District I 1625 N. French Dr., Hobbs, NM 88240 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

\* Attach Additional Sheets If Necessary

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

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

Oil Conservation Division 1220 South St. Francis Dr. Santa Ea NIM 97505

Form C-141

Revised August 8, 2011

				<u> </u>	mia re	, INIVI 8/3	03					•			
			Rele	ease Notific	ation	and Co	rrective A	ction							
						<b>OPERA</b>	ΓOR		☐ Initia	al Report	$\bowtie$	Final Repor			
Name of Co	mpany: X	TO Energy,	Inc.			Contact: Ku									
		00, Aztec, N		co 87410		Telephone 1	No.: (505) 333-3	100							
Facility Nan	ne: Sulliva	an Frame A	# 1E			Facility Type: Gas Well (Basin Dakota/und.MV./Bl/Chacra)									
Surface Ow	ner: Privat	te		Mineral C	)wner				API No	.: 30-045-2	24432				
				LOCA	ATION	N OF REI	LEASE								
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/V	Vest Line	County					
A	30	29N	10W	990	NL	790	   F	EL	San Juan						
				Latitude 36.7	•		ude -107.91853								
						OF REL									
Type of Relea	ase: Produc	ed Water				· · · · · · · · · · · · · · · · · · ·	Release: Unknov	vn	Volume F	Recovered: 1	Vone				
Source of Rel	lease: Belov	w Grade Tank				Date and F Unknown	lour of Occurrence	e:	Date and	Hour of Dis	covery	v: 8-29-2008			
Was Immedia	ate Notice (			1		If YES, To	Whom?								
D W/b0		L	Yes _	No Not R	equirea	Data and I									
By Whom? Was a Watero	course Read	ched?				Date and Hour  If YES, Volume Impacting the Watercourse.									
was a water	Jourso Mour		Yes 🗵	] No		11 125, 10	name impacting t	iic wan	neourse.	OIL CON	IS. D	IV DIST. 3			
If a Watercou	rse was Im	pacted, Descr	ibe Fully.	<b>*</b>						NO	V 1 9	3 2014			
										,110	A TE CE	, 2017			
upgrades of ti chlorides. Th Standard of I to the NMOC than 50 feet, TPH, 10 ppm	he location. e sample re 00 ppm at a CD Guidelin distance to a benzene, a a Affected	The soil beneturned results 47000 ppm vines for the Rea a water well gand 50 ppm to	eath the Bebelow the a USEPA mediation greater that tal BTEX.	GT was sampled at Pit Rule' spill of Method 418.1, or of Leaks, Spills at 1000 feet, and of Method 6-12.	for TPH onfirmate on firming and Releastistance to the control of	via USEPA lion standards that a release uses. The site to surface waximately 12	emoved at the Sul Method 418.1, for s for benzene, tota he has occurred at was ranked a 20 of ter greater than 10 yards of soil was of	BTEX this loc due to a 000 feet	via USEPA , and chlor ation. The s n estimated This set the	Method 86 ides, but absite was there depth to gree closure state.	021, and ove the ranke oundward and ard	ad for total e TPH ed according vater of less I to 100 ppm			
				PH results via US ks, Spills, and Re			f 18.9ppm these rion is required.	esults a	re below th	e levels det	ermine	d for this site			
regulations al public health should their cor the environ	I operators or the envious hoperations had not been the contractions of the contractio	are required to ronment. The nave failed to	given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules at to report and/or file certain release notifications and perform corrective actions for releases which may endangue acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liabile adequately investigate and remediate contamination that pose a threat to ground water, surface water, human head of CD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other equations.								endanger of liability uman health				
							OIL CON	SERV	<b>ATION</b>	DIVISIO	Ŋ				
Signature: 7		ekstra				Approved by	Environmental S	pecialis	i: Jaco		1				
Title: EHS C					,	Approval Da	te: (//au//	4	Expiration	Date:					
		Ioekstra@xtoe	energy.cor	n	Conditions of Approval:  Attached										
Data: 11	1 ~ 1 🕰	Dhone: 50								Auachec	. Ц				

