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-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
☐ Below grade tank registration
☐ Permit of a pit or proposed alternative method
BGT1 Closure Report ☒ Closure of a pit, below-grade tank, or proposed alternative method
☐ Modification to an existing permit/or registration
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Hilcorp Energy Company OGRID #: 372171
Address: 382 Road 3100 Aztec, NM 87410
Facility or well name: J F Bell 2
API Number: 30-045-11809 OCD Permit Number:
U/L or Qtr/Qtr B Section 03 Township 30N Range 13W County: San Juan
Center of Proposed Design: Latitude 36.8459 Longitude -108.18848 NAD83
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Metal
☐ Secondary containment with leak detection ☒ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☒ Other Unspecified

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*
☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify_____

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter) Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature:_____ Date: _____

e-mail address:_____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure ~~Plan~~ Report (only) ☒ OCD Conditions (see attachment)

OCD Representative Signature: Jaclyn Burdine **Approval Date:** 07/22/2022

Title: Environmental Specialist-A **OCD Permit Number:** BGT1

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date: 2/2/2022**

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☒ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☒ Soil Backfilling and Cover Installation
- ☒ Re-vegetation Application Rates and Seeding Technique
- ☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Amanda Walker Title: Operations/Regulatory Technician – Sr

Signature: Date: 4/29/2022

e-mail address: mwalker@hilcorp.com Telephone: (346) 237-2177

Hilcorp Energy Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name: J F Bell 2
API No.: 30-045-11809

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan:

1. HILCORP shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, HILCORP will file the C144 Closure Report as required.

   The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.

2. HILCORP shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

   All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

3. HILCORP will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

   The below-grade tank was disposed of in a division-approved manner.

4. If there is any on-site equipment associated with a below-grade tank, then HILCORP shall remove the equipment, unless the equipment is required for some other purpose.

   All on-site equipment associated with the below-grade tank was removed.

5. HILCORP will test the soils beneath the below-grade tank to determine whether a release has occurred. HILCORP shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. Hilcorp shall notify the division of its results on form C-141.

4/29/2022

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.0	250

6. If HILCORP or the division determines that a release has occurred, then HILCORP shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

   A release was determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then HILCORP shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

   The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
   i. Operator's name
   ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

   Notification is attached.

9. The surface owner shall be notified of HILCORP's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

   The closure process notification to the landowner was sent via email. (See Attached) (Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

    The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. HILCORP shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Hilcorp will repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

    The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
    - Soil Backfilling and Cover Installation (See Report)
    - Re-vegetation application rates and seeding techniques (See Report)
    - Photo documentation of the site reclamation (Pending Final C-141)
    - Confirmation Sampling Results (Included as an attachment)
    - Proof of closure notice (Included as an attachment)

Mandi Walker

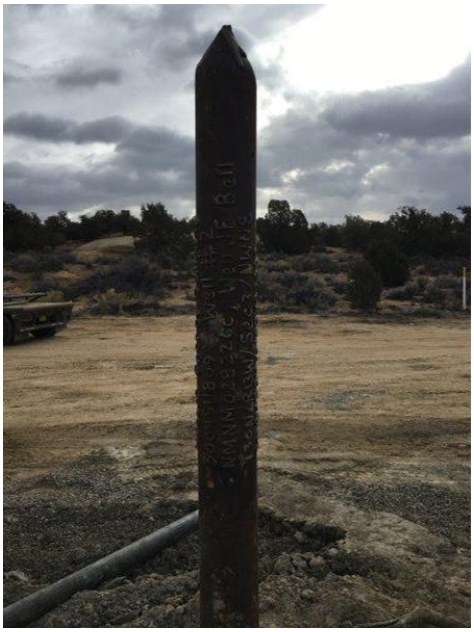
From:	Mandi Walker
Sent:	Thursday, February 17, 2022 6:49 AM
To:	Ben Mitchell; Bobby Spearman; Chad Perkins; Venegas, Victoria, EMNRD; Kandis Roland; Kurt Hoekstra; l1thomas@blm.gov; Mandi Walker; Mitch Killough; Clara Cardoza; Ryan Joyner
Cc:	OCD Enviro; Joey Becker
Subject:	J F Bell 2 - 3004511809 - 72HR CLOSURE NOTICE
Attachments:	30045118090000_JF Bell 2_BGT Permit_OCD Appvd.pdf
Follow Up Flag:	Follow up
Due By:	Monday, April 18, 2022 3:00 PM
Flag Status:	Flagged

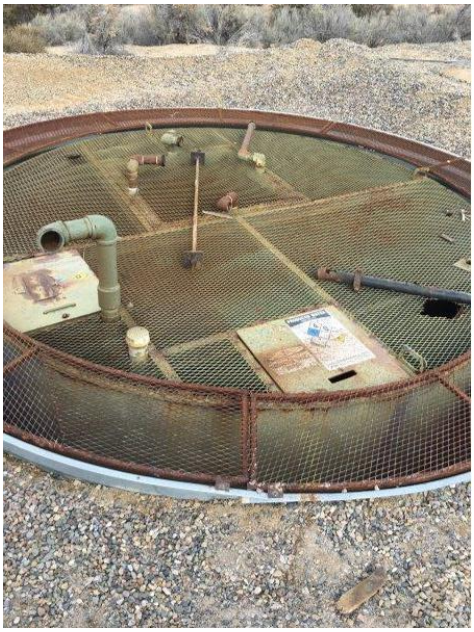
The subject well has a below-grade tank that will begin the closure process between 72 hours and one week from this notification. Please contact me at any time if you have any questions or concerns.

