Armando Martinez
Operations Lead, Portfolio Operations Central

May 20, 2021

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

Re: 2021 Soil Assessment Report – LSAU 82
Case No. 1RP-2208
Lea County, New Mexico

Dear Bradford Billings:

Chevron Environmental Management Company (CEMC) submits herein the *2021 Soil Assessment Report* for 1RP-2208, LSAU 82. The Site is located approximately 6.49 miles southeast of Lovington, in Unit O, Section 31, Township 16 South, Range 37 East, Lea County, New Mexico. The Report was prepared by Arcadis U.S., Inc. (Arcadis), on behalf of CEMC. Based on the 2021 soil investigation data, additional assessment activities will be evaluated, and a proposed scope will be included in a Work Plan for review and approval to further delineate chloride impact in soil.

If you have any questions regarding this submittal, please contact Scott Foord of Arcadis at (713) 953-4853 or me at (505) 690 5408.

Respectfully,

Armando Martinez

Encl. 2021 Soil Assessment Report – LSAU 82

Armando Martinez
Operations Lead Central
Portfolio Operations - Central
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ARCADIS

Chevron Environmental Management Company

2021 Soil Assessment Report

LSAU 82
NMOCD Case No. 1RP-2208

May 2021

2021 Soil Assessment Report

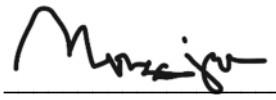
LSAU 82
NMOCD Case No. 1RP-2208

May 2021

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

Prepared For:
Armando Martinez
Operations Lead Central
Chevron Environmental Management Company
P.O. Box 469
Questa, New Mexico 87556

Our Ref:
30064869



Morgan Jordan
Task Manager I

Scott Foord, PG
Certified Project Manager

Contents

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1 Introduction

Arcadis U.S., Inc. (Arcadis) prepared this Site Assessment Report (Report), on behalf of Chevron Environmental Management Company (CEMC), summarizing the soil assessment activities conducted for the LSAU 82 (Site).

2 Project Summary

The Site is located approximately 6.49 miles southeast of Lovington, in Unit O, Section 31, Township 16 South, Range 37 East, Lea County, New Mexico. A site location map is included as **Figure 1**.

On June 08, 2009, internal corrosion of a flowline released approximately 9 barrels (bbls) of produced water. The Initial C-141 Form stated that the wellhead was shut in and the line emptied to prevent any further releases. According to the New Mexico Office of the State Engineers (NMOSE) database, there is a water well approximately 0.16 miles north east of the Site with a depth to groundwater of 50 feet (ft) below ground surface (bgs). The Initial C-141 Form was submitted to the New Mexico Oil Conservation Division (NMOCD) on June 12, 2009 and approved by NMOCD on June 12, 2009. The release was assigned remediation permit number 1RP-2208. The Initial C-141 Form for this release is included in **Appendix A**.

3 2021 Soil Assessment

On February 1, 2021, Arcadis personnel collected soil samples from six locations (SB-1 through SB-6) within the release area. The sample locations were determined based on information obtained by Arcadis from the Initial C-141 Form and from Chevron personnel familiar with the release location associated with remediation permit number 1RP-2208. The soil samples were collected with a hand auger at depths ranging from the surface to approximately 6 ft bgs. Hand auger refusal was encountered within two boring locations SB-1 and SB-5. Each boring location was backfilled with the remaining excavated soil after sample collection. Soils were characterized and logged by a field geologist based on the Unified Soil Classification System (USCS), including texture, structure, and consistency at each sample location from surface to total or refusal depths encountered within each boring. Boring logs for borings advanced deeper than 2 ft bgs are included in **Appendix B**. Soil sample locations are presented on **Figure 2**. A photograph log is presented in **Appendix C**. Sample containers (4 oz. glass jars) were supplied by Eurofins Xenco Laboratories, and samples were collected and placed on ice for delivery to Eurofins Xenco Laboratories in Midland, Texas for analysis.

The soil samples were analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Protection Agency (USEPA) Method 8021B;
- Total Petroleum Hydrocarbons (TPH) as gasoline (TPH-GRO) by USEPA Method 8015;
- TPH as diesel (TPH-DRO) by USEPA Method 8015;
- TPH as oil (TPH-MRO) by USEPA Method 8015; and
- Chloride by USEPA Method 300.

4 Soil Analytical Results

The soil analytical results were compared to the revised New Mexico Administration Code (NMAC) screening levels for the specific analytical constituents specified in **Table 1** within revised Rule 19.15.29. The specific analytical constituents for this site include Benzene, Total BTEX, Total TPH, and chloride for depth to groundwater less than or equal to 50 ft bgs. Total TPH is recognized as the sum of the hydrocarbon chains from C6 to C36. A summary of the soil sample analytical results is presented in **Table 1**. Copies of the certified analytical reports and chain-of-custody documentation from Eurofins Xenco Laboratories are presented in **Appendix D**. The soil analytical map is presented in **Figure 3**.

4.1 BTEX

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

4.2 TPH

- Total TPH (GRO + DRO + MRO) concentrations were reported below the NMAC standard of 100 mg/kg at all sample locations.

4.3 Chloride

- Chloride concentrations were reported above the restoration screening criteria of 600 mg/kg within the first 4 ft of soil, and additionally above the revised Rule 19.15.29 screening limit of 600 mg/kg at depths below 4 ft bgs at one sample location SB-2.
    - SB-2
        - (0 – 0.5 ft) at 4,030 mg/kg
        - (1 – 2 ft) at 1,130 mg/kg
        - (3 – 4 ft) at 1,160 mg/kg
        - (5 – 6 ft) at 634 mg/kg

5 Conclusion

Analytical results associated with the recent assessment activities indicate that concentrations of chloride above the restoration screening criteria of 600 mg/kg within the top 4 ft bgs of soil and above the Rule 19.15.29 soil assessment screening limit of 600 mg/kg for sites with groundwater less than or equal to 50 ft bgs at depths to approximately 6 ft bgs (deepest depth assessed) are present in the vicinity of SB-2. Based upon the findings presented in this report, additional soil assessment activities are recommended to further delineate the chloride impact in soil at the Site. The revised C-141 Form is presented in **Appendix E**.

Tables

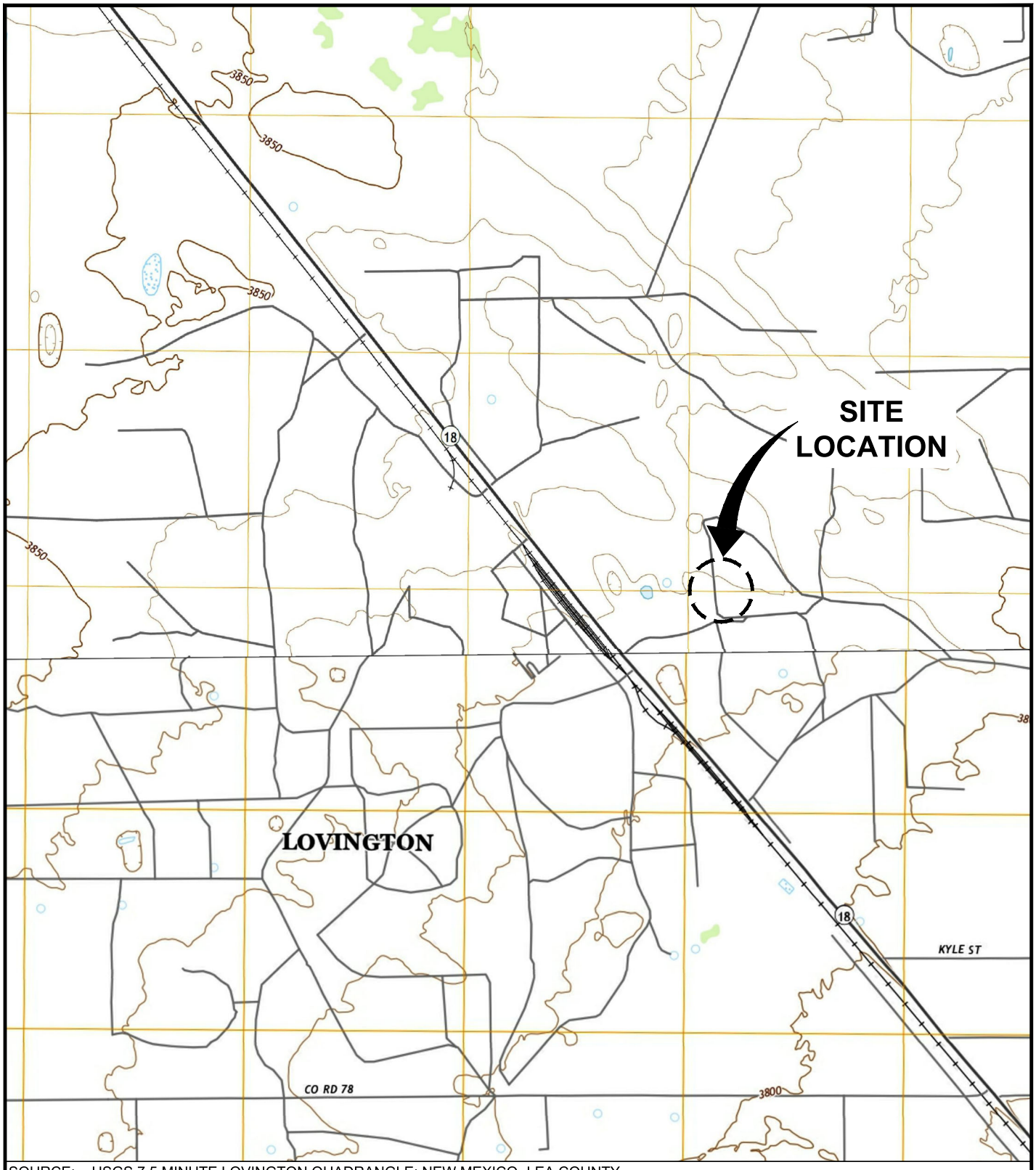
Table 1
2021 Soil Analytical Results
Chevron Environmental Management Company
LSAU 82
Lea County, New Mexico

