



February 11, 2024

NMOCD District 2
1811 S. First St.,
Artesia, New Mexico 88210

SUBJECT: Remediation Closure Report for the Foster Battery Release (NAPP2333335903),
Eddy County, New Mexico

To Whom It May Concern,

On behalf of LH Operating, LLC, Strata Resources (Strata) has prepared this Remediation Closure Report that describes the remediation of a release of produced water and crude oil related to a heater treater fire at the Foster Battery. The site is in Unit J, Section 17, Township 17S, Range 31E, Eddy County, New Mexico, on federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5-minute quadrangle map.

Table 1 summarizes release information and closure criteria.

Table 1: Release Information and Closure Criteria			
Name	Foster Battery	Company	LH Operating, LLC
API Number	N/A	Location	32.834553, -103.889804
Incident Number	NAPP2333335903		
Estimated Date of Release	11/18/2023	Date Reported to NMOCD	11/20/23
Land-Owner	Federal	Reported To	NMOCD, BLM
Source of Release	Heater treater fire.		
Released Volume	4 bbls 41 bbls	Released Material	Crude Oil Produced Water
Recovered Volume	4 bbls 40 bbls	Net Release	1 bbl of Produced Water
NMOCD Closure Criteria	<50 feet to groundwater		
Strata Response Dates	12/30/2023 - 01/02/2024		



1.0 Background

On November 18, 2023, a release was discovered at the Foster Battery after the heater treater vessel caught fire from a lightning strike. Initial response actions were conducted by the operator and included source elimination by means of repair, site stabilization, and release recovery. The release consisted of 4 barrels of crude oil and 41 barrels of produced water. Subsequently, 4 barrels of crude oil and 40 barrels of produced water were successfully recovered. Figures 1 and 2 illustrate the vicinity and site location, while Figure 3 illustrates the release location.

2.0 Site Information and Closure Criteria

The Foster Battery is located approximately 5.42 miles northeast of Loco Hills, New Mexico on federally owned land at an elevation of approximately 3720 feet above mean sea level (amsl).

Based upon the New Mexico Office of the State Engineers (NMOSE) online water well database (Appendix A), depth to groundwater in the area is less than 50 feet below grade surface (bgs). There is no known water sources within ½-mile of the location, according to the NMOSE database (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 2/7/2024).

The nearest significant watercourse is a unnamed playa, located approximately 2,500 feet northwest of the location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs. The site has been restored to meet the standards of Table I of 19.15.29.12 NMAC.

Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix A.

3.0 Release Characterization and Remediation Activities

On November 18, 2023, LH Operating, LLC personnel discovered that the heater treater vessel at the Foster Battery caught fire via lightning strike. Personnel immediately shut in all valves to eliminate the source. An estimated 4 barrels of crude oil and 41 barrels of produced water were released.

On December 30, 2023, Strata mobilized to the site to oversee the excavation of contaminated soil in and around the heater treater. Strata guided the excavation activities by collecting soil samples for field screening. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on December 28, 2023 that closure samples were expected to be collected in two (2) business days. A copy of this notification is included in Appendix B.



On January 2, 2024, Strata began conducting confirmation sampling of the walls and base of the excavation. The areas around sample locations BH1-BH6, North SW1, North SW2, South SW1, South SW2, East SW, West SW were excavated to a depth of 4 feet bgs.

The confirmation samples were comprised of representative wall and base 5-point composite samples, each representing 200 ft² of exposed excavation of the base (BH1-BH6) and walls (North SW1, North SW2, South SW1, South SW2, East SW, West SW). All samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental in Albuquerque, New Mexico (Appendix C)

On January 11, 2024, Strata received lab confirmation that all samples were below NMOCD closure criteria (Table 3).

Figure 3 shows the extent of the excavation and sample locations. All laboratory results are summarized in Table 3 and the analytical reports are included in Appendix C. Approximately 177 cubic yards of contaminated soil was removed and hauled to a NMOCD approved facility.

Upon confirming that all soil samples met the closure standards set by the NMOCD, clean backfill material was brought in and utilized to restore the excavated area, returning it to its original state.

Strata Resources recommends no additional remediation efforts and requests that incident number NAPP2333335903 be closed as all closure requirements were satisfied.

