Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

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: Jason Michaelson Title: Operations Lead Central

Signature: Jason Michelson Date: 05/18/2023

email: jmichelson@chevron.com Telephone: 281-660-8564

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: Nelson Velez Date: 10/23/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

Jason Michelson
Operations Lead, Portfolio Operations Central

July 6, 2023

Mr. Nelson Velez
Environmental Specialist
EMNRD - Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: BCR Federal #1
Incident No. nMLB0525840752
API No. 30-015-26891
Remediation Summary and Soil Closure Request Report

Mr. Velez,

Please find enclosed for your files, copies of the following:

- BCR Federal #1 Remediation Summary and Soil Closure Request Report

Arcadis U.S., Inc. (Arcadis) has prepared this Remediation Summary and Soil Closure Request Report on behalf of Chevron U.S.A. Inc., for soil remediation activities at the BCR Federal #1 (Site), located in Eddy County, New Mexico. Please do not hesitate to call Scott Foord with Arcadis at 713-953-4853 or myself at 832-854-5601, should you have any questions.

Respectfully,

Jason Michelson

Jason Michelson

Encl. BCR Federal #1 Remediation Summary and Soil Closure Request Report

C.C. Amy Barnhill, Chevron/MCBU

Jason Michelson
Operations Lead Central
Portfolio Operations - Central
1500 Louisiana Street, Houston, TX 77002
Tel 832 854 5601 Mobile 281 660 8564
jmichelson@chevron.com

ARCADIS

Chevron U.S.A., Inc.

2023 Remediation Summary and Soil Closure Request Report

BCR Federal #1

Incident ID# nMLB0525840752

June 9, 2023

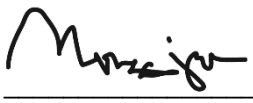
2023 Remediation Summary and Soil Closure Request Report

BCR Federal #1
Incident ID# nMLB0525840752

June 9, 2023

Prepared By:
Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620

Prepared For:
Mid-Continent Business Unit
Chevron North America Exploration and Production
1400 Smith Street, Room 40096
Houston, TX 77002



Morgan Jordan
Project Manager

Scott Foord, PG
Program Manager

2023 Remediation Summary and Soil Closure Request Report
BCR Federal #1
Incident ID# nMLB0525840752

Contents

Tables

Figures

Appendices

2023 Remediation Summary and Soil Closure Request Report
BCR Federal #1
Incident ID# nMLB0525840752

1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this Remediation Summary and Soil Closure Request Report (Report), on behalf of Chevron U.S.A., Inc. (Chevron), for the release site known as the BCR Federal #1 (Site).

2 Project Summary

The Site is approximately 4 miles northwest of Loving, in Unit A, Section 3, Township 23 South, Range 28 East, Eddy County, New Mexico. As of May 17, 2023, the site is not active and has been completely decommissioned. The Site is located on land owned by the United States Department of the Interior and administered by the Bureau of Land Management (BLM); the lease is currently operated by Chevron U.S.A., Inc. A Site Location Map is included as **Figure 1**.

On May 29, 2005, a produced water tank was destroyed by either a direct hit from lightening or a discharge of static electricity releasing 70 barrels (bbls) of produced water. The Initial C-141 Form stated approximately 40 bbls of produced water were recovered. Approximately 2,650 square feet of surface area was impacted by the release within the containment berm at the Site. The tank was removed, and residual fluids were recovered and blended with soil. According to the New Mexico Office of the State Engineers (NMOSE) database, there is a water well approximately 2 miles west of the Site with a depth to groundwater of 31 feet below ground surface (bgs). The Initial C-141 Form for this release was submitted to the New Mexico Oil Conservation Division (NMOCD) on April 5, 2005, and approved by NMOCD on June 14, 2005 with a Conditions of Approval letter attached. Chesapeake submitted a request to NMOCD to defer assessment and remediation activities until the well pad has been decommissioned, but the NMOCD denied the deferral and requested a Delineation Work Plan. The release was assigned incident number nMLB0525840752. No remediation permit number was assigned. The Initial C-141 Form is included as **Appendix A** and the Final C-141 Form is included in **Appendix B.**

3 Pre-Remediation Soil Assessments and Site Characterization

On May 10, 2022, Arcadis collected soil samples from eight locations (SB-1 through SB-8) within close proximity to the former tank battery. The sample locations were determined based on information obtained by Arcadis from the Initial C-141 Form associated with incident number nMLB0525840752. The soil samples were collected with a hand auger at depths ranging from the surface to approximately 0.5 feet bgs. Hand auger refusal was encountered within all boring locations at shallow depths. Neither lateral nor vertical delineation for total petroleum hydrocarbons (TPH) or chloride within the release area were achieved during the initial assessment activities.

On February 13, 2023, Arcadis collected soil samples with a backhoe from nine locations (SB-9 through SB-17) within the release area based on evaluation of analytical data from the prior soil assessment. Soil samples were collected at 0-1 and 1-2 feet bgs depth intervals. A resilient cap rock was encountered at approximately 1 to 2 feet bgs across the release area. Excavation activities with the backhoe continued utilizing a traditional backhoe bucket but were terminated at a depth of approximately 2 feet bgs due to cap rock refusal. Neither lateral nor vertical delineation for TPH or chloride within the release area were achieved during the subsequent assessment activities.

2023 Remediation Summary and Soil Closure Request Report
BCR Federal #1
Incident ID# nMLB0525840752

On February 23, 2023, Arcadis collected additional delineation soil samples from six locations (SB-6 and SB-18 through SB-22) within the release area with a backhoe utilizing a rock breaker attachment. Soil samples were collected at 0.5, 1, and 2 feet bgs depth intervals from locations SB-18 through SB-22, and at one foot intervals down to a total depth of approximately 4 feet bgs at the former location SB-6 in an attempt to achieve vertical delineation at that location.

Former location SB-6 exhibited the highest chloride concentrations from the previous assessment attempts and was therefore chosen as the location to attempt to achieve vertical delineation for benzene, toluene, ethylbenzene and xylenes (BTEX); TPH; and chloride constituents within the release area. Assessment activities were terminated at the SB-6 location following approximately 4 hours of attempted excavation activities utilizing the rock breaker attachment with limited vertical progress due to the resilient cap rock layer. The rock breaker attachment was also noted as developing a small hydraulic leak during excavation activities due the resilient cap rock layer.

Minor TPH exceedances reported from soil samples collected from the SB-6 location at depths of 3 and 4 feet bgs into the cap rock are believed associated with the rock breaker hydraulic leak.

Analytical data reported from soil samples collected throughout the release area for BTEX, TPH, and chloride support evidence that the resilient cap rock layer is a confining unit that is protective of groundwater at the Site.

The soil samples were collected in four-ounce jars provided by Eurofins Xenco Analytical Laboratory (Xenco) located in Midland, Texas, then placed on ice and shipped to Xenco following soil sample collection. All soil samples were analyzed for BTEX by United States Environmental Protection Agency (USEPA) Method 8021, TPH by Method 8015M, and chloride by USEPA Method 300.

Analytical and field screening results from soil samples analyzed during the pre-remediation assessment activities were evaluated prior to remediation activities to determine the horizontal and vertical extents of soil affected by the spill. Soil assessment analytical results are shown in **Appendix C**.

In a virtual meeting held between the NMOCD and Arcadis on March 20, 2023, the NMOCD requested that a Work Plan be submitted requesting variance approval in accordance with New Mexico Administrative Code (NMAC) 19.15.29.14. The Work Plan Addendum was prepared and submitted to NMOCD requesting approval to excavate to the cap rock only. Continued excavation activities below the cap rock were not practicable based on the Sites geologic conditions. Variance approval was granted with the stipulation that soil amendments (gypsum) would be applied on top of the cap rock layer at the base of the excavation, and that the site would be horizontally defined to the New Mexico Administrative Code's (NMAC) part 19.15.29.12 most stringent standards for sidewall composite confirmation samples.

NMOCD verbally agreed to allow ongoing remediation activities at the Site to continue, and approved the variance request during the virtual meeting for the following:

- Due to the resilient cap rock layer encountered at shallow depths across the release area, Arcadis requested approval of a variance to only excavate impacted soil affected above the NMOCD Reclamation Standards present within the release area to the maximum extent practicable (to the surface of the cap rock).
- Following excavation of the impacted soil to the maximum extent practicable above the cap rock, a layer of gypsum will be placed above the cap rock to prevent upward migration of chloride remaining in-situ and to promote revegetation.
- Arcadis requested a variance to collect confirmation sidewall and base samples at 400-500 square feet composite sample intervals within the proposed excavation areas.

- Following completion of excavation and confirmation soil sample collection activities, excavated areas will be backfilled with locally sourced, non-impacted "like" material and the area will be reseeded during the first favorable growing season following closure of the Site.

This request was approved via email by NMOCD on March 22, 2023, and was included in the Soil Remediation Work Plan and Variance Request submitted subsequently to NMOCD through the online Portal.

4 Closure Criteria for Soils Impacted by a Release

The soil analytical results were compared to the revised New Mexico Administration Code (NMAC) screening levels for a release site with depth to groundwater less than 50 feet bgs (revised Rule 19.15.29).

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
BTEX	50 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
Chloride	600 mg/kg

5 Remediation Activities Summary

5.1 Soil Removal

Soil remediation activities were performed by Arcadis and Chevron Facilities group from April 10 through 14, 2023. PID readings, chloride field screening utilizing Hach® test strip results, and analytical results from the pre-remediation assessment activities were evaluated prior to and during remediation activities to determine the horizontal and vertical extent to the surface of the resilient cap rock layer affected by the spill.

The lager excavated area covered an approximate 4,930 square foot area surrounding the former tank battery to the south and smaller excavated area covered an approximate 460 square foot area surrounding the former tank battery to the north. Excavation activities were conducted to a maximum depth of approximately 2 feet bgs to the surface of the resilient cap rock layer within the release area. Approximately 300 cubic yards of impacted soil was excavated, stockpiled on-site adjacent to the release area on 20 mil plastic sheeting, and covered with 20 mil plastic sheeting during remediation activities prior to disposal activities. The limits of the excavations are presented on **Figure 2**.

The stockpiled soil was hauled off site and disposed of at the Lea Land Landfill facility located at Mile Marker 64, US Highway 62/180 East, Carlsbad, New Mexico as Class 2 non-hazardous between April 18 through April 21, 2023. Copies of disposal manifests can be provided upon request. Photographic documentation of the excavation activities is attached in **Appendix D**.

5.2 Excavation Confirmation Sampling Activities

Arcadis personnel conducted excavation confirmation soil sampling activities on April 11 through 14, 2023 for laboratory analysis. These activities included collection of a total of 16 composite base samples (B-1 through B-16) and five composite sidewall samples (SW-1 through SW-5). All composite samples were collected at intervals to maintain an approximate 400-500 square foot sample spacing or less. One composite sidewall sample (SW-3) was determined to have an exceedance at concentrations greater than the applicable NMAC standards specified within 19.15.29 for chloride, and additional soil was excavated from that area and one additional composite sidewall sample (SW-3B) was collected for laboratory analyses.

The soil confirmation soil samples were collected in four-ounce jars provided by Xenco located in Midland, Texas, then placed on ice and shipped to Xenco to be analyzed for BTEX by USEPA Method 8021, TPH by USEPA Method 8015M for gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO), and chloride by USEPA Method 300. Confirmation soil analytical results are shown in **Table 1**. Base composite confirmation sample locations are depicted on **Figure 2** and excavation sidewall composite confirmation sample locations are depicted on **Figure 3**. Laboratory analytical reports are included in **Appendix E**.

5.3 BTEX

Benzene concentrations were reported below the NMAC standard of 10 mg/kg at all composite confirmation soil sample locations. BTEX concentrations were reported below the NMAC standard of 50 milligrams per kilogram (mg/kg) at all composite confirmation soil sample locations.

5.4 TPH

Total TPH concentrations were reported below the NMAC screening standard of 100 mg/kg at all composite confirmation soil sample locations following remediation activities.

5.5 Chloride

All composite confirmation soil samples collected within the excavated area were below the NMAC reclamation limit of 600 mg/kg for sidewalls following remediation activities. Nine base composite confirmation soil samples (B-4 through B-6, B-10 through B-14, and B-16) collected within the excavated area were above the NMAC reclamation limit of 600 mg/kg at the surface of the confining caprock layer at concentrations ranging from 632 mg/kg (B-10) and 957 mg/kg (B-5).

6 Restoration, Reclamation, and Re-Vegetation Plan

Upon receiving laboratory analytical results from the excavation confirmation soil samples confirming impacted soil over the applicable restoration closure limits to the maximum extent practicable to the cap rock, a layer of gypsum (8 cubic yards) was spread on top of the cap rock layer over the entirety of the excavated areas to prevent upward migration of chloride remaining in-situ and to promote revegetation. Following gypsum application over both excavation areas, the excavated areas were backfilled with locally sourced, non-impacted "like" material. The affected area was contoured and compacted to achieve erosion control, stability, and preservation

of surface water flow to the extent practicable. Photographic documentation of gypsum application and backfilling activities are attached in the **Appendix D**.

7 Summary

Analytical results associated with remediation activities conducted in 2023 indicate that the horizontal and vertical extent of BTEX, TPH, and chloride impact in soil above NMAC Closure Criteria for a site with depth to groundwater less than 50 feet bgs have been delineated both horizontally and vertically to the surface of the confining cap rock layer, and impacted soil above the applicable NMAC Closure Criteria has been excavated from the release area down to the surface of the cap rock layer.

8 Soil Closure Request

Remediation activities were conducted in accordance with the NMOCD regulatory guidelines stipulated in NMAC 19.15.29. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. In accordance with the approved Work Plan and Variance Request, gypsum was applied to the cap rock layer with in-situ chloride concentrations confirmed above the NMOCD Reclamation Standard within the bases of the excavated areas. Laboratory analytical results from confirmation soil samples confirm concentrations of BTEX and TPH are below the NMOCD Closure Criteria in each of the submitted soil samples collected from the remediated areas (sidewalls and surface of the cap rock layer), and that chloride concentrations are below the NMOCD Closure Criteria for all sidewalls of the excavated areas.

