

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy	OGRID 372171
Contact Name Clara Cardoza	Contact Telephone 505.564.0733
Contact email ccardoza@hilcorp.com	Incident # (assigned by OCD) nAPP2101050782
Contact mailing address 382 CR 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.6952477 Longitude -107.9413605
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Eaton A 1R	Site Type Gas Well
Date Release Discovered January 8, 2021	API# (if applicable) 30-045-34457

Unit Letter	Section	Township	Range	County
J	25	029N	011W	San Juan

Surface Owner: State Federal Tribal Private (Name: Coffman)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) 12.5	Volume Recovered (bbls) 2
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Over the top

State of New Mexico
Oil Conservation Division

Incident ID	
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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>Clara Cardoza</u> Title: <u>Environmental Specialist</u> Signature: _____ Date: <u>January 22, 2021</u> email: <u>ccardoza@hilcorp.com</u> Telephone: <u>505.564.0733</u>
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	
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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?	<u>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Clara Cardoza Title: Environmental Specialist

Signature:  Date: May 7, 2021

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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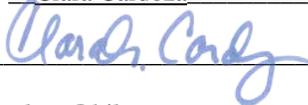
Closure

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

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

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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

Printed Name: Clara Cardoza Title: Environmental Specialist
 Signature:  Date: May 7, 2021
 email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: 02/22/2022
 Printed Name: Nelson Velez Title: Environmental Specialist – Adv

Executive Summary

On January 8, 2021 Hilcorp Energy had a release of condensate at the Eaton A 1R. The source of the original release was an over the top corrosion around a welded seam of the tank. The volume reported in the initial report was 12.5 bbls of condensate based on strapping data recorded by the site operator and calculations using that data and amount of liquid recovered. Once remediation began, historic impacts were found and a notification was sent to NMOCD on 1/29/2021.

Two sample events took place on 1/29 and 2/3/2021 in accordance with NMAC 19.15.9.12D. This site is ranked at 51 - 100 ft per NMAC 19.15.29.12.E.



