

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy Inc.	Contact Kim Champlin
Address #382 County Road 3100 Aztec, NM 87410	Telephone No. (505) 333-3100
Facility Name Ruby Jones #1E (API 30-045-34291)	Facility Type Gas Well

Surface Owner Fee	Mineral Owner	Lease No.
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	07	30N	11W	975	South	820	East	San Juan

Latitude 36.82221 Longitude 108.02580

RCVD JUN 17 '10
OIL CONS. DIV.
DIST. 3

NATURE OF RELEASE

Type of Release Produced Oil & Paraffin	Volume of Release Approx 2.5 bbl	Volume Recovered 0 bbl
Source of Release Separator Rupture Disk	Date and Hour of Occurrence 06/04/08, time unknown	Date and Hour of Discovery 06/04/08 at 11:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell- OCD Aztec Fire Department	
By Whom? Nearby Landowner	Date and Hour Unknown	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. < 1 BBL	

If a Watercourse was Impacted, Describe Fully.*

A narrow manmade irrigation ditch runs across the access road parallel to the location and feeds into a larger irrigation ditch. A mist from the release was carried by the wind coating the brush along the ditch bank and left a sheen on the water in the ditch. Absorbent pads were placed alongside the ditch while absorbent booms were placed in key locations inside the ditch to prevent any impacted water from flowing further down the ditch. A vac truck was dispatched to vac out the ditch until the water running was free of any sheen.

Describe Cause of Problem and Remedial Action Taken.* ☐ See Attached

Describe Area Affected and Cleanup Action Taken.* ☐ See Attached

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.

OIL CONSERVATION DIVISION

Signature: <i>Kim Champlin</i>	Approved by District Supervisor: <i>Brandon Powell</i> For: CP	
Printed Name: Kim Champlin	Approval Date: 9/22/10	Expiration Date:
Title: EH&S Administrative Coordinator	Conditions of Approval:	
E-mail Address: Kim_Champlin@xtoenergy.com	Attached <input type="checkbox"/>	
Date: 06/16/2010 Phone: 505-333-3100		

* Attach Additional Sheets If Necessary

nBpl026540730

On June 4, 2008 between the hours of 10:00 a.m. and 11:00 a.m. during a test, the Ruby Jones #1E had a rupture disc blow out on a 500 psig L-Pud separator. When doing so, a paraffin mist was sent into the air and was carried to the east of the location by the wind. A nearby neighbor reported this to the Aztec Fire Department. The Aztec Fire Department arrived on the scene, blocked the road off, and placed a call to the XTO Energy San Juan District Office. XTO Production Foremen and a lease operator were dispatched to the location. Upon their arrival, the well was immediately shut in and the investigation and clean up process began. A light paraffin mist was carried east onto the location pad, across a dirt road, onto two small manmade irrigation ditches, onto the willow brush along the ditch bank, into a irrigated field of pasture grass, and finally onto the San Juan County Facility buildings and the majority of the vehicles parked outside of the county facilities.

Oil soaker pads and oil booms were placed into both irrigation ditches to collect any paraffin floating on top of the water and prevented any impacted water from flowing further down the ditch. Rosenbaum Construction crew member dumped a loader bucket full of dirt into the closest ditch to divert any flow into a south pasture. Both ditches are small in width, approximately 1-1.5 feet with minimal flow. A Triple S water truck was dispatched to the location and throughout the day hauled water out of the ditch to a local disposal facility. Soaker pads were also placed on any standing water in the eastern portion of the field of pasture grass. Keystone crews and a Cimarron crew arrived at the location with power washers. The crews steam cleaned the production equipment, fence, and ground on the location with a Simple Green/water solution. The owner of the field was contacted and XTO was given permission to proceed with any clean up measures required. The owner also requested that the willow brush be cut down.

Polaris and Envirotech were dispatched to the San Juan County Facilities where they set up a mobile assembly line carwash for a two day period. Pictures of the vehicles were taken prior to being washed. The vehicles were hand scrubbed, then rinsed off with a heated power washer, and then the windows were wiped down. Each driver was then given a free car wash pass to the Octopus carwash in Farmington. Over a two day period, an estimated 300 cars were washed and the drivers received the free Octopus carwash.