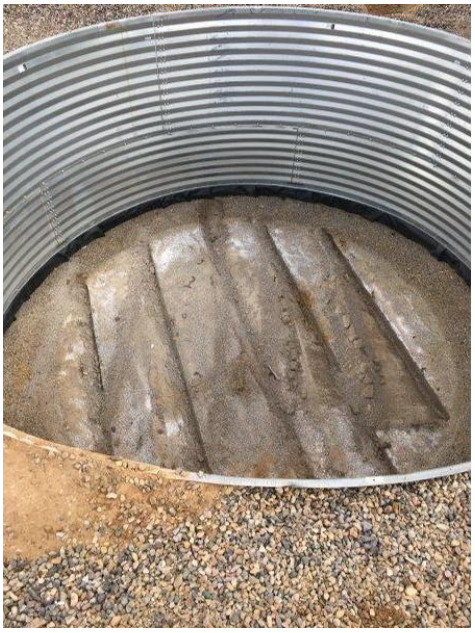
Well Name: J F Bell 2
API#: 30-045-11809
Location: B, 3, 30N, 13W
Footages: 1050' FNL & 1620' FEL
Operator: HEC *Permitted by XTO*
Surface Owner: Federal *Not in SDA Closure*
Scheduled Date & Time of Start: Tuesday 2/22/22 @ 9 am

Please Note Required Photos for Closure
Well site placard
Photos of the BGT prior to closure
The sample location or, more preferred, photos of actual sample collection
Final state of the area after closure.
Photos will require captioning including direction of photo, date and time of photo and a description of the image contents.

Mandi Walker
San Juan North/South (6,7) Regulatory Technician
Hilcorp Energy
346.237.2177
mwalker@hilcorp.com







Photos taken 2/22/2022 @ 9am

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Mitch Killough	Contact Telephone 713-757-5247
Contact email mkillough@hilcorp.com	Incident #
Contact mailing address 1111 Travis Street, Houston, Texas 77002	

Location of Release Source

Latitude 36.8459015 Longitude -108.188446

(NAD 83 in decimal degrees to 5 decimal places)

Site Name J F Bell No. 2	Site Type Well
Date Release Discovered: 4/21/2022 @ 03:52pm (MT) – *Date of Hall Environmental Analytical Laboratory report*	API# 30-045-11809

Unit Letter	Section	Township	Range	County
B	03	30N	13W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private

Nature and Volume of Release

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

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

Cause of Release:
Historical release discovered during the permanent removal of a below-grade tank (BGT). Refer to attached memo (dated 4/22/2022) for additional information.

Per the memo attached, additional delineation attempts will be made in order to develop a better understanding of the probable release amount. However, at this time, more information is needed before determining if this potential release is considered minor or major. All future work on this project will be carried out in accordance with 19.15.29 NMAC.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name: Mitch Killough Title: Environmental Specialist

Signature: _____ Date: 04/22/2022

email: mkillough@hilcorp.com Telephone: 713-757-5247

OCD Only

Received by: _____ Date: _____

Memorandum

To: Victoria Venegas / Nelson Velez, New Mexico Oil Conservation Division (NMOCD)

From: Mitch Killough, Hilcorp Energy Company (Hilcorp)

Date: 4/22/2022

Subject: J F Bell 2 – Permanent Closure of a Below-Grade Tank (BGT)

On 2/17/2022, Hilcorp submitted a 72-hour notice prior to the permanent closure of a BGT at the J F Bell No. 2, San Juan County, New Mexico. As required by Condition 7 *(found in the Closure Plan, received by the NMOCD on 1/20/2009)*, Hilcorp personnel proceeded to collect a 5-pt composite soil sample on 2/22/2022 to determine if any contaminant concentrations exceeded the BGT closure criteria thresholds, per Condition 7. Upon receiving analytical results on 3/7/2022, Hilcorp determined that chlorides and total petroleum hydrocarbons (TPH) exceeded the BGT closure criteria thresholds shown in Condition 7 of the closure plan. Thus, indicating that a potential release occurred (refer to table below). In addition, TPH exceeded the Closure Criteria for Soils Beneath Below-Grade Tanks listed in Table I of 19.15.17.13 NMAC for groundwater depths (≤50 ft).

SOIL ANALYTICAL RESULTS
JF BELL 2
HILCORP ENERGY COMPANY - L48 WEST

Soil Sample Identification	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	GRO+DRO (mg/kg)	TPH (mg/kg)
BGT Base	2/22/2022	<0.025	<0.050	<0.050	<0.099	<0.224	380	<5.0	10	130	<15.0	<145.0
NMOCD BGT Closure Criteria		**0.2**	**NE**	**NE**	**NE**	**50**	**250**	**NE**	**NE**	**NE**	**NE**	**100**
Table I - 19.15.17.13 (≤50 feet)		**10**	**NE**	**NE**	**NE**	**50**	**600**	**NE**	**NE**	**NE**	**NE**	**100**

Upon approval from NMOCD on 3/23/2022, Hilcorp commenced delineation activities to determine if the volume of impacted soils was at or below 12 yards. Between 3/25/2022 and 4/8/2022, Ensolum, LLC attempted to delineate the soils immediately adjacent and beneath the former BGT location specifically for TPH and chlorides. However, upon receiving the latest analytical report (dated 4/21/2022), Hilcorp determined that the soils were yet to be delineated and impacted soils were greater than 12 yards in volume.

