

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

30-045-23000

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: XTO Energy, Inc.	Contact: James McDaniel
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3701
Facility Name: Ohio F Govt #1A (30-045-23000)	Facility Type: Gas Well (Mesaverde)

Surface Owner: Federal	Mineral Owner:	Lease No.: NMNM-021126
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LOCATION OF RELEASE

Unit Letter C	Section 20	Township 31N	Range 12W	Feet from the 990	North/South Line FNL	Feet from the 1800	East/West Line FWL	County San Juan
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Latitude: 36.8895 Longitude: -108.1226

NATURE OF RELEASE

Type of Release: Condensate	Volume of Release: Unknown	Volume Recovered: None
Source of Release: Buried open ended pipe	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: October 12, 2011
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.*

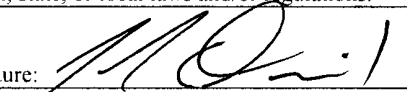
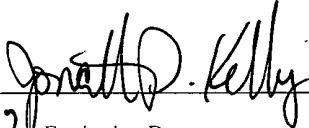
Describe Cause of Problem and Remedial Action Taken.*

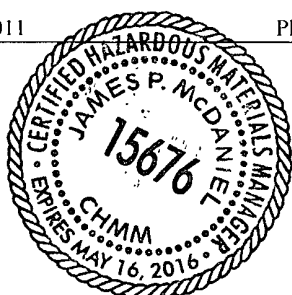
A stain was reported near the BGT at the Ohio F Govt #1A on the well pad. The XTO EH&S Supervisor went to assess the stained area on October 12, 2011, and found an area approximately 12' in diameter. A single boring was conducted in the center of the stained area, and samples were collected from the surface, from 1.5' BGS and from 4' BGS. All three (3) samples were analyzed in the laboratory for DRO/GRO via USEPA Method 8015, and for BTEX via USEPA Method 8021. All three (3) samples returned results above 5,000 ppm TPH. The site was then ranked according to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 30 due to a wash at less than 200 feet from the location, and an estimated depth to groundwater of less than 100 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.*

See attached remediation report for remediation activities.

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: 	OIL CONSERVATION DIVISION	
Printed Name: James McDaniel, CHMM #15676	Approved by District Supervisor: 	
Title: EH&S Supervisor	Approval Date: 1/12/2012	Expiration Date:
E-mail Address: James_McDaniel@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/10/2011	Phone: 505-333-3701	



nJK1201233596

RCVD NOV 14'11

OIL CONS. DIV.

DIST. 3

46

Ohio F Govt #1A Remediation Report

On October 20, 2011, excavation activities began in the stained area. During excavation, an open ended, 2", steel pipe was discovered wrapped in pipe tape. The pipe was leaking a small amount of liquid after being unearthed. The pipe was traced back to the separator, and was coming off of the dump line to the on-site oil tank. This un-used and abandoned line had a check valve to prevent oil from entering the pipe, but the check valve must not have been working 100%. The pipe was removed, and excavation activities continued. Excavation stopped at 20' x 20' x 20' deep due to OSHA regulations on excavations over 20'. Samples were collected from the bottom of the excavation, and one (1) sample was collected from each of the four (4) walls. All five (5) samples were analyzed for DRP/GRO via USEPA Method 8015, and for BTEX via USEPA Method 8021. All four (4) wall samples returned results below the regulatory standards determined for this site. The floor returned results of 151 ppm TPH, above the 100 ppm TPH standard determined for this site. At this time, Brandon Powell, NMOCD Aztec Division, was contacted regarding the sample results. Brandon requested an additional assessment be performed to determine the extent of impacts below the 20'. Additional assessment activities were performed on October 28, 2011. Using a hand auger, an additional sample was collected from the floor of the excavation at 20' deep, and a sample was collected from sandstone at approximately 26' deep. Both samples were analyzed for DRO/GRO via USEPA Method 8015, and for BTEX via USEPA Method 8021. The sample collected at 20' returned results below the regulatory standard for all constituents analyzed. The sample collected from sandstone at approximately 26' returned results of 3,100 ppm TPH and 136.39 ppm total BTEX. These levels are above the NMOCD standards determined for this site. Based on these results, Brandon Powell requested that additional excavation be performed to remove impacted soils down to the sandstone at approximately 26' deep. Due to the excavation being deeper than 20', OSHA regulations require a PE certified excavation plan. A PE certified excavation plan was written, and excavation activities continued on November 4, 2011. The excavation was extended to approximately 30' x 30' x 26' deep, where sandstone was encountered. A sample was collected of the sandstone floor at 26' and analyzed for DRO/GRO via USEPA Method 8015, and for BTEX via USEPA Method 8021. The sample returned results below the benzene and BTEX standards determined for this site, but above the 100 ppm TPH standard at 440 ppm. Due to the dense sandstone encountered at 26', the lack of benzene in the sample results, and an estimated depth to groundwater of 80-90' deep, Brandon Powell approved the excavation to be closed at its current extents. Approximately 488 cubic yards of impacted soil was disposed of at IEI, and the excavation was backfilled using soil from Four Corners Material to match the natural soil at this location. All applicable analytical results and Bills of Lading are attached for your reference.



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

Tax I D 62-0814289

Est. 1970

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

Report Summary

Monday October 17, 2011

Report Number: L541457

Samples Received: 10/14/11

Client Project:

Description: Ohio F Govt 1A

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

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

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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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304



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REPORT OF ANALYSIS

October 17, 2011

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

Date Received : October 14, 2011
Description : Ohio F Govt 1A
Sample ID : SPILL COMPOSITE
Collected By : James McDaniel
Collection Date : 10/12/11 11:00

ESC Sample # : L541457-01

Site ID : OHIO F GOVT 1A

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	93.		%	2540G	10/17/11	1
Benzene	5.2	1.1	mg/kg	8021/8015	10/14/11	2000
Toluene	81.	11.	mg/kg	8021/8015	10/14/11	2000
Ethylbenzene	25.	1.1	mg/kg	8021/8015	10/14/11	2000
Total Xylene	290	3.2	mg/kg	8021/8015	10/14/11	2000
TPH (GC/FID) Low Fraction	5800	220	mg/kg	GRO	10/14/11	2000
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	92.5		% Rec.	8021/8015	10/14/11	2000
a,a,a-Trifluorotoluene(PID)	97.5		% Rec.	8021/8015	10/14/11	2000
TPH (GC/FID) High Fraction	6600	86.	mg/kg	3546/DRO	10/17/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec	3546/DRO	10/17/11	20

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: 10/17/11 16 21 Printed: 10/17/11 16:21



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REPORT OF ANALYSIS

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

October 17, 2011

Date Received : October 14, 2011
Description : Ohio F Govt 1A
Sample ID : SPILL COMPOSITE
Collected By : James McDaniel
Collection Date : 10/12/11 11:00

ESC Sample # : L541457-02

Site ID : OHIO F GOVT 1A

Project :