ANCS 1432842 905



#### COVER LETTER

Friday, August 29, 2008

Martin Nee XTO Energy 382 County Road 3100 Aztec, NM 87410

TEL: (505) 333-3100 FAX (505) 333-3280

RE: Pit Tank Cellar Samples

Dear Martin Nee:

Order No.: 0808273

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 8/15/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001



Date: 29-Aug-08

CLIENT:

XTO Energy

Client Sample ID: Pit Tank Cellar Sullivan Frame A#1

Lab Order:

0808273

Collection Date: 8/12/2008 3:15:00 PM

Project:

Pit Tank Cellar Samples

Date Received: 8/15/2008

Lab ID:

0808273-01

Matrix: SOIL

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES		* ***	· · · · · · · · · · · · · · · · · · ·		Analyst: DAM
Benzene	ND.	0.10	mg/Kg	2	8/25/2008 4:24:41 PM
Toluene	0.16	0.10	mg/Kg	2	8/25/2008 4:24:41 PM
Ethylbenzene	0,22	0.10	mg/Kg	2	8/25/2008 4:24:41 PM
Xylenes, Total	1.4	0.20	mg/Kg	. 2	8/25/2008 4:24:41 PM
Surr: 4-Bromofluorobenzene	109	81.4 <b>-11</b> 7	%REC	2	8/25/2008 4:24:41 PM
EPA METHOD 300.0: ANIONS					Analyst: SLB
Chloride	220	1.5	mg/Kg	5	8/21/2008 9:47:00 PM
EPA METHOD 418.1: TPH					Analyst: LRW
Petroleum Hydrocarbons, TR	18000	1000	mg/Kg	100	8/21/2008

Spike recovery outside accepted recovery limits

Reporting Limit

Page 1 of 3

Value exceeds Maximum Contaminant Level

E Value above quantitation range

Analyte detected below quantitation limits J

Not Detected at the Reporting Limit ND

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

MCL Maximum Contaminant Level

Date: 29-Aug-08

CLIENT: Lab Order: XTO Energy

0808273

Client Sample ID: Pit Tank Cellar Sullivan Frame A#1

Collection Date: 8/12/2008 3:00:00 PM

Project:

Pit Tank Cellar Samples -

Date Received: 8/15/2008

Lab ID:

0808273-02

Matrix: SOIL

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	0.26	0.25	mg/Kg	5	8/25/2008 4:55:04 PM
Toluene	1.0	0.25	mg/Kg	5	8/25/2008 4:55:04 PM
Ethylbenzene	0.55	0.25	mg/Kg	5	8/25/2008 4:55:04 PM
Xylenes, Total	5.3	0.50	mg/Kg	5	8/25/2008 4:55:04 PM
Surr: 4-Bromofluorobenzene	105	81.4-117	%REC	5	8/25/2008 4:55:04 PM
EPA METHOD 418.1: TPH					Analyst: LRW
Petroleum Hydrocarbons, TR	47000	4000	mg/Kg	400	8/21/2008

RL Reporting Limit

Page 2 of 3

Value exceeds Maximum Contaminant Level

E Value above quantitation range

Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits

В Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 29-Aug-08

CLIENT:

XTO Energy

Lab Order:

0808273

Client Sample ID: Pit Tank Cellar Ohio C Govt #4

Collection Date: 8/12/2008 1:30:00 PM

Project:

Pit Tank Cellar Samples

Date Received: 8/15/2008

Lab ID:

0808273-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF .	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	0.050		mg/Kg	1	8/22/2008 9:17:20 PM
Toluene	ND	0.050		mg/Kg	1	8/22/2008 9:17:20 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/22/2008 9:17:20 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/22/2008 9:17:20 PM
Surr: 4-Bromofluorobenzene	81.1	81.4-117	s	%REC	1	8/22/2008 9:17:20 PM
EPA METHOD 300.0: ANIONS						Analyst: SLB
Chloride	44	1.5		mg/Kg	5	8/21/2008 10:04:25 PM
EPA METHOD 418.1: TPH						Analyst: LRW
Petroleum Hydrocarbons, TR	150	10		mg/Kg	1	8/21/2008

