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

April 20, 2022

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

RE: Closure Request
Wolf Lateral PRV
Incident Number NAPP2120957757
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of Lucid Energy Delaware, LLC (Lucid), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Wolf Lateral PRV (Site) located in Unit I, Section 1, Township 22 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following the release of natural gas and pipeline liquid from a pressure release valve (PRV) at the Site. Based on the excavation activities and confirmation soil sample laboratory analytical results, Lucid is submitting this Closure Request, and respectfully requesting no further action (NFA) status for Incident Number NAPP2120957757.

RELEASE BACKGROUND

On July 26, 2021, high line pressure from an upstream operators caused the pressure to build at the PRV. This excess pressure resulted in the PRV functioning as designed, opening to relieve the excess pressure in the associated poly-line. The pressure release resulted in the release of an estimated 2,130 thousand cubic feet (MCF) of natural gas and an unknown volume of natural gas pipeline liquid onto the pipeline right-of-way (ROW). Escaped natural gas and pipeline liquids were not recoverable. Immediate notice was not provided to New Mexico Oil Conservation Division (NMOCD) so that an accurate volume calculation of the loss could be provided. Lucid reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on August 6, 2021. The release was assigned Incident Number NAPP2120957757.

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 less than 50 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 1, located approximately 1.27 miles southeast of the Site. The total depth of the well is 58 feet bgs and the depth to groundwater was recorded at 49 feet bgs. The water well record is provided as Attachment 1. While depth to groundwater appears to be less than 50 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 stream bed, located approximately 1,753 feet north 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 not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (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 September 22, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Preliminary assessment photographs were taken of the release extent to show the lateral extent of impacted soil. The lateral extent of the impacted soil was marked for a one call for further activities (delineation).

DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

On September 29, 2021, WSP personnel returned to the Site to conduct lateral and vertical delineation activities as indicated by site assessment activities. Boreholes BH01 through BH06 were advanced via hand auger within the release extent to a depth of 4 feet bgs to assess the vertical extent of impacted soil. Discrete delineation samples were collected from each borehole at depths of 1-foot and 4 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations were logged

on lithologic/soil sampling logs, which are included in Attachment 2. 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.

Laboratory analytical results for borehole delineation samples indicated BH01A at 4 feet bgs and BH02 and BH02A at 1 foot and 4 feet bgs, respectively, exceeded the TPH Closure Criteria. Concentration of benzene, BTEX, and chloride in all boreholes were compliant with the Site Closure Criteria.

EXCAVATION ACTIVITIES

On February 21, 2022, WSP personnel returned to the Site to oversee excavation and completion of activities, areas that exceeded Closure Criteria were excavated and sampled as FS01-FS03 and SW01-SW04. Field screening results for soil samples FS01-FS03 and SW01-SW04 indicated that chloride concentrations were compliant with the Closure Criteria; benzene, BTEX, TPH-GRO/TPH-DRO, and TPH were compliant with the Closure Criteria as well. The 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 3.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results from excavation samples indicated all concentrations of benzene, BTEX, TPH, and chloride are compliant with the closure criteria. All surficial staining and impacted soil in the release area was removed. Excavation activities were performed using a backhoe and hydro-vacuum truck. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to an approximate depth of 5-foot bgs.

Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS03 were collected

from the floor of the excavation, from a depth of 5-foot bgs. Due to the depth of the excavation, soil samples were taken for the sidewalls (SW) of the excavation (SW01 through SW04). The excavation SW soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3. Photographic documentation was completed during the Site visits and a photographic log is included in Attachment 3.

Laboratory analytical results for excavation soil samples FS01 through FS03 and SW01 through SW04 indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

The excavation area measured approximately 464 square feet. A total of approximately 86 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was backfilled.

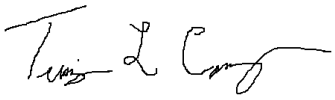
CLOSURE REQUEST

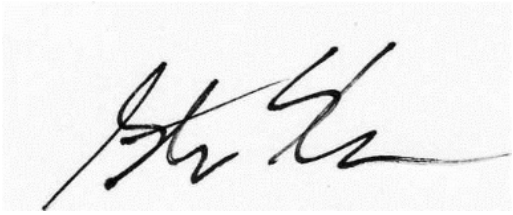
Site assessment and excavation activities were conducted at the Site to address the July 26, 2021 release of natural gas and natural gas pipeline liquid. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, the release extent was laterally delineated to below the most stringent Table 1 Closure Criteria. Based on the soil sample analytical results, no further remediation was required. Lucid backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.

Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. Depth to groundwater has been determined to be less than 50 feet bgs and no other sensitive receptors were identified near the release extent. WSP and Lucid believe these remedial actions are protective of human health, the environment, and groundwater. As such, Lucid respectfully requests NFA for Incident Number nAPP2120957757.

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

Sincerely,





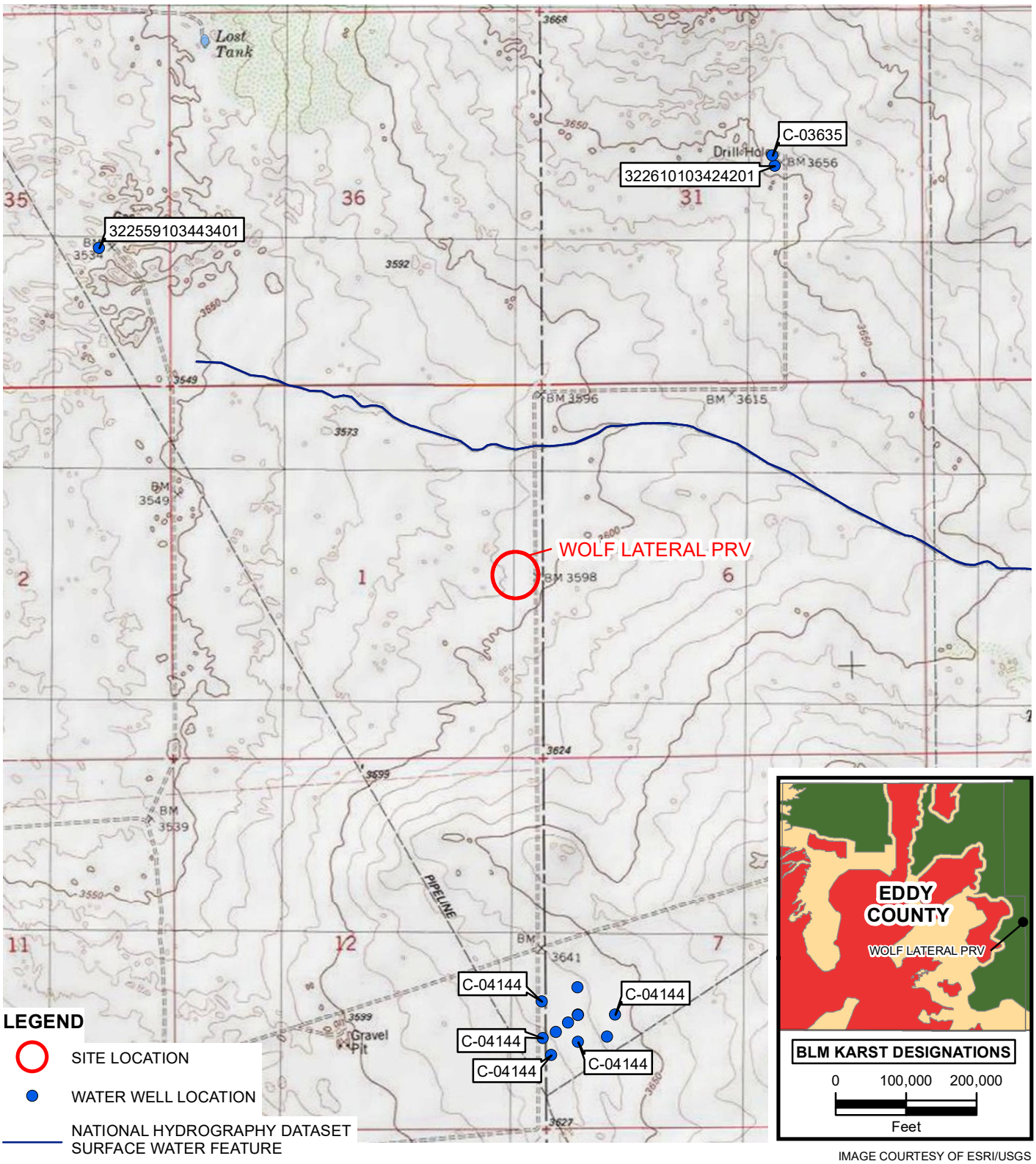
Travis Casey
Consultant, Environmental Scientist

