Chris Brand
Environmental Remediation/ Facility Decom Advisor

VIA ELECTRONIC MAIL

May 21, 2024

New Mexico Oil Conservation Division
District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Lovington Paddock Unit #45
Soil Remediation Work Plan
Incident No. nPAC0617931420
Case No. 1RP-937

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
Lovington Paddock Unit #45 Soil Remediation Work Plan

The Work Plan was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC) for Chevron USA Inc.

Please do not hesitate to call Scott Foord with Arcadis at 713.953.4853, or myself at 661.401.0359, should you have any questions.

Sincerely,

Chris Brand

Encl. 2024 Work Plan
Lovington Paddock Unit #45

cc. Scott Foord – Arcadis
Morgan Jordan – Arcadis

Chris Brand
Environmental Remediation/ Facility Decom Advisor
6301 Deauville Blvd, Midland, TX 79706
Mobile 661 401 0359
chrisbrand@chevron.com

ARCADIS

Chevron Environmental Management Company

2024 Work Plan

Lovington Paddock Unit #45

Lea County, New Mexico

Incident # nPAC0617931420

May 2024

2024 Work Plan

Lovington Paddock Unit #45
Incident # nPAC0617931420
Lea County, New Mexico

May 2024

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

Prepared For:
Chris Brand
Project Manager
CEMC
6301 Deauville Blvd.
Midland, TX 79706

Scott Foord, PG
Program Manager

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2024 Work Plan
Lovington Paddock Unit #45

1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this Work Plan, for Chevron Environmental Management Company (CEMC) on behalf of Chevron U.S.A. Inc., through its division Chevron North America Exploration and Production Company, for the release site known as the Lovington Paddock Unit #45 (Site) located at coordinates: 32.869549, -103.317650. Details of the release are summarized in the New Mexico Oil Conservation Division (NMOCD) Initial C-141 Form included as **Appendix A**.

2 Project Summary

The Site is located on City of Lovington owned land approximately 5.30 miles southeast of the City of Lovington in Unit A, Section 2, Township 17 South, Range 36 East, Lea County, New Mexico. The site is located within a low karst area. A Site Location Map is included as **Figure 1** and a Topographic Map as **Figure 2**.

2.1 Incident # nPAC0617931420

According to the Initial C-141 Form, on June 20, 2006, internal corrosion within a pipe from valve to well head released approximately 10 barrels (bbls) of produced water at the Site. The water was retained on pad. According to the Initial C-141 Form, the amount recovered by vacuum truck was approximately 5 bbls of standing fluid. The Initial C-141 Form was submitted on June 20, 2006 and assigned remediation permit number 1RP-937 and incident number nPAC0617931420. The Initial C-141 Form is included as **Appendix A**.

3 Site Characterization

After a review of the New Mexico Office of State Engineers (NMOSE) and United States Geological Survey (USGS) databases, USGS well 325216103184601 located approximately 0.25 miles east of the Site was identified and gauged with a water level meter by Arcadis on May 20, 2024. The well was verified as dry at 112.05 feet below ground surface (bgs). The Site is within the City of Lovington municipal well field, therefore the most stringent NMOCD closure criteria will be applied.

The following site characteristics were determined in accordance with 19.15.29 New Mexico Administrative Code (NMAC):

- Shallowest depth to groundwater beneath the area affected by the release in ft bgs: Between 100 and 500 feet;
- Method used to determine the depth to groundwater: direct measurement;
- Distance to continuously flowing watercourse or any other significant watercourse: >5 miles;
- Distance to lakebed, sinkhole, or playa lake: Between 0.50 and 1 mile;
- Distance to occupied permanent residence, school, hospital, institution, or church: Between 1 and 5 miles;
- Distance to spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes: Between 1,000 feet and 0.50 mile;
- Distance to any other fresh water well of spring: Between 1,000 feet and 0.50 mile;

- Distance to incorporated municipal boundaries or a defined municipal fresh water well field: 0 feet, overlying, or within area;
- Distance to wetland: Between 500 feet and 1,000 feet;
- Distance to subsurface mine: >5 miles ;
- Distance to (non-karst) unstable area: >5 miles;
- Categorize the risk of this well/site being in a karst geology: Low;
- Distance to a 100-year floodplain: Between 1 and 5 miles; and
- Did the release impact areas not on an exploration, development, production, or storage site? No

The site characterization data is presented in **Appendix B**.

4 NMAC Regulatory Criteria

Per Table I of NMAC part 19.15.29.12, the following closure criteria apply to the Site for reclamation activities within the first 4 feet of soil and within soil greater than 4 feet bgs due to the Site location being within the City of Lovington municipal well field boundaries.

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Oil Range Organics (ORO)	100 mg/kg
Chloride	600 mg/kg

5 Site Assessment Activities

In March 2023 and February 2024, Arcadis performed site assessment activities to evaluate soil impacts stemming from the release. A total of eight (8) sample points (SB-1 through SB-8) were advanced to depths ranging from the surface to 4 feet bgs inside and surrounding the release area to evaluate the horizontal and vertical extents of the release. Soil sample locations are shown on **Figure 3**. Soil samples were collected for chemical analyses, placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas.

The soil samples were analyzed for BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH by EPA Method 8015, and chloride by EPA method 300.0. Soil samples analyzed for BTEX were reported with concentrations ranging from 0.000341 F2 F1 mg/kg (SB-3) to 0.00117 J mg/kg (SB-4). Soil samples analyzed for TPH were reported with concentrations ranging from 15.1 J mg/kg (SB-8) to 116 mg/kg (SB-7). Soil samples analyzed for chloride were reported with concentrations ranging from 63.3 mg/kg (SB-8) to 1,220 mg/kg (SB-3).

Horizontal and vertical delineation of the area of concern was completed during assessment activities. Analytical data collected to date and field screening during proposed remediation activities will be utilized to guide remediation activities. Soil sample analytical results from assessment activities are summarized in **Table 1**. Laboratory reports for soil samples collected during the assessments, including analytical methods, results, and chain-of-custody documents, are attached in **Appendix C.** NMOCD correspondence is shown in **Appendix D.**

6 Proposed Work Plan

Based on the analytical data and the detected TPH and chloride concentrations in soil samples collected during site assessment activities, CEMC proposes to remediate the areas of concern via excavation illustrated in orange as shown in **Figure 3** and bolded in **Table 1**.

The proposed excavation area encompasses a surface area of approximately 2,500 square feet. An estimated 500 cubic yards of soil will be removed and transported to the R360 Halfway CRI Facility, which is listed as an NMOCD approved disposal facility.

In accordance with NMAC 19.15.29.12(D)(1)(b), CEMC proposes the following confirmation sampling plan to adhere with NMOCD requirements. Five-point composite confirmation soil samples will be collected from the excavation floor and sidewalls at 200 square foot intervals for analysis of BTEX by EPA Method 8260, TPH for GRO, DRO, and ORO by EPA Method 8015, and chloride by EPA Method 300.0. Lateral and vertical limits of the excavation will halt once confirmation sample analytical results are in accordance with NMAC 19.15.29.12(D)(1)(c).

Backfill material will be verified to be non-waste containing prior to backfilling the remediated area by obtaining analytical data from the backfill material supplier (R360) if available, or by collecting a five-point composite sample and analyzing for BTEX by EPA Method 8260, TPH for GRO, DRO, and ORO by EPA Method 8015, and chloride by EPA Method 300.0. Following completion of excavation activities and confirmation that the backfill material is non-waste containing, the areas will be backfilled with the clean material and graded to match the original surface conditions and drainage. Approximately 2,500 square feet of the area of concern located within the former pad area will be reclaimed to original condition and re-seeded following remediation activities.

The proposed remediation activities will be implemented within 90 days following approval of this work plan by the NMOCD. The anticipated schedule includes 30 days to setup field work and confirm sub-contractors, 30 days to complete on-site remediation activities, and 30 days to prepare a soil remediation summary and closure request report.

7 Work Plan Approval Request

Upon completion of the above proposed soil remediation activities, a closure request report describing the remediation activities and a separate reclamation report will be submitted to the NMOCD for review. If you have any questions regarding this work plan or need additional information, please do not hesitate to contact Scott Foord at 281-725-7447 or Morgan Jordan at 281-644-9437.

Tables

Table 1
Soil Analytical Results
Chevron Environmental Management Company
LPU 45

ARCADIS

Sample I.D.	Sample Depth (feet bgs)	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	TPH-GRO	TPH-DRO	TPH GRO + DRO	TPH MRO	Total TPH	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMAC Standards			10	--	--	--	50	--	--	--	--	100	600
Restoration Requirements			10	--	--	--	50	--	--	--	--	100	600
SB-1	0-0.5'	03/28/23	<0.000383	<0.000454	<0.000563	<0.000343	<0.000343	34.3 J	<15.0	34.3 J	<15.0	34.3 J	353
	2'	03/28/23	<0.000384	<0.000455	<0.000564	<0.000343	<0.000343	<15.0	<15.0	<15.0	<15.0	<15.0	404
SB-2	0-0.5'	03/28/23	<0.000387	<0.000459	<0.000568	<0.000346	<0.000346	<15.0	<15.0	<15.0	<15.0	<15.0	70.8
	2'	03/28/23	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	32.8 J	<15.0	32.8 J	<15.0	32.8 J	69.7
SB-3	0-0.5'	03/28/23	<0.000381 F2 F1	<0.000451 F2 F1	<0.000559 F2 F1	0.000341 F2 F1	0.000341 F2 F1	26.3 J	<15.0	26.3 J	<15.0	26.3 J	79.9
	2'	03/28/23	<0.000383	<0.000453	<0.000562	<0.000342	<0.000342	31.9 J	<15.0	31.9 J	<15.0	31.9 J	***1,220***
SB-4	1'	02/01/24	--	--	--	--	--	--	--	--	--	--	68.2
	2'	02/01/24	<0.000383	0.00117 J	<0.000563	<0.00101	0.00117 J	<14.9	<14.9	<14.9	<14.9	<14.9	92.3
SB-5	1'	02/01/24	--	--	--	--	--	--	--	--	--	--	69.2
	2'	02/01/24	<0.000383	0.000650 J	<0.000562	<0.00100	<0.00100	<15.0	<15.0	<15.0	<15.0	<15.0	138
	4'	02/01/24	--	--	--	--	--	--	--	--	--	--	358
SB-6	1'	02/01/24	--	--	--	--	--	--	--	--	--	--	105
	2'	02/01/24	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	<15.1	<15.1	<15.1	<15.1	<15.1	***1,050***
	4'	02/01/24	--	--	--	--	--	--	--	--	--	--	***839***
SB-7	1'	02/01/24	--	--	--	--	--	--	--	--	--	--	514
	2'	02/01/24	<0.000387	0.000500 J	<0.000568	<0.00102	<0.00102	<15.0	116	116	<15.0	***116***	599
	4'	02/01/24	--	--	--	--	--	--	--	--	--	--	454
SB-8	1'	02/01/24	--	--	--	--	--	--	--	--	--	--	50.5
	1.5'	02/01/24	<0.000386	0.000534 J	<0.000566	<0.00101	<0.00101	15.1 J	<15.1	15.1 J	<15.1	15.1 J	63.3

