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Chevron Environmental Management Company

# Remediation Summary and Soil Closure Request Report

## Jal Landfarm, Permit NM-02-0012

## Centralized Surface Waste Management Facility

## Lea County, New Mexico

March 10, 2025

# Remediation Summary and Soil Closure Request Report

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

March 10, 2025

**Prepared By:**
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# Acronyms and Abbreviations

| | |
|---|---|
| Arcadis | Arcadis U.S., Inc. |
| bgs | below ground surface |
| BTEX | benzene, toluene, ethylbenzene, and xylenes |
| CEMC | Chevron Environmental Management Company |
| Closure Report | Remediation Summary and Soil Closure Request Report |
| 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 |
| Site | Jal Landfarm, located in Lea County, New Mexico |
| TPH | total petroleum hydrocarbons |
| USEPA | United States Environmental Protection Agency |
| Work Plan | Site Characterization and Soil Remediation Work Plan |

# 1 Introduction

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

On August 2, 1999, the New Mexico Oil Conservation Division (NMOCD) issued Texaco Exploration and 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 On February 14, 2007, Rule 711 was repealed and replaced by 19.15.36 New Mexico Administrative Code (NMAC; February 14, 2007, as amended through June 30, 2016), commonly referred to as Part 36. On December 24, 2020, the NMOCD approved a minor permit modification request that permitted future site activities to be conducted in accordance with Part 36 requirements in lieu of the requirements of provision 19.15.36.20 of Part 36 (NMOCD 2020). Since 2021, the Site has been operated in accordance with the requirements specified in permit NM-02-0012 and Part 36.

Under Part 36, semiannual vadose zone monitoring is performed at the Site to determine whether a release has occurred in the vadose zone. Analytical results of vadose zone monitoring indicated minor impacts of total petroleum hydrocarbons (TPH) and chloride to the vadose zone. In response, CEMC submitted an Initial Form C-141 (i.e., Release Notification Form) to the NMOCD on April 21, 2021, to notify the division of the release in accordance with 19.15.29 NMAC. The NMOCD approved the Release Notification Form on May 18, 2021, and assigned the Site incident number NAPP2113741693. The initial and final C-141 Forms are provided in Appendix A. On November 13, 2024, CEMC submitted a Site Characterization and Soil Remediation Work Plan (Work Plan) for the Site, which provides a site assessment and characterization and describes the remediation plan to address TPH impacts (Arcadis 2024). The NMOCD approved the Work Plan on November 19, 2024 (NMOCD 2024), and remediation activities were performed from January 27 through February 10, 2025. This Closure Report provides a summary of remediation activities completed at the Site and provides documentation of the excavation areas and confirmation sample results. CEMC requested an extension for submittal of the Closure Report, which NMOCD approved on February 17, 2025; the extension request approval is provided in Appendix B.

# 2 Site Description and Background

The Site is located approximately 4.5 miles northwest of Jal, New Mexico (western 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 as 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. Depth to water beneath the landfarm is expected to range from 148 to 174 feet bgs, and regional groundwater flows from northwest to southeast (Stantec Consulting Services Inc. 2017).

The Site was originally approved for 56 landfarm cells (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 and closure for Cells 22, 23, and 24 because the treatment zone closure performance standards specified in provision 19.15.36.15(F) NMAC 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 December 2020, the NMOCD approved a minor permit modification request to discontinue tilling operations at Cells 17, 18, 19, 20, 21, 25, and 26 (NMOCD 2020). Current site activities include monthly site inspections and semiannual treatment zone and vadose zone monitoring. 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.

In October 2024, a site assessment was completed at Cells 17, 18, 19, 20, 21, 25, and 26 to delineate TPH; benzene, toluene, ethylbenzene, and xylenes (BTEX); and chloride based on the 19.15.29 NMAC closure criteria for soils impacted by a release (Part 29 closure criteria; see Section 3) and determine if vadose zone soils were impacted by the treatment zone. Select locations within Cells 17 and 21 exceeded the Part 29 closure criteria for chloride or TPH and required remediation. Additionally, during the December 2024 semiannual vadose zone monitoring event, select locations within Cells 17, 18, and 21 exceeded the Part 29 closure criteria for chloride or TPH and also required remediation. The impacted locations are shown on Figure 2.

# 3 Closure Criteria for Soils Impacted by a Release

The Part 29 closure criteria are determined based on the depth to groundwater and the characteristics of the Site. Given the volume of the release at the Site is unknown, the most stringent Part 29 closure criteria are used. According to Table I of provision 19.15.29.12 NMAC, the Part 29 closure criteria listed in Table 1, below, apply to the Site for remediation and reclamation of the first 4 feet of native soil.

*Table 1 Applicable Part 29 Closure Criteria for Site Soils*

| Depth to Groundwater | Constituent | Part 29 Closure Criteria (mg/kg) | Restoration Criteria (mg/kg)[a] |
|---|---|---|---|
| Less than 50 feet | Chloride | 600 | 600 |
| | TPH (GRO+DRO+ORO) | 100 | 100 |
| | BTEX | 50 | 50 |
| | Benzene | 10 | 10 |

**Notes:**
[a] Revised screening limit and restoration criteria within the first 4 feet bgs in accordance with 19.15.29 NMAC, effective August 14, 2018.
DRO = diesel range organics
GRO = gasoline range organics
mg/kg = milligram per kilogram
ORO = oil range organics

# 4 Soil Remediation Activities

Soil remediation activities were performed from January 27 through February 10, 2025, at the following locations (Figure 2):

- Cell 17, Squares 5, 22, 24, and 66;
- Cell 18, Square 180; and
- Cell 21, Squares 44, 89, 125, and 150.

At each location, treatment zone soil was removed using a backhoe and stockpiled adjacent to the excavation area. Impacted vadose zone soil was then excavated to a maximum depth of approximately 5 to 6 feet below native ground surface. To determine the extent of impacted soil that needed to be removed, soils were screened in the field at 1-foot intervals using a photoionization detector and Hach® chloride test strips.

Once the desired excavation depth and width were achieved at each location (based on field screening results), a five-point composite confirmation sample was collected from the excavation floor and sidewalls. Before sample collection, the backhoe bucket was decontaminated using an Alconox® solution and a pressure washer with potable rinse water. After decontamination was complete, the backhoe bucket was used to collect representative soil from the excavation area. Discrete samples collected from the excavation floor and sidewalls were homogenized in a stainless-steel bowl and placed into laboratory-supplied 4-ounce jars. The sample jars were placed on ice and shipped or delivered to Eurofins Environmental Testing laboratory in Midland, Texas, or Stafford, Texas, for analysis of the following constituents:

- TPH as GRO, DRO, and oil range organics by United States Environmental Protection Agency (USEPA) Method 8015B NM;
- BTEX by USEPA Method 8021B or 8260C; and
- Chloride by USEPA Method 300.

If the confirmation sample results were less than the Part 29 closure criteria, the excavation was considered complete, and the location was backfilled with clean material. If the confirmation sample results exceeded the Part 29 closure criteria, additional soil was removed, and a new confirmation sample was collected to determine whether additional soil removal would be required or if the excavation was complete. A total of 10 confirmation samples were collected from the excavated areas.

Confirmation sample analytical results are provided in Table 2 and shown on Figure 2. Laboratory analytical reports are provided in Appendix C. A photolog of the excavation activities is provided in Appendix D.

In total, approximately 140 cubic yards of impacted soil were excavated and placed in hauling trucks for transport to an offsite disposal facility. The impacted soil was disposed of at the Gandy Marley facility in Caprock, New Mexico as Class 2 non-hazardous material. The disposal manifests are provided in Appendix E.

# 5 Restoration, Reclamation, and Re-Vegetation Plan

Once the confirmation sample results confirmed excavation was complete, each excavation area was backfilled with locally sourced, non-impacted material from the Gandy Marley facility in Caprock, New Mexico, and covered with treatment zone soil that had been removed prior to excavation. A five-point composite soil sample was collected from the backfill material and analyzed for TPH, BTEX, and chloride. The analytical results confirmed the backfill material was below the Part 29 closure criteria (Table 2).

Provision 19.15.29.13 NMAC outlines the restoration, reclamation, and re-vegetation requirements under Part 29. Specifically, provision 19.15.29.13(E) states that “the surface restoration, reclamation and re-vegetation obligations imposed by federal or state agencies or tribes on lands managed or owned by those agencies supersede these provisions and govern the obligations of any responsible party subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment”. CEMC will comply with the applicable requirements of Part 36 in lieu of the requirements of provision 19.15.29.13 NMAC.

# 6 Soil Closure Request

Remediation activities at the Site were conducted in accordance with 19.15.29 NMAC. Impacted soil was excavated and disposed of offsite. Confirmation sample results indicate that concentrations of TPH, BTEX, and chloride are below the Part 29 closure criteria in each excavation area.

No additional soil assessment or remediation activities are recommended for the Site at this time. CEMC requests closure of the vadose zone under 19.15.29 NMAC.

# 7 References

Arcadis. 2024. Site Characterization and Soil Remediation Work Plan. Jal Landfarm NM-020-0012. Centralized Surface Waste Management Facility, Lea County, New Mexico. November 13.

NMOCD. 1999. OCD Rule 711 Permit Approval NM-01-0012 and NM-02-0013. August 2.

NMOCD. 2003a. Letter from R. Anderson (NMOCD) to R. Bailey (Chevron Texaco) re: Texaco E&P Inc. OCD Rule 711 Permit Approval NM-02-0012. March 26.

NMOCD. 2003b. Letter from M. Kieling (NMOCD) to R. Bailey (Chevron Texaco) re: Approval of Discontinued Maintenance Status and Application of Additional Lifts, Texaco E&P Inc., Permit NM-02-0012. July 29.

NMOCD. 2004. Letter from R. Anderson (NMOCD) to R. Bailey (Chevron) re: Chevon USA Inc. Surface Waste Management Facility Permits NM-02-0012 and NM-02-0013. April 1.

NMOCD. 2008. Letter from B. Jones (NMOCD) to R. Bailey (CEMC) re: 2007 Sampling Results of Chevron Centralized Landfarm. Centralized Surface Waste Management Facility Permit NM-2-0012. Lea County, New Mexico. February 19.

NMOCD. 2020. Letter from B. Jones (NMOCD) to R. Speer (Chevon) re: Approval of Permit Minor Modification and Exception Requests. Jal Landfarm, Permit NM2-012. December 24.

NMOCD. 2024. Email from C. Walker (NMOCD) to A. Barnhill (CEMC) re: The Oil Conservation Division (OCD) has approved the application, Application ID: 403258. November 19.

Stantec Consulting Services Inc. 2017. Draft Landfarm Operations, Sampling and Analysis Plan. Chevron Jal Landfarm Surface Waste Management Facility Number NM-02-0012. September 27.

# Table

**Table 2**
**January 2025 Confirmation Sample Results**
**Remediation Summary and Soil Closure Request Report**
**Jal Landfarm, Permit NM-02-0012**
**Lea County, New Mexico**

| | | | Constituent | DRO | | GRO | | ORO | | TPH[a] | | Benzene | | Toluene | | Ethylbenzene | | Xylenes, Total | | BTEX[b] | | Chloride | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Method | USEPA SW846 8015B NM | | USEPA SW846 8015B NM | | USEPA SW846 8015B NM | | -- | | USEPA SW846 8021B | | USEPA SW846 8021B | | USEPA SW846 8021B | | USEPA SW846 8021B | | -- | | USEPA 300.0 | |
| | | | Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| | | | Part 29 Closure Criteria | -- | | -- | | -- | | 100 | | 10 | | -- | | -- | | -- | | 50 | | 600 | |
| Cell | Zone | Sample ID | Sample Date | Excavation Depth (feet bngs) | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| -- | Borrow | Borrow-S-250205 | 2/5/2025 | -- | 18.6 | U | 17.8 | U | 18.6 | U | 18.6 | -- | 0.00172 | U | 0.00246 | U | 0.00134 | U* | 0.00282 | U | 0.00282 | -- | 75.4 | -- |
| Cell 17 | Vadose | Cell 17-Square 22-E-6-250129 | 1/29/2025 | 6 | 15.1 | U | 14.5 | U | 15.1 | U | 15.1 | -- | 0.00139 | U | 0.00199 | U | 0.00108 | U | 0.00228 | U | 0.00228 | -- | 739 | -- |
| Cell 17 | Vadose | Cell 17-Square 22-E-6-250204 | 2/4/2025 | 6 | 16.3 | U | 15.6 | U | 16.3 | U | 16.3 | -- | 0.00150 | U | 0.00215 | U | 0.00117 | U | 0.00246 | U | 0.00246 | -- | 482 | -- |
| Cell 17 | Vadose | Cell 17-Square 24-E-6-250128 | 1/28/2025 | 6 | 23.2 | U | 23.2 | U | 23.2 | U | 23.2 | -- | 0.000419 | U | 0.00133 | U | 0.000333 | U | 0.000474 | U | 0.00133 | -- | 484 | -- |
| Cell 17 | Vadose | Cell 17-Square 5-E-5-250130 | 1/30/2025 | 5 | 16.0 | U | 15.4 | U | 16.0 | U | 16.0 | -- | 0.00148 | U | 0.00212 | U | 0.00116 | U | 0.00242 | U | 0.00242 | -- | 290 | -- |
| Cell 17 | Vadose | Cell 17-Square 66-E-5-250129 | 1/29/2025 | 5 | 15.1 | U | 14.5 | U | 15.1 | U | 15.1 | -- | 0.00138 | U | 0.00198 | U | 0.00108 | U | 0.00226 | U | 0.00226 | -- | 146 | -- |
| Cell 18 | Vadose | Cell 18-Square 180-E-5-250206 | 2/6/2025 | 5 | 20.2 | U | 19.4 | U | 20.2 | U | 20.2 | -- | 0.00186 | U | 0.00268 | U | 0.00146 | U | 0.00306 | U | 0.00306 | -- | 7.26 | J |
| Cell 21 | Vadose | Cell 21-Square 125-E-5-250206 | 2/6/2025 | 5 | 17.2 | U | 16.6 | U | 17.2 | U | 17.2 | -- | 0.00158 | U | 0.00227 | U | 0.00124 | U | 0.00260 | U | 0.00260 | -- | 4.53 | J |
| Cell 21 | Vadose | Cell 21-Square 150-E-6-250205 | 2/5/2025 | 6 | 16.2 | U | 15.5 | U | 16.2 | U | 16.2 | -- | 0.00148 | U | 0.00213 | U | 0.00116 | U | 0.00244 | U | 0.00244 | -- | 12.4 | -- |
| Cell 21 | Vadose | Cell 21-Square 44-E-5-250205 | 2/5/2025 | 5 | 16.2 | U | 15.5 | U | 16.2 | U | 16.2 | -- | 0.00148 | U | 0.00213 | U | 0.00116 | U | 0.00244 | U | 0.00244 | -- | 4.54 | J |
| Cell 21 | Vadose | Cell 21-Square 89-E-5-250205 | 2/5/2025 | 5 | 16.2 | U | 15.6 | U | 16.2 | U | 16.2 | -- | 0.00149 | U | 0.00214 | U | 0.00116 | U | 0.00244 | U | 0.00244 | -- | 4.64 | J |

**Notes:**

1. Non-detect values are reported to the sample detection limit (i.e., the SDL) specified in the laboratory reports.
2. Detected values highlighted in gray exceed the 19.15.29 NMAC closure criteria for soils impacted by a release.
3. Cell 17-Square24-E-6-250128 was analyzed for BTEX using method USEPA SW846 8260C.

[a] TPH is the sum of detected DRO, GRO, and ORO fractions. If all results are non-detect, the highest non-detect value is presented.

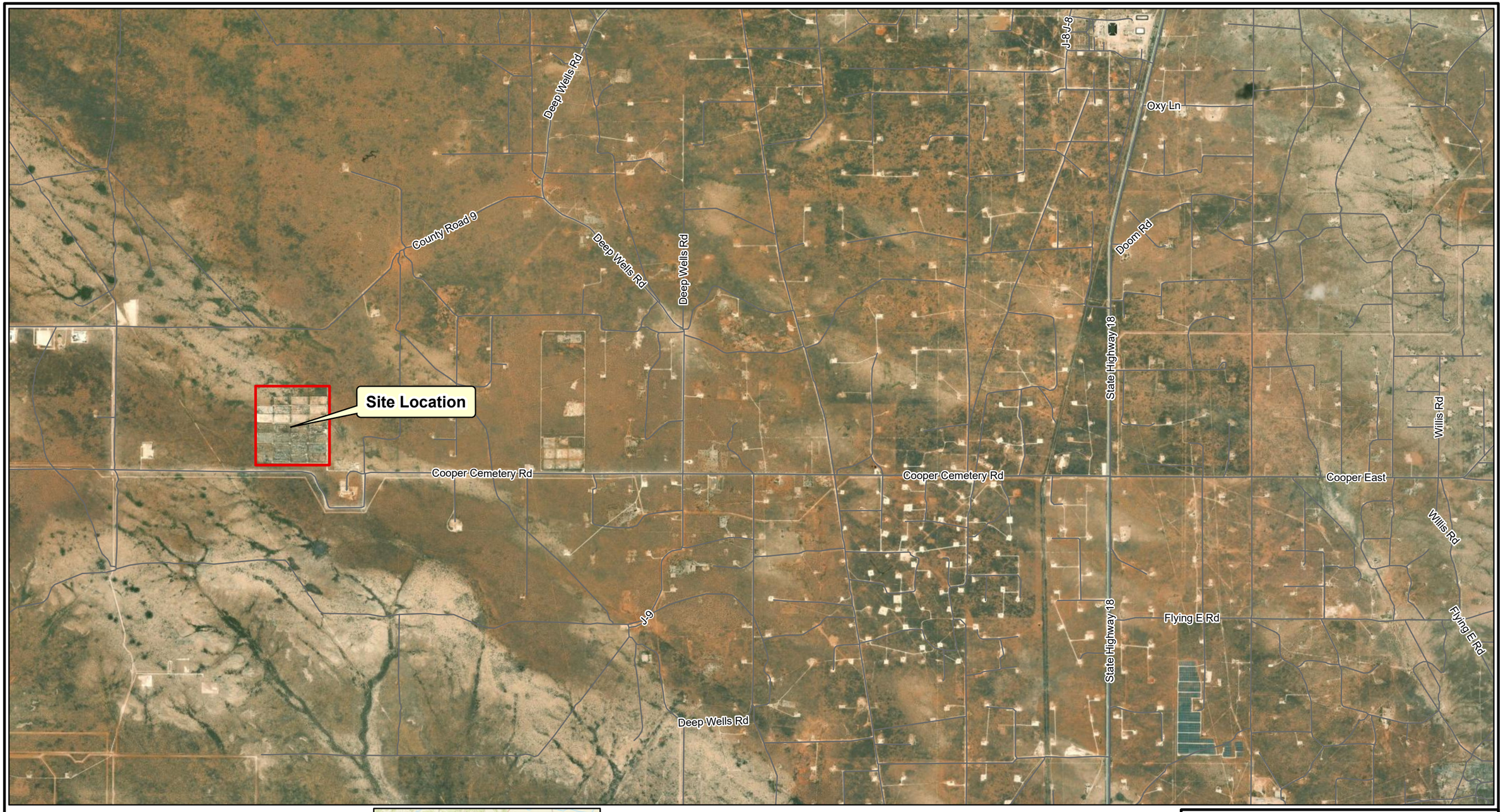
[b] BTEX is the sum of benzene, toluene, ethylbenzene, and xylenes. If all results are non-detect, the highest non-detect value is presented.

