

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1307 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: James McDaniel	
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3701	
Facility Name: Valencia Canyon Unit #40 (30-039-22082)	Facility Type: Gas Well (Mesaverde)	
Surface Owner: Federal	Mineral Owner:	Lease No.:

LOCATION OF RELEASE

Unit Letter M	Section 35	Township 28N	Range 4W	Feet from the 910	North/South Line FSL	Feet from the 870	East/West Line FWL	County Rio Arriba
------------------	---------------	-----------------	-------------	----------------------	-------------------------	----------------------	-----------------------	----------------------

Latitude: 36.61166 Longitude: -107.22709

RCVD MAY 13 '10
OIL CONS. DIV.

NATURE OF RELEASE

DIST 2

Type of Release: Condensate	Volume of Release: 160 bbls	Volume Recovered: None
Source of Release: Broken Drain Line	Date and Hour of Occurrence: January 24, 2010	Date and Hour of Discovery: January 24, 2010
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Brandon Powell	
By Whom? Kim Champlin	Date and Hour: January 25, 2010	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

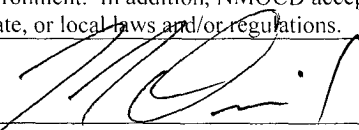
Describe Cause of Problem and Remedial Action Taken.

During snow removal activities, a blade broke the drain line at the above mentioned well site. The blade operator did not notice the broken drain valve, and the contents of the production tank drained onto the well pad. Some cleanup activities were conducted in January, but due to poor road conditions, heavy equipment could not be transported to the site until road conditions improved. The site was ranked a zero pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. This set the closure standards to 5,000 mg/kg TPH, 10 mg/kg benzene and 50 mg/kg total BTEX. Impacted soil was removed using a track hoe. An initial C-141 was submitted to your office on February 4, 2010.

Describe Area Affected and Cleanup Action Taken.*

From April 30, 2010 to May 5, 2010, approximately 1,203 cubic yards of impacted soil was removed to extents of approximately 50' x 30' x 8' deep. On April 30th, composite samples were collected from the west, north and south walls, as well as from the bottom at eight (8) feet below ground surface (BGS). The samples were analyzed for TPH via USEPA Method 8015, and for BTEX via USEPA Method 8021B. The samples returned results below the regulatory standard determined for this site. On May 4th, after additional excavation activities on the NE side of the excavation, additional samples were collected from the NE wall, and from the bottom in the NE section of the excavated area at eight (8) feet BGS. Both samples were analyzed for TPH via USEPA Method 8015 and for BTEX via USEPA Method 8021B. Each sample returned results below the regulatory standard determined for this site. No further excavation is necessary. Impacted soils were transported to Envirotech's Landfarm for disposal, and backfill was brought in from the Moss Pit. Analytical results are attached for your reference.

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		Approved by District Supervisor:  For: CP	
Title: EH&S Specialist		Approval Date: 9/22/10	Expiration Date:
E-mail Address: James_McDaniel@xtoenergy.com		Conditions of Approval:	
Date: 5/11/2010 Phone: 505-333-3701		Attached ☐	

nBP1026552413

16



envirotech
Analytical Laboratory

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

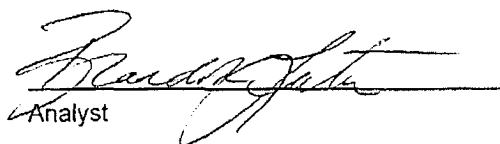
Client:	XTO	Project #:	98031-0528
Sample ID:	West Wall	Date Reported:	05-04-10
Laboratory Number:	53951	Date Sampled:	04-30-10
Chain of Custody No:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Extracted:	04-30-10
Preservative:	Cool	Date Analyzed:	05-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

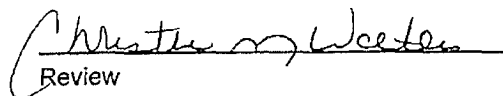
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	84.3	0.2
Diesel Range (C10 - C28)	21.6	0.1
Total Petroleum Hydrocarbons	106	0.2