Based on laboratory analytical results and field activities conducted to date, no additional soil assessment or remediation activities are recommended at this time for the Site. Arcadis requests closure be granted to the BCR Federal #1 site for Incident ID number nMLB0525840752. The Final C-141 Form is included as **Appendix B.**

Tables

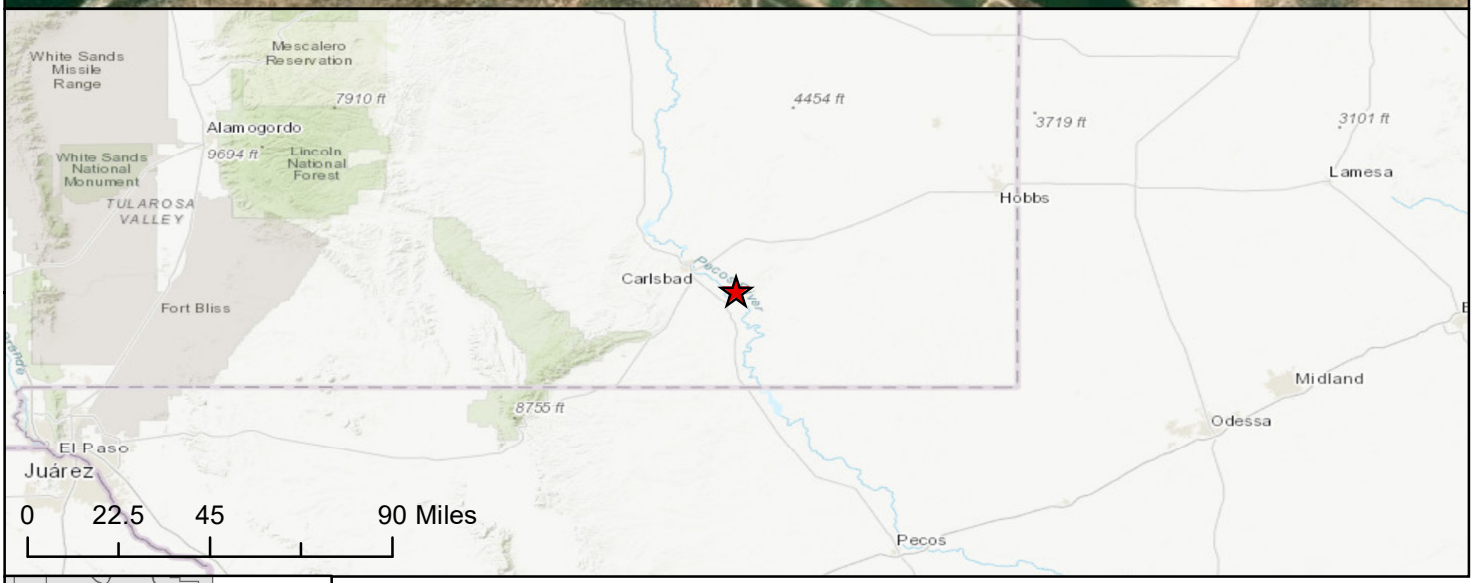
Table 1
2023 Confirmation Soil Analytical Results
BCR Federal #1
Incident # nMLB0525840752
Eddy County, New Mexico

Sample ID	Depth (Feet)	Date Collected	Soil Status	Benzene mg/kg	Total BTEX mg/kg	Total TPH mg/kg	Chloride mg/kg
Restoration Requirements				**10**	**50**	**100**	**600**
SW-1	1	4/11/2023	In-Situ	< 0.000388 F2 F1	< 0.000388 F2 F1	< 15.0	398 F1
SW-2	1	4/11/2023	In-Situ	< 0.000381	< 0.000381	41.6 J	263
SW-3	1	4/11/2023	Removed	< 0.000383	< 0.000383	< 14.9	***1,640***
SW-3b	1	4/14/2023	In-Situ	NA	NA	NA	218 B
SW-4	1	4/11/2023	In-Situ	< 0.000383	< 0.000383	16.3 J	151
SW-5	1	4/11/2023	In-Situ	< 0.000387	< 0.000387	18.5 J	168
B-1	2	4/13/2023	In-Situ	< 0.000387	< 0.000387	53.8	92.1
B-2	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	39.3 J	214
B-3	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	41.8 J	492
B-4	2	4/13/2023	In-Situ	< 0.000384	< 0.000384	58.1	***919***
B-5	2	4/13/2023	In-Situ	< 0.000387	< 0.000387	85.8	***957***
B-6	2	4/13/2023	In-Situ	< 0.000386	< 0.000386	17.2 J	***705***
B-7	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	94.3	197
B-8	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	62.1	509
B-9	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	15.6 J	473
B-10	2	4/13/2023	In-Situ	< 0.000387	< 0.000387	51.4	***632***
B-11	2	4/13/2023	In-Situ	< 0.000385	< 0.000385	80.4	***655 F1***
B-12	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	29.2 J	***700***
B-13	2	4/13/2023	In-Situ	< 0.000383	< 0.000383	16.9 J	***642***
B-14	2	4/13/2023	In-Situ	< 0.000384	< 0.000384	45.9 J	***681***
B-15	2	4/13/2023	In-Situ	< 0.000387	< 0.000387	40.8 J	456
B-16	2	4/13/2023	In-Situ	< 0.000389	< 0.000389	44.1 J	***945***

Legend:
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
B: Compound was found in the blank and the sample
Analytes exceeding New Mexico Adminstration Code Standards are indicated in **bold** (Variance approved at rock)
'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)
NA : Not Analyzed
mg/kg: Milligram per Kilogram
' : Indicates one foot
" : Indicated inches

Notes:
1. Chloride analyzed by EPA Method 300
2. TPH analyzed by EPA Method 8015 M
3. BTEX analyzed by EPA Method 8260B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures



N

NOTES:
1. Datum: D_WGS_1984
2. Site Location: 32.340490, -104.067156

Chevron Environmental Management Company
BCR Fed #1
Eddy County, New Mexico

SITE LOCATION MAP

ARCADIS

FIGURE
1

P:\T:_ENV\Chevron\Chevron_BCR Fed #1\MXD\Figure 1_Site Location Map.mxd: 6/9/2022: 3:10:56 PM

Legend

- Composite Base Soil Samples
- DCP Water Line
- Excavation (2 feet)

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.340490, -104.067156

0 30 60 Feet

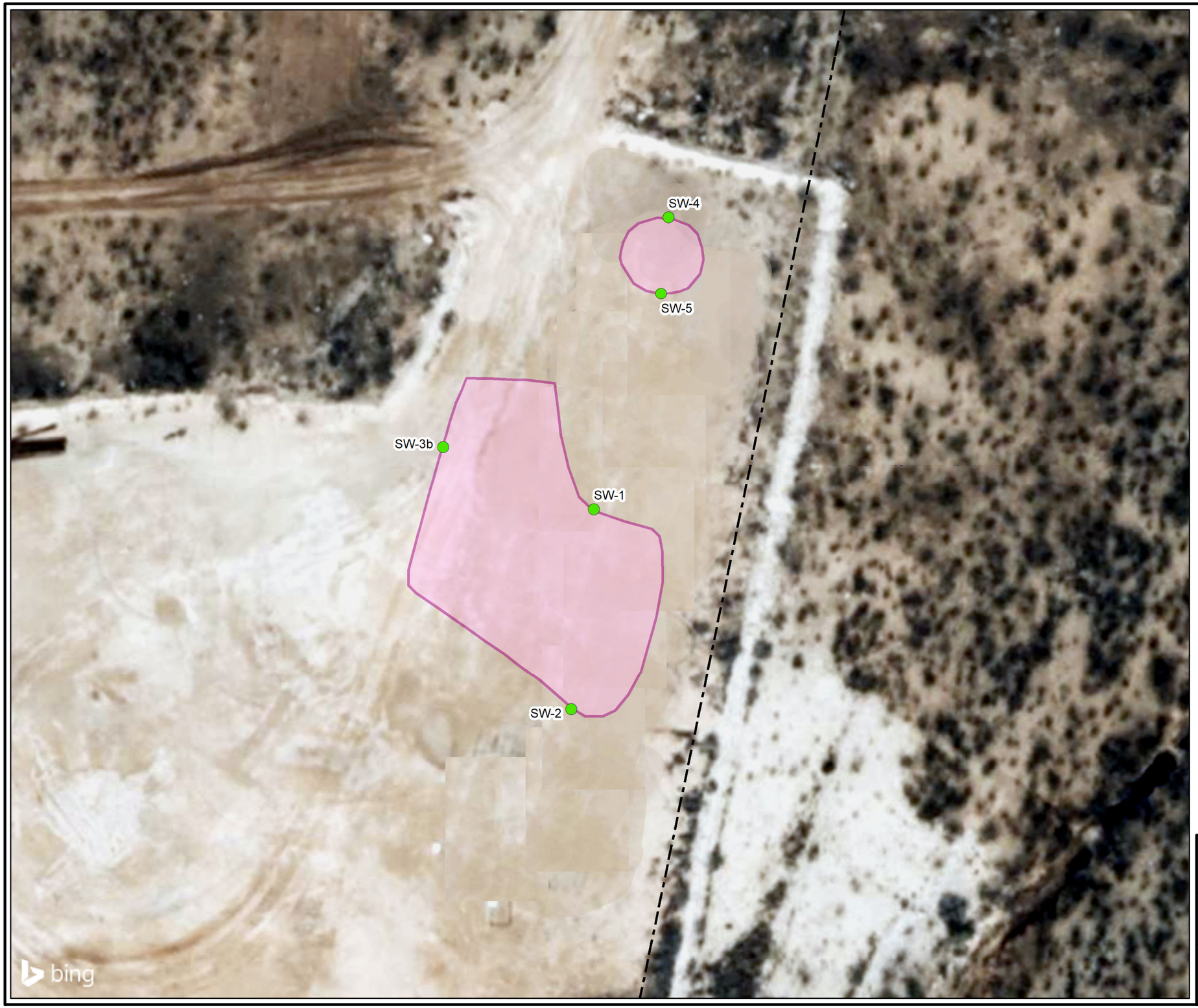
GRAPHIC SCALE

Chevron Environmental Management Company
BCR Federal #1
Eddy County, New Mexico

Excavation Base Soil Sample Locations Map

ARCADIS | FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #) T:_EHSS\Projects_ArcMap\Land\Chevron\BCR_Fed1\Fig2_SoilSampleResults_base.mxd 5/18/2023 2:55:19 PM



Legend

- Composite Sidewall Soil Samples
- DCP Water Line
- Excavation (2 feet)

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.340490, -104.067156

0 30 60 Feet

GRAPHIC SCALE

Chevron Environmental Management Company
BCR Federal #1
Eddy County, New Mexico

Excavation Sidewall Soil Sample Locations Map

ARCADIS

FIGURE 3

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry ; Client (Project #) T:_EHSSIProjects_ArcMap\Land\Chevron\BCR_Fed1\Fig1_SoilSampleResults_sidewall.mxd 5/18/2023 2:40:13 PM

Appendix A

Initial C-141 Form Incident # nMLB0525840752

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

Form C-14
Revised October 10, 200

Submit 2 Copies to appropriat
District Office in accordanc
with Rule 116 on bacl
side of forn

30-015-26891
nMLB052584075Z

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Repo

Name of Company: Chesapeake Energy	**Contact:** Bradley Blevins
Address: 5014 Carlsbad Highway	**Telephone No.:** (505) 391-1462 ext. 24
Facility Name: BCR Federal Well #1 Battery	**Facility Type:** Tank Battery

Surface Owner: United States Federal Government	**Mineral Owner:** United States Federal Government	**Lease No.:**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	3	23 S	28 E					Eddy

Latitude: N 32º 20' 25.3 " **Longitude:** W 104° 04' 2.37"

NATURE OF RELEASE

Type of Release: Produced Water	**Volume of Release:** 70 barrels	**Volume Recovered:** 40 barrels
Source of Release: Tank	**Date and Hour of Occurrence:** 29 May 2005, time unknown	**Date and Hour of Discovery:** 29 May 2005 prior to 12:00 p.m.
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	**If YES, To Whom?** Mike Bratcher, NMOCD Artesia office was notified on 1 June 2005	
By Whom? Bradley Blevins	**Date and Hour:** 1 June 2005	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse:** Not Applicable	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.* Produce water tank was destroyed, either by a direct hit by lightening or a discharge of static electricity. The tank has been removed, the site shut in and residual fluids recovered and/or blended with soil.

Describe Area Affected and Cleanup Action Taken.* Approximately 2,650 square feet of surface area was impacted by the release. all of which is within a containment berm at the site. The tank has been removed and residual fluids recovered and/or blended with soil. A Delineation and/or Closure Plan will be developed and submitted to the NMOCD.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Bradley Blevins	**OIL CONSERVATION DIVISION**	
Printed Name: Bradley Blevins	**Approved by District Supervisor:** TIM GU by Mike Bratcher	
Title: Field Technician	**Approval Date:** 9/14/05	**Expiration Date:** N/A
E-mail Address: bblevins@chkenrgy.com	**Conditions of Approval:**	**Attached** ☒
Date: 06-14-05 **Phone:** (505) 391-1462 ext. 24		

*** Attach Additional Sheets If Necessary**

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Chesapeake Energy
5014 Carlsbad Highway
Hobbs, NM 88240

September 14, 2005

Reference: BCR Federal 001 Tank Battery A-3-23s-28e 30-015-26891 Operator Reference # 160010

Operator,

The NMOCD District 2 Office (OCD) is in receipt of a Closure Proposal prepared and submitted by your agent, Environmental Plus Inc. for a produced fluids release that occurred at the above referenced well site on or about May 29, 2005. The document submitted proposes to remediate site at time of tank battery decommission.
According to available ground water information for this area, the well site is situated in a possible water sensitive area. The proposal to leave contaminates in place for any length of time is denied.
An inspection of the site by OCD personnel on 9/13/05 shows that area appears to have had recent releases, possibly after initial excavation at site. (Photos enclosed)

At this time, the OCD is requesting the following:

1. Equipment be repaired or replaced to minimize the possibility of continued and future releases at this site.
2. Site is to be delineated for vertical and horizontal extent of contamination and type and levels of contaminants present.
3. A remediation work plan is to be formulated based on OCD guidelines and presented to the OCD for review.
4. Please have work plan submitted to OCD no later than September 30, 2005

If I can be of assistance in this matter, my contact information is listed below.

Thank you,

Mike Bratcher
NMOCD District 2
1301 W Grand Ave
Artesia, NM 88210
(505) 748-1283 Ext 108
(505) 626-0857
Mike.Bratcher@state.nm.us

Appendix B

Final C-141 Form Incident # nMLB0525840752

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	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	< 50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology? Medium	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs- **Not Applicable**
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

State of New Mexico
Oil Conservation Division

Incident ID	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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: ____Jason Michelson Title: _____ Operations Lead Central

Signature:_ Jason Michelson Date: __05/18/2023_____

email: ___ jmichelson@chevron.com_____ Telephone: ___281-660-8564_____

OCD Only

Received by: _____ Date: _____

Appendix C

Work Plan and Variance Request

Jason Michelson
Operations Lead, Portfolio Operations Central

March 20, 2023

Mr. Nelson Velez
Environmental Specialist
EMNRD - Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: BCR Federal #1
Incident No. nMLB0525840752
API No. 30-015-26891
Soil Remediation Work Plan and Variance Request

Mr. Velez,

Please find enclosed for your files, copies of the following:

- BCR Federal #1 Soil Remediation Work Plan and Variance Request

Arcadis U.S., Inc. (Arcadis) has prepared this Soil Remediation Work Plan and Variance Request on behalf of Chevron U.S.A. Inc., for soil remediation activities at the BCR Federal #1 (Site), located in Eddy County, New Mexico. Please do not hesitate to call Scott Foord with Arcadis at 713-953-4853 or myself at 832-854-5601, should you have any questions.