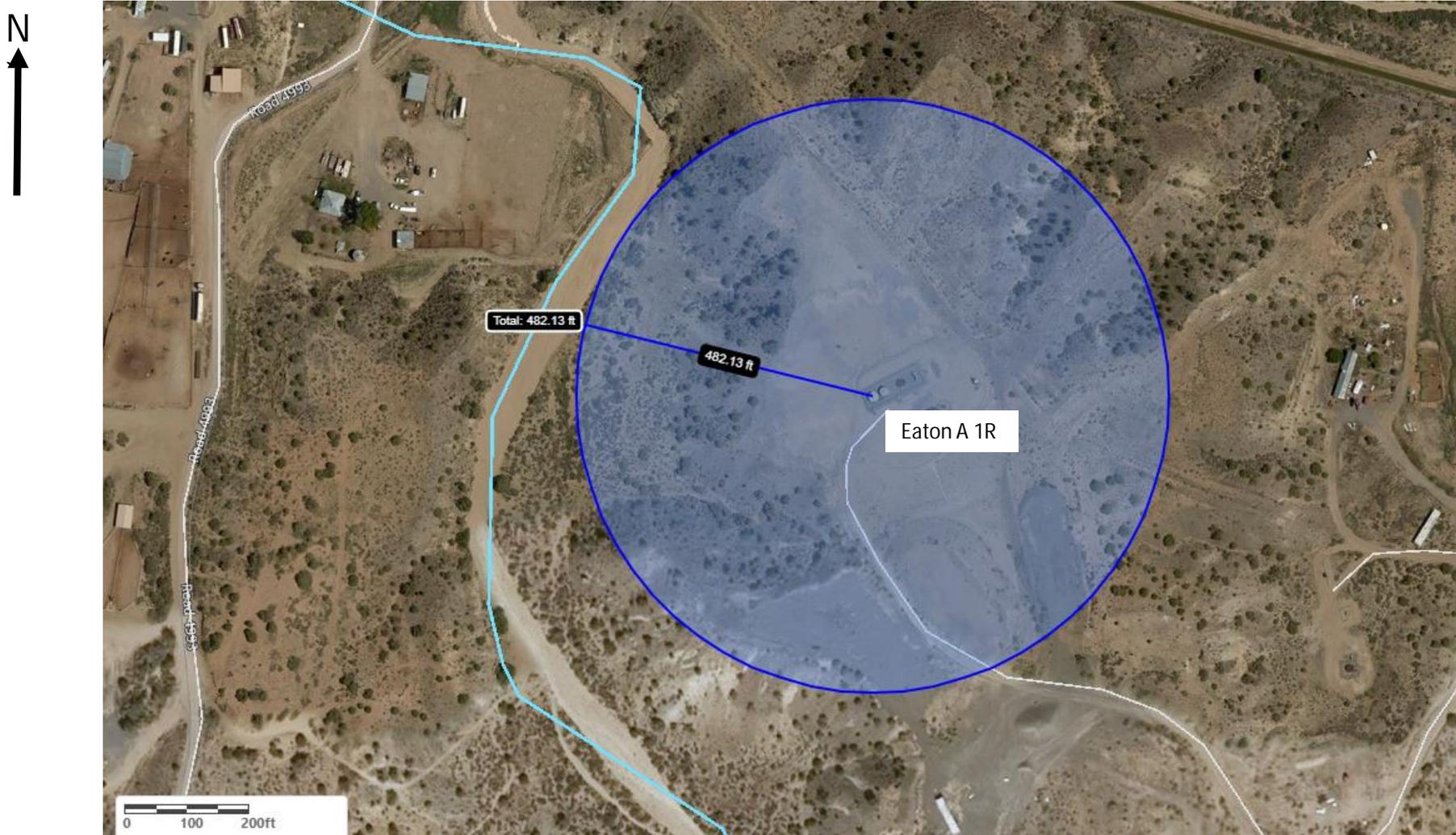
 Release Area

Nearby Pipelines



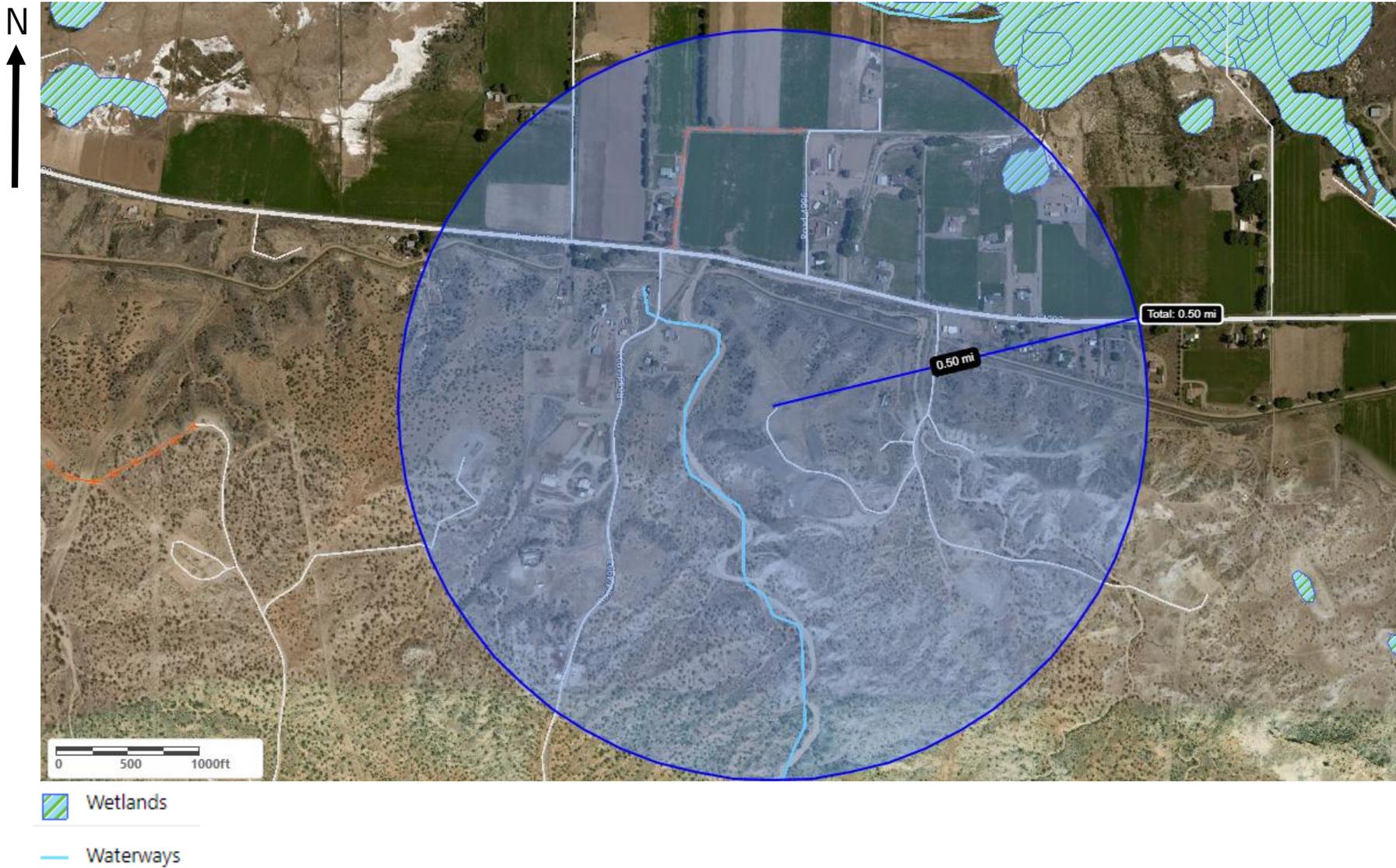
— Enterprise Conventional

Distance to watercourse



Distance to watercourse approximately 482 ft

Water sources or courses within ½ mile



Depth to groundwater



New Mexico Office of the State Engineer Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)			(NAD83 UTM in meters)				
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
SJ 00804		4	1	25	29N	11W		236866	4065508*
Driller License:	666	Driller Company:	GILBERT, JOHN G.						
Driller Name:	GILBERT, JOHN G.								
Drill Start Date:	10/09/1978	Drill Finish Date:	10/12/1978	Plug Date:					
Log File Date:	10/23/1978	PCW Rcv Date:		Source:	Shallow				
Pump Type:		Pipe Discharge Size:		Estimated Yield:	15 GPM				
Casing Size:	6.00	Depth Well:	37 feet	Depth Water:	25 feet				
Water Bearing Stratifications:									
	Top	Bottom	Description						
	30	37	Sandstone/Gravel/Conglomerate						

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/5/21 1:15 PM

POINT OF DIVERSION SUMMARY

POD #	Elevation (ft)	GW depth (ft)
SJ 00804	5492	25
SJ 04040	5504	20
SJ 01808	5526	43
Eaton A 1R	5570	102, 86, 87 AVG 92



New Mexico Office of the State Engineer Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)			(NAD83 UTM in meters)					
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	
SJ 04040	POD1	3	4	2	30	29N	10W	239159	4065370	
Driller License:	717	Driller Company:	WESTERN WATER WELLS							
Driller Name:	HOOD, TERRY									
Drill Start Date:	01/01/2014	Drill Finish Date:	01/08/2014	Plug Date:						
Log File Date:	01/08/2014	PCW Rcv Date:		Source:	Shallow					
Pump Type:		Pipe Discharge Size:		Estimated Yield:	15 GPM					
Casing Size:	6.00	Depth Well:	32 feet	Depth Water:	20 feet					
Water Bearing Stratifications:										
	Top	Bottom	Description							
		0	32	Sandstone/Gravel/Conglomerate						

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5/5/21 2:54 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)			(NAD83 UTM in meters)					
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	
SJ 01808	0-5	1	1	3	26	29N	11W	234753	4065274*	
Driller License:	583	Driller Company:	EARL & SONS INC.							
Driller Name:										
Drill Start Date:	02/06/1984	Drill Finish Date:	02/06/1984	Plug Date:						
Log File Date:	09/21/1984	PCW Rcv Date:		Source:	Shallow					
Pump Type:		Pipe Discharge Size:		Estimated Yield:						
Casing Size:	6.00	Depth Well:	52 feet	Depth Water:	43 feet					
Water Bearing Stratifications:										
	Top	Bottom	Description							
		42	47	Sandstone/Gravel/Conglomerate						
Casing Perforations:										
	Top	Bottom								
		32	52							

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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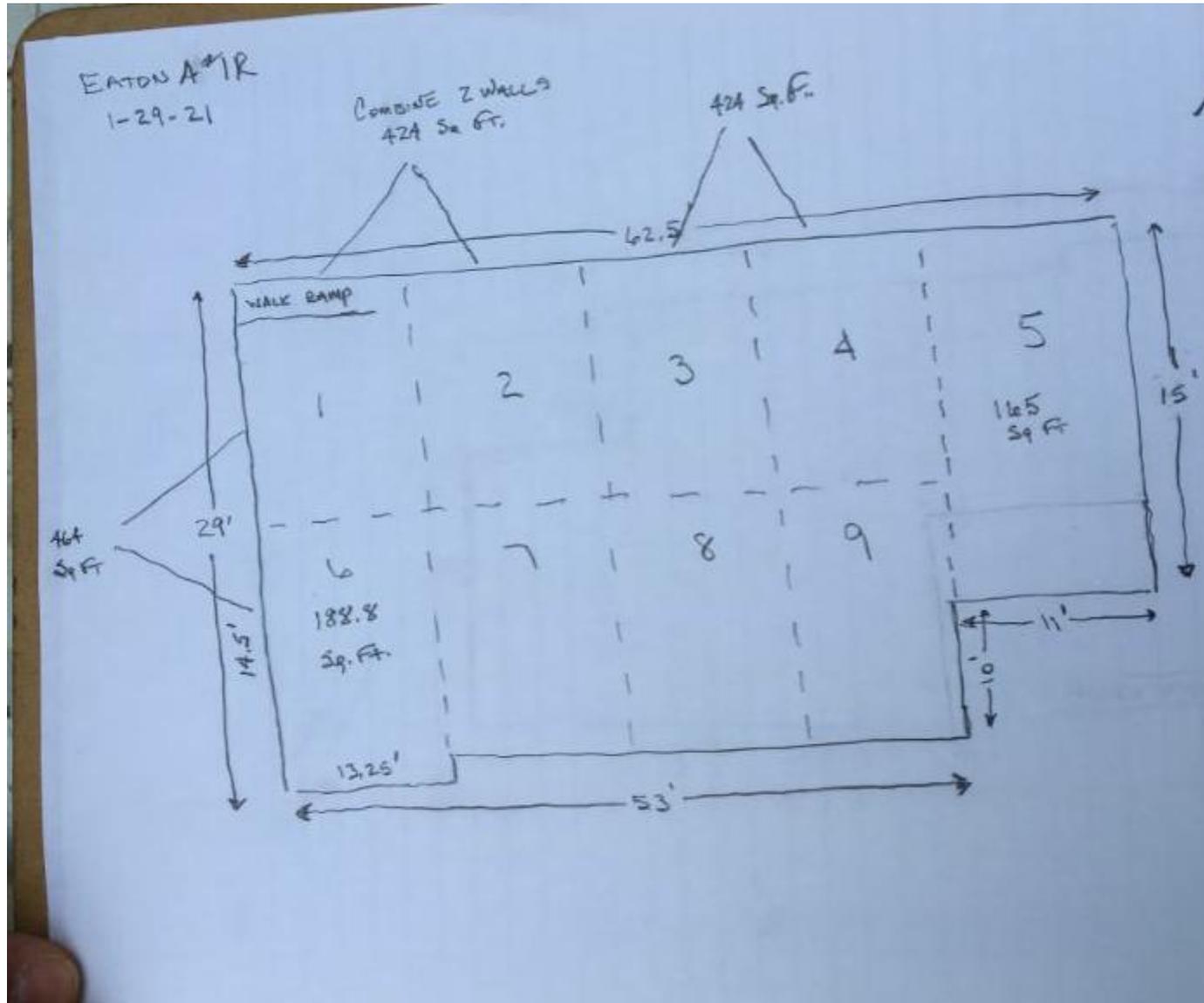
POINT OF DIVERSION SUMMARY