XTO spoke with Mr. David P. Keck, the San Juan County Public Works Director about having the windows of the county building cleaned. Mr. Keck stated that he did not see any residue on any of the windows and that he did not see any need for XTO to clean their windows.

The roof of the building was inspected, and it was found to have a gravel/tar roof with no residue.

Four individuals from the County Administration Office complained of eye, nose, and throat irritation. XTO offered them the medical assistance of Reliance Medical Center in Aztec. The offer was denied by all four individuals, stating that they were feeling better.

June 5, 2008

The location was inspected and samples were collected. Envirotech was then dispatched to spray a microbial solution onto the ground of the well pad. The willow brush was removed and taken to their facility. Each tree was an average of ½" round 12' tall. The microbial solution was left to dry and was raked into the ground. Samples will be collected again in approximately two weeks according to Envirotech personnel.

June 06, 2008

An XTO foreman went around to each County Department to insure that all of the employees that had their vehicle affected were taken care of and that their vehicles had been cleaned.

Note:

Upon further investigation of the incident after the clean up it was discovered that the fuel gas supply to the separator pressure controller had filled with liquid, allowing the inlet motor valve to fully open, sending 750 psig into the L-Pud unit. This caused the rupture disc to rupture. The emergency shut down pressure switch on the rupture disc piping did not sense the discharge and shut down the well. The rupture disc was replaced and the outlet piping has been plumbed to the production pit. PESCO, the manufacturer of the separator, has inspected the unit to make sure it is functioning properly.

Calculation for volume of release: If the L-Pud separator was full it would hold 65 gallons (1.55 bbls). For this calculation XTO assumed it was full. The well had only been online for 5 days and the average production for the three days prior to the incident was 18 barrels of oil per day. The well vented for a maximum of 45 minutes which calculates to ½-1 barrel of oil. Based on this information the total volume of oil spilled was calculated to be 2.5 barrels.

Additional information for continued clean up:

June 5, 2008

The location was inspected and samples were collected. Envirotech was then dispatched to spray a microbial solution onto the ground of the well pad. The willow brush was removed and taken to their facility. Each tree was an average of ½” round 12’ tall. The microbial solution was left to dry and was raked into the ground. Samples will be collected again in approximately two weeks according to Envirotech personnel.

July 1, 2008

First samples after first microbial solution was applied were collected. Lab results showed TPH levels were decreasing but still above closure standards based on sensitive area determination. Area was left to naturally degrade for a period of time.

May 5, 2009

Second samples after first microbial solution treatment were collected. Still TPH levels were above standard. Another round of microbial solution was applied by Envirotech.