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: **VCU #40**


Analyst


Review



envirotech
Analytical Laboratory

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

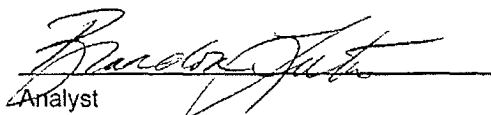
Client:	XTO	Project #:	98031-0528
Sample ID:	North Wall	Date Reported:	05-04-10
Laboratory Number:	53952	Date Sampled:	04-30-10
Chain of Custody No:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Extracted:	04-30-10
Preservative:	Cool	Date Analyzed:	05-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

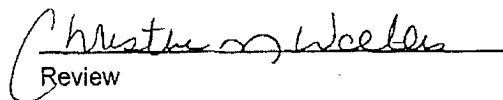
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	55.4	0.2
Diesel Range (C10 - C28)	69.2	0.1
Total Petroleum Hydrocarbons	125	0.2

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: VCU #40


Analyst


Review



envirotech
Analytical Laboratory

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

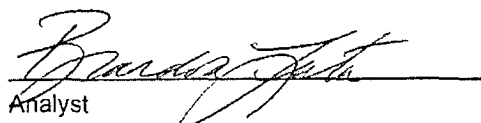
Client:	XTO	Project #:	98031-0528
Sample ID:	South Wall	Date Reported:	05-04-10
Laboratory Number:	53953	Date Sampled:	04-30-10
Chain of Custody No:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Extracted:	04-30-10
Preservative:	Cool	Date Analyzed:	05-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

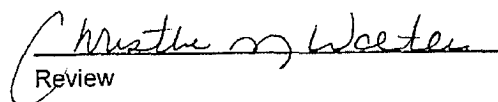
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	115	0.2
Diesel Range (C10 - C28)	88.6	0.1
Total Petroleum Hydrocarbons	204	0.2

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: **VCU #40**


Analyst


Review



envirotech
Analytical Laboratory

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

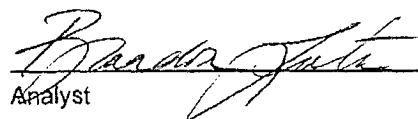
Client:	XTO	Project #:	98031-0528
Sample ID:	Bottom	Date Reported:	05-04-10
Laboratory Number:	53954	Date Sampled:	04-30-10
Chain of Custody No:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Extracted:	04-30-10
Preservative:	Cool	Date Analyzed:	05-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

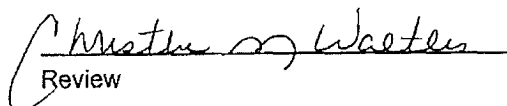
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	7.9	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	7.9	0.2

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: **VCU #40**


Analyst


Review



envirotech

Analytical Laboratory

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	05-03-10 QA/QC	Date Reported:	05-04-10
Laboratory Number:	53943	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-03-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0180E+003	1.0184E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0354E+003	1.0359E+003	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	0.2

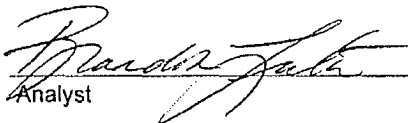
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	5.0	6.1	22.0%	0 - 30%

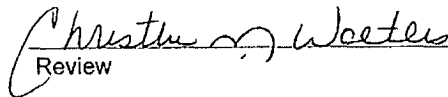
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	269	108%	75 - 125%
Diesel Range C10 - C28	5.0	250	258	101%	75 - 125%

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 53875 - 53876, 53925, 53943 and 53950 - 53954.


