# OIL CONS. DIV DIST. 3

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

JAN 07 2016

Form C-141 Revised August 8, 2011

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

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

			Rele	ease Notifi	catio	n and Co	orrective A	ction	l				
						OPERA'	TOR		Initi	al Report	$\boxtimes$	Fina	l Repor
Name of Co	ompany: X	TO Energy,	Inc.			Contact: Lo							TVE
		00, Aztec, N	lew Mexi	ico 87410			No.: (505) 333-3						1
Facility Na	me: Ropco	16-2				Facility Typ	e: Gas Well (Fi	ruitland	Coal)				
Surface Ow	vner: State	Land		Mineral (	Owner				API No	. 30-045-3	30993	71 W	
				LOC	ATIO	N OF RE	LEASE						
Unit Letter C	Section 16	Township 29 N	Range 14W	Feet from the 1186	North	n/South Line FNL	Feet from the 1392		Vest Line WL	County San Juan			
	12.3			Latitude: N36			W-108*.3193						
	ht .			NA'	TURE	OF REL							
Type of Rele	ease: Produc	ed Water				Volume of	Release: ately 60 bbl.		Volume l	Recovered:	50 bb	l. Reco	vered
Source of Re	elease: 90 de	gree turn in p	roduced w	vater line		Date and I	Hour of Occurrence		Date and	Hour of Di	scover	y: July	2, 2014
		21 0					14 at Unknown Ti	ime	at 1600.	1-1-1-1			1711
Was Immed	iate Notice (		Yes [	No □ Not R	Required	If YES, To	h (NMOCD)						
By Whom?	Logan Hivor				7		Hour: Friday Dece	ember 11	2015 at 1	1640 (Attac	hed)	-	12.5
Was a Water		ched?					olume Impacting			o to (ritial)			
			Yes 🗵	No									
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*						2 0	da		371 63
with the wid Guidelines f regulatory li Describe Arcoming to su analyzed via PPM total C and below st Chlorides, a and below st Cory Smith crew raked i pursuant to tare attached I hereby cert regulations a public health should their or the environment.	est point bei for the Reme mits to 100 ea Affected arface), the p to USEPA Me hlorides, and andards for nd below sta andards for (NMOCD) a nto the impa the approved for your refe tify that the all operators n or the envi operations h onment. In a	ing forty-six (diation of Leappm TPH, 10 and Cleanup A and area, the cethod 8015 (Did below stand TPH and BTH and BTH approved the pacted area applaced area applaced are required to more the packet of the packet	46) feet, a aks, Spills ppm benz Action Tal rossover a proper and BT EX. The same proposed roximately plan discussiven above acceptance adequately DCD acceptance acc	and the longest portion and Releases. The ene, and 50 ppm ken.* On December and the access. O), 8021 (BTEX PH and BTEX. Tample collected a EX. The sample of the energy of	wint being the depth total B' ber 11, 2 ss road (1), and control the samplet the error collected TO required from the mith (No plete to release port by the remediant of the samplet to release to the samplet to remediant the samplet to release to the samplet to remediant the samplet the	g ninety-four to groundwate TEX.  2015, a composite area, for a total chlorides. The collected a consover area are and at the access dested approvating gypsum to an application and the best of my notifications a the NMOCD mate contaminate.	at the 90 degree et (94) feet long. The er is estimated be estite soil sample wal of four (4) company sample collected to the pad returned analytical is road area returned in the application the application that pose and the estimated and the estimated as "Final Right in that pose a the eye the operator of the estimated as "Final Right in that pose a the eye the operator of the estimated as "Final Right in that pose a the eye the operator of the estimated as "Final Right in the estimated as "Final Right in that pose a the eye the operator of the estimated as "Final Right in the estimated	vas colle posite so at the so a analytic results of ed analytic on of gy ea on De mately or 5. No fur understar ctive act Report" de reat to great to great to great to great to great to great	as ranked a in fifty (50) cted from a bil samples curce return cal results of below de- tical results psum to the cember 28 ine (1) lb. p rther action and that pur- ions for rel- loes not rel- round water	the source a collected. And analytic of 3,600 PP etectable lines of 2,500 Fe esite to add, 2015. On er linear foot is required suant to NM leases which lieve the oper, surface w	area (po All samal result M total hit PPM total dress of December. Actil. The s	e NMO et the  oint of r aples we lts of 6, l Chlori d total tal Chloride ber 30, ivity wa sample rules ar endang of liabil uman h	release ere lab ,200 ides, levels. 2015 a as results
Signature: T	Jogan H	hixon				Approved by	OIL CON Environmental S		1	DIVIST	ON		>
Printed Nam	ie: Logan Hi	xon				227	20.			osse	u	_	
Title: EHS C	Coordinator					Approval Da	te:02/33/11	Q	Expiration	Date:		The state of	1
The last to		Hixon@xtoer  4, 2016  ets If Necess		Phone: 505-333-	-3683	Conditions o	f Approval:			Attache	d 🗆		
Attach Add	itional She	ets If Necess	sary			MILLIS	257473	10		TE P	10		183