ARCADIS

Sample I.D. No.	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													600*
SB-1	0-0.5'	02/01/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	17.1 J	<15.0	17.1 J	<15.0	17.1 J	8.84
	1'-2'	02/01/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	16.2 J	<15.0	16.2 J	<15.0	16.2 J	9.70
	3'-4'	02/01/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	19.7 J	<15.0	19.7 J	<15.0	19.7 J	14.2
DUP (SB-1)	3'-4'	02/01/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	23.9 J	<14.9	23.9 J	<14.9	23.9 J	16.3
SB-2	0-0.5'	02/01/21	<0.000387	<0.000458	<0.000568	<0.000346	<0.000346	23.1 J	<15.0	23.1 J	<15.0	23.1 J	***4,030***
	1'-2'	02/01/21	<0.000387	<0.000458	<0.000568	<0.000346	<0.000346	21.2 J	<15.0	21.2 J	<15.0	21.2 J	***1,130***
	3'-4'	02/01/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	23.5 J	<15.0	23.5 J	<15.0	23.5 J	***1,160***
	5'-6'	02/01/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	21.5 J	<15.0	21.5 J	<15.0	21.5 J	***634***
SB-3	0-0.5'	02/01/21	<0.000385	<0.000456	<0.000565	<0.000344	<0.000344	19.4 J	<14.9	19.4 J	<14.9	19.4 J	11.6
	1'-2'	02/01/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	18.7 J	<15.0	18.7 J	<15.0	18.7 J	12.1
	3'-4'	02/01/21	<0.000381	<0.000451	<0.000559	<0.000341	<0.000341	16.6 J	<15.0	16.6 J	<15.0	16.6 J	19.5
	5'-6'	02/01/21	<0.000384	<0.000455	<0.000564	<0.000344	<0.000344	19.5 J	<15.0	19.5 J	<15.0	19.5 J	34.5
SB-4	0-0.5'	02/01/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	18.0 J	<15.0	18.0 J	<15.0	18.0 J	176
	1'-2'	02/01/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	17.6 J	<14.9	17.6 J	<14.9	17.6 J	205
	3-4'	02/01/21	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	18.9 J	<15.0	18.9 J	<15.0	18.9 J	192
	5'-6'	02/01/21	<0.000383	<0.000454	<0.000563	<0.000343	<0.000343	25.4 J	<15.0	25.4 J	<15.0	25.4 J	247
SB-5	0-0.5'	02/01/21	<0.000385	<0.000456	<0.000565	<0.000344	<0.000344	28.6 J	<14.9	28.6 J	<14.9	28.6 J	8.41
	1'-2'	02/01/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	25.5 J	<15.0	25.5 J	<15.0	25.5 J	43.4
	3'-4'	02/01/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	24.4 J	<15.0	24.4 J	<15.0	24.4 J	150
SB-6	0-0.5'	02/01/21	<0.000383	<0.000454	<0.000563	<0.000343	<0.000343	22.9 J	<15.0	22.9 J	<15.0	22.9 J	7.83
	1'-2'	02/01/21	<0.000389	<0.000460	<0.000570	<0.000348	<0.000348	39.1 J	<15.0	39.1 J	15.3 J	54.4	18.3
	3'-4'	02/01/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	38.2 J	<14.9	38.2 J	<14.9	38.2 J	86.1
	5'-6'	02/01/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	35.3 J	<15.0	35.3 J	<15.0	35.3 J	38.2

Legend:
BOLD = Analytes exceeding NMAC standards / 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
'<' 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
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
" ' " : Indicates feet
*Revised screening limit and restoration criteria within the first 4 feet below ground surface per Rule 19.15.29 effective August 14, 2018
DUP : Duplicate sample
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

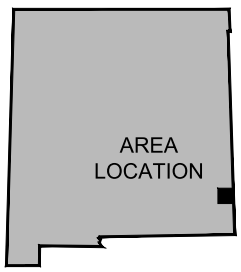


SOURCE: USGS 7.5 MINUTE LOVINGTON QUADRANGLE: NEW MEXICO- LEA COUNTY

N

0 2000' 4000'

APPROXIMATE GRAPHIC SCALE



NEW MEXICO

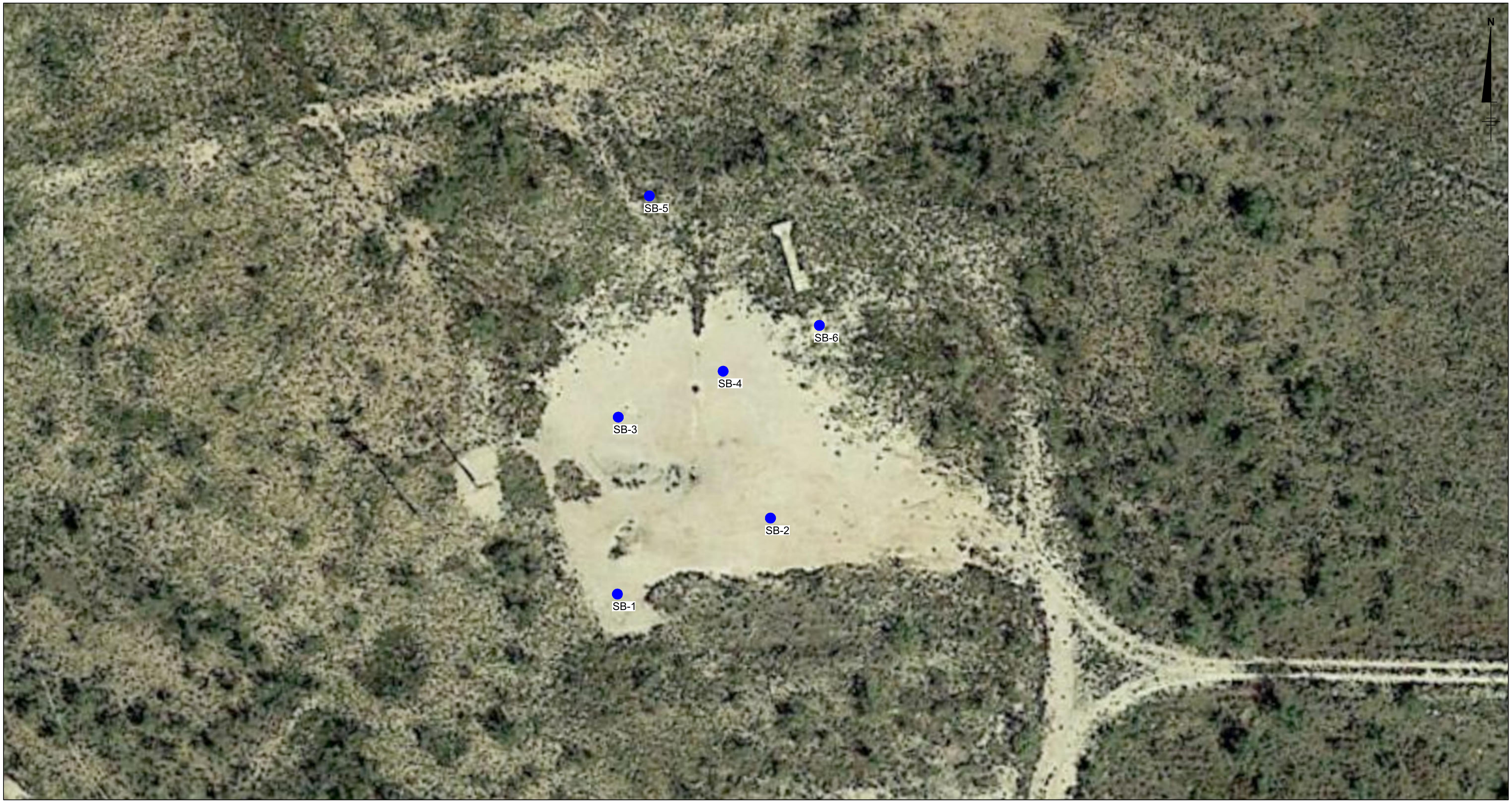
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LSAU 82
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY:TMAPA,FL DIV/GROUP:85 DB:JAR LD:(Opt) PIC:(Opt) PM:M.Strickler TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\ARI0007\1BIM 360\Arcadis\ANA - CHEVRON CORPORATION\Project Files\LSAU 82\2021\01-DWG\GWM-2021Q1-F01-SITE LOCATION MAP.dwg LAYOUT: 1 SAVED: 2/18/2021 11:43 AM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 2/18/2021 11:44 AM BY: R, ANITA



LEGEND:

SB-1 ● SOIL SAMPLE LOCATIONS

0 40' 80'

APPROXIMATE SCALE 1 in. = 40 ft.

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY,
LSAU 82
LEA COUNTY, NEW MEXICO

SOIL SAMPLE LOCATIONS MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\Pai01041\ACCDocs\Arcadis\ANA - CHEVRON CORPORATION\Project Files\LSAU 82\2021\01-DWG\GWM-2021Q1-F02-SOIL SAMPLE LOCATION MAP_1.dwg LAYOUT: 2 SAVED: 2/19/2021 4:20 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 5/19/2021
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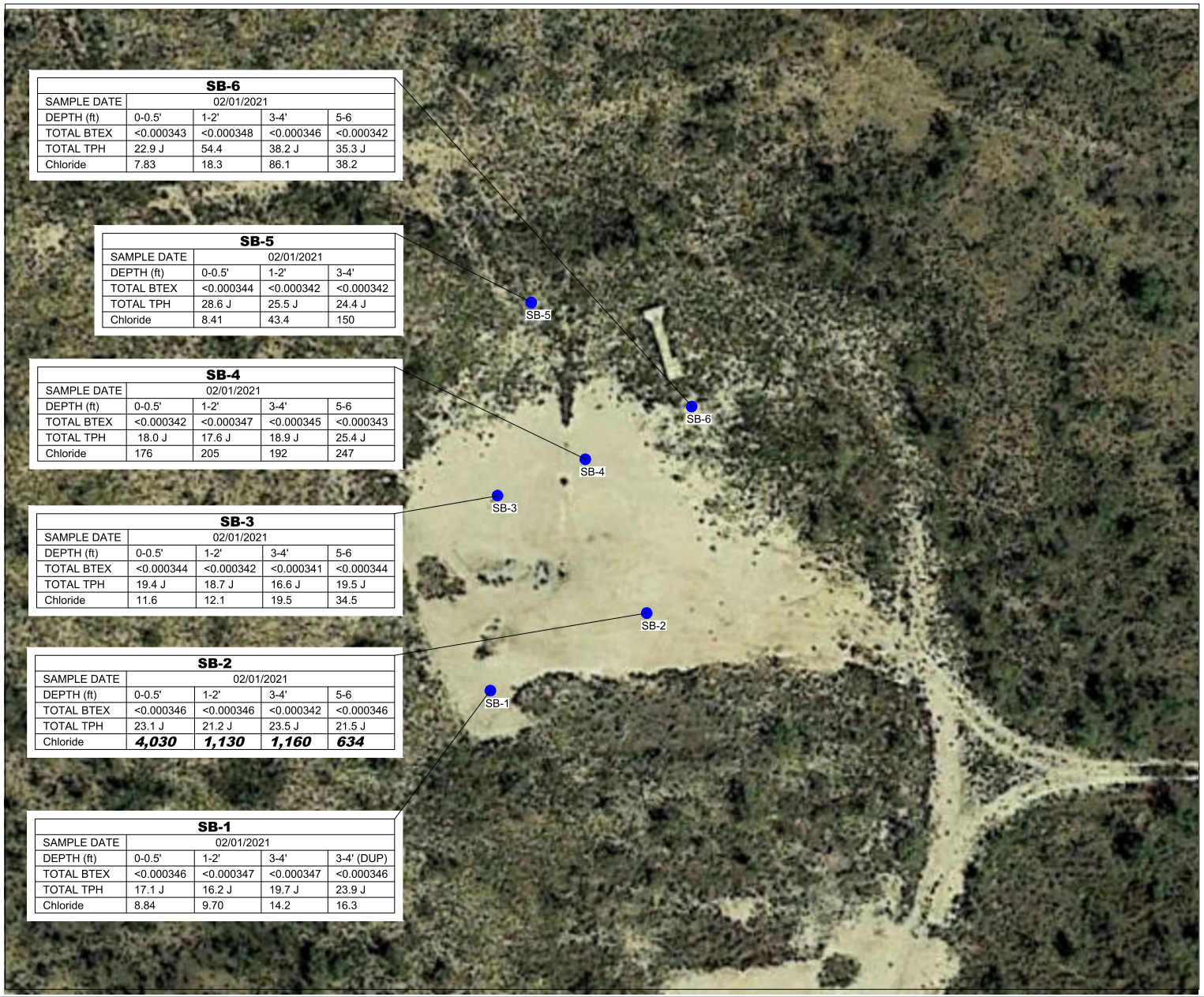

