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

Accepted for the record 01/26/2023

Responsible Party

NV

)

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Jennifer Deal	Contact Telephone 505-801-6517
Contact email jdeal@hilcorp.com	Incident #
Contact mailing address 382 Road 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.7502785_

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Hare 15	Site Type Well
Date Release Discovered 7/15/2020 @ 3:15pm	API# 3004508646

Unit Letter	Section	Township	Range	County
М	03	29N	10W	San Juan

Surface Owner: State Federal Tribal Private (Name:_____

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) 115	Volume Recovered (bbls) 0 bbls
□ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

A release of 115 bbls of condensate was released due to vandalism from someone shooting up the tank. Operations had the remaining liquids in the tank pulled. Release remained on location and inside the berm. 0 bbls was recovered. OCD will be notified 48 hours prior to sampling.

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Page	2
1 ugo	~

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	Release amount was >25 bbls
🛛 Yes 🗌 No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
OCD and BLM was prov	ided notification by email on 7/16.2020 at 1pm by Jennifer Deal

Initial Response

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

 \square 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:Jennifer Deal	Title:Environmental Specialist		
Signature: Gennifer Deal	Date: 7/27/2020		
email:jdeal@hilcorp.com	Telephone:505-801-6517		
OCD Only			
Received by:	Date:		

Page 3

Oil Conservation Division

	Page 3 of 27
Incident ID	NRM2020945060
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)
Did this release impact groundwater or surface water? groundwater	X Yes 🗌 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🔀 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🔀 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🔀 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No
Are the lateral extents of the release overlying a subsurface mine?	Yes X No
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes X No
Are the lateral extents of the release within a 100-year floodplain?	Yes X No
Did the release impact areas not on an exploration, development, production, or storage site?	🔀 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- X Field data
- X Data table of soil contaminant concentration data
- X Depth to water determination
- X Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- X Boring or excavation logs
- Photographs including date and GIS information
- X Topographic/Aerial maps
- X Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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			Incident ID	NRM2020945060
Page 4	Oil Conservation Division	rvation Division		
			Facility ID	
			Application ID	
I hereby certify that the info regulations all operators are public health or the environn failed to adequately investig addition, OCD acceptance o and/or regulations. Printed Name:	rmation given above is true and complete to the required to report and/or file certain release no ment. The acceptance of a C-141 report by the ate and remediate contamination that pose a the f a C-141 report does not relieve the operator of illough	e best of my knowledge a tifications and perform co OCD does not relieve the reat to groundwater, surfa f responsibility for comp 	nd understand that purs prrective actions for rele e operator of liability sh ace water, human health liance with any other fe ntal Specialist - 57-5247	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only				
Received by:		Date:		



October 15, 2021

District III New Mexico Oil Conservation Division 1000 Rio Brazos Aztec, New Mexico 87410

Subject: Site Characterization Report and Remediation Work Plan Hare 15 Hilcorp Energy Company San Juan County, New Mexico NMOCD Incident Number: NRM2020945060

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of Hilcorp Energy Company (Hilcorp), has prepared this *Site Characterization Report and Remediation Work Plan* for the Hare 15 natural gas production well (Site). This document details Site investigation activities completed to date and proposed actions moving forward to address impacted soil and groundwater resulting from a release of natural gas condensate. The Site is located in Unit M, Section 3, Township 29 North, Range 10 West, in San Juan County, New Mexico (Figure 1).

On July 15, 2020, vandalism of an aboveground storage tank (AST) caused a failure and release of approximately 115 barrels (bbls) of natural gas condensate. The release occurred on the well pad and remained inside the secondary containment. Hilcorp removed the remaining liquids from inside of the AST. No released liquids were recovered during initial emergency response efforts. Hilcorp reported the release to the New Mexico Oil Conservation Division (NMOCD) by submitting a *Release Notification and Corrective Action Form C-141* (Form C-141) on July 27, 2020. The release was assigned Incident Number NRM2020945060.

SITE CHARACTERIZATION

The Site is located on Bureau of Land Management (BLM) surface approximately 6.4 miles northeast of Bloomfield, New Mexico, north of US Highway 64. As part of the site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC). This information is further discussed below.

GEOLOGY AND HYDROGEOLOGY

Based on United States Geological Survey (USGS) geologic mapping, the Site is located within the Tertiary Nacimiento Formation. In the report titled "Hydrogeology and Water Resources of San Juan Basin, New Mexico" (Stone, et. al., 1983), the Nacimiento Formation is characterized by interbedded black carbonaceous mudstones and white, coarse-grained sandstones. This formation ranges in thickness from 418 to 2,232 feet. The Nacimiento Formation overlies the Ojo Alamo sandstone (Stone et. al., 1983).

SITE RECEPTORS

Assessment of potential nearby receptors was conducted through desktop reviews of topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, USGS GIS maps, New Mexico Office of the State Engineer (NMOSE) database, and aerial photographs, as well as site-specific observations.

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WSP USA
848 EAST 2ND AVENUE
DURANGO CO 81301
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Tel.: 970-385-1096 wsp.com

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As measured from in on-Site monitoring wells, depth to groundwater is approximately 27 to 40 feet below ground surface (bgs). The nearest domestic/stock water well is NMOSE permitted well SJ-00785-S, located approximately 0.59 miles north of the Site. The well has a recorded depth to water of approximately 20 feet bgs and a total depth of approximately 60 feet bgs.

No wellhead protection areas, springs, or domestic/stock wells are located within a ½ mile from the Site (Figure 1). The nearest significant watercourse to the Site is Slane Canyon, located approximately 660 feet to the east. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland. The Site is not within a 100-year floodplain or overlying a subsurface mine and is not located within an area underlain by unstable geology (low potential karst designation area by the BLM). No occupied permanent residence or structures, including schools, hospitals, institutions, and/or churches, are located within 300 feet of the Site.

SITE CLOSURE CRITERIA

WSP has characterized the Site according to *Table 1, Closure Criteria for Soils Impacted by a Release* in 19.15.29.12 NMAC. Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO): 100 mg/kg
- Chloride: 600 mg/kg

SITE INVESTIGATION ACTIVITIES AND RESULTS

To date, there have been four separate events to delineate subsurface impacts: August 17, 2020 to August 25, 2020; February 9, 2021 to February 11, 2021; May 17, 2021 to May 18, 2021 and September 10, 2021 to September 13, 2021. During each Site delineation attempt, WSP personnel advanced boreholes via hollow-stem auger to confirm the presence or absence of petroleum hydrocarbon impacts to soil and/or groundwater.

In total, 29 boreholes have been advanced at the Site (shown on Figure 2). Soil lithology was logged by a WSP geologist and described based on the Unified Soil Classification System (USCS) as specified in American Society for Testing and Materials (ASTM) D2488. Silty sand and sand were generally encountered to depths of 30 feet bgs. The silty sand/sand was generally underlain by silt/clay with some interbedded silty sand to the terminus of each borehole. Groundwater accumulated in several of the monitoring wells and phase-separated hydrocarbons (PSH) accumulated in seven of the monitoring wells.

SOIL ASSESSMENT

During drilling, soil was inspected for visual staining and the presence or absence of odor. The soil was characterized by visually inspecting the soil samples and field screening the soil headspace using a photoionization detector (PID) to monitor for the presence of organic vapors. Bore logs are attached as Enclosure A. In general, soil samples were collected from each borehole for laboratory analysis from the depth interval displaying the highest field PID measurement. One additional sample was collected from the terminus of each borehole for laboratory analysis. Additional soil samples were also collected from several boreholes for laboratory analysis to better define the vertical profile of impacts to soil.

Soil samples were collected directly into precleaned jars and submitted to Hall Environmental Analysis Laboratory (Hall) for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021, TPH by EPA Method 8015, and chloride by EPA method 300.0. A summary of soil analytical results is presented in Table 1 and Figure 3, with laboratory analytical reports attached as Enclosure B.



Based on the analytical results, the following boreholes contained soil with concentrations of BTEX, benzene, TPH and/or chloride above NMOCD Table 1 Closure Criteria:

BH01, BH03, BH04, BH07, BH08, BH09, BH10, BH11, BH13, BH14, BH15, BH16, BH20, BH21, BH26, BH28, and BH29

Concentrations of TPH exceeding NMOCD Table 1 Closure Criteria ranged from 119 mg/kg in BH28 to 14,860 mg/kg in BH03. Depth of TPH-impacted soil was generally observed to be between 15 feet bgs and 35 feet bgs, except in BH28, which contained impacted soil from ground surface and 5 feet bgs, but not at depth. The elevated TPH consisted of mostly GRO and DRO constituents.

Concentrations of BTEX above NMOCD Table 1 Closure Criteria were detected in seven different borehole locations (BH01, BH03, BH04, BH07, BH13, BH16, and BH26) ranging from 66.6 mg/kg in BH16 to 1,400 mg/kg in BH03. Depth of BTEX impacted soil generally occurred between 15 feet bgs and 30 feet bgs at the Site. Exceedances for total BTEX were primarily attributed to elevated total xylene concentrations with minor concentrations of benzene, toluene, and ethylbenzene detected.

Concentrations of chloride were low in most samples, ranging from below detection limits to 360 mg/kg. One soil sampled exceeded the NMOCD Table 1 Closure Criteria of 600 mg/kg (BH08 @ 25 feet to 30 feet bgs) with a concentration of 610 mg/kg.

GROUNDWATER ASSESSMENT

During the initial delineation event in August 2020, saturated soils indicative of groundwater were not observed during drilling. Because of this, groundwater monitoring wells were not installed at the Site; however, boreholes with petroleum hydrocarbon impacts were completed as potential soil-vapor extraction (SVE) wells, with the screened intervals placed at depths with the highest observed field screening measurements (using a PID). Additionally, nested SVE wells were installed into borehole BH04 (labeled MW04A and MW04B) to address both shallow and deep soil impacts. During subsequent site visits, groundwater and PSH were observed to have accumulated in several of the SVE wells. As such, groundwater monitoring wells were installed at the Site during the follow-up delineation events conducted in February, May, and September 2021 (Figure 4). Monitoring wells were constructed out of 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing and 2-inch Schedule 40 PVC 0.010-inch slotted screen. Wells were completed with 10-20 silica sand pack to three feet above the screened interval, then two feet of hydrated bentonite seal, and then grouted to ground surface. The wells are completed as unprotected stick-up monitoring wells.

Following well construction, monitoring wells were developed using a disposable bailer. Fluid-level measurements were collected using an oil/water interface probe. During well development, 10 well casing volumes of groundwater were removed from each monitoring well, or the well was purged until dry. Monitoring wells were allowed to recharge for at least 24 hours after development prior to the collection of groundwater samples. To accurately determine groundwater elevations, a self-leveling, rotating laser level surveying tool was used to obtain elevation of the top-of-casing for each well. These elevations, along with depth to groundwater in each well are used to determine groundwater elevations in feet above mean sea level.

To date, 27 monitoring wells have been installed at the Site (well identification numbers correspond to the borehole numbers assigned during drilling). Of these, 19 monitoring wells contained sufficient quantities of groundwater to sample during the September 2021 event, with seven of these wells containing measurable quantities of PSH. Depth-to-water and depth-to-product measurements collected during sampling and groundwater elevations were used to infer flow direction of groundwater at the Site. Eight of the monitoring wells installed at the Site (MW02, MW04B, MW08, MW18, MW21, MW25, MW27, and MW28) were either dry or have accumulated low volumes of water, likely originating from drilling and well completion activities or by the monitoring wells acting as a sump to collect only limited moisture temporarily stored in the surrounding soil pore space. The groundwater elevations to do not appear to correlate to the potentiometric surface exhibited by monitoring wells containing higher water volume and recharge capacity. As such, water-level measurements from these wells were not used to construct groundwater potentiometric maps for the Site. Fluid level elevations are summarized in Table 2. A potentiometric map showing the flow of groundwater at the Site is included as Figure 4.



GROUNDWATER SAMPLING AND RESULTS

Groundwater monitoring wells were sampled by purging a minimum of three casing volumes from each well and collecting parameters of the purged groundwater. Monitoring wells MW01, MW06, MW09, MW11, MW14, MW19, MW20, MW22, MW23, MW24, MW26, and MW29 were sampled during the September 2021 event and analyzed for BTEX by EPA Method 8260B. Total BTEX and/or benzene concentrations were detected in all groundwater samples, except for MW23 and MW24, above New Mexico Water Quality Control Commission (NMWQCC) standards. Additionally, measurable PSH is present in wells MW03, MW04, MW07, MW10, MW13, MW15, and MW16 (these wells were not sampled for laboratory analysis). PSH thickness ranged from 0.07 feet in MW07 to 0.60 feet in MW15 during the September 27, 2021 sampling event.

Groundwater analytical results from the groundwater monitoring events conducted at the Site are summarized in Table 3. Groundwater analytical results from the February and September 2021 sampling event are displayed on Figure 5. Laboratory analytical reports are also included in Enclosure B. The WSP Groundwater Sample Collection Forms from the September 2021 event are included as Enclosure C.

INTERIM PSH RECOVERY EVENTS

Since the discovery of the PSH, WSP has conducted several PSH-recovery events using a disposable bailer. Additionally, absorbent product recovery socks have been placed in all wells containing measurable PSH, and replaced as necessary, since October 2020. During the five monitoring events conducted by WSP between September 2020 and September 2021, a total of 13.9 gallons of PSH have been removed from the groundwater table via manual bailing and disposable product-recovery socks. Product thickness has generally decreased between September 2020 and September 2021.

CONCLUSIONS

Based on field screening and analytical results, petroleum hydrocarbon impacts appear to be limited to shallow soils near the source of the recent vandalism release (former AST location). Deeper soil impacts appear to be located within a perched groundwater and/or smear zone above the groundwater, which may be the result of migration in the direction of groundwater flow, generally to the north. Alternatively, there may be historic sources unrelated to the AST release affecting groundwater and soil on portions of the Site. This could be evidenced by the variation in BTEX constituent concentrations. Where present, groundwater or saturated intervals are perched on top of a dense, low permeability, fine sandy silt that transitions to pure silt and clay at depth. Based on field screening and analytical results, there is limited to no observable impacts in the silt/clay layers located below the impacted sandy silt unit.

Based on field screening and observations from the September 2021 event, it was believed that the Site had been delineated to the north after the September 2021 drilling event. However, based on the soil analytical results, the lateral extent of TPH has not been delineated to the north/northeast in boreholes BH28 and BH29. During drilling, no visual/olfactory observations of petroleum hydrocarbons or elevated PID measurements were noted in the depth intervals where TPH concentrations exceeded NMOCD Table 1 Closure Criteria. Additionally, the TPH exceedances in boreholes BH28 and BH29 are dominated by MRO, and to a lesser extent DRO, with no GRO carbon fractions present in these exceedances (nor concentrations of BTEX).Groundwater collected from MW29 contains low concentrations of BTEX, with only benzene exceeding the NMWQCC standard (5 microgram per liter, or $\mu g/L$) at 12 $\mu g/L$. Based on the location of BH29/MW29 and concentrations detected in soil and groundwater, contaminants appear to be attenuating and likely do not migrate substantially further to the north/northwest.

TPH was only encountered at depths of 0 to 5 feet bgs in borehole BH28. These results indicate that TPH in shallow soils at BH28 are not related to the recent or historical release characterized at the Site and are possibly caused by cross contamination with lubricating grease from the drill rig or a small surface release in the area (likely a *de minimus* volume of impacted soil). Additionally, the TPH concentration detected in soil was detected at 119 mg/kg, only slightly above the NMOCD Table 1 Closure Criteria of 100 mg/kg.

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PROPOSED ACTIONS

Based on the investigations described above, WSP proposes to complete the delineation of soil and groundwater at the Site. Additional boreholes will be advanced using a hollow-stem auger drill rig to complete delineation of soil and/or groundwater impacts in several areas of the Site indicated on Figure 6. Delineation near BH28 will be confined to shallow soils and completed using a hand auger. Delineation results will be summarized in a forthcoming Updated Site Characterization Report and Remediation Work Plan that will include a comprehensive evaluation of soil and groundwater impacts, controls on those impacts, and proposed remedial technologies to address impacted soil and groundwater at the Site. Additionally, quarterly groundwater monitoring and PSH recovery events will be conducted beginning in the fourth quarter of 2021.

Because the proposed additional boreholes/wells are located on BLM surface, Hilcorp will submit this report and request permission from the BLM for access within 14 days of submittal of this report to the NMOCD. Based on previous drilling events, a cultural survey is likely required prior to advancing additional boreholes. Once access is granted from the BLM, the additional delineation and reporting will be conducted within 60 days (dependent on driller availability).

REFERENCES

Stone, W., Lyford, F., Frenzel, P., Mizell, N., & Padgett, E. (1983). Hydrogeology and Water Resources of San Juan Basin, New Mexico. New Mexico Bureau of Mines & Mineral Resources.

WSP appreciates the opportunity to provide this report to you. If you have any questions or comments regarding this report, do not hesitate to contact Mr. Stuart Hyde at (970) 903-1607 or at <u>stuart.hyde@wsp.com</u>, or Mitch Killough at (713) 757-5274 or at <u>mkillough@hilcorp.com</u>.

Kind regards,

Stuart Hyde, L.G. Senior Geologist

cc: Mitch Killough, Hilcorp Energy Company

Enclosures:

Receptor Map
Soil Boring Locations
Soil Analytical Results
Groundwater Elevation Map
Groundwater Analytical Results
Proposed Delineation Locations
Soil Analytical Results
Groundwater Elevation Summary
Groundwater Analytical Results
WSP Bore Logs
Laboratory Analytical Reports
Groundwater Sample Collection Forms

Ashley L. ager

Ashley Ager, M.S., P.G. Senior Geologist, Managing Director

FIGURES



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TABLES

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TABLE 1SOIL ANALYTICAL RESULTS

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Soil Sample Identification	Sample Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
NMOCD Closur	re Criteria	NE	10	NE	NE	NE	50	600	NE	NE	NE	100
BH01@20'-24'	8/17/2020	3,118	< 0.47	< 0.94	3.0	120	123.0	<60	1,000	180	<47	1,180
BH01@27'-30'	8/17/2020	41.2	< 0.019	< 0.039	< 0.039	0.10	0.10	<60	<3.9	<9.8	<49	<49
BH02@25'-30'	8/17/2020	1,454	0.053	0.43	0.2	3.9	5	<60	48	17	<50	65
BH02@35'-38'	8/17/2020	515	< 0.020	< 0.039	< 0.039	0.15	0.15	<60	<3.9	<9.9	<50	<50
BH03@10'-15'	8/17/2020	22.0	< 0.024	< 0.048	< 0.048	< 0.095	< 0.095	<60	<4.8	<9.1	<45	<45
BH03@15'-18'	8/17/2020	246	< 0.025	< 0.050	< 0.050	< 0.10	< 0.10	<60	<5.0	<9.8	<49	<49
BH03@23'-25'	8/20/2020	1,238	16	360	64.0	960	1,400	<60	14,000	860	<480	14,860
BH03@29'-30'	8/20/2020	2,246	< 0.024	0.70	0.28	4.90	5.88	<60	76	16	<46	92
BH03@35'-38'	8/20/2020	173	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<59	<5.0	<9.0	<45	<45
BH04@23'-25'	8/17/2020	1,448	< 0.023	0.11	0.14	2.5	2.75	<60	43	35	<45	78
BH04@25'-27'	8/21/2020	1,499	12	300	55	890	1,257	<60	12,000	1,400	<450	13,400
BH04@28'-30'	8/21/2020	102	< 0.025	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.4	<47	<47
BH04@30'-35'	8/21/2020	403	< 0.12	0.68	0.56	7.6	8.84	<60	130	83	<44	213
BH04@35'-38'	8/21/2020	46.0	< 0.025	0.073	< 0.049	0.2	0.273	<60	<4.9	10	<49	<49
BH05@20'-25'	8/21/2020	62.6	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	<59	<4.8	<9.9	<49	<49
BH05@25'-30'	8/21/2020	24.1	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	<60	<4.9	<9.0	<45	<45
BH06@15'-20'	8/21/2020	22.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH06@20'-25'	8/21/2020	41.0	< 0.12	< 0.25	< 0.25	< 0.49	< 0.49	<60	<25	<9.5	<48	<48
BH06@25'-30'	8/21/2020	17.1	< 0.024	< 0.049	< 0.049	0.45	0.45	<60	<4.9	<8.5	<43	<43
BH06@30'-35'	8/21/2020	8.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH07@15'-20'	8/21/2020	2,402	0.79	12	6.8	110	129.6	76	1600	160	<48	1,760
BH07@28'-30'	8/21/2020	174	< 0.023	< 0.046	< 0.046	< 0.092	< 0.092	<60	<4.6	<8.7	<43	<43
BH07@30'-35'	8/21/2020	41.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH08@25'-30'	8/21/2020	649	< 0.050	< 0.10	0.23	1.1	1.3	610	120	270	<45	390
BH08@30'-35'	8/21/2020	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH08@35'-40'	8/21/2020	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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TABLE 1SOIL ANALYTICAL RESULTS

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Soil Sample Identification	Sample Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
NMOCD Closur	e Criteria	NE	10	NE	NE	NE	50	600	NE	NE	NE	100
BH09@25'-27'	8/24/2020	3,359	< 0.12	< 0.25	< 0.25	0.97	0.97	120	98	190	<43	288
BH09@28'-30'	8/24/2020	30.1	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	73	<4.9	11	<47	11
BH09@30'-35'	8/24/2020	6.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH10@15'-20'	8/24/2020	3,317	< 0.12	< 0.24	1.2	19	20.2	<60	180	110	<49	290
BH10@28'-30'	8/24/2020	193	0.044	0.11	< 0.048	0.53	0.684	<60	<4.8	<8.6	<43	<43
BH11@10'-15'	8/24/2020	1,841	0.063	0.33	0.58	18	18.97	200	120	73	<50	193
BH11@25'-30'	8/24/2020	686	0.039	0.14	0.079	1.0	1.3	<60	20	19	<47	39
BH12@10'-15'	8/24/2020	6.1	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	98	<4.9	<8.9	<45	<45
BH12@25'-30'	8/24/2020	0.8	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.7	<49	<49
BH13@25'-27'	8/24/2020	1,912	0.46	11	4.9	73	89.4	<60	800	250	<45	1,050
BH13@28'-30'	8/24/2020	39.4	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<60	<4.8	<9.4	<47	<47
BH13@30'-35'	8/24/2020	174	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH14 @ 25'-27'	2/9/2021	3,204	< 0.12	< 0.25	2.1	26	28	<60	400	170	<46	570
BH14 @ 30'-35'	2/9/2021	20.0	< 0.023	< 0.046	< 0.046	< 0.092	< 0.092	<60	<4.6	<9.8	<49	<49
BH15 @ 25'-30'	2/9/2021	3,055	1.7	23	17	250	292	<60	3,000	360	<47	3,360
BH15 @ 30'-35'	2/9/2021	82.0	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<60	<4.8	<9.9	<49	<49
BH16 @ 25'-30'	2/9/2021	2,332	0.67	9.6	3.3	53	66.6	<60	800	210	<50	1,010
BH16 @ 33'-35'	2/9/2021	212	0.074	0.19	< 0.047	0.42	0.684	<60	<4.7	<9.8	<49	<49
BH17 @ 20'-25'	2/10/2021	1.8	< 0.024	< 0.048	< 0.048	< 0.095	< 0.095	<60	<4.8	<9.4	<47	<47
BH17 @ 25'-30'	2/10/2021	0.3	< 0.023	< 0.047	< 0.047	< 0.094	< 0.094	<60	<4.7	<10	<51	<51
BH18 @ 20'-25'	2/10/2021	0.3	< 0.024	< 0.048	< 0.048	< 0.095	< 0.095	<60	<4.8	<9.7	<48	<48
BH18 @ 25'-30'	2/10/2021	0.0	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	<8.4	<42	<42
BH19 @ 30'-35'	2/10/2021	119	< 0.024	< 0.049	< 0.049	0.43	0.430	<60	9.4	<9.0	<45	9.4
BH19 @ 35'-40'	2/10/2021	4.8	0.050	0.12	0.14	2.1	2.41	<60	13	<10	<50	13
BH20 @ 25'-30'	2/11/2021	2,023	< 0.12	2.8	2.2	38	43	<60	600	190	<49	790
BH20 @ 33'-35'	2/11/2021	80.0	0.056	0.72	0.091	1.5	2.37	<60	9.9	<9.2	<46	9.9
BH21 @ 30'-32.5'	5/17/2021	3,005	< 0.12	< 0.24	< 0.24	46	46	120	1,400	750	<45	2,150
BH21 @ 32.5'-35'	5/17/2021	485	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	<60	11	20	<45	31

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TABLE 1SOIL ANALYTICAL RESULTS

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Soil Sample Identification	Sample Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
NMOCD Closur	e Criteria	NE	10	NE	NE	NE	50	600	NE	NE	NE	100
BH22 @ 27.5'-30'	5/17/2021	28.1	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.9	<49	<49
BH22 @ 37.5'-40'	5/17/2021	9.8	< 0.023	< 0.046	< 0.046	< 0.093	< 0.093	<60	<4.6	<9.4	<47	<47
BH23 @ 35'-37.5'	5/17/2021	11.4	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	<60	<4.9	<8.4	<42	<42
BH23 @ 40'-42'	5/17/2021	8.6	< 0.025	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.0	<45	<45
BH24 @ 25'-27.5'	5/18/2021	17.6	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	<60	<4.9	<8.5	<43	<43
BH24 @ 43.5'-45'	5/18/2021	2.4	< 0.024	< 0.047	< 0.047	< 0.094	< 0.094	<61	<4.7	<8.4	<42	<42
BH25 @ 25'-27.5'	5/18/2021	21.8	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	130	<4.9	<10	<50	<50
BH25 @ 35'-38'	5/18/2021	2.4	< 0.024	< 0.047	< 0.047	< 0.094	< 0.094	85	<4.7	<9.1	<45	<45
BH26 @ 32.5'-35'	5/18/2021	2,407	2.1	42	6.1	94	144.2	86	1,200	110	<44	1,310
BH26 @ 37.5'-40'	5/18/2021	1.8	0.4	1.7	< 0.24	2.0	4.1	120	29	<9.7	<48	29
BH27 @ 0'-5'	9/10/2021	3.6	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	<9.9	<49	<49
BH27 @ 5'-10'	9/10/2021	3.2	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	360	<5.0	<10	<51	<51
BH27 @ 10'-15'	9/10/2021	9.0	<.0.24	< 0.048	< 0.048	< 0.096	< 0.096	210	<4.8	<9.3	<47	<47
BH27 @ 15'-20'	9/10/2021	4.2	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	65	<4.8	<10	<50	<50
BH27 @ 20'-25'	9/10/2021	1.4	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	77	<4.9	<9.6	<48	<48
BH27 @ 25'-30'	9/10/2021	0.9	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	75	<4.8	<9.8	<49	<49
BH27 @ 30'-35'	9/10/2021	0.7	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	70	<4.9	<10	<50	<50
BH27 @ 35'-40'	9/10/2021	0.5	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<60	<4.8	<9.9	<49	<49
BH28 @ 0'-5'	9/10/2021	1.3	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	<59	<4.9	42	77	119
BH28 @ 5'-10'	9/10/2021	3.5	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	100	<4.9	<9.1	<45	<45
BH28 @ 10'-15'	9/10/2021	1.2	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	<60	<4.8	<9.2	<46	<46
BH28 @ 15'-20'	9/10/2021	0.7	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	<60	<4.8	<9.6	<48	<48
BH28 @ 20'-25'	9/10/2021	0.5	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	110	<4.8	<10	<50	<50
BH28 @ 25'-30'	9/10/2021	1.0	< 0.025	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.4	<47	<47
BH28 @ 30'-35'	9/10/2021	0.5	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	<60	<4.8	<9.5	<47	<47
BH28 @ 35'-40'	9/10/2021	0.7	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	<60	<4.9	<9.7	<49	<49

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TABLE 1SOIL ANALYTICAL RESULTS

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Soil Sample Identification	Sample Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
NMOCD Closur	re Criteria	NE	10	NE	NE	NE	50	600	NE	NE	NE	100
BH29 @ 0'-5'	9/13/2021	1.2	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	<10	<50	<50
BH29 @ 5'-10'	9/13/2021	0.3	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	<59	<4.8	<10	<50	<50
BH29 @ 10'-14'	9/13/2021	0.6	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	<8.6	<43	<43
BH29 @ 19.5'-20'	9/13/2021	0.4	< 0.025	< 0.050	< 0.050	< 0.10	< 0.10	<60	<5.0	30	54	84
BH29 @ 24.5'-25'	9/13/2021	1.4	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	33	60	93
BH29 @ 29.5'-30'	9/13/2021	2.2	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	<60	<5.0	15	<48	15
BH29 @ 34.5'-35'	9/13/2021	1.6	< 0.025	< 0.049	< 0.049	< 0.099	< 0.099	<60	<4.9	92	200	292
BH29 @ 39.5'-40'	9/13/2021	0.6	< 0.025	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.5	<48	<48
BH29 @ 44.5'-45'	9/13/2021	0.1	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	<60	<4.9	<9.2	<46	<46

Notes:

Released to Imaging: 1/26/2023 1:04:30 PM

BTEX - benzene, toluene, ethylbenzene, and total xylenes analyzed by US EPA Method 8021B

DRO - diesel range organics analyzed by US EPA Method 8015D

GRO - gasoline range organics analyzed by US EPA Method 8015D

mg/kg - milligrams per kilogram

MRO - motor oil range organics analyzed by US EPA method 8015D

NA - not analyzed

NE - not established

NMOCD - New Mexico Oil Conservation Division

PID - photoionization detector

ppm - parts per million

TPH - total petroleum hydrocarbon (sum of GRO, DRO, and MRO)

Bold - indicates value exceeds stated NMOCD Closure Criteria

< - indicates result is less than the stated laboratory reporting limit

TABLE 2GROUNDWATER ELEVATION SUMMARY

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Well Number	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet amsl)
			9/22/2020	26.48			5,791.34
			10/2/2020	26.48			5,791.34
MW01	5,817.82	27.60	10/7/2020	26.46			5,791.36
			2/17/2021	26.42			5,791.40
			9/27/2021	26.45			5,791.37
			9/22/2020	DRY			
			10/2/2020	37.02 (1)			
MW02	5,817.36	37.10	10/7/2020	DRY			
			2/17/2021	37.09 (1)			
			9/27/2021	DRY			
			9/22/2020	27.85	27.14	0.71	5,790.53
			10/2/2020	30.62	27.16	3.46	5,789.96
MW03	5,817.81	37.55	10/7/2020	29.90	27.14	2.76	5,790.12
			2/17/2021	28.01	27.42	0.59	5,790.27
			9/27/2021	27.45	27.31	0.14	5,790.47
			9/22/2020	27.58	27.56	0.02	5,790.67
			10/2/2020	29.39	27.56	1.83	5,790.30
MW04A	5,818.23	36.58	10/7/2020	28.08	27.57	0.51	5,790.56
			2/17/2021	27.96	27.66	0.30	5,790.51
			9/27/2021	28.15	27.90	0.25	5,790.28
			9/22/2020	DRY			
MW04B	5 818 22	17 30	10/7/2020	DRY			
IVI VV 04D	5,616.22	17.50	2/17/2021	DRY			
			9/27/2021	DRY			
			9/22/2020	27.71			5,790.57
			10/2/2020	27.70			5,790.58
MW06	5,818.28	32.30	10/7/2020	27.67			5,790.61
			2/17/2021	27.75			5,790.53
			9/27/2021	27.75			5,790.53
			9/22/2020	28.77	28.01	0.76	5,790.48
			10/2/2020	28.52	28.03	0.49	5,790.51
MW07	5,818.64	30.45	10/7/2020	28.69	28.16	0.53	5,790.37
			2/17/2021	28.33	Sheen		5,790.31
			9/27/2021	28.29	28.22	0.07	5,790.41

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TABLE 2GROUNDWATER ELEVATION SUMMARY

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Well Number	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet amsl)
			9/22/2020	DRY			
			10/2/2020	DRY			
MW08	5,817.40	37.30	10/7/2020	DRY			
			2/17/2021	36.72 (1)			
			9/27/2021	36.89 (1)			
			9/22/2020	28.10			5,790.51
			10/2/2020	30.71			5,787.90
MW09	5,818.61	32.30	10/7/2020	29.72			5,788.89
			2/17/2021	28.15			5,790.46
			9/27/2021	28.17			5,790.44
			9/22/2020	30.23	29.22	1.01	5,790.31
			10/2/2020	29.74	29.29	0.45	5,790.35
MW10	5,819.73	32.60	10/7/2020	29.80	29.21	0.59	5,790.40
			2/17/2021	30.23	29.49	0.74	5,790.09
			9/27/2021	29.65	29.37	0.28	5,790.30
			9/22/2020	29.01			5,790.36
			10/2/2020	29.02			5,790.35
MW11	5,819.37	32.57	10/7/2020	28.91			5,790.46
			2/17/2021	29.00			5,790.37
			9/27/2021	28.97			5,790.40
			9/22/2020	27.81	27.43	0.38	5,790.55
			10/2/2020	27.80	27.44	0.36	5,790.55
MW13	5,818.06	32.60	10/7/2020	27.81	27.42	0.39	5,790.56
			2/17/2021	27.79	27.64	0.15	5,790.39
			9/27/2021	27.68	27.57	0.11	5,790.47
MW14	5 821 30	33.83	2/17/2021	33.78			5,787.52
101 00 14	5,821.50	55.65	9/27/2021	30.94			5,790.36
MW15	5 823 34	35.62	2/17/2021	33.27	33.11	0.16	5,790.20
101 00 15	5,625.54	55.62	9/27/2021	33.65	33.05	0.60	5,790.17
MW16	5 821 55	37.05	2/17/2021	32.20	31.67	0.53	5,789.77
141 44 10	5,021.55	57.05	9/27/2021	31.71	31.18	0.53	5,790.26
MW/18	5 821 35	32 54	2/17/2021	DRY			
101 10	3,021.33	32.54	9/27/2021	DRY			
MW19	5 825 06	13 50	2/17/2021	34.93			5,790.13
	5,825.06	5,825.06	43.50	9/27/2021	34.93		

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TABLE 2 GROUNDWATER ELEVATION SUMMARY

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Well Number	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet amsl)
MW20	5 820 60	40.13	2/17/2021	30.36			5,790.24
111120	5,020.00	10.15	9/27/2021	30.38			5,790.22
MW21	5 820 72	36.25	5/21/2021	35.88 (1)			
101 00 2.1	5,620.72	50.25	9/27/2021	36.19 (1)			
MW22	5 826 83	12.95	5/21/2021	36.78			5,790.05
101 00 22	5,020.05	42.93	9/27/2021	36.81			5,790.02
MW23	MW23 5 829 60	11 78	5/21/2021	40.38			5,789.22
101 00 2.5	WI W 25 5,829.00	44.78	9/27/2021	39.48			5,790.12
MW24	5 976 76	41.20	5/21/2021	36.35			5,790.41
IVI VV 24	5,820.70	41.39	9/27/2021	36.40			5,790.36
MW25	5 810 84	40.40	5/21/2021	40.02 (1)			
101 00 2.5	3,819.84	40.40	9/27/2021	DRY			
MW26	5 822 35	40.52	5/21/2021	32.58			5,789.77
IVI VV 20	5,822.55	40.32	9/27/2021	32.57			5,789.78
MW27	5 919 56	40.60	9/24/2021	40.40(1)			
101 00 27	5,818.50	40.00	9/27/2021	40.46 (1)			
MW28	5 815 12	40.61	9/24/2021	DRY			
101 00 20	MW28 5,815.12	40.01	9/27/2021	DRY			
MW29 5,829.68	5 820 68	48.10	9/24/2021	39.75			5,789.93
	3,029.00	40.10	9/27/2021	39.75			5,789.93

Notes:

(1) - water measured in well is not indicative of the perched groundwater aquifer at the Site

amsl - above mean sea level

BTOC - below top of casing

--: indicates no GWEL or PSH measured

When product is present, the groundwater elevation is corrected using an estimated density correction factor of 0.8

TABLE 3 GROUNDWATER ANALYTICAL RESULTS

HARE 15 SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY COMPANY

Groundwater Sample Identification	Sample Date	Benzene (µg/L)	Toluene (μg/L)	Ethyl- benzene (μg/L)	Total Xylenes (µg/L)
NMWQCC Grou	ndwater Standard	5	1,000	700	620
MW01	9/28/2021	1,200	14	9.1	9,900
MW06	2/17/2021	110	7.7	27	48
MW06	9/28/2021	210	<5.0	8.0	130
MW09	2/17/2021	37	<5.0	99	230
MW09	9/28/2021	140	<5.0	200	280
MW11	2/17/2021	3,500	4,500	320	11,000
MW11	9/28/2021	3,400	7,500	650	11,000
MW14	9/28/2021	32	5.2	8.2	120
MW19	2/17/2021	660	390	520	2,800
MW19	9/28/2021	720	140	790	1,400
MW20	2/17/2021	12,000	15,000	1,100	10,000
MW20	9/28/2021	11,000	12,000	610	5,100
MW22	9/28/2021	2,000	1,500	890	3,000
MW23	9/28/2021	<2.0	<2.0	<2.0	<3.0
MW24	9/28/2021	<2.0	<2.0	<2.0	<3.0
MW26	9/28/2021	9,700	24,000	830	11,000
MW29	9/28/2021	12	5.9	17	34

Notes:

 $\mu g/L$ - micrograms per liter

NMWQCC - New Mexico Water Quality Control Commision

Bold - indicates value exceeds the NMWQCC Standard

< - indicates result is less than the stated laboratory reporting limit

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ENCLOSURE A – WSP BORE LOGS

Elevation: 5,830 Gravel Pack: 10-20 Silica Sand Casing Type: Schedule 40 PVC	Detector 25' - 15'	PID - 14' - Stek Up	(S.U.)	1 North State	BORI Boring We Date: Logged By Drilling Me I Seal: Ber Diameter:	Advancing Oppo 848 E. 2nd Ave Durango, Colo NG LOG/MONITORING V MINumber: $BHOI/SVE$ 8-17-20 Toanny Burns ethod: Hollow Stem/Air Rotary ntonite $14^{1}-12$ 2" Length: 15^{+}	Project: Project: Project: Project Number: 01782 Drilled By: MO-TE Sampling Method: Conti Grout: Bentonite Hole Diameter: 7	ION DIAGRAM e 15 20018 Drilling nuous 12 - 0 - 1 Depth to Liquid:
Schedule 40 PVC	25-1	S ^{\$10t:} 0.010"			Diameter:	Length: 10 °	Total Depth: 27	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm)	HC Staining?	[#] ^a ^a ^b ^c ^c ^c ^c ^c ^c ^c ^c) Sample) Run	Recovery	Soil/Rock Type	Lithologÿ/Rei	narks	Well Completion
Morst 0.0	No	0 1 2 3 4		X	sw- sM	Tan, H. Brown, m saved w/ Fines. Well graded suppl w/ sit	ed-coarse	
Morist 0. 1 Morist 0. 2	No No	5 6 7 8 9 10 11 12 13 14			5W- 5M 5M	Lt: Brown me Samd w/ fine Well graded. Lt. Brown me, sand w/ fine Well gradeo	d No s/o d-coarse es. L. No s/o	

						Boring/Well #					
	1		Adu	anci		norti	ini	itv	Project:	Hare 15	
1		-	HUV	anul	ing Of	φυπ	411)	C y	Project #	017820018	
C		-						_	Date	8-17-20	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithe	Well Completion	
	Moist	10.8	No		15 16 _		V	SW- SM	Lt. Brown/ter sand W/ No starv	fpres. Well graded.	
	St the st	2,540	No- Mod		17 18 19 20	-		SP	thin \$7-6" lays ho stol. (H. growish poorly graded saved. No so	tan medium l, semi-dense tan, mod. He odor.	
	Dry	3,118	No	BH01 @ 20' -24'	21 22 23	+ + + +	V	SP	SAA, tan No stain. HC odor.	mod to strong	
	V- Meist	2,745	Yes, Heony	09 :15	24 25			SP	Black, strong med. sand	stain/odor,	
	Dry	53.7	S3.7 No	BHOI 27'	26 27 28 29			ML	L. Browntsb Fn. savel, 1 No stain, Ll-gray + Fn. savel. F	gray silt W/ Jodor. gray silt, trace Depse, comput.	backfill slough
	DM	41.2	41.2	-30" <u>09:45</u>	30 31	+ + +	-	Me	No stain/ SAA. No	sto	+
	Dry		No		32 33 34 35 36 37		IX		Limited to less the splitspoon sau refusal (a	no recovery male 30-32' 2 32'	

		Here 15	N.	BORI Boring W	Advancing Oppo 848 E. 2nd Av Durango, Cold ING LOG/MONITORING V ell Number:	ortunity e prado 81301 VELL COMPLETI Project:	ON DIAGRAM
	and the second	Gricz		Date: Logged By	8-17-20	Project Number: 01782	0018
Elevation: 5,830	Detector:	PID		Drilling M	Danny Burns ethod:	MO-TE 3 Sampling Method:	Drilling
Gravel Pack: 10-20 Silica Sand	38'-2	2'		Seal: Bei	ntonite 22'-20'	Grout:	
Schedule 40 PVC	23'-0) (+S.U.)		Diameter:	2" Length: 25'	Hole Diameter:	Depth to Liquid:
Schedule 40 PVC	38-23'	Slot: 0.010"		Diameter:	2" Length: 15'	Total Depth: 38'	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm)	HC Staining	# Depth Hung S	Sample Run	Soil/Rock Type	Lithology/Rer	narks	Well Completion
Murst 0.6 Morst 0.8 SL. Morst. 0.3	No No	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		SW- SM SM	brown, med. san No Stain/oder Well graded SAA. No s/o. Brown fn-med : W/silt No stain/oo	d w/ fines.	

								Boring/Well# BH02				
	15		Rede	anat	na 0-	nat	, mi	the I	Project:	Hare 15		
1			AQV	anci	iy U	φυτί	1111	'y	Project #	017820018		
	1							_	Date	8-17-20	*	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	blogy/Remarks	Well Complet	tion
	Dry	6.3	No		15 16 17 18 19 20 21		V	SW- 5M	Tan, H. B medco Tr-fines No stai	brown well groote arse sand. intoidor.		
	Dry Dry	0.1	No		21 22 23 24 25 26			ML	Sand. Som slightly d No stain/ Dense, oxidize silt. No sta	ed med-coarse re gravel, lense, compact. odoi d gravet brown		
	Dry	∖,454	No	BH02 @15' - 30' 12:00	27 28 29 30	+ + + + +		ML	Lt. gray ish Fu. sand No stain	brown silt w/ Compart. slight-mod HC odor		
	Dry	641	No		31 32 33	+		ML	Gray fn. sem Siltstone. Musty odo	icemented sandy No stain, slight		
	Dr	1 515	No	BH 02 @ 35'	34 35 36 37	- -	X	ML	Gray I mar fn. sand.	oon shale w/ No s/o		
<u> </u>	-			-38'			1					
				1230	38-		+		Refusal Qa	38'	1. 5	1.

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Elevation: 5,830 Gravel Pack: 10-20 Silica Sand Casing Type:	Detector: 35'-1'	PID 7 ¹		1 North Contraction	BORI Boring We Date: Logged By Drilling Me F Seal: Ber	Advancing Opport 848 E. 2nd Ave Durango, Colo NG LOG/MONITORING V IN Number: BH03 8-17-20 T Danny Burns ethod: Hollow Stem/Air Rotary ntonite 19-171	Project: Project: Project Number: 017820 Drilled By: MO-TE I Sampling Method: Contine Grout: Bentonite	ON DIAGRAM 15 0018 0018 000000000000000000000000000000000000
Schedule 40 PVC Screen Type:	20'-	<i>S.</i> U.		_	Diameter:	Length:	Hole Diameter: 7"	Depth to Liquid:
Schedule 40 PVC	35-20'	0.010"	1	-	Diameter:	2" Length: 15'	Total Depth: 38	Depth to Water:
Penetratio Resistance Moisture Content Vapor (ppm	HC Staining	# Depth	Sample Run	Recovery	Soil/Rock Type	Lithology/Rer	narks	Well Completion
Weist 3.7 Weist 15.4	No No No No U-19	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			SW- SM SW	brown med. sa sitt. well grader No stain/od SAA. Med sand, w/ No stain, v. s Brown & tan we med coarse No stain./ode some oxidation	nd w/ fines d mr. silt. H. odor. U graded sand.	