June 30, 2009

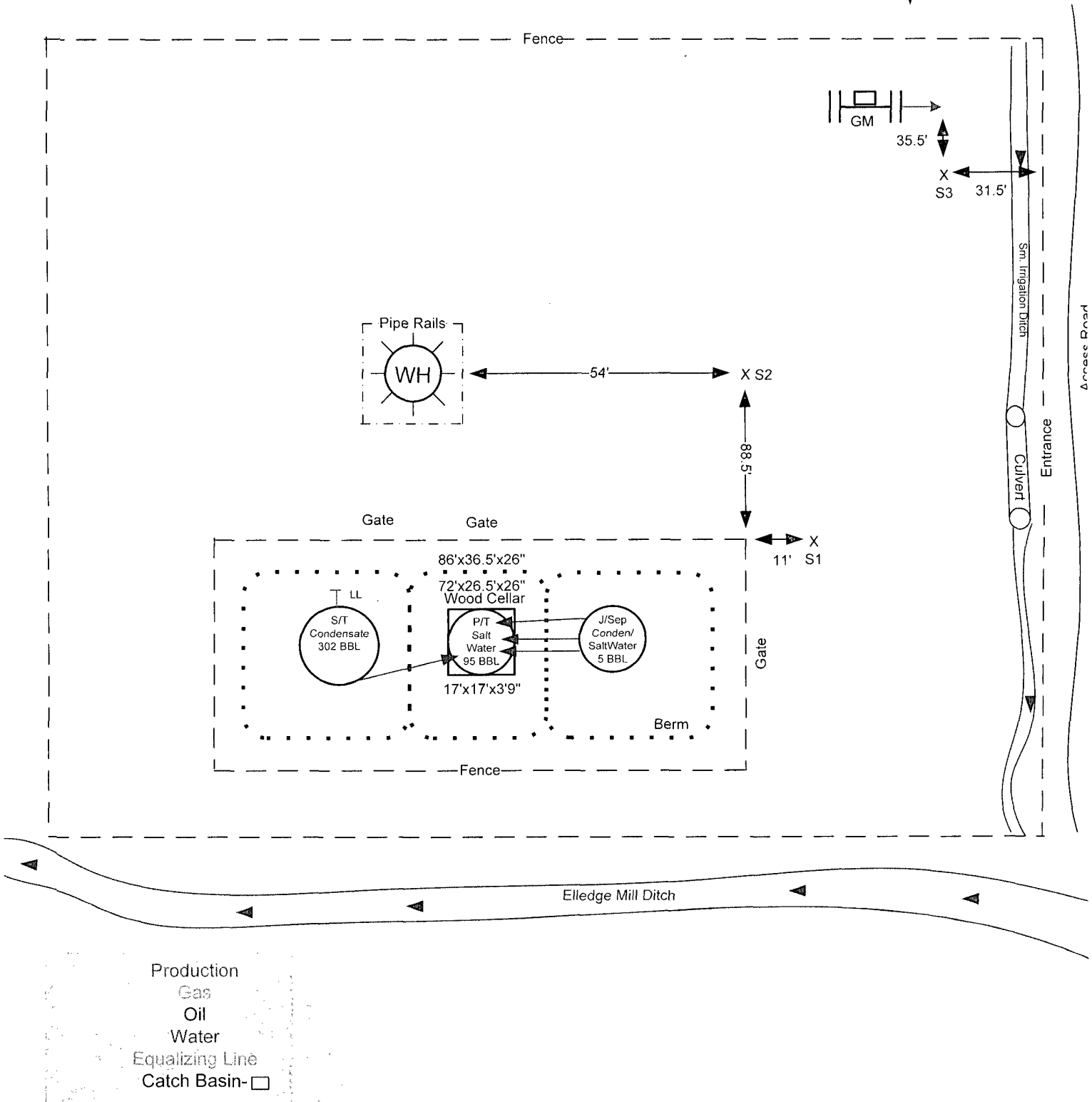
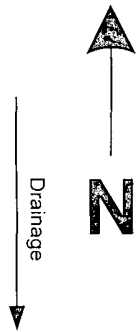
First samples after second application of microbial solution were collected. A difference in TPH levels but slightly above standards. Area was raked and left to naturally degrade for a period of time.

June 8, 2010

Second samples after second application of microbial solution. Lab results verify TPH levels below closure standards.

Date		S1	S2	S3
1st Sample	6/5/2008 Benzene (10ppm)	0.0012	0.0023	0.0022
	BTEX (50 ppm)	3.31	0.0401	0.0101
	TPH (100 ppm)	10500	1000	700
1st Sample After 1st treatment	7/1/2008 Benzene (10ppm)	ND	ND	ND
	BTEX (50 ppm)	ND	ND	ND
	TPH (100 ppm)	3510	1730	450
2nd Sample After 1st treatment	5/8/2009 TPH (100 ppm)	272	4010	261
1st Sample After 2nd treatment	6/30/2009 TPH (100 ppm)	1040	3140	261
2nd Sample After 2nd treatment	6/8/2010 TPH (100 ppm)	35.3	48.6	46.6

Well Name: Ruby Jones # 1 E
Field: San Juan County, NM.
Serial Number: API # 30-045-34291
Section: SE/SE Sec. 07 (P), T-30N, R-11W



ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-1	Date Reported:	06-10-08
Laboratory Number:	45772	Date Sampled:	06-05-08
Chain of Custody:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Analyzed:	06-09-08
Preservative:	Cool	Date Extracted:	06-06-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1.2	0.9
Toluene	133	1.0
Ethylbenzene	231	1.0
p,m-Xylene	2,040	1.2
o-Xylene	902	0.9
Total BTEX	3,310	

ND - Parameter not detected at the stated detection limit.