-- = not applicable
bngs = below native ground surface
BTEX = benzene, toluene, ethylbenzene, and xylenes
DRO = diesel range organics
GRO = gasoline range organics
ID = identification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
mg/kg = milligram per kilogram
MQL = method quantitation limit
NMAC = New Mexico Administrative Code
ORO = oil range organics
SDL = sample detection limit
SW846 = "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition, November 1986 and its updates
TPH = total petroleum hydrocarbon
USEPA = United States Environmental Protection Agency

**Qualifiers:**

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

# Figures




## LEGEND

Landfarm Boundary


0 3,000 6,000

SCALE IN FEET

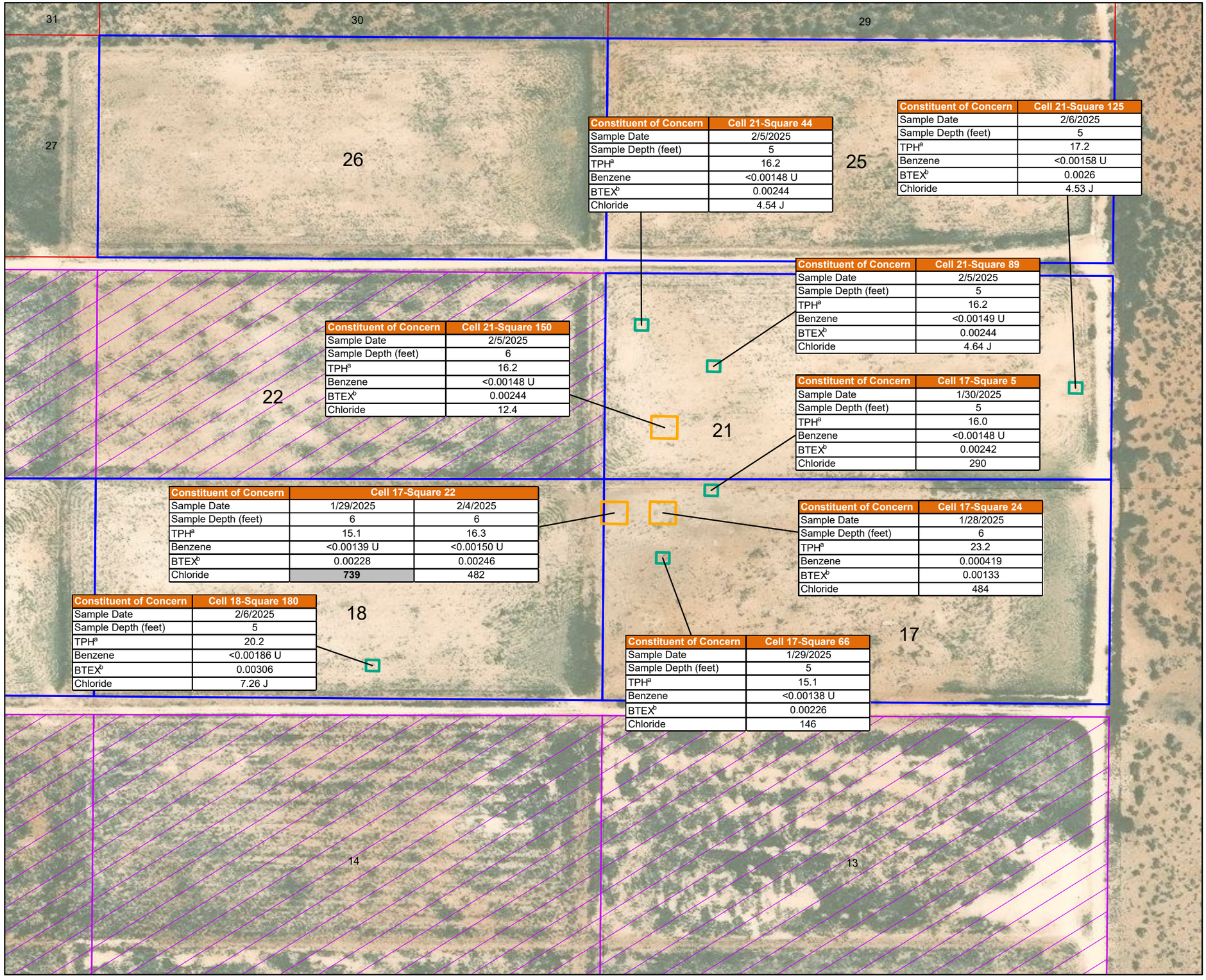
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM, PERMIT NM-02-0012
LEA COUNTY, NEW MEXICO
**REMEDIATION SUMMARY AND SOIL CLOSURE REQUEST REPORT**

**SITE LOCATION MAP**

ARCADIS

FIGURE 1

PATH: T:_ENV\CHEVRON_JAL-LANDFARM\GIS_PRO\2024EVENT\2023_DEC_2024EVENT.APRX SAVED: 2/18/2025 BY: AVI00976




| Constituent of Concern | Cell 21-Square 44 |
|---|---|
| Sample Date | 2/5/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 16.2 |
| Benzene | <0.00148 U |
| BTEX[b] | 0.00244 |
| Chloride | 4.54 J |

| Constituent of Concern | Cell 21-Square 125 |
|---|---|
| Sample Date | 2/6/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 17.2 |
| Benzene | <0.00158 U |
| BTEX[b] | 0.0026 |
| Chloride | 4.53 J |

| Constituent of Concern | Cell 21-Square 89 |
|---|---|
| Sample Date | 2/5/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 16.2 |
| Benzene | <0.00149 U |
| BTEX[b] | 0.00244 |
| Chloride | 4.64 J |

| Constituent of Concern | Cell 21-Square 150 |
|---|---|
| Sample Date | 2/5/2025 |
| Sample Depth (feet) | 6 |
| TPH[a] | 16.2 |
| Benzene | <0.00148 U |
| BTEX[b] | 0.00244 |
| Chloride | 12.4 |

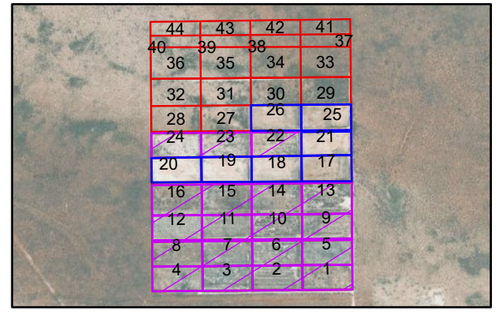
| Constituent of Concern | Cell 17-Square 5 |
|---|---|
| Sample Date | 1/30/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 16.0 |
| Benzene | <0.00148 U |
| BTEX[b] | 0.00242 |
| Chloride | 290 |

| Constituent of Concern | Cell 17-Square 22 | |
|---|---|---|
| Sample Date | 1/29/2025 | 2/4/2025 |
| Sample Depth (feet) | 6 | 6 |
| TPH[a] | 15.1 | 16.3 |
| Benzene | <0.00139 U | <0.00150 U |
| BTEX[b] | 0.00228 | 0.00246 |
| Chloride | **739** | 482 |

| Constituent of Concern | Cell 17-Square 24 |
|---|---|
| Sample Date | 1/28/2025 |
| Sample Depth (feet) | 6 |
| TPH[a] | 23.2 |
| Benzene | 0.000419 |
| BTEX[b] | 0.00133 |
| Chloride | 484 |

| Constituent of Concern | Cell 18-Square 180 |
|---|---|
| Sample Date | 2/6/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 20.2 |
| Benzene | <0.00186 U |
| BTEX[b] | 0.00306 |
| Chloride | 7.26 J |

| Constituent of Concern | Cell 17-Square 66 |
|---|---|
| Sample Date | 1/29/2025 |
| Sample Depth (feet) | 5 |
| TPH[a] | 15.1 |
| Benzene | <0.00138 U |
| BTEX[b] | 0.00226 |
| Chloride | 146 |



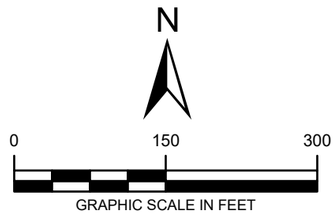

## LEGEND

- Active Landfarm Cell
- Developed Cell - Inactive
- Inactive Landfarm Cell
- 5 feet below native ground surface (Excavation Depth)
- 6 feet below native ground surface (Excavation Depth)

| Constituent of Concern | Part 29 Closure Criteria |
|---|---|
| TPH[a] | 100 |
| Benzene | 10 |
| BTEX[b] | 50 |
| Chloride | 600 |

**NOTES:**

1. **BOLD AND SHADE** - DETECTED VALUE EXCEEDS THE PART 29 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.
2. TPH[a] - TOTAL PETROLEUM HYDROCARBONS (TPH) ARE THE SUM OF DETECTED DIESEL RANGE ORGANIC, GASOLINE RANGE ORGANIC, AND OIL RANGE ORGANIC FRACTIONS. IF ALL RESULTS ARE NON-DETECT, THE HIGHEST NON-DETECT VALUE IS PRESENTED.
3. BTEX[b] - BTEX IS THE SUM OF DETECTED BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES. IF ALL RESULTS ARE NON-DETECT, THE HIGHEST NON-DETECT VALUE IS PRESENTED.
4. J - RESULT IS LESS THAN THE METHOD QUANTITATION LIMIT BUT GREATER THAN OR EQUAL TO THE SAMPLE DETECTION LIMIT AND THE CONCENTRATION IS AN ESTIMATED VALUE.
5. U - ANALYTE WAS NOT DETECTED AT OR ABOVE THE SAMPLE DETECTION LIMIT.
6. ALL RESULTS ARE PRESENTED IN MILLIGRAMS PER KILOGRAMS
7. < - LESS THAN.




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

**REMEDIATION SUMMARY AND SOIL CLOSURE REQUEST REPORT**

# EXCAVATION AREAS AND CONFIRMATION SAMPLE RESULTS

ARCADIS

FIGURE **2**

Path: T:_ENV\Chevron_Jal-Landfarm\GIS_Pro\2024Event\2023_Dec_2024Event.aprx\Figure 2 Analytical Figure Last Saved By: avi00976 2/20/2025

# Appendix A

## Initial and Final C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|---|---|
| Incident ID | NAPP2113741693 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party: Chevron USA Inc. | OGRID: 22364 |
| Contact Name: Armando Martinez | Contact Telephone: 505.690.5408. |
| Contact email: amarti@chevron.com | Incident # *(assigned by OCD)* |
| Contact mailing address: P.O. Box 469 Questa, NM 87564 | |

## Location of Release Source

Latitude 32.214875 Longitude -103.291479
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name: Jal Landfarm | Site Type: Landfarm |
| Date Release Discovered: N/A | API# *(if applicable):* N/A |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| K | 17 | 24S | 36E | Lea |

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Texaco Exploration & Production Co.)

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|---|---|---|
| ☐ Crude Oil | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Produced Water | Volume Released (bbls) | Volume Recovered (bbls) |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☒ No |
| ☐ Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| ☒ Other (describe): Unknown | Volume/Weight Released (provide units): Unknown | Volume/Weight Recovered (provide units) |
| Cause of Release: The Site operates as a surface waste management facility; however, no new waste material has been received since 2007. Waste received at the facility consisted of soil/solids impacted with exempt hydrocarbons. Minor impacts of TPH and Chloride to the vadose zone (2 – 3 feet below native ground surface) have been measured. | | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br>☒ Yes ☐ No | If YES, for what reason(s) does the responsible party consider this a major release?<br><br>This is considered a major release due to the unknown volume of material released. |

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, notification provided to OCD (Bradford Billings) by Arcadis/Chevron on 4/21/2021 via teleconference.

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Routine operation, maintenance, and monitoring activities to remediate impacted treatment zone soils in accordance with NMAC Part 36 (which replaced rule 711) are being conducted and have been since 1999.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Armando Martinez Title: Operations Lead - Central

Signature: Date: 4/21/2021

email: amarti@chevon.com Telephone: 505.690.5408

**OCD Only**

Received by: Ramona Marcus Date: 5/18/2021

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505

CONDITIONS

Action 28440

## CONDITIONS OF APPROVAL

| Operator: | | | OGRID: | Action Number: | Action Type: |
|---|---|---|---|---|---|
| CHEVRON U S A INC | 6301 Deauville Blvd | Midland, TX79706 | 4323 | 28440 | C-141 |

| OCD Reviewer | Condition |
|---|---|
| rmarcus | The submitted C-141 is accepted with the following condition(s): The lateral and longitudinal information does not match the ULSTR regarding the release location. Please correct the conflicting information and report back to OCD. The information provided points to the ULSTR: L-17-24S-36E. The C-141 is reflecting K-17-24S-36E. Also, when submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141. |

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2113741693 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist**: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Armando Martinez Title: Operations Lead

Signature:  Date: February 26, 2025

email: amarti@chevron.com Telephone: 505-690-5408

**OCD Only**

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

# Appendix B

## Closure Report Extension Request Approval

## Schaffer, Alison

**From:** Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Sent:** Monday, February 17, 2025 7:20 AM
**To:** Schaffer, Alison
**Cc:** Martinez, Armando; Hudson, Matt; Tyler, Loyd; Johnson, Sarah; Nanny, Ryan
**Subject:** RE: [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request



Good morning Alison,

Your extension request for the closure report to be due on March 10, 2025 is approved. Please include this extension approval in your submission documents.

Thank you,
Crystal

---

**From:** Schaffer, Alison <Alison.Schaffer@arcadis.com>
**Sent:** Friday, February 14, 2025 3:26 PM
**To:** Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Cc:** Martinez, Armando <amarti@chevron.com>; Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Johnson, Sarah <Sarah.Johnson@arcadis.com>; Nanny, Ryan <Ryan.Nanny@arcadis.com>
**Subject:** RE: [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request

Hi Crystal,

We recently completed remediation activities at the Jal Landfarm in accordance with the approved Site Assessment/Characterization and Remediation Plan. The work was performed January 27 – February 7, 2025. We are in the process of developing the Part 29 Closure Report. The current due date for submittal of the Closure Report is 2/17/2025. We would like to request a 3-week extension for submittal of the report with a proposed due date of March 10, 2025.

Please let me know if you have any questions or if you would like to discuss further.

Thank you,
Alison

**Alison Schaffer**
Environmental Scientist
Arcadis U.S., Inc.
630 Plaza Drive, Suite 200 | Highlands Ranch, CO | 80129 | USA
T +1 303 471 3575

www.arcadis.com

ARCADIS

**From:** Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Sent:** Wednesday, January 15, 2025 11:38 AM
**To:** Nanny, Ryan <Ryan.Nanny@arcadis.com>
**Cc:** Martinez, Armando <amarti@chevron.com>; Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Schaffer, Alison <Alison.Schaffer@arcadis.com>; Johnson, Sarah <Sarah.Johnson@arcadis.com>; Rice, Steve <Steve.Rice@arcadis.com>; Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Subject:** RE: [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request



Good morning Ryan,

Per the approval of the remediation plan a closure report is due on 2/17/2025.

Your request to modify the remediation plan as stated below is approved. Please include this communication and documentation in your closure report. If you request a remediation plan extension and no work or activity on the remediation is/has taking place the extension will most likely be denied.

Please contact me if you have any questions.

Thank you,
Crystal Walker

**From:** Nanny, Ryan <Ryan.Nanny@arcadis.com>
**Sent:** Wednesday, January 15, 2025 10:55 AM
**To:** Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
**Cc:** Martinez, Armando <amarti@chevron.com>; Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Schaffer, Alison <Alison.Schaffer@arcadis.com>; Johnson, Sarah <Sarah.Johnson@arcadis.com>; Rice, Steve <Steve.Rice@arcadis.com>; Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Subject:** RE: [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request



Thank you so much Michael!
Crystal, if you have any questions or would like to discuss further, please let us know.

**From:** Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
**Sent:** Wednesday, January 15, 2025 11:53 AM

**To:** Nanny, Ryan <Ryan.Nanny@arcadis.com>
**Cc:** Martinez, Armando <amarti@chevron.com>; Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Schaffer, Alison <Alison.Schaffer@arcadis.com>; Johnson, Sarah <Sarah.Johnson@arcadis.com>; Rice, Steve <Steve.Rice@arcadis.com>; Walker, Crystal, EMNRD <Crystal.Walker@emnrd.nm.gov>
**Subject:** RE: [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request



Good morning, Ryan

You may want to reach out to Crystal Walker, I have CC'd her on this response, as she was the last reviewer for this incident.

Thank you,

Mike

---

**From:** Nanny, Ryan <Ryan.Nanny@arcadis.com>
**Sent:** Wednesday, January 15, 2025 10:24 AM
**To:** Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
**Cc:** Martinez, Armando <amarti@chevron.com>; Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Schaffer, Alison <Alison.Schaffer@arcadis.com>; Johnson, Sarah <Sarah.Johnson@arcadis.com>; Rice, Steve <Steve.Rice@arcadis.com>
**Subject:** [EXTERNAL] Jal Landfarm (Permit NM02-0012) - Site Assessment/Characterization and Remediation Plan Modification Request



Hello Mr. Buchanan,

We recently received approval of the Jal Landfarm Site Assessment/Characterization and Remediation Plan (incident ID nAPP2113741693).

As part of 19.15.36 NMAC (Part 36), we are required to continue semi-annual vadose zone monitoring until the site is approved to begin closure activities under Part 36. During the recent semi-annual vadose zone monitoring event in December 2024, some samples exceeded the Part 29 closure criteria for chloride and TPH. Although chloride and TPH in the active landfarm cells have been delineated, as presented in the Site Assessment/Characterization and Remediation Plan, we recognize that variable concentrations may be observed across the site due to the sampling methodology (i.e., collection of discrete grab samples) and the heterogenous nature of soil. Since no new impacted material has been placed on the landfarm since 2007, we do not believe these additional chloride and TPH exceedances represent a new release.

We request approval to include these additional locations (and any future locations that may exceed the Part 29 closure criteria) in our Site Assessment/Characterization and Remediation Plan. We propose to remediate all locations that exceed the Part 29 closure criteria during one mobilization prior to initiation of Part 36 closure

activities. Part 36 closure activities will be initiated once the Part 36 Closure Plan is submitted and approved by the NMOCD.

Please let us know if you would like to discuss further or if you have any questions.

Thank you so much Mr. Buchanon!



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# Appendix C

## Laboratory Analytical Reports

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 1/30/2025 3:44:15 PM

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

880-53816-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.





my EOL

# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
1/30/2025 3:44:15 PM

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 880-53816-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD is outside acceptance limits. |
| 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. |
| X | Surrogate recovery exceeds control limits |

### HPLC/IC

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

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| b | The compound was found in the blank and sample |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 880-53816-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 880-53816-1 Eurofins Midland

**Job Narrative**
**880-53816-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 1/29/2025 4:55 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: Cell 17-Square 22-E-6-250129 (880-53816-1) and Cell 17-Square 66-E-5-250129 (880-53816-2).

**GC VOA**
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-101558 and analytical batch 880-101549 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-101549/2). Evidence of matrix interference is present; 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.

**Diesel Range Organics**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-101544 and analytical batch 880-101567 was outside the upper control limits.

