

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

Steve Rice | Project Manager / Senior Environmental Scientist | Steve.Rice@arcadis.com

Arcadis | ARCADIS U.S., Inc
11001 West 120th Avenue, Broomfield, CO | 80021 | USA
M. +1 303 710 7537

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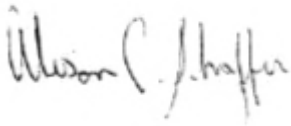
Chevron Environmental Management Company

2019 ANNUAL REPORT

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

July 27, 2020

A large, solid orange geometric shape, resembling a stylized triangle or a section of a larger triangle, is positioned in the bottom right corner of the page. It is composed of two overlapping triangles, creating a complex, angular form that extends from the bottom edge towards the top right corner.



Alison Schaffer
Assistant Project Manager



Steve Rice
Project Manager

2019 ANNUAL REPORT

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

Prepared for:
Chevron Environmental Management
Company

Prepared by:
Arcadis U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch
Colorado 80129
Tel 720 344 3500
Fax 720 344 3535

Our Ref.:
30047616

Date:
July 27, 2020

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ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
Arcadis	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	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

* 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.

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.

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
 - BTEX by USEPA Method 8260B.
- Semiannually (second and fourth quarters 2019):
 - 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.

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

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)	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:

* 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.

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).

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
First quarter 2019	Cell 18	DRO, ORO, chloride	Barium, beryllium, copper, iron, manganese, zinc
	Cell 20	DRO, ORO, chloride	Barium, beryllium, copper, iron, manganese, zinc
	Cell 25	DRO, chloride	Barium, beryllium, chromium, copper, iron, lead, manganese, thallium, zinc
Second quarter 2019	Cell 19	DRO, ORO	Antimony, barium, beryllium, copper, iron, manganese, zinc
	Cell 20	DRO, ORO, chloride	Antimony, arsenic, barium, beryllium, copper, iron, manganese, zinc
	Cell 25	DRO	Antimony, barium, beryllium, chromium, copper, iron, lead, manganese, zinc
	Cell 26	DRO	Antimony, barium, beryllium, copper, iron, lead, manganese, zinc
Fourth quarter 2019	Cell 17	DRO, ORO, chloride	Antimony, arsenic, barium, beryllium, copper, iron, manganese, thallium, zinc
	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.

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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- NMOCD. 2008. Letter from B. Jones (NMOCD) to R. Bailey (Chevron) re: 2017 Sampling Results of Chevron Centralized Landfarm Centralized Surface Waste Management Facility Permit NM-2-0012. February 19.
- Stantec. 2017a. Draft Landfarm Background Sampling and Analysis Plan. Chevron Jal Landfarm Surface Waste Management Facility Number NM-02-0012. September 27.
- Stantec. 2017b. Draft Landfarm Operations, Sampling and Analysis Plan. Chevron Jal Landfarm Surface Waste Management Facility Number NM-02-0012. September 27.
- Texaco Exploration & Production, Inc. 1998. Application for Waste Management Facility Soil Remediation/Landfarm Facility, Lea County, New Mexico. July 29.

TABLES



Table 4
March 2019 Vadose Zone Soil Analytical Results – First Quarter 2019
2019 Annual Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

Constituent				DRO		GRO		ORO		TPH ^a		Benzene		Toluene		Ethylbenzene		Xylenes	
Method				8015B		8015B		8015B		8015B		8260B		8260B		8260B		8260B	
Units				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/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:

^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 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.

Table 5
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				DRO 8015B mg/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		Xylenes 8260B mg/kg		Chloride 300.0 mg/kg	
Background Soil Concentration				--		< 5.00		--		--		< 0.05		< 0.05		< 0.05		< 0.05		10.0	
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	J B	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).

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

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		DRO 8015B mg/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		Xylenes 8260B mg/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	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.

Table 7
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				DRO 8015B mg/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		Xylenes 8260B mg/kg		Chloride 300.0 mg/kg		Calcium 6010B mg/kg	
Background Soil Concentration				--		< 5.00		--		--		< 0.05		< 0.05		< 0.05		< 0.05		10.0		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	U H	0.00138	U H	0.00102	U H	0.00113	U H	110	B	9,190	--
Cell 18	Vadose	Cell18-Square179-S-2-191202	12/02/2019	66.4	--	0.0645	U	71.1	--	138	--	0.000619	U H	0.00136	U H	0.00100	U H	0.00111	U H	3.74	J B	137,000	--
Cell 19	Vadose	Cell19-Square83-S-2-191202	12/02/2019	224	--	0.0641	U	270	--	494	--	0.000571	U H	0.00125	U H	0.000925	U H	0.00102	U H	4.46	B	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	U H	0.00138	U H	0.00102	U H	0.00113	U H	16.5	B	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	J B	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	J B	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	J B	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).

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

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 7
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				Magnesium 6010B mg/kg		Potassium 6010B mg/kg		Sodium 6010B mg/kg		Cyanide 9012B mg/kg		Fluoride 300.0 mg/kg		Nitrate 300.0 mg/kg		Sulfate 300.0 mg/kg	
Background Soil Concentration				49.0		39.0		5.1		--		1.7		2.2		15.0	
Landfarm Cell	Zone	Sample ID	Sample Date	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	1,330	--	1,850	--	1,000	B	0.0885	J	4.91	--	92.1	H B	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	H B	22.4	--
Cell 19	Vadose	Cell19-Square83-S-2-191202	12/02/2019	982	--	927	--	22.5	J B	0.0360	J	2.43	--	5.22	H	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	J H	21.1	--
Cell 21	Vadose	Cell21-Square107-S-2-191203	12/03/2019	1,970	--	1,230	--	47.2	J B	0.0178	U	10.5	--	14.0	--	148	--
Cell 25	Vadose	Cell25-Square108-S-2-191203	12/03/2019	993	--	1,380	--	16.0	J B	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	J B	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)

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 SC

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		DRO 8015B mg/kg		GRO 8015B mg/kg		ORO 8015B mg/kg		TPH ^a 8015B mg/kg		Chloride 300.0 mg/kg	
Treatment Zone Closure Performance Standards				500 mg/kg				--				2,500 mg/kg		1,000 mg/kg	
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Treatment	Cell 17-treatment-S-6-190619	06/19/2019	52.5	B	1.11	U	71.2	--	124.81	--	38.1	--		
Cell 18	Treatment	Cell 18-treatment-S-6-190619	06/19/2019	37.6	B	1.24	U	69.4	--	108.24	--	0.5280	U		
Cell 19	Treatment	Cell 19-treatment-S-6-190619	06/19/2019	16.2	J B	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	J B	1.26	U	86.3	--	118.96	--	0.5300	U		
Cell 25	Treatment	Cell25-treatment-S-6-190619	06/19/2019	48.9	B	1.08	U	73.5	--	123.48	--	0.5280	U		
Cell 26	Treatment	Cell26-treatment-S-6-190619	06/19/2019	37.2	B	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

Constituent Method Units				DRO 8015B mg/kg		GRO 8015B mg/kg		ORO 8015B mg/kg		TPH ^a 8015B mg/kg		Chloride 300.0 mg/kg	
				500 mg/kg		500 mg/kg		--		2,500 mg/kg		1,000 mg/kg	
Landfarm Cell	Zone	Sample ID	Sample Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 17	Treatment	Cell17-Treatment-5-6-191204	12/04/2019	35.1	U	0.0629	U	65.0	--	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

Constituent				DRO		GRO		ORO		TPH ^a		Benzene		Toluene		Ethylbenzene		Xylenes		Chloride	
Method				8015B		8015B		8015B		8015B		8260B		8260B		8260B		8260B		300.0	
Units				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Background Soil 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 18	Vadose	Cell18-Square133-S-2-3-190506	5/6/2019	18.5	B	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	J B	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	J B	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	U H	0.00117	U H	0.000863	U H	0.000956	U H	31.2	
Cell 20	Vadose	Cell20-Square166-S-2-3-190506	5/6/2019	41.9	B	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	J B	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	U H	0.00102	U H	0.000757	U H	0.000839	U H	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	U H	0.00101	U H	0.000747	U H	0.000828	U H	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	U H	0.00128	U H	0.000944	U H	0.00105	U H	0.528	U
Cell 25	Vadose	Cell25-Square98-S-2-3-190506	5/6/2019	2.68	J B	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 Method Units				Antimony 6020 mg/kg		Arsenic 6020 mg/kg		Barium 6020 mg/kg		Beryllium 6020 mg/kg		Cadmium 6020 mg/kg		Chromium 6020 mg/kg		Copper 6020 mg/kg		Iron 6020 mg/kg		Lead 6020 mg/kg		Manganese 6020 mg/kg		Mercury 7471A mg/kg		Selenium 6020 mg/kg		Silver 6020 mg/kg		Thallium 6020 mg/kg		Zinc 6020 mg/kg	
Background Soil Concentrations				--		< 5.0		45.0		--		< 2.0		6.1		--		--		< 5.0		--		< 0.25		< 5.0		< 5.0		--		--	
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	Result	Qualifier	Result	Qualifier	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	^	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	--

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:

ID = identification

-- = not applicable

mg/kg = milligrams per kilogram

NMAC = New Mexico Administrative Code

QC = quality control

RL = reporting limit

SDL = sample detection limit

Qualifiers:

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 Method Units	DRO 8015B mg/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		Xylenes 8260B mg/kg		Chloride 300.0 mg/kg	
Background Soil 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	B	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	U H	0.00111	U H	0.000821	U H	0.00091	U H	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	U H	0.00146	U H	0.00108	U H	0.00119	U H	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	U H	0.00131	U H	0.000966	U H	0.00107	U H	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	U H	0.000777	U H	0.000574	U H	0.000636	U H	0.531	U
Cell 25	Vadose	Cell25-Square-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	U	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 Method Units				Antimony 6020 mg/kg		Arsenic 6020 mg/kg		Barium 6020 mg/kg		Beryllium 6020 mg/kg		Cadmium 6020 mg/kg		Chromium 6020 mg/kg		Copper 6020 mg/kg		Iron 6020 mg/kg		Lead 6020 mg/kg		Manganese 6020 mg/kg		Mercury 7471A mg/kg		Selenium 6020 mg/kg		Silver 6020 mg/kg		Thallium 6020 mg/kg		Zinc 6020 mg/kg	
Background Soil Concentrations				--		< 5.0		45.0		--		< 2.0		6.1		--		--		< 5.0		--		< 0.25		< 5.0		< 5.0		--		--	
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	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	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	B	5,690	--	5.30	--	106	--	0.00325	U	0.259	U	0.119	U	0.277	U	15.0	--

- Notes:
- 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.
 - 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

Constituent Method Units				DRO 8015B mg/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		Xylenes 8260B mg/kg		Chloride 300.0 mg/kg	
Background Soil 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 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	U H	0.00138	U H	0.00102	U H	0.00113	U H	28.4	B
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	U H	0.00156	U H	0.00116	U H	0.00128	U H	2.54	J B
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	U H	0.00152	U H	0.00112	U H	0.00124	U H	2.30	J B
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	U H	0.00122	U H	0.0009	U H	0.000997	U H	25.9	J B
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	U H	0.00145	U H	0.00107	U H	0.00119	U H	2.90	J B
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	U H	0.00145	U H	0.00107	U H	0.00119	U H	3.89	J B
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	U H	0.00153	U H	0.00113	U H	0.00125	U H	3.47	J B
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	U H	0.0017	U H	0.00126	U H	0.00139	U H	2.01	J B
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	H	0.0017	U H	0.00126	U H	0.00139	U H	3.50	J B
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	H	0.00158	U H	0.00117	U H	0.00129	U H	5.41	B
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	H	0.00191	U H	0.00141	U H	0.00157	U H	8.90	B
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	H	0.00151	U H	0.00111	U H	0.00123	U H	22.9	B

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				Antimony 6010B mg/kg		Arsenic 6010B mg/kg		Barium 6010B mg/kg		Beryllium 6010B mg/kg		Cadmium 6010B mg/kg		Chromium 6010B mg/kg		Copper 6010B mg/kg		Iron 6010B mg/kg		Lead 6010B mg/kg		Manganese 6010B mg/kg		Mercury 7471A mg/kg		Selenium 6010B mg/kg		Silver 6010B mg/kg		Thallium 6010B mg/kg		Zinc 6010B mg/kg	
Background Soil Concentrations				--		< 5.0		45.0		--		< 2.0		6.1		--		--		< 5.0		--		< 0.25		< 5.0		< 5.0		--		--	
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	Result	Qualifier	Result	Qualifier	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 Units				Antimony 6010B mg/kg		Arsenic 6010B mg/kg		Barium 6010B mg/kg		Beryllium 6010B mg/kg		Cadmium 6010B mg/kg		Chromium 6010B mg/kg		Copper 6010B mg/kg		Iron 6010B mg/kg		Lead 6010B mg/kg		Manganese 6010B mg/kg		Mercury 7471A mg/kg		Selenium 6010B mg/kg		Silver 6010B mg/kg		Thallium 6010B mg/kg		Zinc 6010B mg/kg	
Background Soil Concentrations				--		< 5.0		45.0		--		< 2.0		6.1		--		--		< 5.0		--		< 0.25		< 5.0		< 5.0		--		--	
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	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cell 1	Vadose	Cell1-Square35-S-2-3-191204	12/04/2019	0.283	U	1.62	--	43.0	--	0.201	J	0.104	J	4.14	--	2.61	--	3,640	--	3.09	--	48.3	--	0.0146	J B	0.316	U	0.145	U	0.338	U	9.46	--
Cell 1	Vadose	Cell1-Square10-S-2-3-191204	12/04/2019	0.307	U	2.24	--	60.9	--	0.324	J	0.172	J	5.58	--	4.98	--	5,290	--	4.19	--	87.6	--	0.0218	B	0.342	U	0.157	U	0.366	U	14.5	--
Cell 1	Vadose	Cell1-Square88-S-2-3-191204	12/04/2019	0.288	U	1.66	--	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	U	0.343	U	12.5	--
Cell 1	Vadose	Cell1-Square155-S-2-3-191204	12/04/2019	0.235	U	1.51	--	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	U	0.280	U	9.28	--
Cell 2	Vadose	Cell2-Square147-S-2-3-191205	12/05/2019	0.3	U	2.20	--	55.2	--	0.337	--	0.149	J	6.68	--	4.23	--	5,990	--	4.80	--	104	--	0.0154	J	0.335	U	0.154	U	0.359	U	15.6	--
Cell 2	Vadose	Cell2-Square10-S-2-3-191205	12/05/2019	0.309	U	1.80	--	35.0	--	0.213	J	0.133	J	4.79	--	2.74	--	3,960	--	2.95	--	56.2	--	0.00608	J	0.345	U	0.159	U	1.64	J	9.77	--
Cell 2	Vadose	Cell2-Square39-S-2-3-191205	12/05/2019	0.224	U	1.53	--	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	U	0.469	J	10.9	--
Cell 2	Vadose	Cell2-Square64-S-2-3-191205	12/05/2019	0.263	U	1.01	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	U	0.314	U	5.52	--
Cell 3	Vadose	Cell3-Square130-S-2-3-191205	12/05/2019	0.228	U	1.89	--	27.0	--	0.206	J	0.0932	J	4.88	--	2.08	--	4,000	--	3.46	--	46.0	B	0.00455	J	0.254	U	0.117	U	1.16	J	9.28	--
Cell 3	Vadose	Cell3-Square153-S-2-3-191205	12/05/2019	0.224	U	1.85	--	23.2	--	0.217	J	0.0772	J	5.09	--	1.95	--	4,330	--	3.35	--	45.6	B	0.00409	J	0.250	U	0.115	U	0.267	U	9.63	--
Cell 3	Vadose	Cell3-Square77-S-2-3-191205	12/05/2019	0.306	U	2.29	--	33.7	--	0.316	J	0.125	J	7.55	--	3.04	--	6,340	--	4.80	--	56.5	--	0.0485	B	0.341	U	0.157	U	0.365	U	12.7	--
Cell 3	Vadose	Cell3-Square120-S-2-3-191205	12/05/2019	0.248	U	1.39	--	19.3	--	0.171	J	0.0803	J	4.45	--	1.93	--	3,670	--	2.79	--	34.9	--	0.0848	B	0.277	U	0.127	U	0.296	U	7.60	--
Cell 4	Vadose	Cell4-Square129-S-2-3-191205	12/05/2019	0.278	U	2.39	--	27.9	--	0.311	--	0.108	J	6.33	--	2.22	--	5,550	--	3.93	--	48.2	B	0.00437	U	0.310	U	0.143	U	0.332	U	13.4	--
Cell 4	Vadose	Cell4-Square114-S-2-3-191205	12/05/2019	0.291	U	2.04	--	44.1	--	0.232	J	0.107	J	5.58	--	2.34	--	4,730	--	3.78	--	49.1	B	0.00797	J	0.325	U	0.149	U	0.347	U	11.2	--
Cell 4	Vadose	Cell4-Square201-S-2-3-191205	12/05/2019	0.277	U	2.24	--	32.0	--	0.256	J	0.101	J	5.72	--	2.13	--	4,990	--	3.72	--	50.2	B	0.0076	J	0.309	U	0.142	U	0.330	U	11.7	--
Cell 4	Vadose	Cell4-Square37-S-2-3-191205	12/05/2019	0.23	U	1.80	--	24.8	--	0.213	J	0.0891	J	5.17	--	2.15	--	4,320	--	3.71	--	53.4	B	0.00463	J	0.256	U	0.118	U	0.274	U	12.0	--
Cell 5	Vadose	Cell5-Square209-S-2-3-191205	12/05/2019	0.288	U	2.35	--	128	--	0.273	J	0.155	J	5.36	--	4.07	--	5,010	--	3.67	--	72.6	--	0.00449	U	0.00449	U	0.148	U	0.344	U	14.7	B
Cell 5	Vadose	Cell5-Square188-S-2-3-191205	12/05/2019	0.367	J	3.68	--	183	--	0.271	J	0.169	J	4.69	--	4.39	--	4,470	--	4.09	--	70.9	--	0.00444	U	0.00444	U	0.143	U	0.999	J B	14.7	B
Cell 5	Vadose	Cell5-Square120-S-2-3-191205	12/05/2019	0.28	U	2.35	--	78.4	--	0.252	J	0.183	J	4.36	--	3.65	--	4,260	--	3.87	--	66.8	--	0.00460	J	0.0046	J	0.150	U	0.624	J B	12.7	B
Cell 5	Vadose	Cell5-Square13-S-2-3-191205	12/05/2019	0.276	U	1.64	--	47.5	--	0.226	J	0.107	J	4.29	--	3.12	--	4,100	--	3.14	--	63.5	--	0.00428	U	0.00428	U	0.142	U	0.330	U	10.5	B
Cell 6	Vadose	Cell6-Square206-S-2-3-191205	12/05/2019	0.245	U	1.46	--	32.7	--	0.248	J	0.106	J	4.91	--	2.94	--	4,620	--	3.55	--	70.3	--	0.00366	U	0.00366	U	0.126	U	0.292	U	11.2	B
Cell 6	Vadose	Cell6-Square202-S-2-3-191205	12/05/2019	0.302	U	1.23	J	28.1	--	0.189	J	0.104	J	4.34	--	2.37	--	3,840	--	2.87	--	52.3	--	0.00427	U	0.00427	U	0.155	U	0.527	J B	8.83	B
Cell 6	Vadose	Cell6-Square110-S-2-3-191205	12/05/2019	0.292	U	1.66	--	41.8	--	0.264	J	0.119	J	5.03	--	2.79	--	4,840	--	3.53	--	63.4	--	0.00758	U	0.00758	J	0.15	U	0.348	U	12.1	B
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	B
Cell 7	Vadose	Cell7-Square22-S-2-3-191205	12/05/2019	0.285	U	1.48	--	44.5	--	0.166	J	0.0799	J	4.20	--	2.00	--	3,340	--	3.01	--	41.8	B	0.0201	--	0.318	U	0.146	U	1.41	J	8.60	--
Cell 7	Vadose	Cell7-Square58-S-2-3-191205	12/05/2019	0.258	U	1.53	--	29.7	--	0.25	J	0.111	J	4.94	--	2.72	--	4,680	--	3.74	--	68.7	--	0.00418	J	0.00418	J	0.132	U	0.308	U	11.5	B
Cell 7	Vadose	Cell7-Square34-S-2-3-191205	12/05/2019	0.257	U	1.71	--	33.1	--	0.282	--	0.111	J	5.6	--	2.73	--	5,100	--	3.81	--	65.0	--	0.00704	J	0.00704	J	0.132	U	0.306	U	11.9	B
Cell 7	Vadose	Cell7-Square153-S-2-3-191205	12/05/2019	0.3	U	1.42	--	23.6	--	0.162	J	0.0776	J	3.67	--	1.56	--	3,430	--	2.59	--	32.5	--	0.00443	U	0.00443	U	0.154	U	0.358	U	8.27	B
Cell 8	Vadose	Cell8-Square122-S-2-3-191205	12/05/2019	0.301	U	2.07	--	34.7	--	0.214	J	0.104	J	5.39	--	2.42	--	4,340	--	5.09	--	53.5	B	0.00626	J	0.336	U	0.154	U	0.359	U	10.9	--
Cell 8	Vadose	Cell8-Square161-S-2-3-191205	12/05/2019	0.297	U	2.11	--	28.1	--	0.268	J	0.109	J	5.76	--	2.96	--	5,070	--	3.74	--	60.0	B	0.0104	J	0.297	U	0.152	U	0.354	U	11.3	--
Cell 8	Vadose	Cell8-Square90-S-2-3-191205	12/05/2019	0.273	U	1.68	--	36.2	--	0.212	J	0.0825	J	4.66	--	2.32	--	3,840	--	3.46	--	42.3	B	0.0205	U	0.305	U	0.140	U	0.326	U	9.66	--
Cell 8	Vadose	Cell8-Square170-S-2-3-191205	12/05/2019	0.298	U	2.08	--	45.1	--	0.199	J	0.103	J	4.35	--	1.95	--	3,670	--	3.18	--	52.8	B	0.00445	U	0.333	U	0.153	U	0.356	U	8.98	--
Cell 9	Vadose	Cell9-Square134-S-2-3-191203	12/03/2019	0.276	U	1.59	--	45.1	--	0.25	J	0.119	J	5.33	--	3.76	--	4,400	--	3.67	--	68.1	--	0.0157	J B	0.308	U	0.141	U	0.329	U	12.6	--
Cell 9	Vadose	Cell9-Square118-S-2-3-191203	12/03/2019	0.296	U	1.15	J	56.2	--	0.179	J	0.102	J	3.54	--	2.5	--	3,210	--	3.01	--	50.9	--	0.00728	J B	0.331	U	0.152	U	0.421	J B	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	U	0.156	U	0.536	J B	10.2	--
Cell 9	Vadose	Cell9-Square189-S-2-3-191203	12/03/2019	0.315	U	1.86	--	53.4	--	0.319	J	0.136	J	5.54	--	3.58	--	5,350	--	5.63	--	85.2	--	0.0732	B	0.352	U	0.162	U	0.377	U	13.1	--
Cell 10	Vadose	Cell10-Square149-S-2-3-191205	12/05/2019	0.297	U	2.17	--	49.3	--	0.326	--	0.141	J	6.80	--	4.46	--	5,910	--	4.63	--	91.2	--	0.0146	J	0.332	U	0.152	U	0.355	U	13.6	--
Cell 10	Vadose	Cell10-Square12-S-2-3-191205	12/05/2019	0.314	U	1.94	--	56.1	--	0.223	J	0.122	J	5.40	--	4.61	--	4,410	--	3.85	--	68.9	--	0.0119	J B	0.351	U	0.161	U	0.375	U	12.3	--
Cell 10	Vadose	Cell10-Square84-S-2-3-191205	12/05/2019	0.246	U	1.56	--	41.3	--	0.212	J	0.117	J	5.07	--	3.64	--	4,240	--	3.52	--	67.1	--	0.0353	B	0.275	U	0.126	U	0.294	U	10.7	--

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

Constituent Method Units				Antimony 6010B mg/kg		Arsenic 6010B mg/kg		Barium 6010B mg/kg		Beryllium 6010B mg/kg		Cadmium 6010B mg/kg		Chromium 6010B mg/kg		Copper 6010B mg/kg		Iron 6010B mg/kg		Lead 6010B mg/kg		Manganese 6010B mg/kg		Mercury 7471A mg/kg		Selenium 6010B mg/kg		Silver 6010B mg/kg		Thallium 6010B mg/kg		Zinc 6010B mg/kg	
Background Soil Concentrations				--		< 5.0		45.0		--		< 2.0		6.1		--		--		< 5.0		--		< 0.25		< 5.0		< 5.0		--		--	
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	Result	Qualifier	Result	Qualifier	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	B	0.00473	J	0.275	U	0.126	U	0.297	J B	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	B	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	B	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	B	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	B	0.275	U	0.126	U	0.604	J B	14.2	B
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	J B	15.3	B
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	B
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	B	0.329	U	0.151	U	0.352	U	16.8	B
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	B	0.289	U	0.133	U	0.309	U	16.8	B
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	B
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	B
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	B
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	J B	0.345	U	0.158	U	0.369	U	5.72	J B

Notes:

- Nondetect values are reported to the SDL specified in the laboratory reports.
- 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.
- Detected values highlighted in grey exceed the SDL or background soil concentration.

Acronyms and ABBreviations:

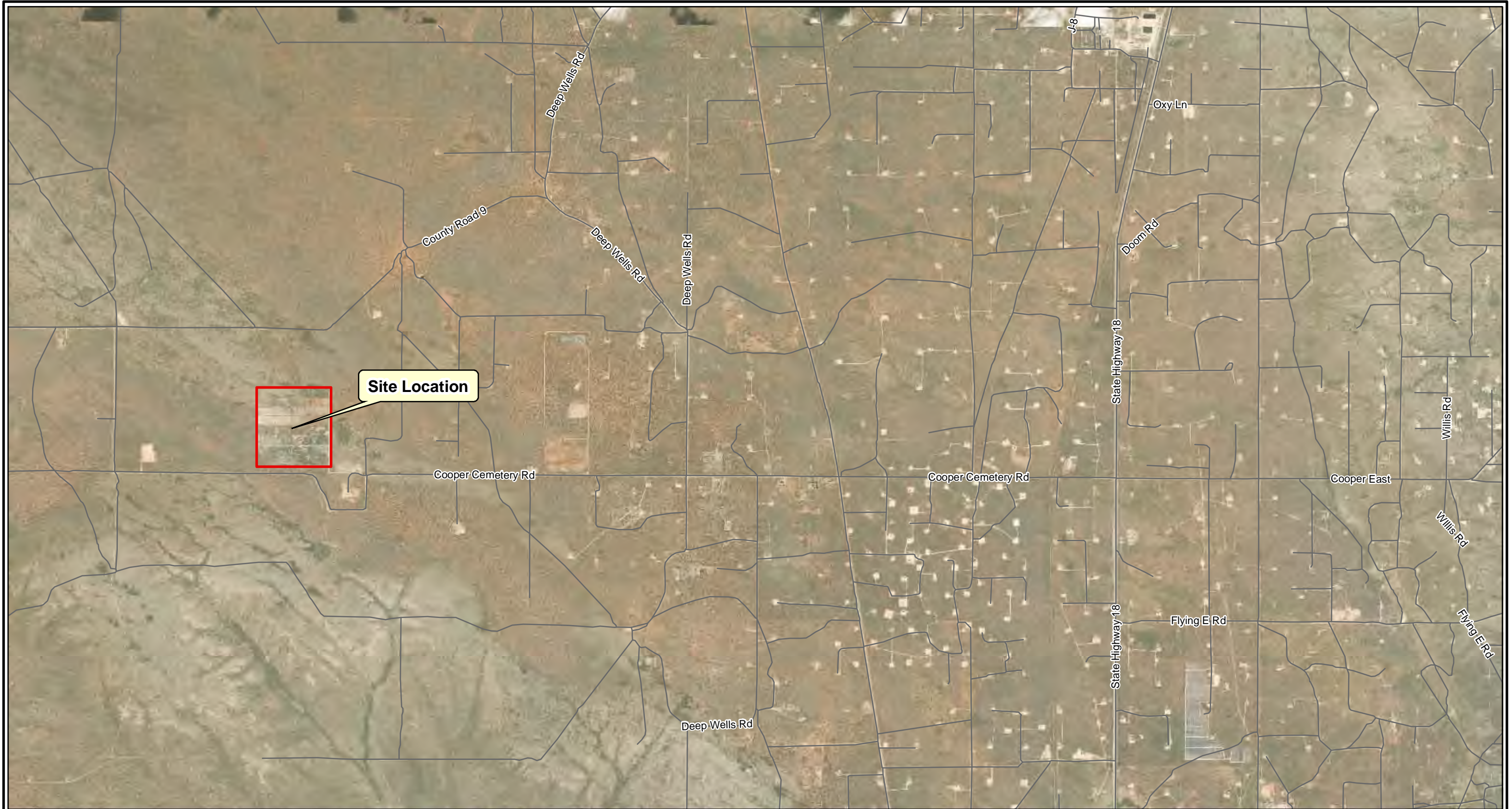
-- = not applicable
ID = identification
mg/kg = milligrams per kilogram
NMAC = New Mexico Administrative Code
SDL = sample detection limit

Qualifiers:


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



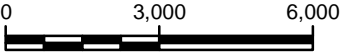


LEGEND

 Landfarm Boundary

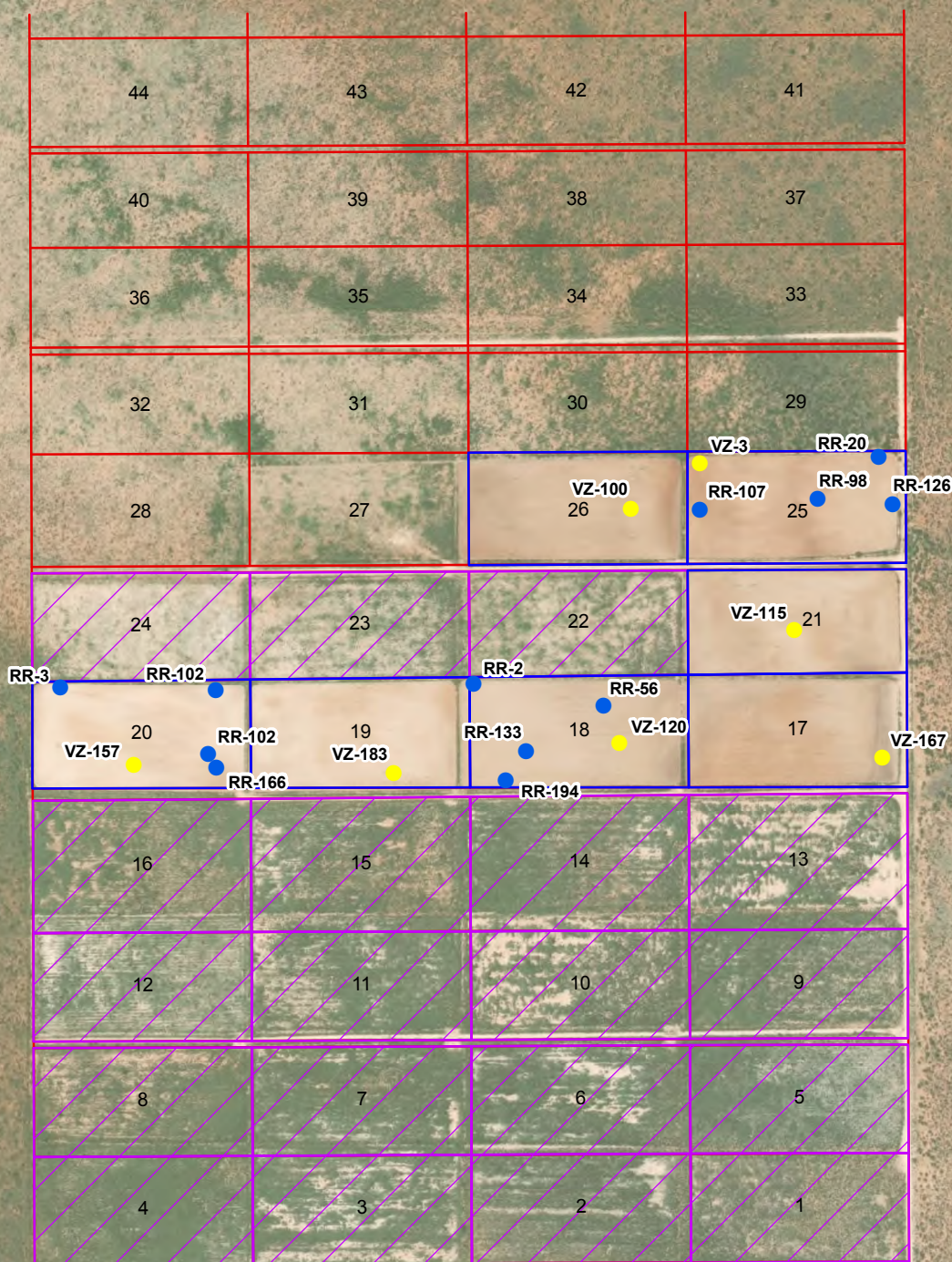


Site Location

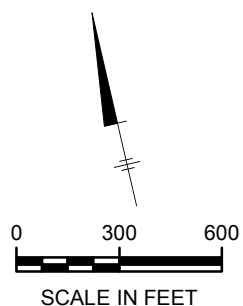
SCALE IN FEET

CHEVRON ENVIRONMENTAL MANAGEMENT COMPAN YJAL LANDFARM (NM-02-0012) LEA COUNTY, NEW MEXICO 2019 ANNUAL REPORT	
SITE LOCATION MAP	
 <small>Design & Consultancy for natural and built assets</small>	FIGURE 1



LEGEND

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



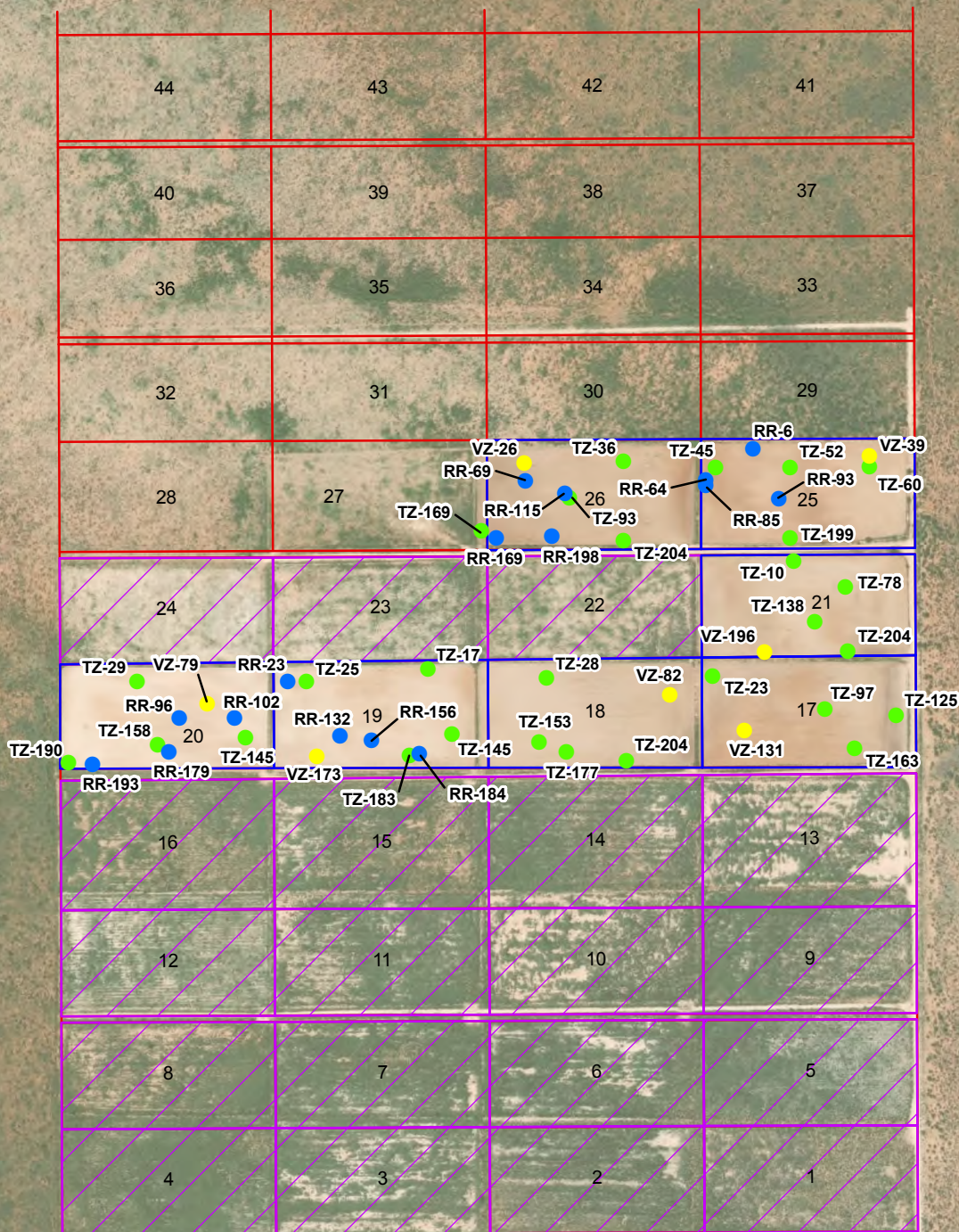
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM (NM-02-0012)
LEA COUNTY, NEW MEXICO
2019 ANNUAL REPORT

FIRST QUARTER 2019 AND RELEASE RESPONSE SAMPLE LOCATIONS

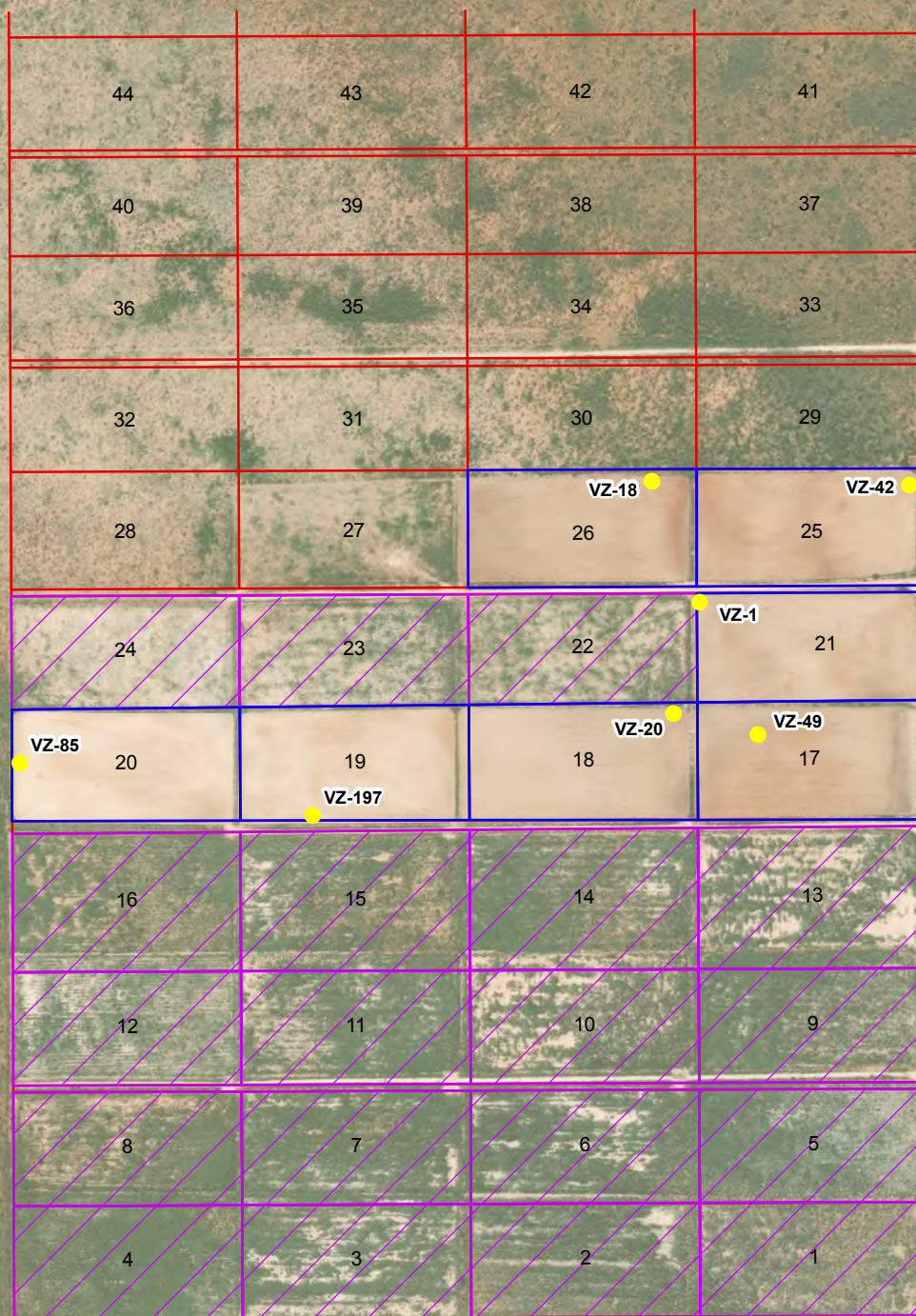
ARCADIS Design & Consultancy
for natural and built assets

FIGURE

2

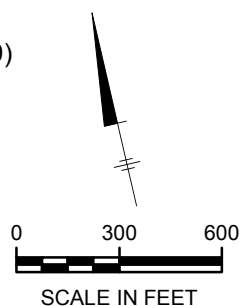


3



LEGEND

- Vadose Zone Sample Locations (September 2019)
- Active Landfarm Cell
- Inactive Landfarm Cell
- Developed Cell - Inactive



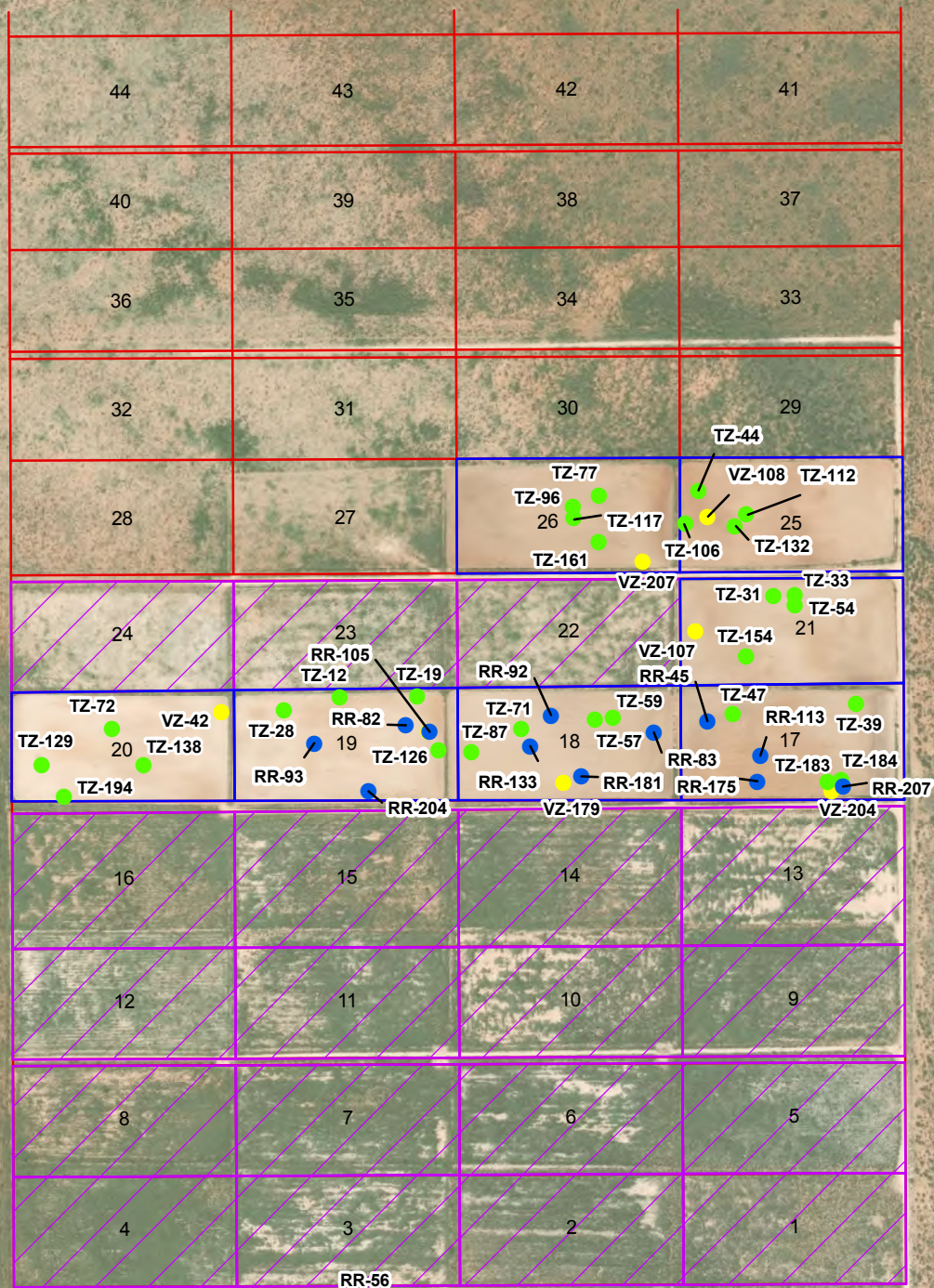
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM (NM-02-0012)
LEA COUNTY, NEW MEXICO
2019 ANNUAL REPORT

THIRD QUARTER SAMPLE LOCATIONS



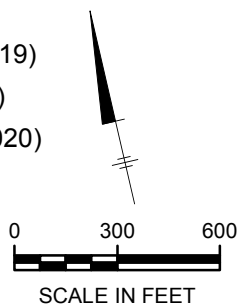
FIGURE

4



LEGEND

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



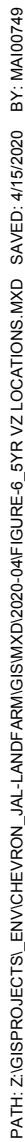
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
 JAL LANDFARM (NM-02-0012)
 LEA COUNTY, NEW MEXICO
2019 ANNUAL REPORT

FOURTH QUARTER 2019 AND RELEASE RESPONSE SAMPLE LOCATIONS

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 built assets

FIGURE

5



● Five-Year Vadose Zone Sample Locations
(December 2019)

-

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM (NM-02-0012)
LEA COUNTY, NEW MEXICO
2019 ANNUAL REPORT

FIVE-YEAR VADOSE ZONE MONITORING SAMPLE LOCATIONS



FIGURE

6

APPENDIX A

2019 Site Activity Photographic Log



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 SITE ACTIVITY PHOTOGRAPHIC LOG

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 SITE ACTIVITY PHOTOGRAPHIC LOG

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 SITE ACTIVITY PHOTOGRAPHIC LOG

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 SITE ACTIVITY PHOTOGRAPHIC LOG

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 SITE ACTIVITY PHOTOGRAPHIC LOG

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 SITE ACTIVITY PHOTOGRAPHIC LOG

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



ANALYTICAL REPORT

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

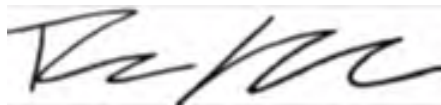
Laboratory Job ID: 600-182577-1

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

For:

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

Review your project
results through

TotalAccess

Have a Question?



