216-1 Date Collected: 12/04/19 10:21

Matrix: Solid

Batch Dilution Batch Batch Prepared Method Prep Type Туре Run Factor Number or Analyzed Analyst Lab TAL HOU Total/NA Analysis 2540B 282911 12/12/19 17:09 ANP

Client Sample ID: Cell22- Square 48-S-2-3-191204

Lab Sample ID: 600-197216-1 Date Collected: 12/04/19 10:21

Matrix: Solid Percent Solids: 90.5

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:04	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:35	KP1	TAL HOU

Client Sample ID: Cell22- Square 157-S-2-3-191204

Lab Sample ID: 600-197216-2 Date Collected: 12/04/19 10:44 **Matrix: Solid**

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell22- Square 157-S-2-3-191204

Lab Sample ID: 600-197216-2 Date Collected: 12/04/19 10:44 Matrix: Solid

Date Received: 12/10/19 17:33 Percent Solids: 90.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:10	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:41	KP1	TAL HOU

Client Sample ID: Cell22- Square 190-S-2-3-191204 Lab Sample ID: 600-197216-3

Date Collected: 12/04/19 10:57 Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell22- Square 190-S-2-3-191204 Lab Sample ID: 600-197216-3

Date Collected: 12/04/19 10:57 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 72.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:12	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:43	KP1	TAL HOU

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell23- Square 208-S-2-3-191204

Date Collected: 12/04/19 11:07 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197216-4

Lab Sample ID: 600-197216-5

Lab Sample ID: 600-197216-5

Lab Sample ID: 600-197216-6

Lab Sample ID: 600-197216-6

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell23- Square 208-S-2-3-191204

Lab Sample ID: 600-197216-4 Date Collected: 12/04/19 11:07 **Matrix: Solid**

Date Received: 12/10/19 17:33 Percent Solids: 76.7

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:14	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:45	KP1	TAL HOU

Client Sample ID: Cell23- Square 132-S-2-3-191204

Date Collected: 12/04/19 11:22

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell23- Square 132-S-2-3-191204

Date Collected: 12/04/19 11:22 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 95.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:16	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:47	KP1	TAL HOU

Client Sample ID: Cell23- Square 111-S-2-3-191204

Date Collected: 12/04/19 11:34 **Matrix: Solid**

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell23- Square 111-S-2-3-191204

Date Collected: 12/04/19 11:34

Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 79.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:26	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:49	KP1	TAL HOU

Client Sample ID: Cell23- Square 87-S-2-3-191204

Date Collected: 12/04/19 11:53 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197216-7

Matrix: Solid

		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
l	Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell23- Square 87-S-2-3-191204

Date Collected: 12/04/19 11:53 Date Received: 12/10/19 17:33

Lab Sample ID: 600-197216-7

Matrix: Solid Percent Solids: 80.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:28	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:51	KP1	TAL HOU

Client Sample ID: Cell24- Square 168-S-2-3-191204

Date Collected: 12/04/19 12:10 Date Received: 12/10/19 17:33

Lab Sample ID: 600-197216-8

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell24- Square 168-S-2-3-191204

Date Collected: 12/04/19 12:10 Date Received: 12/10/19 17:33

Lab Sample ID: 600-197216-8

Matrix: Solid Percent Solids: 72.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:30	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:53	KP1	TAL HOU

Client Sample ID: Cell24- Square 24-S-2-3-191204

Date Collected: 12/04/19 12:23 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197216-9

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B	_	1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell24- Square 24-S-2-3-191204

Date Collected: 12/04/19 12:23 Date Received: 12/10/19 17:33

Lab Sample ID: 600-197216-9

Matrix: Solid

Percent Solids: 78.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:32	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:59	KP1	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Date Received: 12/10/19 17:33

Date Collected: 12/04/19 12:37

Client Sample ID: Cell24- Square 44-S-2-3-191204

Lab Sample ID: 600-197216-10 Date Collected: 12/04/19 12:37 Matrix: Solid

Dilution Batch Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab TAL HOU Total/NA Analysis 2540B 282911 12/12/19 17:09 ANP

Client Sample ID: Cell24- Square 44-S-2-3-191204

Lab Sample ID: 600-197216-10

Matrix: Solid Percent Solids: 71.5

Date Received: 12/10/19 17:33 Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 3050B 284102 12/26/19 14:26 CLD TAL HOU

Total/NA Analysis 6010B 284156 12/27/19 11:34 KP1 TAL HOU Total/NA Prep 7471A 284342 12/30/19 13:23 KP1 TAL HOU TAL HOU Total/NA Analysis 7471A 284444 12/31/19 10:01 KP1

Client Sample ID: Cell24- Square 178-S-2-3-191204

Lab Sample ID: 600-197216-11

Matrix: Solid

Date Collected: 12/04/19 12:50 Date Received: 12/10/19 17:33

Batch **Batch** Dilution Batch Prepared Prep Type Method Factor Number or Analyzed Analyst Туре Run 2540B TAL HOU Total/NA Analysis 282911 12/12/19 17:09 ANP

Client Sample ID: Cell24- Square 178-S-2-3-191204

Lab Sample ID: 600-197216-11

Date Collected: 12/04/19 12:50

Matrix: Solid

Date Received: 12/10/19 17:33 Percent Solids: 95.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284102	12/26/19 14:26	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 11:36	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:03	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704223-19-25	10-31-20
The following analytes the agency does not of	' '	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
2540B		Solid	Percent Moisture	

Eurofins TestAmerica, Houston 6310 Rothway Street

Houston, TX 77040 Phone (713) 690-444 Fax (713) 690-5646

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Cell 23 - Square 48 - S - 3 - 191204 1921 G Solid N N N N N N N N N	Cell22-Square 48-5-2-191204 191204 1021 G Solid N Cell22-Square 48-5-2-191204 191204 1021 G Solid N Cell22-Square 190-5-2-3-191204 191204 1057 G Solid N Cell23-Square 190-5-3-3-191204 191204 1107 G Solid N Cell23-Square 190-5-3-3-191204 191204 1107 G Solid N Cell23-Square 188-5-3-3-191204 191204 1205 G Solid N Cell23-Square 188-5-3-3-191204 191204 1200 G Solid N Cell23-Square 188-5-3-3-191204 191204 1205 G Solid N Cell24-Square 118-5-2-3-191204 191204 1205 G Solid N Cell24-Square 118-5-3-5-191204 191204 1205 G Solid N Cell24-Square 118-5-3-5-191204 191204 1205 G Solid N Cell24-Square 118-5-3-5-191204 191204 1205 G Solid N Cell255-Square 120-5-3-5-191204 191204 1205 G Solid N Cell255-Square 120-5-3-5-191204 191204 1205 G Solid N Cell255-Square 1205 G Solid N Cell256-Square 1205 G Solid N Cell2					ertorm MS/M		00- Chloride/ F	DH -129		tedmuN lafo	
Cell22-Square U8-5-2-191204 191204 1021 G solid N Cell22-Square U8-5-2-3-191204 191204 1044 G solid N Cell23-Square 190-5-2-3-191204 191204 1107 G solid N Cell23-Square 132-5-2-3-191204 191204 1107 G solid N Cell23-Square 111-5-2-3-191204 191204 1107 G solid N Cell23-Square 116-5-3-3-191204 191204 1109 G solid N Cell23-Square 168-5-3-3-191204 191204 1237 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell24-Square HB-5-2-3-191204 1237 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell24-Square HB-consisted by Skin Initiant Doison B Unknown Radiological Cell24-Square HB-5-2-3-191204 1237 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell254-Square HB-5-2-3-191204 19250 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell254-Square HB-5-2-3-191204 19250 G solid N Cell255-Square HB-5-2-3-191204 19250 G solid N Cell255-Square HB-5-2-3-191204 19250 G solid N Cell24-Square HB-5-2-3-191204 19250 G solid N Cell255-Square HB-5-2-3-191204 19204 12250 G solid N Cell255-Square HB-5-2-3-191204 19204 12250 G	Cell 22-Square 48-5-2-191204 191204 1021 G Solid NI Cell 22-Square 157-5-2-3-191204 191204 1044 G Solid NI Cell 23-Square 190-5-2-3-191204 191204 1057 G Solid NI Cell 23-Square 132-5-2-3-191204 191204 1122 G Solid NI Cell 23-Square 111-5-2-3-191204 191204 1157 G Solid NI Cell 23-Square 168-5-2-3-191204 191204 125 G Solid NI Cell 23-Square 168-5-2-3-191204 191204 1257 G Solid NI Cell 24-Square 168-5-2-3-191204 191204 1257 G Solid NI Cell 24-Square 168-5-2-3-191204 191204 1250 G Solid NI Cell 24-Square 168-5-2-3-191204 191204 1250 G Solid NI Cell 24-Square 178-5-2-3-191204 191204 1250 G Solid NI Cell 24-Square 178-5-3-3-191204 191204 1		1		E	X	-	Z	z		ı×	Special Instructions/rote.
Cell 23 - Square 157 - S-3-191204 191204 1049 G Solid N Cell 23 - Square 1900 - S-3-3-191204 191204 1057 G Solid N Cell 23 - Square 208 - S-3-3-191204 191204 1107 G Solid N G Cell 23 - Square 132 - S-3-191204 191204 1107 G Solid N G Cell 23 - Square 111 - S-2-3-191204 191204 1107 G Solid N G Cell 23 - Square 111 - S-2-3-191204 191204 1210 G Solid N G Cell 23 - Square 168 - S-3-191204 191204 1210 G Solid N G Cell 24 - Square 168 - S-3-191204 191204 1210 G Solid N G Cell 24 - Square 170 G Solid N Gossible Hazard Identification G Skin Initiant G Poison B G Unknown G Radiological Figure 1 M G Cell 24 - Square 1 M G Cell 24 - Square 1 M G Cell 25 - Square 1 M G Cell 26 - Square 1 M G Cell 26 - Square 1 M G Cell 27 - Squar	Cell 23 - Square 157 - S-2-3-191204 191204 1044 G Solid N Cell 23 - Square 190 - S-2-3-191204 191204 1057 G Solid N Cell 23 - Square 190 - S-2-3-191204 191204 1107 G Solid N Cell 23 - Square 130 - S-2-3-191204 191204 1154 G Solid N Cell 23 - Square 111 - S-2-3-191204 191204 1154 G Solid N Cell 25 - Square 168 - S-2-3-191204 191204 12150 G Solid N Cell 25 - Square 168 - S-2-3-191204 191204 12150 G Solid N Cell 24 - Square 140 - S-2-3-191204 191204 1237 G Solid N Cell 24 - Square 118 - Squa			5		_)	5		R	
Cell 23 - Square 190 - 5 - 2 - 191204 191204 1057 G Solid No. Cell 23 - Square 132 - 5 - 3 - 191204 191204 1107 G Solid No. Cell 23 - Square 132 - 5 - 3 - 191204 191204 1157 G Solid No. Cell 23 - Square 168 - 5 - 3 - 191204 191204 1215 G Solid No. Cell 24 - Square 168 - 5 - 3 - 191204 191204 1215 G Solid No. Cell 24 - Square 168 - 5 - 3 - 191204 191204 1225 G Solid No. Cell 24 - Square 168 - 5 - 3 - 191204 191204 1255 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 24 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid No. Cell 34 - Square 198 - 5 - 3 - 191204 191204 12 : 54 G Solid N	Cell 23-Square 190-5-2-3-191204 191204 1057 G solid N Cell 23-Square 208-5-3-191204 191204 1107 G solid N Cell 23-Square 132-5-2-191204 191204 1153 G solid N Cell 23-Square 111-5-2-3-191204 191204 1153 G solid N Cell 23-Square 168-5-2-191204 191204 1237 G solid N Cell 24-Square 168-5-2-191204 191204 1237 G solid N Cell 24-Square 146-5-2-191204 191204 1237 G solid N Cell 24-Square 148-5-2-3-191204 191204 1237 G solid N Cell 24-Square 148-5-2-3-191204 191204 12350 G solid N Cell 24-Square 118-5-2-3-191204 191204 12350 G solid N	- Squar 157-5-8-3-191204		b	1,7	3)	>		0	600
Cell 23-Square 208-5-3-3-191204 191204 1107 G Solid N Cell 23-Square 111-5-2-3-191204 191204 1133 G Solid N Cell 23-Square 111-5-2-3-191204 191204 1135 G Solid N Cell 23-Square 168-5-2-3-191204 191204 1210 G Solid N Cell 24-Square 168-5-2-3-191204 191204 1237 G Solid N Cell 24-Square 148-5-2-3-191204 191204 1237 G Solid N Cell 24-Square 148-5-2-3-191204 191204 1237 G Solid N Cell 24-Square 148-5-2-3-191204 191204 1237 G Solid N Cell 24-Square 118 N, Other (specify) Cell 24-Square	Cell 23-Square 208-5-3-3-191204 191204 1107 G solid N Cell 23-Square 132-5-3-191204 191204 1123 G solid N Cell 23-Square 111-5-2-3-191204 191204 1153 G solid N Cell 23-Square 168-5-2-3-191204 191204 1210 G solid N Cell 24-Square 168-5-2-3-191204 191204 1237 G solid N Cell 24-Square 198-5-2-3-191209 191209 1237 G solid N Cell 24-Square 118-5-2-3-191209 191209 1237 G solid N Cell 24-Square 118-5-2-3-191209 191209 1237 G solid N Dossible Hazard Identification Skin Irritant Doison B Unknown Dadrisogical Solid N Deliverable Requested: 1, 11, 111, 10, Other (specify)	Square 190-5-2-3-191204	0	5		$\overline{}$		>	7		n	-197
Cell 23-Square 132-52-3-191204 191204 1122 G Solid N. Cell 23-Square 111-5-2-3-191204 191204 1153 G Solid N. Cell 23-Square 1168-5-2-3-191204 191204 1215 G Solid N. Cell 24-Square 168-5-2-3-191204 191204 1215 G Solid N. Cell 24-Square 168-5-2-3-191204 191204 1237 G Solid N. Cell 24-Square 148-S-2-3-191204 191204 1237 G Solid N. Cell 24-Square 148-S-2-3-191204 191204 1237 G Solid N. Cell 24-Square 11, III, IV, Other (specify) Empty Kit Relinquished by Cell 24-Square 11, III, IV, Other (specify) Empty Kit Relinquished by Company Compa	Cell 23-Square 132-5-2-191204 191204 1122 G Solid N. Cell 23-Square 111-5-2-3-191204 191204 1124 G Solid N. Cell 23-Square 168-5-2-191204 191204 1210 G Solid N. Cell 24-Square 168-5-2-191204 191204 1210 G Solid N. Cell 24-Square 148-5-2-191204 191204 1237 G Solid N. Cell 24-Square 178-5-2-3-191204 191204 12:50 G Solid N. Cell 24-Square 118-118-118-118-118-118-118-118-118-118			5				7	1		B	216
Cell 33-Square 111-5-3-3-191204 191204 1153 G Solid N Cell 33-Square 168-5-3-191204 191204 1215 G Solid N Cell 33-Square 168-5-3-191204 191204 1215 G Solid N Cell 34-Square 168-5-3-191204 191204 12150 G Solid N Cell 34-Square 144-5-3-3-191204 191204 1237 G Solid N Cell 34-Square 146-5-3-3-191204 191204 12:50 G Solid N Cell 34-Square 118 Skin initiant Poison B Unknown Radiological Skin initiant Poison B Unknown Radiological Skin initiant Poison B Unknown Radiological Skin initiant Poison B Unknown Call M Cell 34-Square 118 III. IV, Other (specify) Selinquished by Cell 34-5-3-191204 191204 12:50 G Solid N Company Selinquished by Cell 34-5-3-191204 191204 12:50 G Solid N Company Celinquished by Company Company Company Company Company	Cell 23-Square 111-5-2-3-191204 191204 1153 G solid 21 Cell 23-Square 181-5-2-3-191204 191204 1153 G solid N Cell 23-Square 168-5-2-3-191204 191204 1210 G solid N Cell 24-Square 168-5-2-3-191204 191204 1237 G solid N Cell 24-Square 178-5-2-3-191209 191209 1237 G solid N Cell 24-Square 178-118-118-118-118-118-118-118-118-118-		=	b		2		>	7		0	Chair
Cell 23 - Sydave & 1-5-3-191204 191204 1855 G Solid N Cell 23 - Squave 168-5-3-5-191204 191204 1210 G Solid N Cell 24 - Squave 140-5-3-191204 191204 1237 G Solid N Cell 24 - Squave 140-5-3-191204 191204 1237 G Solid N Cell 24 - Squave 1750 G Solid N Cell 24 - Squave 1750 Solid N Cell 24 - Squave 1750 Solid N Cell 25 - Squave Skin Irritant Doison Date: Date: Time Skin Irritant Date: Solid N Company Solid N Company Solid Solid N Company Solid Solid Solid N Company Solid	Cell 23-Square 181-5-2-191204 191204 1153 G solid N Cell 22-Square 168-5-3-191204 191204 1210 G solid N Cell 34-Square 168-5-3-191204 191204 1227 G solid N Cell 34-Square 14-5-2-3-191204 191204 1237 G solid N Cell 34-Square 178-5-2-3-191204 191204 12:50 G solid N Cell 34-Square 178-118 III. N, Other (specify) Empty Kit Relinquished by:		=	9				>	7		d	n of C
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4-Square 118-5-2-3-191204 191204 12:50 G Solid V zard Identification Sain Interval Inter	178-5-2-3-191204 191204 12:50 G Solid V le Skin Initant Poison B Unknown Radiological V, Other (specify) Date:	1	4	3		_		>	7		14	
zard Identification zard Date Till, III, IV, Other (specify) Sequested: I, III, IV, Other (specify) Interview Date Time CALLIAM Repulsed Date Time Company Company Company Company	le Skin Initant Poison B Unknown Radiological. V, Other (specify) Date:	178-5-2-3-191204		5				>	7		d	
Special Instructions/QC Requirements: Date: Time. Time. Date: Time. Memod of Shipment Company Received by: Date: Company Received by: Date:	III, IV, Other (special Instructions/QC Requirem Date:	Je Skin Initant	Unknown	Radiological		Sampl	e Dispos	al (A fee	may be ass	essed if samples an	e retained	d longer We For
Allum Received by: Time. Company Received by: DateTime.	Date: Time:					Specia	Instruct	ONS/OC F	tequirements			
Callum Repusor Date/Time Company Received by Date/Time Date/Time Company Received by Date/Time Date/Time			Dai			ime				Method of Shipment	S. J. S.	
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	Date/Time Gonpany Receiv		еДіпе	U	ompany	Rec				Date/Time.		Company
Custody Seals Intact Custody Seal No.	Custody Seal No.					Coc	ler Temper	ature(s) °C.	and Other Rema	rks		

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🔅 eurofins

Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

		Da	te/Time Received:			
JOB NUMBER:	711	^		Area Te	a 2:	<
OOD NOMBEN.	1	02		-	1 -	_
UNPACKED BY:	9	CA	RRIER/DRIVER:	re	de	<u>K</u>
Custody Seal Present: [O Nu	mber of Coolers Recei		1	
Cooler ID	Temp	Trip Blank	Observed Temp (°C)	Therm	Therm	Corrected Temp
7075	Blank Y / N	Y / N	5.7	676	+0.1	(°C)
1210	YIG	Y/N	5.1	010	101	2.0
	YIN	YIN				
	YIN	Y/N				
	Y / N	Y / N				91
	Y / N	Y / N				1
Base samples are>pH 12 TX1005 samples frozen upH paper Lot #	2:	O Acid	d preserved are <ph &="" 2:="" f<="" in="" put="" te="" th="" time=""><th>REEZER:</th><th></th><th>O PANA</th></ph>	REEZER:		O PANA
Did samples meet the laborat	ory's standard co	nditions of sample	e acceptability upon recei	ipt?		YES NO
COMMENTS:						
						\$
						- /

HS-SA-WI-013

Rev. 4A; 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197216-1

Login Number: 197216 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.8
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.



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197217-1

Client Project/Site: Chevron - Jal Land Farm Soils

Revision: 2

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 4/17/2020 11:57:59 AM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197217-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-197217-1	Cell13-Square 45-S-2-3-191203	Solid	12/03/19 13:40	12/10/19 17:33
600-197217-2	Cell13-Square 190-S-2-3-191203	Solid	12/03/19 13:53	12/10/19 17:33
600-197217-3	Cell9-Square 134-S-2-3-191203	Solid	12/03/19 14:17	12/10/19 17:33
600-197217-4	Cell9-Square 118-S-2-3-191203	Solid	12/03/19 14:31	12/10/19 17:33
600-197217-5	Cell9-Square 185-S-2-3-191203	Solid	12/03/19 14:42	12/10/19 17:33
600-197217-6	Cell9-Square 189-S-2-3-191203	Solid	12/03/19 15:02	12/10/19 17:33
600-197217-7	Cell1-Square 35-S-2-3-191204	Solid	12/04/19 09:00	12/10/19 17:33
600-197217-8	Cell1-Square 10-S-2-3-191204	Solid	12/04/19 09:20	12/10/19 17:33
600-197217-9	Cell1-Square 88-S-2-3-191204	Solid	12/04/19 09:38	12/10/19 17:33
600-197217-10	Cell1-Square 155-S-2-3-191204	Solid	12/04/19 09:58	12/10/19 17:33
600-197217-11	Cell22-Square 39-S-2-3-191204	Solid	12/04/19 10:07	12/10/19 17:33

Job ID: 600-197217-1

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Client Sample ID: Cell13-Square 45-S-2-3-191203 Lab Sample ID: 600-197217-1

Date Collected: 12/03/19 13:40 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 67.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.170	U	0.570	0.170	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:04	1
Arsenic	1.96		1.42	0.311	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Barium	48.2		1.42	0.0427	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Beryllium	0.321	J	0.356	0.0207	mg/Kg	₩	12/26/19 14:36	12/27/19 14:04	1
Calcium	11900		142	1.23	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Cadmium	0.142	J	0.356	0.0365	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Chromium	5.46		0.712	0.0721	mg/Kg	₩	12/26/19 14:36	12/27/19 14:04	1
Copper	3.92		0.712	0.248	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Iron	5140		28.5	3.60	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Potassium	1120		142	15.7	mg/Kg	₽	12/26/19 14:36	12/27/19 14:04	1
Magnesium	1130		142	2.74	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Manganese	81.6		2.14	0.0543	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Sodium	346		142	1.26	mg/Kg	₽	12/26/19 14:36	12/27/19 14:04	1
Lead	4.27		0.712	0.150	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Antimony	0.330	U	3.56	0.330	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Selenium	0.369	U	2.85	0.369	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Thallium	0.997	J b	2.14	0.395	mg/Kg	☼	12/26/19 14:36	12/27/19 14:04	1
Zinc	13.3		2.14	0.154	mg/Kg	₩	12/26/19 14:36	12/27/19 14:04	1

Method: 7471A - Mercury in Sol	id or Semisolid W	laste (Manual	Cold Vapor Tech	nique))		
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00505 U	0.0240	0.00505 mg/Kg	₩	12/30/19 10:30	12/31/19 08:27	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	32.5	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	67.5	1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell13-Square 190-S-2-3-191203 Lab Sample ID: 600-197217-2 Date Collected: 12/03/19 13:53 **Matrix: Solid** Date Received: 12/10/19 17:33 **Percent Solids: 80.5**

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.144	U	0.483	0.144	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:10	1
Arsenic	2.14		1.21	0.263	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Barium	68.5		1.21	0.0362	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Beryllium	0.278	J	0.302	0.0175	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Calcium	40000		121	1.04	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Cadmium	0.121	J	0.302	0.0309	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Chromium	4.47		0.603	0.0611	mg/Kg	₽	12/26/19 14:36	12/27/19 14:10	1
Copper	2.98		0.603	0.210	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Iron	4300		24.1	3.05	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Potassium	994		121	13.3	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Magnesium	1340		121	2.32	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Manganese	56.7		1.81	0.0460	mg/Kg	☆	12/26/19 14:36	12/27/19 14:10	1
Sodium	79.5	J	121	1.07	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Lead	3.52		0.603	0.127	mg/Kg	₩	12/26/19 14:36	12/27/19 14:10	1
Antimony	0.338	J	3.02	0.280	mg/Kg	☆	12/26/19 14:36	12/27/19 14:10	1
Selenium	0.312	U	2.41	0.312	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:10	1

Eurofins TestAmerica, Houston

4/17/2020 (Rev. 2)

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Date Collected: 12/03/19 13:53

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 80.5

Method: 6010B - Inductively	Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac				
Thallium	0.929 Jb	1.81	0.334 mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:10	1				
Zinc	11.9	1.81	0.130 mg/Kg	☆	12/26/19 14:36	12/27/19 14:10	1				

Method: 7471A - Mercury in So	olid or Sem	isolid Was	ste (Manual						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00398	U	0.0189	0.00398	mg/Kg	<u>₩</u>	12/30/19 10:30	12/31/19 08:33	1
General Chemistry									

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.5	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	80.5	1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell9-Square 134-S-2-3-191203

Date Collected: 12/03/19 14:17

Date Received: 12/10/19 17:33

Lab Sample ID: 600-197217-3

Matrix: Solid

Percent Solids: 83.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.141	U	0.476	0.141	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:12	1
Arsenic	1.59		1.19	0.259	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Barium	45.1		1.19	0.0357	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Beryllium	0.250	J	0.297	0.0172	mg/Kg		12/26/19 14:36	12/27/19 14:12	1
Calcium	11700		119	1.03	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Cadmium	0.119	J	0.297	0.0304	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Chromium	5.33		0.594	0.0602	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:12	1
Copper	3.76		0.594	0.207	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Iron	4400		23.8	3.01	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Potassium	982		119	13.1	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:12	1
Magnesium	1020		119	2.28	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Manganese	68.1		1.78	0.0453	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Sodium	33.9	J	119	1.05	mg/Kg	₽	12/26/19 14:36	12/27/19 14:12	1
Lead	3.67		0.594	0.125	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Antimony	0.276	U	2.97	0.276	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1
Selenium	0.308	U	2.38	0.308	mg/Kg		12/26/19 14:36	12/27/19 14:12	1
Thallium	0.329	U	1.78	0.329	mg/Kg	☼	12/26/19 14:36	12/27/19 14:12	1
Zinc	12.6		1.78	0.128	mg/Kg	₩	12/26/19 14:36	12/27/19 14:12	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.0157	J b	0.0186	0.00391	mg/Kg		12/30/19 10:30	12/31/19 08:35	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.7	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	83.3	1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell9-Square 118-S-2-3-191203

Date Collected: 12/03/19 14:31 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197217-4

Matrix: Solid Percent Solids: 74.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.152	U	0.511	0.152	mg/Kg	<u>₩</u>	12/26/19 14:36	12/27/19 14:14	1
Arsenic	1.15	J	1.28	0.278	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Barium	56.2		1.28	0.0383	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Beryllium	0.179	J	0.319	0.0185	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Calcium	11100		128	1.10	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Cadmium	0.102	J	0.319	0.0327	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Chromium	3.54		0.638	0.0646	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:14	1
Copper	2.50		0.638	0.222	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Iron	3210		25.5	3.23	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Potassium	755		128	14.0	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:14	1
Magnesium	841		128	2.45	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Manganese	50.9		1.92	0.0486	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Sodium	22.3	J	128	1.13	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Lead	3.01		0.638	0.134	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Antimony	0.296	U	3.19	0.296	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Selenium	0.331	U	2.55	0.331	mg/Kg	₩	12/26/19 14:36	12/27/19 14:14	1
Thallium	0.421	J b	1.92	0.354	mg/Kg	☼	12/26/19 14:36	12/27/19 14:14	1
Zinc	10.3		1.92	0.138	mg/Kg	≎	12/26/19 14:36	12/27/19 14:14	1

Method: 7471A - Mercury in So	olid or Semisolid Was	ste (Manual	Cold Vapor Techni	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00728 Jb	0.0204	0.00430 mg/Kg	-	12/30/19 10:30	12/31/19 08:37	1

General Chemistry Analyte	Result Qualifie	er MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Percent Moisture	25.4	1.0	1.0	%			12/12/19 17:09	1	
Percent Solids	74.6	1.0	1.0	%			12/12/19 17:09	1	

Client Sample ID: Cell9-Square 185-S-2-3-191203 Lab Sample ID: 600-197217-5 Date Collected: 12/03/19 14:42 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 75.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.156	U	0.523	0.156	mg/Kg	<u>₩</u>	12/26/19 14:36	12/27/19 14:52	1
Arsenic	1.50		1.31	0.285	mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1
Barium	52.8		1.31	0.0392	mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1
Beryllium	0.203	J	0.327	0.0190	mg/Kg	φ.	12/26/19 14:36	12/27/19 14:52	1
Calcium	28700		131	1.13	mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1
Cadmium	0.111	J	0.327	0.0335	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Chromium	4.06		0.654	0.0662	mg/Kg	₽	12/26/19 14:36	12/27/19 14:52	1
Copper	2.51		0.654	0.228	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Iron	3790		26.2	3.31	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Potassium	862		131	14.4	mg/Kg	₽	12/26/19 14:36	12/27/19 14:52	1
Magnesium	917		131	2.51	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Manganese	48.4		1.96	0.0498	mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1
Sodium	27.7	J	131	1.16	mg/Kg	φ.	12/26/19 14:36	12/27/19 14:52	1
Lead	3.24		0.654	0.137	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Antimony	0.303	U	3.27	0.303	mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1
Selenium	0.339	Ū	2.62	0.339	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:52	1

Percent Solids

Job ID: 600-197217-1

Client Sample ID: Cell9-Square 185-S-2-3-191203

Lab Sample ID: 600-197217-5

Date Collected: 12/03/19 14:42 Date Received: 12/10/19 17:33 Matrix: Solid Percent Solids: 75.0

12/12/19 17:09

Method: 6010B Industively Coupled Plasma, Atomic Emission Spectrometry (Continued)

75.0

Method: 6010B - Inductively C	oupied Piasma - Ator	nic Emissior	i Spectrometry (C	ontir	iuea)		
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.536 J b	1.96	0.362 mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1
Zinc	10.2	1.96	0.141 mg/Kg	₩	12/26/19 14:36	12/27/19 14:52	1

Method: 7471A - Mercury ir	in Solid or Semisolid Waste (Manual Cold Vapor Technique)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00455	U	0.0216	0.00455	mg/Kg	<u> </u>	12/30/19 10:30	12/31/19 08:39	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.0		1.0	1.0	%			12/12/19 17:09	1

1.0

1.0 %

Date Collected: 12/03/19 15:02

Matrix: Solid
Date Received: 12/10/19 17:33

Percent Solids: 72.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.162	U	0.544	0.162	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:26	1
Arsenic	1.86		1.36	0.296	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Barium	53.4		1.36	0.0408	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Beryllium	0.319	J	0.340	0.0197	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:26	1
Calcium	12200		136	1.17	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Cadmium	0.136	J	0.340	0.0348	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Chromium	5.54		0.680	0.0688	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:26	1
Copper	3.58		0.680	0.237	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Iron	5350		27.2	3.44	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Potassium	1280		136	15.0	mg/Kg	φ.	12/26/19 14:36	12/27/19 14:26	1
Magnesium	1040		136	2.61	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Manganese	85.2		2.04	0.0518	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Sodium	21.1	J	136	1.20	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:26	1
Lead	5.63		0.680	0.143	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Antimony	0.315	U	3.40	0.315	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Selenium	0.352	U	2.72	0.352	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Thallium	0.377	U	2.04	0.377	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1
Zinc	13.1		2.04	0.147	mg/Kg	₩	12/26/19 14:36	12/27/19 14:26	1

Method: 7471A - Mercury in Sol									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0732	b	0.0205	0.00432	mg/Kg		12/30/19 10:30	12/31/19 08:41	1
General Chemistry									

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D Prepared	Analyzed	Dil Fac
Percent Moisture	27.9	1.0	1.0 %		12/12/19 17:09	1
Percent Solids	72.1	1.0	1.0 %		12/12/19 17:09	1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell1-Square 35-S-2-3-191204

Date Collected: 12/04/19 09:00

Lab Sample ID: 600-197217-7

Matrix: Solid
Percent Solids: 77.3

Date Received: 12/10/19 17:33 Percent

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.145	U	0.488	0.145	mg/Kg	₩	12/26/19 14:36	12/27/19 14:28	1
Arsenic	1.62		1.22	0.266	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Barium	43.0		1.22	0.0366	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Beryllium	0.201	J	0.305	0.0177	mg/Kg	₽	12/26/19 14:36	12/27/19 14:28	1
Calcium	30000		122	1.05	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Cadmium	0.104	J	0.305	0.0312	mg/Kg	₩	12/26/19 14:36	12/27/19 14:28	1
Chromium	4.14		0.610	0.0618	mg/Kg	₽	12/26/19 14:36	12/27/19 14:28	1
Copper	2.61		0.610	0.212	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Iron	3640		24.4	3.09	mg/Kg	₩	12/26/19 14:36	12/27/19 14:28	1
Potassium	846		122	13.4	mg/Kg	₽	12/26/19 14:36	12/27/19 14:28	1
Magnesium	913		122	2.34	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Manganese	48.3		1.83	0.0465	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Sodium	17.8	J	122	1.08	mg/Kg	₽	12/26/19 14:36	12/27/19 14:28	1
Lead	3.09		0.610	0.128	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Antimony	0.283	U	3.05	0.283	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Selenium	0.316	U	2.44	0.316	mg/Kg	₽	12/26/19 14:36	12/27/19 14:28	1
Thallium	0.338	U	1.83	0.338	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1
Zinc	9.46		1.83	0.132	mg/Kg	☼	12/26/19 14:36	12/27/19 14:28	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Tec Analyte Result Qualifier MQL (Adi) SDL Unit									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0146	J b	0.0213	0.00448	mg/Kg	₽	12/30/19 10:30	12/31/19 08:47	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.7	1.0	1.0 9	%			12/12/19 17:09	1
Percent Solids	77.3	1.0	1.0 %	%			12/12/19 17:09	1

Client Sample ID: Cell1-Square 10-S-2-3-191204

Date Collected: 12/04/19 09:20

Matrix: Solid

Date Received: 12/10/19 17:33

Lab Sample ID: 600-197217-8

Matrix: Solid

Percent Solids: 71.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.157	U	0.529	0.157	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:30	1
Arsenic	2.24		1.32	0.288	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Barium	60.9		1.32	0.0396	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Beryllium	0.324	J	0.330	0.0192	mg/Kg	ф.	12/26/19 14:36	12/27/19 14:30	1
Calcium	21500		132	1.14	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Cadmium	0.172	J	0.330	0.0338	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Chromium	5.58		0.661	0.0669	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Copper	4.98		0.661	0.230	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Iron	5290		26.4	3.34	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Potassium	1330		132	14.5	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Magnesium	1350		132	2.54	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Manganese	87.6		1.98	0.0503	mg/Kg	☼	12/26/19 14:36	12/27/19 14:30	1
Sodium	22.5	J	132	1.17	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Lead	4.19		0.661	0.139	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Antimony	0.307	U	3.30	0.307	mg/Kg	₩	12/26/19 14:36	12/27/19 14:30	1
Selenium	0.342	U	2.64	0.342	mg/Kg		12/26/19 14:36	12/27/19 14:30	1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell1-Square 10-S-2-3-191204

Lab Sample ID: 600-197217-8

Date Collected: 12/04/19 09:20 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 71.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.366	U	1.98	0.366	mg/Kg	\	12/26/19 14:36	12/27/19 14:30	1
Zinc	14.5		1.98	0.143	mg/Kg	₽	12/26/19 14:36	12/27/19 14:30	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0218 b	0.0213	0.00449 mg/Kg	<u>₩</u>	12/30/19 10:30	12/31/19 08:49	1

General Chemistry

Analyte	Result Qualifier	MQL (Adj)	SDL U	Init	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.6	1.0	1.0 %	0			12/12/19 17:09	1
Percent Solids	71.4	1.0	1.0 %	, 0			12/12/19 17:09	1

Client Sample ID: Cell1-Square 88-S-2-3-191204 Lab Sample ID: 600-197217-9

Date Collected: 12/04/19 09:38 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 77.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.148	U	0.496	0.148	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Arsenic	1.66		1.24	0.270	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Barium	41.4		1.24	0.0372	mg/Kg	☼	12/26/19 14:36	12/27/19 14:32	1
Beryllium	0.291	J	0.310	0.0180	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Calcium	2360		124	1.07	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Cadmium	0.124	J	0.310	0.0317	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Chromium	5.51		0.620	0.0627	mg/Kg	ф.	12/26/19 14:36	12/27/19 14:32	1
Copper	3.24		0.620	0.216	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Iron	5070		24.8	3.14	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Potassium	986		124	13.6	mg/Kg	ф.	12/26/19 14:36	12/27/19 14:32	1
Magnesium	907		124	2.38	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Manganese	74.5		1.86	0.0472	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Sodium	12.1	J	124	1.10	mg/Kg	₽	12/26/19 14:36	12/27/19 14:32	1
Lead	4.08		0.620	0.130	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Antimony	0.288	U	3.10	0.288	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Selenium	0.321	U	2.48	0.321	mg/Kg	₽	12/26/19 14:36	12/27/19 14:32	1
Thallium	0.343	U	1.86	0.343	mg/Kg	₩	12/26/19 14:36	12/27/19 14:32	1
Zinc	12.5		1.86	0.134	mg/Kg	☼	12/26/19 14:36	12/27/19 14:32	1

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00420 U	0.0199	0.00420 mg/Kg	₩	12/30/19 10:30	12/31/19 08:51	1

Ge	eneral	Chem	istry
_			

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.4	1.0	1.0 %			12/12/19 17:09	1
Percent Solids	77.6	1.0	1.0 %			12/12/19 17:09	1

Lab Sample ID: 600-197217-10

Client Sample ID: Cell1-Square 155-S-2-3-191204 Date Collected: 12/04/19 09:58 **Matrix: Solid** Date Received: 12/10/19 17:33

Percent Solids: 93.2

Job ID: 600-197217-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry SDL Unit Dil Fac **Analyte** Result Qualifier MQL (Adj) D Prepared Analyzed <u>₩</u> 12/26/19 14:36 12/27/19 14:34 Silver 0.120 U 0.405 0.120 mg/Kg 1.01 0.221 mg/Kg 12/26/19 14:36 12/27/19 14:34 **Arsenic** 1 1.51 0.0304 mg/Kg 12/26/19 14:36 12/27/19 14:34 **Barium** 29.4 1.01 1 **Beryllium** 0.187 J 0.253 0.0147 mg/Kg 12/26/19 14:36 12/27/19 14:34 0.874 mg/Kg 12/26/19 14:36 12/27/19 14:34 1 Calcium 2960 101 Cadmium 0.0860 J 0.253 0.0259 mg/Kg 12/26/19 14:36 12/27/19 14:34 Chromium 4.32 0.506 0.0512 mg/Kg 12/26/19 14:36 12/27/19 14:34 0.176 mg/Kg 12/26/19 14:36 12/27/19 14:34 Copper 2.41 0.506 12/26/19 14:36 12/27/19 14:34 20.2 2.56 mg/Kg Iron 3510 101 11.1 mg/Kg 12/26/19 14:36 12/27/19 14:34 **Potassium** 728 12/26/19 14:36 12/27/19 14:34 Magnesium 101 1.94 mg/Kg 641 Manganese 52.8 1.52 0.0386 mg/Kg 12/26/19 14:36 12/27/19 14:34 **Sodium** 12/26/19 14:36 12/27/19 14:34 8.22 J 101 0.897 mg/Kg Lead 3.23 0.506 0.106 mg/Kg 12/26/19 14:36 12/27/19 14:34 Antimony 0.235 U 2.53 0.235 mg/Kg 12/26/19 14:36 12/27/19 14:34 0.262 U 0.262 mg/Kg 12/26/19 14:36 12/27/19 14:34 Selenium 2.02 Thallium 0.280 U 1.52 0.280 mg/Kg 12/26/19 14:36 12/27/19 14:34 **Zinc** 9.28 1.52 0.109 mg/Kg 12/26/19 14:36 12/27/19 14:34

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL U	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00581	J b	0.0174	0.00366 r	mg/Kg	\	12/30/19 10:30	12/31/19 08:53	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL (Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.8	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	93.2	1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell22-Square 39-S-2-3-191204 Lab Sample ID: 600-197217-11 Date Collected: 12/04/19 10:07 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 93.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.122	U	0.410	0.122	mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:36	1
Arsenic	2.33		1.02	0.223	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Barium	264		1.02	0.0307	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Beryllium	0.292		0.256	0.0148	mg/Kg	φ.	12/26/19 14:36	12/27/19 14:36	1
Calcium	66900		102	0.885	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Cadmium	0.128	J	0.256	0.0262	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Chromium	4.87		0.512	0.0518	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Copper	3.01		0.512	0.178	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Iron	4660		20.5	2.59	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Potassium	1370		102	11.3	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:36	1
Magnesium	2290		102	1.97	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Manganese	59.9		1.54	0.0390	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Sodium	40.3	J	102	0.907	mg/Kg	₩.	12/26/19 14:36	12/27/19 14:36	1
Lead	4.10		0.512	0.108	mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1
Antimony	0.238	U	2.56	0.238	mg/Kg	☼	12/26/19 14:36	12/27/19 14:36	1
Selenium	0.265	U	2.05	0.265	mg/Kg	ф	12/26/19 14:36	12/27/19 14:36	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197217-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell22-Square 39-S-2-3-191204

Lab Sample ID: 600-197217-11 Date Collected: 12/04/19 10:07 **Matrix: Solid**

Date Received: 12/10/19 17:33 Percent Solids: 93.0

Method: 6010B - Inductively C	oupled Plasma - Aton	nic Emissio	n Spectro	metry ((Contin	ued)	
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
					144		

Thallium	0.284 U	1.54	0.284 mg/Kg	<u> </u>	12/26/19 14:36	12/27/19 14:36	1
Zinc	15.3	1.54	0.111 mg/Kg	₩	12/26/19 14:36	12/27/19 14:36	1

Method: 7471A - Mercury in So	olid or Sem	isolid Wa	ste (Manual	Cold Vap	or Tech	nnique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00361	U	0.0171	0.00361	mg/Kg		12/30/19 10:30	12/31/19 08:55	1

General Chemistry Analyte	Result Qualif	ier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.0	1.0	1.0	%			12/12/19 17:09	1
Percent Solids	93.0	1.0	1.0	%			12/12/19 17:09	1

Dil Fac

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197217-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

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
F	Duplicate RPD exceeds the control limit
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.
Ü	Amalyte was not detected at or above the GBE.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197217-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284106/1-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 284106

Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
0.119	U	0.400	0.119	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.218	U	1.00	0.218	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.0300	U	1.00	0.0300	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.0145	U	0.250	0.0145	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.864	U	100	0.864	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.0256	U	0.250	0.0256	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.0506	U	0.500	0.0506	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.174	U	0.500	0.174	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
2.53	U	20.0	2.53	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
11.0	U	100	11.0	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
1.92	U	100	1.92	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.0381	U	1.50	0.0381	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.886	U	100	0.886	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.105	U	0.500	0.105	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.232	U	2.50	0.232	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.259	U	2.00	0.259	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.3200	J	1.50	0.277	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
0.108	U	1.50	0.108	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
	0.119 0.218 0.0300 0.0145 0.864 0.0256 0.0506 0.174 2.53 11.0 1.92 0.0381 0.886 0.105 0.232 0.259 0.3200	Result Qualifier	0.119 U 0.400 0.218 U 1.00 0.0300 U 1.00 0.0145 U 0.250 0.864 U 100 0.0256 U 0.250 0.0506 U 0.500 0.174 U 0.500 2.53 U 20.0 11.0 U 100 1.92 U 100 0.0381 U 1.50 0.886 U 100 0.105 U 0.500 0.105 U 0.500 0.232 U 2.50 0.259 U 2.00 0.3200 J 1.50	0.119 U 0.400 0.119 0.218 U 1.00 0.218 0.0300 U 1.00 0.0300 0.0145 U 0.250 0.0145 0.864 U 100 0.864 0.0256 U 0.250 0.0256 0.0506 U 0.500 0.0506 0.174 U 0.500 0.174 2.53 U 20.0 2.53 11.0 U 100 11.0 1.92 U 100 1.92 0.0381 U 1.50 0.0381 0.886 U 100 0.886 0.105 U 0.500 0.105 0.232 U 2.50 0.232 0.259 U 2.00 0.259 0.3200 J 1.50 0.277	0.119 U 0.400 0.119 mg/Kg 0.218 U 1.00 0.218 mg/Kg 0.0300 U 1.00 0.0300 mg/Kg 0.0145 U 0.250 0.0145 mg/Kg 0.864 U 100 0.864 mg/Kg 0.0256 U 0.250 0.0256 mg/Kg 0.0506 U 0.500 0.0506 mg/Kg 0.174 U 0.500 0.174 mg/Kg 2.53 U 20.0 2.53 mg/Kg 11.0 U 100 11.0 mg/Kg 1.92 U 100 1.92 mg/Kg 0.0381 U 1.50 0.0381 mg/Kg 0.105 U 0.500 0.105 mg/Kg 0.232 U 2.50 0.232 mg/Kg 0.232 U 2.50 0.232 mg/Kg 0.259 U 2.00 0.259	0.119 U 0.400 0.119 mg/Kg 0.218 U 1.00 0.218 mg/Kg 0.0300 U 1.00 0.0300 mg/Kg 0.0145 U 0.250 0.0145 mg/Kg 0.864 U 100 0.864 mg/Kg 0.0256 U 0.250 0.0256 mg/Kg 0.0506 U 0.500 0.0506 mg/Kg 0.174 U 0.500 0.174 mg/Kg 2.53 U 20.0 2.53 mg/Kg 11.0 U 100 11.0 mg/Kg 1.92 U 100 1.92 mg/Kg 0.0381 U 1.50 0.0381 mg/Kg 0.886 U 100 0.886 mg/Kg 0.105 U 0.500 0.105 mg/Kg 0.232 U 2.50 0.232 mg/Kg 0.259 U 2.00 0.259	0.119 U 0.400 0.119 mg/Kg 12/26/19 14:36 0.218 U 1.00 0.218 mg/Kg 12/26/19 14:36 0.0300 U 1.00 0.0300 mg/Kg 12/26/19 14:36 0.0145 U 0.250 0.0145 mg/Kg 12/26/19 14:36 0.864 U 100 0.864 mg/Kg 12/26/19 14:36 0.0256 U 0.250 0.0256 mg/Kg 12/26/19 14:36 0.0506 U 0.500 0.0506 mg/Kg 12/26/19 14:36 0.174 U 0.500 0.174 mg/Kg 12/26/19 14:36 1.0 U 0.500 0.174 mg/Kg 12/26/19 14:36 1.0 U 100 1.0 mg/Kg 12/26/19 14:36 1.92 U 100 1.92 mg/Kg 12/26/19 14:36 0.0381 U 1.50 0.0381 mg/Kg 12/26/19 14:36 0.886 U 100 0.886	0.119 U 0.400 0.119 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.218 U 1.00 0.218 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.0300 U 1.00 0.0300 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.0145 U 0.250 0.0145 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.864 U 100 0.864 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.0256 U 0.250 0.0256 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.0506 U 0.500 0.0506 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.174 U 0.500 0.174 mg/Kg 12/26/19 14:36 12/27/19 14:00 2.53 U 20.0 2.53 mg/Kg 12/26/19 14:36 12/27/19 14:00 1.92 U 100 1.92 mg/Kg 12/26/19 14:36 12/27/19 14:00 0.0381 U 1.50 0.0381 <

Lab Sample ID: LCSSRM 600-284106/2-A

Matrix: Solid

Analysis Batch: 284156

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

Analysis Batch: 284156	Spike	LCSSRM	LCSSRM				Prep Batch: 284106 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	25.8	20.88		mg/Kg		80.9	67.1 - 106.
							6
Arsenic	69.4	62.62		mg/Kg		90.2	66.6 - 106.
Darium	202	227.6		ma/l/a		05.0	6
Barium	393	337.6		mg/Kg		85.9	64.6 - 106. 6
Beryllium	293	263.4		mg/Kg		89.9	72.4 - 106.
Beryman	200	200.4		mg/rtg		00.0	8
Calcium	19300	18770		mg/Kg		97.2	70.5 - 106.
							7
Cadmium	268	245.4		mg/Kg		91.6	71.3 - 106.
							7
Chromium	63.6	53.28		mg/Kg		83.8	71.9 - 106.
Coppor	175	157.6		ma/Ka		00.1	6 72.0 - 106.
Copper	175	157.0		mg/Kg		90.1	72.0 - 106. 9
Iron	17700	13680		mg/Kg		77.3	50.1 - 106.
				3 3			8
Potassium	5740	5070		mg/Kg		88.3	64.6 - 106.
							6
Magnesium	5390	4187		mg/Kg		77.7	64.2 - 106.
	0.40	407.0				75.0	7
Manganese	616	467.0		mg/Kg		75.8	64.1 - 106.
Sodium	9070	7660		mg/Kg		84 5	70.5 - 106.
Codiam	9070	7 300		iiig/itg		04.5	70.5 - 100. 6
Lead	164	156.9		mg/Kg		95.7	71.3 - 106.
							7

Client Sample ID: Lab Control Sample

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID: LCSSRM 600-284106/2-A

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Matrix: Solid				Olicin	. Oai	iipie ii	Prep Type: Total/NA
Analysis Batch: 284156	0						Prep Batch: 284106
Analysis	Spike		LCSSRM	1114	_	0/ D = =	%Rec.
Analyte	Added		Qualifier	Unit	_ D	%Rec	Limits
Antimony	120	30.38		mg/Kg		25.3	20.0 - 106.
							7
Selenium	155	134.2		mg/Kg		86.6	65.2 - 106.
							5
Thallium	81.0	70.52		mg/Kg		87.1	63.2 - 106.
							7
Zinc	482	450.5		mg/Kg		93.5	69.7 - 106.
							6

Lab Sample ID: 600-197217-1 MS Client Sample ID: Cell13-Square 45-S-2-3-191203 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 284156 Prep Batch: 284106

Sample Sample Spike MS MS %Rec. **Analyte** Result Qualifier Added Result Qualifier Unit D %Rec Limits Silver 0.170 U 17.8 15.85 mg/Kg ₩ 89 75 - 125 Arsenic 1.96 71.2 71.51 mg/Kg ₩ 98 75 - 125 Barium 48.2 71.2 Ö 103 75 - 125 121.4 mg/Kg 71.2 75 - 125 Beryllium 0.321 J 72.01 101 mg/Kg Calcium 712 11470 4 ₩ -61 75 - 125 11900 mg/Kg ☼ 69.89 98 Cadmium 712 mg/Kg 75 - 125 0.142 J Ö Chromium 5.46 71.2 74.43 mg/Kg 97 75 - 125 Copper 3.92 71.2 73.93 mg/Kg 98 75 - 125 Iron 5140 712 7018 4 mg/Kg Ö 263 75 - 125 Potassium 1120 712 2520 N1 . ₩ 196 75 - 125 mg/Kg ₩ Magnesium 1130 712 2191 N1 mg/Kg 149 75 - 125 ₩ Manganese 81.6 71.2 147.7 mg/Kg 93 75 - 125 ₩ Sodium 346 712 1078 103 75 - 125 mg/Kg ₩ Lead 4.27 71.2 75.43 mg/Kg 100 75 - 125 ₩ Antimony 0.330 U 107 76.28 N1 mg/Kg 71 75 - 125 Selenium 0.369 U 71.2 68.84 mg/Kg Ö 97 75 - 125 Thallium 71.2 68.47 ☼ 95 75 - 125 0.997 Jb mg/Kg Zinc 35.6 54.00 mg/Kg ₩ 75 - 125 13.3

Lab Sample ID: 600-197217-11 MS Client Sample ID: Cell22-Square 39-S-2-3-191204

Matrix: Solid Analysis Batch: 284156 **Prep Batch: 284106**

Analysis Baton. 204100	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.122	U	12.7	12.55		mg/Kg	₩	99	75 - 125
Arsenic	2.33		50.7	55.69		mg/Kg	☼	105	75 - 125
Barium	264		50.7	380.5	4	mg/Kg	☼	229	75 - 125
Beryllium	0.292		50.7	51.89		mg/Kg	₩.	102	75 - 125
Calcium	66900		507	77500	4	mg/Kg	☼	2086	75 - 125
Cadmium	0.128	J	50.7	53.00		mg/Kg	₩	104	75 - 125
Chromium	4.87		50.7	54.42		mg/Kg	₩.	98	75 - 125
Copper	3.01		50.7	56.10		mg/Kg	₩	105	75 - 125
Iron	4660		507	6462	4	mg/Kg	₩	355	75 - 125
Potassium	1370		507	2595	N1	mg/Kg	₩.	241	75 - 125
Magnesium	2290		507	3047	4	mg/Kg	₩	149	75 - 125
Manganese	59.9		50.7	114.1		mg/Kg	☼	107	75 ₋ 125

Eurofins TestAmerica, Houston

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Prep Type: Total/NA

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197217-11 MS Client Sample ID: Cell22-Square 39-S-2-3-191204

Matrix: Solid

Analysis Batch: 284156

Prep Type: Total/NA Prep Batch: 284106 ме ме

Sample	Sample	Spike	MS	MS				%Rec.	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
40.3	J	507	592.4		mg/Kg	<u> </u>	109	75 - 125	_
4.10		50.7	57.01		mg/Kg	₩	104	75 - 125	
0.238	U	76.1	48.58	N1	mg/Kg	₩	64	75 - 125	
0.265	Ú	50.7	51.13		mg/Kg	₩.	101	75 - 125	
0.284	U	50.7	47.99		mg/Kg	₩	95	75 - 125	
15.3		25.4	44.00		mg/Kg	₩	113	75 - 125	
	Result 40.3 4.10 0.238 0.265 0.284	0.238 U 0.265 U 0.284 U	Result Qualifier Added 40.3 J 507 4.10 50.7 0.238 U 76.1 0.265 U 50.7 0.284 U 50.7	Result Qualifier Added Result 40.3 J 507 592.4 4.10 50.7 57.01 0.238 U 76.1 48.58 0.265 U 50.7 51.13 0.284 U 50.7 47.99	Result Qualifier Added Result Qualifier 40.3 J 507 592.4 4.10 50.7 57.01 0.238 U 76.1 48.58 N1 0.265 U 50.7 51.13 0.284 U 50.7 47.99	Result Qualifier Added Result Qualifier Unit 40.3 J 507 592.4 mg/Kg 4.10 50.7 57.01 mg/Kg 0.238 U 76.1 48.58 N1 mg/Kg 0.265 U 50.7 51.13 mg/Kg 0.284 U 50.7 47.99 mg/Kg	Result 40.3 Qualifier J Added Sesult Sessible Sesult Sesult Sesult Sesult Sesult Sesult Sesult Sesult Session Sesult Session Sess	Result 40.3 Qualifier J Added Secult Secult Secult Secult Secult Security Qualifier Secult Secult Secult Secult Security Unit May 100 Security D Security Security 4.10 50.7 57.01 mg/Kg 104 0.238 U 76.1 48.58 N1 mg/Kg 64 0.265 U 50.7 51.13 mg/Kg 101 0.284 U 50.7 47.99 mg/Kg 95	Result Qualifier Added Added Result Qualifier Unit Unit Unit Unit Unit Unit Unit Unit

Client Sample ID: Cell13-Square 45-S-2-3-191203 Lab Sample ID: 600-197217-1 DU

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 284156							Prep Batch: 28	84106
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.170	U	0.166	U	mg/Kg	-		20
Arsenic	1.96		1.258	JF	mg/Kg	₩	44	20
Barium	48.2		33.70	F	mg/Kg	☼	35	20
Beryllium	0.321	J	0.1887	JF	mg/Kg	₩	52	20
Calcium	11900		11920		mg/Kg	☼	0.1	20
Cadmium	0.142	J	0.08386	JF	mg/Kg	₩	52	20
Chromium	5.46		3.354	F	mg/Kg		48	20
Copper	3.92		2.949	F	mg/Kg	☼	28	20
Iron	5140		3224	F	mg/Kg	☼	46	20
Potassium	1120		714.9	F	mg/Kg	₩	44	20
Magnesium	1130		741.4	F	mg/Kg	☼	41	20
Manganese	81.6		52.90	F	mg/Kg	☼	43	20
Sodium	346		440.6	F	mg/Kg	₩	24	20
Lead	4.27		2.481	F	mg/Kg	☼	53	20
Antimony	0.330	U	0.324	U	mg/Kg	☼	NC	20
Selenium	0.369	Ü	0.362	U	mg/Kg	₩	NC	20
Thallium	0.997	Jb	0.4682	JF	mg/Kg	☼	72	20
Zinc	13.3		8.973	F	mg/Kg	₩	39	20

Lab Sample ID: 600-197217-11 DU Client Sample ID: Cell22-Square 39-S-2-3-191204

Matrix: Solid

Analysis Batch: 284156

Prep Type: Total/NA Prep Batch: 284106

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.122	U	0.122	U	mg/Kg	-	NC	20
Arsenic	2.33		2.453		mg/Kg	₩.	5	20
Barium	264		384.3	F	mg/Kg	₩.	37	20
Beryllium	0.292		0.2765		mg/Kg	*	5	20
Calcium	66900		74350		mg/Kg	₩.	11	20
Cadmium	0.128	J	0.1331	J	mg/Kg	₩.	4	20
Chromium	4.87		4.972		mg/Kg	*	2	20
Copper	3.01		3.277		mg/Kg	₩.	8	20
Iron	4660		4703		mg/Kg	₩.	0.9	20
Potassium	1370		1359		mg/Kg	₩	0.9	20
Magnesium	2290		2123		mg/Kg	₩.	8	20
Manganese	59.9		64.77		mg/Kg	₩	8	20
Sodium	40.3	J	39.73	J	mg/Kg	₩	1	20

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197217-11 DU Client Sample ID: Cell22-Square 39-S-2-3-191204

Matrix: Solid

Client: ARCADIS U.S., Inc.

Analysis Batch: 284156

Prep Type: Total/NA **Prep Batch: 284106**

	Sample	Sample	DU	DU			•	F	RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPI) L	.imit
Lead	4.10		3.938		mg/Kg	- □		4	20
Antimony	0.238	U	0.238	U	mg/Kg	≎	N	2	20
Selenium	0.265	U	0.265	U	mg/Kg	₩	N	2	20
Thallium	0.284	U	0.284	U	mg/Kg	₩	N	2	20
Zinc	15.3		12.95		mg/Kg	₩	1	7	20
-									

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284324/7-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 284444

Prep Type: Total/NA Prep Batch: 284324 MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Mercury 0.003828 J 0.0159 0.00336 mg/Kg <u>12/30/19 10:30</u> <u>12/31/19 09:25</u>

Lab Sample ID: LCS 600-284324/8-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 284444

Prep Batch: 284324 LCS LCS Spike %Rec.

Analyte Added Result Qualifier Unit %Rec Limits 0.234 0.2376 Mercury mg/Kg 101 70 - 130

Lab Sample ID: 600-197217-1 MS Client Sample ID: Cell13-Square 45-S-2-3-191203

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 284444 Prep Batch: 284324 MS MS Spike %Rec. Sample Sample

Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit 0.00505 U 0.332 Mercury 0.3731 mg/Kg 112 75 - 125

Lab Sample ID: 600-197217-1 DU Client Sample ID: Cell13-Square 45-S-2-3-191203

Matrix: Solid

Analysis Batch: 284444

Prep Type: Total/NA

Prep Batch: 284324 **RPD**

DU DU Sample Sample Analyte Result Qualifier Result Qualifier Unit D Limit 0.00461 U Mercury 0.00505 U mg/Kg NC 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197217-5 DU Client Sample ID: Cell9-Square 185-S-2-3-191203 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 282911

Analysis Baton. Lozo in								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Moisture	25.0		26.6		%			20
Percent Solids	75.0		73 4		%		2	20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197217-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

3

4

6

8

11

12

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QC Association Summary

Job ID: 600-197217-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 284106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197217-1	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-2	Cell13-Square 190-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-3	Cell9-Square 134-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-4	Cell9-Square 118-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-5	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-6	Cell9-Square 189-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-7	Cell1-Square 35-S-2-3-191204	Total/NA	Solid	3050B	
600-197217-8	Cell1-Square 10-S-2-3-191204	Total/NA	Solid	3050B	
600-197217-9	Cell1-Square 88-S-2-3-191204	Total/NA	Solid	3050B	
600-197217-10	Cell1-Square 155-S-2-3-191204	Total/NA	Solid	3050B	
600-197217-11	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	3050B	
MB 600-284106/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-284106/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197217-1 MS	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-11 MS	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	3050B	
600-197217-1 DU	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	3050B	
600-197217-11 DU	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	3050B	

Analysis Batch: 284156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197217-1	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-2	Cell13-Square 190-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-3	Cell9-Square 134-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-4	Cell9-Square 118-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-5	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-6	Cell9-Square 189-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-7	Cell1-Square 35-S-2-3-191204	Total/NA	Solid	6010B	284106
600-197217-8	Cell1-Square 10-S-2-3-191204	Total/NA	Solid	6010B	284106
600-197217-9	Cell1-Square 88-S-2-3-191204	Total/NA	Solid	6010B	284106
600-197217-10	Cell1-Square 155-S-2-3-191204	Total/NA	Solid	6010B	284106
600-197217-11	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	6010B	284106
MB 600-284106/1-A	Method Blank	Total/NA	Solid	6010B	284106
LCSSRM 600-284106/2-A	Lab Control Sample	Total/NA	Solid	6010B	284106
600-197217-1 MS	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-11 MS	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	6010B	284106
600-197217-1 DU	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	6010B	284106
600-197217-11 DU	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	6010B	284106

Prep Batch: 284324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197217-1	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-2	Cell13-Square 190-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-3	Cell9-Square 134-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-4	Cell9-Square 118-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-5	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-6	Cell9-Square 189-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-7	Cell1-Square 35-S-2-3-191204	Total/NA	Solid	7471A	
600-197217-8	Cell1-Square 10-S-2-3-191204	Total/NA	Solid	7471A	
600-197217-9	Cell1-Square 88-S-2-3-191204	Total/NA	Solid	7471A	
600-197217-10	Cell1-Square 155-S-2-3-191204	Total/NA	Solid	7471A	
600-197217-11	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	7471A	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197217-1

Project/Site: Chevron - Jal Land Farm Soils

Metals (Continued)

Prep Batch: 284324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-284324/7-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284324/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-197217-1 MS	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	
600-197217-1 DU	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197217-1	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-2	Cell13-Square 190-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-3	Cell9-Square 134-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-4	Cell9-Square 118-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-5	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-6	Cell9-Square 189-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-7	Cell1-Square 35-S-2-3-191204	Total/NA	Solid	7471A	284324
600-197217-8	Cell1-Square 10-S-2-3-191204	Total/NA	Solid	7471A	284324
600-197217-9	Cell1-Square 88-S-2-3-191204	Total/NA	Solid	7471A	284324
600-197217-10	Cell1-Square 155-S-2-3-191204	Total/NA	Solid	7471A	284324
600-197217-11	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	7471A	284324
MB 600-284324/7-A	Method Blank	Total/NA	Solid	7471A	284324
LCS 600-284324/8-A	Lab Control Sample	Total/NA	Solid	7471A	284324
600-197217-1 MS	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197217-1 DU	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	7471A	284324

General Chemistry

Analysis Batch: 282911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197217-1	Cell13-Square 45-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-2	Cell13-Square 190-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-3	Cell9-Square 134-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-4	Cell9-Square 118-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-5	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-6	Cell9-Square 189-S-2-3-191203	Total/NA	Solid	2540B	
600-197217-7	Cell1-Square 35-S-2-3-191204	Total/NA	Solid	2540B	
600-197217-8	Cell1-Square 10-S-2-3-191204	Total/NA	Solid	2540B	
600-197217-9	Cell1-Square 88-S-2-3-191204	Total/NA	Solid	2540B	
600-197217-10	Cell1-Square 155-S-2-3-191204	Total/NA	Solid	2540B	
600-197217-11	Cell22-Square 39-S-2-3-191204	Total/NA	Solid	2540B	
600-197217-5 DU	Cell9-Square 185-S-2-3-191203	Total/NA	Solid	2540B	

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Client: ARCADIS U.S., Inc.

Date Received: 12/10/19 17:33

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell13-Square 45-S-2-3-191203

Date Collected: 12/03/19 13:40

Lab Sample ID: 600-197217-1 **Matrix: Solid**

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell13-Square 45-S-2-3-191203

Lab Sample ID: 600-197217-1

Matrix: Solid Percent Solids: 67.5

Date Collected: 12/03/19 13:40 Date Received: 12/10/19 17:33

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:04	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU

Client Sample ID: Cell13-Square 190-S-2-3-191203

7471A

Lab Sample ID: 600-197217-2

TAL HOU

284444 12/31/19 08:27 KP1

Matrix: Solid

Date Collected: 12/03/19 13:53 Date Received: 12/10/19 17:33

Analysis

Total/NA

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 2540B 282911 12/12/19 17:09 ANP TAL HOU

Client Sample ID: Cell13-Square 190-S-2-3-191203

Lab Sample ID: 600-197217-2

Matrix: Solid

Date Collected: 12/03/19 13:53 Date Received: 12/10/19 17:33

Percent Solids: 80.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:10	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:33	KP1	TAL HOU

Client Sample ID: Cell9-Square 134-S-2-3-191203

Lab Sample ID: 600-197217-3

Matrix: Solid

Date Collected: 12/03/19 14:17 Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell9-Square 134-S-2-3-191203

Lab Sample ID: 600-197217-3

Matrix: Solid

Date Collected: 12/03/19 14:17 Date Received: 12/10/19 17:33 Percent Solids: 83.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:12	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:35	KP1	TAL HOU

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell9-Square 118-S-2-3-191203

Lab Sample ID: 600-197217-4 Date Collected: 12/03/19 14:31

Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell9-Square 118-S-2-3-191203

Lab Sample ID: 600-197217-4

Date Collected: 12/03/19 14:31 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B				12/26/19 14:36		TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:14	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:37	KP1	TAL HOU

Client Sample ID: Cell9-Square 185-S-2-3-191203 Lab Sample ID: 600-197217-5

Date Collected: 12/03/19 14:42

Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell9-Square 185-S-2-3-191203 Lab Sample ID: 600-197217-5

Date Collected: 12/03/19 14:42 Date Received: 12/10/19 17:33

Matrix: Solid Percent Solids: 75.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:52	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:39	KP1	TAL HOU

Client Sample ID: Cell9-Square 189-S-2-3-191203 Lab Sample ID: 600-197217-6

Date Collected: 12/03/19 15:02 **Matrix: Solid** Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell9-Square 189-S-2-3-191203 Lab Sample ID: 600-197217-6

Date Collected: 12/03/19 15:02 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 72.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:26	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:41	KP1	TAL HOU

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell1-Square 35-S-2-3-191204 Lab Sample ID: 600-197217-7

Date Collected: 12/04/19 09:00 Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282911	12/12/19 17:09	ANP	TAL HOU

Date Collected: 12/04/19 09:00 Matrix: Solid

Date Received: 12/10/19 17:33 Percent Solids: 77.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:28	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:47	KP1	TAL HOU

Client Sample ID: Cell1-Square 10-S-2-3-191204 Lab Sample ID: 600-197217-8

Date Collected: 12/04/19 09:20 Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282911	12/12/19 17:09	ANP	TAL HOU

 Date Collected: 12/04/19 09:20
 Matrix: Solid

 Date Received: 12/10/19 17:33
 Percent Solids: 71.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:30	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:49	KP1	TAL HOU

Date Collected: 12/04/19 09:38 Matrix: Solid
Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell1-Square 88-S-2-3-191204 Lab Sample ID: 600-197217-9

 Date Collected: 12/04/19 09:38
 Matrix: Solid

 Date Received: 12/10/19 17:33
 Percent Solids: 77.6

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:32	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:51	KP1	TAL HOU

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell1-Square 155-S-2-3-191204

Lab Sample ID: 600-197217-10

Matrix: Solid

Date Collected: 12/04/19 09:58 Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

Client Sample ID: Cell1-Square 155-S-2-3-191204

Lab Sample ID: 600-197217-10

Date Collected: 12/04/19 09:58 Matrix: Solid
Date Received: 12/10/19 17:33 Percent Solids: 93.2

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:34	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:53	KP1	TAL HOU

Client Sample ID: Cell22-Square 39-S-2-3-191204

Lab Sample ID: 600-197217-11

Matrix: Solid

Date Collected: 12/04/19 10:07 Date Received: 12/10/19 17:33

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 2540B 282911 12/12/19 17:09 ANP TAL HOU

Client Sample ID: Cell22-Square 39-S-2-3-191204

Lab Sample ID: 600-197217-11

Date Collected: 12/04/19 10:07

Matrix: Solid
Date Received: 12/10/19 17:33

Percent Solids: 93.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284106	12/26/19 14:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:36	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:55	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197217-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		Program NELAP	Identification Number T104704223-19-25	Expiration Date 10-31-20
The following analytes the agency does not do		eport, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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Client Information	J. Ster	MUMBU		Kude	Kudchadkar, Sachin G	Sachir	9			Celon Francisco		600-72593-19936	10
	Phone 619 8	35187	65	E-Mail Sachi	E-Mari sachin kudchadkar@testamericainc.com	adkar(Diesta	nericain	E COM			Page of	1
Company:										T. reference			
ARCADIS U.S., Inc.								Analy	Analysis Requested	nested			
Address: 1004 North Big Spring Suite 121	Due Date Requested	ed:	i					,nM				Preservation Codes	in .
Gity	TAT Requested (day	:(ske				notni		e' bp'				B - NaOH	N - Hexane N - None
State, Zip TX, 79701	Standard	lard				eD-nel		מי כניצ					D - Na2048
Phone 432-227-0266(Tel)	# Od					-						F - MeOH G - Amchlor H Association	R-Na2S203 S-H2S04
Email sarah johnson@arcadis.com	#OM				(on								U - Acetone V - MCAA
Project Name: Chevron - Jal Land Farm Soils 2020	Project #. 60011732				170 86			-				K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Sile Cheuren Jal	SSOW#:				eX) as							Other	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (w-water, S-solid, O-westeld),	Fleld Filtered S M/SM mnotre9	8015B_GRO-C6	X3T8-80858	300- Chloridel Fl 50108- Ca, Mg, N 5e, Ag, Tl, Zn	9912- Hg		sedmuli IstoT	an leiseas	Special Instructions/Note:
	\bigvee	X	1 0	ion Code:	Ź	-	-	Z	z		X		
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Coll 13 - Square 110 -5-3-191203	191203	1353	b	Solid	2			>	, >		78	500-	
Cell9-Square 134-5-2-3-191203	191203	LIH!	ى	Solid	2			>	>		a	972	
Cell 9-5guere 118-5-2-3-191203	191203	1431	s	Solid	2			>	1		78	17 C	
Ce119- Square 185-5-2-5-191203	191203	1442	S	Solid	2			1	1		7	hain	
Cell9-Square 189-5-2-3-191203	191203	Soa	S	Solid	2			1	1		0	of Cu	
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Cell 1-Square 10-5-2-3-191204	HOE 191	0430	6	Solid	2			1	>		a	y	
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Cell 22 - Square 39-5-2-3-191204	191204	1001	٥	Solid	3 7))		96		
Possible Hazard Identification Non-Hazard	ison B Unknown		Radiological		Sam	Ple Di	le Disposal (A I Return To Client	(A fee	may be	Sample Disposal (A fee may be assessed if samples are retained longer than a month) Return To Client Disposal By Lab	are retaine	tained longer than 1 r	Months
ther (specify)					Spec	ial Ins	truction	IS/QC R	Special Instructions/QC Requirements	nts			2
Empty Kit Relinquished by:		Date			Time:	L				Method of Shipment			
Redirequistred by Colling Agreement	Date/Time:	1 61	73	Company	1000	Received by	by			Date/Trme	9		Company
Relinquished by	Date/Time			Company		Received by	4	20	3	Date/Tim	1010	1233	Company 177
Reinquished by	Date/Time			Company	æ	Received by	, ph			Date/Time		100	Company
Custody Seals Intact. Custody Seal No.					D	cooler Te	emperatu	re(s) °C a	Cooler Temperature(s) ^a C and Other Remarks	marks			
					1								Ver. 01/16/2019

Seurofins Environment testing Tool America

Chain of Custody Record

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

de eurofins	Environment Testing
	restriction

Eurofins TestAmerica Houston

Cooler ID	Sa	ample Rece	ipt Checkl	list			180E010 1
Custody Seal Present: YES			Da	ate/Time Received: _			
Custody Seal Present: YES	JOB NUMBER:	217	_ cı	LIENT: 1	tre	adio	5_
Cooler ID Temp Blank	UNPACKED BY:	47	C#	ARRIER/DRIVER: _	Fe	de	<u>~</u>
Cooler ID Blank Trip Blank Trip Blank (°C) 1D CF (°C) 7286 Y / N Y /	Custody Seal Present:		IO Nu			1	
Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N Y / N CF = correction factor Samples received on ice?		Blank	Trip Blank	(°C)	ID	CF	Corrected Temp (°C)
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Y / N Y / N			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Y / N	/						1
CF = correction factor Samples received on ice?							14
Samples received on ice? PYES DNO LABORATORY PRESERVATION OF SAMPLES REQUIRED: DNO DYES Base samples are>pH 12: DYES DNO Acid preserved are <ph #="" &="" (5-6mm):="" 2:="" acceptability="" acceptable="" conditions="" d="" date="" dh="" dno="" dyes="" freezer:="" frozen="" headspace="" in="" laboratory's="" lot="" meet="" of="" paper="" put="" receipt:="" receipt?<="" sample="" samples="" standard="" td="" the="" time="" tx1005="" upon="" voa=""><td></td><td>Y/N</td><td>Y / N</td><td></td><td></td><td></td><td></td></ph>		Y/N	Y / N				
pH paper Lot # VOA headspace acceptable (5-6mm): \(\text{YES} \) \(\text{DNA} \) id samples meet the laboratory's standard conditions of sample acceptability upon receipt?						□NO	
id samples meet the laboratory's standard conditions of sample acceptability upon receipt?	TX1005 samples <u>frozen</u>	upon receipt:	□ YES DA	ATE & TIME PUT IN FF	REEZER:		
	oH paper Lot #		_ VC	A headspace acceptab	le (5-6mm): [⊒YES □NO	O MA
COMMENTS:	d samples meet the labora	atory's standard co	nditions of sampl	le acceptability upon receip	pt?		YES NO
	COMMENTS:						
							1

HS-SA-WI-013

Rev. 4A; 08/26/2019

Client: ARCADIS U.S., Inc.