Steve Kahn
Managing Director

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Lithologic/Sampling Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports
Attachment 5	Extension Request and Emails

FIGURES



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 NAPP2120957757

FIGURE 1
SITE LOCATION MAP
WOLF LATERAL PRV
UNIT I SEC 1 T22S R31E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC

P:\Lucid Energy Group\GIS\31403665.004_WOLF LATERAL PRV\MXD\31403665.004_FIG01_SL_RECEPTOR_2022.mxd

LEGEND

IMAGE COURTESY OF ESRI

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

0 50 100
Feet

N

NOTE: INCIDENT NUMBER NAPP2120957757
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
WOLF LATERAL PRV
UNIT I SEC 1 T22S R31E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC

P:\Lucid Energy Group\GIS\31403665.004_WOLF LATERAL PRV\MXD\31403665.004_FIG02_DELINEATION_2022.mxd

LEGEND

FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

EXCAVATION EXTENT

IMAGE COURTESY OF ESRI

0 50 100

Feet

N

NOTE: INCIDENT NUMBER NAPP2120957757
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
WOLF LATERAL PRV
UNIT I SEC 1 T22S R31E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC

P:\Lucid Energy Group\GIS\31403665.004_WOLF LATERAL PRV\MXD\31403665.004_FIG03_EXCAVATION_2022.mxd

TABLES

Table 1

Soil Analytical Results
Wolf Lateral
Incident Number naPP2120957757
Eddy County, New Mexico
Lucid Artesia Company

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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 Samples										
BH01	09/29/2021	1	<0.025	<0.10	<5.0	86	70	86	160	<60
BH01A	09/29/2021	4	<0.024	<0.10	<4.8	650	580	650	**1,200**	<61
BH02	09/29/2021	1	<0.12	<0.49	<25	2,300	1,800	2,300	**4,000**	<60
BH02A	09/29/2021	4	<0.025	<0.10	<4.9	92	96	92	**190**	84
BH03	09/29/2021	1	<0.025	<0.10	<4.9	14	<49	14	14	<60
BH03A	09/29/2021	4	<0.024	<0.09	<4.7	<9.8	<49	<9.8	<49	<60
BH04	09/29/2021	1	<0.024	<0.10	<4.9	<9.7	<48	<9.7	<48	<60
BH04A	09/29/2021	4	<0.024	<0.10	<4.9	<10	<50	<10	<50	<59
BH05	09/29/2021	1	<0.025	<0.10	<4.9	<10	<50	<10	<50	<60
BH05A	09/29/2021	4	<0.024	<0.10	<4.9	<9.3	<47	<9.4	<47	<60
BH06	09/29/2021	1	<0.025	<0.10	<4.9	<9.5	<48	<9.5	<48	<60
BH06A	09/29/2021	4	<0.025	<0.10	<5.0	<10	<50	<10	<50	<60

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

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

* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for

Table 1

Soil Analytical Results
Wolf Lateral
Incident Number naPP2120957757
Eddy County, New Mexico
Lucid Artesia Company

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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**
Excavation Samples										
SW01	02/21/2022	0-5	ND	ND	ND	17	ND	17	17	ND
SW02	02/21/2022	0-5	ND	ND	ND	ND	ND	ND	ND	ND
SW03	02/21/2022	0-5	ND	ND	ND	11	ND	11	11	93
SW04	02/21/2022	0-5	ND	ND	ND	14	ND	14	14	ND
FS01	02/21/2022	5	ND	ND	ND	ND	ND	ND	ND	ND
FS02	02/21/2022	5	ND	ND	ND	ND	ND	ND	ND	ND
FS03	02/21/2022	5	ND	ND	ND	ND	ND	ND	ND	84

ORO - motor oil range organics

chloride concentration in the top 4 feet of soil is 600 mg/kg and 100 mg/kg for TPH

ATTACHMENT 1: REFERENCED WELL RECORD

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04144 POD1	3	1	3	07	22S	32E	620240	3585844

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

Driller Name: ATKINS., WILLIAM B.