1									Boring/Well # BH 03			
		Advancing Opportunity								Project: Hare 15		
	1	L		ZIUV	GIUI		~~· · · · · ·		.,	Project #	017820018	
	enetration	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completion
LTQ COND.		Dry Dry Dry Dry Dry Dry Dry Dry	5.8 246. 985 985 1,238 702 2,246 1,204	NO NO NO Strong YES Strong NO NO NO NO	BH03 23-25 151-18 6H03 23-25 1515 1545 1545 BH03 -35 -35	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36			SW SW SW SW ML ML ML	Lt gray/te well grade No S/ Letusot et resume on it. gray tan saved. No SAA. N Mod. c Black co. Heavy s SAA, Heavy saturated v Dark brown and suray s Mod odor. Gray v. fn t siltste fissile N gray t maro No stuin. Gray v. fn. No st.	un med-coarse- ed sand. /0 8 v/ HSA new 8-20-20 v/ setup. 1, coarse wellgr. stain. V. slt. odor. o stain. odor. y to arse sand. tain /odor. y to arse sand. tain /odor. y to arse sand. tain /odor. y to stain No stain use v. En sandy tain, strong gassy odor. . Sondy silt one. Some cenent. to stain. yas odor. Jas odor. sandy silt. v. St. odor. sandy silt. v. St. odor.	
		איע		1.0	1620	37	11			I INO Sto	WAY A SULLAND	

Retusal @ 38'

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Elevation: 5,830	PID	BOR Boring W Date: Logged B	Advancing Oppo 848 E. 2nd Ave Durango, Colo ING LOG/MONITORING W Vell Number: BH04 8-17-20 Y: Danny Burns Tethod:	Project: Project Hare Project Uniber: 017820 Drilled By: MO-TE I Sampling Method;	ON DIAGRAM 15 0018 Drilling
Gravel Pack: 10-20 Silica Sand		Seal:	ntonito	Grout:	uous
Casing Type: Schedule 40 PVC 25'-50	1 + 5-54	Diameter:	2" Length: 25'+ 5'+	Bentonite Hole Diameter:	Depth to Liquid:
Screen Type: Schedule 40 PVC 35'-25' 4	Slot: 5'-5' 0.010"	Diameter:	2" Length: 0'+10'	Total Depth: 281	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm) HC Staining?	** Depth Samp G. (ft. bgs.) Rur	Recovery Soil/Rock Type	Lithology/Rem	arks	Wellyth
Dry 1,101 Strong Dry 1,101 Strong Oder	$ \begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ \end{array} $	TSW- SM SW SW	Brown, med. sau W/ silt. No stain. Strong HC oc Brown med. san Well graded. No stam. stron Red coarse s Well graded Mo stain, strong	ell graded lor, el w sitt. g HC oder wy sanel. HCoder	

Γ	1	-	2	Adu	anoi	na Ar	norti	mi	ity	Boring/Well # Project:	BH04 Hare 15	
	1		4	AUV	anun	ng op	φυιι		<i>Ly</i>	Project # Date	017820018	-20-20
	Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completion
		Dey	1,401	No		15 16 17 18 19 20 21			SW.	Lt. gray t Med-coa sand. W No stain gassy t	tan rse diense ell graded. , strong sweet. IC odor.	
		i Dey	ા્ મયજ્ઞ	NU	BH04 @ 23-25	22 23 24	+ + + + +		SW	SAA Lt. gray to med-course	s dark gray e sound. Well graded.	
at iono.		shad Wet	1,499	yes strong	17.17 BH04 @2521 0845	25 26 27	+	V	SW	Black coarse Strong slo Dark brava	sand. Well gr. Lig- Corol t gray for sand	
		Dry	102	No No	8H04 28-30 0850	28 29 30	+ + + + + + + + + + + + + + +		ML	U/ silt No stain Dense con sit. odoi	t silty sand. Mod odor. V. fn. sandy silt. pact fissile. Nostain	
		Dry	403	No	8404 C 39.35	32 33 34 35	+		SM	Lt. + DK. sandy sitt W silly but most No stain,	gray interbed istn tsitts. sand. some cement by fissile. slt. odor.	
		Dry	46	No	6-15-2	36 37	+	X	SM	-Gray Jan Silt. -Gray silt	caroon fn. surely store.	
						38		-	1	Refusal	0-38'	2

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Elevation: 5,83 Gravel Pack: 10-20 Silli Casing Type: Schedule 4 Screen Type:	30 ca Sand 40 PVC	Detector	Slot:	PID			BOR Boring V Date: Logged F Drilling N Seal: Be Diameter: Diameter:	Advancing O B48 E. 2nd Durango, C ING LOG/MONITORIN Vell Number: BH05 8-24 -20 By: Danny Burns Method: Hollow Stem/Air Rotary entonite 2" Length:	Pportunity Ave Colorado 81301 GWELL COMPLET Project: Project Number: 01782 Drilled By: MO-TE Sampling Method: Contir Grout: Bentonite Hole Diameter: 7	ION DIAGRAM = 15 20018 Drilling nuous Depth to Liquid:
Schedule 4	10 PVC	60	0.0	10"			Diameter:	Length:	Total Depth: 30	Depth to Water:
Penetratic Resistanc Moisture	Vapor (ppr	HC Stainin	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/	Remarks	Well Completion
Dry Dry Dry	22.0	No No		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			SW -SM SM W.	Lt. Brown fr W/ silt. We No s/d. Lt. Brown M V/ silt. No s/d Lt. brown / ton med coarse can some dense len but still fissile. No stain/odo	n-med sand Ugr. ed. sand. med- d. ses, hard	Back- fill w/ cuttings

								Boring/Well # BHOS		
Advancing Opportunity								Project: Hare 15		
	-	AdV	ancli	ng Up	ιρυπ		יא [Project # 017820018		
								Date	8-21-20	
Penetration Resistance Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithe	ology/Remarks	Well Completion
SL- Moist SL- Moist Dy Dy Dy Dy	42.4	NO	1025 BH05 220 -25 1030 BH05 -30 1040	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37			SW SW SW SM ML ML	Brown m savel. No s/o SAA. No Brown fn. Sendy sil Gray v. fn. No s/o SAA. Gray t marco Mo w Back fi	ed-coarse Wellgr. s Slo silty sand t. No Slo sandy silt. Dense. on v. Fn. sandy silt. ell installed. I w/ cuttings	Back- La Willing La Harrison
Elevation: 5,830 Gravel Pack:		Detector		PID		1 North State	BORI Boring We Date: Logged By Drilling Me I Seal:	Advancing Oppo 848 E. 2nd Ave Durango, Colo NG LOG/MONITORING W Ell Number: BH06 8-21-20 Danny Burns ethod: Hollow Stem/Air Rotary	rtunity Project: Project: Project: Project Number: 017820 Drilled By: MO-TE I Sampling Method: Contim Grout:	ON DIAGRAM 15 0018 Drilling uous
--	-------------	--------------	--------------	---	---------------	---------------	--	---	--	--
Casing Type: Schedule 40	PVC	20'-	SU				Diameter:	$\frac{17 - 17}{\text{Length:}}$	Bentonite	Depth to Liquid:
Screen Type: Schedule 40	PVC	30-20	Slot: 0.0	10"		-	Diameter:	2" 25 Length:	Total Depth: 2C1	Depth to Water:
Penetration Resistance Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Ren	narks	Well Completion
Dry Dry SL Moist	8.3	No		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			SW	Lt. Brown / ta fn-med sand Well Gr. No stain/od Tan med-c sand. Well No s/o SAA. some sitty dense. bu	n w/silt. or. oarse gr. A Fossile.	

									Boring/Well # BH06		
	10		Adv	anci	na Ar	norti	In	itv	Project:	Hare 15	
1	L		יישרי	anon	ing of	port	4111	9	Project #	017820018	
9						6	1.1		Date	8-4-20	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completion
Penetratic Penetratic Penetratic	LID FOR STATE Moisture	Vapor (ippu)	Staining Staining	1130 25 20 25 1110 Sample:	Depth (ft. bgs.) 15 16 17 18 19 20 21 20 21 22 23 24 22 23 24 25 26 27 28 29 30	Sample Run	Recover	W Soil/Roo Type	Lithe Gray to d COOTSE S Well gr. Mod stain Degraded organic n Dark brain Med - coa Some den Organic od SL-mod S SAA. SL-m Degraded odd SL-mod S SAA. SL-m Degraded odd	ark gray and n. SIt. Sweet dor. He odoc or swimp raterial tgray, clark gay rse sand. se. lor, degraded He do itain. oD stain/organic i coarse sand. i Hy sand sandy sith Dense.	Well Completion
	Dry	8.0	юų	(2.00	30 31 32 33 34 35 36 37			ML	SAA No Gray that silt.	oon v. Fn. sandy No slo	

Elevation: 5,830	PID	Boring We Date: Logged By	Advancing Opport 848 E. 2nd Ave Durango, Colo NG LOG/MONITORING W Ill Number: BH07 8-21-20 Danny Burns Ethod: Hollow Stem/Air Batany	rtunity rado 81301 ELL COMPLET Project: Project Number: 01782 Drilled By: MO-TE Sampling Method:	ION DIAGRAM e 15 20018 Drilling
10-20 Silica Sand 28'-12	1	Seal: Ben	itonite 2'-10	Grout: Bentonito	$\frac{1000}{10}$
Schedule 40 PVC [3'-SU.		Diameter:	2" Length: [5]	Hole Diameter: 71	Depth to Liquid:
Schedule 40 PVC 28-13, Slot	0.010"	Diameter:	2" Length: 15'	Total Depth: 351	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm) HC Staining	Depth (ft. bgs.) Run	Soil/Rock Type	Lithology/Rem	arks	Well Completion
SL 2.2 No Moist 2.2 No Dry 1.4 No Dry 2.314 Yest	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SW SW SW	Brown med san Well gr. No slo SAA. No slo SAA. No slo SAA. Lt. brows Lt. gray. med. Mod stain lo	n to e sand solo.	

1	T	2	Adv	anci	ng Op	porti	Boring/Well # BHOT Project: Hare 15 Project # 017820018		1949 		
Penetration Resistance	Moisture Content	 Vapor (ppm) 	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks Cor		Well Completion
	Dry	2,402	Yes sit to Mod	1235	15 16 17 18 19 20 21			SW	SAA. med-co Mod ste SIt. degr	Lt. gray arse savel. atm/odor. aded/organic	Huld an attract
	Dry st.	1,665	yes sitly.		21 22 23 24 25			SW	SAA. 4. gray/ coarse s slt. \$0. odof.	tern med-coarse/ arel. V. swampy/degraded	
	muist miet vet. Dey Dry	1,866	Ves No No	1245 BH07 28-30 1250	26 27 28 29 30			SW SW- SM SM- ML	SAA, dark wetw/con strong sta gray silty si Lt. gray fn. No stain/	gray coarse sound, idensate in/odor. and sandy stit. odor. Dense.	
	Dry	41.2	No	1300	31 32 33 34 35 36			SM ML	Gray Fn. & siltstn. Interbedde No S/O.	sandy silt. Dense. d silty fn. sand. Fissile	

Elevation: 5,830	PID	BORI Boring/We Date: Logged By Drilling Me	Advancing Opport 848 E. 2nd Ave Durango, Colo, NG LOG/MONITORING W 11 Number: BH08 8-21-20 Danny Burns 10 low Stem/Air Potors	rtunity rado 81301 ELL COMPLETI Project: Hard 01782 Drilled By: MO-TE Sampling Method:	ON DIAGRAM e 15 20018 Drilling
10-20 Silica Sand 35'-2	4'	Seal: Ben	atonite 24'-22'	Grout: Bentonite	72'-0'
Schedule 40 PVC 75'-S	.u.	Diameter:	2" Length: 30 *	Hole Diameter: 71	Depth to Liquid:
Schedule 40 PVC 35-25	0.010"	Diameter:	Length: 0°	Total Depth: 40'	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm) HC Staining	Depth Sample Run	Soil/Rock Type	Lithology/Rem	arks	Well Completion
Dry 7.3 No Dry 3.3 No Dry 4.0 No	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SW SM SM SM SM	Lt. Brown me sand w/ sit- No slo SAA. No g SAA. No g SAA. No slo Lt. Brown med med fn - med sand w/ silt.	lo sand No slo	

							1	Boring/Well # BH 08			
		A du	anai		norte	mi	the L	Project:	Project: Hare 15		
		Adv	anci	ny op	φυτι		ly [Project #	017820018		
								Date 8-21-20			
Penetration Resistance Moisture	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completion	
	1 0.9 1 2.1 1 649 1 1,20	No No No	08 95-30 1515 1515 1515 1515 1515 1515 1515 15	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36			SP SW SW ML SM ML SM	SAA. Frown W/ sile Brown to coarse sur Well Gr No Sto No Sto No Sto No Stain, degraded Gray, inte Fn sand Fn sand Stn. N Slight, sw	med sevel t - No s/o tan med to d. Dense. H- gray t. Dense, fissile slt. musty HC odor slt. dor silt. t silt. y silt. t silt. o stain. eet HC odor.		
				36	Ħ		SM	SAA		- i (i	
		1		37		1	The	- Proventing			

1	5	2	Ad	vanc	ing O _l	oport	un	ity	Boring/Well # BH08 Project: Hare 15 Project # 017820018		
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	logy/Remarks	Well Completion
	Dy	233	No	8-14 0-35-40	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	BH		ML.	Gray + mar No s/o. D Bluish gray	con si H. enge fn. si H. No So	

	bull There 15:	Î.	L	Advancing Oppo 848 E. 2nd Ave Durango, Colo	rtunity rado 81301	
Stark I			BORI Boring We	NG LOG/MONITORING W	Project:	ON DIAGRAM
			Date:	BHOY	Hare Project Number:	15
ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:			Logged By	8-24-20	017820 Drilled By:	0018
Elevation: Detector:			Drilling M	Danny Burns	MO-TE I Sampling Method:	Drilling
Gravel Pack:	PID		I Seal:	Hollow Stem/Air Rotary	Continu	uous
Casing Type: 25	-S.U.		Diameter:	Length:	Bentonite 7	Depth to Liquid:
Screen Type:	Slot:		Diameter:	2" 20" Length:	Total Depth:	Depth to Water
	0.010"		1	2" 5'	1035	Soprime water.
Penetratic Resistanc Moisture Content Vapor (ppi HC Stainin	# Depth Щ (ft. bgs.) ∽	Sample Run	Soil/Rock Type	Lithology/Ren	parks	Well Completion
Shirt 4.0 NO Shirt 4.0 NO Dry 1.6 NO	0 1 2 3 4 5 6 7 8 9 10 11 12 13	X	SU -SPM -SM	Brown med. san without well No stewn/add SAA. No :	d w/sott. graded or 5/0	

Advancing Opportunity Advancing Opportunity Advancing Opportunity Project: Hare II Project # 0178200 Date S-24- Date S-24- Lithology/Remarks II Depth (ft. bgs.) II Depth (ft. bgs.) II	15		
Project # Other and the registration Date Brown Date Stander Date Stander Brown Mediation Moisting Stander Indication Stander Indication Stander Indication Indication Indin Indication	Project: Hare 15		
Date Brown Med to Static Woisture Lithology/Remarks Depth (ft. bgs.) Run 20 15 16 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 17 16 17 17 10 10 10 10 10 10 10 10 10 10	0018		
Lithology/Remarks Lithology/Rem	- 20		
Dry 0.0 No 15 16 17 17 18 19 15 14 14 Brown med to coarse sand. Tr sitt. No s/o 19 10 11 12 14 15 16 17 17 18 19 10 10 10 10 10 10 10 10 10 10	Well Completion		
Dry 0.0 No 20 21 22 21 22 23 23 24 25 24 25 25 25 26 26 27 26 27 27 27 27 27 27 27 28 27 28 29 29 29 20 29 29 20 29 29 20 29 20 29 20 29 20 29 20	Well Completion		

Elevation: 5,830 Gravel Pack:	H LØ Detector:	PID		1 NASSA	BORI Boring/We Date: Logged By Drilling Me I Seal:	Advancing Oppor 848 E. 2nd Ave Durango, Color NG LOG/MONITORING W ell Number: BH10 8-24-20 T Danny Burns ethod: Hollow Stem/Air Rotary	tunity rado 81301 ELL COMPLETI Project: Project Number: 01782 Drilled By: MO-TE Sampling Method: Contir	ON DIAGRAM = 15 0018 Drilling nuous
Casing Type: Schedule 40 PVC	20'-51				Bet Diameter:	tonite 17-17	Bentonite (7-0 Depth to Liquid:
Screen Type: Schedule 40 PVC 3	0'-20 Slot: 0.1	010"		-	Diameter:	2" (5) Length: 10 (Total Depth: 35	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm)	HC Staining? Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Rem	harks	Well Completion
Dry 0.1	NU VO So	0 1 2 3 4 5 6 7 8 9 10 11 12 13			SW SW	H-Brown med -No s/o SAA - No s/o H. Brown w/ oxis to slight gray i	sand. dation med sand.	

									Boring/Well #	BHIO	
			Adu	anci		norti	ini	ity	Project:	Hare 15	
1		24	AUV	anu	ng Up	φυπ		Ly	Project #	017820018	
		-							Date 8-24-10		
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completion
	Dry SLi Notst	3,317 2,369	Yes, Mod. Nos.	6H 10 15 -20 1030	15 16 17 18 19 20 21 22 23 24 25 26		V	SP	bray, coa Mod. st Degrade Gray, gra Coarse so Mod s/ Degrad	rse sand. ann/odor d HC gassy odor. yish tan med. D. al HC gassy odor, med-coase samel	
	Notst	878	485		26 27	+	V	SW-SM	SAA, Gray W/ SILL. S	ilt-mod. s/o.	
	Der	A 3	N.S N.S	24 28:30 1045	28 29 30	+	A	SUMT WT	SIT. S/O. -Gray y. Fr No S/O.	. sandy silt. Dense	
	Dry	113	49	1050	31 32 33 34 35 36 37			SNY	Lt. gray int L saved stro. t.gray f L silt stro. Fissile.	ubedded silty found n. saudy silt. Some cement. No 5/0	

State of the	Concession in the	-	-				-				
10 m			4411	fr.	1		1	L	PAdvancing Oppo	rtunity	
0	and the	11-1	मान	-	10.1			SPE	848 E. 2nd Ave	•	
1	·	-1-	建山	1 HER	3 15	193		5	Durango, Colo	rado 81301	
	-	14	I		1			BORI	NG LOG/MONITORING W	ELL COMPLETI	ON DIAGRAM
		and a	124	5/	TT A	γ_{r}		Boring/w	BHU BHU	Project: Hare	15
	14 25		1 2		1.28			Date:	8-24-20	Project Number:	0010
· · · · ·	aware a		A.	A State of the				Logged B	y:	Drilled By:	5018
Elevation:	5 920	and the light	Detector		LABR. BOLLE	essances (1.5	Drilling M	ethod:	MO-TE I Sampling Method:	Drilling
Gravel Pa	5,830 sk:		90	1 11	PID		-	Seal	Hollow Stem/Air Rotary	Contin	uous
10-2 Casing Ty	0 Silica	a Sand	50	~M			_	Be	ntonite [9'-17'	Bentonite	7'-0'
Sche	dule 40) PVC	20-	SU.				Diameter:	2" Length: ZS'	Hole Diameter: 74	Depth to Liquid:
Screen Ty	dule 40) PVC	20'-2	0 ^{slot:} 0.	010"			Diameter:	Length: 1) [†]	Total Depth: 38.51	Depth to Water:
ce u	e t	(m	ng?	#							
etrati istan	oistun onten	r (pi	faini	nple	Depth	Sample	over	Roci	Lithology/Dom	l	Well
Pen Res	ŭ M	Vapo	HC S	San	(ft. bgs.)	Run	Rec	Soil/ T ₃	Liniology/Kei	IATKS	Completion
		-		-	0	T	-				
-						-					
									11 Bours med	sand	
	SL		1.5		2	4		SU	Lt. Drown 1.		
	Moust	0.5	NO		3				well gr.		
					4				III de	-	
						1			NO SIU	-	
					-5-	4				1	
					6					+	
					7 +			G.)	SAN mad-	1	
	Dry	21.3	No		1	1		SW	JAAL WEDE	. oause -	
	· '	2102	ľ		8 +				sand.	1	
					9 I				No sh	+	
					10 +				100 010	Ţ	
			-	t	11 +	-	Ĩ	SM-	Dark gray to black m	red. f	
	Ry		Yes		11 +		1	· ·	sand w/ sitt. Me	d to strong I	
	ì		1000 \$		12				Statn. Swampy, deg	. MLOONER 1	
		, 34,	No	8H	13			SM SM	Brown, w/ oxid. m	cd silty +	
7		NI	51.	11	14 +				send. No stain, st	t. odor 1	
	J Lin		No	210-15	1			sU !	Tan, It Brown meg	I save w/	1 XX
				1150	15			sm	sitt. No stain, sit. d	legraded t	
									gassy FIC odor.	2	

11	3	Adv	anci	ng Op	porti	INİ	ity	Project #	Hare 15 017820018	
Moisture	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithe	ology/Remarks	Well Completic
Dry	175	No		15 16 17 18 19 20			SV	Tan & lt med-c No stai degraded	oarse saind m. SIt. sweet HCodog, swampy	
Re	517	No		21 22 23 24 25		V	SW	LL Brown Coarse S A SIL-S Semi-swees HC odd	- U. gray Sand. stain in spots, t gassy degraded T.	
Shut	+ T	Yes	-	26			SW	SAA 10		1111
	686	No	\$X1 0.15-	27	+	- The Constant of the Constant	M NL	Start In Forschady si silty sowel	terbodded 17 + sitt stut + sevel stn. No slo	
			1220	30 31 32	+ + + + +	X	ML	Gray for son Gray interior silt t si W silts	ndy silt. No slo ideleel Fn. sandy It stn. sand, Fn. I v. Fn	
	13.6	No	1250	33 34 35 36			ML	t silty so No s/o SAA No	und stn. Slo	
- Un	1.9	100		37	<u>tl</u>	I				-

and the second s		-	_		0 BH12						
G	2	1.1	14	11	r de la			L	PAdvancing Oppo	ntunity	
		14.	de l	THER	a 16/				848 E. 2nd Ave	9	
			2	1X		-10-		DODI	Durango, Colo	orado 81301	
		2 11			, inter			Boring/W	NG LOG/MONITORING V	VELL COMPLETI	ON DIAGRAM
	1	and the	125	21	12.24				BH 12	Hare	15
	17 33		4		A A A	の一個分類		Date:	8-14-20	Project Number:	0019
1	-		A.	A State	1.			Logged B	8 ¹	Drilled By:	5018
Elevation	с. с. ору		Detecto	r.		equility i		Drilling M	ethod:	MO-TE I	Drilling
Gravel Pa	5,830 ack:)	_		PID	-	_	Seel	Hollow Stem/Air Rotary	Contin	uous
10-2	20 Silic	a Sand	_					Be	ntonite	Grout: Bentonite	
Sch	edule 4	0 PVC						Diameter:	Length:	Hole Diameter: 711	Depth to Liquid:
Screen Ty Sch	pe: edule 4	0 PVC		Slot:	010"			Diameter:	Length:	Total Depth: 7C1	Depth to Water:
e B	0	Î	ig;						2"	55	
tratic	Isture	idd).	ainir	ple #	Depth	Sample	very	tock			337-11
ene Resi	C OI	apor	C St	Samj	(ft. bgs.)	Run	eco	Typ	Lithology/Rer	narks	Completion
	-	>	Ē				24	Ň			o comprehion
	1				0				. 0	1 0 -	
					1				L.J. Brown me	el-tn.	-
					2	-			- med save.	W/silt.]	t No II
	h.,	00	No					SU	a kara da		- well.
	UNY	0.0	100		3 -	4 8	-		No SJO		
					4		VI	SM			
					5 7		Å			-	- 1
						1	4			1	
					6]					-	
					7 +				SAA NI	/ 1	
	0-	N -7			Ţ	1 t	1	SI.1	JAA. NO S	/0 +	- 1
	VM	Pot	NO		8 +		$\langle $			1	
					9 <u>†</u>		XI	5/1		ł	
					10 +		$\langle \rangle$			1	
1				+	10	4	-			1	
					11 I				2 A A	t	
		1.1		6H	12 +				JAA.	Ţ	
				5	Ť	N)P	>W	Nash	+	
		cil	1	10-1	13 $+$		(-	-5M	0/2 01	t	
	UTY	6.1	IVO	15'	14					Ŧ	
	1			1940	15 T		V			+	
				1245	15	t	1			t	

	-	-								Boring/Well #	BH12	
	HT		1	Adv	anci	na Or	norti	ini	ty 1	Project:	Hare 15	
1		2		AUV	anui	ng op	point		cy	Project #	017820018	
C	~	-								Date	8-24-20	
Penetration Resistance	Moisture Content	Vapor	(mqq)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completion
						15						
						16	-		,	13 8	So med for	-
						17	H	T		UT: DOWN	V HILL MANNAL IN -	-
	Dry	1.	4	No		18	t I	Y	SW	sand w	silt.	
	1					19	H		-214	No st	ain/odor	-
						20	-	1				-
	1					21	[]					-
						22		V	รพ	SAA les	s sitt No sla	+
	ha	0	.8	NO		23	t i	Y		1.1.1.00		L
	INM					24	F		51)		,	-
	1						ť		SM	SAA N	0 5/0	t.
-	-					25	H	-				+
	1					26	†					F
					BUT	27	t	L				<u>+</u>
		A	0		Ø	28	ł	1	0.1	Brown me	d-coarse	t
	Dry	0	8	NO	15'		ţ]	Y	-SM	sand w/	si A.	Ŧ
	-					- 29	Ħ			No da		ţ
					1400	30	+	1				-
	1					31	1					Ŧ
	-					32	t	T	SU	SAA. Bron	M coarse sound.	1
	-		~			33	ŧ	X	5M	100 5/0		ł
	Dry	0	.0	No		34	Ī			Gray, olive, o	lense Fr. sandy si H.	Ţ
	-					35	Ŧ	1	ML	gray I mar	oon silt. w/	+
	1						ţ.	T		fr. sand	No slo	Ţ
-	-					36	H					ţ
			_	_		37	T					1

Elevation: 5,830 Gravel Pack: 10-20 Silica Sand Casing Type: Schedule 40 PVC Screen Type: Schedule 40 PVC Screen Type: Schedule 40 PVC 30 '-2	юг РІD 		Boring W Boring W Date: Logged B Drilling M Seal: Be Diameter:	Advancing Oppo 848 E. 2nd Ave Durango, Colo ING LOG/MONITORING W Vell Number: BH13 8-24-20 Y Danny Burns Tethod: Hollow Stem/Air Rotary ntonite 19'-17' 2" Length: 25' Length: 10'	Project: Project: Project Number: 01782 Drilled By: MO-TE I Sampling Method: Contin Grout: Bentonite Hole Diameter:	ON DIAGRAM 15 0018 Drilling uous 7'-0' Depth to Liquid: Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm) HC Staining?	# Depth	n Sample .) Run	Recovery Soil/Rock Type	Lithology/Rem	narks	Well Completion
SL 2.9 No Dry 3.9 No	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ \end{array} $		SW SW	Brown fn-med sand w/silt. No S/O Lt. Brown / med. to med. sand. Tr. sin No S/O	-med. Poss.fill tan Coarse	
Dry 49.3 No	13 14 15		SW	SAA. SITIY dense @ 14- V- sitanse odor.	15' No stain	

	-	-						1	Boring/Well #	ßł	113
	K		Adu	onoi	na Or	norti	mi	the l	Project:	Hare 15	
1		2	AUV	anci	ng op	φυπ		ly [Project #	017820018	2.4
									Date	8-24-1	0
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithe	ology/Remarks	Well Completion
	Dry Dry Dry Dry Dry	24.9 5 ³ 2 1912 39.4	NO Yes NO NO NO	64163 CZS-T 1445 CZS-T 1445 CZS-T 1445 CZS-T 1445 CZS-T 24 20-25 30-25 30-25	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37			SW- SW- SW- SW- ML ML ML	Lt brown coarse No stain Brown w/ o Lt. gray/dar Dense. Lt. gray/dar Sthy dense Gray to bl sand Str Gray to bl sand Str Gray for No S/O Gray for No S/O Gray sand Cementer No S/ Gray to bl	xidation xidation K gray to bluck ed- coarse sand. No stain, deg. HC ack coarse ong S/O. Gas. own Fn. sandy sitt. in. sand. SH. odor sandy sitt. St. odor sandy sitt. J fissile. O voon sitt. Nos/o	

	B	H IU	Ĩ	iflare	154	i la	いたいよう	BORIN	848 East 2 Durango, G LOG/N	2nd Ave CO 813	nue 01 DRING W	ELL COM	PLETIC)N DIAGRA
	3	1	S. La	5/			Ęų	Boring/Well	Number:	RHI	4	Project:	Hare	15
		AA	2	1	a c			Date:	2-0	1-21	•	Project Number	017820	018
		-1-	1				en e	Logged By:	Danny	Burns		Drilled By:		rilling
levation:	5 920		Detector:			GLANCE - C		Drilling Met	hod:	N/Air D	store	Sampling Metho	od:	, ming
Fravel Pack	5,650				riD			Seal:	unow ster	II/AII K	Jaly	Grout:	Contine	1005
asing Type:	Silica	Sand						Diameter:	ionite	Length:		Hole Diameter:	$\frac{1}{7}$	Depth to Liqui
Schedi	ule 40	PVC		Slot:	2	al 20t		Diameter:		Length:	191	Total Depth:	35'	Depth to Wate
Sched	ule 40	PVC	6	0.0)10" >	<i></i>		2	2"		10			
Penetratior Resistance	Moisture Content	Vapor (ppr	HC Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type		Lit	hology/Ren	narks		Well Completic
	jed Ded	0.6 318 2.112	Ne No Slight		1 2 3 4 5 7 8 9			SW -SM SW -SM	Lt. No Tan, sound Lt.	brow d s Som stat SAA W/ SAA W/ Say	in iand. e. si H in /odos , med. sitt. med. s in /odo	fn-med iand, r.		
	хч	745	JLI-		11 12 13 14 15	- - - - - - - -		SU A	Tan Dens Two of 1	, Me se. sma t. gr	ed san Il lense wy sligh	nd es (<2 at stain	in.) locbr	

C Staining Sample #	Depth (ft. bgs.) 15 16 17 18 19 20	Sample Run	Recovery	Type	Lithe SAA Tare 14	ology/Remarks	Well Completion
N6	15 16 17 18 19 20			SW	SAA. Tain 14		-
			/ \	20A	Dense. No stain	prown med soud	-
No	21 22 23 24 25			5W	Tan, Den No stain Sweet gas	see med sand. , but mod ssy oder.	
14 14 25-27	26 27 28			SU	Gray to d black source Strong sta	ork gray + d, med in lodor wot/sat.	-
yes BH 14 14/18/28-30	29			SM ML	4 gray to Fin sandy	sitt No. slo	
No 21-35	31 32 33 34 35 36			SM ML	Gray Fr Dense, fi No s/o	sandy silt. ssile	
	No 198 014 25-27 14 25-27 14 1971 88-30 8H 14 28-30 14 30-35	No 23 24 25 24 25 24 25 26 27 28 28 29 30 31 32 30 31 32 30 31 32 30 31 32 34 35 36 37	No 23 24 25 26 27 25 - 27 28 28 29 30 31 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 34 35 36 37 37	No 23 24 25 26 25 26 25 26 27 25 28 29 30 31 32 31 32 31 32 31 32 31 32 34 35 36 37 37 36 37 37 37 37 37 37 37 37 37 37 37 37 37 36 37 37 37 36 37 3	No 23 24 25 24 25 25 26 25 25 28 28 28 28 28 28 28 30 31 30 31 32 8H 32 30 31 32 8H 32 30 31 32 8H 32 30 31 32 30 31 35 34 35 36 35 36 31 35 36 31 35 36 35 36 37 38 37 38 38 37 38 38 37 38 37 38 38 37 38 38 37 38 38 38 37 38 38 38 38 37 38 38 38 37 38 38 38 37 38 38 38 37 38 38 38 37 38 37 38 38 37 38 38 37 38 38 37 38 37 38 38 37 38 38 37 38 38 37 38 38 37 38 38 37 38 38 38 38 37 38 38 38 37 38 38 38 37 38 38 38 37 38 38 38 38 37 38 38 38 38 37 38 38 38 38 38 37 38 38 38 38 37 38 38 38 38 37 38 38 38 38 38 37 38 38 38 38 38 37 38 38 38 38 38 37 38 3	No 23 24 25 24 25 25 24 25 25 25 25 25 25 25 25 25 25 26 25 28 28 28 28 28 28 28 28 28 28 28 28 28 28 30 31 31 32 30 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 35 35 36 35 36 37 36 37 37 37 37 37 30 37 30 31 31 35 36 37 37 30 31 31 35 36 37 37 30 31 37 30 31 31 35 36 37 37 30 30 31 37 30 31 37 30 31 35 36 37 37 30 3	No 23 24 24 25 25 25 26 25 25 26 27 25 26 27 28 28 28 28 28 28 28 28 28 28

		ent .	Ĩ	t lare	15			BORIN	WSP USA INC 848 East 2nd Aven Durango, CO 8130	ue 1 RING W	ELL COMPLETI	ON DIAGRAM
				5/				Boring/Wel	INumber: BHIS	5	Project: Hare	: 15
		316	- Ar					2 Date:	2-9-21	-	Project Number: 01782	0018
		=/3	1	ST .		i s	\$. K	Logged By:	Danny Burns	-	Drilled By: MO-TE	Drilling
evation:	5,830		Detector		PID			Drilling Me	thod: Iollow Stem/Air Rot	lary	Sampling Method: Contir	nuous
aver Paci 10-20	^{k:} 0 Silica	Sand						Ben	itonite		Bentonite	Depth to Liquid
Sing Typ Sche	edule 40	PVC		Slot				Diameter:	2"	!	Total Deaths	Depth to Water
Sche	e: dule 40	PVC		0.0	<u>10"</u> 3	2-17		Diameter:	2"	15'	10tal Depth: 35'	Deptil to water:
Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Rer	narks	Well Completion
	SL: Moist Dry Dry	2.6	No No		1 2 3 4 5 6 7 8 9			SU -SM SW	Brown, ta Savel v, No stai Brown sa Coarse Some gra No s/	n or n or vel, v w/ o y den	med 14. oder ned- xidation se silt.	
	Dry	2,247	Yes		10 11 12 13 14 15			sw -	& continuou refusal, t <u>center plu</u> 10-15' Brow Dense sav	is sav read to ig to n t g red. s	mpler o put in get to 20' gray med Light stain	

e 57 of 274	e 		_									
Pag	[WSP U	JSA INC	200 S						Boring/Well #	8415	_
		848 Ea	ist 2nd A	venue						Project:	Hare 15	
		Durang	30, CO 8	31301						Project #	017820018	
	E 0	Γ				1		T		Date	2-9-21	·
	Penetratio Resistanc	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithe	ology/Remarks	Well Completion
						16 17 18	- - - - - -	N		\$ No con Used a get to	tinuous sampler. enter plug to - 20!	
		Dry	18	No		19 20 21	• • • •	4		Cuttings: sand. N	Brown med coarse	
		Dry	1,490	sit. No	وبرا	22 23 24 25 26			SW	coarse sit. ste degraded	s and. in, gassy HC odor.	
		Dry	3 055	Yes	25 -30	27 28 29 30			SW	SAA. D COATSE S SIT-mud -moisi@30	uense. med- sund. stain/odor	-
1 2:33:45 PM		Dry	82	No No	BH 15 20 -35	31 32 33 34			5M- ML	Gray si H. No	No slo. No slo. some fn. sund	
eceived by OCD: 10/15/202					1300	35 36 37				Fissile		

140			1	ithare	164		Product of	BORIN	WSP USA INC 848 East 2nd Aver Durango, CO 813 G LOG/MONITO	nue 01 DRING W	/ELL COMPLETI	ON DIAGRAM
y y			in	5/		1		Boring/Well	Number: BH16		Project: Hare	15
			1			و مرکز		Date:	2-9-21		Project Number: 01782	0018
			1			1	κ.	Logged By	Danny Burns		Drilled By: MO-TE I	Drilling
evation:	5,830		Detector:		PID			Drilling Met H	hod: [ollow Stem/Air Ro	tary	Sampling Method: Contin	uous
avel Pac	^{k:} 0 Silica	Sand						Seal: Ben	tonite		Grout: Bentonite	Double to Double
sing Typ	e: edule 40	PVC		Ct_+				Diameter:	Length:		Hole Diameter: 7"	Depth to Liquid:
reen Typ Sche	e: dule 40	PVC	-	Siot: 0.(010"			Diameter:	Length: 2"	10'	Total Depth: 35'	Depth to Water:
Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litl	nology/Re	marks	Well Completion
	sl Moist	4.1	No		1 2 3 4 5 6		N	SW -SM	Brown N SiH. No s	med slo	sand w/	
	Dry	0.0	Na		7 8 9 10			SW	Lt. Brow Sand, 1 No st	n, ta med. o	n loose.	
	Dry	6.0	No		12 13 14	+ + - - - - - -		5W	tan sand. No	med - 517 5/0	- course - dense,	

	WSP L	JSA INC	venule						Boring/Well #	BH16 Hare 15	
	Durang	si 2nu A 10. CO 8	1301						Project #	017820018	·····
									Date	2-9-21	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completio
	}				15						
					16	-			SAA-		t
									Tan co	parse, med.	Ŧ
	D.,	60	No		17 - 18				sand.	Dense.	ŧ
	124		100						N	1	Ţ
					19 -	- 1			No	5/0,	t
_					20						1
					21	•			Lusina cente	er duy, continuous	+
									sampler re	Fusali	Ŧ
					22	-			1 paging &	uttings.	+
	Der	13	No		23						Ŧ
					24	-			DIGWN, CO	arse t ned	ŧ
						.			Sann. No	>/0,	‡
					25	4			AFESUME	continuous	+
	0.				26				sampler.		1
	Vig		Nu		27	.				E Å	ł
				213		.			-tun to	1t. gray	Ţ.
	st_	2332		64	28 -	- 1			dense n	red coarse	ŧ
	muist		SL.	e'	29				sand.		‡
			Yes	25-30	30	-			slt stain	lodor.	ł
				1600					COARSE AFA	n sand	Ť
	wer		Yes		31	-			not slt	sheen the	+
	1.000		(32			-			t
	-			BH		.			A Div San	du sitt. No s/n	Ŧ
	R		<u> </u>	16	55				y, ,,		t
	MY	212	Nº	33	34		-		11 and sit	t. No slo	Ŧ
				-35	35	·					t
				16-15	24	.] [). 33.5	Ŧ
					- 30				6	after pullimyout	t
					37						I

			j	-4	161		いのため	BOPIN	WSP USA INC 848 East 2nd Avenue Durango, CO 81301	WELL COMPLETI	
in the second				5/	N. C.	A.E	λ. Έιυ 1 - 2	Boring/Wel	INumber: BHI7	Project: Hare	15
	1.34			I .				Date:	2-10-21	Project Number: 017820	018
Elevation:			Detector	N.			54	Logged By	Danny Burns	MO-TE I	Drilling
Gravel Pac	5,830		Detector		PID			Entang Me	Iollow Stem/Air Rotary	Grout:	uous
10-2 Casing Typ	0 Silica	Sand			<u></u>			Ben Diameter:	tonite	Bentonite	Depth to Liquid:
Sche Screen Typ	dule 40	PVC		Slot:				Diameter:	2" Ungth: 0	Total Depth: 2	Depth to Water
Sche	dule 40	PVC	<u></u>	0.0	010"				2"0	50	-
Penetration Resistance	Moisture Content	Vapor (ppm	HC Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/R	emarks	Well Completion
	Dry	1.7	No		1 2 3 4 5 6			SW -5M	Brown, It bro fn-med sand Loose. No si odor.	w/tom w/silt. tain or	No Well set
	Dry	1.0	No		7 8 9 10 11			sw sm	SAA. Tan fn. to sand w/ si well gr.	med. coarse It. No slo	
	Dry	1.2	No		12 13 14	• • •	V	SW -SM	SAA. No	s/o	

WSP U	JSA INC					Boring/Well #	BH17	
848 Ea	ast 2nd Avenue					Project:	Hare 15	0
Duran	go, CO 81301					Date	2-10-2	•
Penetration Resistance Moisture Content	Vapor (ppm) Staining	Sample #	Depth Samj (ft. bgs.) Ru	le overv	Soil/Rock Type	Lithe	ology/Remarks	Well Completio
Dry	0.7 No 1.8		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		SW SV SN ML	SAA. Tu w/siH. Brown/LA coarse san No starn Tan, co No starn Lt grayist sand t st sand t st No sto.	n med sand No s/o Han med d. Tr. sith. Jodor. arse sand oxidation o tan V. fn it to H. Dense.	

a se				// 	1				WSP USA INC			
	1		1 12	-					848 East 2nd Av	enue		
		1200	U Er	llare	164		and a second		Durango, CO 81	301		
		31.6	1	17	B		÷.	BORIN	G LOG/MONIT	FORING W	ELL COMPLETI	ON DIAGRAM
				51	10-20 C.		ЩÇ,	Boring/Wel	Number: BH	18	Project: Hare	15
		6	The		Ale Co			Date:	2-10	-21	Project Number: 01782(0018
	-		113	130	2. (12.) Suits (Logged By:			Drilled By:	
Elevation:		Sector 8	Detector:	19 31	SC 42	1. 1. 1. 2.		Drilling Me	Danny Burns		MO-TET Sampling Method:	Drilling
Gravel Pac	5,830				PID			F	lollow Stem/Air H	Rotary	Contin	uous
10-2	0 Silica	Sand						Ben	tonite		Bentonite	
Casing Typ Sche	e: edule 40	PVC						Diameter:	Length: 2"		Hole Diameter: 7 "	Depth to Liquid:
Screen Typ	e: dule 40	PVC		Slot:	10"			Diameter:	Length:	5	Total Depth: 30	Depth to Water:
50		Ê	lg?				<u> </u>	v.				
ratio	sture	idd)	ainir	ple ⊭	Depth	Sample	лог	Rocl pe	L	ithology/Re	marks	Well
enet	Moi	apor	C St	Sam	(ft. bgs.)	Run	Reco	Soil/ T ₃	Ľ	11101059/100	ind its	Completion
		>	H		0						ing in the second s	
	1						-					1
					1 -	H \	1					+
					2	Į –	M	SW	Lt Brown	n me	d sand	1 1
	N	00	M.		3		Y	-5M	w/ silf	- N	a sla	t I
	Dry	0.0	NO			-	IA.		Noisca		0 510	ŢΙ
					4 -	H		CIA	success.	alt. a	and Nosla	t I
					5	4		541	coarse s	any s	and the po	+
					6		1	1				± 1
					7	-		61				+ 1
					· -		\mathbb{N}	7M	1. Jarra	+ + AIL.	THA	t I
	Dra	0.0	No		8 -	H	Y	SM		1	il a ul	+ 1
	ויין			(9				tu-me	d si	Ity saver	‡
<u> </u>					10				Dense.	No	50	+ 1
				1			1					t 1
					11 -	H			- center p	lua ru	Hinge	+
					12			CLI	SAN) (J.		1
	SL		۸ ۱		13			20-	JAA.			t
	most	0.0	100		- ,, -			SM	No	sla		ŦI
	1				14 -					210		t
				-	15						-105 - 3	
_				-								

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WSP USA INC 848 East 2nd Avenue Durange CO \$1301								Boring/Well # Project:	BHIS Hare 15	
Durang	o, CO 8	1301						Project #	017820018	
								Date		
Penetration Resistance Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completio
Dry	0.0 0.3	No No	51 8 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37			SW SP SP SP ML	Core: Tan. med Plug cuttive Coarse th Dense. Tan coa well gr. Dense. SAA. No Gray, dense Fissite. No	send w/siH. No s/o No s/o. No s/o No s/o S/o. Sn. sandy siH. s/o.	

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Durango, CO 81301				Boring/Well # Project: Ha Project # 0178 Date 2 -		BH 19 re 15 320018 0 - 2 1	
Penetration Resistance Moisture Content Vapor (ppm) Staining	Depth Sample (ft. bgs.) Run	Recovery	Soil/Rock Type	Lithol	ogy/Remarks	Well Completio	
Dry 0.0 N Dry 0.0 N Dry 0.0 N	2π 2π 2π 2π 2π 2π 2π 2π	R	SW -SM SAA SR	BH19 7" diam. H. Boown W sil No si No si No si No si No si No si No si No si No si No si	TD: Fu med sand 1. 10058 1. 1005		
Dry 1.3 N	\$8 \$9		58	SAA.	No slo	ŧ	

Page		WSP U 848 Ea Durang	JSA INC st 2nd A go, CO 8	venue 1301						Boring/Well # Project: Project #	BH19 Hare 15 017820018	
	Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Date	blogy/Remarks	Well Completion
						37 38 19	-	;		BH	19	
		Diy	0.0	No		2 0 1 1 1 1 1 1 1 1			SP	Center pl Tan me sand. Wellgi No	ng-cuttings! Id coarse Dense S/o	
		Dry	7.8	No	割	47 - 48 - 49 - 49 - 49 - 49 - 49 - 49 - 49			SP	SAA	Jo \$0	
		Moist	119	52.	611 19 30 -35	3 0 52			59	Gray, co moisil.	arse second slight oder	
3:45 PM		Derl		Ne	1515	64 - 3 5 -			SM ML	gray sit	ty-fn seurd	-
CD: 10/15/2021 2:3		DM	4,8	No	BH 19 35 -40	56 57 58			mL	Dense	VO SAA S/O	
Received by G			I			40						3

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WSP 848 E Dura	USA INC ast 2nd A ngo, CO 8	venue 1301						Boring/Well # Project: Hare 15 Project # 017820018 Date 2 - 11 - 21		SH(20	
Penetration Resistance Moisture	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	2-11-21 blogy/Remarks	Well Completion	
	0.0	No		37 38 39 40 41 42 43 44 43 44 45 46 47 48 49 49 450			SW SM SW	Brown f Brown f w/sit. Nouse. SAA N	20 er: HSA. 6"dium in med savd Oryunics No Slo		
	Çu	No		\$1 \$2 \$3 \$4 \$5			SP	tan h med Fn- sund.	elgrad med coarse No SU		
Dry	68	No		\$6 \$7 \$8 \$9	- - - - -		SP	Tom me Send. De 81. youssy	d coarse inse sweet HC odor	-	
				20					1.	3	

Durang	o, CO 8130	01					Project: Hare 15 Project # 017820018 Date			
Penetration Resistance Moisture Content	Vapor (ppm)	Staining Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completio	
Dry Dry Wet	27 N 2023 Y 80 N	JD Bri 20 25 -30 -30 25 -30 -30 -30 -30 -30 -30 -30 -30 -30 -30	37 38 39 20 41 42 43 44 25 46 47 48 46 47 48 49 51 52 53 54 56 57 58 59		N	SP SW SW SW ML- ML	BHIZO SAA SL odor Tan to SL odor Tan to Med - me saved - si LA gray ma SIT. SIC IA A Men SIT. SIC IA A Men Some Lt. gray son No SIO. LO'screen TD	2-11-2 iun coarse sund. No stein No stein Under coarse ado: d-sound W/sitt. d. sound - coarse sto.		