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

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

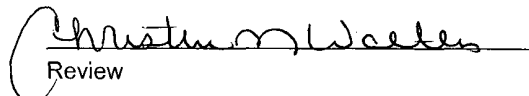
Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Ruby Jones #1E

Analyst



Review



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

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-1	Date Reported:	06-09-08
Laboratory Number:	45772	Date Sampled:	06-05-08
Chain of Custody No:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Extracted:	06-06-08
Preservative:	Cool	Date Analyzed:	06-09-08
Condition:	Intact	Analysis Requested:	8015 TPH

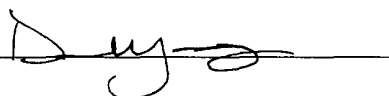
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	645	0.2
Diesel Range (C10 - C28)	9,850	0.1
Total Petroleum Hydrocarbons	10,500	0.2

ND - Parameter not detected at the stated detection limit.

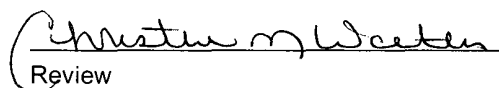
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Ruby Jones #1E**

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-2	Date Reported:	06-10-08
Laboratory Number:	45773	Date Sampled:	06-05-08
Chain of Custody:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Analyzed:	06-09-08
Preservative:	Cool	Date Extracted:	06-06-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.3	0.9
Toluene	3.4	1.0
Ethylbenzene	1.9	1.0
p,m-Xylene	23.2	1.2
o-Xylene	9.3	0.9
Total BTEX	40.1	

ND - Parameter not detected at the stated detection limit.

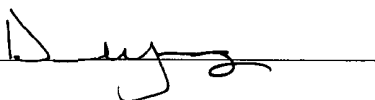
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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

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

Comments: Ruby Jones #1E

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-2	Date Reported:	06-09-08
Laboratory Number:	45773	Date Sampled:	06-05-08
Chain of Custody No:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Extracted:	06-06-08
Preservative:	Cool	Date Analyzed:	06-09-08
Condition:	Intact	Analysis Requested:	8015 TPH

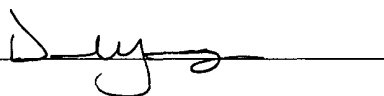
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.0	0.2
Diesel Range (C10 - C28)	1,000	0.1
Total Petroleum Hydrocarbons	1,000	0.2

ND - Parameter not detected at the stated detection limit.

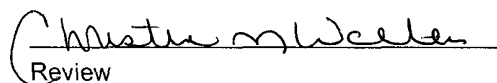
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Ruby Jones #1E**

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-3	Date Reported:	06-10-08
Laboratory Number:	45774	Date Sampled:	06-05-08
Chain of Custody:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Analyzed:	06-09-08
Preservative:	Cool	Date Extracted:	06-06-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2.2	0.9
Toluene	2.7	1.0
Ethylbenzene	1.1	1.0
p,m-Xylene	2.5	1.2
o-Xylene	1.6	0.9
Total BTEX	10.1	

ND - Parameter not detected at the stated detection limit.

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

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: Ruby Jones #1E

Analyst

Review

ENVIROTECH LABS

PRAGTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S-3	Date Reported:	06-09-08
Laboratory Number:	45774	Date Sampled:	06-05-08
Chain of Custody No:	4541	Date Received:	06-05-08
Sample Matrix:	Soil	Date Extracted:	06-06-08
Preservative:	Cool	Date Analyzed:	06-09-08
Condition:	Intact	Analysis Requested:	8015 TPH

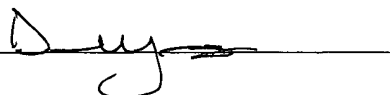
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	700	0.1
Total Petroleum Hydrocarbons	700	0.2

ND - Parameter not detected at the stated detection limit.

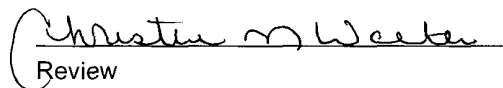
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Ruby Jones #1E**

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-09-08 QA/QC	Date Reported:	06-09-08
Laboratory Number:	45770	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-09-08
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	1.0041E+003	1.0046E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0093E+003	1.0097E+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	ND	ND	0.0%	0 - 30%

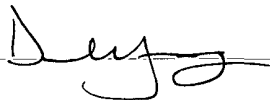
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100%	75 - 125%
Diesel Range C10 - C28	ND	250	244	97.6%	75 - 125%

ND - Parameter not detected at the stated detection limit.