Analyst


Review



envirotech
Analytical Laboratory

**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	West Wall	Date Reported:	05-03-10
Laboratory Number:	53951	Date Sampled:	04-30-10
Chain of Custody:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Analyzed:	05-03-10
Preservative:	Cool	Date Extracted:	04-30-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	407	1.0
Ethylbenzene	143	1.0
p,m-Xylene	1,200	1.2
o-Xylene	246	0.9
Total BTEX	2,000	

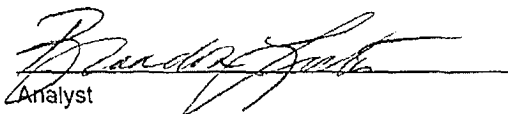
ND - Parameter not detected at the stated detection limit.

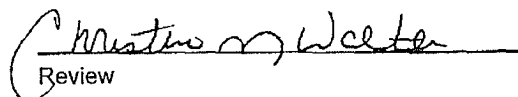
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.9 %
	1,4-difluorobenzene	98.6 %
	Bromochlorobenzene	97.9 %

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: VCU #40


Analyst


Review

**EPA METHOD 8021
 AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	North Wall	Date Reported:	05-03-10
Laboratory Number:	53952	Date Sampled:	04-30-10
Chain of Custody:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Analyzed:	05-03-10
Preservative:	Cool	Date Extracted:	04-30-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	248	1.0
Ethylbenzene	139	1.0
p,m-Xylene	1,410	1.2
o-Xylene	260	0.9
Total BTEX	2,060	

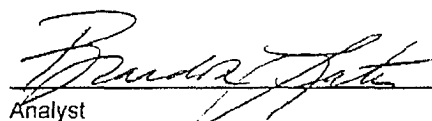
ND - Parameter not detected at the stated detection limit.

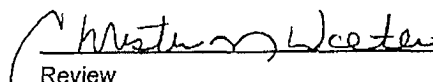
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.5 %
	1,4-difluorobenzene	101 %
	Bromochlorobenzene	101 %

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: VCU #40


 Analyst


 Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	South Wall	Date Reported:	05-03-10
Laboratory Number:	53953	Date Sampled:	04-30-10
Chain of Custody:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Analyzed:	05-03-10
Preservative:	Cool	Date Extracted:	04-30-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	562	1.0
Ethylbenzene	342	1.0
p,m-Xylene	3,340	1.2
o-Xylene	761	0.9
Total BTEX	5,010	

ND - Parameter not detected at the stated detection limit.

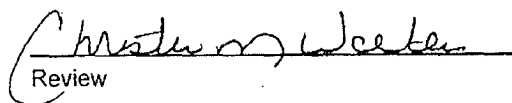
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.9 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	100 %

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: VCU #40


Analyst


Review



envirotech
Analytical Laboratory

**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	Bottom	Date Reported:	05-03-10
Laboratory Number:	53954	Date Sampled:	04-30-10
Chain of Custody:	8709	Date Received:	04-30-10
Sample Matrix:	Soil	Date Analyzed:	05-03-10
Preservative:	Cool	Date Extracted:	04-30-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	27.3	1.0
Ethylbenzene	10.6	1.0
p,m-Xylene	120	1.2
o-Xylene	36.7	0.9
Total BTEX	195	

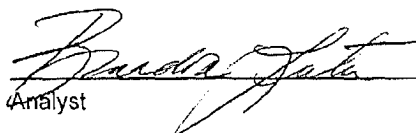
ND - Parameter not detected at the stated detection limit.

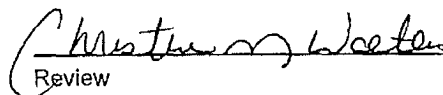
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.8 %
	1,4-difluorobenzene	100.1 %
	Bromochlorobenzene	97 %

