# Executive Summary – Incident #nAPP2409532196

Hilcorp operations personnel identified a release at the San Juan 30-6 Unit 438 wellsite (API 30-039-24302) on 4/2/2024. During routine site visits, operator identified discovered water had filled and spilled over the top of a below ground tank (BGT) into the cribbing/containment. There was also existing precipitation in the containment. Approximately 10 bbls of produced water was removed via vac truck from the cribbing/containment and hauled offsite for disposal. There was no immediate danger to the public and no fire occurred because of this release.

Samples were collected to delineate the extent of impacts around the tank. Twelve (12) grab samples were collected on April 25, 2024. Analytical results from this sampling event were all below NMOCD action criteria noted in NMAC 19.15.29 Table 1. Sample results are included at the end of this summary report. No additional remediation activities were conducted.

As part of this closure request, Hilcorp would like to request a variance from the requirement to collect a 5-point composite sample cited in NMAC 19.15.29.12.D(1). Hilcorp believes grab samples collected at the surface, one foot and two feet below ground surface are adequately representative of the release area.

# Scaled Site Map

Lat: 36.82866 Long: -107.41058 San Juan 30-6 #438 Wellsite API: 30-039-24302



Ν

Release Area

Released to Imaging: 8/15/2024 2:57:34 PM

# Received by OCD: 6/20/2024 1:29:07 PM Depth to groundwater determination.

BGT Siting Criteria for San Juan 30-6 #438; <u>estimated</u> <u>depth to</u> <u>groundwater is</u> <u>approximately 73'.</u>

	Burlington Resources Oil & Gas Company, LP BGT Modification
Burlington is	requesting to modify the below-grade tank permit for SAN JUAN 30-6 UNIT 438.
provided. Bu	ade tank was registered on 9/30/2004 as an existing below-grade tank with siting criteria rlington would like to modify the permit with latitude/longitude of the existing below- well as the Design Mainteners & Comparing and Closure Plan.
grade tank as	well as the Design, Maintenance & Operating and Closure Plan.
	ater at the site was previously ranked for this site as:
	ater at the site was previously ranked for this site as: < 50'

San Juan 30-6 # 29 has a depth to groundwater of 223'. This well is approximately 0.25 miles north of and 150' higher elevation than the San Juan 30-6 #438.



The estimated depth to ground water at this point is 223 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 767 feet to the southeast and is classified by the USGS as an intermittent stream. The nearest perrenial stream is 2,954 feet to the southwest. The nearest water body is 3,581 feet to the southwest. It is classified by the USGS as a perennial lake and is 0.2 acres in size. The nearest spring is 41,678 feet to the southwest. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 3,890 feet to the northwest. The nearest wetland is a 9.5 acre Riverine located 2,924 feet to the southwest. The slope at this location is 5 degrees to the east as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION -- Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Vessilla-Menefee-Orlie complex, 1 to 30 percent slopes' and is well drained and not hydric with severe erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 4.3 miles to the east as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

# Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release







Note 1: Release point is not within 300 ft of a continuously flowing watercourse or other significant water course.

Note 2: The lateral extents of the release point are not shown to be within 300 feet of a mapped wetland.

Distance to mapped water wells: mapped water wells are approximately 1.3 miles from the San Juan 30-6 #438.



**Note:** The lateral extents of the release point are not shown to be within 500 ft of a spring or domestic freshwater well used by less than 5 households (or stock watering) or within 1,000 ft of any freshwater water well or spring.

#### Released to Imaging: 8/15/2024 2:57:34 PM

# Data table of soil contaminant concentrations

						San Juan 30-0	5 Unit 438 L	aboratory R	esults			
Sample Name	Sample Date	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)
19.15.29 Table 1 C	losure Criteria	10,000	4	-	-	2,500	1,000	10	-	-	-	50
S-1 0-6"	4/25/2024	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-1 1'	4/25/2024	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-1 2'	4/25/2024	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2 0-6"	4/25/2024	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2 1'	4/25/2024	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2 2'	4/25/2024	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-3 0-6"	4/25/2024	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-3 1'	4/25/2024	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-3 2'	4/25/2024	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-4 0-6"	4/25/2024	640	9	ND	97	106	9	ND	ND	ND	ND	ND
S-4 1'	4/25/2024	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-4 2'	4/25/2024	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Confirmation samples were collected on 4/25/2024 by Hilcorp personnel. All sample results were below Table 1 Closure Criteria.

### Received by OCD: 6/20/2024 1:29:07 PM

# San Juan 30-6 #438 Field Sample Diagram



Released to Imaging: 8/15/2024 2:57:34 PM

# Site Photos



# Site Photos



Ν

# Topographic Map



# Analytical Data.

See attached Lab Reports.

Received by OCD: 6/20/2024 1:29:07 PM



**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Samantha Grabert Hilcorp Energy PO BOX 4700 Farmington, New Mexico 87499 Generated 5/6/2024 11:39:33 AM

# **JOB DESCRIPTION**

SJ 30-6 Unit 438

# **JOB NUMBER**

885-3545-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109





# **Eurofins Albuquerque**

# **Job Notes**

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

# Authorization

Authorized for release by

(505)345-3975

Andy Freeman, Business Unit Manager andy.freeman@et.eurofinsus.com

Generated 5/6/2024 11:39:33 AM

Laboratory Job ID: 885-3545-1

# **Table of Contents**

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	18
QC Association Summary	22
Lab Chronicle	25
Certification Summary	29
Chain of Custody	30
Receipt Checklists	32

### **Definitions/Glossary**

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438 Job ID: 885-3545-1

Glossary		 3
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	5
CFU	Colony Forming Unit	5
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

### **Case Narrative**

Job ID: 885-3545-1

### Job ID: 885-3545-1

method.

quality control (QC) is further explained in narrative comments.

unless attributed to a dilution or otherwise noted in the narrative.

### **Eurofins Albuquerque**

#### Job Narrative 885-3545-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The samples were received on 4/27/2024 6:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

#### Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### **Diesel Range Organics**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-1

Matrix: Solid

5

Client Sample ID: S-1 0-6' Date Collected: 04/25/24 10:30 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

\_

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/29/24 13:26	04/30/24 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/29/24 13:26	04/30/24 15:02	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	1					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 15:02	1
Ethylbenzene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 15:02	1
Toluene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 15:02	1
Kylenes, Total	ND		0.099	mg/Kg		04/29/24 13:26	04/30/24 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 15:02	1
Method: SW846 8015D - Diesel R	ange Organics	6 (DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/01/24 14:11	05/02/24 09:32	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/01/24 14:11	05/02/24 09:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			05/01/24 14:11	05/02/24 09:32	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
	Desult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quaimer	RL	Unit	U	Fiepaieu	Analyzeu	DirFac

