### OIL CONS. DIV DIST. 3

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

FEB 08 2016

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Name of C						OPERA'	IUK	min	al Report		Final Repo	
					Contact: Rex Farnsworth							
					Telephone No.: (505) 333-3100							
Facility Name: Hun Ne Pah #1F				Facility Type: Gas Well (Mancos, Dakota)								
Surface Ov	vner: Triba	al		Mineral (	Owner		Maria .		API No	o.: 30-045-3	34292	
				LOCA	ATION	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/	West Line	County	777	
С	10	25N	11W	660	F	NL	1960		FWL	San Juan		
	Maria I			Latitude 36.42		W.,	tude -107.99415				1	
						OF REL		27				
Type of Rel	ease: Produc	ed Oil					Release: 10.5 BE	BL's	Volume l	Recovered: 1	0 BBL's	
		ing Box on W	ell Head	1.6			lour of Occurrence			Hour of Dis		
							Time: Unknown		1:53pm			
Was Immed	iate Notice (		Yes 🗆	No ⊠ Not R	equired	If YES, To	Whom?					
By Whom?					1	Date and I	Iour:					
	rcourse Read	ched?					olume Impacting t	he Wat	ercourse.	1,114	J. 14.	
			Yes 🛛	No								
If a Waterco	urse was Im	pacted, Descr	ibe Fully *								196	V-1
Pah #1F lo been releas	e onto the	ing from the ground. 10 b	packing of obls of pro	onto the ground oduced oil was	l. The X	TO Lease of the s	XTO Lease Op Operator estimat pill never left lo The site was ra	ted spi	ll @ 10.5 l . The site	bbl of produ was then ra	iced oil inked ac	that had cording
Pah #1F lo been releas to the NMG groundwat ppm total I Describe Ar pump truck, taken to IEI USEPA Me Leaks, Spill	cation leak te onto the p DCD Guide er greater the STEX.  ea Affected the remaining for disposal thod 8015/3: s and Releas	ing from the ground. 10 to be lines for the han 100 feet and Cleanup Ang soil impact. Sample take 546. Due to stees, no further	packing of bbls of pro- Remedia and an ar- Action Tak- ted around an on Janua ample resu action is re-	onto the ground oduced oil was tion of Leaks, Stroyo over 200 feen. * Based on the well head (Stroy 25, 2016 returning value equired.	I. The X recovered Spills and feet. This he 10.5 b tuffing B rn results ues below	TO Lease (ed and the sid Releases. s set the clood) bl of production was remoted of Benzene of the standard	Operator estimate pill never left lo The site was raissure standard to ed oil that was released by the construction of the con	ted spi ocation nked a 1000 eased w ruction .537 via	Il @ 10.5 l . The site 10 due to ppm TPH with 10 bbl of department a USEPA M NMOCD G	bbl of produced of produced of 2.5 yards of fethod 8021, uidelines for	aced oil anked aced depth enzene, a oil recover of impact TPH of Remedia	that had coording to and 50 ered by ed soil wa 120 via ation of
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NUF1603331450

(3)



# ANALYTICAL REPORT

February 01, 2016



XTO Energy - San Juan Division

OIL CONS. DIV DIST. 3

FEB 08 2016

Sample Delivery Group:

L813715

Samples Received:

01/26/2016

Project Number:

30-045-34292

Description:

Spill

Site:

HUN NE PAH #1F

Report To:

Rex Farnsworth

382 County Road 3100

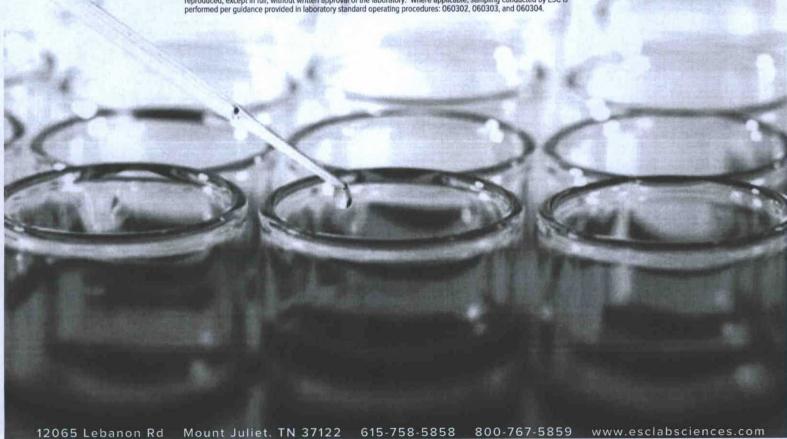
Aztec, NM 87410

Entire Report Reviewed By: Wapline R Richards

Daphne Richards

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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#### SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