NVF1535740316



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

OrderNo.: 1512622

December 23, 2015

James McDaniel XTO Energy 382 County Road 3100 Aztec, NM 87410

TEL: (505) 787-0519 FAX (505) 333-3280

RE: Ropco 16-2

Dear James McDaniel:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/12/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1512622

Date Reported: 12/23/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Energy

Client Sample ID: PAD Composite

Project: Ropco 16-2 Collection Date: 12/11/2015 3:00:00 PM

Lab ID: 1512622-001

Matrix: SOIL

Received Date: 12/12/2015 9:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	3600	150	mg/Kg	100	12/17/2015 5:17:36 PM	M 22840
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANIC	s			Analys	t: JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/16/2015 1:30:15 PM	M 22777
Surr: DNOP	76.7	70-130	%REC	1	12/16/2015 1:30:15 PM	M 22777
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/16/2015 10:50:06 A	M 22789
Surr: BFB	82.5	66.2-112	%REC	1	12/16/2015 10:50:06 A	M 22789
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.047	mg/Kg	1	12/16/2015 10:50:06 A	M 22789
Toluene	ND	0.047	mg/Kg	1	12/16/2015 10:50:06 A	M 22789
Ethylbenzene	ND	0.047	mg/Kg	1	12/16/2015 10:50:06 A	M 22789
Xylenes, Total	ND	0.095	mg/Kg	1	12/16/2015 10:50:06 A	M 22789
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	12/16/2015 10:50:06 A	M 22789

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 9 J
- Sample pH Not In Range P
- Reporting Detection Limit

Lab Order 1512622

Date Reported: 12/23/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Energy

Client Sample ID: Source

Project: Ropco 16-2

Collection Date: 12/11/2015 3:13:00 PM

Lab ID: 1512622-002

Matrix: SOIL

Received Date: 12/12/2015 9:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: LGT
Chloride	6200	300	mg/Kg	200	12/17/2015 5:30:01 F	M 22840
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANIC	S			Analy	st: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	12/16/2015 1:51:50 F	M 22777
Surr: DNOP	75.9	70-130	%REC	1	12/16/2015 1:51:50 F	PM 22777
EPA METHOD 8015D: GASOLINE R	ANGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/16/2015 12:03:35	PM 22789
Surr: BFB	89.6	66.2-112	%REC	1	12/16/2015 12:03:35	PM 22789
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.047	mg/Kg	1	12/16/2015 12:03:35	PM 22789
Toluene	ND	0.047	mg/Kg	1	12/16/2015 12:03:35	PM 22789
Ethylbenzene	ND	0.047	mg/Kg	1	12/16/2015 12:03:35	PM 22789
Xylenes, Total	ND	0.094	mg/Kg	1	12/16/2015 12:03:35	PM 22789
Surr: 4-Bromofluorobenzene	115	80-120	%REC	1	12/16/2015 12:03:35	PM 22789
Surr: 4-Bromofluorobenzene	115	80-120	%REC	1	12/16/2015 12:03:35	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 9 J

- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1512622

Date Reported: 12/23/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Energy

Client Sample ID: Crossover

Project: Ropco 16-2

Collection Date: 12/11/2015 3:30:00 PM

Lab ID: 1512622-003

Matrix: SOIL Received Date: 12/12/2015 9:00:00 AM

Analyses	Result	RL	Qual U	nits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	JRR
Chloride	ND	30	n	ng/Kg	20	12/16/2015 10:31:36 PM	A 22840
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	s				Analyst	JME
Diesel Range Organics (DRO)	36	10	n	ng/Kg	1	12/16/2015 2:13:18 PM	22777
Surr: DNOP	76.8	70-130	9	%REC	1	12/16/2015 2:13:18 PM	22777
EPA METHOD 8015D: GASOLINE R	ANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	n	ng/Kg	1	12/16/2015 1:17:01 PM	22789
Surr: BFB	82.8	66.2-112	9	%REC	1	12/16/2015 1:17:01 PM	22789
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.048	n	ng/Kg	1	12/16/2015 1:17:01 PM	22789
Toluene	ND	0.048	n	ng/Kg	1	12/16/2015 1:17:01 PM	22789
Ethylbenzene	ND	0.048	n	ng/Kg	1	12/16/2015 1:17:01 PM	22789
Xylenes, Total	ND	0.095	n	ng/Kg	1	12/16/2015 1:17:01 PM	22789
Surr: 4-Bromofluorobenzene	106	80-120	9	%REC	1	12/16/2015 1:17:01 PM	22789

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1512622

Date Reported: 12/23/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: XTO Energy

Client Sample ID: Across Road

Project: Ropco 16-2

Collection Date: 12/11/2015 3:20:00 PM

Lab ID: 1512622-004

Matrix: SOIL

Received Date: 12/12/2015 9:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	2500	75	mg/Kg	50	12/17/2015 5:42:26 PM	22840
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	12/16/2015 2:56:19 PM	22777
Surr: DNOP	72.9	70-130	%REC	1	12/16/2015 2:56:19 PM	22777
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/16/2015 1:41:30 PM	22789
Surr: BFB	84.6	66.2-112	%REC	1	12/16/2015 1:41:30 PM	22789
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.047	mg/Kg	1	12/16/2015 1:41:30 PM	22789
Toluene	ND	0.047	mg/Kg	1	12/16/2015 1:41:30 PM	22789
Ethylbenzene	ND	0.047	mg/Kg	1	12/16/2015 1:41:30 PM	22789
Xylenes, Total	ND	0.094	mg/Kg	1	12/16/2015 1:41:30 PM	22789
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	12/16/2015 1:41:30 PM	22789

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1512622

23-Dec-15

Client:

XTO Energy

Project:

Ropco 16-2

Sample ID MB-22840

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 22840

PQL

PQL

1.5

RunNo: 30906

Prep Date: 12/16/2015

Analysis Date: 12/16/2015

SeqNo: 944949

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**  Qual

Chloride

ND

TestCode: EPA Method 300.0: Anions

Sample ID LCS-22840

Client ID: LCSS

SampType: LCS

RunNo: 30906

Prep Date: 12/16/2015

Batch ID: 22840

Analysis Date: 12/16/2015

SeqNo: 944950 %REC

Units: mg/Kg

%RPD **RPDLimit** 

Qual

1.5

90

HighLimit

Chloride

14

15.00

SPK value SPK Ref Val

94.1

110

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits J

Page 5 of 9

- Sample pH Not In Range
- Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1512622

23-Dec-15

Client:

XTO Energy

Project:

Ropco 16-2

Sample ID MB-22777	SampTy	pe: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 22	777	F	RunNo: 3	0855				
Prep Date: 12/14/2015	Analysis Da	ite: 12	2/15/2015	5	SeqNo: 9	43424	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.6		10.00		85.7	70	130			
Sample ID LCS-22777	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID LCS-22777 Client ID: LCSS		pe: LC			tCode: El		8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS		ID: <b>22</b>	777	F		0855	8015M/D: Di		e Organics	
Client ID: LCSS Prep Date: 12/14/2015	Batch	ID: <b>22</b>	777 2/15/2015	F	RunNo: 3	0855			e Organics  RPDLimit	Qual
Client ID: LCSS	Batch Analysis Da	ID: <b>22</b> :	777 2/15/2015	F	RunNo: 3 SeqNo: 9	0855 43440	Units: mg/h	(g		Qual