4.0 Scope and Limitations

The scope of our services included: assessment sampling, verifying release stabilizations; regulatory liaison; remediation; and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Lynn Acosta at (505) 516-7469.

Submitted by:
Strata Resources, LLC

A handwritten signature in cursive script that reads "Lynn A. Acosta".

Lynn A. Acosta,
Project Geoscientist



ATTACHMENTS

Figures:

Figure 1: Topographic Site Map

Figure 2: Aerial Site Map

Figure 3: Site Characterization Map

Tables:

Table 2: NMOCD Closure Criteria

Table 3: Summary of Sample Results

Appendices:

Appendix A: NMOSE Wells Report

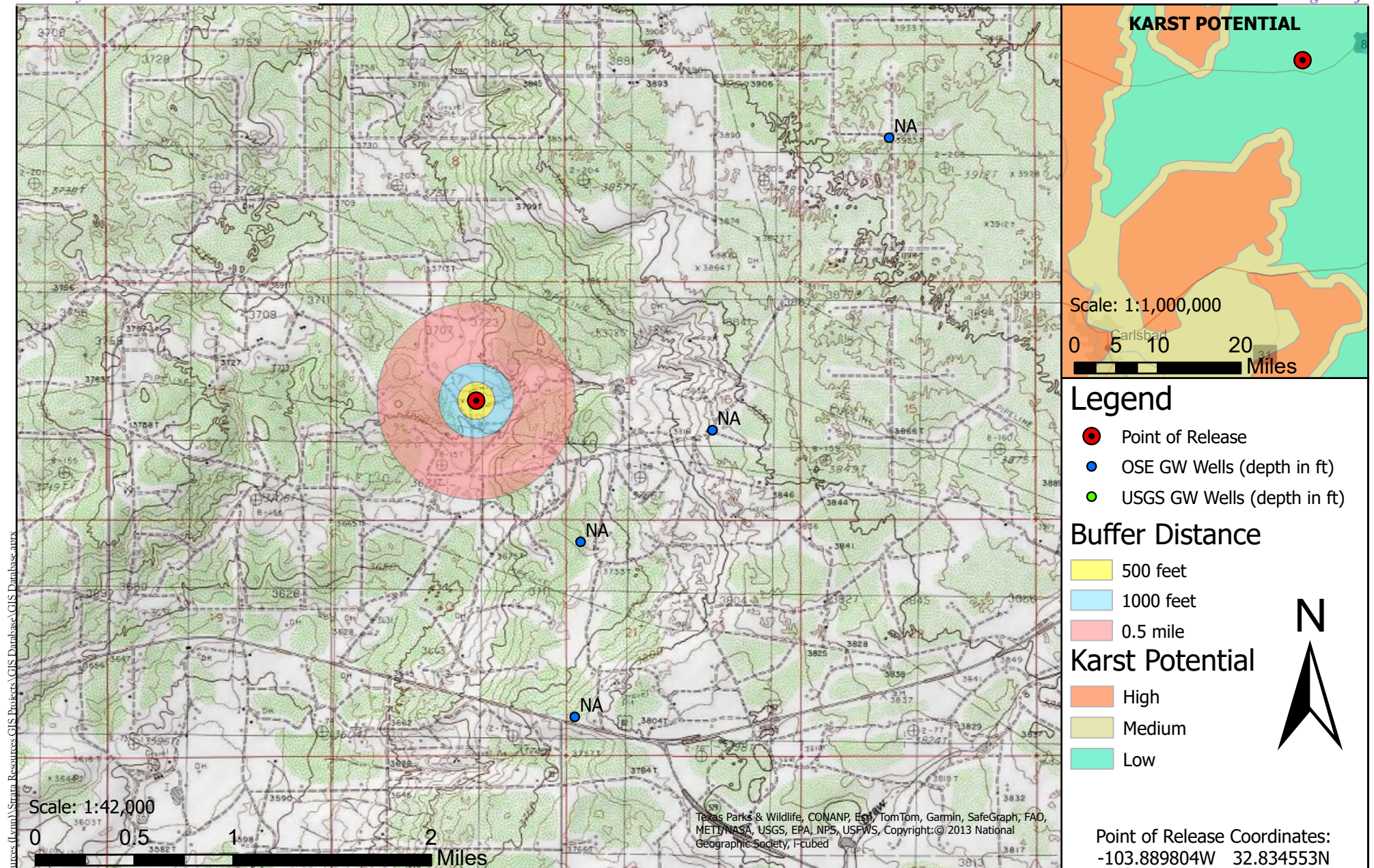
Appendix B: Notification of Sampling

Appendix C: Analytical Laboratory Results

Appendix D: Open Excavation Photo Log



FIGURES



Topographic Site Map
Foster Tank Battery - LH Operating, LLC
UL: J S: 17 T: 17S R: 31E, Eddy County, New Mexico

