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

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

Form C-141

Revised August 8, 2011

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

			Rele	ease Notifi	ication	and Co	orrective A	ction	1				
						OPERA?	ГOR		☐ Initi	al Report	\boxtimes	Final Report	
		TO Energy,					nes McDaniel						
		00, Aztec, N	lew Mexi	ico 87410			No.: (505) 333-3	3701					
Facility Na	ne: Owens	5#1A				Facility Typ	e: Gas Well						
Surface Ow	ner: Federa	al Land		Mineral	Owner				API No	0. 30-045-3	0130		
					ATION	OF REI	LEASE						
Unit Letter K	Section 7	Township 31N	Range 12W	Feet from the 1975	I	h/South Line Feet from the East/West Line County FSL 1980 FWL San Juan							
	·			Latitude: 3	6.91211	11 Longitude: -108.139220							
(n) (n)		. (1)	1.337 .	NA	TURE	OF REL			T		<u></u>		
Type of Rele	ase: Conder	nsate/Produce	d Water			1	Release: 80 bbl. ondensate/38 bbls		Volume I	Recovered:	None		
Source of Re	lease: Produ	uction Tank				Date and F June 20-22	lour of Occurrences. 2014	e:	Date and June 23.	Hour of Dis 2014	scovery	:	
Was Immedi	ate Notice C					If YES, To	Whom?		1 1 11111111111111111111111111111111111				
	☐ Yes ☐ No ☐ Not Requ						h (NMOCD)		OIL	<u>. Cons. I</u>	<u>ID VIC</u>	ST. 3	
By Whom? James McDaniel Was a Watercourse Reached?						lour: June 24, 201				4 004	<u> </u>		
was a water	Was a Watercourse Reached? ☐ Yes ☒ No					II YES, VC	olume Impacting t	tne wat	ercourse.	JUL 2	4 2014	4	
		pacted, Descr and Remedial											
beneath the tai setting the clos made to Cory three samples and moved in Describe Are The attached A were excavated analyzed for D Field Notes. A pile remediation	nk berm. No sure standards Smith with the returned result preparation for a Affected and Remediation the im RO/GRO via MI 5 samples on; see Field of the remedia	fluids were rec s for this location the NMOCD on the above the 50 or excavation ac and Cleanup A Plan was appro- pacted area to e to USEPA Methor returned results Notes. Over the	covered. Toon to 5,000 June 24th, 2 0 ppm BTE ctivities. Action Take extents of 2 od 8015, and s below the enext two three (3) of Three (3) of the covered by the enext two three (3) of the covered by t	he site was then reppm total petrole 2014. Samples we EX standard, deter the NMOCD and 7' x 25' x 10' deep d for BTEX via U NMOCD standard weeks, the pile was composite samples	ranked a ze um hydroca ere collected mining that I the BLM 1 p. Five (5) SEPA Metl ds determing is turned 2-3 s of the pile	ro pursuant to arbons (TPH), d to determine t excavation acregarding reme composite sam hod 8021; see a led for this local times per were were collected.	Il fluids were conta the NMOCD Guide 10 ppm Benzene, a the extent of the im- tivities would need diation activities for pples were collected attached <i>Analytical</i> ation. The impacted ek, and the remedial I, and the samples we	elines for and 50 pp pacted s to be per this local from the Results . It soil was ted soil vere analyse.	r the Remed om total BTE soil from 2', erformed. The station. On Jule excavated a Sample local spiled on the was sampled yzed for DRG	iation of Leal X. The requivalent Area at these eations are out to West end of on July 11, 20/GRO via U	ks, Spills ired 24 how grour n tank ha approximextents, a dined in the loca 014 to de JSEPA M	s and Releases, nour notice was not surface. All as been cleaned mately 300 CY and were the attached tition for biotetermine the Method 8015,	
				s returned results b ee attached <i>Email</i>			ards determined for	this site,	and approva	l to backfill u	ising the	remediated	
regulations a public health should their or or the environ	Il operators or the envir operations h nment. In a	are required to ronment. The ave failed to a	o report are acceptance acceptanc	nd/or file certain ce of a C-141 reprinted investigate and	release no port by the remediate	otifications and NMOCD me contaminati	knowledge and und perform corrector arked as "Final Room that pose a three the operator of	ctive act eport" of eat to g	tions for rel does not rel round wate	eases which ieve the ope r, surface wa	n may en erator of ater, hu	ndanger Fliability man health	
Signature:	///	In	``	AND ARI	MCO.	S aved by	OIL CON Environmental S			DIVISIO	<u> </u>	9	
Title: EHS S				156 J	76 m	Sovoval Da	α / β		Expiration	Date:			
				BASS CYMAN			977						
7/	ess: james_r	ncdaniel@xtc - √	energy.co	76,	20\0	G onditions of	f Approval:			Attachec	i 🗌		
Date: // Attach Addi	tional Shee	ts If Necess	ary	Phone: 505-539	<u></u>	Janes 14	12/10/11	105					
			,		#	イクしょ	1241851) O (,		



€.

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

Report Summary

Tuesday July 15, 2014

Report Number: L709679
Samples Received: 07/12/14
Client Project:

Description: Owens 1A

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



YOUR LABSOF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Logan Hixon

XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

July 15,2014

Date Received :

July 12, 2014

ESC Sample # : L709679-01

Description

Owens 1A

Site ID :

Sample ID

FARLH-071114-0907

Project # :

Collected By : Logan Hixon Collection Date : 07/11/14 09:07

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.1		ે	2540 G-2011	07/14/14	1
Benzene	BDL	0.028	mq/kq	8021/8015	07/14/14	50
Toluene	BDL	0.28	mg/kg	8021/8015	07/14/14	50
Ethylbenzene	1.0	0.028	mg/kg	8021/8015	07/14/14	50
Total Xylene	4.4	0.083	mg/kg	8021/8015	07/14/14	50
TPH (GC/FID) Low Fraction	370	5.5	mg/kg	GRO	07/14/14	50
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.1		% Rec.	8021/8015	07/14/14	50
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	07/14/14	50
TPH (GC/FID) High Fraction Surrogate recovery(%)	530	22.	mg/kg	3546/DRO	07/14/14	5
o-Terphenyl	84.6		% Rec.	3546/DRO	07/14/14	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC.

The reported analytical results relate only to the sample submitted Reported: 07/15/14 12:51 Printed: 07/15/14 12:52 L709679-01 (BTEXGRO) - Non-target compounds too high to run at a lower dilution. L709679-01 (DRO) - Dilution due to matrix



YOUR LABOF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

July 15,2014

Logan Hixon

XTO Energy - San Juan Division 382 County Road 3100

Aztec, NM 87410

ESC Sample # : L709679-02

Date Received : July 12, 2014 Description : Owens 1A

Site ID :

Sample ID

FARLH-071114-0923

Project # :

Collected By : Logan Hixon Collection Date : 07/11/14 09:23

:

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.3		%	2540 G-2011	07/14/14	1
Benzene	BDL	0.028	mg/kg	8021/8015	07/15/14	50
Toluene	0.45	0.28	mg/kg	8021/8015	07/15/14	50
Ethylbenzene	1.3	0.028	mg/kg	8021/8015	07/15/14	50
Total Xylene	5.8	0.083	mg/kg	8021/8015	07/15/14	50
TPH (GC/FID) Low Fraction	450	5.5	mg/kg	GRO	07/15/14	50
Surrogate Recovery-%			J. J			
a,a,a-Trifluorotoluene(FID)	90.7		% Rec.	8021/8015	07/15/14	50
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	07/15/14	50
TPH (GC/FID) High Fraction Surrogate recovery(%)	490	22.	mg/kg	3546/DRO	07/14/14	5
o-Terphenyl	77.6		% Rec.	3546/DRO	07/14/14	5

Results listed are dry weight basis.

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 07/15/14 12:51 Printed: 07/15/14 12:52 L709679-02 (DRO) - Dilution due to matrix L709679-02 (BTEXGRO) - Non-target compounds too high to run at a lower dilution.



YOUR LAB OF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

July 15,2014

Logan Hixon XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

ESC Sample # : L709679-03

Date Received : July 12, 2014 Description : Owens 1A

Site ID :

Sample ID FARLH-071114-0936

Project # :

Collected By : Logan Hixon Collection Date : 07/11/14 09:36

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.6		ajo	2540 G-2011	07/14/14	1
Benzene	BDL	0.028	mq/kq	8021/8015	07/15/14	50
Toluene	0.30	0.28	mq/kg	8021/8015	07/15/14	50
Ethylbenzene	1.2	0.028	mg/kg	8021/8015	07/15/14	50
Total Xylene	8.2	0.083	mq/kq	8021/8015	07/15/14	50
TPH (GC/FID) Low Fraction	430	5.5	mg/kg	GRO	07/15/14	50
Surrogate Recovery-%			3. 3			
a,a,a-Trifluorotoluene(FID)	96.6		% Rec.	8021/8015	07/15/14	50
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	07/15/14	50
TPH (GC/FID) High Fraction Surrogate recovery(%)	570	22.	mg/kg	3546/DRO	07/14/14	5
o-Terphenyl	86.0		% Rec.	3546/DRO	07/14/14	5

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 07/15/14 12:51 Printed: 07/15/14 12:52
L709679-03 (BTEXGRO) - Non-target compounds too high to run at a lower dilution.
L709679-03 (DRO) - Dilution due to matrix