Drill Start Date:	01/29/2018	**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:**	58 feet	**Depth Water:**	49 feet

Water Bearing Stratifications:	Top	Bottom	Description
	42	54	Sandstone/Gravel/Conglomerate
	54	56	Sandstone/Gravel/Conglomerate
	56	58	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	38	58

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National Water Information System: Web Interface

USGS Water Resources (Cooperator Access)

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 322333103461301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 322333103461301 22S.31E.15.13223

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°23'40", Longitude 103°46'15" NAD27
Land-surface elevation 3,456 feet above NAVD88
The depth of the well is 170 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Graph of groundwater level data at USGS 322333103461301 22S.31E.15.13223
Breaks in the plot represent a gap of at least one year between field measurements.

Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
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Help
Data Tips
Explanation of terms
Subscribe for system changes
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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2022-03-21 15:48:18 EDT
0.66 0.59 nadww01

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 9/29/21
Site Name: Wolf Lateral PRV	
RP or Incident Number:	
WSP Job Number:	
Logged By: AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID
Hole Diameter: 0.5'	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		0-4'
D	<151	5.2	Y	BH01	1	1	SP	SAND, brown, fine/medium grained, poorly graded, no stain or odor
D	<151	4.9	N		2	2		
D	<151	1.4	N		3	3		coarse grained
D	<151	7.1	N		4	4	TD@4'	TD@4' Auger Refusal

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BH02	Date: 9-29-21
	Site Name: WOIF lateral PRV	
	RP or Incident Number:	
	WSP Job Number:	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 0.5' / 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		0-4'
D	<151	29.7	Y	BH02	1	1	SP	SAND, brown, medium grained, poorly graded, moderate odor, some staining
D	<151	18.7	N		2	2		no stain,
D	<151	5.4	N		3	3		Faint odor, course grained
D	160	6.3	N		4	4	TD@4'	TD@4' Auger Refusal

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BH03	Date: 9-29-21
	Site Name: Wolf Lateral PRV	
	RP or Incident Number:	
	WSP Job Number:	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 0.5' / 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		0-4'
D	<151	0.2	N	BH03	1	1	SP	SAND, light brown, fine grained, poorly graded, no stain or odor
D	<151	0.1	N		2	2		
D	<151	0.3	N		3	3		orange brown color change, medium grained
D	<151	0.1	N		4	4	TD@4'	reddish brown color change, course grained TD@4' Auger Refusal

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BH04	Date: 9/29/21
	Site Name: Wolf Lateral PRV	
	RP or Incident Number:	
	WSP Job Number:	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 0.5' / 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		0-4'
D	<151	0.3	N	BH04	1	1	SP	SAND, brown, Fine grained, poorly graded, no stain or odor
D	<151	0.5	N		2	2		
D	<151	0.4	N		3	3		reddish brown, medium grained
D	<151	0.2	N		4	4	TD@4'	coarse grained. TD@4' Auger Refusal

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH05	Date: 9/29/21
Site Name: Wolf Lateral PRV	
RP or Incident Number:	
WSP Job Number:	
Logged By: AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID
Hole Diameter: 0.5'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-4'
D	<151	0.5	N	BH05	1	1	SP	SAND, light brown, fine grained, poorly graded, no stain or odor
D	<151	0.4	N		2	2		brown, medium grained.
D	<151	0.3	N		3	3		
D	<151	0.2	N		4	4	TD@4'	Reddish brown, coarse grained TD@4' Auger Refusal

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BH06	Date: 9/29/21
	Site Name: WOLF Lateral PRV	
	RP or Incident Number:	
	WSP Job Number:	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: AC	Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 0.5 / 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		0-4'
D	4151	0.1	N	BH06	1	1	SP	SAND, brown, medium grained, poorly graded, some caliche grains, no stain or odor
D	4151	0.3	N		2	2		
D	4151	0.2	N		3	3		Orange brown, coarse grained
D	4151	0.2	N		4	4	TD@4'	TD@4' Auger Refusal

