



Chris Brand
Environmental Remediation/ Facility Decom Advisor

VIA ELECTRONIC MAIL

June 10, 2024

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

Re: Lovington Paddock Unit #118
Soil Remediation Work Plan
Incident No. NPAC0711538356
Case No. 1RP-1235

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
Lovington Paddock Unit #118 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 #118

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



Chevron Environmental Management Company

2024 Work Plan

Lovington Paddock Unit #118

Lea County, New Mexico

Incident # nPAC0711538356

June 2024

2024 Work Plan
Lovington Paddock Unit #118

2024 Work Plan

Lovington Paddock Unit #118
Incident # nPAC0711538356

Lea County, New Mexico

June 2024

Prepared By:

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Houston
Texas 77042
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Prepared For:

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Scott Foord, PG
Program Manager

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www.arcadis.com

2024 Work Plan
Lovington Paddock Unit #118

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2024 Work Plan
Lovington Paddock Unit #118

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 Chevron Lovington Paddock Unit #118 (Site) located at coordinates: 32.867921, -103.302875. 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 5.80 miles southwest of the City of Lovington in Unit A, Section 1, 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 # nPAC0711538356

According to the Initial C-141 Form, on May 31, 2006, a crack in a 3-inch poly line caused the release of approximately 1.5 barrels (bbls) of oil and 20 bbls of produced water to be released at the Site. Affected area was approximately a 30-foot circular diameter. According to the Initial C-141 Form submitted on April 23, 2007, the amount recovered was approximately 10 bbls of produced water and 0.5 bbls of oil. Visually confirmed contaminated soil was excavated and transported to landfill. The Initial C-141 Form was approved on April 25, 2007 and assigned remediation permit number 1RP-1235 and incident number nPAC0711538356. The Initial C-141 Form is included as **Appendix A**.

3 Site Characterization

There are several groundwater monitoring wells approximately 0.06 miles east of the Site associated with the Chevron Lovington Water Plant Site (OGRID No. 4323 - Case No. 1RP-394) with depth to groundwater verified at greater than 100 feet (ft) below ground surface (bgs) during the most recent semi-annual groundwater monitoring conducted by Arcadis. 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 1,000 and 0.50 miles;
- 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 0.50 and 1 mile;

2024 Work Plan
Lovington Paddock Unit #118

- Distance to any other fresh water well or spring: Between 1000 feet and 0.5 mile;
- Distance to incorporated municipal boundaries or a defined municipal fresh water well field: 0 feet, overlying, or within area;
- Distance to wetland: Between 1,000 feet and 0.50 mile;
- 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? Yes

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, Arcadis performed site assessment activities to evaluate soil impacts stemming from the release. A total of three sample points (SB-1 through SB-3) were advanced to depths ranging from the surface to 2 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 had no detections. Soil samples analyzed for TPH were reported with concentrations ranging from 24.4 J mg/kg (SB-1) to 31.4 mg/kg (SB-3). Soil samples analyzed for chloride were reported with concentrations ranging from 65 mg/kg (SB-1) to 658 mg/kg (SB-2).

2024 Work Plan
Lovington Paddock Unit #118

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 B**. NMOCD correspondence is shown in **Appendix C**.

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 area 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 3,650 square feet. An estimated 300 cubic yards of soil will be removed and transported to the R360 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 3,650 square feet of the area of concern located within the pasture 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 final 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 118
Lea County, New Mexico



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'	03/29/23	<0.000381	<0.000451	<0.000559	<0.000341	<0.000341	26.9 J B	<15.0	26.9 J B	<15.0	26.9 J	65.2
	2'	03/29/23	<0.000383	<0.000453	<0.000562	<0.000342	<0.000342	24.4 J B	<15.0	24.4 J B	<15.0	24.4 J	181
SB-2	0-0.5'	03/29/23	<0.000384	<0.000455	<0.000564	<0.000343	<0.000343	25.5 J B	<15.0	25.5 J B	<15.0	25.5 J	658
	2'	03/29/23	<0.000387	<0.000459	<0.000568	<0.000346	<0.000346	30.4 J B	<15.0	30.4 J B	<15.0	30.4 J	549
SB-3	0-0.5'	03/29/23	<0.000389	<0.000461	<0.000571	<0.000347	<0.000347	31.4 J B	<14.9	31.4 J B	<14.9	31.4 J	171 F1
	2'	03/29/23	<0.000383	<0.000454	<0.000563	<0.000343	<0.000343	31.1 J B	<15.0	31.1 J B	<15.0	31.1 J	184

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

B: Compound was found in the blank and sample.

F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery 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 greater than 100 feet.

TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics

TPH MRO: Total Petroleum 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

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 #118_Pro\Lovington Paddock Unit #118.aprx 5/17/2024 6:28 PM

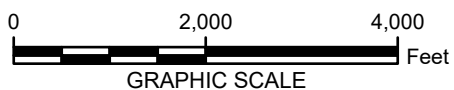


Legend



Site Location

Credits: ESRI Online, Google Earth



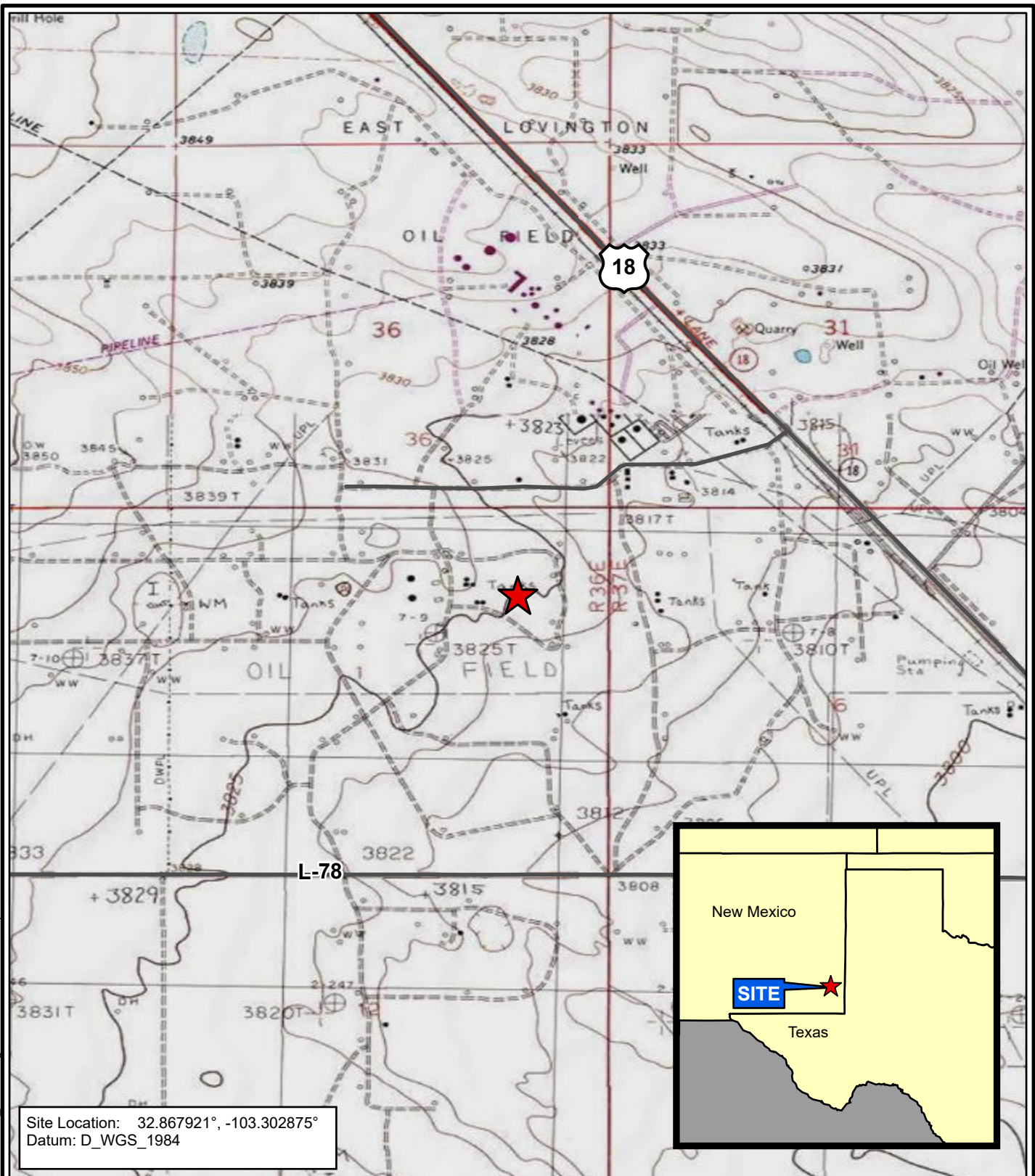
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT #118
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP



FIGURE
1

City: Houston Div/Group: Remediation West - Air Group Created By: W Berry Last Saved By: yadav0264 : Client (Project #)
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Legend