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- Page 6 of 9

- Sample pH Not In Range
- RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1512622

23-Dec-15

Client: Project. XTO Energy

Ronco 16-2

Project:	Ropco 16	-2									
Sample ID	MB-22789	SampTy	/ре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	PBS	Batch	ID: 22	789	F	RunNo: 3	0888				
Prep Date:	12/14/2015	Analysis Da	ate: 1	2/16/2015	5	SeqNo: 9	44112	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 850	5.0	1000		85.2	66.2	112			
Sample ID	LCS-22789	SampTy	/pe: LC	cs	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	LCSS	Batch	ID: 22	2789	F	RunNo: 3	0888				
Prep Date:	12/14/2015	Analysis Da	ate: 1	2/16/2015	5	SeqNo: 9	44113	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Gasoline Rang Surr: BFB	e Organics (GRO)	23 1000	5.0	25.00 1000	0	93.4 105	79.6 66.2	122 112			
Sample ID	1512622-002AMS	SampTy	/pe: <b>M</b>	s	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	Source	Batch	ID: 22	2789	F	RunNo: 3	0888				
Prep Date:	12/14/2015	Analysis Da	ate: 1	2/16/2015	5	SeqNo: 9	44116	Units: mg/k	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
	e Organics (GRO)	23	4.7	37-20-00-00-00-00-00-00-00-00-00-00-00-00-	0	97.6	62.5	151			
Surr: BFB		940		942.5		99.7	66.2	112			
Sample ID	1512622-002AMSI	SampTy	/pe: <b>M</b>	SD	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	e	
Client ID:	Source	Batch	ID: 22	2789	F	RunNo: 3	8880				
Prep Date:	12/14/2015	Analysis Da	ate: 1	2/16/2015	5	SeqNo: 9	44117	Units: mg/l	<b>K</b> g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
The second of	e Organics (GRO)	23	4.7		0	97.7	62.5	151	0.0287	22.1	
Surr: BFB		910		941.6		96.8	66.2	112	0	0	
Sample ID	MB-22811	SampTy	pe: M	BLK	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	je .	W. T
Client ID:	PBS	Batch	ID: 22	2811	F	RunNo: 3	8880				
Prep Date:	12/15/2015	Analysis Da	ate: 1	2/16/2015		SeqNo: 9	44120	Units: %RE	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Surr: BFB	MC -	830		1000		82.7	66.2	112			
Sample ID	LCS-22811	SampTy	/pe: L0	cs	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	je .	1
Client ID:	LCSS	Batch	ID: 22	2811	F	RunNo: 3	8880				
Prep Date:	12/15/2015	Analysis Da	ate: 1	2/16/2015	5	SeqNo: 9	44121	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000	,	1000		101	66.2	112			01100

### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 7 of 9

Sample pH Not In Range RL Reporting Detection Limit

### Hall Environmental Analysis Laboratory, Inc.

1.1

Client: XTO Energy Project: Ropco 16-2

Surr: 4-Bromofluorobenzene

Sample ID MB-22789 TestCode: EPA Method 8021B: Volatiles SampType: MBLK Client ID: PBS Batch ID: 22789 RunNo: 30888 Analysis Date: 12/16/2015 Prep Date: 12/14/2015 SeqNo: 944167 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.050 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

1.000

110

120

80

Sample ID LCS-22789 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 22789 RunNo: 30888 Prep Date: Analysis Date: 12/16/2015 12/14/2015 SeqNo: 944168 Units: mg/Kg SPK value SPK Ref Val Analyte Result PQL %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 0.96 0.050 1.000 0 96.2 80 120 0.97 0.050 1.000 0 97.1 80 120 Toluene Ethylbenzene 0.98 0.050 1.000 0 98.1 80 120 Xylenes, Total 2.8 3.000 0 92.4 80 120 0.10 Surr: 4-Bromofluorobenzene 1.2 1.000 124 80 120 S