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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

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.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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
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

Sample Summary

Client: ARCADIS U.S. Inc

Job ID: 600-182577-1

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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

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 Range Organics - (GC)

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 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	%	-		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

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

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 Range Organics - (GC)

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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 Organics (DRO) (GC)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	81		27 - 151				03/29/19 08:14	03/30/19 00:19	1
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	1
Percent Solids	88.8		1.0	1.0	%			03/28/19 11:30	1

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

Lab Sample ID: 600-182577-3

Date Collected: 03/26/19 14:55

Matrix: Solid

Date Received: 03/27/19 10:32

Method: 8260B - Volatile Organic Compounds (GC/MS)									
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	Qualifier	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 - (GC)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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
Method: 8015B - Diesel Range Organics (DRO) (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
General Chemistry									
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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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

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 - (GC)

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 Organics (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
Percent Moisture	13.4		1.0	1.0	%	-		03/28/19 11:30	1
Percent Solids	86.6		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

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

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 Range Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1300	U	2590	1300	ug/Kg	-	03/28/19 15:30	03/28/19 18:01	50

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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 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

Matrix: Solid

Date Received: 03/27/19 10:32

Method: 8260B - Volatile Organic Compounds (GC/MS)									
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 Organics - (GC)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1370	U	2750	1370	ug/Kg	—	03/28/19 15:30	03/28/19 18:27	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 18:27	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]	2.44	J	4.95	1.98	mg/Kg	—	03/29/19 08:14	03/30/19 12:06	1
Oil Range Organics (C28-C35)	1.98	U	4.95	1.98	mg/Kg		03/29/19 08:14	03/30/19 12:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		27 - 151				03/29/19 08:14	03/30/19 12:06	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.3		1.0	1.0	%	—		03/28/19 11:30	1
Percent Solids	88.7		1.0	1.0	%			03/28/19 11:30	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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

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	1
Ethylbenzene	0.918	U	4.50	0.918	ug/Kg	-	03/27/19 13:30	04/04/19 19:19	1
Toluene	6.11		4.50	1.24	ug/Kg	-	03/27/19 13:30	04/04/19 19:19	1
Xylenes, Total	1.02	U	4.50	1.02	ug/Kg	-	03/27/19 13:30	04/04/19 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	134	X	61 - 130	03/27/19 13:30	04/04/19 19:19	1
Dibromofluoromethane	115		68 - 140	03/27/19 13:30	04/04/19 19:19	1
Toluene-d8 (Surr)	105		50 - 130	03/27/19 13:30	04/04/19 19:19	1
4-Bromofluorobenzene	109		57 - 140	03/27/19 13:30	04/04/19 19:19	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1300	U	2600	1300	ug/Kg	-	03/28/19 15:30	03/28/19 18:55	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 18:55	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]	2.48	J	4.91	1.96	mg/Kg	-	03/29/19 08:14	03/30/19 12:30	1
Oil Range Organics (C28-C35)	1.96	U	4.91	1.96	mg/Kg	-	03/29/19 08:14	03/30/19 12:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		27 - 151				03/29/19 08:14	03/30/19 12:30	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.5		1.0	1.0	%	-		03/28/19 11:30	1
Percent Solids	86.5		1.0	1.0	%	-		03/28/19 11:30	1

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

Qualifiers

GC/MS 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.
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
U	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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-182577-1	Cell 19 - Square 183-S-2-3-190326	133 X	118	110	121
600-182577-2	Cell 18 - Square 120-S-2-3-190326	139 X	118	109	122
600-182577-3	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

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

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

Surrogate Legend

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	OTPH1 (27-151)					
600-182577-1	Cell 19 - Square 183-S-2-3-190326	66					
600-182577-1 MS	Cell 19 - Square 183-S-2-3-190326	72					
600-182577-1 MSD	Cell 19 - Square 183-S-2-3-190326	68					
600-182577-2	Cell 18 - Square 120-S-2-3-190326	81					
600-182577-3	Cell 20 - Square 157-S-2-3-190326	76					
600-182577-4	Cell 26 - Square 100-S-2-3-190326	74					
600-182577-5	Cell 17 - Square 167-S-2-3-190326	28					
600-182577-6	Cell 21 - Square 115-S-2-3-190326	75					
600-182577-7	Cell 25 - Square 3-S-2-3-190326	72					
LCS 400-435122/2-A	Lab Control Sample	82					
MB 400-435122/1-A	Method Blank	88					

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Lab Sample ID: MB 600-261988/7

Matrix: Solid

Analysis Batch: 261988

Client Sample ID: Method Blank

Prep Type: Total/NA

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

Surrogate	MB %Recovery	MB Qualifier	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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Lab Sample ID: MB 600-262121/7

Matrix: Solid

Analysis Batch: 262121

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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 Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

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

Analysis Batch: 435015

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435100

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	50.0	U	100	50.0	ug/Kg		03/28/19 11:00	03/28/19 12:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125				03/28/19 11:00	03/28/19 12:21	1

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

Matrix: Solid

Analysis Batch: 435015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 435100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1000	937.7		ug/Kg		94	62 - 141
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid)	99		65 - 125				

Lab Sample ID: 600-182577-1 MS

Matrix: Solid

Analysis Batch: 435015

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

Prep Type: Total/NA

Prep Batch: 435100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1340	U	26800	28660		ug/Kg		107	10 - 150
Surrogate	MS %Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	93		65 - 125						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	1340	U	26800	28900		ug/Kg		108	10 - 150	1	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	94		65 - 125								

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

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

Matrix: Solid

Analysis Batch: 435252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 435122

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	88		27 - 151				03/29/19 08:14	03/29/19 23:03	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Lab Sample ID: LCS 400-435122/2-A

Matrix: Solid

Analysis Batch: 435252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 435122

			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							
<i>o</i> -Terphenyl	82			27 - 151							

Lab Sample ID: 600-182577-1 MS

Matrix: Solid

Analysis Batch: 435252

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

Prep Type: Total/NA

Prep Batch: 435122

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	1.99	U	273	199.0		mg/Kg		73	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	72		27 - 151								

Lab Sample ID: 600-182577-1 MSD

Matrix: Solid

Analysis Batch: 435252

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

Prep Type: Total/NA

Prep Batch: 435122

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	1.99	U	272	178.6		mg/Kg		66	62 - 204	11	30
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
<i>o</i> -Terphenyl	68		27 - 151								

Method: 2540B - Percent Moisture

Lab Sample ID: 600-182595-B-1 DU

Matrix: Solid

Analysis Batch: 261416

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	0.0		0.0		%		NC	20
Percent Solids	100.0		100.0		%		0	20

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

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

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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

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

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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-182577-3

Date Collected: 03/26/19 14:55

Matrix: Solid

Date Received: 03/27/19 10:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-182577-4

Date Collected: 03/26/19 11:20

Matrix: Solid

Date Received: 03/27/19 10:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Date Collected: 03/26/19 12:25

Matrix: Solid

Date Received: 03/27/19 10:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-182577-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

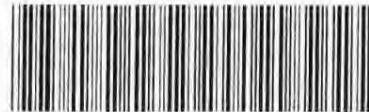
Laboratory: Eurofins TestAmerica, Pensacola

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
Iowa	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	05-15-19
West Virginia DEP	State Program	3	136	07-31-19

Chain of Custody Record

Client Information Client Contact: Steve Rice Company: ARCADIS U.S. Inc. Address: 11001 West 120th Avenue City: Broomfield State, Zip: CO, 80021 Phone: 303-710-7537(Tel) Email: steve.rice@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2018 Site: Jal Land Farm		Sampler: Ryan Mincey / Callum Ferguson Lab PM: Kuchadkar, Sachin G E-Mail: sachin.kuchadkar@testamericainc.com Phone: 888-543-1945 / 432-269-3504		Carier Tracking No(s): COC No: 600-67350-18431.1 Page: Page 1 of 1 Job#: 6048818002	
Due Date Requested: Standard TAT Requested (days): Standard		Analysis Requested			
PO #: 303-710-7537(Tel) WO #: Project #: 60009563 SSOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Amchlor I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify) Other:			
Sample Identification		Total Number of containers			
Cell 19 - Square 183-S-2-3-190326 Cell 13 - Square 120-S-2-3-190326 Cell 20 - Square 157-S-2-3-190326 Cell 26 - Square 100-S-2-3-190326 Cell 17 - Square 167-S-2-3-190326 Cell 21 - Square 115-S-2-3-190326 Cell 25 - Square 3-S-2-3-190326		Special Instructions/Note:			
Sample Date 03/26/19 03/26/19 03/26/19 03/26/19 03/26/19 03/26/19		Field Filtered Sample (Yes or No) 8015B_DRO - (MOD) DRO C10-C28 8015B_GRO - GRO(C6-C10) 8260B - BTEX Only			
Sample Type G=grab G=grab G=grab G=grab G=grab G=grab		Matrix (Weather, Sealed, Overfilled) BT-Tissue, A-AU			
Sample Time 14:10 13:25 14:55 11:20 13:00 12:25 11:45		Preservation Code: Solid Solid Solid Solid Solid Solid Solid			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month, <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Month			
Empty Kit Relinquished by: Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Special Instructions/OC Requirements:			
Date/Time: 3-26-19/0825 Date/Time: [Blank] Date/Time: [Blank]		Date/Time: 3-27-19/1032 Date/Time: [Blank] Date/Time: [Blank]			
Company: Arcadis Company: [Blank] Company: [Blank]		Company: IA Houston Company: [Blank] Company: [Blank]			
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:			



600-182577 Chain of Custody



Receipt Checklist

Loc: 600

182577

Date/Time Received:

19 MAR 27 10:32

JOB NUMBER:

CLIENT:

Arcadis

UNPACKED BY:

CARRIER/DRIVER:

Fedex

Custody Seal Present:

☒ YES☐ NO

Number of Coolers Received:

1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
BW	Y / N	Y / N	1.3	IR678	+0.1	1.4
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice?

☒ YES☐ NO

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

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?

☒ YES☐ NO

COMMENTS:

J.S. 3-27-19

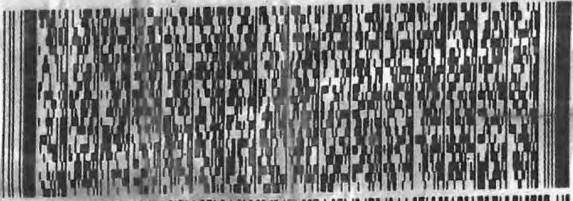
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
731022



FL-US BFM
32514

XH PNSA

TRK# 4840 2905 4724
THU - 28 MAR 3:00P
STANDARD OVERNIGHT



6.96
IN 8

PENSACOLA FL 32514
REF: 6600-67691

TESTAMERICA LABORATORIES, INC.
3355 MCLEMORE DRIVE
SHIPPING/RECEIVING

SHIP DATE: 27MAR19
ACTWGT: 10.00 LB MAN
CAD: 0758523/CAFE3211
BILL RECIPIENT

ORIGIN ID: LKSA (713) 356-2413
SAMPLE RECEIVING
TESTAMERICA INC
6310 ROTHWAY ST
HOUSTON, TX 77040
UNITED STATES US

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Part # 159469-434 RTT2 EXP 12/19

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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 \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR8
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 $<6\text{mm}$ (1/4").	True	
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: 600-184934-1

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



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

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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: 600-184934-1

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.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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
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
7471A	Preparation, Mercury	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.

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Sample ID: 600-184934-1

Date Collected: 05/06/19 15:00

Matrix: Solid

Date Received: 05/07/19 09:50

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.607	U	4.82	0.607	ug/Kg	-	05/08/19 07:55	05/08/19 16:10	1
Ethylbenzene	0.983	U	4.82	0.983	ug/Kg	-	05/08/19 07:55	05/08/19 16:10	1
Toluene	1.33	U	4.82	1.33	ug/Kg	-	05/08/19 07:55	05/08/19 16:10	1
Xylenes, Total	1.09	U	4.82	1.09	ug/Kg	-	05/08/19 07:55	05/08/19 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130				05/08/19 07:55	05/08/19 16:10	1
Dibromofluoromethane	93		68 - 140				05/08/19 07:55	05/08/19 16:10	1
Toluene-d8 (Surr)	90		50 - 130				05/08/19 07:55	05/08/19 16:10	1
4-Bromofluorobenzene	96		57 - 140				05/08/19 07:55	05/08/19 16:10	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	47.4	U	94.9	47.4	ug/Kg	-	05/10/19 12:00	05/10/19 21:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	86		65 - 125				05/10/19 12:00	05/10/19 21:37	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]	4.30	J B	4.94	1.98	mg/Kg	-	05/13/19 10:47	05/15/19 02:43	1
Oil Range Organics (C28-C35)	1.98	U	4.94	1.98	mg/Kg	-	05/13/19 10:47	05/15/19 02:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	83		27 - 151				05/13/19 10:47	05/15/19 02:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.533	U	3.99	0.533	mg/Kg	-		05/17/19 03:41	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	372		0.466	0.103	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Cadmium	0.186	U	0.466	0.186	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Antimony	0.112	U	0.466	0.112	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Thallium	0.0839	U	0.0932	0.0839	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Iron	1740		23.3	3.73	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Silver	0.0177	U	0.0932	0.0177	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Arsenic	3.46		0.466	0.103	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Copper	1.15		0.932	0.373	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Lead	1.14		0.233	0.0690	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Zinc	4.13		3.73	1.86	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Selenium	0.0643	U	0.466	0.0643	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Manganese	13.9		2.33	0.587	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Chromium	2.17		0.466	0.177	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10
Beryllium	0.104	J	0.466	0.0280	mg/Kg	-	05/13/19 12:15	05/13/19 16:45	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0168		0.0126	0.00757	mg/Kg	-	05/14/19 16:18	05/15/19 12:58	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Sample ID: 600-184934-2

Date Collected: 05/06/19 13:21

Matrix: Solid

Date Received: 05/07/19 09:50

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.539	U	4.28	0.539	ug/Kg	-	05/08/19 07:55	05/08/19 16:33	1
Ethylbenzene	0.873	U	4.28	0.873	ug/Kg	-	05/08/19 07:55	05/08/19 16:33	1
Toluene	1.18	U	4.28	1.18	ug/Kg	-	05/08/19 07:55	05/08/19 16:33	1
Xylenes, Total	0.968	U	4.28	0.968	ug/Kg	-	05/08/19 07:55	05/08/19 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130	05/08/19 07:55	05/08/19 16:33	1
Dibromofluoromethane	94		68 - 140	05/08/19 07:55	05/08/19 16:33	1
Toluene-d8 (Surr)	92		50 - 130	05/08/19 07:55	05/08/19 16:33	1
4-Bromofluorobenzene	97		57 - 140	05/08/19 07:55	05/08/19 16:33	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	47.4	U	94.9	47.4	ug/Kg	-	05/10/19 12:00	05/10/19 22:12	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	85		65 - 125	05/10/19 12:00	05/10/19 22:12	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]	3.56	J B	4.95	1.98	mg/Kg	-	05/13/19 10:47	05/15/19 02:55	1
Oil Range Organics (C28-C35)	1.98	U	4.95	1.98	mg/Kg	-	05/13/19 10:47	05/15/19 02:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	88		27 - 151	05/13/19 10:47	05/15/19 02:55	1

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	-		05/17/19 02:30	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	257		0.543	0.119	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Cadmium	0.217	U	0.543	0.217	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Antimony	0.130	U	0.543	0.130	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Thallium	0.0977	U	0.109	0.0977	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Iron	2270		27.1	4.34	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Silver	0.0206	U	0.109	0.0206	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Arsenic	3.79		0.543	0.119	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Copper	1.18		1.09	0.434	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Lead	1.29		0.271	0.0803	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Zinc	4.70		4.34	2.17	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Selenium	0.0749	U	0.543	0.0749	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Manganese	15.8		2.71	0.684	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
Chromium	2.27		0.543	0.206	mg/Kg	-	05/13/19 12:15	05/13/19 17:05	10
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	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0110	J	0.0132	0.00794	mg/Kg	-	05/14/19 16:18	05/15/19 13:00	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

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 Fac
1,2-Dichloroethane-d4 (Surr)	89		61 - 130	05/08/19 07:55	05/08/19 17:22	1
Dibromofluoromethane	90		68 - 140	05/08/19 07:55	05/08/19 17:22	1
Toluene-d8 (Surr)	92		50 - 130	05/08/19 07:55	05/08/19 17:22	1
4-Bromofluorobenzene	90		57 - 140	05/08/19 07:55	05/08/19 17:22	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	45.9	U	91.7	45.9	ug/Kg	-	05/10/19 12:00	05/10/19 22:48	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	86		65 - 125	05/10/19 12:00	05/10/19 22:48	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]	18.5	B	4.93	1.97	mg/Kg	-	05/13/19 10:47	05/15/19 03:08	1
Oil Range Organics (C28-C35)	25.5		4.93	1.97	mg/Kg	-	05/13/19 10:47	05/15/19 03:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	91		27 - 151	05/13/19 10:47	05/15/19 03:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.2		3.97	0.530	mg/Kg	-		05/17/19 03:23	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	121		0.513	0.113	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Cadmium	0.205	U	0.513	0.205	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Antimony	0.123	U	0.513	0.123	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Thallium	0.0923	U	0.103	0.0923	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Iron	2540		25.6	4.10	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Silver	0.0195	U	0.103	0.0195	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Arsenic	2.51		0.513	0.113	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Copper	1.98		1.03	0.410	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Lead	2.20		0.256	0.0759	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Zinc	6.17		4.10	2.05	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Selenium	0.0708	U	0.513	0.0708	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Manganese	50.4		2.56	0.646	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Chromium	3.36		0.513	0.195	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10
Beryllium	0.184	J	0.513	0.0308	mg/Kg	-	05/13/19 12:15	05/13/19 17:09	10

Method: 7471A - Mercury (CVAA)

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	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	1
Dibromofluoromethane	90		68 - 140	05/08/19 07:55	05/08/19 17:46	1
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	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	48.6	U	97.3	48.6	ug/Kg	-	05/10/19 12:00	05/10/19 23:23	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	85		65 - 125	05/10/19 12:00	05/10/19 23:23	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]	2.68	J B	4.86	1.94	mg/Kg	-	05/13/19 10:47	05/15/19 03:20	1
Oil Range Organics (C28-C35)	1.94	U	4.86	1.94	mg/Kg	-	05/13/19 10:47	05/15/19 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	84		27 - 151	05/13/19 10:47	05/15/19 03:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	148		3.97	0.530	mg/Kg	-		05/17/19 16:12	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	52.1		0.510	0.112	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Cadmium	0.204	U	0.510	0.204	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Antimony	0.122	U	0.510	0.122	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Thallium	0.0917	U	0.102	0.0917	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Iron	6300		25.5	4.08	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Silver	0.0194	U	0.102	0.0194	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Arsenic	2.06		0.510	0.112	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Copper	2.07		1.02	0.408	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Lead	4.24		0.255	0.0754	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Zinc	12.8		4.08	2.04	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Selenium	0.0703	U	0.510	0.0703	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Manganese	39.5		2.55	0.642	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Chromium	6.74		0.510	0.194	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10
Beryllium	0.389	J	0.510	0.0306	mg/Kg	-	05/13/19 12:15	05/13/19 17:13	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0106	J	0.0125	0.00749	mg/Kg	-	05/14/19 16:18	05/15/19 13:04	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Sample ID: 600-184934-5

Date Collected: 05/06/19 15:25

Matrix: Solid

Date Received: 05/07/19 09:50

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.568	U	4.51	0.568	ug/Kg	-	05/08/19 07:55	05/08/19 18:10	1
Ethylbenzene	0.920	U	4.51	0.920	ug/Kg	-	05/08/19 07:55	05/08/19 18:10	1
Toluene	1.24	U	4.51	1.24	ug/Kg	-	05/08/19 07:55	05/08/19 18:10	1
Xylenes, Total	1.02	U	4.51	1.02	ug/Kg	-	05/08/19 07:55	05/08/19 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		61 - 130	05/08/19 07:55	05/08/19 18:10	1
Dibromofluoromethane	89		68 - 140	05/08/19 07:55	05/08/19 18:10	1
Toluene-d8 (Surr)	91		50 - 130	05/08/19 07:55	05/08/19 18:10	1
4-Bromofluorobenzene	100		57 - 140	05/08/19 07:55	05/08/19 18:10	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	47.8	U	95.6	47.8	ug/Kg	-	05/10/19 12:00	05/10/19 23:58	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	86		65 - 125	05/10/19 12:00	05/10/19 23:58	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]	4.04	J B	4.93	1.97	mg/Kg	-	05/13/19 10:47	05/15/19 03:32	1
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg	-	05/13/19 10:47	05/15/19 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	84		27 - 151	05/13/19 10:47	05/15/19 03:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.06		3.99	0.533	mg/Kg	-		05/17/19 01:18	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	279		0.484	0.106	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Cadmium	0.193	U	0.484	0.193	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Antimony	0.116	U	0.484	0.116	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Thallium	0.0871	U	0.0967	0.0871	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Iron	1780		24.2	3.87	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Silver	0.0184	U	0.0967	0.0184	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Arsenic	3.25		0.484	0.106	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Copper	1.07		0.967	0.387	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Lead	0.867		0.242	0.0716	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Zinc	3.37	J	3.87	1.93	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Selenium	0.0668	U	0.484	0.0668	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Manganese	13.7		2.42	0.610	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Chromium	1.73		0.484	0.184	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10
Beryllium	0.0890	J	0.484	0.0290	mg/Kg	-	05/13/19 12:15	05/13/19 17:17	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0302		0.0131	0.00790	mg/Kg	-	05/14/19 16:18	05/15/19 13:06	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

Analyte	Result	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 Fac
1,2-Dichloroethane-d4 (Surr)	89		61 - 130	05/08/19 07:55	05/08/19 19:07	1
Dibromofluoromethane	94		68 - 140	05/08/19 07:55	05/08/19 19:07	1
Toluene-d8 (Surr)	91		50 - 130	05/08/19 07:55	05/08/19 19:07	1
4-Bromofluorobenzene	102		57 - 140	05/08/19 07:55	05/08/19 19:07	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	49.6	U	99.2	49.6	ug/Kg	-	05/10/19 12:00	05/11/19 00:32	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	86		65 - 125	05/10/19 12:00	05/11/19 00:32	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]	41.9	B	24.3	9.71	mg/Kg	-	05/13/19 10:47	05/15/19 03:57	5
Oil Range Organics (C28-C35)	61.5		24.3	9.71	mg/Kg	-	05/13/19 10:47	05/15/19 03:57	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	82		27 - 151	05/13/19 10:47	05/15/19 03:57	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg	-		05/17/19 03:05	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	186		0.508	0.112	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Cadmium	0.203	U	0.508	0.203	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Antimony	0.122	U	0.508	0.122	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Thallium	0.0914	U	0.102	0.0914	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Iron	1640		25.4	4.06	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Silver	0.0193	U	0.102	0.0193	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Arsenic	2.89		0.508	0.112	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Copper	2.06		1.02	0.406	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Lead	2.60		0.254	0.0751	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Zinc	5.15		4.06	2.03	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Selenium	0.0701	U	0.508	0.0701	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Manganese	23.7		2.54	0.640	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Chromium	2.29		0.508	0.193	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10
Beryllium	0.119	J	0.508	0.0305	mg/Kg	-	05/13/19 12:15	05/13/19 17:21	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0178		0.0125	0.00749	mg/Kg	-	05/14/19 16:18	05/15/19 13:08	1

Eurofins TestAmerica, Houston

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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	Compound was found in the blank and sample.
E	Result exceeded calibration range.
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
U	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.
E	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.
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.
α	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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (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'-190506	89	90	92	90
600-184934-4	Cell25-Square98-S-2'-3'-190506	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'-190506	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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (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'-190506	86			
600-184934-2	Cell18-Square2-S-2'-3'-190506	85			
600-184934-3	Cell18-Square133-S-2'-3'-190506	86			
600-184934-4	Cell25-Square98-S-2'-3'-190506	85			
600-184934-5	Cell20-Square3-S-2'-3'-190506	86			
600-184934-6	Cell20-Square166-S-2'-3'-190506	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (27-151)			
400-170069-A-1-A MS	Matrix Spike	36			
400-170069-A-1-B MSD	Matrix Spike Duplicate	35			
600-184934-1	Cell18-Square194-S-2'-3'-190506	83			

Eurofins TestAmerica, Houston

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'-190506	91
600-184934-4	Cell25-Square98-S-2'-3'-190506	84
600-184934-5	Cell20-Square3-S-2'-3'-190506	84
600-184934-6	Cell20-Square166-S-2'-3'-190506	82
LCS 400-440614/2-A	Lab Control Sample	110
MB 400-440614/1-A	Method Blank	99

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Sample ID: MB 600-264586/6

Matrix: Solid

Analysis Batch: 264586

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 600-264586/3

Matrix: Solid

Analysis Batch: 264586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	50.0	U	100	50.0	ug/Kg	-	05/10/19 12:00	05/10/19 13:20	1
-C6-C10									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	87		65 - 125				05/10/19 12:00	05/10/19 13:20	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	1000	863.0		ug/Kg	-	86	62 - 141		
-C6-C10									
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	89		65 - 125						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	45.7	U	904	921.7		ug/Kg	-	102	10 - 150		
-C6-C10											
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	89		65 - 125								

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	45.7	U	923	955.2		ug/Kg	-	104	10 - 150	4	32
-C6-C10											
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	90		65 - 125								

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

Analyte	MB Result	MB Qualifier	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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	99		27 - 151	05/13/19 10:47	05/15/19 01:29	1

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

Matrix: Solid

Analysis Batch: 440875

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440614

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics			272	268.8		mg/Kg	-	99	63 - 153		
[C10-C28]											
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	110		27 - 151								

Lab Sample ID: 400-170069-A-1-A MS

Matrix: Solid

Analysis Batch: 440875

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 440614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	19400	E B	271	22210	E 4	mg/Kg	-	1027	62 - 204
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl	36		27 - 151						

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

Matrix: Solid

Analysis Batch: 440875

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	19400	E B	272	21900	E 4	mg/Kg	-	910	62 - 204	1	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	35		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg	-		05/16/19 20:31	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

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

Lab Sample ID: MB 600-265362/1-A

Matrix: Solid

Analysis Batch: 265337

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			05/17/19 15:36	1

Lab Sample ID: LCS 600-265362/2-A

Matrix: Solid

Analysis Batch: 265337

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: 600-184934-4 MS

Matrix: Solid

Analysis Batch: 265337

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

Prep Type: Soluble

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

Lab Sample ID: 600-184934-4 MSD

Matrix: Solid

Analysis Batch: 265337

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

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	148		99.2	239.6		mg/Kg		92	80 - 120	4	20

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Analyte	MB Result	MB 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

Analyte	Spike Added	LCS Result	LCS 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
Arsenic	10.2	9.236		mg/Kg		91	80 - 120
Copper	10.2	10.04		mg/Kg		99	80 - 120
Lead	10.2	9.944		mg/Kg		98	80 - 120
Zinc	10.2	9.880		mg/Kg		97	80 - 120
Selenium	10.2	9.122		mg/Kg		90	80 - 120
Manganese	102	103.6		mg/Kg		102	80 - 120
Chromium	10.2	9.558		mg/Kg		94	80 - 120
Beryllium	10.2	10.11		mg/Kg		99	80 - 120

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

Matrix: Solid

Analysis Batch: 440795

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 440619

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

Matrix: Solid

Analysis Batch: 440795

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 440619

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Analysis Batch: 440795

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440619

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Barium	3.04		5.17	8.163		mg/Kg		99	75 - 125	5	20
Cadmium	0.214	U	5.17	4.550		mg/Kg		88	75 - 125	6	20
Antimony	0.128	U F1	5.17	3.452	F1	mg/Kg		67	75 - 125	17	20
Thallium	0.0963	U	1.03	1.037		mg/Kg		100	75 - 125	3	20
Iron	87.1		517	551.1		mg/Kg		90	75 - 125	3	20
Silver	0.0203	U	5.17	5.005		mg/Kg		97	75 - 125	6	20
Arsenic	1.66		5.17	6.274		mg/Kg		89	75 - 125	1	20
Copper	2.39		5.17	7.074		mg/Kg		91	75 - 125	1	20
Lead	4.93		5.17	10.10		mg/Kg		100	75 - 125	2	20
Zinc	235	E	5.17	237.6	E 4	mg/Kg		41	75 - 125	1	20
Selenium	0.368	J	5.17	5.038		mg/Kg		90	75 - 125	5	20
Manganese	12.2		51.7	60.72		mg/Kg		94	75 - 125	1	20
Chromium	1.19		5.17	5.740		mg/Kg		88	75 - 125	0	20
Beryllium	0.138	J	5.17	5.241		mg/Kg		99	75 - 125	2	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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00778	U	0.0129	0.00778	mg/Kg		05/14/19 16:18	05/15/19 12:29	1

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

Matrix: Solid

Analysis Batch: 440969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0655	0.06781		mg/Kg		103	80 - 120

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

Matrix: Solid

Analysis Batch: 440969

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0158		0.132	0.1371		mg/Kg		92	80 - 120

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

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

Matrix: Solid

Analysis Batch: 440969

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0158		0.132	0.1367		mg/Kg		92	80 - 120	0	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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 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	
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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Lab Sample ID: 600-184934-1

Date Collected: 05/06/19 15:00

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			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

Lab Sample ID: 600-184934-2

Date Collected: 05/06/19 13:21

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			5.839 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 16:33	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 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 HOU
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

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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			6.353 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 17:46	PXS	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

Lab Sample ID: 600-184934-5

Date Collected: 05/06/19 15:25

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			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 Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-184934-1

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 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	Analyte
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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
Iowa	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

Eurofins TestAmerica, Houston

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
Flag Status: 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.

Sample Receipt ChecklistDate/Time Received: 19 MAY 7 9:51JOB NUMBER: XR 47CLIENT: ARCADISUNPACKED BY: XR 47CARRIER/DRIVER: FedexCustody Seal Present: ☒ YES ☐ NONumber of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
<u>WB</u>	<u>Y / N</u>	<u>Y / N</u>	<u>2.1</u>	<u>U76</u>	<u>-0.2</u>	<u>1.9</u>
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NOLABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YESBase 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

COMMENTS:47
5/7/19



600-184934 Waybill

1 of 2
TRK# 7870 8561 8866
0201
MASTER

TUE - 07 MAY 10:30A
PRIORITY OVERNIGHT

AB LKSA

77040
TX-US 1A'i





Chain of Custody Record

Client Information (Sub Contract Lab)						Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s): 600-39386, 1	
Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc.						Phone:		State of Origin: Texas	
						E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1	
Address: 3355 McEmore Drive, City: Pensacola State: FL, Zip: 32514 Phone: 850-474-1001(Tel) 850-478-2671(Fax) Email:						Job #: NELAP - Texas		COC No: 600-184934-1	
Project Name: Chevron - Jal Land Farm Soils 2018 Site:						Accreditations Required (See note):		Preservation Codes:	
Due Date Requested: 5/17/2019						Analysis Requested		Total Number of containers	
TAT Requested (days):						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
PO #:						8015B_GRO/5035A_FP GRO(C6-C10)		8015B_DRO/3546 (MOD) DRO C10-C28	
WO #:						7471A/7471A_Prep		6020/3050B (MOD) Single Element 6020 Metals List	
Sample Identification - Client ID (Lab ID)						Sample Date		Sample Time	
Cell18-Square194-S-2'-3'-190506 (600-184934-1)						5/6/19		15:00 Central	
Cell18-Square2-S-2'-3'-190506 (600-184934-2)						5/6/19		13:21 Central	
Cell18-Square133-S-2'-3'-190506 (600-184934-3)						5/6/19		14:20 Central	
Cell25-Square98-S-2'-3'-190506 (600-184934-4)						5/6/19		12:55 Central	
Cell20-Square3-S-2'-3'-190506 (600-184934-5)						5/6/19		15:25 Central	
Cell20-Square166-S-2'-3'-190506 (600-184934-6)						5/6/19		16:40 Central	
Special Instructions/Note:									
Other:									
M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDA Z - other (specify)									

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the 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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification			
Unconfirmed			
Deliverable Requested: I, II, III, IV, Other (specify)			
Primary Deliverable Rank: 2			
Empty Kit Relinquished by:		Date:	
Relinquished by: [Signature]		Date/Time: 5/18/19 10:00	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: A Yes A No		Custody Seal No.: 190506	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/>			
Special Instructions/QC Requirements:			
Replied by: Kathy Cleary		Date/Time: 5-9-19 8:58	
Received by:		Date/Time:	
Received by:		Date/Time:	
Cooler Temperature(s) °C and Other Remarks:		1.9°C TR7	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-184934-1

Login Number: 184934

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	1.9
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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 \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	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 $<6\text{mm}$ (1/4").	False	
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: 600-185019-1

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



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

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

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.

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) and Cell25-Square107-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

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

Job ID: 600-185019-1

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
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
7471A	Preparation, Mercury	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.

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	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	1
Ethylbenzene	0.962	U	4.72	0.962	ug/Kg	-	05/08/19 15:00	05/09/19 11:56	1
Toluene	1.30	U	4.72	1.30	ug/Kg	-	05/08/19 15:00	05/09/19 11:56	1
Xylenes, Total	1.07	U	4.72	1.07	ug/Kg	-	05/08/19 15:00	05/09/19 11:56	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 11:56	1
Dibromofluoromethane	90		68 - 140	05/08/19 15:00	05/09/19 11:56	1
Toluene-d8 (Surr)	96		50 - 130	05/08/19 15:00	05/09/19 11:56	1
4-Bromofluorobenzene	97		57 - 140	05/08/19 15:00	05/09/19 11:56	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	54.7	U	109	54.7	ug/Kg	-	05/13/19 12:00	05/13/19 21:24	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	82		65 - 125	05/13/19 12:00	05/13/19 21:24	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]	1.98	U	4.94	1.98	mg/Kg	-	05/13/19 12:51	05/15/19 08:18	1
Oil Range Organics (C28-C35)	1.98	U	4.94	1.98	mg/Kg	-	05/13/19 12:51	05/15/19 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	68		27 - 151	05/13/19 12:51	05/15/19 08:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.4		3.97	0.530	mg/Kg	-		05/17/19 00:42	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	345		0.527	0.116	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Cadmium	0.211	U	0.527	0.211	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Antimony	0.127	U	0.527	0.127	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Thallium	0.0949	U	0.105	0.0949	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Iron	1420		26.4	4.22	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Silver	0.0200	U	0.105	0.0200	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Arsenic	4.22		0.527	0.116	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Copper	1.42		1.05	0.422	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Zinc	3.25	J	4.22	2.11	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Selenium	0.0728	U	0.527	0.0728	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Manganese	12.5		2.64	0.664	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Chromium	1.77		0.527	0.200	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10
Beryllium	0.0749	J	0.527	0.0316	mg/Kg	-	05/15/19 12:15	05/15/19 23:17	10

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.805		0.264	0.0780	mg/Kg	-	05/15/19 12:15	05/16/19 08:56	10

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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 Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.468	U H	3.71	0.468	ug/Kg		05/08/19 15:00	05/09/19 12:20	1
Ethylbenzene	0.757	U H	3.71	0.757	ug/Kg		05/08/19 15:00	05/09/19 12:20	1
Toluene	1.02	U H	3.71	1.02	ug/Kg		05/08/19 15:00	05/09/19 12:20	1
Xylenes, Total	0.839	U H	3.71	0.839	ug/Kg		05/08/19 15:00	05/09/19 12:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
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 Range Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	43.9	U	87.7	43.9	ug/Kg		05/13/19 12:00	05/13/19 22:00	1

-C6-C10

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)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.67	J	4.96	1.98	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 Chromatography - Soluble

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)

Analyte	Result	Qualifier	MQL (Adj)	SDL	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
Cadmium	0.209	U	0.522	0.209	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Antimony	0.125	U	0.522	0.125	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Thallium	0.116		0.104	0.0940	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Iron	9040		26.1	4.18	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Silver	0.0198	U	0.104	0.0198	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Arsenic	3.20		0.522	0.115	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Copper	2.46		1.04	0.418	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Lead	5.35	^	0.261	0.0773	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Zinc	18.7		4.18	2.09	mg/Kg		05/15/19 12:15	05/15/19 23:21	10
Selenium	0.0720	U	0.522	0.0720	mg/Kg		05/15/19 12:15	05/15/19 23:21	10

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

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
Mercury	0.0155		0.0126	0.00756	mg/Kg		05/14/19 16:18	05/15/19 12:40	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.533	U H	4.23	0.533	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Ethylbenzene	0.863	U H	4.23	0.863	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Toluene	1.17	U H	4.23	1.17	ug/Kg		05/08/19 15:00	05/09/19 12:44	1
Xylenes, Total	0.956	U H	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

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

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									

Surrogate	%Recovery	Qualifier	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 Range 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	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	86		27 - 151	05/13/19 12:51	05/15/19 08:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0199	U	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	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	D	Prepared	Analyzed	Dil Fac
Lead	2.30		0.262	0.0774	mg/Kg	-	05/15/19 12:15	05/16/19 09:00	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0139		0.0131	0.00791	mg/Kg	-	05/14/19 16:18	05/15/19 12:42	1

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

Lab Sample ID: 600-185019-4

Date Collected: 05/06/19 11:55

Matrix: Solid

Date Received: 05/08/19 09:33

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.461	U H	3.66	0.461	ug/Kg	-	05/08/19 15:00	05/09/19 13:08	1
Ethylbenzene	0.747	U H	3.66	0.747	ug/Kg	-	05/08/19 15:00	05/09/19 13:08	1
Toluene	1.01	U H	3.66	1.01	ug/Kg	-	05/08/19 15:00	05/09/19 13:08	1
Xylenes, Total	0.828	U H	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 Range Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	47.1	U	94.2	47.1	ug/Kg	-	05/13/19 12:00	05/13/19 23:11	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 23:11	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]	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	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Lab Sample ID: 600-185019-4

Date Collected: 05/06/19 11:55

Matrix: Solid

Date Received: 05/08/19 09:33

Method: 300.0 - Anions, Ion Chromatography - Soluble

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	^	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

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0101	J	0.0125	0.00752	mg/Kg		05/14/19 16:18	05/15/19 12:44	1

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

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

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	1
Ethylbenzene	0.981	U	4.81	0.981	ug/Kg		05/08/19 15:00	05/09/19 13:32	1
Toluene	1.33	U	4.81	1.33	ug/Kg		05/08/19 15:00	05/09/19 13:32	1
Xylenes, Total	1.09	U	4.81	1.09	ug/Kg		05/08/19 15:00	05/09/19 13:32	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 13:32	1
Dibromofluoromethane	90		68 - 140	05/08/19 15:00	05/09/19 13:32	1
Toluene-d8 (Surr)	93		50 - 130	05/08/19 15:00	05/09/19 13:32	1
4-Bromofluorobenzene	97		57 - 140	05/08/19 15:00	05/09/19 13:32	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	49.1	U	98.2	49.1	ug/Kg		05/13/19 12:00	05/13/19 23:47	1

-C6-C10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	81		65 - 125	05/13/19 12:00	05/13/19 23:47	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]	2.43	J	4.93	1.97	mg/Kg		05/13/19 12:51	05/15/19 09:08	1
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg		05/13/19 12:51	05/15/19 09:08	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

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	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.09	J	3.95	0.528	mg/Kg	-		05/17/19 02:47	1

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	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.47		0.263	0.0780	mg/Kg	-	05/15/19 12:15	05/16/19 09:04	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00797	U	0.0133	0.00797	mg/Kg	-	05/14/19 16:18	05/15/19 12:46	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.583	U H	4.63	0.583	ug/Kg	-	05/08/19 15:00	05/09/19 13:56	1
Ethylbenzene	0.944	U H	4.63	0.944	ug/Kg	-	05/08/19 15:00	05/09/19 13:56	1
Toluene	1.28	U H	4.63	1.28	ug/Kg	-	05/08/19 15:00	05/09/19 13:56	1
Xylenes, Total	1.05	U H	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 Range 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									

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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	Result	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	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	81		27 - 151	05/13/19 12:51	05/15/19 09:33	1

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			05/17/19 02:12	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	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	10
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) - RA

Analyte	Result	Qualifier	MQL (Adj)	SDL	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 (CVAA)

Analyte	Result	Qualifier	MQL (Adj)	SDL	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

Eurofins TestAmerica, Houston

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	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
U	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
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

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 applicable.
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.
α	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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-185019-1	Cell20-Square102-S-2'-3'-19050	85	90	96	97
600-185019-2	Cell25-Square126-S-2'-3'-190506	82	91	95	103
600-185019-3	Cell18-Square56-S-2'-3'-190506	85	90	95	95
600-185019-4	Cell25-Square20-S-2'-3'-190506	87	95	94	100
600-185019-5	Cell20-Square19-S-2'-3'-190506	87	90	93	97
600-185019-6	Cell25-Square107-S-2'-3'-190506	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
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (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'-190506	82			
600-185019-2	Cell25-Square126-S-2'-3'-190506	82			
600-185019-3	Cell18-Square56-S-2'-3'-190506	81			
600-185019-4	Cell25-Square20-S-2'-3'-190506	82			
600-185019-5	Cell20-Square19-S-2'-3'-190506	81			
600-185019-6	Cell25-Square107-S-2'-3'-190506	82			
LCS 400-440727/1-A	Lab Control Sample	84			
MB 400-440727/2-A	Method Blank	83			
Surrogate Legend					
TFT-F = a,a,a-Trifluorotoluene (fid)					

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

Matrix: Solid

Prep Type: Total/NA

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

Eurofins TestAmerica, Houston

Surrogate Summary

Client: ARCADIS U.S. Inc

Job ID: 600-185019-1

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)		
Lab Sample ID	Client Sample ID	OTPH1 (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
600-185019-5	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
MB 400-440666/1-A	Method Blank	85

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Analyte	MB Result	MB 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

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

Lab Sample ID: LCS 600-264675/3

Matrix: Solid

Analysis Batch: 264675

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

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

Matrix: Solid

Analysis Batch: 440659

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 440727

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	50.0	U	100	50.0	ug/Kg	-	05/13/19 12:00	05/13/19 13:39	1
-C6-C10									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	83		65 - 125				05/13/19 12:00	05/13/19 13:39	1

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

Matrix: Solid

Analysis Batch: 440659

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440727

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	1000	1118		ug/Kg	-	112	62 - 141		
-C6-C10									
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	84		65 - 125						

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

Matrix: Solid

Analysis Batch: 440659

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 440727

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	47.8	U	958	871.5		ug/Kg	-	91	10 - 150		
-C6-C10											
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	84		65 - 125								

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

Matrix: Solid

Analysis Batch: 440659

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 440727

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	47.8	U	952	917.5		ug/Kg	-	96	10 - 150	5	32
-C6-C10											
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	85		65 - 125								

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

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U	5.00	2.00	mg/Kg	-	05/13/19 12:51	05/15/19 07:03	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	05/13/19 12:51	05/15/19 07:03	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	85		27 - 151	05/13/19 12:51	05/15/19 07:03	1

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

Matrix: Solid

Analysis Batch: 440876

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440666

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics			272	250.4		mg/Kg	-	92	63 - 153		
[C10-C28]											
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	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

Prep Batch: 440666

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	75.6		271	312.1		mg/Kg	-	87	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	75.6		270	353.8		mg/Kg	-	103	62 - 204	13	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	99		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			05/16/19 20:31	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 265212

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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

Matrix: Solid

Analysis Batch: 441084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 440955

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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	U	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

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

Matrix: Solid

Analysis Batch: 441084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

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

Matrix: Solid

Analysis Batch: 441084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	9.92	9.918		mg/Kg		100	80 - 120
Lead	9.92	9.873		mg/Kg		99	80 - 120
Zinc	9.92	9.401		mg/Kg		95	80 - 120
Selenium	9.92	9.260		mg/Kg		93	80 - 120
Manganese	99.2	96.33		mg/Kg		97	80 - 120
Chromium	9.92	9.373		mg/Kg		94	80 - 120
Beryllium	9.92	9.025		mg/Kg		91	80 - 120

Lab Sample ID: 600-185019-6 MS

Matrix: Solid

Analysis Batch: 441084

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

Prep Type: Total/NA

Prep Batch: 440955

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	U	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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%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
Beryllium	0.0601	J	5.05	4.627		mg/Kg		90	75 - 125	0	20

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00778	U	0.0129	0.00778	mg/Kg	-	05/14/19 16:18	05/15/19 12:29	1

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

Matrix: Solid

Analysis Batch: 440969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0655	0.06781		mg/Kg	-	103	80 - 120

Lab Sample ID: 600-185019-1 MS

Matrix: Solid

Analysis Batch: 440969

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

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0158		0.132	0.1371		mg/Kg	-	92	80 - 120

Lab Sample ID: 600-185019-1 MSD

Matrix: Solid

Analysis Batch: 440969

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

Prep Type: Total/NA

Prep Batch: 440867

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.0158		0.132	0.1367		mg/Kg	-	92	80 - 120	0	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-185019-2

Date Collected: 05/06/19 12:25

Matrix: Solid

Date Received: 05/08/19 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-185019-3

Date Collected: 05/06/19 13:50

Matrix: Solid

Date Received: 05/08/19 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-185019-4

Date Collected: 05/06/19 11:55

Matrix: Solid

Date Received: 05/08/19 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 HOU
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

Lab Sample ID: 600-185019-5

Date Collected: 05/06/19 15:55

Matrix: Solid

Date Received: 05/08/19 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-185019-1

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 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	Analyte
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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
Iowa	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

Eurofins TestAmerica, Houston



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #

Page 1 of 1

Contact & Company Name		State	City	Zip	Phone	Fax	E-mail Address	Project #	Sample ID	Collection Date	Time	Type	Comp	Grab	Matrix
Steve R. L. Africa		GA	Brentfield	30021	404-251-1905	404-251-1905	Steve.R.L.Africa@bentfield.com	N/A	GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Address: 11001 W. 120th Ave, #100			Jalisco Farm, Jalisco						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
City: Atlanta, GA			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Zip: 30337			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Phone: 404-251-1905			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Fax: 404-251-1905			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
E-mail: Steve.R.L.Africa@bentfield.com			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Project #			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Sample ID			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Collection Date			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Time			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Type			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Comp			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Grab			City: Atlanta						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO
Matrix			State: GA						GA-1125-Square	5-6-19	1225	✓	✓	✓	SO

Special Instructions/Comments		Laboratory Information and Receipt		Cooler Custody Seal (✓)		Sample Receipt		Condition/Cooler Temp.	
See Printed Email Attachment		Fog Africa		Intact		Intact		5-6-19/2013	
		Cooler packed with ice (✓)		Not Intact		Sample Receipt			
		Specify Turnaround Requirements				Shipping Tracking #			

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
Flag Status: 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.



600-185019 Waybill



600-185019 Waybill

2 of 2

MPS# 7870 8561 8877
0263

Mstr# 7870 8561 8866

0201

AB LKSA

TUE - 07 MAY 10:30A
PRIORITY OVERNIGHT

77040
TX-US IAH



TestAmerica Houston

Loc: 600

Sample Rec

185019 ist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

JOB NUMBER:

UNPACKED BY:

Custody Seal Present:

☒ YES☐ NO

Date/Time Received:

19 MAY 8 9:33

CLIENT:

CARRIER/DRIVER:

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
WB	Y / N	Y / N	1.7	070	-0.2	1.5
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice?

☒ YES☐ NO

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

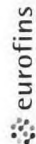
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?

YES

NO

COMMENTS:

Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: _____ Shipping/Receiving: _____ Company: TestAmerica Laboratories, Inc. Address: 3355 McLemore Drive, _____ City: Pensacola State/Zip: FL, 32514 Phone: 850-474-1001(Tel) 850-478-2671(Fax) Email: _____ Project Name: Chevron - Jal Land Farm Soils 2018 Site: _____		Sampler: _____ Lab PM: Kuchadkar, Sachin G Phone: _____ E-Mail: sachin.kuchadkar@testamericainc.com Accreditations Required (See note): NELAP - Texas	Carrier Tracking No(s): _____ State of Origin: Texas Page: Page 1 of 1 Job #: 600-185019-1	COC No: 600-39386.1								
Due Date Requested: 5/20/2019 TAT Requested (days): _____ PO #: _____ WO #: _____ Project #: 60009563 SSOW#: _____		Analysis Requested A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____ Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (Specify)										
Sample Identification - Client ID (Lab ID) 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) Cell25-Square107-S-2'-3'-190506 (600-185019-6)	Sample Date 5/6/19 5/6/19 5/6/19 5/6/19 5/6/19 5/6/19	Sample Time 16:20 Central 12:25 Central 13:50 Central 11:55 Central 15:55 Central 11:25 Central	Sample Type (C=Comp, G=grab) Solid Solid Solid Solid Solid Solid	Matrix (W=water, S=solid, O=waste/oli, BT=tissue, A=air) Solid Solid Solid Solid Solid Solid	Field Filtered Sample (Yes or No) X X X X X X	Perform MS/MSD (Yes or No) X X X X X X	8015B GRO/354A_FP GRO(C6-C10) X X X X X X	8015B DRO/354E (MOD) DRO C10-C28 X X X X X X	7471A/7471A_Prep X X X X X X	6020/3050B (MOD) Single Element 6020 Metals List X X X X X X	Total Number of containers 6 6 6 6 6 6	Special Instructions/Note:

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/test/matrix 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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Custody Seals Intact: _____ Δ Yes Δ No		Method of Shipment: Date: 5/18/2019 Time: 11:00 Company: Kuchadkar, Sachin G Date/Time: 5-9-19 8:58 Company: TA Date/Time: _____ Company: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks: 1.9°C FR 7

Login Sample Receipt Checklist

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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	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 $<6\text{mm}$ (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



Authorized for release by:
7/10/2019 3:29:18 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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: Treatment

Job ID: 600-187283-1

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.