Depth to groundwater POD locations



- ✱ POD Waters
- ✚ Cathodic 2008

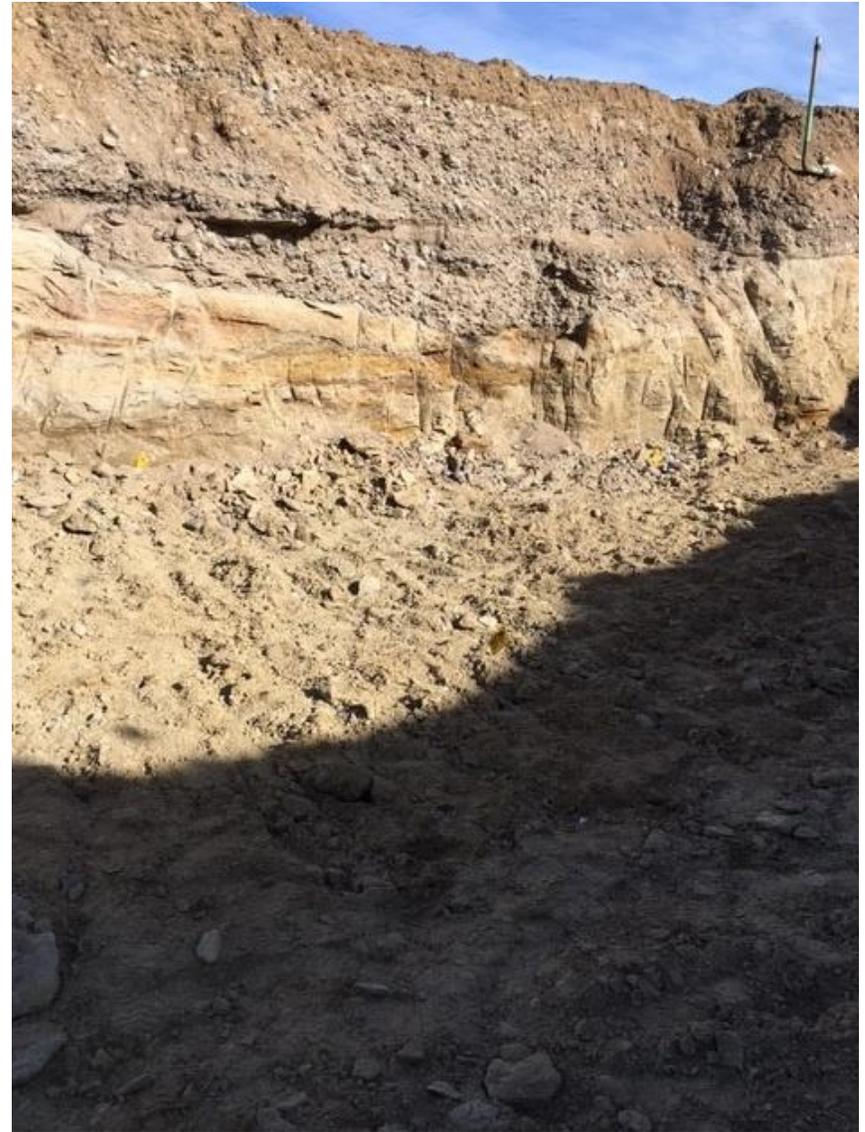
Sample locations/field notes



Sampling 1/29/2021



Wall 1 - 2 and Base 1 - 2



Wall 3 - 4 and Base 3-4

Sampling 1/29/2021



North Wall Sect 5

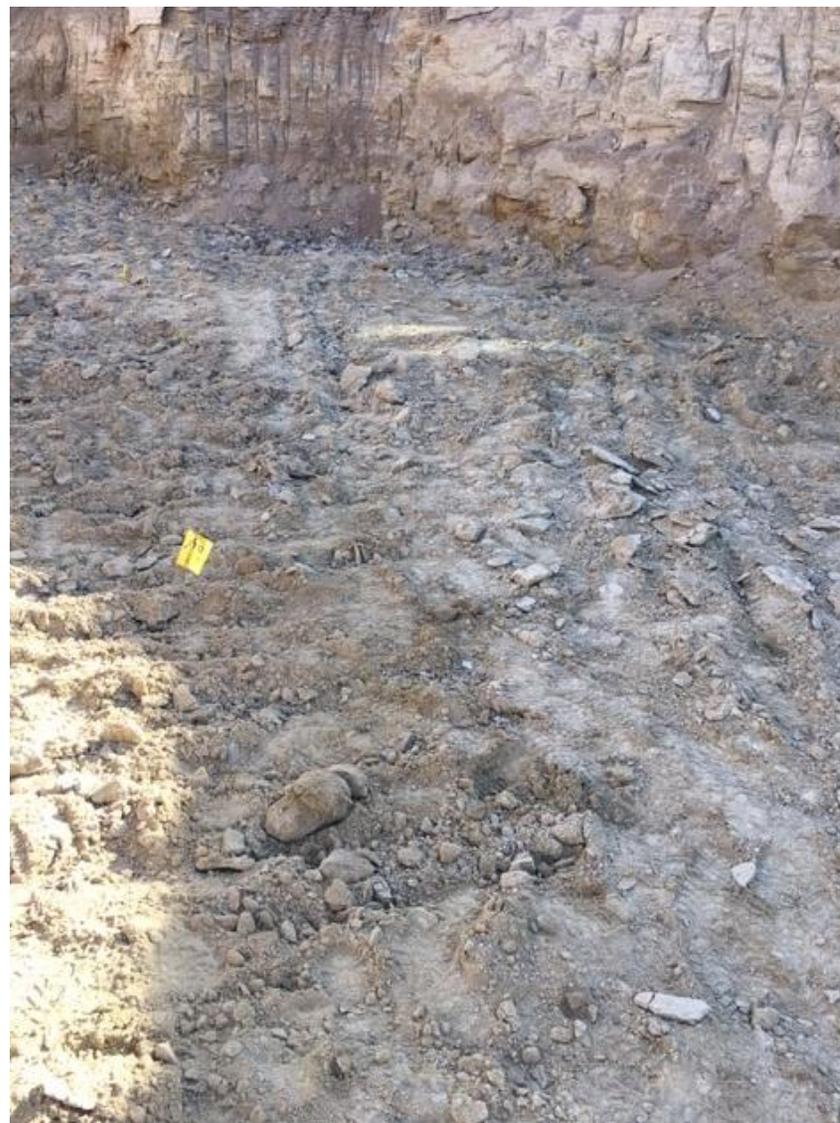


Base 5East

Sampling 1/29/2021



South Wall 5 and Base 5, 9 & 8



Wall 9 & 8 and Base 9 & 8

Sampling 1/29/2021



Wall 6 and Base 6 & 7

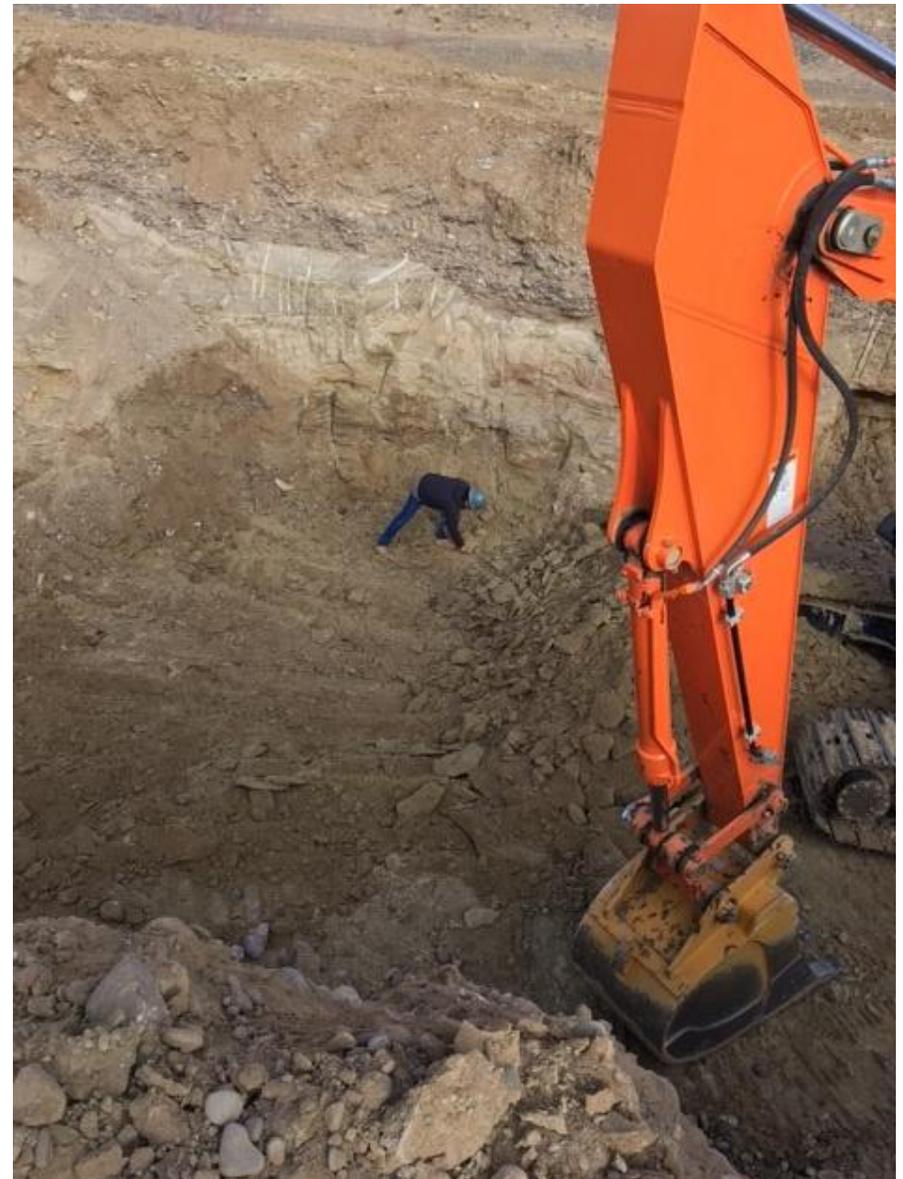


Wall 6 & 7 and Base 6 & 7

Sampling 2/3/2021



Wall 3-4 stain (removed)



