

IRP 09-11-2359

RECEIVED

State of New Mexico
Energy Minerals and Natural Resources

FEB 17 2010

Form C-141
Revised October 10, 2003District 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 87505Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBSOCD

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: Earl Richardson
Address: 200 N. Loraine St., Ste. 800, Midland, TX 79701	Telephone No.: (432) 682-8873
Facility Name: Buckeye Station STATE K	Facility Type: Crude Oil Shipping
Surface Owner: State of New Mexico	Mineral Owner: API
Lease No. 30-025-32413	

LOCATION OF RELEASE

Unit Letter P	Section 31	Township 17S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	-------------

Latitude: N 32° 47' 08.4" Longitude: W 103° 29' 22.1"

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 420 bbl	Volume Recovered: 410 bbl
Source of Release: Tank Overflowed	Date and Hour of Occurrence: 11-17/2009/1100 hrs (MST)	Date and Hour of Discovery: 11/17/2009/1500 hrs (MST)
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Maxey Brown	
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.* Telephone call-out system failed. New telephone call-out system installed. New call-out system called to verify operation.

Describe Area Affected and Cleanup Action Taken.* Spill was contained within firewall and vacuum truck used to recovery oil (410 bbl) and returned to system. Spill area was scraped and contaminated soil (260 cubic yards) was disposed at CRI (OCD Permit R9166). Investigation of lateral and vertical extent completed on 11-30-2009 and remediation project number IRP-09-11-2359 issued by OCD on 12-17-2009. Spill excavated between approximately 1 and 3 feet below. Contaminated soil (1,240 cubic yards) hauled to J Dan Landfarm LLC (NM-01-0045). Final samples reported TPH (269 to 793 mg/Kg) below RRAL (1,000 mg/Kg) and chloride from 8.7 to 53.2 mg/Kg. Recommend no further action and permission to fill excavation.

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:

Printed Name: Mark Larson, Larson & Associates, Inc. (Consultant)

Title: Sr. Project Manager / President

E-mail Address: mark@laenvironmental.com

Date: 02/03/2010

Phone: (432) 687-0901

ENV. ENGINEER:
Approved by District Supervisor:

Approval Date: 02/03/10

Expiration Date: —

Conditions of Approval:

Attached ☐

IRP-09-11-2359

ENVIRONMENTAL ENGINEER

3.17.10

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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	Contact	Velma Gallardo
Address	200 N. Loraine Dr.	Telephone No.	432-620-4315
Facility Name	BUCKEYE STATION STATE K #12	Facility Type	SHIPPING TANK

Surface Owner	STATE	Mineral Owner		Lease No.	
---------------	-------	---------------	--	-----------	--

LOCATION OF RELEASE

APR 30.025.32413

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	31	175	35E					LEA

Latitude N 32 47.15 Longitude W 103 29.314

WTR 95

NATURE OF RELEASE 420 oil

410 oil

Type of Release	SPILL	Volume of Release	420 0515	Volume Recovered	420 0515
Source of Release	TANK OVERFLOWED	Date and Hour of Occurrence	1100	Date and Hour of Discovery	1500 (11-17)
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	(11-17) MAXEY BROWN		
By Whom?	MONTY PIERCE	Date and Hour	11-17-09	1700 (MST)	
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.*

PHONE SYSTEM FAILED.

INSTALLED NEW PHONE SYSTEM.

CALL PHONE SYSTEM EVERY DAY TO VERIFY OPERATIONAL.

Describe Area Affected and Cleanup Action Taken.*

LEAK CONTAINED IN DIKE.

VACUUM 410 0515 FROM CONTAINMENT.

REMOVED 60 YARDS OF DIRT + Hauled TO CRI DISPOSAL.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCED 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 NMOCED 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, NMOCED 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:

Monty Pierce

Printed Name:

MONTY PIERCE

Title:

PUMP FOREMAN

E-mail Address:

MONTY-PIERCE@XTOENERGY.COM

Date: 11-19-09

Phone: 806/252/4639

Approved by District Supervisor

Approval Date: 12.17.09

Expiration Date: 2.17.09

Conditions of Approval:

SUBMIT FINAL C-141 BY

Attached ☐

12P 09.11.2359

* Attach Additional Sheets If Necessary

N CWT 100 7649792

RECEIVED

FEB 17 2010

HOBBSOCD

REMEDIATION REPORT
Buckeye Gathering Station

Crude Oil Spill

1RP-09-11-2359

Lea County, New Mexico

XTO STATE K #12 30.025.
32413

Project No. 9-0139

February 15, 2010

Prepared for:
XTO Energy
200 North Loraine Street, Suite 800
Midland, Texas 79701

Prepared by:
Mark J. Larson
Project Manager

Larson & Associates, Inc.
507 North Marienfeld, Suite 200
Midland, Texas 79701

February 15, 2010

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February 15, 2010

1.0 Executive Summary

This report is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of XTO Energy, Inc. (XTO) by Larson & Associates, Inc. (LAI) to report the remediation of a crude oil spill at the Buckeye Gathering System, Buckeye Station (Site) in Lea County, New Mexico. The Site is located approximately 1.5 miles southeast of Buckeye, New Mexico, in Unit P (SE/SE), Section 31, Township 17 South and Range 35 East. The geodetic position is 32° 47' 08.4" north and 103° 29' 22.1" west.

The spill occurred on November 17, 2009, and involved a release of crude oil, approximately 420 barrels (bbl), of which 410 bbl were recovered. The spill was verbally reported to the New Mexico Oil Conservation Division (OCD) on November 17, 2009 and form C-141 was submitted on November 19, 2009.

On November 30, 2009, LAI personnel supervised collection of soil samples at nine (9) locations (BH-1 through BH-9) using an air rotary rig and jam tube sampler. The samples were analyzed using EPA method SW-846 by 8021B for benzene, toluene, ethylbenzene, and xylene (BTEX), SW8015 modified for total petroleum hydrocarbons (TPH) and EPA method 300 for chloride.

The recommended remediation action levels (RRAL) for benzene (10 mg/Kg), BTEX (50 mg/Kg), and TPH (1,000 mg/Kg) were exceeded in soil samples from approximately 0 to 1 foot below ground surface (bgs) at four (4) locations (BH-5, BH-7, BH-8 and BH-9). TPH was also above the RRAL in samples from 3 to 4 feet bgs at two (2) locations (BH-5 and BH-9) and 7 to 8 feet (BH-7). The vertical extent of chloride was delineated to 250 mg/Kg.

Between January 6 and 25, 2010, LAI personnel supervised Watson Construction Company, Inc. (Watson) whom excavated approximately 1,240 cubic yards of contaminated soil. Soil was disposed at the Jay-Dan Landfarm located near Lovington, New Mexico. On January 12, 2010, LAI personnel collected six (6), 5-spot composite samples (Comp-1 through Comp-6) from the bottom of the excavation. The samples were analyzed for BTEX, TPH and chloride. All the samples were below the RRAL for benzene and BTEX. TPH was also below the RRAL (1,000 mg/Kg) in all samples except Comp-6 (1,091 mg/Kg) which was collected near the southeast corner of the area. On January 25, 2010, Watson excavated soil from the Comp-6 to about 3 feet bgs. TPH in the confirmation sample from 3 feet bgs was 693.3 mg/Kg.

On February 3, 2010, the OCD in Hobbs, New Mexico, granted approval to fill the excavation with clean soil. Between February 8 and 11, 2010, Watson filled the excavation with clean soil acquired from the Jay-Dan Landfarm. The chloride concentration in the top soil and caliche fill was 7.66 mg/Kg and 12.7 mg/Kg, respectively.

February 15, 2010

2.0 Introduction

This report is submitted to the OCD on behalf of XTO by LAI, its consultant, to present the remediation results of a crude oil spill that occurred at the Buckeye Gathering System, Buckeye Station, on November 17, 2009. The Site is located approximately 1.5 miles southeast of Buckeye, in Unit P (SE/SE), Section 31, Township 17 South and Range 35 East, in Lea County, New Mexico. The geodetic position is 32° 47' 08.4" north and 103° 29' 22.1" west. A topographic and depth to groundwater map is presented in Figure 1. An aerial image and facility drawing of the Site are presented in Figures 2 and 3, respectively.

3.0 Chronology

On November 17, 2010, XTO verbally notified the OCD District 1 office in Hobbs, New Mexico, that a spill had occurred at its Buckeye Gathering System, Buckeye Station. The spill involved approximately 420 barrels (bbl) of crude oil, with 410 bbl being recovered and approximately 10 bbl lost in the subsurface. The spill was contained within the earthen firewall.