In light of the latest lab results, Hilcorp is submitting this C-141 to notify the NMOCD of the results. As previously discussed with Nelson Velez on 4/21/2022, Hilcorp will commence additional delineation activities under 19.15.29 NMAC.

Enclosures: Table #1 – Delineation Soil Sample Analytical Results
Hall Lab Reports (dated 3/7/2022, 3/31/2022, 4/21/2022)

Hilcorp Energy Company
1111 Travis Street, Houston, Texas 77002
T 713.209.2400 F 713.289.2750

ENSOLUM

TABLE #1
DELINEATION SOIL SAMPLE ANALYTICAL RESULTS
Hilcorp - Bell JF #2
San Juan County, NM

Ensolum Project No. 07A1988032

Sample Identification	Sample Date	Sample Depth (feet bgs)(1)	Sample Depth (feet bgs)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release (Groundwater <50 feet)				NE	NE	NE	**100**	**600**
Delineation Soil Sample Analytical Results								
N 0-0.5	3/25/2022	6.5 - 7	0 - 0.5	<4.9	18	550	**568**	<60
N 1-1.5	3/25/2022	7.5 - 8	1 - 1.5	<4.9	19	540	**559**	<60
N@3-3.5'	4/8/2022	9.5 - 10	3 - 3.5	<5.0	13	89	**102**	<61
W 0-0.5	3/25/2022	6.5 - 7	0 - 0.5	<4.9	<9.9	<49	<49	<60
W 1-1.5	3/25/2022	7.5 - 8	1 - 1.5	<4.9	<9.8	<49	<49	<60
W@3-3.5'	4/8/2022	9.5 - 10	3 - 3.5	<4.6	10	<48	10	<61
S 0-0.5	3/25/2022	6.5 - 7	0 - 0.5	<4.9	11	130	**141**	<60
S 1-1.5	3/25/2022	7.5 - 8	1 - 1.5	<5.0	<9.7	71	71	<60
S@3.5-4'	4/8/2022	10 - 10.5	3.5 - 4	<4.7	9.7	53	63	<60
E 0-0.5	3/25/2022	6.5 - 7	0 - 0.5	<4.9	10	150	**160**	<59
E 1-1.5	3/25/2022	7.5 - 8	1 - 1.5	<4.9	28	310	**338**	<60
C 0-0.5	3/25/2022	6.5 - 7	0 - 0.5	<4.8	<9.7	100	**100**	**1,100**
C 1-1.5	3/25/2022	7.5 - 8	1 - 1.5	<4.9	11	140	**151**	**1,300**
C@3.5-4'	4/8/2022	10 - 10.5	3.5 - 4	<25	95	149	**244**	**640**
BH01@0-6"	4/8/2022	6.5 - 7	0 - 0.5	<5.0	14	97	**111**	280
BH01@1-1.5'	4/8/2022	7.5 - 8	1 - 1.5	<4.8	11	61	72	570
TP01@7'	4/8/2022	7	7	<4.8	<9.0	<45	<45	<60
TP01@10'	4/8/2022	10	10	<4.7	<9.3	<46	<46	<60
TP02@7'	4/8/2022	7	7	<4.9	<9.9	<49	<49	<60
TP02@10'	4/8/2022	10	10	<4.8	<9.6	<48	<48	<60

Notes:

(1): Samples "N", "W", "S", "E", and "C" were collected from below the former below grade tank. Starting elevation of these locations is approximately 6.5 feet below surface grade.

bgs: below ground surface

mg/kg: milligrams per kilogram

NE: Not Established

NMOCD: New Mexico Oil Conservation Division

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

<0.037: indicates result less than the stated laboratory reporting limit (RL)

*Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table 1 Closure Criteria for Soils Impacted by a Release*

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 07, 2022

Mitch Killough

Hilcorp Energy
PO Box 61529
Houston, TX 77208-1529
TEL: (337) 276-7676
FAX:

RE: JF Bell 2 OrderNo.: 2202A49

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/23/2022 for the analyses presented in the following report.

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

Please don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2202A49**
Date Reported: **3/7/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Hilcorp Energy
Client Sample ID: BGT Base
Project: JF Bell 2
Collection Date: 2/22/2022 9:30:00 AM
Lab ID: 2202A49-001 **Matrix:** SOIL **Received Date:** 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	380	60		mg/Kg	20	3/2/2022 3:20:54 AM	65883
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	10	9.9		mg/Kg	1	2/28/2022 8:02:51 PM	65780
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	2/28/2022 8:02:51 PM	65780
Surr: DNOP	107	51.1-141		%Rec	1	2/28/2022 8:02:51 PM	65780
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 10:00:41 PM	65768
Surr: BFB	109	70-130		%Rec	1	2/25/2022 10:00:41 PM	65768
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	2/25/2022 10:00:41 PM	65768
Toluene	ND	0.050		mg/Kg	1	2/25/2022 10:00:41 PM	65768
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 10:00:41 PM	65768
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2022 10:00:41 PM	65768
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/25/2022 10:00:41 PM	65768