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: VCU #40


Analyst


Review



**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	N/A	Project #:	N/A
Sample ID:	05-03-BTX QA/QC	Date Reported:	05-03-10
Laboratory Number:	53942	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-03-10
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
		Accept Range	0 - 15%		
Benzene	1.3332E+006	1.3359E+006	0.2%	ND	0.1
Toluene	1.2295E+006	1.2319E+006	0.2%	ND	0.1
Ethylbenzene	1.1051E+006	1.1073E+006	0.2%	ND	0.1
p,m-Xylene	2.7420E+006	2.7475E+006	0.2%	ND	0.1
o-Xylene	1.0425E+006	1.0446E+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	24.0	23.6	1.7%	0 - 30%	1.0
Ethylbenzene	19.1	18.7	2.1%	0 - 30%	1.0
p,m-Xylene	196	196	0.3%	0 - 30%	1.2
o-Xylene	15.5	14.9	3.9%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	%Recovery	Accept Range
Benzene	ND	50.0	48.4	96.8%	39 - 150
Toluene	24.0	50.0	71.1	96.1%	46 - 148
Ethylbenzene	19.1	50.0	65.4	94.7%	32 - 160
p,m-Xylene	196	100	274	92.5%	46 - 148
o-Xylene	15.5	50.0	60.1	91.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 53875, 53876, 53942, 53943 and 53950 - 53954.

Analyst

Review

CHAIN OF CUSTODY RECORD

8700

ANALYSIS / PARAMETERS

Client:

Project Name / Location:

XTO Energy

VCL # 40

Client Address:

382 Road 3100
AZTEC NM 87410

Sampler Name:

Kuet

Client Phone No.:

333-3100

Client No.:

98031-0528

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative H ₂ O HCl
----------------------------	-------------	-------------	---------	---------------	--------------------------	-----------------------------------

West Wall 4/30 11:00 53951 (Soil) Sludge Aqueous (1) 4oz Jar

North Wall " 11:30 53952 (Soil) Sludge Aqueous "

South Wall " 11:35 53953 (Soil) Sludge Aqueous "

Bottom " 11:45 53954 (Soil) Sludge Aqueous "

TPH (Method 8015)	X
BTEX (Method 8021)	X
VOC (Method 8260)	
RCRA 8 Metals	
Cation / Anion	
RCI	
TCLP with H/P	
PAH	
TPH (418.1)	
CHLORIDE	

Sample Cool
Sample Intact

Relinquished by: (Signature)
Kuet

Relinquished by: (Signature)

Date 4/30 Time 4:20

Received by: (Signature)
Kuet

Received by: (Signature)

Date 4/30/10 Time 4:20

Received by: (Signature)



envirotech
Analytical Laboratory

Email Results to:
Kuet & JAMES

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com



envirotech
Analytical Laboratory

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

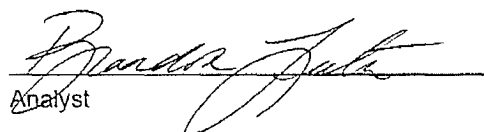
Client:	XTO	Project #:	98031-0528
Sample ID:	NE Bottom Composite	Date Reported:	05-05-10
Laboratory Number:	54010	Date Sampled:	05-04-10
Chain of Custody No:	9277	Date Received:	05-04-10
Sample Matrix:	Soil	Date Extracted:	05-04-10
Preservative:	Cool	Date Analyzed:	05-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

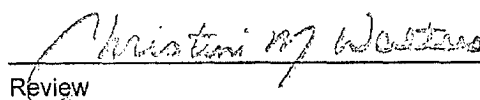
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Valencia Canyon Unit #40**


Analyst


Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

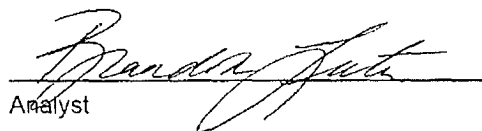
Client:	XTO	Project #:	98031-0528
Sample ID:	NE Section Wall Composite	Date Reported:	05-05-10
Laboratory Number:	54011	Date Sampled:	05-04-10
Chain of Custody No:	9277	Date Received:	05-04-10
Sample Matrix:	Soil	Date Extracted:	05-04-10
Preservative:	Cool	Date Analyzed:	05-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

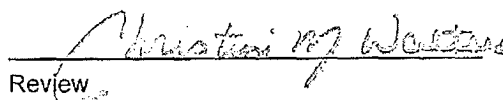
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Valencia Canyon Unit #40**