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

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

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

# Client Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell 17-Square 22-E-6-250129 Lab Sample ID: 880-53816-1

**Date Collected: 01/29/25 11:01** **Matrix: Solid**
**Date Received: 01/29/25 16:55**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U * | 0.00199 | 0.00139 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |
| Toluene | 0.00199 | U * | 0.00199 | 0.00199 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |
| Ethylbenzene | 0.00108 | U * | 0.00199 | 0.00108 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |
| m-Xylene & p-Xylene | 0.00228 | U * | 0.00398 | 0.00228 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |
| o-Xylene | 0.00158 | U * | 0.00199 | 0.00158 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |
| Xylenes, Total | 0.00228 | U * | 0.00398 | 0.00228 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 13:18* | *1* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 13:18* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 01/30/25 07:54 | 01/30/25 13:04 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:54 | 01/30/25 13:04 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:54 | 01/30/25 13:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *80* | | *70 - 130* | *01/30/25 07:54* | *01/30/25 13:04* | *1* |
| *o-Terphenyl* | *75* | | *70 - 130* | *01/30/25 07:54* | *01/30/25 13:04* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **739** | | 10.0 | 0.397 | mg/Kg | | | 01/30/25 10:24 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **6.95** | | 0.100 | 0.100 | % | | | 01/29/25 17:27 | 1 |
| **Percent Solids (ASTM D2216)** | **93.0** | **b** | 0.100 | 0.100 | % | | | 01/29/25 17:27 | 1 |

## Client Sample ID: Cell 17-Square 66-E-5-250129 Lab Sample ID: 880-53816-2

**Date Collected: 01/29/25 13:14** **Matrix: Solid**
**Date Received: 01/29/25 16:55**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00138 | U * | 0.00198 | 0.00138 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |
| Toluene | 0.00198 | U * | 0.00198 | 0.00198 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |
| Ethylbenzene | 0.00108 | U * | 0.00198 | 0.00108 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |
| m-Xylene & p-Xylene | 0.00226 | U * | 0.00396 | 0.00226 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |
| o-Xylene | 0.00157 | U * | 0.00198 | 0.00157 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |
| Xylenes, Total | 0.00226 | U * | 0.00396 | 0.00226 | mg/Kg | | 01/30/25 08:55 | 01/30/25 13:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 13:38* | *1* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 13:38* | *1* |

# Client Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell 17-Square 66-E-5-250129 Lab Sample ID: 880-53816-2

**Date Collected: 01/29/25 13:14** **Matrix: Solid**
**Date Received: 01/29/25 16:55**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 49.9 | 14.5 | mg/Kg | | 01/30/25 07:58 | 01/30/25 13:04 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 49.9 | 15.1 | mg/Kg | | 01/30/25 07:58 | 01/30/25 13:04 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 49.9 | 15.1 | mg/Kg | | 01/30/25 07:58 | 01/30/25 13:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *127* | | *70 - 130* | *01/30/25 07:58* | *01/30/25 13:04* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *01/30/25 07:58* | *01/30/25 13:04* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **146** | | 10.1 | 0.397 | mg/Kg | | | 01/30/25 10:30 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **4.06** | | 0.100 | 0.100 | % | | | 01/29/25 17:27 | 1 |
| **Percent Solids (ASTM D2216)** | **95.9** | **b** | 0.100 | 0.100 | % | | | 01/29/25 17:27 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | BFB1 | DFBZ1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | 96 | 109 |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | 99 | 108 |
| LCS 880-101558/1-A | Lab Control Sample | 92 | 115 |
| LCSD 880-101558/2-A | Lab Control Sample Dup | 93 | 115 |
| MB 880-101558/5-A | Method Blank | 92 | 102 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | 80 | 75 |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | 127 | 108 |
| LCS 880-101543/2-A | Lab Control Sample | 98 | 102 |
| LCS 880-101544/2-A | Lab Control Sample | 124 | 116 |
| LCSD 880-101543/3-A | Lab Control Sample Dup | 101 | 105 |
| LCSD 880-101544/3-A | Lab Control Sample Dup | 129 | 121 |
| MB 880-101543/1-A | Method Blank | 130 | 121 |
| MB 880-101544/1-A | Method Blank | 170 X | 140 X |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-101558/5-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U | 0.00200 | 0.00139 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Toluene | 0.00200 | U | 0.00200 | 0.00200 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Ethylbenzene | 0.00109 | U | 0.00200 | 0.00109 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| m-Xylene & p-Xylene | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| o-Xylene | 0.00158 | U | 0.00200 | 0.00158 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Xylenes, Total | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 11:34* | *1* |
| *1,4-Difluorobenzene (Surr)* | *102* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 11:34* | *1* |

**Lab Sample ID: LCS 880-101558/1-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.06715 | * | mg/Kg | | 67 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.05872 | * | mg/Kg | | 59 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.06264 | * | mg/Kg | | 63 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1328 | * | mg/Kg | | 66 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.06825 | * | mg/Kg | | 68 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* |

**Lab Sample ID: LCSD 880-101558/2-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.06013 | * | mg/Kg | | 60 | 70 - 130 | 11 | 35 |
| Toluene | | | 0.100 | 0.05237 | * | mg/Kg | | 52 | 70 - 130 | 11 | 35 |
| Ethylbenzene | | | 0.100 | 0.05406 | * | mg/Kg | | 54 | 70 - 130 | 15 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1156 | * | mg/Kg | | 58 | 70 - 130 | 14 | 35 |
| o-Xylene | | | 0.100 | 0.06085 | * | mg/Kg | | 61 | 70 - 130 | 11 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-101543/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101565** — **Prep Batch: 101543**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 01/30/25 07:53 | 01/30/25 03:36 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:53 | 01/30/25 03:36 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:53 | 01/30/25 03:36 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *130* | | *70 - 130* | *01/30/25 07:53* | *01/30/25 03:36* | *1* |
| *o-Terphenyl* | *121* | | *70 - 130* | *01/30/25 07:53* | *01/30/25 03:36* | *1* |

**Lab Sample ID: LCS 880-101543/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101565** — **Prep Batch: 101543**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 891.9 | | mg/Kg | | 89 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 912.7 | | mg/Kg | | 91 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *98* | | *70 - 130* |
| *o-Terphenyl* | *102* | | *70 - 130* |

**Lab Sample ID: LCSD 880-101543/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101565** — **Prep Batch: 101543**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 914.2 | | mg/Kg | | 91 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 929.1 | | mg/Kg | | 93 | 70 - 130 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* |
| *o-Terphenyl* | *105* | | *70 - 130* |

**Lab Sample ID: MB 880-101544/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101567** — **Prep Batch: 101544**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-101544/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101567** **Prep Batch: 101544**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 170 | X | 70 - 130 | 01/30/25 07:57 | 01/30/25 03:36 | 1 |
| o-Terphenyl | 140 | X | 70 - 130 | 01/30/25 07:57 | 01/30/25 03:36 | 1 |

**Lab Sample ID: LCS 880-101544/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101567** **Prep Batch: 101544**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1075 | | mg/Kg | | 108 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1077 | | mg/Kg | | 108 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 124 | | 70 - 130 |
| o-Terphenyl | 116 | | 70 - 130 |

**Lab Sample ID: LCSD 880-101544/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101567** **Prep Batch: 101544**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1095 | | mg/Kg | | 109 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1135 | | mg/Kg | | 113 | 70 - 130 | 5 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 129 | | 70 - 130 |
| o-Terphenyl | 121 | | 70 - 130 |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-101556/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 101562**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.395 | U | 10.0 | 0.395 | mg/Kg | | | 01/30/25 09:48 | 1 |

**Lab Sample ID: LCS 880-101556/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 101562**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 236.0 | | mg/Kg | | 94 | 90 - 110 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCSD 880-101556/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 101562**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 235.5 | | mg/Kg | | 94 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## GC VOA

### Analysis Batch: 101549

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Total/NA | Solid | 8021B | 101558 |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Total/NA | Solid | 8021B | 101558 |
| MB 880-101558/5-A | Method Blank | Total/NA | Solid | 8021B | 101558 |
| LCS 880-101558/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 101558 |
| LCSD 880-101558/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 101558 |

### Prep Batch: 101558

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Total/NA | Solid | 5030B | |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Total/NA | Solid | 5030B | |
| MB 880-101558/5-A | Method Blank | Total/NA | Solid | 5030B | |
| LCS 880-101558/1-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 880-101558/2-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |

## GC Semi VOA

### Prep Batch: 101543

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Total/NA | Solid | 8015NM Prep | |
| MB 880-101543/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-101543/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-101543/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 101544

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Total/NA | Solid | 8015NM Prep | |
| MB 880-101544/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-101544/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-101544/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 101565

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Total/NA | Solid | 8015B NM | 101543 |
| MB 880-101543/1-A | Method Blank | Total/NA | Solid | 8015B NM | 101543 |
| LCS 880-101543/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 101543 |
| LCSD 880-101543/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 101543 |

### Analysis Batch: 101567

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Total/NA | Solid | 8015B NM | 101544 |
| MB 880-101544/1-A | Method Blank | Total/NA | Solid | 8015B NM | 101544 |
| LCS 880-101544/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 101544 |
| LCSD 880-101544/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 101544 |

## HPLC/IC

### Leach Batch: 101556

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Soluble | Solid | DI Leach | |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Soluble | Solid | DI Leach | |
| MB 880-101556/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-101556/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## HPLC/IC (Continued)

### Leach Batch: 101556 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 880-101556/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

### Analysis Batch: 101562

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Soluble | Solid | 300.0 | 101556 |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Soluble | Solid | 300.0 | 101556 |
| MB 880-101556/1-A | Method Blank | Soluble | Solid | 300.0 | 101556 |
| LCS 880-101556/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 101556 |
| LCSD 880-101556/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 101556 |

## General Chemistry

### Analysis Batch: 101522

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Total/NA | Solid | D2216 | |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Total/NA | Solid | D2216 | |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell 17-Square 22-E-6-250129 Lab Sample ID: 880-53816-1

**Date Collected: 01/29/25 11:01** **Matrix: Solid**
**Date Received: 01/29/25 16:55**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.02 g | 5 mL | 101558 | 01/30/25 08:55 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 101549 | 01/30/25 13:18 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 101543 | 01/30/25 07:54 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 101565 | 01/30/25 13:04 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 101556 | 01/30/25 08:40 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 101562 | 01/30/25 10:24 | CH | EET MID |
| Total/NA | Analysis | D2216 | | 1 | | | 101522 | 01/29/25 17:27 | SMC | EET MID |

## Client Sample ID: Cell 17-Square 66-E-5-250129 Lab Sample ID: 880-53816-2

**Date Collected: 01/29/25 13:14** **Matrix: Solid**
**Date Received: 01/29/25 16:55**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.05 g | 5 mL | 101558 | 01/30/25 08:55 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 101549 | 01/30/25 13:38 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 101544 | 01/30/25 07:58 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 101567 | 01/30/25 13:04 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 101556 | 01/30/25 08:40 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 101562 | 01/30/25 10:30 | CH | EET MID |
| Total/NA | Analysis | D2216 | | 1 | | | 101522 | 01/29/25 17:27 | SMC | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Midland

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 | T104704400 | 06-30-25 |

# Method Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-53816-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| D2216 | Percent Moisture | ASTM | EET MID |
| 5030B | Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Arcadis US Inc.
Job ID: 880-53816-1
Project/Site: Chevron - Jal Land Farm Soils

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 880-53816-1 | Cell 17-Square 22-E-6-250129 | Solid | 01/29/25 11:01 | 01/29/25 16:55 |
| 880-53816-2 | Cell 17-Square 66-E-5-250129 | Solid | 01/29/25 13:14 | 01/29/25 16:55 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record

eurofins | Environment Testing

880-53816 Chain of Custody

| Client Information | Sampler: | Lab PM: Kudchadkar, Sachin G | Carrier Tracking No(s): |
|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: |
| Company: Arcadis US Inc. | PWSID: | | |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | | |
| City: Midland | TAT Requested (days): 24 TAT | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | |
| Phone: 303-316-6506(Tel) | PO #: PN 3027704 | | |
| Email: sarah.johnson@arcadis.com | WO #: | | |
| Project Name: Chevron - Jal Land Farm Soils | Project #: 86001348 | | |
| Site: | SSOW#: | | |

Analysis Requested

Preservation Codes: N - None

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM - Full TPH | 300_ORGFM_28D - Chloride | 8021B - BTEX | MOISTURE_2540G - Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | X | X | N | N | N | N | X | |
| Cell 17-Square 22-E-6-250129 | 01/29/25 | 1101 | C | Solid | | | X | X | X | X | 2 | |
| Cell 17-Square 66-E-6-250129 | 01/29/25 | 1314 | C | Solid | | | X | X | X | X | 2 | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |

Other:

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

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

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

Special Instructions/QC Requirements:

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

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 01/29/25 1457 | ARCADIS | | 1/29/25 1655 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Cooler Temperature(s) °C and Other Remarks: 4.6/4.5 -.1

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-53816-1

**Login Number: 53816** **List Source: Eurofins Midland**
**List Number: 1**
**Creator: Vasquez, Julisa**

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

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 2/3/2025 10:23:58 AM

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

880-53848-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.





my EOL

# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
2/3/2025 10:23:58 AM

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 880-53848-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD is outside acceptance limits. |
| 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. |
| X | Surrogate recovery exceeds control limits |

### HPLC/IC

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

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| b | The compound was found in the blank and sample |
| 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 |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 880-53848-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 880-53848-1 Eurofins Midland

**Job Narrative**
**880-53848-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The sample was received on 1/30/2025 1:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.5°C.

**Receipt Exceptions**
The following sample was received and analyzed from an unpreserved bulk soil jar: Cell 17Square 5-E-5-250130 (880-53848-1).

**GC VOA**
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-101558 and analytical batch 880-101549 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

**Diesel Range Organics**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-101544 and analytical batch 880-101567 was outside the upper control limits.

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

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

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

# Client Sample Results

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

**Client Sample ID: Cell 17Square 5-E-5-250130** **Lab Sample ID: 880-53848-1**
**Date Collected: 01/30/25 10:16** **Matrix: Solid**
**Date Received: 01/30/25 13:50** **Percent Solids: 94.1**

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00148 | U * | 0.00212 | 0.00148 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |
| Toluene | 0.00212 | U * | 0.00212 | 0.00212 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |
| Ethylbenzene | 0.00116 | U * | 0.00212 | 0.00116 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |
| m-Xylene & p-Xylene | 0.00242 | U * | 0.00424 | 0.00242 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |
| o-Xylene | 0.00168 | U * | 0.00212 | 0.00168 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |
| Xylenes, Total | 0.00242 | U * | 0.00424 | 0.00242 | mg/Kg | ☼ | 01/30/25 14:48 | 01/30/25 18:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *01/30/25 14:48* | *01/30/25 18:58* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *01/30/25 14:48* | *01/30/25 18:58* | *1* |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 15.4 | U | 52.9 | 15.4 | mg/Kg | ☼ | 01/30/25 07:58 | 01/30/25 14:55 | 1 |
| Diesel Range Organics (Over C10-C28) | 16.0 | U | 52.9 | 16.0 | mg/Kg | ☼ | 01/30/25 07:58 | 01/30/25 14:55 | 1 |
| Oil Range Organics (Over C28-C36) | 16.0 | U | 52.9 | 16.0 | mg/Kg | ☼ | 01/30/25 07:58 | 01/30/25 14:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *128* | | *70 - 130* | *01/30/25 07:58* | *01/30/25 14:55* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *01/30/25 07:58* | *01/30/25 14:55* | *1* |

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **290** | | 10.1 | 0.399 | mg/Kg | | | 01/31/25 02:06 | 1 |

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **5.92** | | 0.100 | 0.100 | % | | | 01/30/25 18:24 | 1 |
| **Percent Solids (ASTM D2216)** | **94.1** | **b** | 0.100 | 0.100 | % | | | 01/30/25 18:24 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | BFB1 | DFBZ1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-53848-1 | Cell 17Square 5-E-5-250130 | 95 | 110 |
| LCS 880-101558/1-A | Lab Control Sample | 92 | 115 |
| LCSD 880-101558/2-A | Lab Control Sample Dup | 93 | 115 |
| MB 880-101558/5-A | Method Blank | 92 | 102 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-53848-1 | Cell 17Square 5-E-5-250130 | 128 | 122 |
| LCS 880-101544/2-A | Lab Control Sample | 124 | 116 |
| LCSD 880-101544/3-A | Lab Control Sample Dup | 129 | 121 |
| MB 880-101544/1-A | Method Blank | 170 X | 140 X |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-101558/5-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U | 0.00200 | 0.00139 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Toluene | 0.00200 | U | 0.00200 | 0.00200 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Ethylbenzene | 0.00109 | U | 0.00200 | 0.00109 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| m-Xylene & p-Xylene | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| o-Xylene | 0.00158 | U | 0.00200 | 0.00158 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |
| Xylenes, Total | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 01/30/25 08:55 | 01/30/25 11:34 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 11:34* | *1* |
| *1,4-Difluorobenzene (Surr)* | *102* | | *70 - 130* | *01/30/25 08:55* | *01/30/25 11:34* | *1* |

**Lab Sample ID: LCS 880-101558/1-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.06715 | * | mg/Kg | | 67 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.05872 | * | mg/Kg | | 59 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.06264 | * | mg/Kg | | 63 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1328 | * | mg/Kg | | 66 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.06825 | * | mg/Kg | | 68 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* |

**Lab Sample ID: LCSD 880-101558/2-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101549** **Prep Batch: 101558**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.06013 | * | mg/Kg | | 60 | 70 - 130 | 11 | 35 |
| Toluene | | | 0.100 | 0.05237 | * | mg/Kg | | 52 | 70 - 130 | 11 | 35 |
| Ethylbenzene | | | 0.100 | 0.05406 | * | mg/Kg | | 54 | 70 - 130 | 15 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1156 | * | mg/Kg | | 58 | 70 - 130 | 14 | 35 |
| o-Xylene | | | 0.100 | 0.06085 | * | mg/Kg | | 61 | 70 - 130 | 11 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-101544/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101567** — **Prep Batch: 101544**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 01/30/25 07:57 | 01/30/25 03:36 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *170* | *X* | *70 - 130* | *01/30/25 07:57* | *01/30/25 03:36* | *1* |
| *o-Terphenyl* | *140* | *X* | *70 - 130* | *01/30/25 07:57* | *01/30/25 03:36* | *1* |

**Lab Sample ID: LCS 880-101544/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101567** — **Prep Batch: 101544**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1075 | | mg/Kg | | 108 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1077 | | mg/Kg | | 108 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *124* | | *70 - 130* |
| *o-Terphenyl* | *116* | | *70 - 130* |

**Lab Sample ID: LCSD 880-101544/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 101567** — **Prep Batch: 101544**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1095 | | mg/Kg | | 109 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1135 | | mg/Kg | | 113 | 70 - 130 | 5 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *129* | | *70 - 130* |
| *o-Terphenyl* | *121* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-101670/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 101674**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.395 | U | 10.0 | 0.395 | mg/Kg | | | 01/31/25 00:37 | 1 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 880-101670/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 101674**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 242.3 | | mg/Kg | | 97 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-101670/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 101674**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 242.7 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

## Method: D2216 - Percent Moisture

**Lab Sample ID: MB 880-101679/1** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101679**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 0.100 | U | 0.100 | 0.100 | % | | | 01/30/25 18:24 | 1 |
| Percent Solids | 100 | | 0.100 | 0.100 | % | | | 01/30/25 18:24 | 1 |

**Lab Sample ID: 880-53848-1 DU** **Client Sample ID: Cell 17Square 5-E-5-250130**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 101679**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 5.92 | | | 5.92 | | % | | | | 0 | 20 |
| Percent Solids | 94.1 | b | | 94.1 | | % | | | | 0 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## GC VOA

### Analysis Batch: 101549

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Total/NA | Solid | 8021B | 101558 |
| MB 880-101558/5-A | Method Blank | Total/NA | Solid | 8021B | 101558 |
| LCS 880-101558/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 101558 |
| LCSD 880-101558/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 101558 |

### Prep Batch: 101558

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Total/NA | Solid | 5030B | |
| MB 880-101558/5-A | Method Blank | Total/NA | Solid | 5030B | |
| LCS 880-101558/1-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 880-101558/2-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |

## GC Semi VOA

### Prep Batch: 101544

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Total/NA | Solid | 8015NM Prep | |
| MB 880-101544/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-101544/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-101544/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 101567

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Total/NA | Solid | 8015B NM | 101544 |
| MB 880-101544/1-A | Method Blank | Total/NA | Solid | 8015B NM | 101544 |
| LCS 880-101544/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 101544 |
| LCSD 880-101544/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 101544 |

## HPLC/IC

### Leach Batch: 101670

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Soluble | Solid | DI Leach | |
| MB 880-101670/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-101670/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-101670/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

### Analysis Batch: 101674

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Soluble | Solid | 300.0 | 101670 |
| MB 880-101670/1-A | Method Blank | Soluble | Solid | 300.0 | 101670 |
| LCS 880-101670/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 101670 |
| LCSD 880-101670/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 101670 |

## General Chemistry

### Analysis Batch: 101679

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Total/NA | Solid | D2216 | |
| MB 880-101679/1 | Method Blank | Total/NA | Solid | D2216 | |
| 880-53848-1 DU | Cell 17Square 5-E-5-250130 | Total/NA | Solid | D2216 | |

# Lab Chronicle

Client: Arcadis US Inc.
Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell 17Square 5-E-5-250130
**Lab Sample ID: 880-53848-1**
**Date Collected: 01/30/25 10:16**
**Matrix: Solid**
**Date Received: 01/30/25 13:50**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 101670 | 01/30/25 16:07 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 101674 | 01/31/25 02:06 | CH | EET MID |
| Total/NA | Analysis | D2216 | | 1 | | | 101679 | 01/30/25 18:24 | SMC | EET MID |

## Client Sample ID: Cell 17Square 5-E-5-250130
**Lab Sample ID: 880-53848-1**
**Date Collected: 01/30/25 10:16**
**Matrix: Solid**
**Date Received: 01/30/25 13:50**
**Percent Solids: 94.1**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.01 g | 5 mL | 101558 | 01/30/25 14:48 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 101549 | 01/30/25 18:58 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 101544 | 01/30/25 07:58 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 101567 | 01/30/25 14:55 | TKC | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 880-53848-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Midland

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 | T104704400 | 06-30-25 |

# Method Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-53848-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| D2216 | Percent Moisture | ASTM | EET MID |
| 5030B | Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-53848-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 880-53848-1 | Cell 17Square 5-E-5-250130 | Solid | 01/30/25 10:16 | 01/30/25 13:50 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record


880-53848 Chain of Custody

| Client Information | Sampler: | Lab PM: Kudchadkar, Sachin G | Carrier Tracking No(s): |
|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: 432-288-0876 | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: |
| Company: Arcadis US Inc. | PWSID: | | |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | | |
| City: Midland | TAT Requested (days): 24 Hr TAT | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | |
| Phone: 303-316-6506(Tel) | PO #: PN 3027704 | | |
| Email: sarah.johnson@arcadis.com | WO #: | | |
| Project Name: Chevron - Jal Land Farm Soils | Project #: 86001348 | | |
| Site: | SSOW#: | | |

**Analysis Requested**

Preservation Codes: N - None

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Perform MS/MSD (Yes or No) | Field Filtered Sample (Yes or No) | 8015MOD_NM - Full TPH | 300_ORGFM_28D - Chloride | 9021B - BTEX | MOISTURE_2540G - Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | | | N | N | N | N | | |
| Cell 875 grave 5-E-5-250130 | 01/30/25 | 1016 | C | Solid | | | X | X | X | X | 1 | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |

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

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

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

Special Instructions/QC Requirements:

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

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| | 01/30/25 / 1344 | PRELIM | | 1/30/25 1358 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: Co.Col 6.5 = 1 |
|---|---|---|

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-53848-1

**Login Number: 53848** **List Source: Eurofins Midland**
**List Number: 1**
**Creator: Vasquez, Julisa**

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

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 2/7/2025 9:10:35 AM Revision 1

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

880-54068-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.





my EOL

# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
2/7/2025 9:10:35 AM
Revision 1

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 880-54068-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC VOA

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

### GC Semi VOA

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

### HPLC/IC

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

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| b | The compound was found in the blank and sample |
| 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 |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 880-54068-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 880-54068-1 Eurofins Midland

**Job Narrative**
**880-54068-1**

**Revision**
The report being provided is a revision of the original report sent on 2/6/2025. The report (revision 1) is being revised due to: sample ID corrected: Cell 17-Square 22-E-6-250204.