List Source: Eurofins TestAmerica, Houston

Job Number: 600-197217-1

Login Number: 197217

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.2
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.



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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

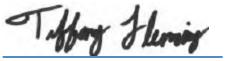
Laboratory Job ID: 600-197218-1

Client Project/Site: Chevron - Jal Land Farm Soils

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



Authorized for release by: 12/31/2019 1:44:40 PM Tiffany Fleming, Project Management Assistant I (361)289-2673 tiffany.fleming@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197218-1 Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

12/31/2019

Sample Summary

Client: ARCADIS U.S., Inc.

600-197218-11

Project/Site: Chevron - Jal Land Farm Soils

Cell7- Square 153 - S-2-3-191205

Lab Sample ID Client Sample ID Matrix Collected Received Asset ID 600-197218-1 Cell5- Square 209 - S-2-3-191205 Solid 12/05/19 08:55 12/10/19 17:32 600-197218-2 Cell5- Square 188 - S-2-3-191205 Solid 12/05/19 09:07 12/10/19 17:32 600-197218-3 Cell5- Square 120 - S-2-3-191205 Solid 12/05/19 09:16 12/10/19 17:32 600-197218-4 Cell5- Square 13 - S-2-3-191205 Solid 12/05/19 09:25 12/10/19 17:32 600-197218-5 Cell6- Square 206 - S-2-3-191205 Solid 12/05/19 09:37 12/10/19 17:32 Cell6- Square 202 - S-2-3-191205 12/10/19 17:32 600-197218-6 Solid 12/05/19 09:46 600-197218-7 Cell6- Square 110 - S-2-3-191205 Solid 12/10/19 17:32 12/05/19 09:59 Cell6- Square 24 - S-2-3-191205 Solid 12/10/19 17:32 600-197218-8 12/05/19 10:08 600-197218-9 Cell7- Square 58 - S-2-3-191205 Solid 12/05/19 10:17 12/10/19 17:32 Cell7- Square 34 - S-2-3-191205 600-197218-10 Solid 12/05/19 10:25 12/10/19 17:32

12/05/19 10:33

12/10/19 17:32

Solid

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Job ID: 600-197218-1

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Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Lab Sample ID: 600-197218-1

Date Collected: 12/05/19 08:55 Matrix: Solid Date Received: 12/10/19 17:32 Percent Solids: 76.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.148	U	0.497	0.148	mg/Kg		12/26/19 14:41	12/27/19 13:13	1
Arsenic	2.35		1.24	0.271	mg/Kg	₩	12/26/19 14:41	12/27/19 13:13	1
Barium	128		1.24	0.0372	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Beryllium	0.273	J	0.310	0.0180	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Calcium	53500		124	1.07	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Cadmium	0.155	J	0.310	0.0318	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Chromium	5.36		0.621	0.0628	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Copper	4.07		0.621	0.216	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Iron	5010		24.8	3.14	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Potassium	1290		124	13.7	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Magnesium	2140		124	2.38	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Manganese	72.6		1.86	0.0473	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Sodium	37.0	J	124	1.10	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Lead	3.67		0.621	0.130	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Antimony	0.288	U	3.10	0.288	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Selenium	0.322	U	2.48	0.322	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Thallium	0.344	U	1.86	0.344	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1
Zinc	14.7	b	1.86	0.134	mg/Kg	₽	12/26/19 14:41	12/27/19 13:13	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00449	U	0.0213	0.00449	mg/Kg	\$	12/30/19 14:44	12/31/19 10:37	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.0	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	76.0	1.0	1.0 %			12/13/19 08:48	1

Client Sample ID: Cell5- Square 188 - S-2-3-191205 Lab Sample ID: 600-197218-2 Date Collected: 12/05/19 09:07 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 80.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.143	U	0.482	0.143	mg/Kg	<u> </u>	12/26/19 14:41	12/27/19 13:19	1
Arsenic	3.68		1.20	0.262	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Barium	183		1.20	0.0361	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Beryllium	0.271	J	0.301	0.0175	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Calcium	131000		241	2.08	mg/Kg	₽	12/26/19 14:41	12/27/19 14:18	2
Cadmium	0.169	J	0.301	0.0308	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Chromium	4.69		0.602	0.0609	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Copper	4.39		0.602	0.210	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Iron	4470		24.1	3.05	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Potassium	1280		120	13.2	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Magnesium	3300		120	2.31	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Manganese	70.9		1.81	0.0459	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Sodium	69.1	J	120	1.07	mg/Kg	\$	12/26/19 14:41	12/27/19 13:19	1
Lead	4.09		1.20	0.253	mg/Kg	₽	12/26/19 14:41	12/27/19 14:18	2
Antimony	0.367	J	3.01	0.279	mg/Kg	₽	12/26/19 14:41	12/27/19 13:19	1
Selenium	0.312	U	2.41	0.312	mg/Kg	φ.	12/26/19 14:41	12/27/19 13:19	1

Eurofins TestAmerica, Houston

Page 5 of 29

Client Sample ID: Cell5- Square 188 - S-2-3-191205

Date Collected: 12/05/19 09:07 Date Received: 12/10/19 17:32

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197218-2

Matrix: Solid Percent Solids: 80.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Thallium	0.999	J b	1.81	0.334	mg/Kg	₩	12/26/19 14:41	12/27/19 13:19	1
	Zinc	14.7	b	3.61	0.260	mg/Kg	₽	12/26/19 14:41	12/27/19 14:18	2

Method: 7471A - Mercury in Solid or	or Semisolid Waste (Manual Cold Vapor Technique)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00444	U	0.0211	0.00444	mg/Kg	\	12/30/19 14:44	12/31/19 10:47	1
General Chemistry						_	_		
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

1.0 % **Percent Moisture** 19.4 1.0 12/13/19 08:48 12/13/19 08:48 **Percent Solids** 1.0 1.0 % 80.6

Client Sample ID: Cell5- Square 120 - S-2-3-191205 Lab Sample ID: 600-197218-3

Date Collected: 12/05/19 09:16 Matrix: Solid Date Received: 12/10/19 17:32 Percent Solids: 74.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.150	U	0.504	0.150	mg/Kg	₩	12/26/19 14:41	12/27/19 13:21	1
Arsenic	2.35		1.26	0.275	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Barium	78.4		1.26	0.0378	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Beryllium	0.252	J	0.315	0.0183	mg/Kg	\$	12/26/19 14:41	12/27/19 13:21	1
Calcium	70000		126	1.09	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Cadmium	0.183	J	0.315	0.0323	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Chromium	4.36		0.630	0.0637	mg/Kg	₩	12/26/19 14:41	12/27/19 13:21	1
Copper	3.65		0.630	0.219	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Iron	4260		25.2	3.19	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Potassium	1050		126	13.9	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Magnesium	1630		126	2.42	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Manganese	66.8		1.89	0.0480	mg/Kg	≎	12/26/19 14:41	12/27/19 13:21	1
Sodium	34.4	J	126	1.12	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Lead	3.87		0.630	0.132	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Antimony	0.292	U	3.15	0.292	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Selenium	0.326	U	2.52	0.326	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Thallium	0.624	J b	1.89	0.349	mg/Kg	₽	12/26/19 14:41	12/27/19 13:21	1
Zinc	12.7	b	1.89	0.136	mg/Kg	₩	12/26/19 14:41	12/27/19 13:21	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00460	J	0.0218	0.00460	mg/Kg	\$	12/30/19 14:44	12/31/19 10:49	1

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.8	1.0	1.0	%			12/13/19 08:48	1
Percent Solids	74.2	1.0	1.0	%			12/13/19 08:48	1

Eurofins TestAmerica, Houston

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell5- Square 13 - S-2-3-191205

Lab Sample ID: 600-197218-4 Date Collected: 12/05/19 09:25 Matrix: Solid

Date Received: 12/10/19 17:32 Percent Solids: 82.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.142	U	0.476	0.142	mg/Kg	₩	12/26/19 14:41	12/27/19 13:23	1
Arsenic	1.64		1.19	0.259	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Barium	47.5		1.19	0.0357	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Beryllium	0.226	J	0.298	0.0173	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Calcium	10700		119	1.03	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Cadmium	0.107	J	0.298	0.0305	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Chromium	4.29		0.595	0.0602	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Copper	3.12		0.595	0.207	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Iron	4100		23.8	3.01	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Potassium	937		119	13.1	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Magnesium	1010		119	2.29	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Manganese	63.5		1.79	0.0453	mg/Kg	₩	12/26/19 14:41	12/27/19 13:23	1
Sodium	49.4	J	119	1.05	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Lead	3.14		0.595	0.125	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Antimony	0.276	U	2.98	0.276	mg/Kg	₩	12/26/19 14:41	12/27/19 13:23	1
Selenium	0.308	U	2.38	0.308	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Thallium	0.330	U	1.79	0.330	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1
Zinc	10.5	b	1.79	0.129	mg/Kg	₽	12/26/19 14:41	12/27/19 13:23	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00428	U	0.0203	0.00428	mg/Kg	<u> </u>	12/30/19 14:44	12/31/19 10:51	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D Prepared	Analyzed	Dil Fac
Percent Moisture	17.6	1.0	1.0 %		12/13/19 08:48	1
Percent Solids	82.4	1.0	1.0 %		12/13/19 08:48	1

Client Sample ID: Cell6- Square 206 - S-2-3-191205 Lab Sample ID: 600-197218-5 Date Collected: 12/05/19 09:37 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 90.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.422	0.126	mg/Kg		12/26/19 14:41	12/27/19 14:16	1
Arsenic	1.46		1.06	0.230	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Barium	32.7		1.06	0.0317	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Beryllium	0.248	J	0.264	0.0153	mg/Kg	*	12/26/19 14:41	12/27/19 14:16	1
Calcium	1790		106	0.912	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Cadmium	0.106	J	0.264	0.0270	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Chromium	4.91		0.528	0.0534	mg/Kg	\$	12/26/19 14:41	12/27/19 14:16	1
Copper	2.94		0.528	0.184	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Iron	4620		21.1	2.67	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Potassium	960		106	11.6	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Magnesium	828		106	2.03	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Manganese	70.3		1.58	0.0402	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Sodium	11.6	J	106	0.935	mg/Kg	*	12/26/19 14:41	12/27/19 14:16	1
Lead	3.55		0.528	0.111	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Antimony	0.245	U	2.64	0.245	mg/Kg	₽	12/26/19 14:41	12/27/19 14:16	1
Selenium	0.273	U	2.11	0.273	mg/Kg		12/26/19 14:41	12/27/19 14:16	1

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Client: ARCADIS U.S., Inc.

Percent Solids

Lab Sample ID: 600-197218-5

12/13/19 08:48

Client Sample ID: Cell6- Square 206 - S-2-3-191205 Date Collected: 12/05/19 09:37 Matrix: Solid Date Received: 12/10/19 17:32 Percent Solids: 90.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Thallium	0.292	U	1.58	0.292	mg/Kg	₩	12/26/19 14:41	12/27/19 14:16	1	
Zinc	11.2	b	1.58	0.114	mg/Kg	₩	12/26/19 14:41	12/27/19 14:16	1	

Method: 7471A - Mercury in Solid o	or Semisolid	Waste (Mar	nual Cold Va _l	por Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00366	U	0.0174	0.00366	mg/Kg	\	12/30/19 14:44	12/31/19 10:53	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.8		1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell6- Square 202 - S-2-3-191205 Lab Sample ID: 600-197218-6

1.0

90.2

1.0 %

Date Collected: 12/05/19 09:46 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 73.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.155	U	0.520	0.155	mg/Kg	*	12/26/19 14:41	12/27/19 13:35	1
Arsenic	1.23	J	1.30	0.284	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Barium	28.1		1.30	0.0390	mg/Kg	₩	12/26/19 14:41	12/27/19 13:35	1
Beryllium	0.189	J	0.325	0.0189	mg/Kg	*	12/26/19 14:41	12/27/19 13:35	1
Calcium	3210		130	1.12	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Cadmium	0.104	J	0.325	0.0333	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Chromium	4.34		0.650	0.0658	mg/Kg	\$	12/26/19 14:41	12/27/19 13:35	1
Copper	2.37		0.650	0.226	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Iron	3840		26.0	3.29	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Potassium	843		130	14.3	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Magnesium	642		130	2.50	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Manganese	52.3		1.95	0.0496	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Sodium	11.1	J	130	1.15	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Lead	2.87		0.650	0.137	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Antimony	0.302	U	3.25	0.302	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Selenium	0.337	U	2.60	0.337	mg/Kg	\$	12/26/19 14:41	12/27/19 13:35	1
Thallium	0.527	J b	1.95	0.360	mg/Kg	₽	12/26/19 14:41	12/27/19 13:35	1
Zinc	8.83	b	1.95	0.140	mg/Kg	₩	12/26/19 14:41	12/27/19 13:35	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	ual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00427	U	0.0203	0.00427	mg/Kg	\	12/30/19 14:44	12/31/19 10:55	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.1	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	73.9	1.0	1.0 %			12/13/19 08:48	1

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Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell6- Square 110 - S-2-3-191205

Lab Sample ID: 600-197218-7 Date Collected: 12/05/19 09:59 Matrix: Solid

Date Received: 12/10/19 17:32 Percent Solids: 74.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.150	U	0.503	0.150	mg/Kg	<u></u>	12/26/19 14:41	12/27/19 13:37	
Arsenic	1.66		1.26	0.274	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Barium	41.8		1.26	0.0377	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Beryllium	0.264	J	0.314	0.0182	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Calcium	10400		126	1.09	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Cadmium	0.119	J	0.314	0.0322	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Chromium	5.03		0.628	0.0636	mg/Kg		12/26/19 14:41	12/27/19 13:37	
Copper	2.79		0.628	0.219	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Iron	4840		25.1	3.18	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Potassium	1200		126	13.8	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Magnesium	962		126	2.41	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Manganese	63.4		1.89	0.0479	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Sodium	18.6	J	126	1.11	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Lead	3.53		0.628	0.132	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	
Antimony	0.292	U	3.14	0.292	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Selenium	0.326	U	2.51	0.326	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Thallium	0.348	U	1.89	0.348	mg/Kg	₩	12/26/19 14:41	12/27/19 13:37	
Zinc	12.1	b	1.89	0.136	mg/Kg	₽	12/26/19 14:41	12/27/19 13:37	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00758	J	0.0225	0.00474	mg/Kg	☼	12/30/19 14:44	12/31/19 10:57	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.6	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	74.4	1.0	1.0 %			12/13/19 08:48	1

Client Sample ID: Cell6- Square 24 - S-2-3-191205 Lab Sample ID: 600-197218-8 Date Collected: 12/05/19 10:08 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 80.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.145	U	0.488	0.145	mg/Kg	-	12/26/19 14:41	12/27/19 13:39	1
Arsenic	2.02		1.22	0.266	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Barium	124		1.22	0.0366	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Beryllium	0.183	J	0.305	0.0177	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Calcium	58800		122	1.06	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Cadmium	0.0977	J	0.305	0.0313	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Chromium	3.66		0.611	0.0618	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Copper	2.18		0.611	0.212	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Iron	3350		24.4	3.09	mg/Kg	₩	12/26/19 14:41	12/27/19 13:39	1
Potassium	822		122	13.4	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Magnesium	1150		122	2.34	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Manganese	40.7		1.83	0.0465	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Sodium	260		122	1.08	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Lead	2.67		0.611	0.128	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Antimony	0.283	U	3.05	0.283	mg/Kg	₽	12/26/19 14:41	12/27/19 13:39	1
Selenium	0.316	U	2.44	0.316	mg/Kg	φ.	12/26/19 14:41	12/27/19 13:39	1

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Client: ARCADIS U.S., Inc.

Mercury

Lab Sample ID: 600-197218-8

12/31/19 10:58

₩

12/30/19 14:44

Client Sample ID: Cell6- Square 24 - S-2-3-191205 Date Collected: 12/05/19 10:08 Matrix: Solid Date Received: 12/10/19 17:32

Percent Solids: 80.3

Method: 6010B - Inductively Coupl									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.338	U	1.83	0.338	mg/Kg		12/26/19 14:41	12/27/19 13:39	1
Zinc	8.63	b	1.83	0.132	mg/Kg	₩	12/26/19 14:41	12/27/19 13:39	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Result Qualifier MQL (Adj) Dil Fac Analyte SDL Unit Prepared Analyzed

0.0212

0.00446 mg/Kg

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.7		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	80.3		1.0	1.0	%			12/13/19 08:48	1

0.00446 U

Lab Sample ID: 600-197218-9 **Client Sample ID: Cell7- Square 58 - S-2-3-191205**

Date Collected: 12/05/19 10:17 Matrix: Solid Date Received: 12/10/19 17:32 Percent Solids: 84.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.132	U	0.445	0.132	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Arsenic	1.53		1.11	0.242	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Barium	29.7		1.11	0.0334	mg/Kg	₩	12/26/19 14:41	12/27/19 13:41	1
Beryllium	0.250	J	0.278	0.0161	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Calcium	4480		111	0.961	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Cadmium	0.111	J	0.278	0.0285	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Chromium	4.94		0.556	0.0563	mg/Kg	\$	12/26/19 14:41	12/27/19 13:41	1
Copper	2.72		0.556	0.193	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Iron	4680		22.2	2.81	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Potassium	990		111	12.2	mg/Kg	*	12/26/19 14:41	12/27/19 13:41	1
Magnesium	707		111	2.14	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Manganese	68.7		1.67	0.0424	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Sodium	56.4	J	111	0.985	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Lead	3.74		0.556	0.117	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Antimony	0.258	U	2.78	0.258	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Selenium	0.288	U	2.22	0.288	mg/Kg	\$	12/26/19 14:41	12/27/19 13:41	1
Thallium	0.308	U	1.67	0.308	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1
Zinc	11.5	b	1.67	0.120	mg/Kg	₽	12/26/19 14:41	12/27/19 13:41	1

Method: 7471A - Mercury in Solid	or Semisolid Waste (Mar	nual Cold Vap	or Technique)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00418 J	0.0178	0.00376 mg/Kg	<u></u>	12/30/19 14:44	12/31/19 11:00	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.0	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	84.0	1.0	1.0 %			12/13/19 08:48	1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell7- Square 34 - S-2-3-191205

Date Collected: 12/05/19 10:25 Date Received: 12/10/19 17:32

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197218-10

Matrix: Solid Percent Solids: 83.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.132	U	0.442	0.132	mg/Kg	\	12/26/19 14:41	12/27/19 13:43	1
Arsenic	1.71		1.11	0.241	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Barium	33.1		1.11	0.0332	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Beryllium	0.282		0.276	0.0160	mg/Kg	\$	12/26/19 14:41	12/27/19 13:43	1
Calcium	5720		111	0.955	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Cadmium	0.111	J	0.276	0.0283	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Chromium	5.60		0.553	0.0560	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Copper	2.73		0.553	0.192	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Iron	5100		22.1	2.80	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Potassium	1050		111	12.2	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Magnesium	813		111	2.12	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Manganese	65.0		1.66	0.0421	mg/Kg	₩	12/26/19 14:41	12/27/19 13:43	1
Sodium	425		111	0.980	mg/Kg	*	12/26/19 14:41	12/27/19 13:43	1
Lead	3.81		0.553	0.116	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Antimony	0.257	U	2.76	0.257	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Selenium	0.286	U	2.21	0.286	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Thallium	0.306	U	1.66	0.306	mg/Kg	₽	12/26/19 14:41	12/27/19 13:43	1
Zinc	11.9	b	1.66	0.119	mg/Kg	₩	12/26/19 14:41	12/27/19 13:43	1

Method: 7471A - Mercury in Solid of	r Semisolid	Waste (Mai	nual Cold Vapo	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00704	J	0.0190	0.00401	mg/Kg	\	12/30/19 14:44	12/31/19 11:02	1

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	83.7		1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell7- Square 153 - S-2-3-191205 Lab Sample ID: 600-197218-11 Date Collected: 12/05/19 10:33

Date Received: 12/10/19 17:32 Percent Solids: 72.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.517	0.154	mg/Kg		12/26/19 14:41	12/27/19 13:45	1
Arsenic	1.42		1.29	0.282	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Barium	23.6		1.29	0.0388	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Beryllium	0.162	J	0.323	0.0187	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Calcium	6400		129	1.12	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Cadmium	0.0776	J	0.323	0.0331	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Chromium	3.67		0.646	0.0654	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Copper	1.56		0.646	0.225	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Iron	3430		25.9	3.27	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Potassium	649		129	14.2	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Magnesium	602		129	2.48	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Manganese	32.5		1.94	0.0492	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Sodium	27.2	J	129	1.15	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Lead	2.59		0.646	0.136	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Antimony	0.300	U	3.23	0.300	mg/Kg	₽	12/26/19 14:41	12/27/19 13:45	1
Selenium	0.335	U	2.59	0.335	mg/Kg	\$	12/26/19 14:41	12/27/19 13:45	1

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Matrix: Solid

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Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Date Collected: 12/05/19 10:33 Date Received: 12/10/19 17:32 Lab Sample ID: 600-197218-11

Matrix: Solid

Percent Solids: 72.3

Method: 6010B - Inductively Coupl	ed Plasma -	Atomic Em	ission Spectron	netry (Co	ontinued)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.358	U	1.94	0.358	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1
Zinc	8.27	b	1.94	0.140	mg/Kg	₩	12/26/19 14:41	12/27/19 13:45	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mai	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00443	U	0.0211	0.00443	mg/Kg		12/30/19 14:44	12/31/19 11:04	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.7		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	72.3		1.0	1.0	%			12/13/19 08:48	1

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

QC

RER

RPD

TEF TEQ

RL

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

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
F	Duplicate RPD exceeds the control limit
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.
Glossary	

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Client: ARCADIS U.S., Inc. Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284107/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA** Prep Batch: 284107 Analysis Batch: 284156 MR MR

	MB	MR							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Calcium	0.864	U	100	0.864	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Potassium	11.0	U	100	11.0	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Sodium	0.886	U	100	0.886	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Thallium	0.3900	J	1.50	0.277	mg/Kg		12/26/19 14:41	12/27/19 13:09	1
Zinc	0.1700	J	1.50	0.108	mg/Kg		12/26/19 14:41	12/27/19 13:09	1

Lab Sample ID: LCSSRM 600-284107/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284156 **Prep Batch: 284107**

	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	25.8	22.54		mg/Kg		87.4	67.1 - 106.	
							6	
Arsenic	69.4	63.43		mg/Kg		91.4	66.6 - 106.	
							6	
Barium	393	330.0		mg/Kg		84.0	64.6 - 106.	
Donallium	202	259.0					6	
Beryllium	293	259.0		mg/Kg		00.4	72.4 - 106. 8	
Calcium	19300	17870		mg/Kg		92.6	o 70.5 - 106.	
Caldian	10000	11010		mg/rtg		02.0	7 0.0 - 100.	
Cadmium	268	240.7		mg/Kg		89.8	71.3 - 106.	
							7	
Chromium	63.6	53.28		mg/Kg		83.8	71.9 - 106.	
							6	
Copper	175	157.6		mg/Kg		90.1	72.0 - 106.	
							9	
Iron	17700	13400		mg/Kg		75.7	50.1 - 106.	
Potassium	5740	4944		malka		06.1	8	
Polassium	5740	4944		mg/Kg		00.1	64.6 - 106.	
Magnesium	5390	4035		mg/Kg		74 9	6 64.2 - 106.	
	3333			919			7	
Manganese	616	469.3		mg/Kg		76.2	64.1 - 106.	
-							7	
Sodium	9070	8317		mg/Kg		91.7	70.5 - 106.	
							6	
Lead	164	152.1		mg/Kg		92.7	71.3 - 106.	
							7	

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Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284107/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 284156 Prep Batch: 284107
Spike LCSSRM LCSSRM %Rec.

							,	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	120	33.63		mg/Kg		28.0	20.0 - 106.	
							7	
Selenium	155	137.7		mg/Kg		88.8	65.2 - 106.	
							5	
Thallium	81.0	69.93		mg/Kg		86.3	63.2 - 106.	
							7	
Zinc	482	437.4		mg/Kg		90.7	69.7 - 106.	
							6	

Lab Sample ID: 600-197218-1 MS Client Sample ID: Cell5- Square 209 - S-2-3-191205

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 284156 Prep Batch: 284107

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Silver 0.148 15.5 14.51 mg/Kg # 93 75 - 125 Arsenic 2.35 62.1 ₩ 103 75 - 125 66.43 mg/Kg 158.2 N1 Ü Barium 128 62.1 mg/Kg 49 75 - 125 Beryllium 62.1 61.25 98 75 - 125 0.273 J mg/Kg ₩ Calcium 53500 621 62580 4 mg/Kg 1455 75 - 125 62.82 101 Cadmium 0.155 J 62.1 mg/Kg 75 - 125 Ü Chromium 5.36 62.1 59.69 mg/Kg 88 75 - 125 Copper 4.07 62.1 65.56 99 75 - 125 mg/Kg 5010 621 5228 4 mg/Kg Ü 35 75 - 125 1290 621 . . 75 - 125 Potassium 2166 N1 142 mg/Kg ₩ Magnesium 2140 621 3529 N1 mg/Kg 224 75 - 125 ₩ Manganese 72.6 62.1 111.2 N1 mg/Kg 62 75 - 125 ₩ 75 - 125 Sodium 37.0 621 683.5 mg/Kg 104 ₽ Lead 3.67 62.1 63.63 mg/Kg 97 75 - 125 ₽ Antimony 0.288 U 93.1 72.01 mg/Kg 77 75 - 125 Selenium 0.322 U 62.1 62.39 mg/Kg Ö 101 75 - 125 Thallium 62.1 ₽ 0.344 U 57.94 93 75 - 125 mg/Kg 31.0 44.03 ₩ Zinc 14.7 b mg/Kg 75 - 125

Lab Sample ID: 600-197218-11 MS

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Matrix: Solid

Prep Type: Total/NA

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 284156 Prep Batch: 284107

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.154	U	16.8	15.58		mg/Kg	₩	93	75 - 125
Arsenic	1.42		67.1	70.16		mg/Kg	₩	102	75 - 125
Barium	23.6		67.1	99.10		mg/Kg	₩	112	75 ₋ 125
Beryllium	0.162	J	67.1	70.36		mg/Kg	₩	105	75 - 125
Calcium	6400		671	7533	4	mg/Kg	₩	169	75 ₋ 125
Cadmium	0.0776	J	67.1	68.75		mg/Kg	₩	102	75 ₋ 125
Chromium	3.67		67.1	71.30		mg/Kg	₩	101	75 ₋ 125
Copper	1.56		67.1	70.23		mg/Kg	₩	102	75 ₋ 125
Iron	3430		671	4914	4	mg/Kg	₩	221	75 - 125
Potassium	649		671	1874	N1	mg/Kg	₩.	182	75 ₋ 125
Magnesium	602		671	1548	N1	mg/Kg	₩	141	75 ₋ 125
Manganese	32.5		67.1	106.7		mg/Kg	₩	110	75 - 125

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Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197218-11 MS Client Sample ID: Cell7- Square 153 - S-2-3-191205

Matrix: Solid

Client: ARCADIS U.S., Inc.

Prep Type: Total/NA **Prep Batch: 284107** Analysis Batch: 284156

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Sodium	27.2	J	671	721.8		mg/Kg	<u></u>	103	75 - 125
Lead	2.59		67.1	71.10		mg/Kg	₩	102	75 - 125
Antimony	0.300	U	101	87.62		mg/Kg	₩	87	75 ₋ 125
Selenium	0.335	U	67.1	67.54		mg/Kg	₽	101	75 - 125
Thallium	0.358	U	67.1	66.23		mg/Kg	₩	99	75 ₋ 125
Zinc	8.27	b	33.6	44.13		mg/Kg	₩	107	75 ₋ 125

Lab Sample ID: 600-197218-1 DU Client Sample ID: Cell5- Square 209 - S-2-3-191205

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 284156							Prep Batch: 2	2 <mark>84107</mark>
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.148	U	0.148	U	mg/Kg	<u> </u>	NC	20
Arsenic	2.35		2.340		mg/Kg	☼	0.5	20
Barium	128		108.7		mg/Kg	₽	16	20
Beryllium	0.273	J	0.2545	J	mg/Kg	₽	7	20
Calcium	53500		47190		mg/Kg	₽	13	20
Cadmium	0.155	J	0.1304	J	mg/Kg	₽	17	20
Chromium	5.36		5.115		mg/Kg	\$	5	20
Copper	4.07		3.886		mg/Kg	₽	5	20
Iron	5010		4815		mg/Kg	₽	4	20
Potassium	1290		1248		mg/Kg	\$	3	20
Magnesium	2140		2226		mg/Kg	₽	4	20
Manganese	72.6		69.22		mg/Kg	₽	5	20
Sodium	37.0	J	35.57	J	mg/Kg	₽	4	20
Lead	3.67		3.594		mg/Kg	₽	2	20
Antimony	0.288	U	0.288	U	mg/Kg	₩	NC	20
Selenium	0.322	U	0.322	U	mg/Kg	₩	NC	20
Thallium	0.344	U	0.4532	J	mg/Kg	₩	NC	20
Zinc	14.7	b	14.34		mg/Kg	₽	2	20

Lab Sample ID: 600-197218-11 DU Client Sample ID: Cell7- Square 153 - S-2-3-191205

Matrix: Solid

Prep Type: Total/NA **Prep Batch: 284107** Analysis Batch: 284156

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.154	U	0.165	U	mg/Kg	<u> </u>	NC	20
Arsenic	1.42		1.003	JF	mg/Kg	☆	34	20
Barium	23.6		19.74		mg/Kg	₽	18	20
Beryllium	0.162	J	0.1106	JF	mg/Kg	*	37	20
Calcium	6400		7344		mg/Kg	☆	14	20
Cadmium	0.0776	J	0.06916	J	mg/Kg	\$	11	20
Chromium	3.67		2.911	F	mg/Kg	*	23	20
Copper	1.56		1.238	F	mg/Kg	☆	23	20
Iron	3430		2537	F	mg/Kg	☆	30	20
Potassium	649		515.6	F	mg/Kg		23	20
Magnesium	602		529.7		mg/Kg	☆	13	20
Manganese	32.5		26.16	F	mg/Kg	\$	22	20
Sodium	27.2	J	29.24	J	mg/Kg		7	20

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Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197218-11 DU Client Sample ID: Cell7- Square 153 - S-2-3-191205 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 284156 **Prep Batch: 284107**

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Lead	2.59		1.881	F	mg/Kg	*	32	20
Antimony	0.300	U	0.321	U	mg/Kg	₩	NC	20
Selenium	0.335	U	0.358	U	mg/Kg	*	NC	20
Thallium	0.358	U	0.383	U	mg/Kg	₽	NC	20
Zinc	8.27	b	5.124	F	mg/Kg	₩	47	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284366/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 Prep Batch: 284366 мв мв

MQL (Adj) SDL Unit Analyte Result Qualifier D Prepared Analyzed Dil Fac Mercury 0.00330 U 0.0157 0.00330 mg/Kg 12/30/19 14:44 12/31/19 10:33

Lab Sample ID: LCS 600-284366/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444 Prep Batch: 284366 LCS LCS %Rec. Spike

Added Result Qualifier Mercury 0.231 0.2371 mg/Kg 103 70 - 130

Lab Sample ID: 600-197218-1 MS Client Sample ID: Cell5- Square 209 - S-2-3-191205

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 284444 Prep Batch: 284366 Spike MS MS Sample Sample %Rec.

Analyte Result Qualifier Added Result Qualifier D %Rec Limits Unit 0.00449 U 0.304 0.3085 102 75 - 125 Mercury mg/Kg

Lab Sample ID: 600-197218-1 DU Client Sample ID: Cell5- Square 209 - S-2-3-191205

Matrix: Solid

Analysis Batch: 284444 Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit RPD Limit

Mercury 0.00449 U 0.004750 J mg/Kg 20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197218-1 DU Client Sample ID: Cell5- Square 209 - S-2-3-191205 **Matrix: Solid**

Analysis Batch: 282965

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Moisture	24.0		22.5		%		 6	20
Percent Solids	76.0		77.5		%		2	20

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Prep Type: Total/NA

Prep Batch: 284366

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 2540B - Percent Moisture (Continued)

Lab Sample ID: 600-197218-11 DU **Client Sample ID: Cell7- Square 153 - S-2-3-191205**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 282965

Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit RPD

Limit Percent Moisture 27.7 % 26.5 4 20 2 Percent Solids 72.3 73.5 % 20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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Client: ARCADIS U.S., Inc.

Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 284107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-3	Cell5- Square 120 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-4	Cell5- Square 13 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-5	Cell6- Square 206 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-6	Cell6- Square 202 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-7	Cell6- Square 110 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-8	Cell6- Square 24 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-9	Cell7- Square 58 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-10	Cell7- Square 34 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-11	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	3050B	
MB 600-284107/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-284107/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197218-1 MS	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-11 MS	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-1 DU	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	3050B	
600-197218-11 DU	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	3050B	

Analysis Batch: 284156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-3	Cell5- Square 120 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-4	Cell5- Square 13 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-5	Cell6- Square 206 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-6	Cell6- Square 202 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-7	Cell6- Square 110 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-8	Cell6- Square 24 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-9	Cell7- Square 58 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-10	Cell7- Square 34 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-11	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	6010B	284107
MB 600-284107/1-A	Method Blank	Total/NA	Solid	6010B	284107
LCSSRM 600-284107/2-A	Lab Control Sample	Total/NA	Solid	6010B	284107
600-197218-1 MS	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-11 MS	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-1 DU	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	6010B	284107
600-197218-11 DU	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	6010B	284107

Prep Batch: 284366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	<u> </u>
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-3	Cell5- Square 120 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-4	Cell5- Square 13 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-5	Cell6- Square 206 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-6	Cell6- Square 202 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-7	Cell6- Square 110 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-8	Cell6- Square 24 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-9	Cell7- Square 58 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-10	Cell7- Square 34 - S-2-3-191205	Total/NA	Solid	7471A	

Eurofins TestAmerica, Houston

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Metals (Continued)

Prep Batch: 284366 (Continued)

Lab Sample ID	Client Sample ID	ent Sample ID Prep Type		Method	Prep Batch
600-197218-11	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	7471A	
MB 600-284366/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284366/2-A	Lab Control Sample	Total/NA	Solid	7471A	
600-197218-1 MS	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	
600-197218-1 DU	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-3	Cell5- Square 120 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-4	Cell5- Square 13 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-5	Cell6- Square 206 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-6	Cell6- Square 202 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-7	Cell6- Square 110 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-8	Cell6- Square 24 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-9	Cell7- Square 58 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-10	Cell7- Square 34 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-11	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	7471A	284366
MB 600-284366/1-A	Method Blank	Total/NA	Solid	7471A	284366
LCS 600-284366/2-A	Lab Control Sample	Total/NA	Solid	7471A	284366
600-197218-1 MS	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	284366
600-197218-1 DU	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	284366

General Chemistry

Analysis Batch: 282965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	2540B	 _
600-197218-2	Cell5- Square 188 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-3	Cell5- Square 120 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-4	Cell5- Square 13 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-5	Cell6- Square 206 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-6	Cell6- Square 202 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-7	Cell6- Square 110 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-8	Cell6- Square 24 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-9	Cell7- Square 58 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-10	Cell7- Square 34 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-11	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-1 DU	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	2540B	
600-197218-11 DU	Cell7- Square 153 - S-2-3-191205	Total/NA	Solid	2540B	

Date Received: 12/10/19 17:32

Date Collected: 12/05/19 08:55

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Date Collected: 12/05/19 08:55

Lab Sample ID: 600-197218-1 Matrix: Solid

۱		Batch	Batch		Dilution	Batch	Prepared		
۱	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
۱	Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Lab Sample ID: 600-197218-1

Matrix: Solid

Date Received: 12/10/19 17:32 Percent Solids: 76.0

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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:13	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:37	KP1	TAL HOU

Client Sample ID: Cell5- Square 188 - S-2-3-191205

Lab Sample ID: 600-197218-2

Matrix: Solid

Date Collected: 12/05/19 09:07 Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell5- Square 188 - S-2-3-191205

Lab Sample ID: 600-197218-2

Date Collected: 12/05/19 09:07 Date Received: 12/10/19 17:32

Matrix: Solid Percent Solids: 80.6

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:19	KP1	TAL HOU
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		2	284156	12/27/19 14:18	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:47	KP1	TAL HOU

Client Sample ID: Cell5- Square 120 - S-2-3-191205

Lab Sample ID: 600-197218-3

Matrix: Solid

Date Collected: 12/05/19 09:16 Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell5- Square 120 - S-2-3-191205

Lab Sample ID: 600-197218-3

Date Collected: 12/05/19 09:16

Matrix: Solid Percent Solids: 74.2

Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:21	KP1	TAL HOU

Eurofins TestAmerica, Houston

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell5- Square 120 - S-2-3-191205

Lab Sample ID: 600-197218-3 Date Collected: 12/05/19 09:16 Date Received: 12/10/19 17:32

Matrix: Solid Percent Solids: 74.2

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 7471A 284366 12/30/19 14:44 KP1 TAL HOU Total/NA Analysis 7471A 284444 12/31/19 10:49 KP1 TAL HOU 1

Client Sample ID: Cell5- Square 13 - S-2-3-191205 Lab Sample ID: 600-197218-4

Date Collected: 12/05/19 09:25 **Matrix: Solid**

Date Received: 12/10/19 17:32

Batch Batch Dilution Batch Prepared Method Number Lab Prep Type Туре Run Factor or Analyzed Analyst Total/NA 2540B 282965 ANP TAL HOU Analysis 12/13/19 08:48

Client Sample ID: Cell5- Square 13 - S-2-3-191205 Lab Sample ID: 600-197218-4

Date Collected: 12/05/19 09:25 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 82.4

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab 3050B Total/NA Prep 284107 12/26/19 14:41 CLD TAL HOU TAL HOU Total/NA Analysis 6010B 1 284156 12/27/19 13:23 KP1 TAL HOU Total/NA Prep 7471A 284366 12/30/19 14:44 KP1 Total/NA Analysis 7471A 284444 12/31/19 10:51 KP1 TAL HOU

Client Sample ID: Cell6- Square 206 - S-2-3-191205 Lab Sample ID: 600-197218-5

Date Collected: 12/05/19 09:37 **Matrix: Solid**

Date Received: 12/10/19 17:32

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 2540B 282965 12/13/19 08:48 ANP TAL HOU

Client Sample ID: Cell6- Square 206 - S-2-3-191205 Lab Sample ID: 600-197218-5

Date Collected: 12/05/19 09:37 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 90.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 14:16	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:53	KP1	TAL HOU

Client Sample ID: Cell6- Square 202 - S-2-3-191205 Lab Sample ID: 600-197218-6

Date Collected: 12/05/19 09:46 **Matrix: Solid** Date Received: 12/10/19 17:32

Batch Batch Dilution Batch Prepared Prep Type Type Method Run Factor Number or Analyzed Analyst Lab Total/NA Analysis 2540B 282965 12/13/19 08:48 ANP TAL HOU Client: ARCADIS U.S., Inc.

Client Sample ID: Cell6- Square 202 - S-2-3-191205

Lab Sample ID: 600-197218-6 Date Collected: 12/05/19 09:46 **Matrix: Solid** Date Received: 12/10/19 17:32

Percent Solids: 73.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:35	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:55	KP1	TAL HOU

Client Sample ID: Cell6- Square 110 - S-2-3-191205

Lab Sample ID: 600-197218-7

Matrix: Solid

Date Collected: 12/05/19 09:59 Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell6- Square 110 - S-2-3-191205

Lab Sample ID: 600-197218-7 **Matrix: Solid**

Date Collected: 12/05/19 09:59 Date Received: 12/10/19 17:32 Percent Solids: 74.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:37	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:57	KP1	TAL HOU

Client Sample ID: Cell6- Square 24 - S-2-3-191205

Lab Sample ID: 600-197218-8

Matrix: Solid

Date Collected: 12/05/19 10:08 Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell6- Square 24 - S-2-3-191205 Lab Sample ID: 600-197218-8

Date Collected: 12/05/19 10:08 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 80.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:39	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:58	KP1	TAL HOU

Client Sample ID: Cell7- Square 58 - S-2-3-191205 Lab Sample ID: 600-197218-9

Date Collected: 12/05/19 10:17 **Matrix: Solid**

Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU	_

Eurofins TestAmerica, Houston

Client Sample ID: Cell7- Square 58 - S-2-3-191205

Lab Sample ID: 600-197218-9 Date Collected: 12/05/19 10:17 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 84.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:41	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:00	KP1	TAL HOU

Client Sample ID: Cell7- Square 34 - S-2-3-191205

Lab Sample ID: 600-197218-10 Date Collected: 12/05/19 10:25 **Matrix: Solid**

Date Received: 12/10/19 17:32

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell7- Square 34 - S-2-3-191205

Lab Sample ID: 600-197218-10 Date Collected: 12/05/19 10:25 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 83.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:43	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:02	KP1	TAL HOU

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Lab Sample ID: 600-197218-11 Date Collected: 12/05/19 10:33 **Matrix: Solid**

Date Received: 12/10/19 17:32

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Date Collected: 12/05/19 10:33 **Matrix: Solid** Date Received: 12/10/19 17:32 Percent Solids: 72.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284107	12/26/19 14:41	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 13:45	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:04	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

Lab Sample ID: 600-197218-11

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197218-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	Expiration Date 10-31-20	
		ELAP	T104704223-19-25		
The following analytes the agency does not of		ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for	
Analysis Method	Prep Method	Matrix	Analyte		
2540B		Solid	Percent Moisture		
20100		Cona	. 0.00		

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F - TSP Dodecahydrate Special Instructions/Note: other (specify) N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 H - Na2S2O3 Months 5 + H2504 W-pH4-5 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 600-72593-19936.10 +0 Preservation Codes: G - Amchlor H - Ascorbic Acid A - HCL B - NaOH C - Zn Acetate D - Ninc Acid E - NaHSQ4 F - MeOH I - Ice J - Di Water K - EDTA 600-197218 Chain of Custody Page Job# Archive For Total Number of containers Date/Time Method of Shipment arrier Tracking No(s) Disposal By Lab Analysis Requested Cooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements 8015- Chanide z sachin.kudchadkar@testamericainc.com nZ ,IT ,gA ,a& Return To Client \$260B-BTEX Kudchadkar, Sachin G 80128 CRO -Ce-C10 - Soz Jar Canton 80128 DRO/ORO -C10-C38/ C58-C36- 4 oz Jar- Canton 2 2 2 2 2 2 2 Perform MS/MSD (Yes of No) 2 2 2 22 Hreeden Company Smaller, Smaller, Orwastered Preservation Code: Matrix Solid Company Radiological G=grab) (C=comp, Sample Type 5 0 0 6 5 2460 6198518792 Starrdard 0907 0925 9160 191,205 0851 1959 1008 1025 Sample 0937 101 1033 Time J. Steinmann Date: Unknown TAT Requested (days): Due Date Requested: 191305 9130S 191205 191205 191205 Sample Date 191305 19/305 191205 191905 191205 Project # 60011732 atte/Time Poison B elle-Square 112-2-3-191205 ell 5-Squana09-5-2-191205 29441202-5-2-19120S C115-Sydale 108 -5-2-3-191205 ello-Square 24-5-2-191205 20115-5quare 13-5-2-3-191205 Cel17- Syngre 58-5-2-191205 20117-Square 24-5-2-191205 G117-5-11001 53-5-3-111203 Celle-Square 206-5-3-191205 20115-Square 120 - 5-2-3 - 191205 Skin Imitant Deliverable Requested 1, II, IV, Other (specify) teg son Custody Seal No Chevron - Jal Land Farm Soils 2020 Flammable Candrain. Possible Hazard Identification Suite 121 Allin sarah johnson@arcadis.com Empty Kit Relinquished by Custody Seals Intact Sample Identification Client Information 1004 North Big Spring A Yes A No Non-Hazard ARCADIS U.S., Inc 432-227-0266(Tel) (hewon Sarah Johnson -4/16inquished by iquished by State, Zip TX, 79701 oject Name Midland

Environment Testing TestAmorica

Seurofins :

Chain of Custody Record

Eurofins TestAmerica, Houston

Phone (713) 690-4444 Fax (713) 690-5646

Hcuston, TX 77040 6310 Rothway Street

Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

36	illible nece	ipi oneckii	51			
	21	Q Dat	e/Time Received: _			
JOB NUMBER:	121	O CLI	ENT:	Fred Fe	a di	5
UNPACKED BY:	47	CAF	RRIER/DRIVER:	Te	de	<u>K</u>
Custody Seal Present:		NO Nur	mber of Coolers Receiv	ved:	1	
Cooler ID	Temp	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7301	(Y) N	Y / (N)	5.8	676	1-0.1	5.9
	Y/N	Y/N				D
	Y/N	Y / N				
	Y / N	Y / N				M
	Y / N F = correction factor	Y / N				
Base samples are>pH 1 TX1005 samples frozen pH paper Lot #	2: □YES □N	NO Acid	d preserved are <ph 2:<="" th=""><th>REEZER:</th><th>□NO □YES □N</th><th>IO ÆNĀ</th></ph>	REEZER:	□NO □YES □N	IO ÆNĀ
Did samples meet the labora	atory's standard co	onditions of sample	acceptability upon recei	pt?		PYES NO
COMMENTS:						
						Ŋ
						1
						45

HS-SA-WI-013

Rev. 4A: 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197218-1

Login Number: 197218 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.9
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.	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.
		•

Eurofins TestAmerica, Houston



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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197219-1

Client Project/Site: Chevron - Jal Land Farm Soils

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



Authorized for release by: 12/31/2019 1:45:14 PM Tiffany Fleming, Project Management Assistant I (361)289-2673 tiffany.fleming@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method Description Method Protocol Laboratory 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) SW846 TAL HOU 7471A 2540B Percent Moisture SM20 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils SW846 TAL HOU 7471A Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation SW846 TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197219-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID Client Sample ID Matrix Collected Received Asset ID 12/10/19 17:33 600-197219-1 Cell 21 - Square 48-S-2-3-191203 Solid 12/03/19 10:30 Cell 21 - Square 169-S-2-3-191203 600-197219-2 Solid 12/03/19 10:54 12/10/19 17:33 600-197219-3 Cell 21 - Square 204-S-2-3-191203 Solid 12/03/19 11:07 12/10/19 17:33 600-197219-4 Cell 25 - Square 199-S-2-3-191203 Solid 12/03/19 11:23 12/10/19 17:33 600-197219-5 Cell 25 - Square 181-S-2-3-191203 Solid 12/03/19 11:43 12/10/19 17:33 Cell 25 - Square 207-S-2-3-191203 600-197219-6 Solid 12/03/19 11:55 12/10/19 17:33 600-197219-7 Cell 26 - Square 181-S-2-3-191203 Solid 12/03/19 12:06 12/10/19 17:33 Cell 26 - Square 199-S-2-3-191203 Solid 12/10/19 17:33 600-197219-8 12/03/19 12:28 600-197219-9 Cell 26 - Square 108-S-2-3-191203 Solid 12/03/19 12:41 12/10/19 17:33 Cell 13 - Square 105-S-2-3-191203 600-197219-10 Solid 12/03/19 13:04 12/10/19 17:33 600-197219-11 Cell 13 - Square 186-S-2-3-191203 Solid 12/03/19 13:21 12/10/19 17:33

Job ID: 600-197219-1

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1:

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

1 Toject/offe. Offerfor dar Land Land Tarm Cons

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Date Collected: 12/03/19 10:30
Date Received: 12/10/19 17:33

Lab Sample ID: 600-197219-1 Matrix: Solid Percent Solids: 87.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	<u></u>	12/26/19 14:47	12/27/19 12:22	1
Arsenic	2.27		1.06	0.231	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Barium	44.3		1.06	0.0318	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Beryllium	0.254	J	0.265	0.0154	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Calcium	10700		106	0.916	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Cadmium	0.148	J	0.265	0.0271	mg/Kg	₩	12/26/19 14:47	12/27/19 12:22	1
Chromium	5.30		0.530	0.0536	mg/Kg		12/26/19 14:47	12/27/19 12:22	1
Copper	3.85		0.530	0.184	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Iron	4550		21.2	2.68	mg/Kg	₩	12/26/19 14:47	12/27/19 12:22	1
Potassium	1060		106	11.7	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Magnesium	1050		106	2.04	mg/Kg	₩	12/26/19 14:47	12/27/19 12:22	1
Manganese	61.9		1.59	0.0404	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Sodium	19.7	J b	106	0.939	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Lead	4.88		0.530	0.111	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Antimony	0.246	U	2.65	0.246	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1
Selenium	0.275	U	2.12	0.275	mg/Kg	₩	12/26/19 14:47	12/27/19 12:22	1
Thallium	0.604	J b	1.59	0.294	mg/Kg	₩	12/26/19 14:47	12/27/19 12:22	1
Zinc	14.2	b	1.59	0.114	mg/Kg	₽	12/26/19 14:47	12/27/19 12:22	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.115	b	0.0180	0.00378	mg/Kg	₩	12/30/19 10:30	12/31/19 08:57	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.7	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	87.3	1.0	1.0 %			12/13/19 08:48	1

Client Sample ID: Cell 21 - Square 169-S-2-3-191203

Date Collected: 12/03/19 10:54

Date Received: 12/10/19 17:33

Lab Sample ID: 600-197219-2

Matrix: Solid

Percent Solids: 73.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.155	U	0.522	0.155	mg/Kg	<u> </u>	12/26/19 14:47	12/27/19 12:27	1
Arsenic	3.92		1.31	0.285	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Barium	336		1.31	0.0392	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Beryllium	0.196	J	0.326	0.0189	mg/Kg	φ.	12/26/19 14:47	12/27/19 12:27	1
Calcium	140000		261	2.26	mg/Kg	₽	12/26/19 14:47	12/27/19 13:25	2
Cadmium	0.137	J	0.326	0.0334	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Chromium	3.73		0.653	0.0661	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Copper	4.33		0.653	0.227	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Iron	3340		26.1	3.30	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Potassium	915		131	14.4	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Magnesium	2590		131	2.51	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Manganese	41.4		1.96	0.0497	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Sodium	71.6	J b	131	1.16	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Lead	7.97		1.31	0.274	mg/Kg	₽	12/26/19 14:47	12/27/19 13:25	2
Antimony	0.303	U	3.26	0.303	mg/Kg	₽	12/26/19 14:47	12/27/19 12:27	1
Selenium	0.338	U	2.61	0.338	mg/Kg		12/26/19 14:47	12/27/19 12:27	1

Eurofins TestAmerica, Houston

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08:48 1

Percent Solids: 73.6

Lab Sample ID: 600-197219-2

Client Sample ID: Cell 21 - Square 169-S-2-3-191203 Matrix: Solid Date Collected: 12/03/19 10:54 Date Received: 12/10/19 17:33

	Matrix. Solid
Percen	t Solids: 73.6

Job ID: 600-197219-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)											
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Thallium	1.43	J b	1.96	0.362	mg/Kg		12/26/19 14:47	12/27/19 12:27	1		
Zinc	15.3	b	3.92	0.282	mg/Kg	₽	12/26/19 14:47	12/27/19 13:25	2		

– Method: 7471A - Mercury in Solid o	r Semisolid	Waste (Man	ual Cold Vapo	r Technique)				
Zinc	15.3	b	3.92	0.282 mg/Kg	₩	12/26/19 14:47	12/27/19 13:25	2
Thallium	1.43	J b	1.96	0.362 mg/Kg	₩	12/26/19 14:47	12/27/19 12:27	1
•		•	,			•	•	

Method: 7471A - Mercury in Solid	d or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00435	U	0.0207	0.00435	mg/Kg	\	12/30/19 10:30	12/31/19 09:03	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.4		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	73.6		1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell 21 - Square 204-S-2-3-191203 Lab Sample ID: 600-197219-3

Date Collected: 12/03/19 11:07 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 84.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.138	U	0.465	0.138	mg/Kg	*	12/26/19 14:47	12/27/19 12:29	1
Arsenic	2.33		1.16	0.254	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Barium	81.3		1.16	0.0349	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Beryllium	0.314		0.291	0.0169	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1
Calcium	42200		116	1.01	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1
Cadmium	0.163	J	0.291	0.0298	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Chromium	5.36		0.582	0.0589	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1
Copper	3.92		0.582	0.202	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1
Iron	5110		23.3	2.94	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Potassium	1260		116	12.8	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1
Magnesium	1350		116	2.23	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Manganese	78.1		1.75	0.0443	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Sodium	27.6	J b	116	1.03	mg/Kg		12/26/19 14:47	12/27/19 12:29	1
Lead	4.64		0.582	0.122	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Antimony	0.270	U	2.91	0.270	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Selenium	0.301	U	2.33	0.301	mg/Kg		12/26/19 14:47	12/27/19 12:29	1
Thallium	0.322	U	1.75	0.322	mg/Kg	₩	12/26/19 14:47	12/27/19 12:29	1
Zinc	16.9	b	1.75	0.126	mg/Kg	₽	12/26/19 14:47	12/27/19 12:29	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Man	ual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00392	U	0.0186	0.00392	mg/Kg	\	12/30/19 10:30	12/31/19 09:05	1

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL U	Init	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.7	1.0	1.0 %	, 0			12/13/19 08:48	1
Percent Solids	84.3	1.0	1.0 %	6			12/13/19 08:48	1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell 25 - Square 199-S-2-3-191203

Lab Sample ID: 600-197219-4 Date Collected: 12/03/19 11:23 Matrix: Solid

Date Received: 12/10/19 17:33 Percent Solids: 77.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.151	U	0.508	0.151	mg/Kg	\$	12/26/19 14:47	12/27/19 12:31	1
Arsenic	3.04		1.27	0.277	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Barium	73.1		1.27	0.0381	mg/Kg	₩	12/26/19 14:47	12/27/19 12:31	1
Beryllium	0.470		0.318	0.0184	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Calcium	39600		127	1.10	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Cadmium	0.184	J	0.318	0.0325	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Chromium	7.35		0.636	0.0643	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Copper	4.05		0.636	0.221	mg/Kg	₩	12/26/19 14:47	12/27/19 12:31	1
Iron	7340		25.4	3.22	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Potassium	1650		127	14.0	mg/Kg	₩	12/26/19 14:47	12/27/19 12:31	1
Magnesium	1260		127	2.44	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Manganese	106		1.91	0.0484	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Sodium	31.1	J b	127	1.13	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Lead	5.48		0.636	0.133	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Antimony	0.295	U	3.18	0.295	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Selenium	0.329	U	2.54	0.329	mg/Kg	₩	12/26/19 14:47	12/27/19 12:31	1
Thallium	0.352	U	1.91	0.352	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1
Zinc	16.8	b	1.91	0.137	mg/Kg	₽	12/26/19 14:47	12/27/19 12:31	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0710	b	0.0217	0.00457	mg/Kg	₩	12/30/19 10:30	12/31/19 09:11	1
Gonoral Chomietry									

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.9	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	77.1	1.0	1.0 %			12/13/19 08:48	1

Client Sample ID: Cell 25 - Square 181-S-2-3-191203 Lab Sample ID: 600-197219-5 Date Collected: 12/03/19 11:43 Date Received: 12/10/19 17:33 Percent Solids: 83.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.133	U	0.446	0.133	mg/Kg	<u> </u>	12/26/19 14:47	12/27/19 12:33	1
Arsenic	2.73		1.12	0.243	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Barium	50.7		1.12	0.0335	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Beryllium	0.452		0.279	0.0162	mg/Kg	φ.	12/26/19 14:47	12/27/19 12:33	1
Calcium	3270		112	0.964	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Cadmium	0.145	J	0.279	0.0286	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Chromium	7.36		0.558	0.0565	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Copper	3.49		0.558	0.194	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Iron	7600		22.3	2.82	mg/Kg	☼	12/26/19 14:47	12/27/19 12:33	1
Potassium	1550		112	12.3	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Magnesium	1150		112	2.14	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Manganese	77.4		1.67	0.0425	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Sodium	14.5	J b	112	0.989	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Lead	5.33		0.558	0.117	mg/Kg	☼	12/26/19 14:47	12/27/19 12:33	1
Antimony	0.259	U	2.79	0.259	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Selenium	0.289	U	2.23	0.289	mg/Kg		12/26/19 14:47	12/27/19 12:33	1

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Matrix: Solid

Lab Sample ID: 600-197219-5

Client Sample ID: Cell 25 - Square 181-S-2-3-191203 Date Collected: 12/03/19 11:43 Date Received: 12/10/19 17:33

Matrix: Solid Percent Solids: 83.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)											
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Thallium	0.309	U	1.67	0.309	mg/Kg	*	12/26/19 14:47	12/27/19 12:33	1		
Zinc	16.8	b	1.67	0.121	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1		

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.309	U	1.67	0.309	mg/Kg	₩	12/26/19 14:47	12/27/19 12:33	1
Zinc	16.8	b	1.67	0.121	mg/Kg	₽	12/26/19 14:47	12/27/19 12:33	1
Method: 7471A - Mercury in Solid	or Semisolid	Waste (Man	ual Cold Va	por Technic	nue)				

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0714	b	0.0196	0.00414	mg/Kg		12/30/19 10:30	12/31/19 09:13	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	83.7		1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell 25 - Square 207-S-2-3-191203 Lab Sample ID: 600-197219-6

Date Collected: 12/03/19 11:55 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 77.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.148	U	0.496	0.148	mg/Kg		12/26/19 14:47	12/27/19 12:35	1
Arsenic	2.75		1.24	0.271	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Barium	49.3		1.24	0.0372	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Beryllium	0.441		0.310	0.0180	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Calcium	4440		124	1.07	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Cadmium	0.130	J	0.310	0.0318	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Chromium	7.31		0.620	0.0628	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Copper	2.85		0.620	0.216	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Iron	7460		24.8	3.14	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Potassium	1410		124	13.7	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Magnesium	1160		124	2.38	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Manganese	63.0		1.86	0.0473	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1
Sodium	23.5	J b	124	1.10	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Lead	4.61		0.620	0.130	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Antimony	0.288	U	3.10	0.288	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Selenium	0.321	U	2.48	0.321	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Thallium	0.344	U	1.86	0.344	mg/Kg	₽	12/26/19 14:47	12/27/19 12:35	1
Zinc	16.4	b	1.86	0.134	mg/Kg	₩	12/26/19 14:47	12/27/19 12:35	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)								
	Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00454 U	0.0216	0.00454 mg/Kg	☼	12/30/19 10:30	12/31/19 09:15	1

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.5	1.0	1.0	%			12/13/19 08:48	1
Percent Solids	77.5	1.0	1.0	%			12/13/19 08:48	1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell 26 - Square 181-S-2-3-191203

Lab Sample ID: 600-197219-7 Date Collected: 12/03/19 12:06 Matrix: Solid Date Received: 12/10/19 17:33

Percent Solids: 75.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.516	0.153	mg/Kg	₩	12/26/19 14:47	12/27/19 12:43	1
Arsenic	2.64		1.29	0.281	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Barium	139		1.29	0.0387	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Beryllium	0.193	J	0.322	0.0187	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Calcium	86800		129	1.11	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Cadmium	0.148	J	0.322	0.0330	mg/Kg	₩	12/26/19 14:47	12/27/19 12:43	1
Chromium	3.35		0.644	0.0652	mg/Kg	\$	12/26/19 14:47	12/27/19 12:43	1
Copper	2.53		0.644	0.224	mg/Kg	₩	12/26/19 14:47	12/27/19 12:43	1
Iron	3500		25.8	3.26	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Potassium	865		129	14.2	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Magnesium	1090		129	2.47	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Manganese	47.3		1.93	0.0491	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Sodium	36.2	J b	129	1.14	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Lead	3.40		0.644	0.135	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Antimony	0.299	U	3.22	0.299	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Selenium	0.334	U	2.58	0.334	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1
Thallium	0.357	U	1.93	0.357	mg/Kg	₩	12/26/19 14:47	12/27/19 12:43	1
Zinc	12.3	b	1.93	0.139	mg/Kg	₽	12/26/19 14:47	12/27/19 12:43	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL Un	nit C	Prepared	Analyzed	Dil Fac	
Mercury	0.00467	U	0.0222	0.00467 mg	g/Kg 🕏	12/30/19 10:3	12/31/19 09:17	1	

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.7	1.0	1.0	%			12/13/19 08:48	1
Percent Solids	75.3	1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell 26 - Square 199-S-2-3-191203 Lab Sample ID: 600-197219-8 Date Collected: 12/03/19 12:28 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 75.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.517	0.154	mg/Kg	*	12/26/19 14:47	12/27/19 12:45	1
Arsenic	1.84		1.29	0.282	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Barium	45.0		1.29	0.0388	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Beryllium	0.259	J	0.323	0.0187	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Calcium	12700		129	1.12	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Cadmium	0.136	J	0.323	0.0331	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Chromium	4.99		0.646	0.0654	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Copper	3.73		0.646	0.225	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Iron	4700		25.9	3.27	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Potassium	1210		129	14.2	mg/Kg	\$	12/26/19 14:47	12/27/19 12:45	1
Magnesium	1020		129	2.48	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Manganese	77.9		1.94	0.0492	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Sodium	17.2	J b	129	1.15	mg/Kg	\$	12/26/19 14:47	12/27/19 12:45	1
Lead	3.79		0.646	0.136	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Antimony	0.300	U	3.23	0.300	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1
Selenium	0.335	U	2.59	0.335	mg/Kg		12/26/19 14:47	12/27/19 12:45	1

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12/31/2019

Lab Sample ID: 600-197219-8

Client Sample ID: Cell 26 - Square 199-S-2-3-191203 Date Collected: 12/03/19 12:28

Matrix: Solid Percent Solids: 75.1

Date Received: 12/10/19 17:33

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Thallium	0.358	U	1.94	0.358	mg/Kg		12/26/19 14:47	12/27/19 12:45	1	
Zinc	12.8	b	1.94	0.140	mg/Kg	₽	12/26/19 14:47	12/27/19 12:45	1	

	Zinc	12.8	D	1.94	0.140	mg/Kg	**	12/26/19 14:47	12/27/19 12:45	1
	Method: 7471A - Mercury in Solid o	or Semisolid	Waste (Mai	nual Cold Vapo	or Technic	que)				
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00433	U	0.0206	0.00433	mg/Kg		12/30/19 10:30	12/31/19 09:19	1
ì	_ _									
	General Chemistry									

MQL (Adj)

1.0

1.0

SDL Unit

1.0 %

1.0 % D

Prepared

Client Sample ID: Cell 26 - Square 108-S-2-3-191203

Result Qualifier

24.9

75.1

Lab Sample ID: 600-197219-9

Analyzed

12/13/19 08:48 12/13/19 08:48

Date Collected: 12/03/19 12:41

Analyte

Percent Moisture

Percent Solids

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 70.2	

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.158	U	0.533	0.158	mg/Kg	₩	12/26/19 14:47	12/27/19 12:47	1
Arsenic	3.67		1.33	0.290	mg/Kg	☼	12/26/19 14:47	12/27/19 12:47	1
Barium	520		1.33	0.0399	mg/Kg	₩	12/26/19 14:47	12/27/19 12:47	1
Beryllium	0.0998	J	0.333	0.0193	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Calcium	210000		666	5.75	mg/Kg	☼	12/26/19 14:47	12/27/19 13:27	5
Cadmium	0.0799	J	0.333	0.0341	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Chromium	1.81		0.666	0.0674	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Copper	1.70		0.666	0.232	mg/Kg	☼	12/26/19 14:47	12/27/19 12:47	1
Iron	1490		26.6	3.37	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Potassium	424		133	14.6	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Magnesium	3100		133	2.56	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Manganese	15.9		2.00	0.0507	mg/Kg	₩	12/26/19 14:47	12/27/19 12:47	1
Sodium	93.5	J b	133	1.18	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Lead	1.66	J	3.33	0.699	mg/Kg	₽	12/26/19 14:47	12/27/19 13:27	5
Antimony	0.309	U	3.33	0.309	mg/Kg	₩	12/26/19 14:47	12/27/19 12:47	1
Selenium	0.345	U	2.66	0.345	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Thallium	0.369	U	2.00	0.369	mg/Kg	₽	12/26/19 14:47	12/27/19 12:47	1
Zinc	5.72	J b	9.98	0.719	mg/Kg	₩	12/26/19 14:47	12/27/19 13:27	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00620	J b	0.0227	0.00478	mg/Kg	\$	12/30/19 10:30	12/31/19 09:21	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29.8	1.0	1.0 %			12/13/19 08:48	1
Percent Solids	70.2	1.0	1.0 %			12/13/19 08:48	1

Dil Fac

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Date Collected: 12/03/19 13:04 Date Received: 12/10/19 17:33

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197219-10 Matrix: Solid

Percent Solids: 71.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.159	U	0.536	0.159	mg/Kg	-	12/26/19 14:47	12/27/19 12:49	1
Arsenic	2.33		1.34	0.292	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Barium	70.9		1.34	0.0402	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Beryllium	0.301	J	0.335	0.0194	mg/Kg	\$	12/26/19 14:47	12/27/19 12:49	1
Calcium	47600		134	1.16	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Cadmium	0.147	J	0.335	0.0343	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Chromium	4.93		0.670	0.0678	mg/Kg	\$	12/26/19 14:47	12/27/19 12:49	1
Copper	3.68		0.670	0.233	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Iron	4760		26.8	3.39	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Potassium	1340		134	14.7	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Magnesium	1210		134	2.57	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Manganese	73.5		2.01	0.0510	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Sodium	29.8	J b	134	1.19	mg/Kg	\$	12/26/19 14:47	12/27/19 12:49	1
Lead	4.19		0.670	0.141	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Antimony	0.311	U	3.35	0.311	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Selenium	0.347	U	2.68	0.347	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Thallium	0.371	U	2.01	0.371	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1
Zinc	12.6	b	2.01	0.145	mg/Kg	₽	12/26/19 14:47	12/27/19 12:49	1

Method: 7471A - Mercury in Solid of	or Semisolid	Waste (Ma	nual Cold Vapo	r Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00482	U	0.0229	0.00482	mg/Kg	₩	12/30/19 13:23	12/31/19 10:27	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.2	1.0	1.0	%			12/13/19 08:48	1
Percent Solids	71.8	1.0	1.0	%			12/13/19 08:48	1