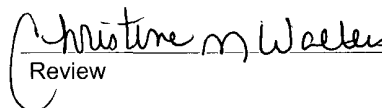
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 45764 - 45766, 45768, and 45770 - 45775.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	06-09-BT QA/QC	Date Reported:	06-10-08
Laboratory Number:	45770	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-09-08
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	2.9127E+007	2.9186E+007	0.2%	ND	0.1
Toluene	2.3211E+007	2.3258E+007	0.2%	ND	0.1
Ethylbenzene	1.6849E+007	1.6883E+007	0.2%	ND	0.1
p,m-Xylene	3.6519E+007	3.6592E+007	0.2%	ND	0.1
o-Xylene	1.5736E+007	1.5767E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.7	2.7	0.0%	0 - 30%	0.9
Toluene	2.9	2.7	6.9%	0 - 30%	1.0
Ethylbenzene	1.1	1.0	9.1%	0 - 30%	1.0
p,m-Xylene	3.3	3.1	6.1%	0 - 30%	1.2
o-Xylene	2.2	2.1	4.5%	0 - 30%	0.9

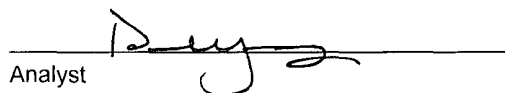
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.7	50.0	52.6	99.8%	39 - 150
Toluene	2.9	50.0	52.5	99.2%	46 - 148
Ethylbenzene	1.1	50.0	50.9	99.6%	32 - 160
p,m-Xylene	3.3	100	98.3	95.2%	46 - 148
o-Xylene	2.2	50.0	51.9	99.4%	46 - 148

ND - Parameter not detected at the stated detection limit.

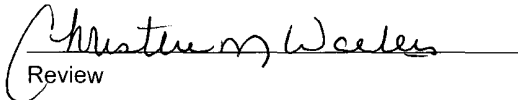
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 45764 - 45766, 45768, and 45770 - 45775.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S1-RS	Date Reported:	07-07-08
Laboratory Number:	46197	Date Sampled:	07-01-08
Chain of Custody:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Analyzed:	07-03-08
Preservative:	Cool	Date Extracted:	07-02-08
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	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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

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

Comments: Ruby Jones #1E

Analyst

Review

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

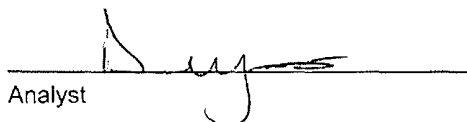
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S1-RS	Date Reported:	07-09-08
Laboratory Number:	46197	Date Sampled:	07-01-08
Chain of Custody No:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Extracted:	07-02-08
Preservative:	Cool	Date Analyzed:	07-03-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	3,510	0.1
Total Petroleum Hydrocarbons	3,510	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: **Ruby Jones #1E**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S2-RS	Date Reported:	07-07-08
Laboratory Number:	46198	Date Sampled:	07-01-08
Chain of Custody:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Analyzed:	07-03-08
Preservative:	Cool	Date Extracted:	07-02-08
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	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

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

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

Comments: Ruby Jones #1E

Analyst

Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

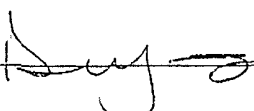
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S2-RS	Date Reported:	07-09-08
Laboratory Number:	46198	Date Sampled:	07-01-08
Chain of Custody No:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Extracted:	07-02-08
Preservative:	Cool	Date Analyzed:	07-03-08
Condition:	Intact	Analysis Requested:	8015 TPH

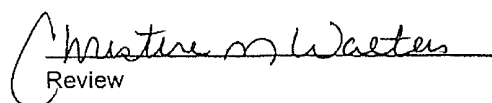
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	1,730	0.1
Total Petroleum Hydrocarbons	1,730	0.2

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: **Ruby Jones #1E**

Analyst 

Review 

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S3-RS	Date Reported:	07-07-08
Laboratory Number:	46199	Date Sampled:	07-01-08
Chain of Custody:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Analyzed:	07-03-08
Preservative:	Cool	Date Extracted:	07-02-08
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	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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