Organic 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: 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

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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

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

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 - (GC)

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 Organics (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 Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	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)	SDL	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	%			06/20/19 17:56	1

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

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

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

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

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 Organics (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 Chromatography - 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
Percent Solids	90.0		1.0	1.0	%	-		06/20/19 17:56	1

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

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

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 - (GC)

Analyte	Result	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 Organics (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
Oil Range Organics (C28-C35)	2.00	J	4.91	1.97	mg/Kg	-	06/24/19 13:26	06/26/19 00:57	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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
<i>o</i> -Terphenyl	89		27 - 151					06/24/19 13:26	06/26/19 00:57	1
Method: 300.0 - Anions, Ion 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										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D		Prepared	Analyzed	Dil Fac
Percent Moisture	14.5		1.0	1.0	%	-			06/20/19 17:56	1
Percent Solids	85.5		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

Method: 8260B - Volatile Organic Compounds (GC/MS)										
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 Range Organics - (GC)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	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
<i>a,a,a</i> -Trifluorotoluene (fid)	105		65 - 125					06/27/19 12:30	06/27/19 18:34	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]	1.95	U	4.88	1.95	mg/Kg	-		06/24/19 13:26	06/26/19 01:10	1
Oil Range Organics (C28-C35)	1.95	U	4.88	1.95	mg/Kg	-		06/24/19 13:26	06/26/19 01:10	1
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		27 - 151					06/24/19 13:26	06/26/19 01:10	1
Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D		Prepared	Analyzed	Dil Fac
Chloride	32.4		4.00	0.534	mg/Kg	-			07/01/19 14:12	1
General Chemistry										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D		Prepared	Analyzed	Dil Fac
Percent Moisture	10.8		1.0	1.0	%	-			06/20/19 17:56	1
Percent Solids	89.2		1.0	1.0	%	-			06/20/19 17:56	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

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

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 Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	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 Organics (DRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.05	J	4.91	1.96	mg/Kg	-	06/24/19 13:26	06/26/19 01:23	1
Oil Range Organics (C28-C35)	1.96	U	4.91	1.96	mg/Kg	-	06/24/19 13:26	06/26/19 01:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	96		27 - 151				06/24/19 13:26	06/26/19 01:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.33		3.99	0.533	mg/Kg	-		07/01/19 14:30	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		1.0	1.0	%	-		06/20/19 17:56	1
Percent Solids	87.8		1.0	1.0	%	-		06/20/19 17:56	1

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

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.
E	Result exceeded calibration range.
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.
X	Surrogate is outside control limits

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.
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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-187283-1	Cell 20-square79-S-2-3-190618	98	87	84	96
600-187283-2	Cell	101	93	87	100
600-187283-3	19-square173-S-2-3-190618	101	90	83	95
600-187283-4	Cell	108	94	85	95
600-187283-5	17-square131-S-2-3-190618	105	93	86	98
LCS 600-267618/3	21-square196-S-2-3-190618	98	90	94	104
LCS 600-267618/4	Lab Control Sample	96	93	93	105
MB 600-267618/6	Lab Control Sample Dup	105	91	87	100
	Method Blank				
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (65-125)			
600-187283-1	Cell 20-square79-S-2-3-190618	106			
600-187283-1 MS	Cell	109			
600-187283-1 MSD	20-square79-S-2-3-190618	109			
600-187283-2	Cell	105			
600-187283-3	19-square173-S-2-3-190618	105			
600-187283-4	Cell	105			
600-187283-5	18-square82-S-2-3-190618	106			
LCS 400-445986/2-A	Cell	109			
MB 400-445986/1-A	21-square196-S-2-3-190618	105			
	Lab Control Sample				
	Method Blank				
Surrogate Legend					
TFT-F = a,a,a-Trifluorotoluene (fid)					

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (27-151)			
400-172083-A-1-A MS	Matrix Spike	263 X			
400-172083-A-1-B MSD	Matrix Spike Duplicate	262 X			
600-187283-1	Cell	96			
	20-square79-S-2-3-190618				

Eurofins TestAmerica, Houston

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)		
Lab Sample ID	Client Sample ID	OTPH1 (27-151)
600-187283-2	Cell 19-square173-S-2-3-190618	96
600-187283-3	Cell	89
600-187283-4	18-square82-S-2-3-190618	96
600-187283-5	Cell	96
	17-square131-S-2-3-190618	
	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		
OTPH = o-Terphenyl		

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

Lab Sample ID: MB 600-267618/6

Matrix: Solid

Analysis Batch: 267618

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analysis Batch: 267618

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.34		ug/Kg		95	70 - 131
Ethylbenzene	50.0	46.74		ug/Kg		93	66 - 130
Toluene	50.0	45.26		ug/Kg		91	67 - 130
Xylenes, Total	100	94.58		ug/Kg		95	63 - 130
m-Xylene & p-Xylene	50.0	46.86		ug/Kg		94	64 - 130
o-Xylene	50.0	47.72		ug/Kg		95	62 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	44.50		ug/Kg		89	70 - 131	6	30
Ethylbenzene	50.0	42.21		ug/Kg		84	66 - 130	10	30
Toluene	50.0	42.08		ug/Kg		84	67 - 130	7	30
Xylenes, Total	100	85.59		ug/Kg		86	63 - 130	10	30
m-Xylene & p-Xylene	50.0	42.23		ug/Kg		84	64 - 130	10	30
o-Xylene	50.0	43.36		ug/Kg		87	62 - 130	10	30

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	50.0	U	100	50.0	ug/Kg		06/27/19 12:30	06/27/19 13:16	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125				06/27/19 12:30	06/27/19 13:16	1

Lab Sample ID: LCS 400-445986/2-A

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10	1000	1095		ug/Kg		109	62 - 141		
Surrogate	%Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	109		65 - 125						

Lab Sample ID: 600-187283-1 MS

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Total/NA

Prep Batch: 445986

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10	1100	U	21900	24800		ug/Kg		113	10 - 150		
Surrogate	%Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	109		65 - 125								

Lab Sample ID: 600-187283-1 MSD

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Total/NA

Prep Batch: 445986

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	1100	U	21900	26210		ug/Kg		120	10 - 150	6	32
Surrogate	%Recovery	MSD 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

Prep Type: Total/NA

Prep Batch: 445495

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.00	U	5.00	2.00	mg/Kg		06/24/19 13:26	06/25/19 22:06	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		06/24/19 13:26	06/25/19 22:06	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	98		27 - 151				06/24/19 13:26	06/25/19 22:06	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

Lab Sample ID: LCS 400-445495/2-A

Matrix: Solid

Analysis Batch: 445687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445495

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics			276	260.2		mg/Kg	-	94	63 - 153		
[C10-C28]											
			LCS	LCS							
Surrogate	%Recovery		Qualifier	Limits							
o-Terphenyl	110			27 - 151							

Lab Sample ID: 400-172083-A-1-A MS

Matrix: Solid

Analysis Batch: 445687

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445495

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	5480		271	6681	E 4	mg/Kg		444	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	263	X	27 - 151								

Lab Sample ID: 400-172083-A-1-B MSD

Matrix: Solid

Analysis Batch: 445687

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 445495

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	5480		269	6242	4	mg/Kg	-	284	62 - 204	7	30
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
o-Terphenyl	262	X	27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			07/01/19 11:49	1

Lab Sample ID: LCS 600-268411/2-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	197.9		mg/Kg		99	90 - 110

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-187283-1 MS

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.78		99.0	121.9		mg/Kg		113	80 - 120

Lab Sample ID: 600-187283-1 MSD

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Cell 20-square79-S-2-3-190618

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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

Matrix: Solid

Analysis Batch: 267688

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16.2		13.8		%		16	20
Percent Solids	83.8		86.2		%		3	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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	%

QC Association Summary

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

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	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	

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 Batch
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	

Eurofins TestAmerica, Houston

QC Association Summary

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 Batch
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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-187283-2

Date Collected: 06/18/19 10:42

Matrix: Solid

Date Received: 06/19/19 11:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.43 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 15:40	WS1	TAL HOU
Total/NA	Prep	5035			11.436 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 17:22	GRK	TAL PEN
Total/NA	Prep	3546			15.02 g	1.0 mL	445495	06/24/19 13:26	KLR	TAL PEN
Total/NA	Analysis	8015B		1			445687	06/26/19 00:44	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 13:36	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267688	06/20/19 17:56	AP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.32 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

Lab Sample ID: 600-187283-5

Date Collected: 06/18/19 13:34

Matrix: Solid

Date Received: 06/19/19 11:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Treatment

Job ID: 600-187283-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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
Iowa	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

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

Eurofins TestAmerica, Houston

Chain of Custody Record

Client Information		Company: ARCADIS U.S. Inc.		Lab PM: Sachin Kudchadkar		Carrier Tracking No(s):		COC No: 600-59019-16898 1	
Client Contact: Steve Rice		Phone: 303-710-7537		E-Mail: sachin.kudchadkar@testamericainc.com		Page 1 of 1		Job #:	
Address: 11001 West 120th Avenue		City: Broomfield		State: CO, 80021		Phone: 303-710-7537(Tel)		Email: steve.rice@arcadis.com	
Project Name: Chevron - Jal Land Farm Soils 2018		Project #: 60009563		SSOW#:		Purchase Order Requested		WO #:	
Site: TREATMENT		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (S=Soils, P=Plants, O=Other)	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8015B DRO - C10-C28/ C28-C35		8015E DRO - C6-C10 (SHORT HOLD****)		300_ORGFM_28D - CHLORIDE	
8260B - BTEX Only (SHORT HOLD****)		MOISTURE		N		N		N	
Total Number of Containers		Special Instructions/Note:		***SAMPLES MUST BE RECEIVED BY THE HOUSTON LABORATORY WITHIN 48HRS OF COLLECTION					
Preservation Codes:		A - HCL		M - Hexane		N - None		O - AsNaO2	
B - NaOH		C - Zn Acetate		D - Nitric Acid		E - NaHSO4		F - MeOH	
G - Amchlor		H - Ascorbic Acid		I - Ice		J - DI Water		K - EDTA	
L - EDA		Other:		T - TSP Dodecahydrate		U - Acetone		V - MCAA	
W - pH 4.5		Z - other (specify)							

Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by:		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Relinquished by: Sarah Johnson		Special Instructions/QC Requirements:	
Relinquished by:		Method of Shipment:	
Relinquished by:		Date/Time: 6-17-19 11:20	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: Yes No		Cooler Temperature(s) °C and Other Remarks:	

Sample Recei **187283** t

Time Received:

19 JUN 19 11:50

JOB NUMBER:

J83

CLIENT:

Arcadis

UNPACKED BY:

CARRIER/DRIVER:

Client

Custody Seal Present:

☒ YES☐ NO

Number of Coolers Received:

1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
WIB	Y / N	Y / N	2.7	676	-0.2	2.5
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES☐ NO

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:

Handwritten signature and date 6/19/19 are present in the comments section.

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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 \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5°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)	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 $<6\text{mm}$ (1/4").	True	
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: 600-187336-1

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

For:

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

Attn: Steve Rice



Authorized for release by:
7/10/2019 3:31:06 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

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.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Client Sample ID: Cell25-treatment-S-6-190619

Lab Sample ID: 600-187336-1

Date Collected: 06/19/19 08:12

Matrix: Solid

Date Received: 06/20/19 10:04

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1080	U	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	B	24.8	9.91	mg/Kg	-	06/26/19 12:37	06/29/19 03:52	5
Oil Range Organics (C28-C35)	73.5		24.8	9.91	mg/Kg	-	06/26/19 12:37	06/29/19 03:52	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	96		27 - 151	06/26/19 12:37	06/29/19 03:52	5

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	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.1		1.0	1.0	%	-		06/21/19 15:25	1
Percent Solids	94.9		1.0	1.0	%	-		06/21/19 15:25	1

Client Sample ID: Cell25-square39-S-2-3-190619

Lab Sample ID: 600-187336-2

Date Collected: 06/19/19 09:07

Matrix: Solid

Date Received: 06/20/19 10:04

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	1
Ethylbenzene	0.996	U	4.88	0.996	ug/Kg	-	06/20/19 11:48	06/24/19 14:35	1
Toluene	6.70		4.88	1.35	ug/Kg	-	06/20/19 11:48	06/24/19 14:35	1
Xylenes, Total	3.45	J	4.88	1.10	ug/Kg	-	06/20/19 11:48	06/24/19 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		61 - 130	06/20/19 11:48	06/24/19 14:35	1
Dibromofluoromethane	91		68 - 140	06/20/19 11:48	06/24/19 14:35	1
Toluene-d8 (Surr)	80		50 - 130	06/20/19 11:48	06/24/19 14:35	1
4-Bromofluorobenzene	95		57 - 140	06/20/19 11:48	06/24/19 14:35	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1180	U	2370	1180	ug/Kg	-	06/27/19 12:30	06/27/19 22:07	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 22:07	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]	3.00	J B	4.87	1.95	mg/Kg	-	06/26/19 12:37	06/29/19 04:05	1
Oil Range Organics (C28-C35)	3.65	J	4.87	1.95	mg/Kg	-	06/26/19 12:37	06/29/19 04:05	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Client Sample ID: Cell25-square39-S-2-3-190619

Lab Sample ID: 600-187336-2

Date Collected: 06/19/19 09:07

Matrix: Solid

Date Received: 06/20/19 10:04

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		27 - 151	06/26/19 12:37	06/29/19 04:05	1

Method: 300.0 - Anions, Ion 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

Date Collected: 06/19/19 09:56

Matrix: Solid

Date Received: 06/20/19 10:04

Method: 8260B - Volatile Organic Compounds (GC/MS)									
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)	110		61 - 130	06/20/19 11:48	06/24/19 15:01	1
Dibromofluoromethane	94		68 - 140	06/20/19 11:48	06/24/19 15:01	1
Toluene-d8 (Surr)	85		50 - 130	06/20/19 11:48	06/24/19 15:01	1
4-Bromofluorobenzene	97		57 - 140	06/20/19 11:48	06/24/19 15:01	1

Method: 8015B - Gasoline Range Organics - (GC)									
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
<i>a,a,a</i> -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
<i>o</i> -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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

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

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 Organics (DRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37.2	B	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 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 16:53	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.7		1.0	1.0	%	-		06/21/19 15:25	1
Percent Solids	92.3		1.0	1.0	%	-		06/21/19 15:25	1

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Qualifiers

GC/MS 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.

GC VOA

Qualifier	Qualifier Description
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

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.

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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (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
LCS 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)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (65-125)			
600-187283-I-1-C MS	Matrix Spike	109			
600-187283-I-1-D MSD	Matrix Spike Duplicate	109			
600-187336-1	Cell25-treatment-S-6-190619	106			
600-187336-2	Cell25-square39-S-2-3-190619	107			
600-187336-3	Cell26-square26-S-2-3-190619	106			
600-187336-4	Cell26-treatment-S-6-190619	107			
LCS 400-445986/2-A	Lab Control Sample	109			
MB 400-445986/1-A	Method Blank	105			

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (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			
LCS 400-445773/2-A	Lab Control Sample	98			
MB 400-445773/1-A	Method Blank	91			

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Lab Sample ID: MB 600-267801/6

Matrix: Solid

Analysis Batch: 267801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	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

Analysis Batch: 267801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	48.47		ug/Kg		97	70 - 131
Ethylbenzene	50.0	49.74		ug/Kg		99	66 - 130
Toluene	50.0	47.47		ug/Kg		95	67 - 130
Xylenes, Total	100	89.38		ug/Kg		89	63 - 130
m-Xylene & p-Xylene	50.0	44.36		ug/Kg		89	64 - 130
o-Xylene	50.0	45.02		ug/Kg		90	62 - 130

Surrogate	LCS %Recovery	LCS 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

Matrix: Solid

Analysis Batch: 267801

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	45.59		ug/Kg		91	70 - 131	6	30
Ethylbenzene	50.0	41.25		ug/Kg		82	66 - 130	19	30
Toluene	50.0	43.53		ug/Kg		87	67 - 130	9	30
Xylenes, Total	100	82.64		ug/Kg		83	63 - 130	8	30
m-Xylene & p-Xylene	50.0	40.61		ug/Kg		81	64 - 130	9	30
o-Xylene	50.0	42.03		ug/Kg		84	62 - 130	7	30

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	50.0	U	100	50.0	ug/Kg		06/27/19 12:30	06/27/19 13:16	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125				06/27/19 12:30	06/27/19 13:16	1

Lab Sample ID: LCS 400-445986/2-A

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1000	1095		ug/Kg		109	62 - 141
Surrogate	%Recovery	LCS Qualifier	Limits				
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1100	U	21900	24800		ug/Kg		113	10 - 150
Surrogate	%Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	109		65 - 125						

Lab Sample ID: 600-187283-I-1-D MSD

Matrix: Solid

Analysis Batch: 445920

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 445986

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	1100	U	21900	26210		ug/Kg		120	10 - 150	6	32
Surrogate	%Recovery	MSD 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

Analysis Batch: 446178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445773

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.939	J	5.00	2.00	mg/Kg		06/26/19 12:37	06/29/19 01:55	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		06/26/19 12:37	06/29/19 01:55	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	91		27 - 151				06/26/19 12:37	06/29/19 01:55	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Lab Sample ID: LCS 400-445773/2-A

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445773

			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

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445773

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	906	B F1 F2	273	3830	F1	mg/Kg		1071	62 - 204		
Surrogate	MS %Recovery	MS 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
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	906	B F1 F2	268	1232	F2	mg/Kg	-	121	62 - 204	103	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	150		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			07/01/19 11:49	1

Lab Sample ID: LCS 600-268411/2-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	197.9		mg/Kg		99	90 - 110

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-187336-2 MS

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Cell25-square39-S-2-3-190619

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Client Sample ID: Cell25-square39-S-2-3-190619

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Matrix: Solid

Analysis Batch: 267770

Client Sample ID: Cell26-square26-S-2-3-190619

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	13.2		12.9		%		2	20
Percent Solids	86.8		87.1		%		0.3	20

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	%

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187336-2	Cell25-square39-S-2-3-190619	Total/NA	Solid	8260B	267736
600-187336-3	Cell26-square26-S-2-3-190619	Total/NA	Solid	8260B	267736
MB 600-267801/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-267801/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-267801/4	Lab Control Sample Dup	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
600-187336-1	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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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 Batch
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	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

Client Sample ID: Cell25-treatment-S-6-190619

Lab Sample ID: 600-187336-1

Date Collected: 06/19/19 08:12

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-187336-2

Date Collected: 06/19/19 09:07

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-187336-3

Date Collected: 06/19/19 09:56

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.36 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187336-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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
Iowa	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

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

Eurofins TestAmerica, Houston

Chain of Custody Record

Client Information Client Contact: Steve Rice Company: ARCADIS U.S. Inc. Address: 11001 West 120th Avenue City: Broomfield State, Zip: CO, 80021 Phone: 303-710-7537 (Tel) Email: steve.rice@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2018 Site: TREATMENT		Sampler: Sarah Johnson / Callum Ferguson Lab PM: Sachin Kudchadkar E-Mail: sachin.kudchadkar@testamericainc.com Phone: 303-710-7537		Camer Tracking No(s): COC No: 600-59019-16898.1 Page: Page 1 of 1 Job #:	
Due Date Requested: 6/20/19 TAT Requested (days):		Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:			
Sample Identification (U1125-treatment-S-U-190619) (U1125-Square 39-S-2-3-190619) (U1126-Square 26-S-2-3-190619) (U1126-treatment-S-U-190619)		Sample Date 190619 08:12 190619 09:07 190619 09:56 190619 10:38		Sample Type (C=Comp, G=grab) C G G C	
Matrix (W=Water, S=Soil, O=Other) S S S S		Field Filtered Sample (Yes or No) N X X X X		Perform MS/MSD (Yes or No) N X X X X	
8015B_ORO - C10-C28/ C28-C35 8015B_GRO - C6-C10 (SHORT HOLD...) 300_ORGFM_28D - CHLORIDE 8260B - BTEX Only (SHORT HOLD...) MOISTURE		Total Number of Containers X X X X X		Special Instructions/Note: ***SAMPLES MUST BE RECEIVED BY THE HOUSTON LABORATORY WITHIN 48HRS OF COLLECTION	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months					
Empty Kit Relinquished by: Relinquished by: Sarah Johnson Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]					
Relinquished by: Relinquished by: Sarah Johnson Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]					
Date: 6/20/19 Date/Time: 10:00 Date/Time: 10:00 Date/Time: 10:00					
Company: Arcadis Company: Arcadis Company: Arcadis Company: Arcadis					
Custody Seal No: 561004 Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:					

Sample Receipt Checklist

19 JUN 20 10:04

JOB NUMBER:

187336

Date/Time Received:

CLIENT:

Arcadis

UNPACKED BY:

ST

CARRIER/DRIVER:

FCS

Custody Seal Present:

☒ YES☐ NO

Number of Coolers Received:

1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
WB	Y / N	Y / N	5.2	676	-0.2	5.0
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice?

☒ YES☐ NO

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:

6/20/19



600-187336 Waybill

FedEx

TRK# 4840 2906 4677
0221

THU - 20 JUN 10:30A
PRIORITY OVERNIGHT

AB LKSA

77040

TX-US

IAH





Client Information (Sub Contract Lab)				Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s): 600-40249-1	
Client Contact: Shipping/Receiving				Phone: _____		State of Origin: Texas	
Company: TestAmerica Laboratories, Inc.				E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 1	
Address: 3355 McLemore Drive, Pensacola, FL 32514				Accreditations Required (See note): NELAP - Texas		Job #: 600-187336-1	
Due Date Requested: 7/2/2019				Preservation Codes:			
TAT Requested (days): _____				A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)			
PO #: _____				Other: _____			
WO #: _____							
Project #: 60009563							
SSOW#: _____							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers
Cell25-treatment-S-6-190619 (600-187336-1)	6/19/19	08:12 Central	Solid				5
Cell25-square39-S-2-3-190619 (600-187336-2)	6/19/19	09:07 Central	Solid				5
Cell26-square26-S-2-3-190619 (600-187336-3)	6/19/19	09:56 Central	Solid				5
Cell26-treatment-S-6-190619 (600-187336-4)	6/19/19	10:38 Central	Solid				5
Special Instructions/Note:							
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon 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/test/matrix 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 compliance to TestAmerica Laboratories, Inc.							
Possible Hazard Identification							
Unconfirmed							
Deliverable Requested: I, II, III, IV, Other (specify) _____							
Primary Deliverable Rank: 2							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Special Instructions/QC Requirements:							
Received by: [Signature] Date/Time: 6-22-19 8:20 Company: TA Received by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks: 1.5°C							

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-187336-1

Login Number: 187336

List Source: Eurofins TestAmerica, Pensacola

List Number: 2

List Creation: 06/22/19 11:08 AM

Creator: Hinrichsen, Megan E

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	
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 $<6\text{mm}$ (1/4").	True	
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: 600-187365-1

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

For:

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

Attn: Steve Rice



Authorized for release by:
7/10/2019 3:32:43 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

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.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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	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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-187365-1	Cell 21-treatment-S-6-190619	Solid	06/19/19 11:16	06/20/19 10:04	
600-187365-2	Cell 17-treatment-S-6-190619	Solid	06/19/19 12:04	06/20/19 10:04	
600-187365-3	Cell 18-treatment-S-6-190619	Solid	06/19/19 12:43	06/20/19 10:04	
600-187365-4	Cell 19-treatment-S-6-190619	Solid	06/19/19 13:21	06/20/19 10:04	
600-187365-5	Cell 20-treatment-S-6-190619	Solid	06/19/19 14:00	06/20/19 10:04	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Client Sample ID: Cell 21-treatment-S-6-190619

Lab Sample ID: 600-187365-1

Date Collected: 06/19/19 11:16

Matrix: Solid

Date Received: 06/20/19 10:04

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

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 Organics (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 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 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
Percent Solids	94.8		1.0	1.0	%	-		06/21/19 15:25	1

Client Sample ID: Cell 17-treatment-S-6-190619

Lab Sample ID: 600-187365-2

Date Collected: 06/19/19 12:04

Matrix: Solid

Date Received: 06/20/19 10:04

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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 Fac
a,a,a-Trifluorotoluene (fid)	96		65 - 125	06/27/19 12:30	06/27/19 23:12	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]	52.5	B	24.9	9.96	mg/Kg	-	06/26/19 12:37	06/29/19 05:09	5
Oil Range Organics (C28-C35)	71.2		24.9	9.96	mg/Kg	-	06/26/19 12:37	06/29/19 05:09	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	73		27 - 151	06/26/19 12:37	06/29/19 05:09	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.1		4.00	0.534	mg/Kg	-		07/01/19 17:29	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.2		1.0	1.0	%	-		06/21/19 15:25	1
Percent Solids	93.8		1.0	1.0	%	-		06/21/19 15:25	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Client Sample ID: Cell 18-treatment-S-6-190619

Lab Sample ID: 600-187365-3

Date Collected: 06/19/19 12:43

Matrix: Solid

Date Received: 06/20/19 10:04

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

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 Organics (DRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37.6	B	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	5

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 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
Percent Solids	94.4		1.0	1.0	%	-		06/21/19 15:25	1

Client Sample ID: Cell 19-treatment-S-6-190619

Lab Sample ID: 600-187365-4

Date Collected: 06/19/19 13:21

Matrix: Solid

Date Received: 06/20/19 10:04

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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 Fac
a,a,a-Trifluorotoluene (fid)	95		65 - 125				06/27/19 12:30	06/28/19 00:04	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]	16.2	J B	24.9	9.97	mg/Kg	-	06/26/19 12:37	06/29/19 05:35	5
Oil Range Organics (C28-C35)	49.8		24.9	9.97	mg/Kg	-	06/26/19 12:37	06/29/19 05:35	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		27 - 151				06/26/19 12:37	06/29/19 05:35	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.529	U	3.96	0.529	mg/Kg	-		07/01/19 18:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.3		1.0	1.0	%	-		06/21/19 15:25	1
Percent Solids	93.7		1.0	1.0	%	-		06/21/19 15:25	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Client Sample ID: Cell 20-treatment-S-6-190619

Lab Sample ID: 600-187365-5

Date Collected: 06/19/19 14:00

Matrix: Solid

Date Received: 06/20/19 10:04

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

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 Fac
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 Fac
Diesel Range Organics [C10-C28]	9.72	U	24.3	9.72	mg/Kg	—	06/26/19 12:37	06/29/19 05:47	5
Oil Range Organics (C28-C35)	17.3	J	24.3	9.72	mg/Kg		06/26/19 12:37	06/29/19 05:47	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		27 - 151				06/26/19 12:37	06/29/19 05:47	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.532	U	3.98	0.532	mg/Kg	—		07/01/19 18:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.6		1.0	1.0	%	—		06/21/19 15:25	1
Percent Solids	92.4		1.0	1.0	%			06/21/19 15:25	1

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
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

Qualifier	Qualifier Description
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.
α	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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TFT-F2 (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		
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)		
Lab Sample ID	Client Sample ID	OTPH1 (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
MB 400-445773/1-A	Method Blank	91
Surrogate Legend		
OTPH = o-Terphenyl		

QC Sample Results

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

Analysis Batch: 445922

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445940

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	50.0	U	100	50.0	ug/Kg		06/27/19 12:30	06/27/19 13:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	97		65 - 125				06/27/19 12:30	06/27/19 13:13	1

Lab Sample ID: LCS 400-445940/1-A

Matrix: Solid

Analysis Batch: 445922

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1000	1021		ug/Kg		102	62 - 141
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid)	95		65 - 125				

Lab Sample ID: 400-172093-A-5-C MS

Matrix: Solid

Analysis Batch: 445922

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	49.0	U	967	603.1		ug/Kg		62	10 - 150
Surrogate	MS %Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	93		65 - 125						

Lab Sample ID: 400-172093-A-5-D MSD

Matrix: Solid

Analysis Batch: 445922

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 445940

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	49.0	U	978	680.5		ug/Kg		70	10 - 150	12	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	94		65 - 125								

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

Lab Sample ID: MB 400-445773/1-A

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 445773

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.939	J	5.00	2.00	mg/Kg		06/26/19 12:37	06/29/19 01:55	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		06/26/19 12:37	06/29/19 01:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	91		27 - 151				06/26/19 12:37	06/29/19 01:55	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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

Lab Sample ID: LCS 400-445773/2-A

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 445773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	276	224.5		mg/Kg		81	63 - 153
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	98		27 - 151				

Lab Sample ID: 400-172183-A-1-A MS

Matrix: Solid

Analysis Batch: 446178

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 445773

Top Data: 10/10										
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Diesel Range Organics [C10-C28]	906	B F1 F2	273	3830	F1	mg/Kg	—	1071	62 - 204	
Surrogate	MS %Recovery	MS 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
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	906	B F1 F2	268	1232	F2	mg/Kg	-	121	62 - 204	103	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	150		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268411/1-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			07/01/19 11:49	1

Lab Sample ID: LCS 600-268411/2-A

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	197.9		mg/Kg		99	90 - 110

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-187336-K-2-B MS

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	0.530	U	99.2	87.94		mg/Kg		89	80 - 120

Lab Sample ID: 600-187336-K-2-C MSD

Matrix: Solid

Analysis Batch: 268408

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	0.530	U	99.2	87.87		mg/Kg		89	80 - 120	0	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-187365-5 DU

Matrix: Solid

Analysis Batch: 267770

Client Sample ID: Cell 20-treatment-S-6-190619

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	7.6		6.9		%		9	20
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
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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 Batch
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 Batch
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	3546	
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

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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 Batch
600-187365-1	Cell 21-treatment-S-6-190619	Total/NA	Solid	2540B	
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	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Client Sample ID: Cell 21-treatment-S-6-190619

Lab Sample ID: 600-187365-1

Date Collected: 06/19/19 11:16

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-187365-2

Date Collected: 06/19/19 12:04

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11.216 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 23:12	GRK	TAL PEN
Total/NA	Prep	3546			15.06 g	1.0 mL	445773	06/26/19 12:37	KLR	TAL PEN
Total/NA	Analysis	8015B		5			446178	06/29/19 05:09	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 17:29	SKR	TAL HOU
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell 18-treatment-S-6-190619

Lab Sample ID: 600-187365-3

Date Collected: 06/19/19 12:43

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-187365-4

Date Collected: 06/19/19 13:21

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

Client Sample ID: Cell 19-treatment-S-6-190619

Lab Sample ID: 600-187365-4

Date Collected: 06/19/19 13:21

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			267770	06/21/19 15:25	AP	TAL HOU

Client Sample ID: Cell 20-treatment-S-6-190619

Lab Sample ID: 600-187365-5

Date Collected: 06/19/19 14:00

Matrix: Solid

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2018

Job ID: 600-187365-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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
Iowa	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

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

Eurofins TestAmerica, Houston

Chain of Custody Record

Client Information Client Contact: Steve Rice Company: ARCADIS U.S. Inc. Address: 11001 West 120th Avenue City: Broomfield State, Zip: CO, 80021 Phone: 303-710-7537 (Tel) Email: steve.rice@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2018 Site: TREATMENT		Sampler Sarah Johnson / Callum Ferguson Phone: 303 710 7537 Lab PM: Sachin Kudchadkar E-Mail: sachin.kudchadkar@testamericainc.com		Carrier Tracking Note(s) COC No: 600-59019-16898.1 Page: Page 1 of 1 Job #:																																																																																	
Analysis Requested Due Date Requested: 6/20/19 TAT Requested (days): PO #: Purchase Order Requested WO #: Project # 60009563 SSOW#:																																																																																					
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																																																																																					
Sample Identification <table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (Wet, Solid, Dried, etc.)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8015B_DRO - C10-C28/ C28-C35</th> <th>8015B_GRO - C6-C10 (SHORT HOLD...)</th> <th>300_ORGFM_28D - CHLORIDE</th> <th>8260B - BTEX Only (SHORT HOLD...)</th> <th>MOISTURE</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>Cell 21-treatment-S-10-190619</td> <td>6/20/19</td> <td>11:16</td> <td>C</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>***SAMPLES MUST BE RECEIVED BY THE HOUSTON LABORATORY WITHIN 48HRS OF COLLECTION</td> </tr> <tr> <td>Cell 17-treatment-S-10-190619</td> <td>6/20/19</td> <td>12:04</td> <td>C</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>Cell 18-treatment-S-10-190619</td> <td>6/20/19</td> <td>12:43</td> <td>C</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>Cell 19-treatment-S-10-190619</td> <td>6/20/19</td> <td>13:21</td> <td>C</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>Cell 20-treatment-S-10-190619</td> <td>6/20/19</td> <td>14:00</td> <td>C</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>						Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wet, Solid, Dried, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO - C10-C28/ C28-C35	8015B_GRO - C6-C10 (SHORT HOLD...)	300_ORGFM_28D - CHLORIDE	8260B - BTEX Only (SHORT HOLD...)	MOISTURE	Total Number of Containers	Special Instructions/Note:	Cell 21-treatment-S-10-190619	6/20/19	11:16	C	S	X	X	X	X	X	X	X	X	***SAMPLES MUST BE RECEIVED BY THE HOUSTON LABORATORY WITHIN 48HRS OF COLLECTION	Cell 17-treatment-S-10-190619	6/20/19	12:04	C	S	X	X	X	X	X	X	X		Cell 18-treatment-S-10-190619	6/20/19	12:43	C	S	X	X	X	X	X	X	X		Cell 19-treatment-S-10-190619	6/20/19	13:21	C	S	X	X	X	X	X	X	X		Cell 20-treatment-S-10-190619	6/20/19	14:00	C	S	X	X	X	X	X	X	X	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wet, Solid, Dried, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO - C10-C28/ C28-C35	8015B_GRO - C6-C10 (SHORT HOLD...)	300_ORGFM_28D - CHLORIDE	8260B - BTEX Only (SHORT HOLD...)	MOISTURE	Total Number of Containers	Special Instructions/Note:																																																																								
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Cell 20-treatment-S-10-190619	6/20/19	14:00	C	S	X	X	X	X	X	X	X																																																																										
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)																																																																																					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months																																																																																					
Empty Kit Relinquished by: Relinquished by: Sarah Johnson Date/Time: 6/20/19 Company: ARCADIS U.S. Inc. Relinquished by: Steve Rice Date/Time: 6/20/19 Company: ARCADIS U.S. Inc. Relinquished by:																																																																																					
Custody Seals Intact: Δ Yes Δ No 581006 Cooler Temperature(s) °C and Other Remarks:																																																																																					

Sample Receipt Ch# 187365

19 JUN 20 10:04

ceived:

JOB NUMBER:

CLIENT:

UNPACKED BY:

CARRIER/DRIVER:

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
WIB	Y / N	Y / N	3.4	676	-0.2	3.2
	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				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☒ NO☐ YESBase samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2:

☐ YES ☐ NO

pH paper Lot # _____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☒ NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
---	---	-----------------------------

COMMENTS:



600-187365 Waybill



600-187365 Waybill

FedEx
TRK
022. 4840 2906 4666

THU - 20 JUN 10:30A
PRIORITY OVERNIGHT

AB LKSA

77040
FX-US IAH





Chain of Custody Record

Client Information (Sub Contract Lab)			Lab PM:	Carrier Tracking No(s):	COC No:							
Client Contact:			Kudchadkar, Sachin G		600-40249.1							
Shipping/Receiving			E-Mail:	State of Origin:	Page:							
Company:			sachin.kudchadkar@testamericainc.com	Texas	1 of 1							
Address:			Accreditations Required (See note):									
City:			NELAP - Texas									
State, Zip:			Job #:									
Phone:			600-187365-1									
Email:			Preservation Codes:									
Project Name:			A - HCL									
Chevron - Jal Land Farm Soils 2018			B - NaOH									
Site:			C - Zn Acetate									
			D - Nitric Acid									
			E - NaHSO4									
			F - MeOH									
			G - H2SO4									
			H - Ascorbic Acid									
			I - Ice									
			J - DI Water									
			K - EDTA									
			L - EDA									
			Other:									
Sample Identification - Client ID (Lab ID)			Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/soil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_GRO/5035A_FP GRO(C6-C10)	8015B_DRO/3546 (MOD) DRO C10-C28	Total Number of containers	Special Instructions/Note:
Cell 21-treatment-S-6-190619 (600-187365-1)	6/19/19	11:16 Central	Solid						X	X	5	
Cell 17-treatment-S-6-190619 (600-187365-2)	6/19/19	12:04 Central	Solid						X	X	5	
Cell 18-treatment-S-6-190619 (600-187365-3)	6/19/19	12:43 Central	Solid						X	X	5	
Cell 19-treatment-S-6-190619 (600-187365-4)	6/19/19	13:21 Central	Solid						X	X	5	
Cell 20-treatment-S-6-190619 (600-187365-5)	6/19/19	14:00 Central	Solid						X	X	5	
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/tests/matrix 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 compliance to TestAmerica Laboratories, Inc.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I, II, III, IV, Other (specify)												
Primary Deliverable Rank: 2												
Empty Kit Relinquished by:												
Relinquished by:												
Relinquished by:												
Relinquished by:												
Custody Seals Intact:												
A Yes A No												
Custody Seal No.:												
1.7°C IR8												

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7°C IR-8
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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 $<6\text{mm}$ (1/4").	True	
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: 600-189168-1

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



Authorized for release by:
8/16/2019 4:05:57 PM

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

sachin.kudchadkar@testamericainc.com

LINKS

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results through
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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

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

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

Job ID: 600-189168-1

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
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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

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 Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	27.4	U	54.7	27.4	ug/Kg	-	07/29/19 09:30	07/29/19 19:12	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125	07/29/19 09:30	07/29/19 19:12	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]	2.00	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, Ion Chromatography - Soluble

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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 13:39	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.590	U	4.68	0.590	ug/Kg		07/25/19 12:05	07/25/19 17:17	1
Ethylbenzene	0.955	U	4.68	0.955	ug/Kg		07/25/19 12:05	07/25/19 17:17	1
Toluene	1.29	U	4.68	1.29	ug/Kg		07/25/19 12:05	07/25/19 17:17	1
Xylenes, Total	1.06	U	4.68	1.06	ug/Kg		07/25/19 12:05	07/25/19 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		61 - 130	07/25/19 12:05	07/25/19 17:17	1
Dibromofluoromethane	89		68 - 140	07/25/19 12:05	07/25/19 17:17	1
Toluene-d8 (Surr)	93		50 - 130	07/25/19 12:05	07/25/19 17:17	1
4-Bromofluorobenzene	108		57 - 140	07/25/19 12:05	07/25/19 17:17	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	23.9	U	47.8	23.9	ug/Kg		07/29/19 09:30	07/29/19 19:38	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125	07/29/19 09:30	07/29/19 19:38	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]	1.99	U	4.96	1.99	mg/Kg		07/29/19 10:17	07/30/19 22:42	1
Oil Range Organics (C28-C35)	1.99	U	4.96	1.99	mg/Kg		07/29/19 10:17	07/30/19 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	84		27 - 151	07/29/19 10:17	07/30/19 22:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.05	J	3.99	0.533	mg/Kg			08/02/19 17:59	1
Fluoride	5.15		2.00	0.600	mg/Kg			08/02/19 17:59	1
Sulfate	0.955	U	4.99	0.955	mg/Kg			08/02/19 17:59	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 in Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Lab Sample ID: 600-189168-3

Date Collected: 07/23/19 13:55

Matrix: Solid

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
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	U	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	07/29/19 09:30	07/29/19 20:04	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]	2.00	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	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		27 - 151	07/29/19 10:17	07/30/19 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 Coupled Plasma - Atomic Emission Spectrometry

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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	B	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 in Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Lab Sample ID: 600-189168-4

Date Collected: 07/23/19 12:35

Matrix: Solid

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
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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	24.8	U	49.6	24.8	ug/Kg		07/29/19 09:30	07/29/19 20:30	1

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 23:08	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Client Sample ID: Cell 19-Square156-S-2-3-190723

Lab Sample ID: 600-189168-4

Date Collected: 07/23/19 12:35

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

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

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 Range Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	17.4	U	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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	B	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
<i>o</i> -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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Job ID: 600-189168-1

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

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

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.

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	Compound was found in the blank and sample.
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.
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

Eurofins TestAmerica, Houston

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

1

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Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-189168-1	Cell 19-Square184-S-2-3-19072	93	88	93	107
600-189168-2	Cell 26-Square169-S-2-3-190723	97	89	93	108
600-189168-3	Cell 26-Square69-S-2-3-190723	98	87	92	110
600-189168-4	Cell 19-Square156-S-2-3-190723	85	85	94	108
600-189168-5	Cell19-Square132-S-2-3-190723	85	86	95	109
LCS 600-270286/3	Lab Control Sample	84	90	99	118
LCS 600-270407/3	Lab Control Sample	74	84	98	112
LCSD 600-270286/4	Lab Control Sample Dup	82	86	97	116
LCSD 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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (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 19-Square184-S-2-3-190723	105			
600-189168-2	Cell 26-Square169-S-2-3-190723	103			
600-189168-3	Cell 26-Square69-S-2-3-190723	104			
600-189168-4	Cell 19-Square156-S-2-3-190723	104			
600-189168-5	Cell19-Square132-S-2-3-190723	102			
LCS 400-449881/1-A	Lab Control Sample	102			
MB 400-449881/2-A	Method Blank	103			

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (27-151)			
400-174000-A-1-A MS	Matrix Spike	103			
400-174000-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)		
Lab Sample ID	Client Sample ID	OTPH1 (27-151)
600-189168-1	Cell 19-Square184-S-2-3-19072	34
600-189168-1 MS	Cell	27
600-189168-1 MSD	19-Square184-S-2-3-190723	80
600-189168-2	Cell	84
600-189168-3	26-Square169-S-2-3-190723	66
600-189168-4	Cell	81
600-189168-5	19-Square156-S-2-3-190723	73
LCS 400-449874/2-A	Cell19-Square132-S-2-3-190723	73
LCS 400-450900/2-A	Lab Control Sample	125
MB 400-449874/1-A	Lab Control Sample	70
MB 400-450900/1-A	Method Blank	108
Surrogate Legend		
OTPH = o-Terphenyl		

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Lab Sample ID: MB 600-270286/6

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130		07/25/19 09:45	1
Dibromofluoromethane	89		68 - 140		07/25/19 09:45	1
Toluene-d8 (Surr)	96		50 - 130		07/25/19 09:45	1
4-Bromofluorobenzene	109		57 - 140		07/25/19 09:45	1

Lab Sample ID: LCS 600-270286/3

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		61 - 130
Dibromofluoromethane	90		68 - 140
Toluene-d8 (Surr)	99		50 - 130
4-Bromofluorobenzene	118		57 - 140

Lab Sample ID: LCSD 600-270286/4

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Lab Sample ID: MB 600-270407/6

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	74		61 - 130
Dibromofluoromethane	84		68 - 140
Toluene-d8 (Surr)	98		50 - 130
4-Bromofluorobenzene	112		57 - 140

Lab Sample ID: LCSD 600-270407/4

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	50.0	U	100	50.0	ug/Kg	-	07/29/19 09:30	07/29/19 11:26	1
-C6-C10									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125				07/29/19 09:30	07/29/19 11:26	1

Lab Sample ID: LCS 400-449881/1-A

Matrix: Solid

Analysis Batch: 449860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449881

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	1000	1046		ug/Kg	-	105	62 - 141		
-C6-C10									
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	102		65 - 125						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	10600		48300	56900		ug/Kg	-	96	10 - 150		
-C6-C10											
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	103		65 - 125								

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	10600		48300	57990		ug/Kg	-	98	10 - 150	2	32
-C6-C10											
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	100		65 - 125								

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

Analyte	MB Result	MB 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

Eurofins TestAmerica, Houston

QC Sample Results

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: MB 400-449874/1-A

Matrix: Solid

Analysis Batch: 450125

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 449874

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		27 - 151	07/29/19 10:17	07/30/19 21:24	1

Lab Sample ID: LCS 400-449874/2-A

Matrix: Solid

Analysis Batch: 450524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449874

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics			276	176.2		mg/Kg	-	64	63 - 153		
[C10-C28]											
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
o-Terphenyl	73		27 - 151								

Lab Sample ID: 600-189168-1 MS

Matrix: Solid

Analysis Batch: 450125

Client Sample ID: Cell 19-Square184-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 449874

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	2.00	U F1 F2	276	67.28	F1	mg/Kg	-	24	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	27		27 - 151								

Lab Sample ID: 600-189168-1 MSD

Matrix: Solid

Analysis Batch: 450125

Client Sample ID: Cell 19-Square184-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 449874

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.00	U F1 F2	275	187.6	F2	mg/Kg	-	68	62 - 204	94	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	80		27 - 151								

Lab Sample ID: MB 400-450900/1-A

Matrix: Solid

Analysis Batch: 451040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450900

Analyte	MB	MB	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	4.277	J	5.00	2.00	mg/Kg		08/05/19 08:31	08/06/19 05:42	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		08/05/19 08:31	08/06/19 05:42	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
o-Terphenyl	108		27 - 151	08/05/19 08:31	08/06/19 05:42				

Eurofins TestAmerica, Houston

QC Sample Results

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

Matrix: Solid

Analysis Batch: 451040

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450900

			Spike	LCS	LCS				%Rec.
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics			281	268.7		mg/Kg		96	63 - 153
[C10-C28]									
Surrogate	LCS	LCS							
	%Recovery	Qualifier	Limits						
o-Terphenyl	125		27 - 151						

Lab Sample ID: 400-174000-A-1-A MS

Matrix: Solid

Analysis Batch: 451040

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 450900

Analysis Data: 451045									
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	4.06	J B F1 F2	276	217.9		mg/Kg	-	77	62 - 204
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl	103		27 - 151						

Lab Sample ID: 400-174000-A-1-B MSD

Matrix: Solid

Analysis Batch: 451040

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 450900

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	4.06	J B F1 F2	278	92.17	F1 F2	mg/Kg	-	32	62 - 204	81	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	43		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-271080/1-A

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-189149-A-1-B MS

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	28.8		99.6	144.6		mg/Kg				1	20
Fluoride	0.599	U F1	19.9	39.83		mg/Kg				1	20
Sulfate	60.7	F1	99.6	181.9		mg/Kg				1	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-270635/1-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270635

Analyte	MB Result	MB 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	U	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	U	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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	175	160.5		mg/Kg		91.7	72.0 - 106.9
Iron	17700	12130		mg/Kg		68.6	50.1 - 106.8
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 - 106.7

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

Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	B	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

Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	B	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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell 19-Square184-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	B	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

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Cell 19-Square184-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.589	U	0.595	U	mg/Kg		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	B	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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270637

Analyte	MB Result	MB 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 13:01	1

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29000	32390		ug/Kg	-	111.7	59.7 - 115.2

Lab Sample ID: 600-189195-C-4-G MS

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	91.3		242	367.8		ug/Kg	-	114	75 - 125

Lab Sample ID: 600-189195-C-4-F DU

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	91.3		134.6	F3	ug/Kg	-	38	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Analyte	MQL	MDL	Units
Mercury	17.0	3.58	ug/Kg

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:39	SOT	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.34 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 17:17	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

Lab Sample ID: 600-189168-3

Date Collected: 07/23/19 13:55

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-189168-4

Date Collected: 07/23/19 12:35

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.96 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 11:29	WS1	TAL HOU
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 PEN
Total/NA	Prep	3546			15.07 g	1 mL	449874	07/29/19 10:17	SHB	TAL PEN
Total/NA	Analysis	8015B		1			450125	07/30/19 23:08	S1S	TAL PEN
Soluble	Leach	DI Leach			4.99 g	50 mL	271080	08/02/19 15:26	SKR	TAL HOU
Soluble	Analysis	300.0		1			271032	08/02/19 18:35	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 14:14	KP1	TAL HOU
Total/NA	Prep	7471A			0.65 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:50	SOT	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:52	SOT	TAL HOU

Eurofins TestAmerica, Houston

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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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 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	Analyte
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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	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
Washington	State Program	10	C915	05-15-20

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

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189168-1

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.

Eurofins TestAmerica, Houston

Chain of Custody Record

Client Information		Sampler: <u>Sarah Johnson</u>		Lab PM: <u>Kudchadkar, Sachin G</u>		Carrier Tracking No(s):		COC No: <u>600-69887-19077.2</u>	
Client Contact: <u>Steve Rice</u>		Phone: <u>931-4310-0310</u>		E-Mail: <u>sachin.kudchadkar@testamerica.com</u>				Page: _____	
Company: <u>ARCADIS U.S. Inc</u>		Address: <u>11001 West 120th Avenue</u>		City: <u>Broomfield</u>		State: <u>CO</u>		Zip: <u>80021</u>	
Phone: <u>303-710-7537(Tel)</u>		P.O. #: _____		Purchase Order Requested: <u>40 hr Rush</u>		TAT Requested (days): <u>7/26/19</u>		Due Date Requested: <u>7/26/19</u>	
Email: <u>steve.rice@arcadis.com</u>		WO #: _____		Project #: <u>60009563</u>		SSOW#: _____			
Project Name: <u>Chevron - Jal Land Farm Soils 2019</u>		Site: _____							

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8015B DRO / ORO		8015B GRO - GRO/C6-C10		8260B - BTEX Only		300 - CI		Total Number of Containers	Special Instructions/Note:
					Sample Date	Sample Time	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B DRO / ORO	8015B GRO - GRO/C6-C10	8260B - BTEX Only	300 - CI					
<u>01119-Square 184-S-2-3-190723</u>	<u>7/23/19</u>	<u>12:57</u>	<u>G</u>	<u>Solid</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>01120-Square 184-S-2-3-190723</u>	<u>7/23/19</u>	<u>13:32</u>	<u>G</u>	<u>Solid</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>01120-Square 184-S-2-3-190723</u>	<u>7/23/19</u>	<u>18:55</u>	<u>G</u>	<u>Solid</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>01119-Square 150-S-2-3-190723</u>	<u>7/23/19</u>	<u>12:35</u>	<u>G</u>	<u>Solid</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>01119-Square 132-S-2-3-190723</u>	<u>7/23/19</u>	<u>12:13</u>	<u>G</u>	<u>Solid</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
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600-189168 Chain of Custody

Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify):			
Empty Kit Relinquished by:		Date: _____	
Relinquished by: <u>Sarah Johnson</u>		Date/Time: <u>7/26/19</u>	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seal No.: <u>902070</u>		Custody Seal Intact: <u>Yes</u> <input type="checkbox"/> <u>No</u> <input type="checkbox"/>	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Special Instructions/QC Requirements:			
Received by: <u>Sachin G</u>		Date/Time: <u>7/25/19 10:11</u>	
Received by:		Date/Time:	
Received by:		Date/Time:	
Cooler Temperature(s) °C and Other Remarks:			

Sample Receipt Checklist

Date/Time Received:

19 JUL 25 10:11

JOB NUMBER: _____

CLIENT:

UNPACKED BY: 

CARRIER/DRIVER:

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 2

[illegible]

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

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:

YR 7/25/19

[illegible]

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189168-1

Login Number: 189168

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189168-1

Login Number: 189168

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
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: 600-189171-1

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



Authorized for release by:
8/16/2019 4:04:12 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

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.