Respectfully,

Jason Michelson

Encl. BCR Federal #1 Soil Remediation Work Plan and Variance Request

C.C. Amy Barnhill, Chevron/MCBU

Jason Michelson
Operations Lead Central
Portfolio Operations - Central
1500 Louisiana Street, Houston, TX 77002
Tel 832 854 5601 Mobile 281 660 8564
jmichelson@chevron.com

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	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

Release Notification

Responsible Party

Responsible Party: Chevron USA Inc.	OGRID: 4323
Contact Name: Jason Michelson	Contact Telephone
Contact email: jmichelson@chevron.com	Incident # nMLB0525840752
Contact mailing address:	

Location of Release Source

Latitude 32.340527 Longitude -104.067120

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: BCR Federal Well #1 Battery	Site Type: Tank Battery
Date Release Discovered: May 29, 2005	API# 30-015-26891

Unit Letter	Section	Township	Range	County
A	3	23S	2E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

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) 70	Volume Recovered (bbls) 40
	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)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Produced water tank was destroyed, either by a direct hit by lightening or a discharge of static electricity.

Incident ID	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **Release was greater than 25 barrels.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Initial C-141 Form was submitted on June 14, 2005.**	

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:

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: ___Jason Michelson_____ Title: __Operation Lead Central_____

Signature: Jason Michelson Date: _5/19/2023_____

email: ___ jmichelson@chevron.com _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	nMLB0525840752
District RP	N/A
Facility ID	N/A
Application ID	N/A

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: ___Jason Michelson_____ Title: __Operation Lead Central_____

Signature: Jason Michelson Date: _5/19/2023_____

email: ___ jmichelson@chevron.com _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

ARCADIS

Mr. Nelson Velez
Environmental Specialist
EMNRD - Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Arcadis U.S., Inc.
10205 Westheimer Road
Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620
www.arcadis.com

TX Engineering License # F-533
TX Geoscientist License # 50158

Date: March 20, 2023
Subject: Soil Remediation Work Plan and Variance Request
BCR Federal #1
Incident No. nMLB0525840752
Eddy County, New Mexico

Dear Mr. Velez,

Arcadis U.S., Inc. (Arcadis) has prepared this Soil Remediation Work Plan and Variance Request on behalf of Chevron U.S.A. Inc., for soil remediation activities at the BCR Federal #1 (Site), located in Eddy County, New Mexico.

Project Summary

The Site is approximately 4 miles northwest of Loving, in Unit A, Section 3, Township 23 South, Range 28 East, Eddy County, New Mexico. A Site Locations Map is included in **Figure 1**.

On May 29, 2005, a produced water tank was destroyed by either a direct hit from lightening or a discharge of static electricity releasing 70 barrels (bbls) of produced water. The Initial C-141 Form stated approximately 40 bbls of produced water were recovered. Approximately 2,650 square feet of surface area was impacted by the release within the containment berm at the Site. The tank was removed, and residual fluids were recovered and blended with soil. According to the New Mexico Office of the State Engineers (NMOSE) database, there is a water well approximately 2 miles west of the Site with a depth to groundwater of 31 feet below ground surface (bgs). The Initial C-141 Form for this release was submitted to the New Mexico Oil Conservation Division (NMOCD) on April 5, 2005, and approved by NMOCD on June 14, 2005 with a Conditions of Approval letter attached. Chesapeake submitted a request to NMOCD to defer assessment and remediation activities until the well pad has been decommissioned, but the NMOCD denied the deferral and requested a Delineation Work Plan. The release was assigned incident number nMLB0525840752. No remediation permit number was assigned. The Initial C-141 Form for this release and the Conditionals of Approval letter are included in **Attachment 1**.

Mr. Nelson Velez
EMNRD
March 20, 2023

Regulatory Criteria

The soil analytical results were compared to the revised New Mexico Administration Code (NMAC) screening levels for a release site with depth to groundwater less than 50 feet bgs (revised Rule 19.15.29).

Constituent	Limit
Benzene	10 mg/Kg
Total BTEX	50 mg/kg
TPH (GRO+DRO+MRO)	100 mg/Kg
Chloride	600 mg/Kg

Soil Assessment Activities

On May 10, 2022, Arcadis collected soil samples from eight locations (SB-1 through SB-8) within close proximity to the former tank battery. The sample locations were determined based on information obtained by Arcadis from the Initial C-141 Form associated with incident number nMLB0525840752. The soil samples were collected with a hand auger at depths ranging from the surface to approximately 0.5 feet bgs. Hand auger refusal was encountered within all boring locations at shallow depths. Neither lateral nor vertical delineation for total petroleum hydrocarbons (TPH) or chloride within the release area were achieved during the initial assessment activities.

On February 13, 2023, Arcadis collected soil samples with a backhoe from nine locations (SB-9 through SB-17) within the release area based on evaluation of analytical data from the prior soil assessment. Soil samples were collected at 0-1 and 1-2 feet bgs depth intervals. A resilient cap rock was encountered at approximately 1-foot bgs across the release area. Excavation activities with the backhoe continued utilizing a traditional backhoe bucket but were terminated at a depth of approximately 2 feet bgs due to cap rock refusal. Neither lateral nor vertical delineation for TPH or chloride within the release area were achieved during the subsequent assessment activities.

On February 23, 2023, Arcadis collected additional delineation soil samples from six locations (SB-6, SB-18 through SB-22) within the release area with a backhoe utilizing a rock breaker attachment. Soil samples were collected at 0.5, 1, and 2 feet bgs depth intervals from locations SB-18 through SB-22, and at one foot intervals down to a total depth of approximately 4 feet bgs at the former location SB-6 in an attempt to achieve vertical delineation at that location.

Former location SB-6 exhibited the highest chloride concentrations from the previous assessment attempts and was therefore chosen as the location to attempt to achieve vertical delineation for chloride, TPH and BTEX constituents within the release area. Assessment activities were terminated at the SB-6 location following approximately 4 hours of attempted excavation activities utilizing the rock breaker attachment with limited vertical progress due to the resilient cap rock layer. The rock breaker attachment was also noted as developing a small hydraulic leak during excavation activities.

Mr. Nelson Velez
EMNRD
March 20, 2023

Minor TPH exceedances reported from soil samples collected from the SB-6 location at depths of 3 and 4 feet bgs are believed associated with the rock breaker hydraulic leak.

Analytical data reported from soil samples collected throughout the release area for chloride, TPH and BTEX support evidence that the resilient cap rock layer is a confining unit that is protective of groundwater at the Site.

A summary of the soil sample analytical results is presented in **Table 1**. A Soil Sample Locations Map which includes all soil sample locations installed to date, future proposed step out soil sample locations suggested by NMOCD, and the estimated impacted area is presented in **Figure 2**.

Variance Request

- Due to the resilient cap rock layer encountered at shallow depths across the release area, Arcadis is requesting a variance to only excavate impacted soil affected above the NMOCD Reclamation Standard present within the release area to the maximum extent practicable (to the surface of the cap rock).
- Following excavation of the impacted soil to the maximum extent practicable above the cap rock, a layer of gypsum will be placed above the cap rock to prevent upward migration of chloride remaining in-situ and to promote revegetation.
- Additionally, Arcadis is requesting a variance to collect confirmation sidewall and base samples at 400-500 square feet composite sample intervals within the proposed excavation area.

  The Proposed Excavation and Confirmation Sample Location Map is presented in **Figure 3**.

Reclamation and Re-Vegetation Plan

Following completion of excavation and confirmation soil sample collection activities, excavated areas will be backfilled with locally sourced, non-impacted “like” material and the area will be reseeded during the first favorable growing season following closure of the Site.

Conclusion

Upon completion of the remediation and reclamation activities, a remediation summary and closure request will be submitted to the NMOCD, containing a detailed summary of the field activities and laboratory analytical results.

Mr. Nelson Velez
EMNRD
March 20, 2023

If you have any questions or comments with regards to this work plan and variance request, please do not hesitate to contact Scott Foord at 713.953.4853 or by e-mail at William.foord@arcadis.com.

Sincerely,

Arcadis U.S., Inc.

Scott Foord, PG
Program Manager

Enclosures:

Table 1. Summary of Soil sample Analytical Results
Figure 1. Site Locations Map
Figure 2. Soil Sample Locations Map
Figure 3. Proposed Excavation and Confirmation Sample Location Map
Attachment 1. Initial C-141 Form

Table

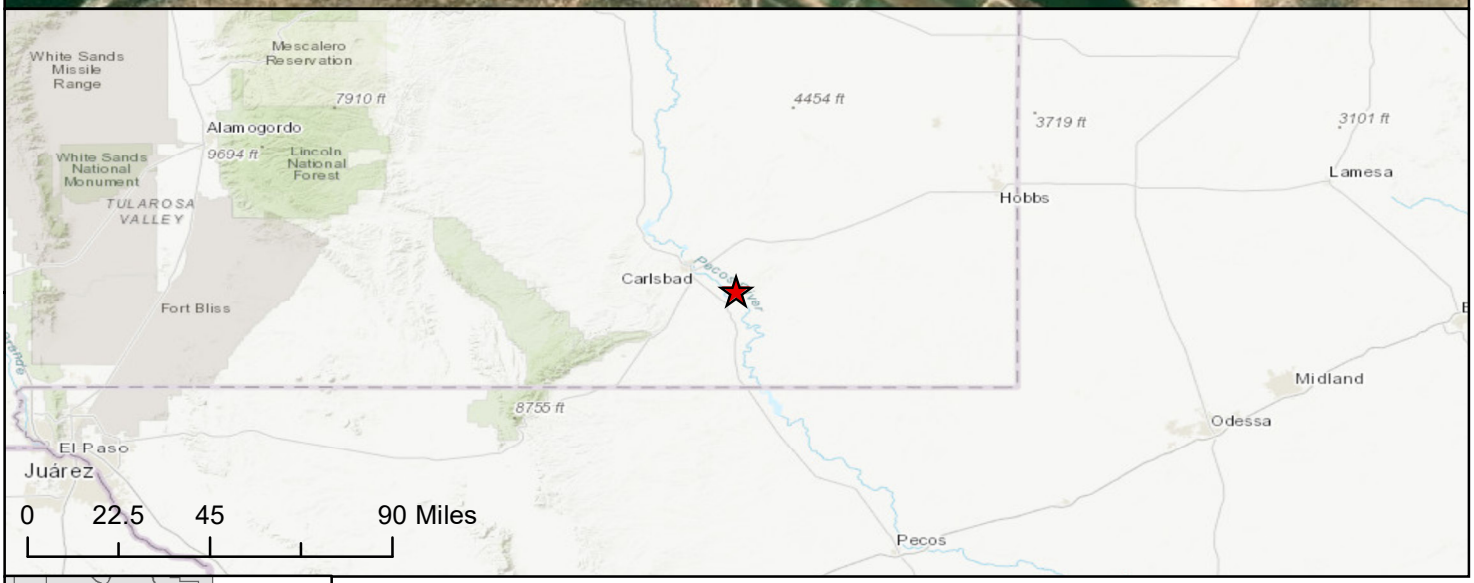
Table 1
Soil Analytical Results
Chevron Environmental Management Company
BCR Federal #1
Incident No. NMLB0525840752
Eddy County, New Mexico

Sample	Date	Depth (feet)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
Remediation Levels			**10**	**50**	***100***	***600***
SB-1	5/10/2022	0-0.5	0.000427	0.00132	4.89 BJ	***672***
SB-2	5/10/2022	0-0.5	0.00135 BJ	0.003801	7.9	38.6
SB-3	5/10/2022	0-0.5	0.00213	0.0454	1.96	15.7
SB-4	5/10/2022	0-0.5	0.00133	0.0559	9.18	258
SB-5	5/10/2022	0-0.5	0.00027	0.00126	<0.0262	***1,630***
	2/13/2023	1-2	--	--	<49.9	480
SB-6	5/10/2022	0-0.5	0.00022	0.00121	0.628 BJ	***894***
	2/13/2023	1-2	--	--	57.9	***2,400***
	2/23/2023	3	--	--	***102***	452
	2/23/2023	4	--	--	***101***	332
SB-7	5/10/2022	0-0.5	0.00071	.00313	***146.5***	159
SB-8	5/10/2022	0-0.5	0.00072	0.00323	1.1	15.6
SB-9	2/13/2023	0-1	<0.00199	<0.00398	<50.0	22.2
		1-2	--	--	<49.9	15.2
SB-10	2/13/2023	0-1	--	--	82.8	***784***
		1-2	--	--	91.1	***1,340***
SB-11	2/13/2023	0-1	--	--	78.5	***853***
		1-2	--	--	80.1	449
SB-12	2/13/2023	0-1	--	--	57.9	***1,670***
		1-2	--	--	60.8	281
SB-13	2/13/2023	0-1	--	--	<49.9	***1,870***
		1-2	--	--	<49.9	***1,820***
SB-14	2/13/2023	0-1	<0.00200	<0.00401	<50.0	61.8
		1-2	<0.00199	<0.00398	<49.8	16.8
SB-15	2/13/2023	0-1	--	--	***266***	88.4
		1-2	--	--	59.9	***1,560***
SB-16	2/23/2023	0.5	--	--	69.4	281
		1	--	--	68	273
		2.5	--	--	***119***	572
SB-17	2/23/2023	0.5	--	--	62.7	171
		1	--	--	52.8	128
		2.5	--	--	66.6	125
SB-18	2/23/2023	0.5	--	--	56.5	***622***
		1	--	--	56.1	545
		2.5	--	--	62.2	***821***
SB-19	2/23/2023	0.5	--	--	78.6	67.3
		1	--	--	75.2	50.5
		2.5	--	--	73	61.9
SB-20	2/23/2023	0.5	--	--	50	165
		1	--	--	78.5	505
		2.5	--	--	64.7	582
SB-21	2/23/2023	0.5	--	--	29.3 J	210
		1	--	--	45.6 J	217
		2.5	--	--	59.4	194
SB-22	2/23/2023	0.5	--	--	39.7 J	21.6
		1	--	--	42 J	12
		2.5	--	--	40.2 J	36.6

Notes:
BOLD = Analytes exceeding NMAC standards
'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)
J = The identification of the analyte is acceptable; the reported value is an estimate.
B = The same analyte is found in the associated blank.
mg/kg: Milligram per Kilogram
BTEX : Benzene, Toluene, Ethylbenzene, and Total Xylenes
NMAC : New Mexico Administration Code
Total TPH: GRO+DRO+MRO
*Revised screening limit and restoration criteria within the first 4 feet below ground surface per Rule 19.15.29 effective August 14, 2

Notes:
1. Chloride analyzed by United States Environmental Protection Agency (USEPA) Method 300.0
2. TPH analyzed by USEPA Method 8015M
3. BTEX analyzed by USEPA Method 8015/8021
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures



N

NOTES:
1. Datum: D_WGS_1984
2. Site Location: 32.340490, -104.067156

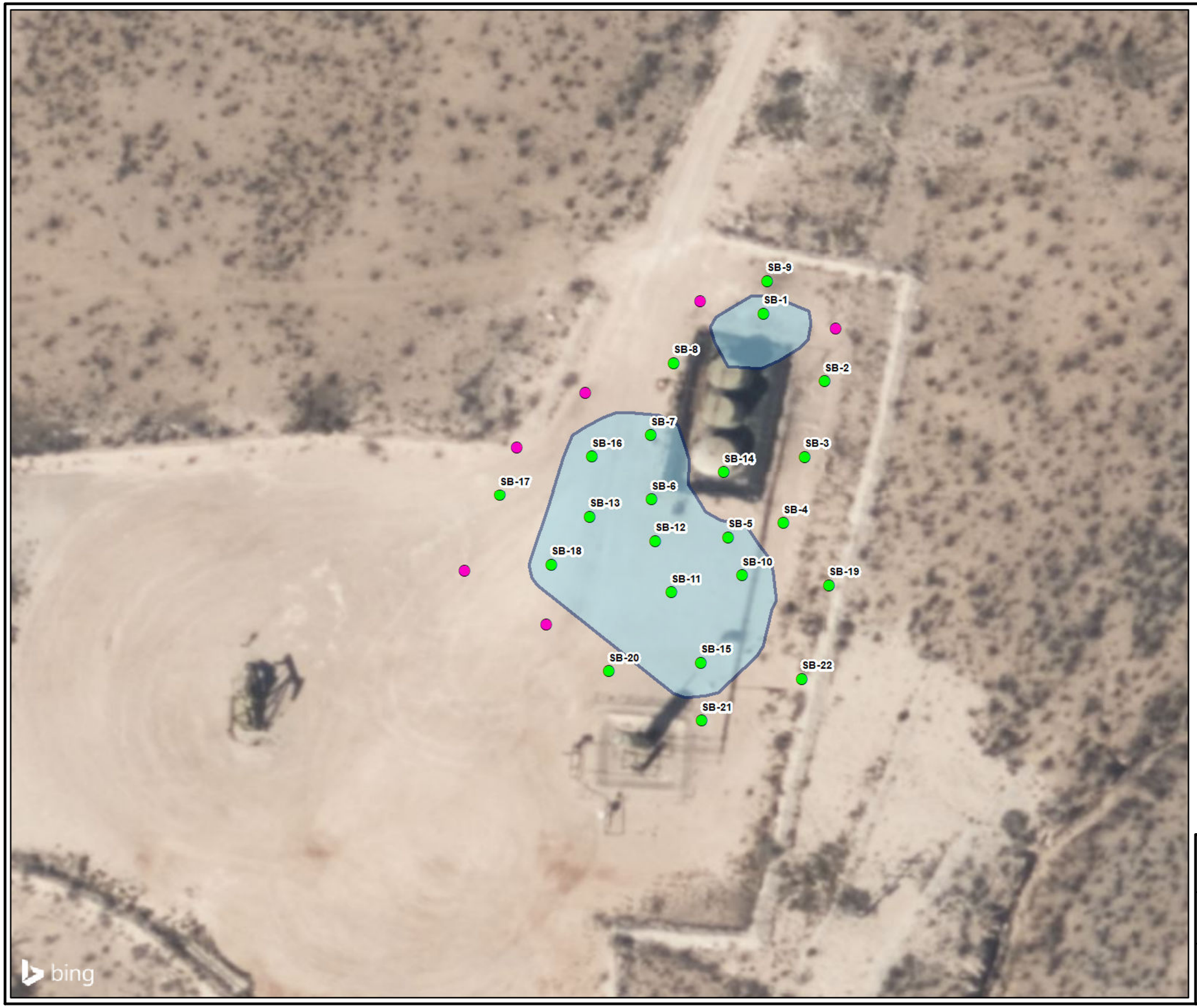
Chevron Environmental Management Company
BCR Fed #1
Eddy County, New Mexico

SITE LOCATION MAP

ARCADIS

FIGURE
1

P:\T:_ENV\Chevron\Chevron_BCR Fed #1\MXD\Figure 1_Site Location Map.mxd: 6/9/2022: 3:10:56 PM



Legend

- Current Soil Sample Locations to Date
- Proposed Soil Sample Locations
- Impacted Area

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.340490, -104.067156

0 40 80 Feet

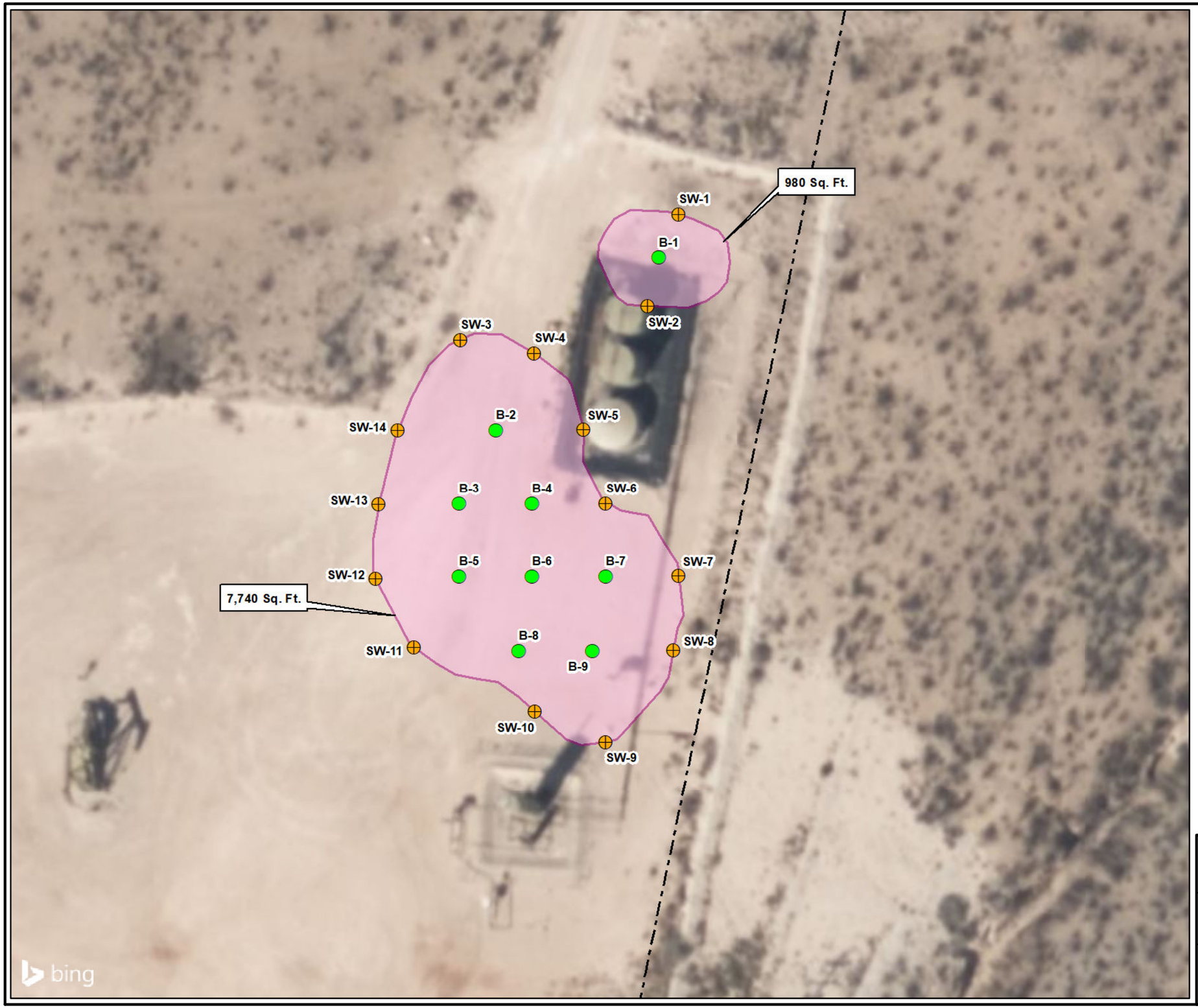
GRAPHIC SCALE

Chevron Environmental Management Company
BCR Fed #1
Eddy County, New Mexico

Soil Sample Location Map

ARCADIS | FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry ; Client (Project #)
T:_EHS\Projects_ArcMap\Land\Chevron\BCR_Fed1\Fig2_SSLM.mxd 3/14/2023 3:44:42 PM



Legend

- Proposed Confirmation Sidewall Sample
- Proposed Confirmation Base Sample
- Proposed excavation (2 feet)
- Production Pipeline

NOTES:
1. Datum: GCS_WGS_1984
2. Site Location: 32.340490, -104.067156

0 30 60 Feet

GRAPHIC SCALE

Chevron Environmental Management Company
BCR Fed #1
Eddy County, New Mexico

Proposed Excavation and Confirmation Sampling Map

ARCADIS | FIGURE 3

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry ; Client (Project #)
T:_EHSS\Projects_ArcMap\Land\Chevron\BCR_Fed1\Fig3_PE&CSM.mxd 3/15/2023 3:10:23 PM

Attachment 1

Initial C-141 Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

Form C-14
Revised October 10, 200

Submit 2 Copies to appropriat
District Office in accordanc
with Rule 116 on bacl
side of forn

30-015-26891
nMLB052584075Z

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Repo

Name of Company: Chesapeake Energy	**Contact:** Bradley Blevins
Address: 5014 Carlsbad Highway	**Telephone No.:** (505) 391-1462 ext. 24
Facility Name: BCR Federal Well #1 Battery	**Facility Type:** Tank Battery

Surface Owner: United States Federal Government	**Mineral Owner:** United States Federal Government	**Lease No.:**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	3	23 S	28 E					Eddy

Latitude: N 32º 20' 25.3 " **Longitude:** W 104° 04' 2.37"

NATURE OF RELEASE

Type of Release: Produced Water	**Volume of Release:** 70 barrels	**Volume Recovered:** 40 barrels
Source of Release: Tank	**Date and Hour of Occurrence:** 29 May 2005, time unknown	**Date and Hour of Discovery:** 29 May 2005 prior to 12:00 p.m.
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	**If YES, To Whom?** Mike Bratcher, NMOCD Artesia office was notified on 1 June 2005	
By Whom? Bradley Blevins	**Date and Hour:** 1 June 2005	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse:** Not Applicable	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.* Produce water tank was destroyed, either by a direct hit by lightening or a discharge of static electricity. The tank has been removed, the site shut in and residual fluids recovered and/or blended with soil.

Describe Area Affected and Cleanup Action Taken.* Approximately 2,650 square feet of surface area was impacted by the release. all of which is within a containment berm at the site. The tank has been removed and residual fluids recovered and/or blended with soil. A Delineation and/or Closure Plan will be developed and submitted to the NMOCD.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Bradley Blevins	**OIL CONSERVATION DIVISION**	
Printed Name: Bradley Blevins	**Approved by District Supervisor:** TIM GU by MI Mike Bratcher	
Title: Field Technician	**Approval Date:** 9/14/05	**Expiration Date:** N/A
E-mail Address: bblevins@chkenrgy.com	**Conditions of Approval:**	**Attached** ☒
Date: 06-14-05 **Phone:** (505) 391-1462 ext. 24		

*** Attach Additional Sheets If Necessary**

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Chesapeake Energy
5014 Carlsbad Highway
Hobbs, NM 88240

September 14, 2005

Reference: BCR Federal 001 Tank Battery A-3-23s-28e 30-015-26891 Operator Reference # 160010

Operator,

The NMOCD District 2 Office (OCD) is in receipt of a Closure Proposal prepared and submitted by your agent, Environmental Plus Inc. for a produced fluids release that occurred at the above referenced well site on or about May 29, 2005. The document submitted proposes to remediate site at time of tank battery decommission.
According to available ground water information for this area, the well site is situated in a possible water sensitive area. The proposal to leave contaminates in place for any length of time is denied.
An inspection of the site by OCD personnel on 9/13/05 shows that area appears to have had recent releases, possibly after initial excavation at site. (Photos enclosed)

At this time, the OCD is requesting the following:

1. Equipment be repaired or replaced to minimize the possibility of continued and future releases at this site.
2. Site is to be delineated for vertical and horizontal extent of contamination and type and levels of contaminants present.
3. A remediation work plan is to be formulated based on OCD guidelines and presented to the OCD for review.
4. Please have work plan submitted to OCD no later than September 30, 2005

If I can be of assistance in this matter, my contact information is listed below.

Thank you,

Mike Bratcher
NMOCD District 2
1301 W Grand Ave
Artesia, NM 88210
(505) 748-1283 Ext 108
(505) 626-0857
Mike.Bratcher@state.nm.us

Appendix D

2023 Soil Remediation Photographic Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
1	04/13/2023

Direction Photo Taken:

South

Description:

View of NW side of excavation area facing south

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
2	04/13/2023

Direction Photo Taken:

West

Description:

View of southern excavation area from western wall

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
3	04/13/2023

Direction Photo Taken:

West

Description:

View of southern excavation area from western wall following excavation down to bedrock

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
4	04/13/2023

Direction Photo Taken:

NW

Description:

View of northern section following excavation activities

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
5	04/13/2023

Direction Photo Taken:

South

Description:

View of north side of excavation, east wall excavated to cap rock

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
6	04/13/2023

Direction Photo Taken:

South

Description:

View of north area following excavation to cap rock

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
7	04/13/2023

Direction Photo Taken:

NW

Description:

View of SE corner following gypsum application to the excavation area

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
8	04/13/2023

Direction Photo Taken:

North

Description:

View of gypsum application to northern excavation area

ARCADIS

PHOTOGRAPHIC LOG

Property Name:/	Location:	Case No.
BCR Federal #1	Loving County, NM	nMLB0525840752

Photo No.	Date:
9	04/13/2023

Direction Photo Taken:

SE

Description:

View of excavation area following backfilling along north side of the excavation area

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
BCR Federal #1	Eddy County, NM	nMLB0525840752

Photo No.	Date:
10	04/13/2023

Direction Photo Taken:

North

Description:

View of southern excavation area following backfill activities

Appendix E

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Douglas Jordan
ARCADIS U.S. Inc
10205 Westheimer Rd
Suite 800
Houston, Texas 77042

Generated 4/13/2023 4:28:12 PM

JOB DESCRIPTION

BCR Fed #1
SDG NUMBER Eddie County, New Mexico

JOB NUMBER

880-27126-1

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
4/13/2023 4:28:12 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Laboratory Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Job ID: 880-27126-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-27126-1

Receipt
The samples were received on 4/12/2023 5:00 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 12.6°C

Receipt Exceptions
The following samples analyzed for method <TPH 8015> were received and analyzed from an unpreserved bulk soil jar.