Page 67 of 274

10 - 0 - 10 - 10 - 10 - 10 - 10 - 10 -	a			Time	e 16		ſN,	BORI	WSP USA INC 848 East 2nd Avenue Durango, CO 81301 NG LOG/MONITORING WELL COMPLETION DIAGRAM
	1	de.	The	51	Cart		10	Boring/We	ell Number: BH2 Project: Hare 15
-	1	A		1	1		37	Date:	5/17/2/ Project Number: 017820018
	-		11	14.10			1	Logged By:	y: Drilled By:
Elevation:	11.4.8.4	CALLS .	Detector:	45 5	55.00A	ear a	15.	Drilling Me	ethod: Sampling Method:
Gravel Pac	5,830)			PID		-	F Seal:	Hollow Stem/Air Rotary Continuous
10-2 Casing Ty	0 Silica	a Sand						Ber	ntonite Bentonite Length: Hole Diameter Depth to Liquid:
Sche	edule 40	D PVC		Slati				Diameter.	2" 30 ""
Scheen Ty	dule 40	PVC		0.0	010"			Diameter:	2" IO' Total Depth: Depth to Water: 29.5
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks Well Completion
	DRy DRy	6.2 G.7	N N					SP-SM SP/SM	Loose, dry, 12 brown, Sand, little fines, non cohesive, no Slo SAA no Slo
) ry	g.4	N		7 - 8 - 9 -			sp/sm	SAA NO SIG
)RY	4.1	N		10 11 12 13			SM	Leose, dry, It brown, coarse Sand, few fines, no Stain/odor
	Ry	2,2	N		14 15			SM	SAA no s/o

Page 68 of 274

84 Di	WSP USA INC 848 East 2nd Avenue Durango, CO 81301								Boring/Well # Project:	BH 2/ Hare 15	
		,,							Date	5/17/21	1.221
Penetration Resistance Moisture	Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithole	ogy/Remarks	Well Completion
DR	1	2-8	N		15 16			SP	Loose, dry, Coarso Non-concsive	c Sand, crace fines - no 510	
	۷	3.4	N		17 18	-		SP	SAA		$\left\{ \left \right\rangle \right\}$
DP	ly .	1.4	N	1	19 20 21	• • • •	114	sp	SAA		
	se	5,3	~	-	22 23 24	•		sp	meddense, moise Coarse Sand tr Mottling no c	ace fines, white	
_					25			60	<i>c</i>		
	it	/- T	N		²⁶ 27			לי	541		
moif	+ 1	4.8	N		28 29	1.1		CP	med dense, co	arse sand. e gravel	
					30 31	014			0 10 10 99,5		
wet	54 3	005	Y		32			Sp	wet, black, coarse Sand, S	HC Staining trong oder	
	5+ 4	185	N		34 35 36			c2	Moist, Very St gray, Clay	iff, Yellow brown	TP:33

		, Heavel Me	-	BORING LO	848 E. 2nd A	<i>ve</i> Well completi	ON DIAGRAM
	1997 - 19	1	**	Boring/Well Number	BH22	Project:	Harr 15
3	1	X No	-7.9=	Date:	5/17/21	Project Number:	20016
		Yes	2	Logged By:		Drilled By:	Deilling
Elevation:	Detec	tor:		Drilling Method:	ric Carroll	Sampling Method:	Dritting
5,76 Gravel Pack:	0	PID		Hollow : Seal:	Stem/Air Rotary	Grout:	nuous
10-20 Silic Casing Type:	a Sand	12 100	-	Bentonite Diameter:	Length:	Bentonite	Depth to Liquid:
Schedule 4	0 PVC	Slot		2"	30	Tel D. d.	NA
Schedule 40	0 PVC	0.010"	-	2"	Length: 15	Hotal Depth: 40'	Bepin to water.
Penetration Resistance Moisture Content	Vapor (ppm) HC Staining	and	Sample Run	Soil/Rock Type	Lithology/R	emarks	Well Completion
Dry	g. N	2 3 4 5		SM SAA	no 5/0		
	6.3 N	6 7 8 9		SM SAA	no 5/0	V 18	
Dry 4	.9 N	10 11 12		SM 54A Loose brace	, dry, it brow sinds, no s	un, coarse song 10	
DRY 4.	.9 N	13 14 15	5	P 541	no slo		

17	Advancing Opportunit							Boring/Well #	ell # BH 22	
14	Z	AL	Valici	ng Up	ροπι	IN	ity	Project:	Howell M#1	
								Date	017820016	
Resistance Moisture	Vapor	(ppm) Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithole	ogy/Remarks	Well Completio
DR	4 2.4	N		15 16 17			SP	med. dense, dru Sand, litble gra	y, It brown, coarse avel no 5/0	
DRV	2.0	N		18 19	-		sp	SAA noslo		$\left \frac{1}{2} \right\rangle$
	-	T.		20 21		_		1		Ŧ(
	5.4			²² 23			SP	Dense, brown, Seen few grav	Coarse Sand, rel no stain/odor	$\frac{1}{4}$
DRY	8.8	Ň		²⁴ 25 26		-	SP	SAA no s	10	ŧ
DRY	14,9	N		27 28			SP	SAA no Slo		
Dey	28.1	N		29 30		_	58	5A4 no 511	2	
moist	7.5	N		31 32			sp	Dense, moise, Sew growal	coarse sand,	5 E. C.
Wet	17.5	N		33 34 35 36			۶P	No Recovery Coarse, wet	32.5.35 5 Sand,	

r

				-	_				
	-7						Boring/Well #	BH22	
	Ad	ianoi	na 0.	nort		:	Project:	Howell M#1	
1/42	70	anul	iy Up	purt	uП	ily f	Project #	017820016	
						E F	Date	r/17/0	/
.5 3 2	0	#			1.	1	Date	5/////	
Penetrati Resistan Moistur Conten	(ppm) Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	logy/Remarks	Well Completion
		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	37 38 39 40 41 42 43 44 43 44 43 44 43 44 43 44 45 44 45 44 45 47			CL	Dork gra TD = 40'	Y, CIAY, Sbiss	
Firewall Mary	Advancing Oppo 848 E. 2nd Av	ortunity re							
---	--	---------------------------------	----						
	BORING LOG/MONITORING V	VELL COMPLETION DIAGRA	AM						
5	BH23	Howell M#1							
	Date: 5/17/21	Project Number: 017820016							
	Logged By: Eric Carroll	Drilled By: MO-TE Drilling							
Elevation: Detector: DID	Drilling Method:	Sampling Method:							
Gravel Pack:	Hollow Stem/Air Rotary	Grout:	-						
10-20 Silica Sand Casing Type:	Bentonite	Bentonite	d.						
Schedule 40 PVC	2" 40		u.						
Schedule 40 PVC 0.010"	Diameter: Length: 2" 1(1)	Total Depth: 47' Depth to Water	r.						
Penetration Resistance Moisture Content Vapor (ppm) HC Sample # Recovery Recovery	Type Soil/Rock	marks Well Completio	on						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SM COOSE, dry, 1t bro Sew fines ho SI SM SAA NOSIB SM SAA M SAA Dense, dry, 1t yellol Coarse sand no SAA W/ Oxidati	wbrown, Slo							

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						_			Boring/Well #	PH 05	
	17	E	Ad	ianci		anort	in	14.	Project:	Howell M#1	
1	51	Z	Au	anci	ing Op	ροπι	III	ily	Project #	017820016	
		1		. · · ·					Date	5/17/21	
Penetratio	Kcsistance Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	Well Completion
	_ mais	6.8	N		15				DRUSC YOUR	where course	
					16			SP	Sand, little	Sines no slo	
					17	ŧ.					
	mois	+ 3,2	2		18			58	SAA NO	510	ŧ)
-	-				19 -						t / \
		. '81		_	20						$\left \left(\left \right\rangle \right) \right $
		0.2	1		21				1.12.1	3 S	
	MUSE	2.5	1	an ait a'	22	-		SP	SHA no S	; lo	
		1.2	1775	·	23					the state of the s	- / /
	mois	3.4	N		24	-		SP	med. dense, g. no s/o	ray, coarse Sand -	
					25	-			1.1 1		$\left \right\rangle$
	moist	5.4	N		26		ł	SP	SAA no :	sin -	E))
	-				27 -					-	- / /
1					28						£/ K
1	Moig	5.9	N		29			SP	little fines	wn, coarse sand -	
					30						
					31	5		60	<i>c</i> 1 ·		XX X
	moist	10.3	N		32			7	244		
	1				33						1 F ·
	moise	10.6	N		34			SP	SAA		
					35			5			F, F,
	moisc	11,4	N		36 37			SP	SAA		

										v	
			2						Boring/Well #	BH 23	
1	11	-	Ad	vanci	ina Or	port	In	itv	Project:	Howell M#1	
	-11					point			Project #	017820016	
E a	To	1	1	1 74	120.0	1		·	Date	5/17/2/	
atio	ture	Jo (II	ing	le #	Depth	Sample	'ery	e cck			Well
sist	on	Var	tair	du	(ft.	Run	co	Lyp L	Litho	ology/Remarks	Completic
Per Re	ΣU		S	Sa	bgs.)		Re	Soi			- single
	maist	inc	1		37	II			meiss dente	is brown course	
		10-0						SP	Sand, lite	is since	
					38						
						-			NO 316		
	wet				39 -				Wet @ 3	8.5	L. H
					40	-					\downarrow \square
				1.1	40	-	-	-			-11-
	moise	8.6	N		41	-		CL	maist, 910.	V Clay train	t il
-1		017				-			Sand	, - ', orace	$+,i \vdash$
\neg					42	.			June		+
					72 -	1			-D:	42	
					43			5	10-		+ .
					· +	1					+
					44			C			ł
					-	1					+
1					45						+
					+	1					+
					46 1						+
					+	1		1			+
					47 1						+
					Ť						+
					48 Ť						+
					Ť			1211			+
					49 T						+
					T						+
					50 T						t
					Т						+
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-					11			J = I			+
-					58 T						+
-					П						+
					59 T	- C. U.		1.4.1			

	All of the other other of the other other other of the other o	6	¶N.		BORING oring/Well P late:	VSP USA INC 348 East 2nd Avenue Durango, CO 81301 G LOG/MONITORING W Number: <u>BH 24</u> <u>5/19</u>	VELL COMPLETIC Project: Project Number: 017820 Drilled By:	DN DIAGRAM 15 1018
Elevation: 5,830	Detector:	PID	· / · · · ·	10	Drilling Meth	od:	Sampling Method:	Jinnig
Gravel Pack: 10-20 Silica Sand		110	*	s	eal:		Grout:	uous
Casing Type:	1		Ť	I	Bent Diameter:	Length: 110'	Bentonite Hole Diameter:	Depth to Liquid:
Screen Type:	Slot:		-	1	2 Diameter:	Length:	Total Depth:	Depth to Water:
E o E	0.01	0"	(i e i	1	- 2	10	45	39'
Penetratio Resistanc Moisture Content Vapor (ppn	HC Staining? Sample #	Depth Sat (ft. bgs.) F	mple Run	Recovery	Soil/Rock Type	Lithology/R	emarks	Well Completion
DRY 0.6 DRY 0.6 DRY 0.8 DRY 1.1 DRY 1.1 DRY 1.6 DRY 1.6		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	And a strange of the second se			Loose, Dry, coarse Fines no slo SAA no slo Loose, Dry, Coa trace fines SAA	sand, little	
DRY 13.5	\sim	14 15	(.	ł	V	SAA	MIS]) (

	WSP US	A INC	nua						Boring/Well #	BH 24	
	Durange	CO 813	01						Project:	Hare 15	1.1
	Durango,	00015							Project #	017820018	1.12
e a		T		-	1				Date	5/18/2	/
Penetratic Resistanc	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litholo	gy/Remarks	Well Completie
	DAY	21	~		15 16 17 18	-		1 and 1	trace sincs	own coarse san	
	ORY G	-6 1	v	а Т.	19 20 21	den .	1	4	Danse maria	hown conver	
	noist 6.	.8			22 23				Sand, fer	gravel	$\frac{1}{4}$
Î	noise 9.	4 N			24			3	Dense, moist, Sand, organic Some graves	black, coarse swampy odor	T T
	0156 17.	GN	1	4	26 27 28				Very dense, mo sand, some no slo	grave 1	se + /
moi	130 14.	N			29 30	4.4.			SAA ho s	5/0	
- mpi	ist 11.7				31 32				SAA no s	510	ŧ/
moi	10.9	N			33 34 35	Ś			SAA no s	5/0	
Moiz	8.0	N			36		1		SAA nos	10	

WSP LISA INC	1				Boring/Well #	BHZU	
848 East 2nd A	venue				Project:	Hare 15	
Durango, CO 8	1301				Project #	017820018	
				-	Date	5/18/2	1
Penetration Resistance Moisture Content Vapor (ppm)	Staining Sample #	Depth Samp (ft. bgs.) Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completion
mgißt 7.2	N	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			SAA Firm, Gra Sand SAA	Y, CIMY, trace	

.

10-10					_		_				
0			1.		12				WSP USA INC	ţ	
1	1.65	1 .	1 1	THE TO	AR		X,		848 East 2nd Avenue	2 - A - A - A - A	
	1.41	1.1	A	X		195			Durango, CO 81301	1.1.1	
1.4		il.		44	130	a second		BORI	NG LOG/MONITORING	WELL COMPLETI	ON DIAGRAM
1	1	Ris	1 K	21	E.			Boring/We	BH25	Project:	1.6
		Sec.	11 and		La tort		1	Date:	Elic	Project Number:	15
1.1	100	1.	2	6		10		Logged By	5//8	01782	0018
Elevation:	1		Detector:	12 (4)	22.607	C.32 4	1	Deilling M	Danny Burns	MO-TE	Drilling
Gravel Pa	5,830 ck:)		-	PID			Drilling Ma	Hollow Stem/Air Rotary	Sampling Method:	0
10-2	20 Silica	a Sand						Seal:		Grout:	luous
Casing Ty Sch	pe: edule 40	PVC			1.1.1.1			Diameter:	Length:	Bentonite	
Screen Ty	pe:	PVC		Slot:					2" 30'	Hole Diameter:	Depth to Liquid:
Sche	edule 40	PVC	-	0.0	010"			Diameter:	2" Length:	Total Depth:	Depth to Water:
tion	ut Ite	(ud	ŝ	#	52111	1.1	N	×	Ī D	10	36
Penetra Resista	Moistu Conte	Vapor (p	HC Stainin	Sample	Depth (ft. bgs.)	Sample Run	Recover	Soil/Roc Type	Lithology/Re	emarks	Well Completion
	DRY	11.7	N		0				Looka da carda		
		`		1.1	1 1			SP	rose, ary, sand, te	w fines	
						t	0.3	115	no stain/odor		∓ \ _ /
					2 _	4		1.53			+) /
			1		3	1	-1	3151	-1		T /
	DRy	16.0	N	- 05	1390	1.00		SP	SAA No Slo		+
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		20			11			1.1	I II we to the	1. 1.	(A
	URY	3.8	10		12	P. /		SP	SAA no slo	W CON	Ŧ\ /
				a Fi	14					1 1 1	+)
					13 +	4				1 1. 1.	∓/
					14			1.4	1 1 2		⊬ /
	DRV	17	N	11	1	- Y		SP	SAA no sle	Sal In The	
	0.7		-		15				The state of the second se	A CARL CARD	

Page 79 of 274

WSP	USA INC	C				-		Boring/Well #		BH 25	
040 E	ast 2nd A	Avenue R1301						Project:		Hare 15	
Dura		51501						Project #		017820018	
8 9		1.1				_		Date		5/18	
Resistanc Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type		Lithology/Remar	ks	Well Completion
DPY	1.8	N	-	15 16	-		sp	med dense Sand, so	, dry, 13. brs me gravel n	0 5/0	
	2.0	N	•	17 18						- 43 - 5	ŧ('
			* 4 	19 20	-	5	sp	SAA n	0 5/0		
moist	10.8	N		21 22			58	med dens Sand	se, moiss, b. Some grave	rown coarse 1	
Mo.'St	12.6	N		23	+		SP	544	no 510	18 N. N. N.	
moist	21.8	N	3	25 - 26 - 27 -			Sp	SAA	no Sla		+
			4	28			60		no cla	15	
Meise	10,1	N	ę	²⁹ - 30 -		ľ	5P	547	1.0 510	1	
maise	7.9	N		31		Ł	SP	SAA	no slo	(A)	Ť,E
mist	4.2	Λ/		³² - ³³ -		-	C2	SAA	no 5/0		
	· · ·	·		34 35			51	GW	€t ~35	,	
moist	Э. Ч	N		36		ľ	CL	Firm, little	moise, gra Sand	y brown, cl TD=40	ay the

a star	1		1	4		1 N,		WSP USA INC 848 East 2nd Avenue
	1:	3 1	THER	916	20	26		Durango, CO 81301
	1	1		1-11	1.	12	BORI	ING LOG/MONITORING WELL COMPLETION DIAGRAM
121	9.	195	51	C.			Sporing we	BH26 Hare 15
	1.16			12.5%		1	Date:	5/16/21 Project Number: 017820018
		11/1			50	-2	Logged By	3y: Drilled By:
E	1.12	Sell.	12 6	33.00	0.15		2	Danny Burns MO-TE Drilling
5.8	30	Detector:		PID			Drilling M	Hollow Stem/Air Rotary Continuous
Gravel Pack:		0					Seal:	Grout:
10-20 Sili Casing Type:	ca Sand		-	1		-	Diameter:	Entonite Bentonite Depth to Liquid:
Schedule	40 PVC		-	- P. 2	1.57			2" 30 NA
Schedule	40 PVC		Slot:	010"			Diameter:	2" Length: 15 Total Depth: 46 Depth to Water:
E	2		0.				1	
Penetration Resistance Moisture	Vapor (ppn	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks Well Completion
D&v	4.0	N		0	-	8	5M	Loose, dry, 1t. brown, coarse Sand, libtle sines NO 510
DAY	4.2	N		3 - 4 -			SM	SAA no sip
DRY	3.0	N		5 - 6 - 7 - 7			sp	Loose, dry, brown, coarse Sand few gravel no SIA
Dry	3.8			8 9 10	3. I.I.		SP	SAA no slo
DRy	3.8	N		11 <u>+</u> 12 <u>+</u> 13 <u>+</u>		T.	sp.	SAA noslo
DRY	9.6	N		14 15			5p	Dense, dry, Coarse, It brown Sand wit white & Rust mottles

WSP U 848 Ea	JSA IN	C					_	Boring/Well #	BH 26	
Durang	to, CO	81301		r	24			Project:	Hare 15	
	,							Project #	017820018	
Prenetration Resistance Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithole	ogy/Remarks	Well Completic
moist	13.0 6:9	N		15 16 17	-		SP	LOOSE, MOIST COarse Son	d no slc	
Moist	13.0	N		18 19 20	-		58	SAA no	510	
moist	9.3	N		21 22	-		sp	Dense, moise coorse sc.	nd, few gravel	‡(
moise	11.0	N		23 24			SP	SAA no s	510	××`,`` * X X X X X X X X X X X X X X X X X X X
moise	18.5	N	- 6	²⁵ 26 27	-		SP	Dense, dark bri Sand, some g	own, coarse ravel	
meist	16.3	N	14	28 29			SP	SAN NO SI	10	
	16.7	N		30 31			S.P	SAX no s	16	
-wet 3	2407	Y		32 33 34 35	A.P.		sp	LOOSE, WCE, Sand, HC G	Black, Coause Nor	
- web 2	004	У		36 - 37 -			SP	Firm, Moise few San	, gray, cray	

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	MSP C	USA IN	Venue						Boring/Well #	-	B	426	
C T	Durane	TO COS	81301						Project:	_		Hare 15	
	· · · · · ·	50,000	1001						Project #	-		017820018	
ce o	2 -	1	60	#	1.1.1		>	*	Date		_		
stan	Istur	pm)	nin	ple	Depth	Sample	ver	Pe	r :-	thology	Remarks		Well
tesi	Col	> g	Stai	Sam	(ft. bgs.)	Run	eco	Ty	LI	morogy	Remarks		Completio
	-	-		•	37		H	S					
		10	~		5/ 1	"		SP	moise, 9	rav	Firm	Clay	1.1.1
m	DIA	1-8	N		38			1		"		- /	tiFl.
_		1	C ~ ()										I.EL
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			4		NO.	Fri		BORIN Bornst/Well	Durango, CO 8130 G LOG/MONITO	DI DRING W	ELL COMPLETIC	ON DIA	GRAN
		A	test.	21	11	\mathcal{T}		Date	BHZ	1+	Hare Broject Number	15	
						32.5		Date:	9-10-2		017820	8100	
								Logged By	Danny Burns		Drilled By: MO-TE I	Drilling	
elevation:	5,830	-	Detector:		PID			Drilling Met H	hod: ollow Stem/Air Ro	tarv	Sampling Method:	uous	
iravel Pac	k:	01	40	1-7	8'	-		Seal	78'-	26'	Grout: Cement		76-0
10-2 Casing Typ	0 Silica	Sand	10				-	Diameter	Length	201	Hole Diameter: 7 H	Depth	to Liquid:
Sche creen Typ	dule 40	PVC	-	Slot	-01	al and		Diameter	2" Length		Total Depth:	Depth	lo Water:
Sche	dule 40	PVC		0.0	10"	4-24			2"	10	40'	<u> </u>	
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litt	nology/Rer	narks	Com	Vell
	Dry	3.6	No No	BH127 0-5 1055 8427 E 5-10 1100	1 2 3 4 5 6 7 8 9 10			5W -5M SU -5M	Tan, It. med sand No st Tan - It. Is fine - med s no stan 10	brown w/ ain/o brown ands u der	fines dor		
	ory	9.0	No	BH27 C 10-15	12 13 14 15		X	5 W ~5M	ton - 1k med - corrs fines no stan	Brown e Sond Voder	. J/ 50M2		

	WSP U	SA INC							Boring/Well #	BH27		
	848 Eas	at 2nd Ar $CO 8^{1}$	venue						Project: Project #	Hare 15 017820018		
	Durang	U, CU 8.	1501						Date	9-10-2	1	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lith	ology/Remarks	W Comp	ell eletion
	Dry Slat moist	4.2	No	BH27 B-20 1110 BH27 2025 1115	15 16 17 18 19 20 21 22 23 24 25		X	5W ~5M 5M	Tan, medi w/fines. - Lt. brown No 5/0 ten -light l maxim sn 10 5/0	-coarse sand No s/o coarsersand trough - fine to not we fines		
	SL Moist	0.9	No	BH27 @ 25-30 1/20 BH27 @	26 27 28 29 30 31 32		X	SM SM SM	doull ton - m fine sund Bottom 1' white lesses	lm brown w/s: it ~ 50/50 has acconaceous No 5/6		1111111
	SL	0.7	JU O	30.35 11.25	32 33 34 35 36 37		X	52 521	ton fine t well sorted not cou ton - Boow suit w/ fin	to medium soud everte grans sive INO S/O n fine to medium nes 52 cohesine		
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WSP U 848 Eas Durang	SA INC st 2nd Av o, CO 813	enue 301						Boring/Well # Project: Project # Date	BH 27 Hare 017820 9-10 2
Penetration Resistance Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litholog	y/Remarks
	05	Neux	BH 27 Be 35-40 1130	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58			SM SM	The - lt is un W/ silt unconsol N 50 Boltom 1' prey-sr Silt and den TD-40, 88-39	Fire - and san iduted cenish to tan a sec, consuldated slought to

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Well Completion

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Page 8	Elevation: Gravel Pac 10-2 Casing Typ Schee Screen Typ	5,830 k: 0 Silica dule 40 c: adule 40	San
	Penetration Resistance	Moisture Content	(/

En ga	1	3		1	18		See.		WSP USA INC		
¥ .	24			E.	66) 10- 11	a, b			848 East 2nd Avenue		
J.	See Les	1 3	1 IT	Illare	15				Durango, CO 81301		
1	31	1 1	1H	67/	12	- H.	×	BORIN	G LOG/MONITORING W	ELL COMPLETIO	ON DIAGRAM
-141- ·			5	51		7	Ŀч,	Boring/Well	SH 28	Project	15
			1 Per		$\mathbb{T}_{p} \subset \mathbb{T}_{p}$	3.2.33		Date: 9	-10.21	Project Number: 017820	0018
- 65								Logged By	Danny Burns	Drilled By: MO-TE I	Drilling
levation:	5 9 2 0	200	Detector:		PID			Drilling Met	hod: ollow Stem/Air Potery	Sampling Method:	
iravel Pac	5,650 k:		40) (Seal	· · · · · · · · · · · · · · · · · · ·	Grout: Cement	ilury :
10-2 asing Typ	0 Silica e:	Sand	10		-0 			Diameter:	Length: 2 1	Hole Diameter:	Depth to Liquid:
Sche	<u>dule 40</u> e:	PVC		27 Slot:	- 0 *	. 1		2 Diameter:	2" 20 Length: /	Total Depth: 10 - 1	Depth to Water:
Sche	dule 40	PVC	<u></u>	0.0	_{)10"} 3	9-29		2)" (o`	40	
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining'	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Re	marks	Well Completion
			1		0						
	Dry	1.3	N		2 3 4 5 6 7 8			5w- 5M	tan Silty-Fine Unconsolidated top to ancolum sligh No S/O	Soud 6 ¹⁴ fine Hy consolidated	
	Dry	3.5	\sim		9 10	- - - - -	X	5W- 5M	ton unconsolidated ior fine - molium rare gravel pieces.	x silty i sund t No 5/0	
	Dry	1.2	N		12 13 14 15		X	5W- 5M	tan unconsolidate. fine to coarse, a sorted and grains matrix	hoderately in silty	

$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c}$	WSP USA 1 848 East 2n Durango, C	INC d Avenue O 81301			2		Boring/Well # Project: Project # Date	Bit 28 Hare 15 017820018 9-12-2-1		
$\begin{array}{c ccccc} 15 \\ 16 \\ 17 \\ 16 \\ 17 \\ 18 \\ 19 \\ 50 \\ 17 \\ 18 \\ 19 \\ 50 \\ 20 \\ 21 \\ 22 \\ 23 \\ 20 \\ 21 \\ 22 \\ 23 \\ 23 \\ 20 \\ 21 \\ 22 \\ 23 \\ 23 \\ 24 \\ 23 \\ 24 \\ 23 \\ 24 \\ 25 \\ 26 \\ 27 \\ 26 \\ 27 \\ 26 \\ 27 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 26 \\ 27 \\ 28 \\ 30 \\ 31 \\ 31 \\ 31 \\ 31 \\ 31 \\ 31 \\ 31$	Penetration Resistance Moisture Content Vapor	(ppm) Staining	[#] old und work (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completi	on
$\begin{array}{c ccccc} & & & & & & & & & & & & & & & & &$	SIT nust (2	7 N	15 16 17 18 19 20 21	57	X	SP	ton - It. b grouned w/s moderntely si some axida	rwn mediumy-ward which prinvel ar teil trian N SPO		11/1/1/1/1
$\frac{27}{28}$ $\frac{10}{31}$ $\frac{31}{32}$ $\frac{31}{33}$ $\frac{31}{34}$ $\frac{35}{36}$ $\frac{27}{28}$ $\frac{29}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{30}$ $\frac{30}{31}$ $\frac{31}{32}$ $\frac{31}{32}$ $\frac{32}{33}$ $\frac{34}{33}$ $\frac{35}{36}$ $\frac{36}{37}$ $\frac{27}{37}$ $\frac{10}{32}$ $\frac{10}{37}$ $\frac{10}{32}$ $\frac{10}{37}$ $\frac{10}{32}$ 10		N	22 23 24 25 26		X	5-4- 5-4	ton to It provide to a silty motors N S/C	Bown Fire - melium Ccasional Coarse gravi		
SLT wish N 32 33 34 34 35 36 37	Ury 1.1	0 ~	27 28 29 <u>30</u> 31			52- 524	ton - It brow fine - mestur silty matrix Bottom I' J renses, s tim - It. Bro	on unconsulidated gained of some course N 5/0 his white calcares wi isolity more consolidated won Moderately		
	\$LT 	N	32 33 34 35 36 37			5~	concerve, fin grown in s. rare calcon	ne - nedium! It, well garted cours miner: transion		

Page 89 of 274

	WSP U	SA INC							Boring/Well #	BH 28	
	848 Ea	st 2nd Av	venue						Project:	Hare 15	
	Durang	0, CO 81	1301						Date	(1 - 10 - 7)	
ц . 2							~		Date	9-10-21	
Penetratio Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Roch Type	Litho	ology/Remarks	Well Completion
					37	Щ					
	SLT Moist	0.7	\sim		38		57	Su-	tan fine -m. Slightly conso	estim general	
			0		39	Î .	Ň	sm	silty natr:	sorted. T	T.E.
					40	H	μ		TD:US 6	Carely to 39.3	+
_					41 -	ŧ.			10-90 >	10 YI 10 0	Ŧ
					42	t l					Ŧ
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					47	+					+
					48 -	+					+
					49 -	† +					‡
					50	+					1
-					51	+					‡
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	4				53 -	+					+
					54	+					1
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					56						1
					57						1
					58	ł					1
					59	+					+

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	Hare 15	X	BORIN Boring/Well Date: Logged By:	WSP USA INC 848 East 2nd Avenue Durango, CO 81301 G LOG/MONITORING W Number: B H 29 9-13 - 21 Reece Han sun Danny Burns	ELL COMPLETIO Project: Project Number: 017820 Drilled By: MO-TE D	PN DIAGRAM 15 018 rilling
Elevation: Dete 5,830	ector: PI	D	Drilling Met H	hod: follow Stem/Air Rotary	Sampling Method: Continu	ous
Gravel Pack: 10-20 Silica Sand 4	5-33'		Seal: Beni	tonite 33 - 70'	Grout: Bentonite	
Casing Type: Schedule 40 PVC	3.	5-0+	Diameter:	2" Length: ~38	Hole Diameter:	Depth to Liquid:
Screen Type. Schedule 40 PVC	Slot: . 0.010"	45-35	Diameter	Length 10	Total Depth: 45	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm)	The stating of the st	bepth Sample Run	Soil/Rock Type	Lithology/Rer	narks	Well Completion $5 \le 0$
07 1.2 N	134 29 0-5		57- 5m	1.1447- mil ton for growed w/ fores grower. No 5/0	t to conte t occasional.	
Dry 0.3 1	1317 27 C 5-10	5 6 7 8 9	5V- 5M	ton - light Brown, f prainted, m 25% rove gravel. no Sp	fire - medicum silt/Anes 10	
ory 0.6 ^		11 12 13 14 15	sw- sm	tan - It. Brown Drained w/ m 2; NO S/O OFF-white - light + medium gradied soul	fine to mil. 5% fing m, well-sorted. 10% Fines	
& refusal @ ~ @ the bottom	- 14', cu: ta sf each	ed to center 5' stand	plang o	brilling w/ sq1.t sq00,	a sampling	1

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WSP USA II	NC						Boring/Well #	BH 29		
848 East 2nd	Avenue						Project:	Hare 15		
Durango, CC	0 81301						Project #	017820018		
							Date	9-13-21	Т	
netration sistance foisture Content Vapor	(ppm) taining	mple # D (ft.	epth S	Sample Run	ecovery	oil/Rock Type	Lith	ology/Remarks	V Com	Vell pletion
Pe Re		S I			~	Ň			5	3 <u>2</u>
			15 16							
			17					mederately consolidate		/
		au 79				Gidi-	all S car	were be rolt come		/
SL+ O.L Moist	1 N	19.5-20	20		X	5M	off-white/1.74 Median grow	it in well serted		/
51r Moist	N		21		X	3M	Attempted hold	[172] ow stem 0120-25 ved ~ 6" switch		/
			22 23			N N	back to a	center plug + split		
		BH29	24			· · ·	(25% <),	moderately consolidate	\$	/
		24.5-27	2 5 26		8	50	~3" of record Coorde grow Unconsolidated	ery, sa madium - ich sands, attend		/
			27			لم	18% > Fines.	moil-well sorted		
		12/1/24	28 29		2		~54 recording	light are to las		
	- ~	@ 29.5-30	30	-	X		med:un- co noderately 1 1070 > 5:11	will graited.		
			31 32					11 100		
			33			1	1 V/V/ the descent of ~	402 of Samela		
51+ Moist (.6	N		$\frac{34}{35}$	0		1	recover.		+ [™] ~ + [™] ~ + [™] ~	
			36			533 G				
	1		37 T						1	
										'
										2

N 8 1	WSP U 348 Eas Durang	SA INC st 2nd Av o, CO 81	venue 1301						Boring/Well # Project: Project # Date	BH 2.9 Hare 15 017820018 9-13-2/	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Litho	ology/Remarks	Well Completion
	517 No:57	0-6	N	BH29 8-5- 40	37 38 39 40 41 42	- - - - - - - - - - - - - - - - - - -	X		ypot sampled Stord, 1: thorony Cuttings From gray balls of 5:1 The recorrid Innsintul 5: 1 the at tog of Sam	Changed watching changed watching quyen to nelline It to yeld writing isight - med. gray re or shale. some chy Ble (34.5') NSTO	
	sir Mast	0.(N	13/1+ 29 44.5-45	43 44 45 46 47 48 49 50		×		TO Q 45'	13 50	
					51 52 53 54 55 56 57 58 59						
											3

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ENCLOSURE B – LABORATORY ANALYTICAL REPORTS



February 23, 2021

Jennifer Deal HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: Hare 15

OrderNo.: 2102809

Dear Jennifer Deal:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/18/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report
Lab Order 2102809

Date Reported: 2/23/2021

CLIENT: HILCORP ENERGY		Client Sa	mple ID:	: BH06						
Project: Hare 15	Collection Date: 2/17/2021 1:55:00 PM									
Lab ID: 2102809-001	Matrix: AQUEOUS	Receiv	ved Date:	2/18/2	2021 7:50:00 AM					
Analyses	Result	RL Qua	l Units	DF	Date Analyzed					
EPA METHOD 8021B: VOLATILES					Analyst: CCM					
Benzene	110	5.0	µg/L	5	2/19/2021 5:05:00 PM					
Toluene	7.7	5.0	µg/L	5	2/19/2021 5:05:00 PM					
Ethylbenzene	27	5.0	µg/L	5	2/19/2021 5:05:00 PM					
Xylenes, Total	48	10	µg/L	5	2/19/2021 5:05:00 PM					
Surr: 4-Bromofluorobenzene	92.2	80-120	%Rec	5	2/19/2021 5:05:00 PM					

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 7

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Analytical Report Lab Order 2102809

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/23/2021

CLIENT: HILCORP ENERGY	Client Sample ID: BH09									
Project: Hare 15	Collection Date: 2/17/2021 1:23:00 PM									
Lab ID: 2102809-002	Matrix: AQUEOUS Received Date: 2/18/2021 7:50:00 AM									
Analyses	Result	RL (Qual	Units	DF	Date Analyzed				
EPA METHOD 8021B: VOLATILES						Analyst: CCM				
Benzene	37	5.0	Ρ	µg/L	5	2/19/2021 6:16:00 PM				
Toluene	ND	5.0	Ρ	µg/L	5	2/19/2021 6:16:00 PM				
Ethylbenzene	99	5.0	Р	µg/L	5	2/19/2021 6:16:00 PM				
Xylenes, Total	230	10	Р	µg/L	5	2/19/2021 6:16:00 PM				
			_							

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 7

Analytical Report Lab Order 2102809

Hall	Environmenta	l Analysis	Laboratory,	Inc.

Date Reported: 2/23/2021

CLIENT: HILCORP ENERGYClient Sample ID: BH11										
Project: Hare 15	Collection Date: 2/17/2021 2:17:00 PM									
Lab ID: 2102809-003	Matrix: AQUEOUS Received Date: 2/18/2021 7:50:00 AM									
Analyses	Result	RL (Qual	Units	DF	Date Analyzed				
EPA METHOD 8021B: VOLATILES						Analyst: CCM				
Benzene	3500	50	Р	µg/L	50	2/20/2021 12:25:00 PM				
Toluene	4500	100		µg/L	100	2/23/2021 11:43:00 AM				
Ethylbenzene	320	50	Ρ	µg/L	50	2/20/2021 12:25:00 PM				
Xylenes, Total	11000	100	Р	µg/L	50	2/20/2021 12:25:00 PM				
Surr: 4-Bromofluorobenzene	92.4	80-120	Р	%Rec	50	2/20/2021 12:25:00 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н 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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

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Analytical Report Lab Order 2102809

2/20/2021 1:13:00 PM

2/20/2021 12:49:00 PM

2/20/2021 1:13:00 PM

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/23/2021

	IIII CODD ENEDCY			4.0	1 10	DUI10					
CLIENT:	HILCORP ENERGY		Che	nt Sa	mple ID	:BH13					
Project:	Hare 15	Collection Date: 2/17/2021 12:25:00 PM									
Lab ID:	2102809-004	Matrix: AQUEOUS Received Date: 2/18/2021 7:50:00 AM									
Analyses		Result	RL	Qual	Units	DF	Date Analyzed				
EPA MET	HOD 8021B: VOLATILES						Analyst: CCM				
Benzene		660	10	Р	µg/L	10	2/20/2021 1:13:00 PM				
Toluene		390	10	Р	µg/L	10	2/20/2021 1:13:00 PM				

520

2800

109

Р

Ρ

Ρ

10

200

80-120

µg/L

µg/L

%Rec

10

100

10

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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 7

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2102809

Date Reported: 2/23/2021

CLIENT: HILCORP ENERGY	Client Sample ID: BH20								
Project: Hare 15	Collection Date: 2/17/2021 1:00:00 PM								
Lab ID: 2102809-005	Matrix: AQUEOUS Received Date: 2/18/2021 7:50:00 AM								
Analyses	Result	RL	Qual	Units	DF	Date Analyzed			
EPA METHOD 8021B: VOLATILES						Analyst: CCM			
Benzene	12000	200	Р	µg/L	200	2/20/2021 2:00:00 PM			
Toluene	15000	200	Ρ	µg/L	200	2/20/2021 2:00:00 PM			
Ethylbenzene	1100	200	Р	µg/L	200	2/20/2021 2:00:00 PM			
Xylenes, Total	10000 400 P μg/L 200 2/20/2021 2:00:00 PM								
Surr: 4-Bromofluorobenzene	91.7	80-120	Р	%Rec	200	2/20/2021 2:00:00 PM			

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project:	Hare 15										
Sample ID:	100ng BTEX Ics	SampTy	be: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID:	LCSW	Batch	D: R7	5423	F	RunNo: 7	5423				
Prep Date:		Analysis Da	te: 2/	19/2021	S	SeqNo: 2	665200	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		18	1.0	20.00	0	90.4	80	120			
Toluene		18	1.0	20.00	0	89.6	80	120			
Ethylbenzene		18	1.0	20.00	0	89.1	80	120			
Xylenes, Total		54	2.0	60.00	0	89.6	80	120			
Surr: 4-Brom	nofluorobenzene	18		20.00		92.1	80	120			
Sample ID:	MB	SampTy	be: MI	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID:	PBW	Batch	D: R7	5423	F	RunNo: 7	5423				
Prep Date:		Analysis Da	te: 2 /	19/2021	5	SeqNo: 2	665201	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Xylenes, Total		ND	2.0								
Surr: 4-Brom	nofluorobenzene	18		20.00		90.9	80	120			
Sample ID:	2102809-001ams	SampTy	be: MS	6	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID:	BH06	Batch	D: R7	5423	F	RunNo: 7	5423				
Prep Date:		Analysis Da	te: 2/	19/2021	8	SeqNo: 2	665204	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		210	5.0	100.0	113.7	93.7	80	120			
Toluene		100	5.0	100.0	7.695	96.6	80	120			
Ethylbenzene		120	5.0	100.0	26.64	93.9	80	120			
Xylenes, Total		330	10	300.0	47.60	94.9	80	120			
Surr: 4-Brom	nofluorobenzene	90		100.0		90.2	80	120			
Sample ID:	2102809-001amsc	d SampTy	be: MS	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID:	BH06	Batch	D: R7	5423	F	RunNo: 7	5423				
Prep Date:		Analysis Da	te: 2/	19/2021	5	SeqNo: 2	665205	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		220	5.0	100.0	113.7	105	80	120	5.37	20	
Toluene		120	5.0	100.0	7.695	117	80	120	18.0	20	
Ethylbenzene		140	5.0	100.0	26.64	114	80	120	15.7	20	
Xylenes, Total		400	10	300.0	47.60	117	80	120	18.1	20	
Surr: 4-Brom	nofluorobenzene	85		100.0		85.5	80	120	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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2102809 23-Feb-21 **Client:**

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project: Hare 15										
Sample ID: 100ng BTEX Ics	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batcl	h ID: R7	5442	F	RunNo: 7	5442				
Prep Date:	Analysis D	Date: 2/	20/2021	S	SeqNo: 26	665923	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	92.4	80	120			
Toluene	18	1.0	20.00	0	91.3	80	120			
Ethylbenzene	18	1.0	20.00	0	90.6	80	120			
Xylenes, Total	55	2.0	60.00	0	91.2	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		90.3	80	120			
Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBW	Batcl	h ID: R7	5442	F	RunNo: 7	5442				
Prep Date:	Analysis D	Date: 2/	20/2021	S	SeqNo: 26	665924	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		90.9	80	120			
Sample ID: MB	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBW	Batcl	h ID: R7	5471	F	RunNo: 7	5471				
Prep Date:	Analysis D	Date: 2/	23/2021	S	SeqNo: 26	667158	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Surr: 4-Bromofluorobenzene	18		20.00		87.8	80	120			

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

Released to Imaging: 1/26/2023 1:04:30 PM

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 7

WO#: 2102809 23-Feb-21

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HALL ENVIR ANALY LABOR	ONMENTAL YSIS RATORY	Hall Environmental Albi TEL: 505-345-3975 Website: clients.ha	Analy 490 iquerq FAX: Ilenvii	sis Laboratory 1 Hawkins NE ue, NM 87109 505-345-4107 conmental.com	Sa	imple Log-In C	heck List
Client Name:	HILCORP ENERGY	Work Order Number:	2102	2809		RcptNo:	1
Received By:	Cheyenne Cason	2/18/2021 7:50:00 AM					
Completed By:	Cheyenne Cason	2/18/2021 8:12:10 AM					
Reviewed By:	ENM	2/18/21					
Chain of Cust	<u>ody</u>						
1. Is Chain of Cu	stody complete?		Yes	\checkmark	No 🗌	Not Present	
2. How was the s	sample delivered?		Cour	ier			
Log In				<u></u>	_	_	
 Was an attempt 	ot made to cool the samp	les?	Yes	\checkmark	No 🗌	NA 🗌	
4. Were all sample	les received at a tempera	ture of >0° C to 6.0°C	Yes	\checkmark	No 🗌		
5. Sample(s) in p	roper container(s)?		Yes	\checkmark	No 🗌		
6. Sufficient samp	ble volume for indicated te	est(s)?	Yes		No 🗌		
7. Are samples (e	except VOA and ONG) pro	operly preserved?	Yes	\checkmark	No 🗌		
8. Was preservati	ve added to bottles?		Yes		No 🗹	NA 🗌	
9. Received at lea	ast 1 vial with headspace	<1/4" for AQ VOA?	Yes	✓	No 🗌		
10. Were any sam	ple containers received b	roken?	Yes		No 🗹	# of preserved	/
11. Does paperwor (Note discrepar	k match bottle labels?		Yes	\checkmark	No 🗌	bottles checked for pH:	12 unloss noted)
2. Are matrices co	prrectly identified on Chair	n of Custodv?	Yes	V	No 🗌	Adjusted?	rz uness noteu)
3. Is it clear what	analyses were requested	?	Yes	\checkmark	No 🗌		
4. Were all holding (If no, notify cus	g times able to be met? stomer for authorization.)		Yes	\checkmark	No 🗌	Checked by:	5PA 2.18
Special Handlii	ng (if applicable)						
15. Was client noti	fied of all discrepancies v	vith this order?	Yes		No 🗌	NA 🗹	
Person N	lotified:	Date:				r	
By Whon	n:	Via:] eMa	il 🗌 Phone	E 🗌 Fax	x 🗌 In Person	
Regardin	ig:		CONC. BY DA		Condition of a property		
Client Ins	structions:						
16. Additional rem	arks:						
17. <u>Cooler Inform</u> Cooler No	nation Temp °C Condition	Seal Intact Seal No Se	eal Da	te Sign	ed By		

Page 1 of 1

Client: Mailing	Chain Hi Jen Address	-of-C Icorp nifer s:	Den 1	Turn-Ard Star Project I Project #	ound Time: dard □ R Name: Have 15 t:	ush	HALL ENVIRONMENTA ANALYSIS LABORATOF www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request					AL RY								
email o QA/QC Stan Accredi	r Fax#: Package: ndard itation: AC (Type)	□ Az Co □ Othe	Level 4 (Full Validation) pmpliance r	Project N D d Sampler On Ice: # of Coo Cooler T	Manager: anny Burn EC/DB Yes lers: 1 emp(including CF): 2	5 □ No 2 0 + 0.1 = 2.1 (°C	MTBE / TMB's (8021)	5D(GRO / DRO / MRO)	sticides/8082 PCB's	ethod 504.1)	8310 or 8270SIMS	Metals	; NO ₃ , NO ₂ , PO ₄ , SO ₄)A)	emi-VOA)	liform (Present/Absent)				
Date	Time	Matrix	Sample Name	Containe Type and	r Preservat 1# Type	ve HEAL No. ZIOZ809	BIEX)	TPH:801	8081 Pe	EDB (Me	PAHs by	RCRA 8	CI, F, Br	8260 (VC	8270 (Se	Total Col				
2117h	1355	Arheog	131-106	3 von	HC/	Ce l	k										_	-	_	+
	1323		BHOY			002	X				_							11/10/04		
	1711		DHII			<u> </u>	Х										- 17		+	+-
	1300		BH 20			0es	X												+	+
																			1	_
											_		-		_				+	+
					5.5							_							\mp	\perp
													_	_	nte disc reco				+	
Date: 2/17 Date: 2)17/21	Time: 1575 Time: 1811	Relinquish Edda Relinquish	ed by:	Received b	y: Via: Via: Via: Via:	Date Time 2/11/2, 1525 Date Time	Ren	narks P/e	s: 65e	C		Dai Erii	nny c. C	1. Bi	urn.	5 C Q	wsp	P-C	om >m	



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

August 25, 2020

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

OrderNo.: 2008906

Dear Jennifer Deal:

RE: Hare 15

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/18/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall	Environmental	Analysi	s Laborat	tory, Inc.