ATTACHMENT 3: PHOTOGRAPHIC LOG

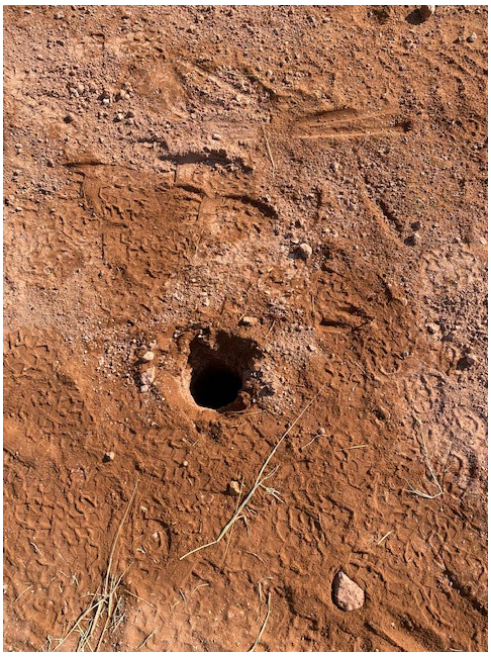
PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
1	September 29, 2021

View of the Release area and Riser

Photo No.	Date
2	September 29, 2021

View of BH01



PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
3	September 29, 2021

View of BH02

Photo No.	Date
4	September 29, 2021

View of BH03

PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
5	September 29, 2021

View of BH04

Photo No.	Date
6	September 29, 2021

View of BH05

PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
7	September 29, 2021

View of BH06

Photo No.	Date
8	February 21, 2022

Start of the Excavation

PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
9	February 21, 2022

Excavation on East side

Photo No.	Date
10	February 21, 2022

Excavation Facing West

PHOTOGRAPHIC LOG		
Lucid Energy Group	Wolf Lateral PRV Lea County, New Mexico	31403665.004

Photo No.	Date
11	February 21, 2022

Excavation Facing East

Photo No.	Date
12	February 21, 2022

Excavation Facing South

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

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

March 09, 2022

Joseph S. Hernandez

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

RE: Wolf Lateral PRV OrderNo.: 2202A45

Dear Joseph S. Hernandez:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/23/2022 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 **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** SW01
Project: Wolf Lateral PRV **Collection Date:** 2/21/2022 11:23:00 AM
Lab ID: 2202A45-001 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	17	8.6		mg/Kg	1	2/25/2022 10:34:53 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/25/2022 10:34:53 PM
Surr: DNOP	110	51.1-141		%Rec	1	2/25/2022 10:34:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 5:18:00 AM
Surr: BFB	110	70-130		%Rec	1	2/25/2022 5:18:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 5:18:00 AM
Toluene	ND	0.050		mg/Kg	1	2/25/2022 5:18:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 5:18:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 5:18:00 AM
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	2/25/2022 5:18:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	3/1/2022 11:46:20 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	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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy
Client Sample ID: SW02
Project: Wolf Lateral PRV
Collection Date: 2/21/2022 11:25:00 AM
Lab ID: 2202A45-002 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/25/2022 10:45:41 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/25/2022 10:45:41 PM
Surr: DNOP	102	51.1-141		%Rec	1	2/25/2022 10:45:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 5:38:00 AM
Surr: BFB	111	70-130		%Rec	1	2/25/2022 5:38:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 5:38:00 AM
Toluene	ND	0.050		mg/Kg	1	2/25/2022 5:38:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 5:38:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 5:38:00 AM
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	2/25/2022 5:38:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	3/2/2022 12:23:34 AM

