

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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

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

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company: XTO Energy, Inc.	Contact: Kurt Hoekstra
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3202
Facility Name: Cooper Gas Com # 1 (30-045-08370)	Facility Type: Gas Well (Basin Dakota)

Surface Owner: Private	Mineral Owner:	Lease No. Fee
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**LOCATION OF RELEASE**

Unit Letter B	Section 15	Township 29N	Range 11W	Feet from the 1190	North/South Line FNL	Feet from the 1650	East/West Line FEL	County San Juan
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Latitude: 36.72958 Longitude: -107.97497

DEC 17 2012

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: None
Source of Release: Below Grade Tank	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 10-3-2012
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*The below grade tank was taken out of service at the Cooper Gas Com # 1 due to maintenance upgrades to this location. A composite sample was collected beneath the location of the on-site BGT, and submitted for laboratory analysis for TPH via USEPA Method 8015 and 418.1, for BTEX via USEPA Method 8021, and for total chlorides. The sample returned results below the 'Pit Rule' spill confirmation standards for benzene, total BTEX and chlorides, but above the 100 ppm TPH standard at 4120 ppm via USEPA Method 418.1, confirming that a release has occurred at this location. The site was then ranked according to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 60 due to an estimated depth to groundwater of less than 50 feet and a distance to surface water of less than 1,000 feet and distance to an irrigation well of less than 1,000 feet. This set the closure standard to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.\*A one call was made, and additional composite samples were taken using a hand auger at depths of 2 feet to 2-1/2 and 4 feet to 4-1/2 feet. These samples returned results below the NMOCD guidelines. Approximately 5 yards of soil was removed from the BGT cellar and hauled to Envirotech's NMOCD permitted land farm. A composite sample was taken at approximately 7-1/2 feet deep this returned results of less than 0.3 ppm TPH via EPA Method 8015. The BGT cellar was then backfilled. Please see the attached, Analytical Results for reference. No further action is required regarding this incident.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Kurt Hoekstra</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Kurt Hoekstra		Approved by District Supervisor: <i>Jonathan D. Kelly</i>	
Title: Sr. Environmental Technician		Approval Date: 12/19/2012 Expiration Date:	
E-mail Address: Kurt_Hoekstra@xtoenergy.com		Conditions of Approval:	
Date: 12-10-12 Phone: 505-333-3202		Attached <input type="checkbox"/>	

NSK 1235450034

Company Name/Address: <b>XTO Energy - San Juan Division</b>  382 County Road 3100 Aztec, NM 87410				Billing Information:  XTO Energy Inc Accounts Payable 382 CR 3100  Aztec, NM 87410				Analysis/Container/Preservative <div style="display: flex; justify-content: space-around; font-weight: bold; font-size: 1.2em;"> <span>8015</span> <span>8021</span> <span>CHLORIDE</span> </div>				Chain of Custody Page ___ of ___  <div style="text-align: center;">   <b>ESC</b>  <small>L-A-B S-C-I-E-N-C-E-S</small>          12065 Lebanon Road          Mt Juliet, TN 37122           Phone: (800) 767-5859          Phone: (615) 758-5858          Fax: (615) 758-5859       </div>	
Report to:				Email to: <b>JAMES MCDANIEL</b> <b>KURT HOEKSTRA</b>									
Project Description: <b>COOPER GAS COM #1</b>				City/State Collected:									
Phone: <b>(505) 333-3100</b>		Client Project #:		ESC Key:									
FAX:													
Collected by: (print) <b>KURT</b>		Site/Facility ID#:		P.O.#:									
Collected by: (signature)		<input checked="" type="checkbox"/> <b>Rush?</b> (Lab MUST Be Notified) <input checked="" type="checkbox"/> Same Day..... 200% <input type="checkbox"/> Next Day..... 100% <input type="checkbox"/> Two Day..... 50% <input type="checkbox"/> Three Day..... 25%		Date Results Needed: Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		No. of Cntrs							
Packed on Ice N <input checked="" type="checkbox"/> Y													

								CoCode <b>XTORNM</b> (lab use only)			
								Template/Prelogin			
								Shipped Via:			
								Remarks/Contaminant		Sample # (lab only)	
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time					
<b>SM. BGT CELLAR</b>		<b>Comp</b>	<b>SS</b>	<b>0-6"</b>	<b>10-3-12</b>	<b>9:45</b>	<b>1</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>L598938-01</b>