Qualiflers;

RL Reporting Limit

Page 3 of 3

Value exceeds Maximum Contaminant Level

<sup>,</sup> E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 29-Aug-08

## **QA/QC SUMMARY REPORT**

Client:

XTO Energy

Project:

Pit Tank Cellar Samples

Work Order:

0808273

								0000273
Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD F	RPDLimit Qual
Method: EPA Method 300.0: A	ınlons						,	
Sample ID: MB-16827		MBLK			Batch	ID: 16827	Analysis Date	: 8/21/2008 8:02:32 PN
Chloride	ND	mg/Kg	0.30					
Sample ID: LCS-16827		LCS			Batch	ID: 16827	Analysis Date	: 8/21/2008 8:19:57 PN
Chloride	14.01	mg/Kg	0.30	93.4	90	110		
Method: EPA Method 418.1: T	РН			·				
Sample ID: MB-16842		MBLK			Batch	ID: 16842	Analysis Date	8/21/2008
Petroleum Hydrocarbons, TR	ND	mg/Kg	10	_	•			
Sample ID: LCS-16842		LCS			Batch	ID: 16842	Analysis Date	8/21/2008
Petroleum Hydrocarbons, TR	91.79	mg/Kg	10	91.8	82	114		
Sample ID: LCSD-16842		LCSD			Batch	ID: 16642	Analysis Date	8/21/2008
Petroleum Hydrocarbons, TR	105.2	mg/Kg	10	105	82	114	13.6	20
Method: EPA Method 8021B: \	√olatiles							
Sample ID: MB-16800		MBLK			Batch	ID: 16800	Analysis Date	: 8/22/2008 4:13:54 PN
Benzene	ND	mg/Kg	0.050	*		`		
Toluene	ND	mg/Kg	0.050					
Ethylbenzenev	ND	mg/Kg	0.050					
Xylenes, Total	ND	mg/Kg	0.10`					
Sample ID: LCS-16800		LCS			Batch	ID: 16800	Analysis Date	: 8/22/2008 4:44:16 PN
Benzene	0.3076	mg/Kg	0.050	110	78.8	132		
Toluene	2.153	mg/Kg	0.050	108	78.9	112		
Ethylbenzene	0.4355	mg/Kg	0.050	109	69.3	125		
Xylenes, Total	2.577	mg/Kg	0.10	112	73	128		

o	ua	lif	i	e	rs	:

E Value above quantitation range

S Spike recovery outside accepted recovery limits

Page 1

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

### Sample Receipt Checklist

Client Name XTO ENERGY	1			Date Received	a:	8/15/2008	
Work Order Number 0808273			1 .	Received by		<i>:</i> 1 (	
Checklist completed by:			815	Sample ID Is	ibels checked by:	Initièle	-
Matrix:	Carrier name	UPS	<u>l</u>				
Shipping container/cooler in good condi	tion?	Yes	V	No 🗌	Not Present		•
Custody seals intact on shipping contain	ner/cooler?	Yes	$\checkmark$	No 🔲	Not Present $\square$	Not Shipped	
Custody seals intact on sample bottles?		Yes	$\checkmark$	No 🗌	N/A		
Chain of custody present?		Yes	$\mathbf{V}$	No 🗌			
Chain of custody signed when relinquis	ned and received?	Yes	$\checkmark$	No 🗌			
Chain of custody agrees with sample la	bels?	Yes	$\checkmark$	No 🗀			
Samples in proper container/bottle?		Yes	$\checkmark$	No 🗌			
Sample containers intact?		Yes	$\checkmark$	No 🗌			
Sufficient sample volume for indicated t	est?	Yes	$\checkmark$	No 🗌			
All samples received within holding time	?	Yes	$\checkmark$	No 🗌			
Water - VOA vials have zero headspace	? No VOA vials subr	nitted	$\mathbf{Z}$	Yes 🗌	No 🗌		
Water - Preservation labels on bottle an	d cap match?	Yes		No 🗆	N/A 🗹		
Water - pH acceptable upon receipt?		Yes		No 🗌	N/A 🗹		
Container/Temp Blank temperature?				<6° C Acceptab			
COMMENTS:				lf given sufficient	time to cool.		
erioria de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición de la composición dela composición dela compo							
Client contacted	Date contacted:			Pers	on contacted		
Contacted by:	Regarding:						
Comments:		v.v					
			******				
•	w.m.			1			
Corrective Action			***************************************				
Corrective Action					· · · · · · · · · · · · · · · · · · ·	, · · · · · · · · · · · · · · · · · · ·	
	——————————————————————————————————————						