**Receipt**
The sample was received on 2/4/2025 5:17 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.3º C.

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

**GC Semi VOA**
Method 8015B NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-102036 and analytical batch 880-102052 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is 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.

**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.

# Client Sample Results

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54068-1

## Client Sample ID: Cell 17-Square 22-E-6-250204

**Date Collected: 02/04/25 12:01**
**Date Received: 02/04/25 17:17**

## Lab Sample ID: 880-54068-1

**Matrix: Solid**
**Percent Solids: 92.5**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00150 | U | 0.00215 | 0.00150 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |
| Toluene | 0.00215 | U | 0.00215 | 0.00215 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |
| Ethylbenzene | 0.00117 | U | 0.00215 | 0.00117 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |
| m-Xylene & p-Xylene | 0.00246 | U | 0.00431 | 0.00246 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |
| o-Xylene | 0.00171 | U | 0.00215 | 0.00171 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |
| Xylenes, Total | 0.00246 | U | 0.00431 | 0.00246 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *116* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:54* | *1* |
| *1,4-Difluorobenzene (Surr)* | *97* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:54* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 15.6 | U | 53.8 | 15.6 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:05 | 1 |
| Diesel Range Organics (Over C10-C28) | 16.3 | U | 53.8 | 16.3 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:05 | 1 |
| Oil Range Organics (Over C28-C36) | 16.3 | U | 53.8 | 16.3 | mg/Kg | ☼ | 02/05/25 08:10 | 02/05/25 11:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *92* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:05* | *1* |
| *o-Terphenyl* | *81* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:05* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **482** | | 10.8 | 0.425 | mg/Kg | ☼ | | 02/05/25 11:07 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **7.54** | | 0.100 | 0.100 | % | | | 02/05/25 10:12 | 1 |
| **Percent Solids (ASTM D2216)** | **92.5** | **b** | 0.100 | 0.100 | % | | | 02/05/25 10:12 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) |
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | 116 | 97 |
| LCS 880-102037/1-A | Lab Control Sample | 99 | 107 |
| LCSD 880-102037/2-A | Lab Control Sample Dup | 94 | 104 |
| MB 880-102037/5-A | Method Blank | 108 | 86 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) |
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | 92 | 81 |
| LCS 880-102036/2-A | Lab Control Sample | 88 | 78 |
| LCSD 880-102036/3-A | Lab Control Sample Dup | 94 | 84 |
| MB 880-102036/1-A | Method Blank | 99 | 89 |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54068-1

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-102037/5-A**
**Matrix: Solid**
**Analysis Batch: 102040**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 102037**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U | 0.00200 | 0.00139 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |
| Toluene | 0.00200 | U | 0.00200 | 0.00200 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |
| Ethylbenzene | 0.00109 | U | 0.00200 | 0.00109 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |
| m-Xylene & p-Xylene | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |
| o-Xylene | 0.00158 | U | 0.00200 | 0.00158 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |
| Xylenes, Total | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/05/25 08:10 | 02/05/25 11:12 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *108* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:12* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 11:12* | *1* |

**Lab Sample ID: LCS 880-102037/1-A**
**Matrix: Solid**
**Analysis Batch: 102040**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 102037**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1086 | | mg/Kg | | 109 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.1084 | | mg/Kg | | 108 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.09870 | | mg/Kg | | 99 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.2053 | | mg/Kg | | 103 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.1026 | | mg/Kg | | 103 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102037/2-A**
**Matrix: Solid**
**Analysis Batch: 102040**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 102037**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1045 | | mg/Kg | | 105 | 70 - 130 | 4 | 35 |
| Toluene | | | 0.100 | 0.1052 | | mg/Kg | | 105 | 70 - 130 | 3 | 35 |
| Ethylbenzene | | | 0.100 | 0.09474 | | mg/Kg | | 95 | 70 - 130 | 4 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1962 | | mg/Kg | | 98 | 70 - 130 | 5 | 35 |
| o-Xylene | | | 0.100 | 0.09847 | | mg/Kg | | 98 | 70 - 130 | 4 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *104* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-102036/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102052** **Prep Batch: 102036**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 02/05/25 08:10 | 02/05/25 05:08 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/05/25 08:10 | 02/05/25 05:08 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/05/25 08:10 | 02/05/25 05:08 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *99* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 05:08* | *1* |
| *o-Terphenyl* | *89* | | *70 - 130* | *02/05/25 08:10* | *02/05/25 05:08* | *1* |

**Lab Sample ID: LCS 880-102036/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102052** **Prep Batch: 102036**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1102 | | mg/Kg | | 110 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 980.1 | | mg/Kg | | 98 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *88* | | *70 - 130* |
| *o-Terphenyl* | *78* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102036/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102052** **Prep Batch: 102036**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1043 | | mg/Kg | | 104 | 70 - 130 | 6 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1031 | | mg/Kg | | 103 | 70 - 130 | 5 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *94* | | *70 - 130* |
| *o-Terphenyl* | *84* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-102045/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102048**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.395 | U | 10.0 | 0.395 | mg/Kg | | | 02/05/25 09:50 | 1 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 880-102045/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102048**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 228.5 | | mg/Kg | | 91 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-102045/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102048**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 226.9 | | mg/Kg | | 91 | 90 - 110 | 1 | 20 |

## Method: D2216 - Percent Moisture

**Lab Sample ID: MB 880-102060/1** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102060**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 0.100 | U | 0.100 | 0.100 | % | | | 02/05/25 10:12 | 1 |
| Percent Solids | 100 | | 0.100 | 0.100 | % | | | 02/05/25 10:12 | 1 |

**Lab Sample ID: 880-54068-1 DU** **Client Sample ID: Cell 17-Square 22-E-6-250204**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102060**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 7.54 | | | 7.35 | | % | | | | 3 | 20 |
| Percent Solids | 92.5 | b | | 92.7 | | % | | | | 0.2 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## GC VOA

### Prep Batch: 102037

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | 5030B | |
| MB 880-102037/5-A | Method Blank | Total/NA | Solid | 5030B | |
| LCS 880-102037/1-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 880-102037/2-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |

### Analysis Batch: 102040

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | 8021B | 102037 |
| MB 880-102037/5-A | Method Blank | Total/NA | Solid | 8021B | 102037 |
| LCS 880-102037/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 102037 |
| LCSD 880-102037/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 102037 |

## GC Semi VOA

### Prep Batch: 102036

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | 8015NM Prep | |
| MB 880-102036/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-102036/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-102036/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 102052

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | 8015B NM | 102036 |
| MB 880-102036/1-A | Method Blank | Total/NA | Solid | 8015B NM | 102036 |
| LCS 880-102036/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 102036 |
| LCSD 880-102036/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 102036 |

## HPLC/IC

### Leach Batch: 102045

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Soluble | Solid | DI Leach | |
| MB 880-102045/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-102045/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-102045/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

### Analysis Batch: 102048

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Soluble | Solid | 300.0 | 102045 |
| MB 880-102045/1-A | Method Blank | Soluble | Solid | 300.0 | 102045 |
| LCS 880-102045/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 102045 |
| LCSD 880-102045/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 102045 |

## General Chemistry

### Analysis Batch: 102060

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | D2216 | |
| MB 880-102060/1 | Method Blank | Total/NA | Solid | D2216 | |
| 880-54068-1 DU | Cell 17-Square 22-E-6-250204 | Total/NA | Solid | D2216 | |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell 17-Square 22-E-6-250204 Lab Sample ID: 880-54068-1

**Date Collected: 02/04/25 12:01** **Matrix: Solid**
**Date Received: 02/04/25 17:17**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102060 | 02/05/25 10:12 | SMC | EET MID |

## Client Sample ID: Cell 17-Square 22-E-6-250204 Lab Sample ID: 880-54068-1

**Date Collected: 02/04/25 12:01** **Matrix: Solid**
**Date Received: 02/04/25 17:17** **Percent Solids: 92.5**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.02 g | 5 mL | 102037 | 02/05/25 08:10 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102040 | 02/05/25 11:54 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 102036 | 02/05/25 08:10 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102052 | 02/05/25 11:05 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 102045 | 02/05/25 08:19 | SI | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102048 | 02/05/25 11:07 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Midland

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 | T104704400 | 06-30-25 |

# Method Summary

Client: Arcadis US Inc. Job ID: 880-54068-1
Project/Site: Chevron - Jal Land Farm Soils

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| D2216 | Percent Moisture | ASTM | EET MID |
| 5030B | Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54068-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 880-54068-1 | Cell 17-Square 22-E-6-250204 | Solid | 02/04/25 12:01 | 02/04/25 17:17 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record

eurofins | Environment Testing

| Client Information | Sampler: Terry S. Longwell | Lab PM: Kudchadkar, Sachin G | Carrier Tracking No(s): | COC No: 860-36208-12103.1 |
|---|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: 432-288-0876 | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: | Page: Page 1 of 1 |
| Company: Arcadis US Inc. | PWSID: | | | Job #: |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | | | |
| City: Midland | TAT Requested (days): 24 hr TAT | | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | | |
| Phone: 303-316-6506(Tel) | PO #: PN 3027704 | | | |
| Email: sarah.johnson@arcadis.com | WO #: | | | |
| Project Name: Chevron - Jal Land Farm Soils | Project #: 86001348 | | | |
| Site: | SSOW#: | | | |

880-54068 Chain of Custody

**Analysis Requested**

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM - Full TPH | 300_ORGFM_28D - Chloride | 30218 - BTEX | MOISTURE_2540G - Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | X | X | N | N | N | N | X | |
| Cell A-Square 22-E-6-250204 | 02/04/25 ~~Test~~ 05 | 1201 | G | Solid | | | X | X | X | X | 1 | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |

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

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

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

Special Instructions/QC Requirements:

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

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 02/04/25 / 1717 | ARCADIS | Teddy Faudell Jr | 2/4/25 1717 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Cooler Temperature(s) °C and Other Remarks: 5.4/5.3°C IR-8 (-0.1)

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-54068-1

**Login Number: 54068** **List Source: Eurofins Midland**
**List Number: 1**
**Creator: Vasquez, Julisa**

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

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 2/6/2025 5:29:08 PM

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

880-54131-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.





my EOL

# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
2/6/2025 5:29:08 PM

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 880-54131-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD is outside acceptance limits. |
| 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. |
| X | Surrogate recovery exceeds control limits |

### HPLC/IC

| 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. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| b | The compound was found in the blank and sample |
| 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 |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 880-54131-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 880-54131-1 Eurofins Midland

**Job Narrative**
**880-54131-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 2/5/2025 5:12 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C.

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: Borrow-S-250205 (880-54131-1), Cell21-Square 150-E-6-250205 (880-54131-2), Cell21-Square 89-E-5-250205 (880-54131-3) and Cell21-Square-44-E-5-250205 (880-54131-4).

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

**Diesel Range Organics**
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: Cell21-Square 150-E-6-250205 (880-54131-2) and Cell21-Square-44-E-5-250205 (880-54131-4). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (880-54131-A-1-F MSD). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-102119 and analytical batch 880-102154 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

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

# Client Sample Results

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Borrow-S-250205 Lab Sample ID: 880-54131-1

**Date Collected: 02/05/25 09:02** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 81.5**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00172 | U | 0.00246 | 0.00172 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |
| Toluene | 0.00246 | U | 0.00246 | 0.00246 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |
| Ethylbenzene | 0.00134 | U * | 0.00246 | 0.00134 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |
| m-Xylene & p-Xylene | 0.00282 | U | 0.00493 | 0.00282 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |
| o-Xylene | 0.00195 | U | 0.00246 | 0.00195 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |
| Xylenes, Total | 0.00282 | U | 0.00493 | 0.00282 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 04:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *87* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 04:47* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 04:47* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 17.8 | U | 61.3 | 17.8 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 09:44 | 1 |
| Diesel Range Organics (Over C10-C28) | 18.6 | U | 61.3 | 18.6 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 09:44 | 1 |
| Oil Range Organics (Over C28-C36) | 18.6 | U | 61.3 | 18.6 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 09:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *70* | | *70 - 130* | *02/05/25 20:26* | *02/06/25 09:44* | *1* |
| *o-Terphenyl* | *66* | *X* | *70 - 130* | *02/05/25 20:26* | *02/06/25 09:44* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **75.4** | | 12.3 | 0.487 | mg/Kg | ☼ | | 02/06/25 09:58 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **18.5** | | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |
| **Percent Solids (ASTM D2216)** | **81.5** | **b** | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |

## Client Sample ID: Cell21-Square 150-E-6-250205 Lab Sample ID: 880-54131-2

**Date Collected: 02/05/25 10:48** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 93.4**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00148 | U | 0.00213 | 0.00148 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |
| Toluene | 0.00213 | U | 0.00213 | 0.00213 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |
| Ethylbenzene | 0.00116 | U * | 0.00213 | 0.00116 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |
| m-Xylene & p-Xylene | 0.00244 | U | 0.00427 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |
| o-Xylene | 0.00169 | U | 0.00213 | 0.00169 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |
| Xylenes, Total | 0.00244 | U | 0.00427 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:07* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:07* | *1* |

# Client Sample Results

Client: Arcadis US Inc.
Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell21-Square 150-E-6-250205
**Lab Sample ID: 880-54131-2**
**Date Collected: 02/05/25 10:48**
**Matrix: Solid**
**Date Received: 02/05/25 17:12**
**Percent Solids: 93.4**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 15.5 | U | 53.4 | 15.5 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:33 | 1 |
| Diesel Range Organics (Over C10-C28) | 16.2 | U | 53.4 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:33 | 1 |
| Oil Range Organics (Over C28-C36) | 16.2 | U | 53.4 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *72* | | *70 - 130* | *02/05/25 20:26* | *02/06/25 10:33* | *1* |
| *o-Terphenyl* | *66* | *X* | *70 - 130* | *02/05/25 20:26* | *02/06/25 10:33* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **12.4** | | 10.7 | 0.423 | mg/Kg | ☼ | | 02/06/25 10:16 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **6.61** | | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |
| **Percent Solids (ASTM D2216)** | **93.4** | **b** | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |

## Client Sample ID: Cell21-Square 89-E-5-250205
**Lab Sample ID: 880-54131-3**
**Date Collected: 02/05/25 12:43**
**Matrix: Solid**
**Date Received: 02/05/25 17:12**
**Percent Solids: 92.9**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00149 | U | 0.00214 | 0.00149 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |
| Toluene | 0.00214 | U | 0.00214 | 0.00214 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |
| Ethylbenzene | 0.00116 | U * | 0.00214 | 0.00116 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |
| m-Xylene & p-Xylene | 0.00244 | U | 0.00428 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |
| o-Xylene | 0.00169 | U | 0.00214 | 0.00169 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |
| Xylenes, Total | 0.00244 | U | 0.00428 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:28* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:28* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 15.6 | U | 53.5 | 15.6 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:49 | 1 |
| Diesel Range Organics (Over C10-C28) | 16.2 | U | 53.5 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:49 | 1 |
| Oil Range Organics (Over C28-C36) | 16.2 | U | 53.5 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 10:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *70* | | *70 - 130* | *02/05/25 20:26* | *02/06/25 10:49* | *1* |
| *o-Terphenyl* | *65* | *X* | *70 - 130* | *02/05/25 20:26* | *02/06/25 10:49* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **4.64** | **J** | 10.8 | 0.428 | mg/Kg | ☼ | | 02/06/25 10:22 | 1 |

# Client Sample Results

Client: Arcadis US Inc.
Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell21-Square 89-E-5-250205
**Lab Sample ID: 880-54131-3**
**Date Collected: 02/05/25 12:43**
**Matrix: Solid**
**Date Received: 02/05/25 17:12**
**Percent Solids: 92.9**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture (ASTM D2216) | 7.06 | | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |
| Percent Solids (ASTM D2216) | 92.9 | b | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |

## Client Sample ID: Cell21-Square-44-E-5-250205
**Lab Sample ID: 880-54131-4**
**Date Collected: 02/05/25 13:48**
**Matrix: Solid**
**Date Received: 02/05/25 17:12**
**Percent Solids: 93.6**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00148 | U | 0.00213 | 0.00148 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |
| Toluene | 0.00213 | U | 0.00213 | 0.00213 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |
| Ethylbenzene | 0.00116 | U * | 0.00213 | 0.00116 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |
| m-Xylene & p-Xylene | 0.00244 | U | 0.00426 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |
| o-Xylene | 0.00169 | U | 0.00213 | 0.00169 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |
| Xylenes, Total | 0.00244 | U | 0.00426 | 0.00244 | mg/Kg | ☼ | 02/05/25 20:40 | 02/06/25 05:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:48* | *1* |
| *1,4-Difluorobenzene (Surr)* | *91* | | *70 - 130* | *02/05/25 20:40* | *02/06/25 05:48* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 15.5 | U | 53.4 | 15.5 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 11:06 | 1 |
| Diesel Range Organics (Over C10-C28) | 16.2 | U | 53.4 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 11:06 | 1 |
| Oil Range Organics (Over C28-C36) | 16.2 | U | 53.4 | 16.2 | mg/Kg | ☼ | 02/05/25 20:26 | 02/06/25 11:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *72* | | *70 - 130* | *02/05/25 20:26* | *02/06/25 11:06* | *1* |
| *o-Terphenyl* | *66* | *X* | *70 - 130* | *02/05/25 20:26* | *02/06/25 11:06* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 4.54 | J | 10.6 | 0.419 | mg/Kg | ☼ | | 02/06/25 10:28 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture (ASTM D2216) | 6.40 | | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |
| Percent Solids (ASTM D2216) | 93.6 | b | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | BFB1 | DFBZ1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-54131-1 | Borrow-S-250205 | 87 | 86 |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | 97 | 92 |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | 96 | 92 |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | 100 | 91 |
| LCS 880-102116/1-A | Lab Control Sample | 116 | 100 |
| LCSD 880-102116/2-A | Lab Control Sample Dup | 123 | 93 |
| MB 880-102116/5-A | Method Blank | 92 | 89 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 880-54131-1 | Borrow-S-250205 | 70 | 66 X |
| 880-54131-1 MS | Borrow-S-250205 | 67 X | 68 X |
| 880-54131-1 MSD | Borrow-S-250205 | 69 X | 67 X |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | 72 | 66 X |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | 70 | 65 X |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | 72 | 66 X |
| LCS 880-102119/2-A | Lab Control Sample | 74 | 77 |
| LCSD 880-102119/3-A | Lab Control Sample Dup | 74 | 76 |
| MB 880-102119/1-A | Method Blank | 99 | 92 |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-102116/5-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102043** **Prep Batch: 102116**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U | 0.00200 | 0.00139 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |
| Toluene | 0.00200 | U | 0.00200 | 0.00200 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |
| Ethylbenzene | 0.00109 | U | 0.00200 | 0.00109 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |
| m-Xylene & p-Xylene | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |
| o-Xylene | 0.00158 | U | 0.00200 | 0.00158 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |
| Xylenes, Total | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/05/25 20:40 | 02/05/25 23:56 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *02/05/25 20:40* | *02/05/25 23:56* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *02/05/25 20:40* | *02/05/25 23:56* | *1* |

