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 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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

			Rele	ease Notifica	atio	n and Co	rrective A	ction			1-11-61-2
						<b>OPERA</b>	<b>TOR</b>		Initi	al Report	Final Repor
Name of Co						Contact: Lo	<u> </u>				
		00, Aztec, N		co 87410			No.: (505) 333-3	3683			
Facility Na	me: Maddo	ox Gas Com	C 1			Facility Type: Gas Well					
Surface Ow	ner: Privat	e		Mineral Ov	wner				API No	. 30-045-0	7773
				LOCA'	TIO	N OF REI	EASE				
Unit Letter	Section	Township	Range			/South Line	Feet from the	East/V	Vest Line	County	
M	27	29 N	10W	875		FSL	850		WL	San Juan	
Type of Rele Source of Re		ed Water		Latitude: N <u>36*.</u> NATI		Volume of Date and H		vn	Date and	Recovered: Hour of Dis	
Was Immediate Notice Given?  ☐ Yes ☐ No ☒ Not Required					Unknown If YES, To N/A	Whom?		April 17,	2017		
By Whom?						Date and H	our				
Was a Watercourse Reached?  ☐ Yes ☐ No						If YES, Volume Impacting the Watercourse.					
of the on-site for total chlorices than Describe Are On Monday Molected, and chlorides. The BTEX, and Thereby certifications all public health should their of the standard chlorides.	BGT, and strides. The standards for T of Leaks, S 200 feet. T a Affected a May 1, 2013 disubmitted the sample resemble. No fur fy that the ill operators or the environment of the sample resemble.	submitted for ample returne PH, confirmir pills and Rele his set the cloand Cleanup A remediation for laboratory turned results ther action is information giare required to comment. The ave failed to a	laboratory d results b ag that a re ases. The same stand activities of analysis is below the required for ven above to report an acceptance adequately	analysis for TPH velow the 'Pit Rule' lease has occurred site was ranked a 4 ard to 100 ppm TP en.*  occurred on the BC or TPH via USEP/ NMOCD Guideline or this site. Attacher is true and complete d/or file certain rele of a C-141 report investigate and rer	yia US spill at this to due PH, 10 at the PH, 10 at the PH, 10 at the PH at	SEPA Method confirmation is a location. The to an estimate ppm benzene, lar. The cellar thod 8015 (C6 or the Remediate ple results the best of my notifications at the NMOCD mete contaminati	8015 (C6-C40), I tandards for Benzesite was then rard depth of ground and 50 ppm total was excavated to C40), Benzene a ion of Leaks, Spiknowledge and und perform correctarked as "Final Roon that pose a thr	Benzene zene, To nked acc d water I I BTEX. o a depth and BTE. ills, and I anderstar ctive acti deport" deat to gr	and BTEX ording to t ess than 50 of 1.5' wh X via USE Releases stand that pursons for reloos not reloound wate	and the chlo he NMOCD of feet, and did the care a compound of the care a care	osite sample was 8021, and for total Benzene, Total  OCD rules and may endanger rator of liability ater, human health
federal, state,				tance of a C-141 re	eport c	does not renev	OIL CON				
Signature: Printed Name	:: Logan Hi	xon				Approved by	Environmental S		1	nonso	
Title: EHS Co	oordinator					Approval Dat	e:	I	Expiration	Date:	
E-mail Addre	,			Dhana 505 222 24	.02	Conditions of Approval:				Attached	
Date:	2 (0	. 2017		Phone: 505-333-36	083						

\* Attach Additional Sheets If Necessary

NCS1712155828



# ANALYTICAL REPORT May 08, 2017

XTO Energy - San Juan Division

Sample Delivery Group:

L906190

Samples Received:

05/02/2017

Project Number:

Description:

Maddox Gas Com C1

Report To:

James McDaniel

382 County Road 3100

Aztec, NM 87410

Entire Report Reviewed By: Washne 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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ONE LAB. NATIONWIDE.



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GI

Al

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



BGT 1.5' COMPOSITE L906190-01 Solid		Collected by LH	Collected date/time 05/01/17 13:30	Received date/time 05/02/17 08:45	
Method	Batch	Dilution	Preparation	Analysis	Analyst
			date/time	date/time	
Total Solids by Method 2540 G-2011	WG976193	1	05/03/17 15:10	05/03/17 15:24	MLW
Wet Chemistry by Method 9056A	WG975921	1 -	05/05/17 14:34	05/05/17 23:45	SAM
Volatile Organic Compounds (GC) by Method 8015/8021	WG977057	.99	05/05/17 14:18	05/06/17 01:12	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG976523	1	05/04/17 12:29	05/04/17 15:12	KLM























默

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

Cp

<sup>2</sup>Tc















# BGT 1.5' COMPOSITE Collected date/time: 05/01/17 13:30

# SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.



	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.7		1	05/03/2017 15:24	WG976193