FARRF-012516-1047 L813715-01 Solid	Collected by Rex Farnsworth	Collected date/time 01/25/16 10:47	Received date/time 01/26/16 09:00		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3546/DRO	WG845201	1	01/28/16 01:12	01/28/16 12:44	AAT
Total Solids by Method 2540 G-2011	WG845113	1	01/28/16 09:08	01/29/16 10:55	KDW
Volatile Organic Compounds (GC) by Method 8015/8021	WG845471	25	01/29/16 06:00	01/29/16 11:27	вмв

























#### CASE NARRATIVE

ONE LAB. NATIONWIDE.



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the data

Daphne Richards
Technical Service Representative





















## FARRF-012516-1047 Collected date/time: 01/25/16 10:47

# SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.



Total Solids by Method 2540 G-2011

Total condo by monto 2010 0 2011								
	Result	Qualifier	Dilution	Analysis	Batch	75 75		
Analyte	%			date / time				
Total Solids	91.7		1	01/29/2016 10:55	WG845113			





	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
Benzene	ND		0.0136	25	01/29/2016 11:27	WG845471
Toluene	ND		0.136	25	01/29/2016 11:27	WG845471
Ethylbenzene	0.0700		0.0136	25	01/29/2016 11:27	WG845471
Total Xylene	0.467		0.0409	25	01/29/2016 11:27	WG845471
TPH (GC/FID) Low Fraction	47.5		2.73	25	01/29/2016 11:27	WG845471
(S) a,a,a-Trifluorotoluene(FID)	99.9		59.0-128		01/29/2016 11:27	WG845471
(S) a,a,a-Trifluorotoluene(PID)	100		54.0-144		01/29/2016 11:27	WG845471



Ss



	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	120	<u>J6</u>	4.36	1	01/28/2016 12:44	WG845201
(S) o-Terphenyl	81.3		50.0-150		01/28/2016 12:44	WG845201















#### WG845113

#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

L813715-01

#### Method Blank (MB)

(MB) 01/29/16 10:55

MB RDL MB Result MB Qualifier %

Analyte Total Solids 0.00100

Total Solids by Method 2540 G-2011



#### L813744-03 Original Sample (OS) • Duplicate (DUP)

(OS) 01/29/16 10:56 • (DUP) 01/29/16 10:57

	Original Result	<b>DUP Result</b>	Dilution	DUP RPD	<b>DUP Qualifier</b>	<b>DUP RPD Limits</b>
Analyte	%	%		%		%
Total Solids	88.2	89.3	1	1.33		5







#### Laboratory Control Sample (LCS)

(LCS) 01/29/16 10:55

(200) 0 12 37 10 10:00	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	





#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Volatile Organic Compounds (GC) by Method 8015/8021

#### Method Blank (MB)

(MB) 01/29/16 04:31			
Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Benzene	ND		0.000500
Toluene	ND		0.00500
Ethylbenzene	ND		0.000500
Total Xylene	ND		0.00150
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	100		59.0-128
(S) a,a,a-Trifluorotoluene(PID)	101		54.0-144











#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 01/29/16	02:39 . (1	CSD) 01/	29/16 03:02
----------------	------------	----------	-------------

Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier
mg/kg	mg/kg	mg/kg	%	%	%		
0.0500	0.0434	0.0432	86.8	86.3	70.0-130		
0.0500	0.0454	0.0440	90.8	88.0	70.0-130		
0.0500	0.0473	0.0460	94.5	91.9	70.0-130		
0.150	0.142	0.138	94.6	91.7	70.0-130		
))			100	100	59.0-128		
))			99.2	99.5	54.0-144		
	0.0500 0.0500 0.0500	0.0500 0.0434 0.0500 0.0454 0.0500 0.0473 0.150 0.142	0.0500 0.0434 0.0432 0.0500 0.0454 0.0440 0.0500 0.0473 0.0460 0.150 0.142 0.138	0.0500     0.0434     0.0432     86.8       0.0500     0.0454     0.0440     90.8       0.0500     0.0473     0.0460     94.5       0.150     0.142     0.138     94.6       0)     100	0.0500     0.0434     0.0432     86.8     86.3       0.0500     0.0454     0.0440     90.8     88.0       0.0500     0.0473     0.0460     94.5     91.9       0.150     0.142     0.138     94.6     91.7       0)     100     100	0.0500       0.0434       0.0432       86.8       86.3       70.0-130         0.0500       0.0454       0.0440       90.8       88.0       70.0-130         0.0500       0.0473       0.0460       94.5       91.9       70.0-130         0.150       0.142       0.138       94.6       91.7       70.0-130         0)       100       100       59.0-128	0.0500     0.0434     0.0432     86.8     86.3     70.0-130       0.0500     0.0454     0.0440     90.8     88.0     70.0-130       0.0500     0.0473     0.0460     94.5     91.9     70.0-130       0.150     0.142     0.138     94.6     91.7     70.0-130       0)     100     100     59.0-128