Base 2

Lab Analysis

Data table of soil contamination concentration data

Sample Name	Date Collected	Field VOCs by PID (ppm)	Laboratory Results										
			Chloride (mg/kg)	TPH as DRO (mg/kg)	TPH as GRO (mg/kg)	TPH as MRO (mg/kg)	Total TPH (mg/kg)	TPH as GRO + DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylene (mg/kg)	Total BTEX (mg/kg)
NMOCD Action Level		-	10,000	-	-	-	2,500	1,000	10	-	-	-	50
Base 5	01/29/21		ND	46	ND	ND	46	46	ND	ND	ND	ND	ND
Base 4	01/29/21		ND	340	14	160	514	354	ND	ND	ND	0.11	0.1
Base 3	01/29/21		ND	390	49	200	639	439	ND	0.043	0.15	1.8	2.0
Base 2	01/29/21		ND	2100	530	790	3420	2630	0.035	3.3	2.8	35	41.1
Base 9	01/29/21		ND	67	ND	ND	67	67	ND	ND	ND	ND	ND
Base 8	01/29/21		ND	340	35	150	525	375	ND	ND	ND	0.66	0.7
Base 7	01/29/21		ND	180	24	90	294	204	ND	ND	ND	0.12	0.12
Base 6	01/29/21		ND	18	ND	ND	18	18	ND	ND	ND	ND	ND
Wall 1&2	01/29/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
Wall 3&4	01/29/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
Wall 3&4 Stain	01/29/21		ND	1500	570	530	2600	2070	0.2	5.7	3.4	43	52.3
#5 N Wall	01/29/21		ND	38	9.6	ND	48	48	ND	0.062	0.045	0.5	0.607
#5 E Wall	01/29/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
#5 S Wall	01/29/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
#8&9 Wall	01/29/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
#6&7 Wall	01/29/21		ND	25	5.5	ND	31	31	ND	ND	ND	ND	ND
#1 Base	01/29/21		ND	99	16	ND	115	115	ND	ND	0.061	0.71	0.771
#1&6 Wall	01/29/21		ND	160	29	60	249	189	ND	0.081	0.12	1.5	1.701
3 & 4 Wall Stain	02/03/21		ND	ND	ND	ND	0	0	ND	ND	ND	ND	ND
#2 Base	02/03/21		ND	46.00	ND	ND	46	46	ND	ND	ND	ND	ND

Over closure standard



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

February 04, 2021

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

RE: Eaton A 1R

OrderNo.: 2101B07

Dear Clara Cardoza:

Hall Environmental Analysis Laboratory received 18 sample(s) on 1/30/2021 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #5 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:00:00 AM

Lab ID: 2101B07-001

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	46	9.7		mg/Kg	1	1/30/2021 1:14:42 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2021 1:14:42 PM
Surr: DNOP	87.7	30.4-154		%Rec	1	1/30/2021 1:14:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/30/2021 6:08:38 PM
Surr: BFB	101	75.3-105		%Rec	1	1/30/2021 6:08:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/30/2021 6:08:38 PM
Toluene	ND	0.038		mg/Kg	1	1/30/2021 6:08:38 PM
Ethylbenzene	ND	0.038		mg/Kg	1	1/30/2021 6:08:38 PM
Xylenes, Total	ND	0.077		mg/Kg	1	1/30/2021 6:08:38 PM
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	1/30/2021 6:08:38 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 11:44:55 AM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #4 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:03:00 AM

Lab ID: 2101B07-002

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	340	9.4		mg/Kg	1	1/30/2021 2:25:52 PM
Motor Oil Range Organics (MRO)	160	47		mg/Kg	1	1/30/2021 2:25:52 PM
Surr: DNOP	94.8	30.4-154		%Rec	1	1/30/2021 2:25:52 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	14	3.8		mg/Kg	1	1/30/2021 6:32:07 PM
Surr: BFB	230	75.3-105	S	%Rec	1	1/30/2021 6:32:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/30/2021 6:32:07 PM
Toluene	ND	0.038		mg/Kg	1	1/30/2021 6:32:07 PM
Ethylbenzene	ND	0.038		mg/Kg	1	1/30/2021 6:32:07 PM
Xylenes, Total	0.11	0.077		mg/Kg	1	1/30/2021 6:32:07 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	1/30/2021 6:32:07 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 11:57:19 AM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #3 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:06:00 AM

Lab ID: 2101B07-003

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	390	8.8		mg/Kg	1	1/30/2021 2:49:33 PM
Motor Oil Range Organics (MRO)	200	44		mg/Kg	1	1/30/2021 2:49:33 PM
Surr: DNOP	96.4	30.4-154		%Rec	1	1/30/2021 2:49:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	49	4.1		mg/Kg	1	1/30/2021 6:55:42 PM
Surr: BFB	429	75.3-105	S	%Rec	1	1/30/2021 6:55:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	1/30/2021 6:55:42 PM
Toluene	0.043	0.041		mg/Kg	1	1/30/2021 6:55:42 PM
Ethylbenzene	0.15	0.041		mg/Kg	1	1/30/2021 6:55:42 PM
Xylenes, Total	1.8	0.082		mg/Kg	1	1/30/2021 6:55:42 PM
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	1	1/30/2021 6:55:42 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	61		mg/Kg	20	1/31/2021 12:09:44 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #2 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:08:00 AM

Lab ID: 2101B07-004

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	2100	94		mg/Kg	10	1/30/2021 3:36:55 PM
Motor Oil Range Organics (MRO)	790	470		mg/Kg	10	1/30/2021 3:36:55 PM
Surr: DNOP	0	20.4-154	S	%Rec	10	1/30/2021 3:36:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	530	41		mg/Kg	10	2/1/2021 9:18:47 AM
Surr: BFB	354	75.3-105	S	%Rec	10	2/1/2021 9:18:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.035	0.021		mg/Kg	1	1/30/2021 7:19:10 PM
Toluene	3.3	0.041		mg/Kg	1	1/30/2021 7:19:10 PM
Ethylbenzene	2.8	0.041		mg/Kg	1	1/30/2021 7:19:10 PM
Xylenes, Total	35	0.82		mg/Kg	10	2/1/2021 9:18:47 AM
Surr: 4-Bromofluorobenzene	299	80-120	S	%Rec	1	1/30/2021 7:19:10 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	61		mg/Kg	20	1/31/2021 12:22:08 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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative 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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #9 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:12:00 AM

Lab ID: 2101B07-005

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	67	9.7		mg/Kg	1	1/30/2021 4:00:32 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2021 4:00:32 PM
Surr: DNOP	90.5	30.4-154		%Rec	1	1/30/2021 4:00:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/30/2021 7:43:03 PM
Surr: BFB	107	75.3-105	S	%Rec	1	1/30/2021 7:43:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/30/2021 7:43:03 PM
Toluene	ND	0.038		mg/Kg	1	1/30/2021 7:43:03 PM
Ethylbenzene	ND	0.038		mg/Kg	1	1/30/2021 7:43:03 PM
Xylenes, Total	ND	0.077		mg/Kg	1	1/30/2021 7:43:03 PM
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	1/30/2021 7:43:03 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 12:59:22 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #8 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:15:00 AM

Lab ID: 2101B07-006

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	340	9.2		mg/Kg	1	1/30/2021 4:24:12 PM
Motor Oil Range Organics (MRO)	150	46		mg/Kg	1	1/30/2021 4:24:12 PM
Surr: DNOP	95.4	30.4-154		%Rec	1	1/30/2021 4:24:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	35	4.3		mg/Kg	1	1/30/2021 8:06:36 PM
Surr: BFB	338	75.3-105	S	%Rec	1	1/30/2021 8:06:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.021		mg/Kg	1	1/30/2021 8:06:36 PM
Toluene	ND	0.043		mg/Kg	1	1/30/2021 8:06:36 PM
Ethylbenzene	ND	0.043		mg/Kg	1	1/30/2021 8:06:36 PM
Xylenes, Total	0.66	0.086		mg/Kg	1	1/30/2021 8:06:36 PM
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	1/30/2021 8:06:36 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 1:11:46 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #7 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:19:00 AM