SB-6				
SAMPLE DATE	02/01/2021			
DEPTH (ft)	0-0.5'	1-2'	3-4'	5-6
TOTAL BTEX	<0.000343	<0.000348	<0.000346	<0.000342
TOTAL TPH	22.9 J	54.4	38.2 J	35.3 J
Chloride	7.83	18.3	86.1	38.2

SB-5			
SAMPLE DATE	02/01/2021		
DEPTH (ft)	0-0.5'	1-2'	3-4'
TOTAL BTEX	<0.000344	<0.000342	<0.000342
TOTAL TPH	28.6 J	25.5 J	24.4 J
Chloride	8.41	43.4	150

SB-4				
SAMPLE DATE	02/01/2021			
DEPTH (ft)	0-0.5'	1-2'	3-4'	5-6
TOTAL BTEX	<0.000342	<0.000347	<0.000345	<0.000343
TOTAL TPH	18.0 J	17.6 J	18.9 J	25.4 J
Chloride	176	205	192	247

SB-3				
SAMPLE DATE	02/01/2021			
DEPTH (ft)	0-0.5'	1-2'	3-4'	5-6
TOTAL BTEX	<0.000344	<0.000342	<0.000341	<0.000344
TOTAL TPH	19.4 J	18.7 J	16.6 J	19.5 J
Chloride	11.6	12.1	19.5	34.5

SB-2				
SAMPLE DATE	02/01/2021			
DEPTH (ft)	0-0.5'	1-2'	3-4'	5-6
TOTAL BTEX	<0.000346	<0.000346	<0.000342	<0.000346
TOTAL TPH	23.1 J	21.2 J	23.5 J	21.5 J
Chloride	***4,030***	***1,130***	***1,160***	***634***

SB-1				
SAMPLE DATE	02/01/2021			
DEPTH (ft)	0-0.5'	1-2'	3-4'	3-4' (DUP)
TOTAL BTEX	<0.000346	<0.000347	<0.000347	<0.000346
TOTAL TPH	17.1 J	16.2 J	19.7 J	23.9 J
Chloride	8.84	9.70	14.2	16.3

LEGEND:

SB-1 ● SOIL SAMPLE LOCATIONS

N

NOTES:

1. SITE LOCATION: 32.872338, -103.286358.
2. ALL RESULTS ARE PRESENTED IN mg/kg (MILLIGRAM PER KILOGRAM).
3. '<' INDICATES THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL).
4. J INDICATES RESULT IS LESS THAN THE REPORTING LIMIT BUT GREATER THAN OR EQUAL TO THE MDL AND THE CONCENTRATION IS AN APPROXIMATE VALUE.
5. NMAC INDICATES NEW MEXICO ADMINISTRATION CODE.
6. ALL VALUES ARE IN mg/kg (MILLIGRAM PER KILOGRAM).
7. "' ' " INDICATES ONE FOOT.
8. BTEX INDICATES BENZENE, TOLUENE, ETHYLBENZENE AND TOTAL XYLENES.
9. TPH INDICATES TOTAL PETROLEUM HYDROCARBONS.
10. *REVISED SCREENING LIMIT AND RESTORATION CRITERIA WITHIN THE FIRST 4 FEET BELOW GROUND SURFACE PER RULE 19.15.29 EFFECTIVE AUGUST 14, 2018.
11. CHLORIDE ANALYZED BY USEPA METHOD 300.
12. TPH ANALYZED BY SW8015 MOD.
13. BTEX ANALYZED BY USEPA METHOD 8021B.
14. CLOSURE CRITERIA NEW MEXICO ADMINISTRATIVE CODE 19.15.29.12.E(2).
15. DUP INDICATES DUPLICATE SAMPLE RESULTS.
16. BOLD = ANALYTES EXCEEDING NMAC RESTORATION REQUIREMENTS FOR CHLORIDE.

0 40' 80'

APPROXIMATE SCALE 1 in. = 40 ft.

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LSAU 82
LEA COUNTY, NEW MEXICO

SOIL ANALYTICAL RESULTS MAP

ARCADIS

FIGURE 3

Appendix A

Initial C-141 Form 1RP-2208

RECEIVED
JUN 12 2009
HOBBSOCD

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

x Initial Report ☐ Final Report

Name of Company Chevron Midcontinent, LP	Contact Kim Klahsen
Address 56 Texas Camp Road; Lovington NM 88260	Telephone No. 575-396-4414 x128
Facility Name Lovington San Andres Unit #82	Facility Type flow line

Surface Owner STATE.	Mineral Owner State of NM	Lease No. ~~B7896~~

LOCATION OF RELEASE

API # 30 025 31548

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	31	16S	37E	350	South	1630	East	Lea

Latitude N 32-52.446 **Longitude** 103-17.230 API # 30-025-31548 Chloride content 35000 PPM

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 9 bbls	Volume Recovered 0
Source of Release Flowline	Date and Hour of Occurrence 6/08/09 2:00 PM	Date and Hour of Discovery 6/08/09 @ 5:30 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson	
By Whom? Larry Ridenour	Date and Hour 6/09/09 @ 6:35 AM	
Was a Watercourse Reached? ☐ Yes x No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* Water course was not impacted.

Describe Cause of Problem and Remedial Action Taken.*
Internal corrosion on a flowline. Well was shut in and the line emptied to prevent any additional release of fluid.

CHLORIDE CONTENT?

Describe Area Affected and Cleanup Action Taken.*
Area will be sampled and action will be determined after receiving sample results.

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 D. Ridenour	Approved by District Supervisor: L Johnson ENVIRONMENTAL ENGINEER
Title: Production Team Leader	Approval Date: 6.12.09 Expiration Date: 8.12.09
E-mail Address: LRidenour@Chevron.com	Conditions of Approval: Attached ☐ IRP# 09.6.2208
Date: 6/12/09 Phone: 575-396-4414 x102	

* Attach Additional Sheets If Necessary

FGRL0916649747

Appendix B

Boring Logs

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 4' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-1 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 10YR 5/3 brown very fine to fine sand, little medium to coarse grains, silty, moderately sorted, subrounded, loose, dry, slight organic odor. at 0.75' color change to 10YR 7/3 very pale brown. at 1-1.25' caliche pebbles, loose throughout, little to some, subrounded, hard. USCS - SM
1	1-2'		silty sand 10YR 6/4 light yellow brown, very fine sand, well sorted, some silt, trace clay, loose, dry, lenses with little to some clay, throughout sand, nonplastic, loose. USCS - SM/SC
3	3-4'		
4			End of boring 4' bgs.
5			

ARCADIS

Remarks: Total Depth: 4' Below Ground Surface (bgs)

Project: 30064869 Template: LPTEMPLATE_HA_Final

Data File: SB-1 Date: 2/12/2021 Created/Edited by: AD

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 6' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-2 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 10YR 5/3 brown, very fine to fine sand, moderately sorted, with little to some fine gravel, calcareous, hard, loose, dry. USCS - SM
	1-2'		silty sand 7.5YR 3/2 dark brown very fine sand, well sorted, loose, some silt, with trace to little lenses of clayey sand, very fine, as above with nonplastic, soft clay throughout, dry, little to some caliche pebbles loose throughout. USCS - SM
	3-4'		
5	5-6'		sandy caliche 10YR 8/3 very pale brown fine sand, well sorted, in a silty calcareous matrix, loose to friable, poorly cemented, with some caliche nodules, moderately cemented, friable to hard, loose throughout. USCS - SM
			End of boring 6' bgs.

ARCADIS

Remarks: Total Depth: 6' Below Ground Surface (bgs)

Project: 30064869 Template: LPTEMPLATE_HA_Final Page: 1 of 1
Data File: SB-2 Date: 2/12/2021 Created/Edited by: AD

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 6' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-3 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 7.5YR 7/3 very pale brown, very fine to fine sand, moderately sorted, silty, with little to some fine gravel poorly sorted throughout, loose, dry. USCS - SM
	1-2'		clayey sand 7.5YR 3/2 dark brown very fine sand, well sorted, little silt, some clay homogenous throughout. nonplastic, loose to soft. USCS - SC
	3-4'		silty sand 7.5YR 5/3 brown very fine, well sorted, little to some silt, loose, with little caliche granules to pebbles loose throughout, at 3' color change to 7.5YR 6/3 light brown at 3.5' sand becomes firm, friable, slightly cemented. USCS - SM
5	5-6'		
			End of boring 6' bgs. refusal on caliche

ARCADIS

Remarks: Total Depth: 6' Below Ground Surface (bgs)

Project: 30064869 Template: LPTEMPLATE_HA_Final Page: 1 of 1
Data File: SB-3 Date: 2/12/2021 Created/Edited by: AD

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 6' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-4 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 7.5YR 7/3 very pale brown, very fine to fine sand, moderately sorted, silty, with little fine gravel poorly sorted throughout, hard, loose, dry. USCS - SM
			clayey sand 7.5YR 3/2 dark brown very fine sand, well sorted, little silt, with some clay homogenous throughout. nonplastic, loose to soft, dry. USCS - SC
	1-2'		silty sand 7.5YR 5/3 brown very fine, well sorted, silty, loose, trace clay, dry, with trace to little caliche granules to pebbles, loose throughout. at 4.75-6' little to some caliche pebbles loose throughout, hard, subrounded, well cemented, white. USCS - SM
	3-4'		
5	5-6'		
			End of boring 6' bgs.

