

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Hilcorp Energy Company	Contact Jennifer Deal
Address 382 Road 3100 Aztec, NM 87410	Telephone No. (505) 324-5128
Facility Name Federal Gas Com 1 #2	Facility Type Gas Well

Surface Owner	Mineral Owner Federal	API No. 30-045-29816
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LOCATION OF RELEASE

Unit Letter B	Section 20	Township 32N	Range 12W	Feet from the 1000	North/South Line North	Feet from the 2320	East/West Line East	County San Juan County
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Latitude 36.9761505 Longitude -108.1177292 NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 48bbls	Volume Recovered 45bbls
Source of Release Produced Water Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 5/14/2018 @11:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Cory, Vanessa and Whitney	
By Whom? Paul Keloff	Date and Hour 5/15/18 @8:45am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Operator discovered over top spill of produced water. Heritage XTO water transfer engine and pump failed to kick on due to dead battery. Once transfer pump didn't kick on the relay to pumping unit was also defective and failed to shut off pumping unit which caused it to keep running and resulted in an OTT. 45 bbls were recovered. Spill remained inside the berm.

Describe Area Affected and Cleanup Action Taken.*

Hilcorp Energy Company used a vac truck to recover 45 bbls of produced water. Confirmation sampling occurred on May 21, 2018 and analytical results were below the NMOCD regulatory standards – no further action is required. The soil sampling report is attached for review. No further remediation required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <i>Jennifer Deal</i>	OIL CONSERVATION DIVISION	
Printed Name: Jennifer Deal	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Environmental Specialist	Approval Date: 6/18/18	Expiration Date:
E-mail Address: jdeal@hilcorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 6/4/18	Phone: (505) 324-5128	

* Attach Additional Sheets If Necessary

#WCS 1814340171

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

June 04, 2018

Jennifer Deal

HILCORP ENERGY

PO Box 4700

Farmington, NM 87499

TEL: (505) 564-0733

FAX

RE: Federal Gas Com 1 #2

OrderNo.: 1805B49

Dear Jennifer Deal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/22/2018 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".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: Spill Area

Project: Federal Gas Com 1 #2

Collection Date: 5/21/2018 9:05:00 AM

Lab ID: 1805B49-001

Matrix: SOIL

Received Date: 5/22/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	74	30		mg/Kg	20	5/31/2018 5:28:12 PM	38410
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/24/2018 8:34:13 PM	38293
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/24/2018 8:34:13 PM	38293
Surr: DNOP	73.7	70-130		%Rec	1	5/24/2018 8:34:13 PM	38293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Surr: BFB	92.6	15-316		%Rec	1	5/23/2018 2:36:12 PM	38268
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Benzene	ND	0.023		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Toluene	ND	0.047		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Ethylbenzene	ND	0.047		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Xylenes, Total	ND	0.094		mg/Kg	1	5/23/2018 2:36:12 PM	38268
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/23/2018 2:36:12 PM	38268

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B49

04-Jun-18

Client: HILCORP ENERGY
Project: Federal Gas Com 1 #2

Sample ID	MB-38410	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	38410	RunNo:	51634					
Prep Date:	5/31/2018	Analysis Date:	5/31/2018	SeqNo:	1685046	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-38410	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	38410	RunNo:	51634					
Prep Date:	5/31/2018	Analysis Date:	5/31/2018	SeqNo:	1685047	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

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 Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B49

04-Jun-18

Client: HILCORP ENERGY
Project: Federal Gas Com 1 #2

Sample ID	MB-38293	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	38293	RunNo:	51500					
Prep Date:	5/23/2018	Analysis Date:	5/24/2018	SeqNo:	1678871	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	12		10.00		123	70	130			

Sample ID	LCS-38293	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	38293	RunNo:	51500					
Prep Date:	5/23/2018	Analysis Date:	5/24/2018	SeqNo:	1678940	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.5	70	130			
Surr: DNOP	6.0		5.000		119	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical 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 Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B49

04-Jun-18

Client: HILCORP ENERGY
Project: Federal Gas Com 1 #2

Sample ID	MB-38268	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	38268	RunNo:	51480					
Prep Date:	5/22/2018	Analysis Date:	5/23/2018	SeqNo:	1676691	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	890		1000		89.2	15	316			

Sample ID	LCS-38268	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	38268	RunNo:	51480					
Prep Date:	5/22/2018	Analysis Date:	5/23/2018	SeqNo:	1676692	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	75.9	131			
Surr: BFB	1000		1000		103	15	316			