Client Sample ID: Cell 13 - Square 186-S-2-3-191203 Lab Sample ID: 600-197219-11 Date Collected: 12/03/19 13:21 **Matrix: Solid** Date Received: 12/10/19 17:33 Percent Solids: 79.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.141	U	0.473	0.141	mg/Kg	*	12/26/19 14:47	12/27/19 12:51	1
Arsenic	1.73		1.18	0.258	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Barium	58.3		1.18	0.0355	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Beryllium	0.236	J	0.295	0.0171	mg/Kg	*	12/26/19 14:47	12/27/19 12:51	1
Calcium	23500		118	1.02	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Cadmium	0.118	J	0.295	0.0303	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Chromium	4.28		0.591	0.0598	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Copper	2.81		0.591	0.206	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Iron	4060		23.6	2.99	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Potassium	972		118	13.0	mg/Kg	\$	12/26/19 14:47	12/27/19 12:51	1
Magnesium	1040		118	2.27	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Manganese	56.9		1.77	0.0450	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Sodium	156	b	118	1.05	mg/Kg	\$	12/26/19 14:47	12/27/19 12:51	1
Lead	3.47		0.591	0.124	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1
Antimony	0.274	U	2.95	0.274	mg/Kg	₩	12/26/19 14:47	12/27/19 12:51	1
Selenium	0.306	U	2.36	0.306	mg/Kg		12/26/19 14:47	12/27/19 12:51	1

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12/31/2019

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Date Collected: 12/03/19 13:21

Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 79.8

Method: 6010B - Inductively Coupl	ed Plasma -	Atomic Em	ission Spectro	metry (Co	ontinued)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.327	U	1.77	0.327	mg/Kg	₩	12/26/19 14:47	12/27/19 12:51	1
Zinc	12.8	b	1.77	0.128	mg/Kg	₽	12/26/19 14:47	12/27/19 12:51	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00402	U	0.0191	0.00402	mg/Kg	₽	12/30/19 13:23	12/31/19 10:29	1
_									

	General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Percent Moisture	20.2		1.0	1.0	%			12/13/19 08:48	1
١	Percent Solide	70.9		1.0	1.0	%			12/13/19 08:48	1

Lab Sample ID: 600-197219-11

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

QC

RER RL

RPD

TEF TEQ **Quality Control**

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

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
F	Duplicate RPD exceeds the control limit
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.
Glossary	

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Client: ARCADIS U.S., Inc. Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284108/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA** Analysis Batch: 284156 **Prep Batch: 284108**

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Calcium	0.864	U	100	0.864	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Potassium	11.0	U	100	11.0	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Sodium	2.010	J	100	0.886	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Thallium	0.3300	J	1.50	0.277	mg/Kg		12/26/19 14:47	12/27/19 12:18	1
Zinc	0.1150	J	1.50	0.108	mg/Kg		12/26/19 14:47	12/27/19 12:18	1

Lab Sample ID: LCSSRM 600-284108/2-A					Client	Sample	ID: Lab Control Sample	
Matrix: Solid							Prep Type: Total/NA	
Analysis Batch: 284156							Prep Batch: 284108	
	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	

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	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	25.8	22.52		mg/Kg		87.3	67.1 - 106.	
							6	
Arsenic	69.4	62.65		mg/Kg		90.3	66.6 - 106.	
							6	
Barium	393	329.8		mg/Kg		83.9	64.6 - 106.	
D #:		054.0					6	
Beryllium	293	251.3		mg/Kg		85.8	72.4 - 106.	
Calcium	19300	16970		mg/Kg		87.9	8 70.5 - 106.	
Odiolatii	15500	10070		mg/rtg		07.0	70.0 - 100.	
Cadmium	268	238.6		mg/Kg		89.0	71.3 - 106.	
				0 0			7	
Chromium	63.6	50.69		mg/Kg		79.7	71.9 - 106.	
							6	
Copper	175	156.4		mg/Kg		89.4	72.0 - 106.	
							9	
Iron	17700	12770		mg/Kg		72.1		
BUSINESS CONTRACTOR OF THE STATE OF THE STAT							8	
Potassium	5740	4753		mg/Kg		82.8	64.6 - 106.	
Magnesium	5390	3810		mg/Kg		70.7	6 64.2 - 106.	
wagnesium	3390	3010		mg/rxg		70.7	7	
Manganese	616	457.5		mg/Kg		74.3	64.1 - 106.	
g							7	
Sodium	9070	7925		mg/Kg		87.4	70.5 - 106.	
							6	
Lead	164	147.2		mg/Kg		89.8	71.3 - 106.	
							7	

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Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284108/2-A					Client	Sample	ID: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 284156							Prep Batch: 284108
	Spike	LCSSRM	LCSSRM				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits

	Spike	LUSSKIN	LUSSKIN				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	120	32.10		mg/Kg		26.8	20.0 - 106.	
							7	
Selenium	155	138.1		mg/Kg		89.1	65.2 - 106.	
							5	
Thallium	81.0	68.46		mg/Kg		84.5	63.2 - 106.	
							7	
Zinc	482	419.5		mg/Kg		87.0	69.7 - 106.	
							6	

Lab Sample ID: 600-197219-1 MS Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Analysis Batch: 284156									•	Batch: 284108
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.126	U	14.3	13.26		mg/Kg	<u> </u>	93	75 - 125	
Arsenic	2.27		57.2	59.76		mg/Kg	₽	100	75 - 125	
Barium	44.3		57.2	108.5		mg/Kg	₽	112	75 - 125	
Beryllium	0.254	J	57.2	57.70		mg/Kg	\$	100	75 - 125	

75 ₋ 125
2 75 - 125
) 75 ₋ 125
4 75 - 125
75 ₋ 125
3 75 ₋ 125
3 75 - 125
9 75 - 125
3 75 - 125
75 - 125
5 75 ₋ 125
2 75 - 125
7 75 - 125
7 75 - 125
9 75 - 125
3 75 ₋ 125
5 75 - 125

Lab Sample ID: 600-197219-11 MS Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Matrix: Solid

Analysis Batch: 284156

					Prep Type: Total/NA	
					Prep Batch: 284108	
Sample	Spike	MS MS	5		%Rec.	
O	A -1 -11	D14 O		D 0/D-	- 1514-	

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.141	U	14.5	13.65		mg/Kg	₽	94	75 - 125
Arsenic	1.73		58.0	61.41		mg/Kg	☼	103	75 - 125
Barium	58.3		58.0	119.5		mg/Kg	☼	106	75 - 125
Beryllium	0.236	J	58.0	59.96		mg/Kg	*	103	75 - 125
Calcium	23500		580	22770	4	mg/Kg	☼	-125	75 - 125
Cadmium	0.118	J	58.0	59.56		mg/Kg	☼	102	75 - 125
Chromium	4.28		58.0	62.11		mg/Kg	₩.	100	75 ₋ 125
Copper	2.81		58.0	62.69		mg/Kg	☼	103	75 - 125
Iron	4060		580	6420	4	mg/Kg	₽	407	75 - 125
Potassium	972		580	2369	N1	mg/Kg	₩.	241	75 ₋ 125
Magnesium	1040		580	2092	N1	mg/Kg	₽	182	75 _ 125
Manganese	56.9		58.0	118.8		mg/Kg	₽	107	75 - 125

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197219-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284108

l		Sample	Sample	Spike	MS	MS				%Rec.	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Sodium	156	b	580	758.5		mg/Kg	₩	104	75 - 125	
	Lead	3.47		58.0	62.40		mg/Kg	₽	102	75 - 125	
	Antimony	0.274	U	87.0	61.99	N1	mg/Kg	₩	71	75 - 125	
ı	Selenium	0.306	U	58.0	58.46		mg/Kg	₽	101	75 - 125	
	Thallium	0.327	U	58.0	56.97		mg/Kg	₩	98	75 - 125	
ı	Zinc	12.8	b	29.0	45.81		mg/Kg	₩	114	75 - 125	

Matrix: Solid

Lab Sample ID: 600-197219-1 DU

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Prep Type: Total/NA

Analysis Batch: 284156							Prep Batch: 2	84108
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.126	U	0.132	U	mg/Kg	<u> </u>	NC NC	20
Arsenic	2.27		2.234		mg/Kg	☼	2	20
Barium	44.3		45.18		mg/Kg	₽	2	20
Beryllium	0.254	J	0.2668	J	mg/Kg	₽	5	20
Calcium	10700		10310		mg/Kg	₽	4	20
Cadmium	0.148	J	0.1445	J	mg/Kg	₽	3	20
Chromium	5.30		5.446		mg/Kg	₽	3	20
Copper	3.85		3.985		mg/Kg	₽	3	20
Iron	4550		4842		mg/Kg	☼	6	20
Potassium	1060		1125		mg/Kg	₽	6	20
Magnesium	1050		1034		mg/Kg	₽	2	20
Manganese	61.9		65.69		mg/Kg	☼	6	20
Sodium	19.7	Jb	18.39	J	mg/Kg	₽	7	20
Lead	4.88		5.102		mg/Kg	₽	5	20
Antimony	0.246	U	0.258	U	mg/Kg	₽	NC	20
Selenium	0.275	U	0.288	U	mg/Kg	₽	NC	20
Thallium	0.604	Jb	0.3501	JF	mg/Kg	₩	53	20
Zinc	14.2	b	18.18	F	mg/Kg	₩	25	20

Lab Sample ID: 600-197219-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284108

,								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.141	U	0.141	U	mg/Kg	*	NC	20
Arsenic	1.73		1.483		mg/Kg	₩	15	20
Barium	58.3		49.91		mg/Kg	₩	16	20
Beryllium	0.236	J	0.2127	J	mg/Kg	₽	11	20
Calcium	23500		15510	F	mg/Kg	₩	41	20
Cadmium	0.118	J	0.1004	J	mg/Kg	₩	16	20
Chromium	4.28		3.805		mg/Kg	₽	12	20
Copper	2.81		2.440		mg/Kg	₩	14	20
Iron	4060		3633		mg/Kg	₩	11	20
Potassium	972		866.8		mg/Kg	₽	11	20
Magnesium	1040		907.6		mg/Kg	₩	13	20
Manganese	56.9		47.07		mg/Kg	₽	19	20
Sodium	156	b	157.3		mg/Kg	₩	0.8	20
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Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197219-11 DU Client Sample ID: Cell 13 - Square 186-S-2-3-191203 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 284156 Prep Batch: 284108

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Lead	3.47		2.818	F	mg/Kg	*	21	20
Antimony	0.274	U	0.274	U	mg/Kg	₩	NC	20
Selenium	0.306	U	0.306	U	mg/Kg	*	NC	20
Thallium	0.327	U	0.327	U	mg/Kg	₩	NC	20
Zinc	12.8	b	9.289	F	mg/Kg	₽	32	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284324/7-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 Prep Batch: 284324 MB MB

SDL Unit Analyte Result Qualifier MQL (Adj) D Prepared Analyzed Dil Fac Mercury 0.003828 J 0.0159 0.00336 mg/Kg 12/30/19 10:30 12/31/19 09:25

Lab Sample ID: LCS 600-284324/8-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444 Prep Batch: 284324 LCS LCS %Rec. Spike

Added Result Qualifier Mercury 0.234 0.2376 mg/Kg 101 70 - 130

Lab Sample ID: 600-197219-1 MS Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 Prep Batch: 284324

Spike MS MS Sample Sample %Rec.

Analyte Result Qualifier Added Result Qualifier D Limits Unit %Rec 0.115 b 0.268 0.3623 92 75 - 125 Mercury mg/Kg

Lab Sample ID: 600-197219-1 DU Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 284444 Prep Batch: 284324 Sample Sample DU DU **RPD**

Analyte Result Qualifier Result Qualifier Unit Limit Mercury 0.115 b 0.01063 JF mg/Kg

Lab Sample ID: MB 600-284342/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444 **Prep Batch: 284342**

мв мв

Result Qualifier SDL Unit Analyte MQL (Adj) Prepared Analyzed Dil Fac Mercury 0.003738 J 0.0157 0.00330 mg/Kg 12/30/19 13:23 12/31/19 09:27

Lab Sample ID: LCS 600-284342/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 284444 Prep Batch: 284342 Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit %Rec Limits Mercury 0.224 0.2253 mg/Kg 101 70 - 130

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QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197219-10 DU

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 282965

		Sample	Sample	DU	DU					RPD
	Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
	Percent Moisture	28.2		25.6		%			10	20
l	Percent Solids	71.8		74.4		%			4	20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

_ Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 284108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	3050B	_
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-3	Cell 21 - Square 204-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-4	Cell 25 - Square 199-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-5	Cell 25 - Square 181-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-6	Cell 25 - Square 207-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-7	Cell 26 - Square 181-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-10	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-11	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	3050B	
MB 600-284108/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-284108/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197219-1 MS	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-11 MS	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-1 DU	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	3050B	
600-197219-11 DU	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	3050B	

Analysis Batch: 284156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-3	Cell 21 - Square 204-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-4	Cell 25 - Square 199-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-5	Cell 25 - Square 181-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-6	Cell 25 - Square 207-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-7	Cell 26 - Square 181-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-10	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-11	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	6010B	284108
MB 600-284108/1-A	Method Blank	Total/NA	Solid	6010B	284108
LCSSRM 600-284108/2-A	Lab Control Sample	Total/NA	Solid	6010B	284108
600-197219-1 MS	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-11 MS	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-1 DU	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	6010B	284108
600-197219-11 DU	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	6010B	284108

Prep Batch: 284324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-3	Cell 21 - Square 204-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-4	Cell 25 - Square 199-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-5	Cell 25 - Square 181-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-6	Cell 25 - Square 207-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-7	Cell 26 - Square 181-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	7471A	

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QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197219-1

Metals (Continued)

Prep Batch: 284324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
MB 600-284324/7-A	Method Blank	Total/NA	Solid	7471A
LCS 600-284324/8-A	Lab Control Sample	Total/NA	Solid	7471A
600-197219-1 MS	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A
600-197219-1 DU	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A

Prep Batch: 284342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-10	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	7471A	
600-197219-11	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	7471A	
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-3	Cell 21 - Square 204-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-4	Cell 25 - Square 199-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-5	Cell 25 - Square 181-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-6	Cell 25 - Square 207-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-7	Cell 26 - Square 181-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-10	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	7471A	284342
600-197219-11	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	7471A	284342
MB 600-284324/7-A	Method Blank	Total/NA	Solid	7471A	284324
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	284342
LCS 600-284324/8-A	Lab Control Sample	Total/NA	Solid	7471A	284324
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	284342
600-197219-1 MS	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A	284324
600-197219-1 DU	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	7471A	284324

General Chemistry

Analysis Batch: 282965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-2	Cell 21 - Square 169-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-3	Cell 21 - Square 204-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-4	Cell 25 - Square 199-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-5	Cell 25 - Square 181-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-6	Cell 25 - Square 207-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-7	Cell 26 - Square 181-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-10	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-11	Cell 13 - Square 186-S-2-3-191203	Total/NA	Solid	2540B	
600-197219-10 DU	Cell 13 - Square 105-S-2-3-191203	Total/NA	Solid	2540B	

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12/31/2019

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Date Received: 12/10/19 17:33

Date Collected: 12/03/19 10:30

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Date Collected: 12/03/19 10:30

Lab Sample ID: 600-197219-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Lab Sample ID: 600-197219-1

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 87.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:22	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 08:57	KP1	TAL HOU

Client Sample ID: Cell 21 - Square 169-S-2-3-191203

Lab Sample ID: 600-197219-2

Date Collected: 12/03/19 10:54 Date Received: 12/10/19 17:33

Matrix: Solid

Ratch **Batch** Dilution Batch Prepared Prep Type Туре Method Factor Number or Analyzed Analyst Run Total/NA 2540B ANP TAL HOU Analysis 282965 12/13/19 08:48

Client Sample ID: Cell 21 - Square 169-S-2-3-191203

Lab Sample ID: 600-197219-2

Matrix: Solid

Date Collected: 12/03/19 10:54 Date Received: 12/10/19 17:33

Percent Solids: 73.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:27	KP1	TAL HOU
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		2	284156	12/27/19 13:25	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:03	KP1	TAL HOU

Client Sample ID: Cell 21 - Square 204-S-2-3-191203

Lab Sample ID: 600-197219-3

Matrix: Solid

Date Collected: 12/03/19 11:07 Date Received: 12/10/19 17:33

Date Collected: 12/03/19 11:07

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 21 - Square 204-S-2-3-191203

Lab Sample ID: 600-197219-3

Matrix: Solid

Percent Solids: 84.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	·		284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:29	KP1	TAL HOU

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Client Sample ID: Cell 21 - Square 204-S-2-3-191203

Date Collected: 12/03/19 11:07 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197219-3

Matrix: Solid Percent Solids: 84.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:05	KP1	TAL HOU

Client Sample ID: Cell 25 - Square 199-S-2-3-191203

Date Collected: 12/03/19 11:23 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197219-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Lab Sample ID: 600-197219-4 Client Sample ID: Cell 25 - Square 199-S-2-3-191203

Date Collected: 12/03/19 11:23 Date Received: 12/10/19 17:33 **Matrix: Solid**

Percent Solids: 77.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:31	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:11	KP1	TAL HOU

Client Sample ID: Cell 25 - Square 181-S-2-3-191203 Lab Sample ID: 600-197219-5

Date Collected: 12/03/19 11:43

Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 25 - Square 181-S-2-3-191203 Lab Sample ID: 600-197219-5

Date Collected: 12/03/19 11:43 Date Received: 12/10/19 17:33 **Matrix: Solid**

Percent Solids: 83.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:33	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:13	KP1	TAL HOU

Client Sample ID: Cell 25 - Square 207-S-2-3-191203 Lab Sample ID: 600-197219-6

Matrix: Solid

Date Collected: 12/03/19 11:55 Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

10

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell 25 - Square 207-S-2-3-191203

Date Collected: 12/03/19 11:55 Da

Lab Sample ID: 600-197219-6

Matrix: Solid 77.5

Job ID: 600-197219-1

ate Received: 12/1	0/19 17:33								Percent Solids: 7
-	D-4-b	Datak		Dile-tie	Datab	D			
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	

	Daten	Datcii		Dilution	Datcii	Frepareu		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:35	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:15	KP1	TAL HOU

Client Sample ID: Cell 26 - Square 181-S-2-3-191203 Lab Sample ID: 600-197219-7

Date Collected: 12/03/19 12:06 Date Received: 12/10/19 17:33 Matrix: Solid

Batch Batch Dilution Batch Prepared Method Factor Number or Analyzed Prep Type Туре Run Analyst Lab Total/NA 2540B 282965 12/13/19 08:48 ANP TAL HOU Analysis

Client Sample ID: Cell 26 - Square 181-S-2-3-191203

Lab Sample ID: 600-197219-7 Date Collected: 12/03/19 12:06

Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 75.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:43	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:17	KP1	TAL HOU

Client Sample ID: Cell 26 - Square 199-S-2-3-191203 Lab Sample ID: 600-197219-8

Date Collected: 12/03/19 12:28

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 26 - Square 199-S-2-3-191203 Lab Sample ID: 600-197219-8

Date Collected: 12/03/19 12:28 Matrix: Solid Date Received: 12/10/19 17:33 Percent Solids: 75.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:45	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:19	KP1	TAL HOU

Client Sample ID: Cell 26 - Square 108-S-2-3-191203 Lab Sample ID: 600-197219-9

Date Collected: 12/03/19 12:41 Matrix: Solid

Date Received: 12/10/19 17:33

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282965	12/13/19 08:48	ANP	TAL HOU

Eurofins TestAmerica, Houston

Matrix: Solid

Job ID: 600-197219-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell 26 - Square 108-S-2-3-191203

Date Collected: 12/03/19 12:41 Date Received: 12/10/19 17:33 Lab Sample ID: 600-197219-9

Matrix: Solid

Percent Solids: 70.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:47	KP1	TAL HOU
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		5	284156	12/27/19 13:27	KP1	TAL HOU
Total/NA	Prep	7471A			284324	12/30/19 10:30	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 09:21	KP1	TAL HOU

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Date Collected: 12/03/19 13:04

Date Received: 12/10/19 17:33

Lab Sample ID: 600-197219-10 **Matrix: Solid**

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Date Collected: 12/03/19 13:04

Date Received: 12/10/19 17:33

Lab Sample ID: 600-197219-10 **Matrix: Solid**

Percent Solids: 71.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:49	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:27	KP1	TAL HOU

Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Date Collected: 12/03/19 13:21

Date Received: 12/10/19 17:33

Lab	Sample	ID: 600	J-19/2	19-11

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Client Sample ID: Cell 13 - Square 186-S-2-3-191203

Date Collected: 12/03/19 13:21 Date Received: 12/10/19 17:33

Lab Sample ID: 600-197219-11

Matrix: Solid

Percent Solids: 79.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284108	12/26/19 14:47	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284156	12/27/19 12:51	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:29	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas		ELAP	T104704223-19-25	10-31-20	
The following analytes the agency does not of	•	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for	
Analysis Method	Prep Method	Matrix	Analyte		
2540B		Solid	Percent Moisture		

Eurofins TestAmerica, Houston

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- eurofins

Chain of Custody Record

Eurofins TestAmerica, Houston

Phone (713) 690-4444 Fax (713) 690-5646

Houston, TX 77040

5310 Tothway Street

N - None
O - AsNa02
P - Na2045
O - Na203
R - Na25203
S - H2504
T - TSP Dodecahydrate Special Instructions/Note: Months W-PH 4-5 600-72593-19936.10 Jo. Preservation Codes: A - HCL
B - NaOH
C - Zn Acetate
C - Zn Acetate
E - Nime Acid
F - NaHSO4
F - MeOH
G - Amchio: I - Ice J - DI Water K - EDTA are retained longe L-EDA Archive For Page. Page Total Number of containers 18 18 SP 0 Date/Time ethod of Shipment Sample Disposal (A fee may be assessed if samples Disposal By Lab Analysis Requested coler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements 015- Chanide sachin kudchadkar@testamericainc.com > > Return To Client Lab PM Kudchadkar, Sachin G E-Mail SZEOB-BTEX cerved by 3015B_GRO -C6-C10 - Zoz jar Canton 80128 DRO/ORO -C10-C38/ C38-C39- 4 oz lat- Canton Arcades Company 7 2 2 2 2 2 2 Time 7 2 Preservation Code. Solid Solid Solid Solid Solid Solid Solid Solid Solid Matrix Solid Solid Company Radiological (C=comb, G=grab) Sample Type 3 2 Standard 1238 1331 6198118792 143 Sample 1304 206 1030 1054 191203 1123 1155 INEI 1107 J. Skinman Unknown Date (AT Requested (days) Jue Date Requested: 191303 191203 191303 191203 191203 Square 105 - 5-2-191203 191203 211 13-Square 186-5-2-3-191203 191203 12/5/17 191203 ell 21-5 Square204-5-2-3-191203 19120 Sample Date 191203 Project #. 60011732 Date/Time Poison B e1136-Square 108-5-2-191203 Square 199-5-2-3-191203 Ell 25-5 June 199-5-2-191203 "ellas-Square 181-5-2-3-191203 511 Alo-Square 181-5-3-3-191203 ell 25 - Square 207 - 5.2-3 -191203 el121-Square 169-5-2-3-191203 e1121- Square 48-3-2-3-191203 Skin Imiant eliverable Requested: I, II, III, IV, Other (specify) Custody Seal No Chevron - Jai Land Farm Soils 2020 Flammable Possible Hazard Identification Suite 121 Jal (andtarm sarah johnson@arcadis.com Empty Kit Relinquished by Custody Seals Intact Client Information 1004 North Big Spring Sample Identification A Yes A No e1130-. ARCADIS U.S., Inc Non-Hazard 432-227-0266(Tel) ell 13 idnished by Sarah Johnson yd bedsingr yd barlsiupr State, Zp. TX, 79701 Midland

Loc: 600 197219

de eurofins

Environment Testing TestAmerica

'19 DEC 10 17:3

Eurofins TestAmerica Houston

Sample Receipt Checklist

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?

IOD NUMBER.	21		te/Time Received:	trea	2 1 :	
JOB NUMBER:	1	CLI	ENT: 2	FICO	10/	2
UNPACKED BY:	47	CA	RRIER/DRIVER: _	Fe	de	<u>~</u>
Custody Seal Present:	ØYES □	NO Nur	mber of Coolers Receive			
Cooler ID	Temp	Trip Blank	Observed Temp (°C)	Therm ID	Therm	Corrected Temp (°C)
7312	(W) N	Y /(N)	5.6	676	+0.1	5.7
	Y/N	Y / N				
	Y/N	Y/N				14
	Y / N	Y / N				
	Y/N	Y / N				
	F = correction factor					
Samples received on ice	e? MYES LI	NO				
LABORATORY PRESE	RVATION OF S	AMPLES REQU	IRED: DNO	□YES		
EADONATONT THESE	INVANION OF S					
Base samples are>pH 1	2: DYES D	NO Acid	d preserved are <ph 2:<="" td=""><td>□YES</td><td>□NO</td><td></td></ph>	□YES	□NO	
TX1005 samples <u>frozen</u>	upon receipt:	☐ YES DA	TE & TIME PUT IN FI	REEZER:		
pH paper Lot #		VO	A headspace acceptab	le (5-6mm): [TYES DIN	O ØNA

COMMENTS:

HS-SA-WI-013

pH paper Lot #_

Rev. 4A: 08/26/2019

YES | NO

Client: ARCADIS U.S., Inc.

Job Number: 600-197219-1

Login Number: 197219 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.7
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.	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.

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197229-1

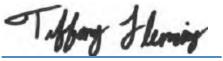
Client Project/Site: Chevron - Jal Land Farm Soils

For:

🔅 eurofins

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



Authorized for release by: 12/30/2019 9:03:24 AM Tiffany Fleming, Project Management Assistant I (361)289-2673 tiffany.fleming@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method Description Method Protocol Laboratory 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) SW846 TAL HOU 7471A 2540B Percent Moisture SM20 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils SW846 TAL HOU

Protocol References:

7471A

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation

Job ID: 600-197229-1

TAL HOU

SW846

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asse
600-197229-1	Cell16- Square 12-S-2-3-191206	Solid	12/06/19 10:56	12/10/19 10:38	
600-197229-2	Cell15- Square 152-S-2-3-191206	Solid	12/06/19 11:04	12/10/19 10:38	
600-197229-3	Cell15- Square 75-S-2-3-191206	Solid	12/06/19 11:13	12/10/19 10:38	
600-197229-4	Cell15- Square 145-S-2-3-191206	Solid	12/06/19 11:22	12/10/19 10:38	
600-197229-5	Cell15- Square 21-S-2-3-191206	Solid	12/06/19 11:31	12/10/19 10:38	
600-197229-6	Cell14- Square 46-S-2-3-191206	Solid	12/06/19 11:39	12/10/19 10:38	
600-197229-7	Cell14- Square 49-S-2-3-191206	Solid	12/06/19 11:45	12/10/19 10:38	
600-197229-8	Cell14- Square 20-S-2-3-191206	Solid	12/06/19 11:55	12/10/19 10:38	
600-197229-9	Cell14- Square 19-S-2-3-191206	Solid	12/06/19 12:02	12/10/19 10:38	

Job ID: 600-197229-1

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Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell16- Square 12-S-2-3-191206

Lab Sample ID: 600-197229-1 Date Collected: 12/06/19 10:56 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 75.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.515	0.153	mg/Kg	₩	12/12/19 19:01	12/16/19 16:44	1
Arsenic	1.51		1.29	0.281	mg/Kg	₽	12/12/19 19:01	12/17/19 15:39	1
Barium	21.1		1.29	0.0386	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Beryllium	0.187	J	0.322	0.0187	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Calcium	1380	b	129	1.11	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Cadmium	0.0837	J	0.322	0.0330	mg/Kg	₽	12/12/19 19:01	12/17/19 15:39	1
Chromium	4.63		0.644	0.0652	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Copper	2.45		0.644	0.224	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Iron	3690		25.8	3.26	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Potassium	728		129	14.2	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Magnesium	494		129	2.47	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Manganese	44.7	b	1.93	0.0491	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Sodium	8.28	J b	129	1.14	mg/Kg	\$	12/12/19 19:01	12/16/19 16:44	1
Lead	3.20		0.644	0.135	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Antimony	0.299	U	3.22	0.299	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1
Selenium	0.334	U	2.58	0.334	mg/Kg	₽	12/12/19 19:01	12/17/19 15:39	1
Thallium	0.357	U	1.93	0.357	mg/Kg	₽	12/12/19 19:01	12/17/19 15:39	1
Zinc	10.1		1.93	0.139	mg/Kg	₽	12/12/19 19:01	12/16/19 16:44	1

Method: 7471A - Mercury in Solid	or Semisolid V	Naste (Ma	nual Cold Vapo	r Techniq	ļue)				
Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0229		0.0208	0.00438	mg/Kg	*	12/27/19 12:50	12/27/19 15:18	1

General Chemistry Analyte	Result Qualif	ier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.6	1.0	1.0	%			12/11/19 13:54	1
Percent Solids	75.4	1.0	1.0	%			12/11/19 13:54	1

Client Sample ID: Cell15- Square 152-S-2-3-191206 Lab Sample ID: 600-197229-2 Date Collected: 12/06/19 11:04 **Matrix: Solid** Date Received: 12/10/19 10:38

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.149	U	0.502	0.149	mg/Kg	*	12/12/19 19:01	12/16/19 16:52	1
Arsenic	1.59		1.25	0.273	mg/Kg	₽	12/12/19 19:01	12/17/19 15:41	1
Barium	23.0		1.25	0.0376	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Beryllium	0.194	J	0.314	0.0182	mg/Kg	*	12/12/19 19:01	12/16/19 16:52	1
Calcium	895	b	125	1.08	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Cadmium	0.0815	J	0.314	0.0321	mg/Kg	₽	12/12/19 19:01	12/17/19 15:41	1
Chromium	5.04		0.627	0.0635	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Copper	2.56		0.627	0.218	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Iron	3920		25.1	3.17	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Potassium	726		125	13.8	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Magnesium	498		125	2.41	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Manganese	52.7	b	1.88	0.0478	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Sodium	15.9	J b	125	1.11	mg/Kg	*	12/12/19 19:01	12/16/19 16:52	1
Lead	3.19		0.627	0.132	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Antimony	0.291	U	3.14	0.291	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1
Selenium	0.325	U	2.51	0.325	mg/Kg		12/12/19 19:01	12/17/19 15:41	1

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Percent Solids: 75.2

Percent Solids

Lab Sample ID: 600-197229-2

12/11/19 13:54

Client Sample ID: Cell15- Square 152-S-2-3-191206 Date Collected: 12/06/19 11:04 **Matrix: Solid** Date Received: 12/10/19 10:38

Percent Solids: 75.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.347	U	1.88	0.347	mg/Kg	\	12/12/19 19:01	12/17/19 15:41	1
Zinc	9.07		1.88	0.135	mg/Kg	₽	12/12/19 19:01	12/16/19 16:52	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac ₩ 0.0215 0.00453 mg/Kg 12/27/19 12:50 12/27/19 15:20 Mercury 0.0527 **General Chemistry** Dil Fac Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed **Percent Moisture** 24.8 1.0 1.0 % 12/11/19 13:54

Client Sample ID: Cell15- Square 75-S-2-3-191206 Lab Sample ID: 600-197229-3

1.0

75.2

%

1.0

Date Collected: 12/06/19 11:13 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac ₩ Silver 0.151 0.506 0.151 mg/Kg 12/12/19 19:01 12/16/19 16:54 1.27 0.276 mg/Kg 12/12/19 19:01 12/17/19 15:43 **Arsenic** 1.72 ₩ **Barium** 33.3 1.27 0.0380 mg/Kg 12/12/19 19:01 12/16/19 16:54 ₩ 12/12/19 19:01 Beryllium 0.234 J 0.316 0.0184 mg/Kg 12/16/19 16:54 12/12/19 19:01 Calcium 4430 127 1.09 mg/Kg 12/16/19 16:54 0.316 Cadmium 0.0949 0.0324 mg/Kg 12/12/19 19:01 12/17/19 15:43 Chromium 5.26 0.633 0.0641 mg/Kg 12/12/19 19:01 12/16/19 16:54 Copper 3.09 0.633 0.220 mg/Kg 12/12/19 19:01 12/16/19 16:54 12/12/19 19:01 4220 25.3 3.20 mg/Kg 12/16/19 16:54 Iron 13.9 ₩ 127 12/12/19 19:01 12/16/19 16:54 **Potassium** 781 mg/Kg 127 2.43 12/12/19 19:01 12/16/19 16:54 Magnesium 680 mg/Kg ₩ 1.90 0.0482 mg/Kg 12/12/19 19:01 12/16/19 16:54 Manganese 65.4 b 127 12/12/19 19:01 12/16/19 16:54 **Sodium** 1.12 mg/Kg 11.7 J_b Lead 3.63 0.633 0.133 mg/Kg 12/12/19 19:01 12/16/19 16:54 Antimony 0.294 U 3.16 0.294 mg/Kg 12/12/19 19:01 12/16/19 16:54 Selenium 0.328 U 2.53 0.328 mg/Kg 12/12/19 19:01 12/17/19 15:43 Thallium 0.351 U 1.90 0.351 mg/Kg 12/12/19 19:01 12/17/19 15:43 12/12/19 19:01 Zinc 10.8 1 90 0.137 mg/Kg 12/16/19 16:54

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0278	0.0213	0.00448 mg/Kg	\	12/27/19 12:50	12/27/19 15:26	

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.2	1.0	1.0 %			12/11/19 13:54	1
Percent Solids	73.8	1.0	1.0 %			12/11/19 13:54	1

Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell15- Square 145-S-2-3-191206

Lab Sample ID: 600-197229-4 Date Collected: 12/06/19 11:22 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 90.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Result Qualifier SDL Unit D Prepared Analyzed Dil Fac Analyte MQL (Adj) Silver 0.127 Ū 0.127 12/12/19 19:01 12/16/19 16:56 0.428 mg/Kg 1 07 12/12/19 19:01 12/17/19 15:45 **Arsenic** 1.81 0.233 mg/Kg ä **Barium** 33.5 1.07 0.0321 mg/Kg 12/12/19 19:01 12/16/19 16:56 φ 0.267 0.0155 mg/Kg 12/12/19 19:01 12/16/19 16:56 **Beryllium** 0.208 J ₩ 107 0.924 mg/Kg 12/12/19 19:01 12/16/19 16:56 **Calcium** 7620 ₽ 0.267 12/12/19 19:01 12/17/19 15:45 Cadmium 0.0909 0.0274 mg/Kg À Chromium 5.07 0.535 0.0541 mg/Kg 12/12/19 19:01 12/16/19 16:56 0.535 0.186 12/12/19 19:01 12/16/19 16:56 3.24 mg/Kg Copper 4040 21.4 2.70 mg/Kg 12/12/19 19:01 12/16/19 16:56 ġ **Potassium** 790 107 11.8 mg/Kg 12/12/19 19:01 12/16/19 16:56 ŭ Magnesium 709 107 2.05 mg/Kg 12/12/19 19:01 12/16/19 16:56 ä 12/12/19 19:01 Manganese 60.6 b 1.60 0.0407 mg/Kg 12/16/19 16:56 **Sodium** 10.8 Jb 107 0.947 mg/Kg 12/12/19 19:01 12/16/19 16:56 Lead 3.44 0.535 0.112 mg/Kg 12/12/19 19:01 12/16/19 16:56 ₩ Antimony 0.248 2 67 0.248 mg/Kg 12/12/19 19:01 12/16/19 16:56 à Selenium 0.277 U 2.14 0.277 mg/Kg 12/12/19 19:01 12/17/19 15:45 Thallium 0.296 U 12/12/19 19:01 1.60 0.296 mg/Kg 12/17/19 15:45 Zinc 1.60 0.115 mg/Kg 12/12/19 19:01 12/16/19 16:56 11.3

	Method: 7471A - Mercury in Solid of	or Semisolid	Waste (Mai	nual Cold Vapo	or Technic	que)				
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Į	Mercury	0.0188		0.0178	0.00375	mg/Kg	\	12/27/19 12:50	12/27/19 15:28	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.2	1.0	1.0 %			12/11/19 14:12	1
Percent Solids	90.8	1.0	1.0 %			12/11/19 14:12	1

Client Sample ID: Cell15- Square 21-S-2-3-191206 Lab Sample ID: 600-197229-5 Date Collected: 12/06/19 11:31 Matrix: Solid Date Received: 12/10/19 10:38

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac Silver 0.153 U 77 12/12/19 19:01 12/16/19 16:58 0.516 0.153 mg/Kg ₽ **Arsenic** 1.28 1 29 0.281 mg/Kg 12/12/19 19:01 12/17/19 15:47 ₩ 12/12/19 19:01 1.29 0.0387 mg/Kg 12/16/19 16:58 Barium 27.4 12/16/19 16:58 0.322 0.0187 12/12/19 19:01 **Beryllium** 0.168 mg/Kg ġ **Calcium** 6160 b 129 1.11 mg/Kg 12/12/19 19:01 12/16/19 16:58 12/17/19 15:47 0.322 0.0330 mg/Kg 12/12/19 19:01 Cadmium 0.0838 0.644 0.0652 à 12/12/19 19:01 12/16/19 16:58 Chromium 4.30 mg/Kg 12/12/19 19:01 12/16/19 16:58 Copper 2.69 0.644 0.224 mg/Kg ₩ Iron 3340 25.8 3.26 mg/Kg 12/12/19 19:01 12/16/19 16:58 12/12/19 19:01 12/16/19 16:58 129 14.2 mg/Kg 738 **Potassium** ŭ 129 2.47 mg/Kg 12/12/19 19:01 12/16/19 16:58 Magnesium 706 # 1.93 0.0491 12/12/19 19:01 12/16/19 16:58 Manganese 56.8 b mg/Kg φ **Sodium** 129 1.14 mg/Kg 12/12/19 19:01 12/16/19 16:58 12.4 J b 0.644 0.135 mg/Kg Ü 12/12/19 19:01 12/16/19 16:58 Lead 2.69 Antimony 0.299 U 3.22 0.299 mg/Kg 12/12/19 19:01 12/16/19 16:58 Selenium 0.334 U 12/12/19 19:01 12/17/19 15:47 2 58 0.334 mg/Kg

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Percent Solids: 75.3

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell15- Square 21-S-2-3-191206 Lab Sample ID: 600-197229-5

Date Collected: 12/06/19 11:31 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 75.3

Method: 6010B - Inductively Couple	ethod: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.357	U	1.93	0.357	mg/Kg		12/12/19 19:01	12/17/19 15:47	1
Zinc	10.9		1.93	0.139	mg/Kg	₩	12/12/19 19:01	12/16/19 16:58	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0177	J	0.0205	0.00432	mg/Kg	\	12/27/19 12:50	12/27/19 15:30	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.7		1.0	1.0	%			12/11/19 14:12	1
Percent Solids	75.3		1.0	1.0	%			12/11/19 14:12	1

Lab Sample ID: 600-197229-6 Client Sample ID: Cell14- Square 46-S-2-3-191206

Date Collected: 12/06/19 11:39 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 91.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.127	U	0.429	0.127	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Arsenic	2.88		1.07	0.234	mg/Kg	₽	12/12/19 19:01	12/17/19 15:49	1
Barium	66.4		1.07	0.0321	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Beryllium	0.455		0.268	0.0155	mg/Kg	\$	12/12/19 19:01	12/16/19 17:00	1
Calcium	7170	b	107	0.926	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Cadmium	0.145	J	0.268	0.0274	mg/Kg	₽	12/12/19 19:01	12/17/19 15:49	1
Chromium	8.38		0.536	0.0542	mg/Kg	\$	12/12/19 19:01	12/16/19 17:00	1
Copper	5.42		0.536	0.186	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Iron	7490		21.4	2.71	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Potassium	1320		107	11.8	mg/Kg	*	12/12/19 19:01	12/16/19 17:00	1
Magnesium	1450		107	2.06	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Manganese	136	b	1.61	0.0408	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Sodium	123	b	107	0.949	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Lead	6.10		0.536	0.112	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Antimony	0.249	U	2.68	0.249	mg/Kg	₽	12/12/19 19:01	12/16/19 17:00	1
Selenium	0.277	U	2.14	0.277	mg/Kg	₽	12/12/19 19:01	12/17/19 15:49	1
Thallium	0.297	U	1.61	0.297	mg/Kg	₽	12/12/19 19:01	12/17/19 15:49	1
Zinc	21.2		1.61	0.116	mg/Kg	₩	12/12/19 19:01	12/16/19 17:00	1

Method: 7471A - Mercury in Solid	or Semisolid Waste (Ma	nual Cold Vap	oor Technique)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0691	0.0183	0.00385 mg/Kg	₩	12/27/19 12:50	12/27/19 15:32	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.5	1.0	1.0 %			12/11/19 14:12	1
Percent Solids	91.5	1.0	1.0 %			12/11/19 14:12	1

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Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell14- Square 49-S-2-3-191206

Lab Sample ID: 600-197229-7 Date Collected: 12/06/19 11:45 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 96.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116	U	0.390	0.116	mg/Kg	-	12/12/19 19:01	12/16/19 17:02	1
Arsenic	2.09		0.975	0.213	mg/Kg	₽	12/12/19 19:01	12/17/19 15:51	1
Barium	43.3		0.975	0.0292	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Beryllium	0.263		0.244	0.0141	mg/Kg	\$	12/12/19 19:01	12/16/19 17:02	1
Calcium	8790	b	97.5	0.842	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Cadmium	0.117	J	0.244	0.0250	mg/Kg	₽	12/12/19 19:01	12/17/19 15:51	1
Chromium	5.80		0.487	0.0493	mg/Kg		12/12/19 19:01	12/16/19 17:02	1
Copper	3.80		0.487	0.170	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Iron	4680		19.5	2.47	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Potassium	974		97.5	10.7	mg/Kg		12/12/19 19:01	12/16/19 17:02	1
Magnesium	970		97.5	1.87	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Manganese	77.5	b	1.46	0.0371	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Sodium	165	b	97.5	0.864	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Lead	4.17		0.487	0.102	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Antimony	0.226	U	2.44	0.226	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1
Selenium	0.252	U	1.95	0.252	mg/Kg	₽	12/12/19 19:01	12/17/19 15:51	1
Thallium	0.270	U	1.46	0.270	mg/Kg	₽	12/12/19 19:01	12/17/19 15:51	1
Zinc	13.8		1.46	0.105	mg/Kg	₽	12/12/19 19:01	12/16/19 17:02	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	0.0300		0.0170	0.00358	mg/Kg	₩	12/27/19 12:50	12/27/19 15:34	1	

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D Prepa	red Analyzed	Dil Fac
Percent Moisture	3.2	1.0	1.0 %	<u> </u>	12/11/19 14:12	1
Percent Solids	96.8	1.0	1.0 %		12/11/19 14:12	1

Client Sample ID: Cell14- Square 20-S-2-3-191206 Lab Sample ID: 600-197229-8 Date Collected: 12/06/19 11:55 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.513	0.153	mg/Kg		12/12/19 19:01	12/16/19 17:04	1
Arsenic	2.18		1.28	0.280	mg/Kg	₽	12/12/19 19:01	12/17/19 15:53	1
Barium	46.5		1.28	0.0385	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Beryllium	0.289	J	0.321	0.0186	mg/Kg	*	12/12/19 19:01	12/16/19 17:04	1
Calcium	8880	b	128	1.11	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Cadmium	0.128	J	0.321	0.0329	mg/Kg	₽	12/12/19 19:01	12/17/19 15:53	1
Chromium	6.38		0.642	0.0649	mg/Kg	\$	12/12/19 19:01	12/16/19 17:04	1
Copper	4.27		0.642	0.223	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Iron	5370		25.7	3.25	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Potassium	1160		128	14.1	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Magnesium	1110		128	2.46	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Manganese	93.5	b	1.93	0.0489	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Sodium	29.6	J b	128	1.14	mg/Kg	\$	12/12/19 19:01	12/16/19 17:04	1
Lead	4.77		0.642	0.135	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Antimony	0.298	U	3.21	0.298	mg/Kg	₽	12/12/19 19:01	12/16/19 17:04	1
Selenium	0.332	U	2.57	0.332	mg/Kg		12/12/19 19:01	12/17/19 15:53	1

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Lab Sample ID: 600-197229-8

Client Sample ID: Cell14- Square 20-S-2-3-191206 Date Collected: 12/06/19 11:55 Matrix: Solid Date Received: 12/10/19 10:38

Percent Solids: 73.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)											
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Thallium	0.356	U	1.93	0.356	mg/Kg	-	12/12/19 19:01	12/17/19 15:53	1	
	Zinc	16.3		1.93	0.139	mg/Kg	₩	12/12/19 19:01	12/16/19 17:04	1	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Dil Fac Result Qualifier MQL (Adj) Analyte SDL Unit Prepared Analyzed ₩ Mercury 0.0201 0.00424 mg/Kg 12/27/19 12:50 12/27/19 15:40 0.0207

General Chemistry Analyte	Posult	Qualifier	MQL (Adj)	SDL	Unit	n	Prepared	Analyzed	Dil Fac
Analyte		Qualifier		3DL	Onit		- riepaieu	Allalyzeu	
Percent Moisture	26.5		1.0	1.0	%			12/11/19 14:12	1
Percent Solids	73.5		1.0	1.0	%			12/11/19 14:12	1

Client Sample ID: Cell14- Square 19-S-2-3-191206 Lab Sample ID: 600-197229-9

Date Collected: 12/06/19 12:02 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 93.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Arsenic	2.66		1.06	0.231	mg/Kg	₽	12/12/19 19:01	12/17/19 15:55	1
Barium	70.7		1.06	0.0318	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Beryllium	0.323		0.265	0.0154	mg/Kg	*	12/12/19 19:01	12/16/19 17:06	1
Calcium	40200	b	106	0.916	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Cadmium	0.143	J	0.265	0.0272	mg/Kg	₽	12/12/19 19:01	12/17/19 15:55	1
Chromium	6.40		0.530	0.0537	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Copper	4.07		0.530	0.185	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Iron	5580		21.2	2.68	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Potassium	1310		106	11.7	mg/Kg	*	12/12/19 19:01	12/16/19 17:06	1
Magnesium	1210		106	2.04	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Manganese	95.4	b	1.59	0.0404	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Sodium	23.1	J b	106	0.940	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Lead	5.15		0.530	0.111	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Antimony	0.246	U	2.65	0.246	mg/Kg	₽	12/12/19 19:01	12/16/19 17:06	1
Selenium	0.275	U	2.12	0.275	mg/Kg	₩.	12/12/19 19:01	12/17/19 15:55	1
Thallium	0.294	U	1.59	0.294	mg/Kg	₽	12/12/19 19:01	12/17/19 15:55	1
Zinc	15.8		1.59	0.115	mg/Kg	₩	12/12/19 19:01	12/16/19 17:06	1

Method: 7471A - Mercury in Solid	or Semisolid Waste (Ma	nual Cold Vap	or Technique)				
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0257	0.0171	0.00360 mg/Kg	☼	12/27/19 12:50	12/27/19 15:42	1

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.6	1.0	1.0 %			12/11/19 14:13	1
Percent Solids	93.4	1.0	1.0 %			12/11/19 14:13	1

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

М	e	ta	ls
	·	ıu	

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
F	Duplicate RPD exceeds the control limit
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
F	Duplicate RPD exceeds the control limit

Glossary

Ciossary	
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
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)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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3

4

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6

0

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4

12

Job ID: 600-197229-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

мв мв

0.105 U

0.232 U

0.108 U

MB MB

Lab Sample ID: MB 600-282928/1-A

Matrix: Solid

Analysis Batch: 283187

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

Prep Batch: 282928

MQL (Adj) Analyte Result Qualifier SDL Unit Prepared Analyzed Dil Fac Silver 0.119 U 12/12/19 19:01 0.400 0.119 mg/Kg 12/16/19 16:01 Barium 0.0300 U 1.00 0.0300 mg/Kg 12/12/19 19:01 12/16/19 16:01 Beryllium 0.0145 U 0.250 0.0145 mg/Kg 12/12/19 19:01 12/16/19 16:01 Calcium 1.190 J 100 0.864 mg/Kg 12/12/19 19:01 12/16/19 16:01 Chromium 0.0506 U 0.500 0.0506 mg/Kg 12/16/19 16:01 12/12/19 19:01 Copper 0.174 U 0.500 0.174 mg/Kg 12/12/19 19:01 12/16/19 16:01 Iron 2.53 U 20.0 12/12/19 19:01 12/16/19 16:01 2.53 mg/Kg Potassium 11.0 U 100 11.0 mg/Kg 12/12/19 19:01 12/16/19 16:01 Magnesium 1.92 U 100 1.92 mg/Kg 12/12/19 19:01 12/16/19 16:01 Manganese 0.04500 J 1.50 0.0381 mg/Kg 12/12/19 19:01 12/16/19 16:01 Sodium 4.460 J 100 0.886 mg/Kg 12/12/19 19:01 12/16/19 16:01

0.500

2.50

1.50

0.105 mg/Kg

0.232 mg/Kg

0.108 mg/Kg

Lab Sample ID: MB 600-282928/1-A

Matrix: Solid

Lead

Zinc

Antimony

Analysis Batch: 283285

Client Sample ID: Method Blank

12/16/19 16:01

12/16/19 16:01

12/16/19 16:01

12/12/19 19:01

12/12/19 19:01

12/12/19 19:01

Prep Type: Total/NA

Prep Batch: 282928

MQL (Adj) Analyte Result Qualifier SDL Unit D Prepared Analyzed Dil Fac Arsenic 0.218 U 1.00 0.218 mg/Kg 12/12/19 19:01 12/17/19 14:45 Cadmium 0.0256 U 0.250 0.0256 mg/Kg 12/12/19 19:01 12/17/19 14:45 Selenium 0.259 U 2 00 0.259 mg/Kg 12/12/19 19:01 12/17/19 14:45 Thallium 0.277 U 12/12/19 19:01 12/17/19 14:45 1.50 0.277 mg/Kg

Lab Sample ID: LCSSRM 600-282928/2-A

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282928

7 , 6.6 - 2.16 2.6 .6.	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	25.8	22.17		mg/Kg		85.9	67.1 - 106.	
							6	
Barium	393	310.1		mg/Kg		78.9		
Dec III ee	000	000.4				00.0	6	
Beryllium	293	262.4		mg/Kg		89.6	72.4 - 106.	
Calcium	19300	17290		mg/Kg		89.6	8 70.5 ₋ 106.	
Calolani	10000	17200		mg/11g		00.0	70.0 - 100.	
Chromium	63.6	58.15		mg/Kg		91.4	71.9 - 106.	
							6	
Copper	175	163.5		mg/Kg		93.4	72.0 - 106.	
							9	
Iron	17700	13510		mg/Kg		76.3		
Detection	5740	4754				00.0	8	
Potassium	5740	4751		mg/Kg		02.0	64.6 - 106. 6	
Magnesium	5390	4110		mg/Kg		76.3	64.2 - 106.	
g				99			7	
Manganese	616	514.8		mg/Kg		83.6	64.1 - 106.	
							7	
Sodium	9070	7457		mg/Kg		82.2	70.5 - 106.	
							6	

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Job ID: 600-197229-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282928/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 282928** Analysis Batch: 283187 LCSSRM LCSSRM

	Spike	LUSSKIVI	LUSSKIVI		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Lead	164	161.5	mg/Kg	98.5	71.3 - 106.	
					7	
Antimony	120	26.49	mg/Kg	22.1	20.0 - 106.	
					7	
Zinc	482	503.0	mg/Kg	104.4	69.7 - 106.	
					6	

Lab Sample ID: LCSSRM 600-282928/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 283285							Prep Batch: 282928	
	Spike	LCSSRM I	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	69.4	61.09		mg/Kg		88.0	66.6 - 106. 6	
Cadmium	268	237.4		mg/Kg		88.6	71.3 ₋ 106. 7	
Selenium	155	129.9		mg/Kg		83.8	65.2 - 106. 5	
Thallium	81.0	69.90		mg/Kg		86.3	63.2 - 106.	

Lab Sample ID: 600-197229-9 MS Client Sample ID: Cell14- Square 19-S-2-3-191206

Matrix: Solid

Analysis Batch: 283187	Sample	Sample	Spike	MS	MS				Prep Batch: 282928
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits
Silver	0.126	U -	13.1	11.44		mg/Kg	<u></u>	87	75 - 125
Barium	70.7		52.5	123.2		mg/Kg	₽	100	75 ₋ 125
Beryllium	0.323		52.5	50.43		mg/Kg	₩	95	75 - 125
Calcium	40200	b	525	31530	4	mg/Kg	₩	-1651	75 ₋ 125
Chromium	6.40		52.5	60.81		mg/Kg	₩	104	75 - 125
Copper	4.07		52.5	57.45		mg/Kg	₩	102	75 ₋ 125
Iron	5580		525	8076	4	mg/Kg	₩	475	75 ₋ 125
Potassium	1310		525	2713	N1	mg/Kg	₩	267	75 ₋ 125
Magnesium	1210		525	2186	N1	mg/Kg	₩	186	75 ₋ 125
Manganese	95.4	b	52.5	160.6		mg/Kg	₩	124	75 - 125
Sodium	23.1	J b	525	557.7		mg/Kg	₩	102	75 ₋ 125
Lead	5.15		52.5	57.45		mg/Kg	₩	100	75 ₋ 125
Antimony	0.246	U	78.8	35.61	N1	mg/Kg	₩	45	75 ₋ 125
Zinc	15.8		26.3	53.77	N1	mg/Kg	₩	145	75 ₋ 125

Lab Sample ID: 600-197229-9 MS Client Sample ID: Cell14- Square 19-S-2-3-191206

Analysis Batch: 283285

Matrix: Solid

•	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.126	U	13.1	11.07		mg/Kg	<u></u>	84	75 - 125	
Arsenic	2.66		52.5	49.44		mg/Kg	₩	89	75 - 125	
Barium	70.3		52.5	120.3		mg/Kg	₽	95	75 - 125	
Beryllium	0.318		52.5	48.94		mg/Kg	₩.	93	75 - 125	
Calcium	41000		525	31560	4	mg/Kg	₽	-1794	75 - 125	

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Prep Type: Total/NA

Prep Type: Total/NA **Prep Batch: 282928**

Client: ARCADIS U.S., Inc. Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197229-9 MS Client Sample ID: Cell14- Square 19-S-2-3-191206 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 283285 **Prep Batch: 282928**

MS MS Sample Sample Spike %Rec. Result Qualifier Added Result Qualifier Unit %Rec Limits ₩ Cadmium 0.143 52.5 48.91 mg/Kg 93 75 - 125 ₩ Chromium 6.14 52.5 57.71 mg/Kg 98 75 - 125 Copper 3.63 52.5 52.56 mg/Kg ₽ 93 75 - 125 ₽ 5670 525 469 75 - 125 Iron 8139 4 mg/Kg Ö 253 Potassium 1330 525 2662 N1 mg/Kg 75 - 125 525 2288 N1 196 75 - 125 Magnesium 1260 mg/Kg ₩ 120 Manganese 89.6 52.5 152.4 mg/Kg 75 - 125 Sodium 20.0 J 525 551.9 101 75 - 125 mg/Kg Lead 5.42 52.5 54.61 Ö 75 - 125 mg/Kg Antimony ₽ 0.246 U 78.8 39.58 N1 mg/Kg 50 75 - 125 Ö Selenium 0.275 U 52.5 45.91 mg/Kg 87 75 - 125 Thallium 0.294 U 52.5 44.68 85 75 - 125 mg/Kg ₩ Zinc 14.7 26.3 50.31 N1 mg/Kg 136 75 - 125

Lab Sample ID: 600-197229-9 DU Client Sample ID: Cell14- Square 19-S-2-3-191206

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 283187				Prep Batch: 282928				
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.126	U	0.123	U	mg/Kg	*	NC	20
Barium	70.7		62.68		mg/Kg	₩	12	20
Beryllium	0.323		0.3450		mg/Kg	₩	6	20
Calcium	40200	b	20480	F	mg/Kg	₩	65	20
Chromium	6.40		6.582		mg/Kg	₩	3	20
Copper	4.07		4.341		mg/Kg	₩	6	20
Iron	5580		5583		mg/Kg	₩	0	20
Potassium	1310		1315		mg/Kg	₩	0.2	20
Magnesium	1210		1160		mg/Kg	₩	4	20
Manganese	95.4	b	100.3		mg/Kg	₩	5	20
Sodium	23.1	Jb	17.91	JF	mg/Kg	₩	25	20
Lead	5.15		5.361		mg/Kg	₩	4	20
Antimony	0.246	U	0.239	U	mg/Kg	₽	NC	20
Zinc	15.8		15.92		mg/Kg	₽	0.9	20

Lab Sample ID: 600-197229-9 DU Client Sample ID: Cell14- Square 19-S-2-3-191206

Matrix: Solid Prep Type: Total/NA Analysis Batch: 283285 Prep Batch: 282928

						i iep Dateii. 2	02320
Sample	Sample	DU	DU				RPD
Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
0.126	U	0.123	U	mg/Kg	\$	NC	20
2.66		2.534		mg/Kg	☼	5	20
70.3		60.87		mg/Kg	₽	14	20
0.318		0.3244		mg/Kg	\$	2	20
41000		20410	F	mg/Kg	₽	67	20
0.143	J	0.1339	J	mg/Kg	₽	7	20
6.14		6.165		mg/Kg	₽	0.4	20
3.63		3.832		mg/Kg	₽	5	20
5670		5650		mg/Kg	₽	0.4	20
1330		1264		mg/Kg		5	20
	Result 0.126 2.66 70.3 0.318 41000 0.143 6.14 3.63 5670	70.3 0.318 41000 0.143 J 6.14 3.63 5670	Result Qualifier Result 0.126 U 0.123 2.66 2.534 70.3 60.87 0.318 0.3244 41000 20410 0.143 J 0.1339 6.14 6.165 3.63 3.832 5670 5650	Result 0.126 Qualifier Result 0.123 Qualifier 2.66 2.534 U 70.3 60.87 0.318 0.3244 41000 20410 F 0.143 J 0.1339 J 6.14 6.165 3.832 5670 5650 5650	Result Qualifier Result Qualifier Unit 0.126 U 0.123 U mg/Kg 2.66 2.534 mg/Kg 70.3 60.87 mg/Kg 0.318 0.3244 mg/Kg 41000 20410 F mg/Kg 0.143 J 0.1339 J mg/Kg 6.14 6.165 mg/Kg 3.63 3.832 mg/Kg 5670 5650 mg/Kg	Result 0.126 Qualifier Result 0.123 Qualifier Unit 0.123 D 2.66 2.534 mg/Kg ** 70.3 60.87 mg/Kg ** 0.318 0.3244 mg/Kg ** 41000 20410 F mg/Kg ** 0.143 J 0.1339 J mg/Kg ** 6.14 6.165 mg/Kg ** 3.63 3.832 mg/Kg ** 5670 5650 mg/Kg **	Sample Result Result Qualifier Qualifier Result Qualifier Unit D mg/Kg D mg/Kg NC 0.126 U 0.123 U mg/Kg Mg/Kg

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Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197229-9 DU Client Sample ID: Cell14- Square 19-S-2-3-191206 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 283285 **Prep Batch: 282928**

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Magnesium	1260		1212		mg/Kg	*	4	20
Manganese	89.6		93.99		mg/Kg	\$	5	20
Sodium	20.0	J	23.38	J	mg/Kg	\$	15	20
Lead	5.42		5.413		mg/Kg	₩.	0.1	20
Antimony	0.246	U	0.239	U	mg/Kg	\$	NC	20
Selenium	0.275	U	0.267	U	mg/Kg	\$	NC	20
Thallium	0.294	U	0.285	U	mg/Kg	\$	NC	20
Zinc	14.7		14.50		mg/Kg	≎	1	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284203/7-B Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA **Prep Batch: 284203** Analysis Batch: 284242 MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 12/27/19 12:50 12/27/19 15:02 Mercury 0.00336 U 0.0159 0.00336 mg/Kg

Lab Sample ID: LCS 600-284203/8-B **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

0.2431

mg/Kg

mg/Kg

104

₩

70 - 130

Analysis Batch: 284242 Prep Batch: 284203 Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits

0.234

Lab Sample ID: 600-197229-7 MS Client Sample ID: Cell14- Square 49-S-2-3-191206 Matrix: Solid

Analysis Batch: 284242 Prep Batch: 284203 Sample Sample Spike MS MS Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits

75 - 125 Mercury 0.0300 0.250 0.2662 mg/Kg 94 Lab Sample ID: 600-197229-7 DU Client Sample ID: Cell14- Square 49-S-2-3-191206

Matrix: Solid Analysis Batch: 284242 Prep Batch: 284203 DU DU RPD Sample Sample RPD Analyte Result Qualifier Result Qualifier Unit D Limit

0.02340 F

Method: 2540B - Percent Moisture

0.0300

Lab Sample ID: 600-197229-7 DU Client Sample ID: Cell14- Square 49-S-2-3-191206

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 282754

Mercury

Mercury

•	Sample	Sample	DU	DU				RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
Percent Moisture	3.2		2.6	F	%		 22	20	
Percent Solids	96.8		97.4		%		0.7	20	

Eurofins TestAmerica, Houston

12/30/2019

Prep Type: Total/NA

Prep Type: Total/NA

20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

_ Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

ſ	Analyte	MQL	MDL	Units
	Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units	
Percent Moisture	1.0	1.0	%	
Percent Solids	1.0	1.0	%	

2

Δ

5

0

9

11

12

1.

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Metals

Prep Batch: 282928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	3050B	_
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	3050B	
MB 600-282928/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197229-9 MS	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	3050B	
600-197229-9 DU	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	3050B	

Analysis Batch: 283187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928
MB 600-282928/1-A	Method Blank	Total/NA	Solid	6010B	282928
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	6010B	282928
600-197229-9 MS	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-9 DU	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928

Analysis Batch: 283285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928
MB 600-282928/1-A	Method Blank	Total/NA	Solid	6010B	282928
LCSSRM 600-282928/2-A	Lab Control Sample	Total/NA	Solid	6010B	282928
600-197229-9 MS	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928
600-197229-9 DU	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	6010B	282928

Prep Batch: 284203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	7471A	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Metals (Continued)

Prep Batch: 284203 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	7471A	_
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	7471A	
MB 600-284203/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-284203/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-197229-7 MS	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	
600-197229-7 DU	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	

Analysis Batch: 284242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	7471A	284203
MB 600-284203/7-B	Method Blank	Total/NA	Solid	7471A	284203
LCS 600-284203/8-B	Lab Control Sample	Total/NA	Solid	7471A	284203
600-197229-7 MS	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	284203
600-197229-7 DU	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	7471A	284203

General Chemistry

Analysis Batch: 282754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197229-1	Cell16- Square 12-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-2	Cell15- Square 152-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-3	Cell15- Square 75-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-4	Cell15- Square 145-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-5	Cell15- Square 21-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-6	Cell14- Square 46-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-7	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-8	Cell14- Square 20-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-9	Cell14- Square 19-S-2-3-191206	Total/NA	Solid	2540B	
600-197229-7 DU	Cell14- Square 49-S-2-3-191206	Total/NA	Solid	2540B	

Client Sample ID: Cell16- Square 12-S-2-3-191206

Date Collected: 12/06/19 10:56 Date Received: 12/10/19 10:38

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197229-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell16- Square 12-S-2-3-191206

Date Collected: 12/06/19 10:56

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197229-1

Matrix: Solid Percent Solids: 75.4

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:44	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:39	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:18	TWR	TAL HOU

Client Sample ID: Cell15- Square 152-S-2-3-191206

Date Collected: 12/06/19 11:04

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197229-2

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell15- Square 152-S-2-3-191206

Date Collected: 12/06/19 11:04

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197229-2 **Matrix: Solid**

Lab Sample ID: 600-197229-3

Percent Solids: 75.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:52	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:41	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:20	TWR	TAL HOU

Client Sample ID: Cell15- Square 75-S-2-3-191206

Date Collected: 12/06/19 11:13

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

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Matrix: Solid

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Client Sample ID: Cell15- Square 75-S-2-3-191206

Date Collected: 12/06/19 11:13 Date Received: 12/10/19 10:38 Lab Sample ID: 600-197229-3

Matrix: Solid Percent Solids: 73.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:54	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:43	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:26	TWR	TAL HOU

Client Sample ID: Cell15- Square 145-S-2-3-191206

Date Collected: 12/06/19 11:22 Date Received: 12/10/19 10:38 Lab Sample ID: 600-197229-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:12	ANP	TAL HOU

Client Sample ID: Cell15- Square 145-S-2-3-191206

Date Collected: 12/06/19 11:22 Date Received: 12/10/19 10:38 Lab Sample ID: 600-197229-4

Matrix: Solid Percent Solids: 90.8

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:56	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:45	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:28	TWR	TAL HOU

Client Sample ID: Cell15- Square 21-S-2-3-191206

Date Collected: 12/06/19 11:31 Date Received: 12/10/19 10:38 Lab Sample ID: 600-197229-5

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282754	12/11/19 14:12	ANP	TAL HOU

Client Sample ID: Cell15- Square 21-S-2-3-191206

Date Collected: 12/06/19 11:31

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197229-5

Matrix: Solid

Percent Solids: 75.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 16:58	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:47	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:30	TWR	TAL HOU

Client Sample ID: Cell14- Square 46-S-2-3-191206

Date Collected: 12/06/19 11:39 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197229-6

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:12	ANP	TAL HOU

Client Sample ID: Cell14- Square 46-S-2-3-191206

Lab Sample ID: 600-197229-6 Date Collected: 12/06/19 11:39 Matrix: Solid

Percent Solids: 91.5

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 17:00	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:49	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:32	TWR	TAL HOU

Client Sample ID: Cell14- Square 49-S-2-3-191206

Lab Sample ID: 600-197229-7 Date Collected: 12/06/19 11:45

Matrix: Solid

Date Received: 12/10/19 10:38

Date Received: 12/10/19 10:38

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst 2540B 282754 12/11/19 14:12 TAL HOU Total/NA Analysis ANP

Client Sample ID: Cell14- Square 49-S-2-3-191206

Lab Sample ID: 600-197229-7 Date Collected: 12/06/19 11:45 Matrix: Solid

Percent Solids: 96.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 17:02	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:51	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:34	TWR	TAL HOU

Client Sample ID: Cell14- Square 20-S-2-3-191206

Lab Sample ID: 600-197229-8 Date Collected: 12/06/19 11:55 **Matrix: Solid**

Date Received: 12/10/19 10:38

Batch Batch Dilution Batch Prepared Method Туре Run Factor Number Prep Type or Analyzed Analyst Lab Total/NA 2540B 282754 12/11/19 14:12 TAL HOU Analysis ANP

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell14- Square 20-S-2-3-191206

Lab Sample ID: 600-197229-8 Date Collected: 12/06/19 11:55 **Matrix: Solid** Date Received: 12/10/19 10:38

Percent Solids: 73.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 17:04	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:53	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:40	TWR	TAL HOU

Client Sample ID: Cell14- Square 19-S-2-3-191206

Lab Sample ID: 600-197229-9 Date Collected: 12/06/19 12:02 **Matrix: Solid**

Date Received: 12/10/19 10:38

Batch Batch Dilution Batch Prepared Method Prep Type Number or Analyzed Type Run Factor Analyst Lab 2540B TAL HOU Total/NA Analysis 282754 12/11/19 14:13 ANP

Client Sample ID: Cell14- Square 19-S-2-3-191206 Lab Sample ID: 600-197229-9

Date Collected: 12/06/19 12:02 **Matrix: Solid** Percent Solids: 93.4 Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 17:06	TWR	TAL HOU
Total/NA	Prep	3050B			282928	12/12/19 19:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283285	12/17/19 15:55	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:42	TWR	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197229-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	Expiration Date 10-31-20	
		ELAP	T104704223-19-25		
The following analytes the agency does not of	' '	ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for	
Analysis Method	Prep Method	Matrix	Analyte		
		0.11.1	<u> </u>		
2540B		Solid	Percent Moisture		

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Environment Testing TestAmerica N - Nane
O - AsNaO2
P - Na2O4S
O - Na2SO3
R - Na2SO3
S - H2SO4
T - TSP Dodecatydrate flow out of Bar. Special Instructions/Note: other (specify) U - Acetone v - MCAA W - pH 4-5 Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 600-72593-19936.10 Preservation Codes 101 🕃 eurofins A - HCL
B - NaOH
C - Zn Acetate
C - Nath Sola
E - Nath Sola
F - Mechor
G - Amchlor
H - Ascorbic Acid J-Di Water K-EDTA 1299.216 L-EDA Page. Page Total Number of containers 37 8 18 Midland Method of Shipment #264 Disposal By Lab Analysis Requested coler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements sachin kudchadkar@testamericamo.com > 5010B- Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr,Fe, Pb,Mn, Kudchadkar, Sachin G 80128 CRO -CE-C10 - 202 Jar Canton Chain of Custody Record 80128 DHOIOHO -C10-C38 C58-C39- 4 oz lat- Canton N 2 2 11 Arcadio A Number Lah PM Preservation Code: Solid Solid Solid Solid Matrix Solid Solid Solid Solid Solid Solid Solid Radiological (C=comb, G=grab) Sample Type 15 0 6 851 B792 13 Standard Steinmann Sample 1202 1056 1139 145 3 1113 91206 115S 1131 Date Unknown (AT Requested (days) Due Date Requested: 191206 191906 191306 191200 191206 191306 Sample Date 12/9/1 010 90016 191306 60011732 #OM Poison B CellH-Square46-5-2-3-191206 21116-Square12-5-2-191206 944167.5-5-2-3-19120b e1115-Square 21-5-2-3-19120b ell15-Square 145-5-2-3-191206 21114- Square 19-5-2-191206 Cell 14-59ume49-5-2-191200 21/14 - Square 30 -5-2-3-191200 el115-5gume |52-5-2-191206 Skin frntant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (713) 690-4444 Fax (713) 690-5646 いっとうか Chevron - Jal Land Farm Soils 2020 Flammable Possible Hazard Identification Suite 121 Chevron Landham sarah johnson@arcadis.com empty Kit Relinquished by Custody Seals Intact. 1004 North Big Spring Sample Identification Client Information Houston, TX 77040 A Yes A No 5310 Rothway, Street Non-Hazard 432-227-0266(Tei) ARCADIS U.S. Sarah Johnson quished by State, Zip TX, 79701 Midland

🔅 eurofins

Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

-	ě	ES	73	-	5.	3	×	2	*	-	
	4	J	į,	È	b	T	6	T.		U	Sec. Ba

122	CLI	IENT:	Arc	<i>edis</i>	
47	CA	RRIER/DRIVER: _	that:	EX	
DYES Ø	NO Nu				
Temp Blank\	Trip Blame	Observed Temp (°C)	, ID	CF	Corrected Temp (°C)
Y / (N)	Y / (N)	2.8	678	-0.3	2.5
Y/M	Y/N				
YIN	YIN				1
Y / N	Y/N				4
Y / N	Y / N				9)
	Temp Blank Y / N Y / N Y / N Y / N Y / N	Temp Blank Trip Blank Y / N	Temp Blank Trip Blank (°C) Y / N	CARRIER/DRIVER:	CARRIER/DRIVER:

Date/Time Received:

CF = correction factor Samples received on ice? YES

LABORATORY PRESERVATION OF SAMPLES	REQUIRED: DNO DYE	S				
Base samples are>pH 12: □YES □NO	Acid preserved are <ph 2:<="" td=""><td>S □NO</td></ph>	S □NO				
TX1005 samples <u>frozen</u> upon receipt: YES	DATE & TIME PUT IN FREEZER:					
pH paper Lot #	VOA headspace acceptable (5-6mm): □YES □NO □NA					
Did samples meet the laboratory's standard conditions of	sample acceptability upon receipt?	☐YES ☐ NO				

COMMENTS:	
-/-	4

HS-SA-WI-013

Rev. 4A: 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197229-1

Login Number: 197229 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	2.5
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.