Lab Order 2008906

Date Reported: 8/25/2020

CLIENT: HILCORP ENERGY		Cl	ient Sa	ample II	D: BF	H01@ 20'-24'	
Project: Hare 15		(Collect	tion Dat	e: 8/1	7/2020 9:15:00 AM	
Lab ID: 2008906-001	Matrix: SOIL		Recei	ved Dat	e: 8/1	.8/2020 7:55:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CJS
Chloride	ND	60		mg/Kg	20	8/24/2020 6:09:05 PM	54629
EPA METHOD 8015M/D: DIESEL RANG	BE ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	180	9.5		mg/Kg	1	8/20/2020 1:07:25 AM	54513
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/20/2020 1:07:25 AM	54513
Surr: DNOP	100	30.4-154		%Rec	1	8/20/2020 1:07:25 AM	54513
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	NSB
Gasoline Range Organics (GRO)	1000	94		mg/Kg	20	8/19/2020 1:31:49 PM	54505
Surr: BFB	298	75.3-105	S	%Rec	20	8/19/2020 1:31:49 PM	54505
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.47		mg/Kg	20	8/19/2020 1:31:49 PM	54505
Toluene	ND	0.94		mg/Kg	20	8/19/2020 1:31:49 PM	54505
Ethylbenzene	3.0	0.94		mg/Kg	20	8/19/2020 1:31:49 PM	54505
Xylenes, Total	120	1.9		mg/Kg	20	8/19/2020 1:31:49 PM	54505
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	20	8/19/2020 1:31:49 PM	54505

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
- Н 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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 15

Hall Environmental	l Analysis	Laboratory,	Inc.
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Lab Order 2008906

Date Reported: 8/25/2020

CLIENT:	HILCORP ENERGY	C	Client Sample ID: BH01@ 27'-30'
Project:	Hare 15		Collection Date: 8/17/2020 9:45:00 AM
Lab ID:	2008906-002	Matrix: MEOH (SOIL)	Received Date: 8/18/2020 7:55:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	8/18/2020 11:56:09 AM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/18/2020 11:13:13 AM	54497
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2020 11:13:13 AM	54497
Surr: DNOP	90.3	30.4-154	%Rec	1	8/18/2020 11:13:13 AM	54497
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/18/2020 10:00:33 AM	54485
Surr: BFB	95.5	75.3-105	%Rec	1	8/18/2020 10:00:33 AM	54485
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.019	mg/Kg	1	8/18/2020 10:00:33 AM	54485
Toluene	ND	0.039	mg/Kg	1	8/18/2020 10:00:33 AM	54485
Ethylbenzene	ND	0.039	mg/Kg	1	8/18/2020 10:00:33 AM	54485
Xylenes, Total	0.10	0.077	mg/Kg	1	8/18/2020 10:00:33 AM	54485
Surr: 4-Bromofluorobenzene	98.6	80-120	%Rec	1	8/18/2020 10:00:33 AM	54485

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 15

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008906

Date Reported: 8/25/2020

CLIENT:	HILCORP ENERGY	Client Sample ID: BH02@ 25'-30' Collection Date: 8/17/2020 12:00:00 PM Matrix: SOIL Received Date: 8/18/2020 7:55:00 AM						
Project:	Hare 15						7/2020 12:00:00 PM	
Lab ID:	2008906-003							
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst	CJS
Chloride		ND	60		mg/Kg	20	8/24/2020 6:46:18 PM	54629
EPA MET	HOD 8015M/D: DIESEL RANG	GE ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)		17	10		mg/Kg	1	8/20/2020 1:17:34 AM	54513
Motor Oil Range Organics (MRO)		ND	50		mg/Kg	1	8/20/2020 1:17:34 AM	54513
Surr: [DNOP	87.7	30.4-154		%Rec	1	8/20/2020 1:17:34 AM	54513
EPA MET	HOD 8015D: GASOLINE RAN	IGE					Analyst	: NSB
Gasoline	Range Organics (GRO)	48	4.8		mg/Kg	1	8/20/2020 1:40:55 AM	54505
Surr: E	3FB	204	75.3-105	S	%Rec	1	8/20/2020 1:40:55 AM	54505
EPA MET	HOD 8021B: VOLATILES						Analyst	: NSB
Benzene		0.053	0.024		mg/Kg	1	8/20/2020 1:40:55 AM	54505
Toluene		0.43	0.048		mg/Kg	1	8/20/2020 1:40:55 AM	54505
Ethylben	zene	0.20	0.048		mg/Kg	1	8/20/2020 1:40:55 AM	54505
Xylenes,	Total	3.9	0.097		mg/Kg	1	8/20/2020 1:40:55 AM	54505
Surr: 4	1-Bromofluorobenzene	114	80-120		%Rec	1	8/20/2020 1:40:55 AM	54505

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental	l Analysis	Laboratory, Inc.
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Lab Order 2008906

Date Reported: 8/25/2020

CLIENT:	HILCORP ENERGY	(Client Sample ID: BH02@ 35'-38'				
Project:	Hare 15		Collection Date: 8/17/2020 12:30:00 PM				
Lab ID:	2008906-004	Matrix: MEOH (SOIL)	Received Date: 8/18/2020 7:55:00 AM				

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	8/18/2020 12:08:34 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/18/2020 11:37:24 AM	54497
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/18/2020 11:37:24 AM	54497
Surr: DNOP	92.0	30.4-154	%Rec	1	8/18/2020 11:37:24 AM	54497
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/18/2020 10:24:02 AM	54485
Surr: BFB	101	75.3-105	%Rec	1	8/18/2020 10:24:02 AM	54485
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	8/18/2020 10:24:02 AM	54485
Toluene	ND	0.039	mg/Kg	1	8/18/2020 10:24:02 AM	54485
Ethylbenzene	ND	0.039	mg/Kg	1	8/18/2020 10:24:02 AM	54485
Xylenes, Total	0.15	0.079	mg/Kg	1	8/18/2020 10:24:02 AM	54485
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	8/18/2020 10:24:02 AM	54485

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
- Н 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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008906

Date Reported: 8/25/2020

CLIENT:	HILCORP ENERGY		Cl	ient Sample II): Bł	H03@ 10'-15'					
Project:	Hare 15		(Collection Date	e: 8/1	17/2020 2:20:00 PM					
Lab ID:	2008906-005	Matrix: SOIL	Matrix: SOIL Received Date: 8/18/2020 7								
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA MET	THOD 300.0: ANIONS					Analyst	: CJS				
Chloride		ND	60	mg/Kg	20	8/24/2020 6:58:43 PM	54629				
EPA MET	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	BRM				
Diesel R	ange Organics (DRO)	ND	9.1	mg/Kg	1	8/20/2020 1:27:44 AM	54513				
Motor Oi	il Range Organics (MRO)	ND	45	mg/Kg	1	8/20/2020 1:27:44 AM	54513				
Surr: I	DNOP	95.7	30.4-154	%Rec	1	8/20/2020 1:27:44 AM	54513				
EPA MET	THOD 8015D: GASOLINE RANG	θE				Analyst	: NSB				
Gasoline	e Range Organics (GRO)	ND	4.8	mg/Kg	1	8/20/2020 2:04:18 AM	54505				
Surr: I	BFB	96.0	75.3-105	%Rec	1	8/20/2020 2:04:18 AM	54505				
EPA MET	THOD 8021B: VOLATILES					Analyst	: NSB				
Benzene	9	ND	0.024	mg/Kg	1	8/20/2020 2:04:18 AM	54505				
Toluene		ND	0.048	mg/Kg	1	8/20/2020 2:04:18 AM	54505				
Ethylben	izene	ND	0.048	mg/Kg	1	8/20/2020 2:04:18 AM	54505				
Xylenes,	Total	ND	0.095	mg/Kg	1	8/20/2020 2:04:18 AM	54505				
Surr: 4	4-Bromofluorobenzene	101	80-120	%Rec	1	8/20/2020 2:04:18 AM	54505				

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
- Н 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

в Analyte detected in the associated Method Blank

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Surr: 4-Bromofluorobenzene

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008906

Date Reported: 8/25/2020

8/20/2020 10:15:11 AM 54526

CLIENT:	HILCORP ENERGY		Cl	lient Sample II	D: BI	H03@ 15'-18'	
Project:	Hare 15		(Collection Dat	e: 8/1	17/2020 2:30:00 PM	
Lab ID:	2008906-006	Matrix: SOIL		Received Dat	e: 8 /1	18/2020 7:55:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS					Analyst	CJS
Chloride		ND	60	mg/Kg	20	8/24/2020 7:11:07 PM	54629
EPA MET	THOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel R	ange Organics (DRO)	ND	9.8	mg/Kg	1	8/20/2020 4:28:28 PM	54549
Motor Oi	il Range Organics (MRO)	ND	49	mg/Kg	1	8/20/2020 4:28:28 PM	54549
Surr: I	DNOP	94.8	30.4-154	%Rec	1	8/20/2020 4:28:28 PM	54549
EPA MET	THOD 8015D: GASOLINE RANGE	E				Analyst	RAA
Gasoline	e Range Organics (GRO)	ND	5.0	mg/Kg	1	8/20/2020 10:15:11 AM	54526
Surr: I	BFB	94.9	75.3-105	%Rec	1	8/20/2020 10:15:11 AM	54526
EPA MET	THOD 8021B: VOLATILES					Analyst	RAA
Benzene	9	ND	0.025	mg/Kg	1	8/20/2020 10:15:11 AM	54526
Toluene		ND	0.050	mg/Kg	1	8/20/2020 10:15:11 AM	54526
Ethylben	izene	ND	0.050	mg/Kg	1	8/20/2020 10:15:11 AM	54526
Xylenes.	Total	ND	0.10	mg/Kg	1	8/20/2020 10:15:11 AM	54526

99.4

80-120

%Rec

1

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
- Н 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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008906

Date Reported: 8/25/2020

8/20/2020 11:25:34 AM 54526

8/20/2020 11:25:34 AM 54526

CLIENT:	HILCORP ENERGY		Cl	lient Sa	ample II	D: BH	104@ 23'-25'	
Project:	Hare 15		(Collect	tion Dat	e: 8/1	7/2020 3:15:00 PM	
Lab ID:	2008906-007	Matrix: SOIL		Recei	ved Dat	e: 8/1	8/2020 7:55:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst	CJS
Chloride		ND	60		mg/Kg	20	8/24/2020 7:23:32 PM	54629
EPA MET	HOD 8015M/D: DIESEL RAN	IGE ORGANICS					Analyst	BRM
Diesel R	ange Organics (DRO)	35	9.0		mg/Kg	1	8/20/2020 4:58:03 PM	54549
Motor Oi	l Range Organics (MRO)	ND	45		mg/Kg	1	8/20/2020 4:58:03 PM	54549
Surr: I	ONOP	101	30.4-154		%Rec	1	8/20/2020 4:58:03 PM	54549
EPA MET	HOD 8015D: GASOLINE RA	NGE					Analyst	RAA
Gasoline	Range Organics (GRO)	43	4.7		mg/Kg	1	8/20/2020 11:25:34 AM	54526
Surr: I	3FB	296	75.3-105	S	%Rec	1	8/20/2020 11:25:34 AM	54526
EPA MET	HOD 8021B: VOLATILES						Analyst	RAA
Benzene		ND	0.023		mg/Kg	1	8/20/2020 11:25:34 AM	54526
Toluene		0.11	0.047		mg/Kg	1	8/20/2020 11:25:34 AM	54526
Ethylben	zene	0.14	0.047		mg/Kg	1	8/20/2020 11:25:34 AM	54526

2.5

117

0.094

80-120

mg/Kg

%Rec

1

1

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

Qualifiers:

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

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Client:	HILCOR	P ENERGY								
Project:	Hare 15									
Sample ID:	MB-54499	SampType: m	blk	Tes	tCode: EPA	A Method	300.0: Anions	6		
Client ID:	PBS	Batch ID: 54	1499	R	RunNo: 711	54				
Prep Date:	8/18/2020	Analysis Date: 8	/18/2020	S	SeqNo: 248	31784	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC L	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5	i							
Sample ID:	LCS-54499	SampType: Ic	s	Tes	tCode: EPA	A Method	300.0: Anions	6		
Client ID:	LCSS	Batch ID: 54	1499	R	RunNo: 711	54				
Prep Date:	8/18/2020	Analysis Date: 8	/18/2020	S	SeqNo: 248	1785	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC L	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.8	90	110			
Sample ID:	MB-54629	SampType: m	blk	Tes	tCode: EPA	Method	300.0: Anions	6		
Client ID:	PBS	Batch ID: 54	4629	R	RunNo: 713	03				
Prep Date:	8/24/2020	Analysis Date: 8	/24/2020	S	SeqNo: 248	8391	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC L	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-54629	SampType: Ic	s	Tes	tCode: EPA	Method	300.0: Anions	6		
Client ID:	LCSS	Batch ID: 54	4629	R	RunNo: 713	03				
Prep Date:	8/24/2020	Analysis Date: 8	/24/2020	S	SeqNo: 248	8392	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC L	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	93.4	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2008906

25-Aug-20

WO#:

Client: Project:	HILCOR Hare 15	P ENERGY									
Sample ID:	MB-54497	SampType	e: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch ID	: 544	497	F	RunNo: 7	1146				
Prep Date:	8/18/2020	Analysis Date	e: 8/	18/2020	S	SeqNo: 24	480616	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Motor Oil Rang Surr: DNOP	Organics (DRO) je Organics (MRO)	ND ND 9.7	10 50	10.00		97.2	30.4	154			
Sample ID:	LCS-54497	SampType	e: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rango	e Organics	
Client ID:	LCSS	Batch ID	: 544	497	F	RunNo: 7	1146		J	J	
Prep Date:	8/18/2020	Analysis Date	: 8/	18/2020	S	SeqNo: 24	480639	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Surr: DNOP	Organics (DRO)	53 4.8	10	50.00 5.000	0	106 96.1	70 30.4	130 154			
Sample ID:	LCS-54468	SampType	e: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID	: 544	468	F	RunNo: 7 '	1149				
Prep Date:	8/17/2020	Analysis Date	e: 8/	19/2020	5	SeqNo: 24	482200	Units: %Red	;		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.9		5.000		97.1	30.4	154			
Sample ID:	MB-54468	SampType	e: Me	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch ID): 544	468	F	RunNo: 7	1149				
Prep Date:	8/17/2020	Analysis Date	e: 8/	19/2020	S	SeqNo: 24	482202	Units: %Red	;		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		10		10.00		103	30.4	154			
Sample ID:	LCS-54512	SampType	e: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID	: 54	512	F	RunNo: 7 '	1197				
Prep Date:	8/18/2020	Analysis Date	: 8/	19/2020	S	SeqNo: 24	483610	Units: %Red	;		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.7		5.000		93.2	30.4	154			
Sample ID:	LCS-54513	SampType	e: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID	: 54	513	F	RunNo: 7 '	1197				
Prep Date:	8/18/2020	Analysis Date	e: 8/	19/2020	S	SeqNo: 24	483611	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	54	10	50.00	0	108	70	130			
Surr: DNOP		4.7		5.000		93.8	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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2008906

25-Aug-20

WO#:

Client: Project:	HILCOR Hare 15	P ENERG	Y								
Sample ID:	MB-54512	SampT	уре: М	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	• Organics	
Client ID:	PBS	Batch	ID: 54	1512	F	RunNo: 7	1197				
Prep Date:	8/18/2020	Analysis D	ate: 8	/19/2020	S	SeqNo: 24	483614	Units: %Rec	:		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		10		10.00		102	30.4	154			
Sample ID:	MB-54513	SampT	уре: М	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	• Organics	
Client ID:	PBS	Batch	ID: 54	1513	F	RunNo: 7 ′	1197				
Prep Date:	8/18/2020	Analysis D	ate: 8	/19/2020	S	SeqNo: 24	483615	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10)							
Motor Oil Rang	ge Organics (MRO)	ND 11	50	10.00		115	30.4	154			
				-							
Sample ID:	2008906-006AMS	SampT	ype: M	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	BH03@ 15-18	Batcr Apolygia D	oto: 94	1549	ſ	Runino: 7	1237	Lipito: ma/K	-		
Prep Date:	8/19/2020	Analysis D	ale. d	/20/2020			485416	Units: mg/K	9		
Analyte	Organica (DBO)	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	organics (DRO)	48	9.1	45.41	5.405	93.0 105	30.4	154			
Sample ID:	2008906-006AMS) SampT	vpe: M	SD	Tes	tCode: F	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	BH03@ 15'-18'	Batch	D: 54	1549	F	RunNo: 7	1237		g-		
Prep Date:	8/19/2020	Analysis D	ate: 8	/20/2020	S	SeqNo: 24	485417	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	47	9.5	47.53	5.403	86.8	47.4	136	2.11	43.4	
Surr: DNOP		4.5		4.753		93.8	30.4	154	0	0	
Sample ID:	LCS-54549	SampT	ype: L	cs	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch	ID: 54	1549	F	RunNo: 7 '	1237				
Prep Date:	8/19/2020	Analysis D	ate: 8	/20/2020	S	SeqNo: 24	485497	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	59	10	50.00	0	119	70	130			
Surr: DNOP		5.6		5.000		113	30.4	154			
Sample ID:	MB-54549	SampT	уре: М	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	organics	
Client ID:	PBS	Batch	ID: 54	1549	F	RunNo: 7 ′	1237				
Prep Date:	8/19/2020	Analysis D	ate: 8	/20/2020	S	SeqNo: 24	485499	Units: mg/K	g		
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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

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	WO#:	2008906	
I abaratary Ina			

25-Aug-20

Client:	HILCORP EN	ERGY									
Project:	Hare 15										
Sample ID: MB-5454	19 S	ampType:	MBLK		Test	Code: EP	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS		Batch ID:	54549		R	unNo: 71	237				
Prep Date: 8/19/20	20 Analy	sis Date:	8/20/202	20	S	eqNo: 24	85499	Units: mg/Kg	g		
Analyte	Res	ult PO	QL SPK	value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (D	RO) I	ND	10								
Motor Oil Range Organics	(MRO) I	ND	50								
Surr: DNOP		11		10.00		111	30.4	154			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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25-Aug-20

WO#:

Client: Project:	HILCOR Hare 15	PENERGY	<u></u>								
Sample ID:	mb-54485	SampTy	/pe: M	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 54	485	F	RunNo: 71	1140				
Prep Date:	8/17/2020	Analysis Da	ate: 8/	/18/2020	S	SeqNo: 24	481489	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	je Organics (GRO)	ND 1000	5.0	1000		99.6	75.3	105			
Sample ID:	lcs-54485	SampTy	/pe: LC	s	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 54	485	F	RunNo: 71	1140				
Prep Date:	8/17/2020	Analysis Da	ate: 8 /	/18/2020	S	SeqNo: 24	481490	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	5.0	25.00	0	88.6	72.5	106			_
Surr: BFB		1100		1000		110	75.3	105			S
Sample ID:	mb-54505	SampTy	/pe: MI	BLK	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	PBS	Batch	ID: 54	505	F	RunNo: 71	1173				
Prep Date:	8/18/2020	Analysis Da	ate: 8 /	/19/2020	S	SeqNo: 24	483097	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	je Organics (GRO)	ND 1000	5.0	1000		102	75.3	105			
Sample ID:	lcs-54505	SampTy	/pe: LC	s	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: 54	505	F	RunNo: 7 1	1173				
Prep Date:	8/18/2020	Analysis Da	ate: 8 /	/19/2020	ç	SeqNo: 24	483098	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	90.9	72.5	106			
Surr: BFB		1100		1000		105	75.3	105			S
Sample ID:	2008906-007ams	SampTy	/pe: M \$	S	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	BH04@ 23'-25'	Batch	ID: 54	526	F	RunNo: 71	1246				
Prep Date:	8/18/2020	Analysis Da	ate: 8 /	20/2020	S	SeqNo: 24	485750	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	59	4.8	24.15	42.60	65.9	61.3	114			
Surr: BFB		2600		966.2		273	75.3	105			S
Sample ID:	2008906-007amsd	SampTy	/pe: M \$	SD	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	BH04@ 23'-25'	Batch	ID: 54	526	F	RunNo: 71	1246				
Prep Date:	8/18/2020	Analysis Da	ate: 8 /	/20/2020	S	SeqNo: 24	485751	Units: mg/K	(g		
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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#:	2008906

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Hare 15

Sample ID: 2008906-007amsd

Client:

Project:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

SampType: MSD

HILCORP ENERGY

Client ID: BH04@ 23'-25'	Batch	n ID: 54	526	F	RunNo: 7	1246				
Prep Date: 8/18/2020	Analysis D	ate: 8/	20/2020	5	SeqNo: 24	485751	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	52	4.9	24.63	42.60	39.9	61.3	114	11.0	20	S
Surr: BFB	2400		985.2		242	75.3	105	0	0	S
Sample ID: Ics-54526	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch	n ID: 54	526	F	RunNo: 7 '	1246				
Prep Date: 8/18/2020	Analysis D	ate: 8/	20/2020	5	SeqNo: 24	485797	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.4	72.5	106			
Surr: BFB	1100		1000		108	75.3	105			S
Sample ID: mb-54526	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: PBS	Batch	n ID: 54	526	F	RunNo: 7	1246				
Prep Date: 8/18/2020	Analysis D	ate: 8/	20/2020	5	SeqNo: 24	485801	Units: mg/k	(g		
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		101	75.3	105			

TestCode: EPA Method 8015D: Gasoline Range

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit
- Not in Range

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WO#: 2008906

25-Aug-20

Client:	HILCOR	P ENERG	Y								
Project:	Hare 15										
Sample ID:	mb-54485	SampT	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	h ID: 54	485	F	RunNo: 7	1140				
Prep Date:	8/17/2020	Analysis D	Date: 8/	18/2020	S	SeqNo: 2	481537	Units: mg/ł	٢g		
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-Brom	nofluorobenzene	1.0		1.000		102	80	120			
Sample ID:	LCS-54485	SampT	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batcl	h ID: 54	485	F	RunNo: 7	1140				
Prep Date:	8/17/2020	Analysis D	Date: 8/	18/2020	S	SeqNo: 2	481538	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.92	0.025	1.000	0	92.0	80	120			
Toluene		0.93	0.050	1.000	0	93.3	80	120			
Ethylbenzene		0.94	0.050	1.000	0	93.5	80	120			
Xylenes, Total		2.8	0.10	3.000	0	93.9	80	120			
Surr: 4-Brom	nofluorobenzene	1.0		1.000		102	80	120			
Sample ID:	mb-54505	SampT	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	h ID: 54	505	F	RunNo: 7					
Prep Date:	8/18/2020	Analysis D	Date: 8/	19/2020	S	SeqNo: 2	483124	Units: mg/k	٢g		
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-Brom	nofluorobenzene	1.0		1.000		105	80	120			
Sample ID:	LCS-54505	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batcl	h ID: 54	505	F	RunNo: 7	1173				
Prep Date:	8/18/2020	Analysis D	Date: 8/	19/2020	S	SeqNo: 2	483125	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.93	0.025	1.000	0	93.0	80	120			
Toluene		0.95	0.050	1.000	0	95.0	80	120			
Ethylbenzene		0.95	0.050	1.000	0	95.0	80	120			
Xylenes, Total		2.9	0.10	3.000	0	96.4	80	120			
Surr: 4-Brom	nofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2008906

25-Aug-20

WO#:

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Anal	yte	Result	PQL	SPK value	SPK I	Ref Val	%REC	LowLimit	HighLimit	%RPD
Benze	ne	ND	0.025							
Toluene		ND	0.050							
Ethylb	enzene	ND 0.050								
Kylene	es, Total	ND	0.10							
Surr: 4-Bromofluorobenzene		1.0		1.000			100	80	120	
Juali	fiere									
2uan	Hers: Volue exceeds Maximum Contomin	ant Lanal			р	Anolista dat	acted in the c	an ainted Mathed	Dlault	
D	Sample Diluted Due to Matrix	ant Level.			Б Е	Value above quantitation range				
н	Holding times for preparation or an	alysis exceeded			J	Analyte det	ected below q	uantitation limits		
ND	Not Detected at the Reporting Limit	it			Р	Sample pH	Not In Range			
PQL	Practical Quanitative Limit				RL	Reporting I	Limit			
	% Recovery outside of range due to	dilution or matrix								

Project:	Hare 15										
Sample ID:	2008906-006ams	SampT	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID:	BH03@ 15'-18'	Batc	h ID: 54	526	F	RunNo: 7	1246				
Prep Date:	8/18/2020	Analysis E	Date: 8/ 2	20/2020	S	SeqNo: 24	485953	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.89	0.024	0.9579	0	92.8	76.3	120			
Toluene		0.90	0.048	0.9579	0	93.7	78.5	120			
Ethylbenzene		0.91	0.048	0.9579	0	95.5	78.1	124			
Xylenes, Total		2.7	0.096	2.874	0	95.5	79.3	125			
Surr: 4-Brom	nofluorobenzene	1.0		0.9579		105	80	120			
Sample ID:	Sample ID: 2008906-006amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles										
Client ID:	BH03@ 15'-18'	Batc	Batch ID: 54526 RunNo: 71246								
Prep Date:	8/18/2020	Analysis E	Date: 8/ 2	20/2020	SeqNo: 2485954 Units: mg/Kg						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.87	0.024	0.9542	0	90.7	76.3	120	2.67	20	
Toluene		0.88	0.048	0.9542	0	92.1	78.5	120	2.11	20	
Ethylbenzene		0.89	0.048	0.9542	0	93.5	78.1	124	2.57	20	
Xylenes, Total		2.7	0.095	2.863	0	92.8	79.3	125	3.23	20	
Surr: 4-Brom	nofluorobenzene	0.98		0.9542		103	80	120	0	0	
Sample ID:	LCS-54526	SampT	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 54	526	F	RunNo: 7	1246				
Prep Date:	8/18/2020	Analysis [Date: 8/	20/2020	5	SeqNo: 24	485989	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	90.4	80	120			
Toluene		0.91	0.050	1.000	0	90.6	80	120			
Ethylbenzene		0.91	0.050	1.000	0	90.5	80	120			
Xylenes, Total		2.7	0.10	3.000	0	91.6	80	120			
Surr: 4-Brom	nofluorobenzene	1.0		1.000		103	80	120			
Sample ID:	mb-54526	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 54	526	F	RunNo: 7	1246				
Prep Date:	8/18/2020	Analysis D	Date: 8/	20/2020	S	SeqNo: 24	485991	Units: mg/k	٢g		

<i>#2020</i>	Analysis D		20/2020	C C	orinto. Ing/1		
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
	ND	0.025					
	ND	0.050					
	ND	0.050					
	ND	0.10					
hanzana	1.0		1 000		100	00	120

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RPDLimit

Qual

.

WO#: 2008906

25-Aug-20

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	ONMENTAL (SIS Ratory	Hall Environme TEL: 505-345-2 Website: clien	ntal Analysis Labora 4901 Hawkin Albuquerque, NM 8 3975 FAX: 505-345 ts.hallenvironmental	atory s NE 7109 San 4107 .com	nple Log-In Check Lis
Client Name:	HILCORP ENERGY	Work Order Num	ber: 2008906		RcptNo: 1
Received By:	Cheyenne Cason	8/18/2020 7:55:00	AM		
Completed By:	Isaiah Ortiz	8/18/2020 8:26:26	АМ	I. C	Joh
Reviewed By:	OL	6 18 20			,
Chain of Cust	tody				
1. Is Chain of Cu	istody complete?		Yes 🗹	No 🗌	Not Present
2. How was the s	sample delivered?		Courier		
Log In 3. Was an attem	pt made to cool the sam	bles?	Yes 🔽	No 🗔	
4. Were all samp	les received at a tempera	ature of >0° C to 6.0°C	Yes 🗹	No 🗌	
5. Sample(s) in p	proper container(s)?		Yes 🗹	No 🗌	
6. Sufficient sam	ole volume for indicated t	est(s)?	Yes 🗹	No 📋	
7. Are samples (e	except VOA and ONG) pr	operly preserved?	Yes 🗹	No 🗌	
8. Was preservat	ive added to bottles?		Yes 🗌	No 🗹	NA 🗌
9. Received at lea	ast 1 vial with headspace	<1/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹
10. Were any sam	ple containers received l	proken?	Yes	No 🗹	# of preserved
11. Does paperwor (Note discrepa	rk match bottle labels? ncies on chain of custody	()	Yes 🗹	No 🗀	for pH: <pre></pre>
12. Are matrices co	orrectly identified on Cha	in of Custody?	Yes 🗹	No 🗌	Adjusted?
13. Is it clear what	analyses were requested	1?	Yes 🗹	No 🗌	rind sha
14. Were all holdin (If no, notify cu	g times able to be met? stomer for authorization.)	Yes 🗹	No 🗌	Checked by $\mathcal{N}^{\mu}\mathcal{O}\mathcal{O}l\mathcal{A}$
<u>Special Handli</u>	ng (if applicable)				
15. Was client not	ified of all discrepancies	with this order?	Yes 🗌	No 🗌	
Person I	Notified:	Date	: [
By Who	m:	Via:	🗌 eMail 🔄 P	hone 🗌 Fax	🗌 In Person
Regardir	ng:	27-244 (daman tanan menandar mada menandar menandar menandar menandar menandar menandar menandar menandar menan Menandar menandar men	E 1994		NEW AND CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF
Client In	structions:				
16. Additional ren	narks:				
17. <u>Cooler Inform</u> Cooler No	nation Temp ⁰C Condition 1.5 Good	Seal Intact Seal No Not Present	Seal Date	Signed By	

Page 1 of 1

Client: Hilcorp Energy Company AHn: Sennifer Deal Mailing Address:	Turn-Around Time: $48hr$ TAT Standard Rush BH02 Q Project Name: $4BH01$ Q27'30' Hare 15 Project #:	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Eax. 505-345-4107
Phone #:		Analysis Request
QA/QC Package:	Project Manager: LTE- Darmy Burns Fulson, 4777	s (8021)) / MRO) SIMS SIMS PO4, SO4 /Absent)
Accreditation:	Sampler: D. B. April 5	
□ NELAC □ Other	On Ice: A Yes No	A A A A A A A A A A A A A A A A A A A
Q EDD (Type) 7 DF	# of Coolers: \	
	Container Preservative HEAL No	TEX+M B1 Pesti B1 Pes
Date Time Matrix Sample Name	Type and # Type 2008906	
8-17-20 0915 3011 BH01 @ 20-24	1-407 cool 001	
0945 BHOIC 27-30	500	
1200 BH02@25'-30'	003	
1230 BH02@35'-38'	004	
1420 BH03@10'-15'	0.05	
1430 BH03@15'-18'	006	
✓ 1515 ♥ BH04@23'-25'	V V 067	
Date: Time: Relinquished by:	Received by: Via: Date Time	CC. dhencmanne Henricom
8/17/702 1803 Ant Walt	Me courier 8/18/20 0755	dburns(e) Item. com
If necessary, samples submitted to Hall Environmental may be sub	contracted to other accredited laboratories. This serves as notice of this	possibility. Any sub-contracted data will be clearly notated on the analytical report.

and the second second second second



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

September 01, 2020

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

RE: Hare 15

OrderNo.: 2008C46

Dear Jennifer Deal:

Hall Environmental Analysis Laboratory received 19 sample(s) on 8/22/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Gasoline Range Organics (GRO)

Surr: BFB

Hare 15

Project:

Analytical Report Lab Order 2008C46

8/27/2020 5:51:33 AM

8/27/2020 5:51:33 AM

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH03@23'-25' Collection Date: 8/20/2020 3:15:00 PM Received Date: 8/22/2020 0:22:00 AM

Lab ID: 2008C46-001 Matrix: SOIL Received Date: 8/22/2020 9:23:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: BRM Diesel Range Organics (DRO) mg/Kg 860 95 10 8/27/2020 2:28:25 PM Motor Oil Range Organics (MRO) ND 480 D mg/Kg 10 8/27/2020 2:28:25 PM Surr: DNOP 0 30.4-154 S %Rec 10 8/27/2020 2:28:25 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride ND 8/29/2020 9:08:55 PM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR Benzene 0.49 mg/Kg 20 8/26/2020 5:14:52 AM 16 Toluene 360 mg/Kg 200 8/27/2020 5:51:33 AM 9.8 Ethvlbenzene 64 0.98 mg/Kg 20 8/26/2020 5:14:52 AM Xylenes, Total 960 20 mg/Kg 200 8/27/2020 5:51:33 AM Surr: 1.2-Dichloroethane-d4 112 70-130 %Rec 20 8/26/2020 5:14:52 AM Surr: 4-Bromofluorobenzene 86.2 70-130 %Rec 20 8/26/2020 5:14:52 AM Surr: Dibromofluoromethane 109 70-130 %Rec 20 8/26/2020 5:14:52 AM Surr: Toluene-d8 103 70-130 %Rec 20 8/26/2020 5:14:52 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR

14000

106

980

70-130

mg/Kg

%Rec

200

200

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 MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2008C46-002

Hare 15

Project:

Lab ID:

Analytical Report Lab Order 2008C46

Date Reported: 9/1/2020

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH03@29-30' Collection Date: 8/20/2020 3:45:00 PM Received Date: 8/22/2020 9:23:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: BRM
Diesel Range Organics (DRO)	16	9.2	mg/Kg	1	8/26/2020 8:31:45 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/26/2020 8:31:45 PM
Surr: DNOP	74.4	30.4-154	%Rec	1	8/26/2020 8:31:45 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	8/29/2020 9:45:56 PM
EPA METHOD 8260B: VOLATILES SHORT LI	ST				Analyst: JMR
Benzene	ND	0.024	mg/Kg	1	8/26/2020 5:43:40 AM
Toluene	0.70	0.049	mg/Kg	1	8/26/2020 5:43:40 AM
Ethylbenzene	0.28	0.049	mg/Kg	1	8/26/2020 5:43:40 AM
Xylenes, Total	4.9	0.097	mg/Kg	1	8/26/2020 5:43:40 AM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	8/26/2020 5:43:40 AM
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	1	8/26/2020 5:43:40 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	8/26/2020 5:43:40 AM
Surr: Toluene-d8	101	70-130	%Rec	1	8/26/2020 5:43:40 AM
EPA METHOD 8015D MOD: GASOLINE RANG	GE				Analyst: JMR
Gasoline Range Organics (GRO)	76	4.9	mg/Kg	1	8/26/2020 5:43:40 AM
Surr: BFB	114	70-130	%Rec	1	8/26/2020 5:43:40 AM

Matrix: SOIL

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 н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH04@25'-27' Collection Date: 8/21/2020 8:45:00 AM

Project:	Hare 15	Collection Date: 8/21/2020 8:45:00 AM					
Lab ID:	2008C46-004	Matrix: SOIL	ŀ	Receiv	ed Date:	8/22/2	020 9:23:00 AM
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
EPA ME	THOD 8015M/D: DIESEL R	ANGE ORGANICS					Analyst: BRM
Diesel R	ange Organics (DRO)	1400	90		mg/Kg	10	8/27/2020 2:52:26 PM
Motor O	il Range Organics (MRO)	ND	450	D	mg/Kg	10	8/27/2020 2:52:26 PM
Surr:	DNOP	0	30.4-154	S	%Rec	10	8/27/2020 2:52:26 PM
EPA ME	THOD 300.0: ANIONS						Analyst: JMT
Chloride		ND	60		mg/Kg	20	8/29/2020 9:58:17 PM
EPA ME	THOD 8260B: VOLATILES	SHORT LIST					Analyst: JMR
Benzene	e	12	0.49		mg/Kg	20	8/26/2020 6:12:14 AM
Toluene		300	9.9		mg/Kg	200	8/27/2020 6:20:01 AM
Ethylber	nzene	55	0.99		mg/Kg	20	8/26/2020 6:12:14 AM
Xylenes	, Total	890	20		mg/Kg	200	8/27/2020 6:20:01 AM
Surr:	1,2-Dichloroethane-d4	109	70-130		%Rec	20	8/26/2020 6:12:14 AM
Surr:	4-Bromofluorobenzene	92.7	70-130		%Rec	20	8/26/2020 6:12:14 AM
Surr:	Dibromofluoromethane	112	70-130		%Rec	20	8/26/2020 6:12:14 AM
Surr:	Toluene-d8	98.7	70-130		%Rec	20	8/26/2020 6:12:14 AM
EPA ME	THOD 8015D MOD: GASOL	INE RANGE					Analyst: JMR
Gasoline	e Range Organics (GRO)	12000	990		mg/Kg	200	8/27/2020 6:20:01 AM
Surr:	BFB	107	70-130		%Rec	200	8/27/2020 6:20:01 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2008C46-005

Hare 15

Project:

Lab ID:

Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH04@28-30' Collection Date: 8/21/2020 8:50:00 AM

Received Date: 8/22/2020 9:23:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	8/26/2020 8:52:09 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/26/2020 8:52:09 PM
Surr: DNOP	90.4	30.4-154	%Rec	1	8/26/2020 8:52:09 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	8/29/2020 10:10:36 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	8/26/2020 6:40:42 AM
Toluene	ND	0.049	mg/Kg	1	8/26/2020 6:40:42 AM
Ethylbenzene	ND	0.049	mg/Kg	1	8/26/2020 6:40:42 AM
Xylenes, Total	ND	0.098	mg/Kg	1	8/26/2020 6:40:42 AM
Surr: 1,2-Dichloroethane-d4	96.8	70-130	%Rec	1	8/26/2020 6:40:42 AM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	8/26/2020 6:40:42 AM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	8/26/2020 6:40:42 AM
Surr: Toluene-d8	96.8	70-130	%Rec	1	8/26/2020 6:40:42 AM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 6:40:42 AM
Surr: BFB	101	70-130	%Rec	1	8/26/2020 6:40:42 AM

Matrix: SOIL

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hare 15

Project:

Analytical Report Lab Order 2008C46

Date Reported: 9/1/2020

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH05@20-25' Collection Date: 8/21/2020 10:30:00 AM Received Date: 8/22/2020 9:23:00 AM

Lab ID: 2008C46-008	Matrix: SOIL	Received Date: 8/22/2020 9:23:00 AM				
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: BRM	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/26/2020 9:02:15 PM	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/26/2020 9:02:15 PM	
Surr: DNOP	75.6	30.4-154	%Rec	1	8/26/2020 9:02:15 PM	
EPA METHOD 300.0: ANIONS					Analyst: JMT	
Chloride	ND	59	mg/Kg	20	8/29/2020 10:22:57 PM	
EPA METHOD 8260B: VOLATILES SH	HORT LIST				Analyst: JMR	
Benzene	ND	0.024	mg/Kg	1	8/26/2020 7:09:13 AM	
Toluene	ND	0.048	mg/Kg	1	8/26/2020 7:09:13 AM	
Ethylbenzene	ND	0.048	mg/Kg	1	8/26/2020 7:09:13 AM	
Xylenes, Total	ND	0.097	mg/Kg	1	8/26/2020 7:09:13 AM	
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	8/26/2020 7:09:13 AM	
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/26/2020 7:09:13 AM	
Surr: Dibromofluoromethane	114	70-130	%Rec	1	8/26/2020 7:09:13 AM	
Surr: Toluene-d8	96.7	70-130	%Rec	1	8/26/2020 7:09:13 AM	
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst: JMR	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/26/2020 7:09:13 AM	
Surr: BFB	102	70-130	%Rec	1	8/26/2020 7:09:13 AM	

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH05@25-30'

Project:	Hare 15	Collection Date: 8/21/2020 10:40:00 AM							
Lab ID:	2008C46-009	Matrix: SOIL	Received Date: 8/22/2020 9:23:00 AM						
Analyses		Result	RL Qu	ual Units	DF	Date Analyzed			
EPA ME	THOD 8015M/D: DIESEL R/	ANGE ORGANICS				Analyst: BRM			
Diesel R	ange Organics (DRO)	ND	9.0	mg/Kg	1	8/26/2020 9:12:24 PM			
Motor O	il Range Organics (MRO)	ND	45	mg/Kg	1	8/26/2020 9:12:24 PM			
Surr:	DNOP	97.5	30.4-154	%Rec	1	8/26/2020 9:12:24 PM			
EPA ME	THOD 300.0: ANIONS					Analyst: JMT			
Chloride	•	ND	60	mg/Kg	20	8/29/2020 10:35:18 PM			
EPA ME	THOD 8260B: VOLATILES	SHORT LIST				Analyst: JMR			
Benzene	e	ND	0.024	mg/Kg	1	8/26/2020 7:37:51 AM			
Toluene		ND	0.049	mg/Kg	1	8/26/2020 7:37:51 AM			
Ethylber	nzene	ND	0.049	mg/Kg	1	8/26/2020 7:37:51 AM			
Xylenes	, Total	ND	0.097	mg/Kg	1	8/26/2020 7:37:51 AM			
Surr:	1,2-Dichloroethane-d4	96.2	70-130	%Rec	1	8/26/2020 7:37:51 AM			
Surr:	4-Bromofluorobenzene	99.8	70-130	%Rec	1	8/26/2020 7:37:51 AM			
Surr:	Dibromofluoromethane	108	70-130	%Rec	1	8/26/2020 7:37:51 AM			
Surr:	Toluene-d8	102	70-130	%Rec	1	8/26/2020 7:37:51 AM			
EPA ME	THOD 8015D MOD: GASOL	INE RANGE				Analyst: JMR			
Gasoline	e Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 7:37:51 AM			
Surr:	BFB	100	70-130	%Rec	1	8/26/2020 7:37:51 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
- н
- Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hare 15

Project:

Analytical Report Lab Order 2008C46

Date Reported: 9/1/2020

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH06@20'-25' Collection Date: 8/21/2020 11:40:00 AM Received Date: 8/22/2020 9:23:00 AM

Lab ID: 2008C46-011	Matrix: SOIL	Received Date: 8/22/2020 9:23:00 AM				
Analyses	Result	RL Qual	Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RAM	NGE ORGANICS				Analyst: BRM	
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/26/2020 9:22:34 PM	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/26/2020 9:22:34 PM	
Surr: DNOP	75.2	30.4-154	%Rec	1	8/26/2020 9:22:34 PM	
EPA METHOD 300.0: ANIONS					Analyst: JMT	
Chloride	ND	60	mg/Kg	20	8/29/2020 10:47:38 PM	
EPA METHOD 8260B: VOLATILES SH	HORT LIST				Analyst: JMR	
Benzene	ND	0.12	mg/Kg	5	8/26/2020 8:06:35 AM	
Toluene	ND	0.25	mg/Kg	5	8/26/2020 8:06:35 AM	
Ethylbenzene	ND	0.25	mg/Kg	5	8/26/2020 8:06:35 AM	
Xylenes, Total	ND	0.49	mg/Kg	5	8/26/2020 8:06:35 AM	
Surr: 1,2-Dichloroethane-d4	99.6	70-130	%Rec	5	8/26/2020 8:06:35 AM	
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	5	8/26/2020 8:06:35 AM	
Surr: Dibromofluoromethane	110	70-130	%Rec	5	8/26/2020 8:06:35 AM	
Surr: Toluene-d8	104	70-130	%Rec	5	8/26/2020 8:06:35 AM	
EPA METHOD 8015D MOD: GASOLIN	NE RANGE				Analyst: JMR	
Gasoline Range Organics (GRO)	ND	25	mg/Kg	5	8/26/2020 8:06:35 AM	
Surr: BFB	106	70-130	%Rec	5	8/26/2020 8:06:35 AM	

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL
 - Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: Hare 15

Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH06@25-30' Collection Date: 8/21/2020 11:50:00 AM **Dessived Deter** 8/22/2020 0.22.00 AM

Lab ID: 2008C46-012	Matrix: SOIL	Rece	ived Date:	nte: 8/22/2020 9:23:00 AM						
Analyses	Result	RL Qua	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: BRM					
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	8/26/2020 9:32:46 PM					
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	8/26/2020 9:32:46 PM					
Surr: DNOP	75.8	30.4-154	%Rec	1	8/26/2020 9:32:46 PM					
EPA METHOD 300.0: ANIONS					Analyst: JMT					
Chloride	ND	60	mg/Kg	20	8/29/2020 10:59:59 PM					
EPA METHOD 8260B: VOLATILES SH	IORT LIST				Analyst: JMR					
Benzene	ND	0.024	mg/Kg	1	8/26/2020 8:35:12 AM					
Toluene	ND	0.049	mg/Kg	1	8/26/2020 8:35:12 AM					
Ethylbenzene	ND	0.049	mg/Kg	1	8/26/2020 8:35:12 AM					
Xylenes, Total	0.45	0.098	mg/Kg	1	8/26/2020 8:35:12 AM					
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	8/26/2020 8:35:12 AM					
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/26/2020 8:35:12 AM					
Surr: Dibromofluoromethane	110	70-130	%Rec	1	8/26/2020 8:35:12 AM					
Surr: Toluene-d8	100	70-130	%Rec	1	8/26/2020 8:35:12 AM					
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst: JMR					
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 8:35:12 AM					
Surr: BFB	104	70-130	%Rec	1	8/26/2020 8:35:12 AM					

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hare 15

Project:

Analytical Report Lab Order 2008C46

Date Reported: 9/1/2020

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH07@15'-20' Collection Date: 8/21/2020 12:35:00 PM **Becaived Date:** 8/22/2020 0:23:00 AM

Lab ID: 2008C46-014	Matrix: SOIL	Receiv	ed Date:	8/22/2	020 9:23:00 AM
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Ib ID: 2008C46-014 Mail nalyses PA METHOD 8015M/D: DIESEL RANGE ORGA Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP PA METHOD 300.0: ANIONS Chloride PA METHOD 8260B: VOLATILES SHORT LIS Benzene Toluene Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane Surr: Toluene-d8 PA METHOD 8015D MOD: GASOLINE RANGI Gasoline Range Organics (GRO) Surr: BFB Surr: BFB	NGE ORGANICS				Analyst: BRM
Diesel Range Organics (DRO)	160	9.5	mg/Kg	1	8/26/2020 9:42:50 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/26/2020 9:42:50 PM
Surr: DNOP	81.2	30.4-154	%Rec	1	8/26/2020 9:42:50 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	76	60	mg/Kg	20	8/29/2020 11:12:19 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: JMR
Benzene	0.79	0.25	mg/Kg	10	8/26/2020 9:03:41 AM
Toluene	12	0.49	mg/Kg	10	8/26/2020 9:03:41 AM
Ethylbenzene	6.8	0.49	mg/Kg	10	8/26/2020 9:03:41 AM
Xylenes, Total	110	0.98	mg/Kg	10	8/26/2020 9:03:41 AM
Surr: 1,2-Dichloroethane-d4	109	70-130	%Rec	10	8/26/2020 9:03:41 AM
Surr: 4-Bromofluorobenzene	98.9	70-130	%Rec	10	8/26/2020 9:03:41 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	10	8/26/2020 9:03:41 AM
Surr: Toluene-d8	96.5	70-130	%Rec	10	8/26/2020 9:03:41 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: JMR
Gasoline Range Organics (GRO)	1600	49	mg/Kg	10	8/26/2020 9:03:41 AM
Surr: BFB	108	70-130	%Rec	10	8/26/2020 9:03:41 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
- н
- Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: Hare 15

Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH07@28'-30' Collection Date: 8/21/2020 12:50:00 PM

Lab ID: 2008C46-015	Matrix: SOIL	Received Date: 8/22/2020 9:23:00 AM										
Analyses	Result	RL Qua	al Units	DF	Date Analyzed							
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: BRM							
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	8/26/2020 9:52:55 PM							
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	8/26/2020 9:52:55 PM							
Surr: DNOP	84.7	30.4-154	%Rec	1	8/26/2020 9:52:55 PM							
EPA METHOD 300.0: ANIONS					Analyst: JMT							
Chloride	ND	60	mg/Kg	20	8/29/2020 9:50:15 AM							
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: JMR							
Benzene	ND	0.023	mg/Kg	1	8/26/2020 9:32:14 AM							
Toluene	ND	0.046	mg/Kg	1	8/26/2020 9:32:14 AM							
Ethylbenzene	ND	0.046	mg/Kg	1	8/26/2020 9:32:14 AM							
Xylenes, Total	ND	0.092	mg/Kg	1	8/26/2020 9:32:14 AM							
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	8/26/2020 9:32:14 AM							
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/26/2020 9:32:14 AM							
Surr: Dibromofluoromethane	113	70-130	%Rec	1	8/26/2020 9:32:14 AM							
Surr: Toluene-d8	95.8	70-130	%Rec	1	8/26/2020 9:32:14 AM							
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: JMR							
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/26/2020 9:32:14 AM							
Surr: BFB	100	70-130	%Rec	1	8/26/2020 9:32:14 AM							

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Gasoline Range Organics (GRO)

Surr: BFB

Hare 15

Project:

Analytical Report Lab Order 2008C46

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/1/2020 Client Sample ID: BH08@25-30' Collection Date: 8/21/2020 3:15:00 PM

Lab ID: 2008C46-017 Matrix: SOIL Received Date: 8/22/2020 9:23:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: mb Diesel Range Organics (DRO) 8/31/2020 9:07:35 PM 270 9.1 mg/Kg 1 Motor Oil Range Organics (MRO) 8/31/2020 9:07:35 PM ND 45 mg/Kg 1 Surr: DNOP 74.8 30.4-154 %Rec 1 8/31/2020 9:07:35 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 8/29/2020 10:02:36 AM 610 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF Benzene ND 0.050 mg/Kg 2 8/30/2020 4:37:03 AM Toluene 2 ND 0.10 mg/Kg 8/30/2020 4:37:03 AM 2 Ethvlbenzene 0.23 0.10 mg/Kg 8/30/2020 4:37:03 AM Xylenes, Total 1.1 0.20 mg/Kg 2 8/30/2020 4:37:03 AM Surr: 1.2-Dichloroethane-d4 102 70-130 %Rec 2 8/30/2020 4:37:03 AM 2 Surr: 4-Bromofluorobenzene 80.4 70-130 %Rec 8/30/2020 4:37:03 AM Surr: Dibromofluoromethane 70-130 %Rec 2 8/30/2020 4:37:03 AM 112 2 Surr: Toluene-d8 97.7 70-130 %Rec 8/30/2020 4:37:03 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF

120

121

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 MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

mg/Kg

%Rec

10

70-130

2

2

8/30/2020 4:37:03 AM

8/30/2020 4:37:03 AM

- P Sample pH Not In Range
- RL Reporting Limit

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Client:	HILCOR	P ENERGY								
Project:	Hare 15									
Sample ID:	MB-54776	SampType: m	blk	Test	tCode: EP	A Method	300.0: Anions			
Client ID:	PBS	Batch ID: 54	776	R	RunNo: 71	475				
Prep Date:	8/28/2020	Analysis Date: 8	/29/2020	S	SeqNo: 24	95781	Units: mg/Kg	J		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-54776	SampType: Ic	s	Test	tCode: EP	A Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 54	776	R	RunNo: 71	475				
Prep Date:	8/28/2020	Analysis Date: 8	/29/2020	S	SeqNo: 24	95782	Units: mg/Kg	J		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	96.5	90	110			
Sample ID:	MB-54771	SampType: m	blk	Tes	tCode: EP	A Method	300.0: Anions			
Client ID:	PBS	Batch ID: 54	1771	R	RunNo: 71	475				
Prep Date:	8/28/2020	Analysis Date: 8	/29/2020	S	SeqNo: 24	95821	Units: mg/Kg	J		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-54771	SampType: Ic	s	Tes	tCode: EP	A Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 54	1771	R	RunNo: 71	475				
Prep Date:	8/28/2020	Analysis Date: 8	/29/2020	S	SeqNo: 24	95822	Units: mg/Kg	1		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	95.3	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2008C46

