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	NRM2032839072
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Lucid Energy Delaware	OGRID 372422
Contact Name Michael Gant	Contact Telephone 3143307876
Contact email MGant@lucid-energy.com	Incident # *(assigned by OCD)*
Contact mailing address 201 South 4th Street	

Location of Release Source

Latitude 32.399129° Longitude -103.740803°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Martha Lateral	Site Type Natural gas pipeline
Date Release Discovered 10/28/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	11	22S	31E	Eddy

Surface Owner: ☐ State ☑ Federal ☐ Tribal ☐ Private (*Name:* Bureau of Land Management)

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)	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) 420 MCF	Volume Recovered (Mcf) 0 MCF
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release The release was caused by a rupture that occurred at a weld along the polyethylene pipeline.		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032839072
District RP	
Facility ID	
Application ID	

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)?	

Initial Response

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

☑ The source of the release has been stopped.
☑ The impacted area has been secured to protect human health and the environment.
☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Michael Gant
Title: Environmental Coordinator
Signature: MGant
Date: 11/9/2020
email: MGant@lucid-energy.com
Telephone: 3143307876

OCD Only

Received by: Ramona Marcus
Date: 11/23/2020

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032839072
District RP	
Facility ID	
Application ID	

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?	51-100 (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.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Depth to water determination
- ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

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	NRM2032839072
District RP	
Facility ID	
Application ID	

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: Michael Gant Title: Environmental Compliance Manager

Signature: MGant Date: 2/16/2022

email: Mgant@lucid-energy.com Telephone: 314-330-7876

OCD Only

Received by: _____ Date: _____

Incident ID	NRM2032839072
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

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

Printed Name: Michael Gant Title: Environmental Compliance Manager

Signature: MGant Date: 2/16/2022

email: Mgant@lucid-energy.com Telephone: 314-330-7876

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Jennifer Nobui Date: 02/16/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

WSP USA
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

January 19, 2022

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE : Closure Request
Martha Lateral
Incident Number NRM2032839072
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc (WSP) on behalf of Lucid Energy Group (Lucid) presents the following Closure Request detailing site assessment and delineation activities at the Martha Lateral (Site) located in Unit P, Section 11, Township 22 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling activities was to assess the presence or absence of impacts to soil following a release of natural gas at the Site. Based on the results of the soil sampling events, Lucid is submitting this Closure Request, describing site assessment and delineation activities that have occurred and requesting no further action (NFA) for Incident Number NRM2032839072.

RELEASE BACKGROUND

On October 28, 2020, a rupture at a weld along the polyethylene pipeline resulted in the release of approximately 420 thousand cubic feet (MCF) of natural gas at the Site. Lucid reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on November 9, 2020 and was assigned Incident Number NRM2032839072.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-04144 POD 2, located approximately 1.09 miles east of the Site. The total depth of the well is 60 feet bgs and the depth to groundwater was recorded at 55 feet bgs. The water well record is provided as Attachment 1. While depth to groundwater appears to be between 51

and 100 feet bgs for the Site, the well location does not meet the NMOCD interpretated guidance of estimation of depth to water based on its distance being greater than 0.5-mile from the Site.

The closest continuously flowing or significant watercourse to the Site is an intermittent streambed located approximately 26,668 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is located in a low-potential karst area. Potential receptors identified during Site Characterization are displayed in Figure 1.

CLOSURE CRITERIA

There do not appear to be any sensitive receptors related to the Site; however, the location of the assessed depth to water well is not within 0.5-mile of the Site. Therefore, the follow NMOCD Table 1 Closure Criteria apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES

On December 7, 2021, WSP personnel visited the Site to conduct site assessment activities by evaluating the subject release area based on information provided on the Form C-141 and visual observations. WSP reviewed and verified the Form C-141 incident description (release source and release location).

DELINEATION AND SOIL SAMPLING ACTIVITIES

On December 16, 2021, WSP personnel conducted delineation activities to assess the presence or absence of impacts to soil associated with the subject release. Utilizing a hand auger, four delineation soil samples (BH01 through BH04) were advanced in the vicinity of the subject release location. Delineation activities were directed by field screening soil samples for volatile aromatic hydrocarbons using a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of two soil samples were collected from each of the borehole locations: the sample with the highest observed field screening concentrations (approximately 1-foot bgs) and the greatest depth (ranging from 2 to 4 feet bgs) before encountering auger refusal.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler initials, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C), under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0. The delineation sample locations were mapped utilizing a handheld GPS unit and are presented on Figure 2. Field screening results and observations for the delineation soil samples were recorded on lithologic/soil sampling logs and are presented in Attachment 2. Photographic documentation is provided in Attachment 3.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated concentrations of benzene, BTEX, TPH and chloride were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the laboratory analytical report is included as Attachment 4.