**Lab Sample ID: LCS 880-102116/1-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102043** **Prep Batch: 102116**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.09881 | | mg/Kg | | 99 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.09850 | | mg/Kg | | 99 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.1021 | | mg/Kg | | 102 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.2281 | | mg/Kg | | 114 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.1116 | | mg/Kg | | 112 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *116* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *100* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102116/2-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102043** **Prep Batch: 102116**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1046 | | mg/Kg | | 105 | 70 - 130 | 6 | 35 |
| Toluene | | | 0.100 | 0.1072 | | mg/Kg | | 107 | 70 - 130 | 8 | 35 |
| Ethylbenzene | | | 0.100 | 0.1313 | * | mg/Kg | | 131 | 70 - 130 | 25 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.2491 | | mg/Kg | | 125 | 70 - 130 | 9 | 35 |
| o-Xylene | | | 0.100 | 0.1223 | | mg/Kg | | 122 | 70 - 130 | 9 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *123* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-102119/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 14.5 | U | 50.0 | 14.5 | mg/Kg | | 02/05/25 20:21 | 02/06/25 05:08 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/05/25 20:21 | 02/06/25 05:08 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/05/25 20:21 | 02/06/25 05:08 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *99* | | *70 - 130* | *02/05/25 20:21* | *02/06/25 05:08* | *1* |
| *o-Terphenyl* | *92* | | *70 - 130* | *02/05/25 20:21* | *02/06/25 05:08* | *1* |

**Lab Sample ID: LCS 880-102119/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 898.4 | | mg/Kg | | 90 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 908.2 | | mg/Kg | | 91 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *74* | | *70 - 130* |
| *o-Terphenyl* | *77* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102119/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 752.0 | | mg/Kg | | 75 | 70 - 130 | 18 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 764.9 | | mg/Kg | | 76 | 70 - 130 | 17 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *74* | | *70 - 130* |
| *o-Terphenyl* | *76* | | *70 - 130* |

**Lab Sample ID: 880-54131-1 MS** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 17.8 | U | 1230 | 820.7 | N1 | mg/Kg | ☼ | 67 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | 18.6 | U | 1230 | 810.0 | N1 | mg/Kg | ☼ | 66 | 70 - 130 | | |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: 880-54131-1 MS** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *67* | *X* | *70 - 130* |
| *o-Terphenyl* | *68* | *X* | *70 - 130* |

**Lab Sample ID: 880-54131-1 MSD** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102154** **Prep Batch: 102119**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 17.8 | U | 1230 | 851.5 | N1 | mg/Kg | ☼ | 69 | 70 - 130 | 4 | 20 |
| Diesel Range Organics (Over C10-C28) | 18.6 | U | 1230 | 796.4 | N1 | mg/Kg | ☼ | 65 | 70 - 130 | 2 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *69* | *X* | *70 - 130* |
| *o-Terphenyl* | *67* | *X* | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-102134/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102145**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.395 | U | 10.0 | 0.395 | mg/Kg | | | 02/06/25 09:40 | 1 |

**Lab Sample ID: LCS 880-102134/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102145**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 262.8 | | mg/Kg | | 105 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-102134/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102145**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 263.4 | | mg/Kg | | 105 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 880-54131-1 MS** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102145**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 75.4 | | 308 | 410.1 | | mg/Kg | ☼ | 109 | 90 - 110 | | |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 880-54131-1 MSD** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102145**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 75.4 | | 308 | 411.7 | | mg/Kg | ☼ | 109 | 90 - 110 | 0 | 20 |

## Method: D2216 - Percent Moisture

**Lab Sample ID: MB 880-102118/1** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102118**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 0.100 | U | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |
| Percent Solids | 100 | | 0.100 | 0.100 | % | | | 02/05/25 17:40 | 1 |

**Lab Sample ID: 880-54131-1 DU** **Client Sample ID: Borrow-S-250205**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102118**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 18.5 | | 18.3 | | % | | 1 | 20 |
| Percent Solids | 81.5 | b | 81.7 | | % | | 0.3 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## GC VOA

### Analysis Batch: 102043

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Total/NA | Solid | 8021B | 102116 |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Total/NA | Solid | 8021B | 102116 |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Total/NA | Solid | 8021B | 102116 |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Total/NA | Solid | 8021B | 102116 |
| MB 880-102116/5-A | Method Blank | Total/NA | Solid | 8021B | 102116 |
| LCS 880-102116/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 102116 |
| LCSD 880-102116/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 102116 |

### Prep Batch: 102116

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Total/NA | Solid | 5030B | |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Total/NA | Solid | 5030B | |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Total/NA | Solid | 5030B | |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Total/NA | Solid | 5030B | |
| MB 880-102116/5-A | Method Blank | Total/NA | Solid | 5030B | |
| LCS 880-102116/1-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 880-102116/2-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |

## GC Semi VOA

### Prep Batch: 102119

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Total/NA | Solid | 8015NM Prep | |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Total/NA | Solid | 8015NM Prep | |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Total/NA | Solid | 8015NM Prep | |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Total/NA | Solid | 8015NM Prep | |
| MB 880-102119/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-102119/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-102119/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-54131-1 MS | Borrow-S-250205 | Total/NA | Solid | 8015NM Prep | |
| 880-54131-1 MSD | Borrow-S-250205 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 102154

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Total/NA | Solid | 8015B NM | 102119 |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Total/NA | Solid | 8015B NM | 102119 |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Total/NA | Solid | 8015B NM | 102119 |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Total/NA | Solid | 8015B NM | 102119 |
| MB 880-102119/1-A | Method Blank | Total/NA | Solid | 8015B NM | 102119 |
| LCS 880-102119/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 102119 |
| LCSD 880-102119/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 102119 |
| 880-54131-1 MS | Borrow-S-250205 | Total/NA | Solid | 8015B NM | 102119 |
| 880-54131-1 MSD | Borrow-S-250205 | Total/NA | Solid | 8015B NM | 102119 |

## HPLC/IC

### Leach Batch: 102134

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Soluble | Solid | DI Leach | |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Soluble | Solid | DI Leach | |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Soluble | Solid | DI Leach | |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## HPLC/IC (Continued)

### Leach Batch: 102134 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-102134/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-102134/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-102134/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-54131-1 MS | Borrow-S-250205 | Soluble | Solid | DI Leach | |
| 880-54131-1 MSD | Borrow-S-250205 | Soluble | Solid | DI Leach | |

### Analysis Batch: 102145

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Soluble | Solid | 300.0 | 102134 |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Soluble | Solid | 300.0 | 102134 |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Soluble | Solid | 300.0 | 102134 |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Soluble | Solid | 300.0 | 102134 |
| MB 880-102134/1-A | Method Blank | Soluble | Solid | 300.0 | 102134 |
| LCS 880-102134/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 102134 |
| LCSD 880-102134/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 102134 |
| 880-54131-1 MS | Borrow-S-250205 | Soluble | Solid | 300.0 | 102134 |
| 880-54131-1 MSD | Borrow-S-250205 | Soluble | Solid | 300.0 | 102134 |

## General Chemistry

### Analysis Batch: 102118

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Total/NA | Solid | D2216 | |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Total/NA | Solid | D2216 | |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Total/NA | Solid | D2216 | |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Total/NA | Solid | D2216 | |
| MB 880-102118/1 | Method Blank | Total/NA | Solid | D2216 | |
| 880-54131-1 DU | Borrow-S-250205 | Total/NA | Solid | D2216 | |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Borrow-S-250205 Lab Sample ID: 880-54131-1

**Date Collected: 02/05/25 09:02** **Matrix: Solid**
**Date Received: 02/05/25 17:12**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102118 | 02/05/25 17:40 | CH | EET MID |

## Client Sample ID: Borrow-S-250205 Lab Sample ID: 880-54131-1

**Date Collected: 02/05/25 09:02** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 81.5**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 4.98 g | 5 mL | 102116 | 02/05/25 20:40 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102043 | 02/06/25 04:47 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 102119 | 02/05/25 20:26 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102154 | 02/06/25 09:44 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 102134 | 02/06/25 07:59 | SI | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102145 | 02/06/25 09:58 | CH | EET MID |

## Client Sample ID: Cell21-Square 150-E-6-250205 Lab Sample ID: 880-54131-2

**Date Collected: 02/05/25 10:48** **Matrix: Solid**
**Date Received: 02/05/25 17:12**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102118 | 02/05/25 17:40 | CH | EET MID |

## Client Sample ID: Cell21-Square 150-E-6-250205 Lab Sample ID: 880-54131-2

**Date Collected: 02/05/25 10:48** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 93.4**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.02 g | 5 mL | 102116 | 02/05/25 20:40 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102043 | 02/06/25 05:07 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 102119 | 02/05/25 20:26 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102154 | 02/06/25 10:33 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 102134 | 02/06/25 07:59 | SI | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102145 | 02/06/25 10:16 | CH | EET MID |

## Client Sample ID: Cell21-Square 89-E-5-250205 Lab Sample ID: 880-54131-3

**Date Collected: 02/05/25 12:43** **Matrix: Solid**
**Date Received: 02/05/25 17:12**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102118 | 02/05/25 17:40 | CH | EET MID |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell21-Square 89-E-5-250205 Lab Sample ID: 880-54131-3

**Date Collected: 02/05/25 12:43** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 92.9**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.03 g | 5 mL | 102116 | 02/05/25 20:40 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102043 | 02/06/25 05:28 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 102119 | 02/05/25 20:26 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102154 | 02/06/25 10:49 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 102134 | 02/06/25 07:59 | SI | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102145 | 02/06/25 10:22 | CH | EET MID |

## Client Sample ID: Cell21-Square-44-E-5-250205 Lab Sample ID: 880-54131-4

**Date Collected: 02/05/25 13:48** **Matrix: Solid**
**Date Received: 02/05/25 17:12**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102118 | 02/05/25 17:40 | CH | EET MID |

## Client Sample ID: Cell21-Square-44-E-5-250205 Lab Sample ID: 880-54131-4

**Date Collected: 02/05/25 13:48** **Matrix: Solid**
**Date Received: 02/05/25 17:12** **Percent Solids: 93.6**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.01 g | 5 mL | 102116 | 02/05/25 20:40 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102043 | 02/06/25 05:48 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 102119 | 02/05/25 20:26 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102154 | 02/06/25 11:06 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 102134 | 02/06/25 07:59 | SI | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102145 | 02/06/25 10:28 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Midland

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 | T104704400 | 06-30-25 |

# Method Summary

Client: Arcadis US Inc.
Job ID: 880-54131-1
Project/Site: Chevron - Jal Land Farm Soils

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| D2216 | Percent Moisture | ASTM | EET MID |
| 5030B | Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54131-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 880-54131-1 | Borrow-S-250205 | Solid | 02/05/25 09:02 | 02/05/25 17:12 |
| 880-54131-2 | Cell21-Square 150-E-6-250205 | Solid | 02/05/25 10:48 | 02/05/25 17:12 |
| 880-54131-3 | Cell21-Square 89-E-5-250205 | Solid | 02/05/25 12:43 | 02/05/25 17:12 |
| 880-54131-4 | Cell21-Square-44-E-5-250205 | Solid | 02/05/25 13:48 | 02/05/25 17:12 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record


880-54131 Chain of Custody

ting

| Client Information | Sampler: Tony S. Longwell | Lab PM: Kudchadkar, Sachin G | Carrier Tracl |
|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: 432-788-0876 | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: |
| Company: Arcadis US Inc. | PWSID: | | Page 1 of 1 |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | Analysis Requested | Job #: |
| City: Midland | TAT Requested (days): 24 hr TAT | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | |
| Phone: 303-316-6506(Tel) | PO #: PN 3027704 | | Preservation Codes: N - None |
| Email: sarah.johnson@arcadis.com | WO #: | | |
| Project Name: Chevron - Jal Land Farm Soils | Project #: 86001348 | | Other: |
| Site: | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM - Full TPH | 300_ORGFM_28D - Chloride | 8021B - BTEX | MOISTURE_2540G - Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | N | N | | |
| Borrow-S-250205 | 02/05/25 | 0902 | C | Solid | | | X | X | X | X | 2 | |
| Cell21-Square-150-E-6-250205 | 02/05/25 | 1148 | C | Solid | | | X | X | X | X | 2 | |
| Cell21-Square-89-E-5-250205 | 02/05/25 | 1243 | C | Solid | | | X | X | X | X | 2 | |
| Cell21-Square-44-E-5-250205 @1' | 02/05/25 | 1348 | C | Solid | | | X | X | X | X | 2 | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | | | | | | | | | |

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

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

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

Special Instructions/QC Requirements:

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

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| | | 02/05/25 1706 | | | 2.5.25 1700 | |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.6/2.5 |
|---|---|---|

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-54131-1

**Login Number: 54131** **List Source: Eurofins Midland**
**List Number: 1**
**Creator: Lee, Randell**

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

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 2/7/2025 5:04:07 PM

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

880-54170-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.





my EOL

# Eurofins Midland

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
2/7/2025 5:04:07 PM

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 880-54170-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC VOA

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

### GC Semi VOA

| 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 recovery exceeds control limits |

### HPLC/IC

| 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. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| b | The compound was found in the blank and sample |
| 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 |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 880-54170-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 880-54170-1 Eurofins Midland

**Job Narrative**
**880-54170-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 2/6/2025 5:07 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

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

**Diesel Range Organics**
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: Cell21-Square125-E-5-250206 (880-54170-1), Cell18-Square180-E-5-250206 (880-54170-2), (890-7643-A-1-F MS) and (890-7643-A-1-G MSD). Evidence of matrix interferences is not obvious.

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

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

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

# Client Sample Results

Client: Arcadis US Inc.
Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell21-Square125-E-5-250206
**Lab Sample ID: 880-54170-1**
**Date Collected: 02/06/25 12:18**
**Matrix: Solid**
**Date Received: 02/06/25 17:07**
**Percent Solids: 87.4**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00158 | U | 0.00228 | 0.00158 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |
| Toluene | 0.00227 | U | 0.00228 | 0.00227 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |
| Ethylbenzene | 0.00124 | U | 0.00228 | 0.00124 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |
| m-Xylene & p-Xylene | 0.00260 | U | 0.00455 | 0.00260 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |
| o-Xylene | 0.00180 | U | 0.00228 | 0.00180 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |
| Xylenes, Total | 0.00260 | U | 0.00455 | 0.00260 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 12:02* | *1* |
| *1,4-Difluorobenzene (Surr)* | *99* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 12:02* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 16.6 | U | 57.0 | 16.6 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:03 | 1 |
| Diesel Range Organics (Over C10-C28) | 17.2 | U | 57.0 | 17.2 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:03 | 1 |
| Oil Range Organics (Over C28-C36) | 17.2 | U | 57.0 | 17.2 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *70* | | *70 - 130* | *02/07/25 08:37* | *02/07/25 15:03* | *1* |
| *o-Terphenyl* | *61* | *X* | *70 - 130* | *02/07/25 08:37* | *02/07/25 15:03* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **4.53** | **J** | 11.5 | 0.454 | mg/Kg | ☼ | | 02/07/25 12:58 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **12.6** | | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |
| **Percent Solids (ASTM D2216)** | **87.4** | **b** | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |

## Client Sample ID: Cell18-Square180-E-5-250206
**Lab Sample ID: 880-54170-2**
**Date Collected: 02/06/25 14:05**
**Matrix: Solid**
**Date Received: 02/06/25 17:07**
**Percent Solids: 74.6**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00186 | U | 0.00268 | 0.00186 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |
| Toluene | 0.00268 | U | 0.00268 | 0.00268 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |
| Ethylbenzene | 0.00146 | U | 0.00268 | 0.00146 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |
| m-Xylene & p-Xylene | 0.00306 | U | 0.00535 | 0.00306 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |
| o-Xylene | 0.00212 | U | 0.00268 | 0.00212 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |
| Xylenes, Total | 0.00306 | U | 0.00535 | 0.00306 | mg/Kg | ☼ | 02/07/25 09:06 | 02/07/25 12:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 12:23* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 12:23* | *1* |

# Client Sample Results

Client: Arcadis US Inc.
Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

**Client Sample ID: Cell18-Square180-E-5-250206**
**Lab Sample ID: 880-54170-2**
**Date Collected: 02/06/25 14:05**
**Matrix: Solid**
**Date Received: 02/06/25 17:07**
**Percent Solids: 74.6**

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 19.4 | U | 66.7 | 19.4 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:18 | 1 |
| Diesel Range Organics (Over C10-C28) | 20.2 | U | 66.7 | 20.2 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:18 | 1 |
| Oil Range Organics (Over C28-C36) | 20.2 | U | 66.7 | 20.2 | mg/Kg | ☼ | 02/07/25 08:37 | 02/07/25 15:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *70* | | *70 - 130* | *02/07/25 08:37* | *02/07/25 15:18* | *1* |
| *o-Terphenyl* | *62* | *X* | *70 - 130* | *02/07/25 08:37* | *02/07/25 15:18* | *1* |

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **7.26** | **J** | 13.5 | 0.535 | mg/Kg | ☼ | | 02/07/25 13:16 | 1 |

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (ASTM D2216)** | **25.4** | | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |
| **Percent Solids (ASTM D2216)** | **74.6** | **b** | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BFB1 | DFBZ1 | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | | | |
| 880-54170-1 | Cell21-Square125-E-5-250206 | 104 | 99 | | | | | | | | | | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | 97 | 101 | | | | | | | | | | |
| LCS 880-102262/1-A | Lab Control Sample | 100 | 113 | | | | | | | | | | |
| LCSD 880-102262/2-A | Lab Control Sample Dup | 92 | 113 | | | | | | | | | | |
| MB 880-102262/5-A | Method Blank | 101 | 98 | | | | | | | | | | |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1CO1 | OTPH1 | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | | | |
| 880-54170-1 | Cell21-Square125-E-5-250206 | 70 | 61 X | | | | | | | | | | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | 70 | 62 X | | | | | | | | | | |
| LCS 880-102250/2-A | Lab Control Sample | 88 | 75 | | | | | | | | | | |
| LCSD 880-102250/3-A | Lab Control Sample Dup | 93 | 79 | | | | | | | | | | |
| MB 880-102250/1-A | Method Blank | 121 | 108 | | | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-102262/5-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102232** **Prep Batch: 102262**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.00139 | U | 0.00200 | 0.00139 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |
| Toluene | 0.00200 | U | 0.00200 | 0.00200 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |
| Ethylbenzene | 0.00109 | U | 0.00200 | 0.00109 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |
| m-Xylene & p-Xylene | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |
| o-Xylene | 0.00158 | U | 0.00200 | 0.00158 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |
| Xylenes, Total | 0.00229 | U | 0.00400 | 0.00229 | mg/Kg | | 02/07/25 09:06 | 02/07/25 10:59 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 10:59* | *1* |
| *1,4-Difluorobenzene (Surr)* | *98* | | *70 - 130* | *02/07/25 09:06* | *02/07/25 10:59* | *1* |