Figure 1

Revisions

By: _____ Date: _____ Descr: _____

By: _____ Date: _____ Descr: _____

Drawn Sarahmay Schlea

Date 2/6/2024

Checked _____







Approved _____



PO Box 2474
Carlsbad, NM 88221
(505) 516 7469



Legend

-  Point of Release
-  Rivers
-  Streams/Canals/Flowlines
-  FEMA Flood Zones
-  300 Foot Radius
-  200 Foot Radius

0 375 750 1,500
 Feet
 Scale: 1:10,000



Point of Release Coordinates:
 -103.889804W 32.834553N

Aerial Site Map
 Foster Tank Battery - LH Operating, LLC
 UL: J S: 17 T: 17S R:31E, Eddy County, New Mexico

Figure 2

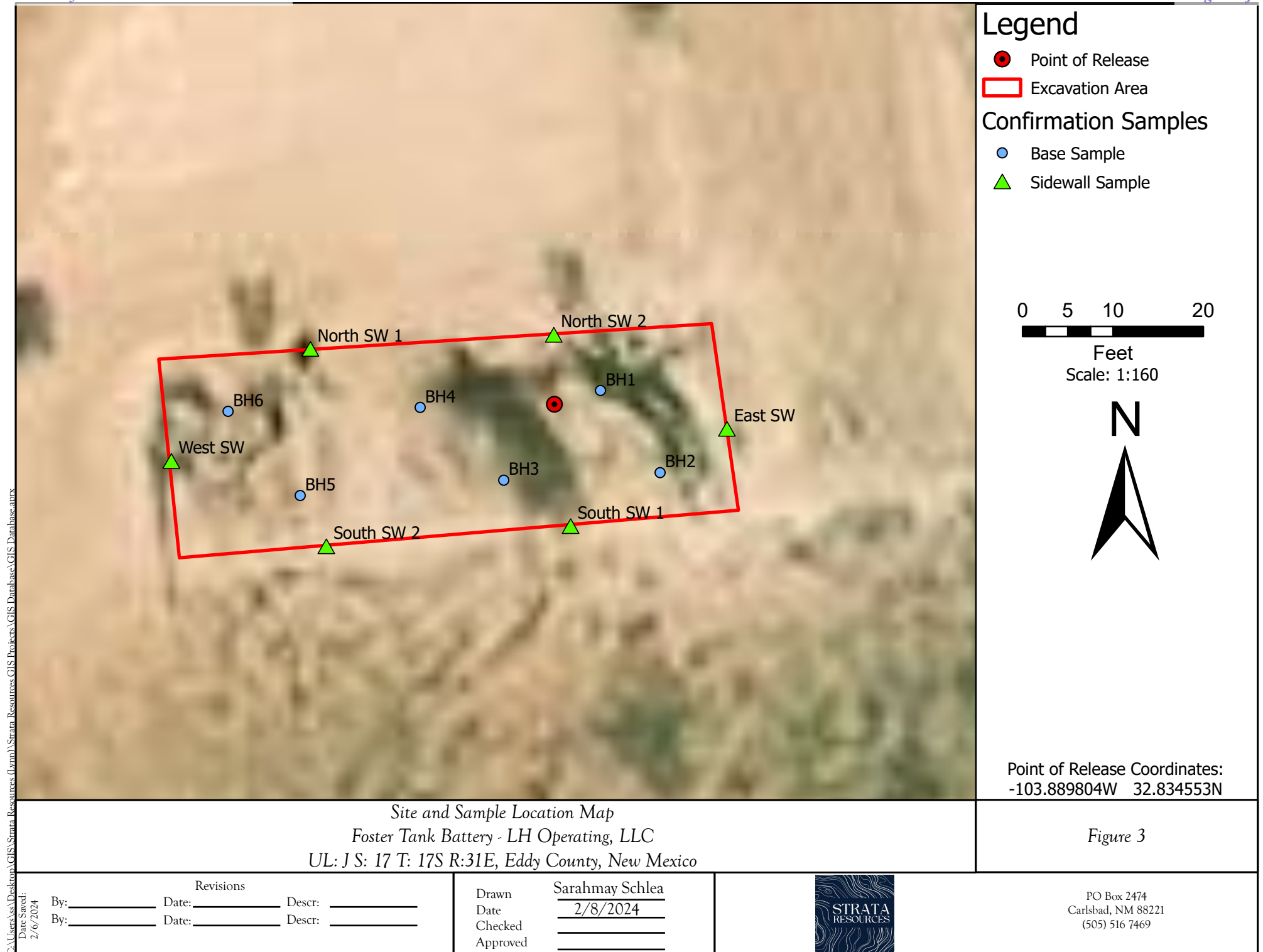
Revisions

By: _____ Date: _____ Descr: _____
 By: _____ Date: _____ Descr: _____

Drawn Sarahmay Schlea
 Date 2/6/2024
 Checked _____
 Approved _____



PO Box 2474
 Carlsbad, NM 88221
 (505) 516 7469





TABLES

Table 2: NMOCD Closure Criteria

LH Operating, LLC
Foster Battery
Incident No. nAPP2333335903

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
General Depth to Groundwater In Region (feet bgs)	>100	New Mexico Office of the State Engineer
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	>5280	United States Geological Survey Topographical Map
Horizontal Distance to Nearest Significant Watercourse (ft)	2,500	Un-named Playa

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS	X	600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					

Table 3: Summary of Sample Results

LH Operating, LLC

Foster Battery

Incident No. nAPP2333335903

Sample ID	Sample Date	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMOCD Closure Criteria		50	10	1000			100	600
BH1	1/2/2024	<0.153	<0.017	<3.4	<9.2	<46	<58.6	<60
BH2		<0.162	<0.018	<3.6	<9.7	<48	<61.3	<60
BH3		<0.158	<0.018	<3.5	<9.6	<48	<61.1	<60