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	10/15/11 0700	MVE	1
Mercury	BDL	0.0010	mg/l	0.20	7470A	10/16/11 1108	JEC	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	10/16/11 1601	ST	1
Barium	0.24	0.15	mg/l	100	6010B	10/16/11 1601	ST	1
Cadmium	BDL	0.050	mg/l	1.0	6010B	10/16/11 1601	ST	1
Chromium	BDL	0.050	mg/l	5.0	6010B	10/16/11 1601	ST	1
Lead	BDL	0.050	mg/l	5.0	6010B	10/16/11 1601	ST	1
Selenium	0.077	0.050	mg/l	1.0	6010B	10/16/11 1601	ST	1
Silver	BDL	0.050	mg/l	5.0	6010B	10/16/11 1601	ST	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

October 17, 2011

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

ESC Sample # : L541457-03

Date Received : October 14, 2011
Description : Ohio F Govt 1A

Site ID : OHIO F GOVT 1A

Sample ID : SPILL COMPOSITE 1.5 FT

Project # :

Collected By : James McDaniel
Collection Date : 10/12/11 11:05

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.		%	2540G	10/17/11	1
Benzene	4.1	1.4	mg/kg	8021/8015	10/14/11	2500
Toluene	120	14.	mg/kg	8021/8015	10/14/11	2500
Ethylbenzene	49.	1.4	mg/kg	8021/8015	10/14/11	2500
Total Xylene	440	4.2	mg/kg	8021/8015	10/14/11	2500
TPH (GC/FID) Low Fraction	9100	280	mg/kg	GRO	10/14/11	2500
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.7		% Rec.	8021/8015	10/14/11	2500
a,a,a-Trifluorotoluene(PID)	99.5		% Rec.	8021/8015	10/14/11	2500
TPH (GC/FID) High Fraction	6200	220	mg/kg	3546/DRO	10/17/11	50
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	10/17/11	50

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

October 17, 2011

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

ESC Sample # : L541457-04

Date Received : October 14, 2011
Description : Ohio F Govt 1A

Site ID : OHIO F GOVT 1A

Sample ID : SPILL COMPOSITE 4 FT

Project # :

Collected By : James McDaniel
Collection Date : 10/12/11 11 10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	96.		%	2540G	10/17/11	1
Benzene	BDL	2.6	mg/kg	8021/8015	10/14/11	5000
Toluene	BDL	26.	mg/kg	8021/8015	10/14/11	5000
Ethylbenzene	BDL	2.6	mg/kg	8021/8015	10/14/11	5000
Total Xylene	170	7.8	mg/kg	8021/8015	10/14/11	5000
TPH (GC/FID) Low Fraction	7400	520	mg/kg	GRO	10/14/11	5000
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	92.1		% Rec.	8021/8015	10/14/11	5000
a,a,a-Trifluorotoluene(PID)	91.5		% Rec.	8021/8015	10/14/11	5000
TPH (GC/FID) High Fraction	BDL	4.2	mg/kg	3546/DRO	10/17/11	1
Surrogate recovery(%)						
o-Terphenyl	53.7		% Rec.	3546/DRO	10/17/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L541457-01	WG560533	SAMP	o-Terphenyl	R1898952	J7
L541457-03	WG560533	SAMP	o-Terphenyl	R1898952	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

Qualifier Report Information

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

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
10/17/11 at 16:22:01

TSR Signing Reports: 288
R2 - Rush: Next Day

drywt

Sample: L541457-01 Account: XTORNM Received: 10/14/11 09:00 Due Date: 10/17/11 00:00 RPT Date: 10/17/11 16:21

Sample: L541457-02 Account: XTORNM Received: 10/14/11 09:00 Due Date: 10/19/11 00:00 RPT Date: 10/17/11 16:21

Sample: L541457-03 Account: XTORNM Received: 10/14/11 09:00 Due Date: 10/17/11 00:00 RPT Date: 10/17/11 16:21

Sample: L541457-04 Account: XTORNM Received: 10/14/11 09:00 Due Date: 10/17/11 00:00 RPT Date: 10/17/11 16:21



YOUR LAB OF CHOICE

XTO Energy - San Juan Division
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

LS41457

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October 17, 2011

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/kg			WG560542	10/14/11 15:28
Ethylbenzene	< .0005	mg/kg			WG560542	10/14/11 15:28
Toluene	< .005	mg/kg			WG560542	10/14/11 15:28
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG560542	10/14/11 15:28
Total Xylene	< .0015	mg/kg			WG560542	10/14/11 15:28
a,a,a-Trifluorotoluene (FID)		% Rec.	93 93	59-128	WG560542	10/14/11 15:28
a,a,a-Trifluorotoluene (FID)		% Rec.	97.19	54-144	WG560542	10/14/11 15:28
Mercury	< .0002	mg/l			WG560680	10/16/11 10:27
Arsenic	< .05	mg/l			WG560761	10/16/11 12:24
Barium	< .15	mg/l			WG560761	10/16/11 12:24
Cadmium	< .05	mg/l			WG560761	10/16/11 12:24
Chromium	< .05	mg/l			WG560761	10/16/11 12:24
Lead	< .05	mg/l			WG560761	10/16/11 12:24
Selenium	< .05	mg/l			WG560761	10/16/11 12:24
Silver	< .05	mg/l			WG560761	10/16/11 12:24
Total Solids	< 1	%			WG560568	10/17/11 09:48
TPH (GC/FID) High Fraction	< 4	ppm			WG560533	10/17/11 09:08
o-Terphenyl		% Rec	63.64	50-150	WG560533	10/17/11 09:08

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0	0	0	20	LS41422-01	WG560680
Arsenic	mg/l	0	0	0	20	LS41528-01	WG560761
Barium	mg/l	0	0	0	20	LS41528-01	WG560761
Cadmium	mg/l	0	0	0	20	LS41528-01	WG560761
Chromium	mg/l	0	0	0	20	LS41528-01	WG560761
Lead	mg/l	0	0	0	20	LS41528-01	WG560761
Selenium	mg/l	0.0680	0.0580	15.7	20	LS41528-01	WG560761
Silver	mg/l	0	0	0	20	LS41528-01	WG560761
Total Solids	%	81.0	81.2	0.0375	5	LS41495-01	WG560568

Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Benzene	mg/kg	.05	0.0393	78.6	76-113	WG560542
Ethylbenzene	mg/kg	.05	0.0440	88.0	78-115	WG560542
Toluene	mg/kg	.05	0.0457	91.3	76-114	WG560542
Total Xylene	mg/kg	.15	0.129	85.9	81-118	WG560542
a,a,a-Trifluorotoluene (FID)				93.03	59-128	WG560542
a,a,a-Trifluorotoluene (PID)				96.88	54-144	WG560542
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.59	120.	67-135	WG560542
a,a,a-Trifluorotoluene (FID)				98.74	59-128	WG560542
a,a,a-Trifluorotoluene (PID)				108.1	54-144	WG560542
Mercury	mg/l	.003	0.00298	99.3	85-115	WG560680