CLOSURE REQUEST

Site assessment and delineation activities were conducted by WSP at the Site to address the October 28, 2020 release of natural gas. Laboratory analytical results for delineation soil samples indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the delineation soil sample analytical results, no further remediation appears required. As such, Lucid respectfully requests NFA for Incident Number NRM2032839072.

If you have any questions or comments, please do not hesitate to contact Mr. Daniel R. Moir at (303) 887-2946.

Sincerely,

WSP USA Inc.

Joseph S. Hernandez
Consultant, Geologist

Daniel R. Moir, P.G.
Sr. Lead Consultant, Geologist

cc: Michael Gant, Lucid
Bureau of Land Management
NMOCD

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Record
Attachment 2	Lithologic/Soil Sampling Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

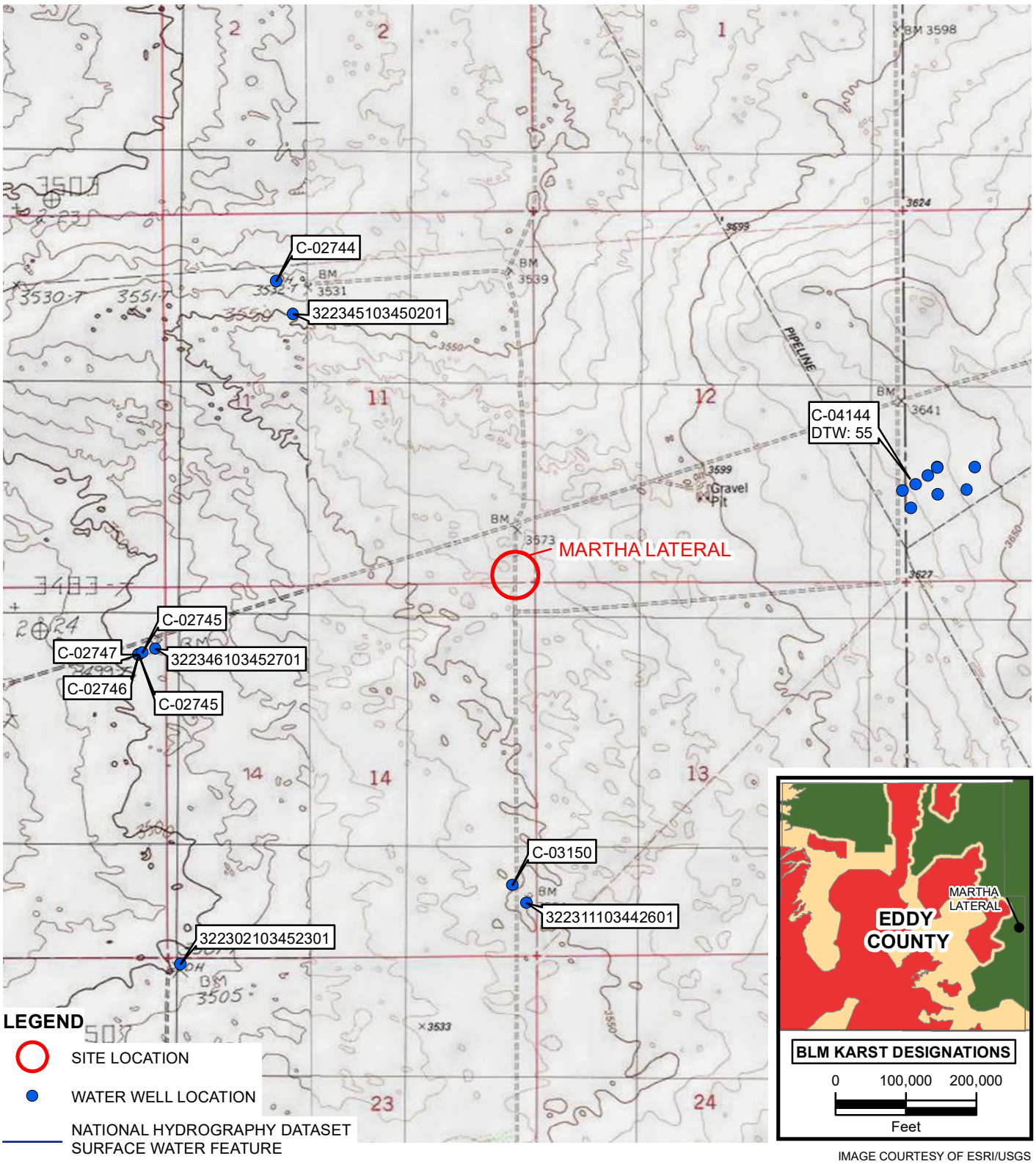

IMAGE COURTESY OF ESRI/USGS

LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NRM2032839072

0 2,000 4,000
Feet

N

FIGURE 1
SITE LOCATION MAP
MARTHA LATERAL
UNIT P SEC 11 T22S R31E
EDDY COUNTY, NEW MEXICO
LUCID ENERGY GROUP

P:\Lucid Energy Group\GIS\31403665.008_MARTHA LATERAL\MXD\31403665.008_FIG01_SL_RECEPTOR_2022.mxd

IMAGE COURTESY OF ESRI

LEGEND

- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS LINE
- WATER LINE

0 50 100
Feet

N

NOTE: INCIDENT NUMBER NRM2032839072
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
MARTHA LATERAL
UNIT P SEC 11 T22S R31E
EDDY COUNTY, NEW MEXICO
LUCID ENERGY GROUP

P:\Lucid Energy Group\GIS\31403665.008_MARTHA LATERAL\MXD\31403665.008_FIG02_DELINEATION_2022.mxd

TABLES

Table 1

Soil Analytical Results
Martha Lateral
Incident Number NRM2032839072
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	**600**
Delineation Soil Samples										
BH01	12/16/2021	1	<0.015	<0.06	<9.7	<3.0	<49	<9.7	<49	<60
BH01	12/16/2021	2	<0.015	<0.06	<9.6	<3.0	<48	<10	<48	<60
BH02	12/16/2021	1	<0.015	<0.06	<9.6	<3.1	<48	<9.6	<48	<60
BH02	12/16/2021	4	<0.017	<0.07	<9.6	<3.3	<48	<9.6	<48	67
BH03	12/16/2021	1	<0.016	<0.06	<9.6	<3.1	<48	<9.6	<48	<60