#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

LCS) 01/29/16 03:24 •	(LCSD) 01/29/16 03:46
-----------------------	-----------------------

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec.	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.23	5.40	95.0	98.3	63.5-137			3.38	20
(S) a,a,a-Trifluorotoluene(FI	D)			98.5	97.1	59.0-128				
(S) a,a,a-Trifluorotoluene(Pl	D)			108	108	54.0-144				



RPD

0.560

3.09

2.77

3.15

%



**RPD Limits** 

%

20

20

20

20

### L813715-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/29/16 11:2	7 - (MS)	01/29/16 11:49	+ (MSD)	01/29/16 12:11

	Spike Amou	int Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0500	ND	1.04	1.04	83.0	83.6	25	49.7-127			0.670	23.5

# QUALITY CONTROL SUMMARY L813715-01

ONE LAB. NATIONWIDE.

Volatile Organic Compounds (GC) by Method 8015/8021

L813715-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/29/16 11:27 • (MS) 01/29/16	6 11:49 • (MSI	0) 01/29/16 12:11										
	Spike Amount Original Resu		MS Result	MSD Result	MS Rec.	MS Rec. MSD Rec.	Rec. Dilution	Dilution Rec. Limits	MS Qualifier	MS Qualifier MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Toluene	0.0500	0.0225	1.06	1.07	83.0	83.8	25	49.8-132			0.900	23.5
Ethylbenzene	0.0500	0.0642	1.15	1.17	86.8	88.5	25	40.8-141			1.82	23.8
Total Xylene	0.150	0.428	3.59	3.71	84.2	87.5	25	41.2-140			3.36	23.7
(S) a,a,a-Trifluorotoluene(FID	))				101	100		59.0-128				
(S) a,a,a-Trifluorotoluene(PII	0)				99.4	98.9		54.0-144				









	Spike Amo	ount Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	43.6	157	158	82.1	83.0	25	28.5-138			0.720	23.6
(S) a,a,a-Trifluorotoluene(FII	0)				97.4	98.5		59.0-128				
(S) a,a,a-Trifluorotoluene(PI	D)				107	107		54.0-144				









#### WG845201

#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE. .

Semi-Volatile Organic Compounds (GC) by Method 3546/DRO

L813715-0

#### Method Blank (MB)

(MB) 01/28/16 11:47			
	MB Result	MB Qualifier	MB RDL
Analyte	mg/kg		mg/kg
TPH (GC/FID) High Fraction	ND		4.00
(S) o-Terphenyl	612	<u>J1</u>	50.0-150





### <sup>3</sup>Ss

#### Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 01/28/16 11:59 · (LCSD) 01	1/28/16 12:10										
	Spike Amount	LCS Result	CS Result LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%	
TPH (GC/FID) High Fraction	60.0	49.3	50.2	82.1	83.7	50.0-150			1.92	20	
(S) o-Terphenyl				121	140	50.0-150					





# <sup>7</sup>Gl

#### L813715-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amo	unt Original Result	MS Result	MSD Result	MS Rec.	ec. MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) High Fraction	60.0	110	128	119	30.0	14.5	1	50.0-150	<u>J6</u>	<u>J6</u>	7.52	20
(S) o-Terphenyl					90.0	94.8		50.0-150				









#### Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.























Тс

Ss

Cn

Sr

Qc

GI

Sc

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

#### State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina 1	DW21704
Florida	E87487	North Carolina 2	41
Georgia	NELAP	North Dakota	R-140
Georgia 1	923	Ohio-VAP	CL0069
daho	TN00003	Oklahoma	9915
Ilinois	200008	Oregon	TN200002
ndiana	C-TN-01	Pennsylvania	68-02979
owa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky 1	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee 14	2006
oulsiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERTO086	Wyoming	A2LA
	NE-OS-15-05		

A2LA - ISO 17025	1461.01	AIHA	100789	
A2LA - ISO 170255	1461.02	DOD	1461.01	
Canada	1461.01	USDA	S-67674	
EPA-Crypto	TN00003			

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>16</sup> Accreditation not applicable

#### Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.