Summary of Remarks For Samples Printed 07/15/14 at 12:52:17

TSR Signing Reports: 288 R2 - Rush: Next Day

Domestic Water Well Sampling-see L609759 Lobato for tests $\,$ EDD's on ALL projects $\,$ email James, Kurt and Logan all reports $\,$

Sample: L709679-01 Account: XTORNM Received: 07/12/14 08:30 Due Date: 07/15/14 00:00 RPT Date: 07/15/14 12:51

Sample: L709679-02 Account: XTORNM Received: 07/12/14 08:30 Due Date: 07/15/14 00:00 RPT Date: 07/15/14 12:51

Sample: L709679-03 Account: XTORNM Received: 07/12/14 08:30 Due Date: 07/15/14 00:00 RPT Date: 07/15/14 12:51



YOUR LAB OF CHOICE

XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L709679

July 15, 2014

Analyte	Result		aboratory Bl Units	ank % Rec		Limit		Patch	Date Analis
Midiyee			JIII CS	OBN 6		ттштС		Batch	Date Analyz
Total Solids	< .1	8	š					WG731413	07/14/14 09
Benzene	< .000	5 n	mg/kg					WG731545	07/14/14 20
Ethylbenzene	< .000	5 n	ng/kg					WG731545	07/14/14 20
Toluene	< .005	π	ng/kg					WG731545	07/14/14 20
TPH (GC/FID) Low Fraction	< .1	n	ng/kg					WG731545	07/14/14 20
Total Xylene	< .001	5 π	ng/kg					WG731545	07/14/14 20
a,a,a-Trifluorotoluene(FID)		٩	Rec.	97.90		59-128		WG731545	07/14/14 20
a,a,a-Trifluorotoluene(PID)		٩	k Rec.	102.0		54-144			07/14/14 20
TPH (GC/FID) High Fraction	< 4	n	mg/kg					WG731445	07/14/14 12
o-Terphenyl			Rec.	87.50		50-150			07/14/14 12
			Duplicate						
Analyte	Units	Result	Duplic	ate F	RPD	Limit		Ref Samp	<u>Batcl</u>
Total Solids	8	86.1	88.1	2	2.29	5		L709692-	07 WG731
		Labora	atory Contro	ol Sample	9				
Analyte	Units	Knowr		Resul		% Rec		Limit	Batch
Total Solids	%	50		50.0		100.		85-115	WG731
10000 001100									
Benzene	mg/kg	.05		0.0415		82.9		70-130	WG731
Ethylbenzene	mg/kg	. 05		0.0451		90.2		70-130	WG731
Toluene	mg/kg	.05		0.0454		90.8		70-130	WG731
Total Xylene	mg/kg	.15		0.138		91.8		70-130	WG733
a,a,a-Trifluorotoluene(PID)						102.0		54-144	WG731
TPH (GC/FID) Low Fraction	mg/kg	5.5		5.86		107.		63.5-137	WG73
a,a,a-Trifluorotoluene(FID)						102.0		59-128	WG733
TPH (GC/FID) High Fraction	mg/kg	60		49.0		81.7		50-150	WG731
o-Terphenyl						79.60		50-150	<u>W</u> G733
		Laboratory	Control Sam	ple Dupl	licate				
Analyte	Units	Result	Ref	%Rec		Limit	RPD	Lin	nit Batch
Benzene	mg/kg	0.0410	0.0415	82.0		70-130	1.07	20	WG731
Ethylbenzene	mq/kq	0.0443	0.0451	89.0		70-130	1.74	20	WG731
Toluene	mg/kg	0.0445	0.0454	89.0		70-130	1.96	20	WG733
Total Xylene	mg/kg	0.135	0.138	90.0		70-130	1:99	20	WG731
a,a,a-Trifluorotoluene(PID)	5, 5			102.0		54-144			WG731
TPH (GC/FID) Low Fraction	mg/kg	5.67	5.86	103.		63.5-137	3.30	20	WG731
a,a,a-Trifluorotoluene(FID)	3,3			98.60		59-128			WG731
TPH (GC/FID) High Fraction	mg/kg	49.2	49.0	82.0		50-150	0.490	20	WG731
o-Terphenyl				78.10		50-150			WG731
			Matrix Spik	:e					
Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit		Ref Samp	Batch
Benzene	mg/kg	0.197	0.000346	. 05	78.0	49.7-	127	L709368-0)1 WG731
Ethylbenzene	mg/kg	0.214	0.000331	. 05	85.0	40.8-		L709368-0	
Toluene	mg/kg	0.214	0.000833	.05	86.0	49.8-		L709368-0	
* Performance of this Analyte						-2.0			



YOUR LABOUR CHOICE

XTO Energy - San Juan Division Logan Hixon

382 County Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L709679

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

July 15, 2014

			Matrix 9						
Analyte	Units	MS Res	Ref Re	es TV	% Rec	Limit		Ref Samp	Batch
Total Xylene	mg/kg	0.649	0.0015	52 .15	86.0	41.2-	140	L709368-01	WG7315
a,a,a-Trifluorotoluene(PID)					101.0	54-14	4		WG7315
TPH (GC/FID) Low Fraction	mg/kg	21.2	0.174	5.5	76.0	28.5-	138	L709368-01	WG7315
a,a,a-Trifluorotoluene(FID)					99.10	59-12	8		WG7315
TPH (GC/FID) High Fraction	mg/kg	52.0	1.06	60	85.0	50-15	0	L709710-04	WG7314
o-Terphenyl					81.20	50-15	0		WG7314
		Mat	riv Cnike	Duplicate				= **	
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	<u>Bat</u> ch
Benzene	mg/kg	0.205	0.197	81.9	49.7-127	4.24	23.5	L709368-01	WG7315
Ethylbenzene	mg/kg	0.219	0.214	87.4	40.8-141	2.24	23.8	L709368-01	WG7315
Toluene	mg/kg	0.221	0.215	88.2	49.8-132	2.97	23.5	L709368-01	WG7315
Total Xylene	mg/kg	0.663	0.649	88.2	41.2-140	2.25	23.7	L709368-01	WG7315
a,a,a-Trifluorotoluene(PID)				101.0	54-144				WG7315
TPH (GC/FID) Low Fraction	mg/kg	20.1	21.2	72.6	28.5-138	4.98	23.6	L709368-01	WG7315
a,a,a-Trifluorotoluene(FID)				99.20	59-128				WG7315
TPH (GC/FID) High Fraction	mg/kg	56.4	52.0	92.3	50-150	8.18	20	L709710-04	WG7314
o-Terphenyl				85.20	50-150				WG7314

Batch number /Run number / Sample number cross reference

WG731413: R2960945: L709679-01 02 03 WG731545: R2961828: L709679-01 02 03 WG731445: R2961930: L709679-01 02 03

^{* *} Calculations are performed prior to rounding of reported values.

^{*} Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LABOR CHOICE

XTO Energy - San Juan Division Logan Hixon 382 County Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L709679

July 15, 2014

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859 Tax I.D. 62-0814289

Est. 1970

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

<i>[</i>]	Quot	e Number			- 1 .1				Anal	ysis			ab Information
		C	····		Page L of 1								
	Locar	Contact	on		10 Contact Phor				ļ				•
ENERGY			Email	Results t	:0:		/			1			
Western Division	Los	jan, h	1 0 × x	, Ja	ms		10		-				ffice Abbreviations
Well Site/Location	130-04	Number 5 - 301	30	Test Region			Dodgeo	7				£	ingo = DUR ken = BAK
Collected By	1	les on Ice		Turnaround Standard			70	سنا					n = RAT ance = PC
Company		Requested	1	Next Do			0	(B)				Roos	evelt = RSV
Signature				Two Day Three Day			-	ب ا	,				arge = LB igeville = OV
y 4 -	Gray Areas f	or Lab Use	Onlyl		. 5 Bus. Days (by	contract)	5	ーノ					
- Joy N				Date Ne		No. of	5/08	387	- 1	j		 	
Sample ID San	iple Name	Media	Date	Time	Preservative	Conts.	8	8					ample Number
FACE H-07114-0907 50:	Die East	5	7-11	0907	(001	1-407		Z					109619-61
	sile mide		701	C580	Cool	1-2107	X	X,					~
FARLIX-071114-0936 Sail	pile west	_ S	7-11	0976	COOl	1-405	\times	X					og
	· · · · · · · · · · · · · · · · · · ·					<u> </u>	ļ			 			
										-			
							-	-		+			
						 -	}			- -			
		 					1			_		_	
				<u> </u>		 	 						
<u>Media</u> : Filter = F Soil = S Wastewater = W	W Groundwate		rinking V				r = SV	/ Air	= A Dr	ill Mud	= DM	Other = 0	T V
Relinquished By: (Signature)		Oate:	-14	Time: 1330	Received By: (Sig	inature)				Nur	nber (of Bottles	Sample Condition
Relinquished By: (Signature)		Date:		Timei						Tem	peral	ture: 3.1	Other Information
Relinquished By: (Signature)		Date:		Time: Received for Lab by: (Signat			ture)		Date: Tim 07-12-14 OS		Time:		
Comments			***************************************				in die Managari		/				JUS
								تخ	102	-	5	5470	2403186 500

^{*} Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200



12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

Report Summary

Wednesday July 02, 2014

Report Number: L707747 Samples Received: 07/01/14 Client Project: 30-045-30130

Description: Owens 1A

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



YOUR LABOR CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

July 02,2014

ESC Sample # : L707747-01

Date Received : July 01, 2014 Description : Owens 1A

: FARJM-062714-1520

Site ID :