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

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	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy
Client Sample ID: SW03
Project: Wolf Lateral PRV
Collection Date: 2/21/2022 11:26:00 AM
Lab ID: 2202A45-003 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	3/1/2022 5:57:11 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/1/2022 5:57:11 AM
Surr: DNOP	95.0	51.1-141		%Rec	1	3/1/2022 5:57:11 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2022 6:37:00 AM
Surr: BFB	111	70-130		%Rec	1	2/25/2022 6:37:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 6:37:00 AM
Toluene	ND	0.049		mg/Kg	1	2/25/2022 6:37:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2022 6:37:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/25/2022 6:37:00 AM
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	2/25/2022 6:37:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	93	60		mg/Kg	20	3/2/2022 12:35:59 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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy
Client Sample ID: SW04
Project: Wolf Lateral PRV
Collection Date: 2/21/2022 11:28:00 AM
Lab ID: 2202A45-004 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	14	9.2		mg/Kg	1	3/4/2022 11:03:51 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2022 11:03:51 AM
Surr: DNOP	89.5	51.1-141		%Rec	1	3/4/2022 11:03:51 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 6:57:00 AM
Surr: BFB	105	70-130		%Rec	1	2/25/2022 6:57:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 6:57:00 AM
Toluene	ND	0.050		mg/Kg	1	2/25/2022 6:57:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 6:57:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2022 6:57:00 AM
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	2/25/2022 6:57:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	59		mg/Kg	20	3/1/2022 11:12:47 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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** FS01
Project: Wolf Lateral PRV **Collection Date:** 2/21/2022 11:30:00 AM
Lab ID: 2202A45-005 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/1/2022 6:18:39 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/1/2022 6:18:39 AM
Surr: DNOP	95.1	51.1-141		%Rec	1	3/1/2022 6:18:39 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 7:16:00 AM
Surr: BFB	110	70-130		%Rec	1	2/25/2022 7:16:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 7:16:00 AM
Toluene	ND	0.050		mg/Kg	1	2/25/2022 7:16:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 7:16:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 7:16:00 AM
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	2/25/2022 7:16:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	3/1/2022 11:25:11 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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy **Client Sample ID:** FS02
Project: Wolf Lateral PRV **Collection Date:** 2/21/2022 11:31:00 AM
Lab ID: 2202A45-006 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	3/1/2022 6:29:22 AM
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	3/1/2022 6:29:22 AM
Surr: DNOP	101	51.1-141		%Rec	1	3/1/2022 6:29:22 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2022 7:36:00 AM
Surr: BFB	107	70-130		%Rec	1	2/25/2022 7:36:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 7:36:00 AM
Toluene	ND	0.049		mg/Kg	1	2/25/2022 7:36:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2022 7:36:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2022 7:36:00 AM
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	2/25/2022 7:36:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	3/1/2022 11:37:35 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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2202A45**
Date Reported: **3/9/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lucid Energy
Client Sample ID: FS03
Project: Wolf Lateral PRV
Collection Date: 2/21/2022 11:32:00 AM
Lab ID: 2202A45-007 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	3/1/2022 6:40:03 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/1/2022 6:40:03 AM
Surr: DNOP	97.4	51.1-141		%Rec	1	3/1/2022 6:40:03 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2022 7:56:00 AM
Surr: BFB	111	70-130		%Rec	1	2/25/2022 7:56:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.025		mg/Kg	1	2/25/2022 7:56:00 AM
Toluene	ND	0.049		mg/Kg	1	2/25/2022 7:56:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2022 7:56:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/25/2022 7:56:00 AM
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	2/25/2022 7:56:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	84	59		mg/Kg	20	3/1/2022 11:49:59 PM

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

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	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#: **2202A45**
09-Mar-22

Client: Lucid Energy
Project: Wolf Lateral PRV

Sample ID: **MB-65883** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **65883** RunNo: **86175**
Prep Date: **3/1/2022** Analysis Date: **3/1/2022** SeqNo: **3037392** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-65883** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **65883** RunNo: **86175**
Prep Date: **3/1/2022** Analysis Date: **3/1/2022** SeqNo: **3037393** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: **MB-65882** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **65882** RunNo: **86158**
Prep Date: **3/1/2022** Analysis Date: **3/1/2022** SeqNo: **3037786** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-65882** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **65882** RunNo: **86158**
Prep Date: **3/1/2022** Analysis Date: **3/1/2022** SeqNo: **3037787** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.5	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	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#: **2202A45**
09-Mar-22

Client: Lucid Energy
Project: Wolf Lateral PRV

Sample ID: **LCS-65789** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **65789** RunNo: **86063**
Prep Date: **2/24/2022** Analysis Date: **2/25/2022** SeqNo: **3033150** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	68.9	135			
Surr: DNOP	5.0		5.000		101	51.1	141			

Sample ID: **MB-65789** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **65789** RunNo: **86063**
Prep Date: **2/24/2022** Analysis Date: **2/25/2022** SeqNo: **3033151** 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		103	51.1	141			

Sample ID: **MB-65804** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **65804** RunNo: **86130**
Prep Date: **2/25/2022** Analysis Date: **2/28/2022** SeqNo: **3036102** 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	11		10.00		105	51.1	141			

Sample ID: **LCS-65804** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **65804** RunNo: **86130**
Prep Date: **2/25/2022** Analysis Date: **2/28/2022** SeqNo: **3036103** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	68.9	135			
Surr: DNOP	5.3		5.000		107	51.1	141			