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#: **2202A49**

07-Mar-22

Client: Hilcorp Energy

Project: JF Bell 2

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

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

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

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

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#: **2202A49**

07-Mar-22

Client: Hilcorp Energy

Project: JF Bell 2

Sample ID: **lcs-65768** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **65768** RunNo: **86121**

Prep Date: **2/23/2022** Analysis Date: **2/25/2022** SeqNo: **3034389** 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	1200		1000		122	70	130			

Sample ID: **mb-65768** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **65768** RunNo: **86121**

Prep Date: **2/23/2022** Analysis Date: **2/25/2022** SeqNo: **3034391** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		111	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#: **2202A49**
07-Mar-22

Client: Hilcorp Energy
Project: JF Bell 2

Sample ID: **LCS-65768** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **65768** RunNo: **86121**
Prep Date: **2/23/2022** Analysis Date: **2/25/2022** SeqNo: **3034455** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: **mb-65768** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **65768** RunNo: **86121**
Prep Date: **2/23/2022** Analysis Date: **2/25/2022** SeqNo: **3034457** 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		101	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: Hilcorp Energy | Work Order Number: 2202A49 | RcptNo: 1

Received By: Tracy Casarrubias 2/23/2022 7:45:00 AM

Completed By: Tracy Casarrubias 2/23/2022 8:59:34 AM

Reviewed By: IO 02/23/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
5. Sample(s) in proper container(s)? Samples Not Frozen. 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: _____

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	Yes			

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #: 505-486-9543

email or Fax#: mkillough@hilcorp.com

QA/QC Package: Rhoekstra@hilcorp.com

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: → 5 day Turn

☒ Standard ☐ Rush

Project Name: JF BELL #2

Project #:

Project Manager: Mitch Killough

Sampler: KURT

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(Including CF): -1.1-0=-1.1 (°C)

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. 2202A49	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)	CHLORIDE 300.0
2-22	9:30	SS	BGT BASE	(1) 4oz Jar	ON ICE	001	X	X									X

Analysis Request

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
2-22	1515					
2/22/22	1747				2/23/22	7:45

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: www.hallenvironmental.com

March 31, 2022

Mitch Killough
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX

RE: Bell JF 2 OrderNo.: 2203E14

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/26/2022 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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: N0-0.5
Project: Bell JF 2
Collection Date: 3/25/2022 11:05:00 AM
Lab ID: 2203E14-001 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	3/29/2022 1:08:21 PM
Motor Oil Range Organics (MRO)	550	49		mg/Kg	1	3/29/2022 1:08:21 PM
Surr: DNOP	83.6	51.1-141		%Rec	1	3/29/2022 1:08:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 12:02:00 PM
Surr: BFB	98.0	37.7-212		%Rec	1	3/28/2022 12:02:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 11:08:37 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** N1-1.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:08:00 AM
Lab ID: 2203E14-002 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	19	9.6		mg/Kg	1	3/29/2022 1:52:32 PM
Motor Oil Range Organics (MRO)	540	48		mg/Kg	1	3/29/2022 1:52:32 PM
Surr: DNOP	87.7	51.1-141		%Rec	1	3/29/2022 1:52:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 12:21:00 PM
Surr: BFB	98.5	37.7-212		%Rec	1	3/28/2022 12:21:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 11:21:01 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** W0-0.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:10:00 AM
Lab ID: 2203E14-003 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/29/2022 10:25:20 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/29/2022 10:25:20 AM
Surr: DNOP	92.8	51.1-141		%Rec	1	3/29/2022 10:25:20 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 12:41:00 PM
Surr: BFB	95.0	37.7-212		%Rec	1	3/28/2022 12:41:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 11:33:25 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** W1-1.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:13:00 AM
Lab ID: 2203E14-004 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/28/2022 6:10:20 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/28/2022 6:10:20 PM
Surr: DNOP	100	51.1-141		%Rec	1	3/28/2022 6:10:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 1:01:00 PM
Surr: BFB	96.1	37.7-212		%Rec	1	3/28/2022 1:01:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 11:45:50 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: S0-0.5
Project: Bell JF 2
Collection Date: 3/25/2022 11:16:00 AM
Lab ID: 2203E14-005 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	11	9.7		mg/Kg	1	3/28/2022 6:21:03 PM
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	3/28/2022 6:21:03 PM
Surr: DNOP	104	51.1-141		%Rec	1	3/28/2022 6:21:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 1:20:00 PM
Surr: BFB	94.6	37.7-212		%Rec	1	3/28/2022 1:20:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 11:58:14 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: S1-1.5
Project: Bell JF 2
Collection Date: 3/25/2022 11:18:00 AM
Lab ID: 2203E14-006 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/29/2022 10:54:48 AM
Motor Oil Range Organics (MRO)	71	48		mg/Kg	1	3/29/2022 10:54:48 AM
Surr: DNOP	92.2	51.1-141		%Rec	1	3/29/2022 10:54:48 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/28/2022 1:40:00 PM
Surr: BFB	103	37.7-212		%Rec	1	3/28/2022 1:40:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 12:10:38 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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** E0-0.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:21:00 AM
Lab ID: 2203E14-007 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	10	9.6		mg/Kg	1	3/28/2022 6:42:35 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	3/28/2022 6:42:35 PM
Surr: DNOP	105	51.1-141		%Rec	1	3/28/2022 6:42:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 2:00:00 PM
Surr: BFB	99.0	37.7-212		%Rec	1	3/28/2022 2:00:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	59		mg/Kg	20	3/29/2022 12:23:03 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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** E1-1.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:24:00 AM
Lab ID: 2203E14-008 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	28	10		mg/Kg	1	3/28/2022 7:04:13 PM
Motor Oil Range Organics (MRO)	310	50		mg/Kg	1	3/28/2022 7:04:13 PM
Surr: DNOP	106	51.1-141		%Rec	1	3/28/2022 7:04:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 2:19:00 PM
Surr: BFB	96.7	37.7-212		%Rec	1	3/28/2022 2:19:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	3/29/2022 12:35:28 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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** C0-0.5
Project: Bell JF 2 **Collection Date:** 3/25/2022 11:26:00 AM
Lab ID: 2203E14-009 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/28/2022 7:26:02 PM
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	3/28/2022 7:26:02 PM
Surr: DNOP	110	51.1-141		%Rec	1	3/28/2022 7:26:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2022 2:39:00 PM
Surr: BFB	97.4	37.7-212		%Rec	1	3/28/2022 2:39:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	1100	60		mg/Kg	20	3/29/2022 1:12:42 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 **2203E14**
Date Reported: **3/31/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: C1-1.5
Project: Bell JF 2
Collection Date: 3/25/2022 11:30:00 AM
Lab ID: 2203E14-010 **Matrix:** SOIL **Received Date:** 3/26/2022 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**
Diesel Range Organics (DRO)	11	9.7		mg/Kg	1	3/28/2022 7:37:02 PM
Motor Oil Range Organics (MRO)	140	49		mg/Kg	1	3/28/2022 7:37:02 PM
Surr: DNOP	108	51.1-141		%Rec	1	3/28/2022 7:37:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 2:59:00 PM
Surr: BFB	101	37.7-212		%Rec	1	3/28/2022 2:59:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **CAS**
Chloride	1300	60		mg/Kg	20	3/29/2022 1:25:07 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#: **2203E14**