ARCADIS

Remarks: Total Depth: 6' Below Ground Surface (bgs)

Project: 30064869 Template: LPTEMPLATE_HA_Final Page: 1 of 1
Data File: SB-4 Date: 2/12/2021 Created/Edited by: AD

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 4.25' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-5 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 7.5YR 7/3 very pale brown, very fine to fine sand, moderately sorted with little to some fine gravel, loose, dry, subrounded. USCS - SM
1	1-2'		silty sand 7.5YR 5/3 brown, very fine, well sorted, little to some silt, loose, trace clay, with trace to little caliche pebbles throughout, dry,
2			at 3-4' caliche lenses, friable to firm, white, sandy, calcareous within silty sand, little to some caliche pebbles throughout. USCS - SM
3	3-4'		
4			End of boring 4.25' bgs. refusal on caliche
5			

ARCADIS

Remarks: Total Depth: 4.25' Below Ground Surface (bgs)

Project: 30064869 Template: LPTEMPLATE_HA_Final

Data File: SB-5 Date: 2/12/2021 Created/Edited by: AD

Date Start/Finish: 2/01/2021 **Drilling Company:** Arcadis **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger Grab	**Borehole Depth:** 6' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** SB-6 **Client:** Chevron **Location:** LSAU-82

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
0	0-0.5'		Silty sand 7.5YR 7/3 very pale brown, very fine to fine sand, moderately sorted, loose, silty, with little to some fine gravel throughout, dry. USCS - SM
	1-2'		silty sand 7.5YR 3/2 dark brown very fine sand, well sorted, silty, loose to blocky, with trace clay in lenses throughout, dry, at 1' as above with little caliche lenses, firm to friable, moderately cemented, sandy, at 2' color change to 7.5YR 7/3 very pale brown. USCS - SM
	3-4'		
5	5-6'		sand 5YR 6/3 light red brown very fine sand, well sorted, loose, dry, trace to little silt, trace caliche pebbles poorly sorted throughout. USCS - SP
			End of boring 6' bgs.

ARCADIS

Remarks: Total Depth: 6' Below Ground Surface (bgs)

Appendix C

Photograph Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
LSAU 82	Lea County, NM	1RP-2208

Photo No.	Date:
1	02/01/2021

Direction Photo Taken:

North west

Description:

Center of the pad

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
LSAU 82	Lea County, NM	1RP-2208

Photo No.	Date:
2	02/01/2021

Direction Photo Taken:

North

Description:

Center of the pad

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
LSAU 82	Lea County, NM	1RP-2208

Photo No.	Date:
3	02/01/2021

Direction Photo Taken:

South east

Description:

Center of the pad

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
LSAU 82	Lea County, NM	1RP-2208

Photo No.	Date:
4	02/01/2021

Direction Photo Taken:

South

Description:

Vegetation surrounding the pad

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
LSAU 82	Lea County, NM	1RP-2208

Photo No.	Date:
5	02/01/2021

Direction Photo Taken:

Facing South west

Description:

Vegetation surrounding the pad

Appendix D

Laboratory Report

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Analytical Report 687047

for

Arcadis U.S., Inc

Project Manager: Morgan Jordan

LSAU 82

30064869-0002B

02.18.2021

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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02.18.2021

Project Manager: **Morgan Jordan**
Arcadis U.S., Inc
1717 W 6th Street, Suite 210
Austin, TX 78703

Reference: Eurofins Xenco, LLC Report No(s): **687047**
LSAU 82
Project Address:

Morgan Jordan:

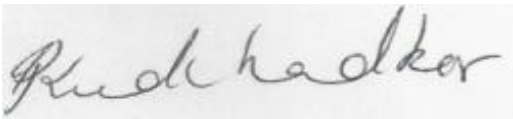
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687047. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687047 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Sachin Kudchadkar
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1-S-0-.5-210201	S	02.01.2021 11:40		687047-001
SB-1-S-1-2-210201	S	02.01.2021 11:46		687047-002
SB-1-S-3-4-210201	S	02.01.2021 12:03		687047-003
SB-1-SD-3-4-210201	S	02.01.2021 00:00		687047-004
SB-2-S-0-.5-210201	S	02.01.2021 12:14		687047-005
SB-2-S-1-2-210201	S	02.01.2021 12:20		687047-006
SB-2-S-3-4-210201	S	02.01.2021 12:25		687047-007
SB-2-S-5-6-210201	S	02.01.2021 12:35		687047-008
SB-3-S-0-.5-210201	S	02.01.2021 13:36		687047-009
SB-3-S-1-2-210201	S	02.01.2021 13:45		687047-010
SB-3-S-3-4-210201	S	02.01.2021 13:57		687047-011
SB-3-S-5-6-210201	S	02.01.2021 14:05		687047-012
SB-4-S-0-.5-210201	S	02.01.2021 14:10		687047-013
SB-4-S-1-2-210201	S	02.01.2021 14:15		687047-014
SB-4-S-3-4-210201	S	02.01.2021 14:21		687047-015
SB-4-S-5-6-210201	S	02.01.2021 14:26		687047-016
SB-5-S-0-.5-210201	S	02.01.2021 15:08		687047-017
SB-5-S-1-2-210201	S	02.01.2021 15:21		687047-018
SB-5-S-3-4-210201	S	02.01.2021 15:24		687047-019
SB-6-S-0-.5-210201	S	02.01.2021 15:36		687047-020
SB-6-S-1-2-210201	S	02.01.2021 15:41		687047-021
SB-6-S-3-4-210201	S	02.01.2021 15:47		687047-022
SB-6-S-5-6-210201	S	02.01.2021 15:58		687047-023

CASE NARRATIVE

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Client Name: Arcadis U.S., Inc

Project Name: LSAU 82

Project ID: *30064869-0002B*
Work Order Number(s): *687047*

Report Date: *02.18.2021*
Date Received: *02.02.2021*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3149943 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7720750-1-BSD,687102-003 S,687102-003 SD.

Batch: LBA-3149971 Chloride by EPA 300

Lab Sample ID 687057-008 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687047-023.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3150089 BTEX by EPA 8021B

Lab Sample ID 687047-005 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687047-005.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; Samples affected are: 687047-005.

Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 687047-005

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-1-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-001 Date Collected: 02.01.2021 11:40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 13:30 % Moisture:

Seq Number: 3149952 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.84**	4.95	0.850	mg/kg	02.03.2021 20:29		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**17.1**	50.0	15.0	mg/kg	02.05.2021 12:57	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 12:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 12:57	U	1
Total TPH	PHC635	**17.1**	50.0	15.0	mg/kg	02.05.2021 12:57	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	02.05.2021 12:57	
o-Terphenyl	84-15-1	86	%	70-130	02.05.2021 12:57	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-1-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-001	Date Collected:	02.01.2021 11:40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:00	% Moisture:	
Seq Number:	3149948			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.03.2021 19:28	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.03.2021 19:28	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.03.2021 19:28	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.03.2021 19:28	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 19:28	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 19:28	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.03.2021 19:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	02.03.2021 19:28	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.03.2021 19:28	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-1-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-002 Date Collected: 02.01.2021 11:46

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 13:30 % Moisture:

Seq Number: 3149952 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.70**	4.95	0.850	mg/kg	02.03.2021 20:34		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.2**	50.0	15.0	mg/kg	02.05.2021 14:01	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 14:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 14:01	U	1
Total TPH	PHC635	**16.2**	50.0	15.0	mg/kg	02.05.2021 14:01	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	02.05.2021 14:01	
o-Terphenyl	84-15-1	84	%	70-130	02.05.2021 14:01	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-1-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-002	Date Collected:	02.01.2021 11:46		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:00	% Moisture:	
Seq Number:	3149948			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	02.03.2021 19:48	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	02.03.2021 19:48	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	02.03.2021 19:48	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	02.03.2021 19:48	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 19:48	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 19:48	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	02.03.2021 19:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.03.2021 19:48	
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.03.2021 19:48	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-1-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-003 Date Collected: 02.01.2021 12:03

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.2**	4.98	0.855	mg/kg	02.03.2021 21:06		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**19.7**	49.9	15.0	mg/kg	02.05.2021 14:22	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 14:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 14:22	U	1
Total TPH	PHC635	**19.7**	49.9	15.0	mg/kg	02.05.2021 14:22	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	02.05.2021 14:22	
o-Terphenyl	84-15-1	83	%	70-130	02.05.2021 14:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-1-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-003	Date Collected:	02.01.2021 12:03		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:00	% Moisture:	
Seq Number:	3149948			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	02.03.2021 20:09	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	02.03.2021 20:09	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	02.03.2021 20:09	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	02.03.2021 20:09	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 20:09	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 20:09	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	02.03.2021 20:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.03.2021 20:09	
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.03.2021 20:09	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-1-SD-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-004 Date Collected: 02.01.2021 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.3**	5.03	0.864	mg/kg	02.03.2021 21:22		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**23.9**	49.8	14.9	mg/kg	02.05.2021 14:44	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	02.05.2021 14:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.05.2021 14:44	U	1
Total TPH	PHC635	**23.9**	49.8	14.9	mg/kg	02.05.2021 14:44	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	02.05.2021 14:44	
o-Terphenyl	84-15-1	84	%	70-130	02.05.2021 14:44	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-1-SD-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-004	Date Collected:	02.01.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MNR				
Analyst:	MNR	Date Prep:	02.03.2021 16:00	% Moisture:	
Seq Number:	3149943			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.04.2021 03:33	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.04.2021 03:33	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.04.2021 03:33	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.04.2021 03:33	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 03:33	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 03:33	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.04.2021 03:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	02.04.2021 03:33	
4-Bromofluorobenzene	460-00-4	127	%	70-130	02.04.2021 03:33	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-2-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-005 Date Collected: 02.01.2021 12:14

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4030**	49.9	8.57	mg/kg	02.03.2021 21:27		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**23.1**	50.0	15.0	mg/kg	02.05.2021 15:05	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 15:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 15:05	U	1
Total TPH	PHC635	**23.1**	50.0	15.0	mg/kg	02.05.2021 15:05	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	02.05.2021 15:05	
o-Terphenyl	84-15-1	83	%	70-130	02.05.2021 15:05	

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LSAU 82

Sample Id:	**SB-2-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-005	Date Collected:	02.01.2021 12:14		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MNR				
Analyst:	MNR	Date Prep:	02.04.2021 08:00	% Moisture:	
Seq Number:	3150089			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	02.04.2021 13:00	UX	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	02.04.2021 13:00	UXF	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	02.04.2021 13:00	UFX	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.04.2021 13:00	UXF	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 13:00	UXF	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 13:00	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.04.2021 13:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.04.2021 13:00	
4-Bromofluorobenzene	460-00-4	138	%	70-130	02.04.2021 13:00	**