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



0 2,000 4,000
Feet
GRAPHIC SCALE

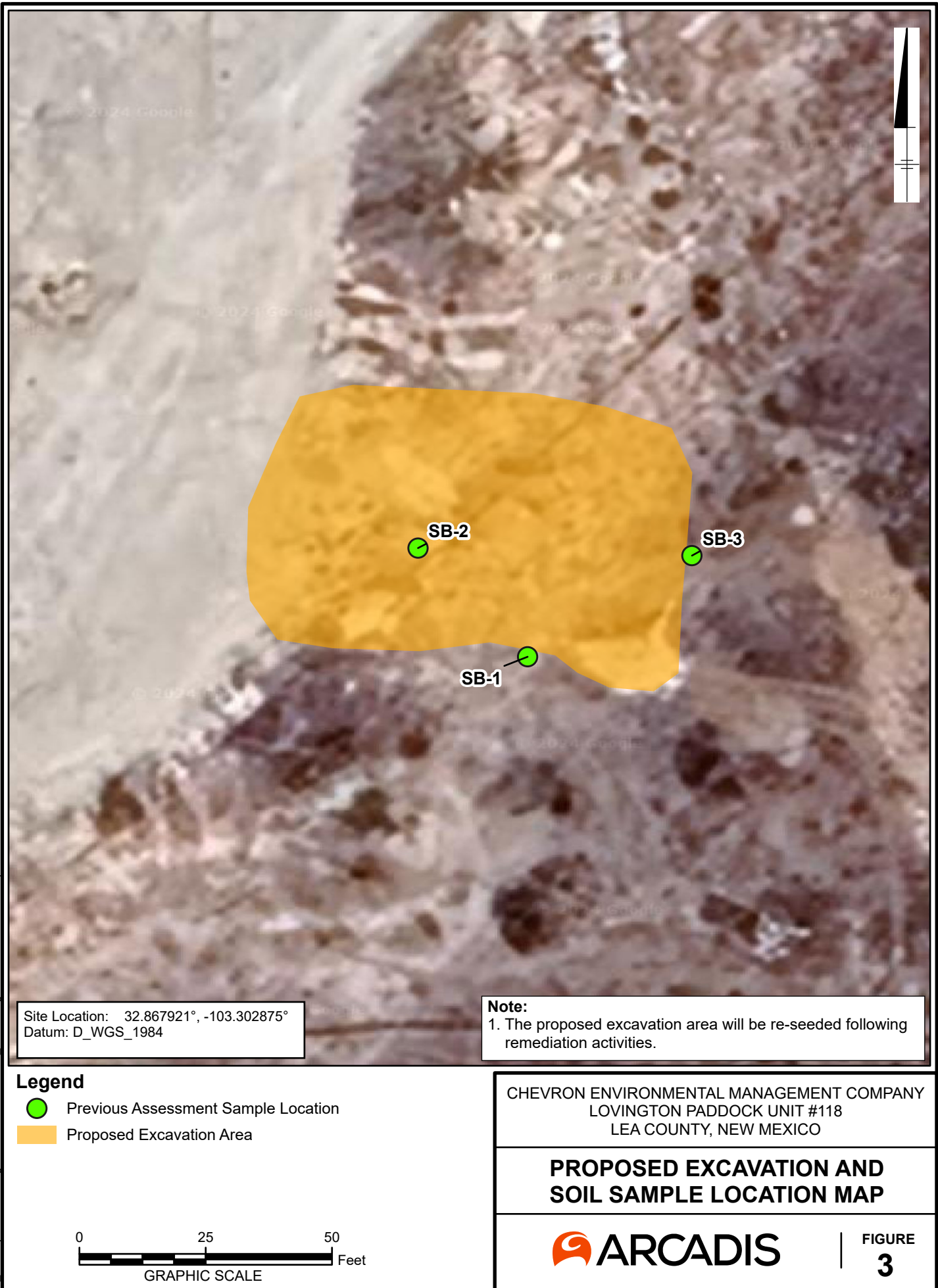
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT #118
LEA COUNTY, NEW MEXICO

TOPOGRAPHIC MAP



FIGURE
2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: vmm1306 ; Client (Project #)
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Appendix A

Initial C-141 Form Incident # nPAC0711538356

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 Well #118

Surface Owner City of Lovington	Mineral Owner State	Lease No.
---------------------------------	---------------------	-----------

LOCATION OF RELEASE API #30025312750000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	1	17S	36E					LEA

Latitude 32.86787 Longitude 103.303

83'

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 1.5 bbls oil and 20 bbl water	Volume Recovered 10 bbls
Source of Release Injection trunk line	Date and Hour of Occurrence 5/31/06 5:00 pm	Date and Hour of Discovery 5/31/06 5:00 pm
Was Immediate Notice Given? Yes X No Not Required	If YES, To Whom?	
By Whom? Larry Ridenour	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

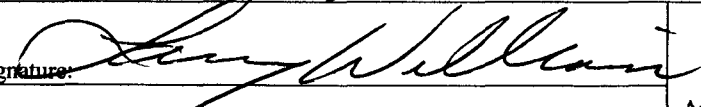
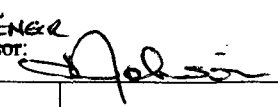
Describe Cause of Problem and Remedial Action Taken.*

Crack in 3" poly line causing 1.5 bbl oil and 20 bbl water to be released. Dig out contaminated soil and took to land fill. Will do final clean up after testing is done.

Describe Area Affected and Cleanup Action Taken.*

30' circle around area where leak occurred. Was able to recover about 10 bbl of water and .5 bbl oil. This will be turned over to EPI for clean up.