31-Mar-22

Client: HILCORP ENERGY

Project: Bell JF 2

Sample ID: **MB-66458**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **66458**	RunNo: **86819**							
Prep Date: **3/29/2022**	Analysis Date: **3/29/2022**	SeqNo: **3067569**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-66458**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **66458**	RunNo: **86819**							
Prep Date: **3/29/2022**	Analysis Date: **3/29/2022**	SeqNo: **3067570**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	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#: **2203E14**

31-Mar-22

Client: HILCORP ENERGY

Project: Bell JF 2

Sample ID: **LCS-66426** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **66426** RunNo: **86781**

Prep Date: **3/28/2022** Analysis Date: **3/28/2022** SeqNo: **3064420** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	68.9	135			
Surr: DNOP	5.0		5.000		101	51.1	141			

Sample ID: **MB-66426** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **66426** RunNo: **86781**

Prep Date: **3/28/2022** Analysis Date: **3/28/2022** SeqNo: **3064421** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2203E14**

31-Mar-22

Client: HILCORP ENERGY

Project: Bell JF 2

Sample ID: **lcs-66421** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **66421** RunNo: **86795**

Prep Date: **3/27/2022** Analysis Date: **3/28/2022** SeqNo: **3065002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	72.3	137			
Surr: BFB	2300		1000		227	37.7	212			S

Sample ID: **mb-66421** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **66421** RunNo: **86795**

Prep Date: **3/27/2022** Analysis Date: **3/28/2022** SeqNo: **3065003** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	37.7	212			

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: HILCORP ENERGY Work Order Number: 2203E14 RcptNo: 1

Received By: Tracy Casarrubias 3/26/2022 10:00:00 AM

Completed By: Tracy Casarrubias 3/26/2022 10:51:54 AM

Reviewed By: DAD 3/26/22

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: TME 3/26/22

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	5.9	Good	Yes			
2	4.1	Good	Yes			

Chain-of-Custody Record

Client: Hilcorp

Attn: Mitch Killough

Mailing Address:

Phone #:

email or Fax#: mKillough@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Need results By: Wednsday, March 30th, 2022

☐ Standard ☒ Rush Next Day

Project Name: Bell JF 2

Project #: 07A1988032

Project Manager: Stuart Hyde

shyde@ensolum.com

Sampler: Reece Hanson

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 3.9 Ø = 3.9 (°C)

4.1 Ø = 4.1

HEAL No. 220BE14

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.	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)
3/25/22	1105	Soil	N 0-0.5	1-4oz jar	Cool	001		X					X			
	1108		N 1-1.5			002										
	1110		W 0-0.5			003										
	1113		W 1-1.5			004										
	1116		S 0-0.5			005										
	1118		S 1-1.5			006										
	1121		E 0-0.5			007										
	1124		E 1-1.5			008										
	1126		C 0-0.5			009										
	1130		C 1-1.5			010										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
3/25/22	1225				3/25/22	1225
3/25	1807			Courier	3/26/22	10:00

Remarks: cc: shyde@ensolum.com
rhanson@ensolum.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: www.hallenvironmental.com

April 21, 2022

Mitch Killough
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: JF Bell 2 OrderNo.: 2204430