BH4		<0.159	<0.018	<3.5	<9.3	<46	<58.8	<60
BH5		<0.158	<0.018	<3.5	<9.7	<49	<62.2	<60
BH6		<0.140	<0.016	<3.1	<9.2	<46	<58.3	<61
North SW 1		<0.149	<0.017	<3.3	<9.5	<47	<59.8	<60
North SW 2		<0.153	<0.017	<3.4	<9.4	<47	<59.8	<60
South SW 1		<0.154	<0.017	<3.4	<9.7	<49	<62.1	<60
South SW 2		<0.159	<0.018	<3.5	<9.3	<46	<58.8	<59
East SW		<0.153	<0.017	<3.4	<9.5	<47	<59.9	<59
West SW		<0.157	<0.017	<3.5	<9.1	<46	<58.6	<60



APPENDIX A: NMOSE WELLS REPORT



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 603905.71 **Northing (Y):** 3633491.59 **Radius:** 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/11/24 9:21 PM WATER COLUMN/ AVERAGE DEPTH TO WATER



APPENDIX B: NOTIFICATION OF SAMPLING

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	298078	Districts:	Artesia
Operator:	[329319] LH Operating, LLC	Counties:	Eddy
Description:	LH Operating, LLC [329319] , V L FOSTER BATTERY , nAPP2333335903		
Status:	APPROVED		
Status Date:	12/28/2023		
References (1):	nAPP2333335903		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2333335903
Incident Name	NAPP2333335903 V L FOSTER BATTERY @ 0
Incident Type	Fire
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	V L FOSTER BATTERY
Date Release Discovered	11/18/2023
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	721
What is the estimated number of samples that will be gathered	8
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/02/2024
Time sampling will commence	07:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Mike Burton 575-499-5306
Please provide any information necessary for navigation to sampling site	Open access 32.834559,-103.889812

Comments

No comments found for this submission.