\*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

**4963 45929458** Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature)	Date: <b>10/3</b>	Time: <b>11:20</b>	Received by: (Signature)	Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: (lab use only) <b>N</b>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: <b>3.7°</b>	Bottles Received: <b>1-402</b>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: <b>10-11-12</b>	Time: <b>0900</b>
				CoC Seals Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	pH Checked: <b>OK</b>
				NCF:	



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Est. 1970

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

### Report Summary

Monday October 08, 2012

Report Number: L598938

Samples Received: 10/04/12

Client Project:

Description: Cooper Gas Com #1

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

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

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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# REPORT OF ANALYSIS

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

October 08,2012

Date Received : October 04, 2012  
Description : Cooper Gas Com #1  
Sample ID : SM. BGT CELLAR 0-6IN  
Collected By : Kurt  
Collection Date : 10/03/12 09:45

ESC Sample # : L598938-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	60.	11.	mg/kg	9056	10/05/12	1
Total Solids	93.0	0.100	%	2540G	10/05/12	1
Benzene	BDL	0.0027	mg/kg	8021/8015	10/04/12	5
Toluene	BDL	0.027	mg/kg	8021/8015	10/04/12	5
Ethylbenzene	BDL	0.0027	mg/kg	8021/8015	10/04/12	5
Total Xylene	BDL	0.0081	mg/kg	8021/8015	10/04/12	5
TPH (GC/FID) Low Fraction	BDL	0.54	mg/kg	GRO	10/04/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.2		% Rec.	8021/8015	10/04/12	5
a,a,a-Trifluorotoluene(PID)	99.8		% Rec.	8021/8015	10/04/12	5
TPH (GC/FID) High Fraction	670	22.	mg/kg	3546/DRO	10/05/12	5
Surrogate recovery(%)						
o-Terphenyl	108.		% Rec.	3546/DRO	10/05/12	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: 10/07/12 13:45 Revised: 10/08/12 08:14



YOUR LAB OF CHOICE

XTO Energy - San Juan Division  
James McDaniel  
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L598938

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG616204	10/04/12 14:32
Ethylbenzene	< .0005	mg/kg			WG616204	10/04/12 14:32
Toluene	< .005	mg/kg			WG616204	10/04/12 14:32
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG616204	10/04/12 14:32
Total Xylene	< .0015	mg/kg			WG616204	10/04/12 14:32
a,a,a-Trifluorotoluene(FID)		% Rec.	97.79	59-128	WG616204	10/04/12 14:32
a,a,a-Trifluorotoluene(PID)		% Rec.	100.4	54-144	WG616204	10/04/12 14:32
TPH (GC/FID) High Fraction	< 4	ppm			WG615981	10/05/12 09:38
o-Terphenyl		% Rec.	77.18	50-150	WG615981	10/05/12 09:38
Total Solids	< .1	%			WG616234	10/05/12 13:15
Chloride	< 10	mg/kg			WG616384	10/05/12 09:19

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Total Solids	%	96.0	96.1	0.270	5	L598968-01	WG616234
Chloride	mg/kg	110.	110.	2.76	20	L599105-03	WG616384

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0506	101.	76-113	WG616204
Ethylbenzene	mg/kg	.05	0.0524	105.	78-115	WG616204
Toluene	mg/kg	.05	0.0522	104.	76-114	WG616204
Total Xylene	mg/kg	.15	0.157	105.	81-118	WG616204
a,a,a-Trifluorotoluene(PID)				101.8	54-144	WG616204
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.90	107.	67-135	WG616204
a,a,a-Trifluorotoluene(FID)				102.8	59-128	WG616204
TPH (GC/FID) High Fraction	ppm	60	48.8	81.4	50-150	WG615981
o-Terphenyl				75.43	50-150	WG615981
Total Solids	%	50	45.4	90.9	85-115	WG616234
Chloride	mg/kg	200	207.	104.	80-120	WG616384

Analyte	Units	Laboratory Control Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref %Rec				
Benzene	mg/kg	0.0507	0.0506	101.	76-113	0.170	WG616204
Ethylbenzene	mg/kg	0.0520	0.0524	104.	78-115	0.850	WG616204
Toluene	mg/kg	0.0516	0.0522	103.	76-114	1.20	WG616204
Total Xylene	mg/kg	0.156	0.157	104.	81-118	0.620	WG616204
a,a,a-Trifluorotoluene(PID)				101.3	54-144		WG616204
TPH (GC/FID) Low Fraction	mg/kg	5.96	5.90	108.	67-135	0.890	WG616204
a,a,a-Trifluorotoluene(FID)				102.9	59-128		WG616204