Lab ID: 2101B07-007

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	180	9.5		mg/Kg	1	1/30/2021 4:47:46 PM
Motor Oil Range Organics (MRO)	90	47		mg/Kg	1	1/30/2021 4:47:46 PM
Surr: DNOP	92.5	30.4-154		%Rec	1	1/30/2021 4:47:46 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	24	4.1		mg/Kg	1	1/30/2021 8:30:34 PM
Surr: BFB	275	75.3-105	S	%Rec	1	1/30/2021 8:30:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	1/30/2021 8:30:34 PM
Toluene	ND	0.041		mg/Kg	1	1/30/2021 8:30:34 PM
Ethylbenzene	ND	0.041		mg/Kg	1	1/30/2021 8:30:34 PM
Xylenes, Total	0.12	0.082		mg/Kg	1	1/30/2021 8:30:34 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	1/30/2021 8:30:34 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	61		mg/Kg	20	1/31/2021 1:24:11 PM

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

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

Analytical Report

Lab Order 2101B07

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #6 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 10:25:00 AM

Lab ID: 2101B07-008

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	18	8.9		mg/Kg	1	1/30/2021 5:11:17 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/30/2021 5:11:17 PM
Surr: DNOP	89.4	30.4-154		%Rec	1	1/30/2021 5:11:17 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/30/2021 8:54:03 PM
Surr: BFB	121	75.3-105	S	%Rec	1	1/30/2021 8:54:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	1/30/2021 8:54:03 PM
Toluene	ND	0.036		mg/Kg	1	1/30/2021 8:54:03 PM
Ethylbenzene	ND	0.036		mg/Kg	1	1/30/2021 8:54:03 PM
Xylenes, Total	ND	0.073		mg/Kg	1	1/30/2021 8:54:03 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/30/2021 8:54:03 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	61		mg/Kg	20	1/31/2021 1:36:36 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
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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 **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #1 & 2 Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 10:45:00 AM

Lab ID: 2101B07-009

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/30/2021 5:34:47 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/30/2021 5:34:47 PM
Surr: DNOP	90.0	30.4-154		%Rec	1	1/30/2021 5:34:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/30/2021 9:17:37 PM
Surr: BFB	97.8	75.3-105		%Rec	1	1/30/2021 9:17:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	1/30/2021 9:17:37 PM
Toluene	ND	0.036		mg/Kg	1	1/30/2021 9:17:37 PM
Ethylbenzene	ND	0.036		mg/Kg	1	1/30/2021 9:17:37 PM
Xylenes, Total	ND	0.072		mg/Kg	1	1/30/2021 9:17:37 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/30/2021 9:17:37 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 1:49:01 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #3 & 4 Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 10:50:00 AM

Lab ID: 2101B07-010

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/30/2021 5:58:11 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/30/2021 5:58:11 PM
Surr: DNOP	89.6	30.4-154		%Rec	1	1/30/2021 5:58:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/30/2021 9:41:38 PM
Surr: BFB	95.0	75.3-105		%Rec	1	1/30/2021 9:41:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	1/30/2021 9:41:38 PM
Toluene	ND	0.036		mg/Kg	1	1/30/2021 9:41:38 PM
Ethylbenzene	ND	0.036		mg/Kg	1	1/30/2021 9:41:38 PM
Xylenes, Total	ND	0.072		mg/Kg	1	1/30/2021 9:41:38 PM
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	1	1/30/2021 9:41:38 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 2:01:25 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #3 & 4 Wall Stain

Project: Eaton A 1R

Collection Date: 1/29/2021 10:52:00 AM

Lab ID: 2101B07-011

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	1500	46		mg/Kg	5	2/1/2021 1:56:18 PM
Motor Oil Range Organics (MRO)	530	230		mg/Kg	5	2/1/2021 1:56:18 PM
Surr: DNOP	109	30.4-154		%Rec	5	2/1/2021 1:56:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	570	20		mg/Kg	5	1/31/2021 12:49:29 AM
Surr: BFB	603	75.3-105	S	%Rec	5	1/31/2021 12:49:29 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	0.20	0.10		mg/Kg	5	1/31/2021 12:49:29 AM
Toluene	5.7	0.20		mg/Kg	5	1/31/2021 12:49:29 AM
Ethylbenzene	3.4	0.20		mg/Kg	5	1/31/2021 12:49:29 AM
Xylenes, Total	43	0.41		mg/Kg	5	1/31/2021 12:49:29 AM
Surr: 4-Bromofluorobenzene	127	80-120	S	%Rec	5	1/31/2021 12:49:29 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 2:13:49 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #5 N. Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 10:58:00 AM

Lab ID: 2101B07-012

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	38	9.2		mg/Kg	1	1/30/2021 6:44:52 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/30/2021 6:44:52 PM
Surr: DNOP	89.8	30.4-154		%Rec	1	1/30/2021 6:44:52 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	9.6	3.6		mg/Kg	1	1/31/2021 1:13:18 AM
Surr: BFB	147	75.3-105	S	%Rec	1	1/31/2021 1:13:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	1/31/2021 1:13:18 AM
Toluene	0.062	0.036		mg/Kg	1	1/31/2021 1:13:18 AM
Ethylbenzene	0.045	0.036		mg/Kg	1	1/31/2021 1:13:18 AM
Xylenes, Total	0.50	0.071		mg/Kg	1	1/31/2021 1:13:18 AM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/31/2021 1:13:18 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 2:26:14 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #5 E. Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 11:03:00 AM

Lab ID: 2101B07-013

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/30/2021 7:08:10 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/30/2021 7:08:10 PM
Surr: DNOP	89.3	30.4-154		%Rec	1	1/30/2021 7:08:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/31/2021 1:37:12 AM
Surr: BFB	94.0	75.3-105		%Rec	1	1/31/2021 1:37:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/31/2021 1:37:12 AM
Toluene	ND	0.038		mg/Kg	1	1/31/2021 1:37:12 AM
Ethylbenzene	ND	0.038		mg/Kg	1	1/31/2021 1:37:12 AM
Xylenes, Total	ND	0.076		mg/Kg	1	1/31/2021 1:37:12 AM
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	1/31/2021 1:37:12 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 2:38:38 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #5 S. Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 11:12:00 AM

Lab ID: 2101B07-014

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/30/2021 7:31:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2021 7:31:29 PM
Surr: DNOP	88.8	30.4-154		%Rec	1	1/30/2021 7:31:29 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	1/31/2021 2:01:09 AM
Surr: BFB	96.0	75.3-105		%Rec	1	1/31/2021 2:01:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	1/31/2021 2:01:09 AM
Toluene	ND	0.040		mg/Kg	1	1/31/2021 2:01:09 AM
Ethylbenzene	ND	0.040		mg/Kg	1	1/31/2021 2:01:09 AM
Xylenes, Total	ND	0.080		mg/Kg	1	1/31/2021 2:01:09 AM
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	1/31/2021 2:01:09 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 2:51:03 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #8 & 9 Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 11:18:00 AM

Lab ID: 2101B07-015

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/30/2021 7:54:47 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2021 7:54:47 PM
Surr: DNOP	90.8	30.4-154		%Rec	1	1/30/2021 7:54:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	1/31/2021 2:25:02 AM
Surr: BFB	94.1	75.3-105		%Rec	1	1/31/2021 2:25:02 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.021		mg/Kg	1	1/31/2021 2:25:02 AM
Toluene	ND	0.042		mg/Kg	1	1/31/2021 2:25:02 AM
Ethylbenzene	ND	0.042		mg/Kg	1	1/31/2021 2:25:02 AM
Xylenes, Total	ND	0.085		mg/Kg	1	1/31/2021 2:25:02 AM
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	1/31/2021 2:25:02 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 3:28:16 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #6 & 7 Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 11:23:00 AM

Lab ID: 2101B07-016

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	25	9.8		mg/Kg	1	1/30/2021 8:18:04 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/30/2021 8:18:04 PM
Surr: DNOP	89.6	30.4-154		%Rec	1	1/30/2021 8:18:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	5.5	3.6		mg/Kg	1	1/31/2021 2:48:53 AM
Surr: BFB	139	75.3-105	S	%Rec	1	1/31/2021 2:48:53 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.018		mg/Kg	1	1/31/2021 2:48:53 AM
Toluene	ND	0.036		mg/Kg	1	1/31/2021 2:48:53 AM
Ethylbenzene	ND	0.036		mg/Kg	1	1/31/2021 2:48:53 AM
Xylenes, Total	ND	0.073		mg/Kg	1	1/31/2021 2:48:53 AM
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	1/31/2021 2:48:53 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 3:40:40 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #1 Base