Sample ID 1512622-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: **PAD Composite** Batch ID: 22789 RunNo: 30888 Prep Date: 12/14/2015 Analysis Date: 12/16/2015 SeqNo: 944170 Units: mg/Kg SPK value SPK Ref Val %REC %RPD Analyte Result PQL LowLimit HighLimit **RPDLimit** Qual Benzene 0.91 0.047 0.9470 96.4 69.6 136 Toluene 0.99 0.047 0.9470 0 104 76.2 134 0.047 0.9470 0 75.8 Ethylbenzene 1.1 113 137 3.1 0.095 2.841 0.02034 109 78.9 133 Xylenes, Total 132 Surr: 4-Bromofluorobenzene 1.2 0.9470 80 120 S

Sample ID 1512622-001AM Client ID: PAD Composite		ype: <b>MS</b>			tCode: E		8021B: Vola	tiles		
Prep Date: 12/14/2015	Analysis D		2/16/2015		SeqNo: 9		Units: mg/F	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.047	0.9461	0	86.4	69.6	136	11.1	20	He I
Toluene	0.89	0.047	0.9461	0	94.2	76.2	134	10.2	20	
Ethylbenzene	0.95	0.047	0.9461	0	100	75.8	137	12.4	20	
Xylenes, Total	2.7	0.095	2.838	0.02034	94.5	78.9	133	14.3	20	
Surr: 4-Bromofluorobenzene	1.1		0.9461		120	80	120	0	0	S

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 8 of 9

WO#:

1512622

23-Dec-15

P Sample pH Not In Range

RL Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1512622

23-Dec-15

Client:

XTO Energy

Project:

Ropco 16-2

Sample ID MB-22811

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

LowLimit

80

Client ID:

RunNo: 30888

PBS

Batch ID: 22811

120

%RPD

Prep Date: Analyte

12/15/2015

Analysis Date: 12/16/2015

PQL

SegNo: 944175 %REC

104

Units: %REC HighLimit

**RPDLimit** Qual

Surr: 4-Bromofluorobenzene Sample ID LCS-22811

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS

Batch ID: 22811

RunNo: 30888

Prep Date: 12/15/2015

SeqNo: 944176

Units: %REC

Analyte

Analysis Date: 12/16/2015

SPK value SPK Ref Val

SPK value SPK Ref Val

%REC

%RPD **RPDLimit** 

Qual

Surr: 4-Bromofluorobenzene

1.2

Result

1.0

1.000

1.000

119

80

HighLimit

120

Qualifiers:

S

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits

В Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits

Page 9 of 9

Sample pH Not In Range

Reporting Detection Limit



Holl Environmental Analysis Laboratory Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Webbits 100 A 4901 Hawkins NE

Website: www.hallenvironmental.com

Client Name: XTO Priergy	Work Order Number:	1512622		RcptNo	1
Received by/date:	12/12/15				
Logged By: Ashley Gallegos	12/12/2015 9:00:00 AM		AZ		
Completed By: Ashley Gallegos	12/14/2015 10:37:24 AM	٨	A		
Reviewed By:	12/14/15				
Chain of Custody	1. 111				
1. Custody seals intact on sample bottles?		Yes 🗌	No 🗌	Not Present 🗸	
2. Is Chain of Custody complete?		Yes 🗸	No	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the samples?	,	Yes 🗸	No 🗆	NA 🗆	
Were all samples received at a temperature	of >0° C to 6.0°C	Yes 🗸	No _	NA 🗆	
6. Sample(s) in proper container(s)?		Yes 🔽	No 🗔		
7. Sufficient sample volume for indicated test(	s)?	Yes 🗸	No 🗆		
8. Are samples (except VOA and ONG) prope		Yes 🗸	No 🗆		
9. Was preservative added to bottles?		Yes 🗌	No 🗸	NA 🗌	
10. VOA vials have zero headspace?		Yes 🗌	No 🗆	No VOA Vials	
11. Were any sample containers received brok	en?	Yes _	No 🗸	# of preserved bottles checked	
12. Does paperwork match bottle labels?		Yes 🗸	No 🗆	for pH:	or >12 unless noted)
(Note discrepancies on chain of custody)	10 110	Yes 🗹	No _	Adjusted?	
13. Are matrices correctly identified on Chain of	r Custody r	Yes V	No 🗆		
14. Is it clear what analyses were requested? 15. Were all holding times able to be met?		Yes 🗸	No 🗆	Checked by:	
(If no, notify customer for authorization.)					
Casaid Handling (if applicable)					
Special Handling (if applicable)  16. Was client notified of all discrepances with	this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:	Date [				
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding:					
Client Instructions:					
17. Additional remarks:					
18 Cooler Information		Carl Date	Signed By		
	Seal Intact   Seal No	Seal Date	Signed By	1	
1 1.4 Good Y	0.5				