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



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Quality Assurance Report  
Level II

L598938

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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) High Fraction o-Terphenyl	ppm	51.1	48.8	85.0 80.23	50-150 50-150	4.56	25	WG615981 WG615981
Chloride	mg/kg	205.	207.	102.	80-120	0.971	20	WG616384

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.229	0	.05	91.6	32-137	L598938-01	WG616204
Ethylbenzene	mg/kg	0.174	0	.05	69.5	10-150	L598938-01	WG616204
Toluene	mg/kg	0.210	0	.05	83.8	20-142	L598938-01	WG616204
Total Xylene	mg/kg	0.530	0	.15	70.7	16-141	L598938-01	WG616204
a,a,a-Trifluorotoluene(PID)					100.2	54-144		WG616204
TPH (GC/FID) Low Fraction	mg/kg	19.4	0	5.5	70.4	55-109	L598938-01	WG616204
a,a,a-Trifluorotoluene(FID)					97.36	59-128		WG616204

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/kg	0.234	0.229	93.4	32-137	1.95	39	L598938-01	WG616204
Ethylbenzene	mg/kg	0.199	0.174	79.6	10-150	13.6	44	L598938-01	WG616204
Toluene	mg/kg	0.221	0.210	88.3	20-142	5.18	42	L598938-01	WG616204
Total Xylene	mg/kg	0.616	0.530	82.2	16-141	15.0	46	L598938-01	WG616204
a,a,a-Trifluorotoluene(PID)				100.7	54-144				WG616204
TPH (GC/FID) Low Fraction	mg/kg	19.1	19.4	69.6	55-109	1.20	20	L598938-01	WG616204
a,a,a-Trifluorotoluene(FID)				97.86	59-128				WG616204

Batch number /Run number / Sample number cross reference

WG616204: R2376515: L598938-01  
WG615981: R2376954: L598938-01  
WG616234: R2377494: L598938-01  
WG616384: R2377994: L598938-01

\* \* 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 LAB OF CHOICE**

XTO Energy - San Juan Division  
James McDaniel  
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L598938

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October 08, 2012

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.


Company Name/Address: <b>XTO Energy - San Juan Division</b>  382 County Road 3100 Aztec, NM 87410				Billing Information:  XTO Energy Inc Accounts Payable 382 CR 3100  Aztec, NM 87410				Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">           Report to:             Project Description: <u>COOPER GAS CON #1</u>            Phone: (505) 333-3100            FAX:         </div> <div style="width: 40%;">           Email to: <u>JAMES McDANIEL</u>  <u>KURT HOEKSTRA</u>             City/State Collected:             Client Project #:             ESC Key:         </div> <div style="width: 20%; text-align: center;">           Chain of Custody            Page ___ of ___               L.A.B S.C.I.E.N.C.E.S            12065 Lebanon Road            Mt. Juliet, TN 37122             Phone: (800) 767-5859            Phone: (615) 758-5858            Fax: (615) 758-5859   <b>C083</b> </div> </div>					
Collected by: (print) <u>Kurt</u> Collected by (signature): <u>Kurt Hoekstra</u> Immediately Packed on Ice N <u>Y</u>				Site/Facility ID#: _____ P.O.#: _____  <div style="display: flex;"> <div style="flex: 1;"> <b>Rush?</b> (Lab MUST Be Notified)            ___ Same Day..... 200%            ___ Next Day..... 100%            ___ Two Day..... 50%            ___ Three Day..... 25%         </div> <div style="flex: 1;"> <b>Date Results Needed:</b>            Email? ___No___Yes            FAX? ___No___Yes         </div> <div style="flex: 0.5; text-align: center;">           No of Cntrs         </div> </div>				<div style="border: 1px solid black; padding: 5px;">             CoCode <b>XTORNM</b> (lab use only)              Template/Prelogin              Shipped Via:           </div>					
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time							Remarks/Contaminant	Sample # (lab only)
ANGER 2' to 2.5'	Comp	SS	2' to 2.5'	10/8	8:50	1	X						1599691-01
ANGER 4' to 4.5'	Comp	SS	4' to 4.5'	10/8	9:10	1	X						-02