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197250-1

Client Project/Site: Chevron - Jal Land Farm Soils 2020

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 4/10/2020 1:41:32 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method	Method Description	Protocol	Laboratory
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197250-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-197250-1	Cell11-Square134-S-2-191206	Solid	12/06/19 09:16	12/10/19 10:38	
600-197250-2	Cell11-Square93-S-2-191206	Solid	12/06/19 09:27	12/10/19 10:38	
600-197250-3	Cell11-Square90-S-2-191206	Solid	12/06/19 09:36	12/10/19 10:38	
600-197250-4	Cell11-Square65-S-2-191206	Solid	12/06/19 09:43	12/10/19 10:38	
600-197250-5	Cell12-Square84-S-2-191206	Solid	12/06/19 09:50	12/10/19 10:38	
600-197250-6	Cell12-Square37-S-2-191206	Solid	12/06/19 09:58	12/10/19 10:38	
600-197250-7	Cell12-Square14-S-2-191206	Solid	12/06/19 10:14	12/10/19 10:38	
600-197250-8	Cell12-Square27-S-2-191206	Solid	12/06/19 10:18	12/10/19 10:38	
600-197250-9	Cell16-Square87-S-2-191206	Solid	12/06/19 10:31	12/10/19 10:38	
600-197250-10	Cell16-Square94-S-2-191206	Solid	12/06/19 10:39	12/10/19 10:38	
600-197250-11	Cell16-Square134-S-2-191206	Solid	12/06/19 10:47	12/10/19 10:38	

Job ID: 600-197250-1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell11-Square134-S-2-191206

Lab Sample ID: 600-197250-1 Date Collected: 12/06/19 09:16 **Matrix: Solid**

Date Received: 12/10/19 10:38 **Percent Solids: 83.1**

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.133	U	0.445	0.133	mg/Kg	₩	12/12/19 21:03	12/16/19 11:47	1
Arsenic	2.27		1.11	0.243	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Barium	53.0		1.11	0.0334	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Beryllium	0.284	b	0.278	0.0161	mg/Kg	₽	12/12/19 21:03	12/16/19 11:47	1
Calcium	25300		111	0.962	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Cadmium	0.139	J	0.278	0.0285	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Chromium	6.15		0.557	0.0564	mg/Kg	₽	12/12/19 21:03	12/16/19 11:47	1
Copper	3.55		0.557	0.194	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Iron	5210		22.3	2.82	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Potassium	1040		111	12.3	mg/Kg	₽	12/12/19 21:03	12/16/19 11:47	1
Magnesium	829		111	2.14	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Manganese	71.0		1.67	0.0424	mg/Kg	₩	12/12/19 21:03	12/16/19 11:47	1
Sodium	25.6	J b	111	0.987	mg/Kg	₽	12/12/19 21:03	12/16/19 11:47	1
Lead	4.59		0.557	0.117	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Antimony	0.258	U	2.78	0.258	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Selenium	0.288	U	2.23	0.288	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Thallium	0.401	J	1.67	0.308	mg/Kg	☼	12/12/19 21:03	12/16/19 11:47	1
Zinc	14.7		1.67	0.120	mg/Kg	₩	12/12/19 21:03	12/16/19 11:47	1

Method: 7471A - Mercury in So	olid or Sem	isolid Was	te (Manual	Cold Vap	or Tec	hnique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0233		0.0192	0.00404	mg/Kg	<u></u>	12/27/19 12:50	12/27/19 15:44	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.9	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	83.1	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell11-Square93-S-2-191206 Lab Sample ID: 600-197250-2 Date Collected: 12/06/19 09:27 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 71.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.156	U	0.524	0.156	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 11:53	1
Arsenic	1.78		1.31	0.286	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Barium	33.8		1.31	0.0393	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Beryllium	0.229	J b	0.328	0.0190	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Calcium	2490		131	1.13	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Cadmium	0.111	J	0.328	0.0335	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Chromium	5.46		0.655	0.0663	mg/Kg	₽	12/12/19 21:03	12/16/19 11:53	1
Copper	2.84		0.655	0.228	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Iron	4450		26.2	3.31	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Potassium	777		131	14.4	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Magnesium	687		131	2.52	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Manganese	56.8		1.97	0.0499	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Sodium	65.8	J b	131	1.16	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Lead	3.42		0.655	0.138	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Antimony	0.304	U	3.28	0.304	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Selenium	0.339	U	2.62	0.339	mg/Kg		12/12/19 21:03	12/16/19 11:53	1

Client Sample ID: Cell11-Square93-S-2-191206

Lab Sample ID: 600-197250-2

Matrix: Solid

Date Collected: 12/06/19 09:27 Date Received: 12/10/19 10:38 **Percent Solids: 71.3**

Method: 6010B - Inductively C	oupled Plasma - Ator	nic Emission	Spectro	metry (G	Contir	iued)		
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	1.63 J	1.97	0.363	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1
Zinc	9.98	1.97	0.142	mg/Kg	₩	12/12/19 21:03	12/16/19 11:53	1

Analyte		Result Qualifier MQL (Adj) SDL Unit D				Prepared	Analyzed	Dil Fac	
Mercury	0.00863 J		0.0238	0.00502	mg/Kg	\	12/27/19 12:50	12/27/19 15:50	1
General Chemistry									

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.7	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	71.3	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell11-Square90-S-2-191206 Lab Sample ID: 600-197250-3 Date Collected: 12/06/19 09:36 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.149	U	0.502	0.149	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 11:55	1
Arsenic	1.81		1.26	0.274	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Barium	45.5		1.26	0.0377	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Beryllium	0.220	J b	0.314	0.0182	mg/Kg		12/12/19 21:03	12/16/19 11:55	1
Calcium	14300		126	1.08	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Cadmium	0.113	J	0.314	0.0321	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Chromium	5.35		0.628	0.0635	mg/Kg	₩.	12/12/19 21:03	12/16/19 11:55	1
Copper	3.06		0.628	0.218	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Iron	4330		25.1	3.18	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Potassium	994		126	13.8	mg/Kg	₩.	12/12/19 21:03	12/16/19 11:55	1
Magnesium	773		126	2.41	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Manganese	57.7		1.88	0.0478	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Sodium	15.6	Jb	126	1.11	mg/Kg	₽	12/12/19 21:03	12/16/19 11:55	1
Lead	3.41		0.628	0.132	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Antimony	0.291	U	3.14	0.291	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1
Selenium	0.325	U	2.51	0.325	mg/Kg	₽	12/12/19 21:03	12/16/19 11:55	1
Thallium	0.508	J	1.88	0.348	mg/Kg	☼	12/12/19 21:03	12/16/19 11:55	1
Zinc	11.4		1.88	0.136	mg/Kg	₩	12/12/19 21:03	12/16/19 11:55	1

Method: 7471A - Mercury in S	olid or Semisolid Was	ste (Manual	Cold Vapor Techn	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00606 J	0.0213	0.00448 mg/Kg	-	12/27/19 12:50	12/27/19 15:52	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.2	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	73.8	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell11-Square65-S-2-191206

Date Collected: 12/06/19 09:43 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197250-4 **Matrix: Solid**

Percent Solids: 72.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.158	U	0.529	0.158	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 11:57	1
Arsenic	1.66		1.32	0.289	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Barium	41.0		1.32	0.0397	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Beryllium	0.258	J b	0.331	0.0192	mg/Kg	₽	12/12/19 21:03	12/16/19 11:57	1
Calcium	4890		132	1.14	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Cadmium	0.119	J	0.331	0.0339	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Chromium	5.57		0.662	0.0670	mg/Kg	φ.	12/12/19 21:03	12/16/19 11:57	1
Copper	3.28		0.662	0.230	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Iron	4950		26.5	3.35	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Potassium	1030		132	14.6	mg/Kg	₽	12/12/19 21:03	12/16/19 11:57	1
Magnesium	763		132	2.54	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Manganese	73.6		1.99	0.0504	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Sodium	25.1	J b	132	1.17	mg/Kg	₽	12/12/19 21:03	12/16/19 11:57	1
Lead	3.77		0.662	0.139	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Antimony	0.307	U	3.31	0.307	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Selenium	0.343	U	2.65	0.343	mg/Kg	₽	12/12/19 21:03	12/16/19 11:57	1
Thallium	0.367	U	1.99	0.367	mg/Kg	☼	12/12/19 21:03	12/16/19 11:57	1
Zinc	11.5		1.99	0.143	mg/Kg	₩	12/12/19 21:03	12/16/19 11:57	1

Method: 7471A - Mercury in So	olid or Sem	isolid Was	te (Manual	Cold Vap	or Tec	hnique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00736	J	0.0213	0.00448	mg/Kg	₩	12/27/19 12:50	12/27/19 15:54	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.4	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	72.6	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell12-Square84-S-2-191206 Lab Sample ID: 600-197250-5 Date Collected: 12/06/19 09:50 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.161	U	0.543	0.161	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 11:59	1
Arsenic	1.94		1.36	0.296	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Barium	100		1.36	0.0407	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Beryllium	0.163	J b	0.339	0.0197	mg/Kg	ф.	12/12/19 21:03	12/16/19 11:59	1
Calcium	62000		136	1.17	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Cadmium	0.102	J	0.339	0.0347	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Chromium	4.08		0.678	0.0687	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Copper	2.16		0.678	0.236	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Iron	3350		27.1	3.43	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Potassium	655		136	14.9	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Magnesium	717		136	2.61	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Manganese	37.4		2.04	0.0517	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Sodium	33.6	J b	136	1.20	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Lead	2.90		0.678	0.142	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Antimony	0.315	U	3.39	0.315	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Selenium	0.351	Ū	2.71	0.351	mg/Kg		12/12/19 21:03	12/16/19 11:59	1

Client Sample ID: Cell12-Square84-S-2-191206

Lab Sample ID: 600-197250-5

Date Collected: 12/06/19 09:50 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.0

Analyte	Result Q	lualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.376 U		2.04	0.376	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1
Zinc	8.51		2.04	0.147	mg/Kg	₩	12/12/19 21:03	12/16/19 11:59	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00657 J	0.0218	0.00460 mg/Kg	<u>∓</u>	12/27/19 12:50	12/27/19 15:56	1

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.0	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	73.0	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell12-Square37-S-2-191206

Lab Sample ID: 600-197250-6

Date Collected: 12/06/19 09:58

General Chemistry

Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 74.7

Method: 6010B - Inductively	Coupled Plasma - Atomic Emission Spectrometry
	D 1/ 0 1/2 1401 /4 10 0D1 11 1/

Method: 6010B - Induc	tively Coupled Pla	sma - Ato	mic Emission	n Spectre	ometry				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.515	0.153	mg/Kg	<u></u>	12/12/19 21:03	12/16/19 12:01	1
Arsenic	2.45		1.29	0.281	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Barium	36.2		1.29	0.0386	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Beryllium	0.360	b	0.322	0.0187	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Calcium	4160		129	1.11	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Cadmium	0.142	J	0.322	0.0330	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Chromium	7.62		0.644	0.0651	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Copper	3.37		0.644	0.224	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Iron	6910		25.7	3.26	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Potassium	1270		129	14.2	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Magnesium	1020		129	2.47	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Manganese	67.5		1.93	0.0490	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Sodium	103	Jb	129	1.14	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Lead	4.93		0.644	0.135	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Antimony	0.299	U	3.22	0.299	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Selenium	0.333	U	2.57	0.333	mg/Kg	₽	12/12/19 21:03	12/16/19 12:01	1
Thallium	0.357	U	1.93	0.357	mg/Kg	☼	12/12/19 21:03	12/16/19 12:01	1
Zinc	14.4		1.93	0.139	mg/Kg	₩	12/12/19 21:03	12/16/19 12:01	1

-1			
-1	N/a46ad. 7/7/A N/aua	milia Callal au Caustaallal Wasta	(Manual Cold Vapor Technique)
-1	NIETOOO: /4/14 = NIETOIII	rv in Solin or Semisolin Waste	ilvianijai Coin vanor Lechninije)
-1	Mictiloa. 141 IA - Micioal	y in cond or comisona waste	(indifidational control reciningac)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	Ď	Prepared	Analyzed	Dil Fac
Mercury	0.00965 J	0.0220	0.00464 mg/Kg	\	12/27/19 12:50	12/27/19 15:58	1

Genera	Chem	istry
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Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.3	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	74.7	1.0	1.0	%			12/12/19 10:35	1

Lab Sample ID: 600-197250-7

Client Sample ID: Cell12-Square14-S-2-191206
Date Collected: 12/06/19 10:14

Matrix: Solid Percent Solids: 97.3

Job ID: 600-197250-1

Date Received: 12/10/19 10:38

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.399	0.119	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 12:03	1
Arsenic	1.69		0.998	0.218	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Barium	31.3		0.998	0.0299	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Beryllium	0.220	J b	0.250	0.0145	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:03	1
Calcium	14900		99.8	0.862	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Cadmium	0.0998	J	0.250	0.0256	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Chromium	5.13		0.499	0.0505	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:03	1
Copper	2.44		0.499	0.174	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Iron	4360		20.0	2.53	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Potassium	811		99.8	11.0	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:03	1
Magnesium	606		99.8	1.92	mg/Kg	₩	12/12/19 21:03	12/16/19 12:03	1
Manganese	51.9		1.50	0.0380	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Sodium	196	b	99.8	0.884	mg/Kg	₩	12/12/19 21:03	12/16/19 12:03	1
Lead	3.65		0.499	0.105	mg/Kg	₩	12/12/19 21:03	12/16/19 12:03	1
Antimony	0.232	U	2.50	0.232	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Selenium	0.259	U	2.00	0.259	mg/Kg	₩	12/12/19 21:03	12/16/19 12:03	1
Thallium	0.277	U	1.50	0.277	mg/Kg	☼	12/12/19 21:03	12/16/19 12:03	1
Zinc	9.14		1.50	0.108	mg/Kg	≎	12/12/19 21:03	12/16/19 12:03	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00680	J	0.0175	0.00368	mg/Kg	\$	12/27/19 12:50	12/27/19 16:00	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	2.7	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	97.3	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell12-Square27-S-2-191206

Date Collected: 12/06/19 10:18

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197250-8

Matrix: Solid

Percent Solids: 81.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.136	U	0.457	0.136	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 12:05	1
Arsenic	1.68		1.14	0.249	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Barium	30.5		1.14	0.0343	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Beryllium	0.211	J b	0.285	0.0166	mg/Kg	φ.	12/12/19 21:03	12/16/19 12:05	1
Calcium	8210		114	0.986	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Cadmium	0.0970	J	0.285	0.0292	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Chromium	5.06		0.571	0.0578	mg/Kg	₽	12/12/19 21:03	12/16/19 12:05	1
Copper	2.16		0.571	0.199	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Iron	4220		22.8	2.89	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Potassium	873		114	12.6	mg/Kg	₽	12/12/19 21:03	12/16/19 12:05	1
Magnesium	781		114	2.19	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Manganese	45.1		1.71	0.0435	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Sodium	174	b	114	1.01	mg/Kg	Φ.	12/12/19 21:03	12/16/19 12:05	1
Lead	3.26		0.571	0.120	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Antimony	0.265	U	2.85	0.265	mg/Kg	₩	12/12/19 21:03	12/16/19 12:05	1
Selenium	0.296	Ū	2.28	0.296	mg/Kg		12/12/19 21:03	12/16/19 12:05	1

Dil Fac

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID: 600-197250-8

Client Sample ID: Cell12-Square27-S-2-191206
Date Collected: 12/06/19 10:18

Matrix: Solid

Date Received: 12/10/19 10:38

Matrix: Solid
Percent Solids: 81.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)												
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed						
Thallium	0.316 U	1.71	0.316 mg/Kg	\	12/12/19 21:03	12/16/19 12:05						

 Thallium
 0.316 U
 1.71
 0.316 mg/Kg
 № 12/12/19 21:03 12/16/19 12:05

 Zinc
 9.24
 1.71
 0.123 mg/Kg
 № 12/12/19 21:03 12/16/19 12:05

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00440	J	0.0186	0.00392	mg/Kg	<u> </u>	12/30/19 14:44	12/31/19 11:10	1

General Chemistry

Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.1	1.0	1.0 %	%		•	12/12/19 10:35	1
Percent Solids	81.9	1.0	1.0 %	%			12/12/19 10:35	1

Client Sample ID: Cell16-Square87-S-2-191206 Lab Sample ID: 600-197250-9

Date Collected: 12/06/19 10:31

Date Received: 12/10/19 10:38

Matrix: Solid

Percent Solids: 70.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.163	U	0.549	0.163	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 12:17	1
Arsenic	1.81		1.37	0.299	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Barium	30.5		1.37	0.0412	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Beryllium	0.281	J b	0.343	0.0199	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:17	1
Calcium	2510		137	1.19	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Cadmium	0.144	J	0.343	0.0351	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Chromium	5.32		0.686	0.0695	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:17	1
Copper	3.10		0.686	0.239	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Iron	4730		27.5	3.47	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Potassium	957		137	15.1	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:17	1
Magnesium	865		137	2.64	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Manganese	66.4		2.06	0.0523	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Sodium	34.6	J b	137	1.22	mg/Kg	₽	12/12/19 21:03	12/16/19 12:17	1
Lead	4.68		0.686	0.144	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Antimony	0.318	U	3.43	0.318	mg/Kg	₩	12/12/19 21:03	12/16/19 12:17	1
Selenium	0.355	U	2.75	0.355	mg/Kg	₽	12/12/19 21:03	12/16/19 12:17	1
Thallium	1.27	J	2.06	0.380	mg/Kg	☼	12/12/19 21:03	12/16/19 12:17	1
Zinc	11.7		2.06	0.148	mg/Kg	₽	12/12/19 21:03	12/16/19 12:17	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00474 U	0.0225	0.00474 mg/Kg	₩	12/30/19 14:44	12/31/19 11:16	1

General Chemistry

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29.3	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	70.7	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell16-Square94-S-2-191206

Lab Sample ID: 600-197250-10 Date Collected: 12/06/19 10:39

Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 97.2

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg	₩	12/12/19 21:03	12/16/19 12:19	1
Arsenic	1.45		0.999	0.218	mg/Kg	₩	12/12/19 21:03	12/16/19 12:19	1
Barium	20.6		0.999	0.0300	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Beryllium	0.195	J b	0.250	0.0145	mg/Kg	☆	12/12/19 21:03	12/16/19 12:19	1
Calcium	815		99.9	0.863	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Cadmium	0.0899	J	0.250	0.0256	mg/Kg	≎	12/12/19 21:03	12/16/19 12:19	1
Chromium	4.54		0.499	0.0505	mg/Kg	☆	12/12/19 21:03	12/16/19 12:19	1
Copper	2.28		0.499	0.174	mg/Kg	≎	12/12/19 21:03	12/16/19 12:19	1
Iron	3770		20.0	2.53	mg/Kg	₩	12/12/19 21:03	12/16/19 12:19	1
Potassium	695		99.9	11.0	mg/Kg	₽	12/12/19 21:03	12/16/19 12:19	1
Magnesium	520		99.9	1.92	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Manganese	42.9		1.50	0.0381	mg/Kg	₩	12/12/19 21:03	12/16/19 12:19	1
Sodium	249	b	99.9	0.885	mg/Kg	₽	12/12/19 21:03	12/16/19 12:19	1
Lead	3.04		0.499	0.105	mg/Kg	≎	12/12/19 21:03	12/16/19 12:19	1
Antimony	0.232	U	2.50	0.232	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Selenium	0.259	U	2.00	0.259	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Thallium	0.345	J	1.50	0.277	mg/Kg	☼	12/12/19 21:03	12/16/19 12:19	1
Zinc	8.18		1.50	0.108	mg/Kg	₩	12/12/19 21:03	12/16/19 12:19	f

Method: 7471A - Mercury in So	olid or Semis	solid Waste	(Manual	Cold Vap	or Tech	nique)			
Analyte	Result C	Qualifier N	/IQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00340 U	U	0.0161	0.00340	mg/Kg	☆	12/30/19 14:44	12/31/19 11:18	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	2.8	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	97.2	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell16-Square134-S-2-191206 Lab Sample ID: 600-197250-11 Date Collected: 12/06/19 10:47 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 89.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.125	U	0.419	0.125	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 12:21	1
Arsenic	1.58		1.05	0.229	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Barium	25.2		1.05	0.0315	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Beryllium	0.241	J b	0.262	0.0152	mg/Kg	ф.	12/12/19 21:03	12/16/19 12:21	1
Calcium	1530		105	0.906	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Cadmium	0.0944	J	0.262	0.0268	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Chromium	5.27		0.524	0.0531	mg/Kg	₽	12/12/19 21:03	12/16/19 12:21	1
Copper	2.43		0.524	0.182	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Iron	4550		21.0	2.65	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Potassium	835		105	11.5	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:21	1
Magnesium	691		105	2.01	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Manganese	50.1		1.57	0.0399	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Sodium	465	b	105	0.929	mg/Kg	₩.	12/12/19 21:03	12/16/19 12:21	1
Lead	3.85		0.524	0.110	mg/Kg	₩	12/12/19 21:03	12/16/19 12:21	1
Antimony	0.243	U	2.62	0.243	mg/Kg	☆	12/12/19 21:03	12/16/19 12:21	1
Selenium	0.272	U	2.10	0.272	mg/Kg	\	12/12/19 21:03	12/16/19 12:21	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197250-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Percent Solids

Client Sample ID: Cell16-Square134-S-2-191206

89.1

Lab Sample ID: 600-197250-11

Date Collected: 12/06/19 10:47 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 89.1

Method: 6010B - Inductively Co	oupled Plasma	a - Atomic	: Emissio	n Spectro	ometry	(Contin	nued)		
Analyte	Result Qua	alifier I	/IQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.290 U		1.57	0.290	mg/Kg	<u> </u>	12/12/19 21:03	12/16/19 12:21	1
Zinc	9.69		1.57	0.113	mg/Kg	₽	12/12/19 21:03	12/16/19 12:21	1

Method: 7471A - Mercury in	Solid or Sem	isolid Wa	ste (Manual	Cold Vap	or Techi	nique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00358	J	0.0166	0.00349	mg/Kg		12/30/19 14:44	12/31/19 11:20	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.9		1.0	1.0	%			12/12/19 10:35	1

1.0

1.0 %

12/12/19 10:35

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197250-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method Detection Limit

Minimum Level (Dioxin)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Not Calculated

Quality Control

Qualifiers

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.

Glossary

MDL

ML

NC

ND

PQL

QC

RER

RPD

TEF

TEQ

RL

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282936/1-A

Lab Sample ID: LCSSRM 600-282936/2-A

Matrix: Solid

Matrix: Solid Analysis Batch: 283152 **Client Sample ID: Method Blank Prep Type: Total/NA**

Prep Batch: 282936

	MB							
Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
0.119	U	0.400	0.119	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.218	U	1.00	0.218	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.0300	U	1.00	0.0300	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.01500	J	0.250	0.0145	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.864	U	100	0.864	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.0256	U	0.250	0.0256	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.0506	U	0.500	0.0506	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.174	U	0.500	0.174	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
2.53	U	20.0	2.53	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
11.0	U	100	11.0	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
1.92	U	100	1.92	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.0381	U	1.50	0.0381	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
1.530	J	100	0.886	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.105	U	0.500	0.105	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.232	U	2.50	0.232	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.259	U	2.00	0.259	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.277	U	1.50	0.277	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
0.108	U	1.50	0.108	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
	0.119 0.218 0.0300 0.01500 0.864 0.0256 0.0506 0.174 2.53 11.0 1.92 0.0381 1.530 0.105 0.232 0.259 0.277	Result Qualifier 0.119 U 0.218 U 0.0300 U 0.01500 J 0.864 U 0.0256 U 0.0506 U 0.174 U 2.53 U 11.0 U 1.92 U 0.0381 U 1.530 J 0.105 U 0.232 U 0.259 U 0.277 U 0.108 U	0.119 U 0.400 0.218 U 1.00 0.0300 U 1.00 0.01500 J 0.250 0.864 U 100 0.0256 U 0.250 0.0506 U 0.500 0.174 U 0.500 2.53 U 20.0 11.0 U 100 1.92 U 100 0.0381 U 1.50 1.530 J 100 0.105 U 0.500 0.232 U 2.50 0.259 U 2.00 0.277 U 1.50	0.119 U 0.400 0.119 0.218 U 1.00 0.218 0.0300 U 1.00 0.0300 0.01500 J 0.250 0.0145 0.864 U 100 0.864 0.0256 U 0.250 0.0256 0.0506 U 0.500 0.0506 0.174 U 0.500 0.174 2.53 U 20.0 2.53 11.0 U 100 11.0 1.92 U 100 1.92 0.0381 U 1.50 0.0381 1.530 J 100 0.886 0.105 U 0.500 0.105 0.232 U 2.50 0.232 0.259 U 2.00 0.259 0.277 U 1.50 0.277	0.119 U 0.400 0.119 mg/Kg 0.218 U 1.00 0.218 mg/Kg 0.0300 U 1.00 0.0300 mg/Kg 0.01500 J 0.250 0.0145 mg/Kg 0.864 U 100 0.864 mg/Kg 0.0256 U 0.250 0.0256 mg/Kg 0.0506 U 0.500 0.0506 mg/Kg 0.174 U 0.500 0.174 mg/Kg 2.53 U 20.0 2.53 mg/Kg 11.0 U 100 11.0 mg/Kg 1.92 U 100 1.92 mg/Kg 0.0381 U 1.50 0.0381 mg/Kg 0.105 U 0.500 0.105 mg/Kg 0.105 U 0.500 0.105 mg/Kg 0.232 U 2.50 0.232 mg/Kg 0.259 U 2.00 0.259	0.119 U 0.400 0.119 mg/Kg 0.218 U 1.00 0.218 mg/Kg 0.0300 U 1.00 0.0300 mg/Kg 0.01500 J 0.250 0.0145 mg/Kg 0.864 U 100 0.864 mg/Kg 0.0256 U 0.250 0.0256 mg/Kg 0.0506 U 0.500 0.0506 mg/Kg 0.174 U 0.500 0.174 mg/Kg 2.53 U 20.0 2.53 mg/Kg 11.0 U 100 11.0 mg/Kg 1.92 U 100 1.92 mg/Kg 0.0381 U 1.50 0.0381 mg/Kg 1.530 J 100 0.886 mg/Kg 0.105 U 0.500 0.105 mg/Kg 0.232 U 2.50 0.232 mg/Kg 0.259 U 2.00 0.259	0.119 U 0.400 0.119 mg/Kg 12/12/19 21:03 0.218 U 1.00 0.218 mg/Kg 12/12/19 21:03 0.0300 U 1.00 0.0300 mg/Kg 12/12/19 21:03 0.01500 J 0.250 0.0145 mg/Kg 12/12/19 21:03 0.864 U 100 0.864 mg/Kg 12/12/19 21:03 0.0256 U 0.250 0.0256 mg/Kg 12/12/19 21:03 0.0506 U 0.500 0.0506 mg/Kg 12/12/19 21:03 0.174 U 0.500 0.174 mg/Kg 12/12/19 21:03 2.53 U 20.0 2.53 mg/Kg 12/12/19 21:03 1.92 U 100 1.92 mg/Kg 12/12/19 21:03 0.0381 U 1.50 0.0381 mg/Kg 12/12/19 21:03 1.530 J 100 0.886 mg/Kg 12/12/19 21:03 0.105 U 0.500 0.105	0.119 U 0.400 0.119 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.218 U 1.00 0.218 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.0300 U 1.00 0.0300 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.01500 J 0.250 0.0145 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.864 U 100 0.864 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.0256 U 0.250 0.0256 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.0506 U 0.250 0.0256 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.0506 U 0.500 0.0506 mg/Kg 12/12/19 21:03 12/16/19 11:22 0.174 U 0.500 0.174 mg/Kg 12/12/19 21:03 12/16/19 11:22 2.53 U 20.0 2.53 mg/Kg 12/12/19 21:03 12/16/19 11:22 1.92 U 100 11.0

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analysis Batch: 283152 Analyte	Spike Added		LCSSRM Qualifier	Unit	D	%Rec	Prep Batch: 282936 %Rec. Limits
Silver	25.8	23.10		mg/Kg		89.5	67.1 - 106.
				3 3			6
Arsenic	69.4	66.71		mg/Kg		96.1	66.6 - 106.
							6
Barium	393	341.1		mg/Kg		86.8	64.6 - 106.
							6
Beryllium	293	261.4		mg/Kg		89.2	72.4 - 106.
							8
Calcium	19300	19500		mg/Kg		101.0	70.5 - 106.
Cadmium	260	269.7		ma/l/a		100.2	7
Cadmium	268	268.7		mg/Kg		100.3	71.3 - 106.
Chromium	63.6	60.92		mg/Kg		95.8	71.9 - 106.
Gillomani	00.0	00.52		mg/rtg		55.0	6
Copper	175	173.4		mg/Kg		99.1	72.0 - 106.
				3 3			9
Iron	17700	14730		mg/Kg		83.2	50.1 - 106.
							8
Potassium	5740	5131		mg/Kg		89.4	64.6 - 106.
							6
Magnesium	5390	4276		mg/Kg		79.3	64.2 - 106.
							7
Manganese	616	509.2		mg/Kg		82.7	64.1 - 106.
On divine		7000				07.5	7
Sodium	9070	7939		mg/Kg		87.5	70.5 - 106.
Lead	164	160.1		mg/Kg		07.6	6 71.3 - 106.
Leau	104	100.1		mg/rkg		91.0	71.3 - 106.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282936/2-A Matrix: Solid Analysis Batch: 283152	Spike	LCSSRM	LCSSRM	Client	Sar	nple IC	Prep Type: Total/NA Prep Batch: 282936 %Rec.	4
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	120	35.19		mg/Kg	_	29.3	20.0 - 106. 7	-
Selenium	155	148.2		mg/Kg		95.6	65.2 - 106. 5	
Thallium	81.0	75.32		mg/Kg		93.0	63.2 - 106. 7	
Zinc	482	464.2		mg/Kg		96.3	69.7 - 106.	

Client Sample ID: Cell11-Square134-S-2-191206 Lab Sample ID: 600-197250-1 MS

Client: ARCADIS U.S., Inc.

Matrix: Solid Prep Type: Total/NA Analysis Batch: 283152 Prep Batch: 282936 Spike MS MS %Rec. Sample Sample

	Janipie	Sample	Spike	IVIO	IVIO				/oixec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.133	U	14.9	12.47		mg/Kg	<u> </u>	84	75 - 125	
Arsenic	2.27		59.5	58.11		mg/Kg	₩	94	75 - 125	
Barium	53.0		59.5	120.3		mg/Kg	₩	113	75 - 125	
Beryllium	0.284	b	59.5	54.08		mg/Kg	₩.	90	75 - 125	
Calcium	25300		595	37750	4	mg/Kg	₩	2094	75 - 125	
Cadmium	0.139	J	59.5	56.58		mg/Kg	₩	95	75 - 125	
Chromium	6.15		59.5	64.07		mg/Kg	₩	97	75 - 125	
Copper	3.55		59.5	61.45		mg/Kg	₩	97	75 - 125	
Iron	5210		595	7508	4	mg/Kg	₩	387	75 - 125	
Potassium	1040		595	2444	N1	mg/Kg	₩	235	75 - 125	
Magnesium	829		595	1896	N1	mg/Kg	₩	179	75 - 125	
Manganese	71.0		59.5	131.2		mg/Kg	₩	101	75 - 125	
Sodium	25.6	Jb	595	621.6		mg/Kg	₩	100	75 - 125	
Lead	4.59		59.5	59.78		mg/Kg	₩	93	75 - 125	
Antimony	0.258	U	89.3	53.52	N1	mg/Kg	₩	60	75 - 125	
Selenium	0.288	U	59.5	55.53		mg/Kg	₩	93	75 - 125	
Thallium	0.401	J	59.5	54.00		mg/Kg	₩	90	75 - 125	
Zinc	14.7		29.8	48.27		mg/Kg	☼	113	75 ₋ 125	

Lab Sample ID: 600-197250-11 MS Client Sample ID: Cell16-Square134-S-2-191206 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 283152 Prep Batch: 282936

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.125	U	13.0	10.09		mg/Kg	₩	78	75 - 125	
Arsenic	1.58		51.9	52.20		mg/Kg	☼	97	75 - 125	
Barium	25.2		51.9	79.88		mg/Kg	☼	105	75 - 125	
Beryllium	0.241	Jb	51.9	48.38		mg/Kg	₩	93	75 - 125	
Calcium	1530		519	2345	N1	mg/Kg	₩	157	75 - 125	
Cadmium	0.0944	J	51.9	51.44		mg/Kg	☼	99	75 - 125	
Chromium	5.27		51.9	58.90		mg/Kg	₽	103	75 - 125	
Copper	2.43		51.9	53.45		mg/Kg	₩	98	75 - 125	
Iron	4550		519	6565	4	mg/Kg	☼	388	75 - 125	
Potassium	835		519	1993	N1	mg/Kg	₽	223	75 - 125	
Magnesium	691		519	1593	N1	mg/Kg	☼	174	75 - 125	
Manganese	50.1		51.9	113.6		mg/Kg	₩	122	75 - 125	

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Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197250-11 MS Client Sample ID: Cell16-Square134-S-2-191206

Matrix: Solid

Client: ARCADIS U.S., Inc.

Prep Type: Total/NA **Analysis Batch: 283152 Prep Batch: 282936**

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Sodium	465	b	519	952.0		mg/Kg	<u> </u>	94	75 - 125	
Lead	3.85		51.9	53.96		mg/Kg	₩	96	75 - 125	
Antimony	0.243	U	77.9	45.83	N1	mg/Kg	₩	59	75 - 125	
Selenium	0.272	Ü	51.9	50.69		mg/Kg	₩	98	75 - 125	
Thallium	0.290	U	51.9	49.57		mg/Kg	₩	95	75 - 125	
Zinc	9.69		26.0	40.07		mg/Kg	₩	117	75 ₋ 125	

Lab Sample ID: 600-197250-1 DU Client Sample ID: Cell11-Square134-S-2-191206

Matrix: Solid

Prep Type: Total/NA Pren Batch: 282936 Analysis Batch: 283152

Analysis Batch: 283152							Prep Batch: 20	32936
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.133	U	0.136	U	mg/Kg	- -	NC	20
Arsenic	2.27		2.377		mg/Kg	₩	5	20
Barium	53.0		59.74		mg/Kg	☼	12	20
Beryllium	0.284	b	0.2806	j	mg/Kg	₩	1	20
Calcium	25300		23840		mg/Kg	☼	6	20
Cadmium	0.139	J	0.1489	J	mg/Kg	₽	7	20
Chromium	6.15		6.272		mg/Kg	₩	2	20
Copper	3.55		3.597		mg/Kg	₩	1	20
Iron	5210		5499		mg/Kg	₩	5	20
Potassium	1040		1074		mg/Kg	₩	3	20
Magnesium	829		851.7		mg/Kg	₩	3	20
Manganese	71.0		69.19		mg/Kg	₩	3	20
Sodium	25.6	J b	23.86	J	mg/Kg	₩	7	20
Lead	4.59		4.622		mg/Kg	₩	0.7	20
Antimony	0.258	U	0.266	U	mg/Kg	₽	NC	20
Selenium	0.288	U	0.297	Ü	mg/Kg	₩	NC	20
Thallium	0.401	J	0.317	U	mg/Kg	₩	NC	20

Lab Sample ID: 600-197250-11 DU Client Sample ID: Cell16-Square134-S-2-191206 Prep Type: Total/NA

12.76

mg/Kg

Matrix: Solid

Zinc

Analysis Batch: 283152 Prep Batch: 282936

14.7

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.125	U	0.132	U	mg/Kg	- -	NC	20
Arsenic	1.58		1.644		mg/Kg	\$	4	20
Barium	25.2		26.35		mg/Kg	\$	5	20
Beryllium	0.241	Jb	0.2444	J	mg/Kg	₩	1	20
Calcium	1530		1366		mg/Kg	\$	11	20
Cadmium	0.0944	J	0.1055	J	mg/Kg	\$	11	20
Chromium	5.27		5.543		mg/Kg	₩	5	20
Copper	2.43		2.571		mg/Kg	\$	6	20
Iron	4550		4686		mg/Kg	\$	3	20
Potassium	835		836.4		mg/Kg	₩	0.2	20
Magnesium	691		688.7		mg/Kg	\$	0.4	20
Manganese	50.1		52.00		mg/Kg	₩	4	20
Sodium	465	b	458.0		mg/Kg	₩	1	20

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Prep Batch: 284203

Prep Batch: 284203

Prep Batch: 284366

Prep Batch: 284366

Prep Type: Total/NA

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued) Lab Sample ID: 600-197250-11 DU Client Sample ID: Cell16-Square134-S-2-191206

Matrix: Solid Prep Type: Total/NA Analysis Batch: 283152 **Prep Batch: 282936**

7 midily 010 = ditoin = 00 10=								
-	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Lead	3.85		3.754		mg/Kg	-		20
Antimony	0.243	U	0.258	U	mg/Kg	₩	NC	20
Selenium	0.272	U	0.288	U	mg/Kg	₩	NC	20
Thallium	0.290	U	0.308	U	mg/Kg	₩	NC	20
Zinc	9.69		10.25		mg/Kg	≎	6	20
<u> </u>								

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284203/7-B Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid Analysis Batch: 284242

MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Mercury 0.00336 U 0.0159 0.00336 mg/Kg <u>12/27/19 12:50</u> <u>12/27/19 15:02</u>

Lab Sample ID: LCS 600-284203/8-B **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284242

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Mercury 0.234 0.2431 mg/Kg 70 - 130

Lab Sample ID: MB 600-284366/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444

MB MB

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330 U	0.0157	0.00330 mg/Kg		12/30/19 14:44	12/31/19 10:33	

Lab Sample ID: LCS 600-284366/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284444

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits

0.231 Mercury 0.2371 mg/Kg 103 70 - 130

Lab Sample ID: 600-197250-8 MS Client Sample ID: Cell12-Square27-S-2-191206

Matrix: Solid Prep Type: Total/NA Prep Batch: 284366

Analysis Batch: 284444 Sample Sample Spike MS MS %Rec.

Analyte Result Qualifier Added Result Qualifier I imits Unit D %Rec 0.00440 J 0.269 0.3082 113 75 - 125 Mercury mg/Kg

Lab Sample ID: 600-197250-8 DU Client Sample ID: Cell12-Square27-S-2-191206

Matrix: Solid

Analysis Batch: 284444

Prep Batch: 284366 DU DU Sample Sample **RPD**

Result Qualifier Result Qualifier Analyte Unit Limit 0.00440 J Mercury 0.00386 U mg/Kg

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197250-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197250-1 DU

Matrix: Solid

Analysis Batch: 282836

Client Sample ID: Cell11-Square134-S-2-191206

Prep Type: Total/NA

DU DU RPD Sample Sample Analyte **Result Qualifier** Result Qualifier Unit RPD Limit Percent Moisture 16.9 17.8 % 20 6 Percent Solids 83.1 % 20 82.2

Lab Sample ID: 600-197250-11 DU

Matrix: Solid

Analysis Batch: 282836

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

DU DU RPD Sample Sample Result Qualifier RPD **Analyte** Result Qualifier Unit D Limit Percent Moisture 10.9 11.6 % 6 20 Percent Solids 89.1 88.4 % 8.0 20

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units	
Percent Moisture	1.0	1.0	%	
Percent Solids	1.0	1.0	%	

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Prep Batch: 282936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-1	Cell11-Square134-S-2-191206	Total/NA	Solid	3050B	
600-197250-2	Cell11-Square93-S-2-191206	Total/NA	Solid	3050B	
600-197250-3	Cell11-Square90-S-2-191206	Total/NA	Solid	3050B	
600-197250-4	Cell11-Square65-S-2-191206	Total/NA	Solid	3050B	
600-197250-5	Cell12-Square84-S-2-191206	Total/NA	Solid	3050B	
600-197250-6	Cell12-Square37-S-2-191206	Total/NA	Solid	3050B	
600-197250-7	Cell12-Square14-S-2-191206	Total/NA	Solid	3050B	
600-197250-8	Cell12-Square27-S-2-191206	Total/NA	Solid	3050B	
600-197250-9	Cell16-Square87-S-2-191206	Total/NA	Solid	3050B	
600-197250-10	Cell16-Square94-S-2-191206	Total/NA	Solid	3050B	
600-197250-11	Cell16-Square134-S-2-191206	Total/NA	Solid	3050B	
MB 600-282936/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282936/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197250-1 MS	Cell11-Square134-S-2-191206	Total/NA	Solid	3050B	
600-197250-11 MS	Cell16-Square134-S-2-191206	Total/NA	Solid	3050B	
600-197250-1 DU	Cell11-Square134-S-2-191206	Total/NA	Solid	3050B	
600-197250-11 DU	Cell16-Square134-S-2-191206	Total/NA	Solid	3050B	

Analysis Batch: 283152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-1	Cell11-Square134-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-2	Cell11-Square93-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-3	Cell11-Square90-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-4	Cell11-Square65-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-5	Cell12-Square84-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-6	Cell12-Square37-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-7	Cell12-Square14-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-8	Cell12-Square27-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-9	Cell16-Square87-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-10	Cell16-Square94-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-11	Cell16-Square134-S-2-191206	Total/NA	Solid	6010B	282936
MB 600-282936/1-A	Method Blank	Total/NA	Solid	6010B	282936
LCSSRM 600-282936/2-A	Lab Control Sample	Total/NA	Solid	6010B	282936
600-197250-1 MS	Cell11-Square134-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-11 MS	Cell16-Square134-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-1 DU	Cell11-Square134-S-2-191206	Total/NA	Solid	6010B	282936
600-197250-11 DU	Cell16-Square134-S-2-191206	Total/NA	Solid	6010B	282936

Prep Batch: 284203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-1	Cell11-Square134-S-2-191206	Total/NA	Solid	7471A	_
600-197250-2	Cell11-Square93-S-2-191206	Total/NA	Solid	7471A	
600-197250-3	Cell11-Square90-S-2-191206	Total/NA	Solid	7471A	
600-197250-4	Cell11-Square65-S-2-191206	Total/NA	Solid	7471A	
600-197250-5	Cell12-Square84-S-2-191206	Total/NA	Solid	7471A	
600-197250-6	Cell12-Square37-S-2-191206	Total/NA	Solid	7471A	
600-197250-7	Cell12-Square14-S-2-191206	Total/NA	Solid	7471A	
MB 600-284203/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-284203/8-B	Lab Control Sample	Total/NA	Solid	7471A	

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Job ID: 600-197250-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Analysis Batch: 284242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-1	Cell11-Square134-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-2	Cell11-Square93-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-3	Cell11-Square90-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-4	Cell11-Square65-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-5	Cell12-Square84-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-6	Cell12-Square37-S-2-191206	Total/NA	Solid	7471A	284203
600-197250-7	Cell12-Square14-S-2-191206	Total/NA	Solid	7471A	284203
MB 600-284203/7-B	Method Blank	Total/NA	Solid	7471A	284203
LCS 600-284203/8-B	Lab Control Sample	Total/NA	Solid	7471A	284203

Prep Batch: 284366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-8	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	
600-197250-9	Cell16-Square87-S-2-191206	Total/NA	Solid	7471A	
600-197250-10	Cell16-Square94-S-2-191206	Total/NA	Solid	7471A	
600-197250-11	Cell16-Square134-S-2-191206	Total/NA	Solid	7471A	
MB 600-284366/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284366/2-A	Lab Control Sample	Total/NA	Solid	7471A	
600-197250-8 MS	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	
600-197250-8 DU	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-8	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	284366
600-197250-9	Cell16-Square87-S-2-191206	Total/NA	Solid	7471A	284366
600-197250-10	Cell16-Square94-S-2-191206	Total/NA	Solid	7471A	284366
600-197250-11	Cell16-Square134-S-2-191206	Total/NA	Solid	7471A	284366
MB 600-284366/1-A	Method Blank	Total/NA	Solid	7471A	284366
LCS 600-284366/2-A	Lab Control Sample	Total/NA	Solid	7471A	284366
600-197250-8 MS	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	284366
600-197250-8 DU	Cell12-Square27-S-2-191206	Total/NA	Solid	7471A	284366

General Chemistry

Analysis Batch: 282836

ID 34-S-2-191206 3-S-2-191206	Prep Type Total/NA	Matrix Solid	Method 2540B	Prep Batch
	Total/NA	Solid	2540P	
3-5-2-101206			2040D	
0-0-2-191200	Total/NA	Solid	2540B	
0-S-2-191206	Total/NA	Solid	2540B	
5-S-2-191206	Total/NA	Solid	2540B	
4-S-2-191206	Total/NA	Solid	2540B	
7-S-2-191206	Total/NA	Solid	2540B	
4-S-2-191206	Total/NA	Solid	2540B	
7-S-2-191206	Total/NA	Solid	2540B	
7-S-2-191206	Total/NA	Solid	2540B	
4-S-2-191206	Total/NA	Solid	2540B	
34-S-2-191206	Total/NA	Solid	2540B	
34-S-2-191206	Total/NA	Solid	2540B	
34-S-2-191206	Total/NA	Solid	2540B	
	3-5-2-191206 0-S-2-191206 5-S-2-191206 4-S-2-191206 4-S-2-191206 7-S-2-191206 7-S-2-191206 4-S-2-191206 34-S-2-191206 34-S-2-191206 34-S-2-191206	0-S-2-191206 Total/NA 5-S-2-191206 Total/NA 4-S-2-191206 Total/NA 7-S-2-191206 Total/NA 4-S-2-191206 Total/NA 7-S-2-191206 Total/NA 7-S-2-191206 Total/NA 34-S-2-191206 Total/NA 34-S-2-191206 Total/NA 34-S-2-191206 Total/NA 34-S-2-191206 Total/NA	0-S-2-191206 Total/NA Solid 5-S-2-191206 Total/NA Solid 4-S-2-191206 Total/NA Solid 7-S-2-191206 Total/NA Solid 4-S-2-191206 Total/NA Solid 7-S-2-191206 Total/NA Solid 7-S-2-191206 Total/NA Solid 7-S-2-191206 Total/NA Solid 34-S-2-191206 Total/NA Solid 34-S-2-191206 Total/NA Solid 34-S-2-191206 Total/NA Solid 34-S-2-191206 Total/NA Solid	0-S-2-191206 Total/NA Solid 2540B 5-S-2-191206 Total/NA Solid 2540B 4-S-2-191206 Total/NA Solid 2540B 7-S-2-191206 Total/NA Solid 2540B 4-S-2-191206 Total/NA Solid 2540B 7-S-2-191206 Total/NA Solid 2540B 7-S-2-191206 Total/NA Solid 2540B 4-S-2-191206 Total/NA Solid 2540B 34-S-2-191206 Total/NA Solid 2540B 34-S-2-191206 Total/NA Solid 2540B 34-S-2-191206 Total/NA Solid 2540B

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Job ID: 600-197250-1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell11-Square134-S-2-191206

Lab Sample ID: 600-197250-1 Date Collected: 12/06/19 09:16 **Matrix: Solid**

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell11-Square134-S-2-191206

Lab Sample ID: 600-197250-1 Date Collected: 12/06/19 09:16 Matrix: Solid

Date Received: 12/10/19 10:38 Percent Solids: 83.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 11:47	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:44	TWR	TAL HOU

Client Sample ID: Cell11-Square93-S-2-191206

Lab Sample ID: 600-197250-2 Date Collected: 12/06/19 09:27 Matrix: Solid

Date Received: 12/10/19 10:38

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 2540B 282836 12/12/19 10:35 ANP TAL HOU

Client Sample ID: Cell11-Square93-S-2-191206

Lab Sample ID: 600-197250-2 Date Collected: 12/06/19 09:27 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 71.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 11:53	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:50	TWR	TAL HOU

Client Sample ID: Cell11-Square90-S-2-191206

Date Collected: 12/06/19 09:36 **Matrix: Solid**

Date Received: 12/10/19 10:38

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell11-Square90-S-2-191206 Lab Sample ID: 600-197250-3

Date Collected: 12/06/19 09:36 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 73.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 11:55	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:52	TWR	TAL HOU

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Lab Sample ID: 600-197250-3

Client Sample ID: Cell11-Square65-S-2-191206

Date Collected: 12/06/19 09:43

Date Received: 12/10/19 10:38

Batch Dilution Batch Prepared Method or Analyzed Analyst **Prep Type** Type Run **Factor** Number Lab Total/NA 2540B 282836 12/12/19 10:35 ANP TAL HOU Analysis

Client Sample ID: Cell11-Square65-S-2-191206

Date Collected: 12/06/19 09:43

Date Received: 12/10/19 10:38

Date Received	1: 12/10/19 1	0.30						Perce	nt ·
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU	
Total/NA	Analysis	6010B		1	283152	12/16/19 11:57	KP1	TAL HOU	
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU	
Total/NA	Analysis	7471A		1	284242	12/27/19 15:54	TWR	TAL HOU	

Client Sample ID: Cell12-Square84-S-2-191206

Date Collected: 12/06/19 09:50

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square84-S-2-191206

Date Collected: 12/06/19 09:50

Date Received: 12/10/19 10:38

	Batch	Batch	_	Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 11:59	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:56	TWR	TAL HOU

Client Sample ID: Cell12-Square37-S-2-191206

Date Collected: 12/06/19 09:58

Date Received: 12/10/19 10:38

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square37-S-2-191206

Date Collected: 12/06/19 09:58

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:01	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 15:58	TWR	TAL HOU

Lab Sample ID: 600-197250-4

Lab Sample ID: 600-197250-5

Lab Sample ID: 600-197250-6

Lab Sample ID: 600-197250-6

Matrix: Solid

Lab Sample ID: 600-197250-4

Matrix: Solid

Matrix: Solid

Matrix: Solid

Percent Solids: 74.7

Percent Solids: 73.0

Matrix: Solid Percent Solids: 72.6

10

Lab Sample ID: 600-197250-5

Matrix: Solid

Matrix: Solid

Client Sample ID: Cell12-Square14-S-2-191206

Date Collected: 12/06/19 10:14 Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square14-S-2-191206

Date Collected: 12/06/19 10:14

Date Received: 12/10/19 10:38

Lab Sample	ID: 600-197250-7
	Matrix: Solid
	Percent Solids: 97.3

Lab Sample ID: 600-197250-7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:03	KP1	TAL HOU
Total/NA	Prep	7471A			284203	12/27/19 12:50	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284242	12/27/19 16:00	TWR	TAL HOU

Client Sample ID: Cell12-Square27-S-2-191206

Date Collected: 12/06/19 10:18 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197250-8 Matrix: Solid

Lab Sample ID: 600-197250-9

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Total/NA Analysis 2540B 282836 12/12/19 10:35 ANP TAL HOU

Client Sample ID: Cell12-Square27-S-2-191206

Date Collected: 12/06/19 10:18 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197250-8 **Matrix: Solid** Percent Solids: 81.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:05	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:10	KP1	TAL HOU

Client Sample ID: Cell16-Square87-S-2-191206

Date Collected: 1	te Collected: 12/06/19 10:31 te Received: 12/10/19 10:38		Matrix: Solid				
Date Received: 1	2/10/19 10	:38					
	D-4-b	D-4-I	D!!	D-4-1-	D		<u> </u>

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell16-Square87-S-2-191206

Lab Sample ID: 600-197250-9 Date Collected: 12/06/19 10:31 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 70.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:17	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:16	KP1	TAL HOU

Client Sample ID: Cell16-Square94-S-2-191206

Lab Sample ID: 600-197250-10 Date Collected: 12/06/19 10:39 **Matrix: Solid** Date Received: 12/10/19 10:38

١		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell16-Square94-S-2-191206

Lab Sample ID: 600-197250-10 Date Collected: 12/06/19 10:39 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:19	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:18	KP1	TAL HOU

Client Sample ID: Cell16-Square134-S-2-191206

Lab Sample ID: 600-197250-11 Date Collected: 12/06/19 10:47 **Matrix: Solid**

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell16-Square134-S-2-191206

Lab Sample ID: 600-197250-11 Date Collected: 12/06/19 10:47 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 89.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282936	12/12/19 21:03	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:21	KP1	TAL HOU
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 11:20	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197250-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		r ogram ELAP	Identification Number	Expiration Date 10-31-20	
The following analyte the agency does not do	•	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for whi	
Analysis Method 2540B	Prep Method	Matrix Solid	Analyte Percent Moisture		
2540B		Solid	Percent Solids		

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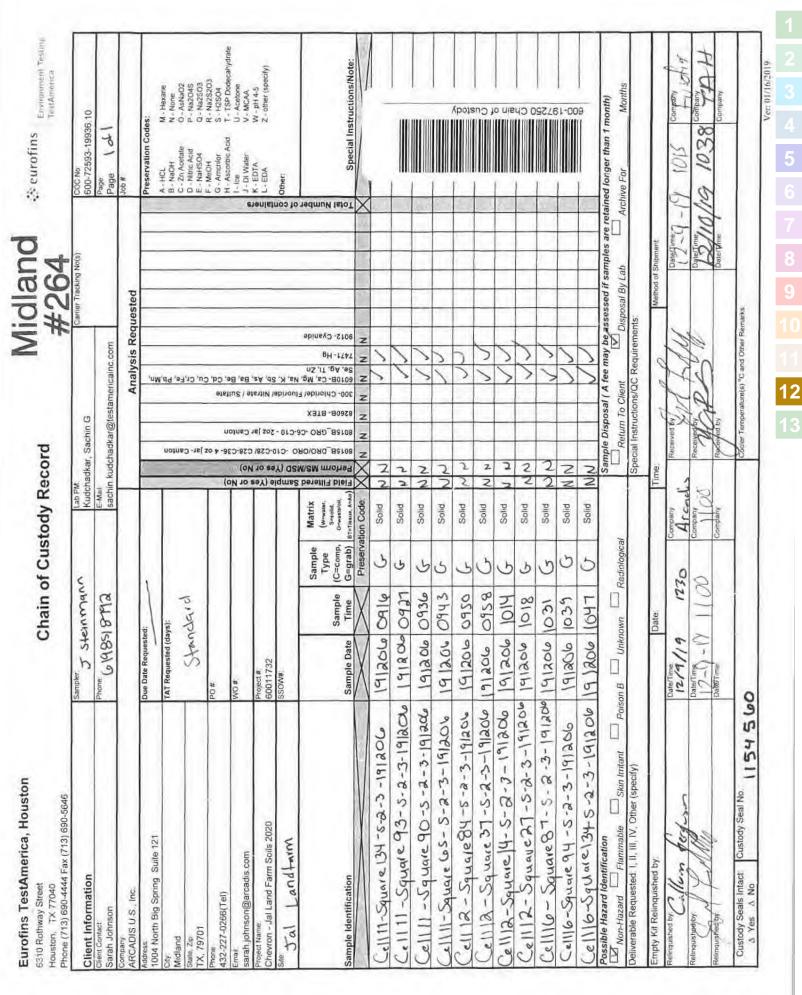
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🔅 eurofins

Eurofins TestAmerica Houston

Loc: 600 197250 Environment Testing TestAmerica

Sample Receipt Checklist

'19DEC10 10:38

		Dat	le/Time Received: _				
JOB NUMBER:		CLI	ENT:	Arc	adis		
UNPACKED BY:	ye	CA	RRIER/DRIVER:	fld:	EX		
Custody Seal Present:	ZYES DI	NO Nur	nber of Coolers Receive	ved:	1		
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected (°C)	Temp
2050	YIN	YIM	1.3	676	+0.1	1.4	
	Y / N	Y/N					
	Y / N	Y/N					
	YIN	Y/N				1.1.	
	Y/N	Y / N			1/2	110/19	
	Y / N	Y/N		(7.		
Base samples are>pH 12 TX1005 samples frozen pH paper Lot #		□ YES DA	d preserved are <ph 2:<br="">TE & TIME PUT IN FI A headspace acceptab</ph>	REEZER:	□NO	O MA	
Did samples meet the labora	tory's standard co	nditions of sample	acceptability upon recei	pt?		DYES	□ NO
COMMENTS:							
				yp/	2/10/1	9	
				()	1 1		

HS-SA-WI-013

Rev. 4A; 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197250-1

Login Number: 197250

List Source: Eurofins TestAmerica, Houston

List Number: 1 Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	1.4
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.

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197254-1

Client Project/Site: Chevron - Jal Land Farm Soils

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 4/10/2020 2:27:29 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3546	Microwave Extraction	SW846	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197254-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-197254-1	Cell20-Treatment-S-6-191204	Solid	12/04/19 10:19	12/09/19 17:23	
600-197254-2	Cell19-Treatment-S-6-191204	Solid	12/04/19 12:35	12/09/19 17:23	
600-197254-3	Cell18-Treatment-S-6-191204	Solid	12/04/19 13:46	12/09/19 17:23	
600-197254-4	Cell17-Treatment-S-6-191204	Solid	12/04/19 14:17	12/09/19 17:23	
600-197254-5	Cell21-Treatment-S-6-191204	Solid	12/04/19 14:49	12/09/19 17:23	
600-197254-6	Cell25-Treatment-S-6-191204	Solid	12/04/19 15:17	12/09/19 17:23	
600-197254-7	Cell26-Treatment-S-6-191204	Solid	12/04/19 15:42	12/09/19 17:23	

Job ID: 600-197254-1

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Client Sample ID: Cell20-Treatment-S-6-191204

Method: 8015B - Gasoline Range Organics - (GC)

Date Collected: 12/04/19 10:19 Date Received: 12/09/19 17:23 Lab Sample ID: 600-197254-1

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.6	U	99.0	63.6	ug/Kg		12/16/19 11:05	12/16/19 18:23	1
Surrogate Trifluorotoluene (Surr)	%Recovery	Qualifier	Limits 20 - 140				Prepared 12/16/19 11:05	Analyzed 12/16/19 18:23	Dil Fac

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.9	U	49.0	33.9	mg/Kg		12/16/19 09:26	12/18/19 16:33	1
C28-C36	42.5	J	49.0	33.9	mg/Kg		12/16/19 09:26	12/18/19 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	55	-	26 - 125				12/16/19 09:26	12/18/19 16:33	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.2	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	78.8	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell20-Treatment-S-6-191204 Lab Sample ID: 600-197254-1

Date Collected: 12/04/19 10:19

Matrix: Solid
Date Received: 12/09/19 17:23

Percent Solids: 78.8

Method: 300.0 - Anions	Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	5.35		5.06	0.676	mg/Kg	- -		12/22/19 16:54	1		
Nitrate as N	0.318	UH	2.53	0.318	mg/Kg	₽		12/22/19 16:54	1		
Fluoride	4.44		2.53	0.761	mg/Kg	₩		12/22/19 16:54	1		
Sulfate	1.21	U	6.33	1.21	mg/Kg	\$		12/22/19 16:54	1		

Client Sample ID: Cell19-Treatment-S-6-191204 Lab Sample ID: 600-197254-2

Date Collected: 12/04/19 12:35
Date Received: 12/09/19 17:23

Method: 8015B - Gasoline Rar	nge Organic	:s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.6	U	99.0	63.6	ug/Kg		12/16/19 11:05	12/16/19 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	85		20 - 140				12/16/19 11:05	12/16/19 20:13	1
- Method: 8015B - Diesel Range	Organics (DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	60.6		50.4	34.8	mg/Kg		12/16/19 09:26	12/18/19 17:00	1

020-000	00.2		00.1	01.0	9/119		12/10/10 00:20	12/10/10 17:00	•
Surrogate o-Terphenyl (Surr)	%Recovery	Qualifier	26 - 125				Prepared 12/16/19 09:26	Analyzed 12/18/19 17:00	Dil Fac
General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.6		1.0	1.0	%			12/12/19 10:35	1
Percent Solids	73.4		1.0	1.0	%			12/12/19 10:35	1

Eurofins TestAmerica, Houston

Matrix: Solid

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell19-Treatment-S-6-191204

Date Collected: 12/04/19 12:35 Date Received: 12/09/19 17:23

Lab Sample ID: 600-197254-2

Lab Sample ID: 600-197254-3

Matrix: Solid

Job ID: 600-197254-1

Percent Solids: 73.4

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	5.79	5.37	0.717	mg/Kg	<u></u>	1	2/22/19 17:14	1		
Nitrate as N	11.1 H	2.69	0.337	mg/Kg	₩	1	2/22/19 17:14	1		
Fluoride	6.26	2.69	0.808	mg/Kg	☼	1	2/22/19 17:14	1		
Sulfate	384	6.71	1.29	mg/Kg		1.	2/22/19 17:14	1		

Client Sample ID: Cell18-Treatment-S-6-191204

Date Collected: 12/04/19 13:46	Matrix: Solid
Date Received: 12/09/19 17:23	

Method: 8015B - Gasoline Ra	nge Organics	s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.9	Ū	99.6	63.9	ug/Kg		12/16/19 11:05	12/16/19 20:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	89		20 - 140				12/16/19 11:05	12/16/19 20:50	1

Method: 8015B - Diesel Range	Organics (DRO) (GC	3)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	173		47.6	32.9	mg/Kg		12/16/19 09:26	12/18/19 17:26	1
C28-C36	219		47.6	32.9	mg/Kg		12/16/19 09:26	12/18/19 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	67		26 - 125				12/16/19 09:26	12/18/19 17:26	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	90.3	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell18-Treatment-S-6-191204 Lab Sample ID: 600-197254-3 Date Collected: 12/04/19 13:46 **Matrix: Solid** Date Received: 12/09/19 17:23 Percent Solids: 90.3

Method: 300.0 - Anions	s, Ion Chromatography -	Soluble						
Analyte	Result Qualifi	ier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.13 J	4.49	0.599	mg/Kg	\		12/22/19 17:34	1
Nitrate as N	8.52 H	2.24	0.281	mg/Kg	☼		12/22/19 17:34	1
Fluoride	4.98	2.24	0.674	mg/Kg	☼		12/22/19 17:34	1
Sulfato	24 6	5.61	1.07	ma/Ka			12/22/19 17:34	1

Lab Sample ID: 600-197254-4 Client Sample ID: Cell17-Treatment-S-6-191204 Date Collected: 12/04/19 14:17 **Matrix: Solid**

Date Received: 12/09/19 17:23

Method: 8015B - Gasoline Rar	nge Organio	s - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	62.9	Ū	98.0	62.9	ug/Kg		12/16/19 11:05	12/16/19 21:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	98		20 - 140				12/16/19 11:05	12/16/19 21:27	1

Eurofins TestAmerica, Houston

Lab Sample ID: 600-197254-4

Date Collected: 12/04/19 14:17

Matrix: Solid

Job ID: 600-197254-1

Date Received: 12/09/19 17:23

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	35.1	U	50.7	35.1	mg/Kg		12/16/19 09:26	12/18/19 17:53	1
C28-C36	65.0		50.7	35.1	mg/Kg		12/16/19 09:26	12/18/19 17:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		26 - 125				12/16/19 09:26	12/18/19 17:53	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.5	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	94.5	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell17-Treatment-S-6-191204

Client Sample ID: Cell17-Treatment-S-6-191204

Lab Sample ID: 600-197254-4

Date Collected: 12/04/19 14:17

Matrix: Solid

Date Received: 12/09/19 17:23 Percent Solids: 94.5

Method: 300.0 - Anions,	Ion Chromatography - Sol	uble						
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared A	nalyzed	Dil Fac
Chloride	3.05 J	4.16	0.556	mg/Kg		12/2	22/19 17:55	1
Nitrate as N	5.72 H	2.08	0.261	mg/Kg	₽	12/2	22/19 17:55	1
Fluoride	2.10	2.08	0.626	mg/Kg	₽	12/2	22/19 17:55	1
Sulfate	173	5.21	0.996	mg/Kg		12/2	22/19 17:55	1

Client Sample ID: Cell21-Treatment-S-6-191204 Lab Sample ID: 600-197254-5

Date Collected: 12/04/19 14:49 Date Received: 12/09/19 17:23

Matrix: Solid

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.4	U	102	65.4	ug/Kg		12/16/19 11:05	12/16/19 22:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	99		20 - 140				12/16/19 11:05	12/16/19 22:03	
: Method: 8015B - Diesel Range	•	, ,	;)				12/10/19 11:00		
Method: 8015B - Diesel Range	•	DRO) (GO Qualifier		SDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B - Diesel Range Analyte	•	Qualifier	;)		Unit mg/Kg	<u>D</u>			Dil Fac
·	Result	Qualifier	MQL (Adj)	35.0		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10 - C28]	Result 48.2	Qualifier J	MQL (Adj) 50.6	35.0	mg/Kg	<u>D</u>	Prepared 12/16/19 09:26	Analyzed 12/18/19 18:19	Dil Fac

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.2	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	75.8	1.0	1.0	%			12/12/19 10:35	1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell21-Treatment-S-6-191204

Date Collected: 12/04/19 14:49 Date Received: 12/09/19 17:23 Lab Sample ID: 600-197254-5

Matrix: Solid Percent Solids: 75.8

Method: 300.0 - Anions	, Ion Chromatography - Sol	uble						
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.3	5.22	0.697	mg/Kg	<u></u>		12/22/19 18:56	1
Nitrate as N	11.7 H	2.61	0.328	mg/Kg	≎		12/22/19 18:56	1
Fluoride	5.52	2.61	0.785	mg/Kg	₩		12/22/19 18:56	1
Sulfate	42.3	6.53	1.25	mg/Kg			12/22/19 18:56	1

Client Sample ID: Cell25-Treatment-S-6-191204

Date Collected: 12/04/19 15:17 Date Received: 12/09/19 17:23 Lab Sample ID: 600-197254-6

Matrix: Solid

Method: 8015B - Gasoline	Range Organio	cs - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C	63.2	U	98.4	63.2	ug/Kg		12/16/19 11:05	12/16/19 22:40	1
Surrogate Trifluorotoluene (Surr)	%Recovery	Qualifier	20 - 140				Prepared 12/16/19 11:05	Analyzed 12/16/19 22:40	Dil Fac

Method: 8015B - Diesel Rang	e Organics ((DRO) (GC	;)						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.4	U	48.3	33.4	mg/Kg		12/16/19 09:26	12/18/19 18:46	1
C28-C36	37.4	J	48.3	33.4	mg/Kg		12/16/19 09:26	12/18/19 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	87		26 - 125				12/16/19 09:26	12/18/19 18:46	

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.7	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	76.3	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell25-Treatment-S-6-191204

Date Collected: 12/04/19 15:17

Lab Sample ID: 600-197254-6

Matrix: Solid

Date Collected: 12/04/19 15:17

Date Received: 12/09/19 17:23

Matrix: Solid
Percent Solids: 76.3

Method: 300.0 - Anions,	Ion Chromatography - So	oluble						
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D P	repared	Analyzed	Dil Fac
Chloride	19.2	5.28	0.705	mg/Kg	*		12/22/19 19:16	1
Nitrate as N	9.20 H	2.64	0.331	mg/Kg	≎		12/22/19 19:16	1
Fluoride	3.79	2.64	0.794	mg/Kg	≎		12/22/19 19:16	1
Sulfate	20.8	6.60	1.26	mg/Kg	₽		12/22/19 19:16	1

Client Sample ID: Cell26-Treatment-S-6-191204 Lab Sample ID: 600-197254-7

Date Collected: 12/04/19 15:42 Matrix: Solid

Date Received: 12/09/19 17:23

Method: 8015B - Gasoline Ra	nge Organio	cs - (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.6	U	99.0	63.6	ug/Kg		12/16/19 11:06	12/16/19 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	95	-	20 - 140				12/16/19 11:06	12/16/19 23:17	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell26-Treatment-S-6-191204

Lab Sample ID: 600-197254-7 Date Collected: 12/04/19 15:42 **Matrix: Solid**

Date Received: 12/09/19 17:23

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	240		50.4	34.9	mg/Kg		12/16/19 09:26	12/18/19 19:13	1
C28-C36	259		50.4	34.9	mg/Kg		12/16/19 09:26	12/18/19 19:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	87		26 - 125				12/16/19 09:26	12/18/19 19:13	1

General Chemistry Analyte	Result Qualifi	ier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.2	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	78.8	1.0	1.0	%			12/12/19 10:35	1

Lab Sample ID: 600-197254-7 Client Sample ID: Cell26-Treatment-S-6-191204

Date Collected: 12/04/19 15:42 **Matrix: Solid** Date Received: 12/09/19 17:23 Percent Solids: 78.8

Analyte	Result Qualifie	er MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.0	5.09	0.680	mg/Kg	<u> </u>		12/22/19 19:37	1
Nitrate as N	6.76 H	2.55	0.320	mg/Kg	≎		12/22/19 19:37	1
Fluoride	2.33 J	2.55	0.766	mg/Kg	≎		12/22/19 19:37	1
Sulfate	15.8	6.37	1.22	mg/Kg			12/22/19 19:37	1

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

Qualifiers

GC VOA

Qualifier Qualifier Description

U Analyte was not detected at or above the SDL.