* 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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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Arsenic	mg/l	1.13	1.18	104	85-115	WG560761
Barium	mg/l	1.13	1.15	102	85-115	WG560761
Cadmium	mg/l	1.13	1.16	103	85-115	WG560761
Chromium	mg/l	1.13	1.22	108	85-115	WG560761
Lead	mg/l	1.13	1.07	94.7	85-115	WG560761
Selenium	mg/l	1.13	1.25	111	85-115	WG560761
Silver	mg/l	1.13	1.20	106	85-115	WG560761
Total Solids	%	50	50.0	100	85-155	WG560568
TPH (GC/FID) High Fraction	ppm	60	45.1	75.2	50-150	WG560533
o-Terphenyl				69.88	50-150	WG560533

Analyte	Units	Laboratory Control Result	Sample Ref	Duplicate %Rec	Limit	RPD	Limit	Batch
Benzene	mg/kg	0.0430	0.0393	86.0	76-113	8.98	20	WG560542
Ethylbenzene	mg/kg	0.0483	0.0440	96.0	78-115	9.24	20	WG560542
Toluene	mg/kg	0.0503	0.0457	101	76-114	9.77	20	WG560542
Total Xylene	mg/kg	0.139	0.129	93.0	81-118	7.72	20	WG560542
a,a,a-Trifluorotoluene (FID)				93.68	59-128			WG560542
a,a,a-Trifluorotoluene (PID)				96.67	54-144			WG560542
TPH (GC/FID) Low Fraction	mg/kg	6.75	6.59	123	67-135	2.37	20	WG560542
a,a,a-Trifluorotoluene (FID)				98.94	59-128			WG560542
a,a,a-Trifluorotoluene (PID)				108.4	54-144			WG560542
TPH (GC/FID) High Fraction	ppm	45.2	45.1	75.0	50-150	0.0854	25	WG560533
o-Terphenyl				69.27	50-150			WG560533

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/kg	0.213	0	.05	85.2	32-137	L541314-08	WG560542
Ethylbenzene	mg/kg	0.238	0	.05	95.3	10-150	L541314-08	WG560542
Toluene	mg/kg	0.250	0	.05	99.9	20-142	L541314-08	WG560542
Total Xylene	mg/kg	0.691	0	.15	92.1	16-141	L541314-08	WG560542
a,a,a-Trifluorotoluene (FID)					93.29	59-128		WG560542
a,a,a-Trifluorotoluene (PID)					95.95	54-144		WG560542
TPH (GC/FID) Low Fraction	mg/kg	30.4	0	5.5	111	55-109	L541314-08	WG560542
a,a,a-Trifluorotoluene (FID)					98.03	59-128		WG560542
a,a,a-Trifluorotoluene (PID)					103.8	54-144		WG560542
Mercury	mg/l	0.00322	0	.003	107	70-130	L540814-02	WG560680
Mercury	mg/l	0.00307	0	.003	102	70-130	L541422-01	WG560680
Arsenic	mg/l	1.08	0	1.13	95.6	75-125	L541528-01	WG560761
Barium	mg/l	1.24	0	1.13	110	75-125	L541528-01	WG560761
Cadmium	mg/l	1.13	0	1.13	100	75-125	L541528-01	WG560761
Chromium	mg/l	1.22	0	1.13	108	75-125	L541528-01	WG560761
Lead	mg/l	1.05	0	1.13	92.9	75-125	L541528-01	WG560761
Selenium	mg/l	1.23	0.0580	1.13	104	75-125	L541528-01	WG560761
Silver	mg/l	0.910	0	1.13	80.5	75-125	L541528-01	WG560761
Arsenic	mg/l	1.06	0	1.13	93.8	75-125	L540814-01	WG560761
Barium	mg/l	1.15	0	1.13	102	75-125	L540814-01	WG560761

* 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 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L541457

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

Tax I D 62-0814289

Est. 1970

October 17, 2011

Analyte	Units	MS Res	Matrix Spike			Limit	Ref Samp	Batch
			Ref Res	TV	% Rec			
Cadmium	mg/l	1.12	0	1.13	99.1	75-125	L540814-01	WG560761
Chromium	mg/l	1.66	0.430	1.13	109.	75-125	L540814-01	WG560761
Lead	mg/l	1.03	0	1.13	91.2	75-125	L540814-01	WG560761
Selenium	mg/l	1.13	0	1.13	100.	75-125	L540814-01	WG560761
Silver	mg/l	1.17	0	1.13	104	75-125	L540814-01	WG560761
TPH (GC/FID) High Fraction	ppm	45.9	0	60	76.5	50-150	L541421-01	WG560533
o-Terphenyl					69.30	50-150		WG560533

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.213	0.213	85.4	32-137	0.240	39	L541314-08	WG560542
Ethylbenzene	mg/kg	0.237	0.238	94.9	10-150	0.370	44	L541314-08	WG560542
Toluene	mg/kg	0.246	0.250	98.2	20-142	1.68	42	L541314-08	WG560542
Total Xylene	mg/kg	0.684	0.691	91.2	16-141	1.01	46	L541314-08	WG560542
a,a,a-Trifluorotoluene (FID)	mg/kg	29.6	30.4	93.12	59-128	2.90	20	L541314-08	WG560542
a,a,a-Trifluorotoluene (PID)				96.17	54-144				WG560542
TPH (GC/FID) Low Fraction				107.	55-109				WG560542
a,a,a-Trifluorotoluene (FID)				97.79	59-128				WG560542
a,a,a-Trifluorotoluene (PID)				106.5	54-144				WG560542
Mercury	mg/l	0.00318	0.00322	106.	70-130	1.25	20	L540814-02	WG560680
Mercury	mg/l	0.00328	0.00307	109.	70-130	6.61	20	L541422-01	WG560680
Arsenic	mg/l	1.09	1.06	96.5	75-125	2.79	20	L540814-01	WG560761
Barium	mg/l	1.23	1.15	109	75-125	6.72	20	L540814-01	WG560761
Cadmium	mg/l	1.11	1.12	98.2	75-125	0.897	20	L540814-01	WG560761
Chromium	mg/l	1.24	1.66	71.7*	75-125	29.0*	20	L540814-01	WG560761
Lead	mg/l	1.07	1.03	94.7	75-125	3.81	20	L540814-01	WG560761
Selenium	mg/l	1.24	1.13	110.	75-125	9.28	20	L540814-01	WG560761
Silver	mg/l	0.867	1.17	76.7	75-125	29.7*	20	L540814-01	WG560761
Arsenic	mg/l	1.13	1.06	100	75-125	6.39	20	L540814-01	WG560761
Barium	mg/l	1.21	1.15	107.	75-125	5.08	20	L540814-01	WG560761
Cadmium	mg/l	1.17	1.12	104	75-125	4.37	20	L540814-01	WG560761
Chromium	mg/l	1.65	1.66	108	75-125	0.604	20	L540814-01	WG560761
Lead	mg/l	1.08	1.03	95.6	75-125	4.74	20	L540814-01	WG560761
Selenium	mg/l	1.20	1.13	106	75-125	6.01	20	L540814-01	WG560761
Silver	mg/l	1.24	1.17	110	75-125	5.81	20	L540814-01	WG560761
TPH (GC/FID) High Fraction	ppm	47.3	45.9	78.8	50-150	2.97	25	L541421-01	WG560533
o-Terphenyl				69.98	50-150				WG560533