01-Sep-20

WO#:

Client: Project:	HILCOR Hare 15	P ENERG	Y												
Sample ID:	LCS-54670	SampT	ype: LC	CS	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics					
Client ID:	LCSS	Batch	ו ID: 54	670	F	RunNo: 7	1390								
Prep Date:	8/25/2020	Analysis D)ate: 8	/26/2020	S	SeqNo: 24	492006	Units: mg/h	٨g						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range (Organics (DRO)	51	10	50.00	0	102	70	130							
Surr: DNOP		4.1		5.000		81.6	30.4	154							
Sample ID:	MB-54670	SampT	ype: M	BLK	Tes	tCode: El	PA Method	Method 8015M/D: Diesel Range Organics							
Client ID:	PBS	Batch	ו ID: 54	670	F	RunNo: 7	1390								
Prep Date:	8/25/2020	Analysis D)ate: 8	/26/2020	S	BeqNo: 24	492010	Units: mg/k	٨g						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range (Organics (DRO)	ND	10												
Motor Oil Rang	ge Organics (MRO)	ND	50												
Surr: DNOP		9.6		10.00		96.1	30.4	154							
Sample ID:	MB-54770	SampT	ype: M	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics					
Client ID:	PBS	Batch	า ID: 54	770	F	RunNo: 7	1494								
Prep Date:	8/28/2020	Analysis D)ate: 8	/31/2020	5	SeqNo: 24	496848	Units: mg/h	٨g						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range (Organics (DRO)	ND	10												
Motor Oil Rang	ge Organics (MRO)	ND	50												
Surr: DNOP		11		10.00		105	30.4	154							
Sample ID:	LCS-54770	SampT	ype: LC	CS	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics					
Client ID:	LCSS	Batch	ו ID: 54	770	F	RunNo: 7 '	1494								
Prep Date:	8/28/2020	Analysis D)ate: 8	/31/2020	5	SeqNo: 24	496851	Units: mg/h	٨g						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range (Organics (DRO)	54	10	50.00	0	108	70	130							
Surr: DNOP		4.9		5.000		98.3	30.4	154							

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

2008C46

01-Sep-20

WO#:

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project: Hare 15										
Sample ID: Ics-54644	SampTy	be: LC	S4	Test	tCode: E	PA Method	8260B: Volat	tiles Short	List	
Client ID: BatchQC	Batch I	D: 54	644	R	lunNo: 7	1358				
Prep Date: 8/24/2020	Analysis Da	te: 8 /	25/2020	S	eqNo: 2	490933	Units: mg/#	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0 0 92		80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.8	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.4	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.49		0.5000		97.0	70	130			
Sample ID: mb-54644	SampTy	be: MI	BLK	Tes	tCode: E	PA Method	8260B: Volat	tiles Short	List	
Client ID: PBS	Batch I	D: 54	644	R	lunNo: 7	1358				
Prep Date: 8/24/2020	Analysis Da	te: 8 /	25/2020	S	eqNo: 2	490934	Units: mg/k	٢g		
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: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		115	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			
Sample ID: mb-54766	SampTy	be: MI	BLK	Tes	tCode: E	PA Method	8260B: Volat	tiles Short	List	
Client ID: PBS	Batch I	D: 54	766	R	lunNo: 7	1470				
Prep Date: 8/28/2020	Analysis Da	te: 8 /	29/2020	S	eqNo: 2	495418	Units: mg/k	٢g		
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: 1,2-Dichloroethane-d4	0.49		0.5000		98.6	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.3	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		114	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2008C46

01-Sep-20

Client:	HILCORP ENERGY
Project:	Hare 15

Sample ID: Ics-54766	SampT	ype: LC	S4	Tes	List								
Client ID: BatchQC	Batch	h ID: 547	766	F	RunNo: 7								
Prep Date: 8/28/2020	Analysis D	Date: 8/ 2	29/2020	S	SeqNo: 24	495419	Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.95	0.025	1.000	0	95.2	80	120						
Toluene	1.0	0.050	1.000	0	103	80	120						
Ethylbenzene	1.0	0.050	1.000	0	104	80	120						
Xylenes, Total	3.2	0.10	3.000	0	108	80	120						
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		101	70	130						
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130						
Surr: Dibromofluoromethane	0.55 0.5000		0.5000	110 70			130						
Surr: Toluene-d8	0.51		0.5000		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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#:	2008C46
	01 Sam 20

01-Sep-20

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project:	Hare 15												
Sample ID: I	lcs-54644	Samp	Гуре: LC	S	Test	tCode: EF	PA Method	8015D Mod:	Gasoline	Range			
Client ID:	LCSS	Batc	h ID: 54	644	R	tunNo: 71	1358						
Prep Date:	8/24/2020	Analysis E	Date: 8/	25/2020	S	eqNo: 24	190993	Units: mg/k	٢g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range	Organics (GRO)	22	5.0	25.00	0	86.3	70	130					
Surr: BFB		500		500.0		100	70	130					
Sample ID: I	mb-54644	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline	Range			
Client ID:	PBS	Batc	h ID: 54	644	R	lunNo: 71	1358						
Prep Date:	8/24/2020	Analysis [Date: 8/	25/2020	S	eqNo: 24	490994	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		500		500.0		99.2	70	130					
Sample ID: I	mb-54766	Samp	Гуре: МВ	BLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID:	PBS	Batc	h ID: 54	766	R	lunNo: 71	1470						
Prep Date:	8/28/2020	Analysis [Date: 8/	29/2020	S	eqNo: 24	495454	Units: mg/h	٢g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range	Organics (GRO)	ND	5.0										
Surr: BFB		510		500.0		103	70	130					
Sample ID: I	lcs-54766	Samp	Гуре: LC	s	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline	Range			
Client ID:	LCSS	Batc	h ID: 54	766	R	lunNo: 7 1	1470						
Prep Date:	8/28/2020	Analysis [Date: 8/	29/2020	S	eqNo: 24	495455	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range	Organics (GRO)	22	5.0	25.00	0	89.3	70	130					
Surr: BFB		520		500.0		104	70	130					

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2008C46

01-Sep-20

WO#:

	HALL ENVIR ANALY LABOR	ONMENT/ /SIS Ratory	AL.	Hal TEI Wi	l Environment Ai L: 505-345-39 ebsite: clients.i	al Analy. 490 Ibuquerq 75 FAX: hallenvir	sis Labo I Hawk ue, NM 505-34 onment	oratory kins NE (87109 5-4107 tal.com	San	nple Log-In C	Check List
С	lient Name:	HILCORP	ENERGY	Work	Order Numbe	er: 2008	3C46			RcptNo	: 1
Re	eceived By:	Juan Roja Juan Roia	s	8/22/20 8/24/20	20 9:23:00 A	M		4u 4u	andy	-	
Re	eviewed By:	10	-	8(74)	20				2		
<u>Ch</u> 1. 2.	a in of Cus t Is Chain of Cu How was the s	tody istody compl sample delive	ete? ered?			Yes <u>Cour</u>	⊻ ier	ı	No 🗌	Not Present	
<u>Le</u> 3.	o g In Was an attem	pt made to c	ool the sampl	es?		Yes	~	١	No 🗌		
4.	Were all samp	les received	at a temperat	ure of >0° C t	o 6.0°C	Yes	~	١	No 🗌		
5.	Sample(s) in p	oroper contai	ner(s)?			Yes	✓	٢	No 🗌		
6. 5	Sufficient sam	ole volume fo	or indicated te	st(s)?		Yes	✓	N	lo 🗌		
7. /	Are samples (e	except VOA a	and ONG) pro	perly preserve	d?	Yes	\checkmark	N	lo 🗌		
8. \	Was preservat	ive added to	bottles?			Yes		N	lo 🗸	NA 🗌	
9. 1	Received at lea	ast 1 vial with	n headspace <	<1/4" for AQ V	OA?	Yes		N	lo 🗌	NA 🔽	
10.	Were any sam	ple containe	rs received br	oken?		Yes		٢	10 🔽	# of preserved bottles checked	
11.ı (Does paperwo Note discrepa	rk match bot ncies on cha	tle labels? in of custody)			Yes	✓	N	lo 🗌	for pH:	>12 unless noted)
12./	Are matrices c	orrectly ident	ified on Chair	of Custody?		Yes	✓	N	o 🗌	Adjusted?	
13.1	s it clear what	analyses we	re requested?)		Yes	\checkmark	N	lo 🗌		e chuled
14.\ (Vere all holdin If no, notify cu	g times able stomer for a	to be met? uthorization.)			Yes	✓	Ν	o 🗌	/ Checked by	N 8/24/20
Spe	cial Handli	ng (if app	licable)								
15.	Was client not	ified of all dis	screpancies w	ith this order?		Yes		Ν	10 🗌	NA 🗹	
	Person N	Notified:			Date						
	By Whor	m:			Via:	eMa	uil 🗌	Phone	🗌 Fax	In Person	
	Regardir	ng:									
	Client In	structions:									
16.	Additional rem	narks:									
17.	Cooler Inform	nation									
	Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Da	ite	Signe	d By		
	1	2.8	Good								

Page 1 of 1

Released to Imaging: 1/20	nain <u>-lilco</u> Jer address	-of-Co orp Er miter	ustody Record Vergy Company Deal	Turn-Around Time: Standard Rush Project Name: Hare 15 Project #:						HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107												
Phone #:				A	F									A	naly	sis	Req	uest	1			
cemail or I	Fax#:			Project Manager:				E.	Ó		1.0904	1.1111.0.0	11 211	SO4		영화 나석	ent)		Marine Bar	19.827		
QA/QC Pa	ackage:			17	E-D	anny	Bur	ns	802	/ MF	CB's		MS	-th In -ch	04, 9			Abse				0.7
Standa	ard		□ Level 4 (Full Validation)			0			- 2	RO	2 PC		1S07	11-001	, PO			ent/P		2		1 1
Accredita	ation:		ompliance	Sampler: D. Burns				./₽	0/0	808	4.1)	- 82		Ň			rese					
	C Type)	PDF		Un Ice	e: coolers:	- Yes			ų,	GRC	des/	d 50	0 0	als	0 ^{3,}		VOA	n (P				
	<u>- 7 - 7 -</u>			Coole	r Temp	O(including C	F): 7	.8-022.8	-A	5D	stici	etho	83	Met	Z,	(YC	-ime	liforr				
Date T	ime	Matrix	Sample Name	Conta Type a	iner and #	Preser Type	vative	HEAL NO. 2008646	BTEX?	TPH:801	8081 Pe	EDB (Me	PAHs by	RCRA 8	CI)F, BI	8260 (V(8270 (Se	Total Co				
8-20-20	1515	Soil	BH03@23'-25'	1-	402	(08	1	_001	X	Х				10.00	X						+	
1	1545	ī	BH03@29'-30'		1	1		-007	1	1					1						+	+-+-
	1620		BH03@35-38'		1			-002		\top										+	+	+ +-
8-21-20	0845		BH04@25-27'					-004		\top											-	+
[(0 8 50		BH04@ 28'-30'					-065		\top					\uparrow	_			\neg			+
	0900		BH04@ 30-35'		1			-006												+	+	
	0910		BH04 @ 35'-38'					-007													1	
	1030		BH05@20'-25'					-008							1000			2.1	19	2.7.1		++-
	1040	· · ·	BH05@25'-30'					-009							1.10						1	
	1136		BH06@ 15'-20'					-010						11-11							Τ	
	1140		BH06@20'-25'					-011														
V-1	150	V	BH06@25'-30'	×		P	4	alter - Landard at	9	V			-		V	- Ce						
Date: Ti <u>Shihor</u> <u>S</u> Date: Ti <u>S</u> <u>12</u> <u>w</u> 0	me: -21-20 me: 123	Relinquish Relinquish	ed by: ed by:	Receive	ed by: Mats ed by:	Via: Via: Via:	les-	Date Time $-\frac{9_{21}}{20} (723)$ Date Time 8 (72) 70 9!73	Rem	narks Sc C	s: c :	er d	na bi he	i) irv nc	f. ns ma	or O M	14	tol env	N NCO	li M . con	st	Luge 110 vj
1 22/20 9 If no	123 ecessary,	samples sub	mitted to Hall Environmental may be subc	contracted	to other a	ccredited la	iboratorie	s. This serves as notice of this	s possit	pility. A	Any su	b-contr	he	data y	ma will be	clearly	notat	ted on	the ana	alytical r	report.	

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Client: Hilcorp Energy Company Attn: Jennifer Deal Mailing Address:	Turn-Around Time: Standard Rush Project Name: Have 15 Project #:	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request					
202 Phone #:	· · · · · · · · · · · · · · · · · · ·						
email or Fax#:	Project Manager:						
	LTE- Damny Durns	(802) 04, S 2B's 2B's 2B's 2B's 2B's 2B's 2B's 2B's					
Standard Level 4 (Full Valida	ion)						
Accreditation:	Sampler: DB						
□ NELAC □ Other							
	# of Coolers: 1						
Date Time Matrix Sample Name	Container Preservative HEAL No.	PH:8015 Met 081 Pes 081 Pes					
V-21 IISO Col BHOG @25'-26"	Type and # Type 7005096						
Set 100 Sole Dilobers 50	1-402 000 -012						
1200 1106@ 30-35	-013						
1235 BH07@15-201	-014						
1250 BH07@28:-30'	-015						
1300 BH07@ 30'-35'	-016						
1515 BHO8@25-30'	-077						
1540 BHOS@ 30'-35'	018						
or 1545 BHOS@ 25'-40"							
Bate: Time: Relinquished by:	Received by: Via: Date Time	<u>s Stepg</u> . l					
122/202923 CANADAD WAAT CANA COURIER 8/22/10 9:23							

y, 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
	-)

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September 01, 2020

Jennifer Deal Hilcorp Energy PO Box 61529 Houston, TX 77208-1529 TEL: (337) 276-7676 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: Hare 15

OrderNo.: 2008C94

Dear Jennifer Deal:

Hall Environmental Analysis Laboratory received 12 sample(s) on 8/25/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Surr: 4-Bromofluorobenzene

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

8/26/2020 1:11:40 PM 54684

CLIENT:	Hilcorp Energy	Client Sample ID: BH09@ 25'-27'								
Project:	Hare 15	Collection Date: 8/24/2020 9:35:00 AM								
Lab ID:	2008C94-001	Matrix: SOIL Received Date: 8/25/2020 8:00:00 AM								
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch		
EPA MET	THOD 300.0: ANIONS						Analyst	: JMT		
Chloride		120	60		mg/Kg	20	8/29/2020 7:07:45 PM	54781		
EPA METHOD 8015M/D: DIESEL RANGE (E ORGANICS					Analyst	BRM		
Diesel R	ange Organics (DRO)	190	8.6		mg/Kg	1	8/27/2020 2:22:29 PM	54694		
Motor Oi	Range Organics (MRO)	ND	43		mg/Kg	1	8/27/2020 2:22:29 PM	54694		
Surr: I	DNOP	84.8	30.4-154		%Rec	1	8/27/2020 2:22:29 PM	54694		
EPA MET	HOD 8015D: GASOLINE RANG	GE				Analyst: N		: NSB		
Gasoline	e Range Organics (GRO)	98	25		mg/Kg	5	8/26/2020 1:11:40 PM	54684		
Surr: I	BFB	319	75.3-105	S	%Rec	5	8/26/2020 1:11:40 PM	54684		
EPA METHOD 8021B: VOLATILES							Analyst	: NSB		
Benzene	9	ND	0.12		mg/Kg	5	8/26/2020 1:11:40 PM	54684		
Toluene		ND	0.25		mg/Kg	5	8/26/2020 1:11:40 PM	54684		
Ethylben	izene	ND	0.25		mg/Kg	5	8/26/2020 1:11:40 PM	54684		
Xylenes,	Total	0.97	0.50		mg/Kg	5	8/26/2020 1:11:40 PM	54684		

109

80-120

%Rec

5

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

8/26/2020 6:17:41 PM

54684

54684

54684

54684

54684

CLIENT:	Hilcorp Energy	Client Sample ID: BH09@ 28'-30'						
Project:	Hare 15	Collection Date: 8/24/2020 9:40:00						
Lab ID:	2008C94-002	Matrix: SOIL Received Date: 8/25/2020 8:00:00 AM						
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA MET	HOD 300.0: ANIONS					Analys	t: JMT	
Chloride		73	60	mg/Kg	20	8/29/2020 7:20:10 PM	54781	
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: BRM	
Diesel Ra	ange Organics (DRO)	11	9.4	mg/Kg	1	8/27/2020 2:52:19 PM	54694	
Motor Oi	Range Organics (MRO)	ND	47	mg/Kg	1	8/27/2020 2:52:19 PM	54694	
Surr: E	DNOP	97.4	30.4-154	%Rec	1	8/27/2020 2:52:19 PM	54694	
EPA MET	HOD 8015D: GASOLINE RANG	E				Analys	t: NSB	
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 6:17:41 PM	54684	
Surr: E	3FB	100	75.3-105	%Rec	1	8/26/2020 6:17:41 PM	54684	
EPA MET	HOD 8021B: VOLATILES					Analys	t: NSB	

ND

ND

ND

ND

102

0.025

0.049

0.049

0.099

80-120

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

1

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

Qualifiers:

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT: Hilcorn Energy		Cl	ient S	amnle II)• BF	110@ 15'-20'	
Project: Hara 15		(tion Dat	0. 8/2	24/2020 10·30·00 AM	
Lab ID: 2008C94-004	Matrix: SOIL	,	Recei	ived Dat	e: 8/2	25/2020 8:00:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	JMT
Chloride	ND	60		mg/Kg	20	8/29/2020 7:32:34 PM	54781
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	110	9.8		mg/Kg	1	8/27/2020 3:02:13 PM	54694
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2020 3:02:13 PM	54694
Surr: DNOP	81.5	30.4-154		%Rec	1	8/27/2020 3:02:13 PM	54694
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	: NSB
Gasoline Range Organics (GRO)	180	24		mg/Kg	5	8/26/2020 1:35:07 PM	54684
Surr: BFB	295	75.3-105	S	%Rec	5	8/26/2020 1:35:07 PM	54684
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	8/26/2020 1:35:07 PM	54684
Toluene	ND	0.24		mg/Kg	5	8/26/2020 1:35:07 PM	54684
Ethylbenzene	1.2	0.24		mg/Kg	5	8/26/2020 1:35:07 PM	54684
Xylenes, Total	19	0.48		mg/Kg	5	8/26/2020 1:35:07 PM	54684
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	5	8/26/2020 1:35:07 PM	54684

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT:	Hilcorp Energy	Client Sample ID: BH10@ 28'-30'							
Project:	Hare 15		(Collect	ion Dat	e: 8/2	24/2020 10:45:00 AM		
Lab ID:	2008C94-005	Matrix: SOIL		Recei	ved Dat	e: 8/2	25/2020 8:00:00 AM		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch	
EPA MET	HOD 300.0: ANIONS						Analyst	JMT	
Chloride		ND	60		mg/Kg	20	8/29/2020 7:44:59 PM	54781	
EPA MET	ORGANICS					Analyst	BRM		
Diesel Ra	ange Organics (DRO)	ND	8.6		mg/Kg	1	8/27/2020 3:12:06 PM	54694	
Motor Oi	I Range Organics (MRO)	ND	43		mg/Kg	1	8/27/2020 3:12:06 PM	54694	
Surr: E	DNOP	89.0	30.4-154		%Rec	1	8/27/2020 3:12:06 PM	54694	
EPA MET	HOD 8015D: GASOLINE RANG	E					Analyst	NSB	
Gasoline	Range Organics (GRO)	ND	4.8		mg/Kg	1	8/26/2020 6:41:11 PM	54684	
Surr: E	3FB	106	75.3-105	S	%Rec	1	8/26/2020 6:41:11 PM	54684	
EPA MET	HOD 8021B: VOLATILES						Analyst	NSB	
Benzene		0.044	0.024		mg/Kg	1	8/26/2020 6:41:11 PM	54684	
Toluene		0.11	0.048		mg/Kg	1	8/26/2020 6:41:11 PM	54684	
Ethylben	zene	ND	0.048		mg/Kg	1	8/26/2020 6:41:11 PM	54684	
Xylenes,	Total	0.53	0.097		mg/Kg	1	8/26/2020 6:41:11 PM	54684	
Surr: 4	1-Bromofluorobenzene	105	80-120		%Rec	1	8/26/2020 6:41:11 PM	54684	

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL
 - Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT:	Hilcorp Energy	Client Sample ID: BH11@ 10'-15'							
Project:	Hare 15		(Collect	ion Dat	e: 8/2	24/2020 11:50:00 AM		
Lab ID:	2008C94-006	Matrix: SOIL		Recei	ved Dat	e: 8/2	25/2020 8:00:00 AM		
Analyses		Result	Result RL Qual Units DF Date				Date Analyzed	Batch	
EPA MET	HOD 300.0: ANIONS						Analyst	: JMT	
Chloride		200	60		mg/Kg	20	8/29/2020 7:57:24 PM	54781	
EPA MET	HOD 8015M/D: DIESEL RAN	GE ORGANICS					Analyst	BRM	
Diesel Range Organics (DRO)		73	10		mg/Kg	1	8/27/2020 3:21:59 PM	54694	
Motor Oi	Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2020 3:21:59 PM	54694	
Surr: D	DNOP	76.0	30.4-154		%Rec	1	8/27/2020 3:21:59 PM	54694	
EPA MET	HOD 8015D: GASOLINE RAN	NGE					Analyst	: NSB	
Gasoline	Range Organics (GRO)	120	4.9		mg/Kg	1	8/26/2020 7:04:38 PM	54684	
Surr: E	3FB	284	75.3-105	S	%Rec	1	8/26/2020 7:04:38 PM	54684	
EPA MET	HOD 8021B: VOLATILES						Analyst	: NSB	
Benzene		0.063	0.024		mg/Kg	1	8/26/2020 7:04:38 PM	54684	
Toluene		0.33	0.049		mg/Kg	1	8/26/2020 7:04:38 PM	54684	
Ethylben	zene	0.58	0.049		mg/Kg	1	8/26/2020 7:04:38 PM	54684	
Xylenes,	Total	18	0.98		mg/Kg	10	8/27/2020 9:00:32 AM	54684	
Surr: 4	I-Bromofluorobenzene	149	80-120	S	%Rec	1	8/26/2020 7:04:38 PM	54684	

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT:	Hilcorp Energy		Cl	ient Sa	ample II): BF	H11@ 25'-30'	
Project:	Hare 15		(Collect	tion Dat	e: 8/2	24/2020 12:20:00 PM	
Lab ID:	2008C94-007	Matrix: SOIL		Recei	ved Dat	e: 8/2	25/2020 8:00:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst	: JMT
Chloride		ND	60		mg/Kg	20	8/29/2020 8:09:49 PM	54781
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Ra	ange Organics (DRO)	19	9.3		mg/Kg	1	8/27/2020 3:31:51 PM	54694
Motor Oi	I Range Organics (MRO)	ND	47		mg/Kg	1	8/27/2020 3:31:51 PM	54694
Surr: D	ONOP	88.3	30.4-154		%Rec	1	8/27/2020 3:31:51 PM	54694
EPA MET	HOD 8015D: GASOLINE RANG	E					Analyst	: NSB
Gasoline	Range Organics (GRO)	20	4.7		mg/Kg	1	8/26/2020 7:28:06 PM	54684
Surr: E	3FB	163	75.3-105	S	%Rec	1	8/26/2020 7:28:06 PM	54684
EPA MET	HOD 8021B: VOLATILES						Analyst	: NSB
Benzene		0.039	0.024		mg/Kg	1	8/26/2020 7:28:06 PM	54684
Toluene		0.14	0.047		mg/Kg	1	8/26/2020 7:28:06 PM	54684
Ethylben	zene	0.079	0.047		mg/Kg	1	8/26/2020 7:28:06 PM	54684
Xylenes,	Total	1.0	0.094		mg/Kg	1	8/26/2020 7:28:06 PM	54684
Surr: 4	4-Bromofluorobenzene	105	80-120		%Rec	1	8/26/2020 7:28:06 PM	54684

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Surr: 4-Bromofluorobenzene

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

8/26/2020 7:51:39 PM 54684

CLIENT:	Hilcorp Energy	Client Sample ID: BH12@ 10'-15'								
Project:	Hare 15	Collection Date: 8/24/2020 1:45:00 PM								
Lab ID:	2008C94-008	Matrix: SOIL Received Date: 8/25/2020 8:00:00 AM								
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA MET	HOD 300.0: ANIONS					Analyst	MRA			
Chloride		98	60	mg/Kg	20	8/30/2020 9:14:17 AM	54784			
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM			
Diesel Range Organics (DRO)		ND	8.9	mg/Kg	1	8/27/2020 3:41:44 PM	54694			
Motor Oil	I Range Organics (MRO)	ND	45	mg/Kg	1	8/27/2020 3:41:44 PM	54694			
Surr: D	DNOP	105	30.4-154	%Rec	1	8/27/2020 3:41:44 PM	54694			
EPA MET	HOD 8015D: GASOLINE RANGE					Analyst	NSB			
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 7:51:39 PM	54684			
Surr: E	3FB	98.2	75.3-105	%Rec	1	8/26/2020 7:51:39 PM	54684			
EPA MET	HOD 8021B: VOLATILES					Analyst	NSB			
Benzene		ND	0.024	mg/Kg	1	8/26/2020 7:51:39 PM	54684			
Toluene		ND	0.049	mg/Kg	1	8/26/2020 7:51:39 PM	54684			
Ethylben	zene	ND	0.049	mg/Kg	1	8/26/2020 7:51:39 PM	54684			
Xylenes,	Total	ND	0.097	mg/Kg	1	8/26/2020 7:51:39 PM	54684			

102

80-120

%Rec

1

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported:	9/1	/2020
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CLIENT: Hilcorp Energy	Client Sample ID: BH12@ 25'-30'								
Project: Hare 15	Collection Date: 8/24/2020 2:00:00 PM								
Lab ID: 2008C94-009	Matrix: SOIL		Received Date	e: 8/2	25/2020 8:00:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analysi	: MRA			
Chloride	ND	60	mg/Kg	20	8/30/2020 9:51:18 AM	54784			
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	: BRM			
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/27/2020 3:51:36 PM	54694			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/27/2020 3:51:36 PM	54694			
Surr: DNOP	87.9	30.4-154	%Rec	1	8/27/2020 3:51:36 PM	54694			
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2020 8:15:07 PM	54684			
Surr: BFB	102	75.3-105	%Rec	1	8/26/2020 8:15:07 PM	54684			
EPA METHOD 8021B: VOLATILES					Analyst	: NSB			
Benzene	ND	0.024	mg/Kg	1	8/26/2020 8:15:07 PM	54684			
Toluene	ND	0.049	mg/Kg	1	8/26/2020 8:15:07 PM	54684			
Ethylbenzene	ND	0.049	mg/Kg	1	8/26/2020 8:15:07 PM	54684			
Xylenes, Total	ND	0.098	mg/Kg	1	8/26/2020 8:15:07 PM	54684			
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/26/2020 8:15:07 PM	54684			

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT:	Hilcorp Energy	Client Sample ID: BH13@ 25'-27'									
Project:	Hare 15		(Collect	tion Dat	e: 8/2	24/2020 2:45:00 PM				
Lab ID:	2008C94-010	Matrix: SOIL		Recei	ved Dat	e: 8/2	25/2020 8:00:00 AM	-27' 2:45:00 PM 3:00:00 AM Analyst: MRA 20 10:03:38 AM 54784 Analyst: BRM 20 4:01:29 PM 54694 20 4:01:29 PM 54694 20 4:01:29 PM 54694 Analyst: NSB 20 8:38:32 PM 54684 Analyst: NSB 20 8:38:32 PM 54684 Analyst: NSB			
Analyses		Result	Result RL Qual Units DF Da		Date Analyzed	Batch					
EPA MET	HOD 300.0: ANIONS						Analyst	MRA			
Chloride		ND	60		mg/Kg	20	8/30/2020 10:03:38 AM	54784			
EPA MET	HOD 8015M/D: DIESEL RAN	IGE ORGANICS					Analyst	BRM			
Diesel Range Organics (DRO)		250	8.9		mg/Kg	1	8/27/2020 4:01:29 PM	54694			
Motor Oil Range Organics (MRO)		ND	45		mg/Kg	1	8/27/2020 4:01:29 PM	54694			
Surr: [DNOP	82.8	30.4-154		%Rec	1	8/27/2020 4:01:29 PM	54694			
EPA MET	HOD 8015D: GASOLINE RA	NGE					Analyst	: NSB			
Gasoline	Range Organics (GRO)	800	47		mg/Kg	10	8/26/2020 8:38:32 PM	54684			
Surr: E	3FB	375	75.3-105	S	%Rec	10	8/26/2020 8:38:32 PM	54684			
EPA MET	HOD 8021B: VOLATILES						Analyst	: NSB			
Benzene		0.46	0.24		mg/Kg	10	8/26/2020 8:38:32 PM	54684			
Toluene		11	0.47		mg/Kg	10	8/26/2020 8:38:32 PM	54684			
Ethylben	zene	4.9	0.47		mg/Kg	10	8/26/2020 8:38:32 PM	54684			
Xylenes,	Total	73	0.95		mg/Kg	10	8/26/2020 8:38:32 PM	54684			
Surr: 4	1-Bromofluorobenzene	122	80-120	S	%Rec	10	8/26/2020 8:38:32 PM	54684			

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2008C94

Date Reported: 9/1/2020

CLIENT:	Hilcorp Energy	Client Sample ID: BH13@ 28'-30'							
Project:	Hare 15	Collection Date: 8/24/2020 2:50:00 PM							
Lab ID:	2008C94-011	Matrix: SOIL Received Date: 8/25/2020 8:00:00 A							
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch		
EPA MET	THOD 300.0: ANIONS					Analyst	MRA		
Chloride		ND	60	mg/Kg	20	8/30/2020 10:15:59 AM	54784		
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM		
Diesel R	ange Organics (DRO)	ND	9.4	mg/Kg	1	8/27/2020 4:11:21 PM	54694		
Motor Oi	l Range Organics (MRO)	ND	47	mg/Kg	1	8/27/2020 4:11:21 PM	54694		
Surr: [DNOP	80.2	30.4-154	%Rec	1	8/27/2020 4:11:21 PM	54694		
EPA MET	HOD 8015D: GASOLINE RANGE					Analyst	NSB		
Gasoline	e Range Organics (GRO)	ND	4.8	mg/Kg	1	8/26/2020 10:12:14 PM	54684		
Surr: E	BFB	99.4	75.3-105	%Rec	1	8/26/2020 10:12:14 PM	54684		
EPA MET	THOD 8021B: VOLATILES					Analyst	NSB		
Benzene		ND	0.024	mg/Kg	1	8/26/2020 10:12:14 PM	54684		
Toluene		ND	0.048	mg/Kg	1	8/26/2020 10:12:14 PM	54684		
Ethylben	izene	ND	0.048	mg/Kg	1	8/26/2020 10:12:14 PM	54684		
Xylenes,	Total	ND	0.096	mg/Kg	1	8/26/2020 10:12:14 PM	54684		
Surr: 4	4-Bromofluorobenzene	103	80-120	%Rec	1	8/26/2020 10:12:14 PM	54684		

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Hilcorp E	Energy							
Project:	Hare 15								
Sample ID:	MB-54781	SampType: I	mblk	Test	tCode: EPA Meth	nod 300.0: Anions			
Client ID:	PBS	Batch ID:	54781	R	unNo: 71481				
Prep Date:	8/29/2020	Analysis Date:	8/29/2020	S	eqNo: 2496084	Units: mg/Kg	1		
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC LowLin	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.	.5						
Sample ID:	LCS-54781	LCS-54781 SampType: Ics TestCode: EPA Method 300.0: Anions							
Client ID:	LCSS	Batch ID:	54781	R	tunNo: 71481				
Prep Date:	8/29/2020	Analysis Date:	8/29/2020	S	eqNo: 2496085	Units: mg/Kg	J		
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC LowLin	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.	.5 15.00	0	94.8	90 110			
Sample ID:	MB-54784	SampType: I	mblk	Test	tCode: EPA Meth	nod 300.0: Anions			
Client ID:	PBS	Batch ID:	54784	R	RunNo: 71487				
Prep Date:	8/30/2020	Analysis Date:	8/30/2020	S	eqNo: 2496319	Units: mg/Kg	J		
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC LowLin	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.	.5						
Sample ID:	LCS-54784	SampType: I	lcs	Test	tCode: EPA Meth	nod 300.0: Anions			
Client ID:	LCSS	Batch ID:	54784	R	unNo: 71487				
Prep Date:	8/30/2020	Analysis Date:	8/30/2020	S	eqNo: 2496320	Units: mg/Kg	J		
Analyte		Result PQI	L SPK value	SPK Ref Val	%REC LowLin	mit HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.	.5 15.00	0	94.7	90 110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2008C94

01-Sep-20

QC SUMMARY REPORT Hall Envir

	WO#:	2008C94
onmental Analysis Laboratory, Inc.		01-Sep-20

Client:	Hilcorp E	nergy									
Project:	Hare 15										
Sample ID:	2008C94-001AMS	SampT	уре: М	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH09@ 25'-27'	Batch	ו ID: 54	694	F	RunNo: 7	1442				
Prep Date:	8/26/2020	Analysis D)ate: 8/	27/2020	S	SeqNo: 2	494229	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	260	8.5	42.30	190.8	157	47.4	136			S
Surr: DNOP		3.9		4.230		92.7	30.4	154			
Sample ID:	2008C94-001AMS	D SampT	ype: M	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH09@ 25'-27'	Batch	ו ID: 54	694	F	RunNo: 7	1442				
Prep Date:	8/26/2020	Analysis D)ate: 8/	27/2020	S	SeqNo: 2	494230	Units: mg/	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	270	8.6	43.18	190.8	189	47.4	136	5.72	43.4	S
Surr: DNOP		4.0		4.318		92.3	30.4	154	0	0	
Sample ID:	LCS-54694	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 54	694	F	RunNo: 7	1442				
Prep Date:	8/26/2020	Analysis D)ate: 8/	27/2020	S	SeqNo: 2	494270	Units: mg/ł	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	44	10	50.00	0	87.6	70	130			
Surr: DNOP		4.0		5.000		80.5	30.4	154			
Sample ID:	MB-54694	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ו ID: 54	694	F	RunNo: 7	1442				
Prep Date:	8/26/2020	Analysis D)ate: 8/	27/2020	S	SeqNo: 2	494272	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		7.5		10.00		75.1	30.4	154			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Hilcorp E Hare 15	Energy									
Sample ID:	mb-54684	SampT	ype: M	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 54	684	R	RunNo: 7	1387				
Prep Date:	8/25/2020	Analysis D	ate: 8	/26/2020	S	SeqNo: 24	491806	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 980	5.0	1000		98.4	75.3	105			
Sample ID:	lcs-54684	SampT	ype: L(s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 54	684	R	RunNo: 7	1387				
Prep Date:	8/25/2020	Analysis D	ate: 8	/26/2020	S	SeqNo: 24	491807	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	20	5.0	25.00	0	80.2	72.5	106			
Surr: BFB		1100		1000		110	75.3	105			S
Sample ID:	lcs-54699	SampT	ype: L(S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 54	699	R	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis D	ate: 8	/27/2020	S	SeqNo: 24	494653	Units: %Red	•		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		111	75.3	105			S
Sample ID:	lcs-54720	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 54	720	R	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis D	ate: 8	/27/2020	S	SeqNo: 24	494654	Units: %Red	•		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		110	75.3	105			S
Sample ID:	MB-54699	SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 54	699	R	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis D	ate: 8	/27/2020	S	SeqNo: 24	494655	Units: %Red	•		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		930		1000		93.5	75.3	105			
Sample ID:	mb-54720	SampT	уре: М	BLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 54	720	R	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis D	ate: 8	/27/2020	S	SeqNo: 24	494656	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		980		1000		97.9	75.3	105			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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WO#:	2008C94

01-Sep-20

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Hilcorp I Hare 15	Energy									
Sample ID:	mb-54684	Samp	Гуре: М	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batc	h ID: 54	684	F	RunNo: 7	1387				
Prep Date:	8/25/2020	Analysis [Date: 8	/26/2020	S	SeqNo: 2	491855	Units: mg/k	٢g		
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-Bron	nofluorobenzene	1.0		1.000		102	80	120			
Sample ID:	LCS-54684	Samp	Гуре: L	CS	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batc	h ID: 54	684	F	RunNo: 7	1387				
Prep Date:	8/25/2020	Analysis [Date: 8	/26/2020	5	SeqNo: 2	491856	Units: mg/#	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.84	0.025	1.000	0	83.7	80	120			
Toluene		0.86	0.050	1.000	0	85.6	80	120			
Ethylbenzene		0.86	0.050	1.000	0	86.2	80	120			
Xylenes, Total		2.6	0.10	3.000	0	87.1	80	120			
Surr: 4-Bron	nofluorobenzene	1.1		1.000		106	80	120			
Sample ID:	LCS-54699	Samp	Гуре: L	cs	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batc	h ID: 54	699	F	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis [Date: 8	/27/2020	S	SeqNo: 2	494691	Units: %Re	c		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		103	80	120			
Sample ID:	LCS-54720	Samp	Гуре: L	cs	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batc	h ID: 54	720	F	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis [Date: 8	/27/2020	S	SeqNo: 2	494692	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		104	80	120			
Sample ID:	MB-54699	Samp	Гуре: М	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 54	699	F	RunNo: 7	1413				
Prep Date:	8/26/2020	Analysis [Date: 8	/27/2020	5	SeqNo: 2	494693	Units: %Re	c		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	0.99		1.000		98.6	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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01-Sep-20

Client:	Hilcorp Ener	gy									
Project:	Hare 15										
Sample ID: mb-547	720	SampTyp	e: ME	BLK	Test	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS		Batch I	D: 54	720	R	lunNo: 7 1	413				
Prep Date: 8/26/2	2 020 An	alysis Dat	e: 8/	27/2020	S	eqNo: 24	194694	Units: %Rec	;		
Analyte	F	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobe	nzene	1.0		1.000		101	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
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- P Sample pH Not In Range
- RL Reporting Limit

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01-Sep-20

I HAC ICO OJ MITI	Page	158	of 274
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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: clients.hal	Analy 490 quera FAX: Ilenvi	sis Laborato 11 Hawkins N 10e, NM 8710 505-345-410 ronmental.co	ry /E 09 17 m	Sar	nple Log-In Check	List
Client Name: Hilcorp Energy	Nork Order Number:	200	8C94			RcptNo: 1	
Received By: Cheyenne Cason 8/2	25/2020 8:00:00 AM						
Completed By: Isaiah Ortiz 8/2	5/2020 9:02:54 AM			songer andre	$\sim c$	\sim	
Reviewed By: JR 8/25-120						,	
Chain of Custody							
1. Is Chain of Custody complete?		Yes		No		Not Present 🗌	
2. How was the sample delivered?		<u>Cou</u>	rier				÷
Log In 3. Was an attempt made to cool the samples?		Yes		No			
4. Were all samples received at a temperature of >	0° C to 6.0°C	Yes		No	Ĺ	NA 🗍	
5. Sample(s) in proper container(s)?		Yes	\checkmark	No			
6. Sufficient sample volume for indicated test(s)?		Yes		No			
7. Are samples (except VOA and ONG) properly pre	served?	Yes		No			
8. Was preservative added to bottles?		Yes		No	\checkmark		
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	\checkmark	······································	
11. Does paperwork match bottle labels?		Yes		No		# of preserved bottles checked for pH:	- notod
12 Are matrices correctly identified on Chain of Custo	vdv2	Vac		No		Adjusted?	s noteu
13 Is it clear what analyses were requested?	, say :	Yes		No			
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		Checked by: CM-8	1251
Special Handling (if applicable)							
15. Was client notified of all discrepancies with this o	rder?	Yes		No		NA 🔽	
Person Notified:	Date:						
By Whom:	μ Via: Γ] eM	ail 🗌 Pho	ne 🗆	Fax	In Person	
Regarding:		_			-		
Client Instructions:						nalisen on son and a second source of the second source of the second source of the second source of the second	
16. Additional remarks:	······································						•
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal In 1 2.5 Good Not Pres	tact Seal No Se	eal D	ate Si	gned	Ву		
			· · · · · · · · · · · · · · · · · · ·			- Contract of the second second second second second second second second second second second second second s	

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Released to	Chain Hild	-of-Cı שרף	Ustody Record Eleneraly Company	Turn-Around	Time: d □ Rus l	·····		£1		F			El	NV	/IF					
AH	n. J	mifer	Deal	Project Nam	e:			e			www	.hal	llenv	ironr	men	tal.co	om			
Mailing	Address	;		7 Hare	- 15			4901 Hawkins NE - Albuquerque, NM 87109						D: 1						
: 1/2				Project #:			1	Т	el. 50)5-34	5-39	975	F	- ax	505-	-345-	4107			0/13/
S Phone	#:		<u></u>									A	naly	sis	Req	uest				102
🔓 <u>email c</u>	or Fax#:	jdeal	Chilcorp.com	Project Mana	ager:	BHARMS) E	١þ				5	လို			∋nt)				12:5
	Package:			LIE-	Danny	1200103	(80	Ľ۲	CB's		WIS	ଁ ତ ତ	64			Abse				3:40
	ndard		Level 4 (Full Validation)		Part		S C	Ro	82 P(70S	8	ц Ч			ent/				PM
∠ Accred	itation: .AC	□ AZ Co	ompliance r	Sampler: 1	V- DWINS		₽	5	/806	4	r 82		渇		4)	res				
) (Type)	POF		# of Coolers:			BE	N CE	ides	od 5(6	tals	¢		0/-	m L				
				Cooler Temp	(including CE) Z.H	+01525E	A	1512	estic	letho	y 83	₩	1	(AO)	emi	olifo				
				Container	Preservative	HEALNO	{ <u>}</u>	1:80	31 P	<u>е</u>	Hs b	RA		200	0 (S	o al				
Date	Time	Matrix	Sample Name	Type and #	Туре	2008094		<u>i</u>	806	Ē	PA	22	ভ	826	827	Tot				
8 24 20	0935	Soil	BH09@25-27'	1-402	COOL	001	X	X					X	.						
	0940	l	BH09@28'-30'		1	00Z	1	1					ĩ							
	0950		BH09@30-35' A			003							Π							
	1030		BH10@15'-20'			004														
	1045		BH10@28'-30'			m 5													1	1
	1150		BH11@10'-15'			006							\square						-	
	1220		BH11@25-30'			007		Τ												
	1345		BH12@ 10'-15'			008													-	
	1400		BH12@25'-30'			009														
	1445		BH13@25'-27'			016														
	1450		BH13@28'-30'			011		Ţ												
V	1500	V	BH13@30'-35'	V	V	012	V	V					V							
Date: 8-24-20 Date:	Time:)6/9 Time:	Relinquish	ed by:	Received by:	Via Daet Via:	Date Time	Rem	nark	s: J	r= her	Ĥ	ol ra	ol nn	0		em	1.Ce	5m		Fage
124/2020	1751	()	hothe IN alter	Cre	Carre	8/15/20 0800			dl	our	ns	6	<u>)</u>	+e	n	r c	0W	۱		10 VCL
	n necessary,	samples/sut	annued to Hall Environmental may be sub	Contracted to other a	ICCREDILED IBDORATORI	es. This serves as notice of this	s possil	ынту.	ANY SU	io-contr	acted	uata v	WIII De	clearly	y notai	led on i	ine ana	iiytical re	sport.	2/4

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February 19, 2021

Danny Burns HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: Hare 15

OrderNo.: 2102671

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 14 sample(s) on 2/12/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: HILCORP ENERGY

Project: Hare 15

Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 14 @ 25'-27' Collection Date: 2/9/2021 10:15:00 AM **Descrived Deter** 2/12/2021 7:20:00 AM

Lab ID: 2102671-001	Matrix: SOIL	Rec	Received Date: 2/12/2021 7:30:00 AM							
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: JME					
Diesel Range Organics (DRO)	170	9.2	mg/Kg	1	2/18/2021 7:35:46 AM					
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/18/2021 7:35:46 AM					
Surr: DNOP	93.7	70-130	%Rec	1	2/18/2021 7:35:46 AM					
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: CCM					
Gasoline Range Organics (GRO)	400	25	mg/Kg	5	2/18/2021 12:42:00 PM					
Surr: BFB	227	75.3-105	S %Rec	5	2/18/2021 12:42:00 PM					
EPA METHOD 8021B: VOLATILES					Analyst: CCM					
Benzene	ND	0.12	mg/Kg	5	2/18/2021 12:42:00 PM					
Toluene	ND	0.25	mg/Kg	5	2/18/2021 12:42:00 PM					
Ethylbenzene	2.1	0.25	mg/Kg	5	2/18/2021 12:42:00 PM					
Xylenes, Total	26	0.49	mg/Kg	5	2/18/2021 12:42:00 PM					
Surr: 4-Bromofluorobenzene	157	80-120	S %Rec	5	2/18/2021 12:42:00 PM					
EPA METHOD 300.0: ANIONS					Analyst: VP					
Chloride	ND	60	mg/Kg	20	2/17/2021 12:28:10 PM					

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 14 @ 30'-35' **Project:** Hare 15 Collection Date: 2/9/2021 10:30:00 AM Lab ID: 2102671-002 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 2/17/2021 10:53:40 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 2/17/2021 10:53:40 PM Surr: DNOP 147 70-130 S %Rec 1 2/17/2021 10:53:40 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 2/17/2021 12:40:00 AM 4.6 mg/Kg 1 Surr: BFB 88.3 75.3-105 %Rec 1 2/17/2021 12:40:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.023 mg/Kg 2/17/2021 12:40:00 AM 1 Toluene ND 0.046 mg/Kg 1 2/17/2021 12:40:00 AM Ethylbenzene ND 0.046 mg/Kg 1 2/17/2021 12:40:00 AM Xylenes, Total ND 0.092 mg/Kg 1 2/17/2021 12:40:00 AM Surr: 4-Bromofluorobenzene 85.5 80-120 %Rec 1 2/17/2021 12:40:00 AM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 2/17/2021 1:05:24 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

ma/Ka

20

- Р Sample pH Not In Range
- Reporting Limit RL

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Hare 15

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Project:

Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

Analytical Report Lab Order 2102671

2/17/2021 9:05:19 AM

2/17/2021 1:42:39 PM

Analyst: VP

Analyst: NSB

50

50

50

50

50

50

50

20

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/19/2021 **CLIENT: HILCORP ENERGY** Client Sample ID: BH 15 @ 25'-30' Collection Date: 2/9/2021 12:45:00 PM 2102671-003 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME **Diesel Range Organics (DRO)** 2/15/2021 9:01:28 AM 360 9.4 mg/Kg 1 Motor Oil Range Organics (MRO) 2/15/2021 9:01:28 AM ND 47 mg/Kg 1 92.9 70-130 %Rec 1 2/15/2021 9:01:28 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB

230

1.2

2.3

2.3

4.7

60

80-120

S

75.3-105

3000

233

1.7

23

17

250

108

ND

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

Qualifiers:

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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CLIENT: HILCORP ENERGY

Project: Hare 15

Analytical Report
Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 15 @ 30'-35' Collection Date: 2/9/2021 1:00:00 PM Received Date: 2/12/2021 7:30:00 AM

Lab ID: 2102671-004	Matrix: SOIL	Rece	eived Date:	te: 2/12/2021 7:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: JME				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	2/15/2021 10:11:52 AM				
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/15/2021 10:11:52 AM				
Surr: DNOP	95.1	70-130	%Rec	1	2/15/2021 10:11:52 AM				
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/17/2021 10:16:41 AM				
Surr: BFB	98.2	75.3-105	%Rec	1	2/17/2021 10:16:41 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.024	mg/Kg	1	2/17/2021 10:16:41 AM				
Toluene	ND	0.048	mg/Kg	1	2/17/2021 10:16:41 AM				
Ethylbenzene	ND	0.048	mg/Kg	1	2/17/2021 10:16:41 AM				
Xylenes, Total	ND	0.096	mg/Kg	1	2/17/2021 10:16:41 AM				
Surr: 4-Bromofluorobenzene	94.4	80-120	%Rec	1	2/17/2021 10:16:41 AM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	ND	60	mg/Kg	20	2/17/2021 1:55:03 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

2/17/2021 2:07:27 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 16 @ 25'-30' **Project:** Hare 15 Collection Date: 2/9/2021 4:00:00 PM Lab ID: 2102671-005 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) 210 10 mg/Kg 1 2/15/2021 10:36:25 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 2/15/2021 10:36:25 AM Surr: DNOP 94.2 70-130 %Rec 1 2/15/2021 10:36:25 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 800 2/17/2021 9:29:07 AM 96 mg/Kg 20 Surr: BFB 176 75.3-105 S %Rec 20 2/17/2021 9:29:07 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 0.67 0.48 mg/Kg 20 2/17/2021 9:29:07 AM Toluene 9.6 0.96 mg/Kg 20 2/17/2021 9:29:07 AM Ethylbenzene 3.3 0.96 mg/Kg 20 2/17/2021 9:29:07 AM Xylenes, Total 53 1.9 mg/Kg 20 2/17/2021 9:29:07 AM 2/17/2021 9:29:07 AM Surr: 4-Bromofluorobenzene 102 80-120 %Rec 20 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit POL
- Practical Quanitative Limit S
- % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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CLIENT: HILCORP ENERGY

Hare 15

Project:

Analytical Report
Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 16 @ 33'-35' Collection Date: 2/9/2021 4:15:00 PM Received Date: 2/12/2021 7:30:00 AM

Lab ID: 2102671-006 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM							
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS					Analyst: JME	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/15/2021 10:59:56 AM	
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2021 10:59:56 AM	
Surr: DNOP	92.1	70-130		%Rec	1	2/15/2021 10:59:56 AM	
EPA METHOD 8015D: GASOLINE RANG	θE					Analyst: NSB	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/17/2021 11:27:28 AM	
Surr: BFB	105	75.3-105	S	%Rec	1	2/17/2021 11:27:28 AM	
EPA METHOD 8021B: VOLATILES						Analyst: NSB	
Benzene	0.074	0.024		mg/Kg	1	2/17/2021 11:27:28 AM	
Toluene	0.19	0.047		mg/Kg	1	2/17/2021 11:27:28 AM	
Ethylbenzene	ND	0.047		mg/Kg	1	2/17/2021 11:27:28 AM	
Xylenes, Total	0.42	0.095		mg/Kg	1	2/17/2021 11:27:28 AM	
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/17/2021 11:27:28 AM	
EPA METHOD 300.0: ANIONS						Analyst: VP	
Chloride	ND	60		mg/Kg	20	2/17/2021 2:44:40 PM	

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: HILCORP ENERGY

Project: Hare 15

Analytical Report
Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 17 @ 20'-25' Collection Date: 2/10/2021 9:15:00 AM Received Date: 2/12/2021 7:30:00 AM

Lab ID: 2102671-007	Matrix: SOIL	Received Date: 2/12/2021 7:30:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: JME			
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	2/15/2021 11:23:31 AM			
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/15/2021 11:23:31 AM			
Surr: DNOP	92.9	70-130	%Rec	1	2/15/2021 11:23:31 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/17/2021 11:51:04 AM			
Surr: BFB	101	75.3-105	%Rec	1	2/17/2021 11:51:04 AM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.024	mg/Kg	1	2/17/2021 11:51:04 AM			
Toluene	ND	0.048	mg/Kg	1	2/17/2021 11:51:04 AM			
Ethylbenzene	ND	0.048	mg/Kg	1	2/17/2021 11:51:04 AM			
Xylenes, Total	ND	0.095	mg/Kg	1	2/17/2021 11:51:04 AM			
Surr: 4-Bromofluorobenzene	99.4	80-120	%Rec	1	2/17/2021 11:51:04 AM			
EPA METHOD 300.0: ANIONS					Analyst: VP			
Chloride	ND	60	mg/Kg	20	2/17/2021 2:57:05 PM			

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 17 @ 25'-30' **Project:** Hare 15 Collection Date: 2/10/2021 9:30:00 AM Lab ID: 2102671-008 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 10 mg/Kg 1 2/15/2021 11:47:13 AM Motor Oil Range Organics (MRO) ND 51 mg/Kg 1 2/15/2021 11:47:13 AM Surr: DNOP 94.4 70-130 %Rec 1 2/15/2021 11:47:13 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 2/17/2021 12:14:48 PM 4.7 mg/Kg 1 Surr: BFB 102 75.3-105 %Rec 1 2/17/2021 12:14:48 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 2/17/2021 12:14:48 PM 0.023 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 2/17/2021 12:14:48 PM Ethylbenzene ND 0.047 mg/Kg 1 2/17/2021 12:14:48 PM Xylenes, Total ND 0.094 mg/Kg 1 2/17/2021 12:14:48 PM Surr: 4-Bromofluorobenzene 99.5 80-120 %Rec 1 2/17/2021 12:14:48 PM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 2/17/2021 3:09:30 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit S
- % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

ma/Ka

20

- Р Sample pH Not In Range
- Reporting Limit RL

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CLIENT: HILCORP ENERGY

Project: Hare 15

Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 18 @ 20'-25' Collection Date: 2/10/2021 12:00:00 PM noiwed Date: 2/12/2021 7.20.00 AM ъ

Lab ID: 2102671-009	Matrix: SOIL	Reco	Received Date: 2/12/2021 7:30:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: JME				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	2/15/2021 12:10:50 PM				
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/15/2021 12:10:50 PM				
Surr: DNOP	93.7	70-130	%Rec	1	2/15/2021 12:10:50 PM				
EPA METHOD 8015D: GASOLINE RAN	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/17/2021 12:38:34 PM				
Surr: BFB	101	75.3-105	%Rec	1	2/17/2021 12:38:34 PM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.024	mg/Kg	1	2/17/2021 12:38:34 PM				
Toluene	ND	0.048	mg/Kg	1	2/17/2021 12:38:34 PM				
Ethylbenzene	ND	0.048	mg/Kg	1	2/17/2021 12:38:34 PM				
Xylenes, Total	ND	0.095	mg/Kg	1	2/17/2021 12:38:34 PM				
Surr: 4-Bromofluorobenzene	98.7	80-120	%Rec	1	2/17/2021 12:38:34 PM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	ND	60	mg/Kg	20	2/17/2021 3:21:55 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 18 @ 25'-30' **Project:** Hare 15 Collection Date: 2/10/2021 12:15:00 PM Lab ID: 2102671-010 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 8.4 mg/Kg 1 2/15/2021 12:34:26 PM Motor Oil Range Organics (MRO) ND 42 mg/Kg 1 2/15/2021 12:34:26 PM Surr: DNOP 94.0 70-130 %Rec 1 2/15/2021 12:34:26 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 2/17/2021 1:02:14 PM 5.0 mg/Kg 1 Surr: BFB 101 75.3-105 %Rec 1 2/17/2021 1:02:14 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 2/17/2021 1:02:14 PM 0.025 mg/Kg 1 Toluene 0.050 ND mg/Kg 1 2/17/2021 1:02:14 PM Ethylbenzene ND 0.050 mg/Kg 1 2/17/2021 1:02:14 PM Xylenes, Total ND 0.099 mg/Kg 1 2/17/2021 1:02:14 PM 2/17/2021 1:02:14 PM Surr: 4-Bromofluorobenzene 99.2 80-120 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 2/17/2021 3:34:20 PM ma/Ka 20

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 Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Project:

Lab ID:

Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 19 @ 30'-35' Hare 15 Collection Date: 2/10/2021 3:15:00 PM 2102671-011 Matrix: SOIL Received Date: 2/12/2021 7:30:00 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 2/15/2021 12:58:11 PM Motor Oil Range Organics (MRO) 2/15/2021 12:58:11 PM ND 45 mg/Kg 1 Surr: DNOP 92.6 70-130 %Rec 1 2/15/2021 12:58:11 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 9.4 2/18/2021 10:29:46 AM 4.9 mg/Kg 1 Surr: BFB 139 75.3-105 S %Rec 1 2/18/2021 10:29:46 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB M

Benzene	ND	0.024	mg/Kg	1	2/18/2021 10:29:46 AM
Toluene	ND	0.049	mg/Kg	1	2/18/2021 10:29:46 AM
Ethylbenzene	ND	0.049	mg/Kg	1	2/18/2021 10:29:46 AM
Xylenes, Total	0.43	0.098	mg/Kg	1	2/18/2021 10:29:46 AM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	2/18/2021 10:29:46 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	2/17/2021 3:46:45 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н Holding times for preparation or analysis exceeded
- ND
- Not Detected at the Reporting Limit PQL
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 19 @ 35'-40' **Project:** Hare 15 Collection Date: 2/10/2021 3:30:00 PM Lab ID: 2102671-012 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 10 mg/Kg 1 2/15/2021 1:21:55 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 2/15/2021 1:21:55 PM Surr: DNOP 94.5 70-130 %Rec 1 2/15/2021 1:21:55 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 2/17/2021 3:00:22 PM 13 4.8 mg/Kg 1 Surr: BFB 124 75.3-105 S %Rec 1 2/17/2021 3:00:22 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 0.050 2/17/2021 3:00:22 PM 0.024 mg/Kg 1 Toluene 0.12 0.048 mg/Kg 1 2/17/2021 3:00:22 PM Ethylbenzene 0.14 0.048 mg/Kg 1 2/17/2021 3:00:22 PM Xylenes, Total 2.1 0.096 mg/Kg 1 2/17/2021 3:00:22 PM 2/17/2021 3:00:22 PM Surr: 4-Bromofluorobenzene 102 80-120 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 2/18/2021 2:57:38 PM ma/Ka 20

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 Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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EPA METHOD 300.0: ANIONS

Chloride

Analytical Report
Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 20 @ 25'-30' **Project:** Hare 15 Collection Date: 2/11/2021 9:45:00 AM Lab ID: 2102671-013 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) 190 9.8 mg/Kg 1 2/15/2021 1:45:39 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 2/15/2021 1:45:39 PM Surr: DNOP 94.8 70-130 %Rec 1 2/15/2021 1:45:39 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 600 5 2/17/2021 3:24:01 PM 24 mg/Kg 5 Surr: BFB 507 75.3-105 S %Rec 2/17/2021 3:24:01 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.12 mg/Kg 5 2/17/2021 3:24:01 PM Toluene 5 2.8 0.24 mg/Kg 2/17/2021 3:24:01 PM Ethylbenzene 2.2 0.24 mg/Kg 5 2/17/2021 3:24:01 PM Xylenes, Total 38 0.47 mg/Kg 5 2/17/2021 3:24:01 PM 2/17/2021 3:24:01 PM 5 Surr: 4-Bromofluorobenzene 121 80-120 S %Rec

ND

60

ma/Ka

20

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analyst: VP

2/18/2021 3:10:02 PM

Analytical Report
Lab Order 2102671

Date Reported: 2/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 20 @ 33'-35' **Project:** Hare 15 Collection Date: 2/11/2021 10:00:00 AM Lab ID: 2102671-014 Matrix: SOIL Received Date: 2/12/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.2 mg/Kg 1 2/15/2021 2:09:25 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 2/15/2021 2:09:25 PM Surr: DNOP 94.5 70-130 %Rec 1 2/15/2021 2:09:25 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 9.9 2/17/2021 3:47:32 PM 4.9 mg/Kg 1 Surr: BFB 105 75.3-105 S %Rec 1 2/17/2021 3:47:32 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 0.056 0.024 mg/Kg 2/17/2021 3:47:32 PM 1 Toluene 0.72 0.049 mg/Kg 1 2/17/2021 3:47:32 PM Ethylbenzene 0.091 0.049 mg/Kg 1 2/17/2021 3:47:32 PM Xylenes, Total 1.5 0.098 mg/Kg 1 2/17/2021 3:47:32 PM 2/17/2021 3:47:32 PM Surr: 4-Bromofluorobenzene 100 80-120 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 2/18/2021 3:22:27 PM ma/Ka 20

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
- H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- NDNot Detected at the Reporting LimitPQLPractical Quanitative Limit
- QL Practical Quantative Linit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Client:	HILCOR	PENERGY								
	Hale 15									
Sample ID	: MB-58160	SampType: M	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch ID: 58	160	F	RunNo: 75	5345				
Prep Date:	2/17/2021	Analysis Date: 2	/17/2021	S	GeqNo: 26	663499	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID	: LCS-58160	SampType: LO	S	Tes	tCode: EF	PA Method	300.0: Anion	S		
Client ID:	LCSS	Batch ID: 58	160	F	RunNo: 75	5345				
Prep Date:	2/17/2021	Analysis Date: 2	/17/2021	S	SeqNo: 26	63500	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	93.8	90	110			
Sample ID	: MB-58190	SampType: M	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch ID: 58	190	F	RunNo: 75	5398				
Prep Date:	2/18/2021	Analysis Date: 2	/18/2021	S	SeqNo: 26	64555	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID	: LCS-58190	SampType: LO	S	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch ID: 58	190	F	RunNo: 75	5398				
Prep Date:	2/18/2021	Analysis Date: 2	/18/2021	S	SeqNo: 26	664556	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	96.2	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
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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19-Feb-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR Hare 15	P ENERG	Y								
Sample ID:	MB-58108	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 58	108	F	RunNo: 7	5307				
Prep Date:	2/13/2021	Analysis D	ate: 2/	15/2021	S	SeqNo: 2	660760	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.3		10.00		93.3	70	130			
Sample ID:	LCS-58108	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 58	108	F	RunNo: 7	5307				
Prep Date:	2/13/2021	Analysis D	ate: 2/	15/2021	S	SeqNo: 2	660763	Units: mg/ #	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	46	10	50.00	0	92.8	68.9	141			
Surr: DNOP		4.3		5.000		87.0	70	130			
Sample ID:	2102671-003AMS	SampT	ype: MS	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH 15 @ 25'-30'	Batch	ID: 58	108	F	RunNo: 7	5307				
Prep Date:	2/13/2021	Analysis D	ate: 2/	15/2021	S	SeqNo: 2	660769	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	340	9.6	47.76	358.5	-30.0	15	184			S
Surr: DNOP		4.5		4.776		94.4	70	130			
Sample ID:	2102671-003AMS) SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH 15 @ 25'-30'	Batch	ID: 58	108	F	RunNo: 7	5307				
Prep Date:	2/13/2021	Analysis D	ate: 2/	15/2021	S	SeqNo: 2	660770	Units: mg/h	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	320	9.1	45.33	358.5	-95.4	15	184	8.77	23.9	S
Surr: DNOP		4.3		4.533		94.6	70	130	0	0	
Sample ID:	MB-58107	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 58	107	F	RunNo: 7	5362				
Prep Date:	2/13/2021	Analysis D	ate: 2/	17/2021	S	SeqNo: 2	663323	Units: mg/	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		13		10.00		134	70	130			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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19-Feb-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCORI Hare 15	P ENERGY									
Sample ID:	MB-58130	SampType	: MB	LK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch ID	: 581	30	F	RunNo: 7	5362				
Prep Date:	2/15/2021	Analysis Date	: 2/ 1	17/2021	S	SeqNo: 2	663324	Units: %Red	•		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		11		10.00		112	70	130			
Sample ID:	LCS-58107	SampType	: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID	: 581	07	F	RunNo: 7	5362				
Prep Date:	2/13/2021	Analysis Date	: 2/ 1	17/2021	5	SeqNo: 2	663326	Units: mg/K	g		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	60	10	50.00	0	119	68.9	141			
Surr: DNOP		6.8		5.000		136	70	130			S
Sample ID:	LCS-58130	SampType	: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch ID	: 581	30	F	RunNo: 7	5362				
Prep Date:	2/15/2021	Analysis Date	: 2/ 1	17/2021	S	SeqNo: 2	663327	Units: %Red	•		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.7		5.000		115	70	130			
Sample ID:	2102698-001AMS	SampType	: MS		Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	BatchQC	Batch ID	: 581	30	F	RunNo: 7	5362				
Prep Date:	2/15/2021	Analysis Date	: 2/ 1	17/2021	S	SeqNo: 2	663364	Units: %Red	•		
Analyte		Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.2		4.766		108	70	130			
Sample ID:	2102698-001AMSD	SampType	: MS	D	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	BatchQC	Batch ID	: 581	30	F	RunNo: 7	5362				
Prep Date:	2/15/2021	Analysis Date	: 2/ 1	17/2021	5	SeqNo: 2	663365	Units: %Red	•		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.9		4.955		99.8	70	130	0	0	
Sample ID:	2102662-001AMS	SampType	: MS		Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	BatchQC	Batch ID	: 581	07	F	RunNo: 7	5367				
Prep Date:	2/13/2021	Analysis Date	: 2/ 1	18/2021	S	SeqNo: 2	663963	Units: mg/K	g		
Analyte		Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	300	9.3	46.60	301.4	-6.88	15	184			S
Surr: DNOP		5.2		4.660		112	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
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- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2102671

19-Feb-21

Client:

HILCORP ENERGY

Project:	Hare 15										
Sample ID:	2102662-001AMSD	SampTyp	e: MS	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	BatchQC	Batch II): 58 '	107	F	RunNo: 7	5367				
Prep Date:	2/13/2021	Analysis Date	e: 2/	18/2021	S	SeqNo: 2	663964	Units: mg/K	٤g		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	330	9.7	48.59	301.4	51.8	15	184	9.09	23.9	
Surr: DNOP		5.1		4.859		106	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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19-Feb-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR Hare 15	P ENERG	Y								
Sample ID:	LCS-58099	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gasc	oline Rang	e	
Client ID:	LCSS	Batch	ID: 58	099	F	RunNo: 7	5347				
Prep Date:	2/12/2021	Analysis D	ate: 2	/16/2021	S	SeqNo: 2	662785	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	25 1000	5.0	25.00 1000	0	98.9 99.6	80 75.3	120 105			
Sample ID:	MB-58099	SampT	ype: M I	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch ID: 58099			F	RunNo: 7	5347				
Prep Date:	2/12/2021	Analysis D	ate: 2	/16/2021	S	SeqNo: 2	662786	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 890	5.0	1000		88.6	75.3	105			
Sample ID:	2102662-001ams	SampT	уре: М	S	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	BatchQC	Batch	ID: 58	099	F	RunNo: 7	5347				
Prep Date:	2/12/2021	Analysis D	ate: 2	/16/2021	S	SeqNo: 2	662788	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	22	4.9	24.73	0	87.3	61.3	114			
Surr: BFB		990		989.1		100	75.3	105			
Sample ID:	2102662-001amsd	SampT	ype: M	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	BatchQC	Batch	ID: 58	099	F	RunNo: 7	5347				
Prep Date:	2/12/2021	Analysis D	ate: 2	/16/2021	S	SeqNo: 2	662790	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	23	5.0	24.83	0	91.0	61.3	114	4.57	20	
Surr: BFB		970		993.0		97.7	75.3	105	0	0	
Sample ID:	mb-58102	SampT	ype: M I	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch	ID: 58	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis D	ate: 2	/17/2021	S	SeqNo: 2	663391	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0	1000			75.0	405			
Sum: BFB		990		1000		99.0	75.3	105			
Sample ID:	lcs-58102	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	LCSS	Batch	ID: 58	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis D	ate: 2	/17/2021	S	SeqNo: 2	663392	Units: mg/k	٢g		
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
- Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit

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WO#: 2102671 19-Feb-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR Hare 15	P ENERGY								
Sample ID:	lcs-58102	SampType	LCS	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch ID:	58102	R	RunNo: 75	5364				
Prep Date:	2/12/2021	Analysis Date:	2/17/2021	S	SeqNo: 26	663392	Units: mg/K	g		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	29 1100	5.0 25.00 1000	0	114 112	80 75.3	120 105			S
Sample ID:	mb-58120	SampType	BLK	Test	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch ID:	58120	R	RunNo: 75	5364				
Prep Date:	2/15/2021	Analysis Date:	2/17/2021	S	SeqNo: 26	663411	Units: %Rec	;		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		980	1000		98.5	75.3	105			
Sample ID:	lcs-58120	SampType	LCS	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch ID:	58120	R	RunNo: 75	5364				
Client ID: Prep Date:	LCSS 2/15/2021	Batch ID: Analysis Date:	58120 2/17/2021	R	RunNo: 75 SeqNo: 26	5364 563412	Units: %Rec	;		
Client ID: Prep Date: Analyte	LCSS 2/15/2021	Batch ID: Analysis Date: Result P	58120 2/17/2021 QL SPK value	R S SPK Ref Val	RunNo: 75 SeqNo: 26 %REC	5364 563412 LowLimit	Units: %Rec HighLimit	; %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Surr: BFB	LCSS 2/15/2021	Batch ID: Analysis Date: Result Po 1100	58120 2/17/2021 QL SPK value 1000	R S SPK Ref Val	RunNo: 75 SeqNo: 26 <u>%REC</u> 112	5364 563412 LowLimit 75.3	Units: %Rec HighLimit 105	s %RPD	RPDLimit	Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID:	LCSS 2/15/2021 2102698-001ams	Batch ID: Analysis Date: Result P 1100 SampType	58120 2/17/2021 QL SPK value 1000	R S SPK Ref Val Test	RunNo: 75 SeqNo: 26 <u>%REC</u> 112 tCode: EF	5364 563412 LowLimit 75.3 PA Method	Units: %Rec HighLimit 105 8015D: Gaso	%RPD	RPDLimit e	Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID:	LCSS 2/15/2021 2102698-001ams BatchQC	Batch ID: Analysis Date: Result P 1100 SampType Batch ID:	58120 2/17/2021 QL SPK value 1000 : MS : 58120	R S SPK Ref Val Tes R	RunNo: 75 SeqNo: 26 <u>%REC</u> 112 tCode: EF RunNo: 75	5364 563412 LowLimit 75.3 PA Method 5364	Units: %Rec HighLimit 105 8015D: Gaso	%RPD	RPDLimit e	Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date:	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021	Batch ID: Analysis Date: Result Pr 1100 SampType Batch ID: Analysis Date:	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 	R SPK Ref Val Test R S	RunNo: 75 SeqNo: 26 <u>%REC</u> 112 tCode: EF RunNo: 75 SeqNo: 26	5364 563412 LowLimit 75.3 PA Method 5364 563414	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec	%RPD line Rang	RPDLimit e	Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date: Analyte	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021	Batch ID: Analysis Date: Result P 1100 SampType Batch ID: Analysis Date: Result P	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 QL SPK value 	R SPK Ref Val Tesi R SPK Ref Val	RunNo: 75 SeqNo: 26 <u>%REC</u> 112 tCode: EF RunNo: 75 SeqNo: 26 %REC	5364 563412 LowLimit 75.3 PA Method 5364 563414 LowLimit	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec HighLimit	%RPD line Rang %RPD	RPDLimit e RPDLimit	Qual S Qual
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date: Analyte Surr: BFB	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021	Batch ID: Analysis Date: Result Pr 1100 SampType Batch ID: Analysis Date: Result Pr 1100	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 QL SPK value 979.4 	R SPK Ref Val Tes R SPK Ref Val	RunNo: 75 SeqNo: 26 %REC 112 tCode: EF RunNo: 75 SeqNo: 26 %REC 110	5364 563412 LowLimit 75.3 PA Method 5364 563414 LowLimit 75.3	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec HighLimit 105	%RPD line Rang %RPD	RPDLimit e RPDLimit	Qual S Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date: Analyte Surr: BFB Sample ID:	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021 2102698-001amsd	Batch ID: Analysis Date: Result P 1100 SampType Batch ID: Analysis Date: Result P 1100	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 QL SPK value 979.4 MSD 	R SPK Ref Val Test SPK Ref Val SPK Ref Val	RunNo: 75 SeqNo: 26 <u>%REC</u> 112 tCode: EF RunNo: 75 SeqNo: 26 <u>%REC</u> 110 tCode: EF	5364 563412 LowLimit 75.3 PA Method 5364 563414 LowLimit 75.3 PA Method	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec HighLimit 105 8015D: Gaso	%RPD line Rang %RPD line Rang	RPDLimit e RPDLimit	Qual S Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID:	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021 2102698-001amsd BatchQC	Batch ID: Analysis Date: Result Pr 1100 SampType Batch ID: Analysis Date: Result Pr 1100 SampType Batch ID:	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 QL SPK value 979.4 MSD 58120 	R SPK Ref Val Tesi SPK Ref Val SPK Ref Val Tesi R	RunNo: 75 SeqNo: 26 %REC 112 tCode: EF RunNo: 75 SeqNo: 26 %REC 110 tCode: EF RunNo: 75	5364 563412 LowLimit 75.3 PA Method 5364 563414 LowLimit 75.3 PA Method 5364	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec HighLimit 105 8015D: Gaso	%RPD line Rang %RPD line Rang	RPDLimit e RPDLimit e	Qual S Qual S
Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID: Prep Date:	LCSS 2/15/2021 2102698-001ams BatchQC 2/15/2021 2102698-001amsd BatchQC 2/15/2021	Batch ID: Analysis Date: Result Pr 1100 SampType Batch ID: Analysis Date: Result Pr 1100	 58120 2/17/2021 QL SPK value 1000 MS 58120 2/17/2021 QL SPK value 979.4 MSD 58120 2/17/2021 	R SPK Ref Val Test SPK Ref Val SPK Ref Val Test R S	RunNo: 75 SeqNo: 26 %REC 112 tCode: EF RunNo: 75 SeqNo: 26 %REC 110 tCode: EF RunNo: 75 SeqNo: 26	5364 563412 LowLimit 75.3 PA Method 5364 563414 LowLimit 75.3 PA Method 5364 5364 5364	Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec HighLimit 105 8015D: Gaso Units: %Rec	%RPD line Rang %RPD line Rang	RPDLimit e RPDLimit e	Qual S Qual S
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Qualifiers:

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2102671

19-Feb-21
Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project:	Hare 15										
Sample ID:	LCS-58099	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	ID: 58	099	R	unNo: 7	5347				
Prep Date:	2/12/2021	Analysis Da	ite: 2/	16/2021	S	eqNo: 2	662841	Units: mg/ I	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.88	0.025	1.000	0	88.3	80	120			
Toluene		0.86	0.050	1.000	0	86.4	80	120			
Ethylbenzene		0.86	0.050	1.000	0	85.5	80	120			
Xylenes, Total		2.6	0.10	3.000	0	85.6	80	120			
Surr: 4-Brom	nofluorobenzene	0.86		1.000		85.9	80	120			
Sample ID:	MB-58099	SampTy	pe: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch	ID: 58	099	R	tunNo: 7	5347				
Prep Date:	2/12/2021	Analysis Da	ite: 2/	16/2021	S	eqNo: 2	662842	Units: mg/I	٨g		
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-Brom	nofluorobenzene	0.86		1.000		85.6	80	120			
Sample ID:	2102662-002ams	SampTy	ре: М	6	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	ID: 58	099	R	tunNo: 7	5347				
Prep Date:	2/12/2021	Analysis Da	ite: 2/	16/2021	S	eqNo: 2	662845	Units: mg/ I	Кg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.79	0.025	0.9833	0	80.7	76.3	120			
Toluene		0.78	0.049	0.9833	0	79.7	78.5	120			
Ethylbenzene		0.78	0.049	0.9833	0	79.3	78.1	124			
Xylenes, Total		2.3	0.098	2.950	0	79.3	79.3	125			S
Surr: 4-Brom	nofluorobenzene	0.83		0.9833		84.3	80	120			
Sample ID:	2102662-002amsd	SampTy	pe: M \$	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch	ID: 58	099	R	lunNo: 7	5347				
Prep Date:	2/12/2021	Analysis Da	ite: 2/	16/2021	S	eqNo: 2	662846	Units: mg/ I	Кg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.79	0.024	0.9766	0	81.1	76.3	120	0.189	20	
Toluene		0.78	0.049	0.9766	0	80.3	78.5	120	0.00802	20	
Ethylbenzene		0.78	0.049	0.9766	0	79.9	78.1	124	0.0365	20	
Xylenes, Total		2.3	0.098	2.930	0	79.9	79.3	125	0.0622	20	
Surr: 4-Brom	notluorobenzene	0.81		0.9766		83.4	80	120	0	0	

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WO#: 2102671 19-Feb-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	HILCOR	P ENERG	θY								
Project:	Hare 15										
O a serie ID		0						0004D V-1-	(1)		
Sample ID:	mb-58102	Samp	iype: Nie		les		PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	n ID: 58'	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis [Date: 2/	17/2021	ç	SeqNo: 2	663437	Units: mg/l	٨g		
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-Bron	nofluorobenzene	0.97		1.000		96.7	80	120			
Sample ID:	LCS-58102	Samp	Гуре: LC	S	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 58 [.]	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis [Date: 2/	17/2021	5	SeqNo: 2	663438	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.025	1.000	0	100	80	120			
Toluene		1.0	0.050	1.000	0	101	80	120			
Ethylbenzene		1.0	0.050	1.000	0	100	80	120			
Xylenes, Total		3.0	0.10	3.000	0	99.9	80	120			
Surr: 4-Bron	nofluorobenzene	0.99		1.000		99.0	80	120			
Sample ID:	2102671-004ams	Samp	Гуре: МS	3	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	BH 15 @ 30'-35'	Batc	h ID: 58	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis [Date: 2/	17/2021	S	SeqNo: 2	663441	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.93	0.025	0.9930	0.01367	92.2	76.3	120			
Toluene		0.97	0.050	0.9930	0.02050	96.0	78.5	120			
Ethylbenzene		0.97	0.050	0.9930	0.01347	96.4	78.1	124			
Xylenes, Total		3.0	0.099	2.979	0.08345	96.7	79.3	125			
Surr: 4-Bron	nofluorobenzene	1.0		0.9930		101	80	120			
Sample ID:	2102671-004amsd	I Samp	Гуре: МS	SD	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	BH 15 @ 30'-35'	Batc	h ID: 58 '	102	F	RunNo: 7	5364				
Prep Date:	2/12/2021	Analysis [Date: 2/	17/2021	S	SeqNo: 2	663442	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.93	0.025	0.9872	0.01367	92.8	76.3	120	0.0132	20	
Toluene		0.98	0.049	0.9872	0.02050	96.7	78.5	120	0.117	20	
Ethylbenzene		0.96	0.049	0.9872	0.01347	96.2	78.1	124	0.789	20	
Xylenes, Total		3.0	0.099	2.962	0.08345	96.9	79.3	125	0.400	20	
Surr: 4-Bron	nofluorobenzene	0.97		0.9872		98.2	80	120	0	0	

Qualifiers:

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2102671

19-Feb-21

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	HILCOR	P ENERGY									
Project:	Hare 15										
O		0T			T						
Sample ID:	mb-58120	Sampiyp	e: W	BLK	Ies	Code: E	PA Method	8021B: Volati	les		
Client ID:	PBS	Batch I	D: 58	8120	R	unNo: 7	75364				
Prep Date:	2/15/2021	Analysis Dat	e: 2	/17/2021	S	eqNo: 2	2663454	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bror	nofluorobenzene	0.97		1.000		97.3	80	120			
Sample ID:	LCS-58120	SampTyp	e: L(cs	Tes	Code: E	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batch I	D: 58	3120	R	unNo: 7	75364				
Prep Date:	2/15/2021	Analysis Dat	e: 2	/17/2021	S	eqNo: 2	2663455	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bror	nofluorobenzene	1.0		1.000		102	80	120			
Sample ID:	2102698-002ams	SampTyp	e: M	S	Tes	Code: E	PA Method	8021B: Volati	les		
Client ID:	BatchQC	Batch I	D: 58	8120	R	unNo: 7	75364				
Prep Date:	2/15/2021	Analysis Dat	e: 2	/17/2021	S	eqNo: 2	2663458	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bror	nofluorobenzene	0.97		0.9662		100	80	120			
Sample ID:	2102698-002amsd	SampTyp	e: M	SD	Tes	Code: E	PA Method	8021B: Volati	les		
Client ID:	BatchQC	Batch I	D: 58	8120	R	unNo: 7	75364				
Prep Date:	2/15/2021	Analysis Dat	e: 2	/17/2021	S	eqNo: 2	2663459	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bror	nofluorobenzene	0.97		0.9804		98.5	80	120	0	0	

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- P Sample pH Not In Range
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2102671

19-Feb-21

WO#:

HALL ENVIRC ANALY LABOR	DNMENTAL SIS ATORY	Hall Environmen A TEL: 505-345-39 Website: clients	tal Analysis Labor 4901 Hawki Ibuquerque, NM & 175 FAX: 505-345 hallenvironmenta	ratory ns NE 87109 San -4107 1.com	nple Log-In Che	neck List		
Client Name:	HILCORP ENERGY	Work Order Numb	er: 2102671		RcptNo: 1			
Received By:	Desiree Dominguez	2/12/2021 7:30:00 A	M	TA				
Completed By:	Desiree Dominguez	2/12/2021 10:21:51	AM	TPS				
Reviewed By:	ENM	2/12/21						
Chain of Custo	ody							
1. Is Chain of Cus	stody complete?		Yes 🗹	No 🗌	Not Present			
2. How was the sa	ample delivered?		Courier					
<u>Log In</u>								
3. Was an attemp	t made to cool the sample	s?	Yes 🗹	No 🗌	NA 🗌			
4. Were all sample	es received at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗌				
5. Sample(s) in pr	oper container(s)?		Yes 🗹	No 🗌				
6. Sufficient samp	le volume for indicated tes	t(s)?	Yes 🗹	No 🗌				
7. Are samples (ex	cept VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗌				
8. Was preservativ	ve added to bottles?		Yes 🗌	No 🗹	NA 🗌			
9. Received at leas	st 1 vial with headspace <	1/4" for AQ VOA?	Yes	No 🗌	NA 🗹			
10. Were any samp	ble containers received bro	ken?	Yes	No 🗹	# of preserved			
11. Does paperwork	match bottle labels?		Yes 🗹	No 🗌	bottles checked for pH:			
(Note discrepan	cies on chain of custody)				Adjusted2	unless noted)		
12. Are matrices co	rrectly identified on Chain	of Custody?	Yes 🗹		Adjusted			
14 Were all holding	times able to be mot?		Yes 🔽		Checked by: DAN	01.01.		
(If no, notify cus	tomer for authorization.)		res 💌			2112/21		
Special Handlir	ng (if applicable)							
15. Was client notif	fied of all discrepancies wi	th this order?	Yes	No 🗌	NA 🗹			
Person N	otified:	Date:		ali në videri të të të të të të të të				
By Whom	1:	Via:	eMail F	Phone 🗌 Fax	In Person			
Regarding Client Ins	g: Tructions:	n son an a fair an an an an an an an an an an an an an	den angeneren der nicht ohne der einen Annen ein mer wir derenten eine deren	and an and the second second second second second second second second second second second second second second				
16. Additional rem	arks:							
17. <u>Cooler Inform</u> Cooler No	ation Temp ºC Condition	Seal Intact Seal No	Seal Date	Signed By				

a						P3 10	,f	2													Ke
	Chain	-of-Cı	ustody Record	Turn-Around	Time:]												B. I. T.		Cerve
Client:	Hila	orp E	nergy Company	Standard	I 🗆 Rush			151			M						201	DA			· doy
Att	n. T	ennif	rec Deal	Project Name	e:					-		v hal		iron	moni	tal or					• <u> </u>
Mailing	Address	:		Har	re 15			10	01 L	lawki	ine N	v.nai			orqu			100): II
5				Project #:		i.		43 T	ori el 50	05-34	115 1	975	F	- av	505-	345	.4107	109			/1.3/
Phone	#:									00-0-	10-0.	A	naly	/sis	Req	uest	- 107				
email o	or Fax#:			Project Mana	ager:		Ē	6					04			nt)					
QA/QC	Package:			WSP-D	anny Bul	rns	802	MR	B's		MS	00	04, S			bsei					5.40
🗆 Star	ndard		□ Level 4 (Full Validation)				B's (RO/	2 PC		1S07	300	DG .			ent/A					Im
	litation:		ompliance	Sampler:).	Burns		₩ H	9	808	4.1)	r 827	6	0x		$\langle \rangle$	rese					
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				Cooler Temp	(including CF):	8-0.0=1.8 (°C)	Į	5D(stici	etho	/ 83	Met	Ľ	(AO	emi-	lifor					
				Containor	Proconvotivo			1:801	1 Pe	Ű.	ls by	ZA 8	<u>f</u>	0 (V	0 (S	D Co					
Date	Time	Matrix	Sample Name	ContainerPreservativeHEAL No.Type and #Type2102671			E	Ę	808	EDE	PAF	RCF	Ú)	826	827	Tota		27			
2-9-21	1015	SOIL	BH14@25-27	1-402	1-402 COOL -001 >			Х					Х			1958					
1	1030		BH 14@ 30-35'		2	-002	1	1					1								
	1245		BH 15@ 25'-30'			-003	Π					1									+
	1300		BH 15@ 30'-35'			-004													\neg	\top	
	1600		BH 16@ 25'-30'			-005														\top	+
V	1615		BH 16@ 33'-35'			-006	1											\top		+	+
2-10-21	0915		BH 17 @ 20'-25'			-007										100				+	
1	0930		BH17@25-30'			-008												1			
	1200		BH18@20'-25'		-	-009									2	1.00					
	1215		BH 18 @ 25'-30'			- 010															11
	1515		BH 19@ 30'-35'			- DI I													-		
V	1530		BH19@ 35'-40'			-012	Y	V					V								
Date:	Time:	Relinquish	ied by:	Received by:	Via:	Date Time	Ren	nark	s:	1			h		۸ <i>۲</i>	\bigcirc	1.1	cr	5 /	° mA/	
1-(1-1) Date:	IJJJ]	Relinquish	ed by:	Received by:	Via:	Date Time		ĽC	- '	da	nn	y.	U	W I	15	0	W	24		-011	ase
Zuh	18/7		And I hat a	Contraction by:					C	levi	η,	he	nc	Ma	inn	(a)	S	sp	- 501	ŋ	100
1.10	If necessary	samples sub	Math United to Hall Environmental may be sub	contracted to other a		allalal 7:30	nosci	ihility	Anve	ub-cont	racted	l data i	will be	clear	v noto	ted on	the an	alutical	report		/

Re					Pg 2	ofZ															
leas C	hain	-of-Cu	ustody Record	Turn-Around	Time:	and a set of the set o										~					
d Client:	Hil	Corp	Energy Company	Standard Project Nam	l 🗆 Rush e:					A	N		Y	SIS	S L	A	BO	RA	TC	R	1
Mailing	Address	Jemi	ter Deal	-	Harel	5					www	w.ha	llenv	vironi	men	tal.co	om				
				Project #	TTATE	2	-	49	01 H	lawk	ins N	NE ·	- Alt	ouqu	erqu	ie, N	M 87	109			
26/2								Te	el. 50	05-34	45-3	975		ax	505-	-345	-4107	7		1111111	
email o	#: r Eax#:	1		Draiget Mana	aori			6				1	nen ĭ	SIS	кеq	ues		Since See			
	Package			INSP-D	amy Bur	ns	121)	RO	s'		S		So			sent					
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Accredi	tation:	□ Az Co	ompliance	Sampler:) Burns		NB.	DRC)82 F	1	3270		02, 1			sent					
	AC	Other	r	On Ice:	⊠ Yes	□ No	́ ⊢ 	102	s/80	504.	or 8	Ś	Z		(A)	(Pre		8			
	(Type)	T		# of Coolers:	1		Ħ	9	cide) po	310	etal	ŐN	(i-VC	rm					
				Cooler Temp	(including CF): 1,8	-0.0=1,8 (°C)	Σ	15	esti	Aeth	oy 8	8 M	Ъ,	VOA	Sem	olifo					
				Container	Preservative	HEAL No.	No.	H:80	81 P	B (A	Hst	RA	щ	30 (\	20 (5	al C					
Date	Time	Matrix	Sample Name	Type and # Type 2102671				Ę	808	Ш	PA	RC	CI)	82(827	Tot					
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	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.																				

cessary,	samp	ples 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

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May 28, 2021

Mitch Killough HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: Hare 15

OrderNo.: 2105875

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/20/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hare 15

Project:

Analytical Report Lab Order 2105875

Date Reported: 5/28/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH21 30-32.5 Collection Date: 5/17/2021 10:00:00 AM Received Date: 5/20/2021 7:20:00 AM

Lab ID: 2105875-001	Matrix: SOIL	Received Date: 5/20/2021 7:20:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: mb				
Diesel Range Organics (DRO)	750	8.9	mg/Kg	1	5/21/2021 8:33:29 PM				
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	5/21/2021 8:33:29 PM				
Surr: DNOP	122	70-130	%Rec	1	5/21/2021 8:33:29 PM				
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: NSB				
Gasoline Range Organics (GRO)	1400	24	mg/Kg	5	5/21/2021 10:37:12 PM				
Surr: BFB	898	70-130	S %Rec	5	5/21/2021 10:37:12 PM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.12	mg/Kg	5	5/21/2021 10:37:12 PM				
Toluene	ND	0.24	mg/Kg	5	5/21/2021 10:37:12 PM				
Ethylbenzene	ND	0.24	mg/Kg	5	5/21/2021 10:37:12 PM				
Xylenes, Total	46	0.47	mg/Kg	5	5/21/2021 10:37:12 PM				
Surr: 4-Bromofluorobenzene	122	70-130	%Rec	5	5/21/2021 10:37:12 PM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	120	60	mg/Kg	20	5/21/2021 11:31:42 AM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 19

Surr: 4-Bromofluorobenzene

Chloride

Analytical Report Lab Order 2105875

Date Reported: 5/28/2021

5/24/2021 10:16:15 AM Analyst: **VP**

5/21/2021 11:44:06 AM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH21 32.5-35 **Project:** Hare 15 Collection Date: 5/17/2021 10:10:00 AM Lab ID: 2105875-002 Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 20 9.0 mg/Kg 1 5/21/2021 8:43:35 PM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 5/21/2021 8:43:35 PM Surr: DNOP 79.1 70-130 %Rec 1 5/21/2021 8:43:35 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 5/24/2021 10:16:15 AM 11 4.9 mg/Kg 1 Surr: BFB 136 70-130 S %Rec 1 5/24/2021 10:16:15 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 5/24/2021 10:16:15 AM 1 Toluene ND 0.049 mg/Kg 1 5/24/2021 10:16:15 AM Ethylbenzene ND 0.049 mg/Kg 1 5/24/2021 10:16:15 AM Xylenes, Total 0.26 0.099 mg/Kg 1 5/24/2021 10:16:15 AM

103

ND

70-130

60

%Rec

ma/Ka

1

20

EPA METHOD 300.0: ANIONS

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 19

Date Reported: 5/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH22 27.5-30 **Project:** Hare 15 Collection Date: 5/17/2021 12:00:00 PM Lab ID: 2105875-003 Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 5/21/2021 8:53:42 PM Motor Oil Range Organics (MRO) 5/21/2021 8:53:42 PM ND 49 mg/Kg 1 Surr: DNOP 85.4 70-130 %Rec 1 5/21/2021 8:53:42 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/21/2021 11:24:04 PM 4.9 mg/Kg 1 Surr: BFB 90.8 70-130 %Rec 1 5/21/2021 11:24:04 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 5/21/2021 11:24:04 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 5/21/2021 11:24:04 PM Ethylbenzene ND 0.049 mg/Kg 1 5/21/2021 11:24:04 PM Xylenes, Total ND 0.098 mg/Kg 1 5/21/2021 11:24:04 PM Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 5/21/2021 11:24:04 PM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 5/21/2021 11:56:31 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

ma/Ka

20

- Р Sample pH Not In Range
- Reporting Limit RL

Page 3 of 19

Ethylbenzene

Xylenes, Total

Chloride

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2105875

Date Reported: 5/28/2021

5/21/2021 11:47:30 PM

5/21/2021 11:47:30 PM

5/21/2021 11:47:30 PM Analyst: **VP**

5/21/2021 12:33:43 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH22 37.5-40 **Project:** Hare 15 Collection Date: 5/17/2021 12:30:00 PM Lab ID: 2105875-004 Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 5/21/2021 9:03:50 PM ND 9.4 mg/Kg 1 Motor Oil Range Organics (MRO) 5/21/2021 9:03:50 PM ND 47 mg/Kg 1 Surr: DNOP 131 70-130 S %Rec 1 5/21/2021 9:03:50 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/21/2021 11:47:30 PM 4.6 mg/Kg 1 Surr: BFB 90.6 70-130 %Rec 1 5/21/2021 11:47:30 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB 5/21/2021 11:47:30 PM Benzene ND 0.023 mg/Kg 1 Toluene ND 0.046 mg/Kg 1 5/21/2021 11:47:30 PM

ND

ND

101

ND

0.046

0.093

70-130

60

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

20

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Hare 15

Analytical Report Lab Order 2105875

Date Reported: 5/28/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23 35-37.5 Collection Date: 5/17/2021 3:00:00 PM wed Date: 5/20/2021 7.20.00 AM ъ

Lab ID: 2105875-005	Matrix: SOIL	Received Date: 5/20/2021 7:20:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: mb				
Diesel Range Organics (DRO)	ND	8.4	mg/Kg	1	5/21/2021 9:13:58 PM				
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	5/21/2021 9:13:58 PM				
Surr: DNOP	87.3	70-130	%Rec	1	5/21/2021 9:13:58 PM				
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/22/2021 12:10:49 AM				
Surr: BFB	92.0	70-130	%Rec	1	5/22/2021 12:10:49 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.024	mg/Kg	1	5/22/2021 12:10:49 AM				
Toluene	ND	0.049	mg/Kg	1	5/22/2021 12:10:49 AM				
Ethylbenzene	ND	0.049	mg/Kg	1	5/22/2021 12:10:49 AM				
Xylenes, Total	ND	0.097	mg/Kg	1	5/22/2021 12:10:49 AM				
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	5/22/2021 12:10:49 AM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	ND	60	mg/Kg	20	5/21/2021 12:46:08 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: Hare 15

Analytical Report Lab Order 2105875

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/28/2021 Client Sample ID: BH23 40-42 Collection Date: 5/17/2021 3:15:00 PM wed Date: 5/20/2021 7.20.00 AM ъ