Project # : 30-045-30130

Collected By

Sample ID

Collection Date : 06/27/14 15:20

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	85.9		96	2540 G-2011	07/02/14	1
Benzene	1.3	1.2	mg/kg	8021/8015	07/02/14	2000
Toluene	31.	12.	mg/kg	8021/8015	07/02/14	2000
Ethylbenzene	19.	1.2	mg/kg	8021/8015	07/02/14	2000
Total Xylene	160	3.5	mg/kg	8021/8015	07/02/14	2000
TPH (GC/FID) Low Fraction	2800	230	mg/kg	GRO	07/02/14	2000
Surrogate Recovery-%			J. J			
a,a,a-Trifluorotoluene(FID)	95.4		% Rec.	8021/8015	07/02/14	2000
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021/8015	07/02/14	2000
TPH (GC/FID) High Fraction Surrogate recovery(%)	1300	93.	mg/kg	3546/DRO	07/02/14	20
o-Terphenyl	77.9		% Rec.	3546/DRO	07/02/14	20

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:



YOUR LAB OF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859

Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

July 02,2014

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

Date Received : July 01, 2014

Description : Owens 1A

Sample ID FARJM-062714-1500

Collected By

Collection Date : 06/27/14 15:00

ESC Sample # : L707747-02

Site ID :

Project # : 30-045-30130

Parameter	Dry Result	Det. Limit	Units	Method	Date_	Dil.
Total Solids	86.6		%	2540 G-2011	07/02/14	1
Benzene	BDL	0.0029	mg/kg	8021/8015	07/02/14	5
Toluene	BDL	0.029	mg/kg	8021/8015	07/02/14	5
Ethylbenzene	BDL	0.0029	mg/kg	8021/8015	07/02/14	5
Total Xylene	BDL	0.0087	mg/kg	8021/8015	07/02/14	5
TPH (GC/FID) Low Fraction	BDL	0.58	mg/kg	GRO	07/02/14	5
Surrogate Recovery-%			3 . 3			
a,a,a-Trifluorotoluene(FID)	96.7		% Rec.	8021/8015	07/02/14	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	07/02/14	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	BDL	4.6	mg/kg	3546/DRO	07/02/14	1
o-Terphenyl	75.9		% Rec.	3546/DRO	07/02/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:



YOUR LAB OF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Project # : 30-045-30130

REPORT OF ANALYSIS

July 02,2014

XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410 Otto Naegle

ESC Sample # : L707747-03

Date Received : July 01, 2014 Description : Owens 1A

Site ID : Sample ID : FARJM-062714-1356

Collected By : Collection Date : 06/27/14 13:56

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	87.7		8	2540 G-2011	07/02/14	1
Benzene	BDL	0.0028	mg/kg	8021/8015	07/02/14	5
Toluene	BDL	0.028	mg/kg	8021/8015	07/02/14	5
Ethylbenzene	BDL	0.0028	mg/kg	8021/8015	07/02/14	5
Total Xylene	BDL	0.0086	mg/kg	8021/8015	07/02/14	5
TPH (GC/FID) Low Fraction	BDL	0.57	mg/kg	GRO	07/02/14	5
Surrogate Recovery-%			5. 5			
a,a,a-Trifluorotoluene(FID)	97.6		% Rec.	8021/8015	07/02/14	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	07/02/14	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	6.5	4.6	mg/kg	3546/DRO	07/02/14	1
o-Terphenyl	76.8		% Rec.	3546/DRO	07/02/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)



YOUR LABOR CHOICE

Sample ID

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

ESC Sample # : L707747-04

Project #: 30-045-30130

REPORT OF ANALYSIS

July 02,2014

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

Date Received : July 01, 2014 Description : Owens 1A

Site ID : FARJM-062714-1424

Collected By

Collection Date : 06/27/14 14:24

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	87.6		%	2540 G-2011	07/02/14	1
Benzene	BDL	0.0028	mg/kg	8021/8015	07/02/14	5
Toluene	BDL	0.028	mg/kg	8021/8015	07/02/14	5
Ethylbenzene	BDL	0.0028	mg/kg	8021/8015	07/02/14	5
Total Xvlene	BDL	0.0086	mg/kg	8021/8015	07/02/14	5
TPH (GC/FID) Low Fraction	BDL	0.57	mg/kg	GRO	07/02/14	5
Surrogate Recovery-%			3. 3			
a,a,a-Trifluorotoluene(FID)	96.9		% Rec.	8021/8015	07/02/14	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	07/02/14	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	5.1	4.6	mg/kg	3546/DRO	07/02/14	1
o-Terphenyl	72.9		% Rec.	3546/DRO	07/02/14	1

Results listed are dry weight basis.

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:



YOUR LABTOF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859

Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

July 02,2014

Site ID :

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

Date Received : July 01, 2014 Description : Owens 1A

Description

Sample ID FARJM-062714-1358

Collected By

Collection Date : 06/27/14 13:58

ESC Sample # : L707747-05

Project #: 30-045-30130

Parameter	Dry Result	Det. Limit	Units	Method	Date_	Dil.
Total Solids	86.7		8	2540 G-2011	07/02/14	1
Benzene	BDL	0.0029	mq/kq	8021/8015	07/02/14	5
Toluene	BDL	0.029	mq/kq	8021/8015	07/02/14	5
Ethylbenzene	BDL	0.0029	mg/kg	8021/8015	07/02/14	5
Total Xylene	BDL	0.0086	mg/kg	8021/8015	07/02/14	5
TPH (GC/FID) Low Fraction	BDL	0.58	mg/kg	GRO	07/02/14	5
Surrogate Recovery-%			3, 3			
a,a,a-Trifluorotoluene(FID)	97.1		% Rec.	8021/8015	07/02/14	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	07/02/14	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	BDL	4.6	mg/kg	3546/DRO	07/02/14	1
o-Terphenyl	70.1		% Rec.	3546/DRO	07/02/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Note:



YOUR LABOF CHOICE

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Otto Naegle XTO Energy - San Juan Division 382 County Road 3100 Aztec, NM 87410

July 02,2014

ESC Sample # : L707747-06

Date Received : Description

July 01, 2014

Owens 1A

Site ID :

Sample ID

FARJM-062714-1350

Project #: 30-045-30130

Collected By

Collection Date : 06/27/14 13:50

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	77.8		%	2540 G-2011	07/02/14	1
Benzene	BDL	0.0032	mg/kg	8021/8015	07/02/14	5
Toluene	BDL	0.032	mg/kg	8021/8015	07/02/14	5
Ethylbenzene	0.0095	0.0032	mg/kg	8021/8015	07/02/14	5
Total Xylene	0.032	0.0096	mg/kg	8021/8015	07/02/14	5
TPH (GC/FID) Low Fraction	3.3	0.64	mq/kg	GRO	07/02/14	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.9		% Rec.	8021/8015	07/02/14	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	07/02/14	5
TPH (GC/FID) High Fraction Surrogate recovery(%)	BDL	5.1	mg/kg	3546/DRO	07/02/14	1
o-Terphenyl	68.8		% Rec.	3546/DRO	07/02/14	1

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Attachment A List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L707747-01	WG729713	SAMP	o-Terphenyl	R2954292	J7

Attachment B Explanation of OC Qualifier Codes

aning

J7

Surrogate recovery cannot be used for control limit evaluation due to dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision The agreement between a set of samples or between duplicate samples.

 Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed 07/02/14 at 15:46:02

TSR Signing Reports: 288 R2 - Rush: Next Day

Domestic Water Well Sampling-see L609759 Lobato for tests EDD's on ALL projects email James, Kurt and Logan all reports

Sample: L707747-01 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45 Sample: L707747-02 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45 Sample: L707747-03 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45 Sample: L707747-04 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45 Sample: L707747-05 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45 Sample: L707747-06 Account: XTORNM Received: 07/01/14 13:00 Due Date: 07/02/14 00:00 RPT Date: 07/02/14 15:45