GC VOA
Method 8021B: LCS biased high. Since only an acceptable LCS or LCSD is required per the method, the data has been qualified and reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-3-S-230411 (880-27126-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-51023 and analytical batch 880-51017 was outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-51020 and analytical batch 880-51010 contained Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-51020/2-A) and (MB 880-51020/1-A). 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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-51022 and analytical batch 880-51053 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.SW-1-S-230411 (880-27126-1), (880-27126-A-1-G MS) and (880-27126-A-1-H MSD)

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-1-S-230411

Lab Sample ID: 880-27126-1
Matrix: Solid
Date Collected: 04/11/23 14:46
Date Received: 04/12/23 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U F2 F1	0.00202	0.000388	mg/Kg		04/13/23 09:28	04/13/23 12:22	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		04/13/23 09:28	04/13/23 12:22	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		04/13/23 09:28	04/13/23 12:22	1
m-Xylene & p-Xylene	<0.00102	U *+	0.00403	0.00102	mg/Kg		04/13/23 09:28	04/13/23 12:22	1
o-Xylene	<0.000347	U *+	0.00202	0.000347	mg/Kg		04/13/23 09:28	04/13/23 12:22	1
Xylenes, Total	<0.00102	U *+	0.00403	0.00102	mg/Kg		04/13/23 09:28	04/13/23 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:22*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			04/13/23 17:12	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	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 12:04	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 12:04	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*04/13/23 08:22*	*04/13/23 12:04*	*1*
o-Terphenyl	*89*		*70 - 130*	*04/13/23 08:22*	*04/13/23 12:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**398**	**F1**	4.97	0.393	mg/Kg			04/13/23 11:39	1

Client Sample ID: SW-2-S-230411

Lab Sample ID: 880-27126-2
Matrix: Solid
Date Collected: 04/11/23 14:51
Date Received: 04/12/23 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		04/13/23 09:28	04/13/23 12:42	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		04/13/23 09:28	04/13/23 12:42	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		04/13/23 09:28	04/13/23 12:42	1
m-Xylene & p-Xylene	<0.00100	U *+	0.00396	0.00100	mg/Kg		04/13/23 09:28	04/13/23 12:42	1
o-Xylene	<0.000341	U *+	0.00198	0.000341	mg/Kg		04/13/23 09:28	04/13/23 12:42	1
Xylenes, Total	<0.00100	U *+	0.00396	0.00100	mg/Kg		04/13/23 09:28	04/13/23 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:42*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**41.6**	**J**	49.9	15.0	mg/Kg			04/13/23 17:12	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-2-S-230411

Lab Sample ID: 880-27126-2
Matrix: Solid
Date Collected: 04/11/23 14:51
Date Received: 04/12/23 17:00

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	17.4	J	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:05	1
Diesel Range Organics (Over C10-C28)	24.2	J B	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:05	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:05*	*1*
o-Terphenyl	*95*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263		4.99	0.394	mg/Kg			04/13/23 11:53	1

Client Sample ID: SW-3-S-230411

Lab Sample ID: 880-27126-3
Matrix: Solid
Date Collected: 04/11/23 14:48
Date Received: 04/12/23 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/13/23 09:28	04/13/23 13:03	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/13/23 09:28	04/13/23 13:03	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/13/23 09:28	04/13/23 13:03	1
m-Xylene & p-Xylene	<0.00101	U *+	0.00398	0.00101	mg/Kg		04/13/23 09:28	04/13/23 13:03	1
o-Xylene	<0.000343	U *+	0.00199	0.000343	mg/Kg		04/13/23 09:28	04/13/23 13:03	1
Xylenes, Total	<0.00101	U *+	0.00398	0.00101	mg/Kg		04/13/23 09:28	04/13/23 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*04/13/23 09:28*	*04/13/23 13:03*	*1*
1,4-Difluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*04/13/23 09:28*	*04/13/23 13:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<14.9	U	49.8	14.9	mg/Kg			04/13/23 17:12	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	<14.9	U	49.8	14.9	mg/Kg		04/13/23 08:22	04/13/23 13:26	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		04/13/23 08:22	04/13/23 13:26	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/13/23 08:22	04/13/23 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:26*	*1*
o-Terphenyl	*90*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		24.8	1.96	mg/Kg			04/13/23 11:58	5

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-4-S-230411

Lab Sample ID: 880-27126-4
Matrix: Solid
Date Collected: 04/11/23 14:50
Date Received: 04/12/23 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/13/23 09:28	04/13/23 13:23	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/13/23 09:28	04/13/23 13:23	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/13/23 09:28	04/13/23 13:23	1
m-Xylene & p-Xylene	<0.00100	U *+	0.00398	0.00100	mg/Kg		04/13/23 09:28	04/13/23 13:23	1
o-Xylene	<0.000342	U *+	0.00199	0.000342	mg/Kg		04/13/23 09:28	04/13/23 13:23	1
Xylenes, Total	<0.00100	U *+	0.00398	0.00100	mg/Kg		04/13/23 09:28	04/13/23 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/13/23 09:28*	*04/13/23 13:23*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*04/13/23 09:28*	*04/13/23 13:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.3**	**J**	50.0	15.0	mg/Kg			04/13/23 17:12	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	**16.3**	**J**	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:48	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:48	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:48*	*1*
o-Terphenyl	*83*		*70 - 130*	*04/13/23 08:22*	*04/13/23 13:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**151**		5.02	0.397	mg/Kg			04/13/23 12:02	1

Client Sample ID: SW-5-S-230411

Lab Sample ID: 880-27126-5
Matrix: Solid
Date Collected: 04/11/23 14:41
Date Received: 04/12/23 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/13/23 09:28	04/13/23 13:44	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/13/23 09:28	04/13/23 13:44	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/13/23 09:28	04/13/23 13:44	1
m-Xylene & p-Xylene	<0.00102	U *+	0.00402	0.00102	mg/Kg		04/13/23 09:28	04/13/23 13:44	1
o-Xylene	<0.000346	U *+	0.00201	0.000346	mg/Kg		04/13/23 09:28	04/13/23 13:44	1
Xylenes, Total	<0.00102	U *+	0.00402	0.00102	mg/Kg		04/13/23 09:28	04/13/23 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*04/13/23 09:28*	*04/13/23 13:44*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/13/23 09:28*	*04/13/23 13:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**18.5**	**J**	49.9	15.0	mg/Kg			04/13/23 17:12	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-5-S-230411

Date Collected: 04/11/23 14:41
Date Received: 04/12/23 17:00

Lab Sample ID: 880-27126-5

Matrix: Solid

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	**18.5**	**J**	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 14:10	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 14:10	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/13/23 08:22	04/13/23 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/13/23 08:22*	*04/13/23 14:10*	*1*
o-Terphenyl	*83*		*70 - 130*	*04/13/23 08:22*	*04/13/23 14:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**168**		5.00	0.395	mg/Kg			04/13/23 12:07	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

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)								
880-27126-1	SW-1-S-230411	100	102								
880-27126-1 MS	SW-1-S-230411	105	88								
880-27126-1 MSD	SW-1-S-230411	129	100								
880-27126-2	SW-2-S-230411	104	82								
880-27126-3	SW-3-S-230411	85	68 S1-								
880-27126-4	SW-4-S-230411	101	72								
880-27126-5	SW-5-S-230411	118	95								
LCS 880-51023/1-A	Lab Control Sample	130	120								
LCSD 880-51023/2-A	Lab Control Sample Dup	114	115								
MB 880-51023/5-A	Method Blank	73	95								

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)								
880-27126-1	SW-1-S-230411	94	89								
880-27126-2	SW-2-S-230411	99	95								
880-27126-3	SW-3-S-230411	92	90								
880-27126-4	SW-4-S-230411	87	83								
880-27126-5	SW-5-S-230411	87	83								
LCS 880-51020/2-A	Lab Control Sample	133 S1+	132 S1+								
LCSD 880-51020/3-A	Lab Control Sample Dup	124	121								
MB 880-51020/1-A	Method Blank	136 S1+	173 S1+								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-51023/5-A
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51023

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/13/23 09:28	04/13/23 12:00	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/13/23 09:28	04/13/23 12:00	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/13/23 09:28	04/13/23 12:00	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/13/23 09:28	04/13/23 12:00	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/13/23 09:28	04/13/23 12:00	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/13/23 09:28	04/13/23 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:00*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/13/23 09:28*	*04/13/23 12:00*	*1*

Lab Sample ID: LCS 880-51023/1-A
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1216		mg/Kg		122	70 - 130
Toluene	0.100	0.1141		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1272		mg/Kg		127	70 - 130
m-Xylene & p-Xylene	0.200	0.2725	*+	mg/Kg		136	70 - 130
o-Xylene	0.100	0.1367	*+	mg/Kg		137	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: LCSD 880-51023/2-A
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51023

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1056		mg/Kg		106	70 - 130	14	35
Toluene	0.100	0.09832		mg/Kg		98	70 - 130	15	35
Ethylbenzene	0.100	0.09996		mg/Kg		100	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.2145		mg/Kg		107	70 - 130	24	35
o-Xylene	0.100	0.1083		mg/Kg		108	70 - 130	23	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 880-27126-1 MS
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: SW-1-S-230411
Prep Type: Total/NA
Prep Batch: 51023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000388	U F2 F1	0.0998	0.06454	F1	mg/Kg		65	70 - 130
Toluene	<0.000460	U	0.0998	0.07844		mg/Kg		79	70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

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

Lab Sample ID: 880-27126-1 MS
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: SW-1-S-230411
Prep Type: Total/NA
Prep Batch: 51023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000570	U	0.0998	0.09073		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00102	U *+	0.200	0.1662		mg/Kg		83	70 - 130
o-Xylene	<0.000347	U *+	0.0998	0.08303		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-27126-1 MSD
Matrix: Solid
Analysis Batch: 51017

Client Sample ID: SW-1-S-230411
Prep Type: Total/NA
Prep Batch: 51023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000388	U F2 F1	0.0990	0.09652	F2	mg/Kg		97	70 - 130	40	35
Toluene	<0.000460	U	0.0990	0.09391		mg/Kg		95	70 - 130	18	35
Ethylbenzene	<0.000570	U	0.0990	0.1028		mg/Kg		104	70 - 130	13	35
m-Xylene & p-Xylene	<0.00102	U *+	0.198	0.2177		mg/Kg		110	70 - 130	27	35
o-Xylene	<0.000347	U *+	0.0990	0.1100		mg/Kg		111	70 - 130	28	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-51020/1-A
Matrix: Solid
Analysis Batch: 51010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 08:14	1
Diesel Range Organics (Over C10-C28)	17.91	J	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 08:14	1
OII Range Organics (Over C28-C36)	15.54	J	50.0	15.0	mg/Kg		04/13/23 08:22	04/13/23 08:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*04/13/23 08:22*	*04/13/23 08:14*	*1*
o-Terphenyl	*173*	*S1+*	*70 - 130*	*04/13/23 08:22*	*04/13/23 08:14*	*1*

Lab Sample ID: LCS 880-51020/2-A
Matrix: Solid
Analysis Batch: 51010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	871.7		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	971.1		mg/Kg		97	70 - 130

Eurofins Midland

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

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

Lab Sample ID: LCS 880-51020/2-A
Matrix: Solid
Analysis Batch: 51010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51020

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: LCSD 880-51020/3-A
Matrix: Solid
Analysis Batch: 51010

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51020

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	939.6		mg/Kg		94	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	829.2		mg/Kg		83	70 - 130	16	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	121		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-51022/1-A
Matrix: Solid
Analysis Batch: 51053

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/13/23 11:26	1

Lab Sample ID: LCS 880-51022/2-A
Matrix: Solid
Analysis Batch: 51053

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	228.2		mg/Kg		91	90 - 110		

Lab Sample ID: LCSD 880-51022/3-A
Matrix: Solid
Analysis Batch: 51053

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	237.7		mg/Kg		95	90 - 110	4	20

Lab Sample ID: 880-27126-1 MS
Matrix: Solid
Analysis Batch: 51053

Client Sample ID: SW-1-S-230411
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	398	F1	249	588.5	F1	mg/Kg		77	90 - 110		

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-27126-1 MSD
Matrix: Solid
Analysis Batch: 51053

Client Sample ID: SW-1-S-230411
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	398	F1	249	589.7	F1	mg/Kg		77	90 - 110	0	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

GC VOA

Analysis Batch: 51017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Total/NA	Solid	8021B	51023
880-27126-2	SW-2-S-230411	Total/NA	Solid	8021B	51023
880-27126-3	SW-3-S-230411	Total/NA	Solid	8021B	51023
880-27126-4	SW-4-S-230411	Total/NA	Solid	8021B	51023
880-27126-5	SW-5-S-230411	Total/NA	Solid	8021B	51023
MB 880-51023/5-A	Method Blank	Total/NA	Solid	8021B	51023
LCS 880-51023/1-A	Lab Control Sample	Total/NA	Solid	8021B	51023
LCSD 880-51023/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	51023
880-27126-1 MS	SW-1-S-230411	Total/NA	Solid	8021B	51023
880-27126-1 MSD	SW-1-S-230411	Total/NA	Solid	8021B	51023

Prep Batch: 51023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Total/NA	Solid	5030B	
880-27126-2	SW-2-S-230411	Total/NA	Solid	5030B	
880-27126-3	SW-3-S-230411	Total/NA	Solid	5030B	
880-27126-4	SW-4-S-230411	Total/NA	Solid	5030B	
880-27126-5	SW-5-S-230411	Total/NA	Solid	5030B	
MB 880-51023/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-51023/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-51023/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-27126-1 MS	SW-1-S-230411	Total/NA	Solid	5030B	
880-27126-1 MSD	SW-1-S-230411	Total/NA	Solid	5030B	

GC Semi VOA

Analysis Batch: 51010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Total/NA	Solid	8015B NM	51020
880-27126-2	SW-2-S-230411	Total/NA	Solid	8015B NM	51020
880-27126-3	SW-3-S-230411	Total/NA	Solid	8015B NM	51020
880-27126-4	SW-4-S-230411	Total/NA	Solid	8015B NM	51020
880-27126-5	SW-5-S-230411	Total/NA	Solid	8015B NM	51020
MB 880-51020/1-A	Method Blank	Total/NA	Solid	8015B NM	51020
LCS 880-51020/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	51020
LCSD 880-51020/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	51020

Prep Batch: 51020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Total/NA	Solid	8015NM Prep	
880-27126-2	SW-2-S-230411	Total/NA	Solid	8015NM Prep	
880-27126-3	SW-3-S-230411	Total/NA	Solid	8015NM Prep	
880-27126-4	SW-4-S-230411	Total/NA	Solid	8015NM Prep	
880-27126-5	SW-5-S-230411	Total/NA	Solid	8015NM Prep	
MB 880-51020/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-51020/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-51020/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 51125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 51125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-2	SW-2-S-230411	Total/NA	Solid	8015 NM	
880-27126-3	SW-3-S-230411	Total/NA	Solid	8015 NM	
880-27126-4	SW-4-S-230411	Total/NA	Solid	8015 NM	
880-27126-5	SW-5-S-230411	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 51022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Soluble	Solid	DI Leach	
880-27126-2	SW-2-S-230411	Soluble	Solid	DI Leach	
880-27126-3	SW-3-S-230411	Soluble	Solid	DI Leach	
880-27126-4	SW-4-S-230411	Soluble	Solid	DI Leach	
880-27126-5	SW-5-S-230411	Soluble	Solid	DI Leach	
MB 880-51022/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-51022/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-51022/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-27126-1 MS	SW-1-S-230411	Soluble	Solid	DI Leach	
880-27126-1 MSD	SW-1-S-230411	Soluble	Solid	DI Leach	

Analysis Batch: 51053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27126-1	SW-1-S-230411	Soluble	Solid	300.0	51022
880-27126-2	SW-2-S-230411	Soluble	Solid	300.0	51022
880-27126-3	SW-3-S-230411	Soluble	Solid	300.0	51022
880-27126-4	SW-4-S-230411	Soluble	Solid	300.0	51022
880-27126-5	SW-5-S-230411	Soluble	Solid	300.0	51022
MB 880-51022/1-A	Method Blank	Soluble	Solid	300.0	51022
LCS 880-51022/2-A	Lab Control Sample	Soluble	Solid	300.0	51022
LCSD 880-51022/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	51022
880-27126-1 MS	SW-1-S-230411	Soluble	Solid	300.0	51022
880-27126-1 MSD	SW-1-S-230411	Soluble	Solid	300.0	51022