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: 		OIL CONSERVATION DIVISION	
Printed Name: Larry Williams		Approved by District Supervisor: 	
Title: HES Champion		Approval Date: 4-23-07	Expiration Date: 6-29-07
E-mail Address: lcwlr@chevron.com		Conditions of Approval:	
Date: 04/23/07 Phone: 505-396-4414		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

Incident - n PAC0711538356
application pPAC0711538443

RP#1235

Appendix B

Laboratory Analytical Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Douglas Jordan
ARCADIS U.S. Inc
10205 Westheimer Rd
Suite 800
Houston, Texas 77042
Generated 4/11/2023 9:17:54 AM

JOB DESCRIPTION

Lovington LPU 118

JOB NUMBER

880-26567-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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
4/11/2023 9:17:54 AM

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

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Laboratory Job ID: 880-26567-1

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Lovington LPU 118

Job ID: 880-26567-1

Job ID: 880-26567-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-26567-1****Receipt**

The samples were received on 3/29/2023 5:32 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

Receipt Exceptions

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

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 880-50056 and analytical batch 880-50075 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-50056/2-A) and (LCSD 880-50056/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-1-S-0-0.5-20230329 (880-26567-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-2-S-2-20230329 (880-26567-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-50056 and analytical batch 880-50075 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50417 and analytical batch 880-50616 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. SB-3-S-0.5-20230329 (880-26567-5), SB-3-S-2-20230329 (880-26567-6), (880-26567-A-5-D MS) and (880-26567-A-5-E MSD)

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

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-1-S-0-0.5-20230329

Lab Sample ID: 880-26567-1

Date Collected: 03/29/23 11:16

Matrix: Solid

Date Received: 03/29/23 17:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		04/06/23 11:50	04/08/23 04:53	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		04/06/23 11:50	04/08/23 04:53	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		04/06/23 11:50	04/08/23 04:53	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		04/06/23 11:50	04/08/23 04:53	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		04/06/23 11:50	04/08/23 04:53	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		04/06/23 11:50	04/08/23 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	04/06/23 11:50	04/08/23 04:53	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/06/23 11:50	04/08/23 04:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	26.9	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	26.9	J B	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 21:22	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 21:22	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 21:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130	03/31/23 17:04	04/01/23 21:22	1
o-Terphenyl	105		70 - 130	03/31/23 17:04	04/01/23 21:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.2		5.03	0.397	mg/Kg			04/07/23 02:22	1

Client Sample ID: SB-1-S-2-20230329

Lab Sample ID: 880-26567-2

Date Collected: 03/29/23 11:23

Matrix: Solid

Date Received: 03/29/23 17:32

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		04/06/23 11:50	04/08/23 08:45	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/06/23 11:50	04/08/23 08:45	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/06/23 11:50	04/08/23 08:45	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/06/23 11:50	04/08/23 08:45	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/06/23 11:50	04/08/23 08:45	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/06/23 11:50	04/08/23 08:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	04/06/23 11:50	04/08/23 08:45	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/06/23 11:50	04/08/23 08:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	24.4	J	49.9	15.0	mg/Kg			04/03/23 12:07	1

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Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-1-S-2-20230329

Lab Sample ID: 880-26567-2

Date Collected: 03/29/23 11:23

Matrix: Solid

Date Received: 03/29/23 17:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.4	J B	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				03/31/23 17:04	04/01/23 22:26	1
o-Terphenyl	85		70 - 130				03/31/23 17:04	04/01/23 22:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.02	0.397	mg/Kg			04/07/23 02:27	1

Client Sample ID: SB-2-S-0.5-20230329

Lab Sample ID: 880-26567-3

Date Collected: 03/29/23 11:25

Matrix: Solid

Date Received: 03/29/23 17:32

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		04/06/23 11:50	04/08/23 09:05	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/06/23 11:50	04/08/23 09:05	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/06/23 11:50	04/08/23 09:05	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/06/23 11:50	04/08/23 09:05	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/06/23 11:50	04/08/23 09:05	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/06/23 11:50	04/08/23 09:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/06/23 11:50	04/08/23 09:05	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/06/23 11:50	04/08/23 09:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	25.5	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	25.5	J B	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:47	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 22:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				03/31/23 17:04	04/01/23 22:47	1
o-Terphenyl	86		70 - 130				03/31/23 17:04	04/01/23 22:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	658		4.97	0.393	mg/Kg			04/07/23 02:31	1

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Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-2-S-2-20230329

Lab Sample ID: 880-26567-4

Date Collected: 03/29/23 11:32

Matrix: Solid

Date Received: 03/29/23 17:32

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		04/06/23 11:50	04/08/23 09:26	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/06/23 11:50	04/08/23 09:26	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/06/23 11:50	04/08/23 09:26	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/06/23 11:50	04/08/23 09:26	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/06/23 11:50	04/08/23 09:26	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/06/23 11:50	04/08/23 09:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/06/23 11:50	04/08/23 09:26	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/06/23 11:50	04/08/23 09:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	30.4	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	30.4	J B	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:09	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:09	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130	03/31/23 17:04	04/01/23 23:09	1
o-Terphenyl	116		70 - 130	03/31/23 17:04	04/01/23 23:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	549		4.96	0.392	mg/Kg			04/07/23 02:36	1