\*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other \_\_\_\_\_

Remarks: \_\_\_\_\_

5040 0636 7107 pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) <u>Kurt Hoekstra</u>	Date: <u>10/8</u>	Time: <u>12:20</u>	Received by: (Signature) <u>[Signature]</u>	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: (lab use only) <div style="text-align: center;">  </div>
Relinquished by: (Signature) <u>[Signature]</u>	Date: _____	Time: _____	Received by: (Signature) <u>[Signature]</u>	Temp: <u>26.0</u> Bottles Received: <u>2462</u>	CoC Seals Intact: <u>Y</u> <u>N</u> <u>NA</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date: _____	Time: _____	Received for lab by: (Signature) <u>[Signature]</u>	Date: <u>10-9-12</u> Time: <u>0900</u>	pH Checked: _____ NCF: _____





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

### Report Summary

Thursday October 18, 2012

Report Number: L599691

Samples Received: 10/09/12

Client Project:

Description: Cooper Gas Com #1

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

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MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
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# REPORT OF ANALYSIS

October 18, 2012

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

Date Received : October 09, 2012  
Description : Cooper Gas Com #1  
Sample ID : AUGER 2-2.5FT  
Collected By : Kurt  
Collection Date : 10/08/12 08:50

ESC Sample # : L599691-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	91.9	0.100	%	2540G	10/10/12	1
TPH (GC/FID) Low Fraction	BDL	0.54	mg/kg	8015D/GRO	10/09/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	100.		% Rec.	602/8015	10/09/12	5
TPH (GC/FID) High Fraction	7.2	4.4	mg/kg	3546/DRO	10/11/12	1
Surrogate recovery(%) o-Terphenyl	72.1		% Rec.	3546/DRO	10/11/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 10/18/12 11:54 Printed: 10/18/12 11:55



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# REPORT OF ANALYSIS

October 18, 2012

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

ESC Sample # : L599691-02

Date Received : October 09, 2012  
Description : Cooper Gas Com #1

Site ID :

Sample ID : AUGER 4-4.5FT

Project # :

Collected By : Kurt  
Collection Date : 10/08/12 09:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.7	0.100	%	2540G	10/10/12	1
TPH (GC/FID) Low Fraction	BDL	0.55	mg/kg	8015D/GRO	10/10/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	10/10/12	5
TPH (GC/FID) High Fraction	45.	4.4	mg/kg	3546/DRO	10/17/12	1
Surrogate recovery(%) o-Terphenyl	77.6		% Rec.	3546/DRO	10/17/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 10/18/12 11:54 Printed: 10/18/12 11:55

Summary of Remarks For Samples Printed  
10/18/12 at 11:55:06

TSR Signing Reports: 288  
R5 - Desired TAT

Sample: L599691-01 Account: XTORNM Received: 10/09/12 09:00 Due Date: 10/16/12 00:00 RPT Date: 10/18/12 11:54

Sample: L599691-02 Account: XTORNM Received: 10/09/12 09:00 Due Date: 10/16/12 00:00 RPT Date: 10/18/12 11:54



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

Quality Assurance Report  
Level II

L599691

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Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	< .1	mg/kg	100.7	59-128	WG616994	10/09/12 14:54
		% Rec.			WG616994	10/09/12 14:54
Total Solids	< .1	%			WG617006	10/10/12 09:47
TPH (GC/FID) High Fraction o-Terphenyl	< .4	ppm	74.34	50-150	WG616855	10/10/12 15:43
		% Rec.			WG616855	10/10/12 15:43
TPH (GC/FID) High Fraction o-Terphenyl	< .4	mg/kg	69.10	50-150	WG617882	10/17/12 10:14
		% Rec.			WG617882	10/17/12 10:14

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	87.0	85.8	1.44	5	L599642-04	WG617006

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.5	5.31	96.6 98.38	67-135 59-128	WG616994 WG616994
Total Solids	%	50	50.0	100.	85-115	WG617006
TPH (GC/FID) High Fraction o-Terphenyl	ppm	60	44.1	73.5 79.21	50-150 50-150	WG616855 WG616855
TPH (GC/FID) High Fraction o-Terphenyl	mg/kg	60	53.3	88.9 76.28	50-150 50-150	WG617882 WG617882