Released to Imaging: 8/15/2024 2:57:34 PM

Client: Hilcorp Energy

Project/Site: SJ 30-6 Unit 438

### **Client Sample Results**

5

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-2

Matrix: Solid

Date Collected: 04/25/24 10:40 Date Received: 04/27/24 06:25

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/29/24 13:26	04/30/24 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/29/24 13:26	04/30/24 16:08	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:26	04/30/24 16:08	
Ethylbenzene	ND		0.047	mg/Kg		04/29/24 13:26	04/30/24 16:08	
Toluene	ND		0.047	mg/Kg		04/29/24 13:26	04/30/24 16:08	
Xylenes, Total	ND		0.094	mg/Kg		04/29/24 13:26	04/30/24 16:08	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 16:08	
Method: SW846 8015D - Diesel R	Range Organics	; (DRO) (GC	<b>)</b>					
			/					
		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte			·	Unit mg/Kg	<u>D</u>	Prepared 05/01/24 14:11	Analyzed 05/02/24 10:09	Dil Fa
Analyte Diesel Range Organics [C10-C28]	Result				<u> </u>	· · ·		Dil Fa
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	Result ND	Qualifier	RL 8.7	mg/Kg	<u> </u>	05/01/24 14:11	05/02/24 10:09	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	<b>RL</b> 8.7 43	mg/Kg	<u> </u>	05/01/24 14:11 05/01/24 14:11	05/02/24 10:09 05/02/24 10:09	Dil Fa
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND <b>%Recovery</b> 103	Qualifier	RL           8.7           43           Limits           62 - 134	mg/Kg	<u> </u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:09 05/02/24 10:09 Analyzed	Dil Fa
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	Result ND ND %Recovery 103 Chromatograp	Qualifier	RL           8.7           43           Limits           62 - 134	mg/Kg	<u>D</u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:09 05/02/24 10:09 Analyzed	Dil Fa

5

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-3

Matrix: Solid

Date Collected: 04/25/24 10:50 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

\_

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/29/24 13:26	04/30/24 17:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 244			04/29/24 13:26	04/30/24 17:13	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:26	04/30/24 17:13	1
Ethylbenzene	ND		0.048	mg/Kg		04/29/24 13:26	04/30/24 17:13	1
Toluene	ND		0.048	mg/Kg		04/29/24 13:26	04/30/24 17:13	1
Xylenes, Total	ND		0.096	mg/Kg		04/29/24 13:26	04/30/24 17:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 17:13	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC	)					
		<mark>s (DRO) (GC</mark> Qualifier	) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte				Unit mg/Kg	D	Prepared 05/01/24 14:11	Analyzed	Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result		RL		<u>D</u>			Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ResultND	Qualifier	<b>RL</b> 9.0	mg/Kg	<u>D</u>	05/01/24 14:11	05/02/24 10:21	1
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	<b>RL</b> 9.0 45	mg/Kg	<u>D</u>	05/01/24 14:11 05/01/24 14:11	05/02/24 10:21 05/02/24 10:21	1 1 Dil Fac
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND <b>%Recovery</b> 99	Qualifier Qualifier	RL           9.0           45           Limits           62 - 134	mg/Kg	<u>D</u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:21 05/02/24 10:21 Analyzed	1 1 Dil Fac
Method: SW846 8015D - Diesel R Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	Result ND ND KRecovery 99 Chromatograp	Qualifier Qualifier	RL           9.0           45           Limits           62 - 134	mg/Kg	<u>D</u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:21 05/02/24 10:21 Analyzed	Dil Fac

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-4

Matrix: Solid

5

Client Sample ID: S-2 0-6' Date Collected: 04/25/24 11:00 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

\_

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/29/24 13:26	04/30/24 17:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/29/24 13:26	04/30/24 17:35	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 17:35	1
Ethylbenzene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 17:35	1
Foluene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 17:35	1
(ylenes, Total	ND		0.098	mg/Kg		04/29/24 13:26	04/30/24 17:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 17:35	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3	mg/Kg		05/01/24 14:11	05/02/24 10:34	1
			41	mg/Kg		05/01/24 14:11	05/02/24 10:34	4
Motor Oil Range Organics [C28-C40]	ND			mg/rtg				1
	ND %Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Surrogate		Qualifier		ingrig		Prepared 05/01/24 14:11	Analyzed	Dil Fac
Surrogate Di-n-octyl phthalate (Surr)	%Recovery 96		Limits 62 - 134					Dil Fac
Motor Oil Range Organics [C28-C40] <i>Surrogate</i> <i>Di-n-octyl phthalate (Surr)</i> Method: EPA 300.0 - Anions, Ion Analyte	%Recovery 96 Chromatograp		Limits 62 - 134	Unit	D			Dil Fac

Released to Imaging: 8/15/2024 2:57:34 PM

Job ID: 885-3545-1

### Lab Sample ID: 885-3545-5 Matrix: Solid

Client Sample ID: S-2 1' Date Collected: 04/25/24 11:10 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/29/24 13:26	04/30/24 17:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			04/29/24 13:26	04/30/24 17:56	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:26	04/30/24 17:56	1
Ethylbenzene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 17:56	1
Toluene	ND		0.049	mg/Kg		04/29/24 13:26	04/30/24 17:56	1
Kylenes, Total	ND		0.098	mg/Kg		04/29/24 13:26	04/30/24 17:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 17:56	1
	ange Organice	s (DRO) (GC	)					
wietnoa: Svv846 8015D - Diesei K	ange organie.							
	•••	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•••		RL 8.1	Unit mg/Kg	<u> </u>	Prepared 05/01/24 14:11	Analyzed 05/02/24 10:46	Dil Fac
Analyte Diesel Range Organics [C10-C28]	Result				D	·		Dil Fac
Analyte Diesel Range Organics [C10-C28] Notor Oil Range Organics [C28-C40]	_ ResultND	Qualifier	8.1	mg/Kg	<u>D</u>	05/01/24 14:11	05/02/24 10:46	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	8.1	mg/Kg	<u> </u>	05/01/24 14:11 05/01/24 14:11	05/02/24 10:46 05/02/24 10:46	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND ND ND 99	Qualifier	8.1 41 <u>Limits</u> 62 - 134	mg/Kg	<u> </u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:46 05/02/24 10:46 <b>Analyzed</b>	1
Method: SW846 8015D - Diesel R Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	Result ND ND <i>%Recovery</i> 99 Chromatograp	Qualifier	8.1 41 <u>Limits</u> 62 - 134	mg/Kg	<u>D</u>	05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 10:46 05/02/24 10:46 <b>Analyzed</b>	Dil Fac

sults

Client: Hilcorp Energy

Di-n-octyl phthalate (Surr)

Analyte

Project/Site: SJ 30-6 Unit 438

Date Collected: 04/25/24 11:20

Date Received: 04/27/24 06:25

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Result Qualifier

97

### **Client Sample Results**

RL

Unit

D

Prepared

Dil Fac

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-6

Analyzed

05/01/24 14:11 05/02/24 10:58

Matrix: Solid

1

,			••=	•	-		/	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/29/24 13:26	04/30/24 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/29/24 13:26	04/30/24 18:18	1
Method: SW846 8021B - Volatile O	rganic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 18:18	1
Ethylbenzene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 18:18	1
Toluene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 18:18	1
Xylenes, Total	ND		0.10	mg/Kg		04/29/24 13:26	04/30/24 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 18:18	1
- Method: SW846 8015D - Diesel Ra	nge Organics	s (DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3	mg/Kg		05/01/24 14:11	05/02/24 10:58	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		05/01/24 14:11	05/02/24 10:58	1

_ Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.0	mg/Kg			05/05/24 04:30	1

62 - 134

Client: Hilcorp Energy

Project/Site: SJ 30-6 Unit 438

Client Sample ID: S-3 0-6'

Date Collected: 04/25/24 11:30

## **Client Sample Results**

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-7

Matrix: Solid

Method: SW846 8015D - Gasoline Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/29/24 13:26	04/30/24 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 244			04/29/24 13:26	04/30/24 18:40	1
Method: SW846 8021B - Volatile (	Organic Comp	ounds (GC)	1					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 18:40	1
Ethylbenzene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 18:40	1
Toluene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 18:40	1
Xylenes, Total	ND		0.099	mg/Kg		04/29/24 13:26	04/30/24 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 18:40	1
∑ Method: SW846 8015D - Diesel R	ance Organic	ء (DRO) (GC	3					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		05/01/24 14:11	05/02/24 11:10	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		05/01/24 14:11	05/02/24 11:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
	96		62 - 134			05/01/24 14:11	05/02/24 11:10	1