GC Semi VOA

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.

HPLC/IC

Qualifier Qualifier Description

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.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

9

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0

9

10

4.0

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Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT1	
Lab Sample ID	Client Sample ID	(20-140)	
600-197254-1	Cell20-Treatment-S-6-191204	84	
600-197254-1 MS	Cell20-Treatment-S-6-191204	98	
600-197254-1 MSD	Cell20-Treatment-S-6-191204	98	
600-197254-2	Cell19-Treatment-S-6-191204	85	
600-197254-3	Cell18-Treatment-S-6-191204	89	
600-197254-4	Cell17-Treatment-S-6-191204	98	
600-197254-5	Cell21-Treatment-S-6-191204	99	
600-197254-6	Cell25-Treatment-S-6-191204	101	
600-197254-7	Cell26-Treatment-S-6-191204	95	
LCS 240-415742/2-A	Lab Control Sample	105	
MB 240-415742/1-A	Method Blank	92	
Surrogate Legend			

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

Matrix: Solid Prep Type: Total/NA

viatrix. Cona			Trep Type: Totalitiza
_			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
Lab Sample ID	Client Sample ID	(26-125)	
600-197254-1	Cell20-Treatment-S-6-191204	55	
600-197254-2	Cell19-Treatment-S-6-191204	95	
600-197254-3	Cell18-Treatment-S-6-191204	67	
600-197254-4	Cell17-Treatment-S-6-191204	81	
600-197254-5	Cell21-Treatment-S-6-191204	68	
600-197254-6	Cell25-Treatment-S-6-191204	87	
600-197254-7	Cell26-Treatment-S-6-191204	87	
LCS 240-415712/21-A	Lab Control Sample	78	
MB 240-415712/20-A	Method Blank	88	
Surrogate Legend			
OTPH = o-Terphenyl (S	Surr)		

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J

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Job ID: 600-197254-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-415742/1-A

Matrix: Solid

Analysis Batch: 415796

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415742

MB MB Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Analyte Gasoline Range Organics [C6 - C10] 64.2 U 100 64.2 ug/Kg <u>12/16/19 11:05</u> <u>12/16/19 17:10</u>

MB MB

%Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac Trifluorotoluene (Surr) 92 20 - 140 <u>12/16/19 11:05</u> <u>12/16/19 17:10</u>

Lab Sample ID: LCS 240-415742/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 415796

Prep Type: Total/NA **Prep Batch: 415742**

%Rec.

Spike LCS LCS Added Limits Analyte Result Qualifier Unit D %Rec 800 713.8 75 - 126 Gasoline Range Organics [C6 ug/Kg

C10]

LCS LCS

Surrogate %Recovery Qualifier Limits Trifluorotoluene (Surr) 105 20 - 140

Lab Sample ID: 600-197254-1 MS Client Sample ID: Cell20-Treatment-S-6-191204

Matrix: Solid

Analysis Batch: 415796

Prep Type: Total/NA

Prep Batch: 415742

MS MS Spike %Rec. Sample Sample Result Qualifier Added Result Qualifier Unit %Rec Limits 810 ug/Kg 63.6 U 655.4 81 10 - 134 Gasoline Range Organics [C6 -

C10]

MS MS

Surrogate %Recovery Qualifier Limits 20 - 140 Trifluorotoluene (Surr) 98

Lab Sample ID: 600-197254-1 MSD

Matrix: Solid

Client Sample ID: Cell20-Treatment-S-6-191204

Prep Type: Total/NA Prep Batch: 415742

Analysis Batch: 415796 MSD MSD Sample Sample Spike %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit 63.6 U 805 606.2 ug/Kg 75 10 - 134 Gasoline Range Organics [C6 -

C10]

MSD MSD

Surrogate %Recovery Qualifier Limits Trifluorotoluene (Surr) 98 20 - 140

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

Lab Sample ID: MB 240-415712/20-A

Matrix: Solid

Analysis Batch: 415836

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415712

	IVID	IVID						
Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6 mg/Kg		12/16/19 09:26	12/17/19 13:24	1
C28-C36	34.6	U	50.0	34.6 mg/Kg		12/16/19 09:26	12/17/19 13:24	1

Eurofins TestAmerica, Houston

Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

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

Lab Sample ID: MB 240-415712/20-A

Lab Sample ID: LCS 240-415712/21-A

Matrix: Solid

Matrix: Solid

Analyte

Analysis Batch: 415836

Client: ARCADIS U.S., Inc.

Client Sample ID: Method Blank

D %Rec

Prep Type: Total/NA

Prep Batch: 415712

MB MB

Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac o-Terphenyl (Surr) 88 26 - 125 12/16/19 09:26 12/17/19 13:24

LCS LCS

LCS LCS

190.8

69.97

184.4

197.5

Result Qualifier

Unit

mg/Kg

mg/Kg

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec.

Prep Batch: 415712

Limits 45 - 120

Diesel Range Organics [C10 -

Analysis Batch: 415836

C28]

LCS LCS

Surrogate %Recovery Qualifier o-Terphenyl (Surr) 78

Limits 26 - 125

Spike

Added

250

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-283766/1-A

Matrix: Solid

Analysis Batch: 283771

Client Sample ID: Method Blank

Analyzed

Prep Type: Soluble

MB MB Analyte SDL Unit Result Qualifier MQL (Adj) Prepared Chloride 0.534 U 4.00 0.534 mg/Kg

12/22/19 15:12 Fluoride 0.601 U 2.00 0.601 mg/Kg 12/22/19 15:12 Sulfate 0.957 U 5.00 0.957 mg/Kg 12/22/19 15:12

Lab Sample ID: LCS 600-283766/2-A

Matrix: Solid

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 283771

Client Sample ID: Lab Control Sample **Prep Type: Soluble**

90 - 110

%Rec. Result Qualifier Unit D %Rec Limits 95 90 - 110 mg/Kg 90 - 110 mg/Kg 93

92

Lab Sample ID: MB 600-283766/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Spike

Added

200

75.0

200

Matrix: Solid

Analysis Batch: 283772

MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Dil Fac Analyzed 0.251 U 2.00 Nitrate as N 0.251 mg/Kg 12/22/19 15:12

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 600-283766/2-A **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 283772

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit %Rec Nitrate as N 100 99.58 mg/Kg 100 90 - 110

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Dil Fac

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030A

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	100	64.2	ug/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
C28-C36	50.0	34.6	mg/Kg
Diesel Range Organics [C10 - C28]	50.0	34.6	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg
Fluoride	2.00	0.601	mg/Kg
Nitrate as N	2.00	0.251	mg/Kg
Sulfate	5.00	0.957	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units	
Percent Moisture	1.0	1.0	%	
Percent Solids	1.0	1.0	%	

L ID: 000 4070E4

4/10/2020 (Rev. 1)

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

GC VOA

Prep Batch: 415742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-2	Cell19-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-3	Cell18-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-4	Cell17-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-5	Cell21-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-6	Cell25-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-7	Cell26-Treatment-S-6-191204	Total/NA	Solid	5030A	
MB 240-415742/1-A	Method Blank	Total/NA	Solid	5030A	
LCS 240-415742/2-A	Lab Control Sample	Total/NA	Solid	5030A	
600-197254-1 MS	Cell20-Treatment-S-6-191204	Total/NA	Solid	5030A	
600-197254-1 MSD	Cell20-Treatment-S-6-191204	Total/NA	Solid	5030A	

Analysis Batch: 415796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-2	Cell19-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-3	Cell18-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-4	Cell17-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-5	Cell21-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-6	Cell25-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-7	Cell26-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
MB 240-415742/1-A	Method Blank	Total/NA	Solid	8015B	415742
LCS 240-415742/2-A	Lab Control Sample	Total/NA	Solid	8015B	415742
600-197254-1 MS	Cell20-Treatment-S-6-191204	Total/NA	Solid	8015B	415742
600-197254-1 MSD	Cell20-Treatment-S-6-191204	Total/NA	Solid	8015B	415742

GC Semi VOA

Prep Batch: 415712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-2	Cell19-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-3	Cell18-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-4	Cell17-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-5	Cell21-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-6	Cell25-Treatment-S-6-191204	Total/NA	Solid	3546	
600-197254-7	Cell26-Treatment-S-6-191204	Total/NA	Solid	3546	
MB 240-415712/20-A	Method Blank	Total/NA	Solid	3546	
LCS 240-415712/21-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 415836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-415712/20-A	Method Blank	Total/NA	Solid	8015B	415712
LCS 240-415712/21-A	Lab Control Sample	Total/NA	Solid	8015B	415712

Analysis Batch: 416219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Total/NA	Solid	8015B	415712
600-197254-2	Cell19-Treatment-S-6-191204	Total/NA	Solid	8015B	415712
600-197254-3	Cell18-Treatment-S-6-191204	Total/NA	Solid	8015B	415712
600-197254-4	Cell17-Treatment-S-6-191204	Total/NA	Solid	8015B	415712

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QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

GC Semi VOA (Continued)

Analysis Batch: 416219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-5	Cell21-Treatment-S-6-191204	Total/NA	Solid	8015B	415712
600-197254-6	Cell25-Treatment-S-6-191204	Total/NA	Solid	8015B	415712
600-197254-7	Cell26-Treatment-S-6-191204	Total/NA	Solid	8015B	415712

HPLC/IC

Leach Batch: 283766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Soluble	Solid	DI Leach	_
600-197254-2	Cell19-Treatment-S-6-191204	Soluble	Solid	DI Leach	
600-197254-3	Cell18-Treatment-S-6-191204	Soluble	Solid	DI Leach	
600-197254-4	Cell17-Treatment-S-6-191204	Soluble	Solid	DI Leach	
600-197254-5	Cell21-Treatment-S-6-191204	Soluble	Solid	DI Leach	
600-197254-6	Cell25-Treatment-S-6-191204	Soluble	Solid	DI Leach	
600-197254-7	Cell26-Treatment-S-6-191204	Soluble	Solid	DI Leach	
MB 600-283766/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-283766/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 283771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-2	Cell19-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-3	Cell18-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-4	Cell17-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-5	Cell21-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-6	Cell25-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-7	Cell26-Treatment-S-6-191204	Soluble	Solid	300.0	283766
MB 600-283766/1-A	Method Blank	Soluble	Solid	300.0	283766
LCS 600-283766/2-A	Lab Control Sample	Soluble	Solid	300.0	283766

Analysis Batch: 283772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-2	Cell19-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-3	Cell18-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-4	Cell17-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-5	Cell21-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-6	Cell25-Treatment-S-6-191204	Soluble	Solid	300.0	283766
600-197254-7	Cell26-Treatment-S-6-191204	Soluble	Solid	300.0	283766
MB 600-283766/1-A	Method Blank	Soluble	Solid	300.0	283766
LCS 600-283766/2-A	Lab Control Sample	Soluble	Solid	300.0	283766

General Chemistry

Analysis Batch: 282836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-1	Cell20-Treatment-S-6-191204	Total/NA	Solid	2540B	_
600-197254-2	Cell19-Treatment-S-6-191204	Total/NA	Solid	2540B	
600-197254-3	Cell18-Treatment-S-6-191204	Total/NA	Solid	2540B	
600-197254-4	Cell17-Treatment-S-6-191204	Total/NA	Solid	2540B	
600-197254-5	Cell21-Treatment-S-6-191204	Total/NA	Solid	2540B	
600-197254-6	Cell25-Treatment-S-6-191204	Total/NA	Solid	2540B	

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QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

General Chemistry (Continued)

Analysis Batch: 282836 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197254-7	Cell26-Treatment-S-6-191204	Total/NA	Solid	2540B	

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Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell20-Treatment-S-6-191204

Date Collected: 12/04/19 10:19 Date Received: 12/09/19 17:23

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197254-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:05	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 18:23	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 16:33	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Lab Sample ID: 600-197254-1 Client Sample ID: Cell20-Treatment-S-6-191204

Date Collected: 12/04/19 10:19 **Matrix: Solid** Date Received: 12/09/19 17:23 Percent Solids: 78.8

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 16:54	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 16:54	DAW	TAL HOU

Client Sample ID: Cell19-Treatment-S-6-191204 Lab Sample ID: 600-197254-2

Date Collected: 12/04/19 12:35 Date Received: 12/09/19 17:23

Total/NA

Dilution Batch Batch Batch Prepared Method Number or Analyzed Analyst Prep Type Type Run **Factor** Lab Total/NA Prep 5030A 415742 12/16/19 11:05 MBB TAL CAN Total/NA Analysis 8015B 1 415796 12/16/19 20:13 MBB TAL CAN Total/NA Prep 3546 415712 12/16/19 09:26 EMB TAL CAN Total/NA Analysis 8015B 416219 12/18/19 17:00 DEB TAL CAN 1

Client Sample ID: Cell19-Treatment-S-6-191204

2540B

Analysis

Lab Sample ID: 600-197254-2 Date Collected: 12/04/19 12:35 **Matrix: Solid** Date Received: 12/09/19 17:23 Percent Solids: 73.4

1

282836 12/12/19 10:35 ANP

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 17:14	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 17:14	DAW	TAL HOU

Client Sample ID: Cell18-Treatment-S-6-191204

Date Collected: 12/04/19 13:46 **Matrix: Solid**

Date Received: 12/09/19 17:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:05	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 20:50	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 17:26	DEB	TAL CAN

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Lab Sample ID: 600-197254-3

TAL HOU

Matrix: Solid

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell18-Treatment-S-6-191204

Lab Sample ID: 600-197254-3 Date Collected: 12/04/19 13:46 **Matrix: Solid**

Date Received: 12/09/19 17:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell18-Treatment-S-6-191204

Lab Sample ID: 600-197254-3 Date Collected: 12/04/19 13:46 **Matrix: Solid**

Date Received: 12/09/19 17:23 Percent Solids: 90.3

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 17:34	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 17:34	DAW	TAL HOU

Client Sample ID: Cell17-Treatment-S-6-191204

Lab Sample ID: 600-197254-4

Date Collected: 12/04/19 14:17 **Matrix: Solid**

Date Received: 12/09/19 17:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:05	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 21:27	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 17:53	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell17-Treatment-S-6-191204

Date Collected: 12/04/19 14:17 Matrix: Solid

Date Received: 12/09/19 17:23 Percent Solids: 94.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 17:55	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 17:55	DAW	TAL HOU

Client Sample ID: Cell21-Treatment-S-6-191204

Date Collected: 12/04/19 14:49 **Matrix: Solid**

Date Received: 12/09/19 17:23

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:05	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 22:03	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 18:19	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Eurofins TestAmerica, Houston

Lab Sample ID: 600-197254-4

Lab Sample ID: 600-197254-5

Project/Site: Chevron - Jal Land Farm Soils

Client Sample ID: Cell21-Treatment-S-6-191204

Date Collected: 12/04/19 14:49 Date Received: 12/09/19 17:23 Lab Sample ID: 600-197254-5

Matrix: Solid

Percent Solids: 75.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 18:56	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 18:56	DAW	TAL HOU

Client Sample ID: Cell25-Treatment-S-6-191204

Date Collected: 12/04/19 15:17 Date Received: 12/09/19 17:23

Lab Sample ID: 600-197254-6

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:05	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 22:40	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 18:46	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell25-Treatment-S-6-191204

Date Collected: 12/04/19 15:17 Date Received: 12/09/19 17:23

Lab Sample ID: 600-197254-6

Matrix: Solid

Percent Solids: 76.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 19:16	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 19:16	DAW	TAL HOU

Client Sample ID: Cell26-Treatment-S-6-191204

Date Collected: 12/04/19 15:42

Date Received: 12/09/19 17:23

Lab Sample	ID:	600-197254-7

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			415742	12/16/19 11:06	MBB	TAL CAN
Total/NA	Analysis	8015B		1	415796	12/16/19 23:17	MBB	TAL CAN
Total/NA	Prep	3546			415712	12/16/19 09:26	EMB	TAL CAN
Total/NA	Analysis	8015B		1	416219	12/18/19 19:13	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell26-Treatment-S-6-191204

Date Collected: 12/04/19 15:42

Date Received: 12/09/19 17:23

Lab Sample ID: 600-197254-7

Matrix: Solid

Percent Solids: 78.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283771	12/22/19 19:37	DAW	TAL HOU
Soluble	Leach	DI Leach			283766	12/22/19 12:01	DAW	TAL HOU
Soluble	Analysis	300.0		1	283772	12/22/19 19:37	DAW	TAL HOU

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197254-1

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197254-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pı	rogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704223-19-25	10-31-20
The following analytes	s are included in this repo	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
the agency does not o	offer certification.	·		,
the agency does not of Analysis Method	offer certification. Prep Method	Matrix	Analyte	
0 ,		Matrix Solid	Analyte Percent Moisture	

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
lowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

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Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street

Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646

Environment Tentang TestAmerica

🔆 eurofins

S. ecial Instri T-TSP Dodeca U-Acetone V-MCAA R - Na2S203 C-Na2SO3 600-197254 Chain of Custody Months S - H2504 W-PH4-5 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont 600-72593-19936.10 reservation Codes 4 H - Ascorbic Acid C - Zn Abetato D - Nitrio Acid E - NaHSO4 G - Amchlor J - D! Water A - HCL B - NaOH - MeOH K-EDTA Page Total Number of containers オゴ + 4 Method of Shipman Analysis Requested Cooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements 3015- Cyanide E-Mail. sachin kudchadkar@testamencainc.com nZ ,IT ,BA ,a2 > Lab PM Kudchadkar, Sachin G cerved by 3015B_GRO -C6-C10 - 20z Jar Canton 80158_DRO/ORO -C10-C28/C28-C36- 4 oz jar- Canton 2 > N > Arcadis TaTissue, Andr Preservation Code: Matrix Solid Company Radiological Type (C=comp, G=grab) Sample 432-164-350A allum feguson Sample 1019 1449 1545 1517 1235 1346 1417 Unknown (AT Requested (days) Due Date Requested: Sample Date 12/4/19 12/4/19 12/5/19 Date/Time 12/4/19 12/4/19 6/1/21 12/4/19 12/119 Project # 60011732 Sate/Time Poison B ell 20-Trahmast - 5-6-191204 ell 21-Treshmat -5-6-191204 ell19 - Trespoent - 5-6-191204 MB - Treshner -5-6-191204 Cell 25 - Treatment - 5-6-19 1202 e1117 - Trahmant -5-6-191204 2011 25-Tradement -5-6-191204 Skin Irritant Deliverable Requested 1, II, III, IV, Other (specify) Custody Seal No. Gravion Chevron - Jal Land Farm Soils 2020 Flammable Suite 121 Possible Hazard Identification sarah johnson@arcadis com mpty Kit Relinquished by Custody Seals Intact. Client Information Sample Identification 1004 North Big Spring ARCADIS U.S., Inc 432-227-0266(Tel) Nor-Hezard Sarah Johnson rigushed by iquished by TX, 79701 Midland

Loc: 600 197254

de eurofins

Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

		Dat	te/Time Received:	10/1/1	1	:23
JOB NUMBER:		CLI	IENT:	Arcac	lis	
UNPACKED BY:	yR.	CA	RRIER/DRIVER:	Fec	lex	
Custody Seal Present:	ØYES DI	NO Nur	mber of Coolers Recei	ved:	1	
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7297	YIM	YIN	5.4	676	+0.1	5.5
	Y / N	Y / N				
	Y / N	Y / N			-	
	Y / N	Y / N		200	2 17/	1/19
-	Y/N	Y/N		1	100/9	///
	OF = correction factor			1 V		
Samples received on its LABORATORY PRES Base samples are>pH	ERVATION OF S		IIRED: ØNO d preserved are <ph 2<="" th=""><th>□YES</th><th>□NO</th><th></th></ph>	□YES	□NO	
LABORATORY PRES	ERVATION OF S	AMPLES REQU		∵ □YES	□NO	
LABORATORY PRES Base samples are>pH	ERVATION OF S 12: YES n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph 2<="" th=""><th>: □YES</th><th></th><th>O ØNA</th></ph>	: □YES		O ØNA
LABORATORY PRES Base samples are>pH TX1005 samples froze	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td>O ØNA</td></ph>	: □YES REEZER: _ ble (5-6mm):		O ØNA
LABORATORY PRES Base samples are>pH TX1005 samples froze	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td></td></ph>	: □YES REEZER: _ ble (5-6mm):		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laborate	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td></td></ph>	: □YES REEZER: _ ble (5-6mm):		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laborate	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td></td></ph>	: □YES REEZER: _ ble (5-6mm):		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laborate	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td></td></ph>	: □YES REEZER: _ ble (5-6mm):		
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laborate	ERVATION OF S 12: □YES □N n upon receipt:	AMPLES REQUINO Acid	d preserved are <ph &="" 2="" f<="" in="" put="" td="" te="" time=""><td>: □YES REEZER: _ ble (5-6mm):</td><td></td><td></td></ph>	: □YES REEZER: _ ble (5-6mm):		

HS-SA-WI-013

Rev. 4A: 08/26/2019

Chain of Custody Record

Seurofins Environment Testing:

Eurofins TestAmerica, Houston 3.1/(3.8)

6310 Rothway Street Houston, TX 77040 Phone: 713-690-4444 Fax: 713-690-5646

Sub- Contract Lab Pops Exchange Statistics Sub- Contract Lab Pops P		Sampler			Lan Fin			רפונום זופרשות חמופי		200	
Second	Client Information (Sub Contract Lab)				Kudc	hadkar, Sar	chin G		09	0-43017.1	
Charleton Char	Client Contact Shipping/Receiving	Phone			sachi	n, kudchadk	(ar@testamericainc.com		Pa	ge 1 of 1	
Control Cont	Dampany TestAmerica Laboratories, Inc.					Accreditations NELAP - Te	Required (See note) exas		Jot 60	0-197254-1	
The control of the	Address 4101 Shuffel Street NW	Due Date Request 12/23/2019	:pa				Analysis F	Requested	Pre	eservation Cod	PS: M. Hevane
Comparison Com	North Canton Vorth Canton State, Zip DH, 44720	TAT Requested (d.	iys):			abue	[C10-C28])		: mi () a w ()		N. Nene O. AsNaO2 P. NaZO4S O. NaZSO3
12419 Sample Date Sample		# O4					sojueßi		. O I .		5 - H2SO4 T - TSP Dodecahydrate U - Acetone
Part Part Solid Part	mail roject Name	Project#				(aM ta	O agnes		_	DI Water EDTA EDA	V - MCAA W - pH 4-5 Z - other (specify)
124/19 124/19 Sample Date Time Cargonial Sample Cargonial Sample Date Time Cargonial Cargoni	hevron - Jal Land Farm Soils te	SSOW#	I			SD (Yes				her:	
124/19 124/19 Central Solid X X	amnle Identification - Client ID (Lab ID)	Sample Date	Sample			Perform MS/M. 80168_GRO/503	8015B_DRO/354		sadmuN IstoT	Special in	C13
			X	Preservat	ion Code:	X			X	$/\!\!\!/$	
12- Treatmen-5-6-191204 (600-197264.2)	ell20-Treatmen-5-6-191204 (600-197254-1)	12/4/19	Central		Solid	×	×		-0	Nesel Range Org	ganics [C10-C28]/ C28
124(19) 20id (2001-197254-3) 124(19) 24177 20id (2011-197254-3) 20id (20id (20id (2011-197254-3) 20id (20id (ell19-Treatmen-5-6-191204 (600-197254-2)	12/4/19	12:35 Central		Solid	×	×		-0	ilesel Range Oro 36	ganics [C10-C28]/ C28
12419 1241	ell18-Treatmen-5-6-191204 (600-197254-3)	12/4/19	13:46 Central		Solid	×	×		- 0	liesel Range Org 36	ganics [C10-C28]/ C28
12/419 Capital 12/419 Capital Solid X X X	el17-Treatmen-5-6-191204 (600-197254-4)	12/4/19	Central		Solid	×	×		. 0	nesel Range Org 36	ganics (C10-C28)/ C28
124/19 Central Solid X X X X X X X X X	eli21-Treatmen-5-6-191204 (600-197254-5)	12/4/19	14:49 Central		Solid	×	×		. 0	liesel Range Org 36	ganics [C10-C28]/ C28
Fig. 6-191204 (600-197254-7) 12/4/19 Central Central Control Central C	eli25-Treatmen-5-6-191204 (600-197254-6)	12/4/19	15.17 Central		Solid	×	×			liesel Range Org 36	ganics (C10-C28)/ C28
Time Since laboratory accreditation are subject to change TestAmerica Laboratories in c places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shape to the instruction on the State of Organ listed above for analysistesterinative than the signed Chain of Custody sitesting to said complicance to TestAmerica Laboratories. This sample is sample accreditation in the State of Organ listed above for analysistesterinative than the signed Chain of Custody sitesting to said complicance to their instructions will be provided. Any changes to accreditation states the samples must be shipped back to their TestAmerica Laboratories. Inc. Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Inconfirmed Elevatories are content to date, return the signed Chain of Custody sitesting to said complete Requested 1, III. III. IV. Other (specify) Primary Deliverable Rank: 2 Special Instructions/OC Requirements: Date: Date:	ell26-Treatmen-5-6-191204 (600-197254-7)	12/4/19	15:42 Central		Solid	×	×			Nesel Range Org	ganics [C10-C28]/ C28
Sample Disposal (A fee may be assessed if samples are retained longer than 1 mo Primary Deliverable Rank: 2 Special Instructions/QC Requirements Method of Shipment	ote: Since laboratory accreditations are subject to change, TestAmerical innertiain accreditation in the State of Origin listed above for ana boratorins, inc. attention immediately. If all requested accreditations a	Laboratories Inc. places the siyais/tests/matrix being analytime current to date, return the s	ownership of r ced, the sample igned Chain of	nethod, analyte as must be ship! Custody attest	& accreditation bed back to the ng to said comp	compliance u TestAmerica pitcance to Ter	pon out subcontract laboratoric laboratory or other instructions stAmerica Laboratories, Inc.	es. This sample shipme	ent is forwarded under chi changes to accreditation s	ain-of-custody If i	the laboratory does not rought to TestAmerica
Primary Deliverable Rank: 2 Special Instructions/QC Requirements Date: Time: Time: Time: Method of Shipment	ossible Hazard Identification					Sample	Disposal (A fee may	se assessed if sar	mples are retained	longer than 1	month)
Date Date Time Date Time Method of Shipment Date/Time Date/Tim	Incontirmed. leliverable Requested 1, II, III, IV, Other (specify)	Primary Deliver	able Rank	2		Special	tetum To Client Instructions/QC Require	Disposal By Lat		For	Months
Description Company Received by MML Date/Time. Date/Time Company Received by Cooler Temperalure(s) "C and Other Remarks.	mpty Kit Relinguished by.		Date			Time		Method of S	shipment	ŀ	
alls Intact: Custody Seal No. Company Received by Cand Other Remarks. Cooler Temperature(s) "C and Other Remarks.	10	111	_		Company	Rece	HILL My pane		2-1	100	Company
Custody Seal No	elinquished by;	Date/Time			Сотрапу	Rece	lived by		Date/Time		Cumpany
	0)					Cool	er Temperature(s) "C and Oth	ar Remarks			

Eurofins TestAmerica Canton Facility	Canton Sample Receip	pt Form/Narrative		Login # :	
Client EJA	Houston	Site Name	1 10	Cooler unpack	ed by:
Cooler Received on 12	-12-19	Opened on 12-1	5-19	11/11	
FedEx: 1st Grd Exp	UPS FAS Clipper	Client Drop Off T	estAmerica Courier	Other	
Receipt After-hours: Dr	op-off Date/Time		Storage Location	-	- Inp
TestAmerica Cooler#	74 Foam Box	Client Cooler	Box Other		
	ed: Bubble Wrap Fo	The second secon	None Other		
COOLANT:	Wet Ice Blue Ice	Dry Ice Water	None		
 Cooler temperature u IR GUN# IR-10 (CI 		Cooler Temp. 3./	See Multiple Cooler For C Corrected Cooler C Corrected Cooler	Temp. S. O°C	
-Were the seals on -Were tamper/custo -Were tamper/custo 3. Shippers' packing slip 4. Did custody papers a 5. Were the custody pap 6. Was/were the person 7. Did all bottles arrive 8. Could all bottle label 9. Were correct bottle(s 10. Sufficient quantity re 11. Are these work share	samples? 16 have been checked at ample(s) at the correct pFOC? mm in any VOA vials? k present in the cooler(s)	(s) signed & dated? or bottle kits (LLHg/mpromised? s)? ? ed in the appropriate pupples clearly identifie oken)? COC? cated? ated analyses? the originating labora H upon receipt?	MeHg)? Ye Ye Ve	S No ch S No V S No V S No O	ests that are not necked for pH by ecciving: OAs ill and Grease OC
Contacted PM	Date	by	via Verbal V	Voice Mail Other	
Concerning					
17. CHAIN OF CUSTO	DY & SAMPLE DISC	REPANCIES		Samples pro	ocessed by:
18. SAMPLE CONDIT	ION			W A	
Sample(s)		were received after t			
Sample(s)			were receive	d in a broken conta	iner.
Sample(s)		were received	l with bubble >6 mm	in diameter. (Notif	y PM)
19. SAMPLE PRESER	VATION				
Sample(s)			were fi	arther preserved in t	the laboratory
Time preserved:	Preservative(s) ad	ided/Lot number(s):	West It	and preserved in	and and the same of the same o
VOA Sample Preservation					

Client: ARCADIS U.S., Inc.

Job Number: 600-197254-1

Login Number: 197254

List Source: Eurofins TestAmerica, Houston

List Number: 1 Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	5.5
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.



Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197259-1

Client Project/Site: Chevron - Jal Land Farm Soils 2020

Revision: 1

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 4/10/2020 11:56:09 AM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

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

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method	Method Description	Protocol	Laboratory
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197259-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset II
600-197259-1	Cell2-Square147-S-2-191205	Solid	12/05/19 15:48	12/10/19 10:38	
600-197259-2	Cell2-Square10-S-2-191205	Solid	12/05/19 15:34	12/10/19 10:38	
600-197259-3	Cell2-Square39-S-2-191205	Solid	12/05/19 15:42	12/10/19 10:38	
600-197259-4	Cell10-Square149-S-2-191205	Solid	12/05/19 16:20	12/10/19 10:38	
600-197259-5	Cell2-Square64-S-2-191205	Solid	12/05/19 15:25	12/10/19 10:38	
600-197259-6	Cell10-Square12-S-2-191205	Solid	12/05/19 16:15	12/10/19 10:38	
600-197259-7	Cell3-Square77-S-2-191205	Solid	12/05/19 15:06	12/10/19 10:38	
600-197259-8	Cell3-Square120-S-2-191205	Solid	12/05/19 15:20	12/10/19 10:38	
600-197259-9	Cell10-Square84-S-2-191205	Solid	12/05/19 15:58	12/10/19 10:38	
600-197259-10	Cell10-Square163-S-2-191205	Solid	12/05/19 16:05	12/10/19 10:38	

Job ID: 600-197259-1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID: 600-197259-1

Client Sample ID: Cell2-Square147-S-2-191205 Date Collected: 12/05/19 15:48 **Matrix: Solid** Date Received: 12/10/19 10:38

Percent Solids: 73.5

Job ID: 600-197259-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 12:30	1
Arsenic	2.20		1.30	0.282	mg/Kg	₩	12/12/19 21:07	12/16/19 12:30	1
Barium	55.2		1.30	0.0389	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Beryllium	0.337		0.324	0.0188	mg/Kg	φ.	12/12/19 21:07	12/16/19 12:30	1
Calcium	11000		130	1.12	mg/Kg	₩	12/12/19 21:07	12/16/19 12:30	1
Cadmium	0.149	J	0.324	0.0332	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Chromium	6.68		0.648	0.0655	mg/Kg	φ.	12/12/19 21:07	12/16/19 12:30	1
Copper	4.23		0.648	0.225	mg/Kg	₩	12/12/19 21:07	12/16/19 12:30	1
Iron	5990		25.9	3.28	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Potassium	1240		130	14.2	mg/Kg	₩.	12/12/19 21:07	12/16/19 12:30	1
Magnesium	1330		130	2.49	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Manganese	104		1.94	0.0493	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Sodium	70.0	J	130	1.15	mg/Kg	₩.	12/12/19 21:07	12/16/19 12:30	1
Lead	4.80		0.648	0.136	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Antimony	0.300	U	3.24	0.300	mg/Kg	☼	12/12/19 21:07	12/16/19 12:30	1
Selenium	0.335	U	2.59	0.335	mg/Kg	₩.	12/12/19 21:07	12/16/19 12:30	1
Thallium	0.359	U	1.94	0.359	mg/Kg	₩	12/12/19 21:07	12/16/19 12:30	1
Zinc	15.6		1.94	0.140	mg/Kg	≎	12/12/19 21:07	12/16/19 12:30	1

Method: 7471A - Mercury in S	olid or Semisolid Was	ste (Manual	Cold Vapor Techn	nique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0154 J	0.0227	0.00479 mg/Kg	₩	12/21/19 12:00	12/22/19 11:47	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.5	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	73.5	1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell2-Square10-S-2-191205 Lab Sample ID: 600-197259-2 Date Collected: 12/05/19 15:34 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 72.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.159	U	0.533	0.159	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 12:42	1
Arsenic	1.80		1.33	0.291	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Barium	35.0		1.33	0.0400	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Beryllium	0.213	J	0.333	0.0193	mg/Kg	φ.	12/12/19 21:07	12/16/19 12:42	1
Calcium	20600		133	1.15	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Cadmium	0.133	J	0.333	0.0341	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Chromium	4.79		0.666	0.0674	mg/Kg	₽	12/12/19 21:07	12/16/19 12:42	1
Copper	2.74		0.666	0.232	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Iron	3960		26.7	3.37	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Potassium	857		133	14.7	mg/Kg	₩.	12/12/19 21:07	12/16/19 12:42	1
Magnesium	760		133	2.56	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Manganese	56.2		2.00	0.0508	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Sodium	17.2	J	133	1.18	mg/Kg	₩	12/12/19 21:07	12/16/19 12:42	1
Lead	2.95		0.666	0.140	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Antimony	0.309	U	3.33	0.309	mg/Kg	☼	12/12/19 21:07	12/16/19 12:42	1
Selenium	0.345	U	2.67	0.345	mg/Kg		12/12/19 21:07	12/16/19 12:42	1

Eurofins TestAmerica, Houston

Client: ARCADIS U.S., Inc.

Date Received: 12/10/19 10:38

General Chemistry

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell2-Square10-S-2-191205

Date Collected: 12/05/19 15:34

Lab Sample ID: 600-197259-2

Matrix: Solid

Job ID: 600-197259-1

Percent Solids: 72.1

Method: 6010B - Inductively	Coupled Plasma - Ator	nic Emission	Spectrometry (Continu	ıed)
Analyte	Result Qualifier	MQL (Adi)	SDL Unit	D	Prepar

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Thallium	1.64 J	2.00	0.369 mg/Kg	₩	12/12/19 21:07	12/16/19 12:42	1
Zinc	9.77	2.00	0.144 mg/Kg	₩	12/12/19 21:07	12/16/19 12:42	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00608 J	0.0211	0.00444 mg/Kg	— ☆	12/21/19 12:00	12/22/19 11:49	1

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.9	1.0	1.0	%			12/12/19 10:35	1
Percent Solids	72.1	1.0	1.0	%			12/12/19 10:35	1

Lab Sample ID: 600-197259-3 Client Sample ID: Cell2-Square39-S-2-191205

Date Collected: 12/05/19 15:42 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 97.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.115	U	0.387	0.115	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Arsenic	1.53		0.967	0.211	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Barium	38.1		0.967	0.0290	mg/Kg	☼	12/12/19 21:07	12/16/19 12:44	1
Beryllium	0.198	J	0.242	0.0140	mg/Kg	ф	12/12/19 21:07	12/16/19 12:44	1
Calcium	16000		96.7	0.835	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Cadmium	0.102	J	0.242	0.0247	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Chromium	4.90		0.483	0.0489	mg/Kg	ф	12/12/19 21:07	12/16/19 12:44	1
Copper	3.07		0.483	0.168	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Iron	3890		19.3	2.45	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Potassium	813		96.7	10.6	mg/Kg	ф	12/12/19 21:07	12/16/19 12:44	1
Magnesium	718		96.7	1.86	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Manganese	56.0		1.45	0.0368	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Sodium	239		96.7	0.857	mg/Kg	₩.	12/12/19 21:07	12/16/19 12:44	1
Lead	3.27		0.483	0.102	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Antimony	0.224	U	2.42	0.224	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1
Selenium	0.250	U	1.93	0.250	mg/Kg	₩	12/12/19 21:07	12/16/19 12:44	1

	Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	
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0.469 J

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Analyte	Result Qualifier	MQL (Adj)	SDL Unit	. D	Prepared	Analyzed	Dil Fac
Mercury	0.00548 J	0.0161	0.00339 mg/Kg	-	12/21/19 12:00	12/22/19 11:51	1

1.45

1.45

0.268 mg/Kg

0.104 mg/Kg

General	Chemistry

Thallium

Zinc

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	2.4	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	97.6	1.0	1.0 %			12/12/19 10:35	1

☼ 12/12/19 21:07 12/16/19 12:44

☼ 12/12/19 21:07 12/16/19 12:44

Client: ARCADIS U.S., Inc. Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell10-Square149-S-2-191205

Lab Sample ID: 600-197259-4 Date Collected: 12/05/19 16:20 **Matrix: Solid**

Date Received: 12/10/19 10:38 **Percent Solids: 73.7**

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.152	U	0.512	0.152	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 12:46	1
Arsenic	2.17		1.28	0.279	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Barium	49.3		1.28	0.0384	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Beryllium	0.326		0.320	0.0186	mg/Kg	₩	12/12/19 21:07	12/16/19 12:46	1
Calcium	4640		128	1.11	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Cadmium	0.141	J	0.320	0.0328	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Chromium	6.80		0.640	0.0648	mg/Kg	₩	12/12/19 21:07	12/16/19 12:46	1
Copper	4.46		0.640	0.223	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Iron	5910		25.6	3.24	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Potassium	1070		128	14.1	mg/Kg	₽	12/12/19 21:07	12/16/19 12:46	1
Magnesium	985		128	2.46	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Manganese	91.2		1.92	0.0488	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Sodium	111	J	128	1.13	mg/Kg	₽	12/12/19 21:07	12/16/19 12:46	1
Lead	4.63		0.640	0.134	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Antimony	0.297	U	3.20	0.297	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Selenium	0.332	U	2.56	0.332	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Thallium	0.355	U	1.92	0.355	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1
Zinc	13.6		1.92	0.138	mg/Kg	☼	12/12/19 21:07	12/16/19 12:46	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0146	J	0.0216	0.00455	mg/Kg	₩	12/21/19 12:00	12/22/19 11:57	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.3	1.0	1.0 %	%			12/12/19 10:35	1
Percent Solids	73.7	1.0	1.0 %	%			12/12/19 10:35	1

Lab Sample ID: 600-197259-5 Client Sample ID: Cell2-Square64-S-2-191205 Date Collected: 12/05/19 15:25 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 83.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.135	U	0.453	0.135	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Arsenic	1.01	J	1.13	0.247	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Barium	27.4		1.13	0.0340	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Beryllium	0.113	J	0.283	0.0164	mg/Kg		12/12/19 21:07	12/16/19 12:48	1
Calcium	25900		113	0.979	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Cadmium	0.0623	J	0.283	0.0290	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Chromium	3.14		0.566	0.0573	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Copper	1.82		0.566	0.197	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Iron	2360		22.7	2.87	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Potassium	461		113	12.5	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Magnesium	480		113	2.17	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Manganese	29.3		1.70	0.0432	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Sodium	22.1	J	113	1.00	mg/Kg	ф.	12/12/19 21:07	12/16/19 12:48	1
Lead	2.01		0.566	0.119	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Antimony	0.263	U	2.83	0.263	mg/Kg	₩	12/12/19 21:07	12/16/19 12:48	1
Selenium	0.293	Ū	2.27	0.293	mg/Kg		12/12/19 21:07	12/16/19 12:48	1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell2-Square64-S-2-191205

Date Collected: 12/05/19 15:25 Date Received: 12/10/19 10:38

Lab Sample ID: 600-197259-5

Matrix: Solid Percent Solids: 83.3

Job ID: 600-197259-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued) Result Qualifier SDL Unit Analyte MQL (Adj) Prepared Analyzed Dil Fac 斑 0.314 mg/Kg 12/12/19 21:07 Thallium 0.314 U 1.70 12/16/19 12:48 1.70 0.122 mg/Kg 12/12/19 21:07 12/16/19 12:48 **Zinc** 5.52

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Analyte Result Qualifier MQL (Adj) SDL Unit Dil Fac D Prepared Analyzed ₩ Mercury 0.00374 U 0.0177 0.00374 mg/Kg <u>12/30/19 13:23</u> <u>12/31/19 10:05</u>

General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Dil Fac Analyzed 1.0 % **Percent Moisture** 16.7 1.0 12/12/19 10:35 **Percent Solids** 83.3 1.0 1.0 % 12/12/19 10:35

Client Sample ID: Cell10-Square12-S-2-191205 Lab Sample ID: 600-197259-6

Date Collected: 12/05/19 16:15 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 72.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Dil Fac Analyzed Ū Silver 0.161 0.542 0.161 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Arsenic** 1.94 1.35 0.295 ma/Ka 12/12/19 21:07 12/16/19 12:50 0.0406 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Barium** 56.1 1.35 0.223 0.0196 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Beryllium** 0.339 1.17 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Calcium** 19600 135 0.339 0.0347 mg/Kg 12/12/19 21:07 12/16/19 12:50 Cadmium 0.122 J 0.677 0.0685 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Chromium** 5.40 Copper 4.61 0.677 0.236 mg/Kg 12/12/19 21:07 12/16/19 12:50 Iron 4410 27 1 3.43 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Potassium** 936 135 14.9 mg/Kg 12/12/19 21:07 12/16/19 12:50 **Magnesium** 135 2.60 ma/Ka 12/12/19 21:07 12/16/19 12:50 1020 Manganese 2 03 0.0516 mg/Kg 12/12/19 21:07 12/16/19 12:50 68.9 **Sodium** 27.8 J 135 1.20 mg/Kg 12/12/19 21:07 12/16/19 12:50 0.677 12/12/19 21:07 12/16/19 12:50 Lead 3.85 0.142 mg/Kg 12/12/19 21:07 12/16/19 12:50 Antimony 0.314 U 3.39 0.314 mg/Kg 12/12/19 21:07 12/16/19 12:50 Selenium 0.351 U 2.71 0.351 mg/Kg Thallium 0.375 mg/Kg 12/12/19 21:07 12/16/19 12:50 0.375 U 2.03 0.146 mg/Kg 12/12/19 21:07 12/16/19 12:50 2.03 **Zinc** 12.3

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac ☼ Mercury 0.0119 Jb 0.0217 0.00457 ma/Ka 12/30/19 13:23 12/31/19 10:11

General Chemistry Result Qualifier SDL Unit Dil Fac Analyte MQL (Adj) D Prepared Analyzed **Percent Moisture** 27.6 1.0 1.0 % 12/12/19 10:35 **Percent Solids** 72.4 1.0 1.0 % 12/12/19 10:35

Client Sample ID: Cell3-Square77-S-2-191205

Lab Sample ID: 600-197259-7 Date Collected: 12/05/19 15:06

Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 73.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.157	U	0.527	0.157	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 12:52	1
Arsenic	2.29		1.32	0.287	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Barium	33.7		1.32	0.0396	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Beryllium	0.316	J	0.330	0.0191	mg/Kg	₩	12/12/19 21:07	12/16/19 12:52	1
Calcium	1870		132	1.14	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Cadmium	0.125	J	0.330	0.0338	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Chromium	7.55		0.659	0.0667	mg/Kg	₩	12/12/19 21:07	12/16/19 12:52	1
Copper	3.04		0.659	0.229	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Iron	6340		26.4	3.34	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Potassium	924		132	14.5	mg/Kg	₽	12/12/19 21:07	12/16/19 12:52	1
Magnesium	79 8		132	2.53	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Manganese	56.5		1.98	0.0502	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Sodium	145		132	1.17	mg/Kg	₩	12/12/19 21:07	12/16/19 12:52	1
Lead	4.80		0.659	0.138	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Antimony	0.306	U	3.30	0.306	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Selenium	0.341	U	2.64	0.341	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Thallium	0.365	U	1.98	0.365	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1
Zinc	12.7		1.98	0.142	mg/Kg	☼	12/12/19 21:07	12/16/19 12:52	1

Method: 7471A - Mercury in Solid	or Sem	isolid Was	te (Manual (Cold Vap	or Tech	nnique)			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0485	b	0.0204	0.00429	mg/Kg	\	12/30/19 13:23	12/31/19 10:13	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.4	1.0	1.0 %	 _		12/12/19 10:35	1
Percent Solids	73.6	1.0	1.0 %			12/12/19 10:35	1

Client Sample ID: Cell3-Square120-S-2-191205 Lab Sample ID: 600-197259-8 Date Collected: 12/05/19 15:20 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 90.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.127	U	0.428	0.127	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 12:54	1
Arsenic	1.39		1.07	0.233	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Barium	19.3		1.07	0.0321	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Beryllium	0.171	J	0.268	0.0155	mg/Kg	φ.	12/12/19 21:07	12/16/19 12:54	1
Calcium	1510		107	0.925	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Cadmium	0.0803	J	0.268	0.0274	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Chromium	4.45		0.535	0.0542	mg/Kg	₩	12/12/19 21:07	12/16/19 12:54	1
Copper	1.93		0.535	0.186	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Iron	3670		21.4	2.71	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Potassium	623		107	11.8	mg/Kg	₩	12/12/19 21:07	12/16/19 12:54	1
Magnesium	497		107	2.06	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Manganese	34.9		1.61	0.0408	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Sodium	35.7	J	107	0.948	mg/Kg	φ.	12/12/19 21:07	12/16/19 12:54	1
Lead	2.79		0.535	0.112	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Antimony	0.248	U	2.68	0.248	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1
Selenium	0.277	U	2.14	0.277	mg/Kg		12/12/19 21:07	12/16/19 12:54	1

Eurofins TestAmerica, Houston

Percent Solids

Client Sample ID: Cell3-Square120-S-2-191205 Lab Sample ID: 600-197259-8

Date Collected: 12/05/19 15:20 Matrix: Solid
Date Received: 12/10/19 10:38 Percent Solids: 90.7

Method: 6010B - Inductively C	oupled Plas	sma - Atoı	mic Emission	Spectro	ometry (Conti	nued)		
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.296	U	1.61	0.296	mg/Kg	₩	12/12/19 21:07	12/16/19 12:54	1
Zinc	7.60		1.61	0.116	mg/Kg	☼	12/12/19 21:07	12/16/19 12:54	1

Method: 7471A - Mercury in	Solid or Semiso	olid Was	ste (Manual	Cold Vap	or Techr	nique)			
Analyte	Result Qu	ualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0848 b		0.0176	0.00370	mg/Kg	\	12/30/19 13:23	12/31/19 10:15	1
General Chemistry									
Analyte	Result Qu	ualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell10-Square84-S-2-191205

Date Collected: 12/05/19 15:58

Matrix: Solid

Date Received: 12/10/19 10:38

Lab Sample ID: 600-197259-9

Matrix: Solid

Percent Solids: 90.6

1.0

90.7

1.0 %

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Dil Fac Analyzed 0.126 U 0.126 mg/Kg Silver 0.424 12/12/19 21:07 12/16/19 12:56 **Arsenic** 1.56 1.06 0.231 mg/Kg 12/12/19 21:07 12/16/19 12:56 1 0.0318 mg/Kg 12/12/19 21:07 12/16/19 12:56 **Barium** 41.3 1.06 **Beryllium** 0.212 J 0.265 0.0154 mg/Kg 12/12/19 21:07 12/16/19 12:56 0.917 mg/Kg 12/12/19 21:07 12/16/19 12:56 **Calcium** 106 6980 0.265 0.0272 mg/Kg 12/12/19 21:07 12/16/19 12:56 Cadmium 0.117 J 0.530 0.0537 mg/Kg 12/12/19 21:07 12/16/19 12:56 **Chromium** 5.07 Copper 3.64 0.530 0.185 mg/Kg 12/12/19 21:07 12/16/19 12:56 4240 21.2 2.68 mg/Kg 12/12/19 21:07 12/16/19 12:56 Iron **Potassium** 106 11.7 mg/Kg 12/12/19 21:07 12/16/19 12:56 887 106 2.04 mg/Kg 12/12/19 21:07 12/16/19 12:56 Magnesium 825 * 12/12/19 21:07 12/16/19 12:56 Manganese 1.59 0.0404 mg/Kg 67.1 **Sodium** 106 0.940 mg/Kg 12/12/19 21:07 12/16/19 12:56 9.66 J 0.111 mg/Kg 12/12/19 21:07 12/16/19 12:56 Lead 3.52 0.530 0.246 mg/Kg 12/12/19 21:07 12/16/19 12:56 Antimony 0.246 U 2.65 Selenium 0.275 U 2.12 0.275 mg/Kg 12/12/19 21:07 12/16/19 12:56 Thallium 0.294 U 0.294 mg/Kg 12/12/19 21:07 12/16/19 12:56 1.59 0.115 mg/Kg 12/12/19 21:07 12/16/19 12:56 1.59 **Zinc** 10.7

Method: 7471A - Mercury in So	olid or Semisolic	d Waste (Manual	Cold Vapor Techi	nique)			
Analyte	Result Quali	ifier MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0353 b	0.0184	0.00389 mg/Kg	-	12/30/19 13:23	12/31/19 10:17	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4	1.0	1.0 %	%			12/12/19 10:35	1
Percent Solids	90.6	1.0	1.0 %	%			12/12/19 10:35	1

12/12/19 10:35

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell10-Square163-S-2-191205

Lab Sample ID: 600-197259-10 Date Collected: 12/05/19 16:05

Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 79.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.145	U	0.486	0.145	mg/Kg	<u> </u>	12/12/19 21:07	12/16/19 13:04	1
Arsenic	1.50		1.22	0.265	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Barium	33.6		1.22	0.0365	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Beryllium	0.213	J	0.304	0.0176	mg/Kg	₩	12/12/19 21:07	12/16/19 13:04	1
Calcium	6880		122	1.05	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Cadmium	0.103	J	0.304	0.0311	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Chromium	4.79		0.608	0.0615	mg/Kg	₩	12/12/19 21:07	12/16/19 14:15	1
Copper	3.33		0.608	0.212	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Iron	4110		24.3	3.08	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Potassium	783		122	13.4	mg/Kg	₽	12/12/19 21:07	12/16/19 13:04	1
Magnesium	731		122	2.33	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Manganese	56.3		1.82	0.0463	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Sodium	11.0	J	122	1.08	mg/Kg	₩	12/12/19 21:07	12/16/19 13:04	1
Lead	3.15		0.608	0.128	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Antimony	0.282	U	3.04	0.282	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Selenium	0.315	U	2.43	0.315	mg/Kg	☼	12/12/19 21:07	12/16/19 14:15	1
Thallium	0.337	U	1.82	0.337	mg/Kg	☼	12/12/19 21:07	12/16/19 13:04	1
Zinc	9.56		1.82	0.131	mg/Kg	₩	12/12/19 21:07	12/16/19 13:04	1

Method: 7471A - Mercury in So	olid or Semisolid Was	te (Manual	Cold Vapor Techn	ique)			
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0762 b	0.0191	0.00401 mg/Kg	-	12/30/19 13:23	12/31/19 10:23	

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1	1.0	1.0 %			12/12/19 10:35	1
Percent Solids	79.9	1.0	1.0 %			12/12/19 10:35	1

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Qualifiers

Qualifier Description
MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
The compound was found in the blank and sample
Duplicate RPD exceeds the control limit
Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
MS, MSD: Spike recovery exceeds upper or lower control limits.
Analyte was not detected at or above the SDL.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDI	Method Detection Limit

Method Detection Limit MDL ML Minimum Level (Dioxin) NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

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Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282937/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA Analysis Batch: 283152** Prep Batch: 282937

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Calcium	0.864	U	100	0.864	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Potassium	11.0	U	100	11.0	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Sodium	0.886	U	100	0.886	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Thallium	0.277	U	1.50	0.277	mg/Kg		12/12/19 21:07	12/16/19 12:13	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/12/19 21:07	12/16/19 12:13	1

Lab Sample ID: LCSSRM 600-282937/2-A

Matrix: Solid Analysis Batch: 283152							Prep Type: Total/NA Prep Batch: 282937
	Spike	LCSSRM	LCSSRM				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	25.8	21.82		mg/Kg	_	84.6	67.1 - 106. 6
Arsenic	69.4	64.92		mg/Kg		93.5	66.6 - 106. 6
Barium	393	323.2		mg/Kg		82.2	64.6 - 106. 6

					6
Arsenic	69.4	64.92	mg/Kg	93.5	66.6 - 106.
					6
Barium	393	323.2	mg/Kg	82.2	64.6 - 106.
					6
Beryllium	293	262.1	mg/Kg	89.5	72.4 - 106.
					8
Calcium	19300	18550	mg/Kg	96.1	70.5 - 106.
On the born	000	050.0		05.0	7
Cadmium	268	256.3	mg/Kg	95.6	71.3 - 106.
Chromium	63.6	56.29	ma/l/a	00 5	71.0.400
Cilidillatii	03.0	30.29	mg/Kg	00.5	71.9 - 106. 6
Copper	175	162.8	mg/Kg	03 N	72.0 - 106.
СОРРО	170	102.0	mg/rtg	00.0	9
Iron	17700	13920	mg/Kg	78.6	50.1 - 106.
			3 3		8
Potassium	5740	4878	mg/Kg	85.0	64.6 - 106.
					6
Magnesium	5390	4266	mg/Kg	79.1	64.2 - 106.
					7
Manganese	616	500.4	mg/Kg	81.2	64.1 - 106.
					7
Sodium	9070	7941	mg/Kg	87.6	70.5 - 106.
					6
Lead	164	160.1	mg/Kg	97.6	71.3 - 106.

Client Sample ID: Lab Control Sample

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Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282937/2-A Matrix: Solid Analysis Batch: 283152	Spike	LCSSRM	LCSSRM	Clier	it Sai	mple II	D: Lab Control Sample Prep Type: Total/NA Prep Batch: 282937 %Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Antimony	120	32.16		mg/Kg		26.8	20.0 - 106. 7
Selenium	155	143.0		mg/Kg		92.3	65.2 - 106. 5
Thallium	81.0	75.54		mg/Kg		93.3	63.2 - 106. 7
Zinc	482	466.0		mg/Kg		96.7	69.7 - 106.

Lab Sample ID: 600-197259-1 MS Client Sample ID: Cell2-Square147-S-2-191205

Client: ARCADIS U.S., Inc.

Matrix: Solid **Prep Type: Total/NA Analysis Batch: 283152** Prep Batch: 282937

Analysis Batch. 200102	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.154	U	16.7	13.78		mg/Kg	<u> </u>	83	75 - 125
Arsenic	2.20		66.7	67.92		mg/Kg	☼	99	75 ₋ 125
Barium	55.2		66.7	99.32	N1	mg/Kg	☼	66	75 - 125
Beryllium	0.337		66.7	59.70		mg/Kg	₩	89	75 ₋ 125
Calcium	11000		667	6164	4	mg/Kg	₩	-721	75 - 125
Cadmium	0.149	J	66.7	67.79		mg/Kg	₩	101	75 ₋ 125
Chromium	6.68		66.7	75.99		mg/Kg	₩	104	75 - 125
Copper	4.23		66.7	71.26		mg/Kg	₩	101	75 ₋ 125
Iron	5990		667	5919	4	mg/Kg	₩	-10	75 ₋ 125
Potassium	1240		667	2097	N1	mg/Kg	₩.	129	75 - 125
Magnesium	1330		667	1770	N1	mg/Kg	₩	65	75 ₋ 125
Manganese	104		66.7	134.1	N1	mg/Kg	₩	45	75 ₋ 125
Sodium	70.0	J	667	684.6		mg/Kg	₩	92	75 ₋ 125
Lead	4.80		66.7	66.26		mg/Kg	₩	92	75 ₋ 125
Antimony	0.300	U	100	71.19	N1	mg/Kg	☼	71	75 - 125
Selenium	0.335	U	66.7	67.46		mg/Kg	₩	101	75 ₋ 125
Thallium	0.359	U	66.7	65.12		mg/Kg	☼	98	75 ₋ 125
Zinc	15.6		33.3	44.55		mg/Kg	☼	87	75 ₋ 125

Lab Sample ID: 600-197259-10 MS Client Sample ID: Cell10-Square163-S-2-191205 **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 283152 Prep Batch: 282937

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.145	U	15.1	12.29		mg/Kg	₩	82	75 - 125	
Arsenic	1.50		60.2	62.49		mg/Kg	☼	101	75 - 125	
Barium	33.6		60.2	91.27		mg/Kg	☼	96	75 ₋ 125	
Beryllium	0.213	J	60.2	56.33		mg/Kg	₩.	93	75 - 125	
Calcium	6880		602	5335	4	mg/Kg	☼	-256	75 ₋ 125	
Cadmium	0.103	J	60.2	62.31		mg/Kg	₩	103	75 ₋ 125	
Copper	3.33		60.2	65.26		mg/Kg	₩.	103	75 ₋ 125	
Iron	4110		602	5376	4	mg/Kg	₩	211	75 ₋ 125	
Potassium	783		602	1916	N1	mg/Kg	☼	188	75 - 125	
Magnesium	731		602	1548	N1	mg/Kg		136	75 ₋ 125	
Manganese	56.3		60.2	111.9		mg/Kg	₩	92	75 ₋ 125	
Sodium	11.0	J	602	601.7		mg/Kg	₩	98	75 - 125	

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Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197259-10 MS Client Sample ID: Cell10-Square163-S-2-191205

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 283152** Prep Batch: 282937

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	3.15		60.2	61.53		mg/Kg	-	97	75 - 125	
Antimony	0.282	U	90.3	67.37		mg/Kg	₩.	75	75 - 125	
Thallium	0.337	U	60.2	59.60		mg/Kg	₩	99	75 - 125	
Zinc	9.56		30.1	42.18		mg/Kg	₩.	108	75 - 125	

Lab Sample ID: 600-197259-10 MS Client Sample ID: Cell10-Square163-S-2-191205

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 283187	Sample	Sample	Spike	MS	MS				Prep Batch: 28293 %Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.145	U	15.1	12.45		mg/Kg	<u> </u>	83	75 - 125
Arsenic	1.68		60.2	60.44		mg/Kg	₩	98	75 - 125
Barium	33.5		60.2	94.16		mg/Kg	₩	101	75 ₋ 125
Beryllium	0.225	J	60.2	60.81		mg/Kg	*	101	75 - 125
Calcium	6220		602	5511	4	mg/Kg	₩	-119	75 - 125
Cadmium	0.115	J	60.2	60.81		mg/Kg	₩	101	75 ₋ 125
Chromium	4.79		60.2	68.51		mg/Kg	₽	106	75 - 125
Copper	3.03		60.2	65.86		mg/Kg	₩	104	75 ₋ 125
Iron	4090		602	5382	4	mg/Kg	₩	214	75 - 125
Potassium	827		602	2016	N1	mg/Kg	₩	198	75 - 125
Magnesium	721		602	1550	N1	mg/Kg	₩	138	75 ₋ 125
Manganese	56.8		60.2	116.2		mg/Kg	₩	99	75 - 125
Sodium	12.9	J	602	630.9		mg/Kg	₽	103	75 - 125
Lead	3.11		60.2	61.35		mg/Kg	₩	97	75 - 125
Antimony	0.282	U	90.3	67.79		mg/Kg	≎	75	75 - 125
Selenium	0.315	U	60.2	58.30		mg/Kg	\$	97	75 - 125
Thallium	1.12	J	60.2	60.56		mg/Kg	≎	99	75 - 125

Lab Sample ID: 600-197259-1 DU Client Sample ID: Cell2-Square147-S-2-191205

44.60

mg/Kg

30.1

10.5

Matrix: Solid

Zinc

Analysis Batch: 283152 Prep Batch: 282937

	Sample	Sample	DU	DU			•	RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.154	U	0.153	U	mg/Kg	* *	NC	20
Arsenic	2.20		1.783	F	mg/Kg	☼	21	20
Barium	55.2		39.36	F	mg/Kg	☼	33	20
Beryllium	0.337		0.2694	JF	mg/Kg	*	22	20
Calcium	11000		6138	F	mg/Kg	☼	56	20
Cadmium	0.149	J	0.1155	JF	mg/Kg	₩	25	20
Chromium	6.68		5.978		mg/Kg	₩	11	20
Copper	4.23		3.656		mg/Kg	☼	15	20
Iron	5990		4792	F	mg/Kg	⇔	22	20
Potassium	1240		971.1	F	mg/Kg	₩	24	20
Magnesium	1330		985.9	F	mg/Kg	₩	30	20
Manganese	104		84.15	F	mg/Kg	⇔	21	20
Sodium	70.0	J	57.25	j	mg/Kg	₩	20	20
Lead	4.80		4.163		mg/Kg	⇔	14	20
Antimony	0.300	U	0.298	U	mg/Kg	⇔	NC	20

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Prep Type: Total/NA

113 75 - 125

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197259-1 DU Client Sample ID: Cell2-Square147-S-2-191205 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 283152** Prep Batch: 282937

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Selenium	0.335	<u>U</u>	0.332	U	mg/Kg	\$	NC	20
Thallium	0.359	U	0.355	U	mg/Kg	₩	NC	20
Zinc	15.6		12.24	F	mg/Kg	₩	24	20

Lab Sample ID: 600-197259-10 DU Client Sample ID: Cell10-Square163-S-2-191205 **Matrix: Solid** Prep Type: Total/NA

Client: ARCADIS U.S., Inc.

Analysis Batch: 283152 Prep Batch: 282937 Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit D RPD Limit 0.145 U ☼ Silver 0.146 U mg/Kg NC 20 ₩ Arsenic 1.50 1.633 mg/Kg 8 20 Barium 30.97 ά 33.6 mg/Kg 8 20 Beryllium 0.213 0.2087 J mg/Kg 2 20 Calcium 6880 4913 F mg/Kg ₩ 33 20 Cadmium 0.103 J 0.09821 J mg/Kg ₩ 5 20 74 Copper 3.33 20 3.149 mg/Kg 4022 2 20 Iron 4110 mg/Kg 795.5 20 Potassium 783 mg/Kg 20 731 707.8 Magnesium mg/Kg Ö Manganese 56.3 54.06 mg/Kg 20 Sodium 11.0 9.772 J mg/Kg 12 20 Lead 3.15 3.272 mg/Kg ď 4 20 Antimony 0.282 U 0.285 U ₩ NC 20 mg/Kg ₩ Thallium 0.337 U 0.340 U mg/Kg NC 20

Lab Sample ID: 600-197259-10 DU Client Sample ID: Cell10-Square163-S-2-191205 **Matrix: Solid** Prep Type: Total/NA

9.557

mg/Kg

9.56

Zinc

Analysis Batch: 283187							Prep Batch: 28	02931
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.145	U	0.146	U	mg/Kg	-	NC	20
Arsenic	1.68		1.835		mg/Kg	₩	9	20
Barium	33.5		33.29		mg/Kg	₩	0.5	20
Beryllium	0.225	J	0.2210	j	mg/Kg	\$	2	20
Calcium	6220		6053		mg/Kg	₩	3	20
Cadmium	0.115	J	0.1105	J	mg/Kg	₩	4	20
Chromium	4.79		4.782		mg/Kg	₩	0.2	20
Copper	3.03		3.051		mg/Kg	₩	0.6	20
Iron	4090		4121		mg/Kg	₩	0.7	20
Potassium	827		839.1		mg/Kg	₩	1	20
Magnesium	721		723.7		mg/Kg	₩	0.4	20
Manganese	56.8		56.76		mg/Kg	☼	0.06	20
Sodium	12.9	J	12.37	J	mg/Kg	₩	4	20
Lead	3.11		3.032		mg/Kg	₩	2	20
Antimony	0.282	U	0.285	U	mg/Kg	₩	NC	20
Selenium	0.315	U	0.318	U	mg/Kg	₩	NC	20
Thallium	1.12	J	0.3622	JF	mg/Kg	₩	103	20
Zinc	10.5		10.17		mg/Kg	₩	3	20

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0.05

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-283743/7-B Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 283798

Prep Type: Total/NA Prep Batch: 283743

MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.00346 mg/Kg Mercury 0.00346 U 0.0165 <u>12/21/19 12:00</u> <u>12/22/19 11:09</u>

Lab Sample ID: LCS 600-283743/8-B **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analyte

Mercury

Analysis Batch: 283798

Spike Added 0.234

LCS LCS 0.2422

Result Qualifier

Unit mg/Kg

D %Rec 103

70 - 130

%Rec. Limits

Client Sample ID: Method Blank

Lab Sample ID: MB 600-284342/1-A

Matrix: Solid

Analysis Batch: 284444

MB MB

Analyte Result Qualifier 0.003738 J Mercury

MQL (Adj) SDI Unit 0.0157 0.00330 mg/Kg

Prepared 12/30/19 13:23 12/31/19 09:27

Analyzed Dil Fac

Prep Batch: 283743

Prep Type: Total/NA

Prep Batch: 284342

Prep Type: Total/NA

Prep Batch: 284342

Prep Type: Total/NA

Prep Batch: 284342

Prep Type: Total/NA

Lab Sample ID: LCS 600-284342/2-A

Matrix: Solid

Analysis Batch: 284444

Analyte

Spike Added 0.224

LCS LCS Result Qualifier 0.2253

MS MS

Unit mg/Kg

Unit

mg/Kg

D %Rec 101 %Rec. Limits 70 - 130

Client Sample ID: Lab Control Sample

Client Sample ID: Cell2-Square64-S-2-191205

Matrix: Solid

Mercury

Mercury

Mercury

Percent Solids

Analysis Batch: 284444

Analyte

Sample Sample Spike Result Qualifier Added 0.00374 U 0.273

0.3169

Result Qualifier

%Rec ₩

Limits 116 75 ₋ 125

Client Sample ID: Cell2-Square64-S-2-191205

%Rec.