Legend:
BOLD = Analytes exceeding Restoration Requirement
J: Result is less than the Reporting Limit but greater than or equal to the MDL and the concentration is an approximate value
F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits.
F2: MS/MSD Relative Percent Difference (RPD) exceeds control limits.
'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)
mg/kg: Milligram per Kilogram
BTEX : Benzene, Toluene, Ethylbenzene, and Total Xylenes
NMAC : New Mexico Administration Code. Criteria based off of depth to groundwater of 51-100 feet.
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH MRO: Total Petroluem Hydrocarbons Motor Oil Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
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, 2018
Notes:
1. Chloride analyzed by United States Environmental Protection Agency Method 300
2. TPH analyzed by TPH by SW8015 Mod DRO/ORO Method
3. BTEX analyzed by USEPA Method 8021B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures

Legend

Site Location

Credits: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Maxar

0 2,000 4,000 Feet

GRAPHIC SCALE

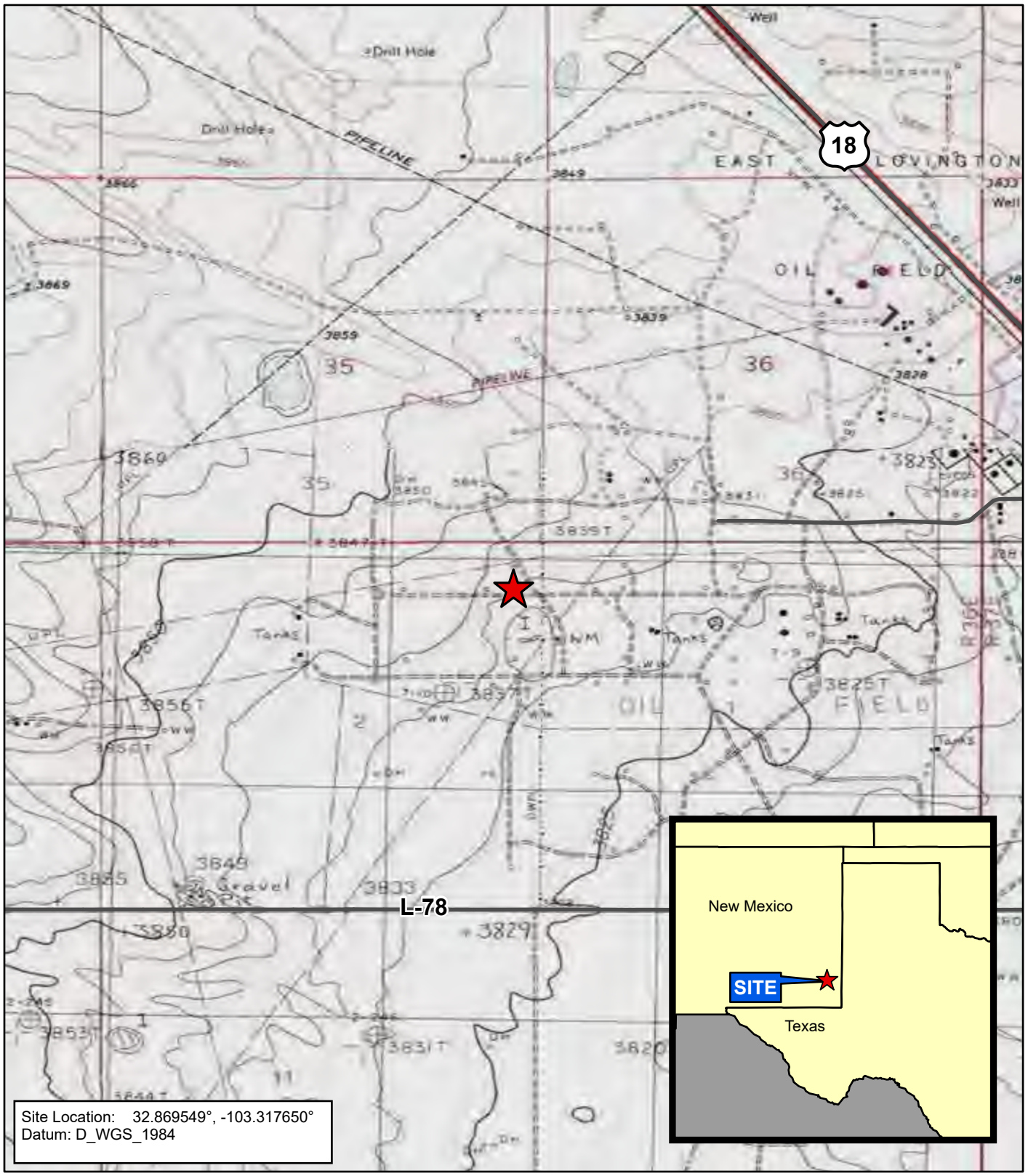
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT #045
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP

ARCADIS

FIGURE 1

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: yadavs0264 : Client (Project #) T:_ENV\Chevron\Upstream\Lovington Paddock Unit #45_Pro\Lovington Paddock Unit #45.aprx 5/21/2024 6:04 PM



Site Location: 32.869549°, -103.317650°
Datum: D_WGS_1984

Legend

Site Location

Credits: ESRI Online, USGS 24,000 K Topo (Map Service)
Red Lake, New Mexico Quadrangle

0 2,000 4,000 Feet
GRAPHIC SCALE

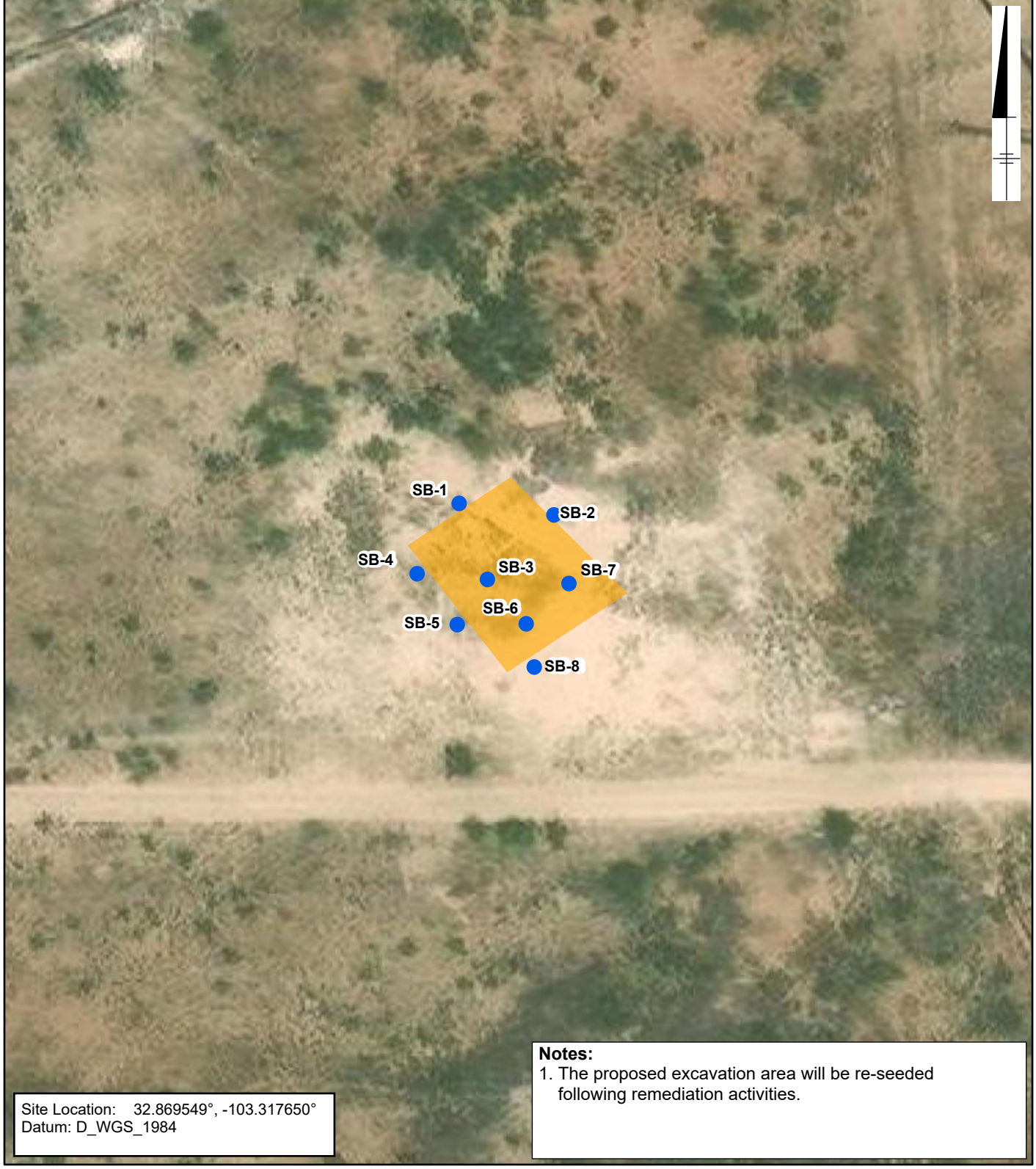
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT #045
LEA COUNTY, NEW MEXICO

TOPOGRAPHIC MAP

ARCADIS

FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: yadavs0264 : Client (Project #)
T:_ENV\Chevron\Upstream\Lovington Paddock Unit #45_Pro\Lovington Paddock Unit #45.aprx 5/21/2024 6:08 PM



Site Location: 32.869549°, -103.317650°
Datum: D_WGS_1984

Notes:
1. The proposed excavation area will be re-seeded following remediation activities.

Legend

- Previous Assessment Sample Location
- Proposed Excavation area

0 50 100 Feet
GRAPHIC SCALE

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT #045
LEA COUNTY, NEW MEXICO

PROPOSED EXCAVATION AND SAMPLE LOCATION MAP

ARCADIS

FIGURE
3

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: yadavs0264 : Client (Project #)
T:_ENV\Chevron\Upstream\Lovington Paddock Unit #45_Pro\Lovington Paddock Unit #45.aprx 5/21/2024 5:38 PM

Appendix A

Initial C-141 Form Incident # nPAC0617931420

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-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Chevron USA Inc.	Contact Wayne Minchew
Address HCR 60 Box 423 Lovington, NM 88260	Telephone No. 505-396-4414
Facility Name Lovington Paddock	Facility Type Injection Well #45

Surface Owner City of Lovington	Mineral Owner State of NM	Lease No. B-1553

LOCATION OF RELEASE 30025038480000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	2	17S	36E	660	North	330	East	LEA

Latitude N32° 52' 10.6" Longitude W103° 19' 3.4"

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 10 bbls	Volume Recovered 5 bbls
Source of Release Injection line going to well	Date and Hour of Occurrence 06-20-06 0900	Date and Hour of Discovery 06-20-06 0930
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Capperton	
By Whom? Larry Ridenour	Date and Hour 06-20-06 1500	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Internal corrosion on pipe. Pipe from valve to well head will be replaced with stainless steel piping

Describe Area Affected and Cleanup Action Taken.*

Water remained on location, picked up all water on surface.