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

Job ID: 600-189171-1

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
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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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- Square96--S-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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

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

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
1,2-Dichloroethane-d4 (Surr)	84		61 - 130				07/25/19 12:14	07/25/19 14:52	1
Dibromofluoromethane	82		68 - 140				07/25/19 12:14	07/25/19 14:52	1
Toluene-d8 (Surr)	95		50 - 130				07/25/19 12:14	07/25/19 14:52	1
4-Bromofluorobenzene	109		57 - 140				07/25/19 12:14	07/25/19 14:52	1

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

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	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]	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	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.355	U H	2.82	0.355	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Ethylbenzene	0.574	U H	2.82	0.574	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Toluene	0.777	U H	2.82	0.777	ug/Kg		07/25/19 12:14	07/25/19 15:16	1
Xylenes, Total	0.636	U H	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
4-Bromofluorobenzene	110		57 - 140	07/25/19 12:14	07/25/19 15:16	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	24.1	U	48.2	24.1	ug/Kg		07/29/19 09:30	07/29/19 21:49	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 21:49	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]	2.84	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	Qualifier	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Method: 6010B - Inductively 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	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	U	1.46	0.269	mg/Kg		07/29/19 14:58	07/30/19 14:26	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 13:56	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	%			07/29/19 09:23	1

Client Sample ID: Cell 20-Square179-S-2-3-190723

Lab Sample ID: 600-189171-3

Date Collected: 07/23/19 10:52

Matrix: Solid

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
Benzene	0.666	U H	5.29	0.666	ug/Kg		07/25/19 12:14	07/25/19 15:40	1
Ethylbenzene	1.08	U H	5.29	1.08	ug/Kg		07/25/19 12:14	07/25/19 15:40	1
Toluene	1.46	U H	5.29	1.46	ug/Kg		07/25/19 12:14	07/25/19 15:40	1
Xylenes, Total	1.19	U H	5.29	1.19	ug/Kg		07/25/19 12:14	07/25/19 15:40	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 15:40	1
Dibromofluoromethane	87		68 - 140	07/25/19 12:14	07/25/19 15:40	1
Toluene-d8 (Surr)	97		50 - 130	07/25/19 12:14	07/25/19 15:40	1
4-Bromofluorobenzene	110		57 - 140	07/25/19 12:14	07/25/19 15:40	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	29.0	U	58.0	29.0	ug/Kg		07/29/19 09:30	07/29/19 22:41	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101		65 - 125	07/29/19 09:30	07/29/19 22:41	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]	2.97	J	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 07:02	1
Oil Range Organics (C28-C35)	1.97	U	4.93	1.97	mg/Kg		07/29/19 08:21	07/31/19 07:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	80		27 - 151	07/29/19 08:21	07/31/19 07:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.27	J	3.98	0.532	mg/Kg			08/02/19 20:58	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Client Sample ID: Cell 20-Square179-S-2-3-190723

Lab Sample ID: 600-189171-3

Date Collected: 07/23/19 10:52

Matrix: Solid

Date Received: 07/25/19 10:11

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 14:29	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.507	U H	4.03	0.507	ug/Kg	-	07/25/19 12:14	07/25/19 16:05	1
Ethylbenzene	0.821	U H	4.03	0.821	ug/Kg	-	07/25/19 12:14	07/25/19 16:05	1
Toluene	1.11	U H	4.03	1.11	ug/Kg	-	07/25/19 12:14	07/25/19 16:05	1
Xylenes, Total	0.910	U H	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
Toluene-d8 (Surr)	94		50 - 130	07/25/19 12:14	07/25/19 16:05	1
4-Bromofluorobenzene	108		57 - 140	07/25/19 12:14	07/25/19 16:05	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	18.7	U	37.5	18.7	ug/Kg	-	07/29/19 09:30	07/29/19 23:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125	07/29/19 09:30	07/29/19 23:07	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]	2.94	J	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 06:49	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 06:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		27 - 151				07/29/19 08:21	07/31/19 06:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.530	U	3.97	0.530	mg/Kg	-		08/02/19 21:52	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

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

Lab Sample ID: 600-189171-5

Date Collected: 07/23/19 11:16

Matrix: Solid

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
Benzene	0.597	U H	4.73	0.597	ug/Kg	-	07/25/19 12:14	07/25/19 16:29	1
Ethylbenzene	0.966	U H	4.73	0.966	ug/Kg		07/25/19 12:14	07/25/19 16:29	1
Toluene	1.31	U H	4.73	1.31	ug/Kg		07/25/19 12:14	07/25/19 16:29	1
Xylenes, Total	1.07	U H	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
Dibromofluoromethane	86		68 - 140				07/25/19 12:14	07/25/19 16:29	1
Toluene-d8 (Surr)	93		50 - 130				07/25/19 12:14	07/25/19 16:29	1
4-Bromofluorobenzene	110		57 - 140				07/25/19 12:14	07/25/19 16:29	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	27.3	U	54.6	27.3	ug/Kg	-	07/29/19 09:30	07/29/19 23:37	1
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	Result	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 Chromatography - Soluble

Analyte	Result	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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	U	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

Eurofins TestAmerica, Houston

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.
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

Qualifier	Qualifier Description
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.
U	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.
B	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.
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)

Eurofins TestAmerica, Houston

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (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
LCS 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (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			
Surrogate Legend					
TFT-F = a,a,a-Trifluorotoluene (fid)					

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (27-151)			
600-189168-G-1-A MS	Matrix Spike	27			
600-189168-G-1-B MSD	Matrix Spike Duplicate	80			
600-189171-1	Cell 20-Square102-S-2-3-190723	51			

Eurofins TestAmerica, Houston

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH1 (27-151)
600-189171-2	Cell 20- Square96--S-2-3-19072	76
600-189171-3	Cell	80
600-189171-4	20-Square179-S-2-3-190723	76
600-189171-5	Cell	76
	19-Square23-S-2-3-190723	
	20-Square193-S-2-3-190723	
600-189207-B-1-A MS	Matrix Spike	82
600-189207-B-1-B MSD	Matrix Spike Duplicate	89
LCS 400-449843/2-A	Lab Control Sample	90
LCS 400-449874/2-A	Lab Control Sample	73
MB 400-449843/1-A	Method Blank	94
MB 400-449874/1-A	Method Blank	70

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Lab Sample ID: MB 600-270286/6

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130		07/25/19 09:45	1
Dibromofluoromethane	89		68 - 140		07/25/19 09:45	1
Toluene-d8 (Surr)	96		50 - 130		07/25/19 09:45	1
4-Bromofluorobenzene	109		57 - 140		07/25/19 09:45	1

Lab Sample ID: LCS 600-270286/3

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		61 - 130
Dibromofluoromethane	90		68 - 140
Toluene-d8 (Surr)	99		50 - 130
4-Bromofluorobenzene	118		57 - 140

Lab Sample ID: LCSD 600-270286/4

Matrix: Solid

Analysis Batch: 270286

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	50.0	U	100	50.0	ug/Kg	-	07/29/19 09:30	07/29/19 11:26	1
-C6-C10									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125				07/29/19 09:30	07/29/19 11:26	1

Lab Sample ID: LCS 400-449881/1-A

Matrix: Solid

Analysis Batch: 449860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449881

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	1000	1046		ug/Kg	-	105	62 - 141		
-C6-C10									
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	102		65 - 125						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	10600		48300	56900		ug/Kg	-	96	10 - 150		
-C6-C10											
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	103		65 - 125								

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	10600		48300	57990		ug/Kg	-	98	10 - 150	2	32
-C6-C10											
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	100		65 - 125								

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

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

Analyte	MB Result	MB 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 08:21	07/31/19 04:18	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 04:18	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	94		27 - 151	07/29/19 08:21	07/31/19 04:18	1

Lab Sample ID: LCS 400-449843/2-A

Matrix: Solid

Analysis Batch: 450128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449843

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]			276	196.0		mg/Kg	-	71	63 - 153		
Surrogate	LCS %Recovery	LCS Qualifier	Limits								
o-Terphenyl	90		27 - 151								

Lab Sample ID: 600-189207-B-1-A MS

Matrix: Solid

Analysis Batch: 450128

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 449843

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	2.07	J	267	171.4		mg/Kg	-	64	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	82		27 - 151								

Lab Sample ID: 600-189207-B-1-B MSD

Matrix: Solid

Analysis Batch: 450128

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 449843

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.07	J	272	195.5		mg/Kg	-	71	62 - 204	13	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	89		27 - 151								

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

Analyte	MB	MB	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
o-Terphenyl	70		27 - 151	07/29/19 10:17	07/30/19 21:24	1			

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Lab Sample ID: LCS 400-449874/2-A

Matrix: Solid

Analysis Batch: 450524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449874

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			276	176.2		mg/Kg	-	64	63 - 153
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
o-Terphenyl	73		27 - 151						

Lab Sample ID: 600-189168-G-1-A MS

Matrix: Solid

Analysis Batch: 450125

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 449874

Analysis Data: 456120										
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Diesel Range Organics [C10-C28]	2.00	U F1 F2	276	67.28	F1	mg/Kg	-	24	62 - 204	
Surrogate	MS %Recovery	MS Qualifier	Limits							
o-Terphenyl	27		27 - 151							

Lab Sample ID: 600-189168-G-1-B MSD

Matrix: Solid

Analysis Batch: 450125

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 449874

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.00	U F1 F2	275	187.6	F2	mg/Kg	-	68	62 - 204	94	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	80		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-271080/1-A

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Lab Sample ID: LCS 600-271080/2-A

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	192.2		mg/Kg	-	96	90 - 110

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-189171-1 MS

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Cell 20-Square102-S-2-3-190723

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.58	J	99.0	98.30		mg/Kg		98	80 - 120

Lab Sample ID: 600-189171-1 MSD

Matrix: Solid

Analysis Batch: 271032

Client Sample ID: Cell 20-Square102-S-2-3-190723

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.58	J	99.0	96.87		mg/Kg		96	80 - 120	1	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-270635/1-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270635

Analyte	MB Result	MB 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	U	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	U	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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
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 - 106.7

Lab Sample ID: 600-189168-A-1-C MS
Matrix: Solid
Analysis Batch: 270736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	B	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
Matrix: Solid
Analysis Batch: 270736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	B	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
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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-189168-A-1-C MS ^5
Matrix: Solid
Analysis Batch: 270736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	1.37	U	49.5	54.33		mg/Kg		110	75 - 125

Lab Sample ID: 600-189168-A-1-B DU
Matrix: Solid
Analysis Batch: 270736

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	B	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-A-1-B DU ^5
Matrix: Solid
Analysis Batch: 270736

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270635

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.589	U	0.595	U	mg/Kg		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	B	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

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

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270637

Analyte	MB Result	MB 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 13:01	1

Eurofins TestAmerica, Houston

QC Sample Results

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

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29000	32390		ug/Kg		111.7	59.7 - 115.2

Lab Sample ID: 600-189195-C-4-G MS

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	91.3		242	367.8		ug/Kg		114	75 - 125

Lab Sample ID: 600-189195-C-4-F DU

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	91.3		134.6	F3	ug/Kg		38	20

Lab Sample ID: MB 600-270759/7-A

Matrix: Solid

Analysis Batch: 270864

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270759

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.25	U	15.5	3.25	ug/Kg		07/30/19 15:59	07/31/19 12:39	1

Lab Sample ID: LCSSRM 600-270759/8-A

Matrix: Solid

Analysis Batch: 270864

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29000	32910		ug/Kg		113.5	59.7 - 115.2

Lab Sample ID: 600-189171-3 MS

Matrix: Solid

Analysis Batch: 270864

Client Sample ID: Cell 20-Square179-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 270759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.58	U F1	250	152.2	F1	ug/Kg		61	75 - 125

Lab Sample ID: 600-189171-3 DU

Matrix: Solid

Analysis Batch: 270864

Client Sample ID: Cell 20-Square179-S-2-3-190723

Prep Type: Total/NA

Prep Batch: 270759

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	3.58	U F1	3.58	U	ug/Kg		NC	20

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QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Method: 2540B - Percent Moisture

Lab Sample ID: 600-189171-1 DU

Matrix: Solid

Analysis Batch: 270569

Client Sample ID: Cell 20-Square102-S-2-3-190723

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	12.8		12.5		%		3	20
Percent Solids	87.2		87.5		%		0.4	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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	%

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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- Square96--S-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- Square96--S-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- Square96--S-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- Square96--S-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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QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

GC Semi VOA (Continued)

Prep Batch: 449843 (Continued)

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- Square96--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-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- Square96--S-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- Square96--S-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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QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

HPLC/IC (Continued)

Leach Batch: 271080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-189171-2	Cell 20- Square96--S-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- Square96--S-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- Square96--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
600-189171-1	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- Square96--S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-3	Cell 20-Square179-S-2-3-190723	Total/NA	Solid	6010B	270635
600-189171-3	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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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- Square96--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

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- Square96--S-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	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Lab Sample ID: 600-189171-2

Date Collected: 07/23/19 10:27

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.88 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 15:16	WS1	TAL HOU
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 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 14:26	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	270637	07/29/19 15:09	SOT	TAL HOU
Total/NA	Analysis	7471A		1			270749	07/30/19 13:56	SOT	TAL HOU
Total/NA	Analysis	2540B		1			270569	07/29/19 09:23	AP	TAL HOU

Client Sample ID: Cell 20-Square179-S-2-3-190723

Lab Sample ID: 600-189171-3

Date Collected: 07/23/19 10:52

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.73 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 Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Client Sample ID: Cell 20-Square179-S-2-3-190723

Lab Sample ID: 600-189171-3

Date Collected: 07/23/19 10:52

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-189171-4

Date Collected: 07/23/19 11:51

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-189171-5

Date Collected: 07/23/19 11:16

Matrix: Solid

Date Received: 07/25/19 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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	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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189171-1

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

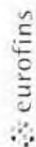
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

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 *

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

Eurofins TestAmerica, Houston


Chain of Custody Record



Eurofins TestAmerica

Client Information		Client Contact: Steve Rice		Lab PM: Kuchadkar, Sachin G		Carrier Tracking No(s): 600-69887-190772	
Company: ARCADIS U.S. Inc		Address: 11001 West 120th Avenue		City: Broomfield		State, Zip: CO, 80021	
Phone: 303-710-7537(Tel)		Email: steve.rice@arcadis.com		Project #		60009563	
Project Name: Chevron - Jal Land Farm Solis 2019		Site:		SSOW#			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Weater, Solid, Overstall, etc)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO / ORO	6020, 7471A	8015B_GRO - GRO(C6-C10)	8260B - BTEX Only	300-Cl	Analysis Requested	Preservation Codes:	Special Instructions/Note:
Cell 20 - Square 102-5-2-3-190723	7/23/19	9:53	G	Solid			X	X	X	X			A - HCL M - Hexane B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Cell 21 - Square 96-5-2-3-190723		10:27		Solid			X	X	X	X				
Cell 20 - Square 179-5-2-3-190723		10:52		Solid			X	X	X	X				
Cell 19 - Square 23-5-2-3-190723		11:51		Solid			X	X	X	X				
Cell 20 - Square 193-5-2-3-190723		11:16		Solid			X	X	X	X				
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										
				Solid										


 600-189171 Chain of Custody

Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:		Date:	
Relinquished by: Sarah Johnson		Date/Time: 7/23/19	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Custody Seal No.: 9102677	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Special Instructions/QC Requirements:			
Received by: Sarah Jones		Date/Time: 7/25/19 10:11	
Received by:		Date/Time:	
Received by:		Date/Time:	
Cooler Temperature(s) °C and Other Remarks:			

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	COMMENTS: 7/25/19 St
--	----------------------------

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

pH paper Lot # _____

Base samples are > pH 12: ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Samples received on ice? ☒ YES ☐ NO

CF = correction factor

[illegible]

Custody Seal Present: YES ☒ NO ☐

UNPACKED BY:

JOB NUMBER:

CARRIER/DRIVER:

CLIENT:

Date/Time Received:

Number of Coolers Received:

Grayhound

Answers

11:01 25 Jul 19

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

189171
Loc: 600

TestAmerica Houston

Sample Receipt Checklist

[illegible]

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189171-1

Login Number: 189171

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Torres, Sandra

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	4.1
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.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189171-1

Login Number: 189171

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (1/4").	True	
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: 600-189207-1

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



Authorized for release by:
8/16/2019 4:04:42 PM

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

sachin.kudchadkar@testamericainc.com

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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

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.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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
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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Client Sample ID: Cell26-Square198-S-2-3-190724

Lab Sample ID: 600-189207-1

Date Collected: 07/24/19 09:08

Matrix: Solid

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	0.702	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 Fac
1,2-Dichloroethane-d4 (Surr)	82		61 - 130	07/25/19 18:10	07/26/19 12:16	1
Dibromofluoromethane	86		68 - 140	07/25/19 18:10	07/26/19 12:16	1
Toluene-d8 (Surr)	96		50 - 130	07/25/19 18:10	07/26/19 12:16	1
4-Bromofluorobenzene	110		57 - 140	07/25/19 18:10	07/26/19 12:16	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	29.1	U	58.2	29.1	ug/Kg	-	07/29/19 11:00	07/29/19 13:48	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	91		65 - 125	07/29/19 11:00	07/29/19 13:48	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]	2.07	J	4.94	1.98	mg/Kg	-	07/29/19 08:21	07/31/19 05:22	1
Oil Range Organics (C28-C35)	1.98	U	4.94	1.98	mg/Kg	-	07/29/19 08:21	07/31/19 05:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		27 - 151	07/29/19 08:21	07/31/19 05:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.805	J	3.97	0.530	mg/Kg	-		08/03/19 14:15	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.46	UF1	16.5	3.46	ug/Kg	-	07/29/19 15:09	07/30/19 13:05	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Client Sample ID: Cell26-Square198-S-2-3-190724

Lab Sample ID: 600-189207-1

Date Collected: 07/24/19 09:08

Matrix: Solid

Date Received: 07/25/19 09:10

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

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

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
4-Bromofluorobenzene	111		57 - 140	07/25/19 18:10	07/26/19 12:40	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	30.2	U	60.3	30.2	ug/Kg		07/29/19 11:00	07/29/19 14:22	1

-C6-C10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	91		65 - 125	07/29/19 11:00	07/29/19 14:22	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]	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 Chromatography - Soluble

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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 Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

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	3.46	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

Matrix: Solid

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	0.806	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 Fac
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	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	27.7	U	55.3	27.7	ug/Kg	-	07/29/19 11:00	07/29/19 14:56	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 14:56	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]	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 05:47	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 05:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	64		27 - 151	07/29/19 08:21	07/31/19 05:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.51	J	3.98	0.531	mg/Kg	-		08/03/19 16:38	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Client Sample ID: Cell25-Square-64-S-2-3-190724

Lab Sample ID: 600-189207-4

Date Collected: 07/24/19 10:46

Matrix: Solid

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	0.677	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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	28.0	U	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	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]	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 05:59	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Client Sample ID: Cell25-Square-64-S-2-3-190724

Lab Sample ID: 600-189207-4

Date Collected: 07/24/19 10:46

Matrix: Solid

Date Received: 07/25/19 09:10

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 05:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		27 - 151				07/29/19 08:21	07/31/19 05:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.532	U	3.98	0.532	mg/Kg	-		08/03/19 14:33	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Date Collected: 07/24/19 11:14

Matrix: Solid

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	0.677	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
4-Bromofluorobenzene	113		57 - 140				07/25/19 18:10	07/26/19 13:53	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

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

Analyte	Result	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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.71	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 Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.21	J	3.98	0.531	mg/Kg	-		08/03/19 14:50	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

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	3.58	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	1
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

Date Collected: 07/24/19 11:43

Matrix: Solid

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.14	U	4.13	1.14	ug/Kg	-	07/25/19 18:10	07/26/19 14:17	1
Xylenes, Total	0.934	U	4.13	0.934	ug/Kg	-	07/25/19 18:10	07/26/19 14:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		61 - 130				07/25/19 18:10	07/26/19 14:17	1
Dibromofluoromethane	88		68 - 140				07/25/19 18:10	07/26/19 14:17	1
Toluene-d8 (Surr)	94		50 - 130				07/25/19 18:10	07/26/19 14:17	1
4-Bromofluorobenzene	107		57 - 140				07/25/19 18:10	07/26/19 14:17	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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	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 16:42	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]	2.56	J	4.87	1.95	mg/Kg	-	07/29/19 08:21	07/31/19 06:24	1
Oil Range Organics (C28-C35)	1.95	U	4.87	1.95	mg/Kg	-	07/29/19 08:21	07/31/19 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		27 - 151				07/29/19 08:21	07/31/19 06:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.946	J F2	4.00	0.534	mg/Kg	-		08/03/19 15:44	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	B	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

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	3.41	U	16.2	3.41	ug/Kg	-	07/29/19 15:09	07/30/19 13:25	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

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

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

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
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

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	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.
α	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)

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-189207-1	Cell26-Square198-S-2-3-190724	82	86	96	110
600-189207-2	Cell26-Square115-S-2-3-190724	84	87	95	111
600-189207-3	Cell25-Square-85-S-2-3-190724	89	89	95	110
600-189207-4	Cell25-Square-64-S-2-3-190724	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-2-3-190724	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
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F2 (65-125)			
400-173703-A-6-B MS	Matrix Spike	94			
400-173703-A-6-C MSD	Matrix Spike Duplicate	92			
600-189207-1	Cell26-Square198-S-2-3-190724	91			
600-189207-2	Cell26-Square115-S-2-3-190724	91			
600-189207-3	Cell25-Square-85-S-2-3-190724	92			
600-189207-4	Cell25-Square-64-S-2-3-190724	92			
600-189207-5	Cell25-Square-6-S-2-3-190724	91			
600-189207-6	Cell25-Square-93-S-2-3-190724	91			
LCS 400-449884/1-A	Lab Control Sample	94			
MB 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH1 (27-151)			
600-189207-1	Cell26-Square198-S-2-3-190724	74			
600-189207-1 MS	Cell26-Square198-S-2-3-190724	82			

Eurofins TestAmerica, Houston

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)		
Lab Sample ID	Client Sample ID	OTPH1 (27-151)
600-189207-1 MSD	Cell26-Square198-S-2-3-190724	89
600-189207-2	Cell26-Square115-S-2-3-190724	74
600-189207-3	Cell25-Square-85-S-2-3-190724	64
600-189207-4	Cell25-Square-64-S-2-3-190724	67
600-189207-5	Cell25-Square-6-S-2-3-190724	69
600-189207-6	Cell25-Square-93-S-2-3-190724	77
LCS 400-449843/2-A	Lab Control Sample	90
MB 400-449843/1-A	Method Blank	94

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Lab Sample ID: MB 600-270407/6

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	74		61 - 130
Dibromofluoromethane	84		68 - 140
Toluene-d8 (Surr)	98		50 - 130
4-Bromofluorobenzene	112		57 - 140

Lab Sample ID: LCSD 600-270407/4

Matrix: Solid

Analysis Batch: 270407

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Lab Sample ID: MB 400-449884/2-A

Matrix: Solid

Analysis Batch: 449856

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 449884

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	50.0	U	100	50.0	ug/Kg	-	07/29/19 11:00	07/29/19 11:53	1
-C6-C10									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	91		65 - 125				07/29/19 11:00	07/29/19 11:53	1

Lab Sample ID: LCS 400-449884/1-A

Matrix: Solid

Analysis Batch: 449856

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 449884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	1000	1040		ug/Kg	-	104	62 - 141		
-C6-C10									
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	94		65 - 125						

Lab Sample ID: 400-173703-A-6-B MS

Matrix: Solid

Analysis Batch: 449856

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 449884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)	50.0	U	967	947.3		ug/Kg	-	98	10 - 150		
-C6-C10											
Surrogate	MS %Recovery	MS Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	94		65 - 125								

Lab Sample ID: 400-173703-A-6-C MSD

Matrix: Solid

Analysis Batch: 449856

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 449884

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)	50.0	U	969	989.2		ug/Kg	-	102	10 - 150	4	32
-C6-C10											
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	92		65 - 125								

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

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

Analyte	MB Result	MB 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 08:21	07/31/19 04:18	1
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg	-	07/29/19 08:21	07/31/19 04:18	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	94		27 - 151	07/29/19 08:21	07/31/19 04:18	1

Lab Sample ID: LCS 400-449843/2-A
Matrix: Solid
Analysis Batch: 450128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449843

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics			276	196.0		mg/Kg	-	71	63 - 153		
[C10-C28]											
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
o-Terphenyl	90		27 - 151								

Lab Sample ID: 600-189207-1 MS
Matrix: Solid
Analysis Batch: 450128

Client Sample ID: Cell26-Square198-S-2-3-190724
Prep Type: Total/NA
Prep Batch: 449843

Sample Data: 100120										Sample Data: 100120	
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	2.07	J	267	171.4		mg/Kg	-	64	62 - 204		
Surrogate	MS %Recovery	MS Qualifier	Limits								
o-Terphenyl	82		27 - 151								

Lab Sample ID: 600-189207-1 MSD
Matrix: Solid
Analysis Batch: 450128

Client Sample ID: Cell26-Square198-S-2-3-190724
Prep Type: Total/NA
Prep Batch: 449843

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.07	J	272	195.5		mg/Kg	-	71	62 - 204	13	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	89		27 - 151								

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg	-		08/03/19 12:10	1

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-271100/2-A

Matrix: Solid

Analysis Batch: 271096

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	191.0		mg/Kg		95	90 - 110

Lab Sample ID: 600-189207-6 MS

Matrix: Solid

Analysis Batch: 271096

Client Sample ID: Cell25-Square-93-S-2-3-190724

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	0.946	J F2	100	121.2		mg/Kg		120	80 - 120

Lab Sample ID: 600-189207-6 MSD

Matrix: Solid

Analysis Batch: 271096

Client Sample ID: Cell25-Square-93-S-2-3-190724

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	0.946	J F2	100	96.05	F2	mg/Kg		95	80 - 120	23	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-270650/1-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270650

Analyte	MB Result	MB 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 10:39	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Barium	0.05500	J	1.00	0.0300	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Copper	0.174	U	0.500	0.174	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Iron	2.53	U	20.0	2.53	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Lead	0.105	U	0.500	0.105	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Selenium	0.259	U	2.00	0.259	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Zinc	0.108	U	1.50	0.108	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Antimony	0.232	U	2.50	0.232	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		07/29/19 16:25	07/30/19 10:39	1
Thallium	0.277	U	1.50	0.277	mg/Kg		07/29/19 16:25	07/30/19 10:39	1

Lab Sample ID: LCSSRM 600-270650/2-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270650

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.8	18.87		mg/Kg		73.1	67.1 - 106.6
Arsenic	69.4	61.95		mg/Kg		89.3	66.6 - 106.6
Barium	393	320.8		mg/Kg		81.6	64.6 - 106.6
Cadmium	268	246.8		mg/Kg		92.1	71.3 - 106.7

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-270650/2-A

Matrix: Solid

Analysis Batch: 270736

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 270650

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	63.6	53.73		mg/Kg		84.5	71.9 - 106.6
Copper	175	159.6		mg/Kg		91.2	72.0 - 106.9
Iron	17700	12550		mg/Kg		70.9	50.1 - 106.8
Manganese	616	486.4		mg/Kg		79.0	64.1 - 106.7
Lead	164	150.2		mg/Kg		91.6	71.3 - 106.7
Selenium	155	132.6		mg/Kg		85.6	65.2 - 106.5
Zinc	482	442.6		mg/Kg		91.8	69.7 - 106.6
Antimony	120	27.13		mg/Kg		22.6	20.0 - 106.7
Beryllium	293	254.1		mg/Kg		86.7	72.4 - 106.8
Thallium	81.0	69.74		mg/Kg		86.1	63.2 - 106.7

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	B	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

Analysis Batch: 270736

Client Sample ID: Cell25-Square-93-S-2-3-190724

Prep Type: Total/NA

Prep Batch: 270650

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	3.40		47.6	57.88		mg/Kg		114	75 - 125
Selenium	1.30	U	47.6	56.40		mg/Kg		118	75 - 125
Zinc	9.73	F1	23.8	40.21	F1	mg/Kg		128	75 - 125
Antimony	1.16	U	47.6	37.48		mg/Kg		79	75 - 125
Beryllium	0.275	J	47.6	54.24		mg/Kg		113	75 - 125
Thallium	1.39	U	47.6	52.55		mg/Kg		110	75 - 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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	B	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	J F1	0.227	U	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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	F1 B	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	mg/Kg		0.1	20
Iron	3550		3500		mg/Kg		1	20
Manganese	29.8	F1	29.90		mg/Kg		0.4	20
Lead	3.40		3.162		mg/Kg		7	20
Selenium	1.30	U	1.27	U	mg/Kg		NC	20
Zinc	9.73	F1	9.314		mg/Kg		4	20
Antimony	1.16	U	1.14	U	mg/Kg		NC	20
Beryllium	0.275	J	0.2696	J	mg/Kg		2	20
Thallium	1.39	U	1.36	U	mg/Kg		NC	20

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 270637

Analyte	MB Result	MB 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 13:01	1

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29000	32390		ug/Kg		111.7	59.7 - 115. 2

Lab Sample ID: 600-189207-1 MS

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Cell26-Square198-S-2-3-190724

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.46	U F1	242	153.0	F1	ug/Kg		63	75 - 125

Lab Sample ID: 600-189207-1 DU

Matrix: Solid

Analysis Batch: 270749

Client Sample ID: Cell26-Square198-S-2-3-190724

Prep Type: Total/NA

Prep Batch: 270637

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	3.46	U F1	3.46	U	ug/Kg		NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-189207-1 DU

Matrix: Solid

Analysis Batch: 270527

Client Sample ID: Cell26-Square198-S-2-3-190724

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	12.7		13.5		%		6	20
Percent Solids	87.3		86.5		%		0.9	20

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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	%

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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 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	
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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

HPLC/IC

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

Client Sample ID: Cell26-Square198-S-2-3-190724

Lab Sample ID: 600-189207-1

Date Collected: 07/24/19 09:08

Matrix: Solid

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
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	AP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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-Square85-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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 600-189207-4

Date Collected: 07/24/19 10:46

Matrix: Solid

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			4.65 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 HOU
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

Lab Sample ID: 600-189207-5

Date Collected: 07/24/19 11:14

Matrix: Solid

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			4.65 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Total/NA	Analysis	2540B		1			270527	07/27/19 18:36	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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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 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	Analyte	
2540B		Solid	Percent Moisture	
2540B		Solid	Percent Solids	

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	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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-189207-1

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 *

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

Eurofins TestAmerica, Houston

Chain of Custody Record



Environmental Testing
 Toxic Analysis

Client Information Client Contact: Steve Rice Company: ARCADIS U.S. Inc. Address: 11001 West 120th Avenue City: Broomfield State, Zip: CO, 80021 Phone: 303-710-7537(Tel) Email: steve.rice@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2019 Site:		Sampler Sarah Johnson/Calum F. Phone: 9314360316 Lab PM: Kuchadkar, Sachin G E-Mail: sachin.kuchadkar@testamerica.com		Carrier Tracking No(s) 600-69867-190772 Page: Job #	
Analysis Requested					
Due Date Requested: 7/26/19 TAT Requested (days): 40 hr rush		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
PO # Purchase Order Requested WFO # Project # 60009563 SSOW#		Preservation Codes: M - Hexane N - Nole O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Sample Identification		Total Number of Containers			
Sample ID 01126-Square 198-S-2-3-190724 01126-Square 115-S-2-3-190724 01125-Square 85-S-2-3-190724 01125-Square 04-S-2-3-190724 01125-Square 11-S-2-3-190724 01125-Square 93-S-2-3-190724 01125-Square 11-S-2-3-190724	Sample Date 7/24/19 7/24/19 7/24/19 7/24/19 7/24/19 7/24/19	Sample Time 9:08 9:43 10:16 10:46 11:14 11:43	Sample Type (C=Comp, G=grab) G G I I I I	Matrix (W=Water, S=Solid, O=Other) Solid Solid Solid Solid Solid Solid	Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) 8015B, PRO / ORO 6020, 7471A 8015B, GRO - GRO(C6-C10) 8260B - BTEX Only 300 - CI
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Method of Shipment:			
Relinquished by: [Signature] Date/Time: 7/24/19 2:12 Company: Arcadis		Date/Time: 7/25/19 9:10 Company: [Signature]			
Relinquished by: [Signature] Date/Time: 7/24/19 2:12 Company: Arcadis		Date/Time: 7/25/19 9:10 Company: [Signature]			
Relinquished by: [Signature] Date/Time: 7/24/19 2:12 Company: Arcadis		Date/Time: 7/25/19 9:10 Company: [Signature]			
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:			

TestAmerica Houston

Loc: 600

189207

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

19 JUL 25 9:10 4

JOB NUMBER:

Date/Time Received:

CLIENT:

UNPACKED BY:

CARRIER/DRIVER:

Custody Seal Present:

☒ YES☐ NO

Number of Coolers Received:

Cooler ID	Temp Blank	Trips Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
W13	Y / N	Y / N	1.7	078	-0.1	1.8
	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				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice?

☒ YES☐ NO

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:



600-189207 Waybill



600-189207 Waybill

TRK# 7886 7116 9609
0201

AB LKSA

THU - 25 JUL 10:30A
PRIORITY OVERNIGHT

77040
TX-US IAH



Client Information		Carrier Tracking Info		Lab PM	
Client Contact: Sarah Johnson/California Client Name: Steve Rice Company: ARCADIS U.S. Inc		Carrier Tracking No(s): 600-69887-190772 Page: 1 Job #: 9314360316		Lab PM: Kudchadkar, Sachin G E-Mail: sachin.kudchadkar@testamericainc.com	
Address: 11001 West 120th Avenue City: Broomfield State: CO Zip: 80021 Phone: 303-710-7537(Tel) Email: steve.rice@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2019 Site: Site		Analysis Requested Due Date Requested: 7/26/19 TAT Requested (days): 40 hr rush PO #: Purchase Order Requested: WO #: Project #: 80009563 SSOW#: 			
Sample Identification Sample ID: 01126-Square 198-S-2-3-190724 Sample ID: 01126-Square 195-S-2-3-190724 Sample ID: 01125-Square 95-S-2-3-190724 Sample ID: 01125-Square 04-S-2-3-190724 Sample ID: 01125-Square 0-S-2-3-190724 Sample ID: 01125-Square 93-S-2-3-190724 Sample ID: 01125-Square 0-S-2-3-190724		Field Filled Sample (Yes or No) Perform MS/MSD (Yes or No) 6015B_GRO - GRO/C6-C10 6020_7471A 8260B - BTEX Only 300 - Cl Total Number of Containers: 5			
Sample Information Sample Date: 7/24/19 Sample Time: 9:08 Sample Type: G Matrix: Solid		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)			
Sample Disposal Possible Hazard Identification: <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab Special Instructions/OC Requirements:			
Empty Kit Relinquished by Relinquished by: Sarah Johnson Relinquished by: Steve Rice Relinquished by: 		Method of Shipment Date/Time: 7/24/19 2:12 Date/Time: 7/27-19 8:17 Date/Time: 1:40 PM			
Custody Seal No: 91021075 Custody Seal Intact: Yes A Yes A No		Company Company: Arcadis Company: Arcadis Company: Arcadis			

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189207-1

Login Number: 189207

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	1.8
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.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-189207-1

Login Number: 189207

List Number: 2

Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

List Creation: 07/27/19 11:33 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	947053
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4°C IR-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 $<6\text{mm}$ (1/4").	True	
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: 600-191317-1

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

For:

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

Attn: Steve Rice



Authorized for release by:
9/27/2019 4:08:40 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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: 600-191317-1

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.

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

Job ID: 600-191317-1

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-191317-1	Cell 21-Square 1-s-2'-3'-190903	Solid	09/03/19 14:25	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	

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Lab Sample ID: 600-191317-1

Date Collected: 09/03/19 14:25

Matrix: Solid

Date Received: 09/04/19 10:34

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

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	1
Ethylbenzene	0.289	U	2.37	0.289	ug/Kg	-	09/13/19 09:44	09/13/19 17:30	1
Toluene	0.473	U	2.37	0.473	ug/Kg	-	09/13/19 09:44	09/13/19 17:30	1
Xylenes, Total	0.900	U	4.73	0.900	ug/Kg	-	09/13/19 09:44	09/13/19 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		72 - 122				09/13/19 09:44	09/13/19 17:30	1
Dibromofluoromethane	93		79 - 123				09/13/19 09:44	09/13/19 17:30	1
Toluene-d8 (Surr)	104		80 - 120				09/13/19 09:44	09/13/19 17:30	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1310	U	2610	1310	ug/Kg	-	09/11/19 12:30	09/11/19 16:56	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125				09/11/19 12:30	09/11/19 16:56	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]	3.52	J	4.97	1.99	mg/Kg	-	09/08/19 18:26	09/11/19 02:38	1
Oil Range Organics (C28-C35)	1.99	U	4.97	1.99	mg/Kg	-	09/08/19 18:26	09/11/19 02:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		27 - 151				09/08/19 18:26	09/11/19 02:38	1

Client Sample ID: Cell 26-Square 18-s-2'-3'-190903

Lab Sample ID: 600-191317-2

Date Collected: 09/03/19 14:50

Matrix: Solid

Date Received: 09/04/19 10:34

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

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 Range Organics - (GC)

Analyte	Result	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	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.43	J	4.96	1.98	mg/Kg	-	09/08/19 18:26	09/11/19 02:51	1
Oil Range Organics (C28-C35)	1.98	U	4.96	1.98	mg/Kg	-	09/08/19 18:26	09/11/19 02:51	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Client Sample ID: Cell 26-Square 18-s-2'-3'-190903

Lab Sample ID: 600-191317-2

Date Collected: 09/03/19 14:50

Matrix: Solid

Date Received: 09/04/19 10:34

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		27 - 151	09/08/19 18:26	09/11/19 02:51	1

Client Sample ID: Cell 25-Square 42-s-2'-3'-190903

Lab Sample ID: 600-191317-3

Date Collected: 09/03/19 15:30

Matrix: Solid

Date Received: 09/04/19 10:34

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

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	Qualifier	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 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
<i>a,a,a</i> -Trifluorotoluene (fid)	100		65 - 125	09/11/19 12:30	09/11/19 17:40	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]	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
<i>o</i> -Terphenyl	73		27 - 151	09/08/19 18:26	09/11/19 03:03	1

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 Compounds (GC/MS)

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
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: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	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 18:06	50

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

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	Result	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

Lab Sample ID: 600-191317-5

Date Collected: 09/03/19 13:35

Matrix: Solid

Date Received: 09/04/19 10:34

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.358	U	2.67	0.358	ug/Kg		09/13/19 09:44	09/13/19 19:22	1
Ethylbenzene	0.326	U	2.67	0.326	ug/Kg		09/13/19 09:44	09/13/19 19:22	1
Toluene	0.534	U	2.67	0.534	ug/Kg		09/13/19 09:44	09/13/19 19:22	1
Xylenes, Total	1.01	U	5.34	1.01	ug/Kg		09/13/19 09:44	09/13/19 19:22	1

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	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]	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

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

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.321	U	2.40	0.321	ug/Kg		09/13/19 09:44	09/13/19 19:50	1
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
Xylenes, Total	0.912	U	4.80	0.912	ug/Kg		09/13/19 09:44	09/13/19 19:50	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1240	U	2480	1240	ug/Kg	-	09/11/19 12:30	09/11/19 18:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125	09/11/19 12:30	09/11/19 18:59	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]	3.03	J	4.77	1.91	mg/Kg	-	09/08/19 18:26	09/11/19 03:54	1
Oil Range Organics (C28-C35)	1.91	U	4.77	1.91	mg/Kg	-	09/08/19 18:26	09/11/19 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	78		27 - 151	09/08/19 18:26	09/11/19 03:54	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.309	U	2.31	0.309	ug/Kg	-	09/13/19 09:44	09/13/19 20:18	1
Ethylbenzene	0.282	U	2.31	0.282	ug/Kg	-	09/13/19 09:44	09/13/19 20:18	1
Toluene	0.462	U	2.31	0.462	ug/Kg	-	09/13/19 09:44	09/13/19 20:18	1
Xylenes, Total	0.877	U	4.62	0.877	ug/Kg	-	09/13/19 09:44	09/13/19 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 122	09/13/19 09:44	09/13/19 20:18	1
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	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	1200	U	2410	1200	ug/Kg	-	09/11/19 12:30	09/11/19 19:29	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125	09/11/19 12:30	09/11/19 19:29	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]	4.80	J	4.85	1.94	mg/Kg	-	09/08/19 18:26	09/11/19 04:07	1
Oil Range Organics (C28-C35)	3.44	J	4.85	1.94	mg/Kg	-	09/08/19 18:26	09/11/19 04:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	77		27 - 151	09/08/19 18:26	09/11/19 04:07	1

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

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.
---	--

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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α	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)
-----	---------------------------------------

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (72-122)	DBFM (79-123)	TOL (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 1-s-2'-3'-190903	95	93	104
600-191317-2	Cell 26-Square 18-s-2'-3'-190903	96	96	103
600-191317-3	Cell 25-Square 42-s-2'-3'-190903	98	96	104
600-191317-4	Cell 19-Square 197-s-2'-3'-190903	97	94	103
600-191317-5	Cell 17-Square 49-s-2'-3'-190903	96	93	104
600-191317-6	Cell 18-Square 20-s-2'-3'-190903	95	94	103
600-191317-7	Cell 20-Square 85-s-2'-3'-190903	96	95	104
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-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TFT-F2 (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		

Surrogate Legend

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

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH1 (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

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

Lab Sample ID: MB 400-456844/2-A

Matrix: Solid

Analysis Batch: 456801

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456844

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	48.58		ug/Kg		97	65 - 130
Ethylbenzene	50.0	53.51		ug/Kg		107	70 - 130
Toluene	50.0	51.18		ug/Kg		102	70 - 130
Xylenes, Total	100	106.7		ug/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS 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

Surrogate	MS %Recovery	MS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	2230		4080	5938		ug/Kg		91	35 - 130	8	39
Surrogate	MSD %Recovery	MSD 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

Matrix: Solid

Analysis Batch: 456419

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456518

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	50.0	U	100	50.0	ug/Kg		09/11/19 12:30	09/11/19 13:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125				09/11/19 12:30	09/11/19 13:21	1

Lab Sample ID: LCS 400-456518/1-A

Matrix: Solid

Analysis Batch: 456419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 456518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1000	925.0		ug/Kg		93	62 - 141
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid)	99		65 - 125				

Lab Sample ID: 600-191317-1 MS

Matrix: Solid

Analysis Batch: 456419

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Prep Type: Total/NA

Prep Batch: 456518

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1310	U	26100	26570		ug/Kg		102	10 - 150
Surrogate	MS %Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	101		65 - 125						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	1310	U	26100	26220		ug/Kg		100	10 - 150	1	32

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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	
Surrogate	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	102		65 - 125

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

Lab Sample ID: MB 400-455952/1-A

Matrix: Solid

Analysis Batch: 456314

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455952

Analyte	MB	MB								
	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		09/08/19 18:25	09/11/19 01:22	1	
Oil Range Organics (C28-C35)	2.00	U	5.00	2.00	mg/Kg		09/08/19 18:25	09/11/19 01:22	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
o-Terphenyl	78		27 - 151				09/08/19 18:25	09/11/19 01:22	1	

Lab Sample ID: LCS 400-455952/2-A

Matrix: Solid

Analysis Batch: 456314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455952

Analyte		Spike	LCS	LCS						
		Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	
Diesel Range Organics [C10-C28]		272	221.0		mg/Kg		81	63 - 153		
Surrogate	%Recovery	Qualifier	Limits							
o-Terphenyl	82		27 - 151							

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

Analyte	Sample	Sample	Spike	MS	MS					
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits
Diesel Range Organics [C10-C28]	9.20		268	214.9		mg/Kg		77	62 - 204	
Surrogate	%Recovery	Qualifier	Limits							
o-Terphenyl	86		27 - 151							

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

Analyte	Sample	Sample	Spike	MSD	MSD						
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Diesel Range Organics [C10-C28]	9.20		269	210.9		mg/Kg		75	62 - 204	2	30
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	82		27 - 151								

Eurofins TestAmerica, Houston

Unadjusted Detection Limits

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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 Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Client Sample ID: Cell 21-Square 1-s-2'-3'-190903

Lab Sample ID: 600-191317-1

Date Collected: 09/03/19 14:25

Matrix: Solid

Date Received: 09/04/19 10:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Date Collected: 09/03/19 14:50

Matrix: Solid

Date Received: 09/04/19 10:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.567 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 17:58	BSW	TAL PEN
Total/NA	Prep	5035			9.92 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 17:14	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 02:51	JAW	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

Matrix: Solid

Date Received: 09/04/19 10:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	AH	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

Client Sample ID: Cell 17-Square 49-s-2'-3'-190903

Lab Sample ID: 600-191317-5

Date Collected: 09/03/19 13:35

Matrix: Solid

Date Received: 09/04/19 10:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.831 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 20:18	BSW	TAL PEN
Total/NA	Prep	5035			10.377 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 19:29	GRK	TAL PEN
Total/NA	Prep	3546			15.45 g	1 mL	455952	09/08/19 18:26	AH	TAL PEN
Total/NA	Analysis	8015B		1			456314	09/11/19 04:07	JAW	TAL PEN

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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 Date
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
Iowa	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
Project/Site: Chevron - Jal Land Farm Soils 2019

Job ID: 600-191317-1

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

Chain of Custody Record



Client Information		Sampler: <i>Eyan Nanny</i>		Lab PM: <i>NA</i>		Carrier Tracking No(s):		COC No: 600-70709-19356.1	
Client Contact: Steve Rice		Phone: <i>866-543-1945</i>		E-Mail: <i>sachin.kudchadkar@lestamericainc.com</i>				Page: <i>1 of 1</i>	
Company: ARCADIS U.S. Inc.		Address: 11001 West 120th Avenue		City: Broomfield		State: CO		Zip: 80021	
Phone: 303-710-7537 (Tel)		PO #: <i>NA</i>		Purchase Order Requested		TAT Requested (days): <i>NA</i>		Due Date Requested: <i>NA</i>	
Email: <i>steve.rice@arcadis.com</i>		Project #: 60009563		Project Name: Chevron - Jal Land Farm Soils 2018		Site: <i>Udorse Zone - Jal Land Farm</i>		SSOWR: <i>NA</i>	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, G=grab)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8015B_DRO - (MOD) DRO C10-C28 - Pensacola		8015_GRO (C6-C10) Pensacola		8260B - BTEX Only		Total Number of Containers	Special Instructions/Note:
					Preservation Code:	Preservation Code:	Preservation Code:	Preservation Code:	Preservation Code:	Preservation Code:	Preservation Code:					
Cell 21 - Square 1-S-2'-3'-190903	9-3-19	1425	G	Solid												
Cell 26 - Square 18-S-2'-3'-190903	9-3-19	1450	G	Solid												
Cell 25 - Square 42-S-2'-3'-190903	9-3-19	1530	G	Solid												
Cell 19 - Square 197-S-2'-3'-190903	9-3-19	1215	G	Solid												
Cell 17 - Square 49-S-2'-3'-190903	9-3-19	1335	G	Solid												
Cell 18 - Square 45	9-3-19	1245	G	Solid												
Cell 18 - Square 20-S-2'-3'-190903	9-3-19	1245	G	Solid												
Cell 20 - Square 85-S-2'-3'-190903	9-3-19	1145	G	Solid												

Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by		Date: <i>9-3-19/2000</i>	
Relinquished by: <i>[Signature]</i>		Company: <i>Arcadis</i>	
Relinquished by: <i>[Signature]</i>		Company: <i>Arcadis</i>	
Relinquished by: <i>[Signature]</i>		Company: <i>Arcadis</i>	
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Special Instructions/QC Requirements:			
Method of Shipment: <i>Fed-Ex Air Priority</i>		Date/Time: <i>9/4/19 1034</i>	
Received by: <i>Sandra Torres</i>		Company: <i>TAH</i>	
Received by:		Date/Time:	
Received by:		Date/Time:	
Cooler Temperature(s) °C and Other Remarks:			

Loc: 600
191317

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

Sample Receipt Checklist

19 SEP 4 10:34

JOB NUMBER: 191317

Date/Time Received: _____

CLIENT: Arcadis

UNPACKED BY: ST

CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
BVI	Y / N	Y / N	2.3	678	+0.1	2.4
	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? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot # _____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☒ N/A

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? ☒ YES ☐ NO

COMMENTS:

TRK# 7895 6527 5991

9/4/19
ST

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 600-191317-1

Login Number: 191317

List Number: 1

Creator: Torres, Sandra

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	2.4
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 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 \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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:

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

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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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Method Summary

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

Job ID: 600-196845-1

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 and/or 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

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	Asset ID
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	
600-196845-3	Cell17-Square111-S-2-3-191202	Solid	12/02/19 10:54	12/04/19 10:35	
600-196845-4	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	
600-196845-7	Cell18-Square176-S-2-3-191202	Solid	12/02/19 12:35	12/04/19 10:35	
600-196845-8	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	
600-196845-11	Cell19-Square70-S-2-3-191202	Solid	12/02/19 13:59	12/04/19 10:35	

Client Sample Results

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

Job ID: 600-196845-1

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 79.9

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U H	0.00500	0.000630	mg/Kg	☼	12/04/19 15:40	12/05/19 17:58	1
Ethylbenzene	0.00102	U H	0.00500	0.00102	mg/Kg	☼	12/04/19 15:40	12/05/19 17:58	1
Toluene	0.00138	U H	0.00500	0.00138	mg/Kg	☼	12/04/19 15:40	12/05/19 17:58	1
Xylenes, Total	0.00113	U H	0.00500	0.00113	mg/Kg	☼	12/04/19 15:40	12/05/19 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		61 - 130	12/04/19 15:40	12/05/19 17:58	1
Dibromofluoromethane	98		68 - 140	12/04/19 15:40	12/05/19 17:58	1
Toluene-d8 (Surr)	93		50 - 130	12/04/19 15:40	12/05/19 17:58	1
4-Bromofluorobenzene	91		57 - 140	12/04/19 15:40	12/05/19 17:58	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.8	U	99.4	63.8	ug/Kg	—	12/07/19 18:04	12/08/19 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	88		20 - 140	12/07/19 18:04	12/08/19 21:05	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]	138		49.5	34.2	mg/Kg	—	12/09/19 10:03	12/10/19 20:53	1
C28-C36	34.2	U	49.5	34.2	mg/Kg	—	12/09/19 10:03	12/10/19 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	74		26 - 125	12/09/19 10:03	12/10/19 20:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110	b	4.97	0.663	mg/Kg	☼		12/20/19 05:10	1
Nitrate as N	92.1	H b	2.48	0.312	mg/Kg	☼		12/20/19 05:10	1
Fluoride	4.91		2.48	0.747	mg/Kg	☼		12/20/19 05:10	1
Sulfate	120		6.21	1.19	mg/Kg	☼		12/20/19 05:10	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.146	U	0.491	0.146	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Arsenic	2.88		1.23	0.268	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Barium	65.7		1.23	0.0368	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Beryllium	0.466		0.307	0.0178	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Calcium	9190		123	1.06	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Cadmium	0.203	J	0.307	0.0314	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Chromium	8.27		0.614	0.0621	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Copper	5.60		0.614	0.214	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Iron	7730		24.6	3.11	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Potassium	1850		123	13.5	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Magnesium	1330		123	2.36	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Manganese	132		1.84	0.0468	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Sodium	1000	b	123	1.09	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Lead	6.83		0.614	0.129	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Antimony	0.285	U	3.07	0.285	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1
Selenium	0.318	U	2.46	0.318	mg/Kg	☼	12/07/19 11:54	12/09/19 15:47	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196845-1

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 79.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

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	0.0192	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
Cyanide, Total	0.0885	J	0.148	0.0222	mg/Kg	☼	12/09/19 10:56	12/09/19 13:30	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00819	J	0.0187	0.00393	mg/Kg	☼	12/11/19 14:22	12/12/19 10:35	1

General Chemistry

Analyte	Result	Qualifier	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

Client Sample Results

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

Job ID: 600-196845-1

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

Percent Solids: 77.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.147	U	0.494	0.147	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Arsenic	1.92		1.24	0.269	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Barium	41.2		1.24	0.0371	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Beryllium	0.272	J	0.309	0.0179	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Calcium	10600		124	1.07	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Cadmium	0.105	J	0.309	0.0316	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Chromium	4.97		0.618	0.0625	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Copper	2.85		0.618	0.215	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Iron	4480		24.7	3.13	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Potassium	1040		124	13.6	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Magnesium	898		124	2.37	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Manganese	58.2		1.85	0.0471	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Sodium	91.2	J b	124	1.09	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Lead	3.92		0.618	0.130	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Antimony	0.287	U	3.09	0.287	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Selenium	0.320	U	2.47	0.320	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Thallium	0.342	U	1.85	0.342	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	1
Zinc	11.3		1.85	0.133	mg/Kg	☼	12/07/19 11:54	12/09/19 15:51	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	0.00775	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	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.2		1.0	1.0	%	—		12/06/19 11:12	1
Percent Solids	77.8		1.0	1.0	%	—		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

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 93.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196845-1

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

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	☼	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 or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0109	J	0.0176	0.00370	mg/Kg	☼	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
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: Cell18-Square179-S-2-3-191202

Lab Sample ID: 600-196845-5

Date Collected: 12/02/19 11:41

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 75.1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000619	U H	0.00491	0.000619	mg/Kg	☼	12/04/19 15:40	12/05/19 18:21	1
Ethylbenzene	0.00100	U H	0.00491	0.00100	mg/Kg	☼	12/04/19 15:40	12/05/19 18:21	1
Toluene	0.00136	U H	0.00491	0.00136	mg/Kg	☼	12/04/19 15:40	12/05/19 18:21	1
Xylenes, Total	0.00111	U H	0.00491	0.00111	mg/Kg	☼	12/04/19 15:40	12/05/19 18:21	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 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, Ion 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	H b	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196845-1

Client Sample ID: Cell18-Square179-S-2-3-191202

Lab Sample ID: 600-196845-5

Date Collected: 12/02/19 11:41

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 75.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	J b	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 (Manual Cold Vapor Technique)

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

Lab Sample ID: 600-196845-6

Date Collected: 12/02/19 12:13

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 78.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196845-1

Client Sample ID: Cell18-Square118-S-2-3-191202

Lab Sample ID: 600-196845-6

Date Collected: 12/02/19 12:13

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 78.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.320	U	2.47	0.320	mg/Kg	☼	12/07/19 11:54	12/09/19 16:07	1
Thallium	0.343	U	1.86	0.343	mg/Kg	☼	12/07/19 11:54	12/09/19 16:07	1
Zinc	20.3		1.86	0.134	mg/Kg	☼	12/07/19 11:54	12/09/19 16:07	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	0.0142	J	0.0210	0.00441	mg/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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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
Thallium	0.325	U	1.76	0.325	mg/Kg	☼	12/07/19 11:54	12/09/19 16:08	1
Zinc	12.3		1.76	0.127	mg/Kg	☼	12/07/19 11:54	12/09/19 16:08	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	0.0103	J	0.0208	0.00438	mg/Kg	☼	12/11/19 14:22	12/12/19 10:49	1

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

Client Sample Results

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

Job ID: 600-196845-1

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

Percent Solids: 90.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000571	U H	0.00453	0.000571	mg/Kg	☼	12/04/19 15:40	12/05/19 18:43	1
Ethylbenzene	0.000925	U H	0.00453	0.000925	mg/Kg	☼	12/04/19 15:40	12/05/19 18:43	1
Toluene	0.00125	U H	0.00453	0.00125	mg/Kg	☼	12/04/19 15:40	12/05/19 18:43	1
Xylenes, Total	0.00102	U H	0.00453	0.00102	mg/Kg	☼	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 Range Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	64.1	U	99.8	64.1	ug/Kg	—	12/07/19 18:04	12/08/19 22:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	88		20 - 140				12/07/19 18:04	12/08/19 22:24	1

Eurofins TestAmerica, Houston

Client Sample Results

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

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

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

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, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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
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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196845-1

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

Percent Solids: 93.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.32		1.03	0.224	mg/Kg	☼	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 (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	J b	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

Client Sample Results

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

Job ID: 600-196845-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00754	J	0.0173	0.00363	mg/Kg	☼	12/11/19 14:22	12/12/19 10:57	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	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

Definitions/Glossary

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

Job ID: 600-196845-1

Qualifiers

GC/MS VOA

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
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
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.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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.