Project: Eaton A 1R

Collection Date: 1/29/2021 3:02:00 PM

Lab ID: 2101B07-017

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	99	9.1		mg/Kg	1	1/30/2021 8:41:21 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/30/2021 8:41:21 PM
Surr: DNOP	91.5	30.4-154		%Rec	1	1/30/2021 8:41:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	16	3.9		mg/Kg	1	1/31/2021 3:12:36 AM
Surr: BFB	205	75.3-105	S	%Rec	1	1/31/2021 3:12:36 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/31/2021 3:12:36 AM
Toluene	ND	0.039		mg/Kg	1	1/31/2021 3:12:36 AM
Ethylbenzene	0.061	0.039		mg/Kg	1	1/31/2021 3:12:36 AM
Xylenes, Total	0.71	0.078		mg/Kg	1	1/31/2021 3:12:36 AM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/31/2021 3:12:36 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	59		mg/Kg	20	1/31/2021 3:53:04 PM

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

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

Analytical Report

Lab Order **2101B07**

Date Reported: 2/4/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #1 & 6 Wall

Project: Eaton A 1R

Collection Date: 1/29/2021 3:08:00 PM

Lab ID: 2101B07-018

Matrix: MEOH (SOIL)

Received Date: 1/30/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	160	9.6		mg/Kg	1	1/30/2021 9:04:38 PM
Motor Oil Range Organics (MRO)	60	48		mg/Kg	1	1/30/2021 9:04:38 PM
Surr: DNOP	92.7	30.4-154		%Rec	1	1/30/2021 9:04:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	29	3.8		mg/Kg	1	1/31/2021 3:36:08 AM
Surr: BFB	308	75.3-105	S	%Rec	1	1/31/2021 3:36:08 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.019		mg/Kg	1	1/31/2021 3:36:08 AM
Toluene	0.081	0.038		mg/Kg	1	1/31/2021 3:36:08 AM
Ethylbenzene	0.12	0.038		mg/Kg	1	1/31/2021 3:36:08 AM
Xylenes, Total	1.5	0.075		mg/Kg	1	1/31/2021 3:36:08 AM
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	1/31/2021 3:36:08 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	1/31/2021 4:30:18 PM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: MB-57817	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57817	RunNo: 74958								
Prep Date: 1/31/2021	Analysis Date: 1/31/2021	SeqNo: 2646202	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57817	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57817	RunNo: 74958								
Prep Date: 1/31/2021	Analysis Date: 1/31/2021	SeqNo: 2646203	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: MB-57812	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57812	RunNo: 74960								
Prep Date: 1/30/2021	Analysis Date: 1/30/2021	SeqNo: 2646384	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		82.5	30.4	154			

Sample ID: LCS-57812	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57812	RunNo: 74960								
Prep Date: 1/30/2021	Analysis Date: 1/30/2021	SeqNo: 2646385	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.7	68.9	141			
Surr: DNOP	3.8		5.000		76.7	30.4	154			

Sample ID: 2101B07-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: #5 Base	Batch ID: 57812	RunNo: 74960								
Prep Date: 1/30/2021	Analysis Date: 1/30/2021	SeqNo: 2646386	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	80	9.4	47.13	46.37	70.5	15	184			
Surr: DNOP	4.1		4.713		88.0	30.4	154			

Sample ID: 2101B07-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: #5 Base	Batch ID: 57812	RunNo: 74960								
Prep Date: 1/30/2021	Analysis Date: 1/30/2021	SeqNo: 2646387	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	73	10	49.75	46.37	54.4	15	184	8.06	23.9	
Surr: DNOP	4.4		4.975		87.7	30.4	154	0	0	

Sample ID: MB-57819	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57819	RunNo: 74965								
Prep Date: 2/1/2021	Analysis Date: 2/1/2021	SeqNo: 2646643	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: LCS-57819	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57819	RunNo: 74965								
Prep Date: 2/1/2021	Analysis Date: 2/1/2021	SeqNo: 2646800	Units: %Rec							
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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: LCS-57819	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57819	RunNo: 74965								
Prep Date: 2/1/2021	Analysis Date: 2/1/2021	SeqNo: 2646800	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.3	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: R74957		RunNo: 74957							
Prep Date:	Analysis Date: 1/30/2021		SeqNo: 2646140		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80	120			
Surr: BFB	1100		1000		107	75.3	105			S

Sample ID: 2101b07-001ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: #5 Base	Batch ID: R74957		RunNo: 74957							
Prep Date:	Analysis Date: 1/30/2021		SeqNo: 2646154		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.8	19.17	0	97.9	61.3	114			
Surr: BFB	890		766.9		116	75.3	105			S

Sample ID: 2101b07-001amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: #5 Base	Batch ID: R74957		RunNo: 74957							
Prep Date:	Analysis Date: 1/30/2021		SeqNo: 2646155		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.8	19.17	0	95.9	61.3	114	2.06	20	
Surr: BFB	900		766.9		117	75.3	105	0	0	S

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: R74957		RunNo: 74957							
Prep Date:	Analysis Date: 1/30/2021		SeqNo: 2646173		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		105	75.3	105			

Sample ID: mb1	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G74963		RunNo: 74963							
Prep Date:	Analysis Date: 2/1/2021		SeqNo: 2647108		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	960		1000		95.8	75.3	105			

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G74963		RunNo: 74963							
Prep Date:	Analysis Date: 2/1/2021		SeqNo: 2647109		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G74963		RunNo: 74963							
Prep Date:	Analysis Date: 2/1/2021		SeqNo: 2647109		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	80	120			
Surr: BFB	1100		1000		108	75.3	105			S

Sample ID: mb-57813	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 57813		RunNo: 74963							
Prep Date: 1/30/2021	Analysis Date: 2/1/2021		SeqNo: 2647126		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.4	75.3	105			

Sample ID: lcs-57813	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 57813		RunNo: 74963							
Prep Date: 1/30/2021	Analysis Date: 2/1/2021		SeqNo: 2647127		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	75.3	105			

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: BS74957	RunNo: 74957								
Prep Date:	Analysis Date: 1/30/2021	SeqNo: 2646178	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: 2101b07-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: #4 Base	Batch ID: BS74957	RunNo: 74957								
Prep Date:	Analysis Date: 1/30/2021	SeqNo: 2646181	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.019	0.7698	0	100	76.3	120			
Toluene	0.78	0.038	0.7698	0.007929	101	78.5	120			
Ethylbenzene	0.79	0.038	0.7698	0	103	78.1	124			
Xylenes, Total	2.5	0.077	2.309	0.1075	102	79.3	125			
Surr: 4-Bromofluorobenzene	0.85		0.7698		111	80	120			

Sample ID: 2101b07-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: #4 Base	Batch ID: BS74957	RunNo: 74957								
Prep Date:	Analysis Date: 1/30/2021	SeqNo: 2646182	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.019	0.7698	0	98.4	76.3	120	1.95	20	
Toluene	0.77	0.038	0.7698	0.007929	98.8	78.5	120	1.86	20	
Ethylbenzene	0.78	0.038	0.7698	0	101	78.1	124	1.55	20	
Xylenes, Total	2.4	0.077	2.309	0.1075	99.3	79.3	125	2.34	20	
Surr: 4-Bromofluorobenzene	0.85		0.7698		110	80	120	0	0	

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: BS74957	RunNo: 74957								
Prep Date:	Analysis Date: 1/30/2021	SeqNo: 2646199	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101B07

04-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: mb1	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B74963	RunNo: 74963								
Prep Date:	Analysis Date: 2/1/2021	SeqNo: 2647153	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			

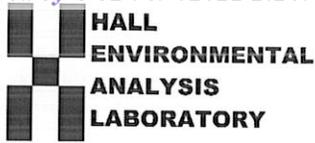
Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B74963	RunNo: 74963								
Prep Date:	Analysis Date: 2/1/2021	SeqNo: 2647154	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	2.8	0.10	3.000	0	94.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: mb-57813	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 57813	RunNo: 74963								
Prep Date: 1/30/2021	Analysis Date: 2/1/2021	SeqNo: 2647161	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: LCS-57813	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 57813	RunNo: 74963								
Prep Date: 1/30/2021	Analysis Date: 2/1/2021	SeqNo: 2647162	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.5	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2101B07 RcptNo: 1

Received By: Juan Rojas 1/30/2021 9:15:00 AM
Completed By: Juan Rojas 1/30/2021 9:30:43 AM
Reviewed By: [Signature] 01/30/2021

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C? Yes [checked] No [] NA []
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? Yes [checked] No []

of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by: JR 1/30/21

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: [] Date []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Rows 1-3.

Chain-of-Custody Record

Client: Hulcoep

Mailing Address: _____

Phone #: 505-793-0733

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Turn-Around Time: Standard Rush 2 Day

Project Name: EATON A # 1R

Project #: _____

Project Manager: CLARA CARDONA

Sampler: KURT

On Ice: Yes No

of Coolers: 3

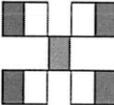
Cooler Temp (including CP): See Remarks (°C)

Container Type and #

Preservative Type

HEAL No.