Analyte	Result Qualifie	r RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29	5.0	mg/Kg			05/05/24 04:36	1

**Eurofins Albuquerque** 

Released to Imaging: 8/15/2024 2:57:34 PM

5

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-8

Matrix: Solid

Date Collected: 04/25/24 11:40 Date Received: 04/27/24 06:25

Client: Hilcorp Energy

Project/Site: SJ 30-6 Unit 438

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/29/24 13:26	04/30/24 19:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 244			04/29/24 13:26	04/30/24 19:01	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/29/24 13:26	04/30/24 19:01	1
Ethylbenzene	ND		0.046	mg/Kg		04/29/24 13:26	04/30/24 19:01	1
Toluene	ND		0.046	mg/Kg		04/29/24 13:26	04/30/24 19:01	1
Xylenes, Total	ND		0.092	mg/Kg		04/29/24 13:26	04/30/24 19:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 19:01	1
Method: SW846 8015D - Diesel R	ange Organics	s (DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/01/24 14:11	05/02/24 11:22	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/01/24 14:11	05/02/24 11:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			05/01/24 14:11	05/02/24 11:22	1
		why Solubl	•					
Method: EPA 300.0 - Anions, Ion	Chromatogran	niy - Solubi	<b>G</b>					
Method: EPA 300.0 - Anions, Ion Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

5

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-9

Matrix: Solid

Date Collected: 04/25/24 11:50
Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/29/24 13:26	04/30/24 19:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/29/24 13:26	04/30/24 19:23	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 19:23	1
Ethylbenzene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 19:23	1
Toluene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 19:23	1
Xylenes, Total	ND		0.10	mg/Kg		04/29/24 13:26	04/30/24 19:23	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)						04/29/24 13:26	04/30/24 19:23	
Method: SW846 8015D - Diesel R	Range Organics	s (DRO) (GC	)					
					D	Prepared	A	
Analyte	Result	Qualifier	RL	Unit		ricparca	Analyzed	Dil Fac
· · · · · · · · · · · · · · · · · · ·	Result	Qualifier	<u></u> 9.2	Unit mg/Kg		05/01/24 14:11	05/02/24 11:35	
Diesel Range Organics [C10-C28]		Qualifier				<u> </u>		
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ND		9.2	mg/Kg		05/01/24 14:11	05/02/24 11:35	
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	ND ND		9.2 46	mg/Kg		05/01/24 14:11 05/01/24 14:11	05/02/24 11:35 05/02/24 11:35	
Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND ND <b>%Recovery</b> 97	Qualifier	9.2 46 <u>Limits</u> 62 - 134	mg/Kg		05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 11:35 05/02/24 11:35 <b>Analyzed</b>	
Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	ND ND %Recovery 97 Chromatograp	Qualifier	9.2 46 <u>Limits</u> 62 - 134	mg/Kg		05/01/24 14:11 05/01/24 14:11 <b>Prepared</b>	05/02/24 11:35 05/02/24 11:35 <b>Analyzed</b>	Dil Fac

Released to Imaging: 8/15/2024 2:57:34 PM

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-10

Matrix: Solid

Client Sample ID: S-4 0-6' Date Collected: 04/25/24 12:00 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/29/24 13:29	04/30/24 19:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/29/24 13:29	04/30/24 19:45	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	1					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:29	04/30/24 19:45	1
Ethylbenzene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 19:45	
Toluene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 19:45	
Xylenes, Total	ND		0.096	mg/Kg		04/29/24 13:29	04/30/24 19:45	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 19:45	
Method: SW846 8015D - Diesel F	Range Organics	; (DRO) (GC	;)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	9.2		9.1	mg/Kg		05/01/24 14:11	05/02/24 11:47	
Motor Oil Range Organics [C28-C40]	97		46	mg/Kg		05/01/24 14:11	05/02/24 11:47	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	98		62 - 134			05/01/24 14:11	05/02/24 11:47	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
			5.1					

 $\begin{bmatrix} 1 \\ 2 \\ 0 \\ 3 \\ - \\ 4 \\ 5 \\ - \\ 5 \\ 6 \end{bmatrix}$ 

5

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-11

Matrix: Solid

Date Collected: 04/25/24 12:10
Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438 Client Sample ID: S-4 1'

Client: Hilcorp Energy

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/29/24 13:29	04/30/24 20:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/29/24 13:29	04/30/24 20:28	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/29/24 13:29	04/30/24 20:28	1
Ethylbenzene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 20:28	1
Toluene	ND		0.048	mg/Kg		04/29/24 13:29	04/30/24 20:28	1
Xylenes, Total	ND		0.097	mg/Kg		04/29/24 13:29	04/30/24 20:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 20:28	1
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diesel F	Range Organics	; (DRO) (GC	)			04/29/24 13:29	04/30/24 20:28	1
Method: SW846 8015D - Diesel F		<mark>; (DRO) (GC</mark> Qualifier	) RL	Unit	D	04/29/24 13:29 Prepared	04/30/24 20:28 Analyzed	1 Dil Fac
Method: SW846 8015D - Diesel F Analyte				Unit mg/Kg	<u>D</u>			,
Method: SW846 8015D - Diesel F Analyte Diesel Range Organics [C10-C28]	Result		RL		<u> </u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015D - Diesel F Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40]	ResultND		<b>RL</b> 9.3	mg/Kg	<u>D</u>	Prepared 05/01/24 14:11	Analyzed	Dil Fac
Method: SW846 8015D - Diesel F Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate	Result ND ND	Qualifier	<b>RL</b> 9.3 46	mg/Kg	<u> </u>	Prepared 05/01/24 14:11 05/01/24 14:11	Analyzed 05/02/24 11:59 05/02/24 11:59	Dil Fac 1 1 Dil Fac
Method: SW846 8015D - Diesel F Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	Result ND ND <b>%Recovery</b> 99	Qualifier Qualifier	RL           9.3           46           Limits           62 - 134	mg/Kg	<u>D</u>	Prepared 05/01/24 14:11 05/01/24 14:11 Prepared	Analyzed 05/02/24 11:59 05/02/24 11:59 Analyzed	Dil Fac
4-Bromofluorobenzene (Surr) Method: SW846 8015D - Diesel F Analyte Diesel Range Organics [C10-C28] Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	Result ND ND %Recovery 99 Chromatograp	Qualifier Qualifier	RL           9.3           46           Limits           62 - 134	mg/Kg	<u>D</u>	Prepared 05/01/24 14:11 05/01/24 14:11 Prepared	Analyzed 05/02/24 11:59 05/02/24 11:59 Analyzed	Dil Fac

Job ID: 885-3545-1

### Lab Sample ID: 885-3545-12 Matrix: Solid

Date Collected: 04/25/24 12:20 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/29/24 13:29	04/30/24 20:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		15 - 244			04/29/24 13:29	04/30/24 20:50	
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/29/24 13:29	04/30/24 20:50	
Ethylbenzene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 20:50	
Toluene	ND		0.047	mg/Kg		04/29/24 13:29	04/30/24 20:50	
Xylenes, Total	ND		0.093	mg/Kg		04/29/24 13:29	04/30/24 20:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)						04/29/24 13:29	04/30/24 20:50	
Method: SW846 8015D - Diesel F	Range Organics	(DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/01/24 14:11	05/02/24 12:12	
	ne in e							
	ND		48	mg/Kg		05/01/24 14:11	05/02/24 12:12	
Motor Oil Range Organics [C28-C40]		Qualifier	48 Limits	mg/Kg		05/01/24 14:11 Prepared	05/02/24 12:12 Analyzed	
Motor Oil Range Organics [C28-C40] Surrogate	ND	Qualifier		mg/Kg				
Motor Oil Range Organics [C28-C40] Surrogate Di-n-octyl phthalate (Surr)	ND <u>%Recovery</u> 101		Limits 62 - 134	mg/Kg		Prepared	Analyzed	
Motor Oil Range Organics [010 020] Surrogate Di-n-octyl phthalate (Surr) Method: EPA 300.0 - Anions, Ion Analyte	ND <u>%Recovery</u> 101 Chromatograp		Limits 62 - 134	mg/Kg Unit	D	Prepared	Analyzed	Dil Fac