СНА	IN-OF	-cust	ODY RECORD	Other:	QA, Std □	/ QC Pa	ickage: evel 4					Ц			ø		LY	SIS	LA	BO	RA	ATA TOI				
Client:	кто Е	EVERG	Υ	Project Name:	^			ج /				***	2.5		Te	lbuqu d. 50 ww.h	15.34	45.3	975	Fa	x 50	7109 15.34	) <b>1</b> 5:41	107		
Address:	382		3100	Project #:	<u>. C</u>	EW	4P. V	SAMPI	E 5						A	7.12	YS	<b>5</b> I	Œο	ŬĘ	1				71,7	5 1 E.
A	ZTEC	NN	1 87410	Project Manager						21)	ine Only)	sel)						50,)	623		,	1,				S S
Phone #:				Sampler: //	<u> </u>	1	)ee		<del></del>	+ TMB's (8021)	H (Gasol	(Gas/Die	)					J <sub>2</sub> , PO <sub>4</sub> ,	B's (80	-		300	,			расе (У
Fax #:	<u> 505 -</u>	333-	3207	Sample Temperat	ure:	H	EK:	STEA 3		rbe + TN	TE + TP	d 8015B	od 418.1	od 504.1	od 8021)	or PAH)	tels	, NO <sub>3</sub> N	cides / PC	(A	i-VDA)	\$				or Heads
Date	Time	Matrix	Sample I.D. No.	Number/Volume	-	eserval		HEAL	No.	BTEX H MTBE	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VDA)	H-0 PADES				Air Bubbles or Headspace (Y or N)
1-12-08	3:15pm	Soil	PIT TANK CELLAR, SULLYAN FRAME AT	€ 3	rigot <sub>2</sub>	111103		0000	1	X	B	I	×		Ξ.	8		ब	8	8	œ	ر بر	$\frac{1}{2}$		$\frac{1}{2}$	4
	1		N.36°42.107	<u> </u>	_			· .					_							.	_	24		$\dashv$		
		-	W 107° 55.172							,														$\dashv$	+	_
•	ļ		TEN. 5517 FT.					-				-											$\dashv$		+	$\dashv$
8-12-08	3:00 pm	5.1	PIT TANK CELLAR SMUNINHEAME AT H	GEAR S	mp	E.		·2		Х			X				-							1		
•																									$\exists$	
						··			 									-					-	+	$\dashv$	
							-													:						
Date:	Time:	M. Lu	ed By: (Signature)	Received	By: (Si	gnatur	e) 8	90  10 08 	0	Rem	arks:			) )							 1		المالات			
Date:	Time:	Relinquishe	ed By: (Signature)	Received	By: 191	gnatur	e)	· •			~ W	<b>LAI</b>	י ו י		ىب <sub>د</sub>	-13	π.	<i>y</i> .	-w	ч (	- <del>1</del> {r	tmf	المال	ر		