YOUR LABFOR CHOICE

XTO Energy - San Juan Division Otto Naegle 382 County Road 3100

Aztec, NM 87410

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L707747

July 02, 2014

		Labora	tory Blank			
Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG729737	07/02/14 07:0
Benzene	< .0005	mg/kg			WG729229	07/01/14 20:1
Ethylbenzene	< .0005	mg/kg			WG729229	07/01/14 20:1
Foluene	< .005	mg/kg				07/01/14 20:1
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG729229	07/01/14 20:3
Total Xylene	< .0015	mg/kg			WG729229	07/01/14 20:
a,a,a-Trifluorotoluene(FID)		% Rec		59-128	WG729229	07/01/14 20:3
a,a,a-Trifluorotoluene(PID)		% Rec	. 103.0	54-144	WG729229	07/01/14 20:3
CPH (GC/FID) High Fraction	< 4	mg/kg			WG729713	07/02/14 08:3
O-Terphenyl		% Rec	. 81.30	50-150	WG729713	07/02/14 08:3
Benzene	< .0005	mg/kg			WG729563	07/02/14 14:3
Ethylbenzene	< .0005	mg/kg			WG729563	07/02/14 14:3
Coluene	< .005	mg/kg			WG729563	07/02/14 14:3
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG729563	07/02/14 14:3
Total Xylene	< .0015	mg/kg			WG729563	07/02/14 14:1
a,a,a-Trifluorotoluene(FID)		% Rec	. 97.90	59-128	WG729563	07/02/14 14:3
a,a,a-Trifluorotoluene(PID)		% Rec	. 102.0	54-144	WG729563	07/02/14 14:1
		Du	plicate			
Analyte	Units	Result	Duplicate RPD	Limit	Ref Sam	p Batch
Total Solids	%	87.9	87.6 0.38	5	L707747	-04 WG72973
		Laboratory	Control Sample			
Analyte	Units	Known Val		% Rec	<u>Li</u> mit	Batch
Potal Solids	%	50	50.0	100.	85-115	WG72973
Benzene	mg/kg	.05	0.0421	84.1	70-130	WG72922
Ethylbenzene	mg/kg	.05	0.0437	87.4	70-130	WG72922
Poluene	mg/kg	.05	0.0432	86.4	70-130	WG72922
Total Xylene	mg/kg	.15	0.133	89.0	70-130	WG72922
a,a,a-Trifluorotoluene(PID)				101.0	54-144	WG72922
PPH (GC/FID) Low Fraction	mg/kg	5.5	5.54	101.	63.5-137	
a,a,a-Trifluorotoluene(FID)		•		98.00	59-128	WG72922
PPH (GC/FID) High Fraction	mg/kg	60	48.5	80.8	50-150	WG72971
O-Terphenyl				78.80	50-150	WG72971
denzene	mg/kg	.05	0.0407	81.4	70-130	WG72956
Ethylbenzene	mg/kg	.05	0.0426	85.1	70-130	₩G72956
Coluene	mg/kg	.05	0.0418	83.6	70-130	WG72956
Cotal Xylene	mg/kg	.15	0.130	86.6	70-130	WG72956
a,a,a-Trifluorotoluene(PID)				102.0	54-144	WG72956
	/-				CO E 10E	WG72956
PPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.5	5.54	101. 99.80	63.5-137 59-128	WG72956