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-1-S-230411

Lab Sample ID: 880-27126-1
Matrix: Solid
Date Collected: 04/11/23 14:46
Date Received: 04/12/23 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	51023	04/13/23 09:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51017	04/13/23 12:22	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51125	04/13/23 17:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	51020	04/13/23 08:22	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51010	04/13/23 12:04	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	51022	04/13/23 09:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51053	04/13/23 11:39	SMC	EET MID

Client Sample ID: SW-2-S-230411

Lab Sample ID: 880-27126-2
Matrix: Solid
Date Collected: 04/11/23 14:51
Date Received: 04/12/23 17:00

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	51023	04/13/23 09:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51017	04/13/23 12:42	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51125	04/13/23 17:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51020	04/13/23 08:22	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51010	04/13/23 13:05	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	51022	04/13/23 09:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51053	04/13/23 11:53	SMC	EET MID

Client Sample ID: SW-3-S-230411

Lab Sample ID: 880-27126-3
Matrix: Solid
Date Collected: 04/11/23 14:48
Date Received: 04/12/23 17:00

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	51023	04/13/23 09:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51017	04/13/23 13:03	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51125	04/13/23 17:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	51020	04/13/23 08:22	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51010	04/13/23 13:26	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	51022	04/13/23 09:17	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	51053	04/13/23 11:58	SMC	EET MID

Client Sample ID: SW-4-S-230411

Lab Sample ID: 880-27126-4
Matrix: Solid
Date Collected: 04/11/23 14:50
Date Received: 04/12/23 17:00

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	51023	04/13/23 09:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51017	04/13/23 13:23	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51125	04/13/23 17:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	51020	04/13/23 08:22	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51010	04/13/23 13:48	AJ	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Client Sample ID: SW-4-S-230411

Lab Sample ID: 880-27126-4
Matrix: Solid
Date Collected: 04/11/23 14:50
Date Received: 04/12/23 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	51022	04/13/23 09:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51053	04/13/23 12:02	SMC	EET MID

Client Sample ID: SW-5-S-230411

Lab Sample ID: 880-27126-5
Matrix: Solid
Date Collected: 04/11/23 14:41
Date Received: 04/12/23 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	51023	04/13/23 09:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51017	04/13/23 13:44	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51125	04/13/23 17:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51020	04/13/23 08:22	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51010	04/13/23 14:10	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	51022	04/13/23 09:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51053	04/13/23 12:07	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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27126-1
SDG: Eddie County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-27126-1	SW-1-S-230411	Solid	04/11/23 14:46	04/12/23 17:00
880-27126-2	SW-2-S-230411	Solid	04/11/23 14:51	04/12/23 17:00
880-27126-3	SW-3-S-230411	Solid	04/11/23 14:48	04/12/23 17:00
880-27126-4	SW-4-S-230411	Solid	04/11/23 14:50	04/12/23 17:00
880-27126-5	SW-5-S-230411	Solid	04/11/23 14:41	04/12/23 17:00

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone 432-704-5440

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Sarah Nolen	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5418-696 1
Client Contact: Midland Accounts Payable	Phone: 432-413-3182	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: New Mexico	Page: ~~Page 1 of 4~~ Page 1 of 1
Company: ARCADIS U S Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24 hours			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: 30168561			
Email: Douglas.Jordan@arcadis.com ~~accountspayable-administration@arcadis-us.com~~	WO #:			
Project Name: BCR Fed #1	Project #: 88001636			
Site: Eddie County New Mexico	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note
			Preservation Code:				N		
SW-1-S-230411	04/11/23	1446	C	Solid			X		402
SW-2-S-230411	04/11/23	1451	C	Solid			X		
SW-3-S-230411	04/11/23	1448	C	Solid			X		
SW-4-S-230411	04/11/23	1450	C	Solid			X		
SW-5-S-230411	04/11/23	1441	C	Solid			X		
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					

880-27126 Chain of Custody

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
Sarah Nolen	04/12/23 1700	arcadis		4/12/23 1700	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
Δ Yes Δ No		12.9/12.4

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-27126-1
SDG Number: Eddie County, New Mexico

Login Number: 27126
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
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	Received same day of collection; chilling process has begun.
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Douglas Jordan
ARCADIS U.S. Inc
10205 Westheimer Rd
Suite 800
Houston, Texas 77042

Generated 4/14/2023 6:03:15 PM

JOB DESCRIPTION

BCR Fed #1
SDG NUMBER Eddy County

JOB NUMBER

880-27159-1

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
4/14/2023 6:03:15 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Laboratory Job ID: 880-27159-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Job ID: 880-27159-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-27159-1

Receipt
The samples were received on 4/13/2023 4:53 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 3.3°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B1-S-230413 (880-27159-1), B2-S-230413 (880-27159-2), B3-S-230413 (880-27159-3), B4-S-230413 (880-27159-4), B5-S-230413 (880-27159-5), B6-S-230413 (880-27159-6), B7-S-230413 (880-27159-7), B8-S-230413 (880-27159-8), B9-S-230413 (880-27159-9), B10-S-230413 (880-27159-10), B11-S-230413 (880-27159-11), B12-S-230413 (880-27159-12), B13-S-230413 (880-27159-13), B14-S-230413 (880-27159-14), B15-S-230413 (880-27159-15) and B16-S-230413 (880-27159-16).

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-51141 and analytical batch 880-51131 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: B1-S-230413 (880-27159-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-51141 and analytical batch 880-51131 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-51144 and analytical batch 880-51175 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.B11-S-230413 (880-27159-11), B12-S-230413 (880-27159-12), B13-S-230413 (880-27159-13), B14-S-230413 (880-27159-14), B15-S-230413 (880-27159-15), B16-S-230413 (880-27159-16), (880-27159-A-11-C MS) and (880-27159-A-11-D MSD)

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B1-S-230413

Date Collected: 04/13/23 10:09
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/14/23 08:55	04/14/23 11:22	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		04/14/23 08:55	04/14/23 11:22	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		04/14/23 08:55	04/14/23 11:22	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:22	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		04/14/23 08:55	04/14/23 11:22	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:22*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.8**		49.8	14.9	mg/Kg			04/14/23 16:43	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	**29.7**	**J B**	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 11:42	1
Diesel Range Organics (Over C10-C28)	**24.1**	**J**	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 11:42	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*04/14/23 08:16*	*04/14/23 11:42*	*1*
o-Terphenyl	*109*		*70 - 130*	*04/14/23 08:16*	*04/14/23 11:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.1**		5.00	0.395	mg/Kg			04/14/23 10:47	1

Client Sample ID: B2-S-230413

Date Collected: 04/13/23 10:10
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 11:43	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/14/23 08:55	04/14/23 11:43	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/14/23 08:55	04/14/23 11:43	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:43	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/14/23 08:55	04/14/23 11:43	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:43*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**39.3**	**J**	50.0	15.0	mg/Kg			04/14/23 16:43	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B2-S-230413

Date Collected: 04/13/23 10:10
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-2
Matrix: Solid

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	17.1	J B	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 12:48	1
Diesel Range Organics (Over C10-C28)	22.2	J	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 12:48	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*04/14/23 08:16*	*04/14/23 12:48*	*1*
o-Terphenyl	*93*		*70 - 130*	*04/14/23 08:16*	*04/14/23 12:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	214		5.01	0.396	mg/Kg			04/14/23 11:02	1

Client Sample ID: B3-S-230413

Date Collected: 04/13/23 10:12
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 12:04	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/14/23 08:55	04/14/23 12:04	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/14/23 08:55	04/14/23 12:04	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 12:04	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/14/23 08:55	04/14/23 12:04	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:04*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	41.8	J	49.9	15.0	mg/Kg			04/14/23 16:43	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	19.3	J B	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:10	1
Diesel Range Organics (Over C10-C28)	22.5	J	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:10	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*04/14/23 08:16*	*04/14/23 13:10*	*1*
o-Terphenyl	*88*		*70 - 130*	*04/14/23 08:16*	*04/14/23 13:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	492		5.03	0.397	mg/Kg			04/14/23 11:06	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B4-S-230413

Lab Sample ID: 880-27159-4
Matrix: Solid
Date Collected: 04/13/23 10:14
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		04/14/23 08:55	04/14/23 12:24	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/14/23 08:55	04/14/23 12:24	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/14/23 08:55	04/14/23 12:24	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/14/23 08:55	04/14/23 12:24	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/14/23 08:55	04/14/23 12:24	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/14/23 08:55	04/14/23 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:24*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**58.1**		49.9	15.0	mg/Kg			04/14/23 16:43	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	**26.6**	**J B**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:32	1
Diesel Range Organics (Over C10-C28)	**31.5**	**J**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:32	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*04/14/23 08:16*	*04/14/23 13:32*	*1*
o-Terphenyl	*105*		*70 - 130*	*04/14/23 08:16*	*04/14/23 13:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**919**		4.98	0.393	mg/Kg			04/14/23 11:11	1

Client Sample ID: B5-S-230413

Lab Sample ID: 880-27159-5
Matrix: Solid
Date Collected: 04/13/23 10:16
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/14/23 08:55	04/14/23 12:45	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/14/23 08:55	04/14/23 12:45	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/14/23 08:55	04/14/23 12:45	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 12:45	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/14/23 08:55	04/14/23 12:45	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:45*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*04/14/23 08:55*	*04/14/23 12:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**85.8**		49.9	15.0	mg/Kg			04/14/23 16:43	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B5-S-230413

Lab Sample ID: 880-27159-5
Matrix: Solid
Date Collected: 04/13/23 10:16
Date Received: 04/13/23 16:53

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	**17.2**	**J B**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:08	1
Diesel Range Organics (Over C10-C28)	**68.6**		49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:08	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:08*	*1*
o-Terphenyl	*92*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**957**		5.02	0.397	mg/Kg			04/14/23 11:16	1

Client Sample ID: B6-S-230413

Lab Sample ID: 880-27159-6
Matrix: Solid
Date Collected: 04/13/23 10:15
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		04/14/23 08:55	04/14/23 13:06	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		04/14/23 08:55	04/14/23 13:06	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		04/14/23 08:55	04/14/23 13:06	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		04/14/23 08:55	04/14/23 13:06	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		04/14/23 08:55	04/14/23 13:06	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		04/14/23 08:55	04/14/23 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:06*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**17.2**	**J**	49.8	14.9	mg/Kg			04/14/23 16:43	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	<14.9	U	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 14:30	1
Diesel Range Organics (Over C10-C28)	**17.2**	**J**	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 14:30	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:30*	*1*
o-Terphenyl	*89*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**705**		5.05	0.399	mg/Kg			04/14/23 11:31	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B7-S-230413

Lab Sample ID: 880-27159-7
Matrix: Solid
Date Collected: 04/13/23 10:19
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 13:27	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/14/23 08:55	04/14/23 13:27	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/14/23 08:55	04/14/23 13:27	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 13:27	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/14/23 08:55	04/14/23 13:27	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:27*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**94.3**		50.0	15.0	mg/Kg			04/14/23 16:43	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	**26.9**	**J B**	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:52	1
Diesel Range Organics (Over C10-C28)	**67.4**		50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:52	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:52*	*1*
o-Terphenyl	*104*		*70 - 130*	*04/14/23 08:16*	*04/14/23 14:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**197**		5.04	0.398	mg/Kg			04/14/23 11:36	1

Client Sample ID: B8-S-230413

Lab Sample ID: 880-27159-8
Matrix: Solid
Date Collected: 04/13/23 10:22
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 13:47	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/14/23 08:55	04/14/23 13:47	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/14/23 08:55	04/14/23 13:47	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 13:47	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/14/23 08:55	04/14/23 13:47	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:47*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/14/23 08:55*	*04/14/23 13:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.1**		50.0	15.0	mg/Kg			04/14/23 16:43	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B8-S-230413

Lab Sample ID: 880-27159-8
Matrix: Solid
Date Collected: 04/13/23 10:22
Date Received: 04/13/23 16:53

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	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:14	1
Diesel Range Organics (Over C10-C28)	**62.1**		50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:14	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:14*	*1*
o-Terphenyl	*85*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**509**		4.98	0.393	mg/Kg			04/14/23 11:40	1

Client Sample ID: B9-S-230413

Lab Sample ID: 880-27159-9
Matrix: Solid
Date Collected: 04/13/23 10:25
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 14:08	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/14/23 08:55	04/14/23 14:08	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/14/23 08:55	04/14/23 14:08	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 14:08	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/14/23 08:55	04/14/23 14:08	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/14/23 08:55*	*04/14/23 14:08*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*04/14/23 08:55*	*04/14/23 14:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15.6**	**J**	50.0	15.0	mg/Kg			04/14/23 16:43	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**	**J B**	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:36	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:36	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:36*	*1*
o-Terphenyl	*89*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**473**		4.95	0.391	mg/Kg			04/14/23 11:45	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B10-S-230413

Date Collected: 04/13/23 10:28
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/14/23 08:55	04/14/23 15:53	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/14/23 08:55	04/14/23 15:53	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/14/23 08:55	04/14/23 15:53	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 15:53	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/14/23 08:55	04/14/23 15:53	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*04/14/23 08:55*	*04/14/23 15:53*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*04/14/23 08:55*	*04/14/23 15:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.4**		49.9	15.0	mg/Kg			04/14/23 16:43	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	**25.5**	**J B**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:58	1
Diesel Range Organics (Over C10-C28)	**25.9**	**J**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:58	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:58*	*1*
o-Terphenyl	*85*		*70 - 130*	*04/14/23 08:16*	*04/14/23 15:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**632**		5.04	0.398	mg/Kg			04/14/23 14:41	1

Client Sample ID: B11-S-230413

Date Collected: 04/13/23 10:30
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/14/23 08:55	04/14/23 16:14	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/14/23 08:55	04/14/23 16:14	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/14/23 08:55	04/14/23 16:14	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/14/23 08:55	04/14/23 16:14	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/14/23 08:55	04/14/23 16:14	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/14/23 08:55	04/14/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:14*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**80.4**		49.8	14.9	mg/Kg			04/14/23 18:55	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B11-S-230413

Lab Sample ID: 880-27159-11
Matrix: Solid
Date Collected: 04/13/23 10:30
Date Received: 04/13/23 16:53

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	**22.3**	**J B**	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 16:41	1
Diesel Range Organics (Over C10-C28)	**58.1**		49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 16:41	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/14/23 08:16	04/14/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*04/14/23 08:16*	*04/14/23 16:41*	*1*
o-Terphenyl	*87*		*70 - 130*	*04/14/23 08:16*	*04/14/23 16:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**655**	**F1**	5.01	0.396	mg/Kg			04/14/23 11:51	1

Client Sample ID: B12-S-230413

Lab Sample ID: 880-27159-12
Matrix: Solid
Date Collected: 04/13/23 10:32
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 16:35	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/14/23 08:55	04/14/23 16:35	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/14/23 08:55	04/14/23 16:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 16:35	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/14/23 08:55	04/14/23 16:35	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/14/23 08:55	04/14/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:35*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**29.2**	**J**	49.9	15.0	mg/Kg			04/14/23 18:55	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	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:03	1
Diesel Range Organics (Over C10-C28)	**29.2**	**J**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:03	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:03*	*1*
o-Terphenyl	*83*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**700**		4.97	0.393	mg/Kg			04/14/23 12:06	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B13-S-230413