BH03	12/16/2021	4	<0.015	<0.06	<9.4	<3.0	<47	<9.4	<47	<60
BH04	12/16/2021	1	<0.015	<0.06	<9.9	<3.1	<49	<9.9	<49	<60
BH04	12/16/2021	4	<0.015	<0.06	<9.9	<3.0	<50	<9.9	<50	<61

Notes

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - motor oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated

ATTACHMENT 1: REFERENCED WELL RECORD

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twn	Rng	(NAD83 UTM in meters) X	Y
NA	C 04144 POD2	3	1	3	07	22S	32E	620147	3585768

Driller License: 1456 **Driller Company:** WHITE DRILLING COMPANY

Driller Name: ATKINS., WILLIAM B.

Drill Start Date:	01/30/2018	**Drill Finish Date:**	01/30/2018	**Plug Date:**	
Log File Date:	02/15/2018	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	2.00	**Depth Well:**	60 feet	**Depth Water:**	55 feet

Water Bearing Stratifications:	Top	Bottom	Description
	52	56	Sandstone/Gravel/Conglomerate
	56	59	Sandstone/Gravel/Conglomerate
	59	60	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	40	60

ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOGS

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BH01	Date: 12/16/2021
	Site Name Martha Lateral	
	RP or Incident Number:	nRM2032839072
	Job Number:	31403665.008
LITHOLOGIC / SOIL SAMPLING LOG	Logged By CS	Method: Hand Auger
Lat/Long: 32.399129, -103.7408	Field Screening: Chloride, PID	Hole Diameter: 3" / Total Depth: 2.5'
Comments:		

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
Dry	<151.2	0	N/A	BH01	1'	1'		Fine grained well sorted sandstone
Dry	<151.2	0.2	N/A	BH01	2'	2'		SAA
								Total Depth

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH02	Date: 12/16/2021
Site Name Martha Lateral	
RP or Incident Number: nRM2032839072	
Job Number: 31403665.008	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By CS		Method:	Hand Auger
Lat/Long: 32.399129, -103.7408	Field Screening: Chloride, PID	Hole Diameter: 3"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
Dry	<151.2	0.1	N/A	BH02	1'	1'		Red- brown, fine grained well sorted sandstone
Dry	<151.2	0.3	N/A	BH02	2'	2'		SAA
Dry	151.2	0.3	N/A	BH02	3'	3'		SAA
Dry	<151.2	0.3	N/A	BH02	4'	4'		SAA
								Total Depth

