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 | NAPP2121158260 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party Lucid Energy Delaware, LLC. | 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 Artesia NM 88210 | |

## Location of Release Source

Latitude 32.248184° Longitude -103.972489°
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name Juniper 8" Lateral #3 | Site Type Natural gas pipeline |
| Date Release Discovered 7/27/2021 | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| F | 3 | 24S | 29E | 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) >500 MCF | Volume Recovered (Mcf) 0 MCF |
| ☑ Other (describe) | Volume/Weight Released (provide units) Pipeline liquids 5 gal | Volume/Weight Recovered (provide units) Pipeline liquids 5 gal |
| Cause of Release The release was caused by high line pressure which caused a rupture at a weld along the poly line. | | |

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2121158260 |
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| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br>☑ Yes ☐ No | If YES, for what reason(s) does the responsible party consider this a major release?<br>This is considered a major release due to the total lost volume of natural gas of >500 MCF. |

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was not provided to OCD, as Lucid did not have immediate and accurate volume calculations of the loss. Once volume loss had been confirmed Lucid EHSR immediately notified OCD and BLM personnel on 7/30/2021 via email and OCD online NOR form.

## Initial Response

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

☑ The source of the release has been stopped.
☑ 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: 7/30/2021

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

**OCD Only**

Received by: Ramona Marcus Date: 8/2/2021

**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 39032

## CONDITIONS

| | |
|---|---|
| Operator:<br>LUCID ENERGY DELAWARE, LLC<br>201 S. Fourth Street<br>Artesia, NM 88210 | OGRID:<br>372422 |
| | Action Number:<br>39032 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| rmarcus | When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141 | 8/2/2021 |

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2121158260 |
| 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? | >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.

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2121158260 |
| 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: 2/18/2022

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

**OCD Only**

Received by: _____ Date: _____

| | |
|---|---|
| Incident ID | NAPP2121158260 |
| 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: 2/18/2022

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: _____ Date: _____

Printed Name: _____ Title: _____

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

January 25, 2022

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

**RE: Closure Request**
**Juniper 8 Lateral #3**
**Incident Numbers nAB1927551697 and nAPP2121158260**
**Eddy County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of Lucid Energy Group. (Lucid), is pleased to present the following Closure Request detailing remedial activities at the Juniper 8 Lateral #3 (Site) located in Unit F, Section 3, Township 24 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of natural gas and/or pipeline liquids at the Site. Based on the excavation activities and results of the delineation and confirmation soil sampling event, Lucid is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Numbers nAB1927551697 and nAPP2121158260.

**RELEASE BACKGROUND**

nAB1927551697

On September 5, 2019, a rupture at a weld on a poly line resulted in the release of 750 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 September 6, 2019 and was assigned Incident Number nAB1927551697. Excavation activities were completed by Lucid. A total of 100 cubic yards of soil was removed and staged onsite on top an impermeable liner. After completion of excavation activities, the excavation areas were secured with fencing.

On September 14, 2021, Mr. Chad Hensley with the NMOCD denied the original Closure Request based on the following reasons:

- *A "Right of Way" is considered Off-Pad and is to be treated like it is in the pasture. Roads, Pasture, and "Right of Ways" are all considered Off-Pad and need to meet the strictest closure criteria for soil standards in the top 4' of soil/material (Equivalent: <50' depth to groundwater).*

- *Sample points Mist 1, #2 south wall, #3 base do not meet closure criteria.*

On September 14, 2021, Lucid communicated with NMOCD that the above requirements would be addressed during upcoming remediation activities associated with Incident Number nAPP2121158260 (described below) as it overlapped the subject release.

nAPP2121158260

On July 27, 2021, high line pressure caused a rupture at a weld along a poly line and resulted in the release of greater than 500 MCF of natural gas and 5 gallons (gal) of pipeline liquid at the Site. Pipeline liquids were not able to be recovered immediately. Lucid reported the release to NMOCD on a Form C-141 on July 26, 2021 and was assigned Incident Number nAPP2121158260.

**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) through a desktop search of potential sensitive receptors as well as referencing an NMOCD approved site characterization of the Site associated with Incident Number nAB1922059305 which included a groundwater depth determination of greater than 100 feet below ground surface (bgs) based on regional water well data. The Closure Request Report and characterization associated with Incident Number nAB1922059305 was subsequently approved by NMOCD on June 24, 2021.

The closest continuously flowing or significant watercourse to the Site is the Pecos River, located approximately 2.15 miles southeast 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 (medium 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)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;

- TPH: 2,500 mg/kg; and
- Chloride: 20,000 mg/kg.

A reclamation closure criteria of 100 mg/kg TPH and 600 mg/kg chloride was applied to the top 4 feet of the pasture area impacted by the release, per NMAC 19.15.29.13.D (1) for areas that will be reclaimed immediately following remediation.

**EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES**

During August 2021, Lucid conducted additional excavation activities to address impacts associated with Incident Number nAPP2121158260 and residual impacts associated with Incident Number nAB1927551697. A total of approximately 150 cubic yards of impacted soil was removed following excavation activities. The impacted soil was staged onsite on top of an impermeable liner. After completion of excavation activities, the excavation area was secured with fencing.

On October 18, 2021, WSP visited to the Site to conduct confirmation sampling activities and verify the absence or presence of any residual impacted and/or waste-containing soil within the excavation area as indicated by field screening. Excavation confirmation soil samples were field screened for volatile aromatic hydrocarbons using a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

WSP collected 5-point composite soil samples to represent at most 200 square feet from the floor and sidewalls 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. Soil samples SW01 through SW06 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 5 feet bgs. Soil samples FS01 through FS08 were collected from the floor of the excavation at 5 feet bgs. The excavation 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.

Based on laboratory analytical results for sidewall confirmation soil samples SW04 and SW05 exceeding the Closure Criteria for chloride, additional excavation appeared warranted to address residual chloride impacts.

On December 28, 2021 WSP returned to the Site to continue excavation activities in the vicinity of sample locations SW04 and SW05. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride. Following removal of impacted soil, WSP collected

5-point composite soil samples at least every 200 square feet from the sidewalls of the excavation. Composite soil samples SW07 and SW08 were collected from the extended sidewalls of the excavation from the ground surface to 7 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The final excavation extent and excavation soil sample locations are presented on Figure 3. Photographic documentation is included in Attachment 1.

A total of approximately 150 cubic yards of impacted soil was removed during final excavation activities. The impacted soil was transported and properly disposed of at the Lea Land Landfill Facility under Lucid approved manifests.

**DELINEATION AND SOIL SAMPLING ACTIVITIES**

nAB1927551697

To address the deficiencies addressed by NMOCD in the September 14, 2021 denial email, WSP personnel conducted delineation activities between December 29 and 30, 2021 to assess the presence or absence of impacts to soil associated with the subject release. Utilizing a hand auger, four delineation soil samples (SS01 through SS04) were advanced in close proximity to the original sample locations[1] to confirm the presence or absence of residual soil impacts from the hydrocarbon mist. Delineation activities were directed by field screening soil samples for volatile aromatic hydrocarbons and chloride. A total of two soil samples were collected from each of the borehole locations: the sample with the highest observed field screening concentrations (approximately 0.5-foot bgs) and the greatest depth (1 foot bgs). The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The delineation sample locations were mapped utilizing a handheld GPS unit and are presented on Figure 3. Field screening results and observations for the delineation soil samples were recorded on lithologic/soil sampling logs and are presented in Attachment 2.

**LABORATORY ANALYTICAL RESULTS**

Laboratory analytical results for all delineation and final excavation confirmation soil samples indicated concentrations of benzene, BTEX, TPH and chloride were compliant with the Closure Criteria and reclamation standard. Laboratory analytical results are summarized in Table 1 and the laboratory analytical report is included as Attachment 3.

**CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site by Lucid to address the September 5, 2019 and July 27, 2021 release of natural gas and/or pipeline fluid. At the

[1] Samples location correlate with Mist #1 through Mist #4 soil sample location areas presented on Figure 5 in Incident Number nAB1927551697 Closure Request Report.

completion of remediation activities for the two releases, a total of approximately 400 cubic yards of impacted soil were removed during final excavation activities. Laboratory analytical results for final excavation confirmation and delineation soil samples indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the reclamation and Closure Criteria. Laboratory analytical results for remediation associated with nAPP2121158260 indicated remediation was achieved for nAB1927551697 as it occurred in the same excavation area.

Based on analytical results from the December 2021 confirmation sampling event, portions of the excavation that did not meet the Closure Criteria, specifically #2 south wall and #3 base, have been adequately remediated based on confirmation soil samples SW08 and FS05 and FS06, respectively. Analytical results for soil samples SS01 through SS04 indicate there is an absence of soil impacts in the vicinity of the historically analyzed Mist #1 through Mist #4, therefore no additional remedial activities appear warranted in those locations. During remedial activities that were taken to address soil impacts associated with Incident Number nAPP2121158260, deficiencies identified for Incident Number nAB1927551697 appear to have been rectified.

Based on the soil sample analytical results, Lucid has sufficiently remediated impacted soils and as such, no further remediation appears warranted. Following review and approval of the Closure Request, Lucid will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The subject area will also be reseeded with a Bureau of Land Management (BLM)-approved seed mix. WSP and Lucid believe these remedial actions are protective of human health, the environment, and groundwater. As such, Lucid respectfully requests NFA for Incident Numbers nAPP2121158260 and nAB1927551697.

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

Sincerely,

WSP USA Inc.

Joseph S. Hernandez
Consultant, Geologist

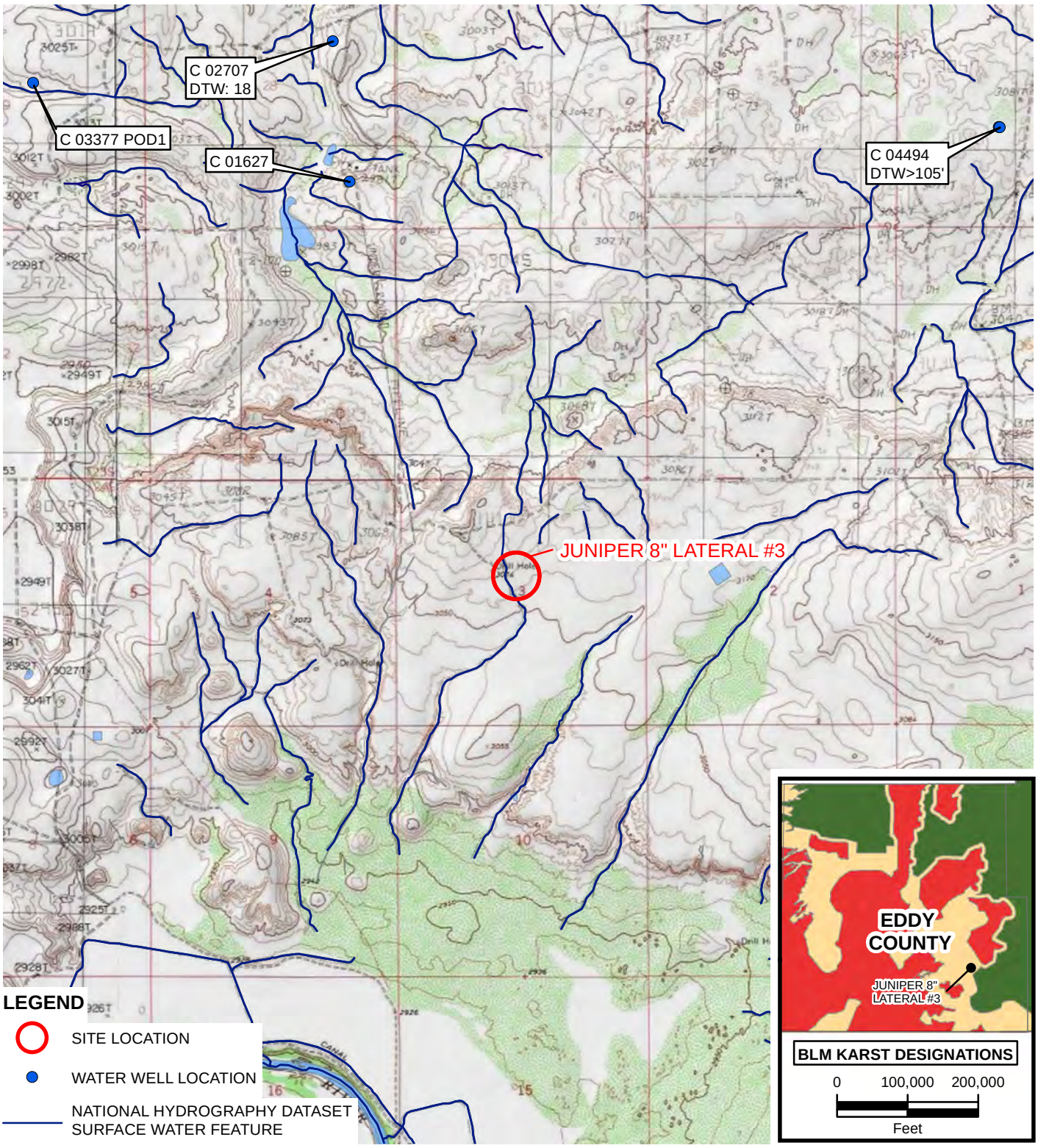
Daniel R. Moir, P.G.
Sr. Lead Consultant, Geologist

cc: Michael Gant, Lucid
Bureau of Land Management
NMOCD

Attachments:

| | |
|---|---|
| Figure 1 | Site Location Map |
| Figure 2 | Excavation Soil Sample Locations |
| Figure 3 | Delineation Soil Sample Locations |
| Table 1 | Soil Analytical Results |
| Attachment 1 | Photographic Log |
| Attachment 2 | Lithologic/Soil Sampling Logs |
| Attachment 3 | Laboratory Analytical Reports |

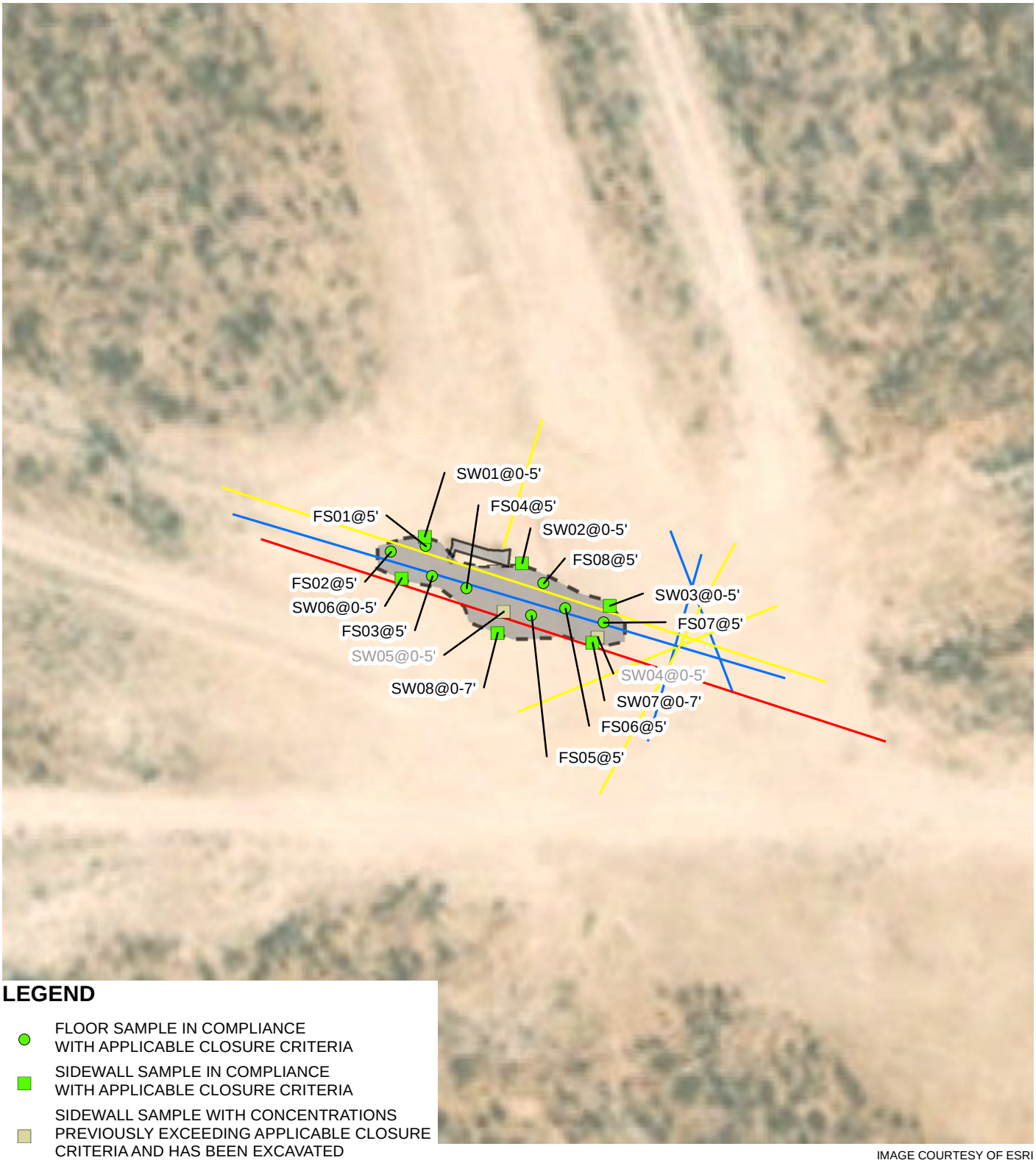
FIGURES




DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBERS nAPP2121158260 AND nAB1927551697

FIGURE 1
SITE LOCATION MAP
JUNIPER 8" LATERAL #3
UNIT F SEC 3 T24S R29E
EDDY COUNTY, NEW MEXICO
**LUCID ENERGY GROUP**

C:\Users\USJG689584\OneDrive - WSP O365\Documents\31403665.000_JUNIPER 8 LATERAL 3\MXD\31403665.000_FIG01_SL_RECEPTOR_2022.mxd




## LEGEND

- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED
- GAS/PIPELINE
- WATER LINE
- ELECTRIC LINE
- EXCAVATION EXTENT
- INFRASTRUCTURE

NOTE: INCIDENT NUMBER nAPP2121158260 AND AND nAB1927551697
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 2
EXCAVATION SOIL SAMPLE LOCATIONS
JUNIPER 8" LATERAL #3
UNIT F SEC 3 T24S R29E
EDDY COUNTY, NEW MEXICO
**LUCID ENERGY GROUP**

P:\Lucid Energy Group\GIS\31403665.000_JUNIPER 8 LATERAL 3\MXD\31403665.000_FIG02_EXCAVATION_2021.mxd


**LEGEND**

- DELINEATION SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS/PIPELINE
- WATER LINE
- ELECTRIC LINE
- INFRASTRUCTURE
- EXCAVATION EXTENT

NOTE: INCIDENT NUMBER nAB1927551697
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
JUNIPER 8" LATERAL #3
UNIT F SEC 3 T24S R29E
EDDY COUNTY, NEW MEXICO
**LUCID ENERGY GROUP**

C:\Users\USJG689584\OneDrive - WSP O365\Documents\31403665.000_JUNIPER 8 LATERAL 3\MXD\31403665.000_FIG03_DELINEATION_2021_2.mxd

TABLES

**Table 1**

**Soil Analytical Results**
**Juniper 8" Lateral #3**
**Incident Number nAPP2121158260 and nAB1927551697**
**Eddy County, New Mexico**

| 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 | **1,000** | **2,500** | **20,000** |
| **Excavation Floor Soil Samples - nAPP2121158260** | | | | | | | | | | |
| FS01 | 10/18/2021 | 5 | <0.025 | <0.10 | <9.8 | <5.0 | <49 | <9.8 | <49 | 300 |
| FS02 | 10/18/2021 | 5 | <0.025 | <0.10 | <9.1 | <4.9 | <46 | <9.1 | <46 | 110 |
| FS03 | 10/18/2021 | 5 | <0.024 | <0.10 | <9.8 | <4.8 | <49 | <9.8 | <49 | 290 |
| FS04 | 10/18/2021 | 5 | <0.024 | <0.09 | 9.4 | <4.7 | <46 | 9.4 | 9.4 | 300 |
| FS05 | 10/18/2021 | 5 | <0.024 | <0.09 | <9.6 | <4.7 | <48 | <9.6 | <48 | 310 |
| FS06 | 10/18/2021 | 5 | <0.023 | <0.09 | <9.5 | <4.7 | <48 | <9.5 | <48 | 410 |
| FS07 | 10/18/2021 | 5 | <0.024 | <0.09 | <9.1 | <4.7 | <46 | <9.1 | <46 | 290 |
| FS08 | 10/18/2021 | 5 | <0.024 | <0.09 | 13 | <4.7 | <49 | 13 | 13 | 360 |
| **Excavation Sidewall Soil Samples - nAPP2121158260** | | | | | | | | | | |
| SW01 | 10/18/2021 | 0 - 5 | <0.023 | <0.09 | <9.0 | <4.6 | <45 | <9.0 | <45 | 250 |
| SW02 | 10/18/2021 | 0 - 5 | <0.023 | <0.09 | <9.2 | <4.7 | <46 | <9.2 | <46 | 600 |
| SW03 | 10/18/2021 | 0 - 5 | <0.024 | <0.10 | <9.3 | <4.8 | <46 | <9.3 | <46 | 220 |

**Table 1**

**Soil Analytical Results**
**Juniper 8" Lateral #3**
**Incident Number nAPP2121158260 and nAB1927551697**
**Eddy County, New Mexico**

| 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 | **1,000** | **2,500** | **20,000** |
| SW04 | 10/18/2021 | 0 - 5 | <0.023 | <0.09 | <8.8 | <4.7 | <44 | <8.8 | <44 | **1,100** |
| SW07 | 12/28/2021 | 0 - 7 | <0.019 | <0.08 | <3.8 | <9.3 | <47 | <9.3 | <47 | 360 |
| SW05 | 10/18/2021 | 0 - 5 | <0.023 | <0.09 | <9.6 | <4.6 | <48 | <9.6 | <48 | **920** |
| SW09 | 12/28/2021 | 0 - 7 | <0.020 | <0.08 | <4.0 | <9.5 | <47 | <9.5 | <47 | 200 |
| SW06 | 10/18/2021 | 0 - 5 | <0.023 | <0.09 | <9.4 | <4.6 | <47 | <9.4 | <47 | 110 |
| **Horizontal Delineation Soil Samples - nAB1927551697** | | | | | | | | | | |
| SS01 | 12/29/2021 | 0.5 | <0.018 | <0.07 | <3.6 | <9.9 | <50 | <9.9 | <50 | 350 |
| SS01A | 12/29/2021 | 1 | <0.021 | <0.08 | <4.2 | <10 | <50 | <10 | <50 | 250 |
| SS02 | 12/30/2021 | 0.5 | <0.020 | <0.08 | <4.0 | <9.2 | <46 | <9.2 | <46 | 110 |
| SS02A | 12/30/2021 | 1 | <0.017 | <0.07 | <3.3 | 10 | <45 | 10 | 10 | <60 |

**Table 1**

**Soil Analytical Results**
**Juniper 8" Lateral #3**
**Incident Number nAPP2121158260 and nAB1927551697**
**Eddy County, New Mexico**

| 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 | **1,000** | **2,500** | **20,000** |
| SS03 | 12/29/2021 | 0.5 | <0.022 | <0.09 | <4.3 | <10 | <50 | <10 | <50 | <60 |
| SS03A | 12/29/2021 | 1 | <0.016 | <0.06 | <3.2 | <9.8 | <49 | <9.8 | <49 | <60 |
| SS04 | 12/29/2021 | 0.5 | <0.017 | <0.07 | <3.4 | <9.9 | <49 | <9.9 | <49 | 120 |
| SS04A | 12/29/2021 | 1 | <0.019 | <0.08 | <3.9 | <9.9 | <49 | <9.9 | <49 | 75 |

**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: PHOTOGRAPHIC LOG

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| **Lucid Energy Group** | **Juniper 8 Lateral #3**<br>**Eddy County, New Mexico** | **31403665.000** |

| **Photo No.** | **Date** |
|---|---|
| 1 | October 18, 2021 |

View of the subject excavation during the site assessment

| **Photo No.** | **Date** |
|---|---|
| 2 | October 18, 2021 |

View of the subject release area during delineation activities.

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| **Lucid Energy Group** | **Juniper 8 Lateral #3**<br>**Eddy County, New Mexico** | **31403665.000** |

| **Photo No.** | **Date** |
|---|---|
| 3 | December 28, 2021 |

View of the excavation during additional remediation activities.

| **Photo No.** | **Date** |
|---|---|
| 4 | December 28, 2021 |

View of the excavation during additional remediation activities.

ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOG

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| SS Name: SS01 | Date: 12/29/2021 |
| Site Name: Juniper 8 Lateral #3 | |
| RP or Incident Number: nAB1927551697 | |
| Job Number: 31403665.000 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By: MR | Method: Hand Auger | | |
| Lat/Long: 32.248184°, -103.972489° | Field Screening: Chloride, PID | Hole Diameter: 3" | Total Depth: 1' |

Comments:
SAA - Same As Above

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| Dry | <151.2 | 1.4 | N/A | SS01 | 0.5' | 0.5' | CCHE | Dry light tan CALICHE, poorly-cemented, no plasticity, no cohesiveness, fine-grained sand with silt matrix, no odor |
| Dry | <151.2 | 1.0 | N/A | SS01A | 1' | 1' | | SAA |
| | | | | | | | | Total Depth: 1' |

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| SS Name: SS02 | Date: 12/30/2021 |
| Site Name: Juniper 8 Lateral #3 | |
| RP or Incident Number: nAB1927551697 | |
| Job Number: 31403665.000 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By: BB | Method: Hand Auger | | |
| Lat/Long: 32.248184°, -103.972489° | Field Screening: Chloride, PID | Hole Diameter: 3" | Total Depth: 1' |

Comments:
SAA - Same As Above

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| Dry | <124 | 0.6 | N/A | SS02 | 0.5' | 0.5' | CCHE | Dry light tan CALICHE, poorly-cemented, no plasticity, no cohesiveness, fine-grained sand with silt matrix, no odor |
| Dry | <124 | 0.6 | N/A | SS02A | 1' | 1' | | SAA |
| | | | | | | | | Total Depth: 1' |

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| SS Name: SS03 | Date: 12/29/2021 |
| Site Name: Juniper 8 Lateral #3 | |
| RP or Incident Number: nAB1927551697 | |
| Job Number: 31403665.000 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By: BB | Method: Hand Auger | | |
| Lat/Long: 32.248184°, -103.972489° | Field Screening: Chloride, PID | Hole Diameter: 3" | Total Depth: 1' |

Comments:
SAA - Same As Above

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| Dry | <124 | 1.0 | N/A | SS03 | 0.5' | 0.5' | CCHE | Dry light tan CALICHE, poorly-cemented, no plasticity, no cohesiveness, fine-grained sand with silt matrix, no odor |
| Dry | <124 | 0.9 | N/A | SS03A | 1' | 1' | | SAA |
| | | | | | | | | Total Depth: 1' |

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| SS Name: SS04 | Date: 12/29/2021 |
| Site Name: Juniper 8 Lateral #3 | |
| RP or Incident Number: nAB1927551697 | |
| Job Number: 31403665.000 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By: BB | Method: Hand Auger | | |
| Lat/Long: 32.248184°, -103.972489° | Field Screening: Chloride, PID | Hole Diameter: 3" | Total Depth: 1' |

Comments:
SAA - Same As Above

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| Dry | <124 | 1.2 | N/A | SS04 | 0.5' | 0.5' | CCHE | Dry light tan CALICHE, poorly-cemented, no plasticity, no cohesiveness, fine-grained sand with silt matrix, no odor |
| Dry | <124 | 0.6 | N/A | SS04A | 1' | 1' | | SAA |
| | | | | | | | | Total Depth: 1' |

ATTACHMENT 3: 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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B24

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 9 sample(s) on 10/23/2021 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 **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS02
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 11:20:00 AM
**Lab ID:** 2110B24-001 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 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 | 10/29/2021 6:05:45 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 10/29/2021 6:05:45 PM |
| Surr: DNOP | 113 | 70-130 | | %Rec | 1 | 10/29/2021 6:05:45 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 10/28/2021 11:19:02 PM |
| Surr: BFB | 101 | 70-130 | | %Rec | 1 | 10/28/2021 11:19:02 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 10/28/2021 11:19:02 PM |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 10/28/2021 11:19:02 PM |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 10/28/2021 11:19:02 PM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 10/28/2021 11:19:02 PM |
| Surr: 4-Bromofluorobenzene | 85.6 | 70-130 | | %Rec | 1 | 10/28/2021 11:19:02 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 110 | 60 | | mg/Kg | 20 | 10/29/2021 3:50:05 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 |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS05
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 12:00:00 PM
**Lab ID:** 2110B24-002 **Matrix:** SOIL
**Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 10/29/2021 6:16:56 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 10/29/2021 6:16:56 PM |
| Surr: DNOP | 121 | 70-130 | | %Rec | 1 | 10/29/2021 6:16:56 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/28/2021 11:42:20 PM |
| Surr: BFB | 100 | 70-130 | | %Rec | 1 | 10/28/2021 11:42:20 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/28/2021 11:42:20 PM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/28/2021 11:42:20 PM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/28/2021 11:42:20 PM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/28/2021 11:42:20 PM |
| Surr: 4-Bromofluorobenzene | 85.2 | 70-130 | | %Rec | 1 | 10/28/2021 11:42:20 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 310 | 60 | | mg/Kg | 20 | 10/29/2021 4:02:29 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 |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW01
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 1:00:00 PM
**Lab ID:** 2110B24-003 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 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 | 10/29/2021 6:28:05 PM |
| Motor Oil Range Organics (MRO) | ND | 45 | | mg/Kg | 1 | 10/29/2021 6:28:05 PM |
| Surr: DNOP | 119 | 70-130 | | %Rec | 1 | 10/29/2021 6:28:05 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 10/29/2021 12:05:35 AM |
| Surr: BFB | 98.7 | 70-130 | | %Rec | 1 | 10/29/2021 12:05:35 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 12:05:35 AM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 12:05:35 AM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 12:05:35 AM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 10/29/2021 12:05:35 AM |
| Surr: 4-Bromofluorobenzene | 84.6 | 70-130 | | %Rec | 1 | 10/29/2021 12:05:35 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 250 | 60 | | mg/Kg | 20 | 10/29/2021 5:04:34 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS04
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 2:00:00 PM
**Lab ID:** 2110B24-004 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 9.4 | 9.1 | | mg/Kg | 1 | 10/28/2021 11:12:26 AM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 10/28/2021 11:12:26 AM |
| Surr: DNOP | 109 | 70-130 | | %Rec | 1 | 10/28/2021 11:12:26 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 12:28:57 AM |
| Surr: BFB | 100 | 70-130 | | %Rec | 1 | 10/29/2021 12:28:57 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/29/2021 12:28:57 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 12:28:57 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 12:28:57 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/29/2021 12:28:57 AM |
| Surr: 4-Bromofluorobenzene | 85.2 | 70-130 | | %Rec | 1 | 10/29/2021 12:28:57 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 300 | 59 | | mg/Kg | 20 | 10/29/2021 5:16:58 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS03
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 2:10:00 PM
**Lab ID:** 2110B24-005 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 10/28/2021 11:22:59 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 10/28/2021 11:22:59 AM |
| Surr: DNOP | 71.5 | 70-130 | | %Rec | 1 | 10/28/2021 11:22:59 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 10/29/2021 12:52:19 AM |
| Surr: BFB | 99.4 | 70-130 | | %Rec | 1 | 10/29/2021 12:52:19 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/29/2021 12:52:19 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 10/29/2021 12:52:19 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 10/29/2021 12:52:19 AM |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 10/29/2021 12:52:19 AM |
| Surr: 4-Bromofluorobenzene | 84.0 | 70-130 | | %Rec | 1 | 10/29/2021 12:52:19 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 290 | 60 | | mg/Kg | 20 | 10/29/2021 5:29:22 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS07
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 2:20:00 PM
**Lab ID:** 2110B24-006 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 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 | 10/28/2021 11:33:35 AM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 10/28/2021 11:33:35 AM |
| Surr: DNOP | 85.7 | 70-130 | | %Rec | 1 | 10/28/2021 11:33:35 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 1:15:37 AM |
| Surr: BFB | 97.9 | 70-130 | | %Rec | 1 | 10/29/2021 1:15:37 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/29/2021 1:15:37 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 1:15:37 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 1:15:37 AM |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 10/29/2021 1:15:37 AM |
| Surr: 4-Bromofluorobenzene | 84.6 | 70-130 | | %Rec | 1 | 10/29/2021 1:15:37 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 290 | 60 | | mg/Kg | 20 | 10/29/2021 5:41:47 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 | 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS08
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 2:40:00 PM
**Lab ID:** 2110B24-007 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 13 | 9.7 | | mg/Kg | 1 | 10/28/2021 11:44:12 AM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 10/28/2021 11:44:12 AM |
| Surr: DNOP | 114 | 70-130 | | %Rec | 1 | 10/28/2021 11:44:12 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 1:38:53 AM |
| Surr: BFB | 97.4 | 70-130 | | %Rec | 1 | 10/29/2021 1:38:53 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/29/2021 1:38:53 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 1:38:53 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 1:38:53 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/29/2021 1:38:53 AM |
| Surr: 4-Bromofluorobenzene | 83.8 | 70-130 | | %Rec | 1 | 10/29/2021 1:38:53 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 360 | 59 | | mg/Kg | 20 | 10/29/2021 5:54:11 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 | 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW06
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 3:00:00 PM
**Lab ID:** 2110B24-008 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 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 | 10/28/2021 11:54:48 AM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 10/28/2021 11:54:48 AM |
| Surr: DNOP | 76.3 | 70-130 | | %Rec | 1 | 10/28/2021 11:54:48 AM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 10/29/2021 2:48:27 AM |
| Surr: BFB | 97.1 | 70-130 | | %Rec | 1 | 10/29/2021 2:48:27 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 2:48:27 AM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 2:48:27 AM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 2:48:27 AM |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 10/29/2021 2:48:27 AM |
| Surr: 4-Bromofluorobenzene | 83.9 | 70-130 | | %Rec | 1 | 10/29/2021 2:48:27 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 110 | 59 | | mg/Kg | 20 | 10/29/2021 6:06:35 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 | 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 | | |

**Analytical Report**
Lab Order **2110B24**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW03
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 3:30:00 PM
**Lab ID:** 2110B24-009 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.3 | | mg/Kg | 1 | 10/28/2021 12:05:23 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 10/28/2021 12:05:23 PM |
| Surr: DNOP | 71.6 | 70-130 | | %Rec | 1 | 10/28/2021 12:05:23 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 10/29/2021 3:11:36 AM |
| Surr: BFB | 94.5 | 70-130 | | %Rec | 1 | 10/29/2021 3:11:36 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 10/29/2021 3:11:36 AM |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 10/29/2021 3:11:36 AM |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 10/29/2021 3:11:36 AM |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 10/29/2021 3:11:36 AM |
| Surr: 4-Bromofluorobenzene | 81.0 | 70-130 | | %Rec | 1 | 10/29/2021 3:11:36 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 220 | 60 | | mg/Kg | 20 | 10/29/2021 6:19:01 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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B24**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **MB-63648** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **63648** RunNo: **82473**

Prep Date: **10/29/2021** Analysis Date: **10/29/2021** SeqNo: **2926254** Units: **mg/Kg**

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

Sample ID: **LCS-63648** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **63648** RunNo: **82473**

Prep Date: **10/29/2021** Analysis Date: **10/29/2021** SeqNo: **2926255** 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 | | | |

Sample ID: **MB-63658** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **63658** RunNo: **82473**

Prep Date: **10/29/2021** Analysis Date: **10/29/2021** SeqNo: **2926286** Units: **mg/Kg**

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

Sample ID: **LCS-63658** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **63658** RunNo: **82473**

Prep Date: **10/29/2021** Analysis Date: **10/29/2021** SeqNo: **2926287** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B24**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **2110B24-004AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FS04** Batch ID: **63615** RunNo: **82434**
Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924924** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 41 | 9.5 | 47.26 | 9.412 | 67.1 | 39.3 | 155 | | | |
| Surr: DNOP | 4.3 | | 4.726 | | 91.2 | 70 | 130 | | | |

Sample ID: **2110B24-004AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **FS04** Batch ID: **63615** RunNo: **82434**
Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924925** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 43 | 9.4 | 47.21 | 9.412 | 70.8 | 39.3 | 155 | 4.02 | 23.4 | |
| Surr: DNOP | 4.3 | | 4.721 | | 90.7 | 70 | 130 | 0 | 0 | |

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**
Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **63615** RunNo: **82434**
Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 70 | 130 | | | |

Sample ID: **LCS-63614** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **63614** RunNo: **82441**
Prep Date: **10/27/2021** Analysis Date: **10/29/2021** SeqNo: **2926599** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 52 | 10 | 50.00 | 0 | 104 | 68.9 | 135 | | | |
| Surr: DNOP | 5.7 | | 5.000 | | 114 | 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 |
| 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#: **2110B24**
***01-Nov-21***

**Client:** Lucid Energy Delaware
**Project:** Juniper 8 inch Lateral 3

Sample ID: **MB-63614** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **63614** RunNo: **82441**
Prep Date: **10/27/2021** Analysis Date: **10/29/2021** SeqNo: **2926600** 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 | | 106 | 70 | 130 | | | |

**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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B24**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **mb-63586** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/29/2021** | SeqNo: **2924585** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

| Sample ID: **lcs-63586** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/28/2021** | SeqNo: **2924586** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B24**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **mb-63586** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/29/2021** | SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

| Sample ID: **LCS-63586** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/28/2021** | SeqNo: **2924636** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B24  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 10:49:13 AM  Sean Livingston

Reviewed By: SCL 10/23/21

## 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 ☐
   Samples not frozen
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: SCL 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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 5 Days

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See remarks


**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. 2110324 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1120 | S | FS02 | | | 001 | X | X | | | | | X | | | |
| | 1200 | | FS05 | | | 002 | X | X | | | | | X | | | |
| | 1300 | | SW01 | | | 003 | X | X | | | | | X | | | |
| | 1400 | | FS04 | | | 004 | X | X | | | | | X | | | |
| | 1410 | | FS03 | | | 005 | X | X | | | | | X | | | |
| | 1420 | | FS07 | | | 006 | X | X | | | | | X | | | |
| | 1440 | | FS08 | | | 007 | X | X | | | | | X | | | |
| | 1500 | | SW06 | | | 008 | X | X | | | | | X | | | |
| ↓ | 1530 | ↓ | SW03 | | | 009 | X | X | | | | | X | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | B. J. Belill | | | 10/22/21 | 1030 |
| 10/22/21 | 1900 | | See carrier | | 10/23/21 | 9:15 |

Remarks:
Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

0.6 ±0
-1.4 ±0
4.9 ±0

Samples not frozen
See 10/23/21

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

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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B26

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/23/2021 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 **2110B26**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW02
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 3:15:00 PM
**Lab ID:** 2110B26-001 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.2 | | mg/Kg | 1 | 10/28/2021 12:58:42 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 10/28/2021 12:58:42 PM |
| Surr: DNOP | 84.6 | 70-130 | | %Rec | 1 | 10/28/2021 12:58:42 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 3:34:47 AM |
| Surr: BFB | 95.3 | 70-130 | | %Rec | 1 | 10/29/2021 3:34:47 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 3:34:47 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 3:34:47 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 3:34:47 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/29/2021 3:34:47 AM |
| Surr: 4-Bromofluorobenzene | 82.2 | 70-130 | | %Rec | 1 | 10/29/2021 3:34:47 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 600 | 60 | | mg/Kg | 20 | 10/29/2021 8:35:33 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 |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B26**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **MB-63658** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926286** Units: **mg/Kg** |

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

| Sample ID: **LCS-63658** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926287** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B26**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 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 |
| 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#: **2110B26**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924585** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

Sample ID: **lcs-63586** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924586** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B26**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

Sample ID: **LCS-63586** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924636** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B26  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 12:06:19 PM  Sean Livingston

Reviewed By: SA 10/23/21

## 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 ☐ |
| | Samples not frozen | | |
| 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: SA 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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: 5 Day

■ Standard ☐ Rush

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See comments


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. 2110824 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1515 | S | SW02 | | | 001 | X | X | | | | | X | | | |

Analysis Request

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | B. J. Belill | | | 10/22/21 | 1030 |
| 10/22/21 | 1900 | | | | 10/23/21 | 9:15 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

0.620 SW 10/23/21
-1.450
4.950
samples not frozen

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

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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B27

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/23/2021 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 **2110B27**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW05
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 4:00:00 PM
**Lab ID:** 2110B27-001 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 10/28/2021 1:09:25 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 10/28/2021 1:09:25 PM |
| Surr: DNOP | 80.3 | 70-130 | | %Rec | 1 | 10/28/2021 1:09:25 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 10/29/2021 3:57:52 AM |
| Surr: BFB | 97.1 | 70-130 | | %Rec | 1 | 10/29/2021 3:57:52 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 3:57:52 AM |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 3:57:52 AM |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 10/29/2021 3:57:52 AM |
| Xylenes, Total | ND | 0.091 | | mg/Kg | 1 | 10/29/2021 3:57:52 AM |
| Surr: 4-Bromofluorobenzene | 83.4 | 70-130 | | %Rec | 1 | 10/29/2021 3:57:52 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 920 | 61 | | mg/Kg | 20 | 10/29/2021 8:47:57 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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B27**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **MB-63658** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926286** Units: **mg/Kg** |

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

| Sample ID: **LCS-63658** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926287** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B27**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 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 |
| 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#: **2110B27**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924585** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

Sample ID: **lcs-63586** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924586** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B27**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **mb-63586** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/29/2021** | SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

| Sample ID: **LCS-63586** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/28/2021** | SeqNo: **2924636** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B27  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 12:09:55 PM  Sean Livingston

Reviewed By: SAC 10/23/21

## 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 ☐
   Samples not frozen
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: SAC 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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: Stand

■ Standard ☐ Rush

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See remarks

**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. 2110827 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1600 | S | SW05 | | | 001 | X | X | | | | | X | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | | | | 10/22/21 | 1030 |
| 10/22/21 | 1900 | | See courier | | 10/23/21 | 9:15 |

Remarks: 0.6 ±0 Samples not frozen

-1.4 ±0 See 10/23/21

4.9 ±0

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

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

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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B28

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/23/2021 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 **2110B28**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS06
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 12:15:00 PM
**Lab ID:** 2110B28-001 **Matrix:** SOIL
**Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.5 | | mg/Kg | 1 | 10/28/2021 1:20:12 PM |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 10/28/2021 1:20:12 PM |
| Surr: DNOP | 85.6 | 70-130 | | %Rec | 1 | 10/28/2021 1:20:12 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 4:20:57 AM |
| Surr: BFB | 95.6 | 70-130 | | %Rec | 1 | 10/29/2021 4:20:57 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 4:20:57 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 4:20:57 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 4:20:57 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/29/2021 4:20:57 AM |
| Surr: 4-Bromofluorobenzene | 82.0 | 70-130 | | %Rec | 1 | 10/29/2021 4:20:57 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 410 | 60 | | mg/Kg | 20 | 10/29/2021 9:25:12 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 |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B28**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **MB-63658** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926286** Units: **mg/Kg** |

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

| Sample ID: **LCS-63658** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926287** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B28**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 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 |
| 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#: **2110B28**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924585** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

Sample ID: **lcs-63586** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924586** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B28**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **mb-63586** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/29/2021** | SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

| Sample ID: **LCS-63586** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/28/2021** | SeqNo: **2924636** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B28  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 12:12:30 PM  Sean Livingston

Reviewed By: SCL 10/23/21

## 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 ☐
   Samples not frozen
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: SCL 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See remarks

**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. 2110B24 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1215 | S | FS06 | | | 001 | X | X | | | | | X | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | | | | 10/22/21 | 1030 |
| 10/22/21 | 1900 | | See courier | | 10/23/21 | 9:15 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

0.6 ±0 = 0.6°C
-1.4 ±0 = -1.4°C
4.9 ±0 = 4.9°C

Samples not frozen
See wlc 3/21

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

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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B29

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/23/2021 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 **2110B29**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** FS01
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 11:00:00 AM
**Lab ID:** 2110B29-001 **Matrix:** SOIL
**Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 10/28/2021 1:30:58 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 10/28/2021 1:30:58 PM |
| Surr: DNOP | 94.5 | 70-130 | | %Rec | 1 | 10/28/2021 1:30:58 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 10/29/2021 4:44:01 AM |
| Surr: BFB | 96.7 | 70-130 | | %Rec | 1 | 10/29/2021 4:44:01 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 10/29/2021 4:44:01 AM |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 10/29/2021 4:44:01 AM |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 10/29/2021 4:44:01 AM |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 10/29/2021 4:44:01 AM |
| Surr: 4-Bromofluorobenzene | 83.9 | 70-130 | | %Rec | 1 | 10/29/2021 4:44:01 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 300 | 60 | | mg/Kg | 20 | 10/29/2021 9:37:37 PM |

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

**Qualifiers:**

| | |
|---|---|
| * | Value exceeds Maximum Contaminant Level. |
| B | Analyte detected in the associated Method Blank |
| D | Sample Diluted Due to Matrix |
| E | 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 |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B29**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **MB-63658** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926286** Units: **mg/Kg** |

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

| Sample ID: **LCS-63658** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63658** | RunNo: **82473** |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926287** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B29**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 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 |
| 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#: **2110B29**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **mb-63586** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/29/2021** | SeqNo: **2924585** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

| Sample ID: **lcs-63586** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **63586** | RunNo: **82415** |
| Prep Date: **10/26/2021** | Analysis Date: **10/28/2021** | SeqNo: **2924586** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B29**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

Sample ID: **LCS-63586** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924636** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B29  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 12:14:20 PM  Sean Livingston

Reviewed By: SGL 10/27/21

## 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 ☐
   Samples not frozen
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: SGL 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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: 5 Days
■ Standard ☐ Rush

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See remarks

**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. 2110829 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1100 | S | FS01 | | | 001 | X | X | | | | | X | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | | | | 10/22/21 | 1030 |
| 10/22/21 | 1900 | | See courier | | 10/23/21 | 9:15 |

Remarks:
Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

0.6 ±0 = 0.6
-1.4 ±0 = 1.4
4.9 ±0 = 4.9

Sample not frozen See 10/23/21

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

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*

November 01, 2021

Michael Gant

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

RE: Juniper 8 inch Lateral 3 OrderNo.: 2110B30

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/23/2021 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 **2110B30**
Date Reported: **11/1/2021**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy Delaware
**Client Sample ID:** SW04
**Project:** Juniper 8 inch Lateral 3
**Collection Date:** 10/18/2021 3:45:00 PM
**Lab ID:** 2110B30-001 **Matrix:** SOIL **Received Date:** 10/23/2021 9:15:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 8.8 | | mg/Kg | 1 | 10/28/2021 1:41:46 PM |
| Motor Oil Range Organics (MRO) | ND | 44 | | mg/Kg | 1 | 10/28/2021 1:41:46 PM |
| Surr: DNOP | 85.5 | 70-130 | | %Rec | 1 | 10/28/2021 1:41:46 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 10/29/2021 10:56:33 AM |
| Surr: BFB | 103 | 70-130 | | %Rec | 1 | 10/29/2021 10:56:33 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 10/29/2021 10:56:33 AM |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 10:56:33 AM |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 10/29/2021 10:56:33 AM |
| Xylenes, Total | ND | 0.094 | | mg/Kg | 1 | 10/29/2021 10:56:33 AM |
| Surr: 4-Bromofluorobenzene | 87.4 | 70-130 | | %Rec | 1 | 10/29/2021 10:56:33 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 1100 | 60 | | mg/Kg | 20 | 10/29/2021 9:50:02 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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2110B30**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

| Sample ID: **MB-63658** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **63658** | RunNo: **82473** | | | | | | | |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926286** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: **LCS-63658** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **63658** | RunNo: **82473** | | | | | | | |
| Prep Date: **10/29/2021** | Analysis Date: **10/29/2021** | SeqNo: **2926287** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.4 | 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 |
| 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#: **2110B30**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **LCS-63615** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924946** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 100 | 68.9 | 135 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.0 | 70 | 130 | | | |

Sample ID: **MB-63615** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **63615** RunNo: **82434**

Prep Date: **10/27/2021** Analysis Date: **10/28/2021** SeqNo: **2924948** 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 | 9.5 | | 10.00 | | 95.4 | 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 |
| 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#: **2110B30**
***01-Nov-21***

**Client:** Lucid Energy Delaware
**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **63586** RunNo: **82415**
Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924585** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 1000 | | 1000 | | 102 | 70 | 130 | | | |

Sample ID: **lcs-63586** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**
Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924586** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 106 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 114 | 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 |
| 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#: **2110B30**

***01-Nov-21***

**Client:** Lucid Energy Delaware

**Project:** Juniper 8 inch Lateral 3

Sample ID: **mb-63586** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/29/2021** SeqNo: **2924635** 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 | 0.87 | | 1.000 | | 87.3 | 70 | 130 | | | |

Sample ID: **LCS-63586** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **63586** RunNo: **82415**

Prep Date: **10/26/2021** Analysis Date: **10/28/2021** SeqNo: **2924636** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.91 | 0.025 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Toluene | 0.92 | 0.050 | 1.000 | 0 | 91.9 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 89.7 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 0.89 | | 1.000 | | 89.0 | 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 |
| 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 Delaware  Work Order Number: 2110B30  RcptNo: 1

Received By: Sean Livingston  10/23/2021 9:15:00 AM  Sean Livingston

Completed By: Sean Livingston  10/23/2021 12:16:29 PM  Sean Livingston

Reviewed By: SLL 10/23/21

## 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 ☐
   Samples not frozen
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: SLL 10/23/21

## 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 | 0.6 | Good | | | | |
| 2 | -1.4 | Good | | | | |
| 3 | 4.9 | 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

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Ben Belill

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See remarks


**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. 2110030 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/18/21 | 1545 | S | SW04 | | | 001 | X | X | | | | | X | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| | | | | | 10/20/21 | 1030 |
| Date: 10/20/21 | Time: 1900 | Relinquished by: | Received by: SGA | Via: UPS | Date: 10/23/21 | Time: 9:45 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

0.6 ±0 sample not frozen
-1.4 ±0 See 10/23/21
4.9 ±0

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

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*

January 07, 2022

Joseph S. Hernandez

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

RE: Juniper 8 Lateral 3 OrderNo.: 2201036

Dear Joseph S. Hernandez:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/4/2022 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS01
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 12:16:00 PM
**Lab ID:** 2201036-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 1/4/2022 6:49:40 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 1/4/2022 6:49:40 PM |
| Surr: DNOP | 80.9 | 70-130 | | %Rec | 1 | 1/4/2022 6:49:40 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 1/4/2022 10:03:53 AM |
| Surr: BFB | 92.8 | 70-130 | | %Rec | 1 | 1/4/2022 10:03:53 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.018 | | mg/Kg | 1 | 1/4/2022 10:03:53 AM |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 1/4/2022 10:03:53 AM |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 1/4/2022 10:03:53 AM |
| Xylenes, Total | ND | 0.072 | | mg/Kg | 1 | 1/4/2022 10:03:53 AM |
| Surr: 4-Bromofluorobenzene | 104 | 70-130 | | %Rec | 1 | 1/4/2022 10:03:53 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 350 | 60 | | mg/Kg | 20 | 1/4/2022 8:27:31 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS01A
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 12:20:00 PM
**Lab ID:** 2201036-002 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 1/4/2022 7:20:55 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 1/4/2022 7:20:55 PM |
| Surr: DNOP | 89.7 | 70-130 | | %Rec | 1 | 1/4/2022 7:20:55 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.2 | | mg/Kg | 1 | 1/4/2022 10:27:25 AM |
| Surr: BFB | 92.1 | 70-130 | | %Rec | 1 | 1/4/2022 10:27:25 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.021 | | mg/Kg | 1 | 1/4/2022 10:27:25 AM |
| Toluene | ND | 0.042 | | mg/Kg | 1 | 1/4/2022 10:27:25 AM |
| Ethylbenzene | ND | 0.042 | | mg/Kg | 1 | 1/4/2022 10:27:25 AM |
| Xylenes, Total | ND | 0.084 | | mg/Kg | 1 | 1/4/2022 10:27:25 AM |
| Surr: 4-Bromofluorobenzene | 104 | 70-130 | | %Rec | 1 | 1/4/2022 10:27:25 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 250 | 60 | | mg/Kg | 20 | 1/4/2022 8:39:55 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS03
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 12:32:00 PM
**Lab ID:** 2201036-003 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 1/4/2022 7:31:20 PM |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 1/4/2022 7:31:20 PM |
| Surr: DNOP | 76.1 | 70-130 | | %Rec | 1 | 1/4/2022 7:31:20 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.3 | | mg/Kg | 1 | 1/4/2022 10:51:16 AM |
| Surr: BFB | 90.6 | 70-130 | | %Rec | 1 | 1/4/2022 10:51:16 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.022 | | mg/Kg | 1 | 1/4/2022 10:51:16 AM |
| Toluene | ND | 0.043 | | mg/Kg | 1 | 1/4/2022 10:51:16 AM |
| Ethylbenzene | ND | 0.043 | | mg/Kg | 1 | 1/4/2022 10:51:16 AM |
| Xylenes, Total | ND | 0.087 | | mg/Kg | 1 | 1/4/2022 10:51:16 AM |
| Surr: 4-Bromofluorobenzene | 101 | 70-130 | | %Rec | 1 | 1/4/2022 10:51:16 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | ND | 60 | | mg/Kg | 20 | 1/4/2022 8:52:19 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS03A
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 12:40:00 PM
**Lab ID:** 2201036-004 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 1/4/2022 7:41:45 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 1/4/2022 7:41:45 PM |
| Surr: DNOP | 79.3 | 70-130 | | %Rec | 1 | 1/4/2022 7:41:45 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 1/4/2022 11:14:50 AM |
| Surr: BFB | 91.9 | 70-130 | | %Rec | 1 | 1/4/2022 11:14:50 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.016 | | mg/Kg | 1 | 1/4/2022 11:14:50 AM |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 1/4/2022 11:14:50 AM |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 1/4/2022 11:14:50 AM |
| Xylenes, Total | ND | 0.065 | | mg/Kg | 1 | 1/4/2022 11:14:50 AM |
| Surr: 4-Bromofluorobenzene | 103 | 70-130 | | %Rec | 1 | 1/4/2022 11:14:50 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | ND | 60 | | mg/Kg | 20 | 1/4/2022 9:29:32 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS04
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 1:27:00 PM
**Lab ID:** 2201036-005 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 1/4/2022 7:52:12 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 1/4/2022 7:52:12 PM |
| Surr: DNOP | 82.1 | 70-130 | | %Rec | 1 | 1/4/2022 7:52:12 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.4 | | mg/Kg | 1 | 1/4/2022 11:38:25 AM |
| Surr: BFB | 94.0 | 70-130 | | %Rec | 1 | 1/4/2022 11:38:25 AM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.017 | | mg/Kg | 1 | 1/4/2022 11:38:25 AM |
| Toluene | ND | 0.034 | | mg/Kg | 1 | 1/4/2022 11:38:25 AM |
| Ethylbenzene | ND | 0.034 | | mg/Kg | 1 | 1/4/2022 11:38:25 AM |
| Xylenes, Total | ND | 0.069 | | mg/Kg | 1 | 1/4/2022 11:38:25 AM |
| Surr: 4-Bromofluorobenzene | 105 | 70-130 | | %Rec | 1 | 1/4/2022 11:38:25 AM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 120 | 60 | | mg/Kg | 20 | 1/4/2022 9:41:57 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 **2201036**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS04A
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/29/2021 1:30:00 PM
**Lab ID:** 2201036-006 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 1/4/2022 8:02:39 PM |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 1/4/2022 8:02:39 PM |
| Surr: DNOP | 80.2 | 70-130 | | %Rec | 1 | 1/4/2022 8:02:39 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.9 | | mg/Kg | 1 | 1/4/2022 12:01:58 PM |
| Surr: BFB | 96.5 | 70-130 | | %Rec | 1 | 1/4/2022 12:01:58 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.019 | | mg/Kg | 1 | 1/4/2022 12:01:58 PM |
| Toluene | ND | 0.039 | | mg/Kg | 1 | 1/4/2022 12:01:58 PM |
| Ethylbenzene | ND | 0.039 | | mg/Kg | 1 | 1/4/2022 12:01:58 PM |
| Xylenes, Total | ND | 0.078 | | mg/Kg | 1 | 1/4/2022 12:01:58 PM |
| Surr: 4-Bromofluorobenzene | 107 | 70-130 | | %Rec | 1 | 1/4/2022 12:01:58 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 75 | 60 | | mg/Kg | 20 | 1/4/2022 9:54:21 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 | | |

# QC SUMMARY REPORT
## Hall Environmental Analysis Laboratory, Inc.

WO#: **2201036**
***07-Jan-22***

**Client:** Lucid Energy
**Project:** Juniper 8 Lateral 3

| Sample ID: **MB-64847** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **64847** | RunNo: **84950** | | | | | | | |
| Prep Date: **1/4/2022** | Analysis Date: **1/4/2022** | SeqNo: **2988853** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: **LCS-64847** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **64847** | RunNo: **84950** | | | | | | | |
| Prep Date: **1/4/2022** | Analysis Date: **1/4/2022** | SeqNo: **2988854** | Units: **mg/Kg** | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.3 | 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#: **2201036**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **2201036-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **SS01** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988427** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 44 | 9.9 | 49.60 | 6.205 | 76.3 | 39.3 | 155 | | | |
| Surr: DNOP | 4.2 | | 4.960 | | 84.6 | 70 | 130 | | | |

Sample ID: **2201036-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **SS01** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988428** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 48 | 9.8 | 48.83 | 6.205 | 86.5 | 39.3 | 155 | 9.49 | 23.4 | |
| Surr: DNOP | 3.8 | | 4.883 | | 78.5 | 70 | 130 | 0 | 0 | |

Sample ID: **LCS-64835** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988438** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 42 | 10 | 50.00 | 0 | 84.1 | 68.9 | 135 | | | |
| Surr: DNOP | 4.1 | | 5.000 | | 82.3 | 70 | 130 | | | |

Sample ID: **MB-64835** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988439** 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 | 8.4 | | 10.00 | | 84.1 | 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#: **2201036**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988058** 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 | 920 | | 1000 | | 92.1 | 70 | 130 | | | |

Sample ID: **lcs-64822** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988059** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 23 | 5.0 | 25.00 | 0 | 92.0 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 106 | 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#: **2201036**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988080** 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 | | 103 | 70 | 130 | | | |

Sample ID: **LCS-64822** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988081** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.90 | 0.025 | 1.000 | 0 | 90.5 | 80 | 120 | | | |
| Toluene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 91.1 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 90.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 106 | 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: 2201036 | RcptNo: 1

Received By: Isaiah Ortiz 1/4/2022 7:28:00 AM

Completed By: Isaiah Ortiz 1/4/2022 7:45:22 AM

Reviewed By: DAD 1/4/22

## 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: JR 1/4/22

## 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 | 1.1 | Good | Not Present | | | |

# 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 24HR

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Joseph Hernandez

Sampler: Ben Belill

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.1°C ±0

**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. 2201036 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/29/21 | 1216 | S | SS01 | JAR/0.5' | N/A | 001 | ■ | ■ | | | | | ■ | | | |
| 12/29/21 | 1220 | S | SS01A | JAR/1' | N/A | 002 | ■ | ■ | | | | | ■ | | | |
| 12/29/21 | 1232 | S | SS03 | JAR/0.5' | N/A | 003 | ■ | ■ | | | | | ■ | | | |
| 12/29/21 | 1240 | S | SS03A | JAR/1' | N/A | 004 | ■ | ■ | | | | | ■ | | | |
| 12/29/21 | 1327 | S | SS04 | JAR/0.5' | N/A | 005 | ■ | ■ | | | | | ■ | | | |
| 12/29/21 | 1330 | S | SS04A | JAR/1' | N/A | 006 | ■ | ■ | | | | | ■ | | | |

| Date | Time | Relinquished by | Received by | Via | Date | Time |
|---|---|---|---|---|---|---|
| 1/3/22 | 1100 | | | | 1/3/22 | 1100 |
| 1/3/22 | 1900 | | | courier | 1/4/22 | 0728 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

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

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*

January 07, 2022

Joseph S. Hernandez

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

RE: Juniper 8 Lateral 3 OrderNo.: 2201037

Dear Joseph S. Hernandez:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/4/2022 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 **2201037**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS02
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/30/2021 11:30:00 AM
**Lab ID:** 2201037-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.2 | | mg/Kg | 1 | 1/4/2022 8:13:06 PM |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 1/4/2022 8:13:06 PM |
| Surr: DNOP | 81.4 | 70-130 | | %Rec | 1 | 1/4/2022 8:13:06 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.0 | | mg/Kg | 1 | 1/4/2022 12:25:35 PM |
| Surr: BFB | 91.3 | 70-130 | | %Rec | 1 | 1/4/2022 12:25:35 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.020 | | mg/Kg | 1 | 1/4/2022 12:25:35 PM |
| Toluene | ND | 0.040 | | mg/Kg | 1 | 1/4/2022 12:25:35 PM |
| Ethylbenzene | ND | 0.040 | | mg/Kg | 1 | 1/4/2022 12:25:35 PM |
| Xylenes, Total | ND | 0.080 | | mg/Kg | 1 | 1/4/2022 12:25:35 PM |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %Rec | 1 | 1/4/2022 12:25:35 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 110 | 60 | | mg/Kg | 20 | 1/4/2022 10:06:45 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 **2201037**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SS02A
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/30/2021 11:40:00 AM
**Lab ID:** 2201037-002 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | 10 | 9.0 | | mg/Kg | 1 | 1/4/2022 8:23:34 PM |
| Motor Oil Range Organics (MRO) | ND | 45 | | mg/Kg | 1 | 1/4/2022 8:23:34 PM |
| Surr: DNOP | 79.4 | 70-130 | | %Rec | 1 | 1/4/2022 8:23:34 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 1/4/2022 12:49:17 PM |
| Surr: BFB | 94.7 | 70-130 | | %Rec | 1 | 1/4/2022 12:49:17 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.017 | | mg/Kg | 1 | 1/4/2022 12:49:17 PM |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 1/4/2022 12:49:17 PM |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 1/4/2022 12:49:17 PM |
| Xylenes, Total | ND | 0.066 | | mg/Kg | 1 | 1/4/2022 12:49:17 PM |
| Surr: 4-Bromofluorobenzene | 106 | 70-130 | | %Rec | 1 | 1/4/2022 12:49:17 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | ND | 60 | | mg/Kg | 20 | 1/4/2022 10:19:10 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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2201037**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

| Sample ID: **MB-64847** | SampType: **mblk** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **64847** | RunNo: **84950** |
| Prep Date: **1/4/2022** | Analysis Date: **1/4/2022** | SeqNo: **2988853** Units: **mg/Kg** |

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

| Sample ID: **LCS-64847** | SampType: **lcs** | TestCode: **EPA Method 300.0: Anions** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **64847** | RunNo: **84950** |
| Prep Date: **1/4/2022** | Analysis Date: **1/4/2022** | SeqNo: **2988854** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.3 | 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#: **2201037**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **LCS-64835** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988438** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 42 | 10 | 50.00 | 0 | 84.1 | 68.9 | 135 | | | |
| Surr: DNOP | 4.1 | | 5.000 | | 82.3 | 70 | 130 | | | |

Sample ID: **MB-64835** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988439** 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 | 8.4 | | 10.00 | | 84.1 | 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#: **2201037**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988058** 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 | 920 | | 1000 | | 92.1 | 70 | 130 | | | |

Sample ID: **lcs-64822** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988059** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 23 | 5.0 | 25.00 | 0 | 92.0 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 106 | 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#: **2201037**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988080** 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 | | 103 | 70 | 130 | | | |

Sample ID: **LCS-64822** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988081** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.90 | 0.025 | 1.000 | 0 | 90.5 | 80 | 120 | | | |
| Toluene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 91.1 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 90.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 106 | 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: 2201037 | RcptNo: 1

Received By: Isaiah Ortiz 1/4/2022 7:28:00 AM I-04

Completed By: Isaiah Ortiz 1/4/2022 7:52:22 AM I-04

Reviewed By: DAD 1/4/22
DAD 1/4/22

## 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: JR 1/4/22

## 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 | 1.1 | Good | Not Present | | | |

# 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 24HR

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Joseph Hernandez

Sampler: Ben Belill

On Ice: ■ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.1 ± 0


**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. 2201037 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/30/21 | 1130 | S | SS02 | JAR/0.5' | N/A | 001 | ■ | ■ | | | | | ■ | | | |
| 12/30/21 | 1140 | S | SS02A | JAR/1' | N/A | 002 | ■ | ■ | | | | | ■ | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 1/3/22 | 1100 | | | | 1/3/22 | 1100 |
| 1/3/22 | 1900 | | | | Date | Time |
| | | | | courier | 1/4/22 | 0728 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

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

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*

January 07, 2022

Joseph S. Hernandez

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

RE: Juniper 8 Lateral 3 OrderNo.: 2201038

Dear Joseph S. Hernandez:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/4/2022 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 **2201038**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SW07
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/28/2021 2:35:00 PM
**Lab ID:** 2201038-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.3 | | mg/Kg | 1 | 1/4/2022 8:34:08 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 1/4/2022 8:34:08 PM |
| Surr: DNOP | 80.6 | 70-130 | | %Rec | 1 | 1/4/2022 8:34:08 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 3.8 | | mg/Kg | 1 | 1/4/2022 1:36:46 PM |
| Surr: BFB | 94.6 | 70-130 | | %Rec | 1 | 1/4/2022 1:36:46 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.019 | | mg/Kg | 1 | 1/4/2022 1:36:46 PM |
| Toluene | ND | 0.038 | | mg/Kg | 1 | 1/4/2022 1:36:46 PM |
| Ethylbenzene | ND | 0.038 | | mg/Kg | 1 | 1/4/2022 1:36:46 PM |
| Xylenes, Total | ND | 0.075 | | mg/Kg | 1 | 1/4/2022 1:36:46 PM |
| Surr: 4-Bromofluorobenzene | 105 | 70-130 | | %Rec | 1 | 1/4/2022 1:36:46 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 360 | 60 | | mg/Kg | 20 | 1/4/2022 10:31:35 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 **2201038**
Date Reported: **1/7/2022**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Lucid Energy **Client Sample ID:** SW08
**Project:** Juniper 8 Lateral 3 **Collection Date:** 12/28/2021 2:45:00 PM
**Lab ID:** 2201038-002 **Matrix:** MEOH (SOIL) **Received Date:** 1/4/2022 7:28:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **SB** |
| Diesel Range Organics (DRO) | ND | 9.5 | | mg/Kg | 1 | 1/4/2022 8:44:47 PM |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 1/4/2022 8:44:47 PM |
| Surr: DNOP | 79.4 | 70-130 | | %Rec | 1 | 1/4/2022 8:44:47 PM |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** |
| Gasoline Range Organics (GRO) | ND | 4.0 | | mg/Kg | 1 | 1/4/2022 2:00:39 PM |
| Surr: BFB | 98.8 | 70-130 | | %Rec | 1 | 1/4/2022 2:00:39 PM |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** |
| Benzene | ND | 0.020 | | mg/Kg | 1 | 1/4/2022 2:00:39 PM |
| Toluene | ND | 0.040 | | mg/Kg | 1 | 1/4/2022 2:00:39 PM |
| Ethylbenzene | ND | 0.040 | | mg/Kg | 1 | 1/4/2022 2:00:39 PM |
| Xylenes, Total | ND | 0.079 | | mg/Kg | 1 | 1/4/2022 2:00:39 PM |
| Surr: 4-Bromofluorobenzene | 108 | 70-130 | | %Rec | 1 | 1/4/2022 2:00:39 PM |
| **EPA METHOD 300.0: ANIONS** | | | | | | Analyst: **CAS** |
| Chloride | 200 | 60 | | mg/Kg | 20 | 1/5/2022 12:23:14 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 | | |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2201038**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **MB-64847** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **64847** RunNo: **84950**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988853** Units: **mg/Kg**

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

Sample ID: **LCS-64847** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **64847** RunNo: **84950**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988854** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.3 | 90 | 110 | | | |

Sample ID: **MB-64852** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **64852** RunNo: **84950**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988889** Units: **mg/Kg**

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

Sample ID: **LCS-64852** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **64852** RunNo: **84950**

Prep Date: **1/4/2022** Analysis Date: **1/5/2022** SeqNo: **2988890** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.7 | 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#: **2201038**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **LCS-64835** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988438** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 42 | 10 | 50.00 | 0 | 84.1 | 68.9 | 135 | | | |
| Surr: DNOP | 4.1 | | 5.000 | | 82.3 | 70 | 130 | | | |

Sample ID: **MB-64835** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64835** RunNo: **84921**

Prep Date: **1/4/2022** Analysis Date: **1/4/2022** SeqNo: **2988439** 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 | 8.4 | | 10.00 | | 84.1 | 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#: **2201038**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988058** 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 | 920 | | 1000 | | 92.1 | 70 | 130 | | | |

Sample ID: **lcs-64822** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988059** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 23 | 5.0 | 25.00 | 0 | 92.0 | 78.6 | 131 | | | |
| Surr: BFB | 1100 | | 1000 | | 106 | 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#: **2201038**

***07-Jan-22***

**Client:** Lucid Energy

**Project:** Juniper 8 Lateral 3

Sample ID: **mb-64822** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988080** 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 | | 103 | 70 | 130 | | | |

Sample ID: **LCS-64822** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **64822** RunNo: **84937**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2988081** Units: **mg/Kg**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.90 | 0.025 | 1.000 | 0 | 90.5 | 80 | 120 | | | |
| Toluene | 0.91 | 0.050 | 1.000 | 0 | 90.8 | 80 | 120 | | | |
| Ethylbenzene | 0.91 | 0.050 | 1.000 | 0 | 91.1 | 80 | 120 | | | |
| Xylenes, Total | 2.7 | 0.10 | 3.000 | 0 | 90.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 106 | 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: 2201038 | RcptNo: 1

Received By: Isaiah Ortiz 1/4/2022 7:28:00 AM I-Ox

Completed By: Isaiah Ortiz 1/4/2022 8:01:33 AM I-Ox

Reviewed By: DAD 1/4/22

## 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: JR 1/4/22

## 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 | 1.1 | Good | Not Present | | | |

# 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 24HR

Project Name: Juniper 8" Lateral #3

Project #: 31403665.000

Project Manager: Joseph Hernandez

Sampler: Ben Belill

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.1°C ±0

**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. 2201038 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/28/21 | 1435 | S | SW07 | JAR/0-7' | N/A | 001 | ■ | ■ | | | | | ■ | | | |
| 12/28/21 | 1445 | S | SW08 | JAR/0-7' | N/A | 002 | ■ | ■ | | | | | ■ | | | |

| Date: | Time: | Relinquished by: | Received by: | Via: | Date | Time |
|---|---|---|---|---|---|---|
| 1/3/22 | 1100 | | | | 1/3/22 | 1100 |
| 1/3/22 | 1900 | | | courier | 1/4/22 | 0728 |

Remarks:

Direct bill to Lucid Energy
AFE 300080
Prop # 195211000
Company # 860

Send confirmation and lab report to joe.hernandez@wsp.com & ben.belill@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 82688

## CONDITIONS

| | |
|---|---|
| Operator:<br>LUCID ENERGY DELAWARE, LLC<br>201 S. Fourth Street<br>Artesia, NM 88210 | OGRID:<br>372422 |
| | Action Number:<br>82688 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| chensley | Closure approved. | 3/21/2022 |