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LSAU 82

Sample Id: **SB-2-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-006 Date Collected: 02.01.2021 12:20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1130**	4.99	0.857	mg/kg	02.03.2021 21:33		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**21.2**	50.0	15.0	mg/kg	02.05.2021 15:27	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 15:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 15:27	U	1
Total TPH	PHC635	**21.2**	50.0	15.0	mg/kg	02.05.2021 15:27	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	02.05.2021 15:27	
o-Terphenyl	84-15-1	83	%	70-130	02.05.2021 15:27	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-2-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-006	Date Collected:	02.01.2021 12:20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	02.03.2021 13:26	U	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	02.03.2021 13:26	U	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	02.03.2021 13:26	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.03.2021 13:26	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 13:26	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 13:26	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.03.2021 13:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 13:26	
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.03.2021 13:26	

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LSAU 82

Sample Id: **SB-2-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-007 Date Collected: 02.01.2021 12:25

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1160**	5.02	0.862	mg/kg	02.03.2021 21:38		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**23.5**	49.9	15.0	mg/kg	02.05.2021 15:48	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 15:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 15:48	U	1
Total TPH	PHC635	**23.5**	49.9	15.0	mg/kg	02.05.2021 15:48	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	02.05.2021 15:48	
o-Terphenyl	84-15-1	86	%	70-130	02.05.2021 15:48	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-2-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-007	Date Collected:	02.01.2021 12:25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	02.03.2021 13:46	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	02.03.2021 13:46	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	02.03.2021 13:46	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	02.03.2021 13:46	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	02.03.2021 13:46	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	02.03.2021 13:46	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	02.03.2021 13:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.03.2021 13:46	
4-Bromofluorobenzene	460-00-4	116	%	70-130	02.03.2021 13:46	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-2-S-5-6-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-008 Date Collected: 02.01.2021 12:35

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**634**	4.97	0.853	mg/kg	02.03.2021 21:54		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**21.5**	50.0	15.0	mg/kg	02.05.2021 16:10	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 16:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 16:10	U	1
Total TPH	PHC635	**21.5**	50.0	15.0	mg/kg	02.05.2021 16:10	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	02.05.2021 16:10	
o-Terphenyl	84-15-1	95	%	70-130	02.05.2021 16:10	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-2-S-5-6-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-008	Date Collected:	02.01.2021 12:35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.03.2021 14:07	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.03.2021 14:07	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.03.2021 14:07	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.03.2021 14:07	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 14:07	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 14:07	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.03.2021 14:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.03.2021 14:07	
4-Bromofluorobenzene	460-00-4	111	%	70-130	02.03.2021 14:07	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-3-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-009 Date Collected: 02.01.2021 13:36

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.6**	4.98	0.855	mg/kg	02.03.2021 21:59		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**19.4**	49.8	14.9	mg/kg	02.05.2021 16:31	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	02.05.2021 16:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.05.2021 16:31	U	1
Total TPH	PHC635	**19.4**	49.8	14.9	mg/kg	02.05.2021 16:31	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	02.05.2021 16:31	
o-Terphenyl	84-15-1	97	%	70-130	02.05.2021 16:31	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-3-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-009	Date Collected:	02.01.2021 13:36		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.03.2021 14:28	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.03.2021 14:28	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.03.2021 14:28	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.03.2021 14:28	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 14:28	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 14:28	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	02.03.2021 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.03.2021 14:28	
4-Bromofluorobenzene	460-00-4	110	%	70-130	02.03.2021 14:28	

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LSAU 82

Sample Id: **SB-3-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-010 Date Collected: 02.01.2021 13:45

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.1**	5.04	0.865	mg/kg	02.03.2021 22:05		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**18.7**	49.9	15.0	mg/kg	02.05.2021 16:53	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 16:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 16:53	U	1
Total TPH	PHC635	**18.7**	49.9	15.0	mg/kg	02.05.2021 16:53	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	02.05.2021 16:53	
o-Terphenyl	84-15-1	86	%	70-130	02.05.2021 16:53	

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LSAU 82

Sample Id:	**SB-3-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-010	Date Collected:	02.01.2021 13:45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 14:48	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	02.03.2021 14:48	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	02.03.2021 14:48	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 14:48	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 14:48	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 14:48	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	02.03.2021 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	02.03.2021 14:48	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 14:48	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-3-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-011 Date Collected: 02.01.2021 13:57

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.5**	5.04	0.865	mg/kg	02.03.2021 22:10		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**16.6**	50.0	15.0	mg/kg	02.05.2021 17:36	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 17:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 17:36	U	1
Total TPH	PHC635	**16.6**	50.0	15.0	mg/kg	02.05.2021 17:36	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	02.05.2021 17:36	
o-Terphenyl	84-15-1	83	%	70-130	02.05.2021 17:36	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-3-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-011	Date Collected:	02.01.2021 13:57		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000381	0.00198	0.000381	mg/kg	02.03.2021 15:09	U	1
Toluene	108-88-3	<0.000451	0.00198	0.000451	mg/kg	02.03.2021 15:09	U	1
Ethylbenzene	100-41-4	<0.000559	0.00198	0.000559	mg/kg	02.03.2021 15:09	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00396	0.00100	mg/kg	02.03.2021 15:09	U	1
o-Xylene	95-47-6	<0.000341	0.00198	0.000341	mg/kg	02.03.2021 15:09	U	1
Total Xylenes	1330-20-7	<0.000341	0.00198	0.000341	mg/kg	02.03.2021 15:09	U	1
Total BTEX		<0.000341	0.00198	0.000341	mg/kg	02.03.2021 15:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 15:09	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.03.2021 15:09	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-3-S-5-6-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-012 Date Collected: 02.01.2021 14:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.5**	5.02	0.862	mg/kg	02.04.2021 09:28		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**19.5**	50.0	15.0	mg/kg	02.05.2021 17:57	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 17:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 17:57	U	1
Total TPH	PHC635	**19.5**	50.0	15.0	mg/kg	02.05.2021 17:57	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.05.2021 17:57	
o-Terphenyl	84-15-1	91	%	70-130	02.05.2021 17:57	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-3-S-5-6-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-012	Date Collected:	02.01.2021 14:05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	02.03.2021 15:30	U	1
Toluene	108-88-3	<0.000455	0.00200	0.000455	mg/kg	02.03.2021 15:30	U	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	02.03.2021 15:30	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	02.03.2021 15:30	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 15:30	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 15:30	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	02.03.2021 15:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 15:30	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 15:30	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-4-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-013 Date Collected: 02.01.2021 14:10

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**176**	4.95	0.850	mg/kg	02.03.2021 22:16		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**18.0**	49.9	15.0	mg/kg	02.05.2021 18:19	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 18:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 18:19	U	1
Total TPH	PHC635	**18.0**	49.9	15.0	mg/kg	02.05.2021 18:19	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.05.2021 18:19	
o-Terphenyl	84-15-1	89	%	70-130	02.05.2021 18:19	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-4-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-013	Date Collected:	02.01.2021 14:10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 15:51	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	02.03.2021 15:51	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	02.03.2021 15:51	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 15:51	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 15:51	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 15:51	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	02.03.2021 15:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 15:51	
4-Bromofluorobenzene	460-00-4	115	%	70-130	02.03.2021 15:51	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-4-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-014 Date Collected: 02.01.2021 14:15

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**205**	5.01	0.860	mg/kg	02.03.2021 22:32		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**17.6**	49.8	14.9	mg/kg	02.05.2021 18:40	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	02.05.2021 18:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.05.2021 18:40	U	1
Total TPH	PHC635	**17.6**	49.8	14.9	mg/kg	02.05.2021 18:40	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.05.2021 18:40	
o-Terphenyl	84-15-1	91	%	70-130	02.05.2021 18:40	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-4-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-014	Date Collected:	02.01.2021 14:15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	02.03.2021 16:11	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	02.03.2021 16:11	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	02.03.2021 16:11	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	02.03.2021 16:11	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 16:11	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	02.03.2021 16:11	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	02.03.2021 16:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 16:11	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 16:11	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-4-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-015 Date Collected: 02.01.2021 14:21

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**192**	5.05	0.867	mg/kg	02.03.2021 22:38		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**18.9**	50.0	15.0	mg/kg	02.05.2021 19:01	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 19:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 19:01	U	1
Total TPH	PHC635	**18.9**	50.0	15.0	mg/kg	02.05.2021 19:01	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	02.05.2021 19:01	
o-Terphenyl	84-15-1	90	%	70-130	02.05.2021 19:01	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-4-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-015	Date Collected:	02.01.2021 14:21		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	02.03.2021 16:32	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	02.03.2021 16:32	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	02.03.2021 16:32	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	02.03.2021 16:32	U	1
o-Xylene	95-47-6	<0.000345	0.00200	0.000345	mg/kg	02.03.2021 16:32	U	1
Total Xylenes	1330-20-7	<0.000345	0.00200	0.000345	mg/kg	02.03.2021 16:32	U	1
Total BTEX		<0.000345	0.00200	0.000345	mg/kg	02.03.2021 16:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 16:32	
1,4-Difluorobenzene	540-36-3	107	%	70-130	02.03.2021 16:32	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-4-S-5-6-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-016 Date Collected: 02.01.2021 14:26

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**247**	4.98	0.855	mg/kg	02.03.2021 22:54		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**25.4**	49.9	15.0	mg/kg	02.05.2021 19:23	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 19:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 19:23	U	1
Total TPH	PHC635	**25.4**	49.9	15.0	mg/kg	02.05.2021 19:23	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.05.2021 19:23	
o-Terphenyl	84-15-1	92	%	70-130	02.05.2021 19:23	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-4-S-5-6-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-016	Date Collected:	02.01.2021 14:26		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 18:38	U	1
Toluene	108-88-3	<0.000454	0.00199	0.000454	mg/kg	02.03.2021 18:38	U	1
Ethylbenzene	100-41-4	<0.000563	0.00199	0.000563	mg/kg	02.03.2021 18:38	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 18:38	U	1
o-Xylene	95-47-6	<0.000343	0.00199	0.000343	mg/kg	02.03.2021 18:38	U	1
Total Xylenes	1330-20-7	<0.000343	0.00199	0.000343	mg/kg	02.03.2021 18:38	U	1
Total BTEX		<0.000343	0.00199	0.000343	mg/kg	02.03.2021 18:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.03.2021 18:38	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.03.2021 18:38	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-5-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-017 Date Collected: 02.01.2021 15:08

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.41**	5.00	0.858	mg/kg	02.03.2021 22:59		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**28.6**	49.8	14.9	mg/kg	02.05.2021 19:44	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	02.05.2021 19:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.05.2021 19:44	U	1
Total TPH	PHC635	**28.6**	49.8	14.9	mg/kg	02.05.2021 19:44	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.05.2021 19:44	
o-Terphenyl	84-15-1	88	%	70-130	02.05.2021 19:44	