Batch number / Run number / Sample number cross reference

WG560542: R1897432: L541457-01 03 04
WG560680: R1898075: L541457-02
WG560558: R1898132: L541457-02
WG560761: R1898333: L541457-02
WG560568: R1898715: L541457-01 03 04
WG560533: R1898952: L541457-01 03 04

* * 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
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Quality Assurance Report
Level II

LS41457

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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 XTO Energy, Inc. 382 County Road 3100 Aztec, NM 87410			Alternate Billing XTORN031810S Report to: James McDaniel E-mail to: james_mcdaniel@xtoenergy.com			Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> 8015(DRO/6RO) 1-4oz/Cool 8021(BTEX) 1-4oz/Cool TCDP Metals 1-4oz/Cool </div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>						Chain of Custody F218 Prepared by: ENVIRONMENTAL Science corp 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859					
Project Description: Ohio F Govt #1A			City/State Collected La Plata, NM														
PHONE 505-333-3701 FAX:		Client Project No. Ohio F Govt #1A		Lab Project #													
Collected by: James McDaniel Collected by (signature):		Site/Facility ID# Ohio F Govt #1A		P.O.#													
Rush? <input checked="" type="checkbox"/> (Lab MUST be Notified) <input checked="" 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 checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		No of													
Packed on Ice N <input checked="" type="checkbox"/>		Shipped Via: Fed Ex		CoCode (lab use only) XTORNM Template/Prelogin													
Sample ID		Comp/Gra		Matrix		Depth		Date		Time		Cntrs		Remarks/contaminant		Sample # (lab only)	
Spill Composite		Comp		SS		-		10/12/11		11 ⁰⁰		2		6541457-01/02		02	
Spill Composite @ 1.5'		Comp		SS		-		10/12/11		11 ⁰⁵		1		03		03	
Spill Composite @ 4'		Comp		SS		-		10/12/11		11 ¹⁰		1		04		04	

Matrix SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other				pH _____ Temp _____							
Remarks: "ONLY 1 COC Per Site!!"				Flow _____ Other _____							
Relinquisher by (Signature) 		Date 10/13/11		Time 0640		Received by (Signature) 		Samples returned via FedEx <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Other _____		Condition (lab use only) OK	
Relinquisher by (Signature)		Date		Time		Received by (Signature)		Temp 3.4°		Bottles Received: 4	
Relinquisher by (Signature)		Date		Time		Received for lab by (Signature) 		Date 10-14-11		Time 0900	

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

Client:	XTO	Project #:	98031-0528
Sample ID:	NW Wall	Date Reported:	10-21-11
Laboratory Number:	60048	Date Sampled:	10-20-11
Chain of Custody No:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Extracted:	10-20-11
Preservative:	Cool	Date Analyzed:	10-20-11
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)	49.7	0.1
Total Petroleum Hydrocarbons	49.7	

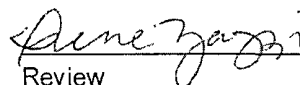
ND - Parameter not detected at the stated detection limit.

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

Comments: **Ohio F Govt A #1**



Analyst



Review

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

Client:	XTO	Project #:	98031-0528
Sample ID:	NE Wall	Date Reported:	10-21-11
Laboratory Number:	60049	Date Sampled:	10-20-11
Chain of Custody No:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Extracted:	10-20-11
Preservative:	Cool	Date Analyzed:	10-20-11
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: **Ohio F Govt A #1**



Analyst



Review

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

Client:	XTO	Project #:	98031-0528
Sample ID:	SW Wall	Date Reported:	10-21-11
Laboratory Number:	60050	Date Sampled:	10-20-11
Chain of Custody No:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Extracted:	10-20-11
Preservative:	Cool	Date Analyzed:	10-20-11
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)	11.7	0.1
Total Petroleum Hydrocarbons	11.7	

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: **Ohio F Govt A #1**



Analyst

Review

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

Client:	XTO	Project #:	98031-0528
Sample ID:	SE Wall	Date Reported:	10-21-11
Laboratory Number:	60051	Date Sampled:	10-20-11
Chain of Custody No:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Extracted:	10-20-11
Preservative:	Cool	Date Analyzed:	10-20-11
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	

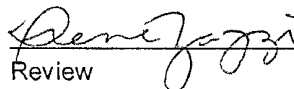
ND - Parameter not detected at the stated detection limit.

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

Comments: **Ohio F Govt A #1**



Analyst



Review

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

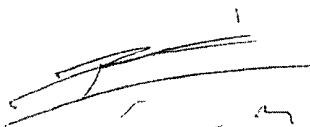
Client:	XTO	Project #:	98031-0528
Sample ID:	Floor @ 20'	Date Reported:	10-21-11
Laboratory Number:	60052	Date Sampled:	10-20-11
Chain of Custody No:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Extracted:	10-20-11
Preservative:	Cool	Date Analyzed:	10-20-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	59.9	0.2
Diesel Range (C10 - C28)	91.2	0.1
Total Petroleum Hydrocarbons	151	

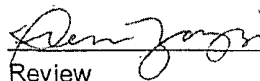
ND - Parameter not detected at the stated detection limit.

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

Comments: **Ohio F Govt A #1**



Analyst



Review

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

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-20-11 QA/QC	Date Reported:	10-21-11
Laboratory Number:	60022	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-20-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	10-20-11	1.012E+03	1.012E+03	0.04%	0 - 15%
Diesel Range C10 - C28	10-20-11	1.005E+03	1.006E+03	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	4.5	0.2
Diesel Range C10 - C28	4.3	0.1


Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Range
Gasoline Range C5 - C10	342	339	1.0%	0 - 30%
Diesel Range C10 - C28	53.4	63.8	19.5%	0 - 30%

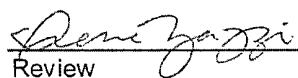
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	342	250	587	99.2%	75 - 125%
Diesel Range C10 - C28	50.5	250	310	103%	75 - 125%

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: QA/QC for Samples 59999-60000, 60022-60023, 60044, 60048-60054


 Analyst


 Review

Client:	XTO	Project #:	98031-0528
Sample ID:	NW Wall	Date Reported:	10-21-11
Laboratory Number:	60048	Date Sampled:	10-20-11
Chain of Custody:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Analyzed:	10-21-11
Preservative:	Cool	Date Extracted:	10-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	23.8	1.0
Ethylbenzene	26.6	1.0
p,m-Xylene	58.5	1.2
o-Xylene	39.6	0.9
Total BTEX	149	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	82.1 %
	1,4-difluorobenzene	92.3 %
	Bromochlorobenzene	86.3 %

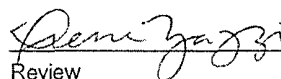
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ohio F Govt A #1