Lab Sample ID: 880-27159-13
Matrix: Solid
Date Collected: 04/13/23 10:35
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/14/23 08:55	04/14/23 16:55	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/14/23 08:55	04/14/23 16:55	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/14/23 08:55	04/14/23 16:55	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 16:55	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/14/23 08:55	04/14/23 16:55	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/14/23 08:55	04/14/23 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:55*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*04/14/23 08:55*	*04/14/23 16:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.9**	**J**	49.9	15.0	mg/Kg			04/14/23 18:55	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	**16.9**	**J B**	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:26*	*1*
o-Terphenyl	*91*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**642**		4.96	0.392	mg/Kg			04/14/23 12:11	1

Client Sample ID: B14-S-230413

Lab Sample ID: 880-27159-14
Matrix: Solid
Date Collected: 04/13/23 10:40
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		04/14/23 08:55	04/14/23 17:16	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/14/23 08:55	04/14/23 17:16	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/14/23 08:55	04/14/23 17:16	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/14/23 08:55	04/14/23 17:16	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/14/23 08:55	04/14/23 17:16	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/14/23 08:55	04/14/23 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:16*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**45.9**	**J**	50.0	15.0	mg/Kg			04/14/23 18:55	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B14-S-230413

Lab Sample ID: 880-27159-14
Matrix: Solid
Date Collected: 04/13/23 10:40
Date Received: 04/13/23 16:53

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	24.8	J B	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:48	1
Diesel Range Organics (Over C10-C28)	21.1	J	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:48	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:48*	*1*
o-Terphenyl	*87*		*70 - 130*	*04/14/23 08:16*	*04/14/23 17:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	681		5.00	0.395	mg/Kg			04/14/23 12:25	1

Client Sample ID: B15-S-230413

Lab Sample ID: 880-27159-15
Matrix: Solid
Date Collected: 04/13/23 10:45
Date Received: 04/13/23 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/14/23 08:55	04/14/23 17:37	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/14/23 08:55	04/14/23 17:37	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/14/23 08:55	04/14/23 17:37	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 17:37	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/14/23 08:55	04/14/23 17:37	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/14/23 08:55	04/14/23 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:37*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40.8	J	50.0	15.0	mg/Kg			04/14/23 18:55	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	21.0	J B	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:09	1
Diesel Range Organics (Over C10-C28)	19.8	J	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:09	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*04/14/23 08:16*	*04/14/23 18:09*	*1*
o-Terphenyl	*90*		*70 - 130*	*04/14/23 08:16*	*04/14/23 18:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	456		5.03	0.397	mg/Kg			04/14/23 12:30	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B16-S-230413

Date Collected: 04/13/23 10:50
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389	mg/Kg		04/14/23 08:55	04/14/23 17:57	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		04/14/23 08:55	04/14/23 17:57	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		04/14/23 08:55	04/14/23 17:57	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		04/14/23 08:55	04/14/23 17:57	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		04/14/23 08:55	04/14/23 17:57	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		04/14/23 08:55	04/14/23 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:57*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*04/14/23 08:55*	*04/14/23 17:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**44.1**	**J**	50.0	15.0	mg/Kg			04/14/23 18:55	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	**19.8**	**J B**	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:31	1
Diesel Range Organics (Over C10-C28)	**24.3**	**J**	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:31	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*04/14/23 08:16*	*04/14/23 18:31*	*1*
o-Terphenyl	*90*		*70 - 130*	*04/14/23 08:16*	*04/14/23 18:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**945**		4.99	0.394	mg/Kg			04/14/23 12:35	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

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)
880-27159-1	B1-S-230413	93	104
880-27159-1 MS	B1-S-230413	104	98
880-27159-1 MSD	B1-S-230413	103	98
880-27159-2	B2-S-230413	101	114
880-27159-3	B3-S-230413	100	118
880-27159-4	B4-S-230413	93	116
880-27159-5	B5-S-230413	94	113
880-27159-6	B6-S-230413	95	114
880-27159-7	B7-S-230413	96	115
880-27159-8	B8-S-230413	102	108
880-27159-9	B9-S-230413	95	111
880-27159-10	B10-S-230413	88	111
880-27159-11	B11-S-230413	92	111
880-27159-12	B12-S-230413	99	118
880-27159-13	B13-S-230413	95	119
880-27159-14	B14-S-230413	103	117
880-27159-15	B15-S-230413	98	116
880-27159-16	B16-S-230413	95	117
LCS 880-51143/1-A	Lab Control Sample	101	105
LCSD 880-51143/2-A	Lab Control Sample Dup	89	99
MB 880-51143/5-A	Method Blank	86	92

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)
880-27159-1	B1-S-230413	132 S1+	109
880-27159-1 MS	B1-S-230413	121	90
880-27159-1 MSD	B1-S-230413	118	88
880-27159-2	B2-S-230413	110	93
880-27159-3	B3-S-230413	105	88
880-27159-4	B4-S-230413	129	105
880-27159-5	B5-S-230413	109	92
880-27159-6	B6-S-230413	107	89
880-27159-7	B7-S-230413	128	104
880-27159-8	B8-S-230413	104	85
880-27159-9	B9-S-230413	106	89
880-27159-10	B10-S-230413	101	85
880-27159-11	B11-S-230413	104	87
880-27159-12	B12-S-230413	102	83
880-27159-13	B13-S-230413	109	91
880-27159-14	B14-S-230413	105	87
880-27159-15	B15-S-230413	110	90
880-27159-16	B16-S-230413	110	90

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 880-27159-1
Project/Site: BCR Fed #1
SDG: Eddy County

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCS 880-51141/2-A	Lab Control Sample	108	82								
LCSD 880-51141/3-A	Lab Control Sample Dup	94	81								
MB 880-51141/1-A	Method Blank	160 S1+	142 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-51143/5-A
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/14/23 08:55	04/14/23 11:00	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/14/23 08:55	04/14/23 11:00	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/14/23 08:55	04/14/23 11:00	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:00	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/14/23 08:55	04/14/23 11:00	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/14/23 08:55	04/14/23 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:00*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*04/14/23 08:55*	*04/14/23 11:00*	*1*

Lab Sample ID: LCS 880-51143/1-A
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1069		mg/Kg		107	70 - 130
Toluene	0.100	0.1066		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1065		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2167		mg/Kg		108	70 - 130
o-Xylene	0.100	0.09513		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-51143/2-A
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1053		mg/Kg		105	70 - 130	2	35
Toluene	0.100	0.1017		mg/Kg		102	70 - 130	5	35
Ethylbenzene	0.100	0.09919		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1989		mg/Kg		99	70 - 130	9	35
o-Xylene	0.100	0.08700		mg/Kg		87	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-27159-1 MS
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: B1-S-230413
Prep Type: Total/NA
Prep Batch: 51143

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000387	U	0.0998	0.07803		mg/Kg		78	70 - 130
Toluene	<0.000458	U	0.0998	0.09016		mg/Kg		90	70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

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

Lab Sample ID: 880-27159-1 MS
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: B1-S-230413
Prep Type: Total/NA
Prep Batch: 51143

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000567	U	0.0998	0.09840		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.200	0.2011		mg/Kg		101	70 - 130
o-Xylene	<0.000345	U	0.0998	0.08657		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-27159-1 MSD
Matrix: Solid
Analysis Batch: 51140

Client Sample ID: B1-S-230413
Prep Type: Total/NA
Prep Batch: 51143

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000387	U	0.0990	0.1037		mg/Kg		105	70 - 130	28	35
Toluene	<0.000458	U	0.0990	0.09894		mg/Kg		100	70 - 130	9	35
Ethylbenzene	<0.000567	U	0.0990	0.1003		mg/Kg		101	70 - 130	2	35
m-Xylene & p-Xylene	<0.00101	U	0.198	0.2013		mg/Kg		102	70 - 130	0	35
o-Xylene	<0.000345	U	0.0990	0.08769		mg/Kg		89	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-51141/1-A
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51141

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.88	J	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 08:56	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 08:56	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/14/23 08:16	04/14/23 08:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*160*	*S1+*	*70 - 130*	*04/14/23 08:16*	*04/14/23 08:56*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*04/14/23 08:16*	*04/14/23 08:56*	*1*

Lab Sample ID: LCS 880-51141/2-A
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	857.3		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	850.3		mg/Kg		85	70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

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

Lab Sample ID: LCS 880-51141/2-A
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: LCSD 880-51141/3-A
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51141

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	847.7		mg/Kg		85	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	803.4		mg/Kg		80	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-27159-1 MS
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: B1-S-230413
Prep Type: Total/NA
Prep Batch: 51141

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	29.7	J B	999	1183		mg/Kg		115	70 - 130
Diesel Range Organics (Over C10-C28)	24.1	J	999	1112		mg/Kg		109	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-27159-1 MSD
Matrix: Solid
Analysis Batch: 51131

Client Sample ID: B1-S-230413
Prep Type: Total/NA
Prep Batch: 51141

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	29.7	J B	997	1143		mg/Kg		112	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	24.1	J	997	1080		mg/Kg		106	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	88		70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-51144/1-A
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/14/23 10:33	1

Lab Sample ID: LCS 880-51144/2-A
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.6		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-51144/3-A
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	230.5		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 880-27159-1 MS
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: B1-S-230413
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	92.1		250	321.8		mg/Kg		92	90 - 110		

Lab Sample ID: 880-27159-1 MSD
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: B1-S-230413
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.1		250	324.6		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-27159-11 MS
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: B11-S-230413
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	655	F1	251	846.5	F1	mg/Kg		77	90 - 110		

Lab Sample ID: 880-27159-11 MSD
Matrix: Solid
Analysis Batch: 51175

Client Sample ID: B11-S-230413
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	655	F1	251	848.0	F1	mg/Kg		77	90 - 110	0	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

GC VOA

Analysis Batch: 51140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Total/NA	Solid	8021B	51143
880-27159-2	B2-S-230413	Total/NA	Solid	8021B	51143
880-27159-3	B3-S-230413	Total/NA	Solid	8021B	51143
880-27159-4	B4-S-230413	Total/NA	Solid	8021B	51143
880-27159-5	B5-S-230413	Total/NA	Solid	8021B	51143
880-27159-6	B6-S-230413	Total/NA	Solid	8021B	51143
880-27159-7	B7-S-230413	Total/NA	Solid	8021B	51143
880-27159-8	B8-S-230413	Total/NA	Solid	8021B	51143
880-27159-9	B9-S-230413	Total/NA	Solid	8021B	51143
880-27159-10	B10-S-230413	Total/NA	Solid	8021B	51143
880-27159-11	B11-S-230413	Total/NA	Solid	8021B	51143
880-27159-12	B12-S-230413	Total/NA	Solid	8021B	51143
880-27159-13	B13-S-230413	Total/NA	Solid	8021B	51143
880-27159-14	B14-S-230413	Total/NA	Solid	8021B	51143
880-27159-15	B15-S-230413	Total/NA	Solid	8021B	51143
880-27159-16	B16-S-230413	Total/NA	Solid	8021B	51143
MB 880-51143/5-A	Method Blank	Total/NA	Solid	8021B	51143
LCS 880-51143/1-A	Lab Control Sample	Total/NA	Solid	8021B	51143
LCSD 880-51143/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	51143
880-27159-1 MS	B1-S-230413	Total/NA	Solid	8021B	51143
880-27159-1 MSD	B1-S-230413	Total/NA	Solid	8021B	51143

Prep Batch: 51143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Total/NA	Solid	5030B	
880-27159-2	B2-S-230413	Total/NA	Solid	5030B	
880-27159-3	B3-S-230413	Total/NA	Solid	5030B	
880-27159-4	B4-S-230413	Total/NA	Solid	5030B	
880-27159-5	B5-S-230413	Total/NA	Solid	5030B	
880-27159-6	B6-S-230413	Total/NA	Solid	5030B	
880-27159-7	B7-S-230413	Total/NA	Solid	5030B	
880-27159-8	B8-S-230413	Total/NA	Solid	5030B	
880-27159-9	B9-S-230413	Total/NA	Solid	5030B	
880-27159-10	B10-S-230413	Total/NA	Solid	5030B	
880-27159-11	B11-S-230413	Total/NA	Solid	5030B	
880-27159-12	B12-S-230413	Total/NA	Solid	5030B	
880-27159-13	B13-S-230413	Total/NA	Solid	5030B	
880-27159-14	B14-S-230413	Total/NA	Solid	5030B	
880-27159-15	B15-S-230413	Total/NA	Solid	5030B	
880-27159-16	B16-S-230413	Total/NA	Solid	5030B	
MB 880-51143/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-51143/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-51143/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-27159-1 MS	B1-S-230413	Total/NA	Solid	5030B	
880-27159-1 MSD	B1-S-230413	Total/NA	Solid	5030B	

GC Semi VOA

Analysis Batch: 51131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Total/NA	Solid	8015B NM	51141

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 51131 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-2	B2-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-3	B3-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-4	B4-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-5	B5-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-6	B6-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-7	B7-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-8	B8-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-9	B9-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-10	B10-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-11	B11-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-12	B12-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-13	B13-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-14	B14-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-15	B15-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-16	B16-S-230413	Total/NA	Solid	8015B NM	51141
MB 880-51141/1-A	Method Blank	Total/NA	Solid	8015B NM	51141
LCS 880-51141/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	51141
LCSD 880-51141/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	51141
880-27159-1 MS	B1-S-230413	Total/NA	Solid	8015B NM	51141
880-27159-1 MSD	B1-S-230413	Total/NA	Solid	8015B NM	51141

Prep Batch: 51141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-2	B2-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-3	B3-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-4	B4-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-5	B5-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-6	B6-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-7	B7-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-8	B8-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-9	B9-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-10	B10-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-11	B11-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-12	B12-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-13	B13-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-14	B14-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-15	B15-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-16	B16-S-230413	Total/NA	Solid	8015NM Prep	
MB 880-51141/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-51141/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-51141/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-27159-1 MS	B1-S-230413	Total/NA	Solid	8015NM Prep	
880-27159-1 MSD	B1-S-230413	Total/NA	Solid	8015NM Prep	