On November 19, 2009, XTO submitted the initial C-141. The spill was attributed to equipment upset and call-out system failure. XTO immediately initiated spill control measures. The system was shut-in, the call-out system problem was corrected and a roustabout crew contracted to assist with cleanup. The crew used a backhoe to scrape approximately 260 cubic yards of contaminated soil for disposal at CRI (OCD Permit R9166) located between Hobbs and Carlsbad, New Mexico. The OCD assigned the incident remediation project number 1RP-09-11-2359.

4.0 Investigation

On November 30, 2009, LAI personnel contracted Scarborough Drilling, Inc., to collect soil samples at nine (9) locations (BH-1 through BH-9) using an air-rotary rig and jam tube sampler. The soil samples were collected at the surface, 3, 5, 7, 10, and 15 feet bgs in clean glass samples jars provided by the laboratory. The containers were labeled, placed on ice in an ice chest and delivered under chain of custody control to XENCO (formerly Environmental Lab of Texas), in Odessa, Texas.

The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA SW846 method 8015, which includes gasoline range organics (GRO) and diesel range organics (DRO) and chloride by method 300. Samples reporting field headspace readings greater than 100 parts per million (ppm) were also analyzed for BTEX by EPA SW846 method 8021B.

The following soil remediation ranking criteria were used to calculate the RRAL:

Ranking Criteria	Result	Ranking Score:
Depth to Groundwater (vertical feet):	50 – 99	10
Wellhead Protection Area:	No	0
Distance to Surface Water Body:	>1000 horizontal feet	0
Total Score		10

February 15, 2010

The following RRALs were assigned to the Site based on the ranking score:

Recommended Remediation Action Levels

Constituent	Action Level (ppm)
Benzene	10
BTEX	50
TPH	1,000

The following soil samples exceed the RRAL for benzene:

Location	Depth (Feet BGS)	Benzene (mg/Kg)
BH-5	0 – 1	13.57
BH-8	0 – 1	19.01

The following soil samples exceed the RRAL for BTEX:

Location	Depth (Feet BGS)	BTEX (mg/Kg)
BH-5	0 – 1	142.98
BH-7	0 – 1	395.10
BH-8	0 – 1	202.80
BH-9	0 – 1	77.59

The following soil samples exceed the RRAL for TPH:

Location	Depth (Feet BGS)	GRO (mg/Kg)	DRO (mg/Kg)	TPH (mg/Kg)
BH-5	0 – 1	3,220	11,800	15,020
	3 – 4	236	939	1,175
BH-7	0 – 1	1,930	3,730	5,660
	7 – 8	304	860	1,164
BH-8	0 – 1	2,890	4,320	7,210
BH-9	0 – 1	3,240	4,850	8,090
	3 – 4	898	3,090	3,988

The maximum chloride concentration was reported in sample BH-5, 5 to 6 feet bgs (780 mg/Kg) and the vertical extent of chloride was delineated to 250 mg/Kg. Table 1 presents a summary of the investigation results for benzene, BTEX, TPH and chloride results.

An investigation report titled '1RP-09-11-2359, Investigation Report/Remediation Plan, Buckeye Gathering Station Crude Oil Spill, Lea County, New Mexico', was submitted to the OCD on December 17, 2009. OCD granted approval to commence remediation.

February 15, 2010

5.0 Remediation

Between January 6 and 25, 2010, Watson Construction Company, Inc. (Watson), under supervision from LAI, excavated approximately 1,240 cubic yards of hydrocarbon contaminated soil from the area inside the firewall (115 x 175 feet) excluding the tank location. The soil was excavated to approximately 1 foot bgs and hauled to the Jay-Dan Landfarm located near Lovington, New Mexico. Clean soil was hauled from the landfarm to the site. Contaminated soil manifest are presented in Appendix A.

On January 12, 2010, LAI personnel collected six, 5-spot composite samples from the bottom of the excavation. The samples were labeled and place on ice immediately upon collection. The samples were submitted under chain of custody control to XENCO (formerly Environmental Lab of Texas). The samples were analyzed for BTEX, TPH and chloride.

All samples were below the RRAL for benzene and BTEX. All samples, except Comp-6, reported TPH below the RRAL. Sample Comp-6, collected near the southeast corner of the area, reported TPH at 1,091 mg/Kg. On January 25, 2010, Watson excavated additional soil to approximately 3 feet bgs near the southeast corner of the excavation. The confirmation sample from 3 feet bgs was 693.3 mg/Kg and below the RRAL. A summary of the remediation sample results are presented in Table 2. Laboratory reports are presented in Appendix B.

Notification was provided to the OCD at least 24 hours prior to beginning remediation and collecting soil samples.

On February 3, 2010, the OCD in Hobbs, New Mexico, granted permission to backfill the excavation with clean soil. Between February 8 and 11, 2010, Watson filled the excavation with clean soil and leveled the location. Photo documentation is presented in Appendix C. Signed initial and final C-141 forms are presented in Appendix D.

Table 1
XTO Energy, Inc.
1RP-09-11-2359
Soil Analytical Data Summary
Buckey Gathering Station
Lea County, New Mexico

Sample ID	Depth	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
New Mexico Regulatory Limit			10	---	---	---	50
BH-1	0 - 1	11/30/2009	0.0756	1.424	0.4119	1.1804	3.092
BH-5	0 - 1	11/30/2009	13.57	53.47	35.06	40.88	142.98
	3 - 4	11/30/2009	0.0086	0.1616	1.279	0.7903	2.2395
BH-6	0 - 1	11/30/2009	<0.0011	<0.0021	<0.0011	0.0014	0.0014
BH-7	0 - 1	11/30/2009	6.058	126.2	123.7	139.15	395.10
	3 - 4	11/30/2009	<0.0213	<0.0426	0.2565	0.5896	0.8461
	7 - 8	11/30/2009	0.0092	1.082	5.189	5.804	12.084
	10 - 11	11/30/2009	<0.0010	<0.0021	0.0028	0.0056	0.0084
BH-8	0 - 1	11/30/2009	19.01	75.50	45.43	62.84	202.8
	5 - 6	11/30/2009	0.0598	1.543	4.357	5.775	11.735
BH-9	0 - 1	11/30/2009	2.256	35.47	12.95	26.92	77.59
	3 - 4	11/30/2009	0.0803	0.6206	0.6484	3.877	5.226
	7 - 8	11/30/2009	<0.0011	0.0047	0.0266	0.0590	0.0903

Notes

Benzene, Toluene, Ethylbenzene and Xylenes analyzed via EPA SW Method 8021B.

All values reported in Milligrams per Kilogram - dry (mg/Kg, parts per million).

Bold indicates the analyte was detected.

Bold and blue indicates the value exceeds NMOCD requirements.

Table 1
XTO Energy, Inc.
1RP-09-11-2359
Soil Boring Analytical Data Summary
Buckeye Gathering Station
Lea County, New Mexico

Sample ID	Depth	Date	GRO C6-C12	DRO C12-C28	TPH C6-C28	Chlorides
New Mexico Regulatory Limit			--	---	1,000	250
BH-1	0 - 1	11/30/2009	139	490	629	9.67
	3 - 4	11/30/2009	81.7	331	412.7	8.99
	5 - 6	11/30/2009	<15.8	19.5	19.5	83.5
BH-2	0 - 1	11/30/2009	<16.2	19.9	19.9	35.4
	3 - 4	11/30/2009	<15.9	19.5	19.5	29.7
	5 - 6	11/30/2009	<15.8	<15.8	<15.8	24.3
BH-3	0 - 1	11/30/2009	<16.0	23.9	<16.0	32.0
	3 - 4	11/30/2009	<15.9	17.6	17.6	12.1
	5 - 6	11/30/2009	<15.6	36.4	36.4	7.25
BH-4	0 - 1	11/30/2009	<16.6	59.7	59.7	438
	3 - 4	11/30/2009	<16.1	37.8	37.8	73.5
	7 - 8	11/30/2009	<16.4	54.2	54.2	22.0
BH-5	0 - 1	11/30/2009	3,220	11,800	15,020	84.9
	3 - 4	11/30/2009	236	939	1,175	694
	5 - 6	11/30/2009	16.6	41.6	58.2	780
	7 - 8	11/30/2009	<16.2	<16.2	<16.2	27.4
BH-6	0 - 1	11/30/2009	<16.0	41.4	41.4	104
	3 - 4	11/30/2009	17.4	34.4	51.8	40.1
	5 - 6	11/30/2009	<16.3	<16.3	<16.3	29.8
BH-7	0 - 1	11/30/2009	1,930	3,730	5,660	13.4
	3 - 4	11/30/2009	191	523	714	8.32
	7 - 8	11/30/2009	304	860	1,164	6.42
	10 - 11	11/30/2009	58.2	262	320.2	4.85
	15 - 16	11/30/2009	<15.8	17.4	17.4	7.88
BH-8	0 - 1	11/30/2009	2,890	4,320	7,210	6.28
	5 - 6	11/30/2009	303	593	896	139
	7 - 8	11/30/2009	<16.4	20.4	20.4	22.2
BH-9	0 - 1	11/30/2009	3,240	4,850	8,090	87.2
	3 - 4	11/30/2009	898	3,090	3,988	29.5
	7 - 8	11/30/2009	44.1	89.5	133.6	24.4
	10 - 11	11/30/2009	<16.0	18.7	18.7	27.8

Notes

Total Petroleum Hydrocarbons analyzed via EPA SW Method 8015 Mod.
All values reported in Milligrams per Kilogram - dry (mg/Kg, parts per million).
Bold indicates the analyte was detected.
Bold and blue indicates the value exceeds NMOCD requirements.