Conditions

Summary: *mburton (12/28/2023)*, Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220



APPENDIX C: ANALYTICAL LABORATORY RESULTS



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 11, 2024

Mike Burton

LH Operating, LLC

4809 Cole Ave, Ste 106

Dallas, TX 75205

TEL: (575) 499-5306

FAX:

RE: Foster Battery

OrderNo.: 2401130

Dear Mike Burton:

Eurofins Environment Testing South Central, LLC received 12 sample(s) on 1/4/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2401130

Date Reported: 1/11/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LH Operating, LLC

Client Sample ID: North SW 1

Project: Foster Battery

Collection Date: 1/2/2024 7:00:00 AM

Lab ID: 2401130-001

Matrix: MEOH (SOIL)

Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/4/2024 11:39:59 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/4/2024 11:39:59 AM
Surr: DNOP	117	69-147		%Rec	1	1/4/2024 11:39:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/4/2024 12:47:40 PM
Surr: BFB	99.7	15-244		%Rec	1	1/4/2024 12:47:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/4/2024 12:47:40 PM
Toluene	ND	0.033		mg/Kg	1	1/4/2024 12:47:40 PM
Ethylbenzene	ND	0.033		mg/Kg	1	1/4/2024 12:47:40 PM
Xylenes, Total	ND	0.066		mg/Kg	1	1/4/2024 12:47:40 PM
Surr: 4-Bromofluorobenzene	92.6	39.1-146		%Rec	1	1/4/2024 12:47:40 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/4/2024 9:57:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

CLIENT: LH Operating, LLC
Project: Foster Battery
Lab ID: 2401130-005

Client Sample ID: East SW
Collection Date: 1/2/2024 7:40:00 AM
Received Date: 1/4/2024 7:20:00 AM

Matrix: MEOH (SOIL)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/4/2024 12:22:04 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/4/2024 12:22:04 PM
Surr: DNOP	109	69-147		%Rec	1	1/4/2024 12:22:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/4/2024 2:22:37 PM
Surr: BFB	100	15-244		%Rec	1	1/4/2024 2:22:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/4/2024 2:22:37 PM
Toluene	ND	0.034		mg/Kg	1	1/4/2024 2:22:37 PM
Ethylbenzene	ND	0.034		mg/Kg	1	1/4/2024 2:22:37 PM
Xylenes, Total	ND	0.068		mg/Kg	1	1/4/2024 2:22:37 PM
Surr: 4-Bromofluorobenzene	92.6	39.1-146		%Rec	1	1/4/2024 2:22:37 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	59		mg/Kg	20	1/5/2024 12:01:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401130

Date Reported: 1/11/2024

CLIENT: LH Operating, LLC Client Sample ID: West SW
Project: Foster Battery Collection Date: 1/2/2024 7:50:00 AM
Lab ID: 2401130-006 Matrix: MEOH (SOIL) Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/4/2024 12:32:40 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/4/2024 12:32:40 PM
Surr: DNOP	97.1	69-147		%Rec	1	1/4/2024 12:32:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/4/2024 2:46:18 PM
Surr: BFB	103	15-244		%Rec	1	1/4/2024 2:46:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/4/2024 2:46:18 PM
Toluene	ND	0.035		mg/Kg	1	1/4/2024 2:46:18 PM
Ethylbenzene	ND	0.035		mg/Kg	1	1/4/2024 2:46:18 PM
Xylenes, Total	ND	0.070		mg/Kg	1	1/4/2024 2:46:18 PM
Surr: 4-Bromofluorobenzene	95.3	39.1-146		%Rec	1	1/4/2024 2:46:18 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 12:14:08 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401130

Date Reported: 1/11/2024

CLIENT: LH Operating, LLC Client Sample ID: BH 1
Project: Foster Battery Collection Date: 1/2/2024 8:00:00 AM
Lab ID: 2401130-007 Matrix: MEOH (SOIL) Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/4/2024 12:43:15 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/4/2024 12:43:15 PM
Surr: DNOP	97.3	69-147		%Rec	1	1/4/2024 12:43:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/4/2024 4:44:55 PM
Surr: BFB	99.7	15-244		%Rec	1	1/4/2024 4:44:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/4/2024 4:44:55 PM
Toluene	ND	0.034		mg/Kg	1	1/4/2024 4:44:55 PM
Ethylbenzene	ND	0.034		mg/Kg	1	1/4/2024 4:44:55 PM
Xylenes, Total	ND	0.068		mg/Kg	1	1/4/2024 4:44:55 PM
Surr: 4-Bromofluorobenzene	93.1	39.1-146		%Rec	1	1/4/2024 4:44:55 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 12:26:33 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2401130