Received Hobbs OCD

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: Larry D Ridenour	OIL CONSERVATION DIVISION
Printed Name: Larry Ridenour	Approved by District Supervisor:
Title: Operations Representative	Approval Date: / Expiration Date:
E-mail Address: lridenour@chevron.com	Conditions of Approval: / Attached ☐
Date: 06-20-06 Phone: 505-396-4414	

* Attach Additional Sheets If Necessary

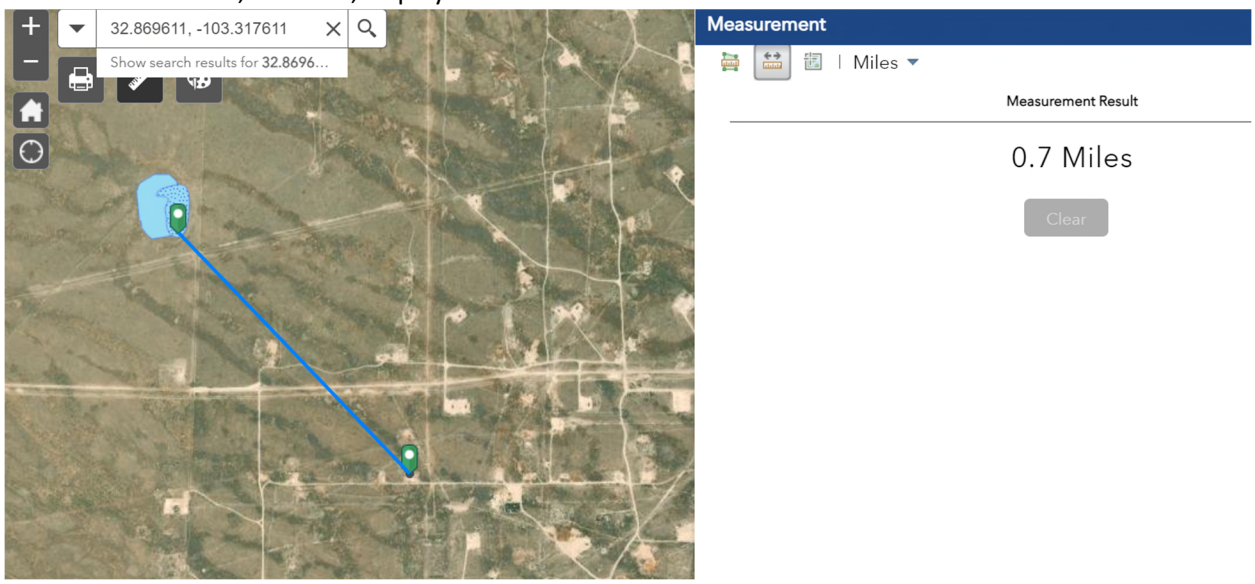
incident - nPAC0617931420
application - pPAC0617932519

RP#937

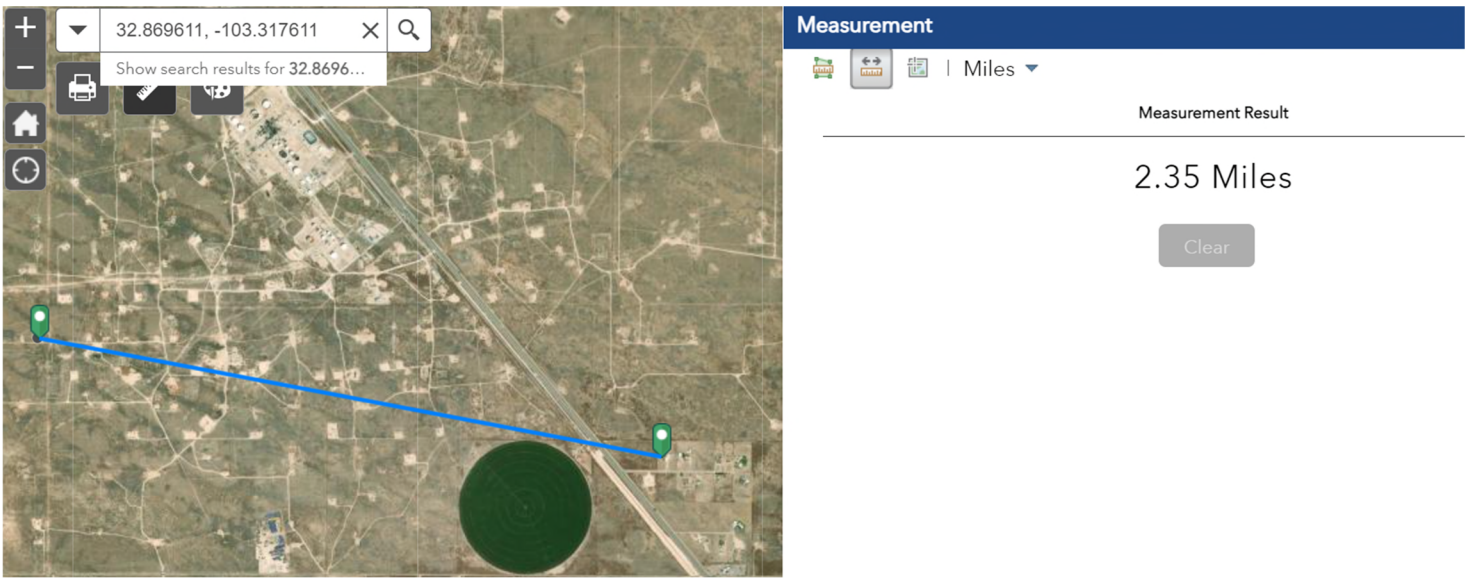
Appendix B

Site Characterization Data

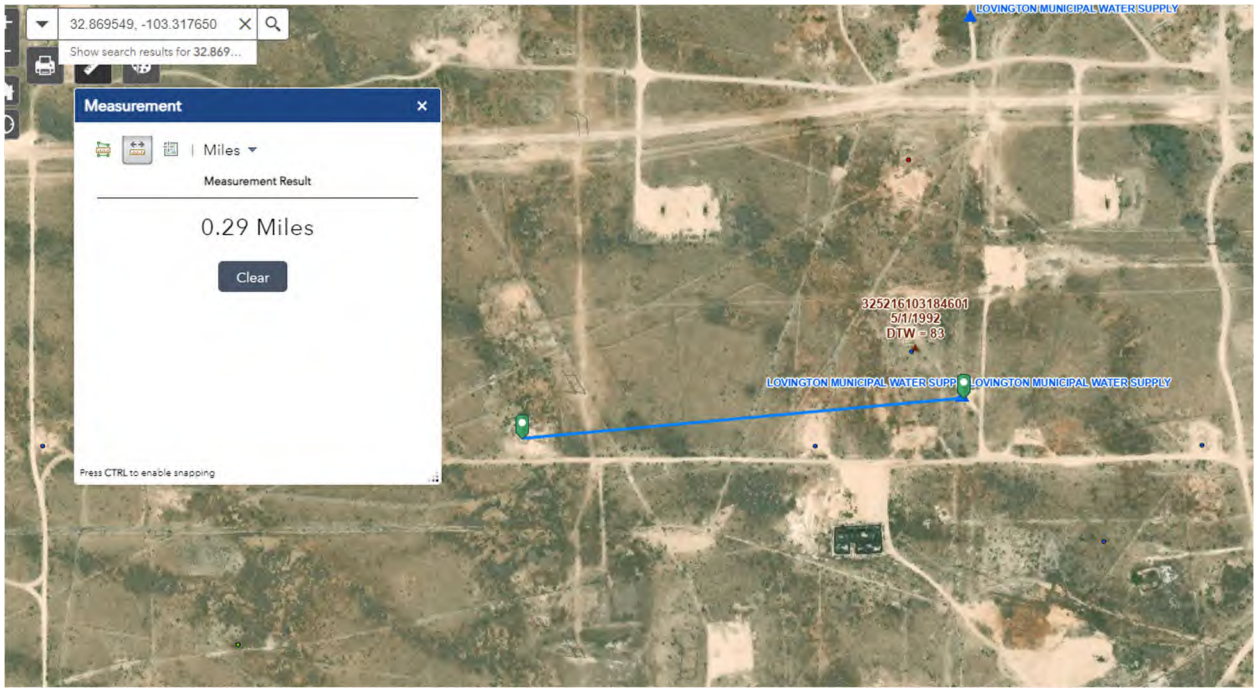
Distance to lakebed, sinkhole, or playa lake.



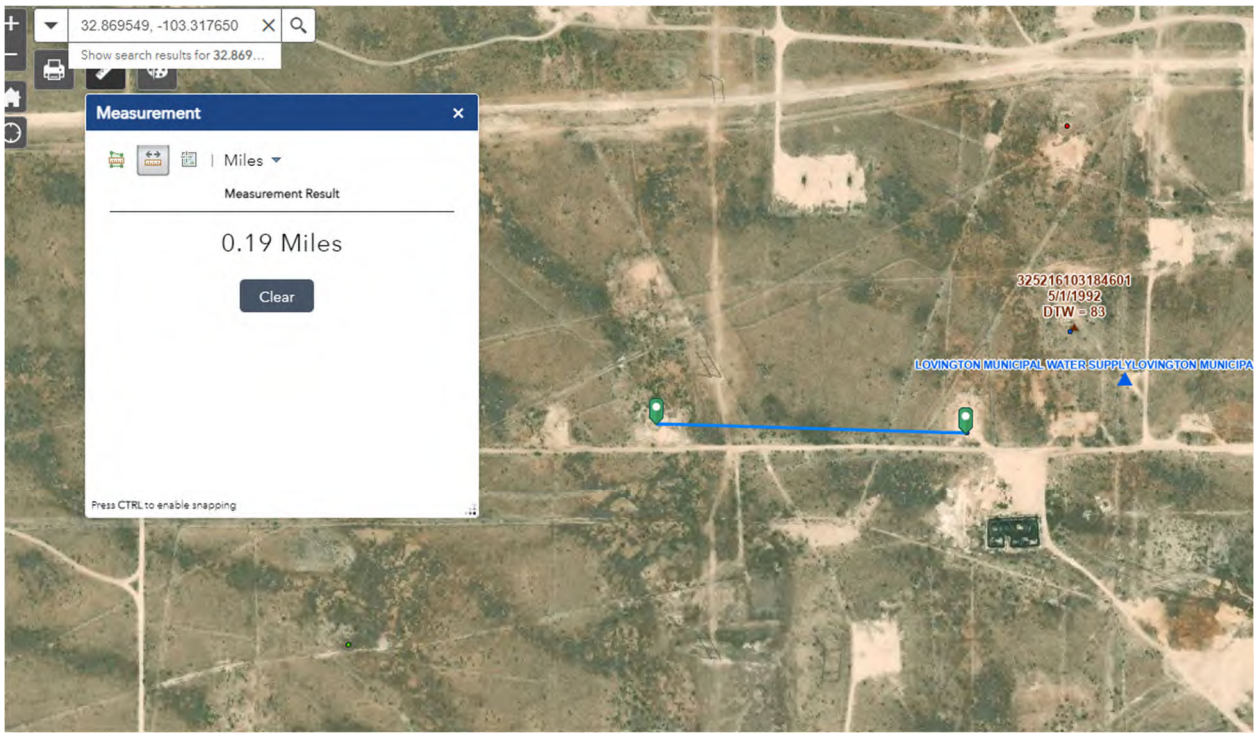
Distance to occupied permanent residence, school, hospital, institution, or church.