^{*} Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

XTO Energy - San Juan Division Otto Naegle 382 County Road 3100

Aztec, NM 87410

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L707747

July 02, 2014

enzene ng/kg 0.0417 0.0421 83.0 70-130 0.796 20 WG72 thylbenzene ng/kg 0.0430 0.0437 86.0 70-130 1.68 20 WG72 Octal Xylene ng/kg 0.0430 0.0437 86.0 70-130 1.68 20 WG72 Octal Xylene ng/kg 0.0430 0.0437 86.0 70-130 1.68 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.131 0.133 87.0 70-130 2.11 20 WG72 Octal Xylene ng/kg 0.0417 0.0407 83.0 50-150 3.85 20 WG72 Octal Xylene ng/kg 0.0433 0.0426 86.0 50-150 3.85 20 WG72 Octal Xylene ng/kg 0.0433 0.0426 86.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.0433 0.0426 86.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.131 0.130 80.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.131 0.130 80.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.131 0.130 80.0 70-130 1.22 20 WG72 Octal Xylene ng/kg 0.131 0.130 80.0 70-130 1.22 20 WG72 Octal Xylene ng/kg 0.131 0.130 80.0 70-130 1.22 20 WG72 Octal Xylene ng/kg 0.0433 0.0426 86.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.0433 0.0426 86.0 70-130 1.69 20 WG72 Octal Xylene ng/kg 0.0431 0.00484 0.5 77.0 59-128 WG72 WG72 Octal Xylene ng/kg 0.0431 0.00484 0.5 77.0 59-128 WG72 WG72 Octal Xylene ng/kg 0.040 0.00089 0.5 77.0 0.0008 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080 0.00080	7 - 7 - 1				Sample Dupl					
thtybbenzene olivene mg/kg 0.0430 0.0437 86.0 70-130 1.68 20 8072 olivene mg/kg 0.0423 0.0432 85.0 70-130 2.02 20 8072 olivene mg/kg 0.131 0.133 87.0 70-130 2.10 20 8072 olivene mg/kg 0.131 0.133 87.0 70-130 2.11 20 8072 mg/kg 0.67710 Low Fraction mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 1.67/FID) Low Fraction mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-130 3.85 20 8072 mg/kg 7-ferphenyl mg/kg 0.0417 0.0407 83.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.0433 0.0428 86.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.0433 0.0428 86.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.134 0.00044 0.5 77.0 49.7-17 1.707321-01 8072 mg/kg 0.134 0.00044 0.5 77.0 59-128 1.707321-01 8072 m	Analyte	Units	Result	Ref	%Rec	Lit	nit	RPD	Limit	Batch
thtybbenzene olivene mg/kg 0.0430 0.0437 86.0 70-130 1.68 20 8072 olivene mg/kg 0.0423 0.0432 85.0 70-130 2.02 20 8072 olivene mg/kg 0.131 0.133 87.0 70-130 2.10 20 8072 olivene mg/kg 0.131 0.133 87.0 70-130 2.11 20 8072 mg/kg 0.67710 Low Fraction mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 1.67/FID) Low Fraction mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-137 1.22 20 8072 mg/kg 7-ferphenyl mg/kg 5.61 5.54 102. 63.5-130 3.85 20 8072 mg/kg 7-ferphenyl mg/kg 0.0417 0.0407 83.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.0433 0.0428 86.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.0433 0.0428 86.0 70-130 1.69 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.131 0.130 88.0 70-130 1.12 20 8072 mg/kg 7-ferphenyl mg/kg 0.134 0.00044 0.5 77.0 49.7-17 1.707321-01 8072 mg/kg 0.134 0.00044 0.5 77.0 59-128 1.707321-01 8072 m	Benzene	ma/ka	0.0417	0.0421	83.0	70	-130	0.790	20	WG7292
column mg/kg 0.0423 0.0432 85.0 70-130 2.02 20 KG72 a,a,a-Trifluorotoluene (PID) mg/kg 5.51 5.54 102.0 54-144 CG72										
total Xylene mg/kg 0.131 0.133 87.0 70.130 2.11 20 8072 PM (GC/FID) Low Praction mg/kg 5.61 5.54 102.0 55.158 1.22 20 8072 PM (GC/FID) Low Praction mg/kg 5.61 5.54 102.0 55.158 1.22 20 8072 PM (GC/FID) High Fraction mg/kg 50.4 48.5 84.0 50.150 3.85 20 8072 enzene mg/kg 0.0433 0.0426 86.0 70.130 1.69 20 8072 enzene mg/kg 0.0423 0.0426 86.0 70.130 1.69 20 8072 cotal Xylene mg/kg 0.0423 0.0418 85.0 70.130 1.22 20 8072 malyte mg/kg 0.0423 0.0418 85.0 70.130 1.22 20 8672 malyte mg/kg 0.35 5.54 97.0 63.5-137 3.24 20	-									
.a,a,a-Trifluorocoluene(FID) Mg/Kg 5.61 5.54 102. 63.5-137 1.22 20 WG72 Mg/Kg 5.61 5.54 102. 65.5-138 1.22 20 WG72 Mg/Kg 5.61 5.54 102. 65.5-138 1.22 20 WG72 Mg/Kg 6.61 5.54 102. 65.5-138 1.22 20 WG72 Mg/Kg 6.61 5.54 102. 65.5-138 1.22 20 WG72 Mg/Kg 6.61 5.54 102. 65.5-136 5.5-138 1.22 20 WG72 Mg/Kg 6.61 5.54 102. 65.5-150 WG72 Mg/Kg 6.64 6.6 5.5-150 5.6-150 WG72 Mg/Kg 6.64 6.6 5.5-150 5.85 20 WG72 Mg/Kg 6.64 6.6 5.5-150 5.85 20 WG72 Mg/Kg 6.64 6.6 6.6 70-130 1.69 2.49 20 WG72 Mg/Kg 6.64 6.6 70-130 1.69 2.0 WG72 Mg/Kg 6.64 6.6 70-130 1.69 20 WG72 Mg/Kg 6.64 6.6 70-130 1.22 20 WG72 Mg/Kg 6.64 6.6 70-130 1.21 20 MG72 Mg/Kg 6.65 6.66 70-130 1.21 20										
		111g/kg	0.131	0.133				2.11	20	
Matrix Spike Matr		01 /1= 01	5 61	F F.						
PR (GC/FID) High Fraction		mg/kg	5.61	5.54				1.22	20	
Perpenent	a,a,a-Trifluorototuene(Fib)				98.20	59	-128			WG7292
### Big content	TPH (GC/FID) High Fraction	mg/kg	50.4	48.5				3.85	20	WG729
theybbenzene oluene mg/kg 0.0433 0.0426 86.0 70-130 1.69 20 WG72 oluene mg/kg 0.0423 0.0418 85.0 70-130 1.22 20 WG72 oluene mg/kg 0.131 0.130 88.0 70-130 1.12 20 WG72 wG72 mg/kg 0.131 0.130 88.0 70-130 1.11 20 WG72 mg/kg 0.131 0.130 88.0 70-130 1.11 20 WG72 mg/kg 0.651 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0448 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.0428 0.042	o-Terphenyl				80.80	50-	-150			WG729
Note Martix Spike Martix Spike Matrix Spike										WG729
cotal Xylene mg/kg 0.131 0.130 88.0 70-130 1.11 20 MG72 2H (GC/PID) Low Fraction mg/kg 5.36 5.54 97.0 63.5-137 3.24 20 MG72 2H (GC/PID) Low Fraction mg/kg 5.36 5.54 97.0 63.5-137 3.24 20 MG72 2H (GC/PID) Low Fraction mg/kg 5.36 5.54 97.0 63.5-137 3.24 20 MG72 2H (GC/PID) Low Fraction mg/kg 0.194 0.000494 0.5 77.0 49.7-127 L707323-01 WG72 2H (GC/PID) Low Fraction mg/kg 0.200 0.00020 0.5 80.0 49.8-132 L707323-01 WG72 2H (GC/PID) Low Fraction mg/kg 0.611 0.00182 15 81.0 49.7-127 L707323-01 WG72 2H (GC/PID) Low Fraction mg/kg 0.611 0.00182 15 81.0 49.7-127 L707323-01 WG72 2H (GC/PID) Low Fraction mg/kg 39.6 <td></td> <td></td> <td></td> <td></td> <td>86.0</td> <td>70-</td> <td>-130</td> <td>1.69</td> <td>20</td> <td>WG729</td>					86.0	70-	-130	1.69	20	WG729
.a,a,a-Trifluorotoluene(PID) 102.0	oluene	mg/kg	0.0423	0.0418	85.0	70	-130	1.22	20	WG729
PR GC/FID Low Fraction	otal Xylene	mg/kg	0.131	0.130	88.0	70	-130	1.11	20	WG729
Matrix Spike Matr	,a,a-Trifluorotoluene(PID)				102.0	54	-144			WG729
Matrix Spike Matr	PPH (GC/FID) Low Fraction	mg/kg	5.36	5.54	97.0	63	.5-137	3.24	20	WG729
Matrix Spike Units MS Res Ref Res TV Rec Limit Ref Samp Batc Renzene Mg/kg 0.194 0.000494 0.5 77.0 49.7-127 1707323-01 WG72	ı,a,a-Trifluorotoluene(FID)				97.70	59	-128		-	WG729
mg/kg				Matrix S	pike					
tthylbenzene	nalyte	Units	MS Res	Ref Res	s TV	% Rec	Limit	:	Ref Samp	Batch
coluene mg/kg 0.200 0.00120 .05 80.0 49.8-132 L707323-01 WG72 cotal Xylene mg/kg 0.611 0.00182 .15 81.0 41.2-140 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 24.7 0.108 5.5 89.0 28.5-138 L707323-01 WG72 PH (GC/FID) High Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PT-terphenyl mg/kg 0.208 0.000466 .05 83.0 49.7-127 L707501-12 WG72 enzene mg/kg 0.218 0.000503 .05 87.0 49.8-132 L707501-12 WG72 enzene mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 cotal Xylene mg/kg 0.6	enzene	mg/kg	0.194	0.00049	94 .05	77.0	49.7-	-127	L707323-01	WG729
otal Xylene mg/kg 0.611 0.00182 .15 81.0 41.2-140 L707323-01 WG72 A,a-Trifluorotoluene (PID) mg/kg 24.7 0.108 5.5 89.0 28.5-138 L707323-01 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 0.208 0.000466 .05 83.0 49.7-127 L707501-12 WG72 enzene mg/kg 0.216 0.00101 .05 81.0 49.7-127 L707501-12 WG72 cotal Xylene mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 Matrix Spike Dupli	thylbenzene	mg/kg	0.200	0.00058	87 .05	80.0	40.8-	-141	L707323-01	WG729
otal Xylene mg/kg 0.611 0.00182 .15 81.0 41.2-140 L707323-01 WG72 A,a-Trifluorotoluene (PID) mg/kg 24.7 0.108 5.5 89.0 28.5-138 L707323-01 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction - Terphenyl mg/kg 0.208 0.000466 .05 83.0 49.7-127 L707501-12 WG72 enzene mg/kg 0.216 0.00101 .05 81.0 49.7-127 L707501-12 WG72 cotal Xylene mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 Matrix Spike Dupli	oluene	mg/kg	0.200	0.00120	0 .05	80.0				WG729
A, a. Trifluorotoluene (PID) Mg/kg 24.7 0.108 5.5 89.0 28.5-138 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 0.208 0.000466 .05 83.0 49.7-127 L707501-12 WG72 PH (GC/FID) High Fraction mg/kg 0.218 0.000503 .05 87.0 40.8-141 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 25.4 0.103 5.5 92.0 28.5-138 L707501-12 WG72 PH (GC/FID) High Fraction mg/kg 0.214 0.194 85.3 49.7-127 9.94 23.5 L707323-01 WG72 PH (High Fraction mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72 PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72										
PH (GC/FID) Low Fraction		5,5								
PH (GC/FID) High Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 39.6 0.0 60 66.0 50-150 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 0.208 0.000466 .05 83.0 49.7-127 L707501-12 WG72 PH (GC/FID) High Fraction mg/kg 0.218 0.000503 .05 87.0 40.8-141 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 25.4 0.103 5.5 92.0 28.5-138 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.216 0.103 5.5 92.0 28.5-138 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.216 0.103 5.5 92.0 28.5-138 L707501-12 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 0.250 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72 PH (GC/FID) Low Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72 PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72		ma/ka	24 7	0 108	5.5				1.707323-01	
Perphenyl	,	5,5		0.100	3.5				3.0.323 01	WG729
Perphenyl	PH (GC/FID) High Fraction	ma/ka	39.6	0.0	60	66.0	50-19	50	1.707350-14	WG729
Matrix Spike Duplicate mg/kg	-Terphenyl	5,5			• • •					WG729
Matrix Spike Duplicate mg/kg	senzene	ma/ka	0.208	0.0004	66 .05	83.0	49.7-	-127	L707501-12	WG729
Voluene mg/kg 0.216 0.00101 .05 86.0 49.8-132 L707501-12 WG72 votal Xylene mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 A, a, a-Trifluorotoluene (PID) mg/kg 25.4 0.103 5.5 92.0 28.5-138 L707501-12 WG72 A, a, a-Trifluorotoluene (FID) Matrix Spike Duplicate malyte Units MSD Ref *Rec Limit RPD Limit Ref Samp Batch Matrix Spike Duplicate malyte Units MSD Ref *Rec Limit RPD Limit Ref Samp Batch Matrix Spike Duplicate MG72 Matrix Spike Duplicate Mg72 Mg72 Mg72 Mg72 Mg72 Mg72 Mg72 Mg72										
otal Xylene mg/kg 0.665 0.00145 .15 88.0 41.2-140 L707501-12 WG72 A,a,a-Trifluorotoluene (PID) mg/kg 25.4 0.103 5.5 92.0 28.5-138 L707501-12 WG72 Matrix Spike Duplicate Matrix Spike Duplicate Matrix Spike Duplicate Ref %Rec Limit RPD Limit Ref Samp Batch enzene mg/kg 0.214 0.194 85.3 49.7-127 9.94 23.5 L707323-01 WG72: thylbenzene mg/kg 0.214 0.194 85.3 49.7-127 9.94 23.5 L707323-01 WG72: coluene mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72: coluene mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72: pH mg/kg <										
A, a-Trifluorotoluene (PID) PH (GC/FID) Low Fraction PM (GC/FID) High Fraction PM (GC/FID) Low Fraction PM (GC/FID) High Fraction PM (GC										
### (GC/FID) Low Fraction		mg/ kg	0.003	0.0014	.13				13707301-12	
Matrix Spike Duplicate malyte Units MSD Ref %Rec Limit RPD Limit Ref Samp Batch enzene malyte malyte malyte malyte Units MSD Ref %Rec Limit RPD Limit Ref Samp Batch malyte malyte malyte malyte malyte Units MSD Ref %Rec Limit RPD Limit Ref Samp Batch malyte Duplicate NG72: Matrix Spike Duplicate NG72: NG72: Matrix Spike Duplicate NG72: Malyte malyte Matrix Spike Duplicate NG72: Malyte Malyte malyte Matrix Spike Duplicate NG72: Malyte Malyte		/1	05.4	0 100						
malyte Units MSD Ref %Rec Limit RPD Limit Ref Samp Batch enzene mg/kg 0.214 0.194 85.3 49.7-127 9.94 23.5 L707323-01 WG725 thylbenzene mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG725 otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG725 ph (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG725 ph (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72	,a,a-Trifluorotoluene(FID)	mg/kg	25.4	0.103	5.5				L/0/501-12	WG729
malyte Units MSD Ref %Rec Limit RPD Limit Ref Samp Batch enzene mg/kg 0.214 0.194 85.3 49.7-127 9.94 23.5 L707323-01 WG725 thylbenzene mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG725 otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG725 ph (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG725 ph (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72			Mat	riv Snike I	Junlicate					
thylbenzene mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72: oluene mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72: otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG72:	nalyte	Units				Limit	RPD	Limit	Ref Samp	Batch
thylbenzene mg/kg 0.215 0.200 85.9 40.8-141 7.17 23.8 L707323-01 WG72: oluene mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG72: otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG72: na,a-Trifluorotoluene(PID) 101.0 54-144 WG72: ng/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72: na,a-Trifluorotoluene(FID) 98.50 59-128 WG72: na,a-Trifluorotoluene(FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72	enzene	ma/ka	0.214	0.194	85.3	49.7-127	9 94	23.5	1,707323-01	WG729
oluene mg/kg 0.215 0.200 85.4 49.8-132 7.11 23.5 L707323-01 WG729 otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG729 A, a-Trifluorotoluene (PID) mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG729 A, a-Trifluorotoluene (FID) mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG729										
otal Xylene mg/kg 0.651 0.611 86.6 41.2-140 6.39 23.7 L707323-01 WG72: a,a,a-Trifluorotoluene (PID) 101.0 54-144 WG72: pH (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72: ya,a-Trifluorotoluene (FID) 98.50 59-128 WG72: PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72:	•									
,a,a-Trifluorotoluene(PID) 101.0 54-144 WG72: PH (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72: A,a,a-Trifluorotoluene(FID) 98.50 59-128 WG72: PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72:										
PH (GC/FID) Low Fraction mg/kg 25.0 24.7 90.5 28.5-138 1.28 23.6 L707323-01 WG72-25.0 24.7 90.5 59-128 WG72-25.0 WG72-25.0 Mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72-25.0 Mg72-25.0 Mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72-25.0 Mg72-25.0 Mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72-25.0 Mg72-25.0 Mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72-25.0 Mg72-25.0 Mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72-25.0 Mg72-25.0 Mg72-25.		mg/xg	0.001				0.33	23.1	L/0/JZJ=U1	
,a,a-Trifluorotoluene(FID) 98.50 59-128 WG72 PH (GC/FID) High Fraction mg/kg 38.7 39.6 64.6 50-150 2.11 20 L707350-14 WG72		mar /1-~	25.0				1 20	22.6	1707222 01	
(,)		mg/kg	23.0	24./			1.28	23.6	⊔/U/3Z3-UI	WG729
(,)		(1	20.7	20.6	C1 C	50 150	0 11	20	1707350 14	ислос
	-Terphenyl	mg/kg	30./	ס.ענ	68.00	50-150 50-150	2.11	20	⊔/0/350-14	WG729