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1-29	10:00	SS	# 5 BASE	A0Z JAR	ON VCS	21011307
	10:03		# 4 BASE	}	}	-001
	10:06		# 3 BASE			-003
	10:08		# 2 BASE			-004
	10:12		# 9 BASE			-005
	10:15		# 8 BASE			-006
	10:19		# 7 BASE			-007
	10:25		# 6 BASE			-008
	10:45		# 1 1/2 WALL			-009
	10:50		# 3 1/4 WALL			-010
	10:52		# 3 1/4 WALL STAIN			-011
	10:58		# 5 NW WALL	-012		
Date:	Time:	Relinquished by:	Relinquished by:	Via:	Date:	Time:
1-29	11:08	<u>Kurt Hulcoep</u>	<u>Kurt Hulcoep</u>	<u>Chothoate</u>	1/29/21	11:18
1-29	19:03	<u>Chothoate</u>	<u>Chothoate</u>	<u>Chothoate</u>	1/30/21	9:15



HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Analysis Request	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride 300.0
BTEX / MTBE / TMBs (8021)	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	X	X

Remarks: 2.4-0=2.4
1.3-0=1.3
1.6-0=1.6

Chain-of-Custody Record

Client: Hilcorp

Turn-Around Time: Standard Rush 2 Day

Project Name: EATON A # 1R

Project #: _____

Phone #: 505-793-0733

email or Fax#: _____

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance NELAC Other

EDD (Type) _____

Project Manager: CLARA CARDOZA

Sampler: KUWEI

On Ice: Yes No

of Coolers: 3

Cooler Temp (including CP): See Remarks (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1-29	11:03	SS	# 5 E. WALL	4oz JAR	ON ICE	2101307
	11:12		# 5 S. WALL	}		-013
	11:18		# 8 & 9 WALL			-014
	11:23		# 6 & 7 WALL			-015
	3:02		# 1 BASE			-016
	3:08		# 1 & 6 WALL			-017
						-018

Relinquished by: [Signature] Date: 1/29/21 Time: 1618

Relinquished by: [Signature] Date: 1/30/21 Time: 9:15

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Analysis Request	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
BTX / MTBE / TMB's (8021)	X								X
	X								X
	X								X
	X								X
	X								X
	X								X
	X								X

Remarks:

2.4-0=2.4
1.3-0=1.3
1.6-0=1.6



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

February 09, 2021

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

RE: Eaton A 1R

OrderNo.: 2102208

Dear Clara Cardoza:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/4/2021 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2102208**

Date Reported: **2/9/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #3 & #4 Wall Stain

Project: Eaton A 1R

Collection Date: 2/3/2021 9:04:00 AM

Lab ID: 2102208-001

Matrix: SOIL

Received Date: 2/4/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/5/2021 8:05:14 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/5/2021 8:05:14 AM
Surr: DNOP	92.0	70-130		%Rec	1	2/5/2021 8:05:14 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	2/4/2021 2:34:58 PM
Surr: BFB	107	75.3-105	S	%Rec	1	2/4/2021 2:34:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	2/4/2021 2:34:58 PM
Toluene	ND	0.039		mg/Kg	1	2/4/2021 2:34:58 PM
Ethylbenzene	ND	0.039		mg/Kg	1	2/4/2021 2:34:58 PM
Xylenes, Total	ND	0.078		mg/Kg	1	2/4/2021 2:34:58 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/4/2021 2:34:58 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	2/4/2021 5:11:27 PM

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

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

Analytical Report

Lab Order **2102208**

Date Reported: **2/9/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: #2 Base

Project: Eaton A 1R

Collection Date: 2/3/2021 10:00:00 AM

Lab ID: 2102208-002

Matrix: SOIL

Received Date: 2/4/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: TOM
Diesel Range Organics (DRO)	46	9.3		mg/Kg	1	2/5/2021 9:16:25 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/5/2021 9:16:25 AM
Surr: DNOP	94.7	70-130		%Rec	1	2/5/2021 9:16:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/4/2021 2:58:25 PM
Surr: BFB	114	75.3-105	S	%Rec	5	2/4/2021 2:58:25 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.091		mg/Kg	5	2/4/2021 2:58:25 PM
Toluene	ND	0.18		mg/Kg	5	2/4/2021 2:58:25 PM
Ethylbenzene	ND	0.18		mg/Kg	5	2/4/2021 2:58:25 PM
Xylenes, Total	ND	0.36		mg/Kg	5	2/4/2021 2:58:25 PM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	5	2/4/2021 2:58:25 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	2/4/2021 5:23:52 PM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2102208

09-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: MB-57922	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 57922	RunNo: 75086								
Prep Date: 2/4/2021	Analysis Date: 2/4/2021	SeqNo: 2650484	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-57922	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 57922	RunNo: 75086								
Prep Date: 2/4/2021	Analysis Date: 2/4/2021	SeqNo: 2650485	Units: mg/Kg							
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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2102208

09-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: MB-57918	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57918	RunNo: 75091								
Prep Date: 2/4/2021	Analysis Date: 2/5/2021	SeqNo: 2650944	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.3	70	130			

Sample ID: LCS-57918	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 57918	RunNo: 75091								
Prep Date: 2/4/2021	Analysis Date: 2/5/2021	SeqNo: 2650945	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.8	68.9	141			
Surr: DNOP	4.2		5.000		84.5	70	130			

Sample ID: 2102208-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: #3 & #4 Wall Stain	Batch ID: 57918	RunNo: 75091								
Prep Date: 2/4/2021	Analysis Date: 2/5/2021	SeqNo: 2650947	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.6	48.08	0	97.0	15	184			
Surr: DNOP	4.4		4.808		91.4	70	130			

Sample ID: 2102208-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: #3 & #4 Wall Stain	Batch ID: 57918	RunNo: 75091								
Prep Date: 2/4/2021	Analysis Date: 2/5/2021	SeqNo: 2650948	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.7	48.69	0	94.6	15	184	1.28	23.9	
Surr: DNOP	4.4		4.869		90.5	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2102208

09-Feb-21

Client: HILCORP ENERGY

Project: Eaton A 1R

Sample ID: mb1	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: G75077	RunNo: 75077								
Prep Date:	Analysis Date: 2/4/2021	SeqNo: 2650151	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		105	75.3	105			

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: G75077	RunNo: 75077								
Prep Date:	Analysis Date: 2/4/2021	SeqNo: 2650152	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80	120			
Surr: BFB	1200		1000		117	75.3	105			S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2102208

09-Feb-21

Client: HILCORP ENERGY

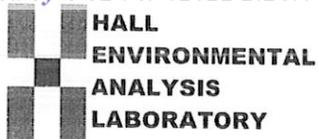
Project: Eaton A 1R

Sample ID: mb1	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B75077	RunNo: 75077								
Prep Date:	Analysis Date: 2/4/2021	SeqNo: 2650166	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B75077	RunNo: 75077								
Prep Date:	Analysis Date: 2/4/2021	SeqNo: 2650169	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.96	0.050	1.000	0	96.0	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: HILCORP ENERGY

Work Order Number: 2102208

RcptNo: 1

Received By: Juan Rojas 2/4/2021 8:00:00 AM

[Signature]

Completed By: Sean Livingston 2/4/2021 8:21:12 AM

[Signature]

Reviewed By: JR 2/4/21

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [] NA []
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? Yes [checked] No []

of preserved bottles checked for pH: 2/4/21 (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: Date:
By Whom: Via: [] eMail [] Phone [] Fax [] In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 0.8, Good, Yes, , ,

Agency Correspondence

Clara Cardoza

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, January 28, 2021 12:23 PM
To: Clara Cardoza
Cc: Kurt Hoekstra
Subject: [EXTERNAL] RE: Conf Samples/Variance

Clara,

OCD reviewing the site it is on Private surface correct? If so the OCD is ok with approving the variance to the 48 hour notice for confirmation samples.

If the surface is Federal or State please make sure to get approval from either agency if needed.

Please sample per 19.15.29.12. NMAC or if needed you may send me photos/facetime and I could alternatively approve an alterative sampling plan.

Thanks,

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>

From: Clara Cardoza <ccardoza@hilcorp.com>
Sent: Thursday, January 28, 2021 11:17 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Kurt Hoekstra <khoekstra@hilcorp.com>
Subject: [EXT] Conf Samples/Variance

Good morning Cory. Hilcorp would like to request a variance on the 48 hr notice on confirmation sampling notice for the Eaton A 1R (nAPP2101050782). We had an over the top that has turned into a bigger excavation as we have found what appears to be historic impacts . Since we have the equipment onsite we wanted to utilize the time to get our confirmation samples completed. We know that NMOCD has restrictions because of COVID so we thought this might be acceptable. We want to sample tomorrow morning at 8:00 a.m. If this is not acceptable, can we schedule a 8:00 a.m. on Monday? Thank you for your consideration.