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Certificate of Analytical Results 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-5-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-017	Date Collected:	02.01.2021 15:08		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.03.2021 18:59	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.03.2021 18:59	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.03.2021 18:59	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.03.2021 18:59	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 18:59	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 18:59	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	02.03.2021 18:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	02.03.2021 18:59	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.03.2021 18:59	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-5-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-018 Date Collected: 02.01.2021 15:21

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.4**	5.00	0.858	mg/kg	02.03.2021 23:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**25.5**	50.0	15.0	mg/kg	02.05.2021 20:06	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 20:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 20:06	U	1
Total TPH	PHC635	**25.5**	50.0	15.0	mg/kg	02.05.2021 20:06	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	02.05.2021 20:06	
o-Terphenyl	84-15-1	83	%	70-130	02.05.2021 20:06	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-5-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-018	Date Collected:	02.01.2021 15:21		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 19:19	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	02.03.2021 19:19	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	02.03.2021 19:19	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 19:19	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:19	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:19	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.03.2021 19:19	
4-Bromofluorobenzene	460-00-4	117	%	70-130	02.03.2021 19:19	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-5-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-019 Date Collected: 02.01.2021 15:24

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**150**	5.00	0.858	mg/kg	02.03.2021 23:10		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**24.4**	50.0	15.0	mg/kg	02.05.2021 20:27	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 20:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 20:27	U	1
Total TPH	PHC635	**24.4**	50.0	15.0	mg/kg	02.05.2021 20:27	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	02.05.2021 20:27	
o-Terphenyl	84-15-1	86	%	70-130	02.05.2021 20:27	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-5-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-019	Date Collected:	02.01.2021 15:24		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 19:40	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	02.03.2021 19:40	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	02.03.2021 19:40	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 19:40	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:40	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:40	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	02.03.2021 19:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.03.2021 19:40	
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.03.2021 19:40	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-6-S-0-.5-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-020 Date Collected: 02.01.2021 15:36

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.83**	5.00	0.858	mg/kg	02.03.2021 23:15		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00 % Moisture:

Seq Number: 3150322 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**22.9**	49.9	15.0	mg/kg	02.05.2021 20:49	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.05.2021 20:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.05.2021 20:49	U	1
Total TPH	PHC635	**22.9**	49.9	15.0	mg/kg	02.05.2021 20:49	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.05.2021 20:49	
o-Terphenyl	84-15-1	89	%	70-130	02.05.2021 20:49	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-6-S-0-.5-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-020	Date Collected:	02.01.2021 15:36		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	02.03.2021 20:01	U	1
Toluene	108-88-3	<0.000454	0.00199	0.000454	mg/kg	02.03.2021 20:01	U	1
Ethylbenzene	100-41-4	<0.000563	0.00199	0.000563	mg/kg	02.03.2021 20:01	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	02.03.2021 20:01	U	1
o-Xylene	95-47-6	<0.000343	0.00199	0.000343	mg/kg	02.03.2021 20:01	U	1
Total Xylenes	1330-20-7	<0.000343	0.00199	0.000343	mg/kg	02.03.2021 20:01	U	1
Total BTEX		<0.000343	0.00199	0.000343	mg/kg	02.03.2021 20:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.03.2021 20:01	
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 20:01	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-6-S-1-2-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-021 Date Collected: 02.01.2021 15:41

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.3**	4.96	0.852	mg/kg	02.03.2021 23:20		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.06.2021 09:00 % Moisture:

Seq Number: 3150326 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**39.1**	49.9	15.0	mg/kg	02.06.2021 19:09	J	1
Diesel Range Organics (DRO)	C10C28DRO	**15.3**	49.9	15.0	mg/kg	02.06.2021 19:09	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.06.2021 19:09	U	1
Total TPH	PHC635	**54.4**	49.9	15.0	mg/kg	02.06.2021 19:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	02.06.2021 19:09	
o-Terphenyl	84-15-1	92	%	70-130	02.06.2021 19:09	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-6-S-1-2-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-021	Date Collected:	02.01.2021 15:41		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000389	0.00202	0.000389	mg/kg	02.03.2021 20:21	U	1
Toluene	108-88-3	<0.000460	0.00202	0.000460	mg/kg	02.03.2021 20:21	U	1
Ethylbenzene	100-41-4	<0.000570	0.00202	0.000570	mg/kg	02.03.2021 20:21	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00404	0.00102	mg/kg	02.03.2021 20:21	U	1
o-Xylene	95-47-6	<0.000348	0.00202	0.000348	mg/kg	02.03.2021 20:21	U	1
Total Xylenes	1330-20-7	<0.000348	0.00202	0.000348	mg/kg	02.03.2021 20:21	U	1
Total BTEX		<0.000348	0.00202	0.000348	mg/kg	02.03.2021 20:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.03.2021 20:21	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.03.2021 20:21	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-6-S-3-4-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-022 Date Collected: 02.01.2021 15:47

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30 % Moisture:

Seq Number: 3149969 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.1**	5.02	0.862	mg/kg	02.03.2021 23:26		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.06.2021 09:00 % Moisture:

Seq Number: 3150326 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**38.2**	49.8	14.9	mg/kg	02.06.2021 19:30	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	02.06.2021 19:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.06.2021 19:30	U	1
Total TPH	PHC635	**38.2**	49.8	14.9	mg/kg	02.06.2021 19:30	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	02.06.2021 19:30	
o-Terphenyl	84-15-1	99	%	70-130	02.06.2021 19:30	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-6-S-3-4-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-022	Date Collected:	02.01.2021 15:47		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.03.2021 20:42	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.03.2021 20:42	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.03.2021 20:42	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.03.2021 20:42	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 20:42	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.03.2021 20:42	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.03.2021 20:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.03.2021 20:42	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.03.2021 20:42	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **SB-6-S-5-6-210201** Matrix: Soil Date Received:02.02.2021 17:00

Lab Sample Id: 687047-023 Date Collected: 02.01.2021 15:58

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 17:05 % Moisture:

Seq Number: 3149971 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**38.2**	5.05	0.867	mg/kg	02.03.2021 17:25	X	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.06.2021 09:00 % Moisture:

Seq Number: 3150326 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**35.3**	50.0	15.0	mg/kg	02.06.2021 19:52	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.06.2021 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.06.2021 19:52	U	1
Total TPH	PHC635	**35.3**	50.0	15.0	mg/kg	02.06.2021 19:52	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.06.2021 19:52	
o-Terphenyl	84-15-1	91	%	70-130	02.06.2021 19:52	

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Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id:	**SB-6-S-5-6-210201**	Matrix:	Soil	Date Received:	02.02.2021 17:00
Lab Sample Id:	687047-023	Date Collected:	02.01.2021 15:58		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	02.03.2021 10:30	% Moisture:	
Seq Number:	3149956			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	02.03.2021 21:02	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	02.03.2021 21:02	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	02.03.2021 21:02	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	02.03.2021 21:02	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	02.03.2021 21:02	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	02.03.2021 21:02	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	02.03.2021 21:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	02.03.2021 21:02	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.2021 21:02	

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720700-1-BLK** Matrix: SOLID

Lab Sample Id: **7720700-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 13:30

Seq Number: 3149952

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	0.858	mg/kg	02.03.2021 17:55	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720704-1-BLK** Matrix: SOLID

Lab Sample Id: **7720704-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 14:30

Seq Number: 3149969

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	0.858	mg/kg	02.03.2021 20:50	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720718-1-BLK** Matrix: SOLID

Lab Sample Id: **7720718-1-BLK**

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Tech: CHE

Analyst: CHE Date Prep: 02.03.2021 17:05

Seq Number: 3149971

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	0.858	mg/kg	02.03.2021 17:09	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720750-1-BLK** Matrix: SOLID

Lab Sample Id: **7720750-1-BLK**

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Tech: MNR

Analyst: MNR Date Prep: 02.03.2021 16:00

Seq Number: 3149943

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.04.2021 01:26	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.04.2021 01:26	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.04.2021 01:26	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.04.2021 01:26	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.04.2021 01:26	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720752-1-BLK** Matrix: SOLID

Lab Sample Id: **7720752-1-BLK**

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Tech: KTL

Analyst: KTL Date Prep: 02.03.2021 10:00

Seq Number: 3149948

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.03.2021 12:37	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.03.2021 12:37	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.03.2021 12:37	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.03.2021 12:37	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 12:37	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720759-1-BLK** Matrix: SOLID

Lab Sample Id: **7720759-1-BLK**

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Tech: KTL

Analyst: KTL Date Prep: 02.03.2021 10:30

Seq Number: 3149956

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.03.2021 13:04	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.03.2021 13:04	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.03.2021 13:04	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.03.2021 13:04	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.03.2021 13:04	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7720791-1-BLK** Matrix: SOLID

Lab Sample Id: **7720791-1-BLK**

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Tech: MNR

Analyst: MNR Date Prep: 02.04.2021 08:00

Seq Number: 3150089

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	02.04.2021 12:35	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	02.04.2021 12:35	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	02.04.2021 12:35	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	02.04.2021 12:35	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.04.2021 12:35	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7721008-1-BLK** Matrix: SOLID

Lab Sample Id: **7721008-1-BLK**

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.05.2021 12:00

Seq Number: 3150322

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.05.2021 11:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.05.2021 11:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.05.2021 11:53	U	1

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Blank Summary 687047

Arcadis U.S., Inc, Austin, TX

LSAU 82

Sample Id: **7721014-1-BLK** Matrix: SOLID

Lab Sample Id: **7721014-1-BLK**

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 02.06.2021 09:00

Seq Number: 3150326

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.06.2021 12:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.06.2021 12:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.06.2021 12:07	U	1

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3149943 **Sample:** 7720750-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 22:53 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	70-130	
4-Bromofluorobenzene	0.0377	0.0300	126	70-130	

Lab Batch #: 3149943 **Sample:** 7720750-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 23:19 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	70-130	
4-Bromofluorobenzene	0.0422	0.0300	141	70-130	**

Lab Batch #: 3149943 **Sample:** 687102-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.03.2021 23:44 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	70-130	
4-Bromofluorobenzene	0.0427	0.0300	142	70-130	**

Lab Batch #: 3149943 **Sample:** 687102-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.04.2021 00:09 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	70-130	
4-Bromofluorobenzene	0.0400	0.0300	133	70-130	**

Lab Batch #: 3149943 **Sample:** 7720750-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.04.2021 01:26 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	70-130	
4-Bromofluorobenzene	0.0262	0.0300	87	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3149948 **Sample:** 7720752-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 10:38 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0289	0.0300	96	70-130	