Analyst



Review

Client:	XTO	Project #:	98031-0528
Sample ID:	NE Wall	Date Reported:	10-21-11
Laboratory Number:	60049	Date Sampled:	10-20-11
Chain of Custody:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Analyzed:	10-21-11
Preservative:	Cool	Date Extracted:	10-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	5.9	1.0
Ethylbenzene	1.2	1.0
p,m-Xylene	10.6	1.2
o-Xylene	3.3	0.9
Total BTEX	21.0	


ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	81.7 %
	1,4-difluorobenzene	90.7 %
	Bromochlorobenzene	86.1 %

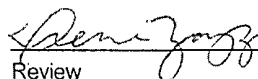
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ohio F Govt A #1



Analyst



Review

**EPA METHOD 8021
 AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	SW Wall	Date Reported:	10-21-11
Laboratory Number:	60050	Date Sampled:	10-20-11
Chain of Custody:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Analyzed:	10-21-11
Preservative:	Cool	Date Extracted:	10-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	1.3	1.0
Ethylbenzene	2.6	1.0
p,m-Xylene	54.9	1.2
o-Xylene	20.3	0.9
Total BTEX	79.1	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	81.2 %
	1,4-difluorobenzene	92.5 %
	Bromochlorobenzene	84.3 %

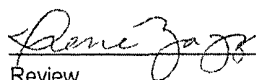
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ohio F Govt A #1



Analyst



Review

Client:	XTO	Project #:	98031-0528
Sample ID:	SE Wall	Date Reported:	10-21-11
Laboratory Number:	60051	Date Sampled:	10-20-11
Chain of Custody:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Analyzed:	10-21-11
Preservative:	Cool	Date Extracted:	10-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

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


ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	84.5 %
	1,4-difluorobenzene	99.6 %
	Bromochlorobenzene	85.4 %

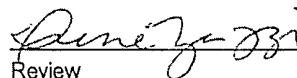
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ohio F Govt A #1



 Analyst



 Review

**EPA METHOD 8021
 AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	Floor @ 20'	Date Reported:	10-21-11
Laboratory Number:	60052	Date Sampled:	10-20-11
Chain of Custody:	12800	Date Received:	10-20-11
Sample Matrix:	Soil	Date Analyzed:	10-21-11
Preservative:	Cool	Date Extracted:	10-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	63.2	1.0
Ethylbenzene	65.2	1.0
p,m-Xylene	826	1.2
o-Xylene	202	0.9
Total BTEX	1,160	

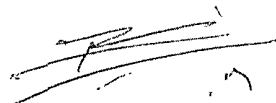
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	83.8 %
	1,4-difluorobenzene	91.1 %
	Bromochlorobenzene	91.5 %

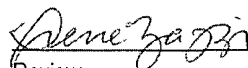
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ohio F Govt A #1



 Analyst



 Review

Client:	N/A	Project #:	N/A
Sample ID:	1021BBLK QA/QC	Date Reported:	10-21-11
Laboratory Number:	60048	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-21-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range	0 - 15%		
Benzene	3.1626E+006	3.1690E+006	0.2%	ND	0.1
Toluene	3.4397E+006	3.4466E+006	0.2%	ND	0.1
Ethylbenzene	3.1384E+006	3.1447E+006	0.2%	ND	0.1
p,m-Xylene	8.7075E+006	8.7249E+006	0.2%	ND	0.1
o-Xylene	2.9398E+006	2.9457E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	23.8	29.7	24.8%	0 - 30%	1.0
Ethylbenzene	26.6	33.9	27.4%	0 - 30%	1.0
p,m-Xylene	59.5	76.2	28.1%	0 - 30%	1.2
o-Xylene	39.6	47.8	20.7%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	493	98.6%	39 - 150
Toluene	23.8	500	530	101%	46 - 148
Ethylbenzene	25.6	500	543	103%	32 - 160
p,m-Xylene	58.5	1000	1,110	105%	46 - 148
o-Xylene	39.6	500	557	103%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996

Comments: QAQC for samples 60048-60054

Analyst

Review

* KUSH *

CHAIN OF CUSTODY RECORD


12800

Client: JAMES XTO MEDANIER			Project Name / Location: OFFICE GOVT A1			ANALYSIS / PARAMETERS													
Client Address: 382 ROAD 3100			Sampler Name: AOSH KIRCHNER			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.: 787-0519			Client No.: 98031-0528																
Sample No./ Identification	Sample Date	Sample Time	Lab No	Sample Matrix	No./Volume of Containers	Preservative													
				Soil	Sludge														
				Solid	Aqueous														
NW WALL	10/20	1315	60048	Soil	Sludge	1	402											X	X
				Solid	Aqueous														
NE WALL	10/20	1325	60049	Soil	Sludge	1	402											X	X
				Solid	Aqueous														
SW WALL	10/20	1330	60050	Soil	Sludge	1	402											X	✓
				Solid	Aqueous														
SE WALL	10/20	1335	60051	Soil	Sludge	1	402											X	X
				Solid	Aqueous														
FLUX @ 20'	10/20	1400	60052	Soil	Sludge	1	402											X	X
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
				Soil	Sludge														
				Solid	Aqueous														
Relinquished by: (Signature) BLG					Date	Time	Received by: (Signature) JENNIFER WINTERS										Date	Time	
					10/20	1625											10-20	4:25	
Relinquished by: (Signature)							Received by: (Signature)												
Relinquished by: (Signature)							Received by: (Signature)												

RUSH!!!

NEXT DAY

10/21



envirotech
Analytical Laboratory

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Tax I.D. 62-0814289

Est. 1970

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

Report Summary

Monday October 31, 2011

Report Number: L544128

Samples Received: 10/29/11

Client Project:

Description: Ohio F Govt 1A

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

Entire Report Reviewed By:

Daphne Richards, ESC Representative

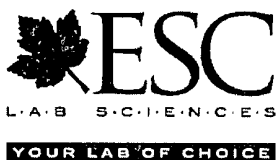
Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

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

October 31, 2011

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

Date Received : October 29, 2011
Description : Ohio F Govt 1A
Sample ID : SANDSTONE 26 FT
Collected By : Joshua Kirchner
Collection Date : 10/28/11 10:00

ESC Sample # : L544128-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	85.		%	2540G	10/31/11	1
Benzene	0.39	0.12	mg/kg	8021/8015	10/31/11	200
Toluene	20.	1.2	mg/kg	8021/8015	10/31/11	200
Ethylbenzene	16.	0.12	mg/kg	8021/8015	10/31/11	200
Total Xylene	100	0.35	mg/kg	8021/8015	10/31/11	200
TPH (GC/FID) Low Fraction	1900	24.	mg/kg	GRO	10/31/11	200
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.9		% Rec.	8021/8015	10/31/11	200
a,a,a-Trifluorotoluene(PID)	101		% Rec.	8021/8015	10/31/11	200
TPH (GC/FID) High Fraction	1200	94.	mg/kg	3546/DRO	10/31/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	10/31/11	20

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 10/31/11 16:24 Printed: 10/31/11 16:25



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REPORT OF ANALYSIS

October 31, 2011

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

Date Received : October 29, 2011
Description : Ohio F Govt 1A
Sample ID : FLOOR 20 FT
Collected By : Joshua Kirchner
Collection Date : 10/28/11 10:30