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.
□	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

Definitions/Glossary

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

Job ID: 600-196845-1

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)

Surrogate Summary

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

Job ID: 600-196845-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-196845-1	Cell17-Square204-S-2-3-191202	96	98	93	91
600-196845-5	Cell18-Square179-S-2-3-191202	95	98	91	89
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TFT2 (20-140)	TFT2 (20-140)
600-196845-1	Cell17-Square204-S-2-3-191202	88	88
600-196845-5	Cell18-Square179-S-2-3-191202	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
Surrogate Legend			
TFT = Trifluorotoluene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	OTPH1 (26-125)
600-196845-1	Cell17-Square204-S-2-3-191202	74
600-196845-1 MS	Cell17-Square204-S-2-3-191202	90
600-196845-1 MSD	2	
	Cell17-Square204-S-2-3-191202	75
600-196845-5	2	
	Cell18-Square179-S-2-3-191202	70
600-196845-9	2	
	Cell19-Square83-S-2-3-191202	72
LCS 240-414439/2-A	Lab Control Sample	86
MB 240-414439/1-A	Method Blank	75
Surrogate Legend		
OTPH = o-Terphenyl (Surr)		

QC Sample Results

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

Job ID: 600-196845-1

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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	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

Analysis Batch: 282157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

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

Job ID: 600-196845-1

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg		12/07/19 18:04	12/08/19 15:48	1
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg		12/07/19 18:04	12/08/19 15:48	1
Surrogate	MB %Recovery	MB 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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg		90	75 - 126
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg		90	75 - 126
Surrogate	LCS %Recovery	LCS 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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 414439

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		26 - 125				12/09/19 10:02	12/10/19 17:44	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	209.3		mg/Kg		84	45 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl (Surr)	86		26 - 125				

QC Sample Results

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

Job ID: 600-196845-1

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

Lab Sample ID: 600-196845-1 MS

Matrix: Solid

Analysis Batch: 414744

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 414439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	138		249	222.7		mg/Kg		34	27 - 120
Surrogate	MS %Recovery	MS Qualifier	Limits						
<i>o</i> -Terphenyl (Surr)	90		26 - 125						

Lab Sample ID: 600-196845-1 MSD

Matrix: Solid

Analysis Batch: 414744

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 414439

Top Data: 11 Rows											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10 - C28]	138		243	186.7	N1	mg/Kg	-	20	27 - 120	18	40
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
<i>o</i> -Terphenyl (Surr)	75		26 - 125								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-283597/1-A

Matrix: Solid

Analysis Batch: 283465

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.286	J	4.00	0.534	mg/Kg			12/20/19 02:27	1
Fluoride	0.601	U	2.00	0.601	mg/Kg			12/20/19 02:27	1
Sulfate	0.957	U	5.00	0.957	mg/Kg			12/20/19 02:27	1

Lab Sample ID: LCS 600-283597/2-A

Matrix: Solid

Analysis Batch: 283465

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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		mg/Kg		98	90 - 110

Lab Sample ID: MB 600-283597/1-A

Matrix: Solid

Analysis Batch: 283466

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.748	J	2.00	0.251	mg/Kg			12/20/19 02:27	1

QC Sample Results

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

Job ID: 600-196845-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-283597/2-A

Matrix: Solid

Analysis Batch: 283466

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	100	101.7		mg/Kg		102	90 - 110

Lab Sample ID: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283605

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Client Sample ID: Cell19-Square83-S-2-3-191202

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.46	b	106	132.8	N1	mg/Kg	☼	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

Client Sample ID: Cell19-Square83-S-2-3-191202

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

QC Sample Results

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

Job ID: 600-196845-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-283603/2-A

Matrix: Solid

Analysis Batch: 283606

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	100	100.3		mg/Kg		100	90 - 110

Lab Sample ID: 600-196845-9 MS

Matrix: Solid

Analysis Batch: 283606

Client Sample ID: Cell19-Square83-S-2-3-191202

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	5.22	H	21.2	22.73		mg/Kg	☼	83	80 - 120

Lab Sample ID: 600-196845-9 MSD

Matrix: Solid

Analysis Batch: 283606

Client Sample ID: Cell19-Square83-S-2-3-191202

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282394

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	34.8	28.23		mg/Kg		81.1	58.3 - 112.

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Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196845-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282394/2-A

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	319	283.1		mg/Kg		88.8	60.2 - 111.6
Barium	299	234.9		mg/Kg		78.6	59.2 - 110.0
Beryllium	190	165.1		mg/Kg		86.9	64.2 - 110.0
Calcium	16000	13630		mg/Kg		85.2	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 - 121.5
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 - 110.1
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 - 110.2
Selenium	322	281.6		mg/Kg		87.4	57.8 - 109.9
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

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell17-Square14-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.122	U	12.6	11.21		mg/Kg	☼	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	J b	504	566.4		mg/Kg	☼	100	75 - 125

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196845-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-196845-4 MS

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell17-Square14-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	9.50		50.4	55.08		mg/Kg	✱	90	75 - 125
Antimony	0.238	U	75.6	40.23	N1	mg/Kg	✱	53	75 - 125
Selenium	0.266	U	50.4	45.49		mg/Kg	✱	90	75 - 125
Thallium	0.285	U	50.4	44.21		mg/Kg	✱	88	75 - 125
Zinc	19.0		25.2	46.85		mg/Kg	✱	111	75 - 125

Lab Sample ID: 600-196845-4 DU

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell17-Square14-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.122	U	0.123	U	mg/Kg	✱	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	J F	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	J b	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)

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		12/11/19 14:22	12/12/19 10:26	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.224	0.2270		mg/Kg		101	70 - 130

QC Sample Results

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

Job ID: 600-196845-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-196845-1 MS

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282758

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0192	J	0.289	0.3184		mg/Kg	☼	104	75 - 125

Lab Sample ID: 600-196845-11 MS

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Cell19-Square70-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282758

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00754	J	0.254	0.2703		mg/Kg	☼	104	75 - 125

Lab Sample ID: 600-196845-1 DU

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282758

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0192	J	0.01395	J F	mg/Kg	☼	31	20

Lab Sample ID: 600-196845-11 DU

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Cell19-Square70-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282758

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00754	J	0.007342	J	mg/Kg	☼	3	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-196845-1 DU

Matrix: Solid

Analysis Batch: 282312

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	20.1		19.7		%		2	20
Percent Solids	79.9		80.3		%		0.6	20

Lab Sample ID: 600-196845-11 DU

Matrix: Solid

Analysis Batch: 282312

Client Sample ID: Cell19-Square70-S-2-3-191202

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	4.7		4.2		%		11	20
Percent Solids	95.3		95.8		%		0.5	20

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 600-282467/1-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282467

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00150	U	0.0100	0.00150	mg/Kg		12/09/19 10:56	12/09/19 13:29	1

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196845-1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 600-282467/2-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.1005		mg/Kg		101	90 - 110

Lab Sample ID: 600-196845-1 MS

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0885	J	1.33	1.329		mg/Kg	✱	93	90 - 110

Lab Sample ID: 600-196845-1 MSD

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Cell17-Square204-S-2-3-191202

Prep Type: Total/NA

Prep Batch: 282467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0885	J	1.37	1.396		mg/Kg	✱	96	90 - 110	5	20

Unadjusted Detection Limits

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

Job ID: 600-196845-1

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	mg/Kg

Eurofins TestAmerica, Houston

Unadjusted Detection Limits

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

Job ID: 600-196845-1

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

QC Association Summary

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

Job ID: 600-196845-1

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

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-196845-1

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

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-196845-1

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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QC Association Summary

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

Job ID: 600-196845-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-196845-1

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

Lab Chronicle

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

Job ID: 600-196845-1

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 21:05	MBB	TAL CAN
Total/NA	Prep	3546			414439	12/09/19 10:03		TAL CAN
Total/NA	Analysis	8015B		1	414744	12/10/19 20:53	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell17-Square204-S-2-3-191202

Lab Sample ID: 600-196845-1

Date Collected: 12/02/19 10:10

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 17:58	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 05:10	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 05:10	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 15:47	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 10:29	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 13:30	AML	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

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

Job ID: 600-196845-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 12/04/19 10:35

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-196845-5

Date Collected: 12/02/19 11:41

Matrix: Solid

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

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

Job ID: 600-196845-1

Client Sample ID: Cell18-Square179-S-2-3-191202

Lab Sample ID: 600-196845-5

Date Collected: 12/02/19 11:41

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-196845-6

Date Collected: 12/02/19 12:13

Matrix: Solid

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

Client Sample ID: Cell18-Square118-S-2-3-191202

Lab Sample ID: 600-196845-6

Date Collected: 12/02/19 12:13

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 16:07	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 10:43	SOT	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-196845-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			282758	12/11/19 14:22	SOT	TAL HOU
Total/NA	Analysis	7471A		1	282867	12/12/19 10:49	SOT	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

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 12/04/19 10:35

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 16:10	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 10:51	SOT	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			282467	12/09/19 10:56	AML	TAL HOU
Total/NA	Analysis	9012B		1	282510	12/09/19 13:34	AML	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282312	12/06/19 11:12	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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.
Project/Site: Chevron - Jal Land Farm

Job ID: 600-196845-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20
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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids
9012B	9012B	Solid	Cyanide, Total

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

Chain of Custody Record



Lowest Price Guarantee
 TestAmerica

Client Information		Sampler: JS CF		Lab PM: Kuchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936 10	
Client Contact: Sarah Johnson		Phone: 619 851 8792		E-Mail: sachin.kuchadkar@testamericainc.com				Page: Job #:	
Company: ARCADIS U.S., Inc.		Address: 1004 North Big Spring Suite 121		City: Midland		State: TX		Zip: 79701	
Phone: 432-227-0266(Tel)		PO #:		WO #:		Project #:		SSOW#:	
Email: sarah.johnson@arcadis.com		Project Name: Chevron - Jal Land Farm Soils 2020		Site: Jal Land Farm					
Due Date Requested:		TAT Requested (days):		PO #:		WO #:		Project #:	
191202		5							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=Water, S=solid, O=Other, BT=Butter, A=Air)	
Cell 17 - Square 204-S-2-3-191202	191202	10:10	G	Solid					
Cell 17 - Square 157-S-2-3-191202	191202	10:40	G	Solid					
Cell 17 - Square 111-S-2-3-191202	191202	10:54	G	Solid					
Cell 17 - Square 14-S-2-3-191202	191202	11:09	G	Solid					
Cell 18 - Square 179-S-2-3-191202	191202	11:41	G	Solid					
Cell 18 - Square 118-S-2-3-191202	191202	12:13	G	Solid					
Cell 18 - Square 176-S-2-3-191202	191202	12:35	G	Solid					
Cell 18 - Square 22-S-2-3-191202	191202	12:50	G	Solid					
Cell 19 - Square 83-S-2-3-191202	191202	13:29	G	Solid					
Cell 19 - Square 29-S-2-3-191202	191202	13:46	G	Solid					
Cell 19 - Square 70-S-2-3-191202	191202	13:59	G	Solid					
Possible Hazard Identification		Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Deliverable Requested I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		FAX	
Relinquished by: Callum Ferguson		12/13/19		1825		Received by: Sandra Jones		Date/Time: 12/14/19 10:35	
Relinquished by:		Date/Time:		Date/Time:		Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Relinquished by:		Date/Time:	
Custody Seals Intact		Custody Seal No.				Cooler Temperature(s) °C and Other Remarks			
Yes <input type="checkbox"/> No <input type="checkbox"/>									

Loc: 600
196845

19 DEC 4 10:35

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

Sample Receipt Checklist

JOB NUMBER: 196845

Date/Time Received: _____

CLIENT: Arcadis

UNPACKED BY: ST

CARRIER/DRIVER: FedEx

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
<u>2071</u>	<u>Y / N</u>	<u>Y / N</u>	<u>4.6</u>	<u>676</u>	<u>+0.1</u>	<u>4.7</u>
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen upon receipt: ☐ YES ☐ NO 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:

12/4/19
ST

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

0.4/1.1

Chain of Custody Record



Environment Testing
TestAmerica



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s)	COC No.						
Client Contact Shipping/Receiving		Phone:	Kudchadkar, Sachin G	State of Origin: Texas	600-42921.1						
Company TestAmerica Laboratories, Inc.		E-Mail: sachin.kudchadkar@testamericainc.com			Page 1 of 1						
Address: 4101 Shuffel Street NW, North Canton State, Zip OH, 44720		Accreditations Required (See note): NELAP - Texas			Job #: 600-196845-1						
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		Due Date Requested: 12/11/2019	Analysis Requested								
Email:		TAT Requested (days):	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:								
Project Name: Chevron - Jal Land Farm		PO #:	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)								
Site:		WO #:									
		Project #: 60011732									
		SSOW#:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	80158_GRO/5030B_SolidMAC Gasoline Range Organics (C6-C10)	80158_ORO/3546 Diesel Range Organics (C10-C28)	C28-C36	Total Number of containers	Special Instructions/Note:
Cell17-Square204-S-2-3-191202 (600-196845-1)	12/2/19	10:10 Central		Solid		X	X	X		2	Diesel Range Organics (C10-C28)/ C28-C36
Cell18-Square179-S-2-3-191202 (600-196845-5)	12/2/19	11:41 Central		Solid		X	X	X		2	Diesel Range Organics (C10-C28)/ C28-C36
Cell19-Square83-S-2-3-191202 (600-196845-9)	12/2/19	13:29 Central		Solid		X	X	X		2	Diesel Range Organics (C10-C28)/ C28-C36
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/matrix 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 compliance to TestAmerica Laboratories, Inc.											
Possible Hazard Identification											
Unconfirmed											
Deliverable Requested: I, II, III, IV, Other (specify)											
Primary Deliverable Rank: 2											
Empty Kit Relinquished by:											
Date:											
Relinquished by: <i>Sandra Four</i>											
Date/Time: 12/5/19											
Relinquished by:											
Date/Time:											
Relinquished by:											
Date/Time:											
Custody Seals intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Custody Seal No.:											
Cooler Temperature(s) °C and Other Remarks:											
Received by: <i>SPG</i>											
Date/Time: 12-6-19 930											
Company: ETA											
Received by:											
Date/Time:											
Company:											
Received by:											
Date/Time:											
Company:											
Method of Shipment:											
Time:											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months											
Special Instructions/QC Requirements:											

Eurofins TestAmerica Canton Sample Receipt Form/Narrative		Login # : 196845
Canton Facility		
Client ETA - Houston	Site Name	Cooler unpacked by: Ryan Cribley
Cooler Received on 12-6-19	Opened on 12-7-19	
FedEx: 1 st Grd <u>Exp</u> UPS FAS Clipper Client Drop Off TestAmerica Courier Other		
Receipt After-hours: Drop-off Date/Time		Storage Location
TestAmerica Cooler # TA	Foam Box	Client Cooler Box Other
Packing material used: <u>Bubble Wrap</u> Foam <u>Plastic Bag</u> None Other		
COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water None		
1. Cooler temperature upon receipt <input type="checkbox"/> See Multiple Cooler Form		
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. <u>0.4</u> °C Corrected Cooler Temp. <u>1.1</u> °C		
IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C		
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u> <u>Yes</u> No		
-Were the seals on the outside of the cooler(s) signed & dated? <u>Yes</u> No NA		
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? <u>Yes</u> No		
-Were tamper/custody seals intact and uncompromised? <u>Yes</u> No NA		
3. Shippers' packing slip attached to the cooler(s)? <u>Yes</u> No		
4. Did custody papers accompany the sample(s)? <u>Yes</u> No		
5. Were the custody papers relinquished & signed in the appropriate place? <u>Yes</u> No		
6. Was/were the person(s) who collected the samples clearly identified on the COC? <u>Yes</u> No		
7. Did all bottles arrive in good condition (Unbroken)? <u>Yes</u> No		
8. Could all bottle labels be reconciled with the COC? <u>Yes</u> No		
9. Were correct bottle(s) used for the test(s) indicated? <u>Yes</u> No		
10. Sufficient quantity received to perform indicated analyses? <u>Yes</u> No		
11. Are these work share samples? <u>Yes</u> No		
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt? <u>Yes</u> No NA pH Strip Lot# <u>HC995364</u>		
13. Were VOAs on the COC? <u>Yes</u> No		
14. Were air bubbles >6 mm in any VOA vials? <u>Yes</u> No NA		
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ <u>Yes</u> No		
16. Was a LL Hg or Me Hg trip blank present? <u>Yes</u> No		
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other		
Concerning _____		

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by: Ryan C
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
18. SAMPLE CONDITION	
Sample(s) _____ were received after the recommended holding time had expired.	
Sample(s) _____ were received in a broken container.	
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)	
19. SAMPLE PRESERVATION	
Sample(s) _____ were further preserved in the laboratory.	
Time preserved: _____ Preservative(s) added/Lot number(s): _____	
VOA Sample Preservation - Date/Time VOAs Frozen: _____	

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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	
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 $<6\text{mm}$ (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: 600-196853-1

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



Authorized for release by:
4/10/2020 2:33:28 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

Job ID: 600-196853-1

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 and/or 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

Sample Summary

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

Job ID: 600-196853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

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

Job ID: 600-196853-1

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

Percent Solids: 83.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.138	U	0.462	0.138	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

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

Date Received: 12/04/19 10:35

Percent Solids: 91.0

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000611	U	0.00485	0.000611	mg/Kg	☼	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

Client Sample Results

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

Job ID: 600-196853-1

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

Method: 8015B - Diesel Range 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
<i>o</i> -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	☼		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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.423	0.126	mg/Kg	☼	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 in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0119	J	0.0187	0.00393	mg/Kg	☼	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
Cyanide, Total	0.0178	U	0.119	0.0178	mg/Kg	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196853-1

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) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.000853	U	0.00418	0.000853	mg/Kg	☼	12/04/19 15:40	12/05/19 17:13	1
Toluene	0.00115	U	0.00418	0.00115	mg/Kg	☼	12/04/19 15:40	12/05/19 17:13	1
Xylenes, Total	0.000945	U	0.00418	0.000945	mg/Kg	☼	12/04/19 15:40	12/05/19 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		61 - 130				12/04/19 15:40	12/05/19 17:13	1
Dibromofluoromethane	101		68 - 140				12/04/19 15:40	12/05/19 17:13	1
Toluene-d8 (Surr)	96		50 - 130				12/04/19 15:40	12/05/19 17:13	1
4-Bromofluorobenzene	88		57 - 140				12/04/19 15:40	12/05/19 17:13	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	64.6	U	101	64.6	ug/Kg	—	12/07/19 18:04	12/08/19 23:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	84		20 - 140				12/07/19 18:04	12/08/19 23:44	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]	34.1	U	49.3	34.1	mg/Kg	—	12/09/19 10:03	12/10/19 23:34	1
C28-C36	34.1	U	49.3	34.1	mg/Kg	—	12/09/19 10:03	12/10/19 23:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		26 - 125				12/09/19 10:03	12/10/19 23:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.27	J b	4.28	0.571	mg/Kg	☼		12/11/19 20:20	1
Nitrate as N	5.80		2.14	0.269	mg/Kg	☼		12/11/19 20:20	1
Fluoride	3.80		2.14	0.643	mg/Kg	☼		12/12/19 21:34	1
Sulfate	10.4		5.35	1.02	mg/Kg	☼		12/12/19 21:34	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.125	U	0.419	0.125	mg/Kg	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196853-1

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: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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	D	Prepared	Analyzed	Dil Fac
Mercury	0.0111	J	0.0176	0.00371	mg/Kg	☼	12/11/19 14:22	12/12/19 11:07	1

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

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

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	12/04/19 15:40	12/05/19 17:35	1
4-Bromofluorobenzene	88		57 - 140	12/04/19 15:40	12/05/19 17:35	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.1	U	98.2	63.1	ug/Kg		12/07/19 18:04	12/09/19 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	85		20 - 140	12/07/19 18:04	12/09/19 00:23	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]	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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196853-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.139	U	0.468	0.139	mg/Kg	☼	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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Definitions/Glossary

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

Job ID: 600-196853-1

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

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.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
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.
□	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)

Eurofins TestAmerica, Houston

Definitions/Glossary

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

Job ID: 600-196853-1

Glossary (Continued)

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)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Surrogate Summary

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

Job ID: 600-196853-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TFT1 (20-140)	TFT1 (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

Surrogate Legend

TFT = Trifluorotoluene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	OTPH1 (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						

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

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

Job ID: 600-196853-1

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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	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

Analysis Batch: 282157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

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

Job ID: 600-196853-1

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg	-	12/07/19 18:04	12/08/19 15:48	1
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg	-	12/07/19 18:04	12/08/19 15:48	1
Surrogate	MB %Recovery	MB 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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg	-	90	75 - 126
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg	-	90	75 - 126
Surrogate	LCS %Recovery	LCS 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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 414439

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		26 - 125				12/09/19 10:02	12/10/19 17:44	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	209.3		mg/Kg	-	84	45 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl (Surr)	86		26 - 125				

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196853-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-282739/1-A

Matrix: Solid

Analysis Batch: 282645

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Lab Sample ID: LCS 600-282739/2-A

Matrix: Solid

Analysis Batch: 282645

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	206.8		mg/Kg	-	103	90 - 110

Lab Sample ID: MB 600-282739/1-A

Matrix: Solid

Analysis Batch: 282646

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/Kg	-		12/11/19 14:33	1

Lab Sample ID: LCS 600-282739/2-A

Matrix: Solid

Analysis Batch: 282646

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	100	100.9		mg/Kg	-	101	90 - 110

Lab Sample ID: MB 600-282739/1-A

Matrix: Solid

Analysis Batch: 282793

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 282793

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	205.8		mg/Kg	-	103	90 - 110
Fluoride	75.0	74.34		mg/Kg	-	99	90 - 110
Sulfate	200	201.3		mg/Kg	-	101	90 - 110

Lab Sample ID: MB 600-282739/1-A

Matrix: Solid

Analysis Batch: 282794

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/Kg	-		12/12/19 15:47	1

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196853-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-282739/2-A

Matrix: Solid

Analysis Batch: 282794

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	100	101.6		mg/Kg		102	90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282394/1-A

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282394

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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		86.9	64.2 - 110.0
Calcium	16000	13630		mg/Kg		85.2	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 - 121.5

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196853-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282394/2-A

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 110.1
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 - 110.2
Selenium	322	281.6		mg/Kg		87.4	57.8 - 109.9
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: 600-196853-3 MS

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell25-Square108-S-2-191203

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.125	U	13.1	10.78		mg/Kg	☼	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	J b	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

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell25-Square108-S-2-191203

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196853-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-196853-3 DU

Matrix: Solid

Analysis Batch: 282489

Client Sample ID: Cell25-Square108-S-2-191203

Prep Type: Total/NA

Prep Batch: 282394

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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

Matrix: Solid

Analysis Batch: 282867

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282758

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		12/11/19 14:22	12/12/19 10:26	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.224	0.2270		mg/Kg		101	70 - 130

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 600-282467/1-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282467

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00150	U	0.0100	0.00150	mg/Kg		12/09/19 10:56	12/09/19 13:29	1

Lab Sample ID: LCS 600-282467/2-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.100	0.1005		mg/Kg		101	90 - 110

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Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-196853-1

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

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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Unadjusted Detection Limits

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

Job ID: 600-196853-1

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

QC Association Summary

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

Job ID: 600-196853-1

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	
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

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QC Association Summary

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

Job ID: 600-196853-1

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 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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QC Association Summary

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

Job ID: 600-196853-1

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

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-196853-1

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

Lab Chronicle

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

Job ID: 600-196853-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 08:50

Matrix: Solid

Date Received: 12/04/19 10:35

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 09:15

Matrix: Solid

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

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

Job ID: 600-196853-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-196853-4

Date Collected: 12/03/19 10:00

Matrix: Solid

Date Received: 12/04/19 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-196853-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-196853-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20
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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids
9012B	9012B	Solid	Cyanide, Total

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	06-01-21
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

Chain of Custody Record

Client Information		Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936.10	
Client Contact: Sarah Johnson		E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page		Page: Page	
Company: ARCADIS U.S., Inc.		Due Date Requested:		Analysis Requested		Job #:	
Address: 1004 North Big Spring Suite 121		TAT Requested (days):		Total Number of Containers		Preservation Codes:	
City: Midland						A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
State, Zip: TX, 79701						M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-S Z - other (specify)	
Phone: 432-227-0266(Tel)		PO #:					
Email: sarah.johnson@arcadis.com		WO #:					
Project Name: Chevron - Jal Land Farm Soils 2020		Project #:					
Site:		SSOW#:					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
Cell 20-Square 12-S-2-3-191203	191203	0850	G	Solid	N	N	N
Cell 21-Square 107-S-2-3-191203	191203	0915	G	Solid	N	N	N
Cell 25-Square 108-S-2-3-191203	191203	0945	G	Solid	N	N	N
Cell 26-Square 207-S-2-3-191203	191203	1000	G	Solid	N	N	N
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:			
Empty Kit Relinquished by:				Method of Shipment: FedEx			
Relinquished by: Callum Ferguson		Date/Time: 12/3/19 1630		Received by: JORD		Date/Time: 12/4/19 1035	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Custody Seals Intact: Yes No		Custody Seal No:		Cooler Temperature(s) °C and Other Remarks:			

19 DEC 4 16:35

Eurofins TestAmerica Houston

Loc: 600
196853



Environment Testing
TestAmerica

Sample Receipt Checklist

JOB NUMBER: _____

Date/Time Received: _____

CLIENT: Arcadis

UNPACKED BY: YR

CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
<u>06700</u>	<u>X / N</u>	<u>Y / N</u>	<u>1.0</u>	<u>676</u>	<u>+0.1</u>	<u>1.1</u>
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2: ☐ YES ☐ NO

TX1005 samples frozen upon receipt: ☐ YES ☐ NO 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:

YR 12/4/19

[illegible]

Eurofins TestAmerica Canton Sample Receipt Form/Narrative				Login # : 196853	
Canton Facility					
Client <u>ETA - Houston</u>		Site Name _____		Cooler unpacked by: <u>Ryan Cribley</u>	
Cooler Received on <u>12-6-19</u>		Opened on <u>12-7-19</u>			
FedEx: 1 st Grd <u>Exp</u> UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____					
Receipt After-hours: Drop-off Date/Time				Storage Location	
TestAmerica Cooler # <u>7A</u>		Foam Box _____		Client Cooler Box _____ Other _____	
Packing material used: <u>Bubble Wrap</u>		Foam <u>Plastic Bag</u>		None _____ Other _____	
COOLANT: <u>Wet Ice</u>		Blue Ice _____		Dry Ice _____ Water _____ None _____	
1. Cooler temperature upon receipt <input type="checkbox"/> See Multiple Cooler Form					
IR GUN# IR-10 (CF +0.7 °C)		Observed Cooler Temp. <u>0.9</u> °C		Corrected Cooler Temp. <u>1.1</u> °C	
IR GUN #IR-11 (CF +0.9 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u>				<u>Yes</u> No _____	
-Were the seals on the outside of the cooler(s) signed & dated?				<u>Yes</u> No NA _____	
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?				<u>Yes</u> <u>No</u> _____	
-Were tamper/custody seals intact and uncompromised?				<u>Yes</u> No NA _____	
3. Shippers' packing slip attached to the cooler(s)?				<u>Yes</u> No _____	
4. Did custody papers accompany the sample(s)?				<u>Yes</u> No _____	
5. Were the custody papers relinquished & signed in the appropriate place?				<u>Yes</u> No _____	
6. Was/were the person(s) who collected the samples clearly identified on the COC?				<u>Yes</u> <u>No</u> _____	
7. Did all bottles arrive in good condition (Unbroken)?				<u>Yes</u> No _____	
8. Could all bottle labels be reconciled with the COC?				<u>Yes</u> No _____	
9. Were correct bottle(s) used for the test(s) indicated?				<u>Yes</u> No _____	
10. Sufficient quantity received to perform indicated analyses?				<u>Yes</u> No _____	
11. Are these work share samples?				<u>Yes</u> No _____	
If yes, Questions 12-16 have been checked at the originating laboratory.					
12. Were all preserved sample(s) at the correct pH upon receipt?				<u>Yes</u> No NA pH Strip Lot# <u>HC995364</u>	
13. Were VOAs on the COC?				<u>Yes</u> No _____	
14. Were air bubbles >6 mm in any VOA vials?  Larger than this.				<u>Yes</u> No NA _____	
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____				<u>Yes</u> No _____	
16. Was a LL Hg or Me Hg trip blank present?				<u>Yes</u> No _____	
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____					
Concerning _____					

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES		Samples processed by: <u>Ryan C</u>
18. SAMPLE CONDITION		
Sample(s) _____ were received after the recommended holding time had expired.		
Sample(s) _____ were received in a broken container.		
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)		
19. SAMPLE PRESERVATION		
Sample(s) _____ were further preserved in the laboratory.		
Time preserved: _____ Preservative(s) added/Lot number(s): _____		
VOA Sample Preservation - Date/Time VOAs Frozen: _____		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 600-196853-1

Login Number: 196853

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-196905-1

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



Authorized for release by:
12/26/2019 10:42:12 AM

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

sachin.kudchadkar@testamericainc.com

LINKS

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results through

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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

Job ID: 600-196905-1

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 and/or 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

Sample Summary

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

Job ID: 600-196905-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

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

Job ID: 600-196905-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	☼	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	☼	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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U H	0.00500	0.000630	mg/Kg	☼	12/04/19 16:03	12/05/19 15:41	1
Ethylbenzene	0.00102	U H	0.00500	0.00102	mg/Kg	☼	12/04/19 16:03	12/05/19 15:41	1
Toluene	0.00138	U H	0.00500	0.00138	mg/Kg	☼	12/04/19 16:03	12/05/19 15:41	1
Xylenes, Total	0.00113	U H	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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.0	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	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196905-1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.5	U	49.9	34.5	mg/Kg	—	12/09/19 10:03	12/11/19 00:53	1
C28-C36	34.5	U	49.9	34.5	mg/Kg	—	12/09/19 10:03	12/11/19 00:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	68		26 - 125				12/09/19 10:03	12/11/19 00:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

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	J H	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: 6010B - 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	☼	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	☼	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	U	2.39	0.309	mg/Kg	☼	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	☼	12/12/19 11:06	12/12/19 16:07	1

General Chemistry

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
Cyanide, Total	0.0206	U	0.137	0.0206	mg/Kg	☼	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 Coupled Plasma - Atomic Emission 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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196905-1

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 Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.08		1.22	0.266	mg/Kg	☼	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 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	☼	12/12/19 11:06	12/12/19 16:09	1

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

Lab Sample ID: 600-196905-4

Date Collected: 12/02/19 15:15

Matrix: Solid

Date Received: 12/04/19 15:07

Percent Solids: 87.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-196905-1

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

Percent Solids: 87.2

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 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

Definitions/Glossary

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

Job ID: 600-196905-1

Qualifiers

GC/MS VOA

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

Qualifier	Qualifier Description
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	Qualifier Description
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.
α	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

Surrogate Summary

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

Job ID: 600-196905-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
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
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)

Lab Sample ID	Client Sample ID	TFT2 (20-140)	TFT2 (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)

Lab Sample ID	Client Sample ID	OTPH1 (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

OTPH = o-Terphenyl (Surr)

QC Sample Results

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

Job ID: 600-196905-1

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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	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

Analysis Batch: 282157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

QC Sample Results

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

Job ID: 600-196905-1

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	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg	-	12/07/19 18:04	12/08/19 15:48	1
Gasoline Range Organics [C6 - C10]	65.61	J	100	64.2	ug/Kg	-	12/07/19 18:04	12/08/19 15:48	1
Surrogate	MB %Recovery	MB 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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg	-	90	75 - 126
Gasoline Range Organics [C6 - C10]	800	720.9		ug/Kg	-	90	75 - 126
Surrogate	LCS %Recovery	LCS 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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 414439

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		26 - 125				12/09/19 10:02	12/10/19 17:44	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	209.3		mg/Kg	-	84	45 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl (Surr)	86		26 - 125				

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196905-1

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

Analyte	MB Result	MB 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

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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: MB 600-283603/1-A

Matrix: Solid

Analysis Batch: 283606

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Lab Sample ID: LCS 600-283603/2-A

Matrix: Solid

Analysis Batch: 283606

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 282599

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282524

Analyte	MB Result	MB 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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196905-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-282524/1-A

Matrix: Solid

Analysis Batch: 282599

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282524

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 282599

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282524

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.5	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 - 120
Beryllium	50.0	50.85		mg/Kg		102	83 - 117
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
Copper	50.0	50.85		mg/Kg		102	84 - 116
Iron	500	500.5		mg/Kg		100	51 - 149
Potassium	500	503.5		mg/Kg		101	74 - 126
Magnesium	500	497.4		mg/Kg		99	73 - 127
Manganese	50.0	52.20		mg/Kg		104	81 - 119
Sodium	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
Selenium	50.0	48.31		mg/Kg		97	80 - 120
Thallium	50.0	50.80		mg/Kg		102	79 - 120
Zinc	25.0	23.78		mg/Kg		95	79 - 121

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-282839/7-B

Matrix: Solid

Analysis Batch: 282902

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282839

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		12/12/19 11:06	12/12/19 15:15	1

Lab Sample ID: LCS 600-282839/8-B

Matrix: Solid

Analysis Batch: 282902

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.231	0.2374		mg/Kg		103	70 - 130

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-196905-1

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 600-282467/1-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282467

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00150	U	0.0100	0.00150	mg/Kg		12/09/19 10:56	12/09/19 13:29	1

Lab Sample ID: LCS 600-282467/2-A

Matrix: Solid

Analysis Batch: 282510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.1005		mg/Kg		101	90 - 110

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-196905-1

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	mg/Kg

Eurofins TestAmerica, Houston

Unadjusted Detection Limits

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

Job ID: 600-196905-1

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

QC Association Summary

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

Job ID: 600-196905-1

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	
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 240-414439/2-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

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

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-196905-1

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

Lab Chronicle

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

Job ID: 600-196905-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

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 10:07	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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

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

Job ID: 600-196905-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282439	12/09/19 08:11	ANP	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

Percent Solids: 87.2

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 10:19	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

Eurofins TestAmerica, Houston

Accreditation/Certification Summary

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

Job ID: 600-196905-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20
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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids
9012B	9012B	Solid	Cyanide, Total

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

Chain of Custody Record

Client Information

Client Contact: Sarah Johnson
Company: ARCADIS U.S., Inc.
Address: 1004 North Big Spring Suite 121
City: Midland
State, Zip: TX, 79701
Phone: 432-227-0266 (Tel)
Email: sarah.johnson@arcadis.com
Project Name: Chevron - Jal Land Farm Soils 2020
Site: Jal Landfarm

600-196905 Chain of Custody

Sampler: JS CF
Phone: 609 851 8792
Lab PM: Kuchadkar, Sat
E-Mail: sachin.kuchadkar@testamerica.com

Analysis Requested

Due Date Requested:
TAT Requested (days):
PO #:
WO #:
Project #:
60011732
SSOW#:

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

Sample Identification	Sample Date	Sample Time	Sample Type (G=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/ORO - C10-C28/C28-C36 - 4 oz jar, Canton	8015B_GRO - C5-C10 - 2oz jar, Canton	8260B - BTEX	300 - Chloride/Fluoride/Nitrate / Sulfate	6010B - Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr, Fe, Pb, Mn, Se, Ag, Ti, Zn	7471 - Hg	9012 - Cyanide	Total Number of Containers	Special Instructions/Note:
Cell 19-Square 180-S-2-3-191202	191202	1412	G	Solid	N	N	N	N	N	N	N	N	N	2	
Cell 20-Square 42-S-2-3-191202	191202	1430	G	Solid	N	N	N	N	N	N	N	N	N	2	
Cell 20-Square 20-S-2-3-191202	191202	1450	G	Solid	N	N	N	N	N	N	N	N	N	2	
Cell 20-Square 88-S-2-3-191202	191202	1515	G	Solid	N	N	N	N	N	N	N	N	N	2	
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											
				Solid											

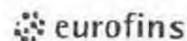
Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
 Special Instructions/OC Requirements:

Empty Kit Relinquished by: Callum Johnson Date: 12/13/19 Time: 1325
 Relinquished by: Callum Johnson Date/Time: 12/13/19 1325 Company: ARCADIS
 Relinquished by: Callum Johnson Date/Time: 12/13/19 1325 Company: ARCADIS
 Relinquished by: Callum Johnson Date/Time: 12/13/19 1325 Company: ARCADIS
 Custody Seals Intact: Yes ☐ No ☐ Custody Seal No 1
 Cooler Temperature(s) °C and Other Remarks:

Loc: 600
196905

196905



Environment Testing
TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

JOB NUMBER: _____

Date/Time Received: _____

CLIENT: Arcadis

UNPACKED BY: _____

CARRIER/DRIVER: FedEx

Custody Seal Present: ☐ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
<u>9710</u>	<u>Y / N</u>	<u>Y / N</u>	<u>3.1</u>	<u>676</u>	<u>+0.1</u>	<u>3.2</u>
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				

CF = correction factor

Samples received on ice? ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

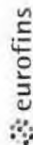
pH paper Lot # _____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? ☐ YES ☐ NO


COMMENTS:

Chain of Custody Record



Environment Testing
TestAmerica

Client Information (Sub Contract Lab)		Sampler: Lab PM: Kuchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-42921.1	
Client Contact: Shipping/Receiving		Phone: E-Mail: sachin.kuchadkar@testamerica.com		State of Origin: Texas		Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Address: 4101 Shuffel Street NW, North Canton, OH, 44720		Accreditations Required (See note): NELAP - Texas		Job #: 600-196905-1	
Due Date Requested: 12/12/2019		TAT Requested (days):		Analysis Requested		Preservation Codes:	
PO #: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:		Perform MS/MSD (Yes or No)		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:	
Project #: 60011732		SSOW#:		Field Filtered Sample (Yes or No)		Total Number of containers	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab) Preservation Code:	
CELL 42-SQUARE 180-S-2-3-191202 (600-196905-2)		12/2/19		14:30 Central		Solid	
Special Instructions/Note:		X		X		X	
Diesel Range Organics [C10-C28]/ C28-C36		X		X		X	
8015B_GRO/5030B_SolidNAC Gasoline Range		X		X		X	
8015B_DRO/3546 Diesel Range Organics [C10-C28]		X		X		X	
C28-C36		X		X		X	
Special Instructions/Note:		GL, C2					
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/matrix 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 compliance to TestAmerica Laboratories, Inc.							
Possible Hazard Identification							
Unconfirmed							
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: Santhi Jones		12/5/19		1700		Company: THH	
Relinquished by:		Date/Time:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Date/Time:		Company:	
Custody Seals Intact:		Custody Seal No.:					
Δ Yes Δ No							

Eurofins TestAmerica Canton Sample Receipt Form/Narrative				Login # : <u>196905</u>
Canton Facility				
Client <u>ETA - Houston</u>	Site Name _____	Cooler unpacked by: <u>Ryan Crubley</u>		
Cooler Received on <u>12-6-19</u>	Opened on <u>12-7-19</u>			
FedEx: 1 st Grd <u>Exp</u> UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____				
Receipt After-hours: Drop-off Date/Time _____		Storage Location _____		
TestAmerica Cooler # <u>TA</u>	Foam Box _____	Client Cooler _____	Box _____	Other _____
Packing material used: <u>Bubble Wrap</u> Foam <u>Plastic Bag</u> None Other _____				
COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water None				
1. Cooler temperature upon receipt <input type="checkbox"/> See Multiple Cooler Form				
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. <u>0.4</u> °C Corrected Cooler Temp. <u>1.1</u> °C				
IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C				
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u> Yes No				
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA				
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No				
-Were tamper/custody seals intact and uncompromised? Yes No NA				
3. Shippers' packing slip attached to the cooler(s)? Yes No				
4. Did custody papers accompany the sample(s)? Yes No				
5. Were the custody papers relinquished & signed in the appropriate place? Yes No				
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No				
7. Did all bottles arrive in good condition (Unbroken)? Yes No				
8. Could all bottle labels be reconciled with the COC? Yes No				
9. Were correct bottle(s) used for the test(s) indicated? Yes No				
10. Sufficient quantity received to perform indicated analyses? Yes No				
11. Are these work share samples? Yes No				
If yes, Questions 12-16 have been checked at the originating laboratory.				
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# <u>HC995364</u>				
13. Were VOAs on the COC? Yes No				
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA				
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No				
16. Was a LL Hg or Me Hg trip blank present? Yes No				
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____				
Concerning _____				

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by: <u>Ryan C</u>
18. SAMPLE CONDITION	
Sample(s) _____ were received after the recommended holding time had expired.	
Sample(s) _____ were received in a broken container.	
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)	
19. SAMPLE PRESERVATION	
Sample(s) _____ were further preserved in the laboratory.	
Time preserved: _____ Preservative(s) added/Lot number(s): _____	
VOA Sample Preservation - Date/Time VOAs Frozen: _____	

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



Authorized for release by:
1/9/2020 5:50:21 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

LINKS

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results through

TotalAccess

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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

Job ID: 600-197147-1

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

Sample Summary

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

Job ID: 600-197147-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

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

Job ID: 600-197147-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.146	U	0.492	0.146	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	☼	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	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (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	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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.152	U	0.511	0.152	mg/Kg	☼	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	J b	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

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	0.0104	J	0.0213	0.00448	mg/Kg	☼	12/21/19 12:00	12/22/19 11:21	1

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0205	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

Date Received: 12/10/19 10:38

Percent Solids: 72.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.514	0.153	mg/Kg	☼	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	☼	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	☼	12/12/19 19:01	12/17/19 15:16	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

Client Sample ID: Cell8-Square170-S-2-3-191205

Lab Sample ID: 600-197147-5

Date Collected: 12/05/19 14:05

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 72.0

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 15:16	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	☼	12/21/19 12:00	12/22/19 11:25	1

General Chemistry

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.143	U	0.479	0.143	mg/Kg	☼	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	☼	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	☼	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	U	2.40	0.310	mg/Kg	☼	12/12/19 19:01	12/17/19 15:18	1
Thallium	0.332	U	1.80	0.332	mg/Kg	☼	12/12/19 19:01	12/17/19 15:18	1
Zinc	13.4		1.80	0.129	mg/Kg	☼	12/12/19 19:01	12/16/19 16:29	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	0.00437	U	0.0208	0.00437	mg/Kg	☼	12/21/19 12:00	12/22/19 11:27	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 16:31	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

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	0.00797	J	0.0214	0.00451	mg/Kg	☼	12/21/19 12:00	12/22/19 11:33	1

General Chemistry

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

Date Received: 12/10/19 10:38

Percent Solids: 81.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.142	U	0.477	0.142	mg/Kg	☼	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	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

Client Sample ID: Cell4-Square201-S-2-3-191205

Lab Sample ID: 600-197147-8

Date Collected: 12/05/19 14:33

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 81.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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	☼	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.118	U	0.396	0.118	mg/Kg	☼	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	☼	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	0.107	mg/Kg	☼	12/12/19 19:01	12/16/19 16:34	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	0.00463	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

Client Sample ID: Cell3-Square130-S-2-3-191205

Lab Sample ID: 600-197147-10

Date Collected: 12/05/19 14:52

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.117	U	0.392	0.117	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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	Unit	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	1.0	%	—		12/11/19 13:54	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	U	1.93	0.250	mg/Kg	☼	12/12/19 19:01	12/17/19 15:37	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197147-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00409	J	0.0153	0.00323	mg/Kg	☼	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
Percent Solids	97.8		1.0	1.0	%			12/11/19 13:54	1

Definitions/Glossary

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

Job ID: 600-197147-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Job ID: 600-197147-1

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

Analyte	MB Result	MB 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

Analyte	MB Result	MB 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	U	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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.8	22.17		mg/Kg		85.9	67.1 - 106.6
Barium	393	310.1		mg/Kg		78.9	64.6 - 106.6
Beryllium	293	262.4		mg/Kg		89.6	72.4 - 106.8
Calcium	19300	17290		mg/Kg		89.6	70.5 - 106.7
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	50.1 - 106.8
Potassium	5740	4751		mg/Kg		82.8	64.6 - 106.6
Magnesium	5390	4110		mg/Kg		76.3	64.2 - 106.7
Manganese	616	514.8		mg/Kg		83.6	64.1 - 106.7
Sodium	9070	7457		mg/Kg		82.2	70.5 - 106.6

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197147-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.7

Lab Sample ID: 600-197147-9 MS

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.118	U	12.0	10.09		mg/Kg	☼	84	75 - 125
Barium	24.8		48.1	79.27		mg/Kg	☼	113	75 - 125
Beryllium	0.213	J	48.1	46.43		mg/Kg	☼	96	75 - 125
Calcium	2970	b	481	3834	4	mg/Kg	☼	179	75 - 125
Chromium	5.17		48.1	56.52		mg/Kg	☼	107	75 - 125
Copper	2.15		48.1	51.32		mg/Kg	☼	102	75 - 125
Iron	4320		481	6690	4	mg/Kg	☼	494	75 - 125
Potassium	743		481	2047	N1	mg/Kg	☼	271	75 - 125
Magnesium	556		481	1508	N1	mg/Kg	☼	198	75 - 125
Manganese	53.4	b	48.1	110.9		mg/Kg	☼	119	75 - 125
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

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.118	U	12.0	9.903		mg/Kg	☼	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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197147-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197147-9 MS

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0891	J	48.1	45.74		mg/Kg	☼	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

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	J	0.2199	J	mg/Kg	☼	3	20
Calcium	2970	b	3783	F	mg/Kg	☼	24	20
Chromium	5.17		5.283		mg/Kg	☼	2	20
Copper	2.15		2.194		mg/Kg	☼	2	20
Iron	4320		4450		mg/Kg	☼	3	20
Potassium	743		778.3		mg/Kg	☼	5	20
Magnesium	556		607.3		mg/Kg	☼	9	20
Manganese	53.4	b	52.33		mg/Kg	☼	2	20
Sodium	144	b	155.9		mg/Kg	☼	8	20
Lead	3.71		3.669		mg/Kg	☼	1	20
Antimony	0.230	U	0.232	U	mg/Kg	☼	NC	20
Zinc	12.0		9.587	F	mg/Kg	☼	23	20

Lab Sample ID: 600-197147-9 DU

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.118	U	0.119	U	mg/Kg	☼	NC	20
Arsenic	1.80		2.049		mg/Kg	☼	13	20
Barium	24.5		27.19		mg/Kg	☼	11	20
Beryllium	0.198	J	0.2099	J	mg/Kg	☼	6	20
Calcium	2970		3810	F	mg/Kg	☼	25	20
Cadmium	0.0891	J	0.09997	J	mg/Kg	☼	11	20
Chromium	4.96		5.123		mg/Kg	☼	3	20
Copper	1.87		1.959		mg/Kg	☼	5	20
Iron	4330		4500		mg/Kg	☼	4	20
Potassium	744		773.3		mg/Kg	☼	4	20

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197147-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197147-9 DU