**Lab Sample ID: LCS 880-102262/1-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102232** **Prep Batch: 102262**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.09314 | | mg/Kg | | 93 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.08069 | | mg/Kg | | 81 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.08787 | | mg/Kg | | 88 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1821 | | mg/Kg | | 91 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.09119 | | mg/Kg | | 91 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102262/2-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102232** **Prep Batch: 102262**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.09697 | | mg/Kg | | 97 | 70 - 130 | 4 | 35 |
| Toluene | | | 0.100 | 0.08339 | | mg/Kg | | 83 | 70 - 130 | 3 | 35 |
| Ethylbenzene | | | 0.100 | 0.09090 | | mg/Kg | | 91 | 70 - 130 | 3 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1878 | | mg/Kg | | 94 | 70 - 130 | 3 | 35 |
| o-Xylene | | | 0.100 | 0.09356 | | mg/Kg | | 94 | 70 - 130 | 3 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 880-102250/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102248** **Prep Batch: 102250**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 19.63 | J | 50.0 | 14.5 | mg/Kg | | 02/07/25 08:37 | 02/07/25 09:22 | 1 |
| Diesel Range Organics (Over C10-C28) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/07/25 08:37 | 02/07/25 09:22 | 1 |
| Oil Range Organics (Over C28-C36) | 15.1 | U | 50.0 | 15.1 | mg/Kg | | 02/07/25 08:37 | 02/07/25 09:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *121* | | *70 - 130* | *02/07/25 08:37* | *02/07/25 09:22* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *02/07/25 08:37* | *02/07/25 09:22* | *1* |

**Lab Sample ID: LCS 880-102250/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102248** **Prep Batch: 102250**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1057 | | mg/Kg | | 106 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1006 | | mg/Kg | | 101 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *88* | | *70 - 130* |
| *o-Terphenyl* | *75* | | *70 - 130* |

**Lab Sample ID: LCSD 880-102250/3-A** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 102248** **Prep Batch: 102250**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1138 | | mg/Kg | | 114 | 70 - 130 | 7 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1070 | | mg/Kg | | 107 | 70 - 130 | 6 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* |
| *o-Terphenyl* | *79* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-102249/1-A** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Soluble**
**Analysis Batch: 102271**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.395 | U | 10.0 | 0.395 | mg/Kg | | | 02/07/25 12:40 | 1 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 880-102249/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 102271**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 259.9 | | mg/Kg | | 104 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-102249/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 102271**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 259.9 | | mg/Kg | | 104 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 880-54170-1 MS** — **Client Sample ID: Cell21-Square125-E-5-250206**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 102271**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 4.53 | J | 287 | 314.1 | | mg/Kg | ☼ | 108 | 90 - 110 | | |

**Lab Sample ID: 880-54170-1 MSD** — **Client Sample ID: Cell21-Square125-E-5-250206**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 102271**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 4.53 | J | 287 | 313.6 | | mg/Kg | ☼ | 108 | 90 - 110 | 0 | 20 |

## Method: D2216 - Percent Moisture

**Lab Sample ID: MB 880-102246/1** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 102246**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 0.100 | U | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |
| Percent Solids | 100 | | 0.100 | 0.100 | % | | | 02/07/25 08:35 | 1 |

**Lab Sample ID: 880-54170-1 DU** — **Client Sample ID: Cell21-Square125-E-5-250206**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 102246**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 12.6 | | | 12.4 | | % | | | | 2 | 20 |
| Percent Solids | 87.4 | b | | 87.6 | | % | | | | 0.2 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## GC VOA

### Analysis Batch: 102232

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Total/NA | Solid | 8021B | 102262 |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Total/NA | Solid | 8021B | 102262 |
| MB 880-102262/5-A | Method Blank | Total/NA | Solid | 8021B | 102262 |
| LCS 880-102262/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 102262 |
| LCSD 880-102262/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 102262 |

### Prep Batch: 102262

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Total/NA | Solid | 5030B | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Total/NA | Solid | 5030B | |
| MB 880-102262/5-A | Method Blank | Total/NA | Solid | 5030B | |
| LCS 880-102262/1-A | Lab Control Sample | Total/NA | Solid | 5030B | |
| LCSD 880-102262/2-A | Lab Control Sample Dup | Total/NA | Solid | 5030B | |

## GC Semi VOA

### Analysis Batch: 102248

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Total/NA | Solid | 8015B NM | 102250 |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Total/NA | Solid | 8015B NM | 102250 |
| MB 880-102250/1-A | Method Blank | Total/NA | Solid | 8015B NM | 102250 |
| LCS 880-102250/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 102250 |
| LCSD 880-102250/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 102250 |

### Prep Batch: 102250

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Total/NA | Solid | 8015NM Prep | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Total/NA | Solid | 8015NM Prep | |
| MB 880-102250/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-102250/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-102250/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

## HPLC/IC

### Leach Batch: 102249

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Soluble | Solid | DI Leach | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Soluble | Solid | DI Leach | |
| MB 880-102249/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-102249/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-102249/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-54170-1 MS | Cell21-Square125-E-5-250206 | Soluble | Solid | DI Leach | |
| 880-54170-1 MSD | Cell21-Square125-E-5-250206 | Soluble | Solid | DI Leach | |

### Analysis Batch: 102271

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Soluble | Solid | 300.0 | 102249 |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Soluble | Solid | 300.0 | 102249 |
| MB 880-102249/1-A | Method Blank | Soluble | Solid | 300.0 | 102249 |
| LCS 880-102249/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 102249 |
| LCSD 880-102249/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 102249 |
| 880-54170-1 MS | Cell21-Square125-E-5-250206 | Soluble | Solid | 300.0 | 102249 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## HPLC/IC (Continued)

### Analysis Batch: 102271 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 MSD | Cell21-Square125-E-5-250206 | Soluble | Solid | 300.0 | 102249 |

## General Chemistry

### Analysis Batch: 102246

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Total/NA | Solid | D2216 | |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Total/NA | Solid | D2216 | |
| MB 880-102246/1 | Method Blank | Total/NA | Solid | D2216 | |
| 880-54170-1 DU | Cell21-Square125-E-5-250206 | Total/NA | Solid | D2216 | |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell21-Square125-E-5-250206 Lab Sample ID: 880-54170-1

**Date Collected: 02/06/25 12:18** **Matrix: Solid**
**Date Received: 02/06/25 17:07**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102246 | 02/07/25 08:35 | CH | EET MID |

## Client Sample ID: Cell21-Square125-E-5-250206 Lab Sample ID: 880-54170-1

**Date Collected: 02/06/25 12:18** **Matrix: Solid**
**Date Received: 02/06/25 17:07** **Percent Solids: 87.4**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.03 g | 5 mL | 102262 | 02/07/25 09:06 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102232 | 02/07/25 12:02 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 102250 | 02/07/25 08:37 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102248 | 02/07/25 15:03 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 102249 | 02/07/25 08:36 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102271 | 02/07/25 12:58 | CH | EET MID |

## Client Sample ID: Cell18-Square180-E-5-250206 Lab Sample ID: 880-54170-2

**Date Collected: 02/06/25 14:05** **Matrix: Solid**
**Date Received: 02/06/25 17:07**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | D2216 | | 1 | | | 102246 | 02/07/25 08:35 | CH | EET MID |

## Client Sample ID: Cell18-Square180-E-5-250206 Lab Sample ID: 880-54170-2

**Date Collected: 02/06/25 14:05** **Matrix: Solid**
**Date Received: 02/06/25 17:07** **Percent Solids: 74.6**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030B | | | 5.01 g | 5 mL | 102262 | 02/07/25 09:06 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 102232 | 02/07/25 12:23 | MNR | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 102250 | 02/07/25 08:37 | EL | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 102248 | 02/07/25 15:18 | TKC | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 102249 | 02/07/25 08:36 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 102271 | 02/07/25 13:16 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Arcadis US Inc. Job ID: 880-54170-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Midland

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 | T104704400 | 06-30-25 |

# Method Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54170-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| D2216 | Percent Moisture | ASTM | EET MID |
| 5030B | Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Job ID: 880-54170-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 880-54170-1 | Cell21-Square125-E-5-250206 | Solid | 02/06/25 12:18 | 02/06/25 17:07 |
| 880-54170-2 | Cell18-Square180-E-5-250206 | Solid | 02/06/25 14:05 | 02/06/25 17:07 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record

eurofins | Environment Testing

880-54170 Chain of Custody

| Client Information | Sampler: Tony S. Longwell | Lab PM: Kuchadkar, Sachin G | Carrier Tracking No(s): |
|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: 432-208-0876 | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: |
| Company: Arcadis US Inc. | PWS D: | Analysis Requested | |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | | |
| City: Midland | TAT Requested (days): 24hr TAT | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | |
| Phone: 303-316-6505(Tel) | PO #: PN 3027704 | | |
| Email: sarah.johnson@arcadis.com | WO #: | | |
| Project Name: Chevron - Jal Land Farm Soils | Project #: 86001348 | | |
| Site: | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Total_BTEX_GRO_DRO (8015MOD_NM) | 8015MOD_NM - Full TPH | 300_ORGFM_28D - Chloride | 8021B - BTEX | MOISTURE_2540G - Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | X | N | N | N | N | X | |
| Cell 11-Square 125-E-5-250206 | 02/06/25 | 1218 | C | Solid | | X | X | X | X | 1 | |
| Cell 18-Square 180-E-5-250206 | 02/06/25 | 1405 | C | Solid | | X | X | X | X | 1 | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |
| | | | | Solid | | | | | | | |

Other:

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

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

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

Special Instructions/QC Requirements:

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

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| | 02/06/25 1707 | ARCADIS | | 2-6-25 1707 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.6/4.5 |
|---|---|---|

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-54170-1

**Login Number: 54170** **List Source: Eurofins Midland**
**List Number: 1**
**Creator: Vasquez, Julisa**

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

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Alison Schaffer
Arcadis US Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Generated 1/30/2025 9:18:45 PM

## JOB DESCRIPTION

Chevron - Jal Land Farm Soils

## JOB NUMBER

860-92301-1

Eurofins Houston
4145 Greenbriar Dr
Stafford TX 77477

See page two for job notes and contact information.





my EOL

# Eurofins Houston

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization

Generated
1/30/2025 9:18:45 PM

Authorized for release by
Sachin Kudchadkar, Senior Project Manager
Sachin.Kudchadkar@et.eurofinsus.com
(281)748-9025

Client: Arcadis US Inc.
Project/Site: Chevron - Jal Land Farm Soils

Laboratory Job ID: 860-92301-1

# Table of Contents

# Definitions/Glossary

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Qualifiers

### GC/MS VOA

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

### GC Semi VOA

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

### HPLC/IC

| 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. |
| 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 |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Arcadis US Inc. Job ID: 860-92301-1
Project: Chevron - Jal Land Farm Soils

## Job ID: 860-92301-1 Eurofins Houston

**Job Narrative**
**860-92301-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The sample was received on 1/29/2025 9:42 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

**GC/MS VOA**
Method 8260C: Sample is a bulk a jar.

Cell-17-Square24-E6-250128 (860-92301-1)

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

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

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

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

# Detection Summary

Client: Arcadis US Inc.
Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell-17-Square24-E6-250128
## Lab Sample ID: 860-92301-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 484 | | 11.0 | 5.51 | mg/Kg | 1 | ☼ | 300.0 | Total/NA |

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell-17-Square24-E6-250128 Lab Sample ID: 860-92301-1

**Date Collected: 01/28/25 16:01** **Matrix: Solid**
**Date Received: 01/29/25 09:42** **Percent Solids: 90.8**

### Method: SW846 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.000419 | U | 0.00110 | 0.000419 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |
| Toluene | 0.00133 | U | 0.00548 | 0.00133 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |
| Ethylbenzene | 0.000333 | U | 0.00110 | 0.000333 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |
| m,p-Xylenes | 0.000474 | U | 0.00219 | 0.000474 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |
| o-Xylene | 0.000346 | U | 0.00110 | 0.000346 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |
| Xylenes, Total | 0.000474 | U | 0.00219 | 0.000474 | mg/Kg | ☼ | 01/29/25 12:40 | 01/29/25 15:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *120* | | *56 - 150* | *01/29/25 12:40* | *01/29/25 15:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *68 - 152* | *01/29/25 12:40* | *01/29/25 15:32* | *1* |
| *Dibromofluoromethane (Surr)* | *93* | | *53 - 142* | *01/29/25 12:40* | *01/29/25 15:32* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *70 - 130* | *01/29/25 12:40* | *01/29/25 15:32* | *1* |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 23.2 | U | 55.0 | 23.2 | mg/Kg | ☼ | 01/29/25 12:01 | 01/29/25 12:59 | 1 |
| Diesel Range Organics (Over C10-C28) | 23.2 | U | 55.0 | 23.2 | mg/Kg | ☼ | 01/29/25 12:01 | 01/29/25 12:59 | 1 |
| Oil Range Organics (Over C28-C36) | 23.2 | U | 55.0 | 23.2 | mg/Kg | ☼ | 01/29/25 12:01 | 01/29/25 12:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *65 - 130* | *01/29/25 12:01* | *01/29/25 12:59* | *1* |
| *o-Terphenyl* | *88* | | *65 - 130* | *01/29/25 12:01* | *01/29/25 12:59* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **484** | | 11.0 | 5.51 | mg/Kg | ☼ | 01/29/25 14:47 | 01/29/25 20:25 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Percent Moisture (EPA Moisture)** | **9.2** | | | | % | | | 01/30/25 14:18 | 1 |
| **Percent Solids (EPA Moisture)** | **90.8** | | | | % | | | 01/30/25 14:18 | 1 |

# Surrogate Summary

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | DCA | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (56-150) | (68-152) | (53-142) | (70-130) |
| 860-92301-1 | Cell-17-Square24-E6-250128 | 120 | 95 | 93 | 92 |
| LCS 860-213378/3 | Lab Control Sample | 98 | 101 | 97 | 100 |
| LCSD 860-213378/4 | Lab Control Sample Dup | 94 | 103 | 94 | 99 |
| MB 860-213378/9 | Method Blank | 112 | 94 | 99 | 96 |

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (65-130) | (65-130) |
| 860-92301-1 | Cell-17-Square24-E6-250128 | 93 | 88 |
| LCS 860-213262/2-A | Lab Control Sample | 107 | 119 |
| LCSD 860-213262/3-A | Lab Control Sample Dup | 110 | 118 |
| MB 860-213262/1-A | Method Blank | 103 | 97 |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 860-213378/9** **Client Sample ID: Method Blank**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 213378**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.000383 | U | 0.00100 | 0.000383 | mg/Kg | | | 01/29/25 14:30 | 1 |
| Toluene | 0.00121 | U | 0.00500 | 0.00121 | mg/Kg | | | 01/29/25 14:30 | 1 |
| Ethylbenzene | 0.000304 | U | 0.00100 | 0.000304 | mg/Kg | | | 01/29/25 14:30 | 1 |
| m,p-Xylenes | 0.000433 | U | 0.00200 | 0.000433 | mg/Kg | | | 01/29/25 14:30 | 1 |
| o-Xylene | 0.000316 | U | 0.00100 | 0.000316 | mg/Kg | | | 01/29/25 14:30 | 1 |
| Xylenes, Total | 0.000433 | U | 0.00200 | 0.000433 | mg/Kg | | | 01/29/25 14:30 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *56 - 150* | | *01/29/25 14:30* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *68 - 152* | | *01/29/25 14:30* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *53 - 142* | | *01/29/25 14:30* | *1* |
| *Toluene-d8 (Surr)* | *96* | | *70 - 130* | | *01/29/25 14:30* | *1* |

**Lab Sample ID: LCS 860-213378/3** **Client Sample ID: Lab Control Sample**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 213378**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.0500 | 0.04706 | | mg/Kg | | 94 | 66 - 142 | | |
| Toluene | | | 0.0500 | 0.04771 | | mg/Kg | | 95 | 74 - 130 | | |
| Ethylbenzene | | | 0.0500 | 0.05160 | | mg/Kg | | 103 | 80 - 130 | | |
| m,p-Xylenes | | | 0.0500 | 0.05158 | | mg/Kg | | 103 | 78 - 130 | | |
| o-Xylene | | | 0.0500 | 0.05194 | | mg/Kg | | 104 | 79 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *56 - 150* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *68 - 152* |
| *Dibromofluoromethane (Surr)* | *97* | | *53 - 142* |
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* |

**Lab Sample ID: LCSD 860-213378/4** **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** **Prep Type: Total/NA**
**Analysis Batch: 213378**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.0500 | 0.04577 | | mg/Kg | | 92 | 66 - 142 | 3 | 25 |
| Toluene | | | 0.0500 | 0.04677 | | mg/Kg | | 94 | 74 - 130 | 2 | 25 |
| Ethylbenzene | | | 0.0500 | 0.05066 | | mg/Kg | | 101 | 80 - 130 | 2 | 25 |
| m,p-Xylenes | | | 0.0500 | 0.04976 | | mg/Kg | | 100 | 78 - 130 | 4 | 25 |
| o-Xylene | | | 0.0500 | 0.05153 | | mg/Kg | | 103 | 79 - 130 | 1 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *56 - 150* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *68 - 152* |
| *Dibromofluoromethane (Surr)* | *94* | | *53 - 142* |
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

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

**Lab Sample ID: MB 860-213262/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213298** — **Prep Batch: 213262**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 21.1 | U | 50.0 | 21.1 | mg/Kg | | 01/28/25 17:19 | 01/29/25 10:07 | 1 |
| Diesel Range Organics (Over C10-C28) | 21.1 | U | 50.0 | 21.1 | mg/Kg | | 01/28/25 17:19 | 01/29/25 10:07 | 1 |
| Oil Range Organics (Over C28-C36) | 21.1 | U | 50.0 | 21.1 | mg/Kg | | 01/28/25 17:19 | 01/29/25 10:07 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *103* | | *65 - 130* | *01/28/25 17:19* | *01/29/25 10:07* | *1* |
| *o-Terphenyl* | *97* | | *65 - 130* | *01/28/25 17:19* | *01/29/25 10:07* | *1* |

**Lab Sample ID: LCS 860-213262/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213298** — **Prep Batch: 213262**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1014 | | mg/Kg | | 101 | 70 - 135 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 954.0 | | mg/Kg | | 95 | 70 - 135 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *107* | | *65 - 130* |
| *o-Terphenyl* | *119* | | *65 - 130* |

**Lab Sample ID: LCSD 860-213262/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213298** — **Prep Batch: 213262**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1072 | | mg/Kg | | 107 | 70 - 135 | 6 | 35 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 955.1 | | mg/Kg | | 96 | 70 - 135 | 0 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *110* | | *65 - 130* |
| *o-Terphenyl* | *118* | | *65 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 860-213482/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213526** — **Prep Batch: 213482**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 5.00 | U | 10.0 | 5.00 | mg/Kg | | 01/29/25 14:47 | 01/29/25 19:45 | 1 |

# QC Sample Results

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 860-213482/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213526** — **Prep Batch: 213482**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 100 | 99.90 | | mg/Kg | | 100 | 90 - 110 | | |

**Lab Sample ID: LCSD 860-213482/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213526** — **Prep Batch: 213482**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 100 | 100.1 | | mg/Kg | | 100 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 860-92301-1 MS** — **Client Sample ID: Cell-17-Square24-E6-250128**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213526** — **Prep Batch: 213482**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 484 | | 110 | 607.2 | 4 | mg/Kg | ☼ | 111 | 90 - 110 | | |

**Lab Sample ID: 860-92301-1 MSD** — **Client Sample ID: Cell-17-Square24-E6-250128**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213526** — **Prep Batch: 213482**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 484 | | 110 | 606.8 | 4 | mg/Kg | ☼ | 111 | 90 - 110 | 0 | 15 |

## Method: Moisture - Percent Moisture

**Lab Sample ID: MB 860-213769/1** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213769**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 0.07 | | | | % | | | 01/30/25 14:18 | 1 |
| Percent Solids | 99.9 | | | | % | | | 01/30/25 14:18 | 1 |

**Lab Sample ID: 860-92301-1 DU** — **Client Sample ID: Cell-17-Square24-E6-250128**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 213769**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 9.2 | | | 9.1 | | % | | | | 2 | 20 |
| Percent Solids | 90.8 | | | 91.0 | | % | | | | 0.2 | 20 |

# QC Association Summary

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## GC/MS VOA

### Analysis Batch: 213378

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 8260C | 213422 |
| MB 860-213378/9 | Method Blank | Total/NA | Solid | 8260C | |
| LCS 860-213378/3 | Lab Control Sample | Total/NA | Solid | 8260C | |
| LCSD 860-213378/4 | Lab Control Sample Dup | Total/NA | Solid | 8260C | |