Table 2
XTO Energy, Inc.
1RP-09-11-2359
Confirmation Analytical Data Summary
Buckey Gathering Station
Lea County, New Mexico

Sample ID	Depth	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
New Mexico Regulatory Limit			10	---	---	---	50
Comp-1	1 - 1.5'	1/12/2010	0.0085	0.4977	1.030	1.3188	2.855
Comp-2	1 - 1.5'	1/12/2010	0.0242	0.2174	0.3722	0.5083	1.1221
Comp-3	1 - 1.5'	1/12/2010	0.0076	0.2006	0.3931	0.5344	1.1357
Comp-4	1 - 1.5'	1/12/2010	0.0407	0.3022	0.8692	0.3611	1.5732
Comp-5	1 - 1.5'	1/12/2010	--	--	--	--	--
Comp-6	1 - 1.5'	1/12/2010	0.0073	0.1408	0.7045	0.7830	1.6356

Notes

Benzene, Toluene, Ethylbenzene and Xylenes analyzed via EPA SW Method 8021B.

All values reported in Milligrams per Kilogram - dry (mg/Kg, parts per million).

Bold indicates the analyte was detected.

Bold and blue indicates the value exceeds NMOCD requirements.

Table 2
XTO Energy, Inc.
1RP-09-11-2359
Remediation Analytical Data Summary
Buckeye Gathering Station
Lea County, New Mexico

Sample ID	Depth	Date	GRO C6-C12	DRO C12-C28	TPH C6-C28	Chlorides
New Mexico Regulatory Limit			--	--	1,000	250
Comp-1	1 - 1.5'	1/12/2010	82.4	187	269	53.2
Comp-2	1 - 1.5'	1/12/2010	122	671	793	13.4
Comp-3	1 - 1.5'	1/12/2010	90.9	389.0	480	43.0
Comp-4	1 - 1.5'	1/12/2010	86.0	191	277	12.0
Comp-5	1 - 1.5'	1/12/2010	36.6	344	381	18.6
Comp-6	1 - 1.5'	1/12/2010	251	840	1,091	80.1
	3'	1/25/2010	51.3	642	693.3	8.7
Fill Material						
Top Soil	--	1/25/2010	--	--	--	7.66
Caliche	--	1/25/2010	--	--	--	12.7

Notes

Total Petroleum Hydrocarbons analyzed via EPA SW Method 8015 Mod.

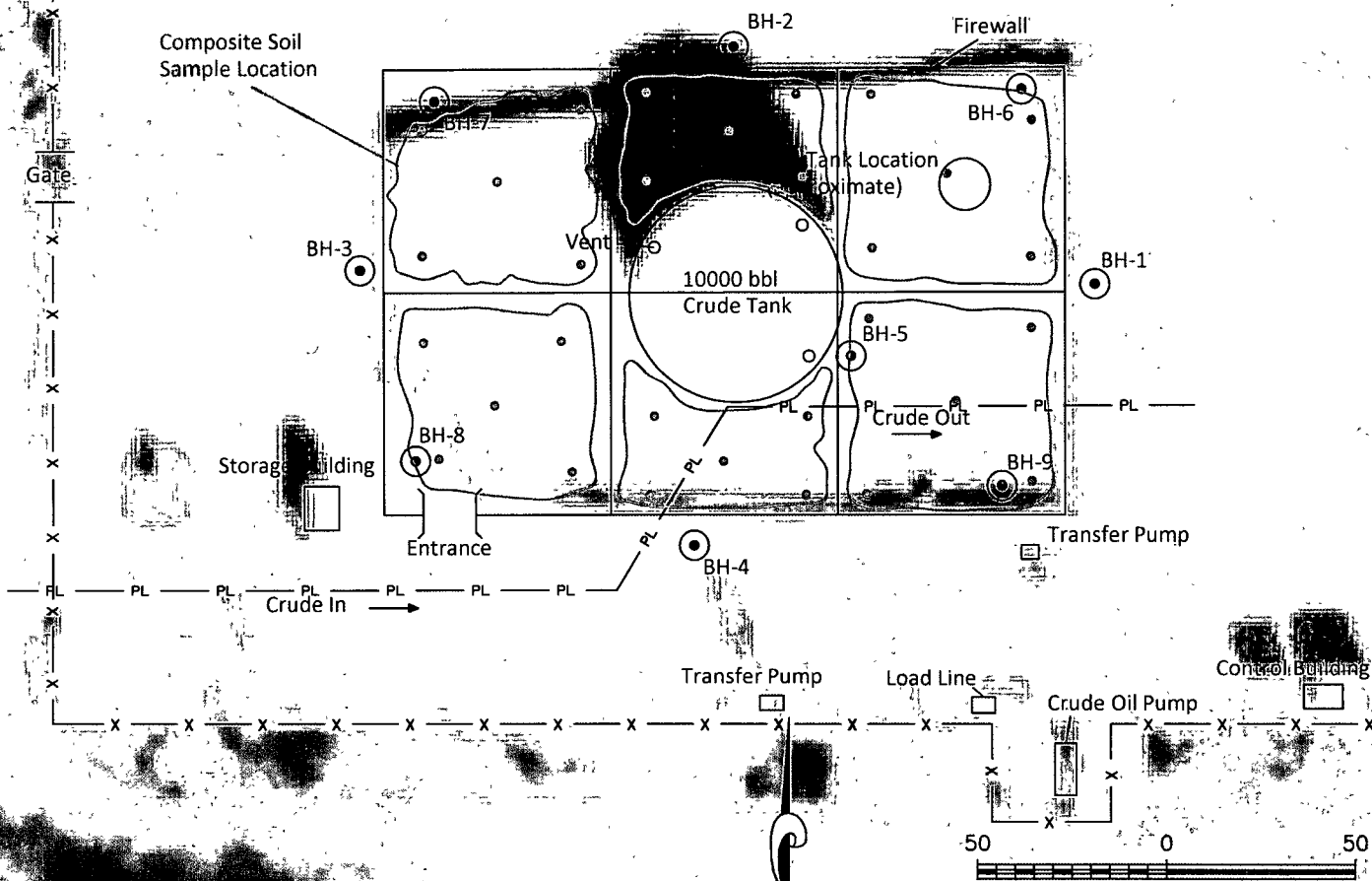
All values reported in Milligrams per Kilogram - dry (mg/Kg, parts per million).

Bold indicates the analyte was detected.

Bold and blue indicates the value exceeds NMOCD requirements.

Larson & Associates, Inc.
Environmental Consultants

Nearest Well:
 ConocoPhillips
 East Vacuum Grayburg Unit Well #011
 Tract 3229, Unit M, (SW/SW) Sec. 32, T-17-S, R-31-E
 API - 30-025-32065-00-00 Approximately 635' NE of Tank



Legend

- x — Fence
- PL — Pipeline
- BH-1
○ - Soil Boring
November 30, 2009

Graphic Scale in Feet

1RP-09-11-2359
 XTO Energy, Inc.
 Buckeye Gathering System
 Buckeye Station
 Sec. 31, T-17-S, R-35-E
 Lea County, New Mexico

N 32° 47' 08.4"
 W 103° 29' 22.1"

Larson &
 Associates, Inc.
 Environmental Consultants

Figure 2 - Aerial Drawing

Nearest Well:
 Conoco Phillips
 East Vacuum Grayburg Unit Well #011
 Tract 3229, Unit M, (SW/SW) Sec. 32, T-17-S, R-31-E
 API - 30-025-32065-00-00 Approximately 635' NE of Tank