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell4-Square37-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Magnesium	591		642.8		mg/Kg	☼	8	20
Manganese	51.0		50.68		mg/Kg	☼	0.7	20
Sodium	141		152.8		mg/Kg	☼	8	20
Lead	3.82		3.844		mg/Kg	☼	0.6	20
Antimony	0.230	U	0.232	U	mg/Kg	☼	NC	20
Selenium	0.256	U	0.259	U	mg/Kg	☼	NC	20
Thallium	0.274	U	0.277	U	mg/Kg	☼	NC	20
Zinc	10.5		9.192		mg/Kg	☼	13	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-283743/7-B

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283743

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00346	U	0.0165	0.00346	mg/Kg		12/21/19 12:00	12/22/19 11:09	1

Lab Sample ID: LCS 600-283743/8-B

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2422		mg/Kg		103	70 - 130

Lab Sample ID: 600-197147-1 MS

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Cell7-Square22-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0201		0.286	0.3327		mg/Kg	☼	109	75 - 125

Lab Sample ID: 600-197147-11 MS

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Cell3-Square153-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00409	J	0.226	0.2673		mg/Kg	☼	117	75 - 125

Lab Sample ID: 600-197147-1 DU

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Cell7-Square22-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.0201		0.00410	U	mg/Kg	☼	NC	20

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197147-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-197147-11 DU

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Cell3-Square153-S-2-3-191205

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00409	J	0.005753	J F	mg/Kg	☼	34	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197147-8 DU

Matrix: Solid

Analysis Batch: 282754

Client Sample ID: Cell4-Square201-S-2-3-191205

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	18.6		20.0		%		7	20
Percent Solids	81.4		80.0		%		2	20

Unadjusted Detection Limits

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	%

QC Association Summary

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

Job ID: 600-197147-1

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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QC Association Summary

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

Job ID: 600-197147-1

Metals

Prep Batch: 283743

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	
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

QC Association Summary

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

Job ID: 600-197147-1

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	

Lab Chronicle

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

Job ID: 600-197147-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Lab Chronicle

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

Job ID: 600-197147-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197147-4

Date Collected: 12/05/19 11:19

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197147-5

Date Collected: 12/05/19 14:05

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell8-Square170-S-2-3-191205

Lab Sample ID: 600-197147-5

Date Collected: 12/05/19 14:05

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 72.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197147-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 14:23

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 14:23

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 14:33

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Lab Chronicle

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

Job ID: 600-197147-1

Client Sample ID: Cell4-Square201-S-2-3-191205

Lab Sample ID: 600-197147-8

Date Collected: 12/05/19 14:33

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197147-9

Date Collected: 12/05/19 14:42

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197147-10

Date Collected: 12/05/19 14:52

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Client Sample ID: Cell3-Square130-S-2-3-191205

Lab Sample ID: 600-197147-10

Date Collected: 12/05/19 14:52

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197147-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197147-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record

Midland
#264Environment Testing
TestAmerica

Client Information		Lab PM		Carrier Tracking No(s)		COC No	
Company: ARCADIS U.S., Inc.		S. Steinmann		Kudchadkar, Sachin G		600-72593-19936-10	
Client Contact: Sarah Johnson		Phone: 619 851 8792		E-Mail: sachin.kudchadkar@testamerica.com		Page: 1 of 1	
Address: 1004 North Big Spring Suite 121		City: Midland		State, Zip: TX, 79701		Job #	
Phone: 432-227-0266(Tel)		PO #		WO #		Preservation Codes:	
Email: sarah.johnson@arcadis.com		TAT Requested (days): Standard		Project # 60011732		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Site: Chevron Landfarm		Due Date Requested:		Analysis Requested		Total Number of Containers	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Cell 17-Square 22-S-2-3-191205		191205		1040		G Solid	
Cell 18-Square 122-S-2-3-191205		191205		1052		G Solid	
Cell 18-Square 101-S-2-3-191205		191205		1108		G Solid	
Cell 18-Square 90-S-2-3-191205		191205		1119		G Solid	
Cell 18-Square 170-S-2-3-191205		191205		1405		G Solid	
Cell 14-Square 129-S-2-3-191205		191205		1414		G Solid	
Cell 14-Square 114-S-2-3-191205		191205		1423		G Solid	
Cell 14-Square 201-S-2-3-191205		191205		1433		G Solid	
Cell 14-Square 37-S-2-3-191205		191205		1442		G Solid	
Cell 13-Square 130-S-2-3-191205		191205		1452		G Solid	
Cell 13-Square 153-S-2-3-191205		191205		1459		G Solid	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		191205		1040		G Solid	
Deliverable Requested: I, II, III, IV, Other (specify)		191205		1052		G Solid	
		191205		1108		G Solid	
		191205		1119		G Solid	
		191205		1405		G Solid	
		191205		1414		G Solid	
		191205		1423		G Solid	
		191205		1433		G Solid	
		191205		1442		G Solid	
		191205		1452		G Solid	
		191205		1459		G Solid	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: Callum Reynolds		12/9/19		1230		Arcadis Company	
Relinquished by:		12-9-19		1100		Fuller Company	
Relinquished by:		12-9-19		1039		Fuller Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No:		Cooler Temperature(s) °C and Other Remarks:		Ver: 01/16/2019	

Loc: 600
197147



Environment Testing
TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

19DEC10 10:38

JOB NUMBER: 197147
UNPACKED BY: ST
Date/Time Received: _____
CLIENT: Arcadis
CARRIER/DRIVER: FldEX

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2304	Y / N	Y / N	1.6	678	-0.3	1.3
	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? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

12/10/19
ST

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 600-197147-1

Login Number: 197147

List Number: 1

Creator: Torres, Sandra

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197216-1

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



Authorized for release by:

12/31/2019 1:42:18 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

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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: 600-197216-1

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

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	
600-197216-3	Cell22- Square 190-S-2-3-191204	Solid	12/04/19 10:57	12/10/19 17:33	
600-197216-4	Cell23- Square 208-S-2-3-191204	Solid	12/04/19 11:07	12/10/19 17:33	
600-197216-5	Cell23- Square 132-S-2-3-191204	Solid	12/04/19 11:22	12/10/19 17:33	
600-197216-6	Cell23- Square 111-S-2-3-191204	Solid	12/04/19 11:34	12/10/19 17:33	
600-197216-7	Cell23- Square 87-S-2-3-191204	Solid	12/04/19 11:53	12/10/19 17:33	
600-197216-8	Cell24- Square 168-S-2-3-191204	Solid	12/04/19 12:10	12/10/19 17:33	
600-197216-9	Cell24- Square 24-S-2-3-191204	Solid	12/04/19 12:23	12/10/19 17:33	
600-197216-10	Cell24- Square 44-S-2-3-191204	Solid	12/04/19 12:37	12/10/19 17:33	
600-197216-11	Cell24- Square 178-S-2-3-191204	Solid	12/04/19 12:50	12/10/19 17:33	

Client Sample Results

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

Job ID: 600-197216-1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.129	U	0.433	0.129	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Arsenic	2.04		1.08	0.236	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Barium	48.9		1.08	0.0325	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Beryllium	0.320		0.271	0.0157	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Calcium	11400		108	0.936	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Cadmium	0.146	J	0.271	0.0277	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Chromium	5.87		0.542	0.0548	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Copper	3.82		0.542	0.189	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Iron	5300		21.7	2.74	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Potassium	1170		108	11.9	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Magnesium	1010		108	2.08	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Manganese	80.8		1.63	0.0413	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Sodium	19.5	J b	108	0.960	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Lead	4.92		0.542	0.114	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Antimony	0.251	U	2.71	0.251	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Selenium	0.281	U	2.17	0.281	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Thallium	1.30	J b	1.63	0.300	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	1
Zinc	13.7		1.63	0.117	mg/Kg	☼	12/26/19 14:26	12/27/19 11:04	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	0.00344	U	0.0163	0.00344	mg/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	U	0.416	0.124	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Arsenic	2.04		1.04	0.227	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Barium	52.7		1.04	0.0312	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Beryllium	0.343		0.260	0.0151	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Calcium	3980		104	0.899	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Cadmium	0.130	J	0.260	0.0266	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Chromium	6.10		0.520	0.0526	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Copper	3.74		0.520	0.181	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Iron	5610		20.8	2.63	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Potassium	1060		104	11.4	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Magnesium	1130		104	2.00	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Manganese	88.5		1.56	0.0396	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Sodium	23.2	J b	104	0.922	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Lead	4.47		0.520	0.109	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Antimony	0.241	U	2.60	0.241	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1
Selenium	0.269	U	2.08	0.269	mg/Kg	☼	12/26/19 14:26	12/27/19 11:10	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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 (Continued)

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	mg/Kg	☼	12/30/19 13:23	12/31/19 09:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		1.0	1.0	%			12/12/19 17:09	1
Percent Solids	90.7		1.0	1.0	%			12/12/19 17:09	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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
Zinc	12.8		1.94	0.140	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	Dil Fac
Mercury	0.0187	J b	0.0215	0.00454	mg/Kg	☼	12/30/19 13:23	12/31/19 09:43	1

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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 (Manual Cold Vapor 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	Qualifier	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.124	U	0.415	0.124	mg/Kg	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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

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

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	0.0318	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
Percent Solids	95.3		1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell23- Square 111-S-2-3-191204

Lab Sample ID: 600-197216-6

Date Collected: 12/04/19 11:34

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 79.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	J b	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 (Manual Cold Vapor Technique)

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

Client Sample Results

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

Job ID: 600-197216-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.138	U	0.463	0.138	mg/Kg	☼	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

Percent Solids: 72.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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

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

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	0.00477	U	0.0226	0.00477	mg/Kg	☼	12/30/19 13:23	12/31/19 09:53	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 17:09	1
Percent Solids	72.6		1.0	1.0	%			12/12/19 17:09	1

Client Sample ID: Cell24- Square 24-S-2-3-191204

Lab Sample ID: 600-197216-9

Date Collected: 12/04/19 12:23

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 78.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	Unit	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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

Date Received: 12/10/19 17:33

Percent Solids: 71.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	J b	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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 95.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197216-1

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

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 (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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

Definitions/Glossary

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

Job ID: 600-197216-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Job ID: 600-197216-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284102/1-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284102

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Silver	25.8	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 - 106.6
Beryllium	293	273.7		mg/Kg		93.4	72.4 - 106.8
Calcium	19300	19120		mg/Kg		99.1	70.5 - 106.7
Cadmium	268	257.8		mg/Kg		96.2	71.3 - 106.7
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 - 106.8
Potassium	5740	5141		mg/Kg		89.6	64.6 - 106.6
Magnesium	5390	4280		mg/Kg		79.4	64.2 - 106.7
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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197216-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284102/2-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell22- Square 48-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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		51.6	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		51.6	8263	4	mg/Kg	☼	573	75 - 125
Potassium	1170		51.6	2598	N1	mg/Kg	☼	277	75 - 125
Magnesium	1010		51.6	2112	N1	mg/Kg	☼	213	75 - 125
Manganese	80.8		51.6	145.8	N1	mg/Kg	☼	126	75 - 125
Sodium	19.5	J b	51.6	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	J b	51.6	47.69		mg/Kg	☼	90	75 - 125
Zinc	13.7		25.8	47.30	N1	mg/Kg	☼	130	75 - 125

Lab Sample ID: 600-197216-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell24- Square 178-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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		48.6	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		48.6	5707	4	mg/Kg	☼	332	75 - 125
Potassium	915		48.6	2099	N1	mg/Kg	☼	244	75 - 125
Magnesium	1190		48.6	2063	N1	mg/Kg	☼	181	75 - 125
Manganese	53.8		48.6	101.9		mg/Kg	☼	99	75 - 125

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197216-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197216-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell24- Square 178-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	28.3	J b	486	562.4		mg/Kg	✱	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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell22- Square 48-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.129	U	0.128	U	mg/Kg	✱	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	J b	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	J b	0.4453	J F	mg/Kg	✱	98	20
Zinc	13.7		15.08		mg/Kg	✱	10	20

Lab Sample ID: 600-197216-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell24- Square 178-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	J b	29.57	J	mg/Kg	✱	4	20

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197216-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197216-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell24- Square 178-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284102

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	3.86		3.952		mg/Kg	✱	2	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

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284342

Analyte	MB		MQL (Adj)	SDL		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier		Result	Qualifier					
Mercury	0.003738	J	0.0157	0.00330		mg/Kg		12/30/19 13:23	12/31/19 09:27	1

Lab Sample ID: LCS 600-284342/2-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Mercury	0.224	0.2253		mg/Kg		101	70 - 130

Lab Sample ID: 600-197216-1 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell22- Square 48-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Mercury	0.00344	U	0.247	0.2772		mg/Kg	✱	112	75 - 125

Lab Sample ID: 600-197216-1 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell22- Square 48-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	0.00344	U	0.00365	U	mg/Kg	✱	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197216-6 DU

Matrix: Solid

Analysis Batch: 282911

Client Sample ID: Cell23- Square 111-S-2-3-191204

Prep Type: Total/NA

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Moisture	20.8		21.6		%		4	20
Percent Solids	79.2		78.4		%		1	20

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	%

QC Association Summary

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

Job ID: 600-197216-1

Metals

Prep Batch: 284102

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	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 Batch
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	

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QC Association Summary

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

Job ID: 600-197216-1

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	
600-197216-2	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	

Lab Chronicle

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

Job ID: 600-197216-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197216-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-5

Date Collected: 12/04/19 11:22

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-6

Date Collected: 12/04/19 11:34

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-6

Date Collected: 12/04/19 11:34

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197216-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-8

Date Collected: 12/04/19 12:10

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-9

Date Collected: 12/04/19 12:23

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197216-9

Date Collected: 12/04/19 12:23

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197216-1

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

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

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

Date Received: 12/10/19 17:33

Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 11:34	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 10:01	KP1	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197216-1

Project/Site: Chevron - Jal Land Farm Soils

Laboratory: Eurofins TestAmerica, Houston

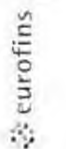
Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record



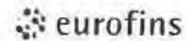
Environment Testing
TestAmerica

Client Information		Sampler: J. Skinninn		Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936.10	
Client Contact: Sarah Johnson		Phone: 619 851 8792		E-Mail: sachin.kudchadkar@testamericainc.com				Page: 1 of 1	
Company: ARCADIS U.S., Inc.								Job #:	
Address: 1004 North Big Spring Suite 121									
City: Midland									
State, Zip: TX, 79701									
Phone: 432-227-0266(Tel)									
Email: sarah.johnson@arcadis.com									
Project Name: Chevron - Jal Land Farm Soils 2020									
Site: Chevron Landfarm									
Due Date Requested:		TAT Requested (days):		PO #:		WG #:		Project #:	
		Standard						60011732	
SSOW#:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, Q=questionable, BT=biological, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B, GPO/ORO, C-10, C-28, C-28-C36, 4 oz jar, Canton	8015B, GPO, C-6, C-10, 2oz jar, Canton
Cell 122-Square 48-S-2-3-191204	191204	1021	G	Solid					
Cell 122-Square 157-S-2-3-191204	191204	1044	G	Solid					
Cell 122-Square 190-S-2-3-191204	191204	1057	G	Solid					
Cell 123-Square 208-S-2-3-191204	191204	1107	G	Solid					
Cell 123-Square 132-S-2-3-191204	191204	1122	G	Solid					
Cell 123-Square 111-S-2-3-191204	191204	1134	G	Solid					
Cell 123-Square 87-S-2-3-191204	191204	1153	G	Solid					
Cell 124-Square 168-S-2-3-191204	191204	1210	G	Solid					
Cell 124-Square 24-S-2-3-191204	191204	1223	G	Solid					
Cell 124-Square 44-S-2-3-191204	191204	1237	G	Solid					
Cell 124-Square 178-S-2-3-191204	191204	12:50	G	Solid					
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological							
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Months:	
Relinquished by: Callum Ferguson		12/5/19		1730		FedEx			
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company:	
Relinquished by:								Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No							

600-197216 Chain of Custody



Loc: 600
197216



Environment Testing
TestAmerica

Eurofins TestAmerica Houston

19 DEC 10 17:33

Sample Receipt Checklist

JOB NUMBER:

2116
47

Date/Time Received:

CLIENT:

Arcadis

UNPACKED BY:

CARRIER/DRIVER:

Fedex

Custody Seal Present: ☐ YES ☒ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7275	Y / N	Y / N	5.7	676	+0.1	5.8
	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? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☒ NO

☐ YES

Base samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

HS-SA-WI-013

Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197217-1

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



Authorized for release by:
4/17/2020 11:57:59 AM

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

sachin.kudchadkar@testamericainc.com

LINKS

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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

Job ID: 600-197217-1

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

Sample Summary

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

Job ID: 600-197217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	Cell11-Square 35-S-2-3-191204	Solid	12/04/19 09:00	12/10/19 17:33	
600-197217-8	Cell11-Square 10-S-2-3-191204	Solid	12/04/19 09:20	12/10/19 17:33	
600-197217-9	Cell11-Square 88-S-2-3-191204	Solid	12/04/19 09:38	12/10/19 17:33	
600-197217-10	Cell11-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	

Client Sample Results

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

Job ID: 600-197217-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.170	U	0.570	0.170	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.144	U	0.483	0.144	mg/Kg	☼	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

Client Sample Results

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

Job ID: 600-197217-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.929	J b	1.81	0.334	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00398	U	0.0189	0.00398	mg/Kg	☼	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

Lab Sample ID: 600-197217-3

Date Collected: 12/03/19 14:17

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 83.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.141	U	0.476	0.141	mg/Kg	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197217-1

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

Method: 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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00728	J b	0.0204	0.00430	mg/Kg	☼	12/30/19 10:30	12/31/19 08:37	1

General Chemistry

Analyte	Result	Qualifier	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.156	U	0.523	0.156	mg/Kg	☼	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	☼	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	☼	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	U	2.62	0.339	mg/Kg	☼	12/26/19 14:36	12/27/19 14:52	1

Eurofins TestAmerica, Houston

Client Sample Results

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

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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 75.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 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	☼	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
Percent Solids	75.0		1.0	1.0	%			12/12/19 17:09	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.162	U	0.544	0.162	mg/Kg	☼	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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197217-1

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

Percent Solids: 77.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 Technique)

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	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.7		1.0	1.0	%	—		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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.157	U	0.529	0.157	mg/Kg	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197217-1

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	☼	12/30/19 10:30	12/31/19 08:49	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.6		1.0	1.0	%			12/12/19 17:09	1
Percent Solids	71.4		1.0	1.0	%			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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	☼	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

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	0.00420	U	0.0199	0.00420	mg/Kg	☼	12/30/19 10:30	12/31/19 08:51	1

General Chemistry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197217-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.120	U	0.405	0.120	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Arsenic	1.51		1.01	0.221	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Barium	29.4		1.01	0.0304	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Beryllium	0.187	J	0.253	0.0147	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Calcium	2960		101	0.874	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Cadmium	0.0860	J	0.253	0.0259	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Chromium	4.32		0.506	0.0512	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Copper	2.41		0.506	0.176	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Iron	3510		20.2	2.56	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Potassium	728		101	11.1	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Magnesium	641		101	1.94	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Manganese	52.8		1.52	0.0386	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Sodium	8.22	J	101	0.897	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Lead	3.23		0.506	0.106	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Antimony	0.235	U	2.53	0.235	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Selenium	0.262	U	2.02	0.262	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Thallium	0.280	U	1.52	0.280	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	1
Zinc	9.28		1.52	0.109	mg/Kg	☼	12/26/19 14:36	12/27/19 14:34	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	0.00581	J b	0.0174	0.00366	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.122	U	0.410	0.122	mg/Kg	☼	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	☼	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	☼	12/26/19 14:36	12/27/19 14:36	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197217-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.284	U	1.54	0.284	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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	Qualifier	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

Definitions/Glossary

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

Job ID: 600-197217-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Beryllium	0.0145	U	0.250	0.0145	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Calcium	0.864	U	100	0.864	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Potassium	11.0	U	100	11.0	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Sodium	0.886	U	100	0.886	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Thallium	0.3200	J	1.50	0.277	mg/Kg		12/26/19 14:36	12/27/19 14:00	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/26/19 14:36	12/27/19 14:00	1

Lab Sample ID: LCSSRM 600-284106/2-A
Matrix: Solid
Analysis Batch: 284156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284106

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6
Barium	393	337.6		mg/Kg		85.9	64.6 - 106.6
Beryllium	293	263.4		mg/Kg		89.9	72.4 - 106.8
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 - 106.6
Copper	175	157.6		mg/Kg		90.1	72.0 - 106.9
Iron	17700	13680		mg/Kg		77.3	50.1 - 106.8
Potassium	5740	5070		mg/Kg		88.3	64.6 - 106.6
Magnesium	5390	4187		mg/Kg		77.7	64.2 - 106.7
Manganese	616	467.0		mg/Kg		75.8	64.1 - 106.7
Sodium	9070	7660		mg/Kg		84.5	70.5 - 106.6
Lead	164	156.9		mg/Kg		95.7	71.3 - 106.7

Eurofins TestAmerica, Houston

QC Sample Results

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 (Continued)

Lab Sample ID: LCSSRM 600-284106/2-A
Matrix: Solid
Analysis Batch: 284156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284106

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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
Matrix: Solid
Analysis Batch: 284156

Client Sample ID: Cell13-Square 45-S-2-3-191203
Prep Type: Total/NA
Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	121.4		mg/Kg	☼	103	75 - 125
Beryllium	0.321	J	71.2	72.01		mg/Kg	☼	101	75 - 125
Calcium	11900		712	11470	4	mg/Kg	☼	-61	75 - 125
Cadmium	0.142	J	71.2	69.89		mg/Kg	☼	98	75 - 125
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	☼	263	75 - 125
Potassium	1120		712	2520	N1	mg/Kg	☼	196	75 - 125
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		mg/Kg	☼	103	75 - 125
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	☼	97	75 - 125
Thallium	0.997	J b	71.2	68.47		mg/Kg	☼	95	75 - 125
Zinc	13.3		35.6	54.00		mg/Kg	☼	114	75 - 125

Lab Sample ID: 600-197217-11 MS
Matrix: Solid
Analysis Batch: 284156

Client Sample ID: Cell22-Square 39-S-2-3-191204
Prep Type: Total/NA
Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

QC Sample Results

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 (Continued)

Lab Sample ID: 600-197217-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell22-Square 39-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	40.3	J	507	592.4		mg/Kg	☼	109	75 - 125
Lead	4.10		50.7	57.01		mg/Kg	☼	104	75 - 125
Antimony	0.238	U	76.1	48.58	N1	mg/Kg	☼	64	75 - 125
Selenium	0.265	U	50.7	51.13		mg/Kg	☼	101	75 - 125
Thallium	0.284	U	50.7	47.99		mg/Kg	☼	95	75 - 125
Zinc	15.3		25.4	44.00		mg/Kg	☼	113	75 - 125

Lab Sample ID: 600-197217-1 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell13-Square 45-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.170	U	0.166	U	mg/Kg	☼	NC	20
Arsenic	1.96		1.258	J F	mg/Kg	☼	44	20
Barium	48.2		33.70	F	mg/Kg	☼	35	20
Beryllium	0.321	J	0.1887	J F	mg/Kg	☼	52	20
Calcium	11900		11920		mg/Kg	☼	0.1	20
Cadmium	0.142	J	0.08386	J F	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	U	0.362	U	mg/Kg	☼	NC	20
Thallium	0.997	J b	0.4682	J F	mg/Kg	☼	72	20
Zinc	13.3		8.973	F	mg/Kg	☼	39	20

Lab Sample ID: 600-197217-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell22-Square 39-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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

Eurofins TestAmerica, Houston

QC Sample Results

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 (Continued)

Lab Sample ID: 600-197217-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell22-Square 39-S-2-3-191204

Prep Type: Total/NA

Prep Batch: 284106

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	4.10		3.938		mg/Kg	☼	4	20
Antimony	0.238	U	0.238	U	mg/Kg	☼	NC	20
Selenium	0.265	U	0.265	U	mg/Kg	☼	NC	20
Thallium	0.284	U	0.284	U	mg/Kg	☼	NC	20
Zinc	15.3		12.95		mg/Kg	☼	17	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284324/7-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284324

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	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	1

Lab Sample ID: LCS 600-284324/8-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2376		mg/Kg		101	70 - 130

Lab Sample ID: 600-197217-1 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell13-Square 45-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00505	U	0.332	0.3731		mg/Kg	☼	112	75 - 125

Lab Sample ID: 600-197217-1 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell13-Square 45-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.00505	U	0.00461	U	mg/Kg	☼	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197217-5 DU

Matrix: Solid

Analysis Batch: 282911

Client Sample ID: Cell9-Square 185-S-2-3-191203

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	25.0		26.6		%		6	20
Percent Solids	75.0		73.4		%		2	20

Eurofins TestAmerica, Houston

Unadjusted Detection Limits

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 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	%

QC Association Summary

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

Job ID: 600-197217-1

Metals

Prep Batch: 284106

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	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	

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QC Association Summary

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

Job ID: 600-197217-1

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	
600-197217-1 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	

Lab Chronicle

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

Job ID: 600-197217-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Date Collected: 12/03/19 13:40

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 67.5

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 14:04	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 08:27	KP1	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Date Collected: 12/03/19 13:53

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 80.5

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 14:10	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

Date Collected: 12/03/19 14:17

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 14:17

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 83.3

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 14:12	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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197217-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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			284106	12/26/19 14:36	CLD	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 75.0

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 14:52	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 14:26	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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197217-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	TAL HOU

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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282911	12/12/19 17:09	ANP	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

Percent Solids: 71.4

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 14:30	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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 14:32	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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197217-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 14:34	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

Date Collected: 12/04/19 10:07

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

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 14:36	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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197217-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record



Environmental Testing
 TestAmerica

Client Information		Sampler: J. Skennam		Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936 10	
Client Contact: Sarah Johnson		Phone: 619 851 8792		E-Mail: sachin.kudchadkar@testamerica.com				Page: 1 of 1	
Company: ARCADIS U.S., Inc.								Job #:	
Address: 1004 North Big Spring Suite 121		Due Date Requested:		Analysis Requested				Preservation Codes:	
City: Midland		TAT Requested (days): Standard						A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Z - other (specify)	
State, Zip: TX, 79701		PO #:							
Phone: 432-227-0266(Tel)		WO #:							
Email: sarah.johnson@arcadis.com		Project #:							
Project Name: Chevron - Jal Land Farm Solis 2020		SSOW#:							
Site: Chevron Jal									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=other)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/RO - C10-C28 / C28-C36 - 4 oz Jar - Canton	8015B_GRO - C6-C10 - 2oz Jar - Canton	8260B - BTEX	300 - Chloride/Fluoride/Nitrate / Sulfate	6010B - Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr, Fe, Pb, Mn, Se, Ag, Ti, Zn	7471 - Hg	9012 - Cyanide	Total Number of Containers	Special Instructions/Note:
Cell 113 - Square 45-S-2-3-191203	191203	1340	G	Solid		N	N								2	 600-197217 Chain of Custody
Cell 113 - Square 110-S-2-3-191203	191203	1353	G	Solid		N	N								2	
Cell 119 - Square 134-S-2-3-191203	191203	1417	G	Solid		N	N								2	
Cell 119 - Square 118-S-2-3-191203	191203	1431	G	Solid		N	N								2	
Cell 119 - Square 185-S-2-3-191203	191203	1442	G	Solid		N	N								2	
Cell 119 - Square 189-S-2-3-191203	191203	1502	G	Solid		N	N								2	
Cell 11 - Square 35-S-2-3-191204	191204	0900	G	Solid		N	N								2	
Cell 11 - Square 10-S-2-3-191204	191204	0920	G	Solid		N	N								2	
Cell 11 - Square 88-S-2-3-191204	191204	0938	G	Solid		N	N								2	
Cell 11 - Square 151-S-2-3-191204	191204	0958	G	Solid		N	N								2	
Cell 122 - Square 39-S-2-3-191204	191204	1007	G	Solid		N	N								2	

Possible Hazard Identification		Disposal By Lab: <input type="checkbox"/> Archive For: <input type="checkbox"/> Months	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Radiological
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements	
Empty Kit Relinquished by: Calvin Haysen		Time: 12/5/19 1730	
Relinquished by: Calvin Haysen	Date/Time: 12/5/19 1730	Received by: ARCADIS	Date/Time: 12/10/19 1733
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	

Loc: 600
197217

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

19 DEC 10 17:36

Sample Receipt Checklist

JOB NUMBER:

217

Date/Time Received:

CLIENT:

Acadix

UNPACKED BY:

47

CARRIER/DRIVER:

Fedex

Custody Seal Present: ☐ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7286	Y / N	Y / N	5.1	676	+0.1	5.2
	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? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☒ NO

☐ YES

Base samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

HS-SA-WI-013

Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 600-197217-1

Login Number: 197217

List Source: Eurofins TestAmerica, Houston

List Number: 1

Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197218-1

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

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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

Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197218-1

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	
600-197218-6	Cell6- Square 202 - S-2-3-191205	Solid	12/05/19 09:46	12/10/19 17:32	
600-197218-7	Cell6- Square 110 - S-2-3-191205	Solid	12/05/19 09:59	12/10/19 17:32	
600-197218-8	Cell6- Square 24 - S-2-3-191205	Solid	12/05/19 10:08	12/10/19 17:32	
600-197218-9	Cell7- Square 58 - S-2-3-191205	Solid	12/05/19 10:17	12/10/19 17:32	
600-197218-10	Cell7- Square 34 - S-2-3-191205	Solid	12/05/19 10:25	12/10/19 17:32	
600-197218-11	Cell7- Square 153 - S-2-3-191205	Solid	12/05/19 10:33	12/10/19 17:32	

Client Sample Results

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

Job ID: 600-197218-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.143	U	0.482	0.143	mg/Kg	☼	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	☼	12/26/19 14:41	12/27/19 13:19	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

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 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
Percent Moisture	19.4		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	80.6		1.0	1.0	%			12/13/19 08:48	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

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

Client Sample Results

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

Job ID: 600-197218-1

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

Percent Solids: 82.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

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 or Semisolid Waste (Manual Cold Vapor Technique)

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
Percent Solids	90.2		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

Date Collected: 12/05/19 09:46

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 73.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.150	U	0.503	0.150	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Arsenic	1.66		1.26	0.274	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Barium	41.8		1.26	0.0377	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Beryllium	0.264	J	0.314	0.0182	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Calcium	10400		126	1.09	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Cadmium	0.119	J	0.314	0.0322	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Chromium	5.03		0.628	0.0636	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Copper	2.79		0.628	0.219	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Iron	4840		25.1	3.18	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Potassium	1200		126	13.8	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Magnesium	962		126	2.41	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Manganese	63.4		1.89	0.0479	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Sodium	18.6	J	126	1.11	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Lead	3.53		0.628	0.132	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Antimony	0.292	U	3.14	0.292	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Selenium	0.326	U	2.51	0.326	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Thallium	0.348	U	1.89	0.348	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	1
Zinc	12.1	b	1.89	0.136	mg/Kg	☼	12/26/19 14:41	12/27/19 13:37	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	0.00758	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	12/26/19 14:41	12/27/19 13:39	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00446	U	0.0212	0.00446	mg/Kg	☼	12/30/19 14:44	12/31/19 10:58	1

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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00418	J	0.0178	0.00376	mg/Kg	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 or Semisolid Waste (Manual Cold Vapor Technique)

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

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 72.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197218-1

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

Percent Solids: 72.3

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 14:41	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 (Manual Cold Vapor Technique)

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

Definitions/Glossary

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

Job ID: 600-197218-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Job ID: 600-197218-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284107/1-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284107

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6
Beryllium	293	259.0		mg/Kg		88.4	72.4 - 106.8
Calcium	19300	17870		mg/Kg		92.6	70.5 - 106.7
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 - 106.8
Potassium	5740	4944		mg/Kg		86.1	64.6 - 106.6
Magnesium	5390	4035		mg/Kg		74.9	64.2 - 106.7
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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197218-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284107/2-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.148	U	15.5	14.51		mg/Kg	☼	93	75 - 125
Arsenic	2.35		62.1	66.43		mg/Kg	☼	103	75 - 125
Barium	128		62.1	158.2	N1	mg/Kg	☼	49	75 - 125
Beryllium	0.273	J	62.1	61.25		mg/Kg	☼	98	75 - 125
Calcium	53500		621	62580	4	mg/Kg	☼	1455	75 - 125
Cadmium	0.155	J	62.1	62.82		mg/Kg	☼	101	75 - 125
Chromium	5.36		62.1	59.69		mg/Kg	☼	88	75 - 125
Copper	4.07		62.1	65.56		mg/Kg	☼	99	75 - 125
Iron	5010		621	5228	4	mg/Kg	☼	35	75 - 125
Potassium	1290		621	2166	N1	mg/Kg	☼	142	75 - 125
Magnesium	2140		621	3529	N1	mg/Kg	☼	224	75 - 125
Manganese	72.6		62.1	111.2	N1	mg/Kg	☼	62	75 - 125
Sodium	37.0	J	621	683.5		mg/Kg	☼	104	75 - 125
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	☼	101	75 - 125
Thallium	0.344	U	62.1	57.94		mg/Kg	☼	93	75 - 125
Zinc	14.7	b	31.0	44.03		mg/Kg	☼	95	75 - 125

Lab Sample ID: 600-197218-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197218-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197218-11 MS

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	27.2	J	671	721.8		mg/Kg	☼	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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.148	U	0.148	U	mg/Kg	☼	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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.154	U	0.165	U	mg/Kg	☼	NC	20
Arsenic	1.42		1.003	J F	mg/Kg	☼	34	20
Barium	23.6		19.74		mg/Kg	☼	18	20
Beryllium	0.162	J	0.1106	J F	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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197218-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197218-11 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284107

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284366

Analyte	MB Result	MB 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	1

Lab Sample ID: LCS 600-284366/2-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.231	0.2371		mg/Kg		103	70 - 130

Lab Sample ID: 600-197218-1 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00449	U	0.304	0.3085		mg/Kg	☼	102	75 - 125

Lab Sample ID: 600-197218-1 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.00449	U	0.004750	J	mg/Kg	☼	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197218-1 DU

Matrix: Solid

Analysis Batch: 282965

Client Sample ID: Cell5- Square 209 - S-2-3-191205

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	24.0		22.5		%		6	20
Percent Solids	76.0		77.5		%		2	20

QC Sample Results

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

Job ID: 600-197218-1

Method: 2540B - Percent Moisture (Continued)

Lab Sample ID: 600-197218-11 DU

Matrix: Solid

Analysis Batch: 282965

Client Sample ID: Cell7- Square 153 - S-2-3-191205

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	27.7		26.5		%		4	20
Percent Solids	72.3		73.5		%		2	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	%

QC Association Summary

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

Job ID: 600-197218-1

Metals

Prep Batch: 284107

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	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 Batch
600-197218-1	Cell5- Square 209 - S-2-3-191205	Total/NA	Solid	7471A	
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	

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QC Association Summary

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

Job ID: 600-197218-1

Metals (Continued)

Prep Batch: 284366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	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	

Lab Chronicle

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

Job ID: 600-197218-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
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

Date Collected: 12/05/19 08:55

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 09:07

Matrix: Solid

Date Received: 12/10/19 17:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 09:16

Matrix: Solid

Date Received: 12/10/19 17:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Date Received: 12/10/19 17:32

Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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Lab Chronicle

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

Job ID: 600-197218-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			284366	12/30/19 14:44	KP1	TAL HOU
Total/NA	Analysis	7471A		1	284444	12/31/19 10:49	KP1	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 13:23	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 10:51	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Lab Chronicle

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

Job ID: 600-197218-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 09:59

Matrix: Solid

Date Received: 12/10/19 17:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 09:59

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 74.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/05/19 10:08

Matrix: Solid

Date Received: 12/10/19 17:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197218-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197218-11

Date Collected: 12/05/19 10:33

Matrix: Solid

Date Received: 12/10/19 17:32

Percent Solids: 72.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record

Client Information		Sampler: J. Steinmann		Lab PM: Kudchadkar, Sachin G.		Carrier Tracking No(s):		COC No: 600-72593-19936.10	
Client Contact: Sarah Johnson		Phone: 6198518792		E-Mail: sachin.kudchadkar@testamericainc.com				Page: 1 of 1	
Company: ARCADIS U.S., Inc.		Address: 1004 North Big Spring Suite 121		City: Midland		State: TX		Zip: 79701	
Phone: 432-227-0266(Tel)		PO #:		WO #:		Project #:		SSOW#:	
Email: sarah.johnson@arcadis.com		Project Name: Chevron - Jal Land Farm Solis 2020		Site: Chavon Landfarm					

Analysis Requested		Preservation Codes:		Special Instructions/Note:	
Analysis Requested	Preservation Codes	Special Instructions/Note			
A - HCL	M - Hexane				
B - NaOH	N - None				
C - Zn Acetate	O - AsNaO2				
D - Nitric Acid	P - Na2O4S				
E - NaHSO4	Q - Na2SO3				
F - MeOH	R - Na2S2O3				
G - Anchor	S - H2SO4				
H - Ascorbic Acid	T - TSP Dodecahydrate				
I - Ice	U - Acetone				
J - DI Water	V - MCAA				
K - EDTA	W - pH 4.5				
L - EDA	Z - other (specify)				
Other:					

Sample Identification	Sample Date	Sample Time	Sample Type (G=Grab)	Matrix (W=Water, S=Solid, O=Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/ORO - C10-C28/ C28-C36 - 4 oz Jar- Canton	8015B_GRO - C6-C10 - 2oz Jar- Canton	8260B - BTEX	300 - Chloride/ Fluoride/ Nitrate / Sulfate	6010B - Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr, Fe, Pb, Mn, Se, Ag, Ti, Zn	7471 - Hg	9012 - Cyanide	Total Number of Containers	Special Instructions/Note:
Cell5-Square 209-S-2-3-191205	191205	0855	G	Solid	N	N									
Cell5-Square 209-S-2-3-191205	191205	0907	G	Solid	N	N									
Cell5-Square 209-S-2-3-191205	191205	0916	G	Solid	N	N									
Cell5-Square 209-S-2-3-191205	191205	0925	G	Solid	N	N									
Cell6-Square 206-S-2-3-191205	191205	0937	G	Solid	N	N									
Cell6-Square 202-S-2-3-191205	191205	0946	G	Solid	N	N									
Cell6-Square 112-S-2-3-191205	191205	0959	G	Solid	N	N									
Cell6-Square 24-S-2-3-191205	191205	1008	G	Solid	N	N									
Cell7-Square 58-S-2-3-191205	191205	1017	G	Solid	N	N									
Cell7-Square 24-S-2-3-191205	191205	1025	G	Solid	N	N									
Cell7-Square 153-S-2-3-191205	191205	1033	G	Solid	N	N									

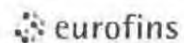
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Non-Hazard	Flammable	Return To Client	Archive For
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/OC Requirements	
Non-Hazard	Flammable	Return To Client	Archive For
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Empty Kit Relinquished by:		Date:	
Relinquished by	Date/Time	Relinquished by	Date/Time
Callum Ferguson	12/15/19 1730	Callum Ferguson	12/15/19 1730

Custody Seal No.		Cooler Temperature(s) °C and Other Remarks:	
Yes	No	Company	Company
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Callum Ferguson	Callum Ferguson
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Callum Ferguson	Callum Ferguson
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Callum Ferguson	Callum Ferguson

Loc: 600
197218



Environment Testing
TestAmerica

Eurofins TestAmerica Houston

19DEC19 17:32

Sample Receipt Checklist

JOB NUMBER: 218
UNPACKED BY: 47
Date/Time Received: _____
CLIENT: Arcadis
CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7301	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	5.8	676	+0.1	5.9
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197219-1

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

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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

Job ID: 600-197219-1

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

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197219-1

Project/Site: Chevron - Jal Land Farm Soils

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-197219-1	Cell 21 - Square 48-S-2-3-191203	Solid	12/03/19 10:30	12/10/19 17:33	
600-197219-2	Cell 21 - Square 169-S-2-3-191203	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	
600-197219-6	Cell 25 - Square 207-S-2-3-191203	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	
600-197219-8	Cell 26 - Square 199-S-2-3-191203	Solid	12/03/19 12:28	12/10/19 17:33	
600-197219-9	Cell 26 - Square 108-S-2-3-191203	Solid	12/03/19 12:41	12/10/19 17:33	
600-197219-10	Cell 13 - Square 105-S-2-3-191203	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	

Client Sample Results

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

Job ID: 600-197219-1

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Lab Sample ID: 600-197219-1

Date Collected: 12/03/19 10:30

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 87.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.126	U	0.424	0.126	mg/Kg	☼	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

Lab Sample ID: 600-197219-2

Date Collected: 12/03/19 10:54

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 73.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.155	U	0.522	0.155	mg/Kg	☼	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	☼	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

Client Sample Results

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

Job ID: 600-197219-1

Client Sample ID: Cell 21 - Square 169-S-2-3-191203

Lab Sample ID: 600-197219-2

Date Collected: 12/03/19 10:54

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 73.6

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 or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (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	☼	12/30/19 10:30	12/31/19 09:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.7		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	84.3		1.0	1.0	%			12/13/19 08:48	1

Client Sample Results

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

Job ID: 600-197219-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.151	U	0.508	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

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	0.0710	b	0.0217	0.00457	mg/Kg	☼	12/30/19 10:30	12/31/19 09:11	1

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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 83.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.133	U	0.446	0.133	mg/Kg	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197219-1

Client Sample ID: Cell 25 - Square 181-S-2-3-191203

Lab Sample ID: 600-197219-5

Date Collected: 12/03/19 11:43

Matrix: Solid

Date Received: 12/10/19 17:33

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

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	0.0714	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Client Sample Results

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

Job ID: 600-197219-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00467	U	0.0222	0.00467	mg/Kg	☼	12/30/19 10:30	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197219-1

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

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

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	0.00433	U	0.0206	0.00433	mg/Kg	☼	12/30/19 10:30	12/31/19 09:19	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.9		1.0	1.0	%			12/13/19 08:48	1
Percent Solids	75.1		1.0	1.0	%			12/13/19 08:48	1

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

Percent Solids: 70.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197219-1

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Lab Sample ID: 600-197219-10

Date Collected: 12/03/19 13:04

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 71.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197219-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 (Manual Cold Vapor Technique)

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
Percent Solids	79.8		1.0	1.0	%			12/13/19 08:48	1

Definitions/Glossary

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

Job ID: 600-197219-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Job ID: 600-197219-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-284108/1-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284108

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284108

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6
Beryllium	293	251.3		mg/Kg		85.8	72.4 - 106.8
Calcium	19300	16970		mg/Kg		87.9	70.5 - 106.7
Cadmium	268	238.6		mg/Kg		89.0	71.3 - 106.7
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	50.1 - 106.8
Potassium	5740	4753		mg/Kg		82.8	64.6 - 106.6
Magnesium	5390	3810		mg/Kg		70.7	64.2 - 106.7
Manganese	616	457.5		mg/Kg		74.3	64.1 - 106.7
Sodium	9070	7925		mg/Kg		87.4	70.5 - 106.6
Lead	164	147.2		mg/Kg		89.8	71.3 - 106.7

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197219-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-284108/2-A

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284108

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.126	U	14.3	13.26		mg/Kg	☼	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
Calcium	10700		572	12190	4	mg/Kg	☼	254	75 - 125
Cadmium	0.148	J	57.2	57.64		mg/Kg	☼	100	75 - 125
Chromium	5.30		57.2	61.13		mg/Kg	☼	98	75 - 125
Copper	3.85		57.2	62.91		mg/Kg	☼	103	75 - 125
Iron	4550		572	6491	4	mg/Kg	☼	339	75 - 125
Potassium	1060		572	2399	N1	mg/Kg	☼	233	75 - 125
Magnesium	1050		572	2199	N1	mg/Kg	☼	200	75 - 125
Manganese	61.9		57.2	121.8		mg/Kg	☼	105	75 - 125
Sodium	19.7	J b	572	606.2		mg/Kg	☼	102	75 - 125
Lead	4.88		57.2	60.68		mg/Kg	☼	97	75 - 125
Antimony	0.246	U	85.9	57.12	N1	mg/Kg	☼	67	75 - 125
Selenium	0.275	U	57.2	56.77		mg/Kg	☼	99	75 - 125
Thallium	0.604	J b	57.2	55.59		mg/Kg	☼	96	75 - 125
Zinc	14.2	b	28.6	46.97		mg/Kg	☼	115	75 - 125

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197219-1

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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
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
Zinc	12.8	b	29.0	45.81		mg/Kg	✱	114	75 - 125

Lab Sample ID: 600-197219-1 DU

Matrix: Solid

Analysis Batch: 284156

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284108

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.126	U	0.132	U	mg/Kg	✱	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	J b	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	J b	0.3501	J F	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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197219-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
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

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284324

Analyte	MB		MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.003828	J	0.0159	0.00336	mg/Kg		12/30/19 10:30	12/31/19 09:25	1

Lab Sample ID: LCS 600-284324/8-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Mercury	0.234	0.2376		mg/Kg		101	70 - 130

Lab Sample ID: 600-197219-1 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Mercury	0.115	b	0.268	0.3623		mg/Kg	☼	92	75 - 125

Lab Sample ID: 600-197219-1 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Prep Type: Total/NA

Prep Batch: 284324

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	0.115	b	0.01063	J F	mg/Kg	☼	166	20

Lab Sample ID: MB 600-284342/1-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284342

Analyte	MB		MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.003738	J	0.0157	0.00330	mg/Kg		12/30/19 13:23	12/31/19 09:27	1

Lab Sample ID: LCS 600-284342/2-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Mercury	0.224	0.2253		mg/Kg		101	70 - 130

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197219-1

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197219-10 DU

Matrix: Solid

Analysis Batch: 282965

Client Sample ID: Cell 13 - Square 105-S-2-3-191203

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	28.2		25.6		%		10	20
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	%

QC Association Summary

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

Job ID: 600-197219-1

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	

Eurofins TestAmerica, Houston

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	

Lab Chronicle

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

Job ID: 600-197219-1

Client Sample ID: Cell 21 - Square 48-S-2-3-191203

Lab Sample ID: 600-197219-1

Date Collected: 12/03/19 10:30

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 10:30

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 73.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 11:07

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 11:07

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197219-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197219-4

Date Collected: 12/03/19 11:23

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Collected: 12/03/19 11:55

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197219-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	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

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 75.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282965	12/13/19 08:48	ANP	TAL HOU

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197219-1

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

Percent Solids: 70.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197219-10

Date Collected: 12/03/19 13:04

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197219-10

Date Collected: 12/03/19 13:04

Matrix: Solid

Date Received: 12/10/19 17:33

Percent Solids: 71.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197219-11

Date Collected: 12/03/19 13:21

Matrix: Solid

Date Received: 12/10/19 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record

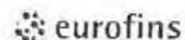
Client Information		Sampler: J. Steinmann		Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936 10	
Client Contact: Sarah Johnson		Phone: 619 818 792		E-Mail: sachin.kudchadkar@testamericainc.com				Page: 1 of 1	
Company: ARCADIS U.S., Inc.		Address: 1004 North Big Spring Suite 121		City: Midland		State: TX		Zip: 79701	
Phone: 432-227-0266(Tel)		Fax: 432-227-0266(Fax)		Email: sarah.johnson@arcadis.com		Project Name: Chevron - Jal Land Farm Soils 2020		Job #:	
Site: Jal Landfarm		Sample Date: 191203		Sample Time: 1030		Sample Type: G		Matrix: Solid	
Sample Identification		Sample Date		Sample Time		Sample Type		Matrix	
Cell 21 - Square 48-5-2-3-191203	191203	1030	G	Solid					
Cell 21 - Square 169-5-2-3-191203	191203	1054	G	Solid					
Cell 21 - Square 204-5-2-3-191203	191203	1107	G	Solid					
Cell 25 - Square 199-5-2-3-191203	191203	1123	G	Solid					
Cell 25 - Square 181-5-2-3-191203	191203	1143	G	Solid					
Cell 25 - Square 207-5-2-3-191203	191203	1155	G	Solid					
Cell 26 - Square 181-5-2-3-191203	191203	1206	G	Solid					
Cell 26 - Square 199-5-2-3-191203	191203	1228	G	Solid					
Cell 26 - Square 108-5-2-3-191203	191203	1241	G	Solid					
Cell 13 - Square 105-5-2-3-191203	191203	1304	G	Solid					
Cell 13 - Square 186-5-2-3-191203	191203	1321	G	Solid					
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Sample Disposal (A fee may be assessed if samples are retained longer.)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Empty Kit Relinquished by:		Date/Time: 12/5/19 1730		Company: ARCADIS		Received by:		Date/Time: 12/10/19 1733	
Relinquished by:		Date/Time: 12/5/19 1730		Company: ARCADIS		Received by:		Date/Time: 12/10/19 1733	
Relinquished by:		Date/Time: 12/5/19 1730		Company: ARCADIS		Received by:		Date/Time: 12/10/19 1733	
Custody Seal Intact		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/OC Requirements:		Method of Shipment:	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No							



600-197219 Chain of Custody

Loc: 600
137219

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

19 DEC 16 17:3

Sample Receipt Checklist

JOB NUMBER: 219
UNPACKED BY: 47
Date/Time Received: _____
CLIENT: Acadix
CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7312	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	5.6	676	+0.1	5.7
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				
	<input type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> Y / <input type="checkbox"/> N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

HS-SA-WI-013

Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197229-1

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:

12/30/2019 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

LINKS

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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

Job ID: 600-197229-1

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

Sample Summary

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

Job ID: 600-197229-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

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

Job ID: 600-197229-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 Waste (Manual Cold Vapor Technique)

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	Qualifier	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

Percent Solids: 75.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197229-1

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

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
Mercury	0.0527		0.0215	0.00453	mg/Kg	☼	12/27/19 12:50	12/27/19 15:20	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.8		1.0	1.0	%	—		12/11/19 13:54	1
Percent Solids	75.2		1.0	1.0	%	—		12/11/19 13:54	1

Client Sample ID: Cell15- Square 75-S-2-3-191206

Lab Sample ID: 600-197229-3

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	U	0.506	0.151	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Arsenic	1.72		1.27	0.276	mg/Kg	☼	12/12/19 19:01	12/17/19 15:43	1
Barium	33.3		1.27	0.0380	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Beryllium	0.234	J	0.316	0.0184	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Calcium	4430	b	127	1.09	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Cadmium	0.0949	J	0.316	0.0324	mg/Kg	☼	12/12/19 19:01	12/17/19 15:43	1
Chromium	5.26		0.633	0.0641	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Copper	3.09		0.633	0.220	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Iron	4220		25.3	3.20	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Potassium	781		127	13.9	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Magnesium	680		127	2.43	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Manganese	65.4	b	1.90	0.0482	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Sodium	11.7	J b	127	1.12	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Lead	3.63		0.633	0.133	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Antimony	0.294	U	3.16	0.294	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	1
Selenium	0.328	U	2.53	0.328	mg/Kg	☼	12/12/19 19:01	12/17/19 15:43	1
Thallium	0.351	U	1.90	0.351	mg/Kg	☼	12/12/19 19:01	12/17/19 15:43	1
Zinc	10.8		1.90	0.137	mg/Kg	☼	12/12/19 19:01	12/16/19 16:54	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	0.0278		0.0213	0.00448	mg/Kg	☼	12/27/19 12:50	12/27/19 15:26	1

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197229-1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.127	U	0.428	0.127	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Arsenic	1.81		1.07	0.233	mg/Kg	☼	12/12/19 19:01	12/17/19 15:45	1
Barium	33.5		1.07	0.0321	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Beryllium	0.208	J	0.267	0.0155	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Calcium	7620	b	107	0.924	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Cadmium	0.0909	J	0.267	0.0274	mg/Kg	☼	12/12/19 19:01	12/17/19 15:45	1
Chromium	5.07		0.535	0.0541	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Copper	3.24		0.535	0.186	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Iron	4040		21.4	2.70	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Potassium	790		107	11.8	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Magnesium	709		107	2.05	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Manganese	60.6	b	1.60	0.0407	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Sodium	10.8	J b	107	0.947	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Lead	3.44		0.535	0.112	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Antimony	0.248	U	2.67	0.248	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	1
Selenium	0.277	U	2.14	0.277	mg/Kg	☼	12/12/19 19:01	12/17/19 15:45	1
Thallium	0.296	U	1.60	0.296	mg/Kg	☼	12/12/19 19:01	12/17/19 15:45	1
Zinc	11.3		1.60	0.115	mg/Kg	☼	12/12/19 19:01	12/16/19 16:56	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	0.0188		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

Percent Solids: 75.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.153	U	0.516	0.153	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Arsenic	1.28	J	1.29	0.281	mg/Kg	☼	12/12/19 19:01	12/17/19 15:47	1
Barium	27.4		1.29	0.0387	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Beryllium	0.168	J	0.322	0.0187	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Calcium	6160	b	129	1.11	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Cadmium	0.0838	J	0.322	0.0330	mg/Kg	☼	12/12/19 19:01	12/17/19 15:47	1
Chromium	4.30		0.644	0.0652	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Copper	2.69		0.644	0.224	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Iron	3340		25.8	3.26	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Potassium	738		129	14.2	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Magnesium	706		129	2.47	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Manganese	56.8	b	1.93	0.0491	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Sodium	12.4	J b	129	1.14	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Lead	2.69		0.644	0.135	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Antimony	0.299	U	3.22	0.299	mg/Kg	☼	12/12/19 19:01	12/16/19 16:58	1
Selenium	0.334	U	2.58	0.334	mg/Kg	☼	12/12/19 19:01	12/17/19 15:47	1

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197229-1

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

Percent Solids: 75.3

Method: 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

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	0.0177	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

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

Date Received: 12/10/19 10:38

Percent Solids: 91.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor 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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197229-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	Prepared	Analyzed	Dil Fac
Percent Moisture	3.2		1.0	1.0	%	—		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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197229-1

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

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)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0207		0.0201	0.00424	mg/Kg	☼	12/27/19 12:50	12/27/19 15:40	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor 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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197229-1

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.