Date Reported: 1/11/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LH Operating, LLC

Client Sample ID: BH 2

Project: Foster Battery

Collection Date: 1/2/2024 8:10:00 AM

Lab ID: 2401130-008

Matrix: MEOH (SOIL)

Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/4/2024 12:53:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/4/2024 12:53:51 PM
Surr: DNOP	97.4	69-147		%Rec	1	1/4/2024 12:53:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/4/2024 5:08:32 PM
Surr: BFB	101	15-244		%Rec	1	1/4/2024 5:08:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/4/2024 5:08:32 PM
Toluene	ND	0.036		mg/Kg	1	1/4/2024 5:08:32 PM
Ethylbenzene	ND	0.036		mg/Kg	1	1/4/2024 5:08:32 PM
Xylenes, Total	ND	0.072		mg/Kg	1	1/4/2024 5:08:32 PM
Surr: 4-Bromofluorobenzene	94.7	39.1-146		%Rec	1	1/4/2024 5:08:32 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 12:38:58 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

CLIENT: LH Operating, LLC
Project: Foster Battery
Lab ID: 2401130-009

Client Sample ID: BH 3
Collection Date: 1/2/2024 8:20:00 AM
Received Date: 1/4/2024 7:20:00 AM

Matrix: MEOH (SOIL)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/4/2024 1:04:28 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/4/2024 1:04:28 PM
Surr: DNOP	96.5	69-147		%Rec	1	1/4/2024 1:04:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/4/2024 5:32:03 PM
Surr: BFB	99.9	15-244		%Rec	1	1/4/2024 5:32:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/4/2024 5:32:03 PM
Toluene	ND	0.035		mg/Kg	1	1/4/2024 5:32:03 PM
Ethylbenzene	ND	0.035		mg/Kg	1	1/4/2024 5:32:03 PM
Xylenes, Total	ND	0.070		mg/Kg	1	1/4/2024 5:32:03 PM
Surr: 4-Bromofluorobenzene	92.3	39.1-146		%Rec	1	1/4/2024 5:32:03 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 1:16:12 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

CLIENT: LH Operating, LLC

Client Sample ID: BH 4

Project: Foster Battery

Collection Date: 1/2/2024 8:30:00 AM

Lab ID: 2401130-010

Matrix: MEOH (SOIL)

Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/4/2024 1:15:04 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/4/2024 1:15:04 PM
Surr: DNOP	98.8	69-147		%Rec	1	1/4/2024 1:15:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/4/2024 5:55:42 PM
Surr: BFB	101	15-244		%Rec	1	1/4/2024 5:55:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/4/2024 5:55:42 PM
Toluene	ND	0.035		mg/Kg	1	1/4/2024 5:55:42 PM
Ethylbenzene	ND	0.035		mg/Kg	1	1/4/2024 5:55:42 PM
Xylenes, Total	ND	0.071		mg/Kg	1	1/4/2024 5:55:42 PM
Surr: 4-Bromofluorobenzene	94.3	39.1-146		%Rec	1	1/4/2024 5:55:42 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 1:28:37 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401130

Date Reported: 1/11/2024

CLIENT: LH Operating, LLC Client Sample ID: BH 5
Project: Foster Battery Collection Date: 1/2/2024 8:40:00 AM
Lab ID: 2401130-011 Matrix: MEOH (SOIL) Received Date: 1/4/2024 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/4/2024 1:25:41 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/4/2024 1:25:41 PM
Surr: DNOP	97.9	69-147		%Rec	1	1/4/2024 1:25:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/4/2024 6:19:17 PM
Surr: BFB	98.2	15-244		%Rec	1	1/4/2024 6:19:17 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/4/2024 6:19:17 PM
Toluene	ND	0.035		mg/Kg	1	1/4/2024 6:19:17 PM
Ethylbenzene	ND	0.035		mg/Kg	1	1/4/2024 6:19:17 PM
Xylenes, Total	ND	0.070		mg/Kg	1	1/4/2024 6:19:17 PM
Surr: 4-Bromofluorobenzene	92.0	39.1-146		%Rec	1	1/4/2024 6:19:17 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	ND	60		mg/Kg	20	1/5/2024 1:41:01 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401130
11-Jan-24