NEAREST XTO WELL STATE K #12 30-025-32413

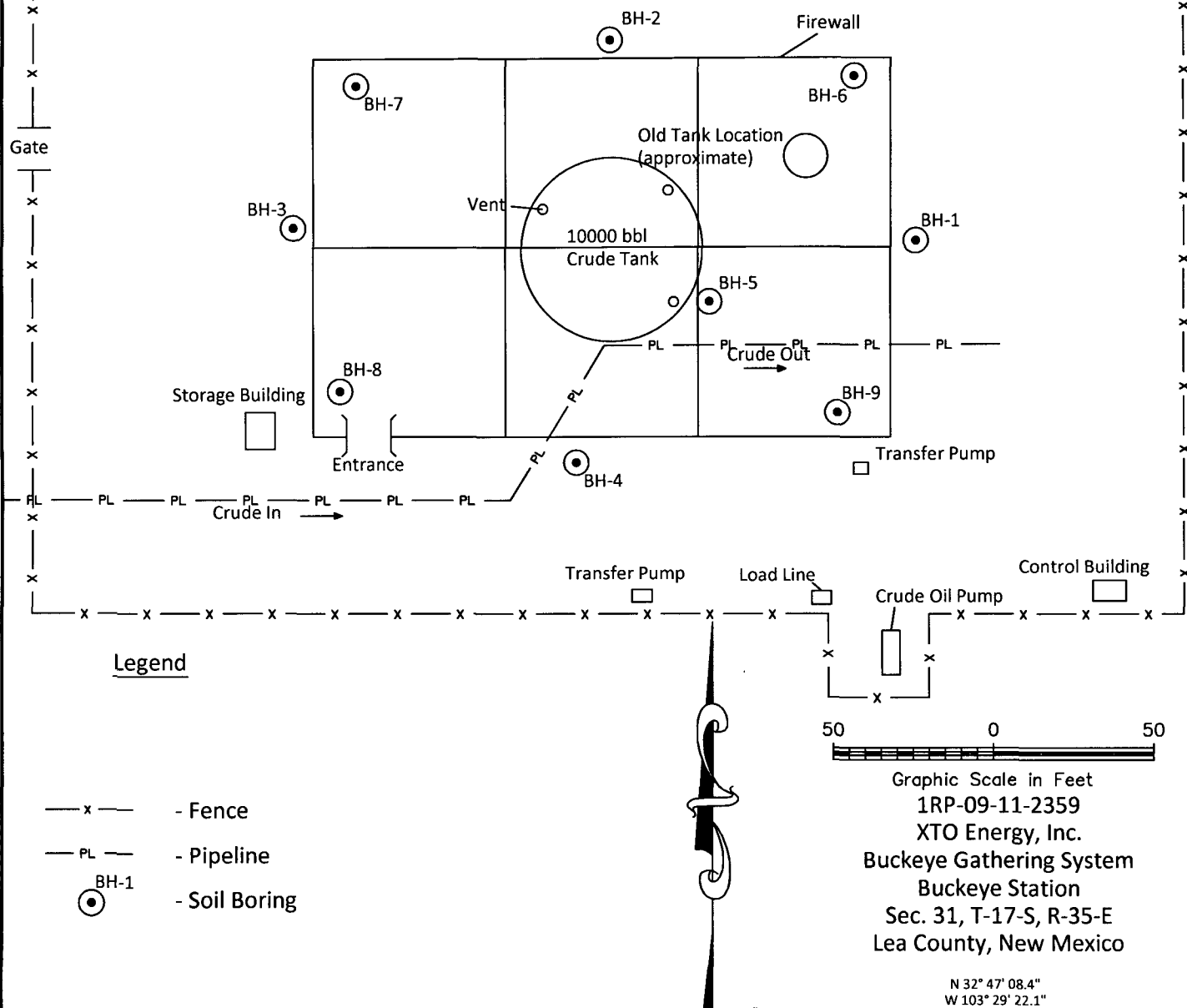


Figure 3 - Site Drawing

Nearest Well:
 Conoco Phillips
 East Vacuum Grayburg Unit Well #011
 Tract 3229, Unit M, (SW/SW) Sec. 32, T-17-S, R-31-E
 API - 30-025-32065-00-00 Approximately 635' NE of Tank

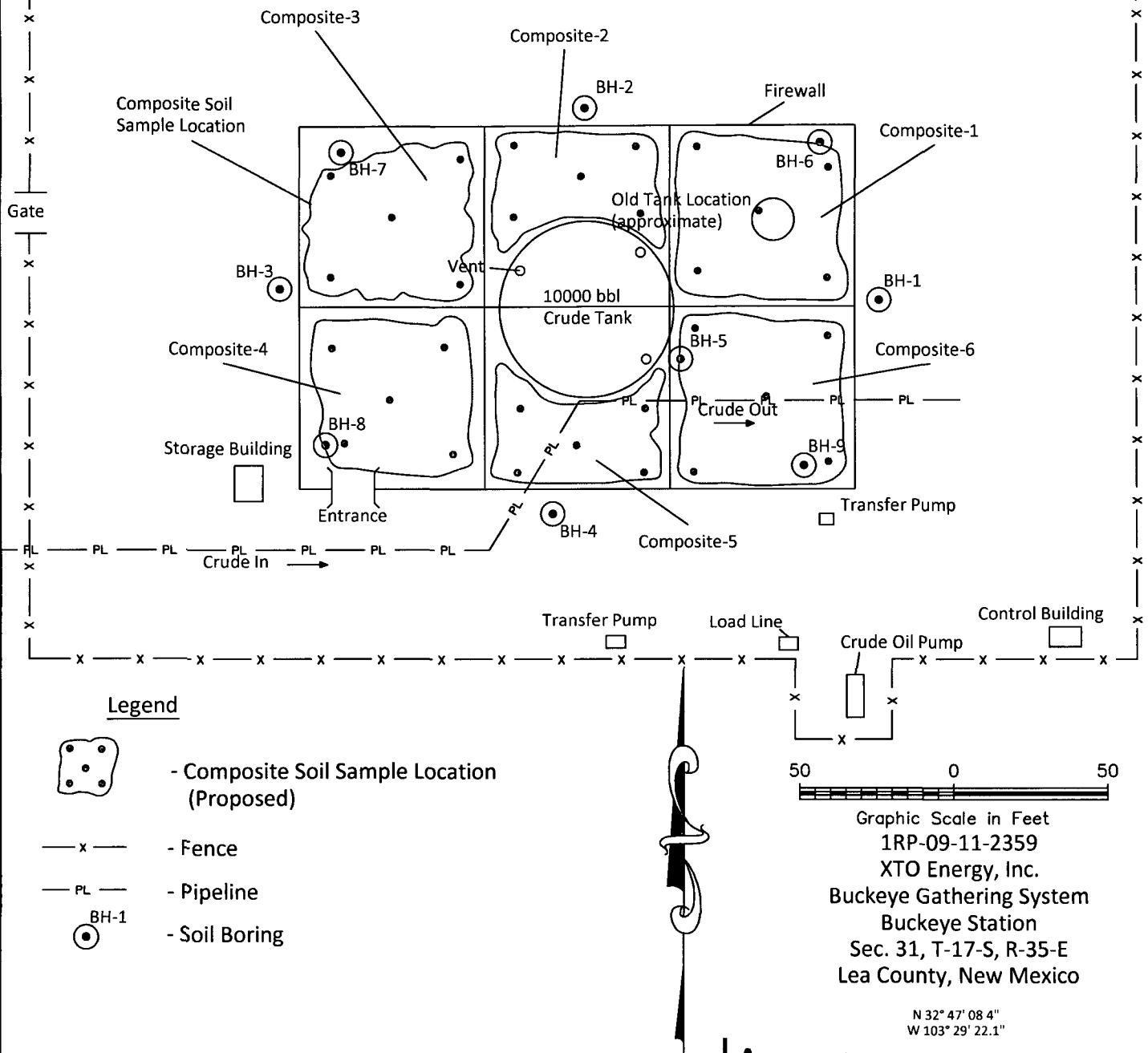


Figure 4 - Composite Soil Sample Locations

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Vasquez 9

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vasquez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Diet

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction

Drivers Signature: Mike Pettit GLEZZ TRUCKING

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Gleez

Drivers Signature: Mike Fortell

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Clez Ti.

Drivers Signature: Jamie Tarver

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1/6/10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction 6122 01

Drivers Signature: Jamie Tararez

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - 61022 01

Drivers Signature: Samie Tavaroz

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lavelle

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WASTE MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Lasquez 901

Drivers Signature: J.O. G.R.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Loukace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Vasquez 901

Drivers Signature: J. O. S.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Lasquez Tr. 901

Drivers Signature: T.O.G.G.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

901

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Vasquez

Drivers Signature: J. O. B. S.