Lab Batch #: 3149948 **Sample:** 7720752-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 10:58 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	70-130	
4-Bromofluorobenzene	0.0289	0.0300	96	70-130	

Lab Batch #: 3149948 **Sample:** 687045-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.03.2021 11:19 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	70-130	
4-Bromofluorobenzene	0.0265	0.0300	88	70-130	

Lab Batch #: 3149948 **Sample:** 687045-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.03.2021 11:39 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene	0.0286	0.0300	95	70-130	

Lab Batch #: 3149948 **Sample:** 7720752-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 12:37 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	70-130	
4-Bromofluorobenzene	0.0306	0.0300	102	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3149956 **Sample:** 7720759-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 11:03 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	70-130	
4-Bromofluorobenzene	0.0326	0.0300	109	70-130	

Lab Batch #: 3149956 **Sample:** 7720759-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 11:24 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	70-130	
4-Bromofluorobenzene	0.0328	0.0300	109	70-130	

Lab Batch #: 3149956 **Sample:** 687047-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.03.2021 11:44 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	70-130	
4-Bromofluorobenzene	0.0341	0.0300	114	70-130	

Lab Batch #: 3149956 **Sample:** 687047-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.03.2021 12:05 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	70-130	
4-Bromofluorobenzene	0.0345	0.0300	115	70-130	

Lab Batch #: 3149956 **Sample:** 7720759-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.03.2021 13:04 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	70-130	
4-Bromofluorobenzene	0.0388	0.0300	129	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3150089 **Sample:** 7720791-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.04.2021 10:01 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	70-130	
4-Bromofluorobenzene	0.0307	0.0300	102	70-130	

Lab Batch #: 3150089 **Sample:** 7720791-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.04.2021 10:27 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	70-130	
4-Bromofluorobenzene	0.0353	0.0300	118	70-130	

Lab Batch #: 3150089 **Sample:** 687047-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.04.2021 10:53 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0370	0.0300	123	70-130	

Lab Batch #: 3150089 **Sample:** 687047-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.04.2021 11:19 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	70-130	
4-Bromofluorobenzene	0.0351	0.0300	117	70-130	

Lab Batch #: 3150089 **Sample:** 7720791-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.04.2021 12:35 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	70-130	
4-Bromofluorobenzene	0.0256	0.0300	85	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3150322 **Sample:** 7721008-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.05.2021 11:53 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.6	100	86	70-130	
o-Terphenyl	48.8	50.0	98	70-130	

Lab Batch #: 3150322 **Sample:** 7721008-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.05.2021 12:14 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	100	88	70-130	
o-Terphenyl	45.2	50.0	90	70-130	

Lab Batch #: 3150322 **Sample:** 7721008-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.05.2021 12:35 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.8	100	90	70-130	
o-Terphenyl	46.4	50.0	93	70-130	

Lab Batch #: 3150322 **Sample:** 687047-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.05.2021 13:18 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.5	99.7	80	70-130	
o-Terphenyl	40.5	49.9	81	70-130	

Lab Batch #: 3150322 **Sample:** 687047-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.05.2021 13:39 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.4	100	76	70-130	
o-Terphenyl	38.9	50.0	78	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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Form 2 - Surrogate Recoveries

Project Name: LSAU 82

Report Date: 02182021

Work Orders : 687047 **Project ID:** 30064869-0002B

Lab Batch #: 3150326 **Sample:** 7721014-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.06.2021 12:07 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	100	91	70-130	
o-Terphenyl	53.1	50.0	106	70-130	

Lab Batch #: 3150326 **Sample:** 7721014-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.06.2021 12:28 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.0	100	98	70-130	
o-Terphenyl	50.2	50.0	100	70-130	

Lab Batch #: 3150326 **Sample:** 7721014-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 02.06.2021 12:49 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	100	92	70-130	
o-Terphenyl	46.0	50.0	92	70-130	

Lab Batch #: 3150326 **Sample:** 687058-041 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.06.2021 13:31 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.6	99.7	83	70-130	
o-Terphenyl	42.1	49.9	84	70-130	

Lab Batch #: 3150326 **Sample:** 687058-041 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 02.06.2021 13:52 **SURROGATE RECOVERY STUDY**

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.2	99.6	84	70-130	
o-Terphenyl	42.1	49.8	85	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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QC Summary 687047

Arcadis U.S., Inc

LSAU 82

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149952 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720700-1-BLK — LCS Sample Id: 7720700-1-BKS — LCSD Sample Id: 7720700-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	242	97	249	100	90-110	3	20	mg/kg	02.03.2021 18:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149969 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720704-1-BLK — LCS Sample Id: 7720704-1-BKS — LCSD Sample Id: 7720704-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	246	98	247	99	90-110	0	20	mg/kg	02.03.2021 20:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149971 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720718-1-BLK — LCS Sample Id: 7720718-1-BKS — LCSD Sample Id: 7720718-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	257	103	90-110	0	20	mg/kg	02.03.2021 17:14	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149952 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687003-037 — MS Sample Id: 687003-037 S — MSD Sample Id: 687003-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.1	252	294	111	278	104	90-110	6	20	mg/kg	02.03.2021 18:16	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149952 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687003-047 — MS Sample Id: 687003-047 S — MSD Sample Id: 687003-047 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	323	250	572	100	564	96	90-110	1	20	mg/kg	02.03.2021 19:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149969 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687047-003 — MS Sample Id: 687047-003 S — MSD Sample Id: 687047-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.2	249	276	105	270	103	90-110	2	20	mg/kg	02.03.2021 21:11	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149969 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687047-013 — MS Sample Id: 687047-013 S — MSD Sample Id: 687047-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	176	248	425	100	441	107	90-110	4	20	mg/kg	02.03.2021 22:22	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149971 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687047-023 — MS Sample Id: 687047-023 S — MSD Sample Id: 687047-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	38.2	253	324	113	318	111	90-110	2	20	mg/kg	02.03.2021 17:30	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149971 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687057-008 — MS Sample Id: 687057-008 S — MSD Sample Id: 687057-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	471	252	732	104	729	102	90-110	0	20	mg/kg	02.03.2021 18:43	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150322 — Matrix: Solid — Date Prep: 02.05.2021
MB Sample Id: 7721008-1-BLK — LCS Sample Id: 7721008-1-BKS — LCSD Sample Id: 7721008-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	963	96	1010	101	70-130	5	20	mg/kg	02.05.2021 12:14	
Diesel Range Organics (DRO)	<15.0	1000	877	88	898	90	70-130	2	20	mg/kg	02.05.2021 12:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		88		90		70-130	%	02.05.2021 12:14
o-Terphenyl	98		90		93		70-130	%	02.05.2021 12:14

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150326 — Matrix: Solid — Date Prep: 02.06.2021
MB Sample Id: 7721014-1-BLK — LCS Sample Id: 7721014-1-BKS — LCSD Sample Id: 7721014-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1090	109	1020	102	70-130	7	20	mg/kg	02.06.2021 12:28	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	950	95	70-130	7	20	mg/kg	02.06.2021 12:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		98		92		70-130	%	02.06.2021 12:28
o-Terphenyl	106		100		92		70-130	%	02.06.2021 12:28

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150322 — Matrix: Solid — Date Prep: 02.05.2021
MB Sample Id: 7721008-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	02.05.2021 11:53	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150326 — Matrix: Solid — Date Prep: 02.06.2021
MB Sample Id: 7721014-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	02.06.2021 12:07	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150322 — Matrix: Soil — Date Prep: 02.05.2021
Parent Sample Id: 687047-001 — MS Sample Id: 687047-001 S — MSD Sample Id: 687047-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	17.1	997	892	88	867	85	70-130	3	20	mg/kg	02.05.2021 13:18	
Diesel Range Organics (DRO)	<15.0	997	790	79	768	77	70-130	3	20	mg/kg	02.05.2021 13:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	80		76		70-130	%	02.05.2021 13:18
o-Terphenyl	81		78		70-130	%	02.05.2021 13:18

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3150326 — Matrix: Soil — Date Prep: 02.06.2021
Parent Sample Id: 687058-041 — MS Sample Id: 687058-041 S — MSD Sample Id: 687058-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	973	98	980	98	70-130	1	20	mg/kg	02.06.2021 13:31	
Diesel Range Organics (DRO)	<15.0	997	921	92	922	93	70-130	0	20	mg/kg	02.06.2021 13:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		84		70-130	%	02.06.2021 13:31
o-Terphenyl	84		85		70-130	%	02.06.2021 13:31

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3149948 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720752-1-BLK — LCS Sample Id: 7720752-1-BKS — LCSD Sample Id: 7720752-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0935	94	0.0949	95	70-130	1	35	mg/kg	02.03.2021 10:38	
Toluene	<0.000456	0.100	0.0878	88	0.0892	89	70-130	2	35	mg/kg	02.03.2021 10:38	
Ethylbenzene	<0.000565	0.100	0.0937	94	0.0941	94	70-130	0	35	mg/kg	02.03.2021 10:38	
m,p-Xylenes	<0.00101	0.200	0.185	93	0.185	93	70-130	0	35	mg/kg	02.03.2021 10:38	
o-Xylene	<0.000344	0.100	0.0899	90	0.0911	91	70-130	1	35	mg/kg	02.03.2021 10:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		101		102		70-130	%	02.03.2021 10:38
4-Bromofluorobenzene	102		96		96		70-130	%	02.03.2021 10:38

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3149956 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720759-1-BLK — LCS Sample Id: 7720759-1-BKS — LCSD Sample Id: 7720759-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0839	84	0.0904	90	70-130	7	35	mg/kg	02.03.2021 11:03	
Toluene	<0.000456	0.100	0.0880	88	0.0932	93	70-130	6	35	mg/kg	02.03.2021 11:03	
Ethylbenzene	<0.000565	0.100	0.0825	83	0.0885	89	70-130	7	35	mg/kg	02.03.2021 11:03	
m,p-Xylenes	<0.00101	0.200	0.169	85	0.180	90	70-130	6	35	mg/kg	02.03.2021 11:03	
o-Xylene	<0.000344	0.100	0.0835	84	0.0902	90	70-130	8	35	mg/kg	02.03.2021 11:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		111		109		70-130	%	02.03.2021 11:03
4-Bromofluorobenzene	129		109		109		70-130	%	02.03.2021 11:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3149943 — Matrix: Solid — Date Prep: 02.03.2021
MB Sample Id: 7720750-1-BLK — LCS Sample Id: 7720750-1-BKS — LCSD Sample Id: 7720750-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.106	106	0.103	103	70-130	3	35	mg/kg	02.03.2021 22:53	
Toluene	<0.000456	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	02.03.2021 22:53	
Ethylbenzene	<0.000565	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	02.03.2021 22:53	
m,p-Xylenes	<0.00101	0.200	0.218	109	0.219	110	70-130	0	35	mg/kg	02.03.2021 22:53	
o-Xylene	<0.000344	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	02.03.2021 22:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	82		96		106		70-130	%	02.03.2021 22:53
4-Bromofluorobenzene	87		126		141	**	70-130	%	02.03.2021 22:53