Wet Chemistry by N	Nethod 9056A
--------------------	--------------

	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
Chloride	58.8		10.8	1	05/05/2017 23:45	WG975921



Cn

Volatile Organic Compounds (GC) by Method 8015/8021

Carl BELLE PERV	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
Benzene	ND		0.000534	.99	05/06/2017 01:12	WG977057
Toluene	ND		0.00534	.99	05/06/2017 01:12	WG977057
Ethylbenzene	ND		0.000534	.99	05/06/2017 01:12	WG977057
Total Xylene	ND		0.00160	.99	05/06/2017 01:12	WG977057
TPH (GC/FID) Low Fraction	0.754		0.107	.99	05/06/2017 01:12	WG977057
(S) a,a,a-Trifluorotoluene(FID)	91.3		77.0-120		05/06/2017 01:12	WG977057
(S) a,a,a-Trifluorotoluene(PID)	100		75.0-128		05/06/2017 01:12	WG977057







# Sc

### Semi-Volatile Organic Compounds (GC) by Method 8015

	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg		date / time		
C10-C28 Diesel Range	ND		4.31	1	05/04/2017 15:12	WG976523	
C28-C40 Oil Range	4.96		4.31	. 1	05/04/2017 15:12	WG976523	
(S) o-Terphenyl	67.2		18.0-148		05/04/2017 15:12	WG976523	

Analyte

Analyte

Total Solids

#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011 L906190-01

Method Blank (MB)

(MB) R3215455-1 05/03/17 15:24 MB Result

MB Qualifier

MB MDL

MB RDL %

Total Solids 0.000300

L906187-01 Original Sample (OS) • Duplicate (DUP)

(OS) L906187-01 05/03/17 15:24 • (DUP) R3215455-3 05/03/17 15:24

Original Result DUP Result

Dilution DUP RPD %

**DUP Qualifier** 

Analyte Total Solids

% 83.1

83.1

0.0413

**DUP RPD Limits** 

5

Laboratory Control Sample (LCS)

(LCS) R3215455-2 05/03/17 15:24

%

50.0

Spike Amount LCS Result

50.0

LCS Rec. %

100

Rec. Limits %

85.0-115

LCS Qualifier















Analyte

Chloride

#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

L906190-01

#### Method Blank (MB)

(MB) R3216060-1 05/05/17 15:59

Wet Chemistry by Method 9056A

MB Result MB Qualifier MB MDL MB RDL mg/kg mg/kg mg/kg 0.795 10.0



#### L905983-03 Original Sample (OS) • Duplicate (DUP)

(OS) L905983-03 05/05/17 17:45 • (DUP) R3216060-4 05/05/17 18:06

	Original Result (dry)	DUP Result	(dry) Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	602	658	1	9		15





#### L906257-01 Original Sample (OS) • Duplicate (DUP)

(OS) L906257-01 05/06/17 10:05 • (DUP) R3216060-8 05/06/17 10:26

	Original Result	<b>DUP</b> Result	Dilution	DUP RPD	DUP Qualifier	<b>DUP RPD Limits</b>
analyte	mg/kg	mg/kg		%		%
Chloride	3380	3390	5	1		15



GI



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

(LCS) R3216060-2 05/05/17 16:20 • (LCSD) R3216060-3 05/05/17 16:41

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Chloride	200	196	186	98	93	80-120			6	15



#### L905983-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L905983-04 05/05/17 18:27 • (MS) R3216060-5 05/05/17 18:48 • (MSD) R3216060-6 05/05/17 19:09

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	662	872	1320	1430	68	85	1	80-120	<u>J6</u>	E	8	15

#### QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Volatile Organic Compounds (GC) by Method 8015/8021

L906190-01

LCS Qualifier

LCSD Qualifier RPD

5.73

7.56

6.93

7,95

#### Method Blank (MB)

(MB) R3216142-5 05/05/17	17:25			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000365	<u>j</u>	0,000150	0.00500
Ethylbenzene	0.000191	<u>J</u>	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			75.0-128











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

(LCS) R3216142-1 05	/05/17 15:34 • (LCSD)	R3216142-2	05/05/17 15:56			
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%
Benzene	0.0500	0.0505	0.0477	101	95.4	71.0-121
Toluene	0.0500	0.0511	0.0474	102	94.8	72.0-120
Ethylbenzene	0.0500	0.0513	0.0479	103	95.7	76.0-121
Total Xylene	0.150	0.150	0.139	100	92.6	75.0-124
(S) a,a,a-Trifluorotolue	ne(FID)			97.0	97.6	77.0-120
(S) a,a,a-Trifluorotolue	ne(PID)			104	105	75.0-128