ESC Sample # : L544128-02

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	90.		%	2540G	10/31/11	1
Benzene	BDL	0.0028	mg/kg	8021/8015	10/30/11	5
Toluene	BDL	0.028	mg/kg	8021/8015	10/30/11	5
Ethylbenzene	BDL	0.0028	mg/kg	8021/8015	10/30/11	5
Total Xylene	0.0089	0.0083	mg/kg	8021/8015	10/30/11	5
TPH (GC/FID) Low Fraction	0.59	0.55	mg/kg	GRO	10/30/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.0		% Rec.	8021/8015	10/30/11	5
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021/8015	10/30/11	5
TPH (GC/FID) High Fraction	61.	4.4	mg/kg	3546/DRO	10/30/11	1
Surrogate recovery(%)						
o-Terphenyl	99.9		% Rec.	3546/DRO	10/30/11	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L544128-01	WG563059	SAMP	o-Terphenyl	R1915474	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

Qualifier Report Information

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

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
10/31/11 at 16:25:01

TSR Signing Reports: 288
R2 - Rush: Next Day

Sample: L544128-01 Account: XTORNM Received: 10/29/11 09.00 Due Date: 10/31/11 00:00 RPT Date: 10/31/11 16:24

Sample: L544128-02 Account: XTORNM Received: 10/29/11 09.00 Due Date: 10/31/11 00:00 RPT Date: 10/31/11 16:24



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Quality Assurance Report
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October 31, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG563116	10/29/11 23:06
Ethylbenzene	< .0005	mg/kg			WG563116	10/29/11 23:06
Toluene	< .005	mg/kg			WG563116	10/29/11 23:06
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG563116	10/29/11 23:06
Total Xylene	< .0015	mg/kg			WG563116	10/29/11 23:06
a,a,a-Trifluorotoluene(FID)		% Rec	99.70	59-128	WG563116	10/29/11 23:06
a,a,a-Trifluorotoluene(PID)		% Rec	108.4	54-144	WG563116	10/29/11 23:06
Total Solids	< 1	%			WG563076	10/31/11 09:25
TPH (GC/FID) High Fraction	< 4	ppm			WG563059	10/30/11 11:56
o-Terphenyl		% Rec	97.57	50-150	WG563059	10/30/11 11:56
Benzene	< .0005	mg/kg			WG563200	10/31/11 14:04
Ethylbenzene	< .0005	mg/kg			WG563200	10/31/11 14:04
Toluene	< .005	mg/kg			WG563200	10/31/11 14:04
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG563200	10/31/11 14:04
Total Xylene	< .0015	mg/kg			WG563200	10/31/11 14:04
a,a,a-Trifluorotoluene(FID)		% Rec	94.79	59-128	WG563200	10/31/11 14:04
a,a,a-Trifluorotoluene(PID)		% Rec	104.2	54-144	WG563200	10/31/11 14:04

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Total Solids	%	89.0	89.2	0.128	5	L544138-07	WG563076

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0507	101.	76-113	WG563116
Ethylbenzene	mg/kg	.05	0.0532	106	78-115	WG563116
Toluene	mg/kg	.05	0.0518	104	76-114	WG563116
Total Xylene	mg/kg	.15	0.158	105	81-118	WG563116
a,a,a-Trifluorotoluene(PID)				105.6	54-144	WG563116
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.52	100	67-135	WG563116
a,a,a-Trifluorotoluene(PID)				103.0	59-128	WG563116
Total Solids	%	50	50.0	100	85-155	WG563076
TPH (GC/FID) High Fraction	ppm	60	52.3	87.2	50-150	WG563059
o-Terphenyl				92.10	50-150	WG563059
Benzene	mg/kg	.05	0.0465	93.1	76-113	WG563200
Ethylbenzene	mg/kg	.05	0.0496	99.3	78-115	WG563200
Toluene	mg/kg	.05	0.0493	98.6	76-114	WG563200
Total Xylene	mg/kg	.15	0.148	98.8	81-118	WG563200
a,a,a-Trifluorotoluene(PID)				101.6	54-144	WG563200
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.46	99.3	67-135	WG563200
a,a,a-Trifluorotoluene(PID)				98.27	59-128	WG563200

* 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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October 31, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/kg	0.0515	0.0507	103	76-113	1.47	20	WG563116
Ethylbenzene	mg/kg	0.0524	0.0532	105	78-115	1.58	20	WG563116
Toluene	mg/kg	0.0516	0.0518	103	76-114	0.480	20	WG563116
Total Xylene	mg/kg	0.155	0.158	103	81-118	2.18	20	WG563116
a,a,a-Trifluorotoluene(PID)				106.3	54-144			WG563116
TPH (GC/FID) Low Fraction	mg/kg	5.61	5.52	102	67-135	1.52	20	WG563116
a,a,a-Trifluorotoluene(FID)				103.1	59-128			WG563116
TPH (GC/FID) High Fraction	ppm	49.1	52.3	82.0	50-150	6.36	25	WG563059
o-Terphenyl				86.25	50-150			WG563059
Benzene	mg/kg	0.0474	0.0465	95.0	76-113	1.92	20	WG563200
Ethylbenzene	mg/kg	0.0507	0.0496	101	78-115	2.08	20	WG563200
Toluene	mg/kg	0.0495	0.0493	99.0	76-114	0.420	20	WG563200
Total Xylene	mg/kg	0.151	0.148	101	81-118	1.95	20	WG563200
a,a,a-Trifluorotoluene(PID)				101.6	54-144			WG563200
TPH (GC/FID) Low Fraction	mg/kg	5.24	5.46	95.0	67-135	4.09	20	WG563200
a,a,a-Trifluorotoluene(FID)				97.28	59-128			WG563200

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.242	0	.05	96.9	32-137	L544161-06	WG563116
Ethylbenzene	mg/kg	0.264	0	.05	106	10-150	L544161-06	WG563116
Toluene	mg/kg	0.258	0	.05	103	20-142	L544161-06	WG563116
Total Xylene	mg/kg	0.794	0	.15	106	16-141	L544161-06	WG563116
a,a,a-Trifluorotoluene(PID)					105.9	54-144		WG563116
TPH (GC/FID) Low Fraction	mg/kg	23.9	0.137	5.5	86.5	55-109	L544161-06	WG563116
a,a,a-Trifluorotoluene(FID)					101.9	59-128		WG563116
TPH (GC/FID) High Fraction	ppm	51.5	0	60	85.8	50-150	L544129-03	WG563059
o-Terphenyl					83.12	50-150		WG563059
Benzene	mg/kg	2.57	0	.05	103	32-137	L544017-04	WG563200
Ethylbenzene	mg/kg	2.55	0.0420	.05	100	10-150	L544017-04	WG563200
Toluene	mg/kg	2.57	0	.05	103	20-142	L544017-04	WG563200
Total Xylene	mg/kg	8.57	0.790	.15	104	16-141	L544017-04	WG563200
a,a,a-Trifluorotoluene(PID)					103.2	54-144		WG563200
TPH (GC/FID) Low Fraction	mg/kg	247	14.9	5.5	84.4	55-109	L544017-04	WG563200
a,a,a-Trifluorotoluene(FID)					99.36	59-128		WG563200