Job ID: 885-3545-1

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

### Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-4053/1-A										Client S	Sample ID:	Methoo	l Blan
Matrix: Solid											Prep 1	Type: To	otal/N/
Analysis Batch: 4241											Pre	p Batcl	h: <b>405</b>
		MB MB											
Analyte	R	esult Qua	lifier	RL		Unit		D	Р	repared	Analyz	ed	Dil Fa
Gasoline Range Organics [C6 - C10]	_	ND		5.0		mg/K	ίg	_	04/2	9/24 13:2	6 04/30/24	14:41	
		MB MB											
Surrogate	%Reco		lifier	Limits					Р	repared	Analyz	red	Dil Fa
4-Bromofluorobenzene (Surr)		100		15 - 244						9/24 13:2			
Lab Sample ID: LCS 885-4053/3-	Α							С	lient	Sample	e ID: Lab Co		
Matrix: Solid												ype: To	
Analysis Batch: 4241												p Batcl	h: 405
			Spi			LCS			_		%Rec		
Analyte			Add			Qualifier	Unit		<u>D</u>	%Rec	Limits		
Gasoline Range Organics [C6 - C10]			25	5.0	27.4		mg/Kg			110	70 - 130		
	LCS	LCS											
Surrogate	%Recovery	Qualifier	Limit										
4-Bromofluorobenzene (Surr)	223		15 - 2	44									
Lab Sample ID: 885-3545-1 MS										(	Client Samp	ole ID: S	5-1 0-(
Matrix: Solid												Type: To	
Analysis Batch: 4241												p Batcl	
	Sample	Sample	Spi	ike	MS	MS					%Rec		
Analyte		Qualifier	Add			Qualifier	Unit		D	%Rec	Limits		
Gasoline Range Organics [C6 - C10]	ND			4.6	27.5		mg/Kg		_	112	70 - 130		
-	MS												
Surrogate	%Recovery	Qualifier	Limit										
4-Bromofluorobenzene (Surr)	230		15 - 2	44									
Lab Sample ID: 885-3545-1 MSD										C	Client Samp	ole ID: S	S-1 0-6
Matrix: Solid											Prep 1	Type: To	otal/N
Analysis Batch: 4241											Pre	p Batcl	h: 405
	Sample	Sample	Spi	ike	MSD	MSD					%Rec		RP
Analyte	Result	Qualifier	Add	ed	Result	Qualifier	Unit		D	%Rec	Limits	RPD	Lim
Gasoline Range Organics [C6 -	ND		24	4.6	27.4		mg/Kg		_	112	70 - 130	0	2
	MSD	MSD											
Surrogate	%Recovery		Limit	s									
4-Bromofluorobenzene (Surr)	228		15 - 2	44									
lethod: 8021B - Volatile Org	janic Coi	npound	ds (GC)										
-										Olivert	Demole ID-	Matha	Diar
Lab Sample ID: MB 885-4053/1-A	L .									Client	Sample ID:		
Matrix: Solid												Type: To	
Analysis Batch: 4242		MB									Pre	p Batcl	n: 405
Analysia	_	MB MB esult Qua	lifian	RL		Unit		D	-	repared	Analyz	ام م	Dil Fa
Analyte	R	esuit (JIIA	IIIIAr										

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/29/24 13:26	04/30/24 14:41	1
Ethylbenzene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 14:41	1
Toluene	ND		0.050	mg/Kg		04/29/24 13:26	04/30/24 14:41	1

**Eurofins Albuquerque** 

Client: Hilcorp Energy

Job ID: 885-3545-1

Project/Site: SJ 30-6 Unit 438

Lab Sample ID: MB 885-4053/1-A									Client Sa	ample ID: Me	hod	Blan
Matrix: Solid										Ргер Тур	e: To	tal/N
Analysis Batch: 4242										Prep E	atch	: 405
		MB MB										
Analyte	Res	ult Qualifier	RL		Unit		D	Pi	repared	Analyzed		Dil Fa
Xylenes, Total		ND	0.10		mg/K	g		04/29	9/24 13:26	04/30/24 14:4	1	
		MB MB										
Surrogate		ery Qualifier	Limits					PI	repared	Analyzed		Dil Fa
4-Bromofluorobenzene (Surr)		<u> </u>					-	04/2	9/24 13:26	04/30/24 14:4	1	
Lab Sample ID: LCS 885-4053/4-A							CI	iont	Samplo	ID: Lab Cont		amnl
Matrix: Solid								iem	Sample	Prep Typ		
Analysis Batch: 4242			Spike	1.00	LCS					Prep E %Rec	atch	: 405
Analysia			Spike			11		-	0/ Dee			
Analyte			Added		Qualifier	Unit		<u>D</u>	<u>%Rec</u>	Limits		
Benzene			1.00	0.957		mg/Kg			96 05	70 - 130		
Ethylbenzene			1.00	0.954		mg/Kg			95	70 - 130		
n&p-Xylene			2.00	1.91		mg/Kg			95	70 - 130		
p-Xylene			1.00	0.958		mg/Kg			96	70 - 130		
			1.00	0.947		mg/Kg			95	70 - 130		
Xylenes, Total			3.00	2.87		mg/Kg			96	70 - 130		
Lab Sample ID: 885-3545-2 MS										Client Sampl	e ID:	S-1
Matrix: Solid										Prep Typ		
Analysis Batch: 4242										Prep E		
······,·······························	Sample \$	Sample	Spike	MS	MS					%Rec		
Analyte	Result (	-	Added	Result	Qualifier	Unit		D	%Rec	Limits		
Benzene	ND		0.944	0.942		mg/Kg		_	100	70 - 130		
Ethylbenzene	ND		0.944	0.962		mg/Kg			102	70 - 130		
m&p-Xylene	ND		1.89	1.93		mg/Kg			102	70 - 130		
o-Xylene	ND		0.944	0.956		mg/Kg			102	70 - 130		
Toluene	ND		0.944	0.949		mg/Kg			101	70 - 130		
	ND		2.83	2.88					101	70 - 130 70 - 130		
Xylenes, Total	ND		2.03	2.00		mg/Kg			102	70 - 130		
Lab Sample ID: 885-3545-2 MSD										Client Sampl		
Matrix: Solid										Ргер Тур		
Analysis Batch: 4242										Prep E	atch	
	Sample \$	•	Spike		MSD					%Rec		RF
Analyte	Result	Qualifier	Added		Qualifier	Unit		<u>D</u>	%Rec		RPD	Lim
Benzene	ND		0.936	0.904		mg/Kg			96	70 - 130	4	:
Ethylbenzene	ND		0.936	0.926		mg/Kg			99	70 - 130	4	
m&p-Xylene	ND		1.87	1.85		mg/Kg			99	70 - 130	4	
o-Xylene	ND		0.936	0.921		mg/Kg			98	70 - 130	4	
Toluene	ND		0.936	0.912		mg/Kg			97	70 - 130	4	:
Xylenes, Total	ND		2.81	2.77		mg/Kg			99	70 - 130	4	:
lethod: 8015D - Diesel Range	Organi	cs (DRO) (C	SC)									
Lab Sample ID: MB 885-4205/1-A									Client S	ample ID: Me	hod	Riar
Matrix: Solid									Sherit 3			
										Prep Typ		
Analysis Batch: 4310										Prep E	atch	: 420
Analyte		MB MB sult Qualifier	RL		Unit		D	D.	repared	Analyzed		Dil Fa
	Res	son soudliner	RI		Unit			~ ~ 1	euareo	AUDIVZEO		