Client Sample ID: SB-3-S-0.5-20230329

Lab Sample ID: 880-26567-5

Date Collected: 03/29/23 11:37

Matrix: Solid

Date Received: 03/29/23 17:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389	mg/Kg		04/06/23 11:50	04/08/23 09:46	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		04/06/23 11:50	04/08/23 09:46	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		04/06/23 11:50	04/08/23 09:46	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		04/06/23 11:50	04/08/23 09:46	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		04/06/23 11:50	04/08/23 09:46	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		04/06/23 11:50	04/08/23 09:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/06/23 11:50	04/08/23 09:46	1
1,4-Difluorobenzene (Surr)	107		70 - 130	04/06/23 11:50	04/08/23 09:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	31.4	J	49.8	14.9	mg/Kg			04/03/23 12:07	1

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Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-3-S-0.5-20230329

Lab Sample ID: 880-26567-5

Date Collected: 03/29/23 11:37

Matrix: Solid

Date Received: 03/29/23 17:32

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	31.4	J B	49.8	14.9	mg/Kg		03/31/23 17:04	04/01/23 23:30	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		03/31/23 17:04	04/01/23 23:30	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		03/31/23 17:04	04/01/23 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				03/31/23 17:04	04/01/23 23:30	1
o-Terphenyl	103		70 - 130				03/31/23 17:04	04/01/23 23:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	171	F1	4.98	0.393	mg/Kg			04/07/23 02:40	1

Client Sample ID: SB-3-S-2-20230329

Lab Sample ID: 880-26567-6

Date Collected: 03/29/23 11:48

Matrix: Solid

Date Received: 03/29/23 17:32

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		04/06/23 11:50	04/08/23 10:07	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/06/23 11:50	04/08/23 10:07	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/06/23 11:50	04/08/23 10:07	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/06/23 11:50	04/08/23 10:07	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/06/23 11:50	04/08/23 10:07	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/06/23 11:50	04/08/23 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				04/06/23 11:50	04/08/23 10:07	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/06/23 11:50	04/08/23 10:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	31.1	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	31.1	J B	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:52	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:52	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/31/23 17:04	04/01/23 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				03/31/23 17:04	04/01/23 23:52	1
o-Terphenyl	104		70 - 130				03/31/23 17:04	04/01/23 23:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	184		5.04	0.398	mg/Kg			04/07/23 02:54	1

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Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

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)
880-26567-1	SB-1-S-0-0.5-20230329	96	103
880-26567-2	SB-1-S-2-20230329	95	106
880-26567-3	SB-2-S-0.5-20230329	103	101
880-26567-4	SB-2-S-2-20230329	98	106
880-26567-5	SB-3-S-0.5-20230329	102	107
880-26567-6	SB-3-S-2-20230329	105	104
LCS 880-50513/1-A	Lab Control Sample	105	111
LCSD 880-50513/2-A	Lab Control Sample Dup	101	109
MB 880-50513/5-A	Method Blank	92	97
MB 880-50621/8	Method Blank	91	100
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)
880-26567-1	SB-1-S-0-0.5-20230329	131 S1+	105
880-26567-1 MS	SB-1-S-0-0.5-20230329	127	94
880-26567-1 MSD	SB-1-S-0-0.5-20230329	124	91
880-26567-2	SB-1-S-2-20230329	105	85
880-26567-3	SB-2-S-0.5-20230329	108	86
880-26567-4	SB-2-S-2-20230329	140 S1+	116
880-26567-5	SB-3-S-0.5-20230329	128	103
880-26567-6	SB-3-S-2-20230329	126	104
LCS 880-50056/2-A	Lab Control Sample	83	64 S1-
LCSD 880-50056/3-A	Lab Control Sample Dup	79	60 S1-
MB 880-50056/1-A	Method Blank	136 S1+	116
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50513/5-A
Matrix: Solid
Analysis Batch: 50621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/06/23 11:50	04/08/23 03:23	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/06/23 11:50	04/08/23 03:23	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/06/23 11:50	04/08/23 03:23	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/06/23 11:50	04/08/23 03:23	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/06/23 11:50	04/08/23 03:23	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/06/23 11:50	04/08/23 03:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	04/06/23 11:50	04/08/23 03:23	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/06/23 11:50	04/08/23 03:23	1

Lab Sample ID: LCS 880-50513/1-A
Matrix: Solid
Analysis Batch: 50621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1084		mg/Kg		108	70 - 130
Toluene	0.100	0.1043		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.09719		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1918		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09751		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-50513/2-A
Matrix: Solid
Analysis Batch: 50621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50513

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1093		mg/Kg		109	70 - 130	1	35
Toluene	0.100	0.1042		mg/Kg		104	70 - 130	0	35
Ethylbenzene	0.100	0.09465		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1857		mg/Kg		93	70 - 130	3	35
o-Xylene	0.100	0.09401		mg/Kg		94	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: MB 880-50621/8
Matrix: Solid
Analysis Batch: 50621

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg			04/07/23 15:47	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg			04/07/23 15:47	1

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QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

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

Lab Sample ID: MB 880-50621/8
Matrix: Solid
Analysis Batch: 50621

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg			04/07/23 15:47	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg			04/07/23 15:47	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg			04/07/23 15:47	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg			04/07/23 15:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130					04/07/23 15:47	1
1,4-Difluorobenzene (Surr)	100		70 - 130					04/07/23 15:47	1