Date: Time: Relinquished By: (S	Date: Time: Relinquished By Signature -									W 107°58;144	N 36 37,819	8/12/08 1:30pm Soul DAID ( Court 4	Date Time Matrix Sample (.D. No.	Fax #:	Phone #: 505 - 333 - 3207		-	N.W.	Address: 382 CC 3100		Client: XTO ENERGY	CHAIN-OF-CUSTODY RECORD
Received By: (Signature)	Received By: (Signetarye) 8/5/5											2	Number/Valume Preservative HEAL No. HEAL No. O&O8 273	Sample Temperature: 3	4-	MARTIN NEE	Project Manager:			PITTANK CELLAR SANDLES	Project Name:	Std Level 4 C
	Remarks:											×	BTEX + N							- Liber 2		· ·
EMAIL	\ <u>क</u>											-	BTEX + N					nly)			3.5	_
A C				 				├	-			×	TPH Meth			Gas/U	eseu				7	
7	2				-	-	-						EDB (Met						72.02 H			L
KESUITS			<del>;                                    </del>						-			<u> </u>	EDC (Met			<u> </u>					s <del>"</del> It	5 A 🛰 🕶
H													8310 (PN	A or P	AH)						Albüquei que, New Mexico 8 Tel. 505.345.3975 — Fax 51 May hallenvironmental com	HALL ENVIRONAMENTAL PROPERTY NEW YORK N
7				,	<u> </u>		<u> </u>	,	ļ	<u> </u>		<u> </u>	RCRA 8 M	letals								MeH Z
- 5	• ,		<u> </u>				<u> </u>	ļ	<u> </u>		-		Anions (F,									kins I
Z	7				ļ. 			ļ	<u> </u>			ļ	8081 Pes		/PC	3's (80	182)				975	m Z D
J.								├	-		ļ. 	-	8260B (V			·	,				xe Hax	Suite. D
TO. KIM CAMMPLIN	7						-	_	-	<i>;</i>		×	8270 (Se	<del></del>		<del></del> .					New Mexico 87 108 3975 Fax 505.345.4107	HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D
pi	Ì	1		 		<del> </del>	· -	-	_		<del>                                     </del>	1	CHLORY	DES.	3	<b>60</b> ~	0_			10 to	345.	
3	-		·	 	-		<del>                                     </del>		+		<del> </del>	-								FO VER	410:	
									<b>.</b>			<del> </del>				·		-		() () () ()	7	•
													Air Bubble	s or H	eadsp	ace (Y	or N)					



Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Sullivan Frame A#1E BGT Pit	Date Reported:	06-16-09
Laboratory Number:	50500	Date Sampled:	06-12-09
Chain of Custody:	7192	Date Received:	06-12-09
Sample Matrix:	Soil	Date Analyzed:	06-16-09
Preservative:	Cool	Date Extracted:	06-15-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1.5	0.9
Toluene	4.1	1.0
Ethylbenzene	3.0	1.0
p,m-Xylene	6.7	1.2
o-Xylene	2.1	0.9
Total BTEX	17.4	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

**BGT Samples.** 

Analyst



Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Ohio C Govt #2 BGT Pit	Date Reported:	06-16-09
Laboratory Number:	50501	Date Sampled:	06-12-09
Chain of Custody:	7192	Date Received:	06-12-09
Sample Matrix:	Soil	Date Analyzed:	06-16-09
Preservative:	Cool	Date Extracted:	06-15-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	2.3	0.9	
Toluene	5.1	1.0	
Ethylbenzene	3.7	1.0	
p,m-Xylene	7.8	1.2	
o-Xylene	6.0	0.9	
Total BTEX	24.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter Percent Recovery	
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

**BGT Samples.** 

Analyst



Olimate	VTO Fire	D 1 . #	
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Ohio C Govt #6 BGT Cellar	Date Reported:	06-16-09
Laboratory Number:	50502	Date Sampled:	06-12-09
Chain of Custody:	7192	Date Received:	06-12-09
Sample Matrix:	Soil	Date Analyzed:	06-16-09
Preservative:	Cool	Date Extracted:	06-15-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	
Toluene	1.6	0.9 1.0
Ethylbenzene	1.3	1.0
p,m-Xylene	1.7	1.2
o-Xylene	1.6	0.9
Total BTEX	6.2	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter Percent Recove	
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

**BGT Samples.** 

Analyst

Mustum Walts



Client:	N/A	Project #:	N/A
Sample ID:	06-16-BT QA/QC	Date Reported:	06-16-09
Laboratory Number:	50500	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-16-09
Condition:	N/A	Analysis:	BTEX