Lab ID: 2105875-006	Matrix: SOIL	Received Date: 5/20/2021 7:20:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: mb				
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	5/21/2021 9:24:00 PM				
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	5/21/2021 9:24:00 PM				
Surr: DNOP	86.5	70-130	%Rec	1	5/21/2021 9:24:00 PM				
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/22/2021 12:34:15 AM				
Surr: BFB	89.7	70-130	%Rec	1	5/22/2021 12:34:15 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.025	mg/Kg	1	5/22/2021 12:34:15 AM				
Toluene	ND	0.049	mg/Kg	1	5/22/2021 12:34:15 AM				
Ethylbenzene	ND	0.049	mg/Kg	1	5/22/2021 12:34:15 AM				
Xylenes, Total	ND	0.098	mg/Kg	1	5/22/2021 12:34:15 AM				
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	5/22/2021 12:34:15 AM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	ND	60	mg/Kg	20	5/21/2021 12:58:32 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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2105875-007

Hare 15

Project:

Lab ID:

Analytical Report Lab Order 2105875

Date Reported: 5/28/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH24 25-27.5 Collection Date: 5/18/2021 10:30:00 AM Received Date: 5/20/2021 7:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: mb
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	5/21/2021 3:17:33 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	5/21/2021 3:17:33 PM
Surr: DNOP	103	70-130	%Rec	1	5/21/2021 3:17:33 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/22/2021 2:55:56 AM
Surr: BFB	89.4	70-130	%Rec	1	5/22/2021 2:55:56 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	5/22/2021 2:55:56 AM
Toluene	ND	0.049	mg/Kg	1	5/22/2021 2:55:56 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/22/2021 2:55:56 AM
Xylenes, Total	ND	0.099	mg/Kg	1	5/22/2021 2:55:56 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/22/2021 2:55:56 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	5/21/2021 1:10:57 PM

Matrix: SOIL

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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 7 of 19

Date Reported: 5/28/2021

5/21/2021 1:23:21 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH24 43.5-45 **Project:** Hare 15 Collection Date: 5/18/2021 11:00:00 AM Lab ID: 2105875-008 Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 8.4 mg/Kg 1 5/21/2021 3:56:24 PM Motor Oil Range Organics (MRO) 5/21/2021 3:56:24 PM ND 42 mg/Kg 1 Surr: DNOP 70-130 %Rec 1 5/21/2021 3:56:24 PM 118 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/22/2021 4:06:05 AM 4.7 mg/Kg 1 Surr: BFB 90.7 70-130 %Rec 1 5/22/2021 4:06:05 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 5/22/2021 4:06:05 AM 1 Toluene 5/22/2021 4:06:05 AM ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 1 5/22/2021 4:06:05 AM Xylenes, Total ND 0.094 mg/Kg 1 5/22/2021 4:06:05 AM 5/22/2021 4:06:05 AM Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

61

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Project: Hare 15

Analytical Report
Lab Order 2105875

Date Reported: 5/28/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH25 25-27.5 Collection Date: 5/18/2021 1:00:00 PM Received Date: 5/20/2021 7:20:00 AM

Lab ID: 2105875-009	Matrix: SOIL	Received Date: 5/20/2021 7:20:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed				
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: mb				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/21/2021 4:06:06 PM				
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/21/2021 4:06:06 PM				
Surr: DNOP	112	70-130	%Rec	1	5/21/2021 4:06:06 PM				
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/22/2021 5:17:00 AM				
Surr: BFB	89.9	70-130	%Rec	1	5/22/2021 5:17:00 AM				
EPA METHOD 8021B: VOLATILES					Analyst: NSB				
Benzene	ND	0.024	mg/Kg	1	5/22/2021 5:17:00 AM				
Toluene	ND	0.049	mg/Kg	1	5/22/2021 5:17:00 AM				
Ethylbenzene	ND	0.049	mg/Kg	1	5/22/2021 5:17:00 AM				
Xylenes, Total	ND	0.098	mg/Kg	1	5/22/2021 5:17:00 AM				
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	5/22/2021 5:17:00 AM				
EPA METHOD 300.0: ANIONS					Analyst: VP				
Chloride	130	60	mg/Kg	20	5/21/2021 1:35:45 PM				

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hare 15

Project:

Lab ID:

Analyses

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2105875

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/28/2021 Client Sample ID: BH25 35-38 Collection Date: 5/18/2021 1:20:00 PM Received Date: 5/20/2021 7:20:00 AM

2105875-010 Matrix: SOIL Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.1 mg/Kg 1 5/21/2021 4:15:48 PM Motor Oil Range Organics (MRO) 5/21/2021 4:15:48 PM ND 45 mg/Kg 1 Surr: DNOP 123 70-130 %Rec 1 5/21/2021 4:15:48 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/22/2021 5:40:37 AM 4.7 mg/Kg 1 Surr: BFB 87.2 70-130 %Rec 1 5/22/2021 5:40:37 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 0.024 mg/Kg 5/22/2021 5:40:37 AM 1

0.047

0.047

0.094

70-130

60

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

20

5/22/2021 5:40:37 AM

5/22/2021 5:40:37 AM

5/22/2021 5:40:37 AM 5/22/2021 5:40:37 AM

5/21/2021 1:48:09 PM

Analyst: VP

ND

ND

ND

98.4

85

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 Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Date Reported: 5/28/2021

5/21/2021 2:00:34 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH26 32.5-35 **Project:** Hare 15 Collection Date: 5/18/2021 3:25:00 PM Lab ID: 2105875-011 Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 110 8.8 mg/Kg 1 5/21/2021 4:25:28 PM Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 5/21/2021 4:25:28 PM Surr: DNOP 112 70-130 %Rec 1 5/21/2021 4:25:28 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 1200 250 50 5/22/2021 6:04:10 AM mg/Kg Surr: BFB 111 70-130 %Rec 50 5/22/2021 6:04:10 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB 2.1 5/22/2021 6:04:10 AM Benzene 1.2 mg/Kg 50 Toluene 42 2.5 mg/Kg 50 5/22/2021 6:04:10 AM Ethylbenzene 6.1 2.5 mg/Kg 50 5/22/2021 6:04:10 AM Xylenes, Total 94 4.9 mg/Kg 50 5/22/2021 6:04:10 AM 5/22/2021 6:04:10 AM Surr: 4-Bromofluorobenzene 103 70-130 %Rec 50 Analyst: VP **EPA METHOD 300.0: ANIONS**

86

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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2105875-012

Hare 15

Project:

Lab ID:

Analyses

Analytical Report Lab Order 2105875

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/28/2021 Client Sample ID: BH26 37.5-40 Collection Date: 5/18/2021 3:35:00 PM Matrix: SOIL Received Date: 5/20/2021 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed**

EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: mb
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/21/2021 4:35:08 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/21/2021 4:35:08 PM
Surr: DNOP	107	70-130	%Rec	1	5/21/2021 4:35:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	29	24	mg/Kg	5	5/22/2021 6:27:37 AM
Surr: BFB	95.4	70-130	%Rec	5	5/22/2021 6:27:37 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	0.40	0.12	mg/Kg	5	5/22/2021 6:27:37 AM
Toluene	1.7	0.24	mg/Kg	5	5/22/2021 6:27:37 AM
Ethylbenzene	ND	0.24	mg/Kg	5	5/22/2021 6:27:37 AM
Xylenes, Total	2.0	0.48	mg/Kg	5	5/22/2021 6:27:37 AM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	5	5/22/2021 6:27:37 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	120	59	mg/Kg	20	5/21/2021 2:12:59 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Client:	HILCOR	P ENERGY									
Project:	Hare 15										
Sample ID:	MB-60175	SampType	: Me	BLK	Test	tCode: EF	PA Method	300.0: Anions	S		
Client ID:	PBS	Batch ID	: 60	175	R	unNo: 77	7560				
Prep Date:	5/21/2021	Analysis Date	: 5/	21/2021	S	eqNo: 27	753340	Units: mg/K	g		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-60175	SampType	: LC	S	Tes	tCode: EF	PA Method	300.0: Anion:	S		
Client ID:	LCSS	Batch ID	: 60	175	R	unNo: 77	7560				
Prep Date:	5/21/2021	Analysis Date	: 5/	21/2021	S	eqNo: 27	753341	Units: mg/K	g		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.1	90	110			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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2105875

28-May-21

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR Hare 15	P ENERGY									
Sample ID:	MB-60165	SampTy	pe: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 60	165	F	RunNo: 7	7563				
Prep Date:	5/20/2021	Analysis Da	te: 5/	21/2021	S	SeqNo: 27	753501	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Drganics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		14		10.00		138	70	130			S
Sample ID:	2105875-007AMS	SampTy	pe: M S	6	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH24 25-27.5	Batch	ID: 60	165	F	RunNo: 7	7563				
Prep Date:	5/20/2021	Analysis Da	te: 5/	21/2021	S	SeqNo: 2	753508	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	44	8.6	43.03	0	101	15	184			
Surr: DNOP		6.2		4.303		145	70	130			S
Sample ID:	2105875-007AMSE) SampTy	pe: MS	SD	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH24 25-27.5	Batch	ID: 60	165	F	RunNo: 7	7563				
Prep Date:	5/20/2021	Analysis Da	te: 5/	21/2021	S	SeqNo: 27	753509	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	44	8.7	43.29	0	102	15	184	0.849	23.9	
Surr: DNOP		4.7		4.329		107	70	130	0	0	
Sample ID:	MB-60164	SampTy	pe: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 60	164	F	RunNo: 77	7604				
Prep Date:	5/20/2021	Analysis Da	te: 5/	22/2021	S	SeqNo: 27	754502	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.7		10.00		97.3	70	130			
Sample ID:	LCS-60164	SampTy	pe: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 60	164	F	RunNo: 7	7604				
Prep Date:	5/20/2021	Analysis Da	te: 5/	22/2021	S	SeqNo: 2	754504	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	47	10	50.00	0	94.4	68.9	141			
Surr: DNOP		4.4		5.000		88.6	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2105875

28-May-21

WO#:

Client:	HILCORF	PENERGY									
Project:	Hare 15										
Sample ID: LCS-60	0165	SampTy	pe: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS		Batch	D: 60	165	F	unNo: 77	7604				
Prep Date: 5/20/2	2021	Analysis Da	te: 5/	/22/2021	5	eqNo: 27	754505	Units: mg/K	ſg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	68.9	141			
Surr: DNOP		5.9		5.000		118	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2105875 28-May-21

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR Hare 15	P ENERGY									
Sample ID:	mb-60157	SampTyp	e: MI	3LK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch I	D: 60	157	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5/	21/2021	S	SeqNo: 2	753626	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 960	5.0	1000		95.8	70	130			
Sample ID:	lcs-60157	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch I	D: 60	157	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5/	21/2021	S	SeqNo: 2	753627	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	24	5.0	25.00	0	96.9	78.6	131			
Surr: BFB		1100		1000		108	70	130			
Sample ID:	mb-60161	SampTyp	e: MI	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch I	D: 60	161	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5/	22/2021	S	SeqNo: 2	753650	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 890	5.0	1000		88.7	70	130			
Sample ID:	lcs-60161	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch I	D: 60	161	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5/	22/2021	S	SeqNo: 2	753651	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	23	5.0	25.00	0	92.4	78.6	131			
Surr: BFB		970		1000		97.3	70	130			
Sample ID:	2105875-007ams	SampTyp	e: M	6	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	BH24 25-27.5	Batch I	D: 60	161	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5 /	22/2021	S	SeqNo: 2	753653	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26	4.7	23.54	0	109	61.3	114			
Surr: BFB		960		941.6		102	70	130			
Sample ID:	2105875-007amsd	SampTyp	e: M	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	BH24 25-27.5	Batch I	D: 60	161	F	RunNo: 7	7587				
Prep Date:	5/20/2021	Analysis Dat	e: 5/	22/2021	S	SeqNo: 2	753654	Units: mg/k	(g		
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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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WO#: **2105875**

28-May-21

Client:

HILCORP ENERGY

Project:	Hare 15										
Sample ID:	2105875-007amsd	SampType	: M S	SD	Test	Code: EF	PA Method	8015D: Gaso	line Range	9	
Client ID:	BH24 25-27.5	Batch ID	60	161	R	unNo: 7	7587				
Prep Date:	5/20/2021	Analysis Date	5/	22/2021	S	eqNo: 2	753654	Units: mg/K	(g		
Analyte		Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	27	4.8	23.83	0	113	61.3	114	4.89	20	
Surr: BFB		970		953.3		102	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2105875

28-May-21

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: HILC Project: Hare	ORP ENERC 15	θY								
Sample ID: mb-60157	Samp	Туре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 60	157	F	RunNo: 7	7587				
Prep Date: 5/20/2021	Analysis [Date: 5/	21/2021	S	SeqNo: 2	753689	Units: mg/ł	٢g		
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	1.1		1.000		107	70	130			
Sample ID: LCS-60157	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 60	157	F	RunNo: 7	7587				
Prep Date: 5/20/2021	Analysis [Date: 5/	21/2021	Ś	SeqNo: 2	753690	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.2	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	70	130			
Sample ID: mb-60161	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 60	161	F	RunNo: 7	7587				
Prep Date: 5/20/2021	Analysis [Date: 5/	22/2021	S	SeqNo: 2	753713	Units: mg/ł	٢g		
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	0.99		1.000		99.5	70	130			
Sample ID: LCS-60161	Samp	Туре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 60	161	F	RunNo: 7	7587				
Prep Date: 5/20/2021	Analysis [Date: 5/	22/2021	S	SeqNo: 2	753714	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.1	80	120			
Toluene	0.98	0.050	1.000	0	98.2	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#:	2105875

Hare 15

Sample ID: 2105875-008ams

Client ID: BH24 43.5-45

Client:

Project:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

SampType: MS

Batch ID: 60161

HILCORP ENERGY

Prep Date: 5/20/2021	Analysis [Date: 5/	22/2021	S	SeqNo: 2	753717	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9597	0.01675	109	76.3	120			
Toluene	1.1	0.048	0.9597	0.03274	115	78.5	120			
Ethylbenzene	1.1	0.048	0.9597	0	117	78.1	124			
Xylenes, Total	3.4	0.096	2.879	0.03979	117	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9597		102	70	130			
Sample ID: 2105875-008amsd	Samp	Гуре: МS	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: BH24 43.5-45	Batc	h ID: 60	161	F	RunNo: 7	7587				
Prep Date: 5/20/2021	Analysis [Date: 5/	22/2021	5	SeqNo: 2	753718	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9625	0.01675	113	80	120	3.87	20	
Toluene	1.2	0.048	0.9625	0.03274	120	80	120	4.90	20	S
Ethylbenzene	1.2	0.048	0.9625	0	123	80	120	4.59	20	S
Xylenes, Total	3.5	0.096	2.887	0.03979	121	80	120	4.01	20	S
Surr: 4-Bromofluorobenzene	0.98		0.9625		102	70	130	0	0	

TestCode: EPA Method 8021B: Volatiles

RunNo: 77587

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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WO#: 2105875

28-May-21

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environment A TEL: 505-345-39 Website: clients.	tal Analysis Labo, 4901 Hawki Ibuquerque, NM 75 FAX: 505-345 hallenvironmenta	ratory ns NE 87109 Sai -4107 1.com	nple Log-In Ch	Page 207 of
Client Name: HILCORP ENERGY	Work Order Numb	er: 2105875		RcptNo: 1	
Received By: Juan Rojas	5/20/2021 7:20:00 A	м	(Juan Eng)		
Completed By: Sean Livingston	5/20/2021 8:17:35 A	М	< /	/ ,	
Reviewed By: JR 5/20/21			J~L	1 John	
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 samp	les?	Yes 🔽	No 🗌	NA 🗌	
4. Were all samples received at a tempera	ture 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 te	est(s)?	Yes 🗹	No		
7. Are samples (except VOA and ONG) pro	perly 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 b	roken?	Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	1	Yes 🗹	No 🗌	for pH: (<2 or >1)	2 unless noted)
12. Are matrices correctly identified on Chair	n of Custody?	Yes 🗹	No 🗌	Adjusted?	
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 🔄	Checked by: 🍛	rA 5.20, c
Special Handling (if applicable)				/	
15. Was client notified of all discrepancies w	vith this order?	Yes	No 🗌	NA 🔽	
Person Notified:	Date:	NEAR THE REPORT OF THE REPORT OF			
By Whom:	Via:	eMail F	hone 🗌 Fax	In Person	
Regarding:		New York, I are the grant on the Party of the			
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amples 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. If necessary, sa V



September 27, 2021

Mitch Killough HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: HARE 15

OrderNo.: 2109910

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 25 sample(s) on 9/17/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 9/27/2021

9/23/2021 1:55:49 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 0-5 **Project:** HARE 15 Collection Date: 9/10/2021 10:55:00 AM Lab ID: 2109910-001 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 9/20/2021 3:56:54 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/20/2021 3:56:54 PM Surr: DNOP 70-130 %Rec 1 9/20/2021 3:56:54 PM 113 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/20/2021 10:39:00 PM 5.0 mg/Kg 1 Surr: BFB 96.1 70-130 %Rec 1 9/20/2021 10:39:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.025 mg/Kg 9/20/2021 10:39:00 PM 1 Toluene ND 0.050 mg/Kg 1 9/20/2021 10:39:00 PM Ethylbenzene ND 0.050 mg/Kg 1 9/20/2021 10:39:00 PM Xylenes, Total ND 0.099 mg/Kg 1 9/20/2021 10:39:00 PM Surr: 4-Bromofluorobenzene 79.7 70-130 %Rec 1 9/20/2021 10:39:00 PM Analyst: VP **EPA METHOD 300.0: ANIONS**

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 30

Date Reported: 9/27/2021

9/23/2021 2:33:03 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 5-10 **Project:** HARE 15 Collection Date: 9/10/2021 11:00:00 AM Lab ID: 2109910-002 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 10 mg/Kg 1 9/20/2021 4:09:26 PM Motor Oil Range Organics (MRO) ND 51 mg/Kg 1 9/20/2021 4:09:26 PM Surr: DNOP 105 70-130 %Rec 1 9/20/2021 4:09:26 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/20/2021 10:59:00 PM 5.0 mg/Kg 1 Surr: BFB 93.5 70-130 %Rec 1 9/20/2021 10:59:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.025 mg/Kg 9/20/2021 10:59:00 PM 1 Toluene ND 0.050 mg/Kg 1 9/20/2021 10:59:00 PM Ethylbenzene ND 0.050 mg/Kg 1 9/20/2021 10:59:00 PM Xylenes, Total ND 0.099 mg/Kg 1 9/20/2021 10:59:00 PM Surr: 4-Bromofluorobenzene 80.1 70-130 %Rec 1 9/20/2021 10:59:00 PM Analyst: VP **EPA METHOD 300.0: ANIONS**

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded ND
- Not Detected at the Reporting Limit POL Practical Quanitative Limit
- S
- % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

Page 2 of 30

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 10-15 **Project:** HARE 15 Collection Date: 9/10/2021 11:05:00 AM Lab ID: 2109910-003 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB **Diesel Range Organics (DRO)** 9/20/2021 4:22:12 PM ND 9.3 mg/Kg 1 Motor Oil Range Organics (MRO) ND 9/20/2021 4:22:12 PM 47 mg/Kg 1 Surr: DNOP 70-130 %Rec 1 9/20/2021 4:22:12 PM 115 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/20/2021 11:19:00 PM 4.8 mg/Kg 1 Surr: BFB 94.6 70-130 %Rec 1 9/20/2021 11:19:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: mb 9/20/2021 11:19:00 PM Benzene ND 0.024 ma/Ka 1 21 11:19:00 PM

Benzene	ND	0.024	iiig/itg		5/20/2021 11.15.00 I W
Toluene	ND	0.048	mg/Kg	1	9/20/2021 11:19:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/20/2021 11:19:00 PM
Xylenes, Total	ND	0.096	mg/Kg	1	9/20/2021 11:19:00 PM
Surr: 4-Bromofluorobenzene	79.6	70-130	%Rec	1	9/20/2021 11:19:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	210	60	mg/Kg	20	9/23/2021 4:12:23 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 30

EPA METHOD 300.0: ANIONS

Chloride

Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 15-20 **Project:** HARE 15 Collection Date: 9/10/2021 11:10:00 AM Lab ID: 2109910-004 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9/20/2021 4:47:12 PM ND 10 mg/Kg 1 Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 9/20/2021 4:47:12 PM Surr: DNOP 108 70-130 %Rec 1 9/20/2021 4:47:12 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/20/2021 11:38:00 PM 4.8 mg/Kg 1 Surr: BFB 95.8 70-130 %Rec 1 9/20/2021 11:38:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/20/2021 11:38:00 PM 1 Toluene ND 0.048 mg/Kg 1 9/20/2021 11:38:00 PM Ethylbenzene ND 0.048 mg/Kg 1 9/20/2021 11:38:00 PM Xylenes, Total ND 0.096 mg/Kg 1 9/20/2021 11:38:00 PM Surr: 4-Bromofluorobenzene 80.0 70-130 %Rec 1 9/20/2021 11:38:00 PM

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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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 30

Analyst: VP

9/23/2021 4:24:48 PM

HARE 15

Project:

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 27 20-25 Collection Date: 9/10/2021 11:15:00 AM Received Date: 9/17/2021 7:30:00 AM

Lab ID: 2109910-005	Matrix: SOIL Result	Received Date: 9/17/2021 7:30:00 AM			
Analyses		RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/20/2021 4:59:35 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/20/2021 4:59:35 PM
Surr: DNOP	98.6	70-130	%Rec	1	9/20/2021 4:59:35 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/20/2021 11:58:00 PM
Surr: BFB	92.8	70-130	%Rec	1	9/20/2021 11:58:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/20/2021 11:58:00 PM
Toluene	ND	0.049	mg/Kg	1	9/20/2021 11:58:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	9/20/2021 11:58:00 PM
Xylenes, Total	ND	0.099	mg/Kg	1	9/20/2021 11:58:00 PM
Surr: 4-Bromofluorobenzene	76.6	70-130	%Rec	1	9/20/2021 11:58:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	77	60	mg/Kg	20	9/23/2021 4:37:13 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/27/2021

9/23/2021 5:14:27 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 25-30 **Project:** HARE 15 Collection Date: 9/10/2021 11:20:00 AM Lab ID: 2109910-006 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 9/20/2021 5:11:59 PM Motor Oil Range Organics (MRO) 9/20/2021 5:11:59 PM ND 49 mg/Kg 1 Surr: DNOP 90.0 70-130 %Rec 1 9/20/2021 5:11:59 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 12:17:00 AM 4.8 mg/Kg 1 Surr: BFB 90.9 70-130 %Rec 1 9/21/2021 12:17:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 9/21/2021 12:17:00 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/21/2021 12:17:00 AM Ethylbenzene ND 0.048 mg/Kg 1 9/21/2021 12:17:00 AM Xylenes, Total ND 0.096 mg/Kg 1 9/21/2021 12:17:00 AM Surr: 4-Bromofluorobenzene 76.9 70-130 %Rec 1 9/21/2021 12:17:00 AM Analyst: VP **EPA METHOD 300.0: ANIONS**

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Surr: 4-Bromofluorobenzene

Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

9/21/2021 1:16:00 AM

9/23/2021 5:51:42 PM

Analyst: VP

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 30-35 **Project:** HARE 15 Collection Date: 9/10/2021 11:25:00 AM Lab ID: 2109910-007 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 10 mg/Kg 1 9/20/2021 11:22:11 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 9/20/2021 11:22:11 AM Surr: DNOP 93.9 70-130 %Rec 1 9/20/2021 11:22:11 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 1:16:00 AM 4.9 mg/Kg 1 Surr: BFB 99.3 70-130 %Rec 1 9/21/2021 1:16:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb 9/21/2021 1:16:00 AM Benzene ND 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/21/2021 1:16:00 AM Ethylbenzene ND 0.049 mg/Kg 1 9/21/2021 1:16:00 AM Xylenes, Total ND 0.098 mg/Kg 1 9/21/2021 1:16:00 AM

81.1

70-130

%Rec

ma/Ka

1

20

EPA METHOD 300.0: ANIONS Chloride 70 60

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

9/23/2021 6:28:56 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 27 35-40 **Project:** HARE 15 Collection Date: 9/10/2021 11:30:00 AM Lab ID: 2109910-008 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 9/20/2021 12:33:56 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/20/2021 12:33:56 PM Surr: DNOP 94.3 70-130 %Rec 1 9/20/2021 12:33:56 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 1:36:00 AM 4.8 mg/Kg 1 Surr: BFB 95.2 70-130 %Rec 1 9/21/2021 1:36:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 9/21/2021 1:36:00 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/21/2021 1:36:00 AM Ethylbenzene ND 0.048 mg/Kg 1 9/21/2021 1:36:00 AM Xylenes, Total ND 0.096 mg/Kg 1 9/21/2021 1:36:00 AM 9/21/2021 1:36:00 AM Surr: 4-Bromofluorobenzene 81.0 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

9/23/2021 6:41:20 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 28 0-5 **Project:** HARE 15 Collection Date: 9/10/2021 12:45:00 PM Lab ID: 2109910-009 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 42 9.5 mg/Kg 1 9/20/2021 12:57:54 PM Motor Oil Range Organics (MRO) 77 48 mg/Kg 1 9/20/2021 12:57:54 PM Surr: DNOP 107 70-130 %Rec 1 9/20/2021 12:57:54 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 1:56:00 AM 4.9 mg/Kg 1 Surr: BFB 92.0 70-130 %Rec 1 9/21/2021 1:56:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/21/2021 1:56:00 AM 1 Toluene ND 0.049 mg/Kg 1 9/21/2021 1:56:00 AM Ethylbenzene ND 0.049 mg/Kg 1 9/21/2021 1:56:00 AM Xylenes, Total ND 0.097 mg/Kg 1 9/21/2021 1:56:00 AM 9/21/2021 1:56:00 AM Surr: 4-Bromofluorobenzene 80.0 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

59

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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HARE 15

2109910-010

Project:

Lab ID:

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 28 5-10 Collection Date: 9/10/2021 12:51:00 PM Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	9/20/2021 1:45:40 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/20/2021 1:45:40 PM
Surr: DNOP	100	70-130	%Rec	1	9/20/2021 1:45:40 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021 2:15:00 AM
Surr: BFB	94.0	70-130	%Rec	1	9/21/2021 2:15:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021 2:15:00 AM
Toluene	ND	0.049	mg/Kg	1	9/21/2021 2:15:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021 2:15:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021 2:15:00 AM
Surr: 4-Bromofluorobenzene	79.6	70-130	%Rec	1	9/21/2021 2:15:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	100	60	mg/Kg	20	9/23/2021 6:53:45 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 28 10-15 Collection Date: 9/10/2021 12:55:00 PM Received Date: 9/17/2021 7:30:00 AM

Lab ID: 2109910-011	Matrix: SOIL	Reco	eived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	9/20/2021 2:09:38 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/20/2021 2:09:38 PM
Surr: DNOP	96.6	70-130	%Rec	1	9/20/2021 2:09:38 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/21/2021 2:35:00 AM
Surr: BFB	95.2	70-130	%Rec	1	9/21/2021 2:35:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021 2:35:00 AM
Toluene	ND	0.048	mg/Kg	1	9/21/2021 2:35:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	9/21/2021 2:35:00 AM
Xylenes, Total	ND	0.096	mg/Kg	1	9/21/2021 2:35:00 AM
Surr: 4-Bromofluorobenzene	81.2	70-130	%Rec	1	9/21/2021 2:35:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 7:06:10 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

9/23/2021 7:18:35 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 28 15-20 **Project:** HARE 15 Collection Date: 9/10/2021 1:01:00 PM Lab ID: 2109910-012 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.6 mg/Kg 1 9/20/2021 2:33:39 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 9/20/2021 2:33:39 PM Surr: DNOP 104 70-130 %Rec 1 9/20/2021 2:33:39 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 2:55:00 AM 4.8 mg/Kg 1 Surr: BFB 94.7 70-130 %Rec 1 9/21/2021 2:55:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/21/2021 2:55:00 AM 1 Toluene ND 0.048 mg/Kg 1 9/21/2021 2:55:00 AM Ethylbenzene ND 0.048 mg/Kg 1 9/21/2021 2:55:00 AM Xylenes, Total ND 0.097 mg/Kg 1 9/21/2021 2:55:00 AM 9/21/2021 2:55:00 AM Surr: 4-Bromofluorobenzene 80.6 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Surr: 4-Bromofluorobenzene

Chloride

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

9/21/2021 3:14:00 AM

Analyst: VP

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 28 20-25 **Project:** HARE 15 Collection Date: 9/10/2021 1:11:00 PM Lab ID: 2109910-013 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 10 mg/Kg 1 9/20/2021 2:57:35 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 9/20/2021 2:57:35 PM Surr: DNOP 103 70-130 %Rec 1 9/20/2021 2:57:35 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 3:14:00 AM 4.8 mg/Kg 1 Surr: BFB 93.4 70-130 %Rec 1 9/21/2021 3:14:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/21/2021 3:14:00 AM 1 Toluene ND 0.048 mg/Kg 1 9/21/2021 3:14:00 AM Ethylbenzene ND 0.048 mg/Kg 1 9/21/2021 3:14:00 AM Xylenes, Total ND 0.097 mg/Kg 1 9/21/2021 3:14:00 AM

EPA METHOD 300.0: ANIONS 60 9/23/2021 7:31:00 PM 110 ma/Ka 20

79.3

70-130

%Rec

1

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

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

Reporting Limit RL

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Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 28 25-30 Collection Date: 9/10/2021 1:29:00 PM **Dessived Deter** 0/17/2021 7:20:00 AM

Lab ID: 2109910-014	Matrix: SOIL	Rece	eived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	9/20/2021 3:21:32 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/20/2021 3:21:32 PM
Surr: DNOP	109	70-130	%Rec	1	9/20/2021 3:21:32 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021 3:34:00 AM
Surr: BFB	95.0	70-130	%Rec	1	9/21/2021 3:34:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/21/2021 3:34:00 AM
Toluene	ND	0.049	mg/Kg	1	9/21/2021 3:34:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021 3:34:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021 3:34:00 AM
Surr: 4-Bromofluorobenzene	80.9	70-130	%Rec	1	9/21/2021 3:34:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 7:43:24 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

9/23/2021 7:55:49 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 28 30-35 **Project:** HARE 15 Collection Date: 9/10/2021 1:41:00 PM Lab ID: 2109910-015 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.5 mg/Kg 1 9/20/2021 3:45:38 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 9/20/2021 3:45:38 PM Surr: DNOP 97.3 70-130 %Rec 1 9/20/2021 3:45:38 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 3:54:00 AM 4.8 mg/Kg 1 Surr: BFB 93.1 70-130 %Rec 1 9/21/2021 3:54:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/21/2021 3:54:00 AM 1 Toluene ND 0.048 mg/Kg 1 9/21/2021 3:54:00 AM Ethylbenzene ND 0.048 mg/Kg 1 9/21/2021 3:54:00 AM Xylenes, Total ND 0.097 mg/Kg 1 9/21/2021 3:54:00 AM 9/21/2021 3:54:00 AM Surr: 4-Bromofluorobenzene 80.1 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

9/23/2021 8:08:14 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 28 35-40 Collection Date: 9/10/2021 2:14:00 PM **Project:** HARE 15 Lab ID: 2109910-016 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9/20/2021 4:09:29 PM ND 9.7 mg/Kg 1 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/20/2021 4:09:29 PM Surr: DNOP 97.7 70-130 %Rec 1 9/20/2021 4:09:29 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/21/2021 4:13:00 AM 4.9 mg/Kg 1 Surr: BFB 93.1 70-130 %Rec 1 9/21/2021 4:13:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 9/21/2021 4:13:00 AM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/21/2021 4:13:00 AM Ethylbenzene ND 0.049 mg/Kg 1 9/21/2021 4:13:00 AM Xylenes, Total ND 0.099 mg/Kg 1 9/21/2021 4:13:00 AM 9/21/2021 4:13:00 AM Surr: 4-Bromofluorobenzene 77.6 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS**

ND

60

ma/Ka

20

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

Qualifiers:

Chloride

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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EPA METHOD 300.0: ANIONS

Chloride

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 29 0-5 **Project:** HARE 15 Collection Date: 9/13/2021 9:17:00 AM Lab ID: 2109910-017 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 10 mg/Kg 1 9/21/2021 2:14:51 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 9/21/2021 2:14:51 PM Surr: DNOP 97.4 70-130 %Rec 1 9/21/2021 2:14:51 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/22/2021 1:02:00 AM 5.0 mg/Kg 1 Surr: BFB 95.6 70-130 %Rec 1 9/22/2021 1:02:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 9/22/2021 1:02:00 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 9/22/2021 1:02:00 AM Ethylbenzene ND 0.050 mg/Kg 1 9/22/2021 1:02:00 AM Xylenes, Total ND 0.099 mg/Kg 1 9/22/2021 1:02:00 AM 9/22/2021 1:02:00 AM Surr: 4-Bromofluorobenzene 80.1 70-130 %Rec 1

ND

60

ma/Ka

20

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 MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analyst: VP

9/23/2021 8:20:38 PM

Ethylbenzene

Xylenes, Total

Chloride

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

9/22/2021 1:21:00 AM

9/22/2021 1:21:00 AM

9/22/2021 1:21:00 AM

9/23/2021 8:57:51 PM

Analyst: VP

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 29 5-10 **Project:** HARE 15 Collection Date: 9/13/2021 9:30:00 AM Lab ID: 2109910-018 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9/21/2021 2:39:06 PM ND 10 mg/Kg 1 Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 9/21/2021 2:39:06 PM Surr: DNOP 95.7 70-130 %Rec 1 9/21/2021 2:39:06 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/22/2021 1:21:00 AM 4.8 mg/Kg 1 Surr: BFB 89.9 70-130 %Rec 1 9/22/2021 1:21:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.024 mg/Kg 9/22/2021 1:21:00 AM 1 Toluene ND 0.048 mg/Kg 1 9/22/2021 1:21:00 AM

ND

ND

78.5

ND

0.048

0.097

70-130

59

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

20

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY Client Sample ID: BH 29 10-14 **Project:** HARE 15 Collection Date: 9/13/2021 9:50:00 AM Lab ID: 2109910-019 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9/21/2021 3:03:21 PM ND 8.6 mg/Kg 1 Motor Oil Range Organics (MRO) ND 43 mg/Kg 1 9/21/2021 3:03:21 PM Surr: DNOP 70-130 %Rec 1 9/21/2021 3:03:21 PM 112 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/22/2021 1:41:00 AM 5.0 mg/Kg 1 Surr: BFB 95.6 70-130 %Rec 1 9/22/2021 1:41:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: mb Benzene ND 0.025 mg/Kg 9/22/2021 1:41:00 AM 1 Toluene ND 0.050 mg/Kg 1 9/22/2021 1:41:00 AM Ethylbenzene ND 0.050 mg/Kg 1 9/22/2021 1:41:00 AM Xylenes, Total ND 0.099 mg/Kg 1 9/22/2021 1:41:00 AM

 Surr: 4-Bromofluorobenzene
 79.9
 70-130
 %Rec
 1
 9/22/2021 1:41:00 AM

 EPA METHOD 300.0: ANIONS
 Analyst: VP

 Chloride
 ND
 60
 ma/Kg
 20
 9/23/2021 9:10:16 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
- H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- NDNot Detected at the Reporting LimitPQLPractical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2109910-020

Project: HARE 15

Lab ID:

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 29 19.5-20 Collection Date: 9/13/2021 10:35:00 AM Received Date: 9/17/2021 7:30:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	30	8.5	mg/Kg	1	9/21/2021 3:27:38 PM
Motor Oil Range Organics (MRO)	54	42	mg/Kg	1	9/21/2021 3:27:38 PM
Surr: DNOP	96.0	70-130	%Rec	1	9/21/2021 3:27:38 PM
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/22/2021 2:01:00 AM
Surr: BFB	92.8	70-130	%Rec	1	9/22/2021 2:01:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/22/2021 2:01:00 AM
Toluene	ND	0.050	mg/Kg	1	9/22/2021 2:01:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	9/22/2021 2:01:00 AM
Xylenes, Total	ND	0.10	mg/Kg	1	9/22/2021 2:01:00 AM
Surr: 4-Bromofluorobenzene	79.6	70-130	%Rec	1	9/22/2021 2:01:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 9:22:41 PM

Matrix: SOIL

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
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 29 24.5-25 Collection Date: 9/13/2021 11:25:00 AM wed Data: 0/17/2021 7.20.00 AM ъ

Lab ID: 2109910-021	Matrix: SOIL	Reco	eived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	33	9.3	mg/Kg	1	9/21/2021 3:52:00 PM
Motor Oil Range Organics (MRO)	60	47	mg/Kg	1	9/21/2021 3:52:00 PM
Surr: DNOP	102	70-130	%Rec	1	9/21/2021 3:52:00 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/22/2021 2:20:00 AM
Surr: BFB	91.7	70-130	%Rec	1	9/22/2021 2:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/22/2021 2:20:00 AM
Toluene	ND	0.050	mg/Kg	1	9/22/2021 2:20:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	9/22/2021 2:20:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	9/22/2021 2:20:00 AM
Surr: 4-Bromofluorobenzene	78.5	70-130	%Rec	1	9/22/2021 2:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 9:35:06 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 29 29.5-30 Collection Date: 9/13/2021 11:55:00 AM Received Date: 9/17/2021 7:30:00 AM

Lab ID: 2109910-022	Matrix: SOIL	Rece	ived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	15	9.7	mg/Kg	1	9/21/2021 4:16:12 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/21/2021 4:16:12 PM
Surr: DNOP	96.7	70-130	%Rec	1	9/21/2021 4:16:12 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/22/2021 2:40:00 AM
Surr: BFB	90.6	70-130	%Rec	1	9/22/2021 2:40:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/22/2021 2:40:00 AM
Toluene	ND	0.050	mg/Kg	1	9/22/2021 2:40:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	9/22/2021 2:40:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	9/22/2021 2:40:00 AM
Surr: 4-Bromofluorobenzene	78.8	70-130	%Rec	1	9/22/2021 2:40:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 10:12:21 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 29 34.5-35 Collection Date: 9/13/2021 12:50:00 PM **Deceived Deter** 0/17/2021 7:20:00 AM

Lab ID: 2109910-023	Matrix: SOIL	Rece	eived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	92	22	mg/Kg	1	9/21/2021 4:40:46 PM
Motor Oil Range Organics (MRO)	200	110	mg/Kg	1	9/21/2021 4:40:46 PM
Surr: DNOP	101	70-130	%Rec	1	9/21/2021 4:40:46 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2021 3:00:00 AM
Surr: BFB	91.4	70-130	%Rec	1	9/22/2021 3:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/22/2021 3:00:00 AM
Toluene	ND	0.049	mg/Kg	1	9/22/2021 3:00:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2021 3:00:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	9/22/2021 3:00:00 AM
Surr: 4-Bromofluorobenzene	77.3	70-130	%Rec	1	9/22/2021 3:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 10:24:46 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2109910

9/22/2021 3:19:00 AM

9/23/2021 10:37:11 PM

Analyst: VP

Analyst: mb

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/27/2021 **CLIENT: HILCORP ENERGY** Client Sample ID: BH 29 39.5-40 Collection Date: 9/13/2021 1:34:00 PM HARE 15 2109910-024 Matrix: SOIL Received Date: 9/17/2021 7:30:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9/21/2021 5:05:03 PM ND 9.5 mg/Kg 1 Motor Oil Range Organics (MRO) 9/21/2021 5:05:03 PM ND 48 mg/Kg 1 92.1 70-130 %Rec 1 9/21/2021 5:05:03 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: mb Gasoline Range Organics (GRO) ND 9/22/2021 3:19:00 AM 4.9 mg/Kg 1

70-130

0.025

0.049

0.049

0.098

70-130

60

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

1

1

20

93.3

ND

ND

ND

ND

81.1

ND

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 Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Project: HARE 15

Analytical Report Lab Order 2109910

Date Reported: 9/27/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH 29 44.5-50 Collection Date: 9/13/2021 2:09:00 PM **Descrived Deter** 0/17/2021 7:20:00 AM

Lab ID: 2109910-025	Matrix: SOIL	Rece	eived Date:	9/17/2	021 7:30:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	9/21/2021 5:29:22 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/21/2021 5:29:22 PM
Surr: DNOP	104	70-130	%Rec	1	9/21/2021 5:29:22 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2021 3:39:00 AM
Surr: BFB	87.8	70-130	%Rec	1	9/22/2021 3:39:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/22/2021 3:39:00 AM
Toluene	ND	0.049	mg/Kg	1	9/22/2021 3:39:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2021 3:39:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/22/2021 3:39:00 AM
Surr: 4-Bromofluorobenzene	76.0	70-130	%Rec	1	9/22/2021 3:39:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021 10:49:36 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCOR HARE 15	P ENERGY									
Sample ID:	MB-62777	SampTyp	be: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch I	D: 62	777	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	S	SeqNo: 2	880721	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-62777	SampTyp	be: LC	s	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	LCSS	Batch I	D: 62	777	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	S	SeqNo: 2	880722	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	1.5	15.00	0	96.9	90	110			
Sample ID:	MB-62788	SampTyp	De: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch I	D: 62	788	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	5	SeqNo: 2	880751	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-62788	SampTyp	be: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch I	D: 62	788	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	5	SeqNo: 2	880752	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	1.5	15.00	0	102	90	110			
Sample ID:	MB-62801	SampTyp	De: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	PBS	Batch I	D: 62	801	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	S	SeqNo: 2	880783	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-62801	SampTyp	be: LC	s	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch I	D: 62	801	F	RunNo: 8	1506				
Prep Date:	9/23/2021	Analysis Dat	te: 9/	23/2021	5	SeqNo: 2	880784	Units: mg/K	g		
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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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27-Sep-21

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	HILCORI HARE 15	P ENERG	Y								
Sample ID:	MB-62671	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: F	PBS	Batch	n ID: 62	671	F	RunNo: 8 '	1393				
Prep Date:	9/17/2021	Analysis D	ate: 9/	20/2021	S	SeqNo: 28	875403	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	ND	10								
Motor Oil Range	Organics (MRO)	ND	50								
Surr: DNOP		11		10.00		106	70	130			
Sample ID: L	_CS-62671	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 62	671	F	RunNo: 8 4	1393				
Prep Date:	9/17/2021	Analysis D	ate: 9/	20/2021	S	SeqNo: 28	875404	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	57	10	50.00	0	115	68.9	135			
Surr: DNOP		5.7		5.000		113	70	130			
Sample ID:	MB-62674	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: F	PBS	Batch	n ID: 62	674	F	RunNo: 8	1438				
Prep Date:	9/18/2021	Analysis D	ate: 9/	20/2021	S	SeqNo: 28	877128	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	ND	10								
Motor Oil Range	Organics (MRO)	ND	50								
Surr: DNOP		8.9		10.00		89.4	70	130			
Sample ID: L	_CS-62674	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	_CSS	Batch	n ID: 62	674	F	RunNo: 8 ′	1438				
Prep Date:	9/18/2021	Analysis D	ate: 9/	20/2021	S	SeqNo: 28	877129	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	47	10	50.00	0	94.8	68.9	135			
Surr: DNOP		4.9		5.000		98.9	70	130			
Sample ID: 2	2109910-007AMS	SampT	ype: MS	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BH 27 30-35	Batch	n ID: 62	674	F	RunNo: 8 '	1438				
Prep Date:	9/18/2021	Analysis D	ate: 9/	20/2021	S	SeqNo: 28	877131	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Or	ganics (DRO)	45	9.5	47.39	0	94.0	39.3	155			
Surr: DNOP		4.6		4.739		96.7	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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27-Sep-21

WO#:

QC SUMMARY REPORT Η

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	WO#:	2109910
all Environmental Analysis Laboratory, Inc.		27-Sep-21

Client:	HILCORI	P ENERGY									
Project:	HARE 15										
					_						
Sample ID:	2109910-007AMSD	SampTyp	e: MS	5D	Test	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	BH 27 30-35	Batch ID): 62 (674	R	unNo: 8	1438				
Prep Date:	9/18/2021	Analysis Date	e: 9/	20/2021	S	eqNo: 2	877132	Units: mg/Kg	9		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	42	9.2	45.96	0	91.2	39.3	155	6.18	23.4	
Surr: DNOP		4.4		4.596		95.9	70	130	0	0	
Sample ID:	LCS-62694	SampTyp	e: LC	S	Test	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch ID): 62 (694	R	unNo: 8	1459				
Prep Date:	9/20/2021	Analysis Date	e: 9/	21/2021	S	eqNo: 2	878299	Units: mg/Kg	9		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Drganics (DRO)	50	10	50.00	0	99.9	68.9	135			
Surr: DNOP		5.2		5.000		105	70	130			
Sample ID:	MB-62694	SampTyp	e: ME	BLK	Test	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch ID): 62 (694	R	unNo: 8	1459				
Prep Date:	9/20/2021	Analysis Date	e: 9/	21/2021	S	eqNo: 2	878300	Units: mg/Kg	9		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		10		10.00		101	70	130			
Sample ID:	MB-62745	SampTyp	e: Me	BLK	Test	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch ID): 62 7	745	R	unNo: 8	1517				
Prep Date:	9/22/2021	Analysis Date	e: 9/	23/2021	S	eqNo: 2	881527	Units: %Rec			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.4		10.00		93.7	70	130			
Sample ID:	LCS-62745	SampTyp	e: LC	S	Test	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch ID): 62 7	745	R	unNo: 8	1517				
Prep Date:	9/22/2021	Analysis Date	e: 9/	23/2021	S	eqNo: 2	881536	Units: %Rec			
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.8		5.000		95.6	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Practical Quanitative Limit PQL

% Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	HILCOR	P ENERGY	Y								
Project:	HARE 15										
Sample ID:	MB-62670	SampTy	ype: ME	BLK	Test	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	PBS	Batch	ID: 62	670	R	RunNo: 8 ′	1399				
Prep Date:	9/17/2021	Analysis Da	ate: 9/	20/2021	S	SeqNo: 28	875617	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		910		1000		91.5	70	130			
Sample ID:	LCS-62670	SampTy	ype: LC	S	Test	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 62	670	R	RunNo: 8 '	1399				
Prep Date:	9/17/2021	Analysis Da	ate: 9/	20/2021	S	SeqNo: 28	875627	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	29	5.0	25.00	0	114	78.6	131			
Surr: BFB		1100		1000		106	70	130			
Sample ID:	mb-62692	SampTy	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gasc	oline Rang	e	
Client ID:	PBS	Batch	ID: 62	692	R	RunNo: 8 ′	1447				
Prep Date:	9/20/2021	Analysis Da	ate: 9/	21/2021	S	SeqNo: 28	877396	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		930		1000		92.5	70	130			
Sample ID:	lcs-62692	SampTy	ype: LC	s	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: 62	692	R	RunNo: 8 4	1447				
Prep Date:	9/20/2021	Analysis Da	ate: 9/	21/2021	S	SeqNo: 28	877398	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	28	5.0	25.00	0	112	78.6	131			
Surr: BFB		1100		1000		107	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