Analyst


Review



envirotech

Analytical Laboratory

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	05-05-10 QA/QC	Date Reported:	05-05-10
Laboratory Number:	53990	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-05-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	O-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	1.0232E+003	1.0236E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0171E+003	1.0175E+003	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	0.2

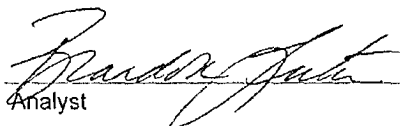
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	338	326	3.6%	0 - 30%

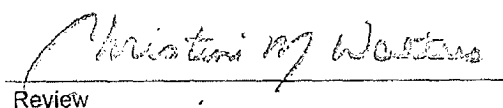
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	257	103%	75 - 125%
Diesel Range C10 - C28	338	250	723	123%	75 - 125%

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 53990 - 53992, 53995 - 53999 and 53010 - 53011.


Analyst


Review



envirotech
Analytical Laboratory

**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	XTO	Project #:	98031-0528
Sample ID:	NE Bottom Composite	Date Reported:	05-05-10
Laboratory Number:	54010	Date Sampled:	05-04-10
Chain of Custody:	9277	Date Received:	05-04-10
Sample Matrix:	Soil	Date Analyzed:	05-05-10
Preservative:	Cool	Date Extracted:	05-04-10
Condition:	Intact	Analysis Requested:	BTEX

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	

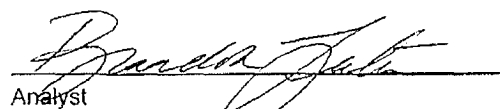
ND - Parameter not detected at the stated detection limit.

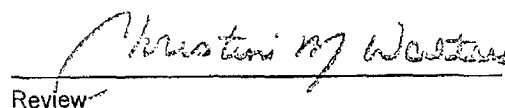
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	92.1 %
	1,4-difluorobenzene	95.9 %
	Bromochlorobenzene	97.3 %

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: Valencia Canyon Unit #40


Analyst


Review



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	NE Section Wall Composite	Date Reported:	05-05-10
Laboratory Number:	54011	Date Sampled:	05-04-10
Chain of Custody:	9277	Date Received:	05-04-10
Sample Matrix:	Soil	Date Analyzed:	05-05-10
Preservative:	Cool	Date Extracted:	05-04-10
Condition:	Intact	Analysis Requested:	BTEX

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	

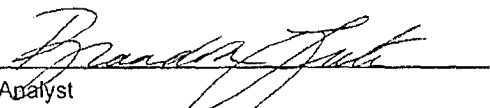
ND - Parameter not detected at the stated detection limit.

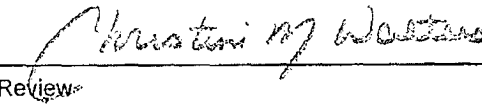
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	91.1 %
	1,4-difluorobenzene	90.0 %
	Bromochlorobenzene	96.0 %

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

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

Comments: Valencia Canyon Unit #40


Analyst


Reviewer



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	05-05-BTX QA/QC	Date Reported:	05-05-10
Laboratory Number:	53990	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-05-10
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
		Accept Range	0 - 15%		
Benzene	1.3395E+006	1.3422E+006	0.2%	ND	0.1
Toluene	1.2345E+006	1.2370E+006	0.2%	ND	0.1
Ethylbenzene	1.1080E+006	1.1102E+006	0.2%	ND	0.1
p,m-Xylene	2.7351E+006	2.7406E+006	0.2%	ND	0.1
o-Xylene	1.0410E+006	1.0431E+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	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	48.5	97.0%	39 - 150
Toluene	ND	50.0	48.6	97.2%	46 - 148
Ethylbenzene	ND	50.0	49.4	98.9%	32 - 160
p,m-Xylene	ND	100	99.3	99.3%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 53990 - 53992, 53995 - 53999 and 53010 - 53011.

Analyst

Review

09277

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