o-Terphenyl

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

XTO Energy - San Juan Division Otto Naegle 382 County Road 3100

Aztec, NM 87410

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L707747

July 02, 2014

		Ma	trix Spik	e Duplicate	:				
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/kg	0.204	0.208	81.4	49.7-127	2.08	23.5	L707501-12	WG729563
Ethylbenzene	mg/kg	0.209	0.218	83.5	40.8-141	4.01	23.8	L707501-12	WG729563
Toluene	mg/kg	0.207	0.216	82.3	49.8-132	4.55	23.5	L707501-12	WG729563
Total Xylene	mg/kg	0.634	0.665	84.4	41.2-140	4.68	23.7	L707501-12	WG729563
a,a,a-Trifluorotoluene(PID)				101.0	54-144				WG729563
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	23.3	25.4	84.5 98.20	28.5-138 59-128	8.41	23.6	L707501-12	WG729563 WG729563

Batch number /Run number / Sample number cross reference

WG729737: R2954070: L707747-01 02 03 04 05 06 WG729229: R2954154: L707747-02 03 04 05 06 WG729713: R2954292: L707747-01 02 03 04 05 06 WG729563: R2954587: L707747-01

^{* *} Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LABOR CHOICE

XTO Energy - San Juan Division Otto Naegle 382 County Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L707747

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

July 02, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

	<i>III</i>	Quot	e Number				1			An	alysis	- Printer		La	b informa	tion
		×70	Camban			Page of										
-		James M	d)anic	1		XTO Contact Phone #										
	MENERGY			Email	Results	Results to:								044		
	Western Division	Tami	Kurt	1.0	561						ĺ				<u>ce Abbrevi</u> igton = FAF	
İ	Well Site/Location	James,	Number		<u> </u>	Test Reason	***************************************						1 1	Duran	go = DUR	-
ļ	Owens # 1/1	70 -(14)	Samples on Ice			Purnaround	·	(%)			-			Bakkei Raton :	n = BAK = BAT	
ļ	Taws Mc Carle	(6	((V / N)			andard		680							ce = PC	
	Company		Requeste	d		ext Day			X						elt ≈ R\$V	
	Signature/	- Stave	onro			vo Day Iree Day		DRO,	7				1 1		ge = LB	
		Gray Areas f	or Lab He	o Onlut	Std	. 5 Bus. Days (by	contract)	\sim	8			1		į.	C165	
	1700	Gidy Alcos	UI EUD US	y Olliy.	Date No	eded	T	∇	021						·	
1	Sample ID San	nple Name	Media	Date	Time	Preservative	No. of Conts.	8015	80					Smi	mple Num	hor
	FARTM-062714-1520 Initia		,5	6/27/4	1520	Cool	1/4-2	\ddot{x}	X			_	1-1		707 747	-ef
	FARJM-062714-1500 East		5	66714	15°00	Cool	1/407	X	7				1 1		<u> </u>	-60
	FARJM-062714-1356 North	1 Wall	Š	6/27/14	1356	Cagil	1/402	X	X							-03
	FARJM-062714-1424 South	Walla	5	6/21/4	1424	Cool	1/402	X	X							~el
	FARJA-062714-1358 West	Wall,	_ کِــا		1358		1/407	X	X				\bot			-05
	FARSM-062714-1350 Bottom	@ 10	<u>S</u>	6/27/14	1350	Cool	1/402	X	X	_			-			96
				 	<u> </u>		 			_		-				ستربيب سسم
											_		+			
				 							_		+-+			
											_	+	+-+	and the second s		
				†	***************************************							_	111	ويسواه والمارية والم		170000000000000000000000000000000000000
	Media: Filter = F Joil = 5 Wastewater = W	W Groundwate		rinking V	Vaster = D			r = SW	/ Air	=A D				20120444		
	Relinquished (Signature)		Date: 6/30	114	Time:	Received By: (Sig	gnature)					6.1	of Both		ample Con	dition TO
	Belinquished By: (Signature)		Date:	,	Time:	Received By: (Sig	nature)				Te	mpero	ature!		ther Inform	
	Relinquished By: (Signature)		Date:		Time:	Received for Lab	by: (Signa	ture)		The same of the sa	De 7/	te:	Time:			96
	Comments IZUSH					V										

^{*} Sample ID will be the office and sampler-date-military time FARIM-MMDDYY-1200

		THE CONTRACT OF THE PARTY OF TH		The state of the s
ENERGY	XTO Energy	On-Site Forr	n	
Well NameOwens	#1A		30-045-301	
Section 7K Township	3/N Range	12W COL	inty San Jua	
Contractors On-Site Keys				
Spill Amountbbls S				
Land Use Range Residential / 1	Tribe	_) Excavation 2	1 × 25 ×	deep
To the second se	SEP PK 21 0000 0000 0000 0000 0000 0000 0000 0	Raw	Sample Location	3

Site Diagram

Comments

Number of Photos Taken

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
	NA	, 100 Standard	NA NA	100	NA
1350		Bottom @ 10' (Sandstore)	Yelbu-Brown sandson	1630	8015,8021
1355	a	South Wall	Brown Sandy-loam	3400	
1356	3	North Wall	Brown Sandy-loam	114	SO15, E021
1358	4	West hall	Brown Sandy-loam	(08	8015, 8021
1424	5	South Wall 2	Brown Sandy-loam	148	8015 8021
1500	6	East Wall	Brown Sandy loam	72	8015 81031
1520	」	Initial Scil Pile	Brown Sand loan		8015 BODI

Name (Print) James Mc James Name (Signature)

Date 6/27 / 19

Company XTC

Hixon, Logan

From:

Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Sent:

Wednesday, July 16, 2014 8:01 AM

To:

Hixon, Logan; Shari Ketcham (sketcham@blm.gov)

Cc:

Morrow, Sherry; McDaniel, James; Trujillo, Marcos; Hoekstra, Kurt; Marriott, Mike

Subject:

RE: Owens 1A Remediation Update

Mr. Hixon

Results look good, XTO has NMOCD approval to backfill.

From: Hixon, Logan [mailto:Logan Hixon@xtoenergy.com]

Sent: Wednesday, July 16, 2014 7:46 AM

To: Smith, Cory, EMNRD; Shari Ketcham (sketcham@blm.gov)

Cc: Morrow, Sherry; McDaniel, James; Trujillo, Marcos; Hoekstra, Kurt; Marriott, Mike

Subject: Owens 1A Remediation Update

Good Morning,

Attached for your reference are the sample analytical data from the Owens 1A soil remediation piles. All three (3) soil piles individual of each other returned results back below the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. XTO plans to begin backfilling the excavation with the soil on Wednesday July 16, 2014. A final C-141 will be submitted at time of completion of backfilling the excavation.

If you have any questions or concerns do not hesitate to contact me at anytime. Thank you and have a good day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | 72 Suttle Street, Suite J | Durango, CO 81303 | ph: 970-247-7708 | Cell: 505-386-8018 Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Logan Hixon@xtoenergy.com

This document may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not the intended recipient, you are on notice that any unauthorized disclosure, copying, distribution or taking of any action in reliance on the contents of this document is prohibited.

Hixon, Logan

From: Ketcham, Shari <sketcham@blm.gov>
Sent: Wednesday, July 16, 2014 8:14 AM

To: Hixon, Logan

Cc: Smith, Cory, EMNRD; Morrow, Sherry; McDaniel, James; Trujillo, Marcos; Hoekstra, Kurt;

Marriott, Mike

Subject: Re: Owens 1A Remediation Update

Since soil samples are below regulatory standards, XTO has approval from BLM to backfill the excavation.

Thank you!

Shari Ketcham Natural Resource Specialist, Spills Biologist BLM Farmington Field Office 6251 College Blvd Suite A Farmington, NM 87402

Office: (505) 564-7713 Fax: (505) 564-7607

On Wed, Jul 16, 2014 at 7:45 AM, Hixon, Logan < Logan Hixon@xtoenergy.com > wrote:

Good Morning,

Attached for your reference are the sample analytical data from the Owens 1A soil remediation piles. All three (3) soil piles individual of each other returned results back below the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. XTO plans to begin backfilling the excavation with the soil on Wednesday July 16, 2014. A final C-141 will be submitted at time of completion of backfilling the excavation.