### Prep Batch: 213422

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 5030C | |

## GC Semi VOA

### Prep Batch: 213262

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 8015NM Prep | |
| MB 860-213262/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 860-213262/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 860-213262/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 213298

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 8015B NM | 213262 |
| MB 860-213262/1-A | Method Blank | Total/NA | Solid | 8015B NM | 213262 |
| LCS 860-213262/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 213262 |
| LCSD 860-213262/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 213262 |

## HPLC/IC

### Prep Batch: 213482

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300_Prep | |
| MB 860-213482/1-A | Method Blank | Total/NA | Solid | 300_Prep | |
| LCS 860-213482/2-A | Lab Control Sample | Total/NA | Solid | 300_Prep | |
| LCSD 860-213482/3-A | Lab Control Sample Dup | Total/NA | Solid | 300_Prep | |
| 860-92301-1 MS | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300_Prep | |
| 860-92301-1 MSD | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300_Prep | |

### Analysis Batch: 213526

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300.0 | 213482 |
| MB 860-213482/1-A | Method Blank | Total/NA | Solid | 300.0 | 213482 |
| LCS 860-213482/2-A | Lab Control Sample | Total/NA | Solid | 300.0 | 213482 |
| LCSD 860-213482/3-A | Lab Control Sample Dup | Total/NA | Solid | 300.0 | 213482 |
| 860-92301-1 MS | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300.0 | 213482 |
| 860-92301-1 MSD | Cell-17-Square24-E6-250128 | Total/NA | Solid | 300.0 | 213482 |

## General Chemistry

### Analysis Batch: 213769

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Total/NA | Solid | Moisture | |
| MB 860-213769/1 | Method Blank | Total/NA | Solid | Moisture | |
| 860-92301-1 DU | Cell-17-Square24-E6-250128 | Total/NA | Solid | Moisture | |

# Lab Chronicle

Client: Arcadis US Inc. Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Client Sample ID: Cell-17-Square24-E6-250128 Lab Sample ID: 860-92301-1

**Date Collected: 01/28/25 16:01** **Matrix: Solid**
**Date Received: 01/29/25 09:42**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | Moisture | | 1 | | | 213769 | 01/30/25 14:18 | JC | EET HOU |

## Client Sample ID: Cell-17-Square24-E6-250128 Lab Sample ID: 860-92301-1

**Date Collected: 01/28/25 16:01** **Matrix: Solid**
**Date Received: 01/29/25 09:42** **Percent Solids: 90.8**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5030C | | | 5.03 g | 5 mL | 213422 | 01/29/25 12:40 | KLV | EET HOU |
| Total/NA | Analysis | 8260C | | 1 | 5 mL | 5 mL | 213378 | 01/29/25 15:32 | KLV | EET HOU |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 213262 | 01/29/25 12:01 | MS | EET HOU |
| Total/NA | Analysis | 8015B NM | | 1 | | | 213298 | 01/29/25 12:59 | TH | EET HOU |
| Total/NA | Prep | 300_Prep | | | 05.00 g | 50 mL | 213482 | 01/29/25 14:47 | JC | EET HOU |
| Total/NA | Analysis | 300.0 | | 1 | | | 213526 | 01/29/25 20:25 | WP | EET HOU |

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

# Accreditation/Certification Summary

Client: Arcadis US Inc.
Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

## Laboratory: Eurofins Houston

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Arkansas DEQ | State | 88-00759 | 08-04-25 |
| Florida | NELAP | E871002 | 06-30-25 |
| Louisiana (All) | NELAP | 03054 | 12-20-25 |
| Oklahoma | NELAP | 1306 | 08-31-25 |
| Texas | NELAP | T104704215 | 07-01-26 |
| Texas | TCEQ Water Supply | T104704215 | 12-28-25 |
| USDA | US Federal Programs | 525-23-79-79507 | 03-20-26 |

# Method Summary

Client: Arcadis US Inc.
Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | EET HOU |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET HOU |
| 300.0 | Anions, Ion Chromatography | EPA | EET HOU |
| Moisture | Percent Moisture | EPA | EET HOU |
| 300_Prep | Anions, Ion Chromatography, 10% Wt/Vol | EPA | EET HOU |
| 5030C | Purge and Trap | SW846 | EET HOU |
| 8015NM Prep | Microextraction | SW846 | EET HOU |

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

# Sample Summary

Client: Arcadis US Inc.
Job ID: 860-92301-1
Project/Site: Chevron - Jal Land Farm Soils

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 860-92301-1 | Cell-17-Square24-E6-250128 | Solid | 01/28/25 16:01 | 01/29/25 09:42 |

**Eurofins Midland**
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

# Chain of Custody Record

eurofins | Environment Testing

1/30/2025

| Client Information | Sampler: Tony Silvas | Lab PM: Kudchadkar Sachin G | Carrier Tracking No(s): | COC No: 860-36208-12103.1 |
|---|---|---|---|---|
| Client Contact: Sarah Johnson | Phone: 432-254-0374 | E-Mail: Sachin.Kudchadkar@et.eurofinsus.com | State of Origin: | Page: Page 1 of 1 |
| Company: Arcadis US Inc. | PWSID: | | | Job #: |
| Address: 1004 North Big Spring Suite 300 | Due Date Requested: | | | |
| City: Midland | TAT Requested (days): 24 Hr TAT | | | |
| State, Zip: TX, 79701 | Compliance Project: Δ Yes Δ No | | | |
| Phone: 303-316-6506(Tel) | PO #: PN 3027704 | | | |
| Email: sarah.johnson@arcadis.com | WO #: | | | |
| Project Name: Chevron Jal Land Farm Soils | Project #: 86001348 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

Preservation Codes: N None; Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM Full TPH | 300_ORGFM_28D Chloride | 8021B BTEX | MOISTURE_2540G Percent Moisture | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | N | N | N | N | | |
| CH-FF-Spoil-24-E6-250128 | 01/28/25 | 1401 | G | Solid | | | X | X | X | X | 2 | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |
| | | | | Solid | | | | | | | | |

860-92301 Chain of Custody

Page 17 of 18

**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/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: | | |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: 01/28/25 1615 | Company: ARCADIS | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: Nuevo | Date/Time: 1-29-25 942 | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks: 2.7 2.6 Hou 368 |
|---|---|---|