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 13 sample(s) on 4/9/2022 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 **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: C@ 3.5-4'
Project: JF Bell 2
Collection Date: 4/8/2022 12:02:00 PM
Lab ID: 2204430-002 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	95	9.7		mg/Kg	1	4/13/2022 7:09:13 PM
Motor Oil Range Organics (MRO)	140	48		mg/Kg	1	4/13/2022 7:09:13 PM
Surr: DNOP	110	51.1-141		%Rec	1	4/13/2022 7:09:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	4/13/2022 9:07:00 PM
Surr: BFB	159	37.7-212		%Rec	5	4/13/2022 9:07:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.12		mg/Kg	5	4/13/2022 9:07:00 PM
Toluene	ND	0.25		mg/Kg	5	4/13/2022 9:07:00 PM
Ethylbenzene	ND	0.25		mg/Kg	5	4/13/2022 9:07:00 PM
Xylenes, Total	ND	0.50		mg/Kg	5	4/13/2022 9:07:00 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	5	4/13/2022 9:07:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	640	59		mg/Kg	20	4/14/2022 12:07:42 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: S@ 3.5-4'
Project: JF Bell 2
Collection Date: 4/8/2022 12:10:00 PM
Lab ID: 2204430-004 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	9.7	9.5		mg/Kg	1	4/13/2022 7:20:02 PM
Motor Oil Range Organics (MRO)	53	47		mg/Kg	1	4/13/2022 7:20:02 PM
Surr: DNOP	119	51.1-141		%Rec	1	4/13/2022 7:20:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/13/2022 9:26:00 PM
Surr: BFB	104	37.7-212		%Rec	1	4/13/2022 9:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.024		mg/Kg	1	4/13/2022 9:26:00 PM
Toluene	ND	0.047		mg/Kg	1	4/13/2022 9:26:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/13/2022 9:26:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/13/2022 9:26:00 PM
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	4/13/2022 9:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/14/2022 12:20:07 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: N@ 3-3.5'
Project: JF Bell 2
Collection Date: 4/8/2022 12:15:00 PM
Lab ID: 2204430-005 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	13	9.4		mg/Kg	1	4/13/2022 7:30:50 PM
Motor Oil Range Organics (MRO)	89	47		mg/Kg	1	4/13/2022 7:30:50 PM
Surr: DNOP	99.2	51.1-141		%Rec	1	4/13/2022 7:30:50 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/13/2022 9:46:00 PM
Surr: BFB	102	37.7-212		%Rec	1	4/13/2022 9:46:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.025		mg/Kg	1	4/13/2022 9:46:00 PM
Toluene	ND	0.050		mg/Kg	1	4/13/2022 9:46:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/13/2022 9:46:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/13/2022 9:46:00 PM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	4/13/2022 9:46:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	61		mg/Kg	20	4/14/2022 12:57:20 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Estimated value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: BH01@ 0-6"
Project: JF Bell 2
Collection Date: 4/8/2022 12:20:00 PM
Lab ID: 2204430-006 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	14	9.6		mg/Kg	1	4/13/2022 7:41:37 PM
Motor Oil Range Organics (MRO)	97	48		mg/Kg	1	4/13/2022 7:41:37 PM
Surr: DNOP	98.7	51.1-141		%Rec	1	4/13/2022 7:41:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/13/2022 10:06:00 PM
Surr: BFB	104	37.7-212		%Rec	1	4/13/2022 10:06:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.025		mg/Kg	1	4/13/2022 10:06:00 PM
Toluene	ND	0.050		mg/Kg	1	4/13/2022 10:06:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/13/2022 10:06:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/13/2022 10:06:00 PM
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	4/13/2022 10:06:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	280	60		mg/Kg	20	4/14/2022 1:09:45 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: BH01@ 1-1.5'
Project: JF Bell 2
Collection Date: 4/8/2022 12:18:00 PM
Lab ID: 2204430-007 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	11	9.6		mg/Kg	1	4/13/2022 7:52:22 PM
Motor Oil Range Organics (MRO)	61	48		mg/Kg	1	4/13/2022 7:52:22 PM
Surr: DNOP	106	51.1-141		%Rec	1	4/13/2022 7:52:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/13/2022 10:26:00 PM
Surr: BFB	102	37.7-212		%Rec	1	4/13/2022 10:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.024		mg/Kg	1	4/13/2022 10:26:00 PM
Toluene	ND	0.048		mg/Kg	1	4/13/2022 10:26:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/13/2022 10:26:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	4/13/2022 10:26:00 PM
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	4/13/2022 10:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	570	60		mg/Kg	20	4/14/2022 1:22:10 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: TP01@ 7'
Project: JF Bell 2
Collection Date: 4/8/2022 12:30:00 PM
Lab ID: 2204430-009 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/13/2022 8:03:06 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/13/2022 8:03:06 PM
Surr: DNOP	98.4	51.1-141		%Rec	1	4/13/2022 8:03:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/13/2022 10:45:00 PM
Surr: BFB	102	37.7-212		%Rec	1	4/13/2022 10:45:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.024		mg/Kg	1	4/13/2022 10:45:00 PM
Toluene	ND	0.048		mg/Kg	1	4/13/2022 10:45:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/13/2022 10:45:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/13/2022 10:45:00 PM
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	4/13/2022 10:45:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/14/2022 1:34:35 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Estimated value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: TP01@ 10'
Project: JF Bell 2
Collection Date: 4/8/2022 12:35:00 PM
Lab ID: 2204430-010 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/13/2022 3:44:04 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/13/2022 3:44:04 PM
Surr: DNOP	101	51.1-141		%Rec	1	4/13/2022 3:44:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/14/2022 1:03:00 AM
Surr: BFB	95.2	37.7-212		%Rec	1	4/14/2022 1:03:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.023		mg/Kg	1	4/14/2022 1:03:00 AM
Toluene	ND	0.047		mg/Kg	1	4/14/2022 1:03:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	4/14/2022 1:03:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	4/14/2022 1:03:00 AM
Surr: 4-Bromofluorobenzene	78.7	70-130		%Rec	1	4/14/2022 1:03:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/14/2022 1:47:00 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Estimated value
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: W@ 3-3.5'
Project: JF Bell 2
Collection Date: 4/8/2022 12:12:00 PM
Lab ID: 2204430-011 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	10	9.6		mg/Kg	1	4/13/2022 3:54:48 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/13/2022 3:54:48 PM
Surr: DNOP	108	51.1-141		%Rec	1	4/13/2022 3:54:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/14/2022 2:02:00 AM
Surr: BFB	98.3	37.7-212		%Rec	1	4/14/2022 2:02:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.023		mg/Kg	1	4/14/2022 2:02:00 AM
Toluene	ND	0.046		mg/Kg	1	4/14/2022 2:02:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	4/14/2022 2:02:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	4/14/2022 2:02:00 AM
Surr: 4-Bromofluorobenzene	80.3	70-130		%Rec	1	4/14/2022 2:02:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	61		mg/Kg	20	4/14/2022 1:59:25 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: TP02@ 7'
Project: JF Bell 2
Collection Date: 4/8/2022 12:40:00 PM
Lab ID: 2204430-012 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/13/2022 4:05:32 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/13/2022 4:05:32 PM
Surr: DNOP	99.7	51.1-141		%Rec	1	4/13/2022 4:05:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2022 3:01:00 AM
Surr: BFB	102	37.7-212		%Rec	1	4/14/2022 3:01:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.025		mg/Kg	1	4/14/2022 3:01:00 AM
Toluene	ND	0.049		mg/Kg	1	4/14/2022 3:01:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/14/2022 3:01:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/14/2022 3:01:00 AM
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	4/14/2022 3:01:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/14/2022 2:11:50 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2204430**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: TP02@ 10'
Project: JF Bell 2
Collection Date: 4/8/2022 12:45:00 PM
Lab ID: 2204430-013 **Matrix:** SOIL **Received Date:** 4/9/2022 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/13/2022 4:16:14 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/13/2022 4:16:14 PM
Surr: DNOP	107	51.1-141		%Rec	1	4/13/2022 4:16:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/14/2022 3:21:00 AM
Surr: BFB	101	37.7-212		%Rec	1	4/14/2022 3:21:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**
Benzene	ND	0.024		mg/Kg	1	4/14/2022 3:21:00 AM
Toluene	ND	0.048		mg/Kg	1	4/14/2022 3:21:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/14/2022 3:21:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/14/2022 3:21:00 AM
Surr: 4-Bromofluorobenzene	82.7	70-130		%Rec	1	4/14/2022 3:21:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	4/14/2022 11:46:05 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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **MB-66827** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **66827** RunNo: **87216**
Prep Date: **4/13/2022** Analysis Date: **4/13/2022** SeqNo: **3084579** Units: **mg/Kg**