If you have any questions or concerns do not hesitate to contact me at anytime. Thank you and have a good day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Logan Hixon@xtoenergy.com

This document may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not the intended recipient, you are on notice that any unauthorized disclosure, copying, distribution or taking of any action in reliance on the contents of this document is prohibited.

Hixon, Logan

From:

Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Sent:

Thursday, June 26, 2014 11:59 AM McDaniel, James; Babcock, Kristen

To: Cc:

Hixon, Logan; Naegele, Seraiah; Ketcham, Shari (sketcham@blm.gov); Powell, Brandon,

EMNRD

Subject:

RF: Owens #1A Remediation Plan

Mr. McDaniel's,

I have approved your remediation Plan for the Owens #1A API# 30-045-30130

With the following conditions of approval.

- 1. XTO Notify NMOCD verbally and by email 72hrs prior to soil sampling of in-situ remediation piles.
- 2. XTO will fence the excavation with 4' hogwire fence with 1 strand of barb wire on top.
- 3. XTO will build a temporary berm around the remediation piles to contain the contaminated material on site.

If you have any questions please feel free to contact me.

Thank you

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: McDaniel, James [mailto:James McDaniel@xtoenergy.com]

Sent: Wednesday, June 25, 2014 3:46 PM

To: Smith, Cory, EMNRD

Cc: Hixon, Logan; Naegele, Seraiah **Subject:** Owens #1A Remediation Plan

Cory,

Per the BLM guidelines, they are requesting that operators submit a remediation plan to them for approval prior to beginning any mechanical remediation activities. Attached is a copy of the remediation plan submitted to them for approval. With the NMOCD and the BLM's approval, we will begin remediation activities at the Owens #1A immediately. Thank you

"Safety takes time, take the time to be safe" (PL)

James McDaniel

EH&S Supervisor XTO Energy Inc. 382 Road 3100

Aztec, New Mexico 87410

Phone: 505.333.3701 | Mobile: 505.787.0519

james mcdaniel@xtoenergy.com

An **ExxonMobil** Subsidiary

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB NO. 1004-013
Expires: July 31, 201

Di B		Expires: July 31, 2010					
SUNDRY	UREAU OF LAND MANA NOTICES AND REPO	RTS ON WELLS	5. Léasc Ser NMSF0				
Do not use th	is form for proposals to il. Use form 3160-3 (API	drill or to re-enter an	6. If Indian,	Allottce or Tribe Name			
SUBMIT IN TR	SUBMIT IN TRIPLICATE - Other instructions on reverse side.						
Type of Well Oil Well		8. Well Name and No. OWENS 1A					
Name of Operator XTO ENERGY INC	9. API Well 30-045-	No. 30130-00-S1					
3a. Address 382 ROAD 3100 AZTEC, NM 87410		3b. Phone No. (include area code Ph: 505-333-3630	_ BLANC	10. Field and Pool, or Exploratory BLANCO MESAVERDE			
4. Location of Well (Footage, Sec., 7			1 1	or Parish, and State			
Sec 7 T31N R12W NESW 19 36.912117 N Lat, 108.139221		JUN 2 6 2014 KB NECULATORY COMPL		AN COUNTY, NM			
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, REPORT, OR	OTHER DATA			
TYPE OF SUBMISSION		TYPE C	F ACTION				
Notice of Intent	☐ Acidize	Deepen	☐ Production (Start/Res	sume)			
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity			
☐ Subsequent Report	☐ Casing Repair	■ New Construction	□ Recomplete	Other			
☐ Final Abandonment Notice	Change Plans	□ Plug and Abandon	□ Temporarily Abando	n			
	Convert to Injection	Plug Back	■ Water Disposal				
Attach the Bond under which the wor following completion of the involved testing has been completed. Final At determined that the site is ready for f XTO Energy Inc. has attached 6/23/14. This remediation plan If you have any questions or complete the state of the	operations. If the operation restandament Notices shall be file inal inspection.) I a Remediation Plan for the will be executed immediation oncerns please contact June 1997. I true and correct. Electronic Submission #	ults in a multiple completion or red d only after all requirements, inclu he spill that occured on this ately upon your approval.	completion in a new interval, a ding reclamation, have been education on 3100.	Form 3160-4 shall be filed once			
	mmitted to AFMSS for pro	cessing by MARK KELLY on	06/26/2014 (14MXK0174SE ILATORY ANALYST)			
Name (Printed/Typed) SHERRY	J MORROW	THE REGU	LATONI ANALISI				
Signature (Electronic	Submission)	Date 06/25/	2014				
	THIS SPACE FO	OR FEDERAL OR STATE	OFFICE USE				
				20,000,000			
Approved By MARK KELLY Conditions of approval, if any, are attache entify that the applicant holds legal or equivalent would entitle the applicant to conduct the supplicant to conduct the applicant t	uitable title to those rights in the	not warrant or		TAL PROTECTIONE 02/26/2014			
Fitle 18 II S.C. Section 1001 and Title 43	115 C Section 1717 multiple			artment or agency of the United			



Owens #1A

API # 30-045-30130 Unit K, Section 7, Township 31N, Range 12W San Juan County, New Mexico Lat: 36.91211 Long: -108.139220

Remediation Plan

Submitted By: James McDaniel EH&S Supervisor XTO Energy, Inc. 505-333-3701

Introduction

On June 23, 2014, a loss of approximately 80 bbls of production fluids was discovered at the Owens #1A well site. Approximately 42 bbls of condensate, and 38 bbls of produced water was lost from the on-site production tank through a hole in the tank. All fluids were contained within the bermed area, and soaked into the ground beneath the tank berm. No fluids were recovered. The site was then ranked a zero pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases, setting the closure standards for this location to 5,000 ppm total petroleum hydrocarbons (TPH), 10 ppm Benzene, and 50 ppm total BTEX. The required 24 hour notice was made to Cory Smith with the NMOCD on June 24th, 2014. Samples were collected to determine the extent of the impacted soil from 2', 4' and 6' below ground surface. All three samples returned results above the 50 ppm BTEX standard, determining that excavation activities would need to be performed. The production tank has been cleaned and moved in preparation for excavation activities.

Proposed Remediation Activity

XTO proposes to excavate the impacted materials to extents of the NMOCD Standards of 5,000 ppm TPH, 10 ppm benzene and 50 ppm total BTEX, as determined by laboratory analysis. Estimated impacted soil is estimated at between 100-150 cubic yards at this time. Due to the relatively low levels of TPH compared to the BTEX constituents in the sample results, XTO proposes to remediate the impacted soil on-site in a bio-pile or landfarm in order to re-use the soils for backfill purposes. Based on the temperature and the volatile nature of the constituents, XTO believes that the light range hydrocarbons will flash off quickly, leaving behind only the heavier, less mobile hydrocarbons. XTO proposes to turn the bio-pile or landfarm 3-4 times, allowing the sun to remediate the soil, and resample for TPH, Benzene and BTEX. Should the impacted soils achieve results below the closure standards determined for this location of 5,000 ppm TPH, 10 ppm benzene and 50 ppm BTEX, the remediated soil would be used for backfill of the spill excavation area. If the closure levels cannot be achieved in a maximum time of two week, then the soil would be hauled off for disposal, with clean backfill being brought in. Preliminary sample results, a topographic map, and a facility diagram are attached with this plan for your reference.

Please consider this remediation plan the proposal for remediation activities at the Owens #1A well site. XTO is prepared to execute this remediation plan immediately upon approval.

James McDaniel, CHMM #15676

EH&S Supervisor XTO Energy, Inc. Western Division



Analytical Report

Report Summary

Client: XTO Energy Inc.

Chain Of Custody Number: 0069

Samples Received: 6/24/2014 1:50:00PM

Job Number: 98031-0528 Work Order: P406101

Project Name/Location: Owens 1A

Entire Report Reviewed By:	Draft	Date:	6/25/14
	Tim Cain, Laboratory Manager		

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.





XTO Energy Inc. 382 CR 3100 Project Name:

Owens 1A

Project Number: Project Manager: 98031-0528

Reported: 25-Jun-14 09:49

Aztec NM, 87410

r: Logan Hixon

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container	
NE 12"	P406101-01A	Soil	06/24/14	06/24/14	Glass Jar, 4 oz.	
W 2'	P406101-02A	Soil	06/24/14	06/24/14	Glass Jar, 4 oz.	
W 6'	P406101-03A	Soil	06/24/14	06/24/14	Glass Jar, 4 oz.	