Sample ID: **2202A45-003AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SW03** Batch ID: **65804** RunNo: **86129**
Prep Date: **2/25/2022** Analysis Date: **3/1/2022** SeqNo: **3036130** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.5	47.26	11.05	105	39.3	155			
Surr: DNOP	4.2		4.726		88.1	51.1	141			

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	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#: **2202A45**
09-Mar-22

Client: Lucid Energy
Project: Wolf Lateral PRV

Sample ID: **2202A45-003AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SW03** Batch ID: **65804** RunNo: **86129**
Prep Date: **2/25/2022** Analysis Date: **3/1/2022** SeqNo: **3036132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.2	46.04	11.05	102	39.3	155	4.24	23.4	
Surr: DNOP	3.9		4.604		84.9	51.1	141	0	0	

Sample ID: **LCS-65926** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **65926** RunNo: **86243**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3040887** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.0	68.9	135			
Surr: DNOP	4.1		5.000		82.7	51.1	141			

Sample ID: **MB-65926** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **65926** RunNo: **86243**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3040889** 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	8.8		10.00		88.4	51.1	141			

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	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#: **2202A45**

09-Mar-22

Client: Lucid Energy

Project: Wolf Lateral PRV

Sample ID: **lcs-65767**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **65767**	RunNo: **86093**
Prep Date: **2/23/2022**	Analysis Date: **2/25/2022**	SeqNo: **3033506** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	78.6	131			
Surr: BFB	1200		1000		119	70	130			

Sample ID: **mb-65767**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **65767**	RunNo: **86093**
Prep Date: **2/23/2022**	Analysis Date: **2/25/2022**	SeqNo: **3033507** 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	1100		1000		112	70	130			

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	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#: **2202A45**
09-Mar-22

Client: Lucid Energy
Project: Wolf Lateral PRV

Sample ID: **lcs-65767**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **65767**	RunNo: **86093**
Prep Date: **2/23/2022**	Analysis Date: **2/25/2022**	SeqNo: **3033704** 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	95.8	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.3	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	70	130			

Sample ID: **mb-65767**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **65767**	RunNo: **86093**
Prep Date: **2/23/2022**	Analysis Date: **2/25/2022**	SeqNo: **3033705** 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	70	130			

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	Estimated value
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: 2202A45 | RcptNo: 1

Received By: Cheyenne Cason 2/23/2022 7:45:00 AM

Completed By: Sean Livingston 2/23/2022 8:41:16 AM

Reviewed By: 2/23/22

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: JN 2/23/22

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	1.0	Good				
2	2.3	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 5 Days

Project Name: Wolf Lateral PRV

Project #: 31403665.004

Project Manager: Joseph S. Hernandez

Sampler: Travis Casey

On Ice: ☒ Yes ☐ No

# of Coolers: 2 6.7-0=6.7 cm

Cooler Temp(including CF): 6.3-0=6.3 cm

2/23/22

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202445	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)
2-21-2022	1123	S	SW01	Glass/4oz.	N/A	001	■	■					■			
2-21-2022	1125	S	SW02	Glass/4oz.	N/A	002	■	■					■			
2-21-2022	1126	S	SW03	Glass/4oz.	N/A	003	■	■					■			
2-21-2022	1128	S	SW04	Glass/4oz.	N/A	004	■	■					■			
2-21-2022	1130	S	FS01	Glass/4oz.	N/A	005	■	■					■			
2-21-2022	1131	S	FS02	Glass/4oz.	N/A	006	■	■					■			
2-21-2022	1132	S	FS03	Glass/4oz.	N/A	007	■	■					■			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
2/22/22	1000				2/22/22	1000
2/22/22	1400				2/23/22	0745

Remarks:

1.0-0=1.0

2.3-0=2.3

Direct bill to Lucid Energy

Prop # 195149100 – Company # 860

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

ATTACHMENT 5: Extension Request and Emails

Casey, Travis

From: Michael Gant <MGant@lucid-energy.com>
Sent: Wednesday, April 20, 2022 10:57 AM
To: Casey, Travis
Subject: FW: [EXTERNAL] Lucid Energy Group - Extension Request - Wolf Lateral PRV (nAPP2120957757)

Wolf Lateral 2nd extension request

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, January 21, 2022 12:50 PM
To: Hernandez, Joseph <Joe.Hernandez@wsp.com>; Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>
Cc: Michael Gant <MGant@lucid-energy.com>
Subject: RE: [EXTERNAL] Lucid Energy Group - Extension Request - Wolf Lateral PRV (nAPP2120957757)

Hi Joseph,

Your request for a 2nd time extension to 04/22/2022 is approved.