Lab Sample ID: 600-197259-5 DU

Lab Sample ID: 600-197259-5 MS

Matrix: Solid

Analysis Batch: 284444

Analyte

Sample Sample Result Qualifier 0.00374 U

79.9

DU DU 0.003999 J

Result Qualifier

DU DU

22.7

77.3

Result Qualifier

Unit D mg/Kg

Prep Batch: 284342

RPD RPD Limit 20

RPD

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197259-10 DU **Matrix: Solid**

Analysis Batch: 282836

Sample Sample Result Qualifier Percent Moisture 20.1

Client Sample ID: Cell10-Square163-S-2-191205

Unit

%

%

Prep Type: Total/NA

RPD Limit 20 3 20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry Prep: 3050B

Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

2

3

4

6

8

46

11

12

R

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Prep Batch: 282937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-1	Cell2-Square147-S-2-191205	Total/NA	Solid	3050B	
600-197259-2	Cell2-Square10-S-2-191205	Total/NA	Solid	3050B	
600-197259-3	Cell2-Square39-S-2-191205	Total/NA	Solid	3050B	
600-197259-4	Cell10-Square149-S-2-191205	Total/NA	Solid	3050B	
600-197259-5	Cell2-Square64-S-2-191205	Total/NA	Solid	3050B	
600-197259-6	Cell10-Square12-S-2-191205	Total/NA	Solid	3050B	
600-197259-7	Cell3-Square77-S-2-191205	Total/NA	Solid	3050B	
600-197259-8	Cell3-Square120-S-2-191205	Total/NA	Solid	3050B	
600-197259-9	Cell10-Square84-S-2-191205	Total/NA	Solid	3050B	
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	3050B	
MB 600-282937/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-282937/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197259-1 MS	Cell2-Square147-S-2-191205	Total/NA	Solid	3050B	
600-197259-10 MS	Cell10-Square163-S-2-191205	Total/NA	Solid	3050B	
600-197259-1 DU	Cell2-Square147-S-2-191205	Total/NA	Solid	3050B	
600-197259-10 DU	Cell10-Square163-S-2-191205	Total/NA	Solid	3050B	

Analysis Batch: 283152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-1	Cell2-Square147-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-2	Cell2-Square10-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-3	Cell2-Square39-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-4	Cell10-Square149-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-5	Cell2-Square64-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-6	Cell10-Square12-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-7	Cell3-Square77-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-8	Cell3-Square120-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-9	Cell10-Square84-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937
MB 600-282937/1-A	Method Blank	Total/NA	Solid	6010B	282937
LCSSRM 600-282937/2-A	Lab Control Sample	Total/NA	Solid	6010B	282937
600-197259-1 MS	Cell2-Square147-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-10 MS	Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-1 DU	Cell2-Square147-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-10 DU	Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937

Analysis Batch: 283187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-10	MS Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937
600-197259-10	DU Cell10-Square163-S-2-191205	Total/NA	Solid	6010B	282937

Prep Batch: 283743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-1	Cell2-Square147-S-2-191205	Total/NA	Solid	7471A	
600-197259-2	Cell2-Square10-S-2-191205	Total/NA	Solid	7471A	
600-197259-3	Cell2-Square39-S-2-191205	Total/NA	Solid	7471A	
600-197259-4	Cell10-Square149-S-2-191205	Total/NA	Solid	7471A	
MB 600-283743/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-283743/8-B	Lab Control Sample	Total/NA	Solid	7471A	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Analysis Batch: 283798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-1	Cell2-Square147-S-2-191205	Total/NA	Solid	7471A	283743
600-197259-2	Cell2-Square10-S-2-191205	Total/NA	Solid	7471A	283743
600-197259-3	Cell2-Square39-S-2-191205	Total/NA	Solid	7471A	283743
600-197259-4	Cell10-Square149-S-2-191205	Total/NA	Solid	7471A	283743
MB 600-283743/7-B	Method Blank	Total/NA	Solid	7471A	283743
LCS 600-283743/8-B	Lab Control Sample	Total/NA	Solid	7471A	283743

Prep Batch: 284342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-5	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	<u>-</u>
600-197259-6	Cell10-Square12-S-2-191205	Total/NA	Solid	7471A	
600-197259-7	Cell3-Square77-S-2-191205	Total/NA	Solid	7471A	
600-197259-8	Cell3-Square120-S-2-191205	Total/NA	Solid	7471A	
600-197259-9	Cell10-Square84-S-2-191205	Total/NA	Solid	7471A	
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	7471A	
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	
600-197259-5 MS	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	
600-197259-5 DU	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	

Analysis Batch: 284444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-5	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-6	Cell10-Square12-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-7	Cell3-Square77-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-8	Cell3-Square120-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-9	Cell10-Square84-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	7471A	284342
MB 600-284342/1-A	Method Blank	Total/NA	Solid	7471A	284342
LCS 600-284342/2-A	Lab Control Sample	Total/NA	Solid	7471A	284342
600-197259-5 MS	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	284342
600-197259-5 DU	Cell2-Square64-S-2-191205	Total/NA	Solid	7471A	284342

General Chemistry

Analysis Batch: 282836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197259-1	Cell2-Square147-S-2-191205	Total/NA	Solid	2540B	_
600-197259-2	Cell2-Square10-S-2-191205	Total/NA	Solid	2540B	
600-197259-3	Cell2-Square39-S-2-191205	Total/NA	Solid	2540B	
600-197259-4	Cell10-Square149-S-2-191205	Total/NA	Solid	2540B	
600-197259-5	Cell2-Square64-S-2-191205	Total/NA	Solid	2540B	
600-197259-6	Cell10-Square12-S-2-191205	Total/NA	Solid	2540B	
600-197259-7	Cell3-Square77-S-2-191205	Total/NA	Solid	2540B	
600-197259-8	Cell3-Square120-S-2-191205	Total/NA	Solid	2540B	
600-197259-9	Cell10-Square84-S-2-191205	Total/NA	Solid	2540B	
600-197259-10	Cell10-Square163-S-2-191205	Total/NA	Solid	2540B	
600-197259-10 DU	Cell10-Square163-S-2-191205	Total/NA	Solid	2540B	

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Client Sample ID: Cell2-Square147-S-2-191205

Lab Sample ID: 600-197259-1 Date Collected: 12/05/19 15:48 **Matrix: Solid**

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell2-Square147-S-2-191205

Lab Sample ID: 600-197259-1 Date Collected: 12/05/19 15:48 **Matrix: Solid** Percent Solids: 73.5

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:30	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:47	SOT	TAL HOU

Client Sample ID: Cell2-Square10-S-2-191205

Lab Sample ID: 600-197259-2 Date Collected: 12/05/19 15:34 Matrix: Solid

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell2-Square10-S-2-191205

Lab Sample ID: 600-197259-2 Date Collected: 12/05/19 15:34 **Matrix: Solid** Percent Solids: 72.1

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:42	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:49	SOT	TAL HOU

Client Sample ID: Cell2-Square39-S-2-191205

Date Collected: 12/05/19 15:42 **Matrix: Solid**

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Lab Sample ID: 600-197259-3 Client Sample ID: Cell2-Square39-S-2-191205

Date Collected: 12/05/19 15:42 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 97.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:44	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:51	SOT	TAL HOU

Eurofins TestAmerica, Houston

Lab Sample ID: 600-197259-3

Matrix: Solid

Lab Sample ID: 600-197259-4

Lab Sample ID: 600-197259-4

Lab Sample ID: 600-197259-5

Client Sample ID: Cell10-Square149-S-2-191205

Date Collected: 12/05/19 16:20

Date Received: 12/10/19 10:38

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell10-Square149-S-2-191205

Date Collecte	ed: 12/05/19	16:20							Matrix: Solid
Date Receive	ed: 12/10/19	10:38							Percent Solids: 73.7
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:46	KP1	TAL HOU
Total/NA	Prep	7471A			283743	12/21/19 12:00	SOT	TAL HOU
Total/NA	Analysis	7471A		1	283798	12/22/19 11:57	SOT	TAL HOU

Client Sample ID: Cell2-Square64-S-2-191205

Date Collected: 12/05/19 15:25

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell2-Square64-5-2-191205	Lab Sample ID: 600-19/259-5
Date Collected: 12/05/19 15:25	Matrix: Solid
Date Received: 12/10/19 10:38	Percent Solids: 83.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:48	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:05	KP1	TAL HOU

Client Sample ID: Cell10-Square12-S-2-191205

Date Collected: 12/05/19 16:15

Date Received: 12/10/19 10:38

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell10-Square12-S-2-191205

Date Collected: 12/05/19 16:15

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:50	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7/171Δ		1	28////	12/31/10 10:11	KD1	TAL HOLL

Eurofins TestAmerica, Houston

Lab Sample ID: 600-197259-6

Lab Sample ID: 600-197259-6

Matrix: Solid

Matrix: Solid

Matrix: Solid

Percent Solids: 72.4

10

Client Sample ID: Cell3-Square77-S-2-191205 Lab Sample ID: 600-197259-7

Date Collected: 12/05/19 15:06 **Matrix: Solid**

Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell3-Square77-S-2-191205

Lab Sample ID: 600-197259-7 Date Collected: 12/05/19 15:06 Matrix: Solid Date Received: 12/10/19 10:38 Percent Solids: 73.6

Batch Dilution Batch Ratch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Prep Total/NA 3050B 282937 12/12/19 21:07 CLD TAL HOU Total/NA Analysis 6010B 283152 12/16/19 12:52 KP1 TAL HOU 1 Total/NA Prep 7471A 284342 12/30/19 13:23 KP1 TAL HOU

Client Sample ID: Cell3-Square120-S-2-191205

7471A

Lab Sample ID: 600-197259-8 Date Collected: 12/05/19 15:20 **Matrix: Solid**

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284444 12/31/19 10:13 KP1

284444 12/31/19 10:15 KP1

TAL HOU

TAL HOU

Date Received: 12/10/19 10:38

Analysis

Total/NA

Total/NA

Batch Batch Dilution Batch Prepared Method **Prep Type** Type Run **Factor** Number or Analyzed **Analyst** Lab Total/NA Analysis 2540B 282836 12/12/19 10:35 ANP TAL HOU

Client Sample ID: Cell3-Square120-S-2-191205

Lab Sample ID: 600-197259-8 Date Collected: 12/05/19 15:20 **Matrix: Solid** Percent Solids: 90.7 Date Received: 12/10/19 10:38

Batch **Batch** Dilution Batch **Prepared** Prep Type Type Method Run Factor Number or Analyzed Analyst Lab Total/NA 3050B 282937 TAL HOU Prep 12/12/19 21:07 CLD Total/NA Analysis 6010B 283152 12/16/19 12:54 KP1 TAL HOU 1 Total/NA Prep 7471A 284342 12/30/19 13:23 KP1 TAL HOU

Client Sample ID: Cell10-Square84-S-2-191205

Analysis

7471A

Lab Sample ID: 600-197259-9 Date Collected: 12/05/19 15:58 Matrix: Solid

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Date Received: 12/10/19 10:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell10-Square84-S-2-191205

Lab Sample ID: 600-197259-9 Date Collected: 12/05/19 15:58 **Matrix: Solid** Date Received: 12/10/19 10:38 Percent Solids: 90.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 12:56	KP1	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:17	KP1	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell10-Square163-S-2-191205

Lab Sample ID: 600-197259-10

Date Collected: 12/05/19 16:05 **Matrix: Solid** Date Received: 12/10/19 10:38

Batch Dilution **Batch** Prepared Method or Analyzed Analyst **Prep Type** Type Run **Factor** Number Lab Total/NA 2540B 12/12/19 10:35 ANP TAL HOU Analysis 282836

Client Sample ID: Cell10-Square163-S-2-191205

Lab Sample ID: 600-197259-10 Date Collected: 12/05/19 16:05 **Matrix: Solid**

Date Received: 12/10/19 10:38 Percent Solids: 79.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283152	12/16/19 13:04	KP1	TAL HOU
Total/NA	Prep	3050B			282937	12/12/19 21:07	CLD	TAL HOU
Total/NA	Analysis	6010B		1	283187	12/16/19 14:15	TWR	TAL HOU
Total/NA	Prep	7471A			284342	12/30/19 13:23	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:23	KP1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197259-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		rogram ELAP	Identification Number T104704223-19-25	Expiration Date 10-31-20
,	•	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for wh
the agency does not o	offer certification			
the agency does not of Analysis Method	offer certification. Prep Method	Matrix	Analyte	
0 ,		Matrix Solid	Analyte Percent Moisture	

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13/6/ Special Instructions/Note: P - Na204S Q - Na2503 R - Na25203 S - H2504 U - TSP Dodecatyd U - Acetone V - MCAA - pH 4-5 other (specify) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 600-72593-19936.10 ٦ Preservation Codes A - HCL
B - NaOH
C - Zn Acetate
C - Zn Acetate
D - Nitric Acid
E - NaHSOA
F - MACHOR
G - Amchlor
H - Ascorbic Acid 1- lce J- DI Water K- EDTA - EDA Archive For Page Total Number of containers 4 6 (8) 08 B 00 600-197259 Chain of Custody Disposal By Lab Analysis Requested oler Temperature(s) *C and Other Remarks Special Instructions/QC Requirements 9012-Cyanide sachin kudchadkar@testamericainc.com Return To Client Kudchadkar, Sachin G 3015B_GRO -C6-C10 - 202 jar Canton 80168_DRO/ORO -C10-C28/ C28-C36- 4 oz jar- Canton Z 2 2 2 2 2 2 Z 2 2 Arcadio E-Wail Smoothd. Preservation Code Matrix Solid Radiological (C=comp, G=grab) Type 5 1 5 5 5 5 SKINNANN 8518792 1630 1558 15/3 1615 1605 1548 525 Sample Standard 1534 19120S 1500 2113-Square 20-5-2-3-191205 191205 1520 Time Date Unknown TAT Requested (days) Due Date Requested: 191305 12/9/19 191205 91205 Ce1110 -Square 163.5-2-3-191205 191205 Sample Date 191205 191305 613 191205 191305 Project # 60011732 Poison B 115456 21110 - Square 84-5-3-19120S el13. Square 77-5-3-191305 Cell10 - Square12-5-2-3-191205 2110 - Square 64-5-2-3-19120S -Square 149-5-2-3-191205 -Squile 10.523-191205 -Squale 39-5 2-3-191205 ella - Squee 147-5-2-3-191205 Skin Imtant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (713) 690-4444 Fax (713) 690-5646 Jal Lindfarm Chevron - Jal Land Farm Soils 2020 Flammable Possible Hazard Identification 1004 North Big Spring Suite 12' sarah.johnson@arcadis.com mpty Kit Relinquished by Custody Seals Intact
A Yes A No Sample Identification Client Information ARCADIS U.S., Inc 432-227-0266(Tel) Non-Hazard ello Sarah Johnson 2113 State, Zip: TX, 79701 Midland

Environment Testing

Seurofins .

#264

Chain of Custody Record

Eurofins TestAmerica, Houston

Houston, TX 77040 6310 Rothway Street

Loc: 600

🔅 eurofins 197259

Environment Testing TestAmerica

'19DEC 10 10:39

Eurofins TestAmerica Houston

JOB NUMBER:

UNPACKED BY:

Sample Receipt Checklist

Date/Time Received:	
CLIENT:	Arcadis
CARRIER/DRIVER:	HOEX
Number of Coolers Book	nived:

Custody Seal Present: Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2473	YIN	YIN	2.7	676	+0.1	2.8
	Y / N	Y/N				
	Y/N	Y/N				
	YIN	YIN				,
	YIN	Y/N		THE	12/11	5/19
	Y / N	Y/N		(/	,	

CF = correction factor

COMMENTS:		
Did samples meet the laboratory's standard conditions of s	sample acceptability upon receipt?	DYES NO
pH paper Lot #	VOA headspace acceptable (5-6mm): ☐YES ☐NO	1
TX1005 samples frozen upon receipt:	DATE & TIME PUT IN FREEZER:	
Base samples are>pH 12: □YES □NO	Acid preserved are <ph 2:="" td="" ☐no<="" ☐yes=""><td></td></ph>	
LABORATORY PRESERVATION OF SAMPLES F	REQUIRED: NO DYES	

HS-SA-WI-013

Rev. 4A: 08/26/2019

AP 12/10/19

Client: ARCADIS U.S., Inc.

Job Number: 600-197259-1

Login Number: 197259

List Source: Eurofins TestAmerica, Houston

List Number: 1 Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	2.8
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.



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-197940-1

Client Project/Site: Chevron - Jal Land Farm Soils 2020

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Skudchadker

Authorized for release by: 1/8/2020 5:41:18 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

.....LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method Description Method Protocol Laboratory 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) SW846 TAL HOU 7471A 2540B Percent Moisture SM20 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils SW846 TAL HOU 7471A Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation SW846 TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-197940-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-197940-1	Cell22-Square48-S-2-3-191217	Solid	12/17/19 07:46	12/19/19 12:40
600-197940-2	Cell22-Square157-S-2-3-191217	Solid	12/17/19 08:31	12/19/19 12:40
600-197940-3	Cell22-Square190-S-2-3-191217	Solid	12/17/19 08:48	12/19/19 12:40
600-197940-4	Cell23-Square208-S-2-3-191217	Solid	12/17/19 09:37	12/19/19 12:40
600-197940-5	Cell23-Square132-S-2-3-191217	Solid	12/17/19 10:01	12/19/19 12:40
600-197940-6	Cell23-Square111-S-2-3-191217	Solid	12/17/19 09:22	12/19/19 12:40
600-197940-7	Cell23-Square87-S-2-3-191217	Solid	12/17/19 09:05	12/19/19 12:40
600-197940-8	Cell24-Square168-S-2-3-191217	Solid	12/17/19 10:20	12/19/19 12:40
600-197940-9	Cell24-Square24-S-2-3-191217	Solid	12/17/19 10:37	12/19/19 12:40
600-197940-10	Cell24-Square44-S-2-3-191217	Solid	12/17/19 10:54	12/19/19 12:40
600-197940-11	Cell24-Square178-S-2-3-191217	Solid	12/17/19 11:14	12/19/19 12:40

Job ID: 600-197940-1

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Client: ARCADIS U.S., Inc.

Client Sample ID: Cell22-Square48-S-2-3-191217

Date Collected: 12/17/19 07:46

Lab Sample ID: 600-197940-1 Matrix: Solid Percent Solids: 93.6

Date Received: 12/19/19 12:40

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.399	0.119	mg/Kg	₩	01/06/20 20:01	01/08/20 11:01	1
Arsenic	2.77		0.998	0.218	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Barium	51.9		0.998	0.0299	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Beryllium	0.424		0.250	0.0145	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Cadmium	0.175	J	0.250	0.0256	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Chromium	7.01		0.499	0.0505	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Copper	4.88		0.499	0.174	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Iron	6950		20.0	2.53	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Manganese	115		1.50	0.0380	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Lead	5.77		0.499	0.105	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Antimony	0.314	J	2.50	0.232	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Selenium	0.259	U	2.00	0.259	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Thallium	0.699	J	1.50	0.277	mg/Kg	₽	01/06/20 20:01	01/08/20 11:01	1
Zinc	19.3		1.50	0.108	mg/Kg	☼	01/06/20 20:01	01/08/20 11:01	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Mercury	0.00690	J	0.0160	0.00337	mg/Kg	#	01/06/20 12:23	01/07/20 11:48	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.4		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	93.6		1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell22-Square157-S-2-3-191217

Lab Sample ID: 600-197940-2 Date Collected: 12/17/19 08:31 Matrix: Solid Date Received: 12/19/19 12:40 Percent Solids: 95.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.398	0.118	mg/Kg	₩	01/06/20 20:01	01/08/20 11:07	1
Arsenic	2.34		0.996	0.217	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Barium	66.2		0.996	0.0299	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Beryllium	0.294		0.249	0.0144	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Cadmium	0.129	J	0.249	0.0255	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Chromium	5.92		0.498	0.0504	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Copper	3.63		0.498	0.173	mg/Kg	φ.	01/06/20 20:01	01/08/20 11:07	1
Iron	5100		19.9	2.52	mg/Kg	≎	01/06/20 20:01	01/08/20 11:07	1
Manganese	71.4		1.49	0.0379	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Lead	4.35		0.498	0.105	mg/Kg	φ.	01/06/20 20:01	01/08/20 11:07	1
Antimony	0.403	J	2.49	0.231	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Selenium	0.258	U	1.99	0.258	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Thallium	1.05	J	1.49	0.276	mg/Kg	₽	01/06/20 20:01	01/08/20 11:07	1
Zinc	13.3		1.49	0.108	mg/Kg	₩	01/06/20 20:01	01/08/20 11:07	1

Method: 7471A - Mercury in Solid o	r Semisolid \	Waste (Ma	nual Cold Vapo	r Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00404	J	0.0164	0.00345	mg/Kg	<u></u>	01/06/20 12:23	01/07/20 11:50	1

Eurofins TestAmerica, Houston

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell22-Square157-S-2-3-191217

Lab Sample ID: 600-197940-2 Date Collected: 12/17/19 08:31 Matrix: Solid

Date Received: 12/19/19 12:40 Percent Solids: 95.7

General Chemistry								
Analyte	Result Qualifie	r MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.3	1.0	1.0	%			12/24/19 09:20	1
Percent Solids	95.7	1.0	1.0	%			12/24/19 09:20	1

Lab Sample ID: 600-197940-3 Client Sample ID: Cell22-Square190-S-2-3-191217

Date Collected: 12/17/19 08:48 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 96.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.399	0.119	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Arsenic	1.96		0.997	0.217	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Barium	42.1		0.997	0.0299	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Beryllium	0.199	J	0.249	0.0145	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Cadmium	0.105	J	0.249	0.0255	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Chromium	4.37		0.498	0.0504	mg/Kg	₩	01/06/20 20:01	01/08/20 11:09	1
Copper	2.85		0.498	0.173	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Iron	4030		19.9	2.52	mg/Kg	₩	01/06/20 20:01	01/08/20 11:09	1
Manganese	55.9		1.50	0.0380	mg/Kg	₩	01/06/20 20:01	01/08/20 11:09	1
Lead	3.49		0.498	0.105	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Antimony	0.231	U	2.49	0.231	mg/Kg	₩	01/06/20 20:01	01/08/20 11:09	1
Selenium	0.258	U	1.99	0.258	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1
Thallium	0.276	U	1.50	0.276	mg/Kg	₩	01/06/20 20:01	01/08/20 11:09	1
Zinc	10.7		1.50	0.108	mg/Kg	₽	01/06/20 20:01	01/08/20 11:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00332	U	0.0158	0.00332	mg/Kg	*	01/06/20 12:23	01/07/20 11:52	1

General Chemistry Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.5		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	96.5		1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell23-Square208-S-2-3-191217 Lab Sample ID: 600-197940-4

Date Collected: 12/17/19 09:37 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 95.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.122	U	0.411	0.122	mg/Kg	*	01/06/20 20:01	01/08/20 11:11	1
Arsenic	2.22		1.03	0.224	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Barium	41.8		1.03	0.0308	mg/Kg	₩	01/06/20 20:01	01/08/20 11:11	1
Beryllium	0.247	J	0.257	0.0149	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Cadmium	0.103	J	0.257	0.0263	mg/Kg	₩	01/06/20 20:01	01/08/20 11:11	1
Chromium	5.15		0.514	0.0520	mg/Kg	₩	01/06/20 20:01	01/08/20 11:11	1
Copper	3.15		0.514	0.179	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Iron	4650		20.5	2.60	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Manganese	62.8		1.54	0.0391	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Lead	3.93		0.514	0.108	mg/Kg	*	01/06/20 20:01	01/08/20 11:11	1
Antimony	0.238	U	2.57	0.238	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1
Selenium	0.266	U	2.05	0.266	mg/Kg	☼	01/06/20 20:01	01/08/20 11:11	1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell23-Square208-S-2-3-191217

Date Collected: 12/17/19 09:37 Date Received: 12/19/19 12:40

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197940-4

Matrix: Solid Percent Solids: 95.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Thallium	0.285	U	1.54	0.285	mg/Kg		01/06/20 20:01	01/08/20 11:11	1
	Zinc	11.0		1.54	0.111	mg/Kg	₽	01/06/20 20:01	01/08/20 11:11	1

Method: 7471A - Mercury in Solid (Analyte		Waste (Man Qualifier	•		i que) . Unit D	Prepared	Analyzed	Dil Fac	
Mercury	0.00369	U	0.0175	0.00369	mg/Kg	<u> </u>	01/06/20 12:23	01/07/20 11:54	1
General Chemistry									

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.6		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	95.4		1.0	1.0	%			12/24/19 09:20	1

Lab Sample ID: 600-197940-5 Client Sample ID: Cell23-Square132-S-2-3-191217

Date Collected: 12/17/19 10:01 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 96.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.116	U	0.389	0.116	mg/Kg	₩	01/06/20 20:01	01/08/20 11:13	1
Arsenic	2.19		0.974	0.212	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Barium	88.8		0.974	0.0292	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Beryllium	0.239	J	0.243	0.0141	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Cadmium	0.107	J	0.243	0.0249	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Chromium	4.70		0.487	0.0493	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Copper	2.50		0.487	0.169	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Iron	4260		19.5	2.46	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Manganese	53.0		1.46	0.0371	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Lead	4.23		0.487	0.102	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Antimony	0.226	U	2.43	0.226	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Selenium	0.252	U	1.95	0.252	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1
Thallium	0.270	U	1.46	0.270	mg/Kg	₩	01/06/20 20:01	01/08/20 11:13	1
Zinc	11.9		1.46	0.105	mg/Kg	₽	01/06/20 20:01	01/08/20 11:13	1

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vapo	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00503	J	0.0159	0.00336	mg/Kg	₩	01/06/20 12:23	01/07/20 11:56	1
General Chemistry									

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.1	1.0	1.0 %			12/24/19 09:20	1
Percent Solids	96.9	1.0	1.0 %			12/24/19 09:20	1

Client Sample ID: Cell23-Square111-S-2-3-191217 Lab Sample ID: 600-197940-6

Date Collected: 12/17/19 09:22 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 77.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.151	U	0.509	0.151	mg/Kg	\$	01/06/20 20:01	01/08/20 11:15	1
Arsenic	2.53		1.27	0.277	mg/Kg	₩	01/06/20 20:01	01/08/20 11:15	1
Barium	115		1.27	0.0382	mg/Kg	₩	01/06/20 20:01	01/08/20 11:15	1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell23-Square111-S-2-3-191217

Date Collected: 12/17/19 09:22 Date Received: 12/19/19 12:40

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197940-6

Matrix: Solid

Percent Solids: 77.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.254	J	0.318	0.0184	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Cadmium	0.146	J	0.318	0.0326	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Chromium	5.86		0.636	0.0644	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Copper	2.81		0.636	0.221	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Iron	5380		25.4	3.22	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Manganese	59.2		1.91	0.0485	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Lead	4.15		0.636	0.134	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Antimony	0.295	U	3.18	0.295	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Selenium	0.329	U	2.54	0.329	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Thallium	0.352	U	1.91	0.352	mg/Kg	₽	01/06/20 20:01	01/08/20 11:15	1
Zinc	13.4		1.91	0.137	mg/Kg	₩	01/06/20 20:01	01/08/20 11:15	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac ₩ Mercury 0.00457 U 0.0217 0.00457 mg/Kg 01/06/20 12:23 01/07/20 12:01

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.9		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	77.1		1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell23-Square87-S-2-3-191217

Date Collected: 12/17/19 09:05 Date Received: 12/19/19 12:40

Lab Sample ID: 600-197940-7

Matrix: Solid Percent Solids: 83.7

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.135	U	0.455	0.135	mg/Kg	\$	01/06/20 20:01	01/08/20 11:23	1
Arsenic	4.16		1.14	0.248	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Barium	91.6		1.14	0.0341	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Beryllium	0.358		0.284	0.0165	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Cadmium	0.159	J	0.284	0.0291	mg/Kg	₩	01/06/20 20:01	01/08/20 11:23	1
Chromium	7.18		0.569	0.0576	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Copper	4.05		0.569	0.198	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Iron	7420		22.8	2.88	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Manganese	60.5		1.71	0.0433	mg/Kg	₩	01/06/20 20:01	01/08/20 11:23	1
Lead	5.22		0.569	0.119	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Antimony	0.404	J	2.84	0.264	mg/Kg	₩	01/06/20 20:01	01/08/20 11:23	1
Selenium	0.295	U	2.28	0.295	mg/Kg	₩	01/06/20 20:01	01/08/20 11:23	1
Thallium	0.315	U	1.71	0.315	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1
Zinc	32.6		1.71	0.123	mg/Kg	₽	01/06/20 20:01	01/08/20 11:23	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00428	U	0.0203	0.00428	mg/Kg	₩	01/06/20 12:23	01/07/20 12:04	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	83.7		1.0	1.0	%			12/24/19 09:20	1

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Client Sample ID: Cell24-Square168-S-2-3-191217

Date Collected: 12/17/19 10:20 Date Received: 12/19/19 12:40

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197940-8

Matrix: Solid

Percent Solids: 89.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.132	U	0.444	0.132	mg/Kg	₩	01/06/20 20:01	01/08/20 11:25	
Arsenic	2.21		1.11	0.242	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Barium	148		1.11	0.0333	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Beryllium	0.233	J	0.277	0.0161	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Cadmium	0.0998	J	0.277	0.0284	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Chromium	4.15		0.555	0.0561	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Copper	1.75		0.555	0.193	mg/Kg	\$	01/06/20 20:01	01/08/20 11:25	
Iron	3640		22.2	2.81	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Manganese	30.4		1.66	0.0423	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Lead	3.02		0.555	0.116	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Antimony	0.257	U	2.77	0.257	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Selenium	0.287	U	2.22	0.287	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Thallium	0.307	U	1.66	0.307	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	
Zinc	11.3		1.66	0.120	mg/Kg	₽	01/06/20 20:01	01/08/20 11:25	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00365	U	0.0173	0.00365	mg/Kg		01/06/20 12:23	01/07/20 12:05	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.7		1.0	1.0	%			12/24/19 09:20	1
Percent Solids	89.3		1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell24-Square24-S-2-3-191217

Date Collected: 12/17/19 10:37 Date Received: 12/19/19 12:40 Lab Sample ID: 600-197940-9

Matrix: Solid Percent Solids: 80.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.141	U	0.474	0.141	mg/Kg	₩	01/06/20 20:01	01/08/20 11:27	1
Arsenic	2.71		1.19	0.258	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Barium	159		1.19	0.0356	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Beryllium	0.302		0.296	0.0172	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Cadmium	0.124	J	0.296	0.0304	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Chromium	5.05		0.593	0.0600	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Copper	2.47		0.593	0.206	mg/Kg	φ.	01/06/20 20:01	01/08/20 11:27	1
Iron	4760		23.7	3.00	mg/Kg	≎	01/06/20 20:01	01/08/20 11:27	1
Manganese	45.3		1.78	0.0452	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Lead	3.89		0.593	0.124	mg/Kg	φ.	01/06/20 20:01	01/08/20 11:27	1
Antimony	0.480	J	2.96	0.275	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Selenium	0.307	U	2.37	0.307	mg/Kg	₽	01/06/20 20:01	01/08/20 11:27	1
Thallium	0.328	U	1.78	0.328	mg/Kg	\$	01/06/20 20:01	01/08/20 11:27	1
Zinc	12.0		1.78	0.128	mg/Kg	₩	01/06/20 20:01	01/08/20 11:27	1

	Method: 7471A - Mercury in Solid of	or Semisolid \	Waste (Ma	nual Cold Vapo	or Technic	que)				
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Mercury	0.00406	J	0.0192	0.00405	mg/Kg	#	01/06/20 12:23	01/07/20 12:12	1

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: Cell24-Square24-S-2-3-191217

Lab Sample ID: 600-197940-9 Date Collected: 12/17/19 10:37 Matrix: Solid Date Received: 12/19/19 12:40 Percent Solids: 80.3

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.7	1.0	1.0	%			12/24/19 09:20	1
Percent Solids	80.3	1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell24-Square44-S-2-3-191217 Lab Sample ID: 600-197940-10

Date Collected: 12/17/19 10:54 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 91.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.422	0.126	mg/Kg	\$	01/06/20 20:01	01/08/20 11:29	1
Arsenic	2.97		1.06	0.230	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Barium	147		1.06	0.0317	mg/Kg	₩	01/06/20 20:01	01/08/20 11:29	1
Beryllium	0.327		0.264	0.0153	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Cadmium	0.106	J	0.264	0.0270	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Chromium	5.33		0.528	0.0534	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Copper	2.70		0.528	0.184	mg/Kg	\$	01/06/20 20:01	01/08/20 11:29	1
Iron	4960		21.1	2.67	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Manganese	54.2		1.58	0.0402	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Lead	4.04		0.528	0.111	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Antimony	0.412	J	2.64	0.245	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Selenium	0.273	U	2.11	0.273	mg/Kg	₩	01/06/20 20:01	01/08/20 11:29	1
Thallium	0.292	U	1.58	0.292	mg/Kg	₽	01/06/20 20:01	01/08/20 11:29	1
Zinc	12.2		1.58	0.114	mg/Kg	☼	01/06/20 20:01	01/08/20 11:29	1

Method: 7471A - Mercury in Solid o	r Semisolid Waste	(Manual Cold Var	oor Technique)				
Analyte	Result Qualifie	er MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0120 J	0.0172	0.00363 mg/K	g $\overline{\Xi}$	01/06/20 12:23	01/07/20 12:13	1

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.9	1.0	1.0	%			12/24/19 09:20	1
Percent Solids	91.1	1.0	1.0	%			12/24/19 09:20	1

Client Sample ID: Cell24-Square178-S-2-3-191217 Lab Sample ID: 600-197940-11

Date Collected: 12/17/19 11:14 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 78.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.140	U	0.472	0.140	mg/Kg	\$	01/06/20 20:01	01/08/20 11:31	1
Arsenic	2.24		1.18	0.257	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Barium	64.6		1.18	0.0354	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Beryllium	0.236	J	0.295	0.0171	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Cadmium	0.124	J	0.295	0.0302	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Chromium	4.99		0.590	0.0597	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Copper	2.99		0.590	0.205	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Iron	4470		23.6	2.99	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Manganese	56.4		1.77	0.0450	mg/Kg	₩	01/06/20 20:01	01/08/20 11:31	1
Lead	3.71		0.590	0.124	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Antimony	0.295	J	2.95	0.274	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1
Selenium	0.306	U	2.36	0.306	mg/Kg	₽	01/06/20 20:01	01/08/20 11:31	1

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1/8/2020

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Date Received: 12/19/19 12:40

Percent Solids

Client Sample ID: Cell24-Square178-S-2-3-191217

Date Collected: 12/17/19 11:14

Lab Sample ID: 600-197940-11

12/24/19 09:20

Matrix: Solid

Percent Solids: 78.4

Method: 6010B - Inductively Coupl	ed Plasma -	Atomic Em	ission Spectron	netry (Co	ontinued)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.327	U	1.77	0.327	mg/Kg		01/06/20 20:01	01/08/20 11:31	1
Zinc	11.0		1.77	0.127	mg/Kg	₩.	01/06/20 20:01	01/08/20 11:31	1

Method: 7471A - Mercury in Solid	or Samisolid	Wasto (Ma	nual Cold Van	or Technic	nuo)				
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00442	J	0.0191	0.00403	mg/Kg	₩	01/06/20 12:23	01/07/20 12:15	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.6		1.0	1.0	%			12/24/19 09:20	1

1.0

78.4

1.0 %

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Definitions/Glossary

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Qualifiers

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.
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.

Glossary

NC

ND

PQL

QC

RER RL

RPD

TEF

TEQ

Not Calculated

Quality Control

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

The second state of the size of the second state of the second sta
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
Percent Recovery
Contains Free Liquid
Contains No Free Liquid
Duplicate Error Ratio (normalized absolute difference)
Dilution Factor
Detection Limit (DoD/DOE)
Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
Decision Level Concentration (Radiochemistry)
Estimated Detection Limit (Dioxin)
Limit of Detection (DoD/DOE)
Limit of Quantitation (DoD/DOE)
Minimum Detectable Activity (Radiochemistry)
Minimum Detectable Concentration (Radiochemistry)
Method Detection Limit
Minimum Level (Dioxin)

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284609/1-A

Matrix: Solid

Analysis Batch: 284734

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

Prep Batch: 284609

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Copper	0.174	U	0.500	0.174	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Iron	2.53	U	20.0	2.53	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Antimony	0.232	U	2.50	0.232	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Thallium	0.277	U	1.50	0.277	mg/Kg		01/06/20 20:01	01/08/20 10:58	1
Zinc	0.108	U	1.50	0.108	mg/Kg		01/06/20 20:01	01/08/20 10:58	1

Lab Sample ID: LCSSRM 600-284609/2-A

Matrix: Solid

Analysis Batch: 284734

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

Prep Batch: 284609

Analysis Batch: 284734	Spike	LCSSRM	LCSSRM				Prep Batch: 284609 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	25.8	22.87		mg/Kg		88.6	67.1 - 106.
							6
Arsenic	69.4	62.29		mg/Kg		89.8	66.6 - 106.
Post in	000	047.0				00.7	6
Barium	393	317.2		mg/Kg		80.7	64.6 - 106.
Beryllium	293	255.2		mg/Kg		87 1	6 72.4 - 106.
Derymani	293	200.2		mg/rtg		07.1	72. 7 - 100.
Cadmium	268	236.6		mg/Kg		88.3	71.3 - 106.
				0 0			7
Chromium	63.6	51.50		mg/Kg		81.0	71.9 - 106.
							6
Copper	175	148.4		mg/Kg		84.8	72.0 - 106.
							9
Iron	17700	13220		mg/Kg		74.7	
Managana	040	404.0				70.7	8
Manganese	616	484.9		mg/Kg		78.7	64.1 - 106. 7
Lead	164	152.4		mg/Kg		92.9	71.3 - 106.
2000		102.1		mgritg		02.0	7 1.0 - 100.
Antimony	120	32.50		mg/Kg		27.1	•
							7
Selenium	155	133.8		mg/Kg		86.3	65.2 - 106.
							5
Thallium	81.0	72.07		mg/Kg		89.0	63.2 - 106.
							7
Zinc	482	452.7		mg/Kg		93.9	69.7 - 106.
							6

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Client: ARCADIS U.S., Inc. Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197940-1 MS Client Sample ID: Cell22-Square48-S-2-3-191217 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 284734 **Prep Batch: 284609**

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.119	U	12.5	11.56		mg/Kg	<u></u>	93	75 - 125	
Arsenic	2.77		49.9	46.87		mg/Kg	₩	88	75 - 125	
Barium	51.9		49.9	102.0		mg/Kg	₽	100	75 - 125	
Beryllium	0.424		49.9	45.18		mg/Kg	\$	90	75 ₋ 125	
Cadmium	0.175	J	49.9	45.10		mg/Kg	₩	90	75 - 125	
Chromium	7.01		49.9	52.26		mg/Kg	₽	91	75 - 125	
Copper	4.88		49.9	48.52		mg/Kg	\$	87	75 ₋ 125	
Iron	6950		499	9119	4	mg/Kg	₩	435	75 - 125	
Manganese	115		49.9	163.4		mg/Kg	₩	96	75 - 125	
Lead	5.77		49.9	52.31		mg/Kg	₽	93	75 - 125	
Antimony	0.314	J	74.9	36.58	N1	mg/Kg	₩	48	75 - 125	
Selenium	0.259	U	49.9	43.79		mg/Kg	₩	88	75 - 125	
Thallium	0.699	J	49.9	45.72		mg/Kg	\$	90	75 - 125	
Zinc	19.3		25.0	48.51		mg/Kg	₩	117	75 _ 125	

Lab Sample ID: 600-197940-11 MS Client Sample ID: Cell24-Square178-S-2-3-191217

Matrix: Solid

Prep Type: Total/NA **Prep Batch: 284609** Analysis Batch: 284734

inalycic Batom 201101									i iop Batoin Boil	
-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.140	U	15.3	15.42		mg/Kg	₽	101	75 - 125	_
Arsenic	2.24		61.3	62.33		mg/Kg	₩	98	75 - 125	
Barium	64.6		61.3	118.7		mg/Kg	₩	88	75 - 125	
Beryllium	0.236	J	61.3	60.11		mg/Kg	\$	98	75 - 125	
Cadmium	0.124	J	61.3	60.66		mg/Kg	₩	99	75 - 125	
Chromium	4.99		61.3	61.66		mg/Kg	₽	92	75 ₋ 125	
Copper	2.99		61.3	60.98		mg/Kg	\$	95	75 - 125	
Iron	4470		613	5509	4	mg/Kg	₩	169	75 - 125	
Manganese	56.4		61.3	115.4		mg/Kg	₽	96	75 - 125	
Lead	3.71		61.3	63.31		mg/Kg	φ.	97	75 _ 125	
Antimony	0.295	J	91.9	64.54	N1	mg/Kg	₽	70	75 - 125	
Selenium	0.306	U	61.3	59.03		mg/Kg	₽	96	75 ₋ 125	
Thallium	0.327	U	61.3	58.55		mg/Kg	₩.	96	75 - 125	
Zinc	11.0		30.6	43.42		ma/Ka	☼	106	75 ₋ 125	

Lab Sample ID: 600-197940-1 DU Client Sample ID: Cell22-Square48-S-2-3-191217

Matrix: Solid

Analysis Batch: 284734 **Prep Batch: 284609** Sample Sample וום וום

	Sample	Sample	DU	טט				KPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.119	U	0.122	U	mg/Kg	* *	NC	20
Arsenic	2.77		2.752		mg/Kg	☼	0.6	20
Barium	51.9		52.02		mg/Kg	₽	0.2	20
Beryllium	0.424		0.3954		mg/Kg	*	7	20
Cadmium	0.175	J	0.1643	J	mg/Kg	☼	6	20
Chromium	7.01		6.871		mg/Kg	₽	2	20
Copper	4.88		4.642		mg/Kg	*	5	20
Iron	6950		6784		mg/Kg	☼	2	20
Manganese	115		116.0		mg/Kg	₽	0.5	20
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Prep Type: Total/NA

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Client: ARCADIS U.S., Inc. Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197940-1 DU

Matrix: Solid

Analysis Batch: 284734

Client Sample ID: Cell22-Square48-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284609

	Sample S	Sample	DU	DU				RPD
Analyte	Result (Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Lead	5.77		5.792		mg/Kg	*	 0.4	20
Antimony	0.314	J	0.2824	J	mg/Kg	₩	11	20
Selenium	0.259 ไ	U	0.266	U	mg/Kg	₩	NC	20
Thallium	0.699	J	0.284	U	mg/Kg	₩	NC	20
Zinc	19.3		16.99		mg/Kg	#	13	20

Lab Sample ID: 600-197940-11 DU Client Sample ID: Cell24-Square178-S-2-3-191217

Matrix: Solid
Analysis Batch: 284734
Prep Batch: 284609

Analysis Batch: 284/34							Prep Batch: 2	84609
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.140	U	0.143	U	mg/Kg	₽	NC	20
Arsenic	2.24		2.045		mg/Kg	☼	9	20
Barium	64.6		61.70		mg/Kg	☼	5	20
Beryllium	0.236	J	0.2165	J	mg/Kg	₽	9	20
Cadmium	0.124	J	0.1022	J	mg/Kg	☼	19	20
Chromium	4.99		4.672		mg/Kg	₽	7	20
Copper	2.99		2.658		mg/Kg	₽	12	20
Iron	4470		4147		mg/Kg	☼	8	20
Manganese	56.4		51.63		mg/Kg	₽	9	20
Lead	3.71		3.554		mg/Kg	₽	4	20
Antimony	0.295	J	0.279	U	mg/Kg	₽	NC	20
Selenium	0.306	U	0.311	U	mg/Kg	₽	NC	20
Thallium	0.327	U	0.333	U	mg/Kg	\$	NC	20
Zinc	11.0		10.14		mg/Kg	₽	8	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284571/7-B

Matrix: Solid

Analysis Batch: 284664

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 284571

MB MB

Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac

Mercury 0.00330 U 0.0157 0.00330 mg/Kg 01/06/20 12:23 01/07/20 11:24 1

Lab Sample ID: LCS 600-284571/8-B Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 284664 Prep Batch: 284571

 Analyte
 Added Mercury
 Result Qualifier
 Unit Unit Unit Unit Mg/Kg
 D 96
 70 - 130

Lab Sample ID: 600-197940-5 MS Client Sample ID: Cell23-Square132-S-2-3-191217

Matrix: Solid

Analysis Batch: 284664

Prep Type: Total/NA

Prep Batch: 284571

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Mercury 0.00503 J 0.235 0.2306 mg/Kg 96 75 - 125

Eurofins TestAmerica, Houston

1/8/2020

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-197940-5 DU Client Sample ID: Cell23-Square132-S-2-3-191217

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 284664 **Prep Batch: 284571**

DU DU RPD Sample Sample Result Qualifier Result Qualifier RPD Limit Analyte Unit D ₩ Mercury 0.00503 J 0.00336 U NC 20 mg/Kg

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197940-1 DU Client Sample ID: Cell22-Square48-S-2-3-191217

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 283939

DU DU RPD Sample Sample Result Qualifier Result Qualifier Unit RPD

Limit % Percent Moisture 6.4 6.3 2 20 Percent Solids 93.6 93.8 %

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

– Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Prep Batch: 284571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197940-1	Cell22-Square48-S-2-3-191217	Total/NA	Solid	7471A	_
600-197940-2	Cell22-Square157-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-3	Cell22-Square190-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-4	Cell23-Square208-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-5	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-10	Cell24-Square44-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-11	Cell24-Square178-S-2-3-191217	Total/NA	Solid	7471A	
MB 600-284571/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-284571/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-197940-5 MS	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	
600-197940-5 DU	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	

Prep Batch: 284609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197940-1	Cell22-Square48-S-2-3-191217	Total/NA	Solid	3050B	-
600-197940-2	Cell22-Square157-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-3	Cell22-Square190-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-4	Cell23-Square208-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-5	Cell23-Square132-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-10	Cell24-Square44-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-11	Cell24-Square178-S-2-3-191217	Total/NA	Solid	3050B	
MB 600-284609/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-284609/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-197940-1 MS	Cell22-Square48-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-11 MS	Cell24-Square178-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-1 DU	Cell22-Square48-S-2-3-191217	Total/NA	Solid	3050B	
600-197940-11 DU	Cell24-Square178-S-2-3-191217	Total/NA	Solid	3050B	

Analysis Batch: 284664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
600-197940-1	Cell22-Square48-S-2-3-191217	Total/NA	Solid	7471A	284571	
600-197940-2	Cell22-Square157-S-2-3-191217	Total/NA	Solid	7471A	28457	
00-197940-3 Cell22-Square190-S-2-3-191217		Total/NA	Solid	7471A	28457	
600-197940-4	Cell23-Square208-S-2-3-191217	Total/NA	Solid	7471A	284571	
600-197940-5	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	28457	
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	7471A	28457	
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	7471A	28457	
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	7471A	28457	
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	7471A	28457	
600-197940-10	Cell24-Square44-S-2-3-191217	Total/NA	Solid	7471A	284571	
600-197940-11	Cell24-Square178-S-2-3-191217	Total/NA	Solid	7471A	28457	
MB 600-284571/7-B	Method Blank	Total/NA		7471A	28457	
LCS 600-284571/8-B	Lab Control Sample	Total/NA	Solid	7471A	284571	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals (Continued)

Analysis Batch: 284664 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197940-5 MS	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	284571
600-197940-5 DU	Cell23-Square132-S-2-3-191217	Total/NA	Solid	7471A	284571

Analysis Batch: 284734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch		
600-197940-1	Cell22-Square48-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-2	Cell22-Square157-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-3	Cell22-Square190-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-4	Cell23-Square208-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-5	Cell23-Square132-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-10	Cell24-Square44-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-11	Cell24-Square178-S-2-3-191217	Total/NA	Solid	6010B	284609		
MB 600-284609/1-A	Method Blank	Total/NA	Solid	6010B	284609		
LCSSRM 600-284609/2-A	Lab Control Sample	Total/NA	Solid	6010B	284609		
600-197940-1 MS	Cell22-Square48-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-11 MS	Cell24-Square178-S-2-3-191217	Total/NA	Solid	6010B	284609		
600-197940-1 DU	0-1 DU Cell22-Square48-S-2-3-191217		Cell22-Square48-S-2-3-191217 Total/NA	Total/NA	Solid	6010B	284609
600-197940-11 DU	Cell24-Square178-S-2-3-191217	Total/NA	Solid	6010B	284609		

General Chemistry

Analysis Batch: 283939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
600-197940-1	Cell22-Square48-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-2	Cell22-Square157-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-3	Cell22-Square190-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-4	Cell23-Square208-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-5	Cell23-Square132-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-10	Cell24-Square44-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-11	Cell24-Square178-S-2-3-191217	Total/NA	Solid	2540B	
600-197940-1 DU	Cell22-Square48-S-2-3-191217	Total/NA	Solid	2540B	

Client Sample ID: Cell22-Square48-S-2-3-191217

Lab Sample ID: 600-197940-1 Date Collected: 12/17/19 07:46 Matrix: Solid

Date Received: 12/19/19 12:40

Client: ARCADIS U.S., Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell22-Square48-S-2-3-191217

Lab Sample ID: 600-197940-1 Date Collected: 12/17/19 07:46 **Matrix: Solid**

Date Received: 12/19/19 12:40 Percent Solids: 93.6

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:01	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 11:48	SOT	TAL HOU

Client Sample ID: Cell22-Square157-S-2-3-191217

Lab Sample ID: 600-197940-2 Date Collected: 12/17/19 08:31 **Matrix: Solid**

Date Received: 12/19/19 12:40

Ratch **Batch** Dilution Batch Prepared Prep Type Method Factor Number or Analyzed Analyst Туре Run 2540B TAL HOU Total/NA Analysis 283939 12/24/19 09:20 ANP

Client Sample ID: Cell22-Square157-S-2-3-191217

Lab Sample ID: 600-197940-2 Date Collected: 12/17/19 08:31 Matrix: Solid Date Received: 12/19/19 12:40 Percent Solids: 95.7

Batch Batch Dilution Batch Prepared Prep Type Method Run Factor Number or Analyzed Type Analyst Lab 3050B 284609 Total/NA Prep 01/06/20 20:01 CLD TAL HOU Total/NA 6010B 284734 01/08/20 11:07 TAL HOU Analysis KP1 Total/NA 7471A TAL HOU Prep 284571 01/06/20 12:23 SOT

Client Sample ID: Cell22-Square190-S-2-3-191217

7471A

Analysis

Date Collected: 12/17/19 08:48 Matrix: Solid

1

284664

01/07/20 11:50

SOT

Date Received: 12/19/19 12:40

Total/NA

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU	

Client Sample ID: Cell22-Square190-S-2-3-191217 Lab Sample ID: 600-197940-3

Date Collected: 12/17/19 08:48 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 96.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:09	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 11:52	SOT	TAL HOU

Eurofins TestAmerica, Houston

TAL HOU

Lab Sample ID: 600-197940-3

Client Sample ID: Cell23-Square208-S-2-3-191217

Date Collected: 12/17/19 09:37 Date Received: 12/19/19 12:40

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-197940-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell23-Square208-S-2-3-191217

Date Collected: 12/17/19 09:37

Date Received: 12/19/19 12:40

Lab Sample ID: 600-197940-4

Matrix: Solid Percent Solids: 95.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:11	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 11:54	SOT	TAL HOU

Client Sample ID: Cell23-Square132-S-2-3-191217

Date Collected: 12/17/19 10:01

Date Received: 12/19/19 12:40

Lab Sample ID: 600-197940-5

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell23-Square132-S-2-3-191217

Date Collected: 12/17/19 10:01

Date Received: 12/19/19 12:40

Lab Sample ID: 600-197940-5

Lab Sample ID: 600-197940-6

Matrix: Solid Percent Solids: 96.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:13	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 11:56	SOT	TAL HOU

Client Sample ID: Cell23-Square111-S-2-3-191217

Date Collected: 12/17/19 09:22

	Date Collected. 12/11/19 09.22						Matrix. Solid		
-	Date Received: 12/19/19 12:40								
ſ	_								
	Batch	Batch	Dilution	Batch	Prepared				

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell23-Square111-S-2-3-191217

Date Collected: 12/17/19 09:22

Date Received: 12/19/19 12:40

Lab Sample ID: 600-197940-6 **Matrix: Solid** Percent Solids: 77.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:15	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:01	SOT	TAL HOU

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Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: Cell23-Square87-S-2-3-191217

Lab Sample ID: 600-197940-7 Date Collected: 12/17/19 09:05

Matrix: Solid

Date Received: 12/19/19 12:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B			283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell23-Square87-S-2-3-191217

Lab Sample ID: 600-197940-7

Date Collected: 12/17/19 09:05 Date Received: 12/19/19 12:40

Matrix: Solid Percent Solids: 83.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:23	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:04	SOT	TAL HOU

Run

Dilution

Factor

Batch

Number

283939

Client Sample ID: Cell24-Square168-S-2-3-191217

Lab Sample ID: 600-197940-8

Date Collected: 12/17/19 10:20

Matrix: Solid

Date Received: 12/19/19 12:40

Prep Type

Total/NA

Ratch

Туре

Analysis

Prepared or Analyzed Analyst 12/24/19 09:20 ANP TAL HOU

Client Sample ID: Cell24-Square168-S-2-3-191217

Batch

Method

2540B

Lab Sample ID: 600-197940-8

Date Collected: 12/17/19 10:20 Date Received: 12/19/19 12:40

Matrix: Solid

Percent Solids: 89.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:25	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:05	SOT	TAL HOU

Client Sample ID: Cell24-Square24-S-2-3-191217

Lab Sample ID: 600-197940-9

Date Collected: 12/17/19 10:37 Date Received: 12/19/19 12:40 Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B	_	1	283939	12/24/19 09:20	ANP	TAL HOU

Client Sample ID: Cell24-Square24-S-2-3-191217

Lab Sample ID: 600-197940-9

Date Collected: 12/17/19 10:37 Date Received: 12/19/19 12:40

Matrix: Solid

Percent Solids: 80.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:27	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:12	SOT	TAL HOU

Lab Chronicle

Job ID: 600-197940-1 Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Date Received: 12/19/19 12:40

Client Sample ID: Cell24-Square44-S-2-3-191217

Lab Sample ID: 600-197940-10 Date Collected: 12/17/19 10:54

Matrix: Solid

Batch Dilution Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab TAL HOU Total/NA Analysis 2540B 283939 12/24/19 09:20 ANP

Client Sample ID: Cell24-Square44-S-2-3-191217 Lab Sample ID: 600-197940-10

Date Collected: 12/17/19 10:54 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 91.1

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:29	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:13	SOT	TAL HOU

Client Sample ID: Cell24-Square178-S-2-3-191217

Lab Sample ID: 600-197940-11 Date Collected: 12/17/19 11:14 **Matrix: Solid**

Date Received: 12/19/19 12:40

Batch **Batch** Dilution Batch Prepared Prep Type Method Factor Number or Analyzed Analyst Туре Run 2540B 12/24/19 09:20 ANP TAL HOU Total/NA Analysis 283939

Client Sample ID: Cell24-Square178-S-2-3-191217 Lab Sample ID: 600-197940-11

Date Collected: 12/17/19 11:14 **Matrix: Solid** Date Received: 12/19/19 12:40 Percent Solids: 78.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			284609	01/06/20 20:01	CLD	TAL HOU
Total/NA	Analysis	6010B		1	284734	01/08/20 11:31	KP1	TAL HOU
Total/NA	Prep	7471A			284571	01/06/20 12:23	SOT	TAL HOU
Total/NA	Analysis	7471A		1	284664	01/07/20 12:15	SOT	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704223-19-25	10-31-20	
The following analytes the agency does not of		ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for	
Analysis Method	Prep Method	Matrix	Analyte		
2540B		Solid	Percent Moisture		
20100		Cona	. 0.00		

PHOSPORTER (CLO) DEGREE OF THE CONTROL OF THE CONTR						
Client Information	J. Skinmann	8	Kudchadk	Latinita Kudichadkar, Sachin G	Tazzang Moter CO.	500-72940-20046 1
Cliem Contact Sarah Johnson	619 BSI 8192	19	Sachin kut	Chair Sachin kudchadkar@lestamencainc com	Page Page	
Company ARCADIS U.S., Inc.				Analysis Requested	# gor	**
Audress 1004 North Big Spring Suite 121	Due Date Requested.	1				ion Codes:
Gity Midland	TAT Requested (days):				« m (NaOH N
State Zip TX, 79701	Standard			T T T T T T T T T T T T T T T T T T T	الله ه د	Nitro Acid P
Phone 452-227-0266(Tel)	Polichase Order Requested	1 2			ŭ Ø z	Acid
Email sarah Johnson@arcadis.com	WO#				- 3	35
ls 2020	Figeti# 60011732	600-1979	600-197940 Chain of Custody	ustody	_	K - EDTA W pM 4 S L - EDA Z = thor (speofly)
, w	SSDW#	1			noo to	et.
Samula idontification	Sample Date Time	Sample N Type (C=comp.	Ratrix Keesin Seesind Period Fillered	Attist, 8010.	19dmuN leto	
Sample Identification	1	- 10	X	10	1	Special Instructions/Note:
Cell 22-5quare 48-5-2-191217	TAIBIT OTHE	৬	Solid	\ \ ?	-	
Cell22-Square157.5-2-3-191217	19121 D831	S	Solid	> 2	-	
(e1122-5quare 190-5-3-191217 191217	19/217 084B	S	Solid	`	-	
Cell 23-59 ware 208-5-2-191217	191217 0937	s	Solid	\ 2		
Cellas. Square 132 - 5-2-3-191217 191217	191217 1001	s	Solid	> 2	3	
Cell 23- Square 111-5-2-3-191217	191217 0922	٥	Solid	>	-	
Cell 23 - Sq Jane 87 - 5-2-191217	191217 0905	ۍ	Solid S	>		
Cell 24 - Square 168-5-2-191217	191217 1020	9	Solid	> 2	-	
Cell24 - Square 24-5-2-191217	191217 1037	5	Solid	> 2	-	
G1124-Square 44-5-2-3-191217		5	Solid x	>	-	
Cell 24 - Square 178-5-2-191217 191217	7191217 1114	S	Solid	> 2	-	
Possible Hazard Identification Non-Hazard Flammable Skin Imtant Poison B	son B Unknown	Radiological	S	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mor	ed if samples are retained long al By Lab Archive For	onger than 1 month) For Months
Deliverable Requested: I, II, III, IV, Other (specify)			S	Special Instructions/QC Requirements		
Empty Kit Relinquished by:	Date		Time		Method of Shipment: Fedex	
Reinaustrechy. Reinaustrechy.	191218 1000		Arcadis	Received by:	ime the	Company
Ag pay	Date/Time	3	Company	Bereined by	2/2/2	120 Company H
		5		1	DANGLITTIG	Campany
Custody Seals Intact: Custody Seal No.				Cooler Temperature(s) "C and Other Remarks		

🔅 eurofins

Environment Testing TestAmerica

*190EC 19 12:4

Eurofins TestAmerica Houston

Sample Receipt Checklist

JOB NUMBER: _	940		ate/Time Received: LIENT:	Arca	dis	
UNPACKED BY: _	ST	C/	ARRIER/DRIVER: _	FedE	EX	
Custody Seal Present	: ZYES D	NO NI	umber of Coolers Receiv		1	
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm	Therm CF	Corrected Temp (°C)
5540	X / N	XIN	2.1	676	+0.1	2.2
	Y / N	Y / N				
	Y / N Y / N	Y / N Y / N				12/19/
	YAN	Y/N				12/11/
	Y/N	Y / N				51
Samples received on LABORATORY PRES Base samples are>pH	SERVATION OF S	NO		□YES	□NO	
LABORATORY PRES Base samples are>pH TX1005 samples froze	SERVATION OF S	SAMPLES REQ	UIRED: ØNO bid preserved are <ph &="" 2:="" ate="" fe<="" in="" put="" th="" time=""><th>□YES</th><th></th><th>IO □NA</th></ph>	□YES		IO □NA
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot #	SERVATION OF S 12: YES n upon receipt:	SAMPLES REQ NO AC	oid preserved are <ph 2:<="" td=""><td>□YES REEZER: _</td><td></td><td>O DNA</td></ph>	□YES REEZER: _		O DNA
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot #	SERVATION OF S 12: YES n upon receipt:	SAMPLES REQ NO AC	oid preserved are <ph &="" 2:="" ate="" fe<="" in="" put="" td="" time=""><td>□YES REEZER: _</td><td></td><td>/</td></ph>	□YES REEZER: _		/
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laboration	SERVATION OF S 12: YES n upon receipt:	SAMPLES REQ NO AC	oid preserved are <ph &="" 2:="" ate="" fe<="" in="" put="" td="" time=""><td>□YES REEZER: _</td><td></td><td>/</td></ph>	□YES REEZER: _		/
LABORATORY PRES Base samples are>pH TX1005 samples froze pH paper Lot # Did samples meet the laborated	SERVATION OF S 12: YES n upon receipt:	SAMPLES REQ NO AC	oid preserved are <ph &="" 2:="" ate="" fe<="" in="" put="" td="" time=""><td>□YES REEZER: _</td><td></td><td>/</td></ph>	□YES REEZER: _		/

HS-SA-WI-013

Rev. 4A; 08/26/2019

Client: ARCADIS U.S., Inc.

Job Number: 600-197940-1

Login Number: 197940 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Steator. Taylor, Jacqueryn K		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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.



ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-199369-1

Client Project/Site: Chevron - Jal Land Farm Soils 2020

For:

🔅 eurofins

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson

Phidchadkar

Authorized for release by: 1/27/2020 3:00:32 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

LINKS

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Total Access

Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method **Method Description** Protocol Laboratory SW846 TAL HOU 8260B Volatile Organic Compounds (GC/MS) 8015B Gasoline Range Organics - (GC) SW846 TAL HOU 8015B Diesel Range Organics (DRO) (GC) SW846 TAL HOU 300.0 Anions, Ion Chromatography MCAWW TAL HOU 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) 7471A SW846 TAL HOU 2540B Percent Moisture SM20 TAL HOU SW846 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils Microwave Extraction SW846 TAL HOU 3546 5030B Purge and Trap SW846 TAL HOU 5030B Purge and Trap for Methanol Extractions SW846 TAL HOU 5035 Closed System Purge & Trap/Laboratory Preservation SW846 TAL HOU 7471A Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation SW846 TAL HOU Deionized Water Leaching Procedure (Routine) TAL HOU DI Leach ASTM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-199369-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Solid	01/14/20 09:16	01/15/20 10:36
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Solid	01/14/20 09:52	01/15/20 10:36
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Solid	01/14/20 10:19	01/15/20 10:36
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Solid	01/14/20 10:50	01/15/20 10:36
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Solid	01/14/20 11:28	01/15/20 10:36
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Solid	01/14/20 11:53	01/15/20 10:36
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Solid	01/14/20 12:26	01/15/20 10:36
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Solid	01/14/20 13:00	01/15/20 10:36
600-199369-9	TRIP BLANK	Water	01/14/20 00:00	01/15/20 10:36

Job ID: 600-199369-1

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Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Zinc

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Lab Sample ID: 600-199369-1 Date Collected: 01/14/20 09:16 Matrix: Solid

Date Received: 01/15/20 10:36 Percent Solids: 89.5

							1 Orochic Gon	140. 00
								Dil Fa
0.000556	UH	0.00441	0.000556	mg/Kg		01/22/20 09:50		
0.000900	UH	0.00441			₩	01/22/20 09:50	01/23/20 12:10	
0.00122	UH	0.00441	0.00122	mg/Kg	₩	01/22/20 09:50	01/23/20 12:10	
0.000997	UH	0.00441	0.000997	mg/Kg	₽	01/22/20 09:50	01/23/20 12:10	
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
118		61 - 130				01/22/20 09:50	01/23/20 12:10	
98		68 - 140				01/22/20 09:50	01/23/20 12:10	
86		50 ₋ 130				01/22/20 09:50	01/23/20 12:10	
93		57 - 140				01/22/20 09:50	01/23/20 12:10	
e Organics - (G	C)							
		MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
0.581	U	0.991	0.581	mg/Kg		01/22/20 13:46	01/22/20 14:45	
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
105		70 - 130				01/22/20 13:46	01/22/20 14:45	
rganics (DRO)	(GC)							
		MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
1.71	U	8.28	1.71	mg/Kg		01/22/20 14:16	01/24/20 05:31	
4.99	U	8.28	4.99	mg/Kg		01/22/20 14:16	01/24/20 05:31	
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
96		60 - 140				01/22/20 14:16	01/24/20 05:31	
omatography -	Soluble							
		MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
25.9	J b	44.7	5.97	mg/Kg	₽		01/23/20 17:10	
ınled Plasma -	Atomic Em	ission Spectr	ometry					
•		MQL (Adj)	-	Unit	D	Prepared	Analyzed	Dil F
0.129	U	0.434	0.129	mg/Kg	\	01/22/20 20:27	01/23/20 11:13	
6.15		1.09	0.237	mg/Kg	₩	01/22/20 20:27	01/23/20 11:13	
		1.09	0.0326		₩	01/22/20 20:27	01/23/20 11:13	
		0.271	0.0157				01/23/20 11:13	
				0 0	₩			
					₩			
					.			
					ŭ			
0.320	J	2.71	0.252	mg/Kg	\$ ₄ 2:	01/22/20 20:27	U1/23/20 11:13	
					- L	04/00/05 55 5	0.4.100.10=	
0.281 2.22	U	2.17 1.63		mg/Kg mg/Kg	₽	01/22/20 20:27 01/22/20 20:27	01/23/20 11:13 01/23/20 11:13	
	Result	0.000900 U H 0.00122 U H 0.000997 U H **Recovery Qualifier* 118 98 86 93 **Property Qualifier* 0.581 U **Recovery Qualifier* 105 **Result Qualifier* 107 **Recovery Qualifier* 1.71 4.99 U **Recovery Qualifier* 1.71 4.99 U **Recovery Qualifier* 1.71 4.99 U **Recovery Qualifier* 0.129 U **Ipled Plasma - Atomic Emerory Qualifier* 0.129 U 6.15 469 0.109 J 241000 b 0.0922 J 2.09 2.48 1730 523 7780	Result Qualifier MQL (Adj)	Result Qualifier MQL (Adj) SDL	Result Qualifier MQL (Adj) SDL Unit	Result Qualifier MQL (Adj) SDL Unit D	Result Qualifier MQL (Adj) SDL Unit D Prepared	Result Qualifier MQL M

1/27/2020

☼ 01/22/20 20:27 01/23/20 12:56

8.14

0.586 mg/Kg

36.2

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-199369-1 Date Collected: 01/14/20 09:16 Matrix: Solid

Date Received: 01/15/20 10:36 Percent Solids: 89.5

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00387	U	0.0184	0.00387	mg/Kg	\	01/22/20 10:40	01/22/20 15:01	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		1.0	1.0	%			01/23/20 09:41	1
			1.0	1.0				01/23/20 09:41	

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Lab Sample ID: 600-199369-2 Date Collected: 01/14/20 09:52 **Matrix: Solid**

Pate Received: 01/15/20 10:36								Percent Soli	ds: 90
Method: 8260B - Volatile Organic	Compounds	(GC/MS)							
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil F
Benzene	0.000631	UH	0.00501	0.000631	mg/Kg	₩	01/22/20 09:50	01/23/20 12:32	
Ethylbenzene	0.00102	UH	0.00501	0.00102	mg/Kg	₩	01/22/20 09:50	01/23/20 12:32	
Toluene	0.00138	UH	0.00501	0.00138	mg/Kg	₩	01/22/20 09:50	01/23/20 12:32	
Xylenes, Total	0.00113	UH	0.00501	0.00113	mg/Kg	₽	01/22/20 09:50	01/23/20 12:32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil
1,2-Dichloroethane-d4 (Surr)	103		61 - 130				01/22/20 09:50	01/23/20 12:32	
Dibromofluoromethane	89		68 - 140				01/22/20 09:50	01/23/20 12:32	
Toluene-d8 (Surr)	84		50 - 130				01/22/20 09:50	01/23/20 12:32	
4-Bromofluorobenzene	88		57 - 140				01/22/20 09:50	01/23/20 12:32	
Method: 8015B - Gasoline Range	Organice - (G	(C)							
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil
Gasoline Range Organics [C6 - C10]	0.590	U	1.01	0.590	mg/Kg		01/22/20 13:46	01/22/20 15:09	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil
a,a,a-Trifluorotoluene	117		70 - 130				01/22/20 13:46	01/22/20 15:09	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil
Diesel Range Organics [C10-C28]	5.67	J	8.28	1.71	mg/Kg		01/22/20 14:16	01/24/20 06:04	
C28-C36	7.27	J	8.28	4.99	mg/Kg		01/22/20 14:16	01/24/20 06:04	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil
o-Terphenyl	93		60 - 140				01/22/20 14:16	01/24/20 06:04	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil
Chloride	28.4	b	4.38	0.585	mg/Kg	-		01/22/20 23:17	
Method: 6010B - Inductively Cou	pled Plasma -	Atomic Em	ission Spectro	ometry					
Analyte	•	Qualifier	MQL (Adj)	•	Unit	D	Prepared	Analyzed	Dil
Silver	0.126	U	0.424	0.126	mg/Kg	<u> </u>	01/22/20 20:27	01/23/20 11:19	
Arsenic	3.89		1.06	0.231	mg/Kg	₩	01/22/20 20:27	01/23/20 11:19	

momounity coup.				,					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	\	01/22/20 20:27	01/23/20 11:19	1
Arsenic	3.89		1.06	0.231	mg/Kg	₩	01/22/20 20:27	01/23/20 11:19	1
Barium	312		1.06	0.0318	mg/Kg	₩	01/22/20 20:27	01/23/20 11:19	1
Beryllium	0.164	J	0.265	0.0154	mg/Kg		01/22/20 20:27	01/23/20 11:19	1
Calcium	247000	b	530	4.58	mg/Kg	₩	01/22/20 20:27	01/23/20 13:02	5
Cadmium	0.138	J	0.265	0.0271	mg/Kg	₩	01/22/20 20:27	01/23/20 11:19	1
Chromium	2.49		0.530	0.0536	mg/Kg	\$	01/22/20 20:27	01/23/20 11:19	1

Eurofins TestAmerica, Houston

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Lab Sample ID: 600-199369-2 Date Collected: 01/14/20 09:52 Matrix: Solid

Date Received: 01/15/20 10:36 Percent Solids: 90.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.75		0.530	0.184	mg/Kg	*	01/22/20 20:27	01/23/20 11:19	1
Iron	2240		21.2	2.68	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Potassium	577		106	11.6	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Magnesium	2650		106	2.03	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Manganese	25.5		1.59	0.0403	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Sodium	251	b	106	0.938	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Lead	1.14	J	2.65	0.556	mg/Kg	₽	01/22/20 20:27	01/23/20 13:02	5
Antimony	0.667	J	2.65	0.246	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Selenium	0.274	U	2.12	0.274	mg/Kg	\$	01/22/20 20:27	01/23/20 11:19	1
Thallium	1.14	J	1.59	0.293	mg/Kg	₽	01/22/20 20:27	01/23/20 11:19	1
Zinc	9.00		7.94	0.572	mg/Kg	\$	01/22/20 20:27	01/23/20 13:02	5
Method: 7471A - Mercury i	n Solid or Semisolid	Waste (Ma	nual Cold Vapo	or Technic	que)				
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00388	U	0.0184	0.00388	mg/Kg	#	01/22/20 10:40	01/22/20 15:07	1
General Chemistry									
	Posult	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Kesuit								
Analyte Percent Moisture	9.2		1.0	1.0	%			01/23/20 09:41	1

Client Sample ID: CELL17-SQUARE 175-S-3-4-200114 Lab Sample ID: 600-199369-3

Date Collected: 01/14/20 10:19 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 88.6

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000714	UH	0.00566	0.000714	mg/Kg		01/22/20 09:50	01/23/20 12:55	1
Ethylbenzene	0.00116	UH	0.00566	0.00116	mg/Kg	₽	01/22/20 09:50	01/23/20 12:55	1
Toluene	0.00156	UH	0.00566	0.00156	mg/Kg	₽	01/22/20 09:50	01/23/20 12:55	1
Xylenes, Total	0.00128	UH	0.00566	0.00128	mg/Kg	\$	01/22/20 09:50	01/23/20 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		61 - 130				01/22/20 09:50	01/23/20 12:55	1
Dibromofluoromethane	88		68 - 140				01/22/20 09:50	01/23/20 12:55	1
Toluene-d8 (Surr)	86		50 - 130				01/22/20 09:50	01/23/20 12:55	1
4-Bromofluorobenzene	92		57 - 140				01/22/20 09:50	01/23/20 12:55	1
Method: 8015B - Gasoline Range		C)							
•	e Organics - (G	•							
Analyte	e Organics - (G Result	Qualifier	MQL (Adj)		Unit mg/Kg	D	Prepared	Analyzed	
•	e Organics - (G	Qualifier	MQL (Adj) 0.998	SDL 0.585	Unit mg/Kg	<u>D</u>		Analyzed 01/22/20 15:33	Dil Fac
Analyte	e Organics - (G Result	Qualifier U				<u>D</u>	Prepared		1
Analyte Gasoline Range Organics [C6 - C10]	e Organics - (G Result 0.585	Qualifier U	0.998			<u>D</u>	Prepared 01/22/20 13:46	01/22/20 15:33	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate	e Organics - (G Result 0.585 %Recovery 104	Qualifier U Qualifier	0.998			<u>D</u>	Prepared 01/22/20 13:46 Prepared	01/22/20 15:33 Analyzed	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene	e Organics - (G Result 0.585 %Recovery 104 Organics (DRO)	Qualifier U Qualifier	0.998	0.585		<u>D</u>	Prepared 01/22/20 13:46 Prepared	01/22/20 15:33 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O	e Organics - (G Result 0.585 %Recovery 104 Organics (DRO) Result	Qualifier U Qualifier (GC)	0.998 Limits 70 - 130	0.585	mg/Kg		Prepared 01/22/20 13:46 Prepared 01/22/20 13:46	01/22/20 15:33 Analyzed 01/22/20 15:33	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O Analyte	e Organics - (G Result 0.585 %Recovery 104 Organics (DRO) Result	Qualifier Qualifier (GC) Qualifier U	0.998 Limits 70 - 130 MQL (Adj)	0.585 SDL	mg/Kg		Prepared 01/22/20 13:46 Prepared 01/22/20 13:46 Prepared	01/22/20 15:33 Analyzed 01/22/20 15:33 Analyzed	
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28]	e Organics - (G Result 0.585 %Recovery 104 Organics (DRO) Result 1.70	Qualifier Qualifier	0.998 Limits 70 - 130 MQL (Adj) 8.27	0.585 SDL 1.70	mg/Kg Unit mg/Kg		Prepared 01/22/20 13:46 Prepared 01/22/20 13:46 Prepared 01/22/20 14:16	01/22/20 15:33 Analyzed 01/22/20 15:33 Analyzed 01/24/20 06:37	Dil Fac