Well Steel acction  Somple iD Sample Name  Company		XIOC						ŀ	-		Ī	
ENERGY  ENERGY	Well Site Location  Well Site Location  Collected By Company Company  Company  Company  Company  Company  Company  Company  Company  Company  Company  Company		untact		×	TO Contact Phon	# 90			À		
ENERGY    Pestern Division	Vestern Division  Well Shell ocation  Well Shell ocation  Collected By  Challs a sign of Company  Company  The Exittent	TX PEN	LO CT	1	2	787	643		Y			
Well Shell goethor  Well Shell goethor  Well Shell goethor  Conserved  Conser	Collected By Company C	5	0 CAN	N	tesults t	0170 Res	V	(	r KO		Farm	fice Abbreviations lington = FAR
Company   Comp	Collected By Charles of Children Company To Fall Children My	O- OHS	1 6 9	93	2	Test Reason			9 (		Dura	ngo = DUR ren = BAK
Sample ID Sample Name Media Date Time Day  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Preservative Conts.  Sample ID Sample Name Media Date Time Sample ID Sample ID Sample Name ID Sample	Company To E-welfay	Somple	N)		Sto	Turnaround		06	2 = Z		Rato	n = RAT ince = PC
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Sample ID Sample Name Media Date Time Preservative Cants.    January 1722	200	ay Areas for	Lab Use (	No. Ballion	X Std.	5 Bus. Days (by	contract)	<u> </u>	212		_	
CER'S Variety of Constant Actes Parl String			0		Time	Preservative	No. of Conts.	<u>z</u>	181			ample Number
Red William Water E Soil S Wortewater = Will Broundwater = CW Drinking Water = DW Studge = SG Surface Water = SW Broundwater = CW Drinking Water = DW Studge = SG Surface Water = SW Broundwater = CW Drinking Water = DW Studge = SG Surface Water = SW Air = A Drill Mud = DM Other = OT SW Standard	( PAC)	W		Jule	15:00	ON ECE	1 Jag	×	X		181	3623-001
Red Soul 2   Continue   Red Soul 2   Continue   Conti	9			Silula	5/13	ON TER	3	×	X			-003
Filter = F Soil = 5 Wastewater = WW groundwater = GW Drinking Waster = DW Studge = SG Surface Water = SW Air = A Drill Mud = DM Other = OT Air School By: (Signature)    Part   P	(crossing)			11/15	08:5	en Tek	15AR	X	X			-003
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nquished By: (Signature) Date: Time: Received for Lab by: (Signature) Date:	Religanished By. (Signoture)	a	Other		Time:	Received By Ki	gnature)	12/21	5 89		oerature:	Other Information
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<sup>\*</sup> Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200

From:

Hixon, Logan

To:

"Smith, Cory, EMNRD"

Cc:

McDaniel, James; Hoekstra, Kurt; Farnsworth, Rex; Powell, Brandon, EMNRD; Fields, Vanessa, EMNRD; Weaver,

John (John Weaver@xtoenergy.com); Morrow, Pete (Pete Morrow@xtoenergy.com); Baxstrom, Scott

(Scott Baxstrom@xtoenergy.com)

Subject:

RE: 2015-12-11 24 Hour Release Notification: Ropco 16-2 (30-045-30993) (24Hr Notification of Activities)

Date:

Tuesday, December 29, 2015 7:43:00 AM

Good Morning Cory,

This will be considered the 24hr notification of application of gypsum at the Ropco 16-2 well site (30-045-30993) located in Section 16(C), Township 29N, and Range 14W.

Work will begin on December 30, 2016 at approximately 13:00.

If you have any questions please don't hesitate to contact us.

Thanks and have a good day!

### Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | ph: 970-247-7708 | Cell: 505-386-8018 | ph: 505-333-3100 |

Logan Hixon@xtoenergy.com

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From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]

Sent: Monday, December 28, 2015 7:25 AM

To: Hixon, Logan

Cc: McDaniel, James; Hoekstra, Kurt; Farnsworth, Rex; Powell, Brandon, EMNRD; Fields, Vanessa,

**EMNRD** 

Subject: RE: 2015-12-11 24 Hour Release Notification: Ropco 16-2 (30-045-30993)

Mr. Hixon,

OCD approves XTO plan to apply gypsum to the release area. Please give the OCD at least 24 hours' notice prior to the application of gypsum. Please submit a final C-141 after the remediation is complete.

Thank you,

Cory Smith
Environmental Specialist
Oil Conservation Division

Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 corv.smith@state.nm.us

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

Sent: Monday, December 28, 2015 5:58 AM

To: Smith, Cory, EMNRD; Powell, Brandon, EMNRD

Cc: McDaniel, James; Hoekstra, Kurt; Farnsworth, Rex; Morrow, Pete; Weaver, John Subject: RE: 2015-12-11 24 Hour Release Notification: Ropco 16-2 (30-045-30993)

Good Morning Cory,

Sample results for the Ropco 16-2 are attached. All sample points returned results below the standards set for the site, for BTEX (50 PPM), and TPH (DRO & GRO) (100 PPM). Chloride levels on two of the four samples were slightly elevated. Due to the site having natural alkalinity and based on chloride results, XTO requests to do the following:

 Spread approximately 30 (40lb) bags of gypsum on the area. For a total of 1,200 lbs. approximately distributed evenly on site and raked in to the soil to prevent transport.

2) After completion of application of gypsum, a final C-141 will submitted with no

further action needed.

With approval of the above stated plan, the work will be completed and submittal of all final documentation will be provided.

If you have any questions do not hesitate contact us at any time.

Thank you for your time, and have a great day!

Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | ph: 970-247-7708 | Cell: 505-386-8018 | ph: 505-333-3100 |

Logan Hixon@xtoenergy.com

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From: Hixon, Logan

Sent: Friday, December 11, 2015 5:41 PM

To: Smith, Cory, EMNRD; BRANDON POWELL (brandon.powell@state.nm.us); jtaschek@slo.state.nm.us

Cc: McDaniel, James (James McDaniel@xtoenergy.com); Hoekstra, Kurt; Farnsworth, Rex

(Rex Farnsworth@xtoenergy.com); Bentson, Brian (Brian Bentson@xtoenergy.com); Morrow, Pete (Pete Morrow@xtoenergy.com); Nee, Martin (Martin Nee@xtoenergy.com); Logan, Michael (Michael Logan@xtoenergy.com); Weaver, John (John Weaver@xtoenergy.com); Divine, Olan

Subject: 2015-12-11 24 Hour Release Notification: Ropco 16-2 (30-045-30993)

Cory.

As discussed on the phone today 12/11/2015 14:47, a release occurred at the Ropco 16-2 well site (30-045-30993) located in Section 16(C), Township 29N, and Range 14W. The release was discovered at 12:15 P.M. MST. The release occurred at a 90 degree turn on the produced water discharge line on location past the water meter and valve below ground for the site. The site has been ranked a 20 due to an estimated depth to groundwater less than fifty (50) feet. Approximately sixty (60) barrels were released with approximately fifty (50) barrels recovered. The impacted area is approximately ninety-four (94) feet in length at its longest points and forty-six (46) feet wide at its widest points, with the deepest saturation level of approximately five (5) inches deep. A composite soil sample was collected from the source area (point of release coming to surface), the pad area, the crossover area, and the access road area, for a total of four (4) composite soil samples collected. All samples will be lab analyzed via USEPA Method 8015 (DRO & GRO), 8021 (BTEX), and chlorides.

Further communication will continue with the receiving of lab analysis results from samples collected today 12/11/2015.

If you have any questions please do not hesitate to contact us at any time.

#### Thank You!

XTO ENERGY INC., an ExxonMobil subsidiary

Logan Hixon | ph: 970-247-7708 | Cell: 505-386-8018 | ph: 505-333-3100 |

Logan\_Hixon@xtoenergy.com

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