Analyte	Units	Laboratory Control Sample Result	Ref	% Rec	Limit	RPD	Limit	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.50	5.31	100. 98.41	67-135 59-128	3.45	20	WG616994 WG616994
TPH (GC/FID) High Fraction o-Terphenyl	ppm	46.0	44.1	77.0 77.10	50-150 50-150	4.29	25	WG616855 WG616855
TPH (GC/FID) High Fraction o-Terphenyl	mg/kg	49.1	53.3	82.0 75.04	50-150 50-150	8.28	20	WG617882 WG617882

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	590.	132.	5.5	83.3 98.13	55-109 59-128	L599329-01	WG616994 WG616994
TPH (GC/FID) High Fraction o-Terphenyl	ppm	50.4	6.70	60	72.8 77.08	50-150 50-150	L599367-08	WG616855 WG616855

\* Performance of this Analyte is outside of established criteria.

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



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James McDaniel  
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Aztec, NM 87410

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Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TPH (GC/FID) High Fraction	mg/kg	58.0	0	60	96.6	50-150	L600561-01	WG617882
o-Terphenyl					80.73	50-150		WG617882

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction	mg/kg	645.	590.	93.4	55-109	8.94	20	L599329-01	WG616994
a,a,a-Trifluorotoluene (FID)				98.71	59-128				WG616994
TPH (GC/FID) High Fraction	ppm	52.4	50.4	76.2	50-150	3.96	25	L599367-08	WG616855
o-Terphenyl				76.68	50-150				WG616855
TPH (GC/FID) High Fraction	mg/kg	57.0	58.0	95.0	50-150	1.67	20	L600561-01	WG617882
o-Terphenyl				79.68	50-150				WG617882

Batch number / Run number / Sample number cross reference

WG616994: R2382577: L599691-01 02  
WG617006: R2382698: L599691-01 02  
WG616855: R2384777: L599691-01  
WG617882: R2396557: L599691-02

\* \* 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.'



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L599691

October 18, 2012

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.

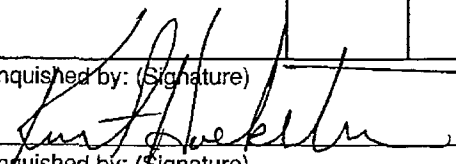
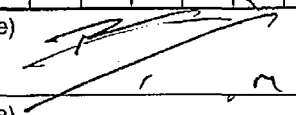

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the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

# CHAIN OF CUSTODY RECORD

14564

Client: <b>XTO</b>			Project Name / Location: <b>Cooper GC # 1</b>			ANALYSIS / PARAMETERS													
Email results to: <b>JAMES McDANIEL KURT HOEKSTRA</b>			Sampler Name: <b>KURT</b>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:			Client No.: <b>98031-0528</b>																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative														
					HgCl <sub>2</sub>	HCl													
<b>Sm BGT Cellar 7 1/2"</b>	<b>10/18</b>	<b>2:40</b>	<b>U3485</b>	<b>1 1/2 Jar</b>				<b>X</b>										<b>Y</b>	<b>Y</b>
Relinquished by: (Signature) 					Date	Time	Received by: (Signature) 					Date	Time						
					<b>10/18</b>	<b>4:00</b>						<b>10/18/12</b>	<b>4:00</b>						
Relinquished by: (Signature)							Received by: (Signature)												
Sample Matrix																			
Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																			
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																			
5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com																			





## Report Summary

Client: XTO

Chain of Custody Number: 14564

Samples Received: 10-18-12

Job Number: 98031-0528

Sample Number(s): 63485

Project Name/Location: Cooper GC #1

Entire Report Reviewed By: *Dene Zazzi* Date: 10-24-12

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.



**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

Client:	XTO	Project #:	98031-0528
Sample ID:	Sm BGT Cellar 7 1/2'	Date Reported:	10-22-12
Laboratory Number:	63485	Date Sampled:	10-18-12
Chain of Custody No:	14564	Date Received:	10-18-12
Sample Matrix:	Soil	Date Extracted:	10-19-12
Preservative:	Cool	Date Analyzed:	10-22-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Cooper GC #1**

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	1022TCAL QA/QC	Date Reported:	10-22-12
Laboratory Number:	63485	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-22-12
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	10-22-12	9.9960E+02	1.0000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	10-22-12	9.9960E+02	1.0000E+03	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	247	98.8%	75 - 125%
Diesel Range C10 - C28	ND	250	274	109%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Was SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 63483-63485, 63501-63504 and 63510-63514