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

Lab Sample ID: MB 880-50056/1-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.50	J	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 20:18	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 20:18	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/31/23 17:04	04/01/23 20:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130				03/31/23 17:04	04/01/23 20:18	1
o-Terphenyl	116		70 - 130				03/31/23 17:04	04/01/23 20:18	1

Lab Sample ID: LCS 880-50056/2-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	801.6		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	794.3		mg/Kg		79	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	83		70 - 130				
o-Terphenyl	64	S1-	70 - 130				

Lab Sample ID: LCSD 880-50056/3-A
Matrix: Solid
Analysis Batch: 50075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50056

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	844.1		mg/Kg		84	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	802.1		mg/Kg		80	70 - 130	1	20

Eurofins Midland

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

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

Lab Sample ID: LCSD 880-50056/3-A

Matrix: Solid

Analysis Batch: 50075

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50056

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	60	S1-	70 - 130

Lab Sample ID: 880-26567-1 MS

Matrix: Solid

Analysis Batch: 50075

Client Sample ID: SB-1-S-0-0.5-20230329

Prep Type: Total/NA

Prep Batch: 50056

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	26.9	J B	998	1186		mg/Kg		116	70 - 130	
Diesel Range Organics (Over C10-C28)	<15.0	U	998	1144		mg/Kg		115	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	127		70 - 130							
o-Terphenyl	94		70 - 130							

Lab Sample ID: 880-26567-1 MSD

Matrix: Solid

Analysis Batch: 50075

Client Sample ID: SB-1-S-0-0.5-20230329

Prep Type: Total/NA

Prep Batch: 50056

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	26.9	J B	997	1135		mg/Kg		111	70 - 130	4	20	
Diesel Range Organics (Over C10-C28)	<15.0	U	997	1100		mg/Kg		110	70 - 130	4	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	124		70 - 130									
o-Terphenyl	91		70 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50417/1-A

Matrix: Solid

Analysis Batch: 50616

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/07/23 01:23	1	

Lab Sample ID: LCS 880-50417/2-A

Matrix: Solid

Analysis Batch: 50616

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	244.6		mg/Kg		98	90 - 110		

Eurofins Midland

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-50417/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50616											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	243.0		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 880-26567-5 MS				Client Sample ID: SB-3-S-0.5-20230329							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50616											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	171	F1	249	369.2	F1	mg/Kg		80	90 - 110		

Lab Sample ID: 880-26567-5 MSD				Client Sample ID: SB-3-S-0.5-20230329							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50616											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	171	F1	249	367.0	F1	mg/Kg		79	90 - 110	1	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

GC VOA

Prep Batch: 50513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Total/NA	Solid	5030B	
880-26567-2	SB-1-S-2-20230329	Total/NA	Solid	5030B	
880-26567-3	SB-2-S-0.5-20230329	Total/NA	Solid	5030B	
880-26567-4	SB-2-S-2-20230329	Total/NA	Solid	5030B	
880-26567-5	SB-3-S-0.5-20230329	Total/NA	Solid	5030B	
880-26567-6	SB-3-S-2-20230329	Total/NA	Solid	5030B	
MB 880-50513/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-50513/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-50513/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 50621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Total/NA	Solid	8021B	50513
880-26567-2	SB-1-S-2-20230329	Total/NA	Solid	8021B	50513
880-26567-3	SB-2-S-0.5-20230329	Total/NA	Solid	8021B	50513
880-26567-4	SB-2-S-2-20230329	Total/NA	Solid	8021B	50513
880-26567-5	SB-3-S-0.5-20230329	Total/NA	Solid	8021B	50513
880-26567-6	SB-3-S-2-20230329	Total/NA	Solid	8021B	50513
MB 880-50513/5-A	Method Blank	Total/NA	Solid	8021B	50513
MB 880-50621/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-50513/1-A	Lab Control Sample	Total/NA	Solid	8021B	50513
LCSD 880-50513/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50513

GC Semi VOA

Prep Batch: 50056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015NM Prep	
880-26567-2	SB-1-S-2-20230329	Total/NA	Solid	8015NM Prep	
880-26567-3	SB-2-S-0.5-20230329	Total/NA	Solid	8015NM Prep	
880-26567-4	SB-2-S-2-20230329	Total/NA	Solid	8015NM Prep	
880-26567-5	SB-3-S-0.5-20230329	Total/NA	Solid	8015NM Prep	
880-26567-6	SB-3-S-2-20230329	Total/NA	Solid	8015NM Prep	
MB 880-50056/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50056/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50056/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26567-1 MS	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015NM Prep	
880-26567-1 MSD	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015NM Prep	