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH03	Date: 12/16/2021
Site Name Martha Lateral	
RP or Incident Number:	nRM2032839072
Job Number:	31403665.008

LITHOLOGIC / SOIL SAMPLING LOG

Logged By CS	Method: Hand Auger		
Lat/Long: 32.399129, -103.7408	Field Screening: Chloride, PID	Hole Diameter: 3"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
Dry	<151.2	0.1	N/A	BH03	1'	1'		Red- brown, fine grained well sorted sandstone
Dry	<151.2	0.3	N/A	BH03	2'	2'		SAA
Dry	<151.2	0.4	N/A	BH03	3'	3'		SAA
Dry	<151.2	0.3	N/A	BH03	4'	4'		SAA
								Total Depth

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH04	Date: 12/16/2021
Site Name Martha Lateral	
RP or Incident Number: nRM2032839072	
Job Number: 31403665.008	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By CS		Method:	Hand Auger
Lat/Long: 32.399129, -103.7408	Field Screening: Chloride, PID	Hole Diameter: 3"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
Dry	<152.2	0.1	N/A	BH04	1'	1'		Red- brown, fine grained well sorted sandstone
Dry	<152.2	0.3	N/A	BH04	2'	2'		SAA
Dry	<152.2	0.0	N/A	BH04	3'	3'		SAA
Dry	<152.2	0.1	N/A	BH04	4'	4'		SAA
								Total Depth

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
Lucid Energy Group	**Martha Lateral** **Lea County, New Mexico**	**31403665.008**

Photo No.	**Date**
1	December 16, 2021

View of the subject release area during delineation activities.

Photo No.	**Date**
2	December 16, 2021

View of the subject release area during delineation activities.

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 27, 2021

Joseph S. Hernandez

Lucid Energy
201 South 4th St.
Artesia, NM 88210
TEL:
FAX:

RE: Martha Lateral NRM2032839072 OrderNo.: 2112C03

Dear Joseph S. Hernandez:

Hall Environmental Analysis Laboratory received 8 sample(s) on 12/21/2021 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH01@2'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 11:00:00 AM
Lab ID: 2112C03-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/21/2021 10:01:35 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2021 10:01:35 AM
Surr: DNOP	91.2	70-130		%Rec	1	12/21/2021 10:01:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/21/2021 9:49:11 AM
Surr: BFB	88.5	70-130		%Rec	1	12/21/2021 9:49:11 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 9:49:11 AM
Toluene	ND	0.030		mg/Kg	1	12/21/2021 9:49:11 AM
Ethylbenzene	ND	0.030		mg/Kg	1	12/21/2021 9:49:11 AM
Xylenes, Total	ND	0.060		mg/Kg	1	12/21/2021 9:49:11 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	12/21/2021 9:49:11 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 11:01:06 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH01@1'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 10:15:00 AM
Lab ID: 2112C03-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/21/2021 10:12:08 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/21/2021 10:12:08 AM
Surr: DNOP	93.5	70-130		%Rec	1	12/21/2021 10:12:08 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/21/2021 10:35:58 AM
Surr: BFB	90.7	70-130		%Rec	1	12/21/2021 10:35:58 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 10:35:58 AM
Toluene	ND	0.030		mg/Kg	1	12/21/2021 10:35:58 AM
Ethylbenzene	ND	0.030		mg/Kg	1	12/21/2021 10:35:58 AM
Xylenes, Total	ND	0.060		mg/Kg	1	12/21/2021 10:35:58 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/21/2021 10:35:58 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 11:13:28 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH02@1'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 10:20:00 AM
Lab ID: 2112C03-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/21/2021 10:22:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2021 10:22:50 AM
Surr: DNOP	105	70-130		%Rec	1	12/21/2021 10:22:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/21/2021 10:59:20 AM
Surr: BFB	89.6	70-130		%Rec	1	12/21/2021 10:59:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 10:59:20 AM
Toluene	ND	0.031		mg/Kg	1	12/21/2021 10:59:20 AM
Ethylbenzene	ND	0.031		mg/Kg	1	12/21/2021 10:59:20 AM
Xylenes, Total	ND	0.062		mg/Kg	1	12/21/2021 10:59:20 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	12/21/2021 10:59:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 11:25:49 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH02@4'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 1:10:00 PM
Lab ID: 2112C03-004 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/21/2021 10:33:25 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2021 10:33:25 AM
Surr: DNOP	94.3	70-130		%Rec	1	12/21/2021 10:33:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/21/2021 11:22:42 AM
Surr: BFB	89.6	70-130		%Rec	1	12/21/2021 11:22:42 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.017		mg/Kg	1	12/21/2021 11:22:42 AM
Toluene	ND	0.033		mg/Kg	1	12/21/2021 11:22:42 AM
Ethylbenzene	ND	0.033		mg/Kg	1	12/21/2021 11:22:42 AM
Xylenes, Total	ND	0.066		mg/Kg	1	12/21/2021 11:22:42 AM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	12/21/2021 11:22:42 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	67	60		mg/Kg	20	12/21/2021 11:38:10 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH03@1'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 10:25:00 AM
Lab ID: 2112C03-005 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/21/2021 10:44:02 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/21/2021 10:44:02 AM
Surr: DNOP	91.8	70-130		%Rec	1	12/21/2021 10:44:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/21/2021 11:46:17 AM
Surr: BFB	91.5	70-130		%Rec	1	12/21/2021 11:46:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.016		mg/Kg	1	12/21/2021 11:46:17 AM
Toluene	ND	0.031		mg/Kg	1	12/21/2021 11:46:17 AM
Ethylbenzene	ND	0.031		mg/Kg	1	12/21/2021 11:46:17 AM
Xylenes, Total	ND	0.063		mg/Kg	1	12/21/2021 11:46:17 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/21/2021 11:46:17 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 11:50:31 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH03@4'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 1:15:00 PM
Lab ID: 2112C03-006 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/21/2021 10:54:38 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/21/2021 10:54:38 AM
Surr: DNOP	93.1	70-130		%Rec	1	12/21/2021 10:54:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/21/2021 12:09:34 PM
Surr: BFB	92.3	70-130		%Rec	1	12/21/2021 12:09:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 12:09:34 PM
Toluene	ND	0.030		mg/Kg	1	12/21/2021 12:09:34 PM
Ethylbenzene	ND	0.030		mg/Kg	1	12/21/2021 12:09:34 PM
Xylenes, Total	ND	0.059		mg/Kg	1	12/21/2021 12:09:34 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/21/2021 12:09:34 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 12:02:52 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	Value above quantitation range
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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH04@1'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 10:30:00 AM
Lab ID: 2112C03-007 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/21/2021 11:05:17 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/21/2021 11:05:17 AM
Surr: DNOP	94.2	70-130		%Rec	1	12/21/2021 11:05:17 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/21/2021 12:33:09 PM
Surr: BFB	92.4	70-130		%Rec	1	12/21/2021 12:33:09 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 12:33:09 PM
Toluene	ND	0.031		mg/Kg	1	12/21/2021 12:33:09 PM
Ethylbenzene	ND	0.031		mg/Kg	1	12/21/2021 12:33:09 PM
Xylenes, Total	ND	0.062		mg/Kg	1	12/21/2021 12:33:09 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/21/2021 12:33:09 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/21/2021 12:15:13 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112C03**
Date Reported: **12/27/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** BH04@4'
Project: Martha Lateral NRM2032839072 **Collection Date:** 12/16/2021 11:15:00 AM
Lab ID: 2112C03-008 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/21/2021 11:15:59 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/21/2021 11:15:59 AM
Surr: DNOP	93.3	70-130		%Rec	1	12/21/2021 11:15:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/21/2021 1:19:55 PM
Surr: BFB	92.9	70-130		%Rec	1	12/21/2021 1:19:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2021 1:19:55 PM
Toluene	ND	0.030		mg/Kg	1	12/21/2021 1:19:55 PM
Ethylbenzene	ND	0.030		mg/Kg	1	12/21/2021 1:19:55 PM
Xylenes, Total	ND	0.059		mg/Kg	1	12/21/2021 1:19:55 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/21/2021 1:19:55 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	61		mg/Kg	20	12/21/2021 12:27:34 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	Value above quantitation range
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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112C03**
27-Dec-21

Client: Lucid Energy
Project: Martha Lateral NRM2032839072

Sample ID: **MB-64654**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **64654**	RunNo: **84700**							
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2979590**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-64654**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **64654**	RunNo: **84700**							
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2979591**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112C03**
27-Dec-21

Client: Lucid Energy
Project: Martha Lateral NRM2032839072

Sample ID: **MB-64653**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **64653**	RunNo: **84681**
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2978068** 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	9.0		10.00		89.8	70	130			