General Chemistry

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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

Job ID: 600-197229-1

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

Analyte	MB Result	MB 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

Analyte	MB Result	MB 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	U	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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.8	22.17		mg/Kg		85.9	67.1 - 106.6
Barium	393	310.1		mg/Kg		78.9	64.6 - 106.6
Beryllium	293	262.4		mg/Kg		89.6	72.4 - 106.8
Calcium	19300	17290		mg/Kg		89.6	70.5 - 106.7
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	50.1 - 106.8
Potassium	5740	4751		mg/Kg		82.8	64.6 - 106.6
Magnesium	5390	4110		mg/Kg		76.3	64.2 - 106.7
Manganese	616	514.8		mg/Kg		83.6	64.1 - 106.7
Sodium	9070	7457		mg/Kg		82.2	70.5 - 106.6

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197229-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.7

Lab Sample ID: 600-197229-9 MS

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.126	U	13.1	11.44		mg/Kg	☼	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

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.126	U	13.1	11.07		mg/Kg	☼	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

Eurofins TestAmerica, Houston

QC Sample Results

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

Job ID: 600-197229-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197229-9 MS

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.143	J	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
Iron	5670		525	8139	4	mg/Kg	✱	469	75 - 125
Potassium	1330		525	2662	N1	mg/Kg	✱	253	75 - 125
Magnesium	1260		525	2288	N1	mg/Kg	✱	196	75 - 125
Manganese	89.6		52.5	152.4		mg/Kg	✱	120	75 - 125
Sodium	20.0	J	525	551.9		mg/Kg	✱	101	75 - 125
Lead	5.42		52.5	54.61		mg/Kg	✱	94	75 - 125
Antimony	0.246	U	78.8	39.58	N1	mg/Kg	✱	50	75 - 125
Selenium	0.275	U	52.5	45.91		mg/Kg	✱	87	75 - 125
Thallium	0.294	U	52.5	44.68		mg/Kg	✱	85	75 - 125
Zinc	14.7		26.3	50.31	N1	mg/Kg	✱	136	75 - 125

Lab Sample ID: 600-197229-9 DU

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	J b	17.91	J F	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

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.126	U	0.123	U	mg/Kg	✱	NC	20
Arsenic	2.66		2.534		mg/Kg	✱	5	20
Barium	70.3		60.87		mg/Kg	✱	14	20
Beryllium	0.318		0.3244		mg/Kg	✱	2	20
Calcium	41000		20410	F	mg/Kg	✱	67	20
Cadmium	0.143	J	0.1339	J	mg/Kg	✱	7	20
Chromium	6.14		6.165		mg/Kg	✱	0.4	20
Copper	3.63		3.832		mg/Kg	✱	5	20
Iron	5670		5650		mg/Kg	✱	0.4	20
Potassium	1330		1264		mg/Kg	✱	5	20

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QC Sample Results

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

Job ID: 600-197229-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197229-9 DU

Matrix: Solid

Analysis Batch: 283285

Client Sample ID: Cell14- Square 19-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 282928

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284203

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		12/27/19 12:50	12/27/19 15:02	1

Lab Sample ID: LCS 600-284203/8-B

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2431		mg/Kg		104	70 - 130

Lab Sample ID: 600-197229-7 MS

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Cell14- Square 49-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 284203

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0300		0.250	0.2662		mg/Kg	✱	94	75 - 125

Lab Sample ID: 600-197229-7 DU

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Cell14- Square 49-S-2-3-191206

Prep Type: Total/NA

Prep Batch: 284203

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.0300		0.02340	F	mg/Kg	✱	25	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197229-7 DU

Matrix: Solid

Analysis Batch: 282754

Client Sample ID: Cell14- Square 49-S-2-3-191206

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	3.2		2.6	F	%		22	20
Percent Solids	96.8		97.4		%		0.7	20

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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

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	%

QC Association Summary

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

Job ID: 600-197229-1

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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197229-1

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	

Lab Chronicle

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

Job ID: 600-197229-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197229-2

Date Collected: 12/06/19 11:04

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197229-2

Date Collected: 12/06/19 11:04

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197229-3

Date Collected: 12/06/19 11:13

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 13:54	ANP	TAL HOU

Lab Chronicle

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

Job ID: 600-197229-1

Client Sample ID: Cell15- Square 75-S-2-3-191206

Lab Sample ID: 600-197229-3

Date Collected: 12/06/19 11:13

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197229-4

Date Collected: 12/06/19 11:22

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197229-5

Date Collected: 12/06/19 11:31

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:12	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197229-1

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

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 12/10/19 10:38

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:12	ANP	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

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:12	ANP	TAL HOU

Lab Chronicle

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

Job ID: 600-197229-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282754	12/11/19 14:13	ANP	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

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Client Information					
Sampler:	J. Steinmann	Lab PM	Kudchadkar, Sachin G	Carrier Tracking No(s)	COC No 600-72593-19936.10
Phone:	619 851 8792	E-Mail	sachin.kudchadkar@testamerica.com	Page	1 of 1
Company	ARCADIS U.S., Inc.	Address	1004 North Big Spring Suite 121	Job #	
City	Midland	State, Zip	TX, 79701		
Phone	432-227-0266(Tel)	Project Name	Chevron - Jal Land Farm Soils 2020		
Email	sachin.johnson@arcadis.com	Site	Chevron Landfarm		
Analysis Requested					
Due Date Requested:		TAT Requested (days):	Standard	Total Number of containers	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:
PO #		W/O #			M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=solid, S=solid, O=water, A=air) BT-Tissue, A=Air	Special Instructions/Note:
Cell 116-Square 12-S-2-3-191206	191206	1056	G	Solid	
Cell 115-Square 12-S-2-3-191206	191206	1104	G	Solid	
Cell 115-Square 75-S-2-3-191206	191206	1113	G	Solid	
Cell 115-Square 145-S-2-3-191206	191206	1122	G	Solid	
Cell 115-Square 21-S-2-3-191206	191206	1131	G	Solid	
Cell 114-Square 40-S-2-3-191206	191206	1139	G	Solid	
Cell 114-Square 49-S-2-3-191206	191206	1145	G	Solid	
Cell 114-Square 120-S-2-3-191206	191206	1155	G	Solid	
Cell 114-Square 19-S-2-3-191206	191206	1202	G	Solid	
				Solid	
				Solid	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: Callen Ferguson J.P. Fulley Company Arcadis Relinquished by: _____ Date/Time: 12/9/19 1100 Relinquished by: _____ Date/Time: 12/9/19 1100 Custody Seal No.: _____ Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Loc: 600
197229

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

Sample Receipt Checklist

19 DEC 10 10:38

JOB NUMBER:

4229

Date/Time Received:

CLIENT:

Arcadis

UNPACKED BY:

CARRIER/DRIVER:

FedEx

Custody Seal Present: ☐ YES ☒ NO

Number of Coolers Received:

1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2602	Y / N	Y / N	2.8	678	-0.3	2.5
	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? ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☒ NO

☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen 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:

HS-SA-WI-013

Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197250-1

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



Authorized for release by:
4/10/2020 1:41:32 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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

Job ID: 600-197250-1

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

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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	

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0233		0.0192	0.00404	mg/Kg	☼	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.156	U	0.524	0.156	mg/Kg	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

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	0.00863	J	0.0238	0.00502	mg/Kg	☼	12/27/19 12:50	12/27/19 15:50	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 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	J b	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Client Sample ID: Cell11-Square65-S-2-191206

Lab Sample ID: 600-197250-4

Date Collected: 12/06/19 09:43

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 72.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.158	U	0.529	0.158	mg/Kg	☼	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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.161	U	0.543	0.161	mg/Kg	☼	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	☼	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	U	2.71	0.351	mg/Kg	☼	12/12/19 21:03	12/16/19 11:59	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	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	☼	12/27/19 12:50	12/27/19 15:56	1

General Chemistry

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

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 74.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 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	J b	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

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	0.00965	J	0.0220	0.00464	mg/Kg	☼	12/27/19 12:50	12/27/19 15:58	1

General Chemistry

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Client Sample ID: Cell12-Square14-S-2-191206

Lab Sample ID: 600-197250-7

Date Collected: 12/06/19 10:14

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.399	0.119	mg/Kg	☼	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

Lab Sample ID: 600-197250-8

Date Collected: 12/06/19 10:18

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 81.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.136	U	0.457	0.136	mg/Kg	☼	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	☼	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	☼	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	U	2.28	0.296	mg/Kg	☼	12/12/19 21:03	12/16/19 12:05	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Client Sample ID: Cell12-Square27-S-2-191206

Lab Sample ID: 600-197250-8

Date Collected: 12/06/19 10:18

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 81.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.316	U	1.71	0.316	mg/Kg	☼	12/12/19 21:03	12/16/19 12:05	1
Zinc	9.24		1.71	0.123	mg/Kg	☼	12/12/19 21:03	12/16/19 12:05	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	0.00440	J	0.0186	0.00392	mg/Kg	☼	12/30/19 14:44	12/31/19 11:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	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

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 70.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.163	U	0.549	0.163	mg/Kg	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	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	0.00340	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.125	U	0.419	0.125	mg/Kg	☼	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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.290	U	1.57	0.290	mg/Kg	☼	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 Semisolid Waste (Manual Cold Vapor Technique)

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
Percent Solids	89.1		1.0	1.0	%	—		12/12/19 10:35	1

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

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
Matrix: Solid
Analysis Batch: 283152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282936

Analyte	MB Result	MB 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 11:22	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Beryllium	0.01500	J	0.250	0.0145	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Calcium	0.864	U	100	0.864	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Copper	0.174	U	0.500	0.174	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Iron	2.53	U	20.0	2.53	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Potassium	11.0	U	100	11.0	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Magnesium	1.92	U	100	1.92	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Sodium	1.530	J	100	0.886	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Antimony	0.232	U	2.50	0.232	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Thallium	0.277	U	1.50	0.277	mg/Kg		12/12/19 21:03	12/16/19 11:22	1
Zinc	0.108	U	1.50	0.108	mg/Kg		12/12/19 21:03	12/16/19 11:22	1

Lab Sample ID: LCSSRM 600-282936/2-A
Matrix: Solid
Analysis Batch: 283152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282936

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.8	23.10		mg/Kg		89.5	67.1 - 106.6
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 - 106.7
Cadmium	268	268.7		mg/Kg		100.3	71.3 - 106.7
Chromium	63.6	60.92		mg/Kg		95.8	71.9 - 106.6
Copper	175	173.4		mg/Kg		99.1	72.0 - 106.9
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 - 106.7
Sodium	9070	7939		mg/Kg		87.5	70.5 - 106.6
Lead	164	160.1		mg/Kg		97.6	71.3 - 106.7

Eurofins TestAmerica, Houston

QC Sample Results

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 (Continued)

Lab Sample ID: LCSSRM 600-282936/2-A

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6

Lab Sample ID: 600-197250-1 MS

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell11-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.133	U	14.9	12.47		mg/Kg	☼	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	J b	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

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	J b	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

Eurofins TestAmerica, Houston

QC Sample Results

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 (Continued)

Lab Sample ID: 600-197250-11 MS

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	465	b	519	952.0		mg/Kg	☼	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	U	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

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell11-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	U	mg/Kg	☼	NC	20
Thallium	0.401	J	0.317	U	mg/Kg	☼	NC	20
Zinc	14.7		12.76		mg/Kg	☼	14	20

Lab Sample ID: 600-197250-11 DU

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	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	J b	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

Eurofins TestAmerica, Houston

QC Sample Results

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 (Continued)

Lab Sample ID: 600-197250-11 DU

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

Prep Batch: 282936

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lead	3.85		3.754		mg/Kg	☼	2	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

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-284203/7-B

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284203

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		12/27/19 12:50	12/27/19 15:02	1

Lab Sample ID: LCS 600-284203/8-B

Matrix: Solid

Analysis Batch: 284242

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2431		mg/Kg		104	70 - 130

Lab Sample ID: MB 600-284366/1-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284366

Analyte	MB Result	MB 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	1

Lab Sample ID: LCS 600-284366/2-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.231	0.2371		mg/Kg		103	70 - 130

Lab Sample ID: 600-197250-8 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell12-Square27-S-2-191206

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00440	J	0.269	0.3082		mg/Kg	☼	113	75 - 125

Lab Sample ID: 600-197250-8 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell12-Square27-S-2-191206

Prep Type: Total/NA

Prep Batch: 284366

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury	0.00440	J	0.00386	U	mg/Kg	☼	NC	20

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16.9		17.8		%		6	20
Percent Solids	83.1		82.2		%		1	20

Lab Sample ID: 600-197250-11 DU

Matrix: Solid

Analysis Batch: 282836

Client Sample ID: Cell16-Square134-S-2-191206

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.9		11.6		%		6	20
Percent Solids	89.1		88.4		%		0.8	20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc.

Job ID: 600-197250-1

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	%

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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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QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-197250-1	Cell11-Square134-S-2-191206	Total/NA	Solid	2540B	
600-197250-2	Cell11-Square93-S-2-191206	Total/NA	Solid	2540B	
600-197250-3	Cell11-Square90-S-2-191206	Total/NA	Solid	2540B	
600-197250-4	Cell11-Square65-S-2-191206	Total/NA	Solid	2540B	
600-197250-5	Cell12-Square84-S-2-191206	Total/NA	Solid	2540B	
600-197250-6	Cell12-Square37-S-2-191206	Total/NA	Solid	2540B	
600-197250-7	Cell12-Square14-S-2-191206	Total/NA	Solid	2540B	
600-197250-8	Cell12-Square27-S-2-191206	Total/NA	Solid	2540B	
600-197250-9	Cell16-Square87-S-2-191206	Total/NA	Solid	2540B	
600-197250-10	Cell16-Square94-S-2-191206	Total/NA	Solid	2540B	
600-197250-11	Cell16-Square134-S-2-191206	Total/NA	Solid	2540B	
600-197250-1 DU	Cell11-Square134-S-2-191206	Total/NA	Solid	2540B	
600-197250-11 DU	Cell16-Square134-S-2-191206	Total/NA	Solid	2540B	

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

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 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

Lab Sample ID: 600-197250-3

Date Collected: 12/06/19 09:36

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Client Sample ID: Cell11-Square65-S-2-191206

Lab Sample ID: 600-197250-4

Date Collected: 12/06/19 09:43

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell11-Square65-S-2-191206

Lab Sample ID: 600-197250-4

Date Collected: 12/06/19 09:43

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 72.6

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 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

Lab Sample ID: 600-197250-5

Date Collected: 12/06/19 09:50

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

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

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 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

Lab Sample ID: 600-197250-6

Date Collected: 12/06/19 09:58

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square37-S-2-191206

Lab Sample ID: 600-197250-6

Date Collected: 12/06/19 09:58

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 74.7

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 12:01	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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Client Sample ID: Cell12-Square14-S-2-191206

Lab Sample ID: 600-197250-7

Date Collected: 12/06/19 10:14

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square14-S-2-191206

Lab Sample ID: 600-197250-7

Date Collected: 12/06/19 10:14

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.3

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 12:03	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

Lab Sample ID: 600-197250-8

Date Collected: 12/06/19 10:18

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell12-Square27-S-2-191206

Lab Sample ID: 600-197250-8

Date Collected: 12/06/19 10:18

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 81.9

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 12:05	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

Lab Sample ID: 600-197250-9

Date Collected: 12/06/19 10:31

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 12:17	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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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 12:21	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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197250-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Midland #264

Chain of Custody Record

Client Information		Sampler: J Steinmann		Lab PM: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 600-72593-19936.10	
Client Contact: Sarah Johnson		Phone: 698518912		E-Mail: sachin.kudchadkar@testamerica.com				Page: 1 of 1	
Company: ARCADIS U.S., Inc.								Job #:	
Address: 1004 North Big Spring, Suite 121									
City: Midland									
State, Zip: TX, 79701									
Phone: 432-227-0266 (Tel)									
Email: sarah.johnson@arcadis.com									
Project Name: Chevron - Jal Land Farm Soils 2020									
Site: Jal Landfarm									

Due Date Requested:		TAT Requested (days):		PO #		WG #		Project #		SSOW#	
		Standard						60011732			

Sample Identification	Sample Date	Sample Time	Sample Type (G=grab)	Matrix (W=water, S=solid, G=grab)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B DRO/ORO - C10-C28/ C28-C36 - 4 oz Jar - Canton	8015B GRO - C6-C10 - 2oz Jar - Canton	8260B - BTEX	300 - Chloride/ Fluoride/ Nitrate / Sulfate	6010B - Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr, Fe, Pb, Mn, Se, Ag, Ti, Zn	7471 - Hg	9012 - Cyanide	Total Number of Containers	Special Instructions/Note:
Cell 11 - Square 134 - S-2-3 - 191206	191206	0916	G	Solid		N	N	N	N	N	N	N	N	N		 600-197250 Chain of Custody
Cell 11 - Square 93 - S-2-3 - 191206	191206	0927	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 11 - Square 90 - S-2-3 - 191206	191206	0936	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 11 - Square 65 - S-2-3 - 191206	191206	0943	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 12 - Square 84 - S-2-3 - 191206	191206	0950	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 12 - Square 37 - S-2-3 - 191206	191206	0958	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 12 - Square 14 - S-2-3 - 191206	191206	1014	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 12 - Square 27 - S-2-3 - 191206	191206	1018	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 16 - Square 87 - S-2-3 - 191206	191206	1031	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 16 - Square 94 - S-2-3 - 191206	191206	1039	G	Solid		N	N	N	N	N	N	N	N	N		
Cell 16 - Square 134 - S-2-3 - 191206	191206	1047	G	Solid		N	N	N	N	N	N	N	N	N		

Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested I, II, III, IV, Other (specify)			

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Special Instructions/QC Requirements:			

Empty Kit Relinquished by:		Date: _____ Time: _____	
Relinquished by: Callum Ferguson		Date/Time: 12/19/19 1230	
Relinquished by: Callum Ferguson		Date/Time: 12-19-19 1100	
Relinquished by: Callum Ferguson		Date/Time: _____	

Relinquished by:		Date/Time: 12-19-19 1015		Company: Fulbright	
Relinquished by:		Date/Time: 12/10/19 1038		Company: Fulbright	
Relinquished by:		Date/Time: _____		Company: _____	

Custody Seals Intact:		1154560		Custody Seal No.	
<input type="checkbox"/> Yes <input type="checkbox"/> No					

Eurofins TestAmerica Houston

Loc: 600
197250Environment Testing
TestAmerica

Sample Receipt Checklist

19DEC10 10:38

JOB NUMBER: _____

Date/Time Received: _____

CLIENT: ArcadisUNPACKED BY: YRCARRIER/DRIVER: FedExCustody Seal Present: ☒ YES ☐ NONumber of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2050	Y / N	Y / N	1.3	676	+0.1	1.4
	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? ☒ YES ☐ NOLABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YESBase samples are >pH 12: ☐ YES ☐ NOAcid preserved are <pH 2: ☐ YES ☐ NOTX1005 samples frozen 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:

YR 12/10/19

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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



Authorized for release by:
4/10/2020 2:27:29 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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results through
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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

Job ID: 600-197254-1

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

Sample Summary

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

Job ID: 600-197254-1

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	

Client Sample Results

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

Job ID: 600-197254-1

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

Method: 8015B - Gasoline Range Organics - (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 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	84		20 - 140				12/16/19 11:05	12/16/19 18:23	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]	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, 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	U H	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

Matrix: Solid

Date Received: 12/09/19 17:23

Method: 8015B - Gasoline Range Organics - (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
C28-C36	86.2		50.4	34.8	mg/Kg		12/16/19 09:26	12/18/19 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	95		26 - 125				12/16/19 09:26	12/18/19 17:00	1

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

Client Sample Results

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

Job ID: 600-197254-1

Client Sample ID: Cell19-Treatment-S-6-191204

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

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	☼		12/22/19 17:14	1
Nitrate as N	11.1	H	2.69	0.337	mg/Kg	☼		12/22/19 17:14	1
Fluoride	6.26		2.69	0.808	mg/Kg	☼		12/22/19 17:14	1
Sulfate	384		6.71	1.29	mg/Kg	☼		12/22/19 17:14	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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.9	U	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)

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, Ion Chromatography - Soluble

Analyte	Result	Qualifier	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
Sulfate	24.6		5.61	1.07	mg/Kg	☼		12/22/19 17:34	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	62.9	U	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

Client Sample Results

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

Job ID: 600-197254-1

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

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

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
<i>o</i> -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

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 - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.05	J	4.16	0.556	mg/Kg	☼		12/22/19 17:55	1
Nitrate as N	5.72	H	2.08	0.261	mg/Kg	☼		12/22/19 17:55	1
Fluoride	2.10		2.08	0.626	mg/Kg	☼		12/22/19 17:55	1
Sulfate	173		5.21	0.996	mg/Kg	☼		12/22/19 17:55	1

Client Sample ID: Cell21-Treatment-S-6-191204

Lab Sample ID: 600-197254-5

Date Collected: 12/04/19 14:49

Matrix: Solid

Date Received: 12/09/19 17:23

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

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	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]	48.2	J	50.6	35.0	mg/Kg	-	12/16/19 09:26	12/18/19 18:19	1
C28-C36	68.5		50.6	35.0	mg/Kg		12/16/19 09:26	12/18/19 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	68		26 - 125				12/16/19 09:26	12/18/19 18:19	1

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

Eurofins TestAmerica, Houston

Client Sample Results

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

Job ID: 600-197254-1

Client Sample ID: Cell21-Treatment-S-6-191204

Lab Sample ID: 600-197254-5

Date Collected: 12/04/19 14:49

Matrix: Solid

Date Received: 12/09/19 17:23

Percent Solids: 75.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.3		5.22	0.697	mg/Kg	☼		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

Lab Sample ID: 600-197254-6

Date Collected: 12/04/19 15:17

Matrix: Solid

Date Received: 12/09/19 17:23

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	63.2	U	98.4	63.2	ug/Kg		12/16/19 11:05	12/16/19 22:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	101		20 - 140				12/16/19 11:05	12/16/19 22:40	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]	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	1

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

Lab Sample ID: 600-197254-6

Date Collected: 12/04/19 15:17

Matrix: Solid

Date Received: 12/09/19 17:23

Percent Solids: 76.3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	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 Range Organics - (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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197254-1

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 - Diesel Range Organics (DRO) (GC)

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
<i>o</i> -Terphenyl (Surr)	87		26 - 125				12/16/19 09:26	12/18/19 19:13	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: 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

Percent Solids: 78.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.0		5.09	0.680	mg/Kg	☼		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.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 600-197254-1

Qualifiers

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.

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.
α	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)

Surrogate Summary

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

Job ID: 600-197254-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFT1 (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

TFT = Trifluorotoluene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH1 (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 (Surr)

QC Sample Results

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

Job ID: 600-197254-1

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	64.2	U	100	64.2	ug/Kg	-	12/16/19 11:05	12/16/19 17:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	92		20 - 140				12/16/19 11:05	12/16/19 17:10	1

Lab Sample ID: LCS 240-415742/2-A

Matrix: Solid

Analysis Batch: 415796

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415742

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	800	713.8		ug/Kg	-	89	75 - 126
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Trifluorotoluene (Surr)	105		20 - 140				

Lab Sample ID: 600-197254-1 MS

Matrix: Solid

Analysis Batch: 415796

Client Sample ID: Cell20-Treatment-S-6-191204

Prep Type: Total/NA

Prep Batch: 415742

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	63.6	U	810	655.4		ug/Kg	-	81	10 - 134
Surrogate	MS %Recovery	MS Qualifier	Limits						
Trifluorotoluene (Surr)	98		20 - 140						

Lab Sample ID: 600-197254-1 MSD

Matrix: Solid

Analysis Batch: 415796

Client Sample ID: Cell20-Treatment-S-6-191204

Prep Type: Total/NA

Prep Batch: 415742

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics [C6 - C10]	63.6	U	805	606.2		ug/Kg	-	75	10 - 134	8	40
Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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

QC Sample Results

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

Job ID: 600-197254-1

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

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		26 - 125	12/16/19 09:26	12/17/19 13:24	1

Lab Sample ID: LCS 240-415712/21-A

Matrix: Solid

Analysis Batch: 415836

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10 - C28]	250	197.5		mg/Kg		79	45 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	78		26 - 125

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-283766/1-A

Matrix: Solid

Analysis Batch: 283771

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			12/22/19 15:12	1
Fluoride	0.601	U	2.00	0.601	mg/Kg			12/22/19 15:12	1
Sulfate	0.957	U	5.00	0.957	mg/Kg			12/22/19 15:12	1

Lab Sample ID: LCS 600-283766/2-A

Matrix: Solid

Analysis Batch: 283771

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	190.8		mg/Kg		95	90 - 110
Fluoride	75.0	69.97		mg/Kg		93	90 - 110
Sulfate	200	184.4		mg/Kg		92	90 - 110

Lab Sample ID: MB 600-283766/1-A

Matrix: Solid

Analysis Batch: 283772

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/Kg			12/22/19 15:12	1

Lab Sample ID: LCS 600-283766/2-A

Matrix: Solid

Analysis Batch: 283772

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	100	99.58		mg/Kg		100	90 - 110

Eurofins TestAmerica, Houston

Unadjusted Detection Limits

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

Job ID: 600-197254-1

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	%

QC Association Summary

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

Job ID: 600-197254-1

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

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-197254-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

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

Job ID: 600-197254-1

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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Lab Chronicle

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

Job ID: 600-197254-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/09/19 17:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 20:13	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 17:00	DEB	TAL CAN
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell19-Treatment-S-6-191204

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-3

Date Collected: 12/04/19 13:46

Matrix: Solid

Date Received: 12/09/19 17:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

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

Job ID: 600-197254-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-5

Date Collected: 12/04/19 14:49

Matrix: Solid

Date Received: 12/09/19 17:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 Chronicle

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

Job ID: 600-197254-1

Client Sample ID: Cell21-Treatment-S-6-191204

Lab Sample ID: 600-197254-5

Date Collected: 12/04/19 14:49

Matrix: Solid

Date Received: 12/09/19 17:23

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-6

Date Collected: 12/04/19 15:17

Matrix: Solid

Date Received: 12/09/19 17:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-6

Date Collected: 12/04/19 15:17

Matrix: Solid

Date Received: 12/09/19 17:23

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-7

Date Collected: 12/04/19 15:42

Matrix: Solid

Date Received: 12/09/19 17:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197254-7

Date Collected: 12/04/19 15:42

Matrix: Solid

Date Received: 12/09/19 17:23

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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Accreditation/Certification Summary

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

Job ID: 600-197254-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20
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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

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	06-01-21
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

Chain of Custody Record

Client Information Client Contact: Sarah Johnson Company: ARCADIS U.S., Inc. Address: 1004 North Big Spring Suite 121 City: Midland State: TX, Zip: 79701 Phone: 432-227-0286(Tel) Email: sarah.johnson@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2020 Site:		Sample Information Sample: Callum Ferguson Lab PM: Kuchadkar, Sachin G E-Mail: sachin.kuchadkar@testamerica.com Phone: 432-269-3509 Due Date Requested: TAT Requested (days): PO #: WO #: Project #: SOW#:		Carrier Tracking Info Carrier Tracking No(s): COC No: 600-72593-19936.10 Page: 1 of 1 Job #	
Analysis Requested					
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - FDA Other:		Preservation Codes: M - Hexane N - NaOH O - H2O2 P - H2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)			
Sample Identification		Field Filtered Sample (Yes or No)			
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Liquid, Solid, Overstuffed, BT-Tissue, AAAL)	Field Filtered Sample (Yes or No)	
12/14/19	1019	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1235	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1346	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1417	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1449	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1517	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12/14/19	1542	C	Solid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Cell 20 - Treatment - S-6-191204 Cell 19 - Treatment - S-6-191204 Cell 18 - Treatment - S-6-191204 Cell 17 - Treatment - S-6-191204 Cell 21 - Treatment - S-6-191204 Cell 25 - Treatment - S-6-191204 Cell 26 - Treatment - S-6-191204		Total Number of Containers: 4			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiobiological Deliverable Requested I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months			
Empty Kit Relinquished by: Relinquished by: Callum Ferguson Date/Time: 12/15/19 1730 Relinquished by: Arcadis Date/Time: 12/15/19 1730 Relinquished by: Arcadis Date/Time: 12/15/19 1730		Method of Shipment: Date/Time: 12/15/19 1730 Date/Time: 12/15/19 1730 Date/Time: 12/15/19 1730			
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:			

Loc: 600
197254



Environment Testing
TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

JOB NUMBER: _____

Date/Time Received: 12/9/19 17:23

CLIENT: Arcadis

UNPACKED BY: YR

CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
<u>7297</u>	<u>Y / N</u>	<u>Y / N</u>	<u>5.4</u>	<u>676</u>	<u>+0.1</u>	<u>5.5</u>
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				
	<u>Y / N</u>	<u>Y / N</u>				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are >pH 12: ☐ YES ☐ NO

Acid preserved are <pH 2: ☐ YES ☐ NO

TX1005 samples frozen upon receipt: ☐ YES ☐ NO 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:

YR 12/9/19

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : _____

Client ETA Houston Site Name _____ Cooler unpacked by: [Signature]
Cooler Received on 12-12-19 Opened on 12-13-19
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____

Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. 3.1 °C Corrected Cooler Temp. 3.8 °C
IR GUN# IR-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
-Were tamper/custody seals intact and uncompromised? Yes No NA

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No

7. Did all bottles arrive in good condition (Unbroken)? Yes No

8. Could all bottle labels be reconciled with the COC? Yes No

9. Were correct bottle(s) used for the test(s) indicated? Yes No

10. Sufficient quantity received to perform indicated analyses? Yes No

11. Are these work share samples? Yes No

If yes, Questions 12-16 have been checked at the originating laboratory.

12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364

13. Were VOAs on the COC? Yes No

14. Were air bubbles >6 mm in any VOA vials? Yes Larger than this. Yes No NA

15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

16. Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: _____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Tests that are not
checked for pH by
Receiving:

VOAs
Oil and Grease
TOC

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-197259-1

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



Authorized for release by:
4/10/2020 11:56:09 AM

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

sachin.kudchadkar@testamericainc.com

LINKS

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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

Job ID: 600-197259-1

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

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Percent Solids: 73.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.154	U	0.518	0.154	mg/Kg	☼	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	☼	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	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.159	U	0.533	0.159	mg/Kg	☼	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	☼	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 Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

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 10:35	1
Percent Solids	72.1		1.0	1.0	%			12/12/19 10:35	1

Client Sample ID: Cell2-Square39-S-2-191205

Lab Sample ID: 600-197259-3

Date Collected: 12/05/19 15:42

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	☼	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	☼	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
Thallium	0.469	J	1.45	0.268	mg/Kg	☼	12/12/19 21:07	12/16/19 12:44	1
Zinc	10.9		1.45	0.104	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)

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

General Chemistry

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.152	U	0.512	0.152	mg/Kg	☼	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	Unit	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

Client Sample ID: Cell2-Square64-S-2-191205

Lab Sample ID: 600-197259-5

Date Collected: 12/05/19 15:25

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 83.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	U	2.27	0.293	mg/Kg	☼	12/12/19 21:07	12/16/19 12:48	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Client Sample ID: Cell2-Square64-S-2-191205

Lab Sample ID: 600-197259-5

Date Collected: 12/05/19 15:25

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 83.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.314	U	1.70	0.314	mg/Kg	☼	12/12/19 21:07	12/16/19 12:48	1
Zinc	5.52		1.70	0.122	mg/Kg	☼	12/12/19 21:07	12/16/19 12:48	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	0.00374	U	0.0177	0.00374	mg/Kg	☼	12/30/19 13:23	12/31/19 10:05	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 10:35	1
Percent Solids	83.3		1.0	1.0	%			12/12/19 10:35	1

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	Analyzed	Dil Fac
Silver	0.161	U	0.542	0.161	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Arsenic	1.94		1.35	0.295	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Barium	56.1		1.35	0.0406	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Beryllium	0.223	J	0.339	0.0196	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Calcium	19600		135	1.17	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Cadmium	0.122	J	0.339	0.0347	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Chromium	5.40		0.677	0.0685	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Copper	4.61		0.677	0.236	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Iron	4410		27.1	3.43	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Potassium	936		135	14.9	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Magnesium	1020		135	2.60	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Manganese	68.9		2.03	0.0516	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Sodium	27.8	J	135	1.20	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Lead	3.85		0.677	0.142	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Antimony	0.314	U	3.39	0.314	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Selenium	0.351	U	2.71	0.351	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Thallium	0.375	U	2.03	0.375	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	1
Zinc	12.3		2.03	0.146	mg/Kg	☼	12/12/19 21:07	12/16/19 12:50	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	0.0119	J b	0.0217	0.00457	mg/Kg	☼	12/30/19 13:23	12/31/19 10:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27.6		1.0	1.0	%			12/12/19 10:35	1
Percent Solids	72.4		1.0	1.0	%			12/12/19 10:35	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.157	U	0.527	0.157	mg/Kg	☼	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	798		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 Semisolid Waste (Manual Cold Vapor Technique)

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.127	U	0.428	0.127	mg/Kg	☼	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	☼	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	☼	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

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	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	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		1.0	1.0	%			12/12/19 10:35	1
Percent Solids	90.7		1.0	1.0	%			12/12/19 10:35	1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 21:07	12/16/19 12:56	1
Arsenic	1.56		1.06	0.231	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Barium	41.3		1.06	0.0318	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Beryllium	0.212	J	0.265	0.0154	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Calcium	6980		106	0.917	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Cadmium	0.117	J	0.265	0.0272	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Chromium	5.07		0.530	0.0537	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Copper	3.64		0.530	0.185	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Iron	4240		21.2	2.68	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Potassium	887		106	11.7	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Magnesium	825		106	2.04	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Manganese	67.1		1.59	0.0404	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Sodium	9.66	J	106	0.940	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Lead	3.52		0.530	0.111	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Antimony	0.246	U	2.65	0.246	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Selenium	0.275	U	2.12	0.275	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Thallium	0.294	U	1.59	0.294	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	1
Zinc	10.7		1.59	0.115	mg/Kg	☼	12/12/19 21:07	12/16/19 12:56	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	0.0353	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	Unit	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.145	U	0.486	0.145	mg/Kg	☼	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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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	1

General Chemistry

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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-282937/1-A

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 282937

Analyte	MB Result	MB 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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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
Beryllium	293	262.1		mg/Kg		89.5	72.4 - 106.8
Calcium	19300	18550		mg/Kg		96.1	70.5 - 106.7
Cadmium	268	256.3		mg/Kg		95.6	71.3 - 106.7
Chromium	63.6	56.29		mg/Kg		88.5	71.9 - 106.6
Copper	175	162.8		mg/Kg		93.0	72.0 - 106.9
Iron	17700	13920		mg/Kg		78.6	50.1 - 106.8
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 - 106.7

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-282937/2-A

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6

Lab Sample ID: 600-197259-1 MS

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell2-Square147-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.154	U	16.7	13.78		mg/Kg	☼	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		66.7	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		66.7	5919	4	mg/Kg	☼	-10	75 - 125
Potassium	1240		66.7	2097	N1	mg/Kg	☼	129	75 - 125
Magnesium	1330		66.7	1770	N1	mg/Kg	☼	65	75 - 125
Manganese	104		66.7	134.1	N1	mg/Kg	☼	45	75 - 125
Sodium	70.0	J	66.7	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

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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		60.2	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		60.2	5376	4	mg/Kg	☼	211	75 - 125
Potassium	783		60.2	1916	N1	mg/Kg	☼	188	75 - 125
Magnesium	731		60.2	1548	N1	mg/Kg	☼	136	75 - 125
Manganese	56.3		60.2	111.9		mg/Kg	☼	92	75 - 125
Sodium	11.0	J	60.2	601.7		mg/Kg	☼	98	75 - 125

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197259-10 MS

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.145	U	15.1	12.45		mg/Kg	☼	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
Zinc	10.5		30.1	44.60		mg/Kg	☼	113	75 - 125

Lab Sample ID: 600-197259-1 DU

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell2-Square147-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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	J F	mg/Kg	☼	22	20
Calcium	11000		6138	F	mg/Kg	☼	56	20
Cadmium	0.149	J	0.1155	J F	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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-197259-1 DU

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell2-Square147-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Selenium	0.335	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

Matrix: Solid

Analysis Batch: 283152

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Silver	0.145	U	0.146	U	mg/Kg	☼	NC	20
Arsenic	1.50		1.633		mg/Kg	☼	8	20
Barium	33.6		30.97		mg/Kg	☼	8	20
Beryllium	0.213	J	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
Copper	3.33		3.149		mg/Kg	☼	6	20
Iron	4110		4022		mg/Kg	☼	2	20
Potassium	783		795.5		mg/Kg	☼	2	20
Magnesium	731		707.8		mg/Kg	☼	3	20
Manganese	56.3		54.06		mg/Kg	☼	4	20
Sodium	11.0	J	9.772	J	mg/Kg	☼	12	20
Lead	3.15		3.272		mg/Kg	☼	4	20
Antimony	0.282	U	0.285	U	mg/Kg	☼	NC	20
Thallium	0.337	U	0.340	U	mg/Kg	☼	NC	20
Zinc	9.56		9.557		mg/Kg	☼	0.05	20

Lab Sample ID: 600-197259-10 DU

Matrix: Solid

Analysis Batch: 283187

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Prep Batch: 282937

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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	J F	mg/Kg	☼	103	20
Zinc	10.5		10.17		mg/Kg	☼	3	20

Eurofins TestAmerica, Houston

QC Sample Results

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

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283743

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00346	U	0.0165	0.00346	mg/Kg		12/21/19 12:00	12/22/19 11:09	1

Lab Sample ID: LCS 600-283743/8-B

Matrix: Solid

Analysis Batch: 283798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 283743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2422		mg/Kg		103	70 - 130

Lab Sample ID: MB 600-284342/1-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284342

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	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	1

Lab Sample ID: LCS 600-284342/2-A

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.224	0.2253		mg/Kg		101	70 - 130

Lab Sample ID: 600-197259-5 MS

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell2-Square64-S-2-191205

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00374	U	0.273	0.3169		mg/Kg	☼	116	75 - 125

Lab Sample ID: 600-197259-5 DU

Matrix: Solid

Analysis Batch: 284444

Client Sample ID: Cell2-Square64-S-2-191205

Prep Type: Total/NA

Prep Batch: 284342

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00374	U	0.003999	J	mg/Kg	☼	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197259-10 DU

Matrix: Solid

Analysis Batch: 282836

Client Sample ID: Cell10-Square163-S-2-191205

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	20.1		22.7		%		12	20
Percent Solids	79.9		77.3		%		3	20

Eurofins TestAmerica, Houston

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	%

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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	

Eurofins TestAmerica, Houston

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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	
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	

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 12/10/19 10:38

Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 12/10/19 10:38

Percent Solids: 72.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197259-3

Date Collected: 12/05/19 15:42

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell2-Square39-S-2-191205

Lab Sample ID: 600-197259-3

Date Collected: 12/05/19 15:42

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197259-5

Date Collected: 12/05/19 15:25

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

Client Sample ID: Cell2-Square64-S-2-191205

Lab Sample ID: 600-197259-5

Date Collected: 12/05/19 15:25

Matrix: Solid

Date Received: 12/10/19 10:38

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197259-6

Date Collected: 12/05/19 16:15

Matrix: Solid

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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	7471A		1	284444	12/31/19 10:11	KP1	TAL HOU

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 12:52	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 10:13	KP1	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

Date Received: 12/10/19 10:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Date Received: 12/10/19 10:38

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 12:54	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 10:15	KP1	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	282836	12/12/19 10:35	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197259-1

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record



Environment Testing
 TestAmerica2

Migariani
#264

Client Information Client Contact: Sarah Johnson Company: ARCADIS U.S., Inc. Address: 1004 North Big Spring Suite 121 City: Midland State, Zip: TX, 79701 Phone: 432-227-0266 (Tel) Email: sarah.johnson@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2020 Site: Jal Landfarm		Sampler: J. Skinnaman Phone: 614 851 8792 Lab PM: Kuchhadkar, Sachin G E-Mail: sachin.kuchhadkar@testamericainc.com		Carrier Tracking No(s): COC No: 600-72593-19936.10 Page: 1 of 1 Job #: 1261											
Analysis Requested Due Date Requested: _____ TAT Requested (days): Standard PO #: _____ WO #: _____ Project #: 60011732 SSOW#: _____															
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Weather, Sealed, Open/Unsealed)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B-DRO/ORO - C10-C28 / C28-C36 - 4 oz Jar - Canton	8015B-DRO - C6-C10 - 2oz Jar - Canton	8260B-BTEX	300-Chloride/Fluoride/Nitrate/Sulfate	6010B-Ca, Mg, Na, K, Sb, As, Ba, Be, Cd, Cu, Cr, Fe, Pb, Mn, Se, Ag, Ti, Zn	7471-Hg	9012-Cyanide	Total Number of Containers	Special Instructions/Note:
Cell 12 - Square 147-S-2-3-191205	191205	1545	G	Solid	N	N	N	N	N	N	N	N	N	2	600-197259 Chain of Custody 93 12/6/19
Cell 12 - Square 10-S-2-3-191205	191205	1534	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 12 - Square 34-S-2-3-191205	191205	1542	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 10 - Square 149-S-2-3-191205	191205	1620	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 12 - Square 64-S-2-3-191205	191205	1525	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 10 - Square 12-S-2-3-191205	191205	1615	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 13 - Square 77-S-2-3-191205	191205	1500	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 13 - Square 120-S-2-3-191205	191205	1520	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 10 - Square 84-S-2-3-191205	191205	1558	G	Solid	N	N	N	N	N	N	N	N	2		
Cell 10 - Square 163-S-2-3-191205	191205	1605	G	Solid	N	N	N	N	N	N	N	N	2		
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____														Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: Relinquished by: <i>Callie Ferguson</i> Relinquished by: <i>Callie Ferguson</i> Relinquished by: <i>Callie Ferguson</i>						Special Instructions/OC Requirements Date/Time: 12/9/19 1230 Date/Time: 12/9/19 Date/Time: 12/9/19						Method of Shipment: _____ Date/Time: 12/9/19 Date/Time: 12/10/19 1038 Date/Time: 12/10/19			
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: 1154561						Cooler Temperature(s) °C and Other Remarks: _____						Company: Eurofins Company: Eurofins Company: Eurofins			

Eurofins TestAmerica Houston

Loc: 600

197259

Environment Testing
TestAmerica

Sample Receipt Checklist

19 DEC 10 10:38

JOB NUMBER: _____ DATE/TIME RECEIVED: _____
UNPACKED BY: JP CLIENT: Arcadis
CARRIER/DRIVER: FedEx
Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2473	Y / N	Y / N	2.7	676	+0.1	2.8
	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? ☒ YES ☐ NOLABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YESBase samples are > pH 12: ☐ YES ☐ NOAcid preserved are < pH 2: ☐ YES ☐ NOTX1005 samples frozen 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:

HS-SA-WI-013

Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

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 \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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



Authorized for release by:
1/8/2020 5:41:18 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
sachin.kudchadkar@testamericainc.com

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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: 600-197940-1

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

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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
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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	☼	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 or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00404	J	0.0164	0.00345	mg/Kg	☼	01/06/20 12:23	01/07/20 11:50	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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	Qualifier	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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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 or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00369	U	0.0175	0.00369	mg/Kg	☼	01/06/20 12:23	01/07/20 11:54	1

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

Client Sample ID: Cell23-Square132-S-2-3-191217

Lab Sample ID: 600-197940-5

Date Collected: 12/17/19 10:01

Matrix: Solid

Date Received: 12/19/19 12:40

Percent Solids: 96.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

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

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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 (Continued)

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	D	Prepared	Analyzed	Dil Fac
Mercury	0.00457	U	0.0217	0.00457	mg/Kg	☼	01/06/20 12:23	01/07/20 12:01	1

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

Lab Sample ID: 600-197940-7

Date Collected: 12/17/19 09:05

Matrix: Solid

Date Received: 12/19/19 12:40

Percent Solids: 83.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

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	☼	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Percent Solids: 89.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.132	U	0.444	0.132	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Arsenic	2.21		1.11	0.242	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Barium	148		1.11	0.0333	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Beryllium	0.233	J	0.277	0.0161	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Cadmium	0.0998	J	0.277	0.0284	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Chromium	4.15		0.555	0.0561	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Copper	1.75		0.555	0.193	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Iron	3640		22.2	2.81	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Manganese	30.4		1.66	0.0423	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Lead	3.02		0.555	0.116	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Antimony	0.257	U	2.77	0.257	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Selenium	0.287	U	2.22	0.287	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Thallium	0.307	U	1.66	0.307	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	1
Zinc	11.3		1.66	0.120	mg/Kg	☼	01/06/20 20:01	01/08/20 11:25	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	0.00365	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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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	☼	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	☼	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 or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00406	J	0.0192	0.00405	mg/Kg	☼	01/06/20 12:23	01/07/20 12:12	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0120	J	0.0172	0.00363	mg/Kg	☼	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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	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
Percent Solids	78.4		1.0	1.0	%	—		12/24/19 09:20	1

Definitions/Glossary

Client: ARCADIS U.S., Inc.