As you mentioned, the initial time extension was requested in October 2021.

Thank you and have a great weekend.

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@state.nm.us

From: Hernandez, Joseph <Joe.Hernandez@wsp.com>
Sent: Friday, January 21, 2022 9:19 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Cc: Michael Gant <MGant@lucid-energy.com>
Subject: [EXTERNAL] Lucid Energy Group - Extension Request - Wolf Lateral PRV (nAPP2120957757)

All,

Lucid Energy Group (Lucid) is requesting an extension to the current deadline for submitting a remediation work plan, deferral report or closure report required in 19.15.29.12.B.(1) NMAC at the Wolf Lateral PRV. A natural gas release was discovered on July 26, 2021 and was assigned Incident Number nAPP2120957757. WSP submitted an extension request to NMOCD on October 22, 2021. Initial site assessment and characterization of the release have been completed. Lucid received BLM access approval for soil disturbance at the site on January 13, 2021. At this time, remedial activities are scheduled to begin to address impacts in an effort to ensure protection of public health and the environment. To provide

enough time for remediation activities, confirmation sampling and the completion of remediation work plan, deferral report or closure report, Lucid requests an extension of the deadline to **April 22, 2022.**

Joseph S. Hernandez
Consultant, Geologist

M+ 1 281-702-2329

WSP USA Inc.
Texas and New Mexico

wsp.com

Casey, Travis

From: Michael Gant <MGant@lucid-energy.com>
Sent: Wednesday, April 20, 2022 10:56 AM
To: Casey, Travis
Subject: FW: Lucid Artesia Company - Extension Request (Wolf Lateral PRV)

Travis,

Can you please include this extension request email to the closure report as an appendix or figure? Mike Bratcher has recently informed us that extension requests need to be included in closure reports. I will be sending the 2nd extension request email shortly.

Please let me know if you have any questions or concerns.

Thanks,
Michael Gant
Environmental Compliance Manager
Lucid Energy Group
3100 McKinnon St. #800
Dallas, TX 75201
+1(314) 330 7876 Cell
mgant@lucid-energy.com | www.lucid-energy.com

From: Hernandez, Joseph <Joe.Hernandez@wsp.com>
Sent: Friday, October 22, 2021 1:04 PM
To: ocd.enviro@state.nm.us
Cc: Michael Gant <MGant@lucid-energy.com>; Moir, Dan <Dan.Moir@wsp.com>; Belill, Benjamin <Ben.Belill@wsp.com>
Subject: Lucid Artesia Company - Extension Request (Wolf Lateral PRV)

[WSP USA | Confidential]

Lucid Artesia Company (Lucid) is requesting an extension to the current deadline for submitting a remediation work plan, deferral report or closure report required in 19.15.29.12.B.(1) NMAC at the Wolf Lateral PRV. A natural gas release was discovered on July 26, 2021 and was assigned Incident Number nAPP2120957757. Initial site assessment and characterization of the release have been completed. At this time, Lucid is evaluating remedial options to address impacts in an effort to ensure protection of public health and the environment, while remaining compliant with Lucid's safety guidelines. Further site assessment and sampling was completed on September 29, 2021. To provide enough time for further site assessment, confirmation sampling and the completion of remediation work plan, deferral report or closure report, Lucid requests an extension of the deadline to **January 22, 2021.**

Thank you,

Joseph S. Hernandez
Associate Consultant, Geologist

M+ 1 281-702-2329

WSP USA

wsp.com

[WSP USA | Confidential]

ATTACHMENT 6: C141 Closure Request

State of New Mexico
Oil Conservation Division

Incident ID	
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: 4/22/2022

email: MGant@lucid-energy.com Telephone: 3143307876

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: 06/02/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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 100906

CONDITIONS

Operator: LUCID ENERGY DELAWARE, LLC 201 S. Fourth Street Artesia, NM 88210	OGRID: 372422
	Action Number: 100906
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/2/2022