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

4-Bromofluorobenzene

Client Sample ID: CELL17-SQUARE 175-S-3-4-200114

Date Collected: 01/14/20 10:19 Date Received: 01/15/20 10:36 Lab Sample ID: 600-199369-3

Matrix: Solid Percent Solids: 88.6

Method: 300.0 - Anions, Ion Chromatography - Soluble											
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	2.54	J b	4.50	0.600	mg/Kg			01/23/20 00:59	1		

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.54	J b	4.50	0.600	mg/Kg	*		01/23/20 00:59	1
_									
Method: 6010B - Inductively Coupl	led Plasma -	Atomic Em	nission Spectroi	metry					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac

Method: 6010B - Inductively 0	Coupled Plasma -	Atomic Em	ission Spectro	metry					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.127	U	0.426	0.127	mg/Kg	-	01/22/20 20:27	01/23/20 11:21	
Arsenic	4.00		1.06	0.232	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Barium	281		1.06	0.0319	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Beryllium	0.0852	J	0.266	0.0154	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Calcium	241000	b	532	4.60	mg/Kg	₩	01/22/20 20:27	01/23/20 13:04	
Cadmium	0.0532	J	0.266	0.0273	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Chromium	1.45		0.532	0.0539	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Copper	1.62		0.532	0.185	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Iron	1170		21.3	2.69	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Potassium	415		106	11.7	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Magnesium	2800		106	2.04	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Manganese	11.8		1.60	0.0406	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Sodium	107	b	106	0.943	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Lead	0.112	U	0.532	0.112	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Antimony	0.511	J	2.66	0.247	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Selenium	0.276	U	2.13	0.276	mg/Kg	₽	01/22/20 20:27	01/23/20 11:21	
Thallium	0.295	U	1.60	0.295	mg/Kg	₩	01/22/20 20:27	01/23/20 11:21	
Zinc	6.63	J	7.99	0.575	mg/Kg	₩	01/22/20 20:27	01/23/20 13:04	

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac		
	Mercury	0.00373 U	0.0177	0.00373 mg/Kg	\	01/22/20 10:40	01/22/20 15:09			

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.4		1.0	1.0	%			01/23/20 09:41	1
Percent Solids	88.6		1.0	1.0	%			01/23/20 09:41	1

Client Sample ID: CELL17-SQUARE 207-S-3-4-200114 Lab Sample ID: 600-199369-4

Date Collected: 01/14/20 10:50 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 90.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000692	U H	0.00549	0.000692	mg/Kg	₩	01/22/20 09:50	01/23/20 13:17	1
Ethylbenzene	0.00112	UH	0.00549	0.00112	mg/Kg	₩	01/22/20 09:50	01/23/20 13:17	1
Toluene	0.00152	UH	0.00549	0.00152	mg/Kg	₽	01/22/20 09:50	01/23/20 13:17	1
Xylenes, Total	0.00124	UH	0.00549	0.00124	mg/Kg	\$	01/22/20 09:50	01/23/20 13:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		61 - 130				01/22/20 09:50	01/23/20 13:17	1
Dibromofluoromethane	91		68 - 140				01/22/20 09:50	01/23/20 13:17	1
Toluene-d8 (Surr)	89		50 ₋ 130				01/22/20 09:50	01/23/20 13:17	1

57 - 140

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1/27/2020

01/23/20 13:17

01/22/20 09:50

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Mercury

Client Sample ID: CELL17-SQUARE 207-S-3-4-200114

Lab Sample ID: 600-199369-4 Date Collected: 01/14/20 10:50 Matrix: Solid

Date Received: 01/15/20 10:36 Percent Solids: 90.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	0.585	U	0.998	0.585	mg/Kg		01/22/20 13:46	01/22/20 15:56	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	101		70 - 130				01/22/20 13:46	01/22/20 15:56	
Method: 8015B - Diesel Range Org	ganics (DRO)	(GC)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	1.70	U	8.27	1.70	mg/Kg		01/22/20 14:16	01/24/20 07:55	
C28-C36	4.98	U	8.27	4.98	mg/Kg		01/22/20 14:16	01/24/20 07:55	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	150	X	60 - 140				01/22/20 14:16	01/24/20 07:55	
Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	2.30	J b	4.44	0.593	mg/Kg	<u></u>		01/23/20 01:20	
Method: 6010B - Inductively Coup	led Plasma -	Atomic Em	ission Spectro	metrv					
Analyte		Qualifier	MQL (Adj)	-	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.129	U	0.434	0.129	mg/Kg	<u> </u>	01/22/20 20:27	01/23/20 11:23	
Arsenic	3.90		1.09	0.237	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Barium	191		1.09	0.0326	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Beryllium	0.185	J	0.272	0.0157	mg/Kg	₩	01/22/20 20:27	01/23/20 11:23	
Calcium	270000	b	543	4.69	mg/Kg	₽	01/22/20 20:27	01/23/20 13:06	
Cadmium	0.141	J	0.272	0.0278	mg/Kg	≎	01/22/20 20:27	01/23/20 11:23	
Chromium	2.82		0.543	0.0550	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Copper	2.27		0.543	0.189	mg/Kg	₩	01/22/20 20:27	01/23/20 11:23	
Iron	2580		21.7	2.75	mg/Kg	₩	01/22/20 20:27	01/23/20 11:23	
Potassium	810		109	11.9	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Magnesium	2270		109	2.09	mg/Kg	₩	01/22/20 20:27	01/23/20 11:23	
Manganese	37.5		1.63	0.0414	mg/Kg	₩	01/22/20 20:27	01/23/20 11:23	
Sodium	96.5	J b	109	0.962	mg/Kg	≎	01/22/20 20:27	01/23/20 11:23	
Lead	1.36	J	2.72	0.570	mg/Kg	≎	01/22/20 20:27	01/23/20 13:06	
Antimony	0.396	J	2.72	0.252	mg/Kg	≎	01/22/20 20:27	01/23/20 11:23	
Selenium	0.281	U	2.17	0.281	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Thallium	0.301	U	1.63	0.301	mg/Kg	₽	01/22/20 20:27	01/23/20 11:23	
Zinc	11.9		8.15	0.586	mg/Kg	₽	01/22/20 20:27	01/23/20 13:06	
Method: 7471A - Mercury in Solid									

General Chemistry								
Analyte	Result Qua	lifier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7	1.0	1.0	%			01/23/20 09:41	1
Percent Solids	90.3	1.0	1.0	%			01/23/20 09:41	1

0.0182

0.00384 mg/Kg

0.00384 U

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1/27/2020

 Image: Transport of the properties of the p

01/22/20 09:50

01/22/20 13:46

01/23/20 13:39

01/22/20 16:20

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

4-Bromofluorobenzene

a,a,a-Trifluorotoluene

Client Sample ID: CELL18-SQUARE 83-S-3-4-200114

Lab Sample ID: 600-199369-5 Date Collected: 01/14/20 11:28 Matrix: Solid Date Received: 01/15/20 10:36 Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS) Result Qualifier SDL Unit D Analyzed Dil Fac Analyte MQL (Adj) Prepared Benzene 0.000697 UΗ 0.00554 0.000697 01/22/20 09:50 01/23/20 13:39 mg/Kg ₽ 0.00554 Ethylbenzene 0.00113 U.H 0.00113 01/22/20 09:50 01/23/20 13:39 mg/Kg ä Toluene 0.00153 UH 0.00554 0.00153 mg/Kg 01/22/20 09:50 01/23/20 13:39 φ Xylenes, Total 0.00125 UH 0.00554 0.00125 mg/Kg 01/22/20 09:50 01/23/20 13:39 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 108 61 - 130 01/22/20 09:50 01/23/20 13:39 96 01/22/20 09:50 01/23/20 13:39 Dibromofluoromethane 68 - 140 Toluene-d8 (Surr) 92 50 - 130 01/22/20 09:50 01/23/20 13:39

Method: 8015B - Gasoline Range Organics - (GC) MQL (Adj) Result Qualifier SDL Unit D Dil Fac Prepared Analyzed Gasoline Range Organics [C6 - C10] 0.590 Ū 1.01 0.590 mg/Kg 01/22/20 13:46 01/22/20 16:20 Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed

70 - 130

57 - 140

89

105

Method: 8015B - Diesel Range Organics (DRO) (GC) SDL D Dil Fac Analyte Result Qualifier MQL (Adj) Unit Prepared Analyzed 01/22/20 14:16 01/24/20 09:01 Diesel Range Organics [C10-C28] 7.29 J 8.27 1.70 mg/Kg C28-C36 4.98 01/22/20 14:16 01/24/20 09:01 8 27 4.98 mg/Kg Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 97 60 - 140 01/22/20 14:16 01/24/20 09:01 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac 0.606 mg/Kg 01/23/20 01:40 Chloride 3.47 J b 4.54

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry MQL (Adj) Result Qualifier SDL Prepared Dil Fac Analyte Unit D Analyzed ₩ Silver 0.130 U 0.437 0.130 mg/Kg 01/22/20 20:27 01/23/20 11:25 **Arsenic** 1 09 0.238 mg/Kg 01/22/20 20:27 01/23/20 11:25 5.18 ₽ **Barium** 350 1.09 0.0327 mg/Kg 01/22/20 20:27 01/23/20 11:25 φ Beryllium 0.273 0.0158 ma/Ka 01/22/20 20:27 01/23/20 11:25 0.131 ₽ 01/22/20 20:27 01/23/20 13:08 Calcium 253000 b 546 4.72 mg/Kg 0.0764 0.273 0.0279 mg/Kg 01/22/20 20:27 01/23/20 11:25 Cadmium 01/22/20 20:27 01/23/20 11:25 Chromium 2.26 0.546 0.0552 mg/Kg ₽ Copper 1.96 0.546 0.190 mg/Kg 01/22/20 20:27 01/23/20 11:25 mg/Kg ₩ 21.8 2.76 01/22/20 20:27 01/23/20 11:25 Iron 2010 01/22/20 20:27 01/23/20 11:25 **Potassium** 542 109 12.0 mg/Kg 01/23/20 11:25 109 2.10 mg/Kg 01/22/20 20:27 Magnesium 4310 1.64 ä 01/22/20 20:27 01/23/20 11:25 Manganese 20.5 0.0416 mg/Kg φ 01/22/20 20:27 01/23/20 11:25 109 **Sodium** 0.967 mg/Kg 107 Jb ŭ 2.73 0.573 mg/Kg 01/22/20 20:27 01/23/20 13:08 5 Lead 1.04 ₽ 0.253 U 2.73 01/22/20 20:27 01/23/20 11:25 Antimony 0.253 mg/Kg ġ Selenium 0.283 U 2.18 0.283 mg/Kg 01/22/20 20:27 01/23/20 11:25 ġ Thallium 0.302 U 1.64 01/22/20 20:27 01/23/20 11:25 0.302 ma/Ka Zinc 11.7 8.19 0.589 mg/Kg 01/22/20 20:27 01/23/20 13:08

Client: ARCADIS U.S., Inc.

Date Collected: 01/14/20 11:28

Date Received: 01/15/20 10:36

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID: 600-199369-5

Matrix: Solid

Percent Solids: 88.1

Job ID: 600-199369-1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00364	U	0.0173	0.00364	mg/Kg	\	01/22/20 10:40	01/22/20 15:13	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.9		1.0	1.0	%			01/23/20 09:41	1
	88.1		1.0	1.0	0/			01/23/20 09:41	4

Client Sample ID: CELL18-SQUARE 181-S-3-4-200114

Client Sample ID: CELL18-SQUARE 83-S-3-4-200114

Date Collected: 01/14/20 11:53 Date Received: 01/15/20 10:36

Barium

Beryllium

Calcium

Cadmium

Chromium

Lab Sample ID: 600-199369-6 **Matrix: Solid**

Percent Solids: 86.0

Method: 8260B - Volatile Organic	-	•				_			
Analyte		Qualifier	MQL (Adj)		Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.000662		0.00525	0.000662	mg/Kg	₽	01/22/20 09:50	01/23/20 14:01	
Ethylbenzene	0.00107	UH	0.00525	0.00107	0 0	₩	01/22/20 09:50	01/23/20 14:01	
Toluene	0.00145	UH	0.00525	0.00145	mg/Kg		01/22/20 09:50	01/23/20 14:01	
Xylenes, Total	0.00119	UH	0.00525	0.00119	mg/Kg	≎	01/22/20 09:50	01/23/20 14:01	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
1,2-Dichloroethane-d4 (Surr)	103		61 - 130				01/22/20 09:50	01/23/20 14:01	
Dibromofluoromethane	93		68 ₋ 140				01/22/20 09:50	01/23/20 14:01	
Toluene-d8 (Surr)	85		50 - 130				01/22/20 09:50	01/23/20 14:01	
4-Bromofluorobenzene	87		57 ₋ 140				01/22/20 09:50	01/23/20 14:01	
Method: 8015B - Gasoline Range	organics - (G	C)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	0.576	U	0.983	0.576	mg/Kg		01/22/20 13:46	01/22/20 16:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
a,a,a-Trifluorotoluene	104		70 - 130				01/22/20 13:46	01/22/20 16:44	
Mathadi 204ED Disaal Danga O	www.ice (DDO)	(00)							
Method: 8015B - Diesel Range O									
			MOL (Adi)	SDI	Unit	D	Prenared	Analyzed	Dil Fa
Analyte	Result	Qualifier	MQL (Adj)		Unit ma/Ka	D	Prepared 01/22/20 14:16	Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28]	Result 1.70	Qualifier U	8.26	1.70	mg/Kg	<u>D</u>	01/22/20 14:16	01/24/20 09:34	
Analyte Diesel Range Organics [C10-C28] C28-C36	Result	Qualifier U		1.70		<u>D</u>	<u>·</u>		
Analyte Diesel Range Organics [C10-C28]	1.70 4.97 %Recovery	Qualifier U U Qualifier	8.26	1.70	mg/Kg	<u>D</u>	01/22/20 14:16	01/24/20 09:34	
Analyte Diesel Range Organics [C10-C28] C28-C36	1.70 4.97	Qualifier U U Qualifier	8.26 8.26	1.70	mg/Kg	<u>D</u>	01/22/20 14:16 01/22/20 14:16	01/24/20 09:34 01/24/20 09:34	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl	Result 1.70 4.97 %Recovery 169	Qualifier U U Qualifier X	8.26 8.26	1.70	mg/Kg	<u>D</u>	01/22/20 14:16 01/22/20 14:16 Prepared	01/24/20 09:34 01/24/20 09:34 Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate		Qualifier U U Qualifier X	8.26 8.26	1.70 4.97	mg/Kg	<u>D</u>	01/22/20 14:16 01/22/20 14:16 Prepared	01/24/20 09:34 01/24/20 09:34 Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro		Qualifier U Qualifier X Soluble Qualifier	8.26 8.26 Limits	1.70 4.97	mg/Kg mg/Kg		01/22/20 14:16 01/22/20 14:16 Prepared 01/22/20 14:16	01/24/20 09:34 01/24/20 09:34 Analyzed 01/24/20 09:34	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro Analyte Chloride	Result 1.70 4.97 %Recovery 169 pmatography - Result 3.89	Qualifier U Qualifier X Soluble Qualifier J b	8.26 8.26 Limits 60 - 140 MQL (Adj) 4.63	1.70 4.97 SDL 0.617	mg/Kg mg/Kg		01/22/20 14:16 01/22/20 14:16 Prepared 01/22/20 14:16	01/24/20 09:34 01/24/20 09:34 Analyzed 01/24/20 09:34 Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro	Result 1.70 4.97 %Recovery 169 pmatography - Result 3.89 spled Plasma -	Qualifier U Qualifier X Soluble Qualifier J b	8.26 8.26 Limits 60 - 140 MQL (Adj) 4.63	1.70 4.97 SDL 0.617	mg/Kg mg/Kg		01/22/20 14:16 01/22/20 14:16 Prepared 01/22/20 14:16	01/24/20 09:34 01/24/20 09:34 Analyzed 01/24/20 09:34 Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl Method: 300.0 - Anions, Ion Chro Analyte Chloride Method: 6010B - Inductively Cou	Result 1.70 4.97 %Recovery 169 pmatography - Result 3.89 spled Plasma -	Qualifier U Qualifier X Soluble Qualifier J b Atomic Em Qualifier	8.26 8.26 Limits 60 - 140 MQL (Adj) 4.63	1.70 4.97 SDL 0.617	mg/Kg mg/Kg Unit mg/Kg	<u>D</u>	01/22/20 14:16 01/22/20 14:16 Prepared 01/22/20 14:16 Prepared	01/24/20 09:34 01/24/20 09:34 Analyzed 01/24/20 09:34 Analyzed 01/23/20 02:00	Dil Fa

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01/23/20 11:27

01/23/20 11:27

01/23/20 13:15

01/23/20 11:27 01/23/20 11:27

01/22/20 20:27

01/22/20 20:27

01/22/20 20:27

01/22/20 20:27

01/22/20 20:27

1.12

0.280

559

0.280

0.559

150

0.134 J

232000 b

0.101 J

2.36

0.0336 mg/Kg

0.0162 mg/Kg

0.0286 mg/Kg

0.0566 mg/Kg

4.83 mg/Kg

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL18-SQUARE 181-S-3-4-200114

Lab Sample ID: 600-199369-6 Date Collected: 01/14/20 11:53 Matrix: Solid Date Received: 01/15/20 10:36

Percent Solids: 86.0

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.18		0.559	0.195	mg/Kg	*	01/22/20 20:27	01/23/20 11:27	1
Iron	2020		22.4	2.83	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Potassium	502		112	12.3	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Magnesium	4380		112	2.15	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Manganese	19.7		1.68	0.0426	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Sodium	304	b	112	0.991	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Lead	0.727	J	2.80	0.587	mg/Kg	₽	01/22/20 20:27	01/23/20 13:15	5
Antimony	0.481	J	2.80	0.260	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Selenium	0.290	U	2.24	0.290	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Thallium	0.310	U	1.68	0.310	mg/Kg	₽	01/22/20 20:27	01/23/20 11:27	1
Zinc	8.64		8.39	0.604	mg/Kg	₽	01/22/20 20:27	01/23/20 13:15	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Mercury	0.00379	U	0.0180	0.00379	mg/Kg	₩	01/22/20 10:40	01/22/20 15:15	1

General Chemistry								
Analyte	Result Qua	alifier MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.0	1.0	1.0	%			01/23/20 09:41	1
Percent Solids	86.0	1.0	1.0	%			01/23/20 09:41	1

Client Sample ID: CELL18-SQUARE 133-S-3-4-200114

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

Lab Sample ID: 600-199369-7 Date Collected: 01/14/20 12:26 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 87.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000661	UH	0.00524	0.000661	mg/Kg	₩	01/22/20 09:50	01/23/20 14:24	1
Ethylbenzene	0.00107	UH	0.00524	0.00107	mg/Kg	☼	01/22/20 09:50	01/23/20 14:24	1
Toluene	0.00145	UH	0.00524	0.00145	mg/Kg	₩	01/22/20 09:50	01/23/20 14:24	1
Xylenes, Total	0.00119	UH	0.00524	0.00119	mg/Kg	\$	01/22/20 09:50	01/23/20 14:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 130				01/22/20 09:50	01/23/20 14:24	1
Dibromofluoromethane	93		68 - 140				01/22/20 09:50	01/23/20 14:24	1
			50 ₋ 130				01/22/20 09:50	01/23/20 14:24	1
Toluene-d8 (Surr)	86		30 - 130				0 22. 20 00.00	0 17 207 20 1 112 1	-

Method: 8015B - Gasoline Range Organics - (GC)										
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics [C6 - C10]	0.591	U	1.01	0.591	mg/Kg		01/22/20 13:46	01/22/20 17:08	1
	Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
l	a,a,a-Trifluorotoluene	104		70 - 130				01/22/20 13:46	01/22/20 17:08	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.71	U	8.28	1.71	mg/Kg		01/22/20 14:48	01/24/20 10:07	1
C28-C36	4.99	U	8.28	4.99	mg/Kg		01/22/20 14:48	01/24/20 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	134		60 - 140				01/22/20 14:48	01/24/20 10:07	

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL18-SQUARE 133-S-3-4-200114

Date Collected: 01/14/20 12:26 Date Received: 01/15/20 10:36

Client: ARCADIS U.S., Inc.

Lab Sample ID: 600-199369-7

Matrix: Solid

Percent Solids: 87.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.90	J b	4.54	0.606	mg/Kg	-		01/23/20 02:21	1
Method: 6010B - Inductiv	vely Coupled Plasma -	Atomic Em	ission Spectro	metry					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.133	U	0.449	0.133	mg/Kg	\	01/22/20 20:27	01/23/20 11:36	1
Arsenic	4.97		1.12	0.244	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Barium	212		1.12	0.0336	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Beryllium	0.146	J	0.280	0.0163	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Calcium	245000	b	561	4.84	mg/Kg	₩	01/22/20 20:27	01/23/20 13:17	5
Cadmium	0.107	J	0.280	0.0287	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Chromium	2.28		0.561	0.0567	mg/Kg	\$	01/22/20 20:27	01/23/20 11:36	1
Copper	1.42		0.561	0.195	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Iron	2000		22.4	2.84	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Potassium	623		112	12.3	mg/Kg		01/22/20 20:27	01/23/20 11:36	1
Magnesium	3100		112	2.15	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Manganese	17.9		1.68	0.0427	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Sodium	157	b	112	0.993	mg/Kg	₩	01/22/20 20:27	01/23/20 11:36	1
Lead	0.813	J	2.80	0.589	mg/Kg	₩	01/22/20 20:27	01/23/20 13:17	5
Antimony	0.404	J	2.80	0.260	mg/Kg	≎	01/22/20 20:27	01/23/20 11:36	1
Selenium	0.290	U	2.24	0.290	mg/Kg	\$	01/22/20 20:27	01/23/20 11:36	1
Thallium	2.58		1.68	0.311	mg/Kg	₽	01/22/20 20:27	01/23/20 11:36	1
Zinc	9.78		8.41	0.605	mg/Kg	₩	01/22/20 20:27	01/23/20 13:17	5

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Mar	ual Cold Vap	or Techniqu	ue)				
Analyte	Result	Qualifier	MQL (Adj)	SDL (Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00372	U	0.0177	0.00372 r	mg/Kg	☼	01/22/20 10:40	01/22/20 15:21	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		1.0	1.0	%			01/23/20 09:41	1
Percent Solids	87.4		1.0	1.0	%			01/23/20 09:41	1

Client Sample ID: CELL18-SQUARE 92-S-3-4-200114

Date Collected: 01/14/20 13:00 Date Received: 01/15/20 10:36

Lab Sample ID: 600-199369-8 **Matrix: Solid** Percent Solids: 87.8

Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000777	UH	0.00617	0.000777	mg/Kg	<u></u>	01/22/20 09:50	01/23/20 14:46	1
Ethylbenzene	0.00126	UH	0.00617	0.00126	mg/Kg	₽	01/22/20 09:50	01/23/20 14:46	1
Toluene	0.00170	UH	0.00617	0.00170	mg/Kg	₩	01/22/20 09:50	01/23/20 14:46	1
Xylenes, Total	0.00139	UH	0.00617	0.00139	mg/Kg	₽	01/22/20 09:50	01/23/20 14:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		61 - 130				01/22/20 09:50	01/23/20 14:46	1
Dibromofluoromethane	93		68 - 140				01/22/20 09:50	01/23/20 14:46	1
Toluene-d8 (Surr)	86		50 - 130				01/22/20 09:50	01/23/20 14:46	1
4-Bromofluorobenzene	82		57 - 140				01/22/20 09:50	01/23/20 14:46	1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL18-SQUARE 92-S-3-4-200114

Date Collected: 01/14/20 13:00 Date Received: 01/15/20 10:36

Client: ARCADIS U.S., Inc.

Analyte

Mercury

Analyte

General Chemistry

Percent Moisture

Percent Solids

Lab Sample ID: 600-199369-8

Matrix: Solid

Percent Solids: 87.8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	0.591	U	1.01	0.591	mg/Kg		01/22/20 13:46	01/22/20 17:56	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	121		70 - 130				01/22/20 13:46	01/22/20 17:56	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	1.71	U	8.28	1.71	mg/Kg		01/22/20 14:48	01/24/20 11:28	
C28-C36	4.99	U	8.28	4.99	mg/Kg		01/22/20 14:48	01/24/20 11:28	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	154	X	60 - 140				01/22/20 14:48	01/24/20 11:28	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil F
Chloride	2.01	Jb	4.51	0.602	mg/Kg	<u></u>		01/23/20 02:41	
Method: 6010B - Inductively Cou Analyte	upled Plasma - Result	Qualifier	MQL (Adj)	SDL	Unit	<u>D</u>	Prepared	Analyzed	Dil F
Method: 6010B - Inductively Cou Analyte	ıpled Plasma -	Qualifier	-	_	Unit mg/Kg	D	Prepared 01/22/20 20:27	Analyzed 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver	upled Plasma - Result	Qualifier	MQL (Adj)	SDL 0.130					Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic	upled Plasma - Result 0.130	Qualifier	MQL (Adj) 0.438	0.130 0.239	mg/Kg		01/22/20 20:27	01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium	upled Plasma - Result 0.130 5.53	Qualifier U	0.438 1.10	0.130 0.239 0.0329	mg/Kg mg/Kg	<u> </u>	01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium	npled Plasma - Result 0.130 5.53 274	Qualifier U	MQL (Adj) 0.438 1.10 1.10	0.130 0.239 0.0329 0.0159	mg/Kg mg/Kg mg/Kg	* *	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium	Result	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274	0.130 0.239 0.0329 0.0159 4.73	mg/Kg mg/Kg mg/Kg mg/Kg	\$ \$ \$	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium	Result 0.130 5.53 274 0.104 276000	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548	0.130 0.239 0.0329 0.0159 4.73 0.0280	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	\$ \$ \$ \$	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19	Dii F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium	Result 0.130 5.53 274 0.104 276000 0.0602	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274	0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	# # # # # # # # # # # # # # # # # # #	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium	0.130 5.53 274 0.104 276000 0.0602	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548	0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 0.548	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	_ Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 0.548 21.9	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410	Qualifier U J b	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 0.548 21.9 110	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410 3120	Qualifier U J b J	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 0.548 21.9 110 110	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77 12.0 2.10 0.0417	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium Manganese Sodium	1pled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410 3120 13.9	Qualifier U J b J	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 21.9 110 110 1.64	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77 12.0 2.10 0.0417 0.971	mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38	Dil F
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium Manganese Sodium	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410 3120 13.9	U J b J U	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 21.9 110 1.10 1.64 110	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77 12.0 2.10 0.0417 0.971 0.115	mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 13:19 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38 01/23/20 11:38	DiiF
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium Manganese Sodium Lead Antimony	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410 3120 13.9 137 0.115	Qualifier U J b J U	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 21.9 110 110 1.64 110 0.548	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77 12.0 2.10 0.0417 0.971 0.115 0.254	mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38	DilF
Method: 6010B - Inductively Cou Analyte Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium Magnesium Manganese Sodium Lead Antimony Selenium Thallium	npled Plasma - Result 0.130 5.53 274 0.104 276000 0.0602 1.57 1.51 1380 410 3120 13.9 137 0.115 0.641	Qualifier U J b U J U U	MQL (Adj) 0.438 1.10 1.10 0.274 548 0.274 0.548 21.9 110 110 1.64 110 0.548 2.74	\$DL 0.130 0.239 0.0329 0.0159 4.73 0.0280 0.0554 0.191 2.77 12.0 2.10 0.0417 0.971 0.115 0.254 0.284	mg/Kg		01/22/20 20:27 01/22/20 20:27	01/23/20 11:38 01/23/20 11:38	DilF

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Analyzed

01/22/20 15:23

Analyzed

01/23/20 09:41

01/23/20 09:41

MQL (Adj)

MQL (Adj)

1.0

1.0

0.0182

SDL Unit

0.00382 mg/Kg

SDL Unit

> 1.0 %

1.0

D

₩

D

Prepared

01/22/20 10:40

Prepared

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

0.00382 U

12.2

87.8

Result Qualifier

Result Qualifier

Dil Fac

Dil Fac

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-199369-9 Date Collected: 01/14/20 00:00

Matrix: Water

Date Received: 01/15/20 10:36

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.560	U	5.00	0.560	ug/L			01/23/20 17:09	1
Ethylbenzene	1.29	U	5.00	1.29	ug/L			01/23/20 17:09	1
Toluene	0.550	U	5.00	0.550	ug/L			01/23/20 17:09	1
Xylenes, Total	1.98	U	5.00	1.98	ug/L			01/23/20 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		50 - 134			-		01/23/20 17:09	1
Dibromofluoromethane	86		62 - 130					01/23/20 17:09	1
Toluene-d8 (Surr)	97		70 - 130					01/23/20 17:09	1
4-Bromofluorobenzene	93		67 - 139					01/23/20 17:09	1

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Qualifiers

\sim	\sim		•		
	1 :/	IVI	8	vc	ΙД

 Qualifier
 Qualifier Description

 H
 Sample was prepped or analyzed beyond the specified holding time

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

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 is outside control limits

HPLC/IC

Qualifier Qualifier Description

b The compound was found in the blank and sample

Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Metals

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

F Duplicate RPD exceeds the control limit

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.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.	
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Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
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)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

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)

Eurofins TestAmerica, Houston

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1/27/2020

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Matrix: Solid Prep Type: Total/NA

				Percent Su	rrogate Rec
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-199369-1	CELL17-SQUARE45-S-3-4-200114	118	98	86	93
600-199369-2	CELL17-SQUARE	103	89	84	88
	113-S-3-4-200114				
600-199369-3	CELL17-SQUARE	102	88	86	92
	175-S-3-4-200114				
600-199369-4	CELL17-SQUARE	106	91	89	86
	207-S-3-4-200114				
600-199369-5	CELL18-SQUARE	108	96	92	89
	83-S-3-4-200114				
600-199369-6	CELL18-SQUARE	103	93	85	87
	181-S-3-4-200114				
600-199369-7	CELL18-SQUARE	105	93	86	82
	133-S-3-4-200114				
600-199369-8	CELL18-SQUARE	109	93	86	82
	92-S-3-4-200114				
LCS 600-285922/3	Lab Control Sample	94	97	89	93
LCSD 600-285922/4	Lab Control Sample Dup	106	99	92	95
MB 600-285922/6	Method Blank	127	100	88	86
Surrogate Legend					

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

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

Matrix: Water Prep Type: Total/NA

_				Percent Sur	rogate Rec
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-199369-9	TRIP BLANK	83	86	97	93
LCS 600-285929/12	Lab Control Sample	101	102	98	105
LCSD 600-285929/13	Lab Control Sample Dup	107	107	103	112
MB 600-285929/15	Method Blank	91	93	108	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

		TFT1
Lab Sample ID	Client Sample ID	(70-130)
600-199369-1	CELL17-SQUARE45-S-3-4-200114	105
600-199369-2	CELL17-SQUARE	117
	113-S-3-4-200114	
600-199369-3	CELL17-SQUARE	104
	175-S-3-4-200114	

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Surrogate Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT1	
Lab Sample ID	Client Sample ID	(70-130)	
600-199369-4	CELL17-SQUARE 207-S-3-4-20011	101	
600-199369-5	CELL18-SQUARE	105	
	83-S-3-4-200114		
600-199369-6	CELL18-SQUARE	104	
	181-S-3-4-200114		
600-199369-7	CELL18-SQUARE	104	
	133-S-3-4-200114		
600-199369-8	CELL18-SQUARE	121	
	92-S-3-4-200114		
LCS 600-285768/1-A	Lab Control Sample	117	
LCSD 600-285768/2-A	Lab Control Sample Dup	115	
MB 600-285768/3-A	Method Blank	116	
Surrogate Legend			

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

Matrix: Solid Prep Type: Total/NA

600-199369-1 CELL 600-199369-2 CELL 113-5 600-199369-3 CELL 175-5 600-199369-4 CELL 207-5 600-199369-5 CELL 83-S 600-199369-6 CELL 181-5	nt Sample ID L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	96 93 119 150 X	
600-199369-1 CELL 600-199369-2 CELL 113-5 600-199369-3 CELL 175-5 600-199369-4 CELL 207-5 600-199369-5 CELL 83-S 600-199369-6 CELL 181-5	L17-SQUARE45-S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	96 93 119	
600-199369-2 CELL 113-5 600-199369-3 CELL 175-5 600-199369-4 CELL 207-5 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-5	L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	93 119 150 X	
600-199369-3 CELL 175-8 600-199369-4 CELL 207-8 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-8	S-3-4-200114 L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	119 150 X	
600-199369-3 CELL 175-8 600-199369-4 CELL 207-8 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-8	L17-SQUARE S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	150 X	
175-8 600-199369-4 CELL 207-8 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-8	S-3-4-200114 L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114	150 X	
600-199369-4 CELL 207-5 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-5	L17-SQUARE S-3-4-200114 L18-SQUARE -3-4-200114		
207-5 600-199369-5 CELL 83-S- 600-199369-6 CELL 181-5	S-3-4-200114 L18-SQUARE -3-4-200114		
600-199369-5 CELL 83-S- 600-199369-6 CELL 181-5	L18-SQUARE -3-4-200114	97	
83-S- 600-199369-6 CELL 181-S	-3-4-200114	97	
600-199369-6 CELL 181-5			
181-5			
	L18-SQUARE	169 X	
600-199369-7 CELL	S-3-4-200114		
	L18-SQUARE	134	
133-5	S-3-4-200114		
600-199369-8 CELL	L18-SQUARE	154 X	
92-S-	-3-4-200114		
LCS 600-285855/2-A Lab 0	Control Sample	111	
MB 600-285855/1-A Metho	od Blank	135	

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3

7

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10

12

13

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: MB 600-285922/6

Matrix: Solid

Analysis Batch: 285922

Client: ARCADIS U.S., Inc.

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

MB MB Result Qualifier MQL (Adj) SDL Unit Dil Fac Analyte Prepared Analyzed Benzene 0.000630 U 0.00500 0.000630 mg/Kg 01/23/20 11:48 Ethylbenzene 0.00102 U 0.00500 0.00102 mg/Kg 01/23/20 11:48 Toluene 0.00138 U 0.00500 0.00138 mg/Kg 01/23/20 11:48 0.00113 U Xylenes, Total 0.00500 0.00113 mg/Kg 01/23/20 11:48

MB MB

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127	61 - 13	0	01/23/20 11:48	1
Dibromofluoromethane	100	68 - 14	0	01/23/20 11:48	1
Toluene-d8 (Surr)	88	50 - 13	0	01/23/20 11:48	1
4-Bromofluorobenzene	86	57 - 14	0	01/23/20 11:48	1

Lab Sample ID: LCS 600-285922/3

Matrix: Solid

Analysis Batch: 285922

Client Sample ID: Lab Control Sample

Prep Type: Total/NA LCS LCS %Rec. Spike

Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.0500 0.04821 96 70 - 131 mg/Kg Ethylbenzene 0.0500 0.05026 mg/Kg 101 66 - 130 Toluene 0.0500 0.05329 mg/Kg 107 67 - 130 0.100 104 63 - 130 Xylenes, Total 0.1039 mg/Kg m-Xylene & p-Xylene 0.0500 0.05269 mg/Kg 105 64 - 130 0.0500 o-Xylene 0.05117 mg/Kg 102 62 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94	-	61 - 130
Dibromofluoromethane	97		68 - 140
Toluene-d8 (Surr)	89		50 - 130
4-Bromofluorobenzene	93		57 ₋ 140

Lab Sample ID: LCSD 600-285922/4

Matrix: Solid

Analysis Batch: 285922

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05258		mg/Kg		105	70 - 131	9	30
Ethylbenzene	0.0500	0.05419		mg/Kg		108	66 - 130	8	30
Toluene	0.0500	0.05741		mg/Kg		115	67 - 130	7	30
Xylenes, Total	0.100	0.1136		mg/Kg		114	63 - 130	9	30
m-Xylene & p-Xylene	0.0500	0.05727		mg/Kg		115	64 - 130	8	30
o-Xylene	0.0500	0.05630		mg/Kg		113	62 - 130	10	30

LUSD	LUSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		61 - 130
Dibromofluoromethane	99		68 - 140
Toluene-d8 (Surr)	92		50 ₋ 130
4-Bromofluorobenzene	95		57 - 140

Project/Site: Chevron - Jal Land Farm Soils 2020

1 Toject/Site. Offerfort - Sai Land 1 ann Soils 2020

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

Lab Sample ID: MB 600-285929/15

Matrix: Water

Analysis Batch: 285929

Client: ARCADIS U.S., Inc.

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

MB MB Result Qualifier MQL (Adj) SDL Unit Dil Fac Analyte Prepared Analyzed Benzene 0.560 U 0.560 ug/L 01/23/20 15:54 5.00 Ethylbenzene 1.29 U 5.00 1.29 ug/L 01/23/20 15:54 Toluene 0.550 U 5.00 0.550 ug/L 01/23/20 15:54 Xylenes, Total 1.98 U 5.00 1.98 ug/L 01/23/20 15:54

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	50 - 134		01/23/20 15:54	1
Dibromofluoromethane	93	62 - 130		01/23/20 15:54	1
Toluene-d8 (Surr)	108	70 - 130		01/23/20 15:54	1
4-Bromofluorobenzene	101	67 - 139		01/23/20 15:54	1

50.0

Lab Sample ID: LCS 600-285929/12

Matrix: Water

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Analysis Batch: 285929

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

LCS LCS %Rec. Spike Added Result Qualifier Unit %Rec Limits 50.0 48.64 97 70 - 131 ug/L 50.0 50.81 ug/L 102 70 - 130 50.0 56.71 ug/L 113 70 - 130 101.1 101 70 - 130 100 ug/L 50.0 50.55 ug/L 101 70 - 130

50.59

ug/L

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		50 - 134
Dibromofluoromethane	102		62 - 130
Toluene-d8 (Surr)	98		70 - 130
4-Bromofluorobenzene	105		67 - 139

Lab Sample ID: LCSD 600-285929/13

Matrix: Water

Analysis Batch: 285929

Client	Sample	D:	Lab	Contro	I Sam	iple [Jup
				Prep T	ype:	Total	/NA

69 - 130

101

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier U	nit D	%Rec	Limits	RPD	Limit
Benzene	50.0	51.41	——— uç	g/L	103	70 - 131	6	20
Ethylbenzene	50.0	52.67	uç	g/L	105	70 - 130	4	20
Toluene	50.0	58.89	uç	g/L	118	70 - 130	4	20
Xylenes, Total	100	104.9	uç	g/L	105	70 - 130	4	20
m-Xylene & p-Xylene	50.0	52.58	uç	g/L	105	70 - 130	4	20
o-Xylene	50.0	52.31	uç	g/L	105	69 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		50 - 134
Dibromofluoromethane	107		62 - 130
Toluene-d8 (Surr)	103		70 - 130
4-Bromofluorobenzene	112		67 - 139

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1/27/2020

Prep Type: Total/NA

Prep Batch: 285768

Dil Fac

Dil Fac

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 600-285768/3-A

Matrix: Solid

Client: ARCADIS U.S., Inc.

Analysis Batch: 285766

MR MR

Analyte Result Qualifier Gasoline Range Organics [C6 - C10]

0.586 U

116

LCS LCS

%Recovery Qualifier

117

MB MB %Recovery Qualifier

Limits 70 - 130

Spike

Added

Limits 70 - 130

Spike

Added

5.00

MQL (Adj)

1.00

SDL Unit

0.586 mg/Kg

LCS LCS

LCSD LCSD

Result Qualifier

SDL

1 70

LCS LCS

32.89

Result Qualifier

Unit

mg/Kg

mg/Kg

Unit

mg/Kg

5.396

Result Qualifier

Unit

mg/Kg

Prepared 01/22/20 08:46

%Rec

%Rec

108

Prepared

01/22/20 08:46

Analyzed 01/22/20 11:01

Client Sample ID: Lab Control Sample

%Rec

Limits

70 - 130

Client Sample ID: Method Blank

Analyzed

01/22/20 11:01

Prep Type: Total/NA

Prep Batch: 285768

Lab Sample ID: LCS 600-285768/1-A

Matrix: Solid

a,a,a-Trifluorotoluene

Surrogate

Analysis Batch: 285766

Gasoline Range Organics [C6 -

C10]

Surrogate a,a,a-Trifluorotoluene

Lab Sample ID: LCSD 600-285768/2-A

Matrix: Solid

Analysis Batch: 285766

Analyte Gasoline Range Organics [C6 -

C10]

Surrogate a,a,a-Trifluorotoluene

%Recovery

Qualifier 115

Qualifier

Qualifier

Ū

1 70

LCSD LCSD

Limits 70 - 130

MQL (Adj)

Limits

Spike

Added

33.2

60 - 140

8.25

8.25

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

Lab Sample ID: MB 600-285855/1-A

Matrix: Solid

Analysis Batch: 285991

MR MR Result

Analyte

Diesel Range Organics [C10-C28] C28-C36 4.97 U

MB MB Surrogate %Recovery o-Terphenyl 135

Lab Sample ID: LCS 600-285855/2-A

Matrix: Solid

Analysis Batch: 285991

Analyte

Diesel Range Organics [C10-C28]

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 285768

%Rec. RPD

RPD Limit 30 70 130

5.00 5.067 101 mg/Kg

Unit

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 285855**

Prepared Analyzed Dil Fac 01/22/20 14:16 01/24/20 02:14 01/22/20 14:16 01/24/20 02:14

> Dil Fac Prepared Analyzed 01/22/20 14:16 01/24/20 02:14

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 285855

1/27/2020

%Rec.

%Rec Limits

99 66 - 134

Prep Type: Total/NA

Prep Batch: 285855

Prep Type: Soluble

Client Sample ID: Lab Control Sample

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID: LCS 600-285855/2-A

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

Matrix: Solid

Surrogate

o-Terphenyl

Analysis Batch: 285991

Client: ARCADIS U.S., Inc.

LCS LCS

%Recovery Qualifier 111

Limits 60 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-285881/1-A

Matrix: Solid

Analysis Batch: 285784

Result Qualifier MQL (Adj) Analyte

Chloride 2.099

мв мв

3.97

SDL Unit 0.530 mg/Kg

Prepared Analyzed

Dil Fac 01/22/20 22:16

Client Sample ID: Method Blank

Lab Sample ID: LCS 600-285881/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 285784

Spike LCS LCS %Rec. Added Result Qualifier Analyte Limits Unit %Rec 198 198.7 Chloride 100 90 - 110 mg/Kg

Lab Sample ID: 600-199369-2 MS

Matrix: Solid

Analyte

Chloride

Analysis Batch: 285784

Sample Sample Spike Result Qualifier babbA 28.4 b 109

128.6

MS MS Result Qualifier

Unit mg/Kg

Limits D %Rec 91 80 - 120

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

%Rec.

%Rec.

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Prep Type: Soluble

RPD

Prep Type: Soluble

Lab Sample ID: 600-199369-2 MSD

Matrix: Solid

Analysis Batch: 285784

Analyte

Sample Sample Result Qualifier Chloride

Spike Added 28.4 b 109

MSD MSD Result Qualifier 142.7

Unit mg/Kg

D

%Rec Limits 104 80 - 120

RPD Limit

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-285901/1-A

Matrix: Solid

Analysis Batch: 285968

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 285901**

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Calcium	2.485	J	100	0.864	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Copper	0.174	U	0.500	0.174	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Iron	2.53	U	20.0	2.53	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Potassium	11.0	U	100	11.0	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Magnesium	1.92	U	100	1.92	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
	Silver Arsenic Barium Beryllium Calcium Cadmium Chromium Copper Iron Potassium	Analyte Result Silver 0.119 Arsenic 0.218 Barium 0.0300 Beryllium 0.0145 Calcium 2.485 Cadmium 0.0256 Chromium 0.0506 Copper 0.174 Iron 2.53 Potassium 11.0	Silver 0.119 U Arsenic 0.218 U Barium 0.0300 U Beryllium 0.0145 U Calcium 2.485 J Cadmium 0.0256 U Chromium 0.0506 U Copper 0.174 U Iron 2.53 U Potassium 11.0 U	Analyte Result Silver Qualifier MQL (Adj) Silver 0.119 U 0.400 Arsenic 0.218 U 1.00 Barium 0.0300 U 1.00 Beryllium 0.0145 U 0.250 Calcium 2.485 J 100 Cadmium 0.0256 U 0.250 Chromium 0.0506 U 0.500 Copper 0.174 U 0.500 Iron 2.53 U 20.0 Potassium 11.0 U 100	Analyte Result Silver Qualifier MQL (Adj) SDL (Adj) Silver 0.119 U 0.400 0.119 Arsenic 0.218 U 1.00 0.218 Barium 0.0300 U 1.00 0.0300 Beryllium 0.0145 U 0.250 0.0145 Calcium 2.485 J 100 0.864 Cadmium 0.0256 U 0.250 0.0256 Chromium 0.0506 U 0.500 0.0506 Copper 0.174 U 0.500 0.174 Iron 2.53 U 20.0 2.53 Potassium 11.0 U 100 11.0	Analyte Result Silver Qualifier MQL (Adj) SDL Unit Silver 0.119 U 0.400 0.119 mg/Kg Arsenic 0.218 U 1.00 0.218 mg/Kg Barium 0.0300 U 1.00 0.0300 mg/Kg Beryllium 0.0145 U 0.250 0.0145 mg/Kg Calcium 2.485 J 100 0.864 mg/Kg Cadmium 0.0256 U 0.250 0.0256 mg/Kg Chromium 0.0506 U 0.500 0.0506 mg/Kg Copper 0.174 U 0.500 0.174 mg/Kg Iron 2.53 U 20.0 2.53 mg/Kg Potassium 11.0 U 100 11.0 mg/Kg	Analyte Result Silver Qualifier MQL (Adj) MQL (Adj) SDL Mit MQKg D Silver 0.119 U 0.400 0.119 mg/Kg Arsenic 0.218 U 1.00 0.218 mg/Kg Barium 0.0300 U 1.00 0.0300 mg/Kg Beryllium 0.0145 U 0.250 0.0145 mg/Kg Calcium 2.485 J 100 0.864 mg/Kg Cadmium 0.0256 U 0.250 0.0256 mg/Kg Chromium 0.0506 U 0.500 0.0506 mg/Kg Copper 0.174 U 0.500 0.174 mg/Kg Iron 2.53 U 20.0 2.53 mg/Kg Potassium 11.0 U 100 11.0 mg/Kg	Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Silver 0.119 U 0.400 0.119 mg/Kg 01/22/20 20:27 Arsenic 0.218 U 1.00 0.218 mg/Kg 01/22/20 20:27 Barium 0.0300 U 1.00 0.0300 mg/Kg 01/22/20 20:27 Beryllium 0.0145 U 0.250 0.0145 mg/Kg 01/22/20 20:27 Calcium 2.485 J 100 0.864 mg/Kg 01/22/20 20:27 Cadmium 0.0256 U 0.250 0.0256 mg/Kg 01/22/20 20:27 Chromium 0.0506 U 0.500 0.0506 mg/Kg 01/22/20 20:27 Copper 0.174 U 0.500 0.174 mg/Kg 01/22/20 20:27 Iron 2.53 U 2.00 2.53 mg/Kg 01/22/20 20:27 Potassium 11.0 U 100 11.0 mg/Kg <t< td=""><td>Analyte Result Qualifier MQL (Adj) SDL voit D voit Prepared Analyzed Silver 0.119 U 0.400 0.119 mg/Kg 01/22/20 20:27 01/23/20 11:09 Arsenic 0.218 U 1.00 0.218 mg/Kg 01/22/20 20:27 01/23/20 11:09 Barium 0.0300 U 1.00 0.0300 mg/Kg 01/22/20 20:27 01/23/20 11:09 Beryllium 0.0145 U 0.250 0.0145 mg/Kg 01/22/20 20:27 01/23/20 11:09 Calcium 2.485 J 100 0.864 mg/Kg 01/22/20 20:27 01/23/20 11:09 Cadmium 0.0256 U 0.250 0.0256 mg/Kg 01/22/20 20:27 01/23/20 11:09 Chromium 0.0506 U 0.500 0.0506 mg/Kg 01/22/20 20:27 01/23/20 11:09 Copper 0.174 U 0.500 0.174 mg/Kg 01/22/20 20:27 01/23/20 11:09 Iron 2.53 U 2.00 2.53 mg/Kg 01/22/20 20:27 01/23/20 11:09</td></t<>	Analyte Result Qualifier MQL (Adj) SDL voit D voit Prepared Analyzed Silver 0.119 U 0.400 0.119 mg/Kg 01/22/20 20:27 01/23/20 11:09 Arsenic 0.218 U 1.00 0.218 mg/Kg 01/22/20 20:27 01/23/20 11:09 Barium 0.0300 U 1.00 0.0300 mg/Kg 01/22/20 20:27 01/23/20 11:09 Beryllium 0.0145 U 0.250 0.0145 mg/Kg 01/22/20 20:27 01/23/20 11:09 Calcium 2.485 J 100 0.864 mg/Kg 01/22/20 20:27 01/23/20 11:09 Cadmium 0.0256 U 0.250 0.0256 mg/Kg 01/22/20 20:27 01/23/20 11:09 Chromium 0.0506 U 0.500 0.0506 mg/Kg 01/22/20 20:27 01/23/20 11:09 Copper 0.174 U 0.500 0.174 mg/Kg 01/22/20 20:27 01/23/20 11:09 Iron 2.53 U 2.00 2.53 mg/Kg 01/22/20 20:27 01/23/20 11:09

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1/27/2020

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QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-285901/1-A

Matrix: Solid

Analysis Batch: 285968

Client Sample ID: Method Blank **Prep Type: Total/NA**

Prep Batch: 285901

	IVID	IVID							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.0381	U	1.50	0.0381	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Sodium	0.9250	J	100	0.886	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Antimony	0.232	U	2.50	0.232	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Thallium	0.277	U	1.50	0.277	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
Zinc	0.108	U	1.50	0.108	mg/Kg		01/22/20 20:27	01/23/20 11:09	1
_									

Lab Sample ID: LCSSRM 600-285901/2-A

Matrix: Solid

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

Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 285968							Prep Batch: 28590 ^o
	Spike	LCSSRM	LCSSRM				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	34.8	25.47		mg/Kg		73.2	58.3 - 112.
							9
Arsenic	319	255.3		mg/Kg		80.0	60.2 - 111.
							6
Barium	299	210.7		mg/Kg		70.5	59.2 - 110.
							0
Beryllium	190	154.8		mg/Kg		81.5	64.2 - 110.
							0
Calcium	16000	12720		mg/Kg		79.5	61.8 - 110.
							0
Cadmium	182	136.6		mg/Kg		75.0	65.4 - 109.
							9
Chromium	189	149.2		mg/Kg		79.0	59.8 - 110.
	40=	00.50					6
Copper	107	86.50		mg/Kg		80.8	61.6 - 110.
las a	40000	40000				04.0	3
Iron	18600	12060		mg/Kg		64.8	24.7 - 121.
Potocoium	11600	8792		malka		75.8	50.0 440
Potassium	11800	0/92		mg/Kg		75.6	59.0 - 110.
Magnesium	13600	10110		mg/Kg		74.3	3 62.5 - 110.
Wagnesium	13000	10110		mg/rtg		74.5	3
Manganese	1390	1034		mg/Kg		74.4	66.1 ₋ 110.
Manganese	1000	1004		mg/rtg		7-7	1
Sodium	14200	10290		mg/Kg		72.5	58.7 - 113.
							4
Lead	148	124.8		mg/Kg		84.3	61.0 - 110.
				0 0			1
Antimony	118	29.46		mg/Kg		25.0	10.0 - 110.
•							2
Selenium	322	251.9		mg/Kg		78.2	57.8 - 109.
							9
Thallium	253	211.6		mg/Kg		83.6	59.7 - 109.
							9
Zinc	498	435.3		mg/Kg		87.4	58.8 - 110.
							0

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-199369-1 MS

Matrix: Solid

Analysis Batch: 285968

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Prep Batch: 285901

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.129	U	13.7	15.51		mg/Kg	₩	113	75 - 125	
Arsenic	6.15		54.8	64.10		mg/Kg	☼	106	75 - 125	
Barium	469		54.8	489.6	4	mg/Kg	₽	37	75 - 125	
Beryllium	0.109	J	54.8	51.76		mg/Kg	₩.	94	75 ₋ 125	
Cadmium	0.0922	J	54.8	58.57		mg/Kg	₽	107	75 ₋ 125	
Chromium	2.09		54.8	53.40		mg/Kg	₽	94	75 - 125	
Copper	2.48		54.8	59.33		mg/Kg	₩.	104	75 ₋ 125	
Iron	1730		548	2530	N1	mg/Kg	₽	147	75 - 125	
Potassium	523		548	1412	N1	mg/Kg	₽	162	75 ₋ 125	
Magnesium	7780		548	8065	4	mg/Kg	\$	52	75 ₋ 125	
Manganese	14.1		54.8	69.31		mg/Kg	₽	101	75 - 125	
Sodium	845	b	548	1506		mg/Kg	₽	121	75 ₋ 125	
Antimony	0.320	J	82.2	68.15		mg/Kg	₽	83	75 - 125	
Selenium	0.281	U	54.8	57.58		mg/Kg	₽	105	75 ₋ 125	
Thallium	2.22		54.8	52.94		mg/Kg	₽	93	75 ₋ 125	

Lab Sample ID: 600-199369-1 MS

Matrix: Solid

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Analysis Batch: 285968									Prep Batch: 285901
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.646	U	13.7	14.08		mg/Kg	<u> </u>	103	75 - 125
Arsenic	6.84		54.8	67.50		mg/Kg	₽	111	75 ₋ 125
Barium	497		54.8	519.9	4	mg/Kg	₽	42	75 - 125
Beryllium	0.136	J	54.8	56.98		mg/Kg	\$	104	75 ₋ 125
Calcium	241000	b	548	243600	4	mg/Kg	₽	496	75 ₋ 125
Cadmium	0.163	J	54.8	61.36		mg/Kg	₽	112	75 ₋ 125
Chromium	2.44	J	54.8	58.32		mg/Kg	\$	102	75 ₋ 125
Copper	2.79		54.8	60.73		mg/Kg	₽	106	75 - 125
Iron	1860		548	2723	N1	mg/Kg	₽	157	75 ₋ 125
Potassium	518	J	548	1484	N1	mg/Kg	₽	176	75 - 125
Magnesium	8660		548	9043	4	mg/Kg	₽	69	75 ₋ 125
Manganese	15.3		54.8	73.61		mg/Kg	₽	106	75 ₋ 125
Sodium	893	b	548	1572		mg/Kg	₽	124	75 - 125
Lead	0.570	U	54.8	58.70		mg/Kg	₽	107	75 ₋ 125
Antimony	1.26	U	82.2	70.54		mg/Kg	₽	86	75 ₋ 125
Selenium	1.41	U	54.8	59.50		mg/Kg	₽	109	75 ₋ 125
Thallium	8.22		54.8	52.21		mg/Kg	₽	80	75 ₋ 125
Zinc	36.2		27.4	40.41	N1	mg/Kg	₽	15	75 - 125

Lab Sample ID: 600-199369-1 DU

Matrix: Solid

Analysis Batch: 285968

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Prep Batch: 285901

1/27/2020

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.129	U	0.128	U	mg/Kg	*	NC NC	20
Arsenic	6.15		6.765		mg/Kg	₩	9	20
Barium	469		501.9		mg/Kg	₩	7	20
Beryllium	0.109	J	0.1128	J	mg/Kg	*	4	20

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Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-199369-1 DU Client Sample ID: CELL17-SQUARE45-S-3-4-200114 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 285968 **Prep Batch: 285901**

Sample	Sample	DU	DU				RPD
Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
0.0922	J	0.05911	JF	mg/Kg	- - - -	44	20
2.09		2.300		mg/Kg	₩	9	20
2.48		2.499		mg/Kg		0.8	20
1730		1921		mg/Kg	‡	11	20
523		558.8		mg/Kg	#	7	20
7780		7507		mg/Kg	#	4	20
14.1		15.71		mg/Kg	#	11	20
845	b	851.7		mg/Kg	‡	0.8	20
0.114	U	0.113	U	mg/Kg	*	NC	20
0.320	J	0.3976	JF	mg/Kg	#	22	20
0.281	U	0.278	U	mg/Kg	‡	NC	20
2.22		0.4782	JF	mg/Kg	.⇔	129	20
	Result 0.0922 2.09 2.48 1730 523 7780 14.1 845 0.114 0.320 0.281	2.48 1730 523 7780 14.1 845 b 0.114 U 0.320 J 0.281 U	Result Qualifier Result 0.0922 J 0.05911 2.09 2.300 2.48 2.499 1730 1921 523 558.8 7780 7507 14.1 15.71 845 b 851.7 0.114 U 0.113 0.320 J 0.3976 0.281 U 0.278	Result Qualifier Result Qualifier 0.0922 J 0.05911 J F 2.09 2.300 2.499 1730 1921 558.8 7780 7507 14.1 15.71 845 b 851.7 0.114 U 0.113 U 0.320 J 0.3976 J F 0.281 U 0.278 U	Result Qualifier Result Qualifier Unit 0.0922 J 0.05911 J F mg/Kg 2.09 2.300 mg/Kg 2.48 2.499 mg/Kg 1730 1921 mg/Kg 523 558.8 mg/Kg 7780 7507 mg/Kg 14.1 15.71 mg/Kg 845 b 851.7 mg/Kg 0.114 U 0.113 U mg/Kg 0.320 J 0.3976 J F mg/Kg 0.281 U 0.278 U mg/Kg	Result Qualifier Result Qualifier Unit D 0.0922 J 0.05911 JF mg/Kg IF 2.09 2.300 mg/Kg IF mg/Kg IF 2.48 2.499 mg/Kg IF mg/Kg IF 1730 1921 mg/Kg IF mg/Kg IF 523 558.8 mg/Kg IF mg/Kg IF 7780 7507 mg/Kg IF mg/Kg IF 14.1 15.71 mg/Kg IF mg/Kg IF 0.114 U 0.113 U mg/Kg IF 0.320 J 0.3976 JF mg/Kg IF 0.281 U 0.278 U mg/Kg IF	Result Qualifier Result Qualifier Unit D RPD 0.0922 J 0.05911 JF mg/Kg 44 2.09 2.300 mg/Kg 9 2.48 2.499 mg/Kg 6 0.8 1730 1921 mg/Kg 6 11 523 558.8 mg/Kg 6 7 7780 7507 mg/Kg 6 4 14.1 15.71 mg/Kg 6 11 845 b 851.7 mg/Kg 6 0.8 0.114 U 0.113 U mg/Kg 6 NC 0.320 J 0.3976 JF mg/Kg 6 NC 0.281 U 0.278 U mg/Kg 6 NC

Lab Sample ID: 600-199369-1 DU Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 285968							Prep Batch: 2	85901
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.646	U	0.639	U	mg/Kg	\(\pi\)	NC NC	20
Arsenic	6.84		7.657		mg/Kg	₽	11	20
Barium	497		570.1		mg/Kg	≎	14	20
Beryllium	0.136	J	0.08060	JF	mg/Kg	\$	51	20
Calcium	241000	b	257900		mg/Kg	₽	7	20
Cadmium	0.163	J	0.138	U	mg/Kg	₽	NC	20
Chromium	2.44	J	2.740		mg/Kg	\$	12	20
Copper	2.79		3.143		mg/Kg	₽	12	20
Iron	1860		2192		mg/Kg	₽	16	20
Potassium	518	J	617.4		mg/Kg	₽	17	20
Magnesium	8660		8920		mg/Kg	≎	3	20
Manganese	15.3		18.13		mg/Kg	₽	17	20
Sodium	893	b	955.1		mg/Kg	\$	7	20
Lead	0.570	U	0.564	U	mg/Kg	☼	NC	20
Antimony	1.26	U	1.25	U	mg/Kg	₽	NC	20
Selenium	1.41	U	1.39	U	mg/Kg	\$	NC	20
Thallium	8.22		1.49	U	mg/Kg	₩	NC	20
Zinc	36.2		9.779	F	mg/Kg	≎	115	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-285823/7-B Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 285823 Analysis Batch: 285878 MB MB

Result Qualifier MQL (Adj) SDL Unit Analyzed Dil Fac Analyte Prepared 0.0157 01/22/20 10:40 Mercury 0.00330 U 0.00330 mg/Kg 01/22/20 14:57

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-285823/8-B			Client Sample ID: Lab Control Sample
Matrix: Solid			Prep Type: Total/NA
Analysis Batch: 285878			Prep Batch: 285823
	Spike	LCS LCS	%Rec.

	Spike	LCS	LCS			%Rec.
Analyte	Added	Result	Qualifier U	nit D	%Rec	Limits
Mercury	0.224	0.2329		g/Kg	104	70 - 130

Lab Sample ID: 600-199369-1 MS Client Sample ID: CELL17-SQUARE45-S-3-4-200114 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 285878 **Prep Batch: 285823**

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Limits Unit D %Rec 0.270 Mercury 0.00387 U 0.1610 N1 mg/Kg 60 75 - 125

Lab Sample ID: 600-199369-1 DU Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Matrix: Solid Prep Type: Total/NA Analysis Batch: 285878 **Prep Batch: 285823** DU DU

Sample Sample Result Qualifier Result Qualifier RPD Limit Analyte Unit ₩ 0.00387 U 0.00387 U NC 20 Mercury mg/Kg

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Analyte	MQL	MDL	Units
Benzene	5.00	0.560	ug/L
Ethylbenzene	5.00	1.29	ug/L
Toluene	5.00	0.550	ug/L
Xylenes, Total	5.00	1.98	ug/L

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	0.00500	0.000630	mg/Kg
Ethylbenzene	0.00500	0.00102	mg/Kg
Toluene	0.00500	0.00138	mg/Kg
Xylenes, Total	0.00500	0.00113	mg/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030B

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	1.00	0.586	mg/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
C28-C36	8.30	5.00	mg/Kg
Diesel Range Organics [C10-C28]	8.30	1.71	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

_ Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

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Unadjusted Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units
Mercury	0.0170	0.00358	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

GC/MS VOA

Analysis Batch: 285922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	8260B	285964
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	8260B	285964
MB 600-285922/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-285922/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-285922/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 285929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-9	TRIP BLANK	Total/NA	Water	8260B	
MB 600-285929/15	Method Blank	Total/NA	Water	8260B	
LCS 600-285929/12	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-285929/13	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 285964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	5035	<u> </u>
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	5035	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	5035	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	5035	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	5035	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	5035	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	5035	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 285766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	8015B	285768
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	8015B	285768
MB 600-285768/3-A	Method Blank	Total/NA	Solid	8015B	285768
LCS 600-285768/1-A	Lab Control Sample	Total/NA	Solid	8015B	285768
LCSD 600-285768/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	285768

Prep Batch: 285768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	5030B	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

GC VOA (Continued)

Prep Batch: 285768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	5030B	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	5030B	
MB 600-285768/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-285768/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-285768/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

GC Semi VOA

Prep Batch: 285855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	3546	
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	3546	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	3546	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	3546	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	3546	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	3546	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	3546	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	3546	
MB 600-285855/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-285855/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 285991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	8015B	285855
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	8015B	285855
MB 600-285855/1-A	Method Blank	Total/NA	Solid	8015B	285855
LCS 600-285855/2-A	Lab Control Sample	Total/NA	Solid	8015B	285855

HPLC/IC

Analysis Batch: 285784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Soluble	Solid	300.0	285881
MB 600-285881/1-A	Method Blank	Soluble	Solid	300.0	285881
LCS 600-285881/2-A	Lab Control Sample	Soluble	Solid	300.0	285881
600-199369-2 MS	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	300.0	285881
600-199369-2 MSD	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	300.0	285881

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QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

HPLC/IC

Leach Batch: 285881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Soluble	Solid	DI Leach	
MB 600-285881/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-285881/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-199369-2 MS	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	DI Leach	
600-199369-2 MSD	CELL17-SQUARE 113-S-3-4-200114	Soluble	Solid	DI Leach	

Analysis Batch: 285890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Soluble	Solid	300.0	285881

Metals

Prep Batch: 285823

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	7471A	
MB 600-285823/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-285823/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-199369-1 MS	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	
600-199369-1 DU	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	

Analysis Batch: 285878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	7471A	285823
MB 600-285823/7-B	Method Blank	Total/NA	Solid	7471A	285823
LCS 600-285823/8-B	Lab Control Sample	Total/NA	Solid	7471A	285823
600-199369-1 MS	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	285823
600-199369-1 DU	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	7471A	285823

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals

Prep Batch: 285901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	3050B	
MB 600-285901/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-285901/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-199369-1 MS	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	3050B	
600-199369-1 DU	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	3050B	

Analysis Batch: 285968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	6010B	285901
MB 600-285901/1-A	Method Blank	Total/NA	Solid	6010B	285901
LCSSRM 600-285901/2-A	Lab Control Sample	Total/NA	Solid	6010B	285901
600-199369-1 MS	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-1 MS	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-1 DU	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901
600-199369-1 DU	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	6010B	285901

General Chemistry

Analysis Batch: 285941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199369-1	CELL17-SQUARE45-S-3-4-200114	Total/NA	Solid	2540B	_
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	Total/NA	Solid	2540B	
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	Total/NA	Solid	2540B	

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Client: ARCADIS U.S., Inc. Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Date Collected: 01/14/20 09:16 Date Received: 01/15/20 10:36

Lab Sample ID: 600-199369-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 14:45	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 05:31	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL17-SQUARE45-S-3-4-200114 Lab Sample ID: 600-199369-1

Date Collected: 01/14/20 09:16 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 89.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOL
Total/NA	Analysis	8260B		1	285922	01/23/20 12:10	WS1	TAL HOL
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOL
Soluble	Analysis	300.0		10	285890	01/23/20 17:10	SKR	TAL HOL
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOL
Total/NA	Analysis	6010B		1	285968	01/23/20 11:13	KP1	TAL HOL
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOL
Total/NA	Analysis	6010B		5	285968	01/23/20 12:56	KP1	TAL HOL
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOL
Total/NA	Analysis	7471A		1	285878	01/22/20 15:01	SOT	TAL HOL

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Lab Sample ID: 600-199369-2 Date Collected: 01/14/20 09:52 **Matrix: Solid**

Date Received: 01/15/20 10:36

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B	-		285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 15:09	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 06:04	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Lab Sample ID: 600-199369-2 Date Collected: 01/14/20 09:52 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 90.8

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 12:32	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/22/20 23:17	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:19	KP1	TAL HOU

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Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Lab Sample ID: 600-199369-2 Date Collected: 01/14/20 09:52 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 90.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:02	KP1	TAL HOU
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:07	SOT	TAL HOU

Client Sample ID: CELL17-SQUARE 175-S-3-4-200114

Lab Sample ID: 600-199369-3 Date Collected: 01/14/20 10:19 **Matrix: Solid**

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 15:33	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 06:37	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL17-SQUARE 175-S-3-4-200114 Lab Sample ID: 600-199369-3

Date Collected: 01/14/20 10:19 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 88.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 12:55	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/23/20 00:59	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:21	KP1	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:04	KP1	TAL HOU
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:09	SOT	TAL HOU

Client Sample ID: CELL17-SQUARE 207-S-3-4-200114

Lab Sample ID: 600-199369-4 Date Collected: 01/14/20 10:50 **Matrix: Solid**

Date Received: 01/15/20 10:36

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 15:56	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 07:55	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Eurofins TestAmerica, Houston

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL17-SQUARE 207-S-3-4-200114

Lab Sample ID: 600-199369-4 Date Collected: 01/14/20 10:50 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 90.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 13:17	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/23/20 01:20	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:23	KP1	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:06	KP1	TAL HOU
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:11	SOT	TAL HOU

Client Sample ID: CELL18-SQUARE 83-S-3-4-200114

Lab Sample ID: 600-199369-5 Date Collected: 01/14/20 11:28 **Matrix: Solid**

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 16:20	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 09:01	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL18-SQUARE 83-S-3-4-200114

Lab Sample ID: 600-199369-5 Date Collected: 01/14/20 11:28 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 88.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 13:39	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/23/20 01:40	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:25	KP1	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:08	KP1	TAL HOU
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:13	SOT	TAL HOU

Client Sample ID: CELL18-SQUARE 181-S-3-4-200114

Lab Sample ID: 600-199369-6 Date Collected: 01/14/20 11:53 **Matrix: Solid**

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 16:44	WS1	TAL HOU

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Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL18-SQUARE 181-S-3-4-200114

Lab Sample ID: 600-199369-6 Date Collected: 01/14/20 11:53 Matrix: Solid

Date Received: 01/15/20 10:36

Client: ARCADIS U.S., Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 09:34	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL18-SQUARE 181-S-3-4-200114

Lab Sample ID: 600-199369-6

Date Collected: 01/14/20 11:53 **Matrix: Solid**

Date Received: 01/15/20 10:36 Percent Solids: 86.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 14:01	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/23/20 02:00	SKR	TAL HOL
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOL
Total/NA	Analysis	6010B		1	285968	01/23/20 11:27	KP1	TAL HOL
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:15	KP1	TAL HOU
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:15	SOT	TAL HOL

Client Sample ID: CELL18-SQUARE 133-S-3-4-200114

Lab Sample ID: 600-199369-7 Date Collected: 01/14/20 12:26 **Matrix: Solid**

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 17:08	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:48	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 10:07	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL18-SQUARE 133-S-3-4-200114

Lab Sample ID: 600-199369-7 Date Collected: 01/14/20 12:26 Matrix: Solid

Date Received: 01/15/20 10:36 Percent Solids: 87.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOU
Total/NA	Analysis	8260B		1	285922	01/23/20 14:24	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		1	285784	01/23/20 02:21	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:36	KP1	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		5	285968	01/23/20 13:17	KP1	TAL HOU

Job ID: 600-199369-1

Matrix: Solid

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL18-SQUARE 133-S-3-4-200114

Lab Sample ID: 600-199369-7 Date Collected: 01/14/20 12:26 **Matrix: Solid** Date Received: 01/15/20 10:36 Percent Solids: 87.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOU
Total/NA	Analysis	7471A		1	285878	01/22/20 15:21	SOT	TAL HOU

Client Sample ID: CELL18-SQUARE 92-S-3-4-200114

Lab Sample ID: 600-199369-8 Date Collected: 01/14/20 13:00

Date Received: 01/15/20 10:36

Client: ARCADIS U.S., Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B	-		285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 17:56	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:48	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 11:28	RJV	TAL HOU
Total/NA	Analysis	2540B		1	285941	01/23/20 09:41	ANP	TAL HOU

Client Sample ID: CELL18-SQUARE 92-S-3-4-200114

Lab Sample ID: 600-199369-8 Date Collected: 01/14/20 13:00 **Matrix: Solid** Percent Solids: 87.8

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			285964	01/22/20 09:50	WS1	TAL HOL
Total/NA	Analysis	8260B		1	285922	01/23/20 14:46	WS1	TAL HOL
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOL
Soluble	Analysis	300.0		1	285784	01/23/20 02:41	SKR	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOL
Total/NA	Analysis	6010B		1	285968	01/23/20 11:38	KP1	TAL HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOL
Total/NA	Analysis	6010B		5	285968	01/23/20 13:19	KP1	TAL HOL
Total/NA	Prep	7471A			285823	01/22/20 10:40	SOT	TAL HOL
Total/NA	Analysis	7471A		1	285878	01/22/20 15:23	SOT	TAL HOL

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-199369-9 Date Collected: 01/14/20 00:00 **Matrix: Water**

Date Received: 01/15/20 10:36

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B			285929	01/23/20 17:09	DT1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

8260B

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

NELAP T104704223-19-25 10-31-19 * The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification: Analysis Method Prep Method Matrix Analysis 2540B Prep Method Matrix Analyte 2540B Solid Percent Moisture 2540B 3050B Solid Chloride 300.0 Josoba Solid Antimony 6010B 3050B Solid Arsenic 6010B 3050B Solid Barlum 6010B 3050B Solid Barlum 6010B 3050B Solid Cadmium 6010B 3050B Solid Calcium 6010B 3050B Solid Copper 6010B 3050B Solid Copper 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B	ithority		Program	Identification Number	Expiration Date
Analysis Method Prep Method Matrix Analyte 2540B Solid Percent Moisture 2540B Solid Percent Solids 300.0 Solid Chloride 6010B 3050B Solid Antimony 6010B 3050B Solid Arsenic 6010B 3050B Solid Arsenic 6010B 3050B Solid Beryllium 6010B 3050B Solid Beryllium 6010B 3050B Solid Cadmium 6010B 3050B Solid Catcium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Magnesium 6010B 3050B Solid Magnesium 6010B 3050B Solid Magnesium 6010B 3050B Solid Selenium 6010B	xas	N	NELAP	T104704223-19-25	10-31-19 *
2540B Solid Percent Moisture 2540B Solid Percent Solids 300.0 Solid Chloride 6010B 3050B Solid Antimony 6010B 3050B Solid Arsenic 6010B 3050B Solid Barium 6010B 3050B Solid Beryllium 6010B 3050B Solid Cadmium 6010B 3050B Solid Calcium 6010B 3050B Solid Chromium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Lead 6010B 3050B Solid Manganesium 6010B 3050B Solid Manganese 6010B 3050B Solid Potassium 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B <td>• .</td> <td></td> <td>out the laboratory is not certif</td> <td>ied by the governing authority. This list ma</td> <td>y include analytes for which</td>	• .		out the laboratory is not certif	ied by the governing authority. This list ma	y include analytes for which
2540B Solid Percent Solids 300.0 Solid Chloride 6010B 3050B Solid Antimony 6010B 3050B Solid Arsenic 6010B 3050B Solid Berlium 6010B 3050B Solid Berlyllium 6010B 3050B Solid Cadmium 6010B 3050B Solid Calcium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Lead 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Magnesium 6010B 3050B Solid Magnesium 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Solium 6010B <td< th=""><th>Analysis Method</th><th>Prep Method</th><th>Matrix</th><th>Analyte</th><th></th></td<>	Analysis Method	Prep Method	Matrix	Analyte	
300.0 Solid Chloride 6010B 3050B Solid Antimony 6010B 3050B Solid Arsenic 6010B 3050B Solid Barlum 6010B 3050B Solid Beryllium 6010B 3050B Solid Cadmium 6010B 3050B Solid Calcium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Manyanese 6010B 3050B Solid Menagenese 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Thallium 6010	2540B		Solid	Percent Moisture	
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6010B 3050B Solid Beryllium 6010B 3050B Solid Cadmium 6010B 3050B Solid Cadicium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Iron 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Potassium 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Mercury 7471A Solid Mercury 8015B	6010B	3050B	Solid	Antimony	
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6010B 3050B Solid Cadmium 6010B 3050B Solid Calcium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Silver 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Thallium 6010B 3050B Solid Mercury 8010B 3050B Solid Mercury 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Ran	6010B	3050B	Solid	Barium	
6010B 3050B Solid Calcium 6010B 3050B Solid Chromium 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Selenium 6010B 3050B Solid Selenium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Thallium 6010B 3050B Solid Mercury 6010B 3050B Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Benzene 8016B 5035 Solid Benzene	6010B	3050B	Solid	Beryllium	
6010B 3050B Solid Copper 6010B 3050B Solid Copper 6010B 3050B Solid Iron 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Potassium 6010B 3050B Solid Selenium 6010B 3050B Solid Solium 6010B 3050B Solid Solium 6010B 3050B Solid Thallium 6010B 3050B Solid Mercury 6010B 3050B Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Benzene 8260B 5035 Solid Benzene	6010B	3050B	Solid	Cadmium	
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6010B 3050B Solid Iron 6010B 3050B Solid Lead 6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Potassium 6010B 3050B Solid Selenium 6010B 3050B Solid Silver 6010B 3050B Solid Sodium 6010B 3050B Solid Thallium 6010B 3050B Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Chromium	
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6010B 3050B Solid Magnesium 6010B 3050B Solid Manganese 6010B 3050B Solid Potassium 6010B 3050B Solid Selenium 6010B 3050B Solid Silver 6010B 3050B Solid Sodium 6010B 3050B Solid Thallium 6010B 3050B Solid Zinc 7471A 7471A Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Iron	
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6010B 3050B Solid Selenium 6010B 3050B Solid Silver 6010B 3050B Solid Sodium 6010B 3050B Solid Thallium 6010B 3050B Solid Zinc 7471A 7471A Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Manganese	
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6010B 3050B Solid Thallium 6010B 3050B Solid Zinc 7471A 7471A Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Silver	
6010B 3050B Solid Zinc 7471A 7471A Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Sodium	
7471A 7471A Solid Mercury 8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Thallium	
8015B 3546 Solid C28-C36 8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	6010B	3050B	Solid	Zinc	
8015B 3546 Solid Diesel Range Organics [C10-C28] 8015B 5030B Solid Gasoline Range Organics [C6 - C10] 8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	7471A	7471A	Solid	Mercury	
8015B5030BSolidGasoline Range Organics [C6 - C10]8260B5035SolidBenzene8260B5035SolidEthylbenzene	8015B	3546	Solid	C28-C36	
8260B 5035 Solid Benzene 8260B 5035 Solid Ethylbenzene	8015B	3546	Solid	Diesel Range Organics [C10-C	228]
8260B 5035 Solid Ethylbenzene	8015B	5030B	Solid	Gasoline Range Organics [C6	- C10]
·	8260B	5035	Solid	Benzene	
8260B 5035 Solid Toluene	8260B	5035	Solid	Ethylbenzene	
	8260B	5035	Solid	Toluene	

Solid

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Xylenes, Total

Eurofins TestAmerica, Houston

 $^{{}^{\}star}\operatorname{Accreditation/Certification\ renewal\ pending\ -\ accreditation/certification\ considered\ valid}.$

reditation/certification renewal pending - accreditation/certification considered valid.