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

Comments: Ruby Jones #1E

Analyst

Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S3-RS	Date Reported:	07-09-08
Laboratory Number:	46199	Date Sampled:	07-01-08
Chain of Custody No:	4709	Date Received:	07-01-08
Sample Matrix:	Soil	Date Extracted:	07-02-08
Preservative:	Cool	Date Analyzed:	07-03-08
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)	450	0.1
Total Petroleum Hydrocarbons	450	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: **Ruby Jones #1E**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-03-BT QA/QC	Date Reported:	07-07-08
Laboratory Number:	46102	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-08
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	1.9144E+007	1.9183E+007	0.2%	ND	0.1
Toluene	1.4285E+007	1.4314E+007	0.2%	ND	0.1
Ethylbenzene	9.9922E+006	1.0012E+007	0.2%	ND	0.1
p,m-Xylene	2.3662E+007	2.3710E+007	0.2%	ND	0.1
o-Xylene	9.3056E+006	9.3242E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	1.2	1.3	8.3%	0 - 30%	0.9
Toluene	2.0	1.9	5.0%	0 - 30%	1.0
Ethylbenzene	1.7	1.8	5.9%	0 - 30%	1.0
p,m-Xylene	3.5	3.3	5.7%	0 - 30%	1.2
o-Xylene	2.2	2.3	4.5%	0 - 30%	0.9

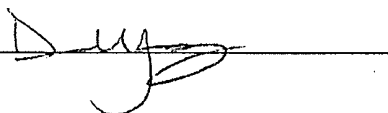
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	%Recovery	Accept Range
Benzene	1.2	50.0	50.7	99.0%	39 - 150
Toluene	2.0	50.0	51.4	98.8%	46 - 148
Ethylbenzene	1.7	50.0	51.5	99.6%	32 - 160
p,m-Xylene	3.5	100	101	97.1%	46 - 148
o-Xylene	2.2	50.0	52.1	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

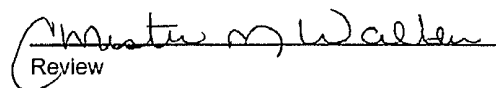
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 46102, 46191, 46192, and 46194 - 46199.

Analyst



Review



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-03-08 QA/QC	Date Reported:	07-09-08
Laboratory Number:	46102	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-08
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	1.0030E+003	1.0034E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0009E+003	1.0013E+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

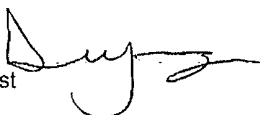
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	253	101%	75 - 125%
Diesel Range C10 - C28	ND	250	247	98.8%	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 46102 - 46103, 46191 - 46192, and 46194 - 46199.

Analyst 

Christine M. Watten
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-03-08 QA/QC	Date Reported:	07-09-08
Laboratory Number:	46102	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-08
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	1.0030E+003	1.0034E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0009E+003	1.0013E+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	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	253	101%	75 - 125%
Diesel Range C10 - C28	ND	250	247	98.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

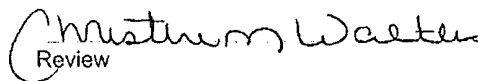
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 46102 - 46103, 46191 - 46192, and 46194 - 46199.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-03-BT QA/QC	Date Reported:	07-07-08
Laboratory Number:	46102	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-08
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	1.9144E+007	1.9183E+007	0.2%	ND	0.1
Toluene	1.4285E+007	1.4314E+007	0.2%	ND	0.1
Ethylbenzene	9.9922E+006	1.0012E+007	0.2%	ND	0.1
p,m-Xylene	2.3662E+007	2.3710E+007	0.2%	ND	0.1
o-Xylene	9.3056E+006	9.3242E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	1.2	1.3	8.3%	0 - 30%	0.9
Toluene	2.0	1.9	5.0%	0 - 30%	1.0
Ethylbenzene	1.7	1.8	5.9%	0 - 30%	1.0
p,m-Xylene	3.5	3.3	5.7%	0 - 30%	1.2
o-Xylene	2.2	2.3	4.5%	0 - 30%	0.9

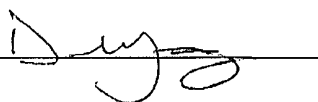
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	1.2	50.0	50.7	99.0%	39 - 150
Toluene	2.0	50.0	51.4	98.8%	46 - 148
Ethylbenzene	1.7	50.0	51.5	99.6%	32 - 160
p,m-Xylene	3.5	100	101	97.1%	46 - 148
o-Xylene	2.2	50.0	52.1	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

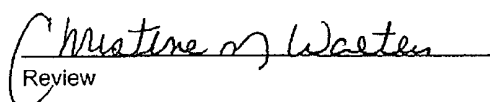
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 46102, 46191, 46192, and 46194 - 46199.