Distance to spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes (Lovington Municipal Water Supply Well NM3521813).



Distance to any other fresh water well or spring (L- 04588).



Distance to a wetland.

Appendix C

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 4/8/2023 8:28:00 AM

JOB DESCRIPTION

LPU - 45

JOB NUMBER

880-26494-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

Eurofins Midland

Job Notes

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
4/8/2023 8:28:00 AM

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

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Laboratory Job ID: 880-26494-1

Table of Contents

Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 880-26494-1
Project/Site: LPU - 45

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: LPU - 45

Job ID: 880-26494-1

Job ID: 880-26494-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-26494-1

Receipt
The samples were received on 3/28/2023 4:57 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 1.3°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: Surrogate recovery for the following sample was outside control limits: (MB 880-50426/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-50430/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-50430 and analytical batch 880-50521 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Surrogate recovery for the following samples were outside control limits: (LCS 880-50008/2-A) and (LCSD 880-50008/3-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
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: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-3-S-0-0.5-20230328

Lab Sample ID: 880-26494-1
Matrix: Solid
Date Collected: 03/28/23 11:57
Date Received: 03/28/23 16:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U F2 F1	0.00198	0.000381	mg/Kg		04/05/23 16:48	04/07/23 06:02	1
Toluene	<0.000451	U F2 F1	0.00198	0.000451	mg/Kg		04/05/23 16:48	04/07/23 06:02	1
Ethylbenzene	<0.000559	U F2 F1	0.00198	0.000559	mg/Kg		04/05/23 16:48	04/07/23 06:02	1
m-Xylene & p-Xylene	<0.00100	U F2 F1	0.00396	0.00100	mg/Kg		04/05/23 16:48	04/07/23 06:02	1
o-Xylene	**0.000341**	**J F2 F1**	0.00198	0.000341	mg/Kg		04/05/23 16:48	04/07/23 06:02	1
Xylenes, Total	<0.00100	U F1	0.00396	0.00100	mg/Kg		04/05/23 16:48	04/07/23 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:02*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26.3**	**J**	49.9	15.0	mg/Kg			04/03/23 12:07	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	**26.3**	**J**	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:21	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:21	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/31/23 09:22*	*04/01/23 16:21*	*1*
o-Terphenyl	*80*		*70 - 130*	*03/31/23 09:22*	*04/01/23 16:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**79.9**		4.97	0.393	mg/Kg			04/05/23 19:32	1

Client Sample ID: SB-3-S-2-20230328

Lab Sample ID: 880-26494-2
Matrix: Solid
Date Collected: 03/28/23 11:58
Date Received: 03/28/23 16:57

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		04/05/23 16:48	04/07/23 06:29	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/05/23 16:48	04/07/23 06:29	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/05/23 16:48	04/07/23 06:29	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/05/23 16:48	04/07/23 06:29	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/05/23 16:48	04/07/23 06:29	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/05/23 16:48	04/07/23 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:29*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**31.9**	**J**	49.9	15.0	mg/Kg			04/03/23 12:07	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-3-S-2-20230328

Lab Sample ID: 880-26494-2
Matrix: Solid
Date Collected: 03/28/23 11:58
Date Received: 03/28/23 16:57

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	31.9	J	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:43	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:43	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/31/23 09:22*	*04/01/23 16:43*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/31/23 09:22*	*04/01/23 16:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		25.1	1.98	mg/Kg			04/05/23 19:36	5

Client Sample ID: SB-1-S-0-0.5-20230328

Lab Sample ID: 880-26494-3
Matrix: Solid
Date Collected: 03/28/23 12:03
Date Received: 03/28/23 16:57

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		04/05/23 16:48	04/07/23 06:55	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/05/23 16:48	04/07/23 06:55	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/05/23 16:48	04/07/23 06:55	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/05/23 16:48	04/07/23 06:55	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/05/23 16:48	04/07/23 06:55	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/05/23 16:48	04/07/23 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:55*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/05/23 16:48*	*04/07/23 06:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	34.3	J	50.0	15.0	mg/Kg			04/03/23 12:07	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	34.3	J	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:05	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:05	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:05*	*1*
o-Terphenyl	*82*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	353		5.02	0.397	mg/Kg			04/05/23 19:41	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-1-S-2-20230328

Lab Sample ID: 880-26494-4
Matrix: Solid
Date Collected: 03/28/23 12:57
Date Received: 03/28/23 16:57

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		04/05/23 16:48	04/07/23 08:23	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/05/23 16:48	04/07/23 08:23	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/05/23 16:48	04/07/23 08:23	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/05/23 16:48	04/07/23 08:23	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/05/23 16:48	04/07/23 08:23	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/05/23 16:48	04/07/23 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*04/05/23 16:48*	*04/07/23 08:23*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*04/05/23 16:48*	*04/07/23 08:23*	*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	50.0	15.0	mg/Kg			04/03/23 12:07	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	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:26	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:26*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**404**		5.03	0.397	mg/Kg			04/05/23 19:45	1

Client Sample ID: SB-2-S-0-0.5-20230328

Lab Sample ID: 880-26494-5
Matrix: Solid
Date Collected: 03/28/23 12:16
Date Received: 03/28/23 16:57

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		04/05/23 16:48	04/07/23 08:49	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/05/23 16:48	04/07/23 08:49	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/05/23 16:48	04/07/23 08:49	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/05/23 16:48	04/07/23 08:49	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/05/23 16:48	04/07/23 08:49	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/05/23 16:48	04/07/23 08:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*04/05/23 16:48*	*04/07/23 08:49*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*04/05/23 16:48*	*04/07/23 08:49*	*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			04/03/23 12:07	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-2-S-0-0.5-20230328

Lab Sample ID: 880-26494-5
Matrix: Solid
Date Collected: 03/28/23 12:16
Date Received: 03/28/23 16:57

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		03/31/23 09:22	04/01/23 17:48	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:48	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:48*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/31/23 09:22*	*04/01/23 17:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.8**		5.04	0.398	mg/Kg			04/05/23 19:50	1

Client Sample ID: SB-2-S-2-20230328

Lab Sample ID: 880-26494-6
Matrix: Solid
Date Collected: 03/28/23 12:19
Date Received: 03/28/23 16:57

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		04/05/23 16:48	04/07/23 09:15	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		04/05/23 16:48	04/07/23 09:15	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		04/05/23 16:48	04/07/23 09:15	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		04/05/23 16:48	04/07/23 09:15	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		04/05/23 16:48	04/07/23 09:15	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		04/05/23 16:48	04/07/23 09:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*04/05/23 16:48*	*04/07/23 09:15*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*04/05/23 16:48*	*04/07/23 09:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**32.8**	**J**	49.9	15.0	mg/Kg			04/03/23 12:07	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	**32.8**	**J**	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 18:10	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 18:10	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 09:22	04/01/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/31/23 09:22*	*04/01/23 18:10*	*1*
o-Terphenyl	*82*		*70 - 130*	*03/31/23 09:22*	*04/01/23 18:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.7**		4.97	0.393	mg/Kg			04/05/23 19:54	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

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)
880-26494-1	SB-3-S-0-0.5-20230328	106	84
880-26494-1 MS	SB-3-S-0-0.5-20230328	112	91
880-26494-1 MSD	SB-3-S-0-0.5-20230328	91	78
880-26494-2	SB-3-S-2-20230328	114	78
880-26494-3	SB-1-S-0-0.5-20230328	119	89
880-26494-4	SB-1-S-2-20230328	126	82
880-26494-5	SB-2-S-0-0.5-20230328	114	84
880-26494-6	SB-2-S-2-20230328	120	87
LCS 880-50430/1-A	Lab Control Sample	107	106
LCSD 880-50430/2-A	Lab Control Sample Dup	100	77
MB 880-50426/5-A	Method Blank	67 S1-	84
MB 880-50430/5-A	Method Blank	68 S1-	84

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)
880-26494-1	SB-3-S-0-0.5-20230328	102	80
880-26494-2	SB-3-S-2-20230328	106	83
880-26494-3	SB-1-S-0-0.5-20230328	105	82
880-26494-4	SB-1-S-2-20230328	111	88
880-26494-5	SB-2-S-0-0.5-20230328	122	99
880-26494-6	SB-2-S-2-20230328	101	82
LCS 880-50008/2-A	Lab Control Sample	86	65 S1-
LCSD 880-50008/3-A	Lab Control Sample Dup	74	55 S1-
MB 880-50008/1-A	Method Blank	112	93

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50426/5-A
Matrix: Solid
Analysis Batch: 50521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/05/23 16:16	04/06/23 15:50	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/05/23 16:16	04/06/23 15:50	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/05/23 16:16	04/06/23 15:50	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 16:16	04/06/23 15:50	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/05/23 16:16	04/06/23 15:50	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 16:16	04/06/23 15:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*04/05/23 16:16*	*04/06/23 15:50*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*04/05/23 16:16*	*04/06/23 15:50*	*1*

Lab Sample ID: MB 880-50430/5-A
Matrix: Solid
Analysis Batch: 50521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/05/23 16:48	04/07/23 05:35	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/05/23 16:48	04/07/23 05:35	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/05/23 16:48	04/07/23 05:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 16:48	04/07/23 05:35	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/05/23 16:48	04/07/23 05:35	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 16:48	04/07/23 05:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*04/05/23 16:48*	*04/07/23 05:35*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*04/05/23 16:48*	*04/07/23 05:35*	*1*

Lab Sample ID: LCS 880-50430/1-A
Matrix: Solid
Analysis Batch: 50521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09961		mg/Kg		100	70 - 130
Toluene	0.100	0.1040		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.09690		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1879		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09963		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-50430/2-A
Matrix: Solid
Analysis Batch: 50521

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1077		mg/Kg		108	70 - 130	8	35

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

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

Lab Sample ID: LCSD 880-50430/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50521 — **Prep Batch: 50430**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1136		mg/Kg		114	70 - 130	9	35
Ethylbenzene			0.100	0.1077		mg/Kg		108	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2094		mg/Kg		105	70 - 130	11	35
o-Xylene			0.100	0.1098		mg/Kg		110	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*