05/02/24 09:08

05/01/24 14:11

Diesel Range Organics [C10-C28]

10

mg/Kg

ND

1

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

# **QC Sample Results**

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438 Job ID: 885-3545-1

Lab Sample ID: MB 885-4205/1 Matrix: Solid Analysis Batch: 4310	- <b>A</b>								Client S		ype: To	d Blank otal/NA h: 4205
		MB MB									•	
Analyte	R	esult Qualifier		RL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Motor Oil Range Organics [C28-C40]		ND		50	mg/ŀ	٢g		05/0	)1/24 14:11	05/02/24	09:08	1
		MB MB										
Surrogate	%Reco	overy Qualifier	Limi	ts				P	repared	Analyz	ed	Dil Fac
Di-n-octyl phthalate (Surr)		104	62 -	134			-	05/0	01/24 14:11	1 05/02/24	09:08	1
Lab Sample ID: LCS 885-4205/	2-0						CI	iont	Sample	BID: Lab Co	ontrol 9	Samnlo
Matrix: Solid									Compre			otal/NA
Analysis Batch: 4310												h: 4205
			Spike	LCS	LCS					%Rec	•	
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Diesel Range Organics			50.0	46.1		mg/Kg			92	60 - 135		
[C10-C28]												
	LCS	LCS										
Surrogate	%Recovery	Qualifier	Limits									
Di-n-octyl phthalate (Surr)	101		62 - 134									
Lab Sample ID: 885-3545-1 MS										lient Samp		6 1 0 C'
Matrix: Solid												otal/NA
Analysis Batch: 4310												h: 4205
Analysis Batch. 4010	Sample	Sample	Spike	MS	MS					%Rec	p Date	
Analyte	•	Qualifier	Added		Qualifier	Unit		D	%Rec	Limits		
Diesel Range Organics	ND		49.2	42.7		mg/Kg		_	87	44 - 136		
[C10-C28]												
	MS	MS										
Surrogate	%Recovery		Limits									
Di-n-octyl phthalate (Surr)	99		62 - 134									
Lab Sample ID: 885-3545-1 MS	n									Client Samp		S 1 0 6'
Matrix: Solid	2											otal/NA
Analysis Batch: 4310												h: 4205
	Sample	Sample	Spike	MSD	MSD					%Rec	p Date	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND		47.2	42.4		mg/Kg		_	90	44 - 136	1	32
	Men	MSD										
Surrogate	%Recovery		Limits									
Di-n-octyl phthalate (Surr)	98		62 - 134									
 Method: 300.0 - Anions, Io	n Chromat	ography										
Lab Sample ID: MB 990 70037	14 A								Client S	Cample ID:	Mother	
Lab Sample ID: MB 880-79937/ Matrix: Solid	1-A								Chent S	Sample ID:		
										Fieb	Type: 3	Soluble
Analysis Ratch: 70066												
Analysis Batch: 79956		MB MR										
Analysis Batch: 79956	R	MB MB esult Qualifier		RL	Unit		D	Р	repared	Analyz	ed	Dil Fac

5 6 7

Job ID: 885-3545-1

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-79937/2-/ Matrix: Solid	4						Client	Sample	ID: Lab Co Prep	ontrol Sa Type: So	
Analysis Batch: 79956										.,,	
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	239		mg/Kg		95	90 - 110		
- Lab Sample ID: LCSD 880-79937/3	- <b>A</b>					Clie	nt Sam	ple ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid									Prep	Type: Se	oluble
Analysis Batch: 79956											
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	238		mg/Kg		95	90 - 110	0	20
- Lab Sample ID: 885-3545-7 MS								c	lient Samp	ole ID: S	-3 0-6'
Matrix: Solid										Type: So	
Analysis Batch: 79956											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	29		249	275		mg/Kg		99	90 - 110		
Lab Sample ID: 885-3545-7 MSD								c	lient Samp	ole ID: S	-3 0-6'
Matrix: Solid									Prep	Type: So	oluble
Analysis Batch: 79956											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	29		249	275		mg/Kg		99	90 - 110	0	20

Released to Imaging: 8/15/2024 2:57:34 PM

**Client Sample ID** 

S-1 0-6'

S-1 1'

S-1 2'

S-2 1'

S-2 2'

S-3 1'

S-3 2'

S-4 1'

S-4 2'

S-1 0-6'

S-1 0-6'

S-1 1'

S-1 1'

Method Blank

Lab Control Sample

Lab Control Sample

S-4 0-6'

S-3 0-6'

S-2 0-6'

### **QC Association Summary**

Prep Type

Total/NA

Matrix

Solid

Method

5030C

5030C 5030C

5030C

5030C

**Client: Hilcorp Energy** Project/Site: SJ 30-6 Unit 438

**GC VOA** 

Prep Batch: 4053

Lab Sample ID

885-3545-1

885-3545-2

885-3545-3

885-3545-4

885-3545-5

885-3545-6

885-3545-7

885-3545-8

885-3545-9

885-3545-10

885-3545-11

885-3545-12

MB 885-4053/1-A

LCS 885-4053/3-A

LCS 885-4053/4-A

885-3545-1 MS

885-3545-2 MS

885-3545-1 MSD

885-3545-2 MSD

Prep Batch

7
8
9

Analys	is E	Batc	h: 4	4241

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Total/NA	Solid	8015D	4053
885-3545-2	S-1 1'	Total/NA	Solid	8015D	4053
885-3545-3	S-1 2'	Total/NA	Solid	8015D	4053
885-3545-4	S-2 0-6'	Total/NA	Solid	8015D	4053
885-3545-5	S-2 1'	Total/NA	Solid	8015D	4053
885-3545-6	S-2 2'	Total/NA	Solid	8015D	4053
885-3545-7	S-3 0-6'	Total/NA	Solid	8015D	4053
885-3545-8	S-3 1'	Total/NA	Solid	8015D	4053
885-3545-9	S-3 2'	Total/NA	Solid	8015D	4053
885-3545-10	S-4 0-6'	Total/NA	Solid	8015D	4053
885-3545-11	S-4 1'	Total/NA	Solid	8015D	4053
885-3545-12	S-4 2'	Total/NA	Solid	8015D	4053
MB 885-4053/1-A	Method Blank	Total/NA	Solid	8015D	4053
LCS 885-4053/3-A	Lab Control Sample	Total/NA	Solid	8015D	4053
885-3545-1 MS	S-1 0-6'	Total/NA	Solid	8015D	4053
885-3545-1 MSD	S-1 0-6'	Total/NA	Solid	8015D	4053

#### Analysis Batch: 4242

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Total/NA	Solid	8021B	4053
885-3545-2	S-1 1'	Total/NA	Solid	8021B	4053
885-3545-3	S-1 2'	Total/NA	Solid	8021B	4053
885-3545-4	S-2 0-6'	Total/NA	Solid	8021B	4053
885-3545-5	S-2 1'	Total/NA	Solid	8021B	4053
885-3545-6	S-2 2'	Total/NA	Solid	8021B	4053
885-3545-7	S-3 0-6'	Total/NA	Solid	8021B	4053
885-3545-8	S-3 1'	Total/NA	Solid	8021B	4053
885-3545-9	S-3 2'	Total/NA	Solid	8021B	4053
885-3545-10	S-4 0-6'	Total/NA	Solid	8021B	4053