Gallbration and	(I-CaliRE	C-Cal RF	%Diff:	Blank	Detect
Detection Limits (ugil.)		Accept, Rang	je 0 - 15%	Conc	Limit
Benzene	5.8551E+006	5.8668E+006	0.2%	ND	0.1
Toluene	5.2463E+006	5.2568E+006	0.2%	ND	0.1
Ethylbenzene	4.6815E+006	4.6908E+006	0.2%	ND	0.1
p,m-Xylene	1.1986E+007	1.2010E+007	0.2%	ND	0.1
o-Xylene	4.4981E+006	4.5072E+006	0.2%	ND	0.1

Duplicate Conc. (ug/kg)	Sample Du	plicate	%DIff:	Accept Range	Detect Limit
Benzene	1.5	1.4	6.7%	0 - 30%	0.9
Toluene	4.1	3.9	4.9%	0 - 30%	1.0
Ethylbenzene	3.0	2.8	6.7%	0 - 30%	1.0
p,m-Xylene	6.7	6.4	4.5%	0 - 30%	1.2
o-Xylene	2.1	2.0	4.8%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample Amo	unt Spiked Spil	(ed Sample	% Recovery	Accept Range
Benzene	1.5	50.0	51.0	99.0%	39 - 150
Toluene	4.1	50.0	52.1	96.3%	46 - 148
Ethylbenzene	3.0	50.0	51.0	96.2%	32 - 160
p,m-Xylene	6.7	100	102	95.3%	46 - 148
o-Xylene	2.1	50.0	48.1	92.3%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 50500 - 50508.

Analyst



### **EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS**

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Sullivan Frame A #1E BGT Pit	Date Reported:	06-16-09
Laboratory Number:	50500	Date Sampled:	06-12-09
Chain of Custody No:	7192	Date Received:	06-12-09
Sample Matrix:	Soil	Date Extracted:	06-15-09
Preservative:	Cool	Date Analyzed:	06-15-09
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

18.9

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

B.G.T. Samples.



### **EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS**

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Ohio C Govt #2 BGT Pit	Date Reported:	06-16-09
Laboratory Number:	50501	Date Sampled:	06-12-09
Chain of Custody No:	7192	Date Received:	06-12-09
Sample Matrix:	Soit	Date Extracted:	06-15-09
Preservative:	Cool	Date Analyzed:	06-15-09
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

15.4

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

B.G.T. Samples.



### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Ohio C Govt #6 BGT Cellar	Date Reported:	06-16-09
Laboratory Number:	50502	Date Sampled:	06-12-09
Chain of Custody No:	7192	Date Received:	06-12-09
Sample Matrix:	Soil	Date Extracted:	06-15-09
Preservative:	Cool	Date Analyzed:	06-15-09
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

35.5

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

B.G.T. Samples.

Analyst



### **EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS** QUALITY ASSURANCE REPORT

Client:

QA/QC

Project #:

N/A

Sample ID:

**QA/QC** 

Date Reported:

06-16-09

Laboratory Number:

06-15-TPH.QA/QC 50500

Date Sampled:

N/A

Sample Matrix: Preservative:

Freon-113

Date Analyzed: Date Extracted: 06-15-09

Condition:

N/A N/A

Analysis Needed:

06-15-09 **TPH** 

Calibration

I-Cal Date

C-Cal Date

I-Cal RF:

C-Cal RF:

% Difference Accept. Range

05-26-09

06-15-09

1,480

1,490

0.7%

+/- 10%

Blank Conc. (mg/Kg)

**TPH** 

Concentration Detection Limit

5.0

**Duplicate Conc.** (mg/Kg)

**TPH** 

Sample

Duplicate

% Difference

Accept. Range +/- 30%

18.9

15.4

18.5%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result % Recovery Accept Range

**TPH** 

18.9

2,000

1,790

88.7%

80 - 120%

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

QA/QC for Samples 50500 - 50508.