Type of Material: Contaminated Soil Oil Diet

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Tabarez 1

Drivers Signature: [Signature]

Type of Material: Contaminated Soil oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction Tabarez I

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Ochoa

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Acha 25

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Ochoa

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-6-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Clezz 2

Drivers Signature: Jamie Tarare

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovell

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - ^{G/ezz} ~~Vasquez~~ 02

Drivers Signature: Samie Tarerez.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - 6122-02

Drivers Signature: Samie Tarnes

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lawrence

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Glezz 02

Drivers Signature: Jamie Tararez.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Loulace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R+L

Drivers Signature: Don Lyan

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R4Z. 07

Drivers Signature: [Signature]

Type of Material: Contaminated Soil oily Diet

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R+L

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MANUEL FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MANUEL FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MAMU FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MANUEL FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Tabarez i

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Tabarez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Tabarez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Tabarez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vasquez 09

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vasquez 9

Drivers Signature: Jain Man

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vasquez 09

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-7-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - G/ezz 02

Drivers Signature: Jamie Tavaroz

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - G/ezz

Drivers Signature: Janie Tavarez

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Glezz

Drivers Signature: Samie Tarrion

Type of Material: Contaminated Soil oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - G/ezz

Drivers Signature: Janie Tararez.

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MAUREL FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MAME FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MAUR FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Franco

Drivers Signature: MANUEL FRANCO

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vazquez

Drivers Signature: Jay Mann

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vazquez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vazquez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WASTE MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Vasquez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R+L

Drivers Signature: Ryan Lujan

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R+L 07

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - R+L

Drivers Signature: Fuan Lyan

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - RTL

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - HB

Drivers Signature: ALEJANDRO VILLALBA

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lopez

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - HB 001

Drivers Signature: ALEJANDRO VILLALBA

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Loulache

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - HB 001

Drivers Signature: AGJANDAO VILLALBA

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - HB 001

Drivers Signature: ALEJANDRO VILLALBA

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Loulace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Pando

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature: Debbie Lovelace]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Pardo 151

Drivers Signature: Eileen B. Pardo

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Pando 151

Drivers Signature: Charles L. Pando

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Dominguez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: [Signature]

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Dominguez

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm # 5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Lovelace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

JAY-DAN LAND FARM
WAST MANIFEST

Generators/Originating Site

Location: XTO Buckeye Gathering Sta.
Buckeye NM

Section _____ Township _____ Range: _____

Trucking Company: Watson Construction - Dominguez 27

Drivers Signature: [Signature]

Type of Material: Contaminated Soil Oily Dirt

Quantity: 1 Loads By 20 yd Dump Truck 20 Total Yards

Cell Number material was placed in land farm #5

Comments: Filter test Performed

Attendant (on duty) Signature: Debbie Loulace

Date: 1-11-10

As a condition of acceptance for disposal, I hereby certify that this waste is exempt waste as defined by the EPA. The waste listed above was generated as a result of oil and gas operations and is exempt from RCRA Sub-Title C Regulations and not mixed with non-exempt waste.

Signature: N/A

Analytical Report 358300

for

Larson & Associates

Project Manager: Michelle Green

Buckeye Gathering

9-0139

21-JAN-10

RECEIVED

FEB 17 2010

HOBBSOCD



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),

South Carolina(96031001), Louisiana(04154), Georgia(917)



21-JAN-10

Project Manager: **Michelle Green**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No: **358300**
Buckeye Gathering
Project Address:

Michelle Green:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 358300. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 358300 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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Sample Cross Reference 358300



Larson & Associates, Midland, TX
Buckeye Gathering

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-1	S	Jan-12-10 09:20		358300-001
Comp-2	S	Jan-12-10 09:45		358300-002
Comp-3	S	Jan-12-10 10:00		358300-003
Comp-4	S	Jan-12-10 10:45		358300-004
Comp-5	S	Jan-12-10 10:25		358300-005
Comp-6	S	Jan-12-10 08:55		358300-006



CASE NARRATIVE

Client Name: Larson & Associates

Project Name: Buckeye Gathering

Project ID: 9-0139

Work Order Number: 358300

Report Date: 21-JAN-10

Date Received: 01/12/2010

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-789184 Percent Moisture

AD2216A

Batch 789184, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity.

Samples affected are: 358300-002, -001, -003, -004, -005, -006.

Batch: LBA-789187 Anions by E300

None

Batch: LBA-789293 TPH By SW8015 Mod

None

Batch: LBA-789314 BTEX by EPA 8021B

SW8021BM

Batch 789314, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 358300-001,358300-003,358300-006.

4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 358300-001 D,358300-001,358300-006,358300-004,358300-002.

Batch: LBA-789640 BTEX by EPA 8021B

SW8021BM

Batch 789640, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 358300-004.

4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 358300-004.



CASE NARRATIVE

Client Name: Larson & Associates

Project Name: Buckeye Gathering

Project ID: 9-0139

Work Order Number: 358300

Report Date: 21-JAN-10

Date Received: 01/12/2010

Batch: LBA-789847 TPH By SW8015 Mod

None



Certificate of Analysis Summary 358300

Larson & Associates, Midland, TX

Project Name: Buckeye Gathering

Project Id: 9-0139

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Jan-12-10 03:00 pm


Report Date: 21-JAN-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	358300-001	358300-002	358300-003	358300-004	358300-005	358300-006
	<i>Field Id:</i>	Comp-1	Comp-2	Comp-3	Comp-4	Comp-5	Comp-6
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-12-10 09 20	Jan-12-10 09 45	Jan-12-10 10 00	Jan-12-10 10 45	Jan-12-10 10 25	Jan-12-10 08 55
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Jan-13-10 09 22	Jan-13-10 09 22	Jan-13-10 09 22	Jan-13-10 09 22	Jan-13-10 09 22	Jan-13-10 09 22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		53 2 4 47	13 4 4 46	43 0 4 56	12 0 4 56	18 6 4 52	80 1 4 70
BTEX by EPA 8021B	<i>Extracted:</i>	Jan-13-10 08 45	Jan-13-10 08 45	Jan-13-10 08 45	Jan-13-10 08 45		Jan-13-10 08 45
	<i>Analyzed:</i>	Jan-13-10 13 52	Jan-13-10 14 15	Jan-13-10 14 38	Jan-13-10 12 44		Jan-13-10 16 33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		mg/kg RL
Benzene		0 0085 0 0052	0 0242 0 0053	0 0076 0 0054	0 0407 0 0011		0 0073 0 0055
Toluene		0 4977 0 0104	0 2174 0 0105	0 2006 0 0109	0 3022 0 0022		0 1408 0 0110
Ethylbenzene		1 030 0 0052	0 3722 0 0053	0 3931 0 0054	0 8692 D 0 0054		0 7045 0 0055
m,p-Xylenes		0 9079 0 0104	0 3407 0 0105	0 3660 0 0109	0 2690 0 0022		0 6152 0 0110
o-Xylene		0 4109 0 0052	0 1676 0 0053	0 1684 0 0054	0 0921 0 0011		0 1678 0 0055
Total Xylenes		1 3188 0 0052	0 5083 0 0053	0 5344 0 0054	0 3611 0 0011		0 7830 0 0055
Total BTEX		2 855 0 0052	1 1221 0 0053	1 1357 0 0054	1 5732 0 0011		1 6356 0 0055
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Jan-12-10 17 00	Jan-12-10 17 00	Jan-12-10 17 00	Jan-12-10 17 00	Jan-12-10 17 00	Jan-12-10 17 00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		6 03 1 00	5 86 1 00	7 98 1 00	7 82 1 00	7 13 1 00	10 6 1 00
TPH By SW8015 Mod	<i>Extracted:</i>	Jan-12-10 16 00	Jan-12-10 16 00	Jan-12-10 16 00	Jan-12-10 16 00	Jan-12-10 16 00	Jan-18-10 10 45
	<i>Analyzed:</i>	Jan-13-10 19 27	Jan-13-10 20 21	Jan-13-10 20 48	Jan-13-10 21 15	Jan-13-10 21 42	Jan-19-10 04 04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		82 4 15 9	122 15 9	90 9 16 2	86 0 16 3	36 6 16 1	251 16 7
C12-C28 Diesel Range Hydrocarbons		187 15 9	671 15 9	389 16 2	191 16 3	344 16 1	840 16 7
C28-C35 Oil Range Hydrocarbons		27 7 15 9	86 2 15 9	64 2 16 2	32 1 16 3	93 4 16 1	96 4 16 7
Total TPH		297 15 9	879 15 9	544 16 2	309 16 3	474 16 1	1187 16 7

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

- F** RPD exceeded lab control limits.

- J** The target analyte was positively identified below the MQL and above the SQL.

- U** Analyte was not detected.

- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

- K** Sample analyzed outside of recommended hold time.

- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

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Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789314

Sample: 547571-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 09:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 789314

Sample: 547571-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 09:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 789314

Sample: 547571-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 10:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 789314

Sample: 358300-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 12:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0608	0.0300	203	80-120	**

Lab Batch #: 789314

Sample: 358300-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 13:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0233	0.0300	78	80-120	**
4-Bromofluorobenzene	0.0392	0.0300	131	80-120	**

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789314

Sample: 358300-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 14:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0411	0.0300	137	80-120	**

Lab Batch #: 789314

Sample: 358300-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 14:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0232	0.0300	77	80-120	**
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

Lab Batch #: 789314

Sample: 358300-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 16:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0198	0.0300	66	80-120	**
4-Bromofluorobenzene	0.0593	0.0300	198	80-120	**

Lab Batch #: 789314

Sample: 358300-001 D / MD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 16:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0407	0.0300	136	80-120	**

Lab Batch #: 789640

Sample: 547760-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/15/10 05:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789640

Sample: 547760-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/15/10 06:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 789640

Sample: 547760-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/15/10 07:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 789640

Sample: 358300-004 / DL

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/15/10 13:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0201	0.0300	67	80-120	**
4-Bromofluorobenzene	0.0546	0.0300	182	80-120	**

Lab Batch #: 789640

Sample: 358525-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/15/10 15:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 789640

Sample: 358525-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/15/10 16:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789293

Sample: 547558-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 14:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	50.6	50.2	101	70-135	

Lab Batch #: 789293

Sample: 547558-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 14:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

Lab Batch #: 789293

Sample: 547558-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/13/10 14:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	99.8	97	70-135	
o-Terphenyl	55.9	49.9	112	70-135	

Lab Batch #: 789293

Sample: 358300-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 19:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	99.6	96	70-135	
o-Terphenyl	54.7	49.8	110	70-135	

Lab Batch #: 789293

Sample: 358300-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 20:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.1	100	87	70-135	
o-Terphenyl	48.8	50.0	98	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789293

Sample: 358300-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 20:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.6	113	70-135	
o-Terphenyl	63.0	49.8	127	70-135	

Lab Batch #: 789293

Sample: 358300-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 21:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.9	100	76	70-135	
o-Terphenyl	44.8	50.0	90	70-135	

Lab Batch #: 789293

Sample: 358300-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 21:42

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.3	99.9	93	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 789293

Sample: 358148-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 23:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

Lab Batch #: 789293

Sample: 358148-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/13/10 23:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	56.2	50.0	112	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Project ID: 9-0139

Lab Batch #: 789847

Sample: 547892-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/19/10 00:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.3	101	91	70-135	
o-Terphenyl	41.8	50.3	83	70-135	

Lab Batch #: 789847

Sample: 547892-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/19/10 00:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.5	110	70-135	
o-Terphenyl	47.7	49.8	96	70-135	

Lab Batch #: 789847

Sample: 547892-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01/19/10 01:22

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.9	100	78	70-135	
o-Terphenyl	44.4	50.1	89	70-135	

Lab Batch #: 789847

Sample: 358300-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/19/10 04:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.1	99.8	84	70-135	
o-Terphenyl	43.1	49.9	86	70-135	

Lab Batch #: 789847

Sample: 357767-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/19/10 07:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.5	99.6	92	70-135	
o-Terphenyl	40.9	49.8	82	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Buckeye Gathering

Work Orders : 358300,

Lab Batch #: 789847

Sample: 357767-003 SD / MSD

Project ID: 9-0139

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01/19/10 08:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	99.5	91	70-135	
o-Terphenyl	40.6	49.8	82	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes



Blank Spike Recovery



Project Name: Buckeye Gathering

Work Order #: 358300

Project ID:

9-0139

Lab Batch #: 789187

Sample: 789187-1-BKS

Matrix: Solid

Date Analyzed: 01/13/2010

Date Prepared: 01/13/2010

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK/BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	11.0	110	75-125	

Blank Spike Recovery [D] = $100 \times [C] / [B]$

All results are based on MDL and validated for QC purposes

BRL - Below Reporting Limit



BS / BSD Recoveries



Project Name: Buckeye Gathering

Work Order #: 358300

Analyst: ASA

Date Prepared: 01/13/2010

Project ID: 9-0139

Date Analyzed: 01/13/2010

Lab Batch ID: 789314

Sample: 547571-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	ND	0 1000	0 1097	110	0 1	0 1085	109	1	70-130	35	
Toluene	ND	0 1000	0 1119	112	0 1	0 1107	111	1	70-130	35	
Ethylbenzene	ND	0 1000	0 1134	113	0 1	0 1118	112	1	71-129	35	
m,p-Xylenes	ND	0 2000	0 2334	117	0 2	0 2302	115	1	70-135	35	
o-Xylene	ND	0 1000	0 1208	121	0 1	0 1190	119	2	71-133	35	

Analyst: ASA

Date Prepared: 01/14/2010

Date Analyzed: 01/15/2010

Lab Batch ID: 789640

Sample: 547760-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	ND	0 1000	0 0980	98	0 1	0 0962	96	2	70-130	35	
Toluene	ND	0 1000	0 0996	100	0 1	0 0977	98	2	70-130	35	
Ethylbenzene	ND	0 1000	0 0990	99	0 1	0 0973	97	2	71-129	35	
m,p-Xylenes	ND	0 2000	0 2024	101	0 2	0 1995	100	1	70-135	35	
o-Xylene	ND	0 1000	0 1051	105	0 1	0 1028	103	2	71-133	35	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Buckeye Gathering

Work Order #: 358300

Analyst: BEV

Date Prepared: 01/12/2010

Project ID: 9-0139

Date Analyzed: 01/13/2010

Lab Batch ID: 789293

Sample: 547558-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	1000	917	92	1000	894	89	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	884	88	1000	860	86	3	70-135	35	

Analyst: BEV

Date Prepared: 01/18/2010

Date Analyzed: 01/19/2010

Lab Batch ID: 789847

Sample: 547892-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	1010	848	84	995	976	98	14	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	797	79	995	785	79	2	70-135	35	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Buckeye Gathering

Work Order #: 358300

Lab Batch #: 789187

Date Analyzed: 01/13/2010

Date Prepared: 01/13/2010

Project ID: 9-0139

Analyst: LATCOR

QC- Sample ID: 358300-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	53.2	106	165	105	75-125	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: **Buckeye Gathering**

Work Order #: 358300

Project ID: 9-0139

Lab Batch ID: 789640

QC- Sample ID: 358525-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/15/2010

Date Prepared: 01/14/2010

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0 1041	0 0922	89	0 1045	0 0836	80	10	70-130	35	
Toluene	ND	0 1041	0 0918	88	0 1045	0 0828	79	10	70-130	35	
Ethylbenzene	ND	0 1041	0 0885	85	0 1045	0 0794	76	11	71-129	35	
m,p-Xylenes	ND	0 2082	0 1799	86	0 2090	0 1616	77	11	70-135	35	
o-Xylene	ND	0 1041	0 0911	88	0 1045	0 0805	77	12	71-133	35	

Lab Batch ID: 789293

QC- Sample ID: 358148-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/13/2010

Date Prepared: 01/12/2010

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1110	984	89	1110	964	87	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	277	1110	1180	81	1110	1260	89	7	70-135	35	

Lab Batch ID: 789847

QC- Sample ID: 357767-003 S

Batch #: 1 Matrix: Soil

Date Analyzed: 01/19/2010

Date Prepared: 01/18/2010

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1210	1030	85	1210	1020	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	31.4	1210	989	79	1210	902	72	9	70-135	35	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery

Project Name: Buckeye Gathering

Work Order #: 358300

Lab Batch #: 789187

Date Analyzed: 01/13/2010

QC- Sample ID: 358300-001 D

Reporting Units: mg/kg

Project ID: 9-0139

Analyst: LATCOR

Batch #: 1

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	53.2	50.8	5	20	

Lab Batch #: 789314

Date Analyzed: 01/13/2010

QC- Sample ID: 358300-001 D

Reporting Units: mg/kg

Date Prepared: 01/13/2010

Analyst: ASA

Batch #: 1

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
BTEX by EPA 8021B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Benzene	0.0085	ND	NC	35	
Toluene	0.4977	0.3743	28	35	
Ethylbenzene	1.030	0.9247	11	35	
m,p-Xylenes	0.9079	0.8219	10	35	
o-Xylene	0.4109	0.4001	3	35	