Lab Sample ID: 880-26494-1 MS — **Client Sample ID: SB-3-S-0-0.5-20230328**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50521 — **Prep Batch: 50430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000381	U F2 F1	0.0998	0.08653		mg/Kg		87	70 - 130
Toluene	<0.000451	U F2 F1	0.0998	0.07723		mg/Kg		77	70 - 130
Ethylbenzene	<0.000559	U F2 F1	0.0998	0.06306	F1	mg/Kg		63	70 - 130
m-Xylene & p-Xylene	<0.00100	U F2 F1	0.200	0.01236	F1	mg/Kg		6	70 - 130
o-Xylene	0.000341	J F2 F1	0.0998	0.07015		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-26494-1 MSD — **Client Sample ID: SB-3-S-0-0.5-20230328**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50521 — **Prep Batch: 50430**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000381	U F2 F1	0.100	0.03577	F2 F1	mg/Kg		36	70 - 130	83	35
Toluene	<0.000451	U F2 F1	0.100	0.03605	F2 F1	mg/Kg		36	70 - 130	73	35
Ethylbenzene	<0.000559	U F2 F1	0.100	0.03797	F2 F1	mg/Kg		38	70 - 130	50	35
m-Xylene & p-Xylene	<0.00100	U F2 F1	0.200	0.07312	F2 F1	mg/Kg		36	70 - 130	142	35
o-Xylene	0.000341	J F2 F1	0.100	0.03649	F2 F1	mg/Kg		36	70 - 130	63	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*

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

Lab Sample ID: MB 880-50008/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50075 — **Prep Batch: 50008**

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		03/31/23 09:22	04/01/23 08:55	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

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

Lab Sample ID: MB 880-50008/1-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 08:55	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 09:22	04/01/23 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/31/23 09:22*	*04/01/23 08:55*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/31/23 09:22*	*04/01/23 08:55*	*1*

Lab Sample ID: LCS 880-50008/2-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	802.6		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	815.4		mg/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*65*	*S1-*	*70 - 130*

Lab Sample ID: LCSD 880-50008/3-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50008

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	895.3		mg/Kg		90	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	737.3		mg/Kg		74	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*55*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50175/1-A
Matrix: Solid
Analysis Batch: 50439

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			04/05/23 17:37	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50175/2-A
Matrix: Solid
Analysis Batch: 50439

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.7		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-50175/3-A
Matrix: Solid
Analysis Batch: 50439

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	241.4		mg/Kg		97	90 - 110	2	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

GC VOA

Prep Batch: 50426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-50426/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 50430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Total/NA	Solid	5030B	
880-26494-2	SB-3-S-2-20230328	Total/NA	Solid	5030B	
880-26494-3	SB-1-S-0-0.5-20230328	Total/NA	Solid	5030B	
880-26494-4	SB-1-S-2-20230328	Total/NA	Solid	5030B	
880-26494-5	SB-2-S-0-0.5-20230328	Total/NA	Solid	5030B	
880-26494-6	SB-2-S-2-20230328	Total/NA	Solid	5030B	
MB 880-50430/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-50430/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-50430/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-26494-1 MS	SB-3-S-0-0.5-20230328	Total/NA	Solid	5030B	
880-26494-1 MSD	SB-3-S-0-0.5-20230328	Total/NA	Solid	5030B	

Analysis Batch: 50521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Total/NA	Solid	8021B	50430
880-26494-2	SB-3-S-2-20230328	Total/NA	Solid	8021B	50430
880-26494-3	SB-1-S-0-0.5-20230328	Total/NA	Solid	8021B	50430
880-26494-4	SB-1-S-2-20230328	Total/NA	Solid	8021B	50430
880-26494-5	SB-2-S-0-0.5-20230328	Total/NA	Solid	8021B	50430
880-26494-6	SB-2-S-2-20230328	Total/NA	Solid	8021B	50430
MB 880-50426/5-A	Method Blank	Total/NA	Solid	8021B	50426
MB 880-50430/5-A	Method Blank	Total/NA	Solid	8021B	50430
LCS 880-50430/1-A	Lab Control Sample	Total/NA	Solid	8021B	50430
LCSD 880-50430/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50430
880-26494-1 MS	SB-3-S-0-0.5-20230328	Total/NA	Solid	8021B	50430
880-26494-1 MSD	SB-3-S-0-0.5-20230328	Total/NA	Solid	8021B	50430

GC Semi VOA

Prep Batch: 50008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Total/NA	Solid	8015NM Prep	
880-26494-2	SB-3-S-2-20230328	Total/NA	Solid	8015NM Prep	
880-26494-3	SB-1-S-0-0.5-20230328	Total/NA	Solid	8015NM Prep	
880-26494-4	SB-1-S-2-20230328	Total/NA	Solid	8015NM Prep	
880-26494-5	SB-2-S-0-0.5-20230328	Total/NA	Solid	8015NM Prep	
880-26494-6	SB-2-S-2-20230328	Total/NA	Solid	8015NM Prep	
MB 880-50008/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50008/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 50075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Total/NA	Solid	8015B NM	50008
880-26494-2	SB-3-S-2-20230328	Total/NA	Solid	8015B NM	50008
880-26494-3	SB-1-S-0-0.5-20230328	Total/NA	Solid	8015B NM	50008
880-26494-4	SB-1-S-2-20230328	Total/NA	Solid	8015B NM	50008

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

GC Semi VOA (Continued)

Analysis Batch: 50075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-5	SB-2-S-0-0.5-20230328	Total/NA	Solid	8015B NM	50008
880-26494-6	SB-2-S-2-20230328	Total/NA	Solid	8015B NM	50008
MB 880-50008/1-A	Method Blank	Total/NA	Solid	8015B NM	50008
LCS 880-50008/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50008
LCSD 880-50008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50008

Analysis Batch: 50184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Total/NA	Solid	8015 NM	
880-26494-2	SB-3-S-2-20230328	Total/NA	Solid	8015 NM	
880-26494-3	SB-1-S-0-0.5-20230328	Total/NA	Solid	8015 NM	
880-26494-4	SB-1-S-2-20230328	Total/NA	Solid	8015 NM	
880-26494-5	SB-2-S-0-0.5-20230328	Total/NA	Solid	8015 NM	
880-26494-6	SB-2-S-2-20230328	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Soluble	Solid	DI Leach	
880-26494-2	SB-3-S-2-20230328	Soluble	Solid	DI Leach	
880-26494-3	SB-1-S-0-0.5-20230328	Soluble	Solid	DI Leach	
880-26494-4	SB-1-S-2-20230328	Soluble	Solid	DI Leach	
880-26494-5	SB-2-S-0-0.5-20230328	Soluble	Solid	DI Leach	
880-26494-6	SB-2-S-2-20230328	Soluble	Solid	DI Leach	
MB 880-50175/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50175/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50175/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 50439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26494-1	SB-3-S-0-0.5-20230328	Soluble	Solid	300.0	50175
880-26494-2	SB-3-S-2-20230328	Soluble	Solid	300.0	50175
880-26494-3	SB-1-S-0-0.5-20230328	Soluble	Solid	300.0	50175
880-26494-4	SB-1-S-2-20230328	Soluble	Solid	300.0	50175
880-26494-5	SB-2-S-0-0.5-20230328	Soluble	Solid	300.0	50175
880-26494-6	SB-2-S-2-20230328	Soluble	Solid	300.0	50175
MB 880-50175/1-A	Method Blank	Soluble	Solid	300.0	50175
LCS 880-50175/2-A	Lab Control Sample	Soluble	Solid	300.0	50175
LCSD 880-50175/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50175

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-3-S-0-0.5-20230328

Lab Sample ID: 880-26494-1
Matrix: Solid
Date Collected: 03/28/23 11:57
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 06:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 16:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50439	04/05/23 19:32	SMC	EET MID

Client Sample ID: SB-3-S-2-20230328

Lab Sample ID: 880-26494-2
Matrix: Solid
Date Collected: 03/28/23 11:58
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 06:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 16:43	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	50439	04/05/23 19:36	SMC	EET MID

Client Sample ID: SB-1-S-0-0.5-20230328

Lab Sample ID: 880-26494-3
Matrix: Solid
Date Collected: 03/28/23 12:03
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 06:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 17:05	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50439	04/05/23 19:41	SMC	EET MID

Client Sample ID: SB-1-S-2-20230328

Lab Sample ID: 880-26494-4
Matrix: Solid
Date Collected: 03/28/23 12:57
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 08:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 17:26	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: LPU - 45

Job ID: 880-26494-1

Client Sample ID: SB-1-S-2-20230328

Lab Sample ID: 880-26494-4
Matrix: Solid
Date Collected: 03/28/23 12:57
Date Received: 03/28/23 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50439	04/05/23 19:45	SMC	EET MID

Client Sample ID: SB-2-S-0-0.5-20230328

Lab Sample ID: 880-26494-5
Matrix: Solid
Date Collected: 03/28/23 12:16
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 08:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 17:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50439	04/05/23 19:50	SMC	EET MID

Client Sample ID: SB-2-S-2-20230328

Lab Sample ID: 880-26494-6
Matrix: Solid
Date Collected: 03/28/23 12:19
Date Received: 03/28/23 16:57

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	50430	04/05/23 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50521	04/07/23 09:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			50184	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50008	03/31/23 09:22	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 18:10	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50175	04/03/23 11:22	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50439	04/05/23 19:54	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: LPU - 45

Job ID: 880-26494-1

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: LPU - 45

Job ID: 880-26494-1

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: LPU - 45

Job ID: 880-26494-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-26494-1	SB-3-S-0-0.5-20230328	Solid	03/28/23 11:57	03/28/23 16:57
880-26494-2	SB-3-S-2-20230328	Solid	03/28/23 11:58	03/28/23 16:57
880-26494-3	SB-1-S-0-0.5-20230328	Solid	03/28/23 12:03	03/28/23 16:57
880-26494-4	SB-1-S-2-20230328	Solid	03/28/23 12:57	03/28/23 16:57
880-26494-5	SB-2-S-0-0.5-20230328	Solid	03/28/23 12:16	03/28/23 16:57
880-26494-6	SB-2-S-2-20230328	Solid	03/28/23 12:19	03/28/23 16:57

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

Chain of Custody Record

26494

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Client Information	Sampler: Terry Shongwell	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5474-713 2
Client Contact: Douglas Jordan	Phone: 432-288-0875	E-Mail: John Builes@et.eurofinsus com	State of Origin:	Page: 1 / Page 1 of 1
Company: ARCADIS U S Inc	PWSID:	Analysis Requested		Job #:
Address: 10205 Westheimer Rd Suite 800	Due Date Requested:			
City: Houston	TAT Requested (days): Standard			
State Zip: TX, 77042	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: PN 30172230 0001C			
Email: douglas jordan@arcadis.com	WO #:			
Project Name: ~~Lovington LPU Central Battery~~ LPU-45	Project #: 88001697			
Site:	SSOW#:			

Preservation Codes: A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H Ascorbic Acid, I Ice, J - DI Water, K EDTA, L EDA, 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:		X	X	N	X	
SB-3-S-0-0.5-20230328	03/28/23	1157	G	Solid			X		
SB-3-S-[redacted]2-20230328	03/28/23	1158	G	Solid			X		
SB-1-S-0-0.5-20230328	03/28/23	1203	G	Solid			X		
SB-1-S-[redacted]-2-20230328	03/28/23	1207	G	Solid			X		
SB-2-S-0-0.5-20230328	03/28/23	1216	G	Solid			X		
SB-2-S-[redacted]2-20230328	03/28/23	1219	G	Solid			X		
				Solid					
				Solid					
				Solid					