Sample ID: **LCS-64653**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **64653**	RunNo: **84681**
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2978069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.2	68.9	135			
Surr: DNOP	4.1		5.000		82.6	70	130			

Sample ID: **2112C03-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH01@2'**	Batch ID: **64653**	RunNo: **84681**
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2979108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	49.75	5.810	71.3	39.3	155			
Surr: DNOP	4.2		4.975		83.9	70	130			

Sample ID: **2112C03-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH01@2'**	Batch ID: **64653**	RunNo: **84681**
Prep Date: **12/21/2021**	Analysis Date: **12/21/2021**	SeqNo: **2979109** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.7	48.45	5.810	71.3	39.3	155	2.27	23.4	
Surr: DNOP	4.0		4.845		82.6	70	130	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112C03**
27-Dec-21

Client: Lucid Energy
Project: Martha Lateral NRM2032839072

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **B84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978920** 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	940		1000		94.4	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **B84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978921** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.3	78.6	131			
Surr: BFB	1000		1000		104	70	130			

Sample ID: **2112C03-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH01@2'**	Batch ID: **B84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/22/2021**	SeqNo: **2978940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	3.0	15.00	0	91.0	61.3	114			
Surr: BFB	600		599.9		100	70	130			

Sample ID: **2112C03-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH01@2'**	Batch ID: **B84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/22/2021**	SeqNo: **2978941** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	3.0	15.00	0	86.7	61.3	114	4.82	20	
Surr: BFB	640		599.9		106	70	130	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112C03**
27-Dec-21

Client: Lucid Energy
Project: Martha Lateral NRM2032839072

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **E84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978967** 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	1.0		1.000		102	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **E84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978968** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.5	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: **2112c03-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH01@1'**	Batch ID: **E84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978987** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.015	0.6002	0	99.1	80	120			
Toluene	0.59	0.030	0.6002	0	98.8	80	120			
Ethylbenzene	0.59	0.030	0.6002	0	97.9	80	120			
Xylenes, Total	1.7	0.060	1.801	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	0.61		0.6002		101	70	130			

Sample ID: **2112c03-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH01@1'**	Batch ID: **E84701**	RunNo: **84701**
Prep Date:	Analysis Date: **12/21/2021**	SeqNo: **2978988** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.61	0.015	0.6002	0	102	80	120	2.80	20	
Toluene	0.60	0.030	0.6002	0	101	80	120	1.71	20	
Ethylbenzene	0.60	0.030	0.6002	0	100	80	120	2.64	20	
Xylenes, Total	1.8	0.060	1.801	0	99.2	80	120	2.28	20	
Surr: 4-Bromofluorobenzene	0.63		0.6002		104	70	130	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Lucid Energy** Work Order Number: **2112C03** RcptNo: **1**

Received By: **Cheyenne Cason** **12/21/2021 8:00:00 AM**

Completed By: **Desiree Dominguez** **12/21/2021 8:15:47 AM**

Reviewed By: SR 12/21/21

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° 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: JR 12/21/21

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: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	-1.2	Good				
2	0.9	Good				

Chain-of-Custody Record

Client: Lucid Energy Group

Michael Gant

Mailing Address: 201 S 4th Artesia, NM 88210

Phone #: 575-810-6144

email or Fax#: mgant@lucid-energy.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ■ Rush Same day TAT

Project Name: Martha Lateral NRM2032839072

Project #: 31403665.008

Project Manager: Joseph S. Hernandez

Sampler: Connor Shore

On Ice: ☑ Yes ☐ No

# of Coolers: 2 -1.0-0.2=-1.2

Cooler Temp(including CF): 1.1-0.2=0.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2112C03	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/10	1000	S	BH01@2'	1	N/A	-001	X	X					X			
	1015		BH01@1'	1		-002										
	1020		BH02@1'	1		-003										
	1310		BH02@4'	1		-004										
	1025		BH03@1'	1		-005										
	1315		BH03@4'	1		-006										
	1030		BH04@1'	1		-007										
	1115		BH04@4'	1		-008										

C-S 12.20.2021

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/20	1115				12/20/21	1115
12/20/21	1900			Chee Courier	12/21/21	0800

Remarks:

Direct bill to Lucid Energy

Prop # 195225000

Company # 860

Send confirmation and lab report to joe.hernandez@wsp.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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 74616

CONDITIONS

Operator: LUCID ENERGY DELAWARE, LLC 201 S. Fourth Street Artesia, NM 88210	OGRID: 372422
	Action Number: 74616
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	None	2/16/2022