Analyst



Review



san ivan reproduction 578-129



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Re-Sample S1	Date Reported:	05-15-09
Laboratory Number:	49970	Date Sampled:	05-08-09
Chain of Custody No:	6946	Date Received:	05-08-09
Sample Matrix:	Soil	Date Extracted:	05-11-09
Preservative:	Cool	Date Analyzed:	05-11-09
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	272	7.8

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Ruby Jones #1E Re-Sample.

Analyst

Review



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	XTO Energy	Project #:	98031:0121
Sample ID:	Re-Sample S2	Date Reported:	05-15-09
Laboratory Number:	49971	Date Sampled:	05-08-09
Chain of Custody No:	6946	Date Received:	05-08-09
Sample Matrix:	Soil	Date Extracted:	05-11-09
Preservative:	Cool	Date Analyzed:	05-11-09
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	4,010	7.8

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Ruby Jones #1E Re-Sample.

Analyst

Review



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	Re-Sample S3	Date Reported:	05-15-09
Laboratory Number:	49972	Date Sampled:	05-08-09
Chain of Custody No:	6946	Date Received:	05-08-09
Sample Matrix:	Soil	Date Extracted:	05-11-09
Preservative:	Cool	Date Analyzed:	05-11-09
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	261	7.8

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Ruby Jones #1E Re-Sample.

Analyst

Review



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EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	05-12-09
Laboratory Number:	05-11-TPH.QA/QC 49970	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	05-11-09
Preservative:	N/A	Date Extracted:	05-11-09
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	05-01-09	05-11-09	1,620	1,750	8.0%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	7.8

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	272	252	7.1%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	272	2,000	2,000	88.0%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 49970 - 49972, 49985, 49986, 50005 and 50028 - 50030.

Analyst

Review

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

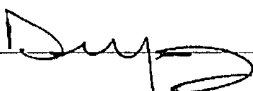
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S1	Date Reported:	07-01-09
Laboratory Number:	50748	Date Sampled:	06-30-09
Chain of Custody No:	7195	Date Received:	07-01-09
Sample Matrix:	Soil	Date Extracted:	07-01-09
Preservative:	Cool	Date Analyzed:	07-01-09
Condition:	Intact	Analysis Needed:	TPH-418.1

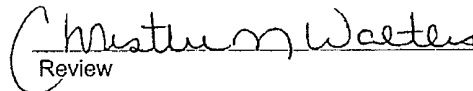
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	1,040	19.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Ruby Jones #1E.

Analyst 

Review 



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S2	Date Reported:	07-01-09
Laboratory Number:	50749	Date Sampled:	06-30-09
Chain of Custody No:	7195	Date Received:	07-01-09
Sample Matrix:	Soil	Date Extracted:	07-01-09
Preservative:	Cool	Date Analyzed:	07-01-09
Condition:	Intact	Analysis Needed:	TPH-418.1

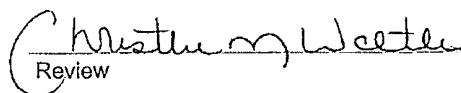
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	3,140	19.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Ruby Jones #1E.**

Analyst 

Review 



Client:	XTO Energy	Project #:	98031-0121
Sample ID:	S3	Date Reported:	07-01-09
Laboratory Number:	50750	Date Sampled:	06-30-09
Chain of Custody No:	7195	Date Received:	07-01-09
Sample Matrix:	Soil	Date Extracted:	07-01-09
Preservative:	Cool	Date Analyzed:	07-01-09
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	261	19.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Ruby Jones #1E.**

Analyst

Review



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT**

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	07-01-09
Laboratory Number:	07-01-TPH.QA/QC 50744	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	07-01-09
Preservative:	N/A	Date Extracted:	07-01-09
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	06-26-09	07-01-09	1,480	1,480	0.0%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	19.0

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	125	142	14.3%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	125	2,000	1,900	89.4%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 50744, 50747 - 50751 and 50753.