Analysis Batch: 50075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015B NM	50056
880-26567-2	SB-1-S-2-20230329	Total/NA	Solid	8015B NM	50056
880-26567-3	SB-2-S-0.5-20230329	Total/NA	Solid	8015B NM	50056
880-26567-4	SB-2-S-2-20230329	Total/NA	Solid	8015B NM	50056
880-26567-5	SB-3-S-0.5-20230329	Total/NA	Solid	8015B NM	50056
880-26567-6	SB-3-S-2-20230329	Total/NA	Solid	8015B NM	50056
MB 880-50056/1-A	Method Blank	Total/NA	Solid	8015B NM	50056
LCS 880-50056/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50056
LCSD 880-50056/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50056
880-26567-1 MS	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015B NM	50056

Eurofins Midland

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

GC Semi VOA (Continued)

Analysis Batch: 50075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1 MSD	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015B NM	50056

Analysis Batch: 50188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Total/NA	Solid	8015 NM	
880-26567-2	SB-1-S-2-20230329	Total/NA	Solid	8015 NM	
880-26567-3	SB-2-S-0.5-20230329	Total/NA	Solid	8015 NM	
880-26567-4	SB-2-S-2-20230329	Total/NA	Solid	8015 NM	
880-26567-5	SB-3-S-0.5-20230329	Total/NA	Solid	8015 NM	
880-26567-6	SB-3-S-2-20230329	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Soluble	Solid	DI Leach	
880-26567-2	SB-1-S-2-20230329	Soluble	Solid	DI Leach	
880-26567-3	SB-2-S-0.5-20230329	Soluble	Solid	DI Leach	
880-26567-4	SB-2-S-2-20230329	Soluble	Solid	DI Leach	
880-26567-5	SB-3-S-0.5-20230329	Soluble	Solid	DI Leach	
880-26567-6	SB-3-S-2-20230329	Soluble	Solid	DI Leach	
MB 880-50417/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50417/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50417/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-26567-5 MS	SB-3-S-0.5-20230329	Soluble	Solid	DI Leach	
880-26567-5 MSD	SB-3-S-0.5-20230329	Soluble	Solid	DI Leach	

Analysis Batch: 50616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26567-1	SB-1-S-0-0.5-20230329	Soluble	Solid	300.0	50417
880-26567-2	SB-1-S-2-20230329	Soluble	Solid	300.0	50417
880-26567-3	SB-2-S-0.5-20230329	Soluble	Solid	300.0	50417
880-26567-4	SB-2-S-2-20230329	Soluble	Solid	300.0	50417
880-26567-5	SB-3-S-0.5-20230329	Soluble	Solid	300.0	50417
880-26567-6	SB-3-S-2-20230329	Soluble	Solid	300.0	50417
MB 880-50417/1-A	Method Blank	Soluble	Solid	300.0	50417
LCS 880-50417/2-A	Lab Control Sample	Soluble	Solid	300.0	50417
LCSD 880-50417/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50417
880-26567-5 MS	SB-3-S-0.5-20230329	Soluble	Solid	300.0	50417
880-26567-5 MSD	SB-3-S-0.5-20230329	Soluble	Solid	300.0	50417

Eurofins Midland

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-1-S-0-0.5-20230329

Lab Sample ID: 880-26567-1

Date Collected: 03/29/23 11:16

Matrix: Solid

Date Received: 03/29/23 17:32

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	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 04:53	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 21:22	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:22	SMC	EET MID

Client Sample ID: SB-1-S-2-20230329

Lab Sample ID: 880-26567-2

Date Collected: 03/29/23 11:23

Matrix: Solid

Date Received: 03/29/23 17:32

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	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 08:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 22:26	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:27	SMC	EET MID

Client Sample ID: SB-2-S-0.5-20230329

Lab Sample ID: 880-26567-3

Date Collected: 03/29/23 11:25

Matrix: Solid

Date Received: 03/29/23 17:32

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	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 09:05	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 22:47	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:31	SMC	EET MID

Client Sample ID: SB-2-S-2-20230329

Lab Sample ID: 880-26567-4

Date Collected: 03/29/23 11:32

Matrix: Solid

Date Received: 03/29/23 17:32

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	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 09:26	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 23:09	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Lovington LPU 118

Job ID: 880-26567-1

Client Sample ID: SB-2-S-2-20230329
Date Collected: 03/29/23 11:32
Date Received: 03/29/23 17:32

Lab Sample ID: 880-26567-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:36	SMC	EET MID

Client Sample ID: SB-3-S-0.5-20230329
Date Collected: 03/29/23 11:37
Date Received: 03/29/23 17:32

Lab Sample ID: 880-26567-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 09:46	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 23:30	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:40	SMC	EET MID

Client Sample ID: SB-3-S-2-20230329
Date Collected: 03/29/23 11:48
Date Received: 03/29/23 17:32

Lab Sample ID: 880-26567-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	50513	04/06/23 11:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50621	04/08/23 10:07	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50188	04/03/23 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50056	03/31/23 17:04	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50075	04/01/23 23:52	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50417	04/05/23 14:49	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50616	04/07/23 02:54	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: Lovington LPU 118