Job ID: 600-197940-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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)

QC Sample Results

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

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

Analyte	MB Result	MB 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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 106.6
Barium	393	317.2		mg/Kg		80.7	64.6 - 106.6
Beryllium	293	255.2		mg/Kg		87.1	72.4 - 106.8
Cadmium	268	236.6		mg/Kg		88.3	71.3 - 106.7
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	50.1 - 106.8
Manganese	616	484.9		mg/Kg		78.7	64.1 - 106.7
Lead	164	152.4		mg/Kg		92.9	71.3 - 106.7
Antimony	120	32.50		mg/Kg		27.1	20.0 - 106.7
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

Eurofins TestAmerica, Houston

QC Sample Results

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

Matrix: Solid

Analysis Batch: 284734

Client Sample ID: Cell22-Square48-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284609

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Silver	0.119	U	12.5	11.56		mg/Kg	☼	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

Matrix: Solid

Analysis Batch: 284734

Client Sample ID: Cell24-Square178-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284609

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				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	☼	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		mg/Kg	☼	106	75 - 125	

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

Analyte	Sample	Sample	DU		Unit	D	RPD			
	Result	Qualifier	Result	Qualifier			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		

Eurofins TestAmerica, Houston

QC Sample Results

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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	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

Matrix: Solid

Analysis Batch: 284734

Client Sample ID: Cell24-Square178-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284609

Analyte	Sample Result	Sample Qualifier	DU Result	DU 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

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 284664

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.231	0.2216		mg/Kg		96	70 - 130

Lab Sample ID: 600-197940-5 MS

Matrix: Solid

Analysis Batch: 284664

Client Sample ID: Cell23-Square132-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284571

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00503	J	0.235	0.2306		mg/Kg	✱	96	75 - 125

Eurofins TestAmerica, Houston

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

Matrix: Solid

Analysis Batch: 284664

Client Sample ID: Cell23-Square132-S-2-3-191217

Prep Type: Total/NA

Prep Batch: 284571

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	0.00503	J	0.00336	U	mg/Kg	✖	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-197940-1 DU

Matrix: Solid

Analysis Batch: 283939

Client Sample ID: Cell22-Square48-S-2-3-191217

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Moisture	6.4		6.3		%		2	20
Percent Solids	93.6		93.8		%		0.1	20

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	%

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 Batch
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	284571
600-197940-3	Cell22-Square190-S-2-3-191217	Total/NA	Solid	7471A	284571
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	284571
600-197940-6	Cell23-Square111-S-2-3-191217	Total/NA	Solid	7471A	284571
600-197940-7	Cell23-Square87-S-2-3-191217	Total/NA	Solid	7471A	284571
600-197940-8	Cell24-Square168-S-2-3-191217	Total/NA	Solid	7471A	284571
600-197940-9	Cell24-Square24-S-2-3-191217	Total/NA	Solid	7471A	284571
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	284571
MB 600-284571/7-B	Method Blank	Total/NA	Solid	7471A	284571
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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

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	Cell22-Square48-S-2-3-191217	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 Batch
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	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	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

Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 11:07	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 11:50	SOT	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197940-5

Date Collected: 12/17/19 10:01

Matrix: Solid

Date Received: 12/19/19 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197940-5

Date Collected: 12/17/19 10:01

Matrix: Solid

Date Received: 12/19/19 12:40

Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Sample ID: 600-197940-6

Date Collected: 12/17/19 09:22

Matrix: Solid

Date Received: 12/19/19 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	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

Matrix: Solid

Date Received: 12/19/19 12:40

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

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

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/19/19 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/19/19 12:40

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-197940-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	283939	12/24/19 09:20	ANP	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

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-19-25	10-31-20

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.

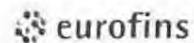
Analysis Method	Prep Method	Matrix	Analyte
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids

Chain of Custody Record

Client Information Client Contact: Sarah Johnson Company: ARCADIS U.S., Inc. Address: 1004 North Big Spring Suite 121 City: Midland State: TX Zip: 79701 Phone: 432-227-0266 (Tel) Email: sarah.johnson@arcadis.com Project Name: Chevron - Jai Land Farm Soils 2020 Site: Chevron Landfarm		Lab Fax: Kuchchadkar, Sachin G Lab Email: sachin.kuchchadkar@testamericainc.com Lab Phone: 619 851 8192		COC No: 600-72940-20046 1 Page: 1 of 1 Job #:					
Due Date Requested: _____ TAT Requested (days): _____ Standard		Analysis Requested							
PO # _____ Purchase Order Requested _____ WQ # _____ Project # 60011732 SSOW#		Barcode: 600-197940 Chain of Custody							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Residue, Swab, Dredge, Soil, Other)	Field Filtered Sample (Yes/No)	Perform MS/MSD (Yes/No)	Total Number of Containers	Special Instructions/Note:
Cell 22-Square 48-S-2-3-191217	191217	0746	G	Solid	N	N	N	1	
Cell 22-Square 57-S-2-3-191217	191217	0831	G	Solid	N	N	N	1	
Cell 22-Square 190-S-2-3-191217	191217	0848	G	Solid	N	N	N	1	
Cell 23-Square 208-S-2-3-191217	191217	0937	G	Solid	N	N	N	1	
Cell 23-Square 132-S-2-3-191217	191217	1001	G	Solid	N	N	N	1	
Cell 23-Square 111-S-2-3-191217	191217	0922	G	Solid	N	N	N	1	
Cell 23-Square 87-S-2-3-191217	191217	0905	G	Solid	N	N	N	1	
Cell 24-Square 168-S-2-3-191217	191217	1020	G	Solid	N	N	N	1	
Cell 24-Square 24-S-2-3-191217	191217	1037	G	Solid	N	N	N	1	
Cell 24-Square 44-S-2-3-191217	191217	1054	G	Solid	N	N	N	1	
Cell 24-Square 178-S-2-3-191217	191217	1114	G	Solid	N	N	N	1	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify) _____						Special Instructions/OC Requirements			
Empty Kit Relinquished by: _____		Date: _____		Method of Shipment: Fedex		Date/Time: _____			
Relinquished by: _____		Date/Time: 191218 1000		Company: Arcadis		Received by: _____		Date/Time: 12/19/19 1240	
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____		Date/Time: _____	
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____		Date/Time: _____	
Custody Seals Intact: _____		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: _____		Ver: 01/16/2019			

Lot: 600
197940

Eurofins TestAmerica Houston



Environment Testing
TestAmerica

13 DEC 19 12:41

Sample Receipt Checklist

JOB NUMBER:

940

Date/Time Received:

Arcadis

UNPACKED BY:

ST

CARRIER/DRIVER:

FedEx

Custody Seal Present:

☒ YES

☐ NO

Number of Coolers Received:

1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
5540	Y / N	Y / N	2.1	676	+0.1	2.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				12/19/19
	Y / N	Y / N				ST

CF = correction factor

Samples received on ice?

☒ YES

☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☒ NO

☐ YES

Base samples are > pH 12:

☐ YES

☐ NO

Acid preserved are < pH 2:

☐ YES

☐ NO

TX1005 samples frozen 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:

12/19/19
ST

Login Sample Receipt Checklist

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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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	2.2
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 $<6\text{mm}$ (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:

ARCADIS U.S., Inc.
1004 North Big Spring
Suite 121
Midland, Texas 79701

Attn: Sarah Johnson



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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results through
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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: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
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
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 HOU
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
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

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000556	U H	0.00441	0.000556	mg/Kg	☼	01/22/20 09:50	01/23/20 12:10	1
Ethylbenzene	0.000900	U H	0.00441	0.000900	mg/Kg	☼	01/22/20 09:50	01/23/20 12:10	1
Toluene	0.00122	U H	0.00441	0.00122	mg/Kg	☼	01/22/20 09:50	01/23/20 12:10	1
Xylenes, Total	0.000997	U H	0.00441	0.000997	mg/Kg	☼	01/22/20 09:50	01/23/20 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		61 - 130	01/22/20 09:50	01/23/20 12:10	1
Dibromofluoromethane	98		68 - 140	01/22/20 09:50	01/23/20 12:10	1
Toluene-d8 (Surr)	86		50 - 130	01/22/20 09:50	01/23/20 12:10	1
4-Bromofluorobenzene	93		57 - 140	01/22/20 09:50	01/23/20 12:10	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.581	U	0.991	0.581	mg/Kg	—	01/22/20 13:46	01/22/20 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		70 - 130	01/22/20 13:46	01/22/20 14:45	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]	1.71	U	8.28	1.71	mg/Kg	—	01/22/20 14:16	01/24/20 05:31	1
C28-C36	4.99	U	8.28	4.99	mg/Kg	—	01/22/20 14:16	01/24/20 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	96		60 - 140	01/22/20 14:16	01/24/20 05:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.9	J b	44.7	5.97	mg/Kg	☼		01/23/20 17:10	10

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.129	U	0.434	0.129	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Arsenic	6.15		1.09	0.237	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Barium	469		1.09	0.0326	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Beryllium	0.109	J	0.271	0.0157	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Calcium	241000	b	543	4.69	mg/Kg	☼	01/22/20 20:27	01/23/20 12:56	5
Cadmium	0.0922	J	0.271	0.0278	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Chromium	2.09		0.543	0.0549	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Copper	2.48		0.543	0.189	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Iron	1730		21.7	2.75	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Potassium	523		109	11.9	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Magnesium	7780		109	2.08	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Manganese	14.1		1.63	0.0413	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Sodium	845	b	109	0.961	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Lead	0.114	U	0.543	0.114	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Antimony	0.320	J	2.71	0.252	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Selenium	0.281	U	2.17	0.281	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Thallium	2.22		1.63	0.301	mg/Kg	☼	01/22/20 20:27	01/23/20 11:13	1
Zinc	36.2		8.14	0.586	mg/Kg	☼	01/22/20 20:27	01/23/20 12:56	5

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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	0.00387	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
Percent Solids	89.5		1.0	1.0	%			01/23/20 09:41	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000631	U H	0.00501	0.000631	mg/Kg	☼	01/22/20 09:50	01/23/20 12:32	1
Ethylbenzene	0.00102	U H	0.00501	0.00102	mg/Kg	☼	01/22/20 09:50	01/23/20 12:32	1
Toluene	0.00138	U H	0.00501	0.00138	mg/Kg	☼	01/22/20 09:50	01/23/20 12:32	1
Xylenes, Total	0.00113	U H	0.00501	0.00113	mg/Kg	☼	01/22/20 09:50	01/23/20 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		61 - 130	01/22/20 09:50	01/23/20 12:32	1
Dibromofluoromethane	89		68 - 140	01/22/20 09:50	01/23/20 12:32	1
Toluene-d8 (Surr)	84		50 - 130	01/22/20 09:50	01/23/20 12:32	1
4-Bromofluorobenzene	88		57 - 140	01/22/20 09:50	01/23/20 12:32	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.590	U	1.01	0.590	mg/Kg		01/22/20 13:46	01/22/20 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	117		70 - 130	01/22/20 13:46	01/22/20 15:09	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]	5.67	J	8.28	1.71	mg/Kg		01/22/20 14:16	01/24/20 06:04	1
C28-C36	7.27	J	8.28	4.99	mg/Kg		01/22/20 14:16	01/24/20 06:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	93		60 - 140	01/22/20 14:16	01/24/20 06:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.4	b	4.38	0.585	mg/Kg	☼		01/22/20 23:17	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.2		1.0	1.0	%			01/23/20 09:41	1
Percent Solids	90.8		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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000714	U H	0.00566	0.000714	mg/Kg	☼	01/22/20 09:50	01/23/20 12:55	1
Ethylbenzene	0.00116	U H	0.00566	0.00116	mg/Kg	☼	01/22/20 09:50	01/23/20 12:55	1
Toluene	0.00156	U H	0.00566	0.00156	mg/Kg	☼	01/22/20 09:50	01/23/20 12:55	1
Xylenes, Total	0.00128	U H	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 Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.585	U	0.998	0.585	mg/Kg		01/22/20 13:46	01/22/20 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		70 - 130	01/22/20 13:46	01/22/20 15:33	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]	1.70	U	8.27	1.70	mg/Kg		01/22/20 14:16	01/24/20 06:37	1
C28-C36	4.98	U	8.27	4.98	mg/Kg		01/22/20 14:16	01/24/20 06:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	119		60 - 140	01/22/20 14:16	01/24/20 06:37	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.127	U	0.426	0.127	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Arsenic	4.00		1.06	0.232	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Barium	281		1.06	0.0319	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Beryllium	0.0852	J	0.266	0.0154	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Calcium	241000	b	532	4.60	mg/Kg	☼	01/22/20 20:27	01/23/20 13:04	5
Cadmium	0.0532	J	0.266	0.0273	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Chromium	1.45		0.532	0.0539	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Copper	1.62		0.532	0.185	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Iron	1170		21.3	2.69	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Potassium	415		106	11.7	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Magnesium	2800		106	2.04	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Manganese	11.8		1.60	0.0406	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Sodium	107	b	106	0.943	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Lead	0.112	U	0.532	0.112	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Antimony	0.511	J	2.66	0.247	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Selenium	0.276	U	2.13	0.276	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Thallium	0.295	U	1.60	0.295	mg/Kg	☼	01/22/20 20:27	01/23/20 11:21	1
Zinc	6.63	J	7.99	0.575	mg/Kg	☼	01/22/20 20:27	01/23/20 13:04	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	0.00373	U	0.0177	0.00373	mg/Kg	☼	01/22/20 10:40	01/22/20 15:09	1

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

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

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	U H	0.00549	0.00112	mg/Kg	☼	01/22/20 09:50	01/23/20 13:17	1
Toluene	0.00152	U H	0.00549	0.00152	mg/Kg	☼	01/22/20 09:50	01/23/20 13:17	1
Xylenes, Total	0.00124	U H	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
4-Bromofluorobenzene	86		57 - 140	01/22/20 09:50	01/23/20 13:17	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.585	U	0.998	0.585	mg/Kg	—	01/22/20 13:46	01/22/20 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		70 - 130				01/22/20 13:46	01/22/20 15:56	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]	1.70	U	8.27	1.70	mg/Kg	—	01/22/20 14:16	01/24/20 07:55	1
C28-C36	4.98	U	8.27	4.98	mg/Kg	—	01/22/20 14:16	01/24/20 07:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	150	X	60 - 140				01/22/20 14:16	01/24/20 07:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.30	J b	4.44	0.593	mg/Kg	✱		01/23/20 01:20	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.129	U	0.434	0.129	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Arsenic	3.90		1.09	0.237	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Barium	191		1.09	0.0326	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Beryllium	0.185	J	0.272	0.0157	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Calcium	270000	b	543	4.69	mg/Kg	✱	01/22/20 20:27	01/23/20 13:06	5
Cadmium	0.141	J	0.272	0.0278	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Chromium	2.82		0.543	0.0550	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Copper	2.27		0.543	0.189	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Iron	2580		21.7	2.75	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Potassium	810		109	11.9	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Magnesium	2270		109	2.09	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Manganese	37.5		1.63	0.0414	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Sodium	96.5	J b	109	0.962	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Lead	1.36	J	2.72	0.570	mg/Kg	✱	01/22/20 20:27	01/23/20 13:06	5
Antimony	0.396	J	2.72	0.252	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Selenium	0.281	U	2.17	0.281	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Thallium	0.301	U	1.63	0.301	mg/Kg	✱	01/22/20 20:27	01/23/20 11:23	1
Zinc	11.9		8.15	0.586	mg/Kg	✱	01/22/20 20:27	01/23/20 13:06	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	0.00384	U	0.0182	0.00384	mg/Kg	✱	01/22/20 10:40	01/22/20 15:11	1

General Chemistry

Analyte	Result	Qualifier	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000697	U H	0.00554	0.000697	mg/Kg	☼	01/22/20 09:50	01/23/20 13:39	1
Ethylbenzene	0.00113	U H	0.00554	0.00113	mg/Kg	☼	01/22/20 09:50	01/23/20 13:39	1
Toluene	0.00153	U H	0.00554	0.00153	mg/Kg	☼	01/22/20 09:50	01/23/20 13:39	1
Xylenes, Total	0.00125	U H	0.00554	0.00125	mg/Kg	☼	01/22/20 09:50	01/23/20 13:39	1

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	1
Dibromofluoromethane	96		68 - 140	01/22/20 09:50	01/23/20 13:39	1
Toluene-d8 (Surr)	92		50 - 130	01/22/20 09:50	01/23/20 13:39	1
4-Bromofluorobenzene	89		57 - 140	01/22/20 09:50	01/23/20 13:39	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.590	U	1.01	0.590	mg/Kg	—	01/22/20 13:46	01/22/20 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		70 - 130	01/22/20 13:46	01/22/20 16:20	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]	7.29	J	8.27	1.70	mg/Kg	—	01/22/20 14:16	01/24/20 09:01	1
C28-C36	4.98	U	8.27	4.98	mg/Kg	—	01/22/20 14:16	01/24/20 09:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	97		60 - 140	01/22/20 14:16	01/24/20 09:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.47	J b	4.54	0.606	mg/Kg	☼		01/23/20 01:40	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.130	U	0.437	0.130	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Arsenic	5.18		1.09	0.238	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Barium	350		1.09	0.0327	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Beryllium	0.131	J	0.273	0.0158	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Calcium	253000	b	546	4.72	mg/Kg	☼	01/22/20 20:27	01/23/20 13:08	5
Cadmium	0.0764	J	0.273	0.0279	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Chromium	2.26		0.546	0.0552	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Copper	1.96		0.546	0.190	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Iron	2010		21.8	2.76	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Potassium	542		109	12.0	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Magnesium	4310		109	2.10	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Manganese	20.5		1.64	0.0416	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Sodium	107	J b	109	0.967	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Lead	1.04	J	2.73	0.573	mg/Kg	☼	01/22/20 20:27	01/23/20 13:08	5
Antimony	0.253	U	2.73	0.253	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Selenium	0.283	U	2.18	0.283	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Thallium	0.302	U	1.64	0.302	mg/Kg	☼	01/22/20 20:27	01/23/20 11:25	1
Zinc	11.7		8.19	0.589	mg/Kg	☼	01/22/20 20:27	01/23/20 13:08	5

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00364	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
Percent Solids	88.1		1.0	1.0	%			01/23/20 09:41	1

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000662	U H	0.00525	0.000662	mg/Kg	☼	01/22/20 09:50	01/23/20 14:01	1
Ethylbenzene	0.00107	U H	0.00525	0.00107	mg/Kg	☼	01/22/20 09:50	01/23/20 14:01	1
Toluene	0.00145	U H	0.00525	0.00145	mg/Kg	☼	01/22/20 09:50	01/23/20 14:01	1
Xylenes, Total	0.00119	U H	0.00525	0.00119	mg/Kg	☼	01/22/20 09:50	01/23/20 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		61 - 130	01/22/20 09:50	01/23/20 14:01	1
Dibromofluoromethane	93		68 - 140	01/22/20 09:50	01/23/20 14:01	1
Toluene-d8 (Surr)	85		50 - 130	01/22/20 09:50	01/23/20 14:01	1
4-Bromofluorobenzene	87		57 - 140	01/22/20 09:50	01/23/20 14:01	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.576	U	0.983	0.576	mg/Kg		01/22/20 13:46	01/22/20 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		70 - 130	01/22/20 13:46	01/22/20 16:44	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]	1.70	U	8.26	1.70	mg/Kg		01/22/20 14:16	01/24/20 09:34	1
C28-C36	4.97	U	8.26	4.97	mg/Kg		01/22/20 14:16	01/24/20 09:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	169	X	60 - 140	01/22/20 14:16	01/24/20 09:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.89	J b	4.63	0.617	mg/Kg	☼		01/23/20 02:00	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.133	U	0.447	0.133	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1
Arsenic	4.45		1.12	0.244	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1
Barium	150		1.12	0.0336	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1
Beryllium	0.134	J	0.280	0.0162	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1
Calcium	232000	b	559	4.83	mg/Kg	☼	01/22/20 20:27	01/23/20 13:15	5
Cadmium	0.101	J	0.280	0.0286	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1
Chromium	2.36		0.559	0.0566	mg/Kg	☼	01/22/20 20:27	01/23/20 11:27	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

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

Percent Solids: 86.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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	Qualifier	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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000661	U H	0.00524	0.000661	mg/Kg	☼	01/22/20 09:50	01/23/20 14:24	1
Ethylbenzene	0.00107	U H	0.00524	0.00107	mg/Kg	☼	01/22/20 09:50	01/23/20 14:24	1
Toluene	0.00145	U H	0.00524	0.00145	mg/Kg	☼	01/22/20 09:50	01/23/20 14:24	1
Xylenes, Total	0.00119	U H	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
Toluene-d8 (Surr)	86		50 - 130	01/22/20 09:50	01/23/20 14:24	1
4-Bromofluorobenzene	82		57 - 140	01/22/20 09:50	01/23/20 14:24	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
a,a,a-Trifluorotoluene	104		70 - 130	01/22/20 13:46	01/22/20 17:08	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]	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	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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 - Inductively Coupled Plasma - Atomic Emission Spectrometry

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 (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00372	U	0.0177	0.00372	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

Lab Sample ID: 600-199369-8

Date Collected: 01/14/20 13:00

Matrix: Solid

Date Received: 01/15/20 10:36

Percent Solids: 87.8

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000777	U H	0.00617	0.000777	mg/Kg	☼	01/22/20 09:50	01/23/20 14:46	1
Ethylbenzene	0.00126	U H	0.00617	0.00126	mg/Kg	☼	01/22/20 09:50	01/23/20 14:46	1
Toluene	0.00170	U H	0.00617	0.00170	mg/Kg	☼	01/22/20 09:50	01/23/20 14:46	1
Xylenes, Total	0.00139	U H	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

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Date Received: 01/15/20 10:36

Percent Solids: 87.8

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 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	121		70 - 130				01/22/20 13:46	01/22/20 17:56	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]	1.71	U	8.28	1.71	mg/Kg	—	01/22/20 14:48	01/24/20 11:28	1
C28-C36	4.99	U	8.28	4.99	mg/Kg	—	01/22/20 14:48	01/24/20 11:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	154	X	60 - 140				01/22/20 14:48	01/24/20 11:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.01	J b	4.51	0.602	mg/Kg	✱		01/23/20 02:41	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.130	U	0.438	0.130	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Arsenic	5.53		1.10	0.239	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Barium	274		1.10	0.0329	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Beryllium	0.104	J	0.274	0.0159	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Calcium	276000	b	548	4.73	mg/Kg	✱	01/22/20 20:27	01/23/20 13:19	5
Cadmium	0.0602	J	0.274	0.0280	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Chromium	1.57		0.548	0.0554	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Copper	1.51		0.548	0.191	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Iron	1380		21.9	2.77	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Potassium	410		110	12.0	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Magnesium	3120		110	2.10	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Manganese	13.9		1.64	0.0417	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Sodium	137	b	110	0.971	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Lead	0.115	U	0.548	0.115	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Antimony	0.641	J	2.74	0.254	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Selenium	0.284	U	2.19	0.284	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Thallium	0.303	U	1.64	0.303	mg/Kg	✱	01/22/20 20:27	01/23/20 11:38	1
Zinc	7.72	J	8.22	0.592	mg/Kg	✱	01/22/20 20:27	01/23/20 13:19	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	0.00382	U	0.0182	0.00382	mg/Kg	✱	01/22/20 10:40	01/22/20 15:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		1.0	1.0	%	—		01/23/20 09:41	1
Percent Solids	87.8		1.0	1.0	%	—		01/23/20 09:41	1

Eurofins TestAmerica, Houston

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

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

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

GC/MS VOA

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
J	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
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

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-199369-1	CELL17-SQUARE45-S-3-4-200114	118	98	86	93
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	103	89	84	88
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	102	88	86	92
600-199369-4	CELL17-SQUARE 207-S-3-4-200114	106	91	89	86
600-199369-5	CELL18-SQUARE 83-S-3-4-200114	108	96	92	89
600-199369-6	CELL18-SQUARE 181-S-3-4-200114	103	93	85	87
600-199369-7	CELL18-SQUARE 133-S-3-4-200114	105	93	86	82
600-199369-8	CELL18-SQUARE 92-S-3-4-200114	109	93	86	82
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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (50-134)	DBFM (62-130)	TOL (70-130)	BFB (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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT1 (70-130)			
600-199369-1	CELL17-SQUARE45-S-3-4-200114	105			
600-199369-2	CELL17-SQUARE 113-S-3-4-200114	117			
600-199369-3	CELL17-SQUARE 175-S-3-4-200114	104			

Eurofins TestAmerica, Houston

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)					
Lab Sample ID	Client Sample ID	TFT1 (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					
LCS 600-285768/2-A	Lab Control Sample Dup	115					
MB 600-285768/3-A	Method Blank	116					
Surrogate Legend							
TFT = a,a,a-Trifluorotoluene							

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	OTPH1 (60-140)					
600-199369-1	CELL17-SQUARE45-S-3-4-200114	96					
600-199369-2	CELL17-SQUARE	93					
	113-S-3-4-200114						
600-199369-3	CELL17-SQUARE	119					
	175-S-3-4-200114						
600-199369-4	CELL17-SQUARE	150 X					
	207-S-3-4-200114						
600-199369-5	CELL18-SQUARE	97					
	83-S-3-4-200114						
600-199369-6	CELL18-SQUARE	169 X					
	181-S-3-4-200114						
600-199369-7	CELL18-SQUARE	134					
	133-S-3-4-200114						
600-199369-8	CELL18-SQUARE	154 X					
	92-S-3-4-200114						
LCS 600-285855/2-A	Lab Control Sample	111					
MB 600-285855/1-A	Method Blank	135					
Surrogate Legend							
OTPH = o-Terphenyl							

QC Sample Results

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)

Lab Sample ID: MB 600-285922/6

Matrix: Solid

Analysis Batch: 285922

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/23/20 11:48	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/23/20 11:48	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/23/20 11:48	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/23/20 11:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		61 - 130		01/23/20 11:48	1
Dibromofluoromethane	100		68 - 140		01/23/20 11:48	1
Toluene-d8 (Surr)	88		50 - 130		01/23/20 11:48	1
4-Bromofluorobenzene	86		57 - 140		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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04821		mg/Kg		96	70 - 131
Ethylbenzene	0.0500	0.05026		mg/Kg		101	66 - 130
Toluene	0.0500	0.05329		mg/Kg		107	67 - 130
Xylenes, Total	0.100	0.1039		mg/Kg		104	63 - 130
m-Xylene & p-Xylene	0.0500	0.05269		mg/Kg		105	64 - 130
o-Xylene	0.0500	0.05117		mg/Kg		102	62 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

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) (Continued)

Lab Sample ID: MB 600-285929/15

Matrix: Water

Analysis Batch: 285929

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.560	U	5.00	0.560	ug/L			01/23/20 15:54	1
Ethylbenzene	1.29	U	5.00	1.29	ug/L			01/23/20 15:54	1
Toluene	0.550	U	5.00	0.550	ug/L			01/23/20 15:54	1
Xylenes, Total	1.98	U	5.00	1.98	ug/L			01/23/20 15:54	1

Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 600-285929/12

Matrix: Water

Analysis Batch: 285929

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	48.64		ug/L		97	70 - 131
Ethylbenzene	50.0	50.81		ug/L		102	70 - 130
Toluene	50.0	56.71		ug/L		113	70 - 130
Xylenes, Total	100	101.1		ug/L		101	70 - 130
m-Xylene & p-Xylene	50.0	50.55		ug/L		101	70 - 130
o-Xylene	50.0	50.59		ug/L		101	69 - 130

Surrogate	LCS %Recovery	LCS 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 ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	51.41		ug/L		103	70 - 131	6	20
Ethylbenzene	50.0	52.67		ug/L		105	70 - 130	4	20
Toluene	50.0	58.89		ug/L		118	70 - 130	4	20
Xylenes, Total	100	104.9		ug/L		105	70 - 130	4	20
m-Xylene & p-Xylene	50.0	52.58		ug/L		105	70 - 130	4	20
o-Xylene	50.0	52.31		ug/L		105	69 - 130	3	20

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: MB 600-285768/3-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 285768

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.586	U	1.00	0.586	mg/Kg	-	01/22/20 08:46	01/22/20 11:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	116		70 - 130				01/22/20 08:46	01/22/20 11:01	1

Lab Sample ID: LCS 600-285768/1-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 285768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]	5.00	5.396		mg/Kg	-	108	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene	117		70 - 130						

Lab Sample ID: LCSD 600-285768/2-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 285768

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	5.00	5.067		mg/Kg	-	101	70 - 130	6	30
Surrogate	LCSD %Recovery	LCSD Qualifier	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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 285855

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.70	U	8.25	1.70	mg/Kg	-	01/22/20 14:16	01/24/20 02:14	1
C28-C36	4.97	U	8.25	4.97	mg/Kg	-	01/22/20 14:16	01/24/20 02:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	135		60 - 140				01/22/20 14:16	01/24/20 02:14	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	33.2	32.89		mg/Kg	-	99	66 - 134		

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

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
<i>o</i> -Terphenyl	111		60 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-285881/1-A

Matrix: Solid

Analysis Batch: 285784

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	2.099	J	3.97	0.530	mg/Kg			01/22/20 22:16		1

Lab Sample ID: LCS 600-285881/2-A

Matrix: Solid

Analysis Batch: 285784

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			198	198.7		mg/Kg		100	90 - 110	

Lab Sample ID: 600-199369-2 MS

Matrix: Solid

Analysis Batch: 285784

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	28.4	b	109	128.6		mg/Kg	✱	91	80 - 120	

Lab Sample ID: 600-199369-2 MSD

Matrix: Solid

Analysis Batch: 285784

Client Sample ID: CELL17-SQUARE 113-S-3-4-200114

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	28.4	b	109	142.7		mg/Kg	✱	104	80 - 120	10	20	

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

Eurofins TestAmerica, Houston

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

Analyte	MB Result	MB 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

Analysis Batch: 285968

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 285901

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 110.6
Copper	107	86.50		mg/Kg		80.8	61.6 - 110.3
Iron	18600	12060		mg/Kg		64.8	24.7 - 121.5
Potassium	11600	8792		mg/Kg		75.8	59.0 - 110.3
Magnesium	13600	10110		mg/Kg		74.3	62.5 - 110.3
Manganese	1390	1034		mg/Kg		74.4	66.1 - 110.1
Sodium	14200	10290		mg/Kg		72.5	58.7 - 113.4
Lead	148	124.8		mg/Kg		84.3	61.0 - 110.1
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

Eurofins TestAmerica, Houston

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: 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Analysis Batch: 285968

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Prep Batch: 285901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.646	U	13.7	14.08		mg/Kg	☼	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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Silver	0.129	U	0.128	U	mg/Kg	☼	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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Cadmium	0.0922	J	0.05911	J F	mg/Kg	☼	44	20
Chromium	2.09		2.300		mg/Kg	☼	9	20
Copper	2.48		2.499		mg/Kg	☼	0.8	20
Iron	1730		1921		mg/Kg	☼	11	20
Potassium	523		558.8		mg/Kg	☼	7	20
Magnesium	7780		7507		mg/Kg	☼	4	20
Manganese	14.1		15.71		mg/Kg	☼	11	20
Sodium	845	b	851.7		mg/Kg	☼	0.8	20
Lead	0.114	U	0.113	U	mg/Kg	☼	NC	20
Antimony	0.320	J	0.3976	J F	mg/Kg	☼	22	20
Selenium	0.281	U	0.278	U	mg/Kg	☼	NC	20
Thallium	2.22		0.4782	J F	mg/Kg	☼	129	20

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Silver	0.646	U	0.639	U	mg/Kg	☼	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	J F	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

Matrix: Solid

Analysis Batch: 285878

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 285823

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		01/22/20 10:40	01/22/20 14:57	1

Eurofins TestAmerica, Houston

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

Matrix: Solid

Analysis Batch: 285878

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 285823

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.224	0.2329		mg/Kg		104	70 - 130

Lab Sample ID: 600-199369-1 MS

Matrix: Solid

Analysis Batch: 285878

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Prep Batch: 285823

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00387	U	0.270	0.1610	N1	mg/Kg	☼	60	75 - 125

Lab Sample ID: 600-199369-1 DU

Matrix: Solid

Analysis Batch: 285878

Client Sample ID: CELL17-SQUARE45-S-3-4-200114

Prep Type: Total/NA

Prep Batch: 285823

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00387	U	0.00387	U	mg/Kg	☼	NC	20

Unadjusted Detection Limits

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)

Eurofins TestAmerica, Houston

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	%

QC Association Summary

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	
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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Eurofins TestAmerica, Houston

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

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

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	

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 12:10	WS1	TAL HOU
Soluble	Leach	DI Leach			285881	01/22/20 16:04	SKR	TAL HOU
Soluble	Analysis	300.0		10	285890	01/23/20 17:10	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 11:13	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 12:56	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 15:01	SOT	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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 HOU
Total/NA	Prep	3050B			285901	01/22/20 20:27	CLD	TAL HOU
Total/NA	Analysis	6010B		1	285968	01/23/20 11:27	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 13:15	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 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199369-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Matrix: Solid

Date Received: 01/15/20 10:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Date Received: 01/15/20 10:36

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 14:46	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 02:41	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 11:38	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 13:19	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 15:23	SOT	TAL HOU

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	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

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199369-1

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	Program	Identification Number	Expiration Date
Texas	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	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-C28]
8015B	5030B	Solid	Gasoline Range Organics [C6 - C10]
8260B	5035	Solid	Benzene
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Toluene
8260B	5035	Solid	Xylenes, Total

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

Eurofins TestAmerica, Houston

Eurofins TestAmerica Houston

Environment Testing
TestAmerica

Loc: 600

199369 Receipt Checklist

JOB NUMBER: _____

Date/Time Received: _____

CLIENT: _____

ARCADIS

20 JAN 15 10:36

UNPACKED BY: _____

CARRIER/DRIVER: _____

FE DEX

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7601	Y / N	Y / N	1.9	IR678	+0.4	2.3
	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? ☒ YES ☐ NOLABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☒ YESBase samples are >pH 12: ☐ YES ☐ NOAcid preserved are <pH 2: ☐ YES ☐ NOTX1005 samples frozen 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:

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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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: 600-199371-1

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



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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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: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
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
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 HOU
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
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

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
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	

Client Sample Results

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0655	H	0.00616	0.000776	mg/Kg	☼	01/22/20 14:05	01/25/20 10:03	1
Ethylbenzene	0.00126	U H	0.00616	0.00126	mg/Kg	☼	01/22/20 14:05	01/25/20 10:03	1
Toluene	0.00170	U H	0.00616	0.00170	mg/Kg	☼	01/22/20 14:05	01/25/20 10:03	1
Xylenes, Total	0.00139	U H	0.00616	0.00139	mg/Kg	☼	01/22/20 14:05	01/25/20 10:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		61 - 130				01/22/20 14:05	01/25/20 10:03	1
Dibromofluoromethane	95		68 - 140				01/22/20 14:05	01/25/20 10:03	1
Toluene-d8 (Surr)	88		50 - 130				01/22/20 14:05	01/25/20 10:03	1
4-Bromofluorobenzene	99		57 - 140				01/22/20 14:05	01/25/20 10:03	1

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.584	U	0.997	0.584	mg/Kg	—	01/22/20 13:46	01/22/20 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		70 - 130				01/22/20 13:46	01/22/20 18:20	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]	1.71	U	8.29	1.71	mg/Kg	—	01/22/20 14:16	01/24/20 03:19	1
C28-C36	4.99	U	8.29	4.99	mg/Kg	—	01/22/20 14:16	01/24/20 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	98		60 - 140				01/22/20 14:16	01/24/20 03:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.50	J b	5.43	0.724	mg/Kg	☼		01/27/20 23:31	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.155	U	0.521	0.155	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Arsenic	2.66		1.30	0.284	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Barium	116		1.30	0.0391	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Beryllium	0.137	J	0.326	0.0189	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Calcium	195000		260	2.25	mg/Kg	☼	01/27/20 15:36	01/28/20 11:04	2
Cadmium	0.104	J	0.326	0.0333	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Chromium	2.29		0.651	0.0659	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Copper	1.13		0.651	0.227	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Iron	2070		26.0	3.29	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Potassium	455		130	14.3	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Magnesium	3180		130	2.50	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Manganese	15.2		1.95	0.0496	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Sodium	133		130	1.15	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Lead	1.73		1.30	0.273	mg/Kg	☼	01/27/20 15:36	01/28/20 11:04	2
Antimony	0.658	J	3.26	0.302	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Selenium	0.337	U	2.60	0.337	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Thallium	0.361	U	1.95	0.361	mg/Kg	☼	01/27/20 15:36	01/28/20 10:29	1
Zinc	9.73		3.91	0.281	mg/Kg	☼	01/27/20 15:36	01/28/20 11:04	2

Eurofins TestAmerica, Houston

Client Sample Results

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

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	0.00913	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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0591	H	0.00693	0.000873	mg/Kg	☼	01/22/20 14:05	01/25/20 10:26	1
Ethylbenzene	0.00141	U H	0.00693	0.00141	mg/Kg	☼	01/22/20 14:05	01/25/20 10:26	1
Toluene	0.00191	U H	0.00693	0.00191	mg/Kg	☼	01/22/20 14:05	01/25/20 10:26	1
Xylenes, Total	0.00157	U H	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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.593	U	1.01	0.593	mg/Kg		01/22/20 13:46	01/22/20 18:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		70 - 130				01/22/20 13:46	01/22/20 18:44	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]	1.70	U	8.25	1.70	mg/Kg		01/22/20 14:16	01/24/20 03:52	1
C28-C36	4.97	U	8.25	4.97	mg/Kg		01/22/20 14:16	01/24/20 03:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		60 - 140				01/22/20 14:16	01/24/20 03:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.90	b	5.68	0.759	mg/Kg	☼		01/27/20 23:52	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Client Sample Results

Client: ARCADIS U.S., Inc.

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

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

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 Solid or Semisolid Waste (Manual Cold Vapor Technique)

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
Percent Solids	70.4		1.0	1.0	%			01/24/20 09:49	1

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

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

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	U H	0.00573	0.00117	mg/Kg	☼	01/22/20 14:05	01/25/20 10:48	1
Toluene	0.00158	U H	0.00573	0.00158	mg/Kg	☼	01/22/20 14:05	01/25/20 10:48	1
Xylenes, Total	0.00129	U H	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 Organics - (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.558	U	0.952	0.558	mg/Kg		01/22/20 13:46	01/22/20 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		70 - 130	01/22/20 13:46	01/22/20 19:08	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]	1.71	U	8.29	1.71	mg/Kg		01/22/20 14:16	01/24/20 04:25	1
C28-C36	4.99	U	8.29	4.99	mg/Kg		01/22/20 14:16	01/24/20 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	111		60 - 140	01/22/20 14:16	01/24/20 04:25	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	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 Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.144	U	0.483	0.144	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Arsenic	4.96		1.21	0.263	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Barium	308		1.21	0.0363	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Beryllium	0.139	J	0.302	0.0175	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Calcium	331000		604	5.22	mg/Kg	☼	01/27/20 15:36	01/28/20 11:16	5
Cadmium	0.115	J	0.302	0.0309	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Chromium	1.92		0.604	0.0611	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Copper	1.56		0.604	0.210	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Iron	1710		24.2	3.06	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Potassium	510		121	13.3	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Magnesium	2640		121	2.32	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Manganese	19.4		1.81	0.0460	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Sodium	189		121	1.07	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Lead	1.57	J	3.02	0.634	mg/Kg	☼	01/27/20 15:36	01/28/20 11:16	5
Antimony	0.483	J	3.02	0.280	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Selenium	0.313	U	2.42	0.313	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Thallium	0.335	U	1.81	0.335	mg/Kg	☼	01/27/20 15:36	01/28/20 10:33	1
Zinc	41.2		9.06	0.653	mg/Kg	☼	01/27/20 15:36	01/28/20 11:16	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	0.00438	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

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

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0216	H	0.00546	0.000688	mg/Kg	☼	01/22/20 14:05	01/25/20 11:10	1
Ethylbenzene	0.00111	U H	0.00546	0.00111	mg/Kg	☼	01/22/20 14:05	01/25/20 11:10	1
Toluene	0.00151	U H	0.00546	0.00151	mg/Kg	☼	01/22/20 14:05	01/25/20 11:10	1
Xylenes, Total	0.00123	U H	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	1

Eurofins TestAmerica, Houston

Client Sample Results

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

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

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 Organics (DRO) (GC)

Analyte	Result	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 Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.9	b	4.82	0.644	mg/Kg	☼		01/28/20 01:13	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

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

Eurofins TestAmerica, Houston

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

Lab Sample ID: 600-199371-5

Date Collected: 01/15/20 00:00

Matrix: Water

Date Received: 01/22/20 10:07

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

Analyte	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	1

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

Qualifiers

GC/MS VOA

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.

HPLC/IC

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.

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.
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

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Surrogate Summary

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (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
Surrogate Legend					
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (50-134)	DBFM (62-130)	TOL (70-130)	BFB (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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT1 (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					

Eurofins TestAmerica, Houston

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)		
Lab Sample ID	Client Sample ID	OTPH1 (60-140)
600-199371-1	CELL19-SQUARE-105-S-3-4-20011	98
600-199371-1 MS	CELL19-SQUARE-105-S-3-4-2 00115	112
600-199371-1 MSD	CELL19-SQUARE-105-S-3-4-2 00115	70
600-199371-2	CELL19-SQUARE-82-S-3-4-20 0115	80
600-199371-3	CELL19-SQUARE-204-S-3-4-2 00115	111
600-199371-4	CELL19-SQUARE-93-S-3-4-20 0115	127
LCS 600-285855/2-A	Lab Control Sample	111
MB 600-285855/1-A	Method Blank	135
Surrogate Legend		
OTPH = o-Terphenyl		

QC Sample Results

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/25/20 09:41	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/25/20 09:41	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/25/20 09:41	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/25/20 09:41	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05047		mg/Kg		101	70 - 131
Ethylbenzene	0.0500	0.05392		mg/Kg		108	66 - 130
Toluene	0.0500	0.05137		mg/Kg		103	67 - 130
Xylenes, Total	0.100	0.1068		mg/Kg		107	63 - 130
m-Xylene & p-Xylene	0.0500	0.05448		mg/Kg		109	64 - 130
o-Xylene	0.0500	0.05236		mg/Kg		105	62 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	79		61 - 130
Dibromofluoromethane	97		68 - 140
Toluene-d8 (Surr)	95		50 - 130
4-Bromofluorobenzene	99		57 - 140

Eurofins TestAmerica, Houston

QC Sample Results

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) (Continued)

Lab Sample ID: MB 600-286180/7

Matrix: Water

Analysis Batch: 286180

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.560	U	5.00	0.560	ug/L			01/25/20 12:06	1
Ethylbenzene	1.29	U	5.00	1.29	ug/L			01/25/20 12:06	1
Toluene	0.550	U	5.00	0.550	ug/L			01/25/20 12:06	1
Xylenes, Total	1.98	U	5.00	1.98	ug/L			01/25/20 12:06	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.52		ug/L		103	70 - 131
Ethylbenzene	50.0	48.19		ug/L		96	70 - 130
Toluene	50.0	59.15		ug/L		118	70 - 130
Xylenes, Total	100	101.9		ug/L		102	70 - 130
m-Xylene & p-Xylene	50.0	53.17		ug/L		106	70 - 130
o-Xylene	50.0	48.77		ug/L		98	69 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Eurofins TestAmerica, Houston

QC Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 600-199371-1

Project/Site: Chevron - Jal Land Farm Soils 2020

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

Lab Sample ID: MB 600-285768/3-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 285768

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.586	U	1.00	0.586	mg/Kg	-	01/22/20 08:46	01/22/20 11:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	116		70 - 130				01/22/20 08:46	01/22/20 11:01	1

Lab Sample ID: LCS 600-285768/1-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 285768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]	5.00	5.396		mg/Kg	-	108	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene	117		70 - 130						

Lab Sample ID: LCSD 600-285768/2-A

Matrix: Solid

Analysis Batch: 285766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 285768

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics [C6 - C10]	5.00	5.067		mg/Kg	-	101	70 - 130	6	30
Surrogate	LCSD %Recovery	LCSD Qualifier	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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 285855

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.70	U	8.25	1.70	mg/Kg	-	01/22/20 14:16	01/24/20 02:14	1
C28-C36	4.97	U	8.25	4.97	mg/Kg	-	01/22/20 14:16	01/24/20 02:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	135		60 - 140				01/22/20 14:16	01/24/20 02:14	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	33.2	32.89		mg/Kg	-	99	66 - 134		

Eurofins TestAmerica, Houston

QC Sample Results

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) (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
o-Terphenyl	111		60 - 140

Lab Sample ID: 600-199371-1 MS

Matrix: Solid

Analysis Batch: 285991

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Prep Type: Total/NA

Prep Batch: 285855

	Sample	Sample	Spike	MS	MS					%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics [C10-C28]	1.71	U	33.3	37.89		mg/Kg		114	66 - 134	
Surrogate	%Recovery	Qualifier	Limits							
o-Terphenyl	112		60 - 140							

Lab Sample ID: 600-199371-1 MSD

Matrix: Solid

Analysis Batch: 285991

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Prep Type: Total/NA

Prep Batch: 285855

	Sample	Sample	Spike	MSD	MSD					%Rec.	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	1.71	U	33.2	29.84		mg/Kg		90	66 - 134	24	30
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	70		60 - 140								

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

	MB	MB								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2.085	J	3.97	0.530	mg/Kg			01/27/20 17:24	1	

Lab Sample ID: LCS 600-286280/2-A

Matrix: Solid

Analysis Batch: 286155

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec.
Analyte			Added	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

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 286293

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.119	U	0.400	0.119	mg/Kg		01/27/20 15:36	01/28/20 10:11	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/27/20 15:36	01/28/20 10:11	1

Eurofins TestAmerica, Houston

QC Sample Results

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: MB 600-286293/1-A

Matrix: Solid

Analysis Batch: 286356

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 286293

Analyte	MB Result	MB 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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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 - 121.5
Potassium	11600	8598		mg/Kg		74.1	59.0 - 110.3
Magnesium	13600	10190		mg/Kg		74.9	62.5 - 110.3
Manganese	1390	1022		mg/Kg		73.5	66.1 - 110.1
Sodium	14200	10820		mg/Kg		76.2	58.7 - 113.4
Lead	148	128.1		mg/Kg		86.6	61.0 - 110.1
Antimony	118	29.33		mg/Kg		24.9	10.0 - 110.2

Eurofins TestAmerica, Houston

QC Sample Results

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.144	U	15.4	16.85		mg/Kg	✱	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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins TestAmerica, Houston

QC Sample Results

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	41.2		30.8	47.13	N1	mg/Kg	✱	19	75 - 125

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.144	U	0.142	U	mg/Kg	✱	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	J F	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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	0.719	U	0.712	U	mg/Kg	✱	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	J F	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	J F	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	J F	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)

Lab Sample ID: MB 600-286344/7-B

Matrix: Solid

Analysis Batch: 286403

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 286344

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		01/28/20 10:32	01/28/20 14:45	1

Lab Sample ID: LCS 600-286344/8-B

Matrix: Solid

Analysis Batch: 286403

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 286344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.234	0.2306		mg/Kg		98	70 - 130

Lab Sample ID: 600-199371-1 MS

Matrix: Solid

Analysis Batch: 286403

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Prep Type: Total/NA

Prep Batch: 286344

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00913	J	0.336	0.2615		mg/Kg	☼	75	75 - 125

Lab Sample ID: 600-199371-1 DU

Matrix: Solid

Analysis Batch: 286403

Client Sample ID: CELL19-SQUARE-105-S-3-4-200115

Prep Type: Total/NA

Prep Batch: 286344

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00913	J	0.01074	J	mg/Kg	☼	16	20

Unadjusted Detection Limits

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)

Eurofins TestAmerica, Houston

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	%

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

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
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.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

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	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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 10:03	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 23:31	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

Lab Sample ID: 600-199371-2

Date Collected: 01/15/20 09:55

Matrix: Solid

Date Received: 01/22/20 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Eurofins TestAmerica, Houston

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils 2020

Job ID: 600-199371-1

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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	286180	01/25/20 18:00	PXS	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: 600-199371-1

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	Program	Identification Number	Expiration Date
Texas	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	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-C28]
8015B	5030B	Solid	Gasoline Range Organics [C6 - C10]
8260B	5035	Solid	Benzene
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Toluene
8260B	5035	Solid	Xylenes, Total

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

Eurofins TestAmerica, Houston

Chain of Custody Record

INS

Environmental Testing
TestAmerica

20114.2

600-199371 Chain of Custody

Client Information		Lab PM		Analysis Requested		Job #	
Client Contact: Sarah Johnson Company: ARCADIS U.S., Inc. Address: 1004 North Big Spring Suite 121 City: Midland State, Zip: TX, 79701 Phone: 432-227-0266(Tel) Email: sarah.johnson@arcadis.com Project Name: Chevron - Jal Land Farm Soils 2020 Site:		Sampler: Tony S. Longwell Phone: 432-684-5408 Lab PM: Kudchadkar, Sachin G E-Mail: sachin.kudchadkar@testamerica.com		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Due Date Requested: TAT Requested (days): Rush TAT PO # Purchase Order Requested WO # Project # 60011732 SSOV#				Analysis Requested 8015B_DRO - Diesel Range Organics (C10-C28) C28-C36 8015B_GRO - Gasoline Range Organics (C6-C10) 300_ORGFM_28D.Chloride 8260B - BTEX Only 6010B/7471 - Sb, As, Ba, Be, Cd, Cu, Fe, Pb, Mn, se, Ag, Ti, Zn, Hg			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
Cell 15 - Square - 105 - 5-3-4-200115	01/15/15	0927	G	S			
Cell 15 - Square - 82 - 5-3-4-200115		0955	G	S			
Cell 15 - Square - 204 - 5-3-4-200115		1028	G	S			
Cell 15 - Square - 93 - 5-3-4-200115	01/15/15	1059	G	S			
Tip 3 Block							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested 1, II, III, IV, Other (specify)				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by: Tony S. Longwell Relinquished by: Tony S. Longwell Relinquished by: Tony S. Longwell				Special Instructions/QC Requirements:			
Date/Time: 01/15/15 1331 Date/Time: 01/15/15 1600 Date/Time:				Method of Shipment:			
Relinquished by: Tony S. Longwell Relinquished by: Tony S. Longwell Relinquished by: Tony S. Longwell				Received by: Tony S. Longwell Received by: Tony S. Longwell Received by: Tony S. Longwell			
Company: ARCADIS Company: ARCADIS Company: ARCADIS				Company: ARCADIS Company: ARCADIS Company: ARCADIS			
Custody Seals Intact Δ Yes Δ No				Cooler Temperature(s) °C and Other Remarks:			

Eurofins TestAmerica Houston

Loc: 600

199371

S

Receipt Checklist

Environment Testing
TestAmerica

Date/Time Received:

20 JAN 16 10:07

JOB NUMBER:

CLIENT:

ARCADIS

UNPACKED BY:

CARRIER/DRIVER:

Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received:

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
7612 7417	Y / N	Y / N	0.6	678	+0.4	
	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? ☐ YES ☐ NOLABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☒ YESBase samples are > pH 12: ☐ YES ☐ NOAcid preserved are < pH 2: ☐ YES ☐ NOTX1005 samples frozen 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:

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

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 $<6\text{mm}$ (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.

Arcadis U.S., Inc.

630 Plaza Drive

Suite 100

Highlands Ranch, Colorado 80129

Tel 720 344 3500

Fax 720 344 3535

www.arcadis.com

A decorative graphic consisting of three thin orange lines. One line is horizontal, extending from the left edge of the page towards the right. Two other lines are diagonal, starting from the bottom left and extending towards the top right, intersecting the horizontal line.