Analyst

Review

CHAIN OF CUSTODY RECORD

7195

Client:		Project Name / Location:		ANALYSIS / PARAMETERS																							
XTO ENERGY		Ruby Jones #1E		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 Address: 382 Road 3100 AZTEC, NM 87410		Sampler Name: Kurt		Client No.: 98031-0121		Sample Matrix		No./Volume of Containers		Preservative																	
Sample No./ Identification		Sample Date		Sample Time		Lab No.		Sample Matrix		No./Volume of Containers		Preservative															
S1		6/30		9:45		50748		Soil Solid		11/20 Jar																	
S2		6/30		9:35		50749		Soil Solid																			
S3		6/30		9:25		50750		Soil Solid																			
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**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**


Client:	XTOEnergy	Project #:	98031-0121
Sample ID:	Re-Sample S1	Date Reported:	06-12-10
Laboratory Number:	54641	Date Sampled:	06-08-10
Chain of Custody No:	9452	Date Received:	06-08-10
Sample Matrix:	Soil	Date Extracted:	06-08-10
Preservative:	Cool	Date Analyzed:	06-09-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.8	0.2
Diesel Range (C10 - C28)	34.6	0.1
Total Petroleum Hydrocarbons	35.3	0.2

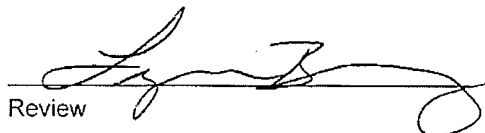
ND - Parameter not detected at the stated detection limit.

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

Comments: **Ruby Jones #1E**



Analyst



Review



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

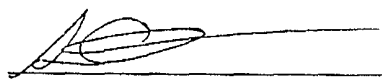
Client:	XTOEnergy	Project #:	98031-0121
Sample ID:	Re-Sample S2	Date Reported:	06-12-10
Laboratory Number:	54642	Date Sampled:	06-08-10
Chain of Custody No:	9452	Date Received:	06-08-10
Sample Matrix:	Soil	Date Extracted:	06-08-10
Preservative:	Cool	Date Analyzed:	06-09-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.8	0.2
Diesel Range (C10 - C28)	47.8	0.1
Total Petroleum Hydrocarbons	48.6	0.2

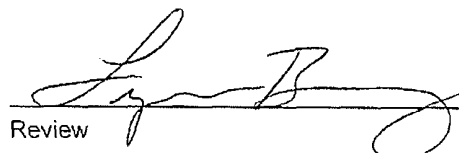
ND - Parameter not detected at the stated detection limit.

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

Comments: **Ruby Jones #1E**



Analyst



Review



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

Client:	XTOEnergy	Project #:	98031-0121
Sample ID:	Re-Sample S3	Date Reported:	06-12-10
Laboratory Number:	54643	Date Sampled:	06-08-10
Chain of Custody No:	9452	Date Received:	06-08-10
Sample Matrix:	Soil	Date Extracted:	06-08-10
Preservative:	Cool	Date Analyzed:	06-09-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.7	0.2
Diesel Range (C10 - C28)	46.0	0.1
Total Petroleum Hydrocarbons	46.6	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: **Ruby Jones #1E**

Analyst

Review



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-09-10 QA/QC	Date Reported:	06-12-10
Laboratory Number:	54534	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-09-10
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	1.0835E+003	1.0839E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.1124E+003	1.1128E+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

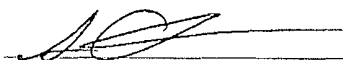
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	1.6	1.4	12.5%	0 - 30%
Diesel Range C10 - C28	63.9	58.7	8.1%	0 - 30%

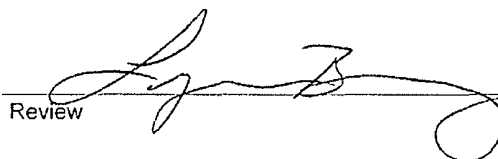
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	1.6	250	254	101%	75 - 125%
Diesel Range C10 - C28	63.9	250	279	89.0%	75 - 125%

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 54534-54539, 54618 and 54641-54643.


Analyst


Review