Client: LH Operating, LLC
Project: Foster Battery

Sample ID: MB-79739		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 79739		RunNo: 102237						
Prep Date: 1/4/2024		Analysis Date: 1/4/2024		SeqNo: 3775239			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-79739		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 79739		RunNo: 102237						
Prep Date: 1/4/2024		Analysis Date: 1/4/2024		SeqNo: 3775240			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

- Qualifiers:
- *

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.
- B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401130

11-Jan-24

Client: LH Operating, LLC

Project: Foster Battery

Sample ID: LCS-79731	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 79731		RunNo: 102236							
Prep Date: 1/4/2024	Analysis Date: 1/4/2024		SeqNo: 3774135		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	61.9	130			
Surr: DNOP	5.7		5.000		115	69	147			

Sample ID: MB-79731	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 79731		RunNo: 102236							
Prep Date: 1/4/2024	Analysis Date: 1/4/2024		SeqNo: 3774136		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	69	147			

Sample ID: 2401130-012AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BH 6	Batch ID: 79731		RunNo: 102236							
Prep Date: 1/4/2024	Analysis Date: 1/4/2024		SeqNo: 3774652		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.1	45.66	0	93.6	54.2	135			
Surr: DNOP	4.5		4.566		99.4	69	147			

Sample ID: 2401130-012AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BH 6	Batch ID: 79731		RunNo: 102236							
Prep Date: 1/4/2024	Analysis Date: 1/4/2024		SeqNo: 3774653		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.3	46.55	0	103	54.2	135	11.2	29.2	
Surr: DNOP	4.8		4.655		104	69	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401130

11-Jan-24

Client: LH Operating, LLC

Project: Foster Battery

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773960		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	70	130			
Surr: BFB	2100		1000		212	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773961		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401130
11-Jan-24

Client: LH Operating, LLC
Project: Foster Battery

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: BS102232	RunNo: 102232								
Prep Date:	Analysis Date: 1/4/2024	SeqNo: 3773965 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.7	70	130			
Toluene	0.92	0.050	1.000	0	91.9	70	130			
Ethylbenzene	0.94	0.050	1.000	0	93.8	70	130			
Xylenes, Total	2.8	0.10	3.000	0	94.4	70	130			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	39.1	146			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: BS102232	RunNo: 102232								
Prep Date:	Analysis Date: 1/4/2024	SeqNo: 3773966 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	39.1	146			

Sample ID: 2401130-001ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: North SW 1	Batch ID: BS102232	RunNo: 102232								
Prep Date:	Analysis Date: 1/4/2024	SeqNo: 3774936 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.017	0.6614	0	88.7	70	130			
Toluene	0.60	0.033	0.6614	0	91.0	70	130			
Ethylbenzene	0.60	0.033	0.6614	0	90.8	70	130			
Xylenes, Total	1.8	0.066	1.984	0	91.4	70	130			
Surr: 4-Bromofluorobenzene	0.64		0.6614		96.2	39.1	146			

Sample ID: 2401130-001amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: North SW 1	Batch ID: BS102232	RunNo: 102232								
Prep Date:	Analysis Date: 1/4/2024	SeqNo: 3774937 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.57	0.017	0.6614	0	86.3	70	130	2.75	20	
Toluene	0.58	0.033	0.6614	0	88.3	70	130	2.98	20	
Ethylbenzene	0.60	0.033	0.6614	0	90.0	70	130	0.951	20	
Xylenes, Total	1.8	0.066	1.984	0	90.6	70	130	0.938	20	
Surr: 4-Bromofluorobenzene	0.64		0.6614		97.3	39.1	146	0	0	

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit



Environment Testin

Eurofins Environment Testing South
Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: LH Operating, LLC

Work Order Number: 2401130

RcptNo: 1

Received By: Tracy Casarrubias

1/4/2024 7:20:00 AM

Completed By: Tracy Casarrubias

1/4/2024 7:39:45 AM

Reviewed By:

1/4/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

1/4/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

Mailing address is missing on COC- TMC 1/4/24

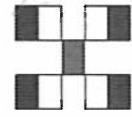
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes	yogi		