**Eurofins Albuquerque** 

<b>Received</b> i	by	<i>OCD</i> :	6/20/2024	1:29:07 PM

### **QC Association Summary**

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

### GC VOA (Continued)

### Analysis Batch: 4242 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-11	S-4 1'	Total/NA	Solid	8021B	4053
885-3545-12	S-4 2'	Total/NA	Solid	8021B	4053
MB 885-4053/1-A	Method Blank	Total/NA	Solid	8021B	4053
LCS 885-4053/4-A	Lab Control Sample	Total/NA	Solid	8021B	4053
885-3545-2 MS	S-1 1'	Total/NA	Solid	8021B	4053
885-3545-2 MSD	S-1 1'	Total/NA	Solid	8021B	4053

### GC Semi VOA

### Prep Batch: 4205

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Total/NA	Solid	SHAKE	
885-3545-2	S-1 1'	Total/NA	Solid	SHAKE	
885-3545-3	S-1 2'	Total/NA	Solid	SHAKE	
885-3545-4	S-2 0-6'	Total/NA	Solid	SHAKE	
885-3545-5	S-2 1'	Total/NA	Solid	SHAKE	
885-3545-6	S-2 2'	Total/NA	Solid	SHAKE	
885-3545-7	S-3 0-6'	Total/NA	Solid	SHAKE	
885-3545-8	S-3 1'	Total/NA	Solid	SHAKE	
885-3545-9	S-3 2'	Total/NA	Solid	SHAKE	
885-3545-10	S-4 0-6'	Total/NA	Solid	SHAKE	
885-3545-11	S-4 1'	Total/NA	Solid	SHAKE	
885-3545-12	S-4 2'	Total/NA	Solid	SHAKE	
MB 885-4205/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4205/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-3545-1 MS	S-1 0-6'	Total/NA	Solid	SHAKE	
885-3545-1 MSD	S-1 0-6'	Total/NA	Solid	SHAKE	

#### Analysis Batch: 4310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Total/NA	Solid	8015D	4205
885-3545-2	S-1 1'	Total/NA	Solid	8015D	4205
885-3545-3	S-1 2'	Total/NA	Solid	8015D	4205
885-3545-4	S-2 0-6'	Total/NA	Solid	8015D	4205
885-3545-5	S-2 1'	Total/NA	Solid	8015D	4205
885-3545-6	S-2 2'	Total/NA	Solid	8015D	4205
885-3545-7	S-3 0-6'	Total/NA	Solid	8015D	4205
885-3545-8	S-3 1'	Total/NA	Solid	8015D	4205
885-3545-9	S-3 2'	Total/NA	Solid	8015D	4205
885-3545-10	S-4 0-6'	Total/NA	Solid	8015D	4205
885-3545-11	S-4 1'	Total/NA	Solid	8015D	4205
885-3545-12	S-4 2'	Total/NA	Solid	8015D	4205
MB 885-4205/1-A	Method Blank	Total/NA	Solid	8015D	4205
LCS 885-4205/2-A	Lab Control Sample	Total/NA	Solid	8015D	4205
885-3545-1 MS	S-1 0-6'	Total/NA	Solid	8015D	4205
885-3545-1 MSD	S-1 0-6'	Total/NA	Solid	8015D	4205

HPLC/IC

#### Leach Batch: 79937

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Soluble	Solid	DI Leach	

Eurofins Albuquerque

Job ID: 885-3545-1

# **QC Association Summary**

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

### HPLC/IC (Continued)

### Leach Batch: 79937 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-2	S-1 1'	Soluble	Solid	DI Leach	
885-3545-3	S-1 2'	Soluble	Solid	DI Leach	
885-3545-4	S-2 0-6'	Soluble	Solid	DI Leach	
885-3545-5	S-2 1'	Soluble	Solid	DI Leach	
885-3545-6	S-2 2'	Soluble	Solid	DI Leach	
885-3545-7	S-3 0-6'	Soluble	Solid	DI Leach	
885-3545-8	S-3 1'	Soluble	Solid	DI Leach	
885-3545-9	S-3 2'	Soluble	Solid	DI Leach	
885-3545-10	S-4 0-6'	Soluble	Solid	DI Leach	
885-3545-11	S-4 1'	Soluble	Solid	DI Leach	
885-3545-12	S-4 2'	Soluble	Solid	DI Leach	
MB 880-79937/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-79937/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-79937/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-3545-7 MS	S-3 0-6'	Soluble	Solid	DI Leach	
885-3545-7 MSD	S-3 0-6'	Soluble	Solid	DI Leach	

#### Analysis Batch: 79956

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
885-3545-1	S-1 0-6'	Soluble	Solid	300.0	79937
885-3545-2	S-1 1'	Soluble	Solid	300.0	79937
885-3545-3	S-1 2'	Soluble	Solid	300.0	79937
885-3545-4	S-2 0-6'	Soluble	Solid	300.0	79937
885-3545-5	S-2 1'	Soluble	Solid	300.0	79937
885-3545-6	S-2 2'	Soluble	Solid	300.0	79937
885-3545-7	S-3 0-6'	Soluble	Solid	300.0	79937
885-3545-8	S-3 1'	Soluble	Solid	300.0	79937
885-3545-9	S-3 2'	Soluble	Solid	300.0	79937
885-3545-10	S-4 0-6'	Soluble	Solid	300.0	79937
885-3545-11	S-4 1'	Soluble	Solid	300.0	79937
885-3545-12	S-4 2'	Soluble	Solid	300.0	79937
MB 880-79937/1-A	Method Blank	Soluble	Solid	300.0	79937
LCS 880-79937/2-A	Lab Control Sample	Soluble	Solid	300.0	79937
LCSD 880-79937/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	79937
885-3545-7 MS	S-3 0-6'	Soluble	Solid	300.0	79937
885-3545-7 MSD	S-3 0-6'	Soluble	Solid	300.0	79937

Page 35 of 52

Job ID: 885-3545-1

Job ID: 885-3545-1

Lab Sample ID: 885-3545-1

# Project/Site: SJ 30-6 Unit 438

Client: Hilcorp Energy

#### Client Sample ID: S-1 0-6' Date Collected: 04/25/24 10:30 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 15:02
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 15:02
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 09:32
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 03:46

### Lab Sample ID: 885-3545-2

Matrix: Solid

8

### Client Sample ID: S-1 1'

Date Collected: 04/25/24 10:40 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 16:08
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 16:08
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 10:09
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:05

#### Client Sample ID: S-1 2' Date Collected: 04/25/24 10:50

### Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 17:13
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 17:13
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 10:21
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:11

#### Client Sample ID: S-2 0-6' Date Collected: 04/25/24 11:00 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 17:35

**Eurofins Albuquerque** 

Page 36 of 52

Matrix: Solid

Lab Sample ID: 885-3545-3

Matrix: Solid

Lab Sample ID: 885-3545-4 Matrix: Solid
5

8

Job ID: 885-3545-1

# Lab Sample ID: 885-3545-4

Lab Sample ID: 885-3545-5

Matrix: Solid

Matrix: Solid

### Date Collected: 04/25/24 11:00 Date Received: 04/27/24 06:25

Project/Site: SJ 30-6 Unit 438 Client Sample ID: S-2 0-6'

Client: Hilcorp Energy

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 17:35
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 10:34
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:17

### Client Sample ID: S-2 1' Date Collected: 04/25/24 11:10 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 17:56
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 17:56
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 10:46
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:24

### Client Sample ID: S-2 2' Date Collected: 04/25/24 11:20 Date Received: 04/27/24 06:25

Lab Sample ID: 885-3545-6

Lab Sample ID: 885-3545-7

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 18:18
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 18:18
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 10:58
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:30