Analysis Batch: 51216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Total/NA	Solid	8015 NM	
880-27159-2	B2-S-230413	Total/NA	Solid	8015 NM	
880-27159-3	B3-S-230413	Total/NA	Solid	8015 NM	
880-27159-4	B4-S-230413	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 51216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-5	B5-S-230413	Total/NA	Solid	8015 NM	
880-27159-6	B6-S-230413	Total/NA	Solid	8015 NM	
880-27159-7	B7-S-230413	Total/NA	Solid	8015 NM	
880-27159-8	B8-S-230413	Total/NA	Solid	8015 NM	
880-27159-9	B9-S-230413	Total/NA	Solid	8015 NM	
880-27159-10	B10-S-230413	Total/NA	Solid	8015 NM	
880-27159-11	B11-S-230413	Total/NA	Solid	8015 NM	
880-27159-12	B12-S-230413	Total/NA	Solid	8015 NM	
880-27159-13	B13-S-230413	Total/NA	Solid	8015 NM	
880-27159-14	B14-S-230413	Total/NA	Solid	8015 NM	
880-27159-15	B15-S-230413	Total/NA	Solid	8015 NM	
880-27159-16	B16-S-230413	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 51144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Soluble	Solid	DI Leach	
880-27159-2	B2-S-230413	Soluble	Solid	DI Leach	
880-27159-3	B3-S-230413	Soluble	Solid	DI Leach	
880-27159-4	B4-S-230413	Soluble	Solid	DI Leach	
880-27159-5	B5-S-230413	Soluble	Solid	DI Leach	
880-27159-6	B6-S-230413	Soluble	Solid	DI Leach	
880-27159-7	B7-S-230413	Soluble	Solid	DI Leach	
880-27159-8	B8-S-230413	Soluble	Solid	DI Leach	
880-27159-9	B9-S-230413	Soluble	Solid	DI Leach	
880-27159-10	B10-S-230413	Soluble	Solid	DI Leach	
880-27159-11	B11-S-230413	Soluble	Solid	DI Leach	
880-27159-12	B12-S-230413	Soluble	Solid	DI Leach	
880-27159-13	B13-S-230413	Soluble	Solid	DI Leach	
880-27159-14	B14-S-230413	Soluble	Solid	DI Leach	
880-27159-15	B15-S-230413	Soluble	Solid	DI Leach	
880-27159-16	B16-S-230413	Soluble	Solid	DI Leach	
MB 880-51144/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-51144/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-51144/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-27159-1 MS	B1-S-230413	Soluble	Solid	DI Leach	
880-27159-1 MSD	B1-S-230413	Soluble	Solid	DI Leach	
880-27159-11 MS	B11-S-230413	Soluble	Solid	DI Leach	
880-27159-11 MSD	B11-S-230413	Soluble	Solid	DI Leach	

Analysis Batch: 51175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-1	B1-S-230413	Soluble	Solid	300.0	51144
880-27159-2	B2-S-230413	Soluble	Solid	300.0	51144
880-27159-3	B3-S-230413	Soluble	Solid	300.0	51144
880-27159-4	B4-S-230413	Soluble	Solid	300.0	51144
880-27159-5	B5-S-230413	Soluble	Solid	300.0	51144
880-27159-6	B6-S-230413	Soluble	Solid	300.0	51144
880-27159-7	B7-S-230413	Soluble	Solid	300.0	51144
880-27159-8	B8-S-230413	Soluble	Solid	300.0	51144

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

HPLC/IC (Continued)

Analysis Batch: 51175 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27159-9	B9-S-230413	Soluble	Solid	300.0	51144
880-27159-10	B10-S-230413	Soluble	Solid	300.0	51144
880-27159-11	B11-S-230413	Soluble	Solid	300.0	51144
880-27159-12	B12-S-230413	Soluble	Solid	300.0	51144
880-27159-13	B13-S-230413	Soluble	Solid	300.0	51144
880-27159-14	B14-S-230413	Soluble	Solid	300.0	51144
880-27159-15	B15-S-230413	Soluble	Solid	300.0	51144
880-27159-16	B16-S-230413	Soluble	Solid	300.0	51144
MB 880-51144/1-A	Method Blank	Soluble	Solid	300.0	51144
LCS 880-51144/2-A	Lab Control Sample	Soluble	Solid	300.0	51144
LCSD 880-51144/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	51144
880-27159-1 MS	B1-S-230413	Soluble	Solid	300.0	51144
880-27159-1 MSD	B1-S-230413	Soluble	Solid	300.0	51144
880-27159-11 MS	B11-S-230413	Soluble	Solid	300.0	51144
880-27159-11 MSD	B11-S-230413	Soluble	Solid	300.0	51144

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B1-S-230413 — Lab Sample ID: 880-27159-1

Date Collected: 04/13/23 10:09 — **Matrix: Solid**
Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 11:22	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 11:42	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 10:47	SMC	EET MID

Client Sample ID: B2-S-230413 — Lab Sample ID: 880-27159-2

Date Collected: 04/13/23 10:10 — **Matrix: Solid**
Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 11:43	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 12:48	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:02	SMC	EET MID

Client Sample ID: B3-S-230413 — Lab Sample ID: 880-27159-3

Date Collected: 04/13/23 10:12 — **Matrix: Solid**
Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 12:04	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 13:10	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:06	SMC	EET MID

Client Sample ID: B4-S-230413 — Lab Sample ID: 880-27159-4

Date Collected: 04/13/23 10:14 — **Matrix: Solid**
Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 12:24	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 13:32	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B4-S-230413 — Lab Sample ID: 880-27159-4

Date Collected: 04/13/23 10:14 — **Matrix: Solid**
Date Received: 04/13/23 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:11	SMC	EET MID

Client Sample ID: B5-S-230413 — Lab Sample ID: 880-27159-5

Date Collected: 04/13/23 10:16 — **Matrix: Solid**
Date Received: 04/13/23 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 14:08	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:16	SMC	EET MID

Client Sample ID: B6-S-230413 — Lab Sample ID: 880-27159-6

Date Collected: 04/13/23 10:15 — **Matrix: Solid**
Date Received: 04/13/23 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 13:06	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 14:30	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:31	SMC	EET MID

Client Sample ID: B7-S-230413 — Lab Sample ID: 880-27159-7

Date Collected: 04/13/23 10:19 — **Matrix: Solid**
Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 13:27	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 14:52	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:36	SMC	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B8-S-230413

Lab Sample ID: 880-27159-8

Date Collected: 04/13/23 10:22

Matrix: Solid

Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 13:47	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 15:14	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:40	SMC	EET MID

Client Sample ID: B9-S-230413

Lab Sample ID: 880-27159-9

Date Collected: 04/13/23 10:25

Matrix: Solid

Date Received: 04/13/23 16:53

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 14:08	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 15:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:45	SMC	EET MID

Client Sample ID: B10-S-230413

Lab Sample ID: 880-27159-10

Date Collected: 04/13/23 10:28

Matrix: Solid

Date Received: 04/13/23 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 15:53	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 16:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 15:58	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 14:41	SMC	EET MID

Client Sample ID: B11-S-230413

Lab Sample ID: 880-27159-11

Date Collected: 04/13/23 10:30

Matrix: Solid

Date Received: 04/13/23 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 16:14	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 16:41	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B11-S-230413
Date Collected: 04/13/23 10:30
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 11:51	SMC	EET MID

Client Sample ID: B12-S-230413
Date Collected: 04/13/23 10:32
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-12
Matrix: Solid

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 16:35	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 17:03	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 12:06	SMC	EET MID

Client Sample ID: B13-S-230413
Date Collected: 04/13/23 10:35
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-13
Matrix: Solid

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 16:55	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 17:26	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 12:11	SMC	EET MID

Client Sample ID: B14-S-230413
Date Collected: 04/13/23 10:40
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-14
Matrix: Solid

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	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 17:16	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 17:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 12:25	SMC	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Client Sample ID: B15-S-230413

Date Collected: 04/13/23 10:45
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 17:37	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 18:09	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 12:30	SMC	EET MID

Client Sample ID: B16-S-230413

Date Collected: 04/13/23 10:50
Date Received: 04/13/23 16:53

Lab Sample ID: 880-27159-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	51143	04/14/23 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51140	04/14/23 17:57	MNR	EET MID
Total/NA	Analysis	8015 NM		1			51216	04/14/23 18:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	51141	04/14/23 08:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51131	04/14/23 18:31	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	51144	04/14/23 09:26	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51175	04/14/23 12:35	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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27159-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-27159-1	B1-S-230413	Solid	04/13/23 10:09	04/13/23 16:53
880-27159-2	B2-S-230413	Solid	04/13/23 10:10	04/13/23 16:53
880-27159-3	B3-S-230413	Solid	04/13/23 10:12	04/13/23 16:53
880-27159-4	B4-S-230413	Solid	04/13/23 10:14	04/13/23 16:53
880-27159-5	B5-S-230413	Solid	04/13/23 10:16	04/13/23 16:53
880-27159-6	B6-S-230413	Solid	04/13/23 10:15	04/13/23 16:53
880-27159-7	B7-S-230413	Solid	04/13/23 10:19	04/13/23 16:53
880-27159-8	B8-S-230413	Solid	04/13/23 10:22	04/13/23 16:53
880-27159-9	B9-S-230413	Solid	04/13/23 10:25	04/13/23 16:53
880-27159-10	B10-S-230413	Solid	04/13/23 10:28	04/13/23 16:53
880-27159-11	B11-S-230413	Solid	04/13/23 10:30	04/13/23 16:53
880-27159-12	B12-S-230413	Solid	04/13/23 10:32	04/13/23 16:53
880-27159-13	B13-S-230413	Solid	04/13/23 10:35	04/13/23 16:53
880-27159-14	B14-S-230413	Solid	04/13/23 10:40	04/13/23 16:53
880-27159-15	B15-S-230413	Solid	04/13/23 10:45	04/13/23 16:53
880-27159-16	B16-S-230413	Solid	04/13/23 10:50	04/13/23 16:53

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins Environment Testing

27159

Client Information	Sampler: Sarah Nolen	Lab PM: Builes John	Carrier Tracking No(s):	COC No.: 880-5418-696 4
Client Contact: Morgan Jordan	Phone: 432-413-3182	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: New Mexico	Page: ~~Page 4 of 4~~ Pg 1 of 2
Company: ARCADIS U S Inc.	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested: 4/14/23			Preservation Codes: A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
City: Midland	TAT Requested (days): *24 hour*			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: 30168561			
Email: Douglas.Jordan@arcadis.com	WO #:			Other:
Project Name: BCR Fed #1	Project #: 88001636			
Site: Eddy County	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	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B1-S-230413	04/13/23	1009	C	Solid			X	X	X		402
B2-S-230413	" "	1010	C	Solid			X	X	X		
B3-S-230413	" "	1012	C	Solid			X	X	X		
B4-S-230413	" "	1014	C	Solid			X	X	X		
B5-S-230413	" "	1016	C	Solid			X	X	X		
B6-S-230413	" "	1015	C	Solid			X	X	X		
B7-S-230413	" "	1019	C	Solid			X	X	X		
B8-S-230413	" "	1022	C	Solid			X	X	X		
B9-S-230413	" "	1025	C	Solid			X	X	X		
B10-S-230413	" "	1028	C	Solid			X	X	X		
B11-S-230413	04/13/23	1036	C	Solid			X	X	X		

880-27159 Chain of Custody

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
Sarah Nolen	04/13/23 1600			04/13/23	
Relinquished by	Date/Time 1653	Company	Received by	Date/Time 1653	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: 3.6/3.3

Ver: 01/16/2019

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins | Environment Testing

27159

4/14/2023

Client Information	Sampler: Sarah Nolen	Lab PM: Bules John	Carrier Tracking No(s):	COC No: 880-5418-696 4
Client Contact: Morgan Jordan	Phone: 432-413-3182	E-Mail: John Bules@et eurofinsus com	State of Origin: New Mexico	Page: ~~Page 4 of 4~~ Pg. 2 of 2
Company: ARCADIS U S Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested: 04/14/23			
City: Midland	TAT Requested (days): *24 hours*			
State, Zip: TX 79701	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: 30168561			
Email: Douglas.Jordan@arcadis com	WO #:			
Project Name: BCR Fed #1	Project #: 88001636			
Site: Eddy County	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
~~B16~~ B12-S-230413	04/13/23	1032	C	Solid			X	X	X		
B13-S-230413	04/13/23	1035	C	Solid			X	X	X		
B14-S-230413	04/13/23	1040	C	Solid			X	X	X		
B15-S-230413	04/13/23	1045	C	Solid			X	X	X		
B16-S-230413	04/13/23	1050	C	Solid			X	X	X		
				Solid							
				Solid							

Loc: 880
27159

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: Sarah Nolen	Date/Time: 04/13/23 1600	Company	Received by:	Date/Time: 04/13/23 1653	Company
Relinquished by:	Date/Time: 1653	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

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-27159-1
SDG Number: Eddy County

Login Number: 27159
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Douglas Jordan
ARCADIS U.S. Inc
10205 Westheimer Rd
Suite 800
Houston, Texas 77042

Generated 4/17/2023 1:13:50 PM

JOB DESCRIPTION

BCR Fed #1
SDG NUMBER Eddy County

JOB NUMBER

880-27190-1

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
4/17/2023 1:13:50 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Laboratory Job ID: 880-27190-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Job ID: 880-27190-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-27190-1

Receipt
The sample was received on 4/14/2023 3:45 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 5.3°C

HPLC/IC
Method 300_ORGFM_28D: The method blank for preparation batch 880-51213 and analytical batch 880-51226 contained Chloride above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.SW-3B-S-230141 (880-27190-1), (MB 880-51213/1-A) and (880-27177-A-1-D)

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Client Sample ID: SW-3B-S-230141
Date Collected: 04/14/23 11:26
Date Received: 04/14/23 15:45

Lab Sample ID: 880-27190-1
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	218	B	5.00	0.395	mg/Kg			04/14/23 21:40	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-51213/1-A
Matrix: Solid
Analysis Batch: 51226

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.525	J	5.00	0.395	mg/Kg			04/14/23 21:02	1

Lab Sample ID: LCS 880-51213/2-A
Matrix: Solid
Analysis Batch: 51226

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	225.2		mg/Kg		90	90 - 110		

Lab Sample ID: LCSD 880-51213/3-A
Matrix: Solid
Analysis Batch: 51226

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	225.5		mg/Kg		90	90 - 110	0	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

HPLC/IC

Leach Batch: 51213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27190-1	SW-3B-S-230141	Soluble	Solid	DI Leach	
MB 880-51213/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-51213/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-51213/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 51226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27190-1	SW-3B-S-230141	Soluble	Solid	300.0	51213
MB 880-51213/1-A	Method Blank	Soluble	Solid	300.0	51213
LCS 880-51213/2-A	Lab Control Sample	Soluble	Solid	300.0	51213
LCSD 880-51213/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	51213

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Client Sample ID: SW-3B-S-230141

Date Collected: 04/14/23 11:26
Date Received: 04/14/23 15:45

Lab Sample ID: 880-27190-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	51213	04/14/23 16:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	51226	04/14/23 21:40	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 U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: BCR Fed #1

Job ID: 880-27190-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-27190-1	SW-3B-S-230141	Solid	04/14/23 11:26	04/14/23 15:45

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

27190

eurofins Environment Testing

Client Information	Sampler: Sarah Voden	Lab PM: Bules John	Carrier Tracking No(s):	COC No.: 880-5418-696 1
Client Contact: Midland Accounts Payable	Phone: 432-413-3182	E-Mail: John Bules@et eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1 → 1 of 1
Company: ARCADIS U S Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): *24 hour *			
State, Zip: TX 79701	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: 30168561			
Email: Douglas.Jordan@arcadis.com ~~accountspayable.administration@arcadis-us.com~~	WO #:			
Project Name: BCR Fed #1	Project #: 88001636			
Site: Eddy County	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Perf TPH	300_ORGFM_28D - Chloride	8021B BTEX	Total Number of containers	Special Instructions/Note.
			Preservation Code:								
SW-3B-S-230414	04/14/23	1126	C	Solid		N		X	N		402
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

880-27190 Chain of Custody

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
		04/14/23 1545			4/14/23 1545	
	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: 5.6 | 5.3 - 0.3

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-27190-1
SDG Number: Eddy County

Login Number: 27190
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
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	

Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620
www.arcadis.com

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 241495

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 241495
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Variance request toward closure is approved. Release resolved.	10/23/2023