5796 US Highway 64, Farmington, NM 87401



#### Chloride

Client: XTO Energy Project #: 98031-0121 Sample ID: Sullivan Frame A #1E BGT Pit Date Reported: 06-16-09 Lab ID#: 50500 Date Sampled: 06-12-09 Sample Matrix: Soil Date Received: 06-12-09 Preservative: Cool Date Analyzed: 06-16-09 Condition: Intact Chain of Custody: 7192

Parameter Concentration (mg/Kg)

Total Chloride 15

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: BGT Samples.

Analyst (Nusthern Weltle Review)



#### Chloride

Client: XTO Energy Project #: 98031-0121 Ohio C Govt #2 BGT Pit Date Reported: 06-16-09 Sample ID: Date Sampled: 06-12-09 50501 Lab ID#: Sample Matrix: Soil Date Received: 06-12-09 Date Analyzed: 06-16-09 Preservative: Cool Chain of Custody: Condition: Intact 7192

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

595

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

**BGT Samples.** 

Analyst



#### Chloride

Client: XTO Energy Project #: 98031-0121 Sample ID: Ohio C Govt #6 BGT Cellar Date Reported: 06-16-09 50502 Date Sampled: 06-12-09 Lab ID#: Date Received: 06-12-09 Sample Matrix: Soil Preservative: Date Analyzed: 06-16-09 Cool Condition: Intact Chain of Custody: 7192

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

40

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

**BGT Samples.** 

Analyst

## CHAIN OF CUSTODY RECORD

Client:	Project Name / Location:				ANALYSIS / PARAMETERS														
XTO ENERGY	B.G.T. S	AMPLES	<u>`</u>																
Client Address: 382 Road 3100 AZTEC NM 87410	B.G.T. S Sampler Name:	- 49	- 810-954	13	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	ω ω											
Client Phone No.:	Client No :				- Pod	sthoc	poq	RCRA 8 Metals	Cation / Anion		TCLP with H/P		Ē	Щ			-	8	itact
505-333-3707	98031-				Met	Š	Med	8	۸ / ۲		With		418	뭂				<u>e</u> .	9
Sample No./ Sample Samp	l lab No. l	•	No./Volume F		ative T	<u> </u> <u>~</u>	9	CRA	atior	RCI	OLP.	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Identification Date Time		Matrix	Containers 3	HgCz HCI	F	<u> </u>	>	Œ	Ö	Œ	F	<u> </u>	<u> </u>	0			- 10	<i>i</i> o   0	N N
RGT P- 16/12 10:00	50500 Solid	Sludge Aqueous	U402JAR			X							X	X			1	/ '	
ONIO C Com (T#2)	الم	Sludge	1)40z JAK			X							X	X	ĺ			$/\!\!/$	1
B.G.T. PIT 6/12 11:00 OHIO C GOVT#6	Soil )	Sludge				X							X	X			,		7
B.C.T. CELLAR 6/12 11:45	Soil	Aqueous Sludge	(1)40z V	w		1	<u> </u>	<u> </u>	<u> </u>				^						_
	Solid	Aqueous																	
	Soil Solid	Sludge Aqueous																	
	Soil	Sludge																	
	Solid Soil	Aqueous			-					-								-+	
	Solid	Sludge Aqueous																	
	Soil Solid	Sludge Aqueous										-							
	Soil Solid	Sludge Aqueous																	
	Soil	Sludge				<u> </u>				-									
Relinquished by (Signature)	Solid	Aqueous				<u> </u>	<u> </u>	<u></u>		1									
Helinquished by (Signature)		Date	Time	Hece	eived by:	Sign): ) د	ature	), ·	11							Dat	- 11	Tim	1 2
Kurt Hackbur	<u> </u>	4/12	4:40		D00	/Cian	\ <u> </u>	37)	750	~						9/1	12/10	10	1370
Relinquished by: (Signature)				Rece	eiveo isy:	(Sign	ature)	)											
Relinquished by: (Signature)				Rece	eived by:	(Sign	ature)	)											
																			]
	5796 US Highwa		env And	7 I I	O L	ebor	C	n ry	E-M Kw Ki	IAIL RIT M. (	RE: HOE	swi EKST plia	is t per J	то:	<del>.</del>				