Phone (713) 690-4444 Fax (713) 690-5646										СемАлления
Client Information	Sampler	Louis	M	Lab PM Kudch	adkar,	Sachin G	600-19	600-199369 Chain of Custody	3511-20114.2	
Client Contact. Sarah Johnson	2 6 3	7 5400	S	E-M Sac		dkar@tes	1 2		79 8	
Company ARCADIS U.S., Inc.							Analysis	sis Reguested	Job#:	
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City Michael	TAT Requested (days):	iys):			1.0-82		. 6A .		žż	Hexane
State Zip. TX, 79701	18:31	141			3 /(823		Mn, se		en po	- AsNaO2 - Na204S
Phone: 432-227-0266(Tel)	Po# Purchase Order Requ	Requested					69. Pb		F - MeOH R - Na G - Amchlor S - H2 M - Ascorbio Acid T - TS	Na2S203 H2S04 TSP Dodecahydrate
Email sarah johnson@arcadis.com	*OM				(on	-	'no 'p		1-tce U-	U - Acetone V - MCAA
Project Name. Chevron - Jal Land Farm Soils 2020 Site:	Project #: 60011732 SSOW#:				(Yes or	gnes eni	Ba, Be, C		K-EDTA L-EDA Other	(4-5 er (specify)
		Sample	Sample Type (C=comp,	Matrix (Western, Smolid, Occustored,	neS besetil Filtered San artorne Beseld - ORG_BER	ORGEM_285,0	YINO X3T8 - 8080 SA ,48 - 1747/8010 PH ,7		o to redmuki isso	
Sample Identification	Sample Date	Lime	G=grab) Preserva	Preservation Code.)8 Z	19 Z		Special Instructions/Note:	ions/Note:
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Call 18 - Sac. 4-83-5-5-4-20014		1183	9	S	2	>	>>			
PHIN - Spir - 181-5-34 - 202119	1	1153	9	S	5	>	>			
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Rossible Hazard Identification					Samp	le Dispos	al (A fee n	nay be assessed if samples a	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	(4)
le Skin Irritant	Poison B Unknown		Radiological			Return To Client	Return To Client Dis	Disposal By Lab	Archive For Mc	Months
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Environment Testing TestAmerica

Eurofins TestAmerica Houston

199369 eceipt Checklist

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UNPACKED BY:	~		CARRIER/DRIVER:	+5	DEX	
	/					
Custody Seal Present:		NO N	Observed Temp		Therm	Comments of Towns
Cooler ID	Temp	Trip Blank	, (℃)	ID	CF	Corrected Temp (℃)
7601	(Y) / N	Y / N	119	IRC17	+0.4	7.3
100.	Y/N	Y / N	1 1/1		,	
	YTN	Y / N	7			
	Y / N	Y / N		1220		
	Y / N	Y / N		-		
	Y/N	YIN				
TX1005 samples <u>frozer</u> pH paper Lot #	n upon receipt:		OATE & TIME PUT IN		□YES □NO	
Did samples meet the labor	ratory's standard co	onditions of sam	ple acceptability upon red	ceipt?		DYES NO
COMMENTS:						
			7	1-7224	/	
HS-SA-WI-013					n.	v. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 600-199369-1

Login Number: 199369 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Trenery, Michael J

oreator. Treffery, iniciaero		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	2.3
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.

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-199371-1

Client Project/Site: Chevron - Jal Land Farm Soils 2020

For:

🔅 eurofins

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Sarah Johnson



Authorized for release by: 1/28/2020 5:31:42 PM

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

..... Links

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Have a Question?



Visit us at: www.testamericainc.com The test results in this report meet all 2003 NELAC and 2009 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.

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Method **Method Description** Protocol Laboratory SW846 TAL HOU 8260B Volatile Organic Compounds (GC/MS) 8015B Gasoline Range Organics - (GC) SW846 TAL HOU 8015B Diesel Range Organics (DRO) (GC) SW846 TAL HOU 300.0 Anions, Ion Chromatography MCAWW TAL HOU 6010B Inductively Coupled Plasma - Atomic Emission Spectrometry SW846 TAL HOU Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) 7471A SW846 TAL HOU 2540B Percent Moisture SM20 TAL HOU SW846 TAL HOU 3050B Acid Digestion of Sediments, Sludges, and Soils Microwave Extraction SW846 TAL HOU 3546 5030B Purge and Trap SW846 TAL HOU 5030B Purge and Trap for Methanol Extractions SW846 TAL HOU 5035 Closed System Purge & Trap/Laboratory Preservation SW846 TAL HOU 7471A Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation SW846 TAL HOU Deionized Water Leaching Procedure (Routine) TAL HOU DI Leach ASTM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Job ID: 600-199371-1

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Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Solid	01/15/20 09:27	01/22/20 10:07
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Solid	01/15/20 09:55	01/22/20 10:07
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Solid	01/15/20 10:28	01/22/20 10:07
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Solid	01/15/20 10:59	01/22/20 10:07
600-199371-5	TRIP BLANK	Water	01/15/20 00:00	01/22/20 10:07

Job ID: 600-199371-1

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Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Zinc

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Lab Sample ID: 600-199371-1 Date Collected: 01/15/20 09:27 Matrix: Solid Date Received: 01/22/20 10:07

Percent Solids: 73.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.0655	Н	0.00616	0.000776	mg/Kg	₩	01/22/20 14:05	01/25/20 10:03	
Ethylbenzene	0.00126	UH	0.00616	0.00126	mg/Kg	₽	01/22/20 14:05	01/25/20 10:03	
Toluene	0.00170	UH	0.00616	0.00170	mg/Kg	₽	01/22/20 14:05	01/25/20 10:03	
Xylenes, Total	0.00139	UH	0.00616	0.00139	mg/Kg	\$	01/22/20 14:05	01/25/20 10:03	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	103		61 - 130				01/22/20 14:05	01/25/20 10:03	
Dibromofluoromethane	95		68 ₋ 140				01/22/20 14:05	01/25/20 10:03	
Toluene-d8 (Surr)	88		50 - 130				01/22/20 14:05	01/25/20 10:03	
4-Bromofluorobenzene	99		57 - 140				01/22/20 14:05	01/25/20 10:03	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	0.584	U	0.997	0.584	mg/Kg		01/22/20 13:46	01/22/20 18:20	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	85		70 - 130				01/22/20 13:46	01/22/20 18:20	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	1.71	U	8.29	1.71	mg/Kg		01/22/20 14:16	01/24/20 03:19	
C28-C36	4.99	U	8.29	4.99	mg/Kg		01/22/20 14:16	01/24/20 03:19	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
o-Terphenyl	98		60 - 140				01/22/20 14:16	01/24/20 03:19	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	3.50	J b	5.43	0.724	mg/Kg	\$		01/27/20 23:31	
Method: 6010B - Inductively Cou	pled Plasma -	Atomic Em	ission Spectro	ometry					
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.155	U	0.521	0.155	mg/Kg	*	01/27/20 15:36	01/28/20 10:29	
Arsenic	2.66		1.30	0.284	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
Barium	116		1.30	0.0391	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
Beryllium	0.137	J	0.326	0.0189	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
Calcium	195000		260	2.25	mg/Kg	☼	01/27/20 15:36	01/28/20 11:04	
Cadmium	0.104	J	0.326	0.0333	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	
Chromium	2.29		0.651	0.0659	mg/Kg		01/27/20 15:36	01/28/20 10:29	
Copper	1.13		0.651	0.227	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
ron	2070		26.0	3.29	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
Potassium	455		130	14.3	mg/Kg		01/27/20 15:36	01/28/20 10:29	
Magnesium	3180		130		mg/Kg	₩	01/27/20 15:36	01/28/20 10:29	
Manganese	15.2		1.95	0.0496		₩	01/27/20 15:36	01/28/20 10:29	
Sodium	133		130		mg/Kg	.	01/27/20 15:36	01/28/20 10:29	
Lead	1.73		1.30		mg/Kg	₽	01/27/20 15:36	01/28/20 11:04	
Antimony	0.658	J	3.26	0.302	mg/Kg	₽	01/27/20 15:36	01/28/20 10:29	
-	0.658 0.337		3.26 2.60		mg/Kg mg/Kg		01/27/20 15:36 01/27/20 15:36	01/28/20 10:29 01/28/20 10:29	
Antimony Selenium Thallium		U		0.337	mg/Kg mg/Kg mg/Kg				

© 01/27/20 15:36 01/28/20 11:04

3.91

0.281 mg/Kg

9.73

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Lab Sample ID: 600-199371-1 Date Collected: 01/15/20 09:27 Matrix: Solid

Date Received: 01/22/20 10:07 Percent Solids: 73.1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00913	J	0.0229	0.00482	mg/Kg	\	01/28/20 10:32	01/28/20 15:21	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.9		1.0	1.0	%			01/24/20 09:49	1
Percent Solids	73.1		1.0	1.0	%			01/24/20 09:49	1

Client Sample ID: CELL19-SQUARE-82-S-3-4-200115

Date Collected: 01/15/20 09:55 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 70.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0591	Н	0.00693	0.000873	mg/Kg	\	01/22/20 14:05	01/25/20 10:26	
Ethylbenzene	0.00141	UH	0.00693	0.00141	mg/Kg	₩	01/22/20 14:05	01/25/20 10:26	1
Toluene	0.00191	UH	0.00693	0.00191	mg/Kg	₽	01/22/20 14:05	01/25/20 10:26	1
Xylenes, Total	0.00157	UH	0.00693	0.00157	mg/Kg	\$	01/22/20 14:05	01/25/20 10:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 130				01/22/20 14:05	01/25/20 10:26	1
Dibromofluoromethane	96		68 - 140				01/22/20 14:05	01/25/20 10:26	1
Toluene-d8 (Surr)	89		50 ₋ 130				01/22/20 14:05	01/25/20 10:26	1
4-Bromofluorobenzene	106		57 - 140				01/22/20 14:05	01/25/20 10:26	1
Surrogate a.a.a-Trifluorotoluene		Qualifier	70 - 130				Prepared 01/02/02 12 12	Analyzed	Dil Fac
a,a,a-iiiiiuoioloiueiie	91		10 - 130				01/22/20 13:46	01/22/20 18:44	1
-		(GC)	70 - 130				01/22/20 13:46	01/22/20 18:44	1
Method: 8015B - Diesel Range O Analyte	Organics (DRO)	(GC) Qualifier	70 - 730 MQL (Adj)	SDL	Unit	D	01/22/20 13:46 Prepared	01/22/20 18:44 Analyzed	
Method: 8015B - Diesel Range O	Organics (DRO) Result	Qualifier		SDL 1.70	Unit mg/Kg	D			Dil Fac
Method: 8015B - Diesel Range O Analyte	Organics (DRO) Result	Qualifier U	MQL (Adj)			<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28]	Organics (DRO) Result 1.70	Qualifier U U	MQL (Adj) 8.25	1.70	mg/Kg	<u>D</u>	Prepared 01/22/20 14:16	Analyzed 01/24/20 03:52	Dil Fac
Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] C28-C36	Prganics (DRO) Result 1.70 4.97	Qualifier U U	MQL (Adj) 8.25 8.25	1.70	mg/Kg	<u> </u>	Prepared 01/22/20 14:16 01/22/20 14:16	Analyzed 01/24/20 03:52 01/24/20 03:52	Dil Fac
Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate	Prganics (DRO) Result 1.70 4.97 %Recovery 80	Qualifier U U Qualifier	MQL (Adj) 8.25 8.25 <i>Limits</i>	1.70	mg/Kg	<u>D</u>	Prepared 01/22/20 14:16 01/22/20 14:16 Prepared	Analyzed 01/24/20 03:52 01/24/20 03:52 Analyzed	Dil Fac
Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] C28-C36 Surrogate o-Terphenyl	Prganics (DRO) Result 1.70 4.97 %Recovery 80 omatography -	Qualifier U U Qualifier	MQL (Adj) 8.25 8.25 <i>Limits</i>	1.70 4.97	mg/Kg	<u>D</u>	Prepared 01/22/20 14:16 01/22/20 14:16 Prepared	Analyzed 01/24/20 03:52 01/24/20 03:52 Analyzed	Dil Fac

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.166	U	0.557	0.166	mg/Kg	-	01/27/20 15:36	01/28/20 10:31	1
Arsenic	4.78		1.39	0.304	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Barium	328		1.39	0.0418	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Beryllium	0.167	J	0.348	0.0202	mg/Kg	*	01/27/20 15:36	01/28/20 10:31	1
Calcium	333000		696	6.02	mg/Kg	₽	01/27/20 15:36	01/28/20 11:06	5
Cadmium	0.0836	J	0.348	0.0357	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Chromium	1.96		0.696	0.0705	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1

Eurofins TestAmerica, Houston

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Lab Sample ID: 600-199371-2

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL19-SQUARE-82-S-3-4-200115

Lab Sample ID: 600-199371-2 Date Collected: 01/15/20 09:55 Matrix: Solid Date Received: 01/22/20 10:07 Percent Solids: 70.4

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.29		0.696	0.242	mg/Kg	-	01/27/20 15:36	01/28/20 10:31	1
Iron	1800		27.9	3.52	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Potassium	622		139	15.3	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Magnesium	3340		139	2.67	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Manganese	14.3		2.09	0.0531	mg/Kg	₽	01/27/20 15:36	01/28/20 10:31	1
Sodium	277		139	1.23	mg/Kg		01/27/20 15:36	01/28/20 10:31	1
Lead	2.12	J	3.48	0.731	mg/Kg	₽	01/27/20 15:36	01/28/20 11:06	5
Antimony	0.323	U	3.48	0.323	mg/Kg	₩	01/27/20 15:36	01/28/20 10:31	1
Selenium	0.361	U	2.79	0.361	mg/Kg		01/27/20 15:36	01/28/20 10:31	1
Thallium	0.386	U	2.09	0.386	mg/Kg	₩	01/27/20 15:36	01/28/20 10:31	1
Zinc	10.0	J	10.4	0.752	mg/Kg	\$	01/27/20 15:36	01/28/20 11:06	5
Method: 7471A - Mercury in S	Solid or Semisolid	Waste (Ma	nual Cold Vap	or Technic	que)				
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00492	U	0.0234	0.00492	mg/Kg	*	01/28/20 10:32	01/28/20 15:26	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29.6		1.0	1.0	%			01/24/20 09:49	1
			1.0	1.0	%			01/24/20 09:49	

Client Sample ID: CELL19-SQUARE-204-S-3-4-200115 Lab Sample ID: 600-199371-3

Date Collected: 01/15/20 10:28 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 80.3

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0496	H	0.00573	0.000722	mg/Kg	\	01/22/20 14:05	01/25/20 10:48	1
Ethylbenzene	0.00117	UH	0.00573	0.00117	mg/Kg	₩	01/22/20 14:05	01/25/20 10:48	1
Toluene	0.00158	UH	0.00573	0.00158	mg/Kg	₽	01/22/20 14:05	01/25/20 10:48	1
Xylenes, Total	0.00129	UH	0.00573	0.00129	mg/Kg	*	01/22/20 14:05	01/25/20 10:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		61 - 130				01/22/20 14:05	01/25/20 10:48	1
Dibromofluoromethane	95		68 - 140				01/22/20 14:05	01/25/20 10:48	1
Toluene-d8 (Surr)	86		50 ₋ 130				01/22/20 14:05	01/25/20 10:48	1
4-Bromofluorobenzene	106		57 - 140				01/22/20 14:05	01/25/20 10:48	1
Method: 8015B - Gasoline Range	•	•		001		_			B.: F
Method: 8015B - Gasoline Range Analyte Gasoline Range Organics [C6 - C10]	•	Qualifier	MQL (Adj) 0.952	SDL 0.558	Unit mg/Kg	<u>D</u>	Prepared 01/22/20 13:46	Analyzed 01/22/20 19:08	
Analyte	Result	Qualifier U				<u>D</u>			1
Analyte Gasoline Range Organics [C6 - C10]	0.558	Qualifier U	0.952			<u>D</u>	01/22/20 13:46	01/22/20 19:08	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate	Result	Qualifier U Qualifier	0.952			<u> </u>	01/22/20 13:46 Prepared	01/22/20 19:08 Analyzed	1
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene	Result 0.558 %Recovery 103 rganics (DRO)	Qualifier U Qualifier	0.952	0.558		<u>D</u>	01/22/20 13:46 Prepared	01/22/20 19:08 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O	Result 0.558 %Recovery 103 rganics (DRO)	Qualifier U Qualifier (GC)	0.952 Limits 70 - 130	0.558	mg/Kg		01/22/20 13:46 Prepared 01/22/20 13:46	01/22/20 19:08 Analyzed 01/22/20 19:08	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O Analyte	Result 0.558 %Recovery 103 rganics (DRO) Result	Qualifier Qualifier	0.952 Limits 70 - 130 MQL (Adj)	0.558 SDL	mg/Kg		01/22/20 13:46 Prepared 01/22/20 13:46 Prepared	01/22/20 19:08 Analyzed 01/22/20 19:08 Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10] Surrogate a,a,a-Trifluorotoluene Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28]		Qualifier U Qualifier (GC) Qualifier U	0.952 Limits 70 - 130 MQL (Adj) 8.29	0.558 SDL 1.71	mg/Kg Unit mg/Kg		01/22/20 13:46 Prepared 01/22/20 13:46 Prepared 01/22/20 14:16	01/22/20 19:08 Analyzed 01/22/20 19:08 Analyzed 01/24/20 04:25	Dil Fac Dil Fac Dil Fac Dil Fac Dil Fac

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Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client: ARCADIS U.S., Inc.

Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Date Collected: 01/15/20 10:28 Date Received: 01/22/20 10:07

Lab Sample ID: 600-199371-3 Matrix: Solid Percent Solids: 80.3

Method: 300.0 - Anions, Ion Chrom Analyte		Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.41	b	4.98	0.665	mg/Kg	*		01/28/20 00:53	1
Method: 6010B - Inductively Coupl		Atomic Emi	ssion Specti	rometry					

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Silver	0.144	U	0.483	0.144	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Arsenic	4.96		1.21	0.263	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Barium	308		1.21	0.0363	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Beryllium	0.139	J	0.302	0.0175	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Calcium	331000		604	5.22	mg/Kg	₽	01/27/20 15:36	01/28/20 11:16	
Cadmium	0.115	J	0.302	0.0309	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Chromium	1.92		0.604	0.0611	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Copper	1.56		0.604	0.210	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	
Iron	1710		24.2	3.06	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Potassium	510		121	13.3	mg/Kg	\$	01/27/20 15:36	01/28/20 10:33	
Magnesium	2640		121	2.32	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Manganese	19.4		1.81	0.0460	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Sodium	189		121	1.07	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Lead	1.57	J	3.02	0.634	mg/Kg	₩	01/27/20 15:36	01/28/20 11:16	
Antimony	0.483	J	3.02	0.280	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Selenium	0.313	U	2.42	0.313	mg/Kg	₽	01/27/20 15:36	01/28/20 10:33	
Thallium	0.335	U	1.81	0.335	mg/Kg	₩	01/27/20 15:36	01/28/20 10:33	
Zinc	41.2		9.06	0.653	mg/Kg	☼	01/27/20 15:36	01/28/20 11:16	

Method: 7471A - Mercury in Solid	or Semisolid	Waste (Ma	nual Cold Vapo	or Technique)				
Analyte	Result	Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00438	U	0.0208	0.00438 mg/Kg	\	01/28/20 10:32	01/28/20 15:29	1

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.7		1.0	1.0	%			01/24/20 09:49	1
Percent Solids	80.3		1.0	1.0	%			01/24/20 09:49	1

Lab Sample ID: 600-199371-4 Client Sample ID: CELL19-SQUARE-93-S-3-4-200115

Date Collected: 01/15/20 10:59 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 82.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0216	Н	0.00546	0.000688	mg/Kg	₩	01/22/20 14:05	01/25/20 11:10	1
Ethylbenzene	0.00111	UH	0.00546	0.00111	mg/Kg	₽	01/22/20 14:05	01/25/20 11:10	1
Toluene	0.00151	UH	0.00546	0.00151	mg/Kg	₩	01/22/20 14:05	01/25/20 11:10	1
Xylenes, Total	0.00123	UH	0.00546	0.00123	mg/Kg	\$	01/22/20 14:05	01/25/20 11:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		61 - 130				01/22/20 14:05	01/25/20 11:10	1
Dibromofluoromethane	93		68 - 140				01/22/20 14:05	01/25/20 11:10	1
Toluene-d8 (Surr)	84		50 ₋ 130				01/22/20 14:05	01/25/20 11:10	1
4-Bromofluorobenzene	100		57 - 140				01/22/20 14:05	01/25/20 11:10	

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1/28/2020

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL19-SQUARE-93-S-3-4-200115

Lab Sample ID: 600-199371-4 Date Collected: 01/15/20 10:59 Matrix: Solid

Date Received: 01/22/20 10:07 Percent Solids: 82.9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.561	U	0.958	0.561	mg/Kg		01/22/20 13:46	01/22/20 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		70 - 130				01/22/20 13:46	01/22/20 19:32	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.58	J	8.27	1.70	mg/Kg		01/22/20 14:16	01/24/20 04:58	1
C28-C36	4.98	U	8.27	4.98	mg/Kg		01/22/20 14:16	01/24/20 04:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	127		60 - 140				01/22/20 14:16	01/24/20 04:58	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	•	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.9	b	4.82	0.644	mg/Kg	<u> </u>		01/28/20 01:13	1

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.141	U	0.473	0.141	mg/Kg	*	01/27/20 15:36	01/28/20 10:39	1
Arsenic	5.36		1.18	0.258	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Barium	350		1.18	0.0355	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Beryllium	0.124	J	0.296	0.0171	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Calcium	313000		591	5.11	mg/Kg	₽	01/27/20 15:36	01/28/20 11:08	5
Cadmium	0.0887	J	0.296	0.0303	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Chromium	1.86		0.591	0.0598	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Copper	1.53		0.591	0.206	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Iron	1630		23.6	2.99	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Potassium	471		118	13.0	mg/Kg	\$	01/27/20 15:36	01/28/20 10:39	1
Magnesium	4360		118	2.27	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Manganese	15.5		1.77	0.0450	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Sodium	241		118	1.05	mg/Kg	\$	01/27/20 15:36	01/28/20 10:39	1
Lead	2.45	J	2.96	0.621	mg/Kg	₽	01/27/20 15:36	01/28/20 11:08	5
Antimony	0.638	J	2.96	0.274	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Selenium	0.306	U	2.36	0.306	mg/Kg	\$	01/27/20 15:36	01/28/20 10:39	1
Thallium	1.31	J	1.77	0.327	mg/Kg	₽	01/27/20 15:36	01/28/20 10:39	1
Zinc	10.6		8.87	0.638	mg/Kg	₩	01/27/20 15:36	01/28/20 11:08	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	0.00392	U	0.0186	0.00392	mg/Kg	₩	01/28/20 10:32	01/28/20 15:31	1	

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.1	1.0	1.0	%			01/24/20 09:49	1
Percent Solids	82.9	1.0	1.0	%			01/24/20 09:49	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: TRIP BLANK

Date Received: 01/22/20 10:07

Lab Sample ID: 600-199371-5 Date Collected: 01/15/20 00:00

Matrix: Water

Analyte	inic Compounds (Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.560	U	5.00	0.560	ug/L			01/25/20 18:00	1
Ethylbenzene	1.29	U	5.00	1.29	ug/L			01/25/20 18:00	1
Toluene	0.550	U	5.00	0.550	ug/L			01/25/20 18:00	1
Xylenes, Total	1.98	U	5.00	1.98	ug/L			01/25/20 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		50 - 134			-		01/25/20 18:00	1
Dibromofluoromethane	96		62 - 130					01/25/20 18:00	1
Toluene-d8 (Surr)	90		70 - 130					01/25/20 18:00	1
4-Bromofluorobenzene	97		67 - 139					01/25/20 18:00	

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Qualifiers

	IS		

Qualifier Description Sample was prepped or analyzed beyond the specified holding time

Analyte was not detected at or above the SDL. U

GC VOA

Qualifier

Qualifier Qualifier Description

II Analyte was not detected at or above the SDL.

GC Semi 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.

HPLC/IC

Qualifier **Qualifier Description**

The compound was found in the blank and sample

Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Metals

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

Duplicate RPD exceeds the control limit

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.

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 CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) DER

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)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Practical Quantitation Limit PQL

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF **TEQ** Toxicity Equivalent Quotient (Dioxin)

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Client: ARCADIS U.S., Inc.

Job ID: 600-199371-1 Project/Site: Chevron - Jal Land Farm Soils 2020

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-199371-1	CELL19-SQUARE-105-S-3-4-20011	103	95	88	99
600-199371-2	CELL19-SQUARE-82-S-3-4-20 0115	105	96	89	106
600-199371-3	CELL19-SQUARE-204-S-3-4-2 00115	107	95	86	106
600-199371-4	CELL19-SQUARE-93-S-3-4-20 0115	101	93	84	100
LCS 600-286174/3	Lab Control Sample	92	102	99	99
LCSD 600-286174/4	Lab Control Sample Dup	79	97	95	99
MB 600-286174/6	Method Blank	110	98	90	104

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

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

Matrix: Water Prep Type: Total/NA

_			Percent Surrogate Recovery (Accepta			
		DCA	DBFM	TOL	BFB	
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)	
600-199371-5	TRIP BLANK	100	96	90	97	
LCS 600-286180/4	Lab Control Sample	93	94	95	118	
LCSD 600-286180/5	Lab Control Sample Dup	89	90	90	112	
MB 600-286180/7	Method Blank	87	85	96	93	

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		TFT1	
Lab Sample ID	Client Sample ID	(70-130)	
600-199371-1	CELL19-SQUARE-105-S-3-4-20011	85	
600-199371-2	CELL19-SQUARE-82-S-3-4-20 0115	91	
600-199371-3	CELL19-SQUARE-204-S-3-4-2 00115	103	
600-199371-4	CELL19-SQUARE-93-S-3-4-20 0115	108	
LCS 600-285768/1-A	Lab Control Sample	117	
LCSD 600-285768/2-A	Lab Control Sample Dup	115	
MB 600-285768/3-A	Method Blank	116	
Surrogate Legend			

TFT = a,a,a-Trifluorotoluene

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Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		OTPH1	
b Sample ID	Client Sample ID	(60-140)	
0-199371-1	CELL19-SQUARE-105-S-3-4-20011	98	
00-199371-1 MS	CELL19-SQUARE-105-S-3-4-2 00115	112	
00-199371-1 MSD	CELL19-SQUARE-105-S-3-4-2 00115	70	
00-199371-2	CELL19-SQUARE-82-S-3-4-20 0115	80	
00-199371-3	CELL19-SQUARE-204-S-3-4-2 00115	111	
00-199371-4	CELL19-SQUARE-93-S-3-4-20 0115	127	
CS 600-285855/2-A	Lab Control Sample	111	
B 600-285855/1-A	Method Blank	135	
Surrogate Legend			

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: MB 600-286174/6

Matrix: Solid

Analysis Batch: 286174

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

MB MB Result Qualifier SDL Unit Dil Fac Analyte MQL (Adj) Prepared Analyzed 01/25/20 09:41 Benzene 0.000630 U 0.00500 0.000630 mg/Kg Ethylbenzene 0.00102 U 0.00500 0.00102 mg/Kg 01/25/20 09:41 Toluene 0.00138 U 0.00500 0.00138 mg/Kg 01/25/20 09:41 Xylenes, Total 0.00113 U 0.00500 0.00113 mg/Kg 01/25/20 09:41

MB MB

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110	61 - 130		01/25/20 09:41	1
Dibromofluoromethane	98	68 - 140		01/25/20 09:41	1
Toluene-d8 (Surr)	90	50 - 130		01/25/20 09:41	1
4-Bromofluorobenzene	104	57 - 140		01/25/20 09:41	1

Lab Sample ID: LCS 600-286174/3

Matrix: Solid

Analysis Batch: 286174

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

LCS LCS Spike %Rec.

Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.0500 0.05047 101 70 - 131 mg/Kg Ethylbenzene 0.0500 0.05392 mg/Kg 108 66 - 130 Toluene 0.0500 0.05137 mg/Kg 103 67 - 130 0.100 0.1068 Xylenes, Total mg/Kg 107 63 - 130 m-Xylene & p-Xylene 0.0500 0.05448 mg/Kg 109 64 - 130 0.0500 o-Xylene 0.05236 mg/Kg 105 62 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		61 - 130
Dibromofluoromethane	102		68 - 140
Toluene-d8 (Surr)	99		50 - 130
4-Bromofluorobenzene	99		57 ₋ 140

Lab Sample ID: LCSD 600-286174/4

Matrix: Solid

Analysis Batch: 286174

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

ruidiyolo Batolii 20011 .										
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.0500	0.04675		mg/Kg		94	70 - 131	8	30	
Ethylbenzene	0.0500	0.05256		mg/Kg		105	66 - 130	3	30	
Toluene	0.0500	0.04949		mg/Kg		99	67 - 130	4	30	
Xylenes, Total	0.100	0.1023		mg/Kg		102	63 - 130	4	30	
m-Xylene & p-Xylene	0.0500	0.05186		mg/Kg		104	64 - 130	5	30	
o-Xylene	0.0500	0.05042		mg/Kg		101	62 _ 130	4	30	

	LCSD LCSD)
Surrogate	%Recovery Quali	fier Limits
1,2-Dichloroethane-d4 (Surr)	79	61 - 130
Dibromofluoromethane	97	68 - 140
Toluene-d8 (Surr)	95	50 - 130
4-Bromofluorobenzene	99	57 ₋ 140

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: MB 600-286180/7

Matrix: Water

Analysis Batch: 286180

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

Job ID: 600-199371-1

мв мв SDL Unit Dil Fac Analyte Result Qualifier MQL (Adj) Prepared Analyzed Benzene 0.560 U 0.560 ug/L 01/25/20 12:06 5.00 Ethylbenzene 1.29 U 5.00 1.29 ug/L 01/25/20 12:06 Toluene 0.550 U 5.00 0.550 ug/L 01/25/20 12:06 Xylenes, Total 1.98 U 5.00 1.98 ug/L 01/25/20 12:06

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87	50 - 134		01/25/20 12:06	1
Dibromofluoromethane	85	62 - 130		01/25/20 12:06	1
Toluene-d8 (Surr)	96	70 - 130		01/25/20 12:06	1
4-Bromofluorobenzene	93	67 - 139		01/25/20 12:06	1

Lab Sample ID: LCS 600-286180/4

Matrix: Water

Analysis Batch: 286180

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

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 50.0 51.52 103 70 - 131 ug/L Ethylbenzene 50.0 48.19 ug/L 96 70 - 130 Toluene 50.0 59.15 ug/L 118 70 - 130 102 70 - 130 Xylenes, Total 100 101.9 ug/L m-Xylene & p-Xylene 50.0 53.17 ug/L 106 70 - 130 o-Xylene 50.0 48.77 ug/L 98 69 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93	-	50 - 134
Dibromofluoromethane	94		62 - 130
Toluene-d8 (Surr)	95		70 - 130
4-Bromofluorobenzene	118		67 - 139

Lab Sample ID: LCSD 600-286180/5

Matrix: Water

Analysis Batch: 286180

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	50.84		ug/L		102	70 - 131	1	20
Ethylbenzene	50.0	50.39		ug/L		101	70 - 130	4	20
Toluene	50.0	58.37		ug/L		117	70 - 130	1	20
Xylenes, Total	100	97.77		ug/L		98	70 - 130	4	20
m-Xylene & p-Xylene	50.0	49.00		ug/L		98	70 - 130	8	20
o-Xylene	50.0	48.77		ug/L		98	69 - 130	0	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		50 - 134
Dibromofluoromethane	90		62 - 130
Toluene-d8 (Surr)	90		70 - 130
4-Bromofluorobenzene	112		67 - 139

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Job ID: 600-199371-1

Prep Batch: 285768

Prep Type: Total/NA

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 600-285768/3-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid Analysis Batch: 285766

Gasoline Range Organics [C6 - C10]

Client: ARCADIS U.S., Inc.

MR MR Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 1.00

0.586 mg/Kg

0.586 U MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 01/22/20 08:46 a,a,a-Trifluorotoluene 116 70 - 130 01/22/20 11:01

Lab Sample ID: LCS 600-285768/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 285766 **Prep Batch: 285768** LCS LCS Spike

%Rec

01/22/20 11:01

01/22/20 08:46

Added Result Qualifier Unit %Rec Limits 5.00 5.396 mg/Kg 108 70 - 130

Gasoline Range Organics [C6 -C10]

LCS LCS

Surrogate %Recovery Qualifier Limits 70 - 130 a,a,a-Trifluorotoluene 117

Lab Sample ID: LCSD 600-285768/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 285766

Prep Type: Total/NA Prep Batch: 285768

Client Sample ID: Method Blank

LCSD LCSD Spike %Rec. RPD Added RPD Limit Analyte Result Qualifier Unit %Rec 5.00 5.067 30 mg/Kg 101 70 130

Gasoline Range Organics [C6 -

C10]

LCSD LCSD

Qualifier Surrogate %Recovery Limits a,a,a-Trifluorotoluene 115 70 - 130

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

Lab Sample ID: MB 600-285855/1-A

Matrix: Solid

Analysis Batch: 285991

Prep Type: Total/NA **Prep Batch: 285855**

MR MR Qualifier SDL Prepared Analyzed Analyte Result MQL (Adj) Unit

Diesel Range Organics [C10-C28] Ū 1 70

8.25 01/22/20 14:16 01/24/20 02:14 1 70 mg/Kg C28-C36 4.97 U 8.25 mg/Kg 01/22/20 14:16 01/24/20 02:14

MB MB Surrogate %Recovery

Dil Fac Qualifier Limits Prepared Analyzed o-Terphenyl 60 - 140 01/22/20 14:16 01/24/20 02:14 135

Lab Sample ID: LCS 600-285855/2-A

Analysis Batch: 285991

Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Prep Batch: 285855

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 33.2 32.89 99 66 - 134 Diesel Range Organics mg/Kg

[C10-C28]

Eurofins TestAmerica, Houston

Dil Fac

Job ID: 600-199371-1

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: LCS 600-285855/2-A

Matrix: Solid

Analysis Batch: 285991

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 285855

LCS LCS

Surrogate %Recovery Qualifier Limits 60 - 140 o-Terphenyl 111

Lab Sample ID: 600-199371-1 MS Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Matrix: Solid

Analysis Batch: 285991

Prep Type: Total/NA

Prep Batch: 285855

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Analyte Unit Limits %Rec 37.89 П 33.3 66 - 134 1 71 Diesel Range Organics mg/Kg 114

[C10-C28]

MS MS

Surrogate %Recovery Qualifier Limits 60 - 140 o-Terphenyl 112

Lab Sample ID: 600-199371-1 MSD Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Matrix: Solid

Analysis Batch: 285991

Prep Type: Total/NA

Prep Batch: 285855

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 33.2 171 U 29 84 mg/Kg 90 66 - 134 24 30

Diesel Range Organics [C10-C28]

MSD MSD

Surrogate %Recovery Qualifier Limits 60 - 140 o-Terphenyl 70

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-286280/1-A

Matrix: Solid

Analysis Batch: 286155

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte

MR MR

SDL Unit Result Qualifier MQL (Adj) D Dil Fac Prepared Analyzed Chloride 3.97 2.085 J 0.530 mg/Kg 01/27/20 17:24

Lab Sample ID: LCS 600-286280/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 286155

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 198 193.3 mg/Kg 97 90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-286293/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 286356

Dil Fac Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed

Silver 0.119 Ū 0.400 0.119 mg/Kg 01/27/20 15:36 01/28/20 10:11 0.218 U Arsenic 1.00 0.218 mg/Kg 01/27/20 15:36 01/28/20 10:11

Eurofins TestAmerica, Houston

Prep Batch: 286293

1/28/2020

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Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-286293/1-A

Matrix: Solid

Analysis Batch: 286356

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

Prep Batch: 286293

	MB	МВ							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.0300	U	1.00	0.0300	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Calcium	0.864	U	100	0.864	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Copper	0.174	U	0.500	0.174	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Iron	2.53	U	20.0	2.53	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Potassium	11.0	U	100	11.0	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Magnesium	1.92	U	100	1.92	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Sodium	0.886	U	100	0.886	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Antimony	0.232	U	2.50	0.232	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Thallium	0.277	U	1.50	0.277	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Zinc	0.108	U	1.50	0.108	mg/Kg		01/27/20 15:36	01/28/20 10:11	1

Lab Sample ID: LCSSRM 600-286293/2-A

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 286293

	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	34.8	26.09		mg/Kg		75.0	58.3 - 112.	
							9	
Arsenic	319	259.2		mg/Kg		81.3	60.2 - 111.	
							6	
Barium	299	214.2		mg/Kg		71.6	59.2 - 110.	
							0	
Beryllium	190	154.1		mg/Kg		81.1	64.2 - 110.	
							0	
Calcium	16000	12590		mg/Kg		78.7	61.8 - 110.	
							0	
Cadmium	182	142.4		mg/Kg		78.2	65.4 - 109.	
							9	
Chromium	189	145.3		mg/Kg		76.9	59.8 - 110.	
							6	
Copper	107	82.41		mg/Kg		77.0	61.6 - 110.	
							3	
Iron	18600	12810		mg/Kg		68.9	24.7 - 121.	
Potassium	11600	8598		mg/Kg		74.1	59.0 - 110.	
							3	
Magnesium	13600	10190		mg/Kg		74.9	62.5 - 110.	
	4000	1000				-0 -	3	
Manganese	1390	1022		mg/Kg		73.5	66.1 - 110.	
Sodium	14200	10820		mg/Kg		76.2	58.7 - 113.	
Total Control of the	440	400.4				00.0	4	
Lead	148	128.1		mg/Kg		86.6	61.0 - 110.	
A atima a an .	440	00.00				04.0	1	
Antimony	118	29.33		mg/Kg		24.9	10.0 - 110.	
							2	

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Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-286293/2-A

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 286293

	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Selenium	322	254.9		mg/Kg		79.2	57.8 - 109.	
							9	
Thallium	253	210.4		mg/Kg		83.2	59.7 - 109.	
							9	
Zinc	498	441.4		mg/Kg		88.6	58.8 - 110.	
							0	

Lab Sample ID: 600-199371-3 MS

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Prep Type: Total/NA Prep Batch: 286293

Allalysis Datoll. 200000									i icp Batcii. 200	
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Silver	0.144	U	15.4	16.85		mg/Kg	<u></u>	109	75 _ 125	
Arsenic	4.96		61.6	73.69		mg/Kg	₩	112	75 ₋ 125	
Barium	308		61.6	407.7	4	mg/Kg	₩	161	75 ₋ 125	
Beryllium	0.139	J	61.6	56.25		mg/Kg	₩	91	75 ₋ 125	
Cadmium	0.115	J	61.6	67.53		mg/Kg	₩	109	75 - 125	
Chromium	1.92		61.6	56.28		mg/Kg	₩	88	75 ₋ 125	
Copper	1.56		61.6	61.29		mg/Kg	₩	97	75 - 125	
Iron	1710		616	2380		mg/Kg	₩	108	75 ₋ 125	
Potassium	510		616	1392	N1	mg/Kg	₩	143	75 ₋ 125	
Magnesium	2640		616	3400	4	mg/Kg	₩	123	75 ₋ 125	
Manganese	19.4		61.6	68.88		mg/Kg	₩	80	75 ₋ 125	
Sodium	189		616	868.1		mg/Kg	₩	110	75 ₋ 125	
Antimony	0.483	J	92.4	88.66		mg/Kg		95	75 ₋ 125	
Selenium	0.313	U	61.6	66.48		mg/Kg	₩	108	75 ₋ 125	
Thallium	0.335	U	61.6	55.01		mg/Kg	₽	89	75 - 125	

Lab Sample ID: 600-199371-3 MS

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Prep Type: Total/NA Prep Batch: 286293

Allalysis Batch. 200330	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Silver	0.719	U	15.4	17.62	-	mg/Kg	₽	114	75 - 125
Arsenic	6.28		61.6	83.76	N1	mg/Kg	₽	126	75 - 125
Barium	375		61.6	470.1	4	mg/Kg	☼	154	75 - 125
Beryllium	0.151	J	61.6	68.24		mg/Kg	*	111	75 ₋ 125
Calcium	331000		616	309000	4	mg/Kg	₽	-3635	75 ₋ 125
Cadmium	0.155	U	61.6	77.14		mg/Kg	☼	125	75 ₋ 125
Chromium	2.36	J	61.6	67.87		mg/Kg	₩.	106	75 - 125
Copper	1.75	J	61.6	69.38		mg/Kg	☼	110	75 ₋ 125
Iron	2080		616	2728		mg/Kg	☼	104	75 ₋ 125
Potassium	606		616	1595	N1	mg/Kg	₩	161	75 ₋ 125
Magnesium	3440		616	4177	4	mg/Kg	₽	120	75 ₋ 125
Manganese	23.4		61.6	82.22		mg/Kg	☼	96	75 - 125
Sodium	233	J	616	1002		mg/Kg	₩	125	75 ₋ 125
Lead	1.57	J	61.6	72.61		mg/Kg	₽	115	75 ₋ 125
Antimony	1.40	U	92.4	101.6		mg/Kg	☼	110	75 - 125
Selenium	1.56	U	61.6	74.46		mg/Kg	*	121	75 ₋ 125
Thallium	1.67	U	61.6	64.39		mg/Kg	₽	105	75 - 125

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1/28/2020

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-199371-3 MS Client Sample ID: CELL19-SQUARE-204-S-3-4-200115 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 286356 **Prep Batch: 286293** MS MS Spike Sample Sample %Rec.

Result Qualifier Added Result Qualifier D Zinc 41.2 30.8 47.13 N1 ₩ 19 75 _ 125 mg/Kg

Lab Sample ID: 600-199371-3 DU Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 286356							Prep Batch: 2	86293
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.144	U	0.142	U	mg/Kg	<u> </u>	NC	20
Arsenic	4.96		5.230		mg/Kg	₽	5	20
Barium	308		326.6		mg/Kg	≎	6	20
Beryllium	0.139	J	0.1436	J	mg/Kg	₽	3	20
Cadmium	0.115	J	0.07779	JF	mg/Kg	≎	38	20
Chromium	1.92		1.855		mg/Kg	≎	4	20
Copper	1.56		1.466		mg/Kg	₽	7	20
Iron	1710		1666		mg/Kg	≎	3	20
Potassium	510		486.0		mg/Kg	≎	5	20
Magnesium	2640		2772		mg/Kg	\$	5	20
Manganese	19.4		14.96	F	mg/Kg	₽	26	20
Sodium	189		201.5		mg/Kg	≎	6	20
Antimony	0.483	J	0.5565	J	mg/Kg	\$	14	20
Selenium	0.313	U	0.310	U	mg/Kg	₽	NC	20
Thallium	0.335	U	0.331	U	mg/Kg	₽	NC	20

Lab Sample ID: 600-199371-3 DU Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Matrix: Solid Prep Type: Total/NA Analysis Batch: 286356 Prep Batch: 286293

Analysis Batch: 286356							Prep Batch: 2	86293
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Silver	0.719	U	0.712	U	mg/Kg	<u> </u>	NC NC	20
Arsenic	6.28		6.193		mg/Kg	☼	1	20
Barium	375		336.3		mg/Kg	₽	11	20
Beryllium	0.151	J	0.1496	J	mg/Kg	₽	1	20
Calcium	331000		289100		mg/Kg	₽	14	20
Cadmium	0.155	U	0.153	U	mg/Kg	₽	NC	20
Chromium	2.36	J	2.034	J	mg/Kg	\$	15	20
Copper	1.75	J	1.257	JF	mg/Kg	₩	33	20
Iron	2080		1683	F	mg/Kg	₩	21	20
Potassium	606		513.4	J	mg/Kg	\$	17	20
Magnesium	3440		3043		mg/Kg	₽	12	20
Manganese	23.4		16.04	F	mg/Kg	₽	37	20
Sodium	233	J	205.1	J	mg/Kg	₩	13	20
Lead	1.57	J	2.094	JF	mg/Kg	₩	29	20
Antimony	1.40	U	1.39	U	mg/Kg	₩	NC	20
Selenium	1.56	U	1.55	U	mg/Kg	₩	NC	20
Thallium	1.67	U	1.66	U	mg/Kg	₩	NC	20
Zinc	41.2		8.347	JF	mg/Kg	₽	133	20

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

мв мв

Lab Sample ID: MB 600-286344/7-B Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 286403

Prep Type: Total/NA **Prep Batch: 286344**

SDL Unit Dil Fac Analyte Result Qualifier MQL (Adj) Prepared Analyzed 0.0157 0.00330 mg/Kg 01/28/20 10:32 01/28/20 14:45 0.00330 U Mercury

Lab Sample ID: LCS 600-286344/8-B Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 286403

Prep Batch: 286344 Spike LCS LCS %Rec.

mg/Kg

Added Result Qualifier Limits Analyte Unit D %Rec

0.234

Lab Sample ID: 600-199371-1 MS Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

0.2306

Matrix: Solid

Mercury

Analysis Batch: 286403

Prep Type: Total/NA

Prep Batch: 286344

Sample Sample Spike MS MS %Rec. Result Qualifier Added Analyte Result Qualifier Limits Unit D %Rec 0.336 ₩ Mercury 0.00913 J 0.2615 mg/Kg 75 75 - 125

Lab Sample ID: 600-199371-1 DU Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Matrix: Solid

Analysis Batch: 286403

DU DU Sample Sample

Prep Type: Total/NA

98

70 - 130

Prep Batch: 286344

RPD Limit Analyte Result Qualifier Result Qualifier Unit D **RPD** Mercury 0.00913 J 0.01074 J 16 20 mg/Kg

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Analyte	MQL	MDL	Units
Benzene	5.00	0.560	ug/L
Ethylbenzene	5.00	1.29	ug/L
Toluene	5.00	0.550	ug/L
Xylenes, Total	5.00	1.98	ug/L

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

Prep: 5035

Analyte	MQL	MDL	Units
Benzene	0.00500	0.000630	mg/Kg
Ethylbenzene	0.00500	0.00102	mg/Kg
Toluene	0.00500	0.00138	mg/Kg
Xylenes, Total	0.00500	0.00113	mg/Kg

Method: 8015B - Gasoline Range Organics - (GC)

Prep: 5030B

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	1.00	0.586	mg/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
C28-C36	8.30	5.00	mg/Kg
Diesel Range Organics [C10-C28]	8.30	1.71	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Prep: 3050B

_ Analyte	MQL	MDL	Units
Antimony	2.50	0.232	mg/Kg
Arsenic	1.00	0.218	mg/Kg
Barium	1.00	0.0300	mg/Kg
Beryllium	0.250	0.0145	mg/Kg
Cadmium	0.250	0.0256	mg/Kg
Calcium	100	0.864	mg/Kg
Chromium	0.500	0.0506	mg/Kg
Copper	0.500	0.174	mg/Kg
Iron	20.0	2.53	mg/Kg
Lead	0.500	0.105	mg/Kg
Magnesium	100	1.92	mg/Kg
Manganese	1.50	0.0381	mg/Kg
Potassium	100	11.0	mg/Kg
Selenium	2.00	0.259	mg/Kg
Silver	0.400	0.119	mg/Kg
Sodium	100	0.886	mg/Kg
Thallium	1.50	0.277	mg/Kg
Zinc	1.50	0.108	mg/Kg

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

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Unadjusted Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Prep: 7471A

Analyte	MQL	MDL	Units	
Mercury	0.0170	0.00358	mg/Kg	

General Chemistry

Analyte	MQL	MDL	Units	
Percent Moisture	1.0	1.0	%	
Percent Solids	1.0	1.0	%	

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

GC/MS VOA

Prep Batch: 286150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	5035	
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	5035	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	5035	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	5035	

Analysis Batch: 286174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	8260B	286150
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	8260B	286150
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	8260B	286150
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	8260B	286150
MB 600-286174/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-286174/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-286174/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 286180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-5	TRIP BLANK	Total/NA	Water	8260B	
MB 600-286180/7	Method Blank	Total/NA	Water	8260B	
LCS 600-286180/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-286180/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 285766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	8015B	285768
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	8015B	285768
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	8015B	285768
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	8015B	285768
MB 600-285768/3-A	Method Blank	Total/NA	Solid	8015B	285768
LCS 600-285768/1-A	Lab Control Sample	Total/NA	Solid	8015B	285768
LCSD 600-285768/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	285768

Prep Batch: 285768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
<u> </u>					
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	5030B	
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	5030B	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	5030B	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	5030B	
MB 600-285768/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-285768/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-285768/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

GC Semi VOA

Prep Batch: 285855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	3546	
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	3546	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	3546	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	3546	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

GC Semi VOA (Continued)

Prep Batch: 285855 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
MB 600-285855/1-A	Method Blank	Total/NA	Solid	3546
LCS 600-285855/2-A	Lab Control Sample	Total/NA	Solid	3546
600-199371-1 MS	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	3546
600-199371-1 MSD	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	3546

Analysis Batch: 285991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	8015B	285855
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	8015B	285855
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	8015B	285855
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	8015B	285855
MB 600-285855/1-A	Method Blank	Total/NA	Solid	8015B	285855
LCS 600-285855/2-A	Lab Control Sample	Total/NA	Solid	8015B	285855
600-199371-1 MS	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	8015B	285855
600-199371-1 MSD	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	8015B	285855

HPLC/IC

Analysis Batch: 286155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Soluble	Solid	300.0	286280
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Soluble	Solid	300.0	286280
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Soluble	Solid	300.0	286280
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Soluble	Solid	300.0	286280
MB 600-286280/1-A	Method Blank	Soluble	Solid	300.0	286280
LCS 600-286280/2-A	Lab Control Sample	Soluble	Solid	300.0	286280

Leach Batch: 286280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Soluble	Solid	DI Leach	_
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Soluble	Solid	DI Leach	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Soluble	Solid	DI Leach	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Soluble	Solid	DI Leach	
MB 600-286280/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-286280/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Metals

Prep Batch: 286293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	3050B	
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	3050B	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	3050B	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	3050B	
MB 600-286293/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-286293/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-199371-3 MS	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	3050B	
600-199371-3 DU	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	3050B	

Prep Batch: 286344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Metals (Continued)

Prep Batch: 286344 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	7471A	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	7471A	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	7471A	
MB 600-286344/7-B	Method Blank	Total/NA	Solid	7471A	
LCS 600-286344/8-B	Lab Control Sample	Total/NA	Solid	7471A	
600-199371-1 MS	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	
600-199371-1 DU	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	

Analysis Batch: 286356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	6010B	286293
MB 600-286293/1-A	Method Blank	Total/NA	Solid	6010B	286293
LCSSRM 600-286293/2-A	Lab Control Sample	Total/NA	Solid	6010B	286293
600-199371-3 MS	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-3 MS	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-3 DU	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293
600-199371-3 DU	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	6010B	286293

Analysis Batch: 286403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	286344
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	7471A	286344
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	7471A	286344
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	7471A	286344
MB 600-286344/7-B	Method Blank	Total/NA	Solid	7471A	286344
LCS 600-286344/8-B	Lab Control Sample	Total/NA	Solid	7471A	286344
600-199371-1 MS	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	286344
600-199371-1 DU	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	7471A	286344

General Chemistry

Analysis Batch: 286087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-199371-1	CELL19-SQUARE-105-S-3-4-200115	Total/NA	Solid	2540B	
600-199371-2	CELL19-SQUARE-82-S-3-4-200115	Total/NA	Solid	2540B	
600-199371-3	CELL19-SQUARE-204-S-3-4-200115	Total/NA	Solid	2540B	
600-199371-4	CELL19-SQUARE-93-S-3-4-200115	Total/NA	Solid	2540B	

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Lab Sample ID: 600-199371-1 Date Collected: 01/15/20 09:27 Matrix: Solid

Date Received: 01/22/20 10:07

Client: ARCADIS U.S., Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 18:20	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 03:19	RJV	TAL HOU
Total/NA	Analysis	2540B		1	286087	01/24/20 09:49	ANP	TAL HOU

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Lab Sample ID: 600-199371-1 Date Collected: 01/15/20 09:27 **Matrix: Solid**

Date Received: 01/22/20 10:07 Percent Solids: 73.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			286150	01/22/20 14:05	WS1	TAL HOL
Total/NA	Analysis	8260B		1	286174	01/25/20 10:03	WS1	TAL HOL
Soluble	Leach	DI Leach			286280	01/27/20 14:00	SKR	TAL HOL
Soluble	Analysis	300.0		1	286155	01/27/20 23:31	SKR	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	286356	01/28/20 10:29	KP1	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		2	286356	01/28/20 11:04	KP1	TAL HOU
Total/NA	Prep	7471A			286344	01/28/20 10:32	SOT	TAL HOU
Total/NA	Analysis	7471A		1	286403	01/28/20 15:21	SOT	TAL HOU

Client Sample ID: CELL19-SQUARE-82-S-3-4-200115

Date Collected: 01/15/20 09:55

Date Received: 01/22/20 10:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 18:44	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 03:52	RJV	TAL HOU
Total/NA	Analysis	2540B		1	286087	01/24/20 09:49	ANP	TAL HOU

Client Sample ID: CELL19-SQUARE-82-S-3-4-200115

Lab Sample ID: 600-199371-2 Date Collected: 01/15/20 09:55 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 70.4

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			286150	01/22/20 14:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	286174	01/25/20 10:26	WS1	TAL HOU
Soluble	Leach	DI Leach			286280	01/27/20 14:00	SKR	TAL HOU
Soluble	Analysis	300.0		1	286155	01/27/20 23:52	SKR	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	286356	01/28/20 10:31	KP1	TAL HOU

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Lab Sample ID: 600-199371-2

Matrix: Solid

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL19-SQUARE-82-S-3-4-200115

Lab Sample ID: 600-199371-2 Date Collected: 01/15/20 09:55 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 70.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		5	286356	01/28/20 11:06	KP1	TAL HOU
Total/NA	Prep	7471A			286344	01/28/20 10:32	SOT	TAL HOU
Total/NA	Analysis	7471A		1	286403	01/28/20 15:26	SOT	TAL HOU

Client Sample ID: CELL19-SQUARE-204-S-3-4-200115

Lab Sample ID: 600-199371-3 Date Collected: 01/15/20 10:28 **Matrix: Solid**

Date Received: 01/22/20 10:07

Client: ARCADIS U.S., Inc.

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 19:08	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 04:25	RJV	TAL HOU
Total/NA	Analysis	2540B		1	286087	01/24/20 09:49	ANP	TAL HOU

Lab Sample ID: 600-199371-3 **Client Sample ID: CELL19-SQUARE-204-S-3-4-200115**

Date Collected: 01/15/20 10:28 **Matrix: Solid** Date Received: 01/22/20 10:07 Percent Solids: 80.3

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			286150	01/22/20 14:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	286174	01/25/20 10:48	WS1	TAL HOU
Soluble	Leach	DI Leach			286280	01/27/20 14:00	SKR	TAL HOU
Soluble	Analysis	300.0		1	286155	01/28/20 00:53	SKR	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	286356	01/28/20 10:33	KP1	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		5	286356	01/28/20 11:16	KP1	TAL HOU
Total/NA	Prep	7471A			286344	01/28/20 10:32	SOT	TAL HOU
Total/NA	Analysis	7471A		1	286403	01/28/20 15:29	SOT	TAL HOU

Client Sample ID: CELL19-SQUARE-93-S-3-4-200115 Lab Sample ID: 600-199371-4

Date Collected: 01/15/20 10:59 **Matrix: Solid**

Date Received: 01/22/20 10:07

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			285768	01/22/20 13:46	WS1	TAL HOU
Total/NA	Analysis	8015B		1	285766	01/22/20 19:32	WS1	TAL HOU
Total/NA	Prep	3546			285855	01/22/20 14:16	SMB	TAL HOU
Total/NA	Analysis	8015B		1	285991	01/24/20 04:58	RJV	TAL HOU
Total/NA	Analysis	2540B		1	286087	01/24/20 09:49	ANP	TAL HOU

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Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Client Sample ID: CELL19-SQUARE-93-S-3-4-200115

Lab Sample ID: 600-199371-4 Date Collected: 01/15/20 10:59 Matrix: Solid

Date Received: 01/22/20 10:07 Percent Solids: 82.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			286150	01/22/20 14:05	WS1	TAL HOU
Total/NA	Analysis	8260B		1	286174	01/25/20 11:10	WS1	TAL HOU
Soluble	Leach	DI Leach			286280	01/27/20 14:00	SKR	TAL HOU
Soluble	Analysis	300.0		1	286155	01/28/20 01:13	SKR	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		1	286356	01/28/20 10:39	KP1	TAL HOU
Total/NA	Prep	3050B			286293	01/27/20 15:36	CLD	TAL HOU
Total/NA	Analysis	6010B		5	286356	01/28/20 11:08	KP1	TAL HOU
Total/NA	Prep	7471A			286344	01/28/20 10:32	SOT	TAL HOU
Total/NA	Analysis	7471A		1	286403	01/28/20 15:31	SOT	TAL HOU

Client Sample ID: TRIP BLANK Lab Sample ID: 600-199371-5

Date Collected: 01/15/20 00:00 **Matrix: Water** Date Received: 01/22/20 10:07

Batch Batch Dilution Batch Prepared Method Analyst Prep Type Туре Run Factor Number or Analyzed Lab TAL HOU Total/NA 8260B PXS Analysis 286180 01/25/20 18:00

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

8260B

Laboratory: Eurofins TestAmerica, Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

thority		rogram	Identification Number	Expiration Date
xas	N	ELAP	T104704223-19-25	10-31-19 *
The following analytes	are included in this report, b	ut the laboratory is not certif	ried by the governing authority. This list ma	ay include analytes for which
the agency does not of	fer certification.			
Analysis Method	Prep Method	Matrix	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	
300.0		Solid	Chloride	
6010B	3050B	Solid	Antimony	
6010B	3050B	Solid	Arsenic	
6010B	3050B	Solid	Barium	
6010B	3050B	Solid	Beryllium	
6010B	3050B	Solid	Cadmium	
6010B	3050B	Solid	Calcium	
6010B	3050B	Solid	Chromium	
6010B	3050B	Solid	Copper	
6010B	3050B	Solid	Iron	
6010B	3050B	Solid	Lead	
6010B	3050B	Solid	Magnesium	
6010B	3050B	Solid	Manganese	
6010B	3050B	Solid	Potassium	
6010B	3050B	Solid	Selenium	
6010B	3050B	Solid	Silver	
6010B	3050B	Solid	Sodium	
6010B	3050B	Solid	Thallium	
6010B	3050B	Solid	Zinc	
7471A	7471A	Solid	Mercury	
8015B	3546	Solid	C28-C36	
8015B	3546	Solid	Diesel Range Organics [C10-0	C28]
8015B	5030B	Solid	Gasoline Range Organics [C6	- C10]
8260B	5035	Solid	Benzene	
8260B	5035	Solid	Ethylbenzene	
8260B	5035	Solid	Toluene	

Xylenes, Total

5035

Solid

3

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7

9

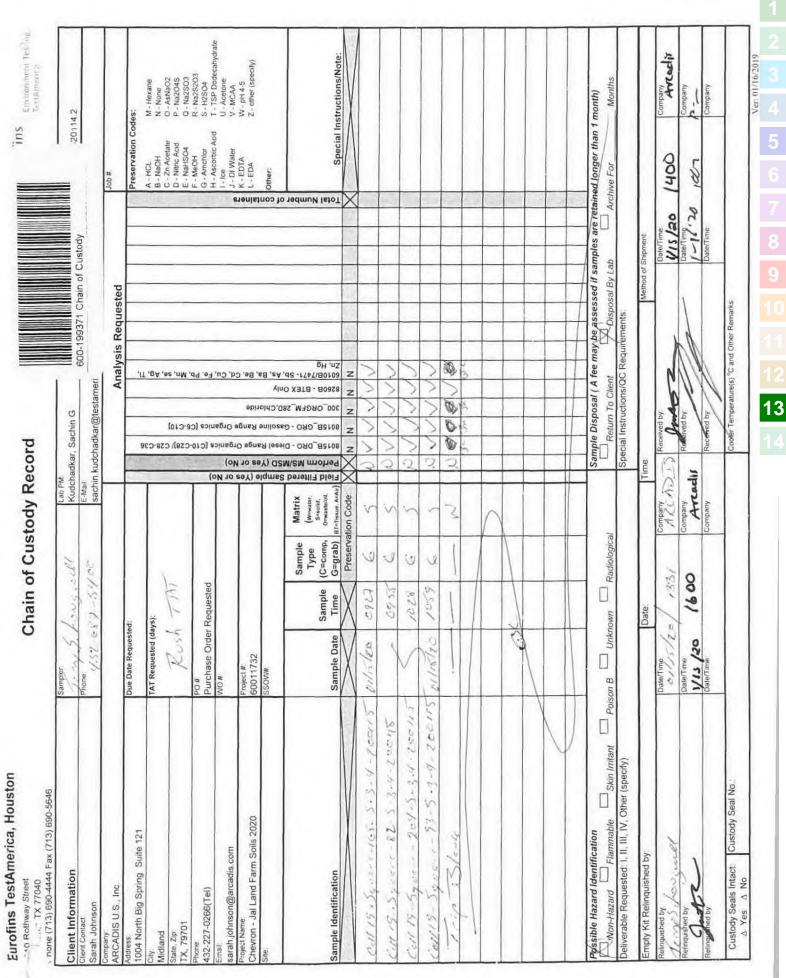
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^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.



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eurofins | Environment Testing TestAmerica

Eurofins TestAmerics Houston
Loc: 600
199371
sipt Checklist

		D	ate/Time Received:			'20 JAN 16 10:
JOB NUMBER: UNPACKED BY:		С	CLIENT: CARRIER/DRIVER:		ARCADIS Feder	
0 1 1 0 10 11	- I	NO N	makes of Caplana Box	ali meli		
Custody Seal Present: 1		NO N	observed Temp	Therm	Therm	Corrected Temp
Cooler ID/51/14	L Blank	Trip Blank	(°C)	ID	CF	(℃)
7612 7417	O/N	CY)/ N	0.10	678	+0.4	1.7
	Y / N	Y/N	0.0			
	Y / N	YIN				
	Y/N	Y/N		1-25-2		
	Y / N	YIN		- ~		
	Y / N	YTN				
X1005 samples <u>frozen</u> H paper Lot#			ATE & TIME PUT IN		□YES □N	NO □NA
d samples meet the labora	tory's standard c	onditions of samp	ole acceptability upon rec	ceipt?		ØYES □ NO
COMMENTS:						
			>	1-2	2~	
					N	

HS-SA-WI-013

Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 600-199371-1

Login Number: 199371 List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Trenery, Michael J

Creator. Trenery, witchaer 3		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
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	1.0
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.

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