880-26494 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
Terry Shongwell	03/28/23 / 1657	Arcadis	J Kramer	3-28-23 1657	
			J Kramer	3-29-23 731AM	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No: | Cooler Temperature(s) °C and Other Remarks: 6/1.3 1R9

Ver 01/16/2019

4/8/2023

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-26494-1

Login Number: 26494
List Number: 1
Creator: Kramer, Jessica

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 2/15/2024 3:51:12 PM

JOB DESCRIPTION

LPU 45
Lovington, NM

JOB NUMBER

880-38876-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

Eurofins Midland

Job Notes

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

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

Authorization

Generated
2/15/2024 3:51:12 PM

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

Client: ARCADIS US Inc
Project/Site: LPU 45

Laboratory Job ID: 880-38876-1
SDG: Lovington, NM

Table of Contents

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: ARCADIS US Inc
Project: LPU 45

Job ID: 880-38876-1

Job ID: 880-38876-1 Eurofins Midland

Job Narrative
880-38876-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 2/5/2024 8:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-4-S-1'-240201 (880-38876-1), SB-4-S-2'-240201 (880-38876-2), SB-5-S-1'-240201 (880-38876-3), SB-5-S-2'-240201 (880-38876-4), SB-5-S-4'-240201 (880-38876-5), SB-6-S-1'-240201 (880-38876-6), SB-6-S-2'-240201 (880-38876-7), SB-6-S-4'-240201 (880-38876-8), SB-7-S-1'-240201 (880-38876-9), SB-7-S-2'-240201 (880-38876-10), SB-7-S-4'-240201 (880-38876-11), SB-8-S-1'-240201 (880-38876-12) and SB-8-S-1.5'-240201 (880-38876-13).

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 880-72465 and analytical batch 880-72794 was outside the upper control limits.

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

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

Client Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-4-S-1'-240201

Lab Sample ID: 880-38876-1
Matrix: Solid
Date Collected: 02/01/24 12:40
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.2		4.96	0.392	mg/Kg			02/05/24 21:52	1

Client Sample ID: SB-4-S-2'-240201

Lab Sample ID: 880-38876-2
Matrix: Solid
Date Collected: 02/01/24 12:50
Date Received: 02/05/24 08:42

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		02/13/24 14:44	02/14/24 23:17	1
Toluene	0.00117	J	0.00199	0.000454	mg/Kg		02/13/24 14:44	02/14/24 23:17	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		02/13/24 14:44	02/14/24 23:17	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		02/13/24 14:44	02/14/24 23:17	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		02/13/24 14:44	02/14/24 23:17	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		02/13/24 14:44	02/14/24 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:17*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00117	J	0.00398	0.00101	mg/Kg			02/14/24 23:17	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	49.7	14.9	mg/Kg			02/10/24 21:24	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	49.7	14.9	mg/Kg		02/06/24 10:41	02/10/24 21:24	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.7	14.9	mg/Kg		02/06/24 10:41	02/10/24 21:24	1
OII Range Organics (Over C28-C36)	<14.9	U	49.7	14.9	mg/Kg		02/06/24 10:41	02/10/24 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/06/24 10:41*	*02/10/24 21:24*	*1*
o-Terphenyl	*79*		*70 - 130*	*02/06/24 10:41*	*02/10/24 21:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.3		4.95	0.391	mg/Kg			02/05/24 21:57	1

Client Sample ID: SB-5-S-1'-240201

Lab Sample ID: 880-38876-3
Matrix: Solid
Date Collected: 02/01/24 13:10
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.2		5.05	0.399	mg/Kg			02/05/24 17:18	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-5-S-2'-240201

Lab Sample ID: 880-38876-4
Matrix: Solid
Date Collected: 02/01/24 13:20
Date Received: 02/05/24 08:42

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		02/13/24 14:44	02/14/24 23:38	1
Toluene	**0.000650**	**J**	0.00199	0.000453	mg/Kg		02/13/24 14:44	02/14/24 23:38	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		02/13/24 14:44	02/14/24 23:38	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		02/13/24 14:44	02/14/24 23:38	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		02/13/24 14:44	02/14/24 23:38	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		02/13/24 14:44	02/14/24 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:38*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			02/14/24 23:38	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			02/10/24 21:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		02/06/24 10:41	02/10/24 21:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		02/06/24 10:41	02/10/24 21:47	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		02/06/24 10:41	02/10/24 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*02/06/24 10:41*	*02/10/24 21:47*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/06/24 10:41*	*02/10/24 21:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**138**		5.03	0.397	mg/Kg			02/05/24 17:39	1

Client Sample ID: SB-5-S-4'-240201

Lab Sample ID: 880-38876-5
Matrix: Solid
Date Collected: 02/01/24 13:30
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**358**		4.97	0.393	mg/Kg			02/05/24 17:46	1

Client Sample ID: SB-6-S-1'-240201

Lab Sample ID: 880-38876-6
Matrix: Solid
Date Collected: 02/01/24 13:50
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**105**		4.98	0.393	mg/Kg			02/05/24 17:52	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-6-S-2'-240201

Lab Sample ID: 880-38876-7
Matrix: Solid
Date Collected: 02/01/24 14:00
Date Received: 02/05/24 08:42

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		02/13/24 14:44	02/14/24 23:58	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		02/13/24 14:44	02/14/24 23:58	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		02/13/24 14:44	02/14/24 23:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		02/13/24 14:44	02/14/24 23:58	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		02/13/24 14:44	02/14/24 23:58	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		02/13/24 14:44	02/14/24 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:58*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/13/24 14:44*	*02/14/24 23:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			02/14/24 23:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.3	15.1	mg/Kg			02/10/24 22:09	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	<15.1	U	50.3	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:09	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.3	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:09	1
OII Range Organics (Over C28-C36)	<15.1	U	50.3	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*02/06/24 10:41*	*02/10/24 22:09*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/06/24 10:41*	*02/10/24 22:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1050**		5.01	0.396	mg/Kg			02/05/24 17:59	1

Client Sample ID: SB-6-S-4'-240201

Lab Sample ID: 880-38876-8
Matrix: Solid
Date Collected: 02/01/24 14:10
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**839**		5.02	0.397	mg/Kg			02/05/24 18:20	1

Client Sample ID: SB-7-S-1'-240201

Lab Sample ID: 880-38876-9
Matrix: Solid
Date Collected: 02/01/24 14:30
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**514**		4.99	0.394	mg/Kg			02/05/24 18:26	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-7-S-2'-240201

Lab Sample ID: 880-38876-10
Matrix: Solid
Date Collected: 02/01/24 14:40
Date Received: 02/05/24 08:42

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		02/13/24 14:44	02/15/24 00:18	1
Toluene	**0.000500**	**J**	0.00201	0.000459	mg/Kg		02/13/24 14:44	02/15/24 00:18	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		02/13/24 14:44	02/15/24 00:18	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		02/13/24 14:44	02/15/24 00:18	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		02/13/24 14:44	02/15/24 00:18	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		02/13/24 14:44	02/15/24 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*02/13/24 14:44*	*02/15/24 00:18*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*02/13/24 14:44*	*02/15/24 00:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			02/15/24 00:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**116**		50.1	15.0	mg/Kg			02/11/24 02:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.1	15.0	mg/Kg		02/06/24 10:41	02/11/24 02:47	1
Diesel Range Organics (Over C10-C28)	**116**		50.1	15.0	mg/Kg		02/06/24 10:41	02/11/24 02:47	1
OII Range Organics (Over C28-C36)	<15.0	U	50.1	15.0	mg/Kg		02/06/24 10:41	02/11/24 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*02/06/24 10:41*	*02/11/24 02:47*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/06/24 10:41*	*02/11/24 02:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**599**		5.00	0.395	mg/Kg			02/05/24 18:33	1

Client Sample ID: SB-7-S-4'-240201

Lab Sample ID: 880-38876-11
Matrix: Solid
Date Collected: 02/01/24 14:50
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**454**		5.04	0.398	mg/Kg			02/05/24 18:40	1

Client Sample ID: SB-8-S-1'-240201

Lab Sample ID: 880-38876-12
Matrix: Solid
Date Collected: 02/01/24 15:20
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.5**		5.03	0.397	mg/Kg			02/05/24 18:47	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-8-S-1.5'-240201

Date Collected: 02/01/24 15:30
Date Received: 02/05/24 08:42

Lab Sample ID: 880-38876-13

Matrix: Solid

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		02/13/24 14:44	02/15/24 00:39	1
Toluene	**0.000534**	**J**	0.00200	0.000457	mg/Kg		02/13/24 14:44	02/15/24 00:39	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		02/13/24 14:44	02/15/24 00:39	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		02/13/24 14:44	02/15/24 00:39	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		02/13/24 14:44	02/15/24 00:39	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		02/13/24 14:44	02/15/24 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*02/13/24 14:44*	*02/15/24 00:39*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*02/13/24 14:44*	*02/15/24 00:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg			02/15/24 00:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15.1**	**J**	50.4	15.1	mg/Kg			02/10/24 22:31	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	**15.1**	**J**	50.4	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:31	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.4	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:31	1
OII Range Organics (Over C28-C36)	<15.1	U	50.4	15.1	mg/Kg		02/06/24 10:41	02/10/24 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*02/06/24 10:41*	*02/10/24 22:31*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/06/24 10:41*	*02/10/24 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.3**		5.02	0.397	mg/Kg			02/05/24 18:53	1

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-38876-2	SB-4-S-2'-240201	81	71
880-38876-4	SB-5-S-2'-240201	82	90
880-38876-7	SB-6-S-2'-240201	72	99
880-38876-10	SB-7-S-2'-240201	80	72
880-38876-13	SB-8-S-1.5'-240201	75	71
LCS 880-73066/1-A	Lab Control Sample	105	112
LCSD 880-73066/2-A	Lab Control Sample Dup	114	121
MB 880-73066/5-A	Method Blank	70	77

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-38876-2	SB-4-S-2'-240201	93	79
880-38876-4	SB-5-S-2'-240201	126	108
880-38876-7	SB-6-S-2'-240201	98	86
880-38876-10	SB-7-S-2'-240201	125	102
880-38876-13	SB-8-S-1.5'-240201	108	92
LCS 880-72465/2-A	Lab Control Sample	106	103
LCSD 880-72465/3-A	Lab Control Sample Dup	105	105
MB 880-72465/1-A	Method Blank	156 S1+	129

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73066/5-A
Matrix: Solid
Analysis Batch: 73181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/13/24 14:44	02/14/24 18:30	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/13/24 14:44	02/14/24 18:30	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/13/24 14:44	02/14/24 18:30	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/13/24 14:44	02/14/24 18:30	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/13/24 14:44	02/14/24 18:30	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/13/24 14:44	02/14/24 18:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*02/13/24 14:44*	*02/14/24 18:30*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/13/24 14:44*	*02/14/24 18:30*	*1*