Job ID: 880-26567-1

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: Lovington LPU 118

Job ID: 880-26567-1

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: Lovington LPU 118

Job ID: 880-26567-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-26567-1	SB-1-S-0-0.5-20230329	Solid	03/29/23 11:16	03/29/23 17:32
880-26567-2	SB-1-S-2-20230329	Solid	03/29/23 11:23	03/29/23 17:32
880-26567-3	SB-2-S-0.5-20230329	Solid	03/29/23 11:25	03/29/23 17:32
880-26567-4	SB-2-S-2-20230329	Solid	03/29/23 11:32	03/29/23 17:32
880-26567-5	SB-3-S-0.5-20230329	Solid	03/29/23 11:37	03/29/23 17:32
880-26567-6	SB-3-S-2-20230329	Solid	03/29/23 11:48	03/29/23 17:32

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Eurofins Midland

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

Chain of Custody Record

eurofins

Environment Testing

Client Information		Sampler: <i>Dey Shorswell</i>		Lab PM: Builes John		Carrier Tracking No(s): 880-5476-715 2	
Client Contact: Douglas Jordan		Phone: 432-288-0876		E-Mail: John Builes@et.eurofins.com		State of Origin:	
Company: ARCADIS U S Inc		Address: 10205 Westheimer Rd Suite 800		City: Houston		State, Zip: TX, 77042	
Phone: 713-953-4739(Tel)		PO #: 30172230		WO #: 0001C		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Email: douglas.jordan@arcadis.com		Project #: 88001697		SSOW#:		Due Date Requested:	
Project Name: Lovington LPU 118		Site:		TAT Requested (days):		Analysis Requested:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
5B-1-5-6-05-20230329	03/29/23	1116	G	Solid	X	X	300_ORGFM_28D, 8015MOD, NM, 8021B
5B-1-5-2-20230329	03/29/23	1123	G	Solid	X	X	
5B-2-5-0-05-20230329	03/29/23	1125	G	Solid	X	X	
5B-2-5-2-20230329	03/29/23	1132	G	Solid	X	X	
5B-3-5-0-05-202329	03/29/23	1139	G	Solid	X	X	
5B-3-5-2-20230329	03/29/23	1148	G	Solid	X	X	
Special Instructions/Note:		880-26567 Chain of Custody					
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months					
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements					
Empty Kit Relinquished by		Date		Time		Method of Shipment:	
Relinquished by: <i>Dey Shorswell</i>		Date/Time: 03/29/23		Time: 1732		Company: <i>ARCADIS</i>	
Relinquished by:		Date/Time:		Time:		Company:	
Relinquished by:		Date/Time:		Time:		Company:	
Custody Seals Intact. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 4.3/4.0			

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-26567-1

Login Number: 26567

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 C

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

Connect with us! www.arcadis.com | [LinkedIn](#) | [Twitter](#) | [Facebook](#)



Be green, leave it on the screen.

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

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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 EMNRD 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

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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 EMNRD 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

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

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 additional information.

Thanks,
Scott

Scott Foord PG, RSO, CPM
AFS Group Service Leader
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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 359075

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	359075
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nPAC0711538356
Incident Name	NPAC0711538356 LOVINGTON PADDOCK UNIT #118 @ 30-025-31275
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-025-31275] LOVINGTON PADDOCK UNIT #118

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	LOVINGTON PADDOCK UNIT #118
Date Release Discovered	05/31/2006
Surface Owner	Private

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Cause: Pipeline (Any) Crude Oil Released: 2 BBL Recovered: 0 BBL Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Pipeline (Any) Produced Water Released: 20 BBL Recovered: 10 BBL Lost: 10 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, Page 2

Action 359075

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:
	4323
	Action Number:
	359075
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: 06/27/2024
--	--

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**District III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170**District IV**1220 S. St Francis Dr., Santa Fe, NM 87505
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QUESTIONS, Page 3

Action 359075

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:
	4323
	Action Number:
	359075
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 1000 (ft.) and ½ (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 ½ and 1 (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 1000 (ft.) and ½ (mi.)
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	Yes

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)	658
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	31.4
GRO+DRO	(EPA SW-846 Method 8015M)	31.4
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	07/30/2024
On what date will (or did) the final sampling or liner inspection occur	08/05/2024
On what date will (or was) the remediation complete(d)	08/29/2024
What is the estimated surface area (in square feet) that will be reclaimed	3650
What is the estimated volume (in cubic yards) that will be reclaimed	300
What is the estimated surface area (in square feet) that will be remediated	3650
What is the estimated volume (in cubic yards) that will be remediated	300

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, Page 4

Action 359075

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	359075
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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
<i>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>	
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: 06/27/2024
<i>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.</i>	

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

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

QUESTIONS, Page 5

Action 359075

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 359075
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6
Action 359075

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	359075
	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 359075

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:
	4323
	Action Number:
	359075
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan approved. The site will need to meet the requirements of 19.15.29.13 NMAC at time of remediation as the site is no longer reasonably needed for production or subsequent drilling activities. A reclamation report will need to be submitted either with the closure report or immediately following the approval of the closure report.	7/2/2024
bhall	The soil cover (backfill) must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	7/2/2024
bhall	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/2/2024
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	7/2/2024
bhall	Submit a complete report through the OCD Permitting website by October 2, 2024.	7/2/2024