Clara M Cardoza
Environmental Specialist
505-564-0733 (O)
505-793-2784 (C)



Clara Cardoza

From: Clara Cardoza
Sent: Wednesday, February 3, 2021 12:19 PM
To: Smith, Cory, EMNRD; Kurt Hoekstra
Subject: RE: [EXTERNAL] RE: Eaton A #1R nAPP2101050782
Attachments: Grab sample before.jpg; Grab after.JPG; Base After.JPG

Cory, as a follow-up to the conversation you had with Kurt this morning regarding confirmation re-sampling at the Eaton A 1R please find the following:

Attached are pictures of the excavation areas that needed to be resampled (Grab sample you requested from 1/29 sampling pictured below in your email and base 2 depicted in my email below).

- Grab sample before – shows the area of the grab sample and Base 2 (on the left of the grab area) both which did not pass and before additional work was done today before resampling.
- Grab sample after – shows the area sampled after dark soil was removed
- Base after – shows base 2 after excavation

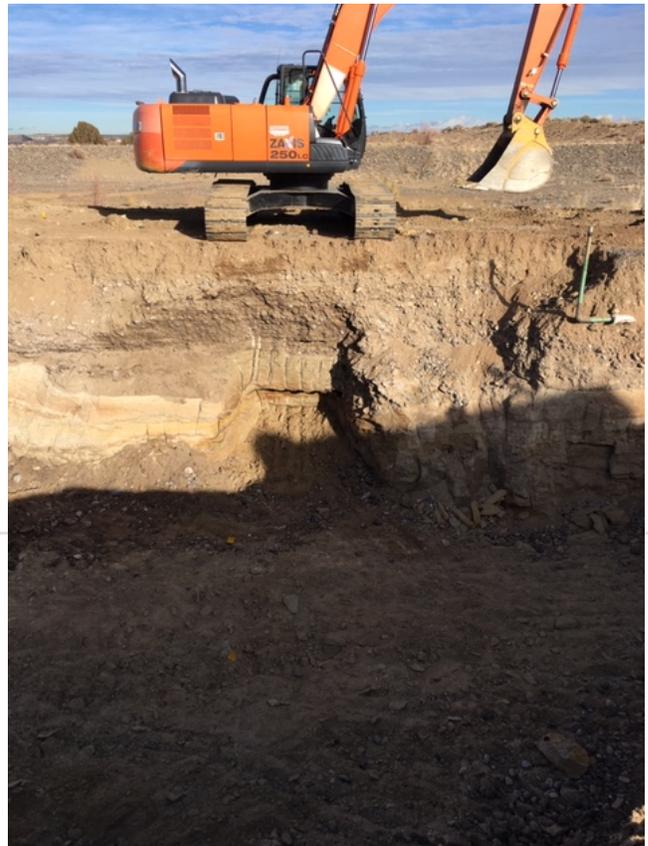
This email also serves to document your approval to resample these two areas without 48 hour notice.

Please let me know if you have any questions.

Thank you,
Clara



Grab sample before



Grab sample after



Base After

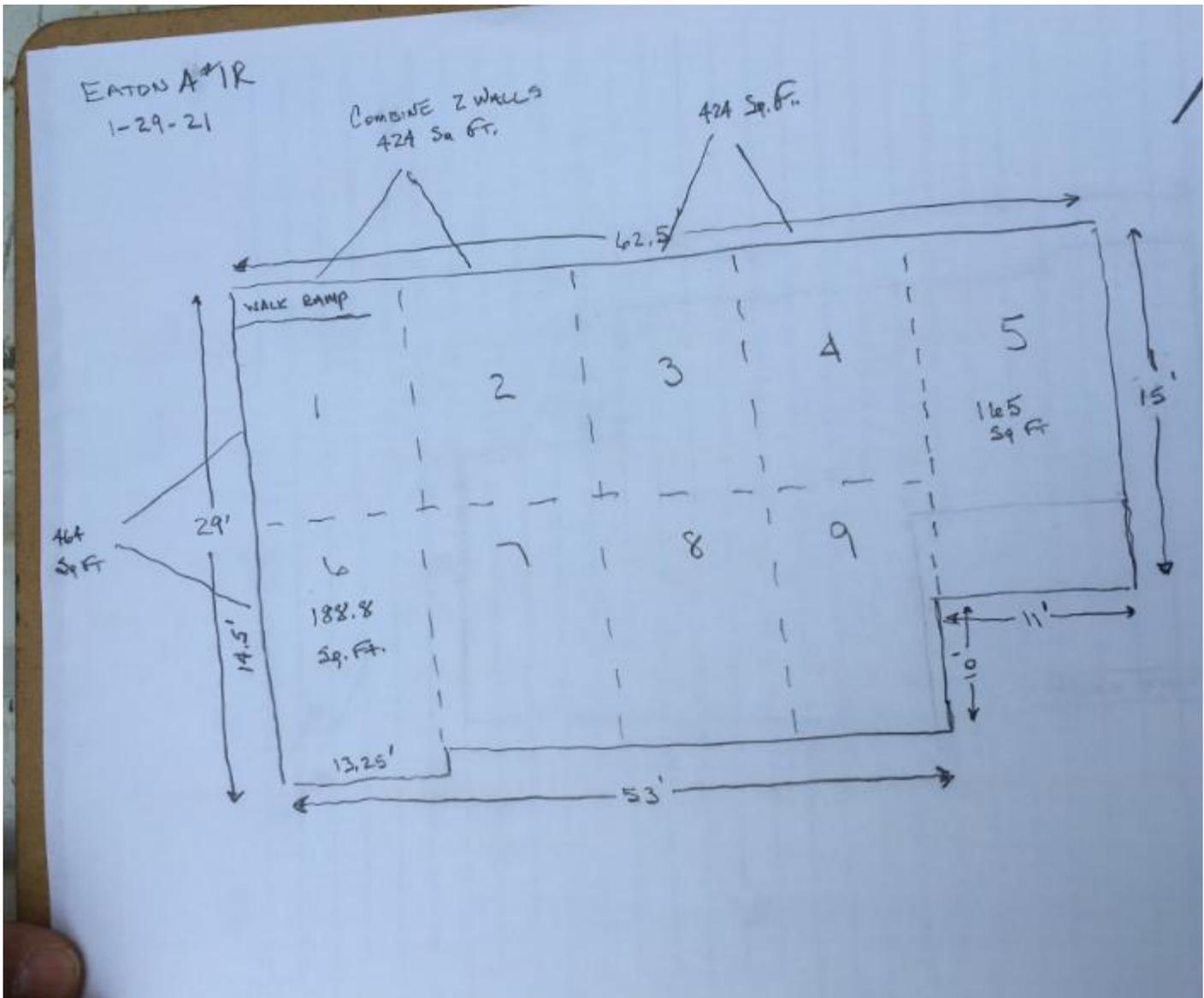
From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Friday, January 29, 2021 9:31 AM
To: Clara Cardoza <ccardoza@hilcorp.com>; Kurt Hoekstra <khoekstra@hilcorp.com>
Subject: [EXTERNAL] RE: Eaton A #1R

Clara,

Thanks for the follow up!

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>

From: Clara Cardoza <ccardoza@hilcorp.com>
Sent: Friday, January 29, 2021 8:47 AM
To: Kurt Hoekstra <khoekstra@hilcorp.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] Re: Eaton A #1R



The attached is the document originally sent via text message that was conditionally approved by Cory in this email string with additional grab sample he specified.

Get [Outlook for iOS](#)

-----Original Message-----

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]

Sent: Friday, January 29, 2021 8:41 AM

To: Kurt Hoekstra <khoekstra@hilcorp.com>; Clara Cardoza <ccardoza@hilcorp.com>

Subject: [EXTERNAL] RE: Eaton A #1R

Kurt,

OCD approves the alternative sampling on the walls for 400 sqft with the following conditions.

- Hilcorp will collect a grab sample of the area in red attached.

Please keep this approval for your records and include it in your Final C-141 as a hard copy will not be sent to you.



Thanks,

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us <http://www.emnrd.state.nm.us/OCD/>

From: Kurt Hoekstra <khoekstra@hilcorp.com>
Sent: Friday, January 29, 2021 8:32:58 AM
To: Cory Smith <Cory.Smith@state.nm.us>; Clara Cardoza <ccardoza@hilcorp.com>
Subject: Eaton A #1R



District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 27379

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 27379
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	2/22/2022