2109910

27-Sep-21

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	HILCO	RP ENERG	Y								
Project:	HARE	15									
Sample ID: I	MB-62670	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	h ID: 620	670	F	RunNo: 8 '	1399				
Prep Date:	9/17/2021	Analysis D	Date: 9/ 2	20/2021	S	SeqNo: 2	875681	Units: mg/k	۲g		
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-Bromo	ofluorobenzene	0.77		1.000		76.7	70	130			
Sample ID: I	LCS-62670	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: I	LCSS	Batcl	h ID: 620	670	F	RunNo: 8	1399				
Prep Date:	9/17/2021	Analysis D	Date: 9/ 3	20/2021	S	SeqNo: 2	875683	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	90.4	80	120			
Toluene		0.90	0.050	1.000	0	90.4	80	120			
Ethylbenzene		0.91	0.050	1.000	0	91.3	80	120			
Xylenes, Total		2.8	0.10	3.000	0	92.1	80	120			
Surr: 4-Bromo	ofluorobenzene	0.80		1.000		79.6	70	130			
Sample ID: I	mb-62692	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	h ID: 620	692	F	RunNo: 8	1447				
Prep Date:	9/20/2021	Analysis D	Date: 9/	21/2021	S	SeqNo: 2	877444	Units: mg/ł	٨g		
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-Bromo	ofluorobenzene	0.79		1.000		79.1	70	130			
Sample ID: I	lcs-62692	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: I	LCSS	Batcl	h ID: 620	692	F	RunNo: 8	1447				
Prep Date:	9/20/2021	Analysis D	Date: 9/	21/2021	5	SeqNo: 2	877446	Units: mg/ł	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.91	0.025	1.000	0	91.1	80	120			
Toluene		0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene		0.92	0.050	1.000	0	91.6	80	120			
Xylenes, Total		2.8	0.10	3.000	0	91.8	80	120			
Surr: 4-Bromo	ofluorobenzene	0.80		1.000		79.6	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- Analyte detected in the associated Method Blank в
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

2109910

27-Sep-21

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ived by OCD: 10/2 HALL ENVIR ANALY LABOR	(15/2021 2: ONMENT) (SIS RATORY	:33:45 PM AL	7 7	lall Environi EL: 505-343 Website: clie	nental Ana, 49 Albuquer 5-3975 FAX ents.hallenv	lysis Lo 01 Ha que, N 1: 505- ironmo	aboratory wkins NE NM 87109 345-4107 ental.com	Sa	mple Log-In Chec	Page 2 ck List
Client Name:	HILCORP	ENERGY	Wo	rk Order Nu	mber: 210	09910			RcptNo: 1	
Received By:	Cheyenne	Cason	9/17/2	021 7:30:0	0 AM		Chene	1		
Completed By:	Sean Liviı	ngston	9/17/2	021 10:33:	48 AM		\leq	/	/ ,	
Reviewed By:	jn ali	7/21						-2	Jot	
Chain of Cust	ody									
1. Is Chain of Cu	stody compl	ete?			Yes	V	No		Not Present	
2. How was the s	ample delive	ered?			<u>Co</u>	irier				
<u>Log In</u>										
3. Was an attemp	ot made to c	ool the sam	oles?		Yes	\checkmark	No		NA	
4. Were all sample	es received	at a tempera	ature of >0° C	to 6.0°C	Yes	\checkmark	No			
5. Sample(s) in pr	roper contair	ner(s)?			Yes		No			
6. Sufficient samp	le volume fo	or indicated t	est(s)?		Yes		No			
7. Are samples (e)	xcept VOA a	ind ONG) pr	operly preserv	red?	Yes		No			
8. Was preservativ	ve added to	bottles?			Yes		No	~	NA	
9. Received at least	st 1 vial with	headsnace	<1/4" for AO	1042	Vaa		No			/
10. Were any same	ole container	s received h	oroken?	VOA!	Voo		No		NA 💆	
					165		140	L Y_]	# of preserved	
11. Does paperwork	k match bott	le labels?			Yes	\checkmark	No [for pH:	
(Note discrepan	icies on chai	n of custody	7)						(<2 or >12 un	less noted)
12. Are matrices co	rrectly identi	fied on Chai	n of Custody?		Yes	\checkmark	No [Adjusted?	
13. Is it clear what a	analyses wer	re requested	?		Yes	\checkmark	No			
(If no, notify cus	times able tomer for au	to be met? thorization.)			Yes	\checkmark	No		Checked by: The	9.17
Special Handlin	ng (if appl	icable)								
15. Was client notif	ied of all dis	crepancies v	with this order	?	Yes		No		NA 🗸	
Person No	otified:			Date	e: [and the sectors		Stationary		
By Whom	: Г	NAMES AND DESCRIPTION		Via	□ eM:	ail 🗆	Phone	Fax	In Person	
Regarding	g: <u>ſ</u> .									
Client Inst	tructions:				Manatana Antonisia Ja			lethictoria de d	Advancedur de van de Antonio de Kanader	
16. Additional rema	arks:									
17. Cooler Informa	ation									
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Da	ate	Signed By	,		
1 2	2.3 0	Good					gou D			
2 4	4.0 0	Good								

Page 1 of 1

Relation of the second s		pye loP3
Chain-of-Custody Record	Turn-Around Time:	
Client: HEC	Standard Rush	HALL ENVIRONMENTAL
athe Mitch Killand	Project Name:	ANALYSIS LABORATORY
Mailing Address:	HARTZ 15	www.hallenvironmental.com
<u> </u>	Project #	4901 Hawkins NE - Albuquerque, NM 87109
26/2	017820018	Tel. 505-345-3975 Fax 505-345-4107
Phone #:	Har Hartin Anna Anna Anna Anna Anna Anna Anna An	Analysis Request
	Project Manager: Sturt Hyde Unny burnt a	
QAVQC Package:	Dany Burg Cwg Con	CB ¹ , Milling CB ¹ ,
\Box NELAC \Box Other	Sampler: On Ice: ™Ves □ No	808 (808 (808 (808 (808 (808 (808 (808
□ EDD (Type)	# of Coolers: 2 2 3 - 0 - 7 - 3	
a H	Cooler Temp(including CF): 4,0-0-4.0 (°C)	etho etho
Date Time Matrix Sample Name	Type and # Type Z109910	
9-10-21 9021 1055 BH 27 0-5	1-402 Capt 001	
1100 -134 27 5-10	500	
1105 131+ 27 10-15	003	
1110 1314 27 15-20	004	
1117 1314 27 20-25	005	
1120 3427 25-30	006	
1125 17 14 27 30- 35	607	
1130 1314 27 35-40	00%	
1245 134 28 0-5	009	
1251 1714 28 5-10	010	
1255 3H 28 10-15	0()	
V 1301 BH 26 15-20	V 012 V	
Date: Time: Relinquished by:	Received by: Via: Date Time Remain	rks:
Date: Time: Relinguished for	100 0000 9-15-21 4+4-75	ş
9-16-201055 (10 / 10 / 10 /	Altil Altil 91	
mallens	1 Ward 116/21/055	<u>ع</u>
· 9/14/21 190	$\mathcal{O}_{\mathcal{O}}$ of the accredited laboratories. This serves as notice of this possibility $\mathcal{O}_{\mathcal{O}}$ $\mathcal{O}_{\mathcal{O}}$ $\mathcal{O}_{\mathcal{O}}$ $\mathcal{O}_{\mathcal{O}}$	γ. Any sub-contracted data will be clearly notated on the analytical report.

Client:	Chain H린(-of-Cu	ustody Record	Turn-Aroun	d Time: d	h				í H A	79.9 IAI N	e LL AL /.hal	2 EI YS		ック イIF らし ment	RO AE	NM BOF	IEN RA		RY	Received by OCD: 1
				Proiect #:				49	01 H	lawki	ns N	IE -	Alb	uque	erqu	e, NI	M 871	09			10/15
Phone	#:			-			1.4	Te	el. 50)5-34	5-39	975 A	F nalv	ax sis	505- Reg	-345-	4107				2021
email c	or Fax#:		-	Project Mar	ager:			6					4			- -					2:3
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🗆 Star	ndard		□ Level 4 (Full Validation)				3) s (8	Ìò	PC		OSIN		D D			ht/At					PM
Accred	itation:	□ Az Co	ompliance	Sampler:		1 17.5995	TMB	HD/	082	,	827		VO ₂ ,			eser					
		□ Othe	·	On Ice:	X Yes	□ No	Ш	ß	es/8	504	lor	s) ₃ , N		(A)	(Pr					
		1		Cooler Tem	D(including CE): 4	-0=2.3	ATB	D)D	ticid	thod	831(Meta	2	(A	N-in	form					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX) N	TPH:8015	8081 Pes	EDB (Met	AHs by	RCRA 8 N	C∱F, Br,	3260 (VO	3270 (Ser	Fotal Coli					
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	930		BH 29 5-10			015							\uparrow								1
	950		134 29 10-14			019							\square								1
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	1125		BH 29 24.5-25			021							\square					\top			1
	1155		134 29 29.5-30			022							\square					\top			٦
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Date: H - 16 - 21	Time: 1055	Relinquish	M Oellow S	Received by:	Via:	Date Time 9/14/21 1055															: 242 of .
9/14/21	If necessary,	samples sub	mitted to Hall Environmental may be subc	contracted to other	accredited laboratorio	es. This serves as notice of this $1176 0730$	possil	oility. A	Any sul	b-contra	acted	data w	vill be c	learly	notate	ed on t	the analy	ytical re	port.		274

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C	Chain	-of-Ci	ustody Record	Turn-Around	Time:					_											CIVE
Client:	1+ E	2C			d 🗆 Rusi	1													NT		- ey
				Project Nam	e:		ANALYSIS LAB						SORATORY			T S					
Mailing	Address	s:		-							ww\	w.hal	llenv	iron	men	tal.co	om				
				Project #:				49 -	01 H	lawk	ins l	NE -	- Alt	ouqu -	erqu	ie, N	M 87	109			11 1 37
Phone	#·		A.	-				le	el. 50)5-34	45-3	975 A	hal	-ax	505	-345	-4107	7			
email o	or Fax#:			Project Mana	ader.			A	alis hai				4	9515	Req	ues.					
QA/QC	Package				agor.		021)	MRO	s's		S		, sc			sent					0.7.
🗆 Star	ndard		□ Level 4 (Full Validation)				s (8	10	PCE		SIN		ΡO₄			t/Ab					1 10
Accred	itation:	🗆 Az Co	ompliance	Sampler:	Harrison, and Like I		MB	DR	082	,	3270		02,			sen					
	AC	□ Othe	ſ	On Ice:	Ves Yes	🗆 No	L /	RO	98/8(504.) or	s	3, N		(YO	(Pre					
	(Type)	Т	1	# of Coolers:	Visaludias CD ¹ · G	3 - 0 = 2.3	ITBE	D(G	ticide	poq	3310	leta	N N	A)	ni-V	orm					
						0=0=40 (0)	N N	015	Pest	Met	by 8	V 8 N	B,	(VO	(Ser	Colif					
Data	Timo	Motrix	Sample Name	Container	Preservative	HEAL No.	E)	E E	081	DB (AHs	CRA	Ъг,	260	270	otal (
9-13-21	1409	40:1	B4 19 445-50	n~4	Carl		9	Å	õ	ш		~	9	8	8	Ĕ					+
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Date:	Time:	Relinquish	ed by:	Received by:	Via	7-15-21 (200)															25
9-16-21	655	M	deleturs	MAT.	Walt	9/16/21 1058															lo c42
9/14/21	If necessary	, samples sub	mitted to Hall Environmental may be subo	contracted to other a	ccredited laboratorie	es. This serves as notice of this	possib	oility. A	Any su	b-cont	racted	data v	will be	clearl	y notai	ted on	the ana	alytical	report.		4



October 14, 2021

Mitch Killough HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

RE: HARE15

OrderNo.: 2109G57

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 12 sample(s) on 9/29/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 10/14/2021

Hall Environmental	Analysis	Laboratory,	Inc.
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	VI W UI
Project:HARE15Collection Date: 9	9/28/2021 10:25:00 AM
Lab ID:2109G57-001Matrix:GROUNDWAReceived Date: 9	9/29/2021 7:21:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed			
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA			
Benzene	1200	100	µg/L	100	10/8/2021 1:10:11 PM			
Toluene	14	5.0	µg/L	5	10/5/2021 4:11:45 PM			
Ethylbenzene	9.1	5.0	µg/L	5	10/5/2021 4:11:45 PM			
Xylenes, Total	9900	150	µg/L	100	10/8/2021 1:10:11 PM			
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	5	10/5/2021 4:11:45 PM			
Surr: Dibromofluoromethane	105	70-130	%Rec	5	10/5/2021 4:11:45 PM			
Surr: Toluene-d8	102	70-130	%Rec	5	10/5/2021 4:11:45 PM			

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 14

Date Reported: 10/14/2021

Hall	Environmen	ital An	alysis I	Laborator	v. Inc.
			•		

CLIENT:	HILCORP ENERGY	Client Sample ID: MW06
Project:	HARE15	Collection Date: 9/28/2021 11:05:00 AM
Lab ID:	2109G57-002	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA
Benzene	210	5.0	µg/L	5	10/8/2021 1:38:46 PM
Toluene	ND	5.0	µg/L	5	10/8/2021 1:38:46 PM
Ethylbenzene	8.0	5.0	µg/L	5	10/8/2021 1:38:46 PM
Xylenes, Total	130	7.5	µg/L	5	10/8/2021 1:38:46 PM
Surr: 1,2-Dichloroethane-d4	97.0	70-130	%Rec	5	10/8/2021 1:38:46 PM
Surr: Dibromofluoromethane	94.2	70-130	%Rec	5	10/8/2021 1:38:46 PM
Surr: Toluene-d8	99.3	70-130	%Rec	5	10/8/2021 1:38:46 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW09
Project:	HARE15	Collection Date: 9/28/2021 1:30:00 PM
Lab ID:	2109G57-003	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA
Benzene	140	5.0	µg/L	5	10/5/2021 5:08:57 PM
Toluene	ND	5.0	µg/L	5	10/5/2021 5:08:57 PM
Ethylbenzene	200	5.0	µg/L	5	10/5/2021 5:08:57 PM
Xylenes, Total	280	7.5	µg/L	5	10/5/2021 5:08:57 PM
Surr: 1,2-Dichloroethane-d4	115	70-130	%Rec	5	10/5/2021 5:08:57 PM
Surr: Dibromofluoromethane	110	70-130	%Rec	5	10/5/2021 5:08:57 PM
Surr: Toluene-d8	103	70-130	%Rec	5	10/5/2021 5:08:57 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW11
Project:	HARE15	Collection Date: 9/28/2021 1:10:00 PM
Lab ID:	2109G57-004	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL Q)ual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: RAA
Benzene	3400	50		µg/L	50	10/8/2021 2:07:18 PM
Toluene	7500	50	Е	µg/L	50	10/8/2021 2:07:18 PM
Ethylbenzene	650	50		µg/L	50	10/8/2021 2:07:18 PM
Xylenes, Total	11000	75		µg/L	50	10/8/2021 2:07:18 PM
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	50	10/8/2021 2:07:18 PM
Surr: Dibromofluoromethane	99.2	70-130		%Rec	50	10/8/2021 2:07:18 PM
Surr: Toluene-d8	98.9	70-130		%Rec	50	10/8/2021 2:07:18 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT	HILCORP ENERGY	Client Sample ID: MW14					
Project:	HARE15		Collection Date: 9/28/2021 12:40:00 PM				
Lab ID:	2109G57-005	Matrix: GROUNDWA	Received Date: 9/29/2021 7:21:00 AM				

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA
Benzene	32	5.0	µg/L	5	10/5/2021 6:05:59 PM
Toluene	5.2	5.0	µg/L	5	10/5/2021 6:05:59 PM
Ethylbenzene	8.2	5.0	µg/L	5	10/5/2021 6:05:59 PM
Xylenes, Total	120	7.5	µg/L	5	10/5/2021 6:05:59 PM
Surr: 1,2-Dichloroethane-d4	118	70-130	%Rec	5	10/5/2021 6:05:59 PM
Surr: Dibromofluoromethane	109	70-130	%Rec	5	10/5/2021 6:05:59 PM
Surr: Toluene-d8	101	70-130	%Rec	5	10/5/2021 6:05:59 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/14/2021

Hall Environmenta	l Analysis	Laboratory,	, Inc.
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CLIENT:	HILCORP ENERGY	Client Sample ID: MW19
Project:	HARE15	Collection Date: 9/28/2021 12:10:00 PM
Lab ID:	2109G57-006	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA
Benzene	720	50	µg/L	50	10/5/2021 6:34:40 PM
Toluene	140	50	µg/L	50	10/5/2021 6:34:40 PM
Ethylbenzene	790	50	µg/L	50	10/5/2021 6:34:40 PM
Xylenes, Total	1400	75	µg/L	50	10/5/2021 6:34:40 PM
Surr: 1,2-Dichloroethane-d4	119	70-130	%Rec	50	10/5/2021 6:34:40 PM
Surr: Dibromofluoromethane	110	70-130	%Rec	50	10/5/2021 6:34:40 PM
Surr: Toluene-d8	102	70-130	%Rec	50	10/5/2021 6:34:40 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/14/2021

Hall	Environmental	Analysis	Laboratory,	Inc.
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CLIENT: HILCORP ENERGY		Client Sample ID: MW20			
Project:	HARE15	Collection Date: 9/28/2021 11:40:00 AM			
Lab ID:	2109G57-007	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM			

Analyses	Result	RL Qual Units		DF	Date Analyzed	
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA	
Benzene	11000	1000	µg/L	1000	10/8/2021 2:35:56 PM	
Toluene	12000	1000	µg/L	1000	10/8/2021 2:35:56 PM	
Ethylbenzene	1200	100	µg/L	100	10/5/2021 7:03:10 PM	
Xylenes, Total	10000	150	µg/L	100	10/5/2021 7:03:10 PM	
Surr: 1,2-Dichloroethane-d4	116	70-130	%Rec	100	10/5/2021 7:03:10 PM	
Surr: Dibromofluoromethane	106	70-130	%Rec	100	10/5/2021 7:03:10 PM	
Surr: Toluene-d8	102	70-130	%Rec	100	10/5/2021 7:03:10 PM	

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/14/2021

Hall Env	vironmental	Analysis	Laboratory,	, Inc.
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CLIENT: HILCORP ENERGY		Client Sample ID: MW22			
Project:	HARE15			Collection Date: 9/27/2021 2:55:00 PM	
Lab ID:	2109G57-008	Matrix:	GROUNDWA	Received Date: 9/29/2021 7:21:00 AM	

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: RAA
Benzene	2000	50	µg/L	50	10/5/2021 7:31:39 PM
Toluene	1500	50	µg/L	50	10/5/2021 7:31:39 PM
Ethylbenzene	890	50	µg/L	50	10/5/2021 7:31:39 PM
Xylenes, Total	3000	75	µg/L	50	10/5/2021 7:31:39 PM
Surr: 1,2-Dichloroethane-d4	114	70-130	%Rec	50	10/5/2021 7:31:39 PM
Surr: Dibromofluoromethane	105	70-130	%Rec	50	10/5/2021 7:31:39 PM
Surr: Toluene-d8	104	70-130	%Rec	50	10/5/2021 7:31:39 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW23
Project:	HARE15	Collection Date: 9/28/2021 10:15:00 AM
Lab ID:	2109G57-009	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	2.0	D	µg/L	2	10/8/2021 3:04:33 PM
Toluene	ND	2.0	D	µg/L	2	10/8/2021 3:04:33 PM
Ethylbenzene	ND	2.0	D	µg/L	2	10/8/2021 3:04:33 PM
Xylenes, Total	ND	3.0	D	µg/L	2	10/8/2021 3:04:33 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	D	%Rec	2	10/8/2021 3:04:33 PM
Surr: Dibromofluoromethane	102	70-130	D	%Rec	2	10/8/2021 3:04:33 PM
Surr: Toluene-d8	97.4	70-130	D	%Rec	2	10/8/2021 3:04:33 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW24
Project:	HARE15	Collection Date: 9/28/2021 10:40:00 AM
Lab ID:	2109G57-010	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	2.0	D	µg/L	2	10/8/2021 3:33:13 PM
Toluene	ND	2.0	D	µg/L	2	10/8/2021 3:33:13 PM
Ethylbenzene	ND	2.0	D	µg/L	2	10/8/2021 3:33:13 PM
Xylenes, Total	ND	3.0	D	µg/L	2	10/8/2021 3:33:13 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	D	%Rec	2	10/8/2021 3:33:13 PM
Surr: Dibromofluoromethane	101	70-130	D	%Rec	2	10/8/2021 3:33:13 PM
Surr: Toluene-d8	95.4	70-130	D	%Rec	2	10/8/2021 3:33:13 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 1/26/2023 1:04:30 PM

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW26
Project:	HARE15	Collection Date: 9/27/2021 2:15:00 PM
Lab ID:	2109G57-011	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: RAA
Benzene	9700	500	Р	µg/L	500	10/8/2021 4:01:50 PM
Toluene	24000	500	Ρ	µg/L	500	10/8/2021 4:01:50 PM
Ethylbenzene	830	50	Ρ	µg/L	50	10/5/2021 8:57:15 PM
Xylenes, Total	11000	75	Ρ	µg/L	50	10/5/2021 8:57:15 PM
Surr: 1,2-Dichloroethane-d4	114	70-130	Ρ	%Rec	50	10/5/2021 8:57:15 PM
Surr: Dibromofluoromethane	109	70-130	Ρ	%Rec	50	10/5/2021 8:57:15 PM
Surr: Toluene-d8	103	70-130	Ρ	%Rec	50	10/5/2021 8:57:15 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Lab Order 2109G57

Date Reported: 10/14/2021

CLIENT:	HILCORP ENERGY	Client Sample ID: MW29
Project:	HARE15	Collection Date: 9/28/2021 9:30:00 AM
Lab ID:	2109G57-012	Matrix: GROUNDWA Received Date: 9/29/2021 7:21:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: RAA
Benzene	12	2.0	D	µg/L	2	10/8/2021 4:30:28 PM
Toluene	5.9	2.0	D	µg/L	2	10/8/2021 4:30:28 PM
Ethylbenzene	17	2.0	D	µg/L	2	10/8/2021 4:30:28 PM
Xylenes, Total	34	3.0	D	µg/L	2	10/8/2021 4:30:28 PM
Surr: 1,2-Dichloroethane-d4	98.5	70-130	D	%Rec	2	10/8/2021 4:30:28 PM
Surr: Dibromofluoromethane	96.9	70-130	D	%Rec	2	10/8/2021 4:30:28 PM
Surr: Toluene-d8	97.4	70-130	D	%Rec	2	10/8/2021 4:30:28 PM

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D
- Sample Diluted Due to Matrix Н
- Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project: HARE15											
Sample ID: 100ng Ics	SampTy	vpe: LC	S	Tes	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch	ID: R8	1831	F	RunNo: 81831						
Prep Date:	Analysis Da	ate: 10	0/5/2021	S	SeqNo: 2	894787	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	26	1.0	20.00	0	129	70	130				
Toluene	21	1.0	20.00	0	107	70	130				
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130				
Surr: Dibromofluoromethane	10		10.00		101	70	130				
Surr: Toluene-d8	10		10.00		103	70	130				
Sample ID: mb	SampTy	vpe: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short L	.ist		
Client ID: PBW	Batch	ID: R8	1831	F	RunNo: 8 9	1831					
Prep Date:	Analysis Da	ate: 10	0/5/2021	S	SeqNo: 2	894802	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	1.5									
Surr: 1,2-Dichloroethane-d4	11		10.00		113	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		99.7	70	130				
Surr: Dibromofluoromethane	10		10.00		105	70	130				
Surr: Toluene-d8	10		10.00		105	70	130				
Sample ID: 100ng Ics	SampTy	vpe: LC	S	Tes	tCode: El	PA Method	8260: Volatile	es Short L	.ist		
Client ID: LCSW	Batch	ID: R8	1984	F	RunNo: 8	1984					
Prep Date:	Analysis Da	ate: 10)/8/2021	5	SeqNo: 2	902662	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	18	1.0	20.00	0	91.6	70	130				
Toluene	19	1.0	20.00	0	92.6	70	130				
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130				
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130				
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130				
Surr: Toluene-d8	9.4		10.00		94.1	70	130				
Sample ID: 2109g57-012ams	SampTy	/pe: MS	6	Tes	tCode: El	PA Method	8260: Volatile	es Short L	.ist		
Client ID: MW29	Batch	ID: R8	1984	F	RunNo: 8 9	1984					
Prep Date:	Analysis Da	ate: 10)/8/2021	5	SeqNo: 2	902671	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	51	2.0	40.00	12.31	97.6	70	130			D	
Toluene	44	2.0	40.00	5.869	95.5	70	130			D	

* 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

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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WO#:	2109G57
	14-Oct-21

B Analyte detected in the associated Method Blank

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

HILCORP ENERGY

Project: HARE1	5									
Sample ID: 2109g57-012ams	s Samp	Type: MS	3	Tes	tCode: E	PA Method	8260: Volatile	es Short L	.ist	
Client ID: MW29	Bato	h ID: R8	1984	F	RunNo: 8	1984				
Prep Date:	Analysis I	Date: 1	0/8/2021	S	SeqNo: 2	902671	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	19		20.00		96.3	70	130			D
Surr: 4-Bromofluorobenzene	21		20.00		103	70	130			D
Surr: Dibromofluoromethane	19		20.00		97.4	70	130			D
Surr: Toluene-d8	20		20.00		98.3	70	130			D
Sample ID: 2109g57-012amsd SampType: MSD TestCode: EPA Method 8260: Volatiles Short List										
Client ID: MW29	Bato	h ID: R8	1984	F	RunNo: 8	1984				
Prep Date:	Analysis I	Date: 1	0/8/2021	5	SeqNo: 2	902672	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	46	2.0	40.00	12.31	83.1	70	130	12.0	20	D
Toluene	43	2.0	40.00	5.869	91.8	70	130	3.35	20	D
Surr: 1,2-Dichloroethane-d4	19		20.00		95.0	70	130	0	0	D
Surr: 4-Bromofluorobenzene	21		20.00		104	70	130	0	0	D
Surr: Dibromofluoromethane	19		20.00		95.3	70	130	0	0	D
Surr: Toluene-d8	20		20.00		98.4	70	130	0	0	D
Sample ID: mb	Samp	Туре: М	BLK	Tes	tCode: E	PA Method	8260: Volatile	es Short L	.ist	
Client ID: PBW	Bato	h ID: R8	1984	F	RunNo: 8	1984				
Prep Date:	Analysis I	Date: 1	0/8/2021	5	SeqNo: 2	903892	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	9.8		10.00		98.3	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

2109G57

14-Oct-21

WO#:

.

ANALYSIS	2:33:45 PM TAL	Ha TE W	ıll Environm EL: 505-345- Vebsite: clier	ental Analysis Labo 4901 Hawki Albuquerque, NM 3975 FAX: 505-345 uts.hallenvironmenta	ratory ns NE 87109 Sar -4107 ul.com	nple Log-In C	Page 25
Client Name: HILCOR	PENERGY	Work	order Nun	nber: 2109G57		RcptNo:	1
Received By: Cheyen	ne Cason	9/29/20	021 7:21:00	AM	Chul		
Completed By: Sean Li	vingston	9/29/20	021 9:28:28	AM	5. /	not a	
Reviewed By: TML		9/29	121		2	-	
Chain of Custody							
1. Is Chain of Custody con	plete?			Yes 🗹	No 🗌	Not Present	
2. How was the sample de	livered?			Courier			
Log In 3. Was an attempt made to	cool the sample	s?		Yes 🗸	No 🗌	NA 🗌	
4. Were all samples receive	ed at a temperatu	re of >0° C	to 6.0°C	Yes 🗹	No 🗌	NA 🗌	
5. Sample(s) in proper con	ainer(s)?			Yes 🖌	No 🗌		
6. Sufficient sample volume	for indicated tes	t(s)?		Yes 🗹	No 🗌		
7. Are samples (except VO)	A and ONG) prop	erly preserv	ed?	Yes 🔽	No 🗌		
8. Was preservative added	to bottles?			Yes	No 🗹	NA 🗌	
9. Received at least 1 vial w	ith headspace <	1/4" for AQ \	/OA?	Yes 🗹	No 🗌		
10. Were any sample contai	ners received bro	ken?		Yes 🗌	No 🗹	# of preserved	
11. Does paperwork match b (Note discrepancies on c	ottle labels? hain of custody)			Yes 🔽	No 🗌	for pH:	>12 unless poted)
12. Are matrices correctly ide	ntified on Chain	of Custody?		Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses	vere requested?			Yes 🗹	No 🗌		1 1
 Were all holding times at (If no, notify customer for 	le to be met? authorization.)			Yes 🔽	No 🗌	Checked by:	12 9/29/2
Special Handling (if an	plicable)				2		
15. Was client notified of all	discrepancies wit	h this order	?	Yes	No 🗌	NA 🗹	
Person Notified:	J		Date	:.]			
By Whom:			Via:	🗌 eMail 🔲 I	Phone 🗌 Fax	In Person	
Regarding: Client Instructions:					nin min et dennederen och at net den som et d		
16. Additional remarks:							
17. Cooler Information							
Cooler No Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By		
1 2.8	Good				- <u>J</u> J		
2 2.1	Good						

Page 1 of 1

3

3.1

Good

Client: Hilcorg Client: Hilcorg atta, Mitch Killongh Mailing Address: Phone #:	ord Turn-Around Time: New Casults by 0/8/2021 \Box Standard \Box Rush Project Name: 1/ARE 5 Project #: TE O 17820018	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Bequest
amail or Fax#: QA/QC Package: D Standard D Level 4 (Full \	Project Manager: Danny Burns Danny. Burnse WSp. com	3's. (8021) RO / MRO) 2 PCB's 0SIMS 0SIMS 0SIMS nt/Absent)
Accreditation: Az Compliance NELAC Dther EDD (Type)	Sampler: Reece Hanson On Ice: © Yes □ No # of Coolers: 3 Cooler Temp(including CF): See Remarks (°C	C I -MTBE / TME -TME -MTBE / TME 15D(GRO / DF 15D(GRO / DF 3810 or 827 y 8310 or 827 3 Metals 3r, NO ₃ , NO ₂ 0A) emi-VOA) emi-VOA)
Date Time Matrix Sample Name 9-28-21 1025 GW MWO1	Container Type and #Preservative TypeHEAL No. $Z_1OQ GS7$ $Z_1OQ GS7$ V0.Q $H_2 C_1$ OOL	BTEX TPH:80 TPH:80 8081 Pe 8082 Pe 8082
1105 MW06 1330 MW09	$\begin{array}{c c} & +c & 002 \\ & +g \\ & +g \\ & 003 \end{array}$	
1240 MW14 1210 MW19	005	
9-27-21 1455 MW 20 9-27-21 1455 MW 22 9-28-21 1015 MW 23	Hcl 007 Hcl 006	
4 1040 MW 24 9-27-21 1415 MW 26 9-28-21 0930 MW 26		
Date: Time: Relinquished by: 9-28-21 S ZI Date: Time: Relinquished by: 9/28/21 S ZI Date: Time: Relinquish	Received by: Via: Date Time Received by: Via: Date Time Received by: Via: Date Time 29 CMC COUNCY 9126121 0721 I may be subcontracted to other accredited laboratories. This serves as notice of	Remarks: $2 \cdot 8 - 0 = 2 \cdot 8$ $2 \cdot 1 - 0 = 2 \cdot 1$ $3 \cdot 1 - 0 = 3 \cdot 1$ this possibility. Any sub-contracted data will be clearly notated on the analytical report.

V

ENCLOSURE C – GROUNDWATER SAMPLE COLLECTION FORMS

	Ground	water Sample Colle	ection Forn	115	B44 Durango. Col	ISP USA Inc. 8 E. 2nd Ave. orado 81301 70 385 1096]	
Pro Proje	oject Name: ct Number:	HARE 15		Pro	oject Location: Sampler:	Hare 15		
Sa	ample Date: Laboratory: Analyses:	09-28-21 Hall Environmental		Shi	Sample Time: pping Method:	Hand Delivery		
Dept	h to Water: Time:	<u>26,45</u>		Total I Dej	Depth of Well: pth to Product:	<u>27.58</u> <u>ND</u>		
Vol. of Wate Method Method of	er to Purge: of Purging: f Sampling:	(27.58-26.) Bailer Bailer	45)•0.	theight of w	ater column * 0.1631 f	or 2" well or 0.6524 for 4" well) * 3 well vols		
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (F)	Conductivit y (us or ms)	Comments		
1010	0.25	0-25 	7,15	L03.9		brown, no Snewn, 1	ja saline	o ger
	· · · · · · · · · · · · · · · · · · ·							
).R							M
Comments:	Sampli	e taken wi dry sitter	iter pur 0.75 g	rginc Dr allons.	25 gallon:	s due to Uell		3 1:04:30 P.
Describe l	Deviations	from SOP:	<u></u>					1/26/202
Signature:	Pa	w		-	Date:	9-28-21		o Imaging:

MI I DC:+ Released to Imaging: 1/26

	Groundv	vater Sample Colle	ction Form	1	Durango, Col T	lorado 81301 970.385.1096	
Pro Projec	ject Name: ct Number:	Hare 15		Pro	oject Location: Sampler:	Hare 15	
Sa I	Sample ID: mple Date: .aboratory: Analyses:	<u> </u>		Shij	Matrix: Sample Time: pping Method:	Groundwater ILO5 Hand Delivery	
Dept	h to Water: Time:	27,75		Total I Dej	Depth of Well: pth to Product:	32.59	
ol. of Wate Method of Method of	er to Purge: of Purging: `Sampling:	132.59-27.74 Bailes Bailes	5). 0.14	31 (height of wa	2.37 ater column * 0.1631 (for 2" well or 0.6524 for 4" well) * 3 well vols	
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp.	Conductivit y (us or ms)	Comments	
10:42	0.5	0.5	6.82	17.3	4.43	clear, no sheen, stor	Mar
omments:	- Jark	pray, hrbid			t adar		
Describe I <u>C</u> C M Signature:	Deviations to to v W	from SOP: Surgle the	well beg after	n to 50 n 1.25	dry af ant remain Date:	Her ~ 1.25 gal ared 9-28-21	

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Ground	water Sample Colle	ection Form	115	B4 Durăngo, Col	ISP USA Inc. 8 E 2nd Ave Iorado 81301 970 385.1096
Project Name: Project Number: Sample ID:	Hare 15 Mile - 08		Pro	oject Location: Sampler: Matrix:	Hare 15 Groundwater
Sample Date: Laboratory: Analyses:	09-26-21 Hall Environmental		Ship	Sample Time: oping Method:	1330 Hand Delivery
Depth to Water: Time:	28.17	2) • 0.1	Total I Dep	Depth of Well: oth to Product: = 2.03	<u>Da. 30</u> <u>ND</u>
Method of Sampling:			(neight of wa		or 2 weil or 0.5524 lor 4 weil) 5 weil vois
Time Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Тетр. (₱) С	Conductivit y (us or ms)	Comments
$\begin{array}{c} 1320 & 0.3 \\ (322 & 0.5 \\ (324 & 0.5 \\ 1326 & 0.5 \\ \end{array}$	1.0 1.5 2.0	7.01 7.00 7.00 6.99	17.0 17.2 17.2	28.4 28.5 15.16	murky yellowish no sheen, strong alo SAM SAM
			······		
Comments: <u>murk</u> <u>Hg Uz</u>	y yellowish / Voa's	no she	er, stru	ng vila	
Describe Deviations	from SOP:		8.5.5		
Signature: <u>}</u>	m			Date:	9-28.21

Ground	water Sample Colle	ction Form		р Durango. Col Т	ISP USA Inc. 8 E 2nd Ave orado 81301 970.385.1096]
Project Name: Project Number: Sample ID:	HARE 15 MW 11	-	Pro	ject Location: Sampler: Matrix:	Hare 15	-
Sample Date: Laboratory: Analyses: Depth to Water:	<u>9-28-21</u> Hall Environmental		Shij Total I	Sample Time: oping Method:	Hand Delivery	-
Vol. of Water to Purge:	1.75 gal		Dep (height of wa	oth to Product:	or 2" well or 0.6524 for 4" well) * 3 well vols	-
Method of Sampling: Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp.	Conductivit y (us or (ffs)	Comments	·]
1259 0.77 1302 0.5 1304 0.5	0.75 1.25 1.75	6.91 6.91 6.91	17.5 17.2 17.6	5.17 4.93 4.81	Mostly clear to lt. Gray. No shen, strong SAA	odo-
						-
						-
Comments:	ky It gray	some	5:1t. N	b shen,	strong odor	-
Describe Deviations	from SOP:				6-29-21	-
Signature:	r pr L		• •	Date:	7-40-41	-

Ground	water Sample Colle	ection Form		B4 Durango. Col	/ SP USA Inc. 8 E. 2nd Ave. Iorado 81301 970.385 1096
Project Name: Project Number: Sample ID:	HARE 15 MW 14		Pro	oject Location: Sampler: Matrix:	Harc 15 Groundwater
Sample Date: Laboratory: Analyses:	<u>9-28 - 21</u> Hall Environmental		Shi	Sample Time: pping Method:	Hand Delivery
Depth to Water: Time:	30.94		Total I Dep	Depth of Well: oth to Product:	33.83
Vol. of Water to Purge: Method of Purging: Method of Sampling:	<u>l. 21 gal</u>		(height of wa	iter column * 0.1631 f	for 2" well or 0.6524 for 4" well) * 3 well vols
Time Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (F)	Conductivit y (us or ms)	Comments
1236 0.5	1.0	6:90 6.87	18.2	5.04	der K gring, mal. Silty no sheen i mad. udor SAA
			······		
			·		
Comments: dark	gray, materil	lely 5:1+	7. 10	sheen,	mounth odor
Describe Deviations	from SOP:				
Signature:	MA.			Date:	9-28-21

	Ground	water Sample Colle	ection Forn		В4 Durango. Col T	ISP USA Inc. 8 E 2nd Ave Iorado 81301 970.385.1096	
Proje Proje Sa Dept	oject Name: ct Number: Sample ID: imple Date: Laboratory: Analyses: h to Water: Time:	1+4 RE 15 MW 19 9-28-21 Hall Environmental 34.93		Pro Ship Total I	oject Location: Sampler: Matrix: Sample Time: oping Method: Depth of Well:	Harc 15 2.14 Groundwater 12.10 Hand Delivery 4.3.50	
Vol. of Wate Method Method o:	er to Purge: of Purging: Sampling:	4.2 gal		(height of wa	iter column * 0.1631 f	for 2" well or 0.6524 for 4" well) * 3 well vols	
Time 1156 1159 1206	Vol. Removed 1.25 1.0 1.0 1.0	Total Vol. Removed (gallons) (.2.5 2-2.5 3.25 4.25	рН (std. units) 6.8.6 6.8.6 6.8.6 	Temp. () C () C	Conductivit y (us or n) 4,54 4,46 4,70 4,80	Comments drv/C gring, Mal. 514 5AA Mod Oder 1255 5:14 5AA	no sheen i strong odor
Comments: Describe I Signature:	Mwk Deviations	from SOP:	2 shee	, mod.	to Strong		maging: 1/26/2023 1:04:30 PM

Groundw	vater Sample Colle	ction Form	1	Durango. Co T	VSP USA Inc. 18 E 2nd Ave 1orado 81301 970.385.1096	
Project Name: Project Number: Sample ID: Sample Date: Laboratory: Analyses: Depth to Water:	HARE 15 MW 20 9-28-21 Hall Environmental 30, 38		Pro Shij	oject Location: Sampler: Matrix: Sample Time: pping Method: Depth of Well:	Hare 15 K 4 Groundwater 1140 Hand Delivery 40,13	
Time: Vol. of Water to Purge: Method of Purging: Method of Sampling:	4.8 grl [3mile [3mile		Dej (height of wa	oth to Product:	for 2" well or 0.6524 for 4" well) * 3 well vols	
Time Vol. Removed 1/2-5 1-5 1/2-8 1-5 1/3/ 1 1/35 1	(gallons) 1.5 3.0 4.0 5.0	pH (std. units) 6.29 6.38 6.38 6.28	17.4 17.4 17.2 16.7	Conductivit y (us or fins) 8.1(8.38 8.40 8.40 8.49	Comments dark gring, 5:14 no sheen / strong gases SAA SAA	odov
Comments: Jark	yry, vey n Vors	s:1ty u/	, 10 St Hg Cl,	preserve	rony clar	
Describe Deviations f	rom SOP:			Date:	9-23-21	

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Received by OCD: 10/15/2021 2:33:45 PM

Project Name:HARE 15Project Number:Project Location:Hare 15Project Number:Sample ID:Mw 22Sample Date: $9-27-21$ Matrix:GroundwaterGroundwaterSample Date: $9-27-21$ Laboratory:Hall EnvironmentalAnalyses:Shipping Method:Depth to Water: $36, 81$ Time:Total Depth of Well:Val of Water to Pure: $2, 9, 41$
Sample ID: $Mw 22$ Matrix: Groundwater Sample Date: $9-27-21$ Sample Time: 1455 Laboratory: Hall Environmental Shipping Method: Hand Delivery Analyses: Total Depth of Well: $42,755$ Depth to Water: $36, 81$ Total Depth of Well: $42,755$ Depth to Product: $27-21$ Depth to Product: $27-21$
Analyses:
Vol. of Water to Durger 2, 9, 4
Method of Sampling:
Vol. RemovedTotal Vol. Removed (gallons)pH (std. units)Temp. (E) CConductivit y (us or ms)Comments
1446 1.0 1.0 6.87 17.1 4.53 silty gray no sheen 1449 1.0 4220 6.85 6.8 4.5 sitt ober 1452 1.0 3.0 6.86 16.7 4.49 sit more clear, sit so
Image: Constraint of the second se
Comments: 5/t. 51/ty, no sheen/slt oclar
Describe Deviations from SOP:
Signature: Date: Date:

	Groundy	vater Sample Colle	ection Forn	1	B44 Durango. Col	ISP USA Inc. 8 E. 2nd Ave. orado: 81301 970.385.1096
Proj Projec	ect Name: 1 Number:	HARE 15		Pro	oject Location: Sampler:	Hare 15
Sar L	Sample ID: nple Date: .aboratory:	MW 23 A 2721 9. Hall Environmental	28-21	Ship	Matrix: Sample Time: pping Method:	Groundwater 1015 Hand Delivery
Depth	to Water: Time:	39.48		Total I Der	Depth of Well: pth to Product:	43.82
Vol. of Wate Method of Method of	r to Purge: of Purging: Sampling:	2.1 gal Brile Brile		(height of wa	ater column * 0.1631 f	ior 2" well or 0.6524 for 4" well} * 3 well vols
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (P)	Conductivit y (us or ms)	Comments
15 [[1.0	0,1	6,87	17.8	3.61	Brown/grey, very silfy no sheen fodor
Comments:	well (9-28-21 al	Fler ~ l Fler well	id gul c I re-ch	moved, 1	bailed m 1.0 gal
Describe D	Deviations 1	from SOP:				
Signature:	Røj	1		-	Date:	9-28-21

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Ground Project Name: Project Number: Sample ID: Sample Date: Laboratory: Analyses: Depth to Water: Time:	Water Sample Colle HAKE 15 MU 24 9-28-21 Hall Environmental 36,40	ction Form	Pro Ship Total I Dep	By Barrier Bar	VSP USA Inc. 8 E. 2nd Ave. torado 81301 970.385.1096 Hare 15 IC // Groundwater 1040 Hand Delivery 40.18	
Vol. of Water to Purge: Method of Purging: Method of Sampling:	1.85 gal 13240 13240		(height of wa	ater column * 0.1631 ±	for 2" well or 0.6524 for 4" well) *	' 3 well vols
Time Vol. Time Vol. Removed 0.5 1036 0.5 1038 0.5 1038 0.5	Total Vol. Removed (gallons) 0-5 1.0 1.5 2.0	pH (std. units) 6.90 6.87 6.86 6.86	Temp. (B)C 16.4 (6.0 16.0 15.8 	Conductivit y (us orms) <u>4.97</u> <u>4.89</u> <u>4.88</u> <u>4.88</u>	$\begin{array}{c} \text{Comments} \\ \text{anvil: f:/f_{1} \cap G \\ S \neq A \\ S \neq A \\ S \neq A \\ S \neq A \\ S \neq A \\ S = $	sheer falor
Comments: <u>5://</u>	, turbil, gr	ay . No	sheen/od	₽ / 		
Describe Deviations				Date:	9-28-21	

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	Groundy	vater Sample Colle	ction Form	115	B4 Durango, Col	ISP USA Inc. 8 E 2nd Ave. Iorado 81301 970.385.1096	
Pro	ject Name:	HARE 15		Pro	oject Location: Sampler:	Hare 15	-
Sa	Sample ID: mple Date: _aboratory:	$\frac{MW}{9-27-21}$ Hall Environmental		Shij	Matrix: Sample Time: pping Method:	Groundwater 1415 Hand Delivery	-
Dept	h to Water: Time:	32,57	· · · · · · · · · · · · · · · · · · ·	Total I Dej	Depth of Well: oth to Product:	39,90	-
Vol. of Wate Method Method of	er to Purge: of Purging: `Sampling:	3.6 gal twile buile		(height of wa	ster column * 0.1631 f	for 2" well or 0.6524 for 4" well) * 3 well vols	<u>s</u> -
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (・・・))	Conductivit y (us or ms)	Comments	
1403 1407 1410 1413	1.0	1.0 2.0 3.D 3.75	6.85 6.85 6.34 6.84	16.8 16.4 16.5	7.83 7.95 8.01 8.02	Silly grey, no sheen SAA SAA SAA	- 5H- 00
							-
				1			
Comments:	<u> </u>	gray, no she	er, slt.	jile/		······	-
Describe I	Deviations 1	from SOP:					-
Signature:	_(U	w		•	Date:	9-28-21	-

	Groundy	water Sample Colle	ction Forn	1	Burango, Col	ISP USA Inc. 8 E. 2nd Ave forado 81301 70.385 1096	
		1140515					
Project Number:			Рго	Sampler:	Hare 15	-	
Sample ID: Sample Date: Laboratory: Analyses:		$\frac{\mathcal{M}\mathcal{W} \mathcal{J}\mathcal{G}}{\mathcal{G}-\mathcal{J}\mathcal{S}-\mathcal{I}}$ Hall Environmental		Matrix: Groundwater Sample Time: 0630 Shipping Method: Hand Delivery			
Depth to Water: Time:		39.75		Total Depth of Well: 48.25 Depth to Product:			-
Vol. of Wate Method Method of	er to Purge: of Purging: Sampling:	4.2 gal Bailo Bailo		(height of wa	ater column * 0.1631 f	or 2" well or 0.6524 for 4" well) * 3 well vol	<u>ls</u>
Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Тетр. (С) (Conductivit y (us or fits)	Comments	
0917		1.0 2.0 3.0 4.5	6.87 6.37 0.67 6.87	16.0 15.9 15.2 13.2	4.97 4.94 4.82 4.94	Mul. Str., no sheen SAA/ SAR SAR; mare sil	- Do odor - Fr
							-
Comments:	gray	, vuy silty	, turbi	l water	au shi	ien lodor	-
Describe I	Deviations	from SOP:				·	-
Signature:	D				Date:	9-28-21	-
L							

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

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	56351
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date			
nvelez	Accepted for the record. See app ID 166063 for most updated status.	1/26/2023			

CONDITIONS

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Action 56351