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/kg	0.232	0.242	92.8	32-137	4.34	39	L544161-06	WG563116
Ethylbenzene	mg/kg	0.236	0.264	94.4	10-150	11.1	44	L544161-06	WG563116
Toluene	mg/kg	0.236	0.258	94.3	20-142	8.94	42	L544161-06	WG563116
Total Xylene	mg/kg	0.701	0.794	93.5	16-141	12.4	46	L544161-06	WG563116
a,a,a-Trifluorotoluene(PID)				105.0	54-144				WG563116
TPH (GC/FID) Low Fraction	mg/kg	24.5	23.9	88.7	55-109	2.49	20	L544161-06	WG563116
a,a,a-Trifluorotoluene(FID)				102.4	59-128				WG563116
TPH (GC/FID) High Fraction	ppm	52.9	51.5	88.2	50-150	2.79	25	L544129-03	WG563059
o-Terphenyl				88.24	50-150				WG563059

* 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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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	2.59	2.57	104.	32-137	0.810	39	L544017-04	WG563200
Ethylbenzene	mg/kg	2.57	2.55	101	10-150	0.830	44	L544017-04	WG563200
Toluene	mg/kg	2.55	2.57	102	20-142	0.930	42	L544017-04	WG563200
Total Xylene	mg/kg	8.66	8.57	105.	16-141	0.980	46	L544017-04	WG563200
a,a,a-Trifluorotoluene (PID)				102.9	54-144				WG563200
TPH (GC/FID) Low Fraction	mg/kg	260	247	89.0	55-109	5.08	20	L544017-04	WG563200
a,a,a-Trifluorotoluene (FID)				104.7	59-128				WG563200

Batch number / Run number / Sample number cross reference

WG563116 R1914212 L544128-02
WG563076 R1915067 L544128-01 02
WG563059 R1915474 L544128-01 02
WG563200 R1915534 L544128-01

* * 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

L544128

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

Tax I D 62-0814289

Est 1970

October 31, 2011

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.



COVER LETTER

Tuesday, November 08, 2011

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

TEL: (505) 333-3100

FAX (505) 333-3280

RE: OHIO F Govt #1A

Order No.: 1111324

Dear James McDaniel:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/5/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", written over a horizontal line.

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Andy Freeman
Laboratory Manager

Hall Environmental Analysis Laboratory, Inc.

Date: 08-Nov-11

Analytical Report

CLIENT: XTO Energy
Lab Order: 1111324
Project: OHIO F Govt #1A
Lab ID: 1111324-01

Client Sample ID: Sandstone 26'
Collection Date: 11/4/2011
Date Received: 11/5/2011
Matrix: MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	120	10		mg/Kg	1	11/7/2011 11:14:16 AM
Surr: DNOP	112	73.4-123		%REC	1	11/7/2011 11:14:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	310	100		mg/Kg	20	11/6/2011 3:54:38 PM
Surr: BFB	151	75.2-136	S	%REC	20	11/6/2011 3:54:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	11/6/2011 3:54:38 PM
Toluene	4.8	1.0		mg/Kg	20	11/6/2011 3:54:38 PM
Ethylbenzene	2.1	1.0		mg/Kg	20	11/6/2011 3:54:38 PM
Xylenes, Total	28	2.0		mg/Kg	20	11/6/2011 3:54:38 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	20	11/6/2011 3:54:38 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
NC Non-Chlorinated
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: OHIO F Govt #1A

Work Order: 1111324

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-29228		MBLK									
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Sample ID: LCS-29228		LCS									
Diesel Range Organics (DRO)	48.29	mg/Kg	10	50	0	96.6	66.7	119			
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML-RB		MBLK									
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: 2.5UG GRO LCS		LCS									
Gasoline Range Organics (GRO)	27.47	mg/Kg	5.0	25	0	110	86.4	132			
Method: EPA Method 8021B: Volatiles											
Sample ID: 1111324-01A MSD		MSD									
Benzene	16.93	mg/Kg	1.0	20	0.0826	84.2	67.2	113	12.9	14.3	
Toluene	22.04	mg/Kg	1.0	20	4.752	86.5	62.1	116	10.9	15.9	
Ethylbenzene	19.62	mg/Kg	1.0	20	2.098	87.6	67.9	127	10.0	14.4	
Xylenes, Total	79.26	mg/Kg	2.0	60	28.17	85.2	60.6	134	10.5	12.6	
Sample ID: 5ML-RB		MBLK									
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: 100NG BTEX LCS		LCS									
Benzene	0.9987	mg/Kg	0.050	1	0	99.9	83.3	107			
Toluene	1.030	mg/Kg	0.050	1	0	103	74.3	115			
Ethylbenzene	1.023	mg/Kg	0.050	1	0	102	80.9	122			
Xylenes, Total	3.094	mg/Kg	0.10	3	0	103	85.2	123			
Sample ID: 1111324-01A MS		MS									
Benzene	19.26	mg/Kg	1.0	20	0.0826	95.9	67.2	113			
Toluene	24.59	mg/Kg	1.0	20	4.752	99.2	62.1	116			
Ethylbenzene	21.69	mg/Kg	1.0	20	2.098	98.0	67.9	127			
Xylenes, Total	88.03	mg/Kg	2.0	60	28.17	99.8	60.6	134			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name XTO ENERGY

Date Received:

11/5/2011

Work Order Number 1111324

Received by: AMF

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name Greyhound

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☐

No ☐

N/A ☒

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Number of preserved bottles checked for pH:

<2 >12 unless noted below.

Container/Temp Blank temperature?

2.9°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

Chain-of-Custody Record		Turn-Around Time:	
Client: <u>XTO Energy</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>SAME DAY</u>	
Mailing Address: <u>382 CR 3100</u>		Project Name: <u>OHIO F Gout # 1A</u>	
<u>Aztec, NM 87410</u>		Project #:	
Phone #: <u>505-787-0519</u>		Project Manager:	
email or Fax#:		<u>James McDaniel</u>	
QA/QC Package:		Sampler: <u>/ Joshua Kirchner</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation:		Sample Temperature: <u>17.2</u>	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____			
<input type="checkbox"/> EDD (Type) _____			

☐ Standard

☒ Rush SAME DAY

OHIO F Govt # 1A

Project #:

Project Manager:

James McDaniel

Sampler: / Joshua Kirchner

Office ☐ Yes

Sample Temperatures: 215

[illegible]

11/4/11 1537

Date	Time
------	------

Art Weber

4

Remarks: cc to joshua@nelsonreveeg.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Industrial Ecosystems Inc.