### Client Sample ID: S-3 0-6' Date Collected: 04/25/24 11:30

Date Received: 04/27/24 06:25

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 18:40
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 18:40

**Eurofins Albuquerque** 

Page 37 of 52

### Lab Chronicle

Job ID: 885-3545-1

Lab Sample ID: 885-3545-7

Lab Sample ID: 885-3545-8

### Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

### Client Sample ID: S-3 0-6' Date Collected: 04/25/24 11:30

Date Received:	04/27/24	06:25

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 11:10
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:36

### Client Sample ID: S-3 1' Date Collected: 04/25/24 11:40 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 19:01
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 19:01
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 11:22
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 04:55

### Client Sample ID: S-3 2' Date Collected: 04/25/24 11:50 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 19:23
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:26
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 19:23
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 11:35
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:01

## Client Sample ID: S-4 0-6'

Date Collected: 04/25/24 12:00 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 19:45
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 19:45
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 11:47

# Lab Sample ID: 885-3545-9 Matrix: Solid

Lab Sample ID: 885-3545-10

Matrix: Solid

**Eurofins Albuquerque** 

Matrix: Solid

Matrix: Solid

8

### Lab Chronicle

Matrix: Solid

Matrix: Solid

Matrix: Solid

8

Lab Sample ID: 885-3545-10

Lab Sample ID: 885-3545-11

Lab Sample ID: 885-3545-12

### Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

#### Client Sample ID: S-4 0-6' Date Collected: 04/25/24 12:00 Date Received: 04/27/24 06:25

		•						
	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:20

### Client Sample ID: S-4 1'

#### Date Collected: 04/25/24 12:10 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 20:28
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 20:28
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 11:59
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:27

### Client Sample ID: S-4 2' Date Collected: 04/25/24 12:20 Date Received: 04/27/24 06:25

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8015D		1	4241	RA	EET ALB	04/30/24 20:50
Total/NA	Prep	5030C			4053	JR	EET ALB	04/29/24 13:29
Total/NA	Analysis	8021B		1	4242	RA	EET ALB	04/30/24 20:50
Total/NA	Prep	SHAKE			4205	PD	EET ALB	05/01/24 14:11
Total/NA	Analysis	8015D		1	4310	JU	EET ALB	05/02/24 12:12
Soluble	Leach	DI Leach			79937	SA	EET MID	05/03/24 13:21
Soluble	Analysis	300.0		1	79956	SMC	EET MID	05/05/24 05:33

### Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975 EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Hilcorp Energy Project/Site: SJ 30-6 Unit 438

### Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progr	am	Identification Number	Expiration Date	
New Mexico	State		NM9425, NM0901	02-26-25	
The following analytes	are included in this report, bu	ut the laboratory is not certif	ied by the governing authority. This list	t may include analytes	
for which the agency d	oes not offer certification.				
Analysis Method	Prep Method	Matrix	Analyte		
8015D	5030C	Solid	Gasoline Range Organics	[C6 - C10]	
8015D	SHAKE	Solid	Diesel Range Organics [C	10-C28]	
8015D	SHAKE	Solid	Motor Oil Range Organics	[C28-C40]	
8021B	5030C	Solid	Benzene		
8021B	5030C	Solid	Ethylbenzene		
8021B	5030C	Solid	Toluene		
8021B	5030C	Solid	Xylenes, Total		
Oregon	NELA	P	NM100001	02-26-25	
aboratory: Eurofins					

### Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

Page 40 of 52

Job ID: 885-3545-1

<i>Received by OCD: 0/20/2024</i>	1:27:07 FM					Page 41 0f 52
⊾ ل						1
						<u></u> 2
Second Second						cal rep
						analytic
<b>/IRON</b> S LAB mental.com erque, NM 8 505-345-4107 Request						a the
RON LLAB ILAB intal.con que, NiM 5-345-4	, (Present/Absent)					5
S I S I uerq 505	(AO)	V-im92) 0728				arly no
- ENVIRONM LYSIS LAB allenvironmental.com - Albuquerque, NM 8, Fax 505-345-4107 Analysis Request		(AOV) 0928				
HALL ENVIRON ANALYSIS LAB www.hallenvironmental.com kins NE - Albuquerque, NM 8 345-3975 Fax 505-345-41 Analysis Request	<sup>1</sup> , <u>402, PO4, 50</u>		╄╌┼╌┽			ta with
HALL ANAL www.hall kins NE - 345-3975	0 of 8270SIMS	RCRA 8 Mets				o ted da
<b>H</b> M Wkins 345-		bontem (Method				9 Sontrac
<ul> <li>HALL ENVIRONA ANALYSIS LAB www.hallenvironmental.com www.hallenvironmental.com</li> <li>4901 Hawkins NE - Albuquerque, NM 8 Tel. 505-345-3975 Fax 505-345-410 Tel. 505-345-3975 Fax 505-345-410</li> </ul>	ies/8082 PCB's					
4901 Tel.						ty An
		BTEX HIB			Remarks:	$\frac{ 2U/2u}{Date Time}$ 27) $h \neq 6.75$ C7) $h \neq 6.75$ C7) $h \neq 6.75$ This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report
						f this p
					Time	Time Time
43 6		1, 1, 1, 0, 0, 1, 1, 0,			μ. μ. μ. μ.	
	10	HE			Date	んデー 4/2 L/2v Via: Date CC-バベ 4/27/2Y
	D No					
C (/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tive O				ratorie
	jer: Kaufm andon S AYes	erva				ed labo
Time:	ger: Kaut andon	Including CF): 6 Preservative Type			- Cia:	
S ame			T.		×	when a
Turn-Around Ld Standard Project Name Project #:	Project Mana <u>Kate</u> Sampler: <i>By</i> On loe:	# or coolers Cooler Tem Container Type and #	$\mathbf{k}$		Received by	Received by
Proj	Project Kat Sample On Ice:	Cooler Cooler Type a			Rece	ontract
	Cerry ion)					odus e
2						
0	i le or p	<i>é</i> (/		2		DDD
8       B	A (Ful	Nan 0-0		1 10,1		
	vel 4	ple			2010	Hall Enviro
sto	<i>S ;nel</i>	Sample Name	5-1	2-2-2-2-2	いい いい うい ひい ひい ひ う	
	S S				lished	Instant by United by United
<b>?</b>	<i>ahdoh, Sinclai</i> , コ Level コ Az Compliance	Matrix 5.0.;	╡ <del>╸╎╴┝╶╎</del>		Relinquished by.	Relinquished by Relinquished by Relinquished by Relinquisted by
Jol Isse	de: <i>1</i> □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		╋╌┥╴┼╍╍╋		000	sary. si
Chain-of-Custody Record : <i>H:/corp</i> ng Address:	Fax; acka tard ation	Time	1000 1000 1100	01110	1150 120 120 1220	ILUI     M. M
<b>Chain-of</b> <sup>Client:</sup> <i>H;/corp</i> Mailing Address: Phone #:	email or Fax#: <i>brandor</i> QA/QC Package: Candard Accreditation: Az C NELAC Oth					11, 21, 11, 11, 11, 11, 11, 11, 11, 11,
Pho Clie					Date	7 4 6 7 ·
Released to Imaging: 8/15/20	24 2:57:34 PM	Page 3	30 of 33			5/6/2024

.