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

Limits
L

**RPD Limits** %

20

20

20

20

# L906157-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L906157-01 05/05/17	7 18:32 • (MS) R3	3216142-8 05/0	05/17 19:38 •	(MSD) R3216142	2-9 05/05/17	20:01						
	Spike Amount	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	0.578	0.562	0.543	10.4	10.3	.98	10.0-147			3,43	30
(S) a,a,a-Trifluorotoluene(FIL	0)				89.5	89.0		77.0-120				
(S) a,a,a-Trifluorotoluene(PIL	0)				101	98.5		75.0-128				

ACCOUNT:

PROJECT:

SDG: L906190

DATE/TIME: 05/08/17 16:32 PAGE: 8 of 13

# QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L906190-01

#### Method Blank (MB)

(MB)	R3215704-1	05/04/17	14:32	
------	------------	----------	-------	--

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Qil Range	U		0.274	4.00
(S) o-Terphenyl	64.0			18.0-148





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

(LOC) DOOMETOA O	05/04/17 14:45	# CCD\ D224E704.2	05/04/47 44:50
(LCS) R3215/04-2	05/04/1/ 14:45	<ul> <li>(LCSD) R3215704-3</li> </ul>	05/04/1/ 14:58

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
C10-C28 Diesel Range	60.0	40.5	50.7	67.5	84.5	50.0-150		<u>J3</u>	22.3	20
(S) o-Terphenyl				59.1	68.1	18.0-148				







### L906190-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L906190-01	1 05/04/17 15:12	<ul> <li>(MS) R3215704-4</li> </ul>	05/04/17 15:26 •	(MSD) R3215704-5	05/04/17 15:40

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	64.7	ND	49.9	50.7	73.6	74.9	1	50.0-150			1.67	20
(S) o-Terphenyl					49.2	50.0		18.0-148				







#### Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL (dry)	Reported Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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.
2:1	

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



















#### **ACCREDITATIONS & LOCATIONS**

ONE LAB. NATIONWIDE.



Ss

Cn

Sr

QC

GI

Sc

ESCLab 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 labs 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

	40660	Nevada	TN-03-2002-34
Alabama			2975
Aliska	UST-080	New Hampshire	
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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	923	Ohio-VAP	CL0069
Idaho	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
Centucky 1	90010	South Dakota	n/a
Centucky <sup>2</sup>	16	Tennessee 14	2006
ouisiana	Al30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas 5	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERTO086	Wyoming	A2LA
Vebraska	NE-OS-15-05		

#### Inira Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA-LAP,LLC	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>no</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.



- //	Quote Number			1 1 1			Analysis/Container					Lab Information		
XTO Contact			Page 1 of 1 XTO Contact Phone #								B027			
ENERGY				Results	505 386-9019 Results to:							AND DESCRIPTION OF THE PROPERTY OF THE PROPERT		
Western Division				cult, Logar			100					Office Abbreviations		
Mell Site/Location		API Number Samples on Ice (Y / N)		Saturday Delivery (Y / N)  Turnaround Standard			CAMP C				В	urango = DUR akken = BAK		
Collected By	(0						670	7			Pice	aton = RAT ceance = PC		
X To	VIC		t Reason P+A		Next Day Two Day			ORO, BTE	3	La	Barge = LB			
Ignature 4		ore Telegale for Lab Use Only!		Three Day Same Day Date Needed		1449	7		Ora	1906 190				
Sample ID Sam	ple Name	Media	Date	Time	Preservative	No. of Conts.	8615	1208				Sample Number		
Bat 1.5' compraide Bat 1	5' comp	5	5-1	1370	Cool	1-402						-0		
			1	1 11 7										
							-		+					
			-					_	+-					
				Total constant and the										
					and the second				-					
Media : Filter = F Soil = S Wastewater = WV	/ Groundwater	= GW Dr	inking W	aster = DV	V Sludge = SG Su	rface Water	= SW /	Air = A	Drill N	dud = D	M Other = C	т		
Relinquished By: (Signature) Relinquished By: (Signature)		Date: 5////7 Date:		Time: /470	Received By: (Signature)					Number o		s Sample Condition		
				Time:	7305 994-		4893			Temperature		Other Information		
Relinquished By: (Signature)		Date:		Time:	Received for Lab					Dates	the same of the sa			

<sup>\*</sup> Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200

ESC LAB S Cooler Rec			
Client: X TORNM	SDG#	190	06/90
Cooler Received/Opened On: 5/ 2 /17	Temperature:	6.6	
Received By: Marina Malone			
Signature: Marina Malorio			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?			
COC Signed / Accurate?			7 7 1
Bottles arrive intact?		-	
Correct bottles used?		/	1
Sufficient volume sent?		/	
If Applicable			Boy Svil
VOA Zero headspace?			
Preservation Correct / Checked?			