XTO Energy Inc. 382 CR 3100 Aztec NM, 87410

Project Name:

Owens 1A

Project Number:

98031-0528

Reported: 25-Jun-14 09:49

Project Manager:

Logan Hixon

DRAFT: NE 12" P406101-01 (Solid)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DRAFT: Volatile Organics by EPA 8021									
Benzene	2.08	0 05	mg/kg	i	1426009	06/24/14	06/24/14	EPA 8021B	_
Toluene	55.6	0.05	mg/kg	J	1426009	06/24/14	06/24/14	EPA 8021B	
Ethylbenzene	26.1	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
p,in-Xylene	244	0 05	mg/kg	i	1426009	06/24/14	06/24/14	EPA 8021B	
o-Xylene	62.7	0,05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total BTEX	ND	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Surrogate: Bromochlorobenzene		139 %	80-	120	1426009	06.24:14	06.24.14	EPA 8021B	S-02
Surrogaie: 1,3-Dichlorobenzene		629 %	80-	120	1426009	06'24 14	06 24:14	EPA 8021B	S-02
DRAFT: Nontralogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	1380	4 99	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	109	30 0	mg/kg	ı	1426010	06/24/14	06/24/14	EPA 8015D	



XTO Energy Inc. 382 CR 3100 Aztec NM, 87410 Project Name:

Owens IA

Project Number: Project Manager: 98031-0528 Logan Hixon

Reported: 25-Jun-14 09:49

DRAFT: W 2' P406101-02 (Solid)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DRAFT: Volatile Organics by EPA 8021									
Benzene	6.48	0,05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Toluene	126	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Ethylbenzene	39.1	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
p,m-Xylene	350	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
o-Xylene	88.3	0.05	nıg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Surrogate: Bromochlorobenzene		132 %	80-	120	1426009	06 24'14	06 24:14	EPA 802 [B	S-02
Surrogate: 1,3-Dichlorobenzene		621%	80	120	1426009	06-24 14	06,24,14	EPA 8021B	S-02
DRAFT: Nonhalogenated Organics by 8015						<u> </u>			
Gasoline Range Organics (C6-C10)	2020	4.99	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	1270	30 0	mg/kg	1	1426010	06/24/14	06/24/14	EPA 8015D	





XTO Energy Inc 382 CR 3100 Aztec NM, 87410

Project Name:

Owens 1A

Project Number: Project Manager: 98031-0528 Logan Hixon

Reported: 25-Jun-14 09:49

DRAFT: W 6' P406101-03 (Solid)

		Reporting							
Analyte	Result	Límit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DRAFT: Volatile Organics by EPA 8021									
Benzene	10.4	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Toluene	194	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Ethylbenzene	57.4	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
p,m-Xylene	470	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
o-Xylene	133	0.05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total Xylenes	ND	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Total BTEX	ND	0 05	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		992 %	80-	-120	1426009	06:24 14	06 24.14	EPA 8021B	S-02
Surrogate: Bromochlorobenzene		445 %	80-	-120	1426009	06.24 14	06.24 14	EPA 8021B	S-02
DRAFT: Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	2710	5.00	mg/kg	1	1426009	06/24/14	06/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	2320	29 9	mg/kg	1	1426010	06/24/14	06/24/14	EPA 8015D	





XTO Energy Inc 382 CR 3100 Aztec NM, 87410 Project Name:

Owens IA

Project Number: Project Manager: 98031-0528 Logan Hixon

Reported: 25-Jun-14 09:49

DRAFT: Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte Batch 1426009 - Purge and Trap EPA 5030 Blank (1426009-BLK1) Benzene	Result ND ND	Limit 0 00 1	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Blank (1426009-BLK1)	ND	0 00 1		Prenared &						
	_	0 00 1		i i cparcu ac	: Analyzed:	24-Jun-14				
	ND		mg/kg	······································			······································			
Coluene		0.001								
Ethylbenzene	ND	0.001	•							
,m-Xylene	ND	0,001	•							
-Xylene	ND	0.001								
Total Xylenes	ND	0,001	•							
Total BTEX	ND	100 0	-							
Surrogate: 1,3-Dichlorobenzene	55.1		ug L	50,0		110	80-/20	·		
urrogaia: Bromochlorobenzene	56,3		~	50.0		1/3	80-120			
Duplicate (1426009-DLIP1)	Sou	rce: P406093-	01	Prepared &	: Analyzed:	24-Jun-14				
Benzenc	ND	0.05	mg/kg		ND				30	
oluene	ND	0,05	-		ND				30	
Ethylbenzene	ND	0.05	•		ND				30	
,m-Xylenc	ND	0.05	-		ND				30	
-Xylane	ND	0.05	+		ND				30	
urrogate: 1,3-Dichlorobenzene	59.2		ug L	50,0		118	80-120			
urrogate: Bromochlorobenzene	62.2		-	50.0		124	80-120			S-0
Matrix Spike (1426089-MSI)	Sou	rce: P406093-	01	Prepared &	Analyzed:	24-Jun-14				
enzene	52,7		ug/L	50,0	ND	105	39-150			
oluene	53,2		•	50.0	ND	106	46-148			
thylbenzene	51,9		*	50 0	ND	104	32-160			
.m-Xylene	106			100	ND	106	46-148			
-Xylene	53,2		"	50.0	ND	106	46-148			
urrogate: 1,3-Dichlorobenzene	57.6		W	50 U		115	80-120			
urrogate: Bromochlorobenzene	60.2			50,0		120	80-120			



XTO Energy Inc.

Project Name:

Owens IA

382 CR 3100 Aztec NM, 87410 Project Number: Project Manager: 98031-0528

Logan Hixon

Reported: 25-Jun-14 09:49

DRAFT: Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	KPD	RPD Limit	Notes
Batch 1426009 - Purge and Trap EPA 5030A										
Blank (1426009-BLK1)				Prepared &	Analyzed:	24-Jun-14				
Gasoline Range Organics (C6-C10)	ND	0,10	mg/kg							
Duplicate (1426009-DUP1)	Sour	ce: P406093-	01	Prepared &	Analyzed:	24-Jun-14				
Gasoline Range Organics (C6-C10)	7 59	4.99	mg/kg		ND				30	
Matrix Spike (1426009-MS1)	Sour	ce: P406093-	01	Prepared &	Analyzed:	24-Jun-14				
Gasoline Range Organics (C6-C10)	0.46		mg/L	0 450	ND	102	75-125			





XTO Energy Inc 382 CR 3100

Project Name:

Owens IA

Aztec NM, 87410

Project Number: Project Manager: 98031-0528

Logan Hixon

Reported: 25-Jun-14 09:49

DRAFT: Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1426010 - DRO Extraction EPA 3550C										
Blank (1426010-BLK1)				Prepared &	Analyzed:	24-Jun-14				
Diesel Range Organics (C10-C28)	ND	30 0	mg/kg			,				
Duplicate (1426010-DE(P1)	Soui	rce: P406093-	01	Prepared &	Analyzed:	24-Jun-14				
Diesel Range Organics (C10-C28)	ND	30 0	mg/kg		ND				30	
Matrix Spike (1426010-MS1)	Source: P406093-01			Prepared & Analyzed: 24-Jun-14						
Diesel Range Organics (C10-C28)	279		mg/L	250	6.00	109	75-125			





XTO Energy Inc.

Project Name:

Owens IA

382 CR 3100 Aztec NM, 87410 Project Number:

98031-0528

Project Manager:

Logan Hixon

Reported: 25-Jun-14 09:49

Notes and Definitions

S-02

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present

in the sample extract

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dıy

Sample results reported on a dry weight basis

RPD

Relative Percent Difference



		Quot	e Number				A A				Ä	neiy	315		
		, XTC	Contact	-	 		e <u>1</u> of <u>1</u> entact Phor 386-86								-98031-0528 -040001001
ENERGY	i	<u> Logan</u>	H;xo	Email	Results	205_ to:	386-86	18						-	THAIRD LEGIT
Western Division	1		Logar				17	,	Ì	İ					Office Abbreviations
Well Site/Location		ADI	Number			Te	est Reason		/_	,		}			Farmington = FAR Durango = DUR
Collected By		30-09 Som	Jes en Ice	30	·	كداج	rnaround		2		t				Bakken = BAK Raton = RAT
L (1959) 77 1 XC	} ∽	· (3/ N)		Standard					\mathbf{x}	เก]]		Piceance = PC
Company	Company OA/OC Requested Two Day						Mod (. ro	(RTEX					Roosevelt = RSV La Barge = LB		
Signature		AND CONTRACTORS	THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE P	r a sadacira	Three Day Std. 5 Bus. Days (by contract)				(74		[]		Orangeville = QV
for 11		Grey Areas	or Lob U	On)#	Date No						掤				
						Date Needed No. of									
Sample ID		ple Name	Media	Date	Time										Sumple Number
TAPLU-062414-0930		12"			0930	CQ	01	1-407	R	子	翻				PARTON DISTRIBUTION DE LA CONTRACTION DE LA CONT
FACLU-062414-0940		'	-	6-24	1812	┼─┤		1-402	$\vdash \vdash$	+					PAROPOLOGICA
FAQLH-867414-1017	W 6			-	BJC			-60	-62	4	392				27.010.0
				<u> </u>								_			
					†										
						4			L			<u> </u>	\vdash		
					ļ		····		<u> </u>						
						 			 			<u> </u>			
Media : Filter = F Soit = S Wastew	ater 4W	W Groundwate	er = GW D	inking (Vaster = D	SW SIC	idge = SG S	urface Wate	x = SV	L_L	r a A	Drill	Mud	DM O	ther = OT
Relinguished by (Signature)	5/		Dotter Cold	11/100			gik) :ved bay			•		Control Control		CHASS Army Exceedings	
Relinquished By: (Signature)	/		Date	1-1-	Timer	er Received By: (Signature) Temperature					Canal information				
Relinquished By: (Signature)			Date:		Time:										
Comments RUSH								iV							

* Sample ID will be the office and sampler-date-military time FARIM-MMDDYY-1200

9.1 10.1 11.6

103)

0069

Page 10 of 10