Lab Sample ID: LCS 880-73066/1-A
Matrix: Solid
Analysis Batch: 73181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09860		mg/Kg		99	70 - 130
Toluene	0.100	0.09998		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.1107		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2212		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1063		mg/Kg		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 880-73066/2-A
Matrix: Solid
Analysis Batch: 73181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73066

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09341		mg/Kg		93	70 - 130	5	35
Toluene	0.100	0.08911		mg/Kg		89	70 - 130	11	35
Ethylbenzene	0.100	0.1012		mg/Kg		101	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2064		mg/Kg		103	70 - 130	7	35
o-Xylene	0.100	0.09953		mg/Kg		100	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

QC Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

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

Lab Sample ID: MB 880-72465/1-A
Matrix: Solid
Analysis Batch: 72794

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72465

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		02/06/24 10:41	02/10/24 18:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		02/06/24 10:41	02/10/24 18:47	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		02/06/24 10:41	02/10/24 18:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*156*	*S1+*	*70 - 130*	*02/06/24 10:41*	*02/10/24 18:47*	*1*
o-Terphenyl	*129*		*70 - 130*	*02/06/24 10:41*	*02/10/24 18:47*	*1*

Lab Sample ID: LCS 880-72465/2-A
Matrix: Solid
Analysis Batch: 72794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	952.7		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	978.5		mg/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: LCSD 880-72465/3-A
Matrix: Solid
Analysis Batch: 72794

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72465

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	951.9		mg/Kg		95	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	962.2		mg/Kg		96	70 - 130	2	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72356/1-A
Matrix: Solid
Analysis Batch: 72369

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			02/05/24 19:29	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-72356/2-A
Matrix: Solid
Analysis Batch: 72369

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	237.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-72356/3-A
Matrix: Solid
Analysis Batch: 72369

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	239.6		mg/Kg		96	90 - 110	1	20

Lab Sample ID: MB 880-72357/1-A
Matrix: Solid
Analysis Batch: 72395

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			02/05/24 16:58	1

Lab Sample ID: LCS 880-72357/2-A
Matrix: Solid
Analysis Batch: 72395

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	246.6		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-72357/3-A
Matrix: Solid
Analysis Batch: 72395

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	246.4		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-38876-3 MS
Matrix: Solid
Analysis Batch: 72395

Client Sample ID: SB-5-S-1'-240201
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	69.2		253	307.9		mg/Kg		95	90 - 110		

Lab Sample ID: 880-38876-3 MSD
Matrix: Solid
Analysis Batch: 72395

Client Sample ID: SB-5-S-1'-240201
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	69.2		253	304.7		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-38876-13 MS
Matrix: Solid
Analysis Batch: 72395

Client Sample ID: SB-8-S-1.5'-240201
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	63.3		251	297.6		mg/Kg		93	90 - 110		

QC Sample Results

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-38876-13 MSD
Matrix: Solid
Analysis Batch: 72395

Client Sample ID: SB-8-S-1.5'-240201
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	63.3		251	297.6		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

GC VOA

Prep Batch: 73066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	5030B	
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	5030B	
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	5030B	
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	5030B	
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	5030B	
MB 880-73066/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-73066/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-73066/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 73181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	8021B	73066
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	8021B	73066
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	8021B	73066
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	8021B	73066
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	8021B	73066
MB 880-73066/5-A	Method Blank	Total/NA	Solid	8021B	73066
LCS 880-73066/1-A	Lab Control Sample	Total/NA	Solid	8021B	73066
LCSD 880-73066/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73066

Analysis Batch: 73268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	Total BTEX	
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	Total BTEX	
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	Total BTEX	
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	Total BTEX	
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 72465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	8015NM Prep	
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	8015NM Prep	
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	8015NM Prep	
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	8015NM Prep	
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	8015NM Prep	
MB 880-72465/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-72465/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-72465/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 72794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	8015B NM	72465
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	8015B NM	72465
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	8015B NM	72465
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	8015B NM	72465
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	8015B NM	72465
MB 880-72465/1-A	Method Blank	Total/NA	Solid	8015B NM	72465
LCS 880-72465/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	72465
LCSD 880-72465/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	72465

QC Association Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

GC Semi VOA

Analysis Batch: 72961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-2	SB-4-S-2'-240201	Total/NA	Solid	8015 NM	
880-38876-4	SB-5-S-2'-240201	Total/NA	Solid	8015 NM	
880-38876-7	SB-6-S-2'-240201	Total/NA	Solid	8015 NM	
880-38876-10	SB-7-S-2'-240201	Total/NA	Solid	8015 NM	
880-38876-13	SB-8-S-1.5'-240201	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 72356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-1	SB-4-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-2	SB-4-S-2'-240201	Soluble	Solid	DI Leach	
MB 880-72356/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72356/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72356/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 72357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-3	SB-5-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-4	SB-5-S-2'-240201	Soluble	Solid	DI Leach	
880-38876-5	SB-5-S-4'-240201	Soluble	Solid	DI Leach	
880-38876-6	SB-6-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-7	SB-6-S-2'-240201	Soluble	Solid	DI Leach	
880-38876-8	SB-6-S-4'-240201	Soluble	Solid	DI Leach	
880-38876-9	SB-7-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-10	SB-7-S-2'-240201	Soluble	Solid	DI Leach	
880-38876-11	SB-7-S-4'-240201	Soluble	Solid	DI Leach	
880-38876-12	SB-8-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-13	SB-8-S-1.5'-240201	Soluble	Solid	DI Leach	
MB 880-72357/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72357/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72357/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-38876-3 MS	SB-5-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-3 MSD	SB-5-S-1'-240201	Soluble	Solid	DI Leach	
880-38876-13 MS	SB-8-S-1.5'-240201	Soluble	Solid	DI Leach	
880-38876-13 MSD	SB-8-S-1.5'-240201	Soluble	Solid	DI Leach	

Analysis Batch: 72369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-1	SB-4-S-1'-240201	Soluble	Solid	300.0	72356
880-38876-2	SB-4-S-2'-240201	Soluble	Solid	300.0	72356
MB 880-72356/1-A	Method Blank	Soluble	Solid	300.0	72356
LCS 880-72356/2-A	Lab Control Sample	Soluble	Solid	300.0	72356
LCSD 880-72356/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72356

Analysis Batch: 72395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-3	SB-5-S-1'-240201	Soluble	Solid	300.0	72357
880-38876-4	SB-5-S-2'-240201	Soluble	Solid	300.0	72357
880-38876-5	SB-5-S-4'-240201	Soluble	Solid	300.0	72357
880-38876-6	SB-6-S-1'-240201	Soluble	Solid	300.0	72357

QC Association Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

HPLC/IC (Continued)

Analysis Batch: 72395 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38876-7	SB-6-S-2'-240201	Soluble	Solid	300.0	72357
880-38876-8	SB-6-S-4'-240201	Soluble	Solid	300.0	72357
880-38876-9	SB-7-S-1'-240201	Soluble	Solid	300.0	72357
880-38876-10	SB-7-S-2'-240201	Soluble	Solid	300.0	72357
880-38876-11	SB-7-S-4'-240201	Soluble	Solid	300.0	72357
880-38876-12	SB-8-S-1'-240201	Soluble	Solid	300.0	72357
880-38876-13	SB-8-S-1.5'-240201	Soluble	Solid	300.0	72357
MB 880-72357/1-A	Method Blank	Soluble	Solid	300.0	72357
LCS 880-72357/2-A	Lab Control Sample	Soluble	Solid	300.0	72357
LCSD 880-72357/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72357
880-38876-3 MS	SB-5-S-1'-240201	Soluble	Solid	300.0	72357
880-38876-3 MSD	SB-5-S-1'-240201	Soluble	Solid	300.0	72357
880-38876-13 MS	SB-8-S-1.5'-240201	Soluble	Solid	300.0	72357
880-38876-13 MSD	SB-8-S-1.5'-240201	Soluble	Solid	300.0	72357

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-4-S-1'-240201

Lab Sample ID: 880-38876-1
Matrix: Solid
Date Collected: 02/01/24 12:40
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:52	CH	EET MID

Client Sample ID: SB-4-S-2'-240201

Lab Sample ID: 880-38876-2
Matrix: Solid
Date Collected: 02/01/24 12:50
Date Received: 02/05/24 08:42

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	73066	02/13/24 14:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73181	02/14/24 23:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73268	02/14/24 23:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			72961	02/10/24 21:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	72465	02/06/24 10:41	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72794	02/10/24 21:24	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:57	CH	EET MID

Client Sample ID: SB-5-S-1'-240201

Lab Sample ID: 880-38876-3
Matrix: Solid
Date Collected: 02/01/24 13:10
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 17:18	CH	EET MID

Client Sample ID: SB-5-S-2'-240201

Lab Sample ID: 880-38876-4
Matrix: Solid
Date Collected: 02/01/24 13:20
Date Received: 02/05/24 08:42

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	73066	02/13/24 14:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73181	02/14/24 23:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73268	02/14/24 23:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			72961	02/10/24 21:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	72465	02/06/24 10:41	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72794	02/10/24 21:47	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 17:39	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-5-S-4'-240201

Lab Sample ID: 880-38876-5
Matrix: Solid
Date Collected: 02/01/24 13:30
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 17:46	CH	EET MID

Client Sample ID: SB-6-S-1'-240201

Lab Sample ID: 880-38876-6
Matrix: Solid
Date Collected: 02/01/24 13:50
Date Received: 02/05/24 08:42

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	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 17:52	CH	EET MID

Client Sample ID: SB-6-S-2'-240201

Lab Sample ID: 880-38876-7
Matrix: Solid
Date Collected: 02/01/24 14:00
Date Received: 02/05/24 08:42

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	73066	02/13/24 14:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73181	02/14/24 23:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73268	02/14/24 23:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			72961	02/10/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	72465	02/06/24 10:41	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72794	02/10/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 17:59	CH	EET MID

Client Sample ID: SB-6-S-4'-240201

Lab Sample ID: 880-38876-8
Matrix: Solid
Date Collected: 02/01/24 14:10
Date Received: 02/05/24 08:42

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	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:20	CH	EET MID

Client Sample ID: SB-7-S-1'-240201

Lab Sample ID: 880-38876-9
Matrix: Solid
Date Collected: 02/01/24 14:30
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:26	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Client Sample ID: SB-7-S-2'-240201

Lab Sample ID: 880-38876-10

Date Collected: 02/01/24 14:40
Matrix: Solid
Date Received: 02/05/24 08:42

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	73066	02/13/24 14:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73181	02/15/24 00:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73268	02/15/24 00:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			72961	02/11/24 02:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	72465	02/06/24 10:41	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72794	02/11/24 02:47	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:33	CH	EET MID

Client Sample ID: SB-7-S-4'-240201

Lab Sample ID: 880-38876-11

Date Collected: 02/01/24 14:50
Matrix: Solid
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:40	CH	EET MID

Client Sample ID: SB-8-S-1'-240201

Lab Sample ID: 880-38876-12

Date Collected: 02/01/24 15:20
Matrix: Solid
Date Received: 02/05/24 08:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:47	CH	EET MID