Page 12 of 52

OCD: 6/20/2024 1.29.07 PM Re i 1 h

11

Job Number: 885-3545-1

List Source: Eurofins Albuquerque

### Login Sample Receipt Checklist

Client: Hilcorp Energy

# Login Number: 3545

List Number: 1 Creator: Rojas, Juan

Question	Answer Comment	
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

### Login Sample Receipt Checklist

**Client: Hilcorp Energy** 

Login Number: 3545 List Number: 2 Creator: Rodriguez, Leticia

<6mm (1/4").

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Eurofins Albuquerque Released to Imaging: 8/15/2024 2:57:34 PM Job Number: 885-3545-1

List Source: Eurofins Midland

List Creation: 05/03/24 11:32 AM

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

QUESTIONS

Action 356280

QUESTIONS		
Operator:	OGRID:	
HILCORP ENERGY COMPANY	372171	
1111 Travis Street	Action Number:	
Houston, TX 77002	356280	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2409532196
Incident Name	NAPP2409532196 SAN JUAN 30-6 #438 @ 30-039-24302
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-039-24302] SAN JUAN 30 6 UNIT #438

#### Location of Release Source

Please answer all the questions in this group.		
Site Name	San Juan 30-6 #438	
Date Release Discovered	04/02/2024	
Surface Owner	Federal	

#### Incident Details

Please answer all the questions in this group.			
Incident Type	Produced Water Release		
Did this release result in a fire or is the result of a fire	No		
Did this release result in any injuries	No		
Has this release reached or does it have a reasonable probability of reaching a watercourse	No		
Has this release endangered or does it have a reasonable probability of endangering public health	No		
Has this release substantially damaged or will it substantially damage property or the environment	No		
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No		

#### Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission Crude Oil Released (bbls) Details Not answered. Cause: Overflow - Tank, Pit, Etc. | Tank (Any) | Produced Water | Released: 10 BBL | Produced Water Released (bbls) Details Recovered: 10 BBL | Lost: 0 BBL Is the concentration of chloride in the produced water >10,000 mg/l No Condensate Released (bbls) Details Not answered. Natural Gas Vented (Mcf) Details Not answered. Natural Gas Flared (Mcf) Details Not answered. Other Released Details Not answered. Are there additional details for the questions above (i.e. any answer containing Not answered. Other, Specify, Unknown, and/or Fire, or any negative lost amounts)

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

QUESTIONS, Page 2

Action 356280

**QUESTIONS** (continued) Operator: OGRID: HILCORP ENERGY COMPANY 372171 1111 Travis Street Action Number: Houston, TX 77002 356280 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)				
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.			
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No			
Reasons why this would be considered a submission for a notification of a major release	Unavailable.			
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.				

Initial	Response
---------	----------

The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for releat the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Kate Kaufman Title: Sr Environmental Specialist Email: kkaufman@hilcorp.com

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

QUESTIONS, Page 3

Action 356280

Page 47 of 52

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	356280
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)	
What method was used to determine the depth to ground water	OCD Imaging Records Lookup	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)	
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)	
Any other fresh water well or spring	Between 1 and 5 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between 1000 (ft.) and ½ (mi.)	
A subsurface mine	Greater than 5 (mi.)	
An (non-karst) unstable area	Greater than 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	None	
A 100-year floodplain	Greater than 5 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	Νο	

#### Remediation Plan

Please answer all the questions	that apply or are indicated. This information must be provided to	the appropriate district office no later than 90 days after the release discovery date.
Requesting a remediation	n plan approval with this submission	Yes
Attach a comprehensive report of	lemonstrating the lateral and vertical extents of soil contamination	n associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
Have the lateral and vertice	cal extents of contamination been fully delineated	Yes
Was this release entirely	contained within a lined containment area	No
Soil Contamination Samplin	ng: (Provide the highest observable value for each, in m	illigrams per kilograms.)
Chloride	(EPA 300.0 or SM4500 CI B)	640
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	106
GRO+DRO	(EPA SW-846 Method 8015M)	9
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
	NMAC unless the site characterization report includes complete melines for beginning and completing the remediation.	d efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated date v	vill the remediation commence	04/25/2024
On what date will (or did)	the final sampling or liner inspection occur	04/25/2024
On what date will (or was	) the remediation complete(d)	04/25/2024
What is the estimated sur	face area (in square feet) that will be reclaimed	0
What is the estimated vol	ume (in cubic yards) that will be reclaimed	0
What is the estimated sur	face area (in square feet) that will be remediated	0
What is the estimated vol	ume (in cubic yards) that will be remediated	0
These estimated dates and mean	surements are recognized to be the best guess or calculation at th	ne time of submission and may (be) change(d) over time as more remediation efforts are completed.
	sed remediation measures may have to be minimally adjusted in a mediation plan proposed, then it should consult with the division	accordance with the physical realities encountered during remediation. If the responsible party has any need to to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 356280

QUESTIONS (continued)		
Operator:	OGRID:	
HILCORP ENERGY COMPANY	372171	
1111 Travis Street	Action Number:	
Houston, TX 77002	356280	
	Action Type:	
QUESTIONS	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the		
This remediation will (or is expected to) utilize the following processes to remediate	/ reduce contaminants:	
(Select all answers below that apply.)		
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Not answered.	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.	
(In Situ) Soil Vapor Extraction	Not answered.	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.	
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.	
OTHER (Non-listed remedial process)	Yes	
Other Non-listed Remedial Process. Please specify	Soil samples collected for site delineation are all below NMOCD closure criteria noted in NMAC 19.15.29 Table 1. No soil remediation is required.	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed ef which includes the anticipated timelines for beginning and completing the remediation.	Forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC	
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or	
I hereby agree and sign off to the above statement	Name: Kate Kaufman Title: Sr Environmental Specialist Email: kkaufman@hilcorp.com Date: 06/20/2024	

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required

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

Page 49 of 52

Action 356280

QUESTIONS (continued)	
Operator: HILCORP ENERGY COMPANY	OGRID: 372171
1111 Travis Street Houston, TX 77002	Action Number: 356280
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of	the following items must be confirmed as part of any request for deferral of remediation.
Requesting a deferral of the remediation closure due date with the approval of this submission	Νο

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

QUESTIONS, Page 6

Action 356280

Page 50 of 52

**QUESTIONS** (continued)

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	356280
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	335389
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/25/2024
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	350

**Remediation Closure Request** 

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.		
Requesting a remediation closure approval with this submission	Yes	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes	
What was the total surface area (in square feet) remediated	0	
What was the total volume (cubic yards) remediated	0	
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes	
What was the total surface area (in square feet) reclaimed	0	
What was the total volume (in cubic yards) reclaimed	0	
Summarize any additional remediation activities not included by answers (above)	Soil samples collected for site delineation are all below NMOCD closure criteria noted in NMAC 19.15.29 Table 1. No soil remediation is required.	
	closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of	
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a water, human health or the environment. In addition, OCD acceptance of a C-141 report	knowledge and understand that pursuant to OCD rules and regulations all operators are required ses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or ally restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed ng notification to the OCD when reclamation and re-vegetation are complete.	

Email: kkaufman@hilcorp.com Date: 06/20/2024
I hereby agree and sign off to the above statement Title: Sr Environmental Specialist

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

QUESTIONS, Page 7

Action 356280

Page 51 of 52

QUESTIONS (continued)	
Operator: HILCORP ENERGY COMPANY	OGRID: 372171
1111 Travis Street Houston, TX 77002	Action Number: 356280
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	

**Reclamation Report** 

Only answer the questions in this group if all reclamation steps have been completed. Requesting a reclamation approval with this submission No

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

Page 52 of 52

CONDITIONS

Action 356280

Operator: OGRID: HILCORP ENERGY COMPANY 372171 1111 Travis Street Action Number: Houston, TX 77002 356280 Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

#### CONDITIONS

Created By		Condition Date
nvelez	None	8/15/2024