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3150089 — Matrix: Solid — Date Prep: 02.04.2021
MB Sample Id: 7720791-1-BLK — LCS Sample Id: 7720791-1-BKS — LCSD Sample Id: 7720791-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0834	83	0.109	109	70-130	27	35	mg/kg	02.04.2021 10:01	
Toluene	<0.000456	0.100	0.0856	86	0.0990	99	70-130	15	35	mg/kg	02.04.2021 10:01	
Ethylbenzene	<0.000565	0.100	0.0882	88	0.0961	96	70-130	9	35	mg/kg	02.04.2021 10:01	
m,p-Xylenes	<0.00101	0.200	0.182	91	0.209	105	70-130	14	35	mg/kg	02.04.2021 10:01	
o-Xylene	<0.000344	0.100	0.0889	89	0.101	101	70-130	13	35	mg/kg	02.04.2021 10:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		87		112		70-130	%	02.04.2021 10:01
4-Bromofluorobenzene	85		102		118		70-130	%	02.04.2021 10:01

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3149948 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687045-001 — MS Sample Id: 687045-001 S — MSD Sample Id: 687045-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0994	0.0765	77	0.0731	73	70-130	5	35	mg/kg	02.03.2021 11:19	
Toluene	2.72	0.0994	1.95	0	1.95	0	70-130	0	35	mg/kg	02.03.2021 11:19	X
Ethylbenzene	<0.000561	0.0994	0.0553	56	0.0498	50	70-130	10	35	mg/kg	02.03.2021 11:19	X
m,p-Xylenes	<0.00101	0.199	0.104	52	0.0929	46	70-130	11	35	mg/kg	02.03.2021 11:19	X
o-Xylene	<0.000342	0.0994	0.0509	51	0.0496	50	70-130	3	35	mg/kg	02.03.2021 11:19	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	02.03.2021 11:19
4-Bromofluorobenzene	88		95		70-130	%	02.03.2021 11:19

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3149956 — Matrix: Soil — Date Prep: 02.03.2021
Parent Sample Id: 687047-006 — MS Sample Id: 687047-006 S — MSD Sample Id: 687047-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0847	85	0.0856	86	70-130	1	35	mg/kg	02.03.2021 11:44	
Toluene	<0.000457	0.100	0.0853	85	0.0808	81	70-130	5	35	mg/kg	02.03.2021 11:44	
Ethylbenzene	<0.000566	0.100	0.0804	80	0.0797	80	70-130	1	35	mg/kg	02.03.2021 11:44	
m,p-Xylenes	<0.00102	0.200	0.163	82	0.167	84	70-130	2	35	mg/kg	02.03.2021 11:44	
o-Xylene	<0.000345	0.100	0.0818	82	0.0816	82	70-130	0	35	mg/kg	02.03.2021 11:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		111		70-130	%	02.03.2021 11:44
4-Bromofluorobenzene	114		115		70-130	%	02.03.2021 11:44

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3149943 Matrix: Soil Date Prep: 02.03.2021
Parent Sample Id: 687102-003 MS Sample Id: 687102-003 S MSD Sample Id: 687102-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0764	76	0.0498	50	70-130	42	35	mg/kg	02.03.2021 23:44	XF
Toluene	<0.000457	0.100	0.0745	75	0.0519	52	70-130	36	35	mg/kg	02.03.2021 23:44	XF
Ethylbenzene	<0.000567	0.100	0.0708	71	0.0457	46	70-130	43	35	mg/kg	02.03.2021 23:44	XF
m,p-Xylenes	<0.00102	0.201	0.144	72	0.0924	46	70-130	44	35	mg/kg	02.03.2021 23:44	XF
o-Xylene	<0.000346	0.100	0.0724	72	0.0469	47	70-130	43	35	mg/kg	02.03.2021 23:44	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		106		70-130	%	02.03.2021 23:44
4-Bromofluorobenzene	142	**	133	**	70-130	%	02.03.2021 23:44

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3150089 Matrix: Soil Date Prep: 02.04.2021
Parent Sample Id: 687047-005 MS Sample Id: 687047-005 S MSD Sample Id: 687047-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0515	52	0.0733	73	70-130	35	35	mg/kg	02.04.2021 10:53	X
Toluene	<0.000457	0.100	0.0556	56	0.0798	79	70-130	36	35	mg/kg	02.04.2021 10:53	XF
Ethylbenzene	<0.000567	0.100	0.0552	55	0.0841	83	70-130	41	35	mg/kg	02.04.2021 10:53	XF
m,p-Xylenes	<0.00102	0.201	0.113	56	0.172	86	70-130	41	35	mg/kg	02.04.2021 10:53	XF
o-Xylene	<0.000346	0.100	0.0552	55	0.0850	84	70-130	43	35	mg/kg	02.04.2021 10:53	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		110		70-130	%	02.04.2021 10:53
4-Bromofluorobenzene	123		117		70-130	%	02.04.2021 10:53

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Chain of Custody Record

687047

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-23595-8666.1
Client Contact: Motgan Jordan	Phone: 619 851 8792	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 1717 W 6th Street. Suite 210	Due Date Requested:			
City: Austin	TAT Requested (days): Std			
State, Zip: TX, 78703				
Phone: 281 644 9437	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: 30064869-0002B	Project #: 30064869-0002B			
Site: LSAU 82	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, 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)	8015_GRO/ DRO/ ORO	300 - Chloride	8021- BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB-1-S-0-.5-210201	2/01/21	1140	G	Solid						1	
SB-1-S-1-2-210201		1156		Solid							
SB-1-S-3-4-210201		1203		Solid							
SB-1-SD-3-4-210201		—		Solid							
SB-2-S-0-.5-210201		1214		Solid							
SB-2-S-1-2-210201		1220		Solid							
SB-2-S-3-4-210201		1225		Solid							
SB-2-S-5-6-210201		1235		Solid							
SB-3-S-0-.5-210201		1330		Solid							
SB-3-S-1-2-210201		1345		Solid							
SB-3-S-3-4-210201	"	1357	"	Solid						"	

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/01/21 1700	Arcadis		2-1-21 1700	Arcadis
2	Carlos Grajeda	2-2-21 1700	Arcadis		2-2-21 1700	
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 2.1/2.6

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

Chain of Custody Record

6907047

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-23595-8666.1
Client Contact: Motgan Jordan	Phone: 619 851 8792	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 1717 W 6th Street. Suite 210	Due Date Requested:			
City: Austin	TAT Requested (days): std			
State, Zip: TX, 78703				
Phone: 281 644 9437	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: 30064869-0002B	Project #: 30064869-0002B			
Site: LSAU 82	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, 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)	8015_GRO/ DRO/ ORO	300 - Chloride	8021- BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB-3-S-5-6-210201	2/01/21	1405	G	Solid						1	
SB-4-S-0-.5-210201		1410		Solid							
SB-4-S-1-2-210201		1415		Solid							
SB-4-S-3-4-210201		1421		Solid							
SB-4-S-5-6-210201		1426		Solid							
SB-5-S-0-.5-210201		1508		Solid							
SB-5-S-1-2-210201		1521		Solid							
SB-5-S-3-4-210201		1527		Solid							
SB-6-S-0-.5-210201		1536		Solid							
SB-6-S-1-2-210201		1541		Solid							
SB-6-S-3-4-210201		1547		Solid							

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/01/21 1700	Arcadis		2-1-21 1700	Arcadis
2		2-2-21 1700	Arcadis		2-2-21 1700	
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks:

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

Chain of Custody Record

6987047

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-23595-8666.1
Client Contact: Motgan Jordan	Phone: 619 851 8792	E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 3 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 1717 W 6th Street. Suite 210	Due Date Requested:			
City: Austin	TAT Requested (days): Std			
State, Zip: TX, 78703				
Phone: 281 644 9437	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: 30064869-0002B	Project #: 30064869-0002B			
Site: LSAU 82	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	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)	8015_GRO/ DRO/ ORO	300 - Chloride	8021- BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB-6-S-5-6-210201	2/01/21	1558	G	Solid			1	1	1	1	
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

gs 2/01/21

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/01/21 1700	Arcadis	Carlos Grajeda	2-1-21 1700	Arcadis
2	Carlos Grajeda	2-2-21 1700	Arcadis		2-2-21 1700	
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Arcadis U.S., Inc

Date/ Time Received: 02.02.2021 05.00.00 PM

Work Order #: 687047

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 02.03.2021
Brianna Teel

Checklist reviewed by: Sachin Kudchadkar Date: 02.04.2021
Sachin Kudchadkar

Appendix E

Revised C-141 Form 1RP-2208

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NGRL0916650301
District RP	1RP-2208
Facility ID	FGRL0916649747
Application ID	NA

Release Notification

Responsible Party

Responsible Party: Chevron Midcontinent, L. P.	OGRID: 241333
Contact Name: Armando Martinez	Contact Telephone: 505-690-5408
Contact email: amarti@chevron.com	Incident # *(assigned by OCD)* NGRL0916650301
Contact mailing address:	

Location of Release Source

Latitude 32.87234 Longitude -103.28636
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: LSAU 82	Site Type: Produced water release
Date Release Discovered: 06/8/2009	API# *(if applicable):* 30-025-31548

Unit Letter	Section	Township	Range	County
O	31	16S	37E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 9	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: Internal corrosion of a flow line.		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NGRL0916650301
District RP	1RP-2208
Facility ID	FGRL0916649747
Application ID	NA

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

State of New Mexico
Oil Conservation Division

Incident ID	NGRL0916650301
District RP	1RP-2208
Facility ID	FGRL0916649747
Application ID	NA

Site Assessment/Characterization

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

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

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. **Attached.**
Field data: **Attached.**
Data table of soil contaminant concentration data: **Attached.**
Depth to water determination: **Less than or equal to 50 ft bgs.**
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release: **None identified.**
Boring or excavation logs: **Attached.**
Photographs including date and GIS information: **Photographic log attached.**
Topographic/Aerial maps; **Topographic map attached.**
Laboratory data including chain of custody: **Attached.**

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NGRL0916650301
District RP	1RP-2208
Facility ID	FGRL0916649747
Application ID	NA

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

Printed Name: Armando Martinez Title: Environmental Project Manager

Signature:_____ _____ Date: 5/20/21_____

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

OCD Only

Received by: Jennifer Nobui Date: 04/18/2022

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

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

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

CONDITIONS

Action 42442

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 42442
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Site Assessment Report Accepted. Proceed with planned additional assessment activities.	4/18/2022