Lab Batch #: 789184

Date Analyzed: 01/12/2010

QC- Sample ID: 358290-001 D

Reporting Units: %

Date Prepared: 01/12/2010

Analyst: WRU

Batch #: 1

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	2.61	3.32	24	20	F

Spike Relative Difference $RPD = 200 * |(B-A)/(B+A)|$

All Results are based on MDL and validated for QC purposes

BRL - Below Reporting Limit

Larson & Associates, Inc.
Environmental Consultants

DATE: 1-12-10 PAGE 1 OF 1
PO #: _____ LAB WORK ORDER #: _____
PROJECT LOCATION OR NAME: BUCKEYE CATHEDRAL
LAI PROJECT #: 9-0139 COLLECTOR: P. BROOKS

Data Reported to: MICHELLE GREEN

[illegible]

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Larson & Assoc.
 Date/ Time: 1.12.10 15:00
 Lab ID #: 358300
 Initials: AL

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	4.1 °C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	<u>Not Present</u>
#4	Custody Seals Intact on sample bottles/ container?	<u>Yes</u>	No	<u>Not Present</u>
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont/ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

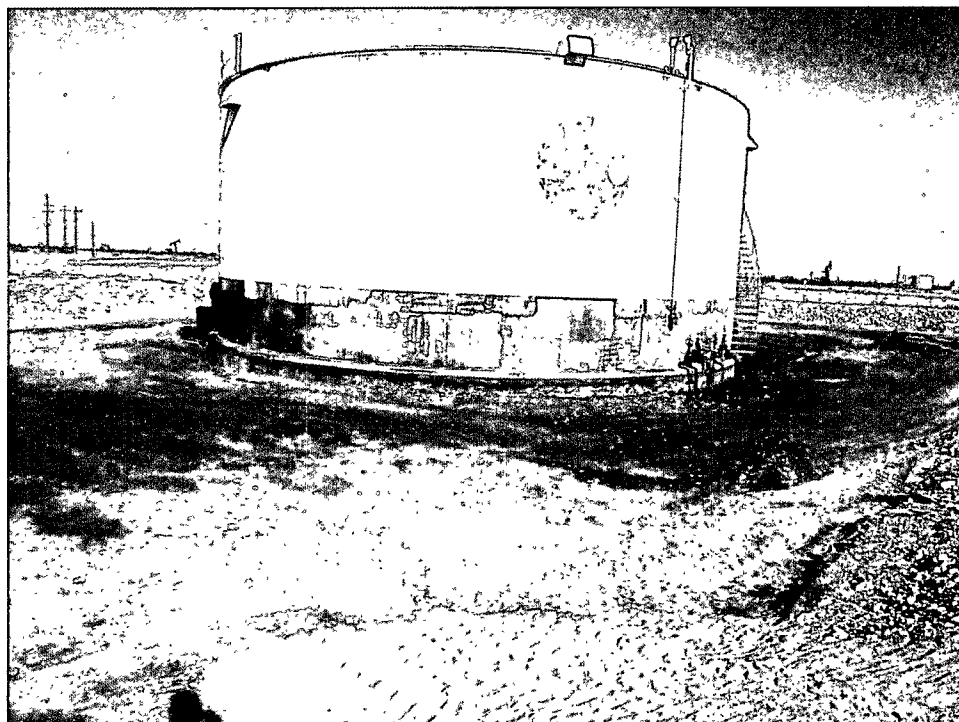
☐
☐
☐

See attached e-mail/ fax
 Client understands and would like to proceed with analysis
 Cooling process had begun shortly after sampling event