Client Sample ID: SB-8-S-1.5'-240201

Lab Sample ID: 880-38876-13

Date Collected: 02/01/24 15:30
Matrix: Solid
Date Received: 02/05/24 08:42

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	73066	02/13/24 14:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73181	02/15/24 00:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73268	02/15/24 00:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			72961	02/10/24 22:31	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	72465	02/06/24 10:41	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72794	02/10/24 22:31	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	72357	02/05/24 10:39	SMC	EET MID
Soluble	Analysis	300.0		1			72395	02/05/24 18:53	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	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.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: ARCADIS US Inc
Project/Site: LPU 45

Job ID: 880-38876-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-38876-1	SB-4-S-1'-240201	Solid	02/01/24 12:40	02/05/24 08:42
880-38876-2	SB-4-S-2'-240201	Solid	02/01/24 12:50	02/05/24 08:42
880-38876-3	SB-5-S-1'-240201	Solid	02/01/24 13:10	02/05/24 08:42
880-38876-4	SB-5-S-2'-240201	Solid	02/01/24 13:20	02/05/24 08:42
880-38876-5	SB-5-S-4'-240201	Solid	02/01/24 13:30	02/05/24 08:42
880-38876-6	SB-6-S-1'-240201	Solid	02/01/24 13:50	02/05/24 08:42
880-38876-7	SB-6-S-2'-240201	Solid	02/01/24 14:00	02/05/24 08:42
880-38876-8	SB-6-S-4'-240201	Solid	02/01/24 14:10	02/05/24 08:42
880-38876-9	SB-7-S-1'-240201	Solid	02/01/24 14:30	02/05/24 08:42
880-38876-10	SB-7-S-2'-240201	Solid	02/01/24 14:40	02/05/24 08:42
880-38876-11	SB-7-S-4'-240201	Solid	02/01/24 14:50	02/05/24 08:42
880-38876-12	SB-8-S-1'-240201	Solid	02/01/24 15:20	02/05/24 08:42
880-38876-13	SB-8-S-1.5'-240201	Solid	02/01/24 15:30	02/05/24 08:42

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

Chain of Custody Record

eurofins | Environment Testing

876

Client Information	Sampler: Heath Boyd	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-8032-1136 10
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: 1 of 2 (Page ~~10 of 14~~)
Company: ARCADIS US Inc	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date 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:
City: Midland	TAT Requested (days): Standard			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #: Purchase Order Requested			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: LPU 45	Project #: ~~88002020~~ 30209808			
Site: Lovington, NM	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)	300_ORGFM_28D; 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	X		
SB-4-S-1'-240201	2/1/24	1240	G	Solid			X		
SB-4-S-2'-240201		1250		Solid		X	X		
SB-5-S-1'-240201		1310		Solid			X		
SB-5-S-2'-240201		1320		Solid		X	X		
SB-5-S-4'-240201		1330		Solid			X		
SB-6-S-1'-240201		1350		Solid			X		
SB-6-S-2'-240201		1400		Solid		X	X		
SB-6-S-4'-240201		1410		Solid			X		
SB-7-S-1'-240201		1430		Solid			X		
SB-7-S-2'-240201		1440		Solid		X	X		
SB-7-S-4'-240201		1450		Solid			X		

880-38876 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
Luis Esparza	2/2/24 1308		Daphne Gonzales		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/5/24 842	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: 1-3|1.5

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing

8764

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-8032-1136 10
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page ~~10 of 14~~ 2 of 2
Company: ARCADIS US Inc	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date 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)
City: Midland	TAT Requested (days): Standard			
State Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #: Purchase Order Requested			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: LPU 45	Project #: ~~88002026~~ 30209808			
Site: Lovington, NM	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)	300_ORGFM_28D, 8015MOD_NM, 8021B	300_ORGFM_28D	Total Number of containers	Special Instructions/Note
			Preservation Code:				N			
SB-8-S-1'-240201	2/01/24	1520	G	Solid				X		
SB-8-S-1.5'-240201	2/01/24	1530	G	Solid			X	X		
				Solid						
				Solid						
				Solid						
				Solid						Loc: 880 38876
				Solid						
				Solid						
				Solid						
				Solid						
				Solid						

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

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

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Luis Esparza	2/2/24 1308		Daphne Gonzales		
Relinquished by	Date/Time	Company	Received by	Date/Time 2/5/24	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time 842	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 US Inc

Job Number: 880-38876-1
SDG Number: Lovington, NM

Login Number: 38876
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	

Appendix D

NMOCD Correspondence

From: Jordan, Morgan
Sent: Monday, May 6, 2024 10:53 AM
To: Krueger, Lauren
Subject: FW: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

Thank You,

Morgan Jordan | Project Manager | douglas.jordan@arcadis.com
Arcadis | Arcadis U.S., Inc.
98 San Jacinto Blvd, Suite 414 | Austin, TX | 78701 | USA
M. +1 281 644 9437

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Tuesday, April 30, 2024 3:41 PM
To: Foord, Scott <William.Foord@arcadis.com>
Cc: Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

Scott,

Based on the age of the releases, OCD will grant the following extension:

1. Inc. No. nPAC0617931420 – LPU 45 New due date is June 26, 2024 (60 days)
2. Inc. No. nPAC0617434320 – LPU Injection Station New due date is June 26, 2024 (60 days)
3. Inc. No. nPAC0711538356 – LPU 118 New due date is June 30, 2024 (60 days)
4. Inc. No. nPAC0706832335 – LSAU 24 New due date is June 26, 2024 (60 days)
5. Inc. No. nGRL0821729742 – LSAU 73 New due date is June 30, 2024 (60 days)
6. Inc. No. NGRL0916650301 – LSAU 82 New due date is June 30, 2024 (60 days)

Please include a copy of this email in the reports for each of the above referenced incident numbers.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110

505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Foord, Scott <William.Foord@arcadis.com>
Sent: Monday, April 29, 2024 8:07 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

Brittany,

Please see comments below specific to the status for each of these sites. We are currently summarizing the analytical data and preparing remediation work plans for each site that has been recently assessed. Chevron Legal has been and is currently in communication with the City of Lovington (surface owner) and we anticipate access confirmation soon. This has been ongoing since at least late 2022 to early 2023. Please let me know if you need any additional information.

1. Inc. No. nPAC0617931420 – LPU 45 – Additional soil assessment activities completed in February 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
2. Inc. No. nPAC0617434320 – LPU Injection Station – Additional soil assessment activities completed in February and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
3. Inc. No. nPAC0711538356 – LPU 118 – The latest soil assessment was completed in March 2023 and a Site Characterization and Remediation Work Plan was submitted to NMOCD in December 2023. The 2023 Site Characterization and Remediation Work Plan was rejected and is currently being revised to address NMOCD comments for resubmittal to the Portal.
4. Inc. No. nPAC0706832335 – LSAU 24 - Additional soil assessment activities completed in February and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
5. Inc. No. nGRL0821729742 – LSAU 73 – The latest soil assessment was completed in March 2023 and a Site Characterization and Remediation Work Plan was submitted to NMOCD in December 2023. The 2023 Site Characterization and Remediation Work Plan was rejected and is currently being revised to address NMOCD comments for resubmittal to the Portal.
6. Inc. No. NGRL0916650301 – LSAU 82 – – The latest soil assessment was completed in March 2023 and a Site Characterization and Remediation Work Plan was submitted to NMOCD in December 2023. The 2023 Site Characterization and Remediation Work Plan was rejected and is currently being revised to address NMOCD comments for resubmittal to the Portal.

Thanks,
Scott
Direct 713-953-4853
Cell 281-725-7477

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Wednesday, April 24, 2024 11:14 AM

To: Foord, Scott <William.Foord@arcadis.com>
Cc: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

Mr. Foord,

After reviewing the previous rejections for the 6 below mentioned incident numbers, the most recent sampling dates in those reports are all over a year old (samples are dated 3/28 or 3/29/2023). These reports were also not submitted to the OCD until December 2023.

Could you please clarify if any additional work has been done at the sites, and how long obtaining access agreements with the City of Lovington has been ongoing?

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, April 24, 2024 8:05 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Subject: Fw: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

FYI. All are under your review.

Nelson V.

From: Foord, Scott <William.Foord@arcadis.com>
Sent: Wednesday, April 3, 2024 3:41 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Brand, Chris M <Chrisbrand@chevron.com>; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: [EXTERNAL] NMOCD Deadline Extension Request - City of Lovington Surface Owned Sites

Nelson,

Chevron is currently working on finalizing access agreements with the City of Lovington for the following sites. The City owns the surface. We apologize for the delays, but this has been a back and forth process with all parties and is still ongoing. We would like to please request 90-day extensions for the 4/26/2024 through 4/30/2024 deadlines to complete remediation plans or closure reports for the following sites:

1. Inc. No. nPAC0617931420 – LPU 45
2. Inc. No. nPAC0617434320 – LPU Injection Station
3. Inc. No. nPAC0711538356 – LPU 118
4. Inc. No. nPAC0706832335 – LSAU 24
5. Inc. No. nGRL0821729742 – LSAU 73
6. Inc. No. NGRL0916650301 – LSAU 82

Please let me know if you need any additioanl information.

Thanks,
Scott

Scott Foord PG, RSO, CPM
AFS Group Service Leader
Arcadis U.S., Inc.
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M +1 281 725 7477
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 357216

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nPAC0617931420**
Incident Name	**NPAC0617931420 LOVINGTON PADDOCK UNIT #045 @ 30-025-03848**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-025-03848] LOVINGTON PADDOCK UNIT #045**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	LOVINGTON PADDOCK UNIT #045
Date Release Discovered	06/20/2006
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Injection Well | Produced Water | Released: 10 BBL | Recovered: 5 BBL | Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 06/25/2024

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1625 N. French Dr., Hobbs, NM 88240
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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Zero feet, overlying, or within area
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	1220
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	116
GRO+DRO	(EPA SW-846 Method 8015M)	116
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		07/25/2024
On what date will (or did) the final sampling or liner inspection occur		07/29/2024
On what date will (or was) the remediation complete(d)		08/25/2024
What is the estimated surface area (in square feet) that will be reclaimed		2500
What is the estimated volume (in cubic yards) that will be reclaimed		500
What is the estimated surface area (in square feet) that will be remediated		2500
What is the estimated volume (in cubic yards) that will be remediated		500
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	R360 Artesia LLC LANDFARM [fEEM0112340644]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 06/25/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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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

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

District I
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Phone:(575) 393-6161 Fax:(575) 393-0720
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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	***{Unavailable.}***

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 357216

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357216
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan conditionally approved. Vertical delineation was not achieved and must be addressed during remediation activities. All side wall and base samples must be at or below the most stringent closure criteria found in Table I.	6/26/2024
bhall	The release area will need to be reclaimed at the time of remediation pursuant to 19.15.29.13 NMAC, including reseeding in the first favorable growing season.	6/26/2024
bhall	Submit a complete and accurate closure and/or reclamation report through the OCD Permitting website by 9/27/2024. Failure to submit a complete report by 9/27/2024 may result in compliance and enforcement penalties pursuant to 19.15.5 NMAC.	6/26/2024