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 Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B49

04-Jun-18

Client: HILCORP ENERGY
Project: Federal Gas Com 1 #2

Sample ID	MB-38268		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 38268		RunNo: 51480					
Prep Date:	5/22/2018		Analysis Date: 5/23/2018		SeqNo: 1676733		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID	LCS-38268		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 38268		RunNo: 51480					
Prep Date:	5/22/2018		Analysis Date: 5/23/2018		SeqNo: 1676734		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.93	0.10	1.000	0	93.0	70.1	121			
Benzene	0.95	0.025	1.000	0	95.1	77.3	128			
Toluene	0.96	0.050	1.000	0	96.1	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	95.5	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.0	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	1805B49-001AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	Spill Area		Batch ID: 38268		RunNo: 51480					
Prep Date:	5/22/2018		Analysis Date: 5/23/2018		SeqNo: 1676736		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.93	0.097	0.9699	0	96.4	56.9	130			
Benzene	0.94	0.024	0.9699	0	96.9	68.5	133			
Toluene	0.97	0.048	0.9699	0	99.6	75	130			
Ethylbenzene	0.97	0.048	0.9699	0	99.7	79.4	128			
Xylenes, Total	2.9	0.097	2.910	0	101	77.3	131			
Surr: 4-Bromofluorobenzene	0.98		0.9699		101	80	120			

Sample ID	1805B49-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	Spill Area		Batch ID: 38268		RunNo: 51480					
Prep Date:	5/22/2018		Analysis Date: 5/23/2018		SeqNo: 1676737		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.87	0.096	0.9588	0	91.2	56.9	130	6.68	20	
Benzene	0.89	0.024	0.9588	0	93.0	68.5	133	5.29	20	
Toluene	0.92	0.048	0.9588	0	95.6	75	130	5.23	20	
Ethylbenzene	0.90	0.048	0.9588	0	93.8	79.4	128	7.25	20	

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 Detection Limit
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1805B49

04-Jun-18

Client: HILCORP ENERGY

Project: Federal Gas Com 1 #2

Sample ID	1805B49-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	Spill Area	Batch ID:	38268	RunNo:	51480					
Prep Date:	5/22/2018	Analysis Date:	5/23/2018	SeqNo:	1676737	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	2.8	0.096	2.876	0	97.2	77.3	131	5.28	20	
Surr: 4-Bromofluorobenzene	0.98		0.9588		103	80	120	0	0	

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
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S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



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

Sample Log-In Check List

Client Name: HILCORP ENERGY FAR

Work Order Number: 1805B49

RcptNo: 1

Received By: Anne Thorne 5/22/2018 6:45:00 AM

Completed By: Michelle Garcia 5/22/2018 9:38:15 AM

Reviewed By: mw 5/22/18
LB: ENM

Michelle Garcia

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
of preserved bottles checked for pH: ENM 5/22/18
(2 or >12 unless noted)
Adjusted: _____
Checked by: _____

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client:

Huiey Energy

Mailing Address:

Project Name: ☒ Standard ☐ Rush
Project #: FENRAT Gas Com 1 & 2

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Project Manager:

JENNIFER DEAR

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

1.4oz Jar

Preservative Type

1.0

HEAL No.

1805349

<input checked="" type="checkbox"/>	BTEX + MTBE + TMB's (8021)
<input checked="" type="checkbox"/>	BTEX + MTBE + TPH (Gas only)
<input checked="" type="checkbox"/>	TPH 8015B (GRO / DRO / MRO)
<input checked="" type="checkbox"/>	TPH (Method 418.1)
<input checked="" type="checkbox"/>	EDB (Method 504.1)
<input checked="" type="checkbox"/>	PAH's (8310 or 8270 SIMS)
<input checked="" type="checkbox"/>	RCRA 8 Metals
<input checked="" type="checkbox"/>	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
<input checked="" type="checkbox"/>	8081 Pesticides / 8082 PCB's
<input checked="" type="checkbox"/>	8260B (VOA)
<input checked="" type="checkbox"/>	8270 (Semi-VOA)
<input checked="" type="checkbox"/>	CHLORIDE
<input checked="" type="checkbox"/>	Air Bubbles (Y or N)

Date:

5-21

Time:

1:00

Relinquished by:

5/21/18

Time:

1:00

Received by:

5/21/18

Time:

1:00

Date:

5/21/18

Time:

1:00

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly related on the analytical report.



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request