Photographic Documentation

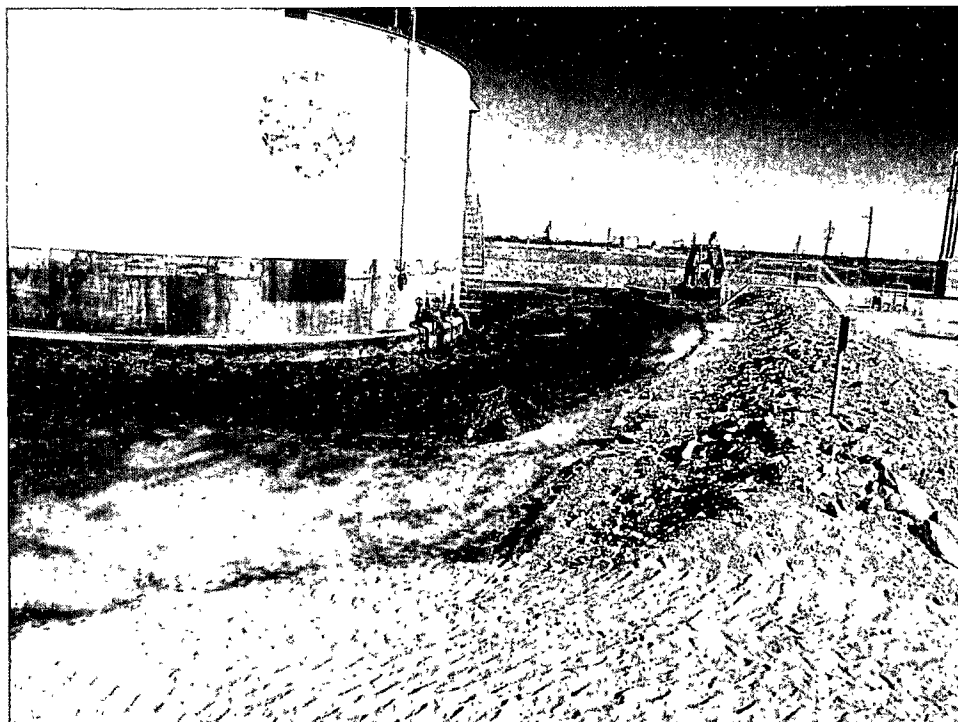


XTO Energy, Inc., Buckeye Gathering System, Buckeye Gathering Station Sign

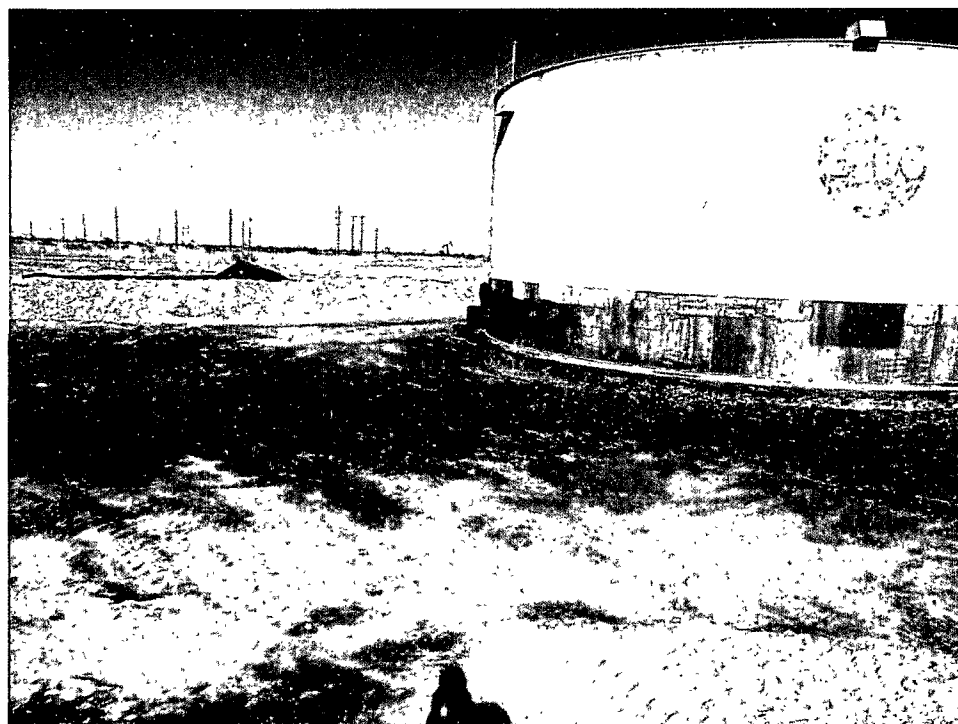


Above-Ground Tank and Spill Looking Northeast, November 20, 2009

Photographic Documentation



South Side of Tank Looking East, November 20, 2009



West Side of Tank Looking North, November 20, 2009

Photographic Documentation



Soil Remediation Looking Northeast, January 6, 2010



Soil Remediation Looking East, January 6, 2010

Photographic Documentation

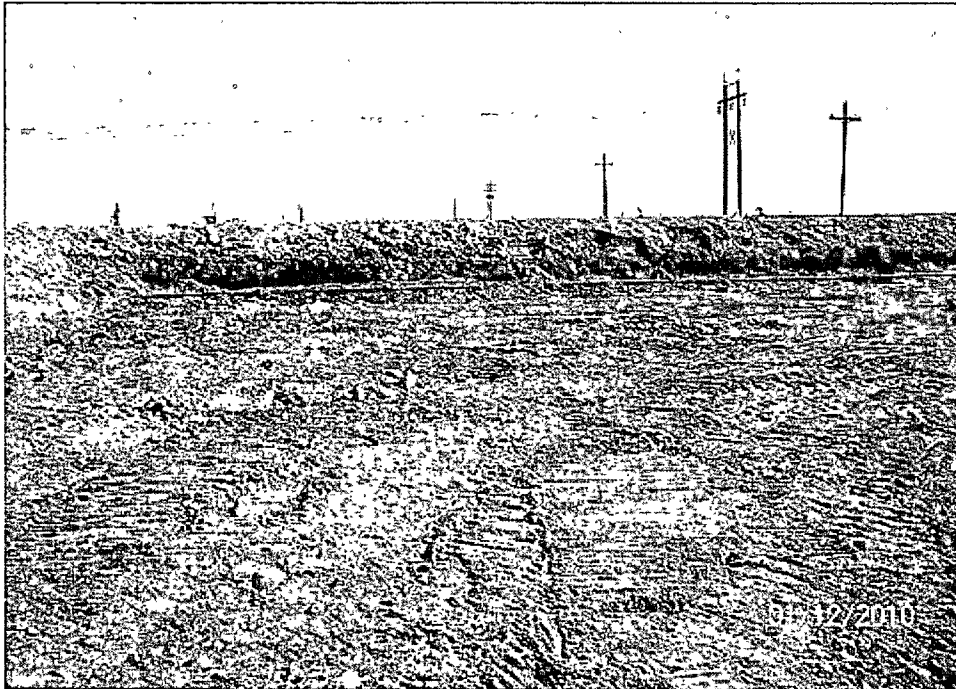


Soil Remediation Looking Southeast, January 6, 2010

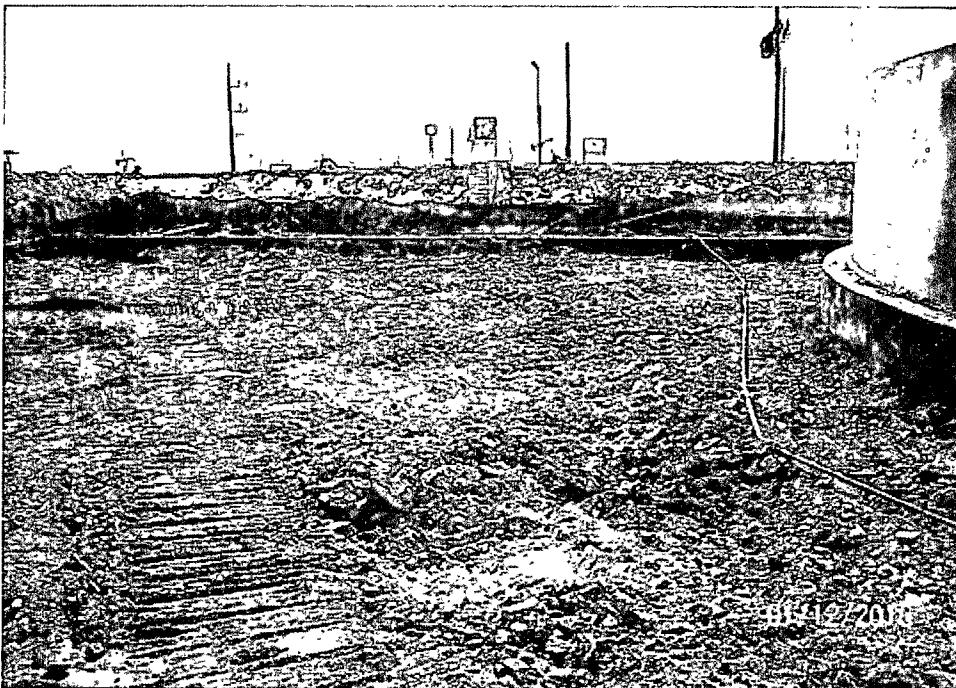


Soil Remediation Looking East, January 12, 2010

Photographic Documentation



Soil Remediation Looking West, January 12, 2010

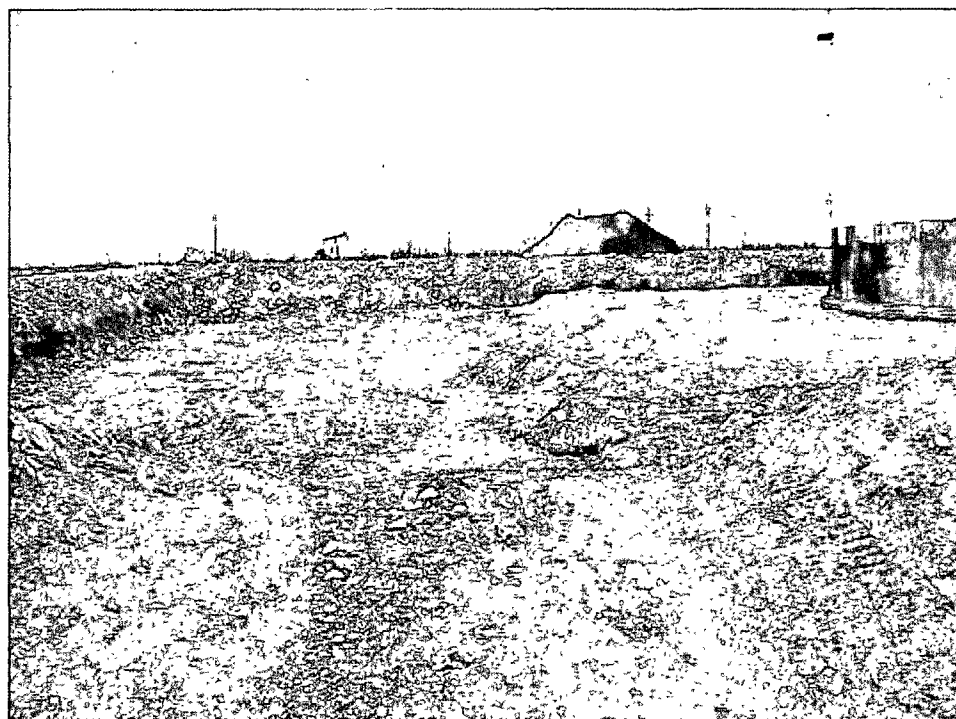


Soil Remediation Looking South, January 12, 2010

Photographic Documentation



Soil Remediation Looking West, January 25, 2010

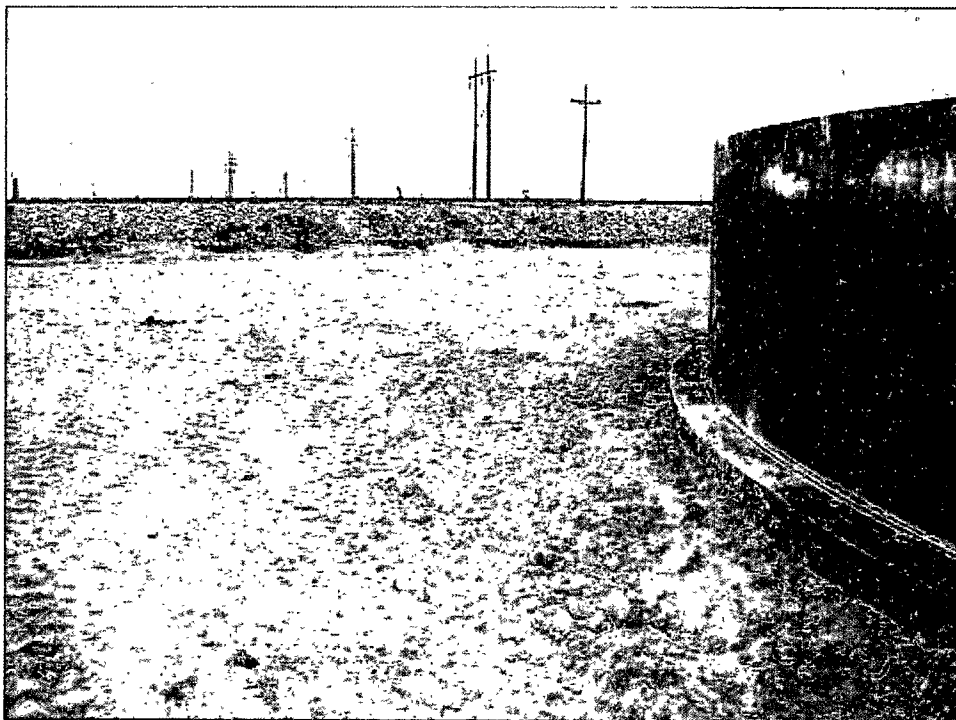


Soil Remediation Looking East, January 25, 2010

Photographic Documentation