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

Sample ID: **LCS-66827** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **66827** RunNo: **87216**
Prep Date: **4/13/2022** Analysis Date: **4/13/2022** SeqNo: **3084580** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Sample ID: **MB-66846** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **66846** RunNo: **87264**
Prep Date: **4/14/2022** Analysis Date: **4/14/2022** SeqNo: **3085821** Units: **mg/Kg**

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

Sample ID: **LCS-66846** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **66846** RunNo: **87264**
Prep Date: **4/14/2022** Analysis Date: **4/14/2022** SeqNo: **3085822** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.0	90	110			

Qualifiers:

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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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **MB-66788** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **66788** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/13/2022** SeqNo: **3084982** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	51.1	141			

Sample ID: **MB-66794** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **66794** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/13/2022** SeqNo: **3084983** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	51.1	141			

Sample ID: **LCS-66788** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **66788** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/13/2022** SeqNo: **3084985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.9	68.9	135			
Surr: DNOP	5.3		5.000		107	51.1	141			

Sample ID: **LCS-66794** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **66794** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/13/2022** SeqNo: **3084986** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.5	68.9	135			
Surr: DNOP	4.3		5.000		85.9	51.1	141			

Sample ID: **2204430-010AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TP01@ 10'** Batch ID: **66794** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3085052** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.7	48.45	7.320	76.8	36.1	154			
Surr: DNOP	5.0		4.845		102	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **2204430-010AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TP01@ 10'** Batch ID: **66794** RunNo: **87194**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3085055** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.3	46.64	7.320	77.7	36.1	154	2.22	33.9	
Surr: DNOP	4.7		4.664		102	51.1	141	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **lcs-66776** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **66776** RunNo: **87227**
Prep Date: **4/11/2022** Analysis Date: **4/13/2022** SeqNo: **3084157** 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	108	72.3	137			
Surr: BFB	2200		1000		218	37.7	212			S

Sample ID: **mb-66776** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **66776** RunNo: **87227**
Prep Date: **4/11/2022** Analysis Date: **4/13/2022** SeqNo: **3084158** 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		99.9	37.7	212			

Sample ID: **lcs-66784** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084192** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	72.3	137			
Surr: BFB	2100		1000		214	37.7	212			S