#49 C.R. 3130 • AZ/CL NM 87410
Phone: 505-632-1782 Fax: 505-632-1876

17970

Unit: 691-777

Employee: Core

Contact: James McDaniel

Date: 10-20-11

PO#:

Billing Code:

Customer

Location Name

☐ Jicarilla Apache Land ☐ Southern Ute Land

LABOR		HRS/UNITS		RATE		TOTAL
Equipment Operator	41000.1		Hours/Day	\$	Per hour/day	\$
General Laborer	41000.1		Hours	\$	Per hour	\$
Project Manager	41000.1		Hours	\$	Per hour	\$
Per Diem	41000.1		Hours	\$	Per day/man	\$
Travel Time	41000.1		Hours	\$	Per hour	\$
EQUIPMENT						
4wd Pickup	42000.1		Miles	\$	Per mile	\$
12yd Dump Truck	42000.1		Hours	\$	Per hour	\$
18yd Side Dump	42000.1		Hours	\$	Per hour	\$
Backhoe with Operator	42000.1		Hours	\$	Per hour	\$
Loader with Operator	42000.1		Hours	\$	Per hour	\$
Excavator with Operator	42000.1		Hours	\$	Per hour	\$
One Ton Truck	42000.1		Hours/Day	\$	Per hour/day	\$
Portable Pressure Wash	42000.1		Hours/Day		Per hour/day	\$
Portable Pres. Wash Unit	42000.1		Hours	\$	Per hour	\$
80 Barrel Vacuum Truck	42000.1		Hours	\$	Per hour	\$
King Vac Truck with Crew	42000.1		Hours	\$	Per hour	\$
Skid Steer	42000.1		Hours	\$	Per hour	\$
Mileage	42000.1		Miles	\$	Per mile	\$
SCBA (Breathing Apparatus)	42000.1		Day	\$	Per day	\$
SCBA Refill	42000.1		Each	\$	Per Refill	\$
LEL, O ₂ , H ₂ S Monitoring	42000.1		Day	\$	Per day	\$
SERVICES						
Chloride Test	45000.2	1	Each	\$ 15.00	Per test	\$ 15.00
Mobile Dewatering	42100.1		Hours/Day	\$	Per hour/day	\$
Mob/Demob	42100.1		Hours	\$	Per hour	\$
Monthly Maintenance	45000.1		Month	\$	Per month	\$
SUPPLIES						
Soap/Degreaser			Gallons	\$	Per gallon	\$
Misc. Description:			Each	\$	Per:	\$
Virgin Soil/Gravel	45500.2		Cubic yard	\$	Per yard	\$
DISPOSAL & MISC.						
Disposal Fee (solids)	44000.2	248	Cubic yard	\$ 50.00	Per yard	\$ 4,960.00
Disposal Fee (liquids)	44100.2		Per barrel	\$	Per barrel	\$
Facility Use Fee	42000.2		Each	\$	Each	\$

Comments:

Cont Soil

Sub Total

4,975.00

Tax

Total

10% - 497.50

\$4,477.50

Employee Signature

Customer Signature

FOR BILLING INQUIRIES PLEASE CALL (505) 632-1782

AMOUNTS ARE DUE NET 30 DAYS. PURCHASER AGREES TO PAY FINANCE CHARGES OF 1.5% PER MONTH (ANNUAL PERCENTAGE RATE OF 18%) OR A MINIMUM CHARGE OF .50 PER MONTH. ACCOUNTS THAT HAVE BEEN PLACED FOR COLLECTION WILL BE CHARGED A \$100.00 COLLECTION FEE IN ADDITION TO REASONABLE ATTORNEY FEES AND COLLECTION CHARGES.



Industrial Ecosystems Inc.

#49 CR 3150 • Acton, NM 87410

Phone: 505-632-1782 • Fax: 505-632-1876

18163

Unit: 23-3

Employee: Core

Contact: James McDaniel

Date: 11-7-11

PO#:

Customer: XTO

Location Name: OHIO F Gort #1A

☐ Jicarilla Apache Land ☐ Southern Ute Land

Billing Code:

LABOR		HRS/UNITS		RATE		TOTAL
Equipment Operator	41000.1		Hours/Day	\$	Per hour/day	\$
General Laborer	41000.1		Hours	\$	Per hour	\$
Project Manager	41000.1		Hours	\$	Per hour	\$
Per Diem	41000.1		Hours	\$	Per day/man	\$
Travel Time	41000.1		Hours	\$	Per hour	\$
EQUIPMENT						
4wd Pickup	42000.1		Miles	\$	Per mile	\$
12yd Dump Truck	42000.1		Hours	\$	Per hour	\$
18yd Side Dump	42000.1		Hours	\$	Per hour	\$
Backhoe with Operator	42000.1		Hours	\$	Per hour	\$
Loader with Operator	42000.1		Hours	\$	Per hour	\$
Excavator with Operator	42000.1		Hours	\$	Per hour	\$
One Ton Truck	42000.1		Hours/Day	\$	Per hour/day	\$
Portable Pressure Wash	42000.1		Hours/Day	\$	Per hour/day	\$
Portable Pres. Wash Unit	42000.1		Hours	\$	Per hour	\$
80 Barrel Vacuum Truck	42000.1		Hours	\$	Per hour	\$
King Vac Truck with Crew	42000.1		Hours	\$	Per hour	\$
Skid Steer	42000.1		Hours	\$	Per hour	\$
Mileage	42000.1		Miles	\$	Per mile	\$
SCBA (Breathing Apparatus)	42000.1		Day	\$	Per day	\$
SCBA Refill	42000.1		Each	\$	Per Refill	\$
LEL, O ₂ , H ₂ S Monitoring	42000.1		Day	\$	Per day	\$
SERVICES						
Chloride Test	45000.2		Each	\$	Per test	\$
Mobile Dewatering	42100.1		Hours/Day	\$	Per hour/day	\$
Mob/Demob	42100.1		Hours	\$	Per hour	\$
Monthly Maintenance	45000.1		Month	\$	Per month	\$
SUPPLIES						
Soap/Degreaser			Gallons	\$	Per gallon	\$
Misc. Description:			Each	\$	Per:	\$
Virgin Soil/Gravel	45500.2		Cubic yard	\$	Per yard	\$
DISPOSAL & MISC.						
Disposal Fee (solids)	44000.2	240	Cubic yard	\$20.00	Per yard	\$4,800.00
Disposal Fee (liquids)	44100.2		Per barrel	\$	Per barrel	\$
Facility Use Fee	42000.2		Each	\$	Each	\$

Comments:

Cont Soil

Sub Total 4,800.00

Tax 0.00
Total 4,800.00

Employee Signature

Customer Signature

\$4,320.00

FOR BILLING INQUIRIES PLEASE CALL (505) 632-1782

AMOUNTS ARE DUE NET 30 DAYS. PURCHASER AGREES TO PAY FINANCE CHARGES OF 1.5% PER MONTH (ANNUAL PERCENTAGE RATE OF 18%) OR A MINIMUM CHARGE OF \$0 PER MONTH. ACCOUNTS THAT HAVE BEEN PLACED FOR COLLECTION WILL BE CHARGED A \$100.00 COLLECTION FEE IN ADDITION TO REASONABLE ATTORNEY FEES AND COLLECTION CHARGES.