Ver: 10/10/2024

# Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 860-92301-1

**Login Number: 92301** **List Source: Eurofins Houston**
**List Number: 1**
**Creator: Jimenez, Nicanor**

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

# Appendix D

## Photograph Log

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico

**Photograph: 1**

**Description:**
**Excavation extent at Cell 17 – Square 22.**

**Location:** Cell 17 - Square 22

**Photograph taken by:**
Jerry Longwell

**Date:** 1/29/2025

**Photograph: 2**

**Description:**
**Excavation extent at Cell 17 – Square 66.**

**Location:** Cell 17 - Square 66

**Photograph taken by:**
Jerry Longwell

**Date:** 1/29/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico

**Photograph: 3**

**Description:**
**Excavation extent at Cell 17 – Square 5.**

**Location:** Cell 17 – Square 5

**Photograph taken by:**
Jerry Longwell

**Date:** 1/30/2025

**Photograph: 4**

**Description:**
**Excavation extent at Cell 17 – Square 66.**

**Location:** Cell 17, Square 66

**Photograph taken by:**
Jerry Longwell

**Date:** 1/30/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico

**Photograph: 5**

**Description: Backfill material stockpiled onsite.**

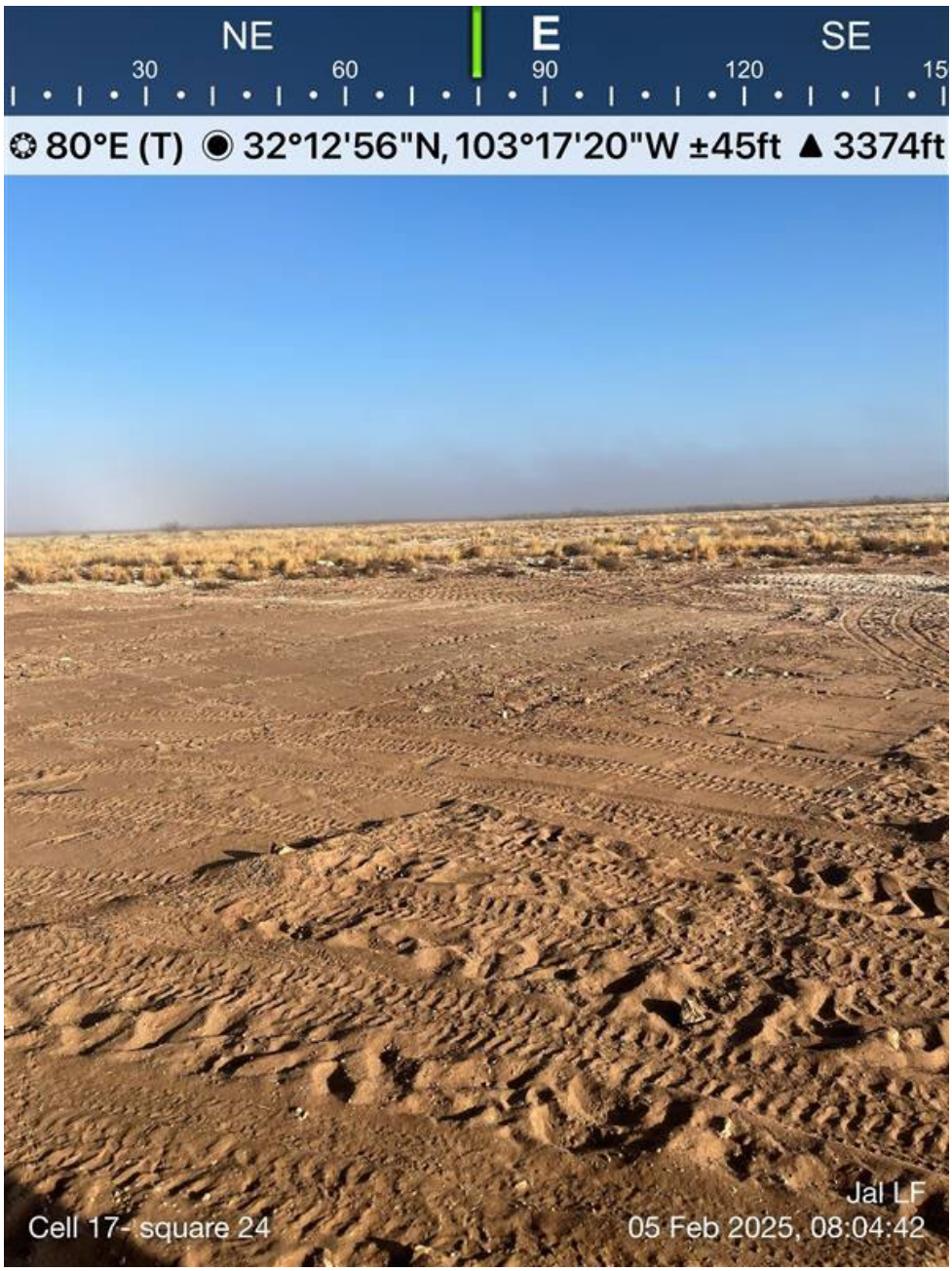
**Location:** Jal Landfarm, NM

**Photograph taken by:** Jerry Longwell

**Date:** 1/31/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico




**Photograph: 6**

**Description: Cell 17 - Square 24 following backfill and compaction of clean soil.**

**Location:** Cell 17 - Square 24

**Photograph taken by:** Jerry Longwell

**Date:** 2/5/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 7**

**Description: Cell 17 - Square 5 following backfill and compaction of clean soil.**

**Location:** Cell 17 - Square 5

**Photograph taken by:** Jerry Longwell

**Date:** 2/5/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 8**

**Description:**
**Excavation extent at Cell 21 - Square 150.**

**Location:** Cell 21 - Square 150

**Photograph taken by:**
Jerry Longwell

**Date:** 2/6/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 9**

**Description:**
**Excavation extent at Cell 21 - Square 89.**

**Location:** Cell 21 - Square 89

**Photograph taken by:**
Jerry Longwell

**Date:** 2/6/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico

**Photograph: 10**

**Description:**
**Excavation extent at Cell 18 - Square 180.**

**Location:** Cell 18 - Square 180

**Photograph taken by:**
Jerry Longwell

**Date:** 2/6/2025

**Photograph: 11**

**Description:**
**Excavation extent at Cell 21 - Square 125.**

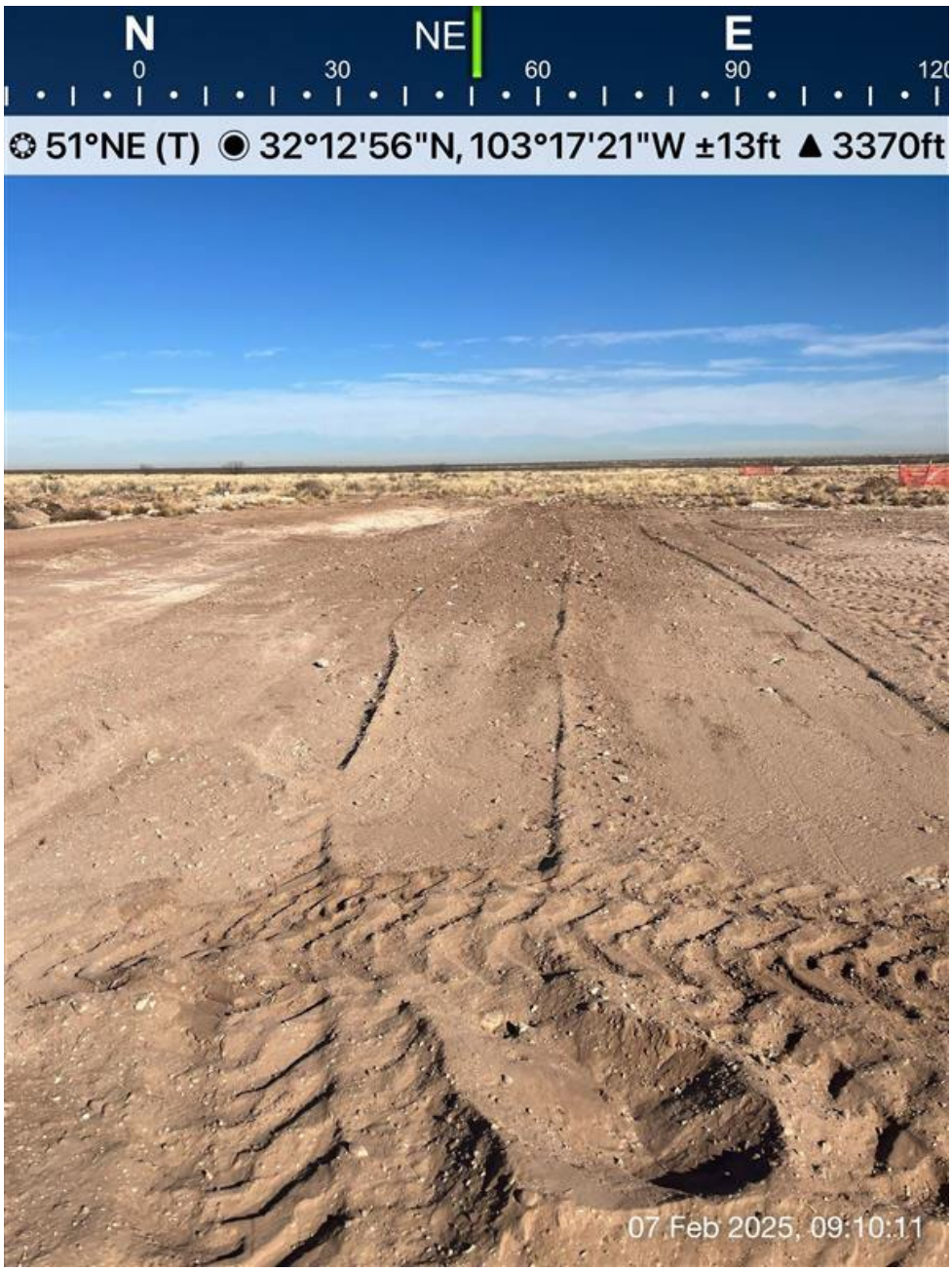
**Location:** Cell 21 - Square 125

**Photograph taken by:**
Jerry Longwell

**Date:** 2/6/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico




**Photograph: 12**

**Description: Cell 17 - Square 22 following backfill and compaction of clean soil.**

**Location:** Cell 17 – Square 22

**Photograph taken by:** Jerry Longwell

**Date:** 2/7/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 13**

**Description: Cell 17 - Square 66 following backfill and compaction of clean soil.**

**Location:** Cell 17 – Square 66

**Photograph taken by:** Jerry Longwell

**Date:** 2/7/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 14**

**Description: Cell 21 - Square 44 following backfill and compaction of clean soil.**

**Location:** Cell – Square 44

**Photograph taken by:** Jerry Longwell

**Date:** 2/7/2025


**Photograph: 15**

**Description: Cell 21 - Square 89 following backfill and compaction of clean soil.**

**Location:** Cell 21 – Square 89

**Photograph taken by:** Jerry Longwell

**Date:** 2/7/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico

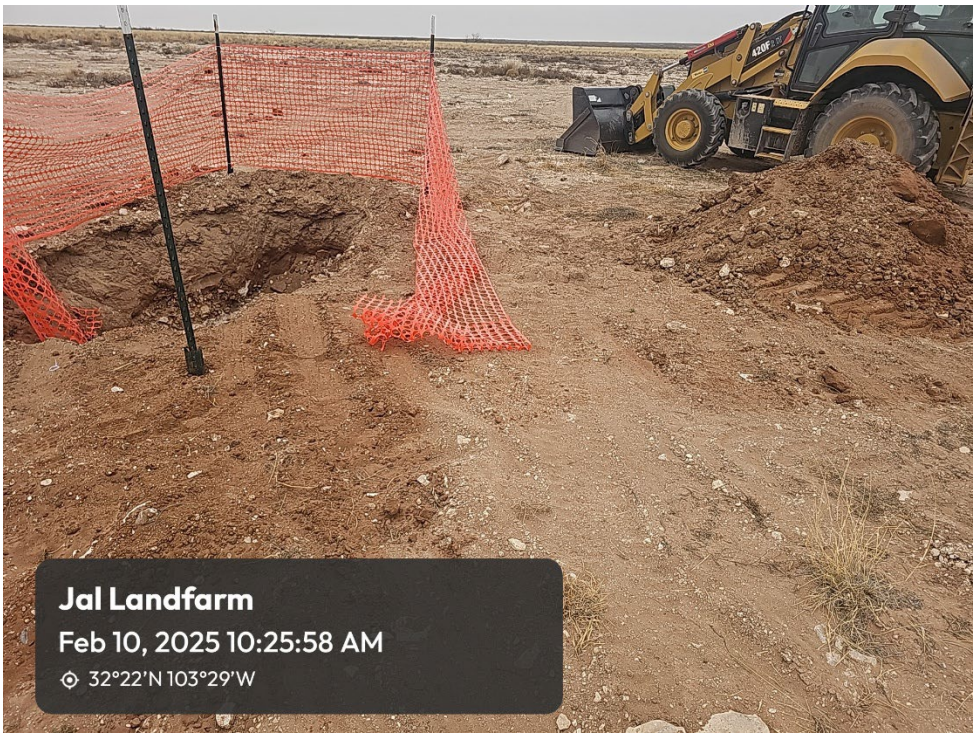

**Photograph: 16**

**Description: Cell 21 - Square 150 following backfill and compaction of clean soil.**

**Location:** Cell 21 – Square 150

**Photograph taken by:** Jerry Longwell

**Date:** 2/7/2025




**Photograph: 17**

**Description: Cell 21 - Square 125 prior to backfill.**

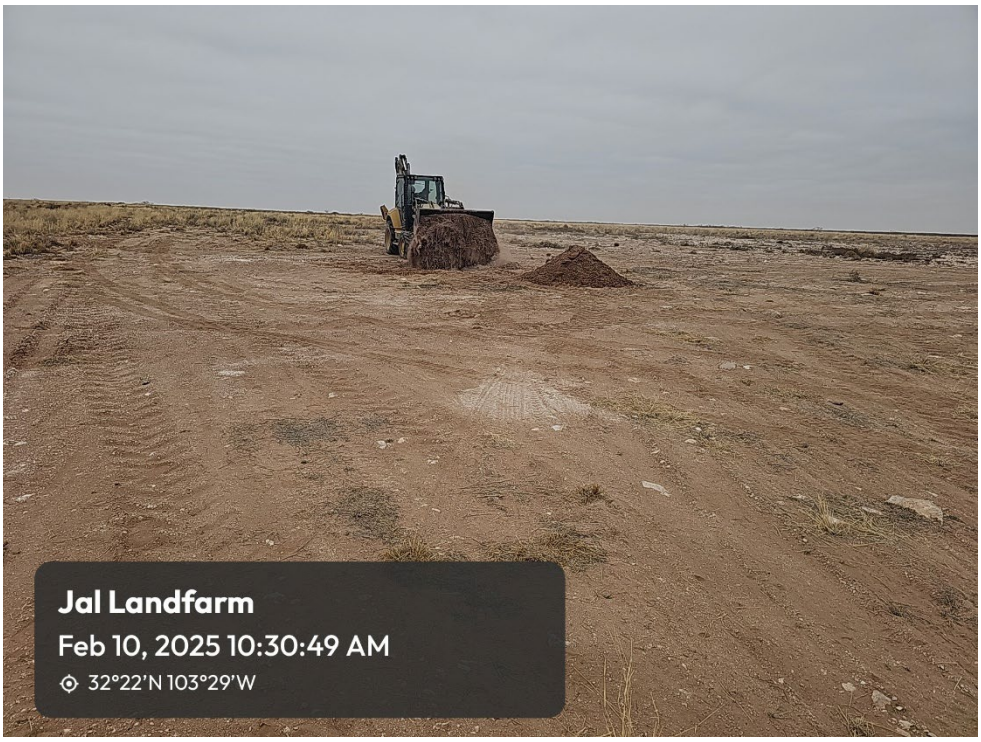
**Location:** Cell 21 - Square 125

**Photograph taken by:** Luis Esparza

**Date:** 2/10/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico



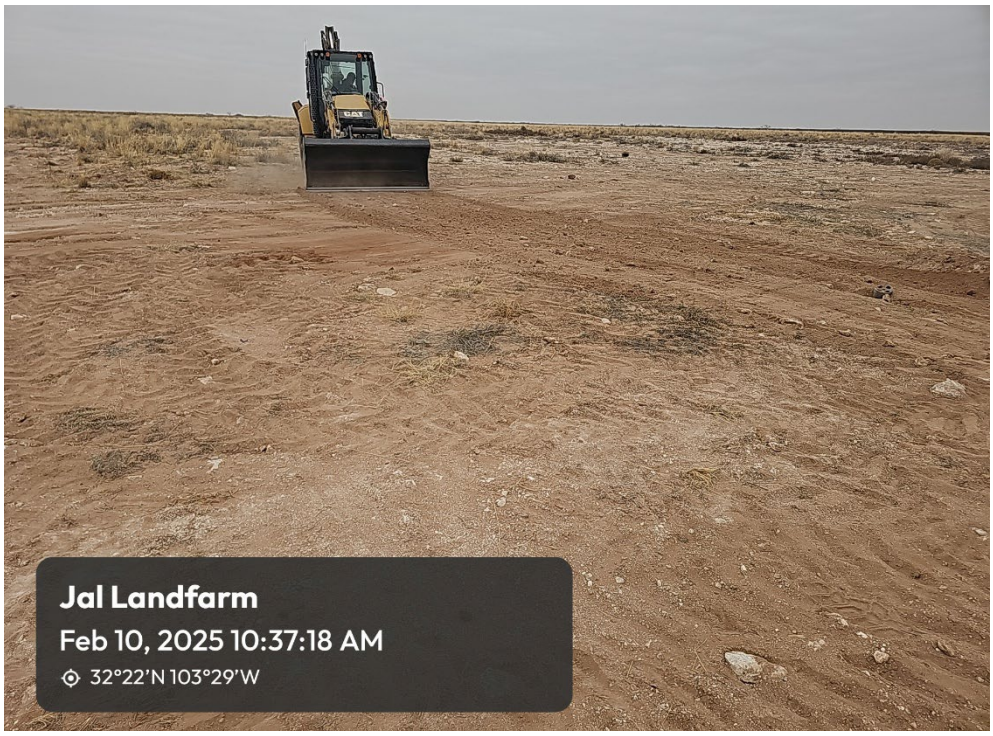

**Photograph: 18**

**Description: Cell 18 - Square 180 during backfill and compaction of clean soil.**

**Location:** Cell 18 - Square 180

**Photograph taken by:** Luis Esparza

**Date:** 2/10/2025




**Photograph: 19**

**Description: Cell 18 - Square 180 after backfill and compaction of clean soil.**

**Location:** Cell 18 - Square 180

**Photograph taken by:** Luis Esparza

**Date:** 2/10/2025

# Photograph Log

Appendix D
Remediation Summary and Soil Closure Request Report
Jal, New Mexico


**Photograph: 20**

**Description: Excavation extent at Cell 21 - Square 125.**

**Location:** Cell 21 - Square 125

**Photograph taken by:** Luis Esparza

**Date:** 2/10/2025


**Photograph: 21**

**Description: Site following backfill and compaction**

**Location:** Jal Landfarm

**Photograph taken by:** Luis Esparza

**Date:** 2/10/2025

# Appendix E

## Disposal Manifests

# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 12

**GENERATOR**

| 3. COMPANY NAME | 4. ADDRESS | | | 5. PICK-UP DATE |
|---|---|---|---|---|
| Chevron U.S.A, Inc. | 32.210056, -103.282861 | | | 02-03-25 |
| PHONE NO. 505-690-5408 | CITY Jal | STATE NM | ZIP 88252 | 6. |

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

12. COMMENTS OR SPECIAL INSTRUCTIONS: Contract: SO 0064 WBS code UWDBU-M4098

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

24-HOUR EMERGENCY NO. Chevron OL Contact - Armando Martinez - 505-690-5408

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

| PRINTED TYPED NAME | SIGNATURE | DATE |
|---|---|---|
| Nadine Balmaceda OBO Chevron | Nadine Balmaceda | 02-03-25 |

**TRANSPORTERS**

| 16. TRANSPORTER (1) | 17. TRANSPORTER (2) |
|---|---|
| NAME: Talon LPE Truck: 12 Phone: 575-631-4733 Name: Rene Quezada | NAME |
| IN CASE OF EMERGENCY CONTACT: David Adkins | IN CASE OF EMERGENCY CONTACT: |
| EMERGENCY PHONE: 575-746-8768 | EMERGENCY PHONE: |
| 18. TRANSPORTER (1): Acknowledgment of receipt of material | 19. TRANSPORTER (2): Acknowledgment of receipt of material |
| PRINTED/TYPED NAME | PRINTED/TYPED NAME |
| SIGNATURE DATE 02-03-25 | SIGNATURE DATE |

**FACILITY DISPOSAL**

| FACILITY NAME: | ADDRESS: | PHONE: |
|---|---|---|
| Gandy – Marley Inc. - Gandy Marley Landfarm | 7210 E 2nd Street | (575) 347-0434 |

| PERMIT NO. | 20. COMMENTS |
|---|---|
| 2739 | |

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

| AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME |
|---|---|---|---|
| | | | |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: Approved By:

If rejected provide details:

**By checking the "Approved" box you are accepting the art as well as size and placement of the logos and text.**

Estimated size will measure: 8.5" (w) x 11" (h)
Artwork produced by: RF

PLEASE PROOF CAREFULLY! Once you approve this proof, full responsibility for the accuracy of the copy, size and positioning of the imprint is YOURS. Please pay particular attention to spelling, capitalization, addresses and phone numbers.

# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 12

**GENERATOR**

3. COMPANY NAME: Chevron U.S.A, Inc. PHONE NO. 505-690-5408
4. ADDRESS: 32.210056, -103.282861 CITY: Jal STATE: NM ZIP: 88252
5. PICK-UP DATE: 02-03-25
6.

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

12. COMMENTS OR SPECIAL INSTRUCTIONS: Contract: SO 0064 WBS code UWDBU-M4098
13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT
24-HOUR EMERGENCY NO.: Chevron OL Contact - Armando Martinez - 505-690-5408

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME: Nadine Balmaceda OBO Chevron | SIGNATURE: Nadine Balmaceda | DATE: 02-03-25

**TRANSPORTERS**

16. TRANSPORTER (1)
NAME: Talon LPE
Truck: 12 Phone: 575-631-4733
Name: Rene Quezada
IN CASE OF EMERGENCY CONTACT: David Adkins
EMERGENCY PHONE: 575-746-8768

17. TRANSPORTER (2)
NAME
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material
PRINTED/TYPED NAME: René G.
SIGNATURE: DATE: 02-03-25

19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME:
SIGNATURE: DATE:

**FACILITY DISPOSAL**

FACILITY NAME: Gandy – Marley Inc. - Gandy Marley Landfarm
ADDRESS: 7210 E 2nd Street
PHONE: (575) 347-0434
PERMIT NO. 2739
20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

| AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME |
|---|---|---|---|
| | | | |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: Approved By:

If rejected provide details:

**By checking the "Approved" box you are accepting the art as well as size and placement of the logos and text.**

Estimated size will measure: 8.5" (w) x 11" (h)
Artwork produced by: RF

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CENTURY GRAPHICS & SIGN, INC. 1.800.228.4467 www.centurygs.com

# CHEVRON - 11"X8.5" FORM PAGE 2

**Types of Container**

| | |
|---|---|
| BA = Burlap, cloth, paper, or plastic bags | DT = Dump truck |
| CF = Fiber or plastic boxes, cartons, cases | DW = Wooden drums, barrels, kegs |
| CM = Metal boxes, cartons, cases (including roll-offs) | HG = Hopper or gondola cars or trash trailers |
| CW = Wooden boxes, cartons, cases | TC = Tank cars |
| CY = Cylinders | TP = Portable tanks |
| DF = Fiberboard or plastic drums, barrels, kegs | TT= Tank trucks or cargo tanks |
| DM = Metal drums, barrels, kegs | |

**Units of Measurement**

| | |
|---|---|
| G = Gallons (liquids only) | N = Cubic Meters |
| K = Kilograms | P = Pounds |
| L = Liters (liquids only) | T = Tons (2,000 Pounds) |
| M = Metric Tons (1,000 Kilograms) | Y = Cubic Yards |
| BBL = Barrels (42 gallons) | F = Cubic Feet |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: _____ Approved By: _____ Submit ☐

If rejected provide details:

**By checking the "Approved" box you are accepting the art as well as size and placement of the logos and text.**

Estimated size will measure: 8.5" (w) x 11" (h)
Artwork produced by: RF

PLEASE PROOF CAREFULLY! Once you approve this proof, full responsibility for the accuracy of the copy, size and positioning of the imprint is YOURS. Please pay particular attention to spelling, capitalization, addresses and phone numbers.

CENTURY GRAPHICS & SIGN, INC. 1.800.228.4467 www.centurygs.com



# CHEVRON - 11"X8.5" FORM PAGE 2

**Types of Container**

| | |
|---|---|
| BA = Burlap, cloth, paper, or plastic bags | DT = Dump truck |
| CF = Fiber or plastic boxes, cartons, cases | DW = Wooden drums, barrels, kegs |
| CM = Metal boxes, cartons, cases (including roll-offs) | HG = Hopper or gondola cars or trash trailers |
| CW = Wooden boxes, cartons, cases | TC = Tank cars |
| CY = Cylinders | TP = Portable tanks |
| DF = Fiberboard or plastic drums, barrels, kegs | TT= Tank trucks or cargo tanks |
| DM = Metal drums, barrels, kegs | |

**Units of Measurement**

| | |
|---|---|
| G = Gallons (liquids only) | N = Cubic Meters |
| K = Kilograms | P = Pounds |
| L = Liters (liquids only) | T = Tons (2,000 Pounds) |
| M = Metric Tons (1,000 Kilograms) | Y = Cubic Yards |
| BBL = Barrels (42 gallons) | F = Cubic Feet |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: _____ Approved By: _____ Submit ☐

If rejected provide details:

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Artwork produced by: RF

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# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 21

**GENERATOR**

3. COMPANY NAME: Chevron U.S.A, Inc.
PHONE NO.: 505-690-5408
4. ADDRESS: 32.210056, -103.282861
CITY: Jal STATE: NM ZIP: 88252
5. PICK-UP DATE: 02-04-25
6.

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

12. COMMENTS OR SPECIAL INSTRUCTIONS:
Contract: SO 0064 WBS code UWDBU-M4098

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT
24-HOUR EMERGENCY NO.
Chevron OL Contact - Armando Martinez - 505-690-5408

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME: Nadine Balmaceda OBO Chevron
SIGNATURE: Nadine Balmaceda DATE: 02-04-25

**TRANSPORTERS**

16. TRANSPORTER (1)
NAME: Talon LPE Phone: 915-540-3350
Truck: 21
Name: Jose M. Garcia
IN CASE OF EMERGENCY CONTACT: David Adkins
EMERGENCY PHONE: 575-746-8768

17. TRANSPORTER (2)
NAME:
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material
PRINTED/TYPED NAME: Jose M
SIGNATURE: DATE: 02-04-25

19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME:
SIGNATURE: DATE:

**FACILITY DISPOSAL**

FACILITY NAME: Gandy – Marley Inc. - Gandy Marley Landfarm
ADDRESS: 7210 E 2nd Street
PHONE: (575) 347-0434
PERMIT NO.: 2739
20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

| AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME |
|---|---|---|---|
| | | | |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: Approved By: Submit

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Artwork produced by: RF

PLEASE R… …y, size and positioning … numbers.

This artw… …rohibited.

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# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 02 | 5. PICK-UP DATE 02-Oct-25

**GENERATOR**

3. COMPANY NAME: Chevron U.S.A, Inc.
PHONE NO.: 505-690-5408
4. ADDRESS: 32.210056, -103.282861
CITY: Jal | STATE: NM | ZIP: 88252
6.

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

13. WASTE PROFILE NO.

12. COMMENTS OR SPECIAL INSTRUCTIONS:
Contract: SO 0064 WBS code UWDBU-M4098

14. IN CASE OF EMERGENCY OR SPILL, CONTACT: Chevron OL Contact - Armando Martinez - 505-690-5408 — 24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME: Nadine Balmaceda OBO Chevron
SIGNATURE: Nadine Balmaceda
DATE: 02-Oct-25

**TRANSPORTERS**

16. TRANSPORTER (1)
NAME: Talon LPE Phone: 575-552-6885
Truck: 02 Name: Edwin Muñoz
IN CASE OF EMERGENCY CONTACT: David Adkins
EMERGENCY PHONE: 575-746-8768

17. TRANSPORTER (2)
NAME:
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material
PRINTED/TYPED NAME:
SIGNATURE:
DATE: 02/01/25

19. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME:
SIGNATURE:
DATE:

**FACILITY DISPOSAL**

FACILITY NAME: Gandy – Marley Inc. - Gandy Marley Landfarm
ADDRESS: 7210 E 2nd Street
PHONE: (575) 347-0434
PERMIT NO.: 2739
20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: Approved By:

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Artwork produced by: RF

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# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 07

**GENERATOR**

| 3. COMPANY NAME | 4. ADDRESS | | | 5. PICK-UP DATE |
|---|---|---|---|---|
| Chevron U.S.A, Inc. | 32.210056, -103.282861 | | | 02/07/25 |
| PHONE NO. 505-690-5408 | CITY Jal | STATE NM | ZIP 88252 | 6. |

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

12. COMMENTS OR SPECIAL INSTRUCTIONS: Contract SO 0064 WBS code UWDBU-M4098

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT

24-HOUR EMERGENCY NO. Chevron OL Contact - Armando Martinez - 505-690-5408

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME: Nadine Balmaceda OBO Chevron | SIGNATURE: Nadine Balmaceda | DATE: 02/07/25

**TRANSPORTERS**

| 16. TRANSPORTER (1) | 17. TRANSPORTER (2) |
|---|---|
| NAME: Talon LPE Phone: 385-354-8793 Truck: 07 Name: Jan Bruyman | NAME |
| IN CASE OF EMERGENCY CONTACT: David Adkins | IN CASE OF EMERGENCY CONTACT: |
| EMERGENCY PHONE: 575-746-8768 | EMERGENCY PHONE: |
| 18. TRANSPORTER (1): Acknowledgment of receipt of material | 19. TRANSPORTER (2): Acknowledgment of receipt of material |
| PRINTED/TYPED NAME: [illegible] | PRINTED/TYPED NAME: |
| SIGNATURE: [signature] DATE: 02/07/25 | SIGNATURE: DATE: |

**FACILITY DISPOSAL**

| FACILITY NAME: | ADDRESS: | PHONE: |
|---|---|---|
| Gandy – Marley Inc. - Gandy Marley Landfarm | 7210 E 2nd Street | (575) 347-0434 |
| PERMIT NO. 2739 | 20. COMMENTS | |

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

| AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME |
|---|---|---|---|
| | | | |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: ☐ Approved By: ☐

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# CHEVRON - 11"X8.5" FORM PAGE 1

## CHEVRON
## MCBU

**NON-HAZARDOUS WASTE MANIFEST** NO: 1 | 1. PAGE 1 OF 2 | 2. TRAILER NO. 02

**GENERATOR**

| 3. COMPANY NAME | 4. ADDRESS | | | 5. PICK-UP DATE |
|---|---|---|---|---|
| Chevron U.S.A, Inc. | 32.210056, -103.282861 | | | 02/07/25 |
| PHONE NO. 505-690-5408 | CITY Jal | STATE NM | ZIP 88252 | 6. |

| 7. NAME OR DESCRIPTION OF WASTE SHIPPED: | 8. CONTAINERS No. | Type | 9. TOTAL QUANTITY | 10. UNIT WT/Vol. | 11. |
|---|---|---|---|---|---|
| a. Soil - E&P Exempt | 1 | DT | 20 | Y | N/A |
| b. | | | | | N/A |
| c. | | | | | N/A |
| d. | | | | | N/A |

12. COMMENTS OR SPECIAL INSTRUCTIONS: Contract SO 0064 WBS code UWDBU-M4098

13. WASTE PROFILE NO.

14. IN CASE OF EMERGENCY OR SPILL, CONTACT — 24-HOUR EMERGENCY NO.: Chevron OL Contact - Armando Martinez - 505-690-5408

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

| PRINTED TYPED NAME | SIGNATURE | DATE |
|---|---|---|
| Nadine Balmaceda OBO Chevron | Nadine Balmaceda | 02/07/25 |

**TRANSPORTERS**

| 16. TRANSPORTER (1) | 17. TRANSPORTER (2) |
|---|---|
| NAME: Talon LPE Phone: 575-552-0385 Truck: 02 Name: Edwin Munoz | NAME |
| IN CASE OF EMERGENCY CONTACT: David Adkins | IN CASE OF EMERGENCY CONTACT: |
| EMERGENCY PHONE: 575-746-8768 | EMERGENCY PHONE: |
| 18. TRANSPORTER (1): Acknowledgment of receipt of material | 19. TRANSPORTER (2): Acknowledgment of receipt of material |
| PRINTED/TYPED NAME | PRINTED/TYPED NAME |
| SIGNATURE DATE 02/07/25 | SIGNATURE DATE |

**FACILITY DISPOSAL**

| FACILITY NAME: | ADDRESS: | PHONE: |
|---|---|---|
| Gandy – Marley Inc. - Gandy Marley Landfarm | 7210 E 2nd Street | (575) 347-0434 |

| PERMIT NO. | 20. COMMENTS |
|---|---|
| 2739 | |

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

| AUTHORIZED SIGNATURE | CELL NO. | DATE | TIME |
|---|---|---|---|
| | | | |

Version Date: April-12-2016

☐ Approved ☐ Rejected

Date: ☐ Approved By: ☐

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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## CONDITIONS

| Operator: | OGRID: |
|---|---|
| CHEVRON U S A INC<br>6301 Deauville Blvd<br>Midland, TX 79706 | 4323 |
| | Action Number:<br>443473 |
| | Action Type:<br>[C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| joseph.kennedy | This approval is for RECORDS RETENTION ONLY. This Soil Closure Request has already approved by the Incidents Group of the OCD on 4/28/2025, WITH CONDITIONS. Please see Incident ID nAPP2113741693 | 10/22/2025 |