Chain-of-Custody Record

Client: <u>LH Operating</u>			
Mailing Address:			
Phone #: <u>575-499-5306</u>			
email or Fax#: <u>Mik @LH Operating . com</u>			
QA/QC Package:			
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other			
<input type="checkbox"/> EDD (Type) _____			
Date	Time	Matrix	Sample Name
1-2-24	0700	Soil	North SW 1
	0710		North SW 2
	0720		South SW 1
	0730		South SW 2
	0740		East SW
	0750		West SW
	0800		BH 1
	0810		2
	0820		3
	0830		4
	0840		5
	0850		6
Date:	Time:	Relinquished by:	
1/3/24	945	Mik BSR	
Date:	Time:	Relinquished by:	
1/3/24	940	Mik BSR	


**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Turn-Around Time:	Project Name:	Project #:	Project Manager:	Sampler:	On Ice:	Yes	No	Heal No.	Container Type and #	Preservative Type	Cooler Temp (including CF):	HEAL No.
Standard <input checked="" type="checkbox"/> Rush <input checked="" type="checkbox"/> 1 Day	Foster Battery		Burton	Burton	<input checked="" type="checkbox"/>			7401130	Jar	ICE	38 ± 0 ± 3.0 (°C)	001
BTEX, MTBE / TMBs (8021) <input checked="" type="checkbox"/> TPH:8015D(GRO / DRO / MRO) <input checked="" type="checkbox"/> 8081 Pesticides/8082 PCB's <input checked="" type="checkbox"/> EDB (Method 504.1) <input checked="" type="checkbox"/> PAHs by 8310 or 8270SIMS <input checked="" type="checkbox"/> RCRA 8 Metals <input checked="" type="checkbox"/> C, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄ <input checked="" type="checkbox"/> 8260 (VOA) <input checked="" type="checkbox"/> 8270 (Semi-VOA) <input checked="" type="checkbox"/> Total Coliform (Present/Absent) <input checked="" type="checkbox"/>												
Remarks: Received by: <u>Mik BSR</u> Date: <u>1/3/24</u> Time: <u>945</u> Received by: <u>Mik BSR</u> Date: <u>1/4/24</u> Time: <u>7:20</u>												



APPENDIX D: OPEN EXCAVATION PHOTO LOG

Foster Battery Open Excavation Photolog



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

QUESTIONS

Action 315089

QUESTIONS

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID:	329319
	Action Number:	315089
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2333335903
Incident Name	NAPP2333335903 V L FOSTER BATTERY @ 0
Incident Type	Fire
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	V L FOSTER BATTERY
Date Release Discovered	11/18/2023
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Fire Treating Tower Crude Oil Released: 4 BBL Recovered: 4 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Fire Treating Tower Produced Water Released: 41 BBL Recovered: 40 BBL Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS, Page 2

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 315089
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more; (2) an unauthorized release of a volume that: (a) results in a fire or is the result of a fire.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Michael Burton Title: Enviromental Manager Email: mike@lhoperating.com Date: 02/16/2024
--	--

District I
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
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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
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QUESTIONS, Page 3

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID:
	329319
	Action Number:
	315089
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	12/30/2023
On what date will (or did) the final sampling or liner inspection occur	01/02/2024
On what date will (or was) the remediation complete(d)	01/02/2024
What is the estimated surface area (in square feet) that will be reclaimed	1200
What is the estimated volume (in cubic yards) that will be reclaimed	44
What is the estimated surface area (in square feet) that will be remediated	1200
What is the estimated volume (in cubic yards) that will be remediated	44

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 315089
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Michael Burton Title: Enviromental Manager Email: mike@lhoperating.com Date: 02/16/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 315089
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS, Page 6

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID:	329319
	Action Number:	315089
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	298078
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/02/2024
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	721

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1200
What was the total volume (cubic yards) remediated	44
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1200
What was the total volume (in cubic yards) reclaimed	44
Summarize any additional remediation activities not included by answers (above)	N/A

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

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

I hereby agree and sign off to the above statement	Name: Michael Burton Title: Enviromental Manager Email: mike@lhoperating.com Date: 02/16/2024
--	--

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QUESTIONS, Page 7

Action 315089

QUESTIONS (continued)

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 315089
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 315089

CONDITIONS

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 315089
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2333335903 V L FOSTER BATTERY, thank you. This Remediation Closure Report is approved.	4/19/2024