Sample ID: **mb-66784** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084193** 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	980		1000		97.6	37.7	212			

Sample ID: **2204430-010ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **TP01@ 10'** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084195** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.54	0	102	70	130			
Surr: BFB	2000		941.6		211	37.7	212			

Sample ID: **2204430-010amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **TP01@ 10'** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084196** Units: **mg/Kg**

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

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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **2204430-010amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **TP01@ 10'** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.56	0	102	70	130	0.0942	20	
Surr: BFB	2000		942.5		213	37.7	212	0	0	S

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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **lcs-66776** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **66776** RunNo: **87227**
Prep Date: **4/11/2022** Analysis Date: **4/13/2022** SeqNo: **3084210** 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	91.0	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.5	80	120			
Surr: 4-Bromofluorobenzene	0.83		1.000		83.3	70	130			

Sample ID: **mb-66776** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **66776** RunNo: **87227**
Prep Date: **4/11/2022** Analysis Date: **4/13/2022** SeqNo: **3084211** 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	0.83		1.000		82.9	70	130			

Sample ID: **lcs-66784** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084245** 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	90.2	80	120			
Toluene	0.91	0.050	1.000	0	90.8	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.5	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.3	80	120			
Surr: 4-Bromofluorobenzene	0.83		1.000		82.9	70	130			

Sample ID: **mb-66784** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084246** 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	0.82		1.000		81.7	70	130			

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#: **2204430**
21-Apr-22

Client: HILCORP ENERGY
Project: JF Bell 2

Sample ID: **2204430-011ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **W@ 3-3.5'** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084249** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.023	0.9276	0	80.6	68.8	120			
Toluene	0.76	0.046	0.9276	0	82.3	73.6	124			
Ethylbenzene	0.77	0.046	0.9276	0	83.0	72.7	129			
Xylenes, Total	2.3	0.093	2.783	0	82.1	75.7	126			
Surr: 4-Bromofluorobenzene	0.76		0.9276		82.0	70	130			

Sample ID: **2204430-011amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **W@ 3-3.5'** Batch ID: **66784** RunNo: **87227**
Prep Date: **4/12/2022** Analysis Date: **4/14/2022** SeqNo: **3084250** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.023	0.9311	0	90.0	68.8	120	11.5	20	
Toluene	0.86	0.047	0.9311	0	91.8	73.6	124	11.4	20	
Ethylbenzene	0.87	0.047	0.9311	0	92.9	72.7	129	11.7	20	
Xylenes, Total	2.6	0.093	2.793	0	92.6	75.7	126	12.4	20	
Surr: 4-Bromofluorobenzene	0.77		0.9311		82.9	70	130	0	0	

Qualifiers:

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ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
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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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2204430 RcptNo: 1

Received By: Desiree Dominguez 4/9/2022 9:45:00 AM DD

Completed By: Desiree Dominguez 4/11/2022 8:39:38 AM DD

Reviewed By: JN 4/11/22

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: CM 4/11/22

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	2.1	Good	Yes			

Chain-of-Custody Record

Client: Hilcorp Energy Company
Attn Mitch Killough
Mailing Address: 1111 Travis St
Houston, TX
Phone #: 713-757-5247
email or Fax#: mkillough@hilcorp.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time: ~~Standard~~ 5 day turnaround by 4/15
☒ Standard ☒ ~~Rush 3-Day by 4/13~~
Project Name: JF Bell 2
Project #:
Project Manager: Stuart Hyde
shyde@ensolum.com
Sampler: Stuart Hyde
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.3 - 0.2 = 2.1°c

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 Request ID	Container Type and #	Preservative Type	HEAL No. 2204430	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
4/8/22	1200	Soil	C@3-3.5'	4oz jar	—	-001 HOLD	⊘		⊘					⊘	⊘			
	1202		C@3.5-4'			-002	X		X					X				
	1205		C@4.5-5'			-003 HOLD												
	1210		SC@3.5-4'			-004	X		X					X				
	1215		NC@3-3.5'			-005	X		X					X				
	1220		BH01@0-6"			-006	X		X					X				
	1218		BH01@1-1.5'			-007	X		X					X				
	1225		BH01@3-3.5'			-008 HOLD	⊘		⊘					⊘	⊘			
	1230		TP01@7'			-009	X		X					X				
	1235		TP01@10'			-010	X		X					X				
	1212		WC@3-3.5'			-011	X		X					X				
	1240		TP02@7'			-012	X		X					X				

Remarks:

Date	Time	Relinquished by:	Received by:	Date	Time
4/8/22	1349			4/8/22	1349
4/9/22	1756		courier	4/9/22	9:45

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.

Chain-of-Custody Record

Client: Hilcorp

Mitch Killough

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day standard Results by 4/15

☒ Standard ~~☒ Rush 3 Day~~

Project Name: JF Bell 2

Project #:

Project Manager: Sturt Hyde

Sampler: SH

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.3-0.2=2.1 (°C)

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. 2204430	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)
4/8/22	1245	Soil	TP02 @10'	4oz jar	—	-013	X	X					X			

Analysis Request

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4/8/22	1349					
4/8/22	~~1349~~ 1356			courier	4/9/22	9:45

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 102831

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 102831
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By	Condition	Condition Date
jburdine	Closure report submitted per App ID# 102831 on 4/29/2022. Release confirmed, remediation required per 19.15.29 NMAC see incident #NAPP2212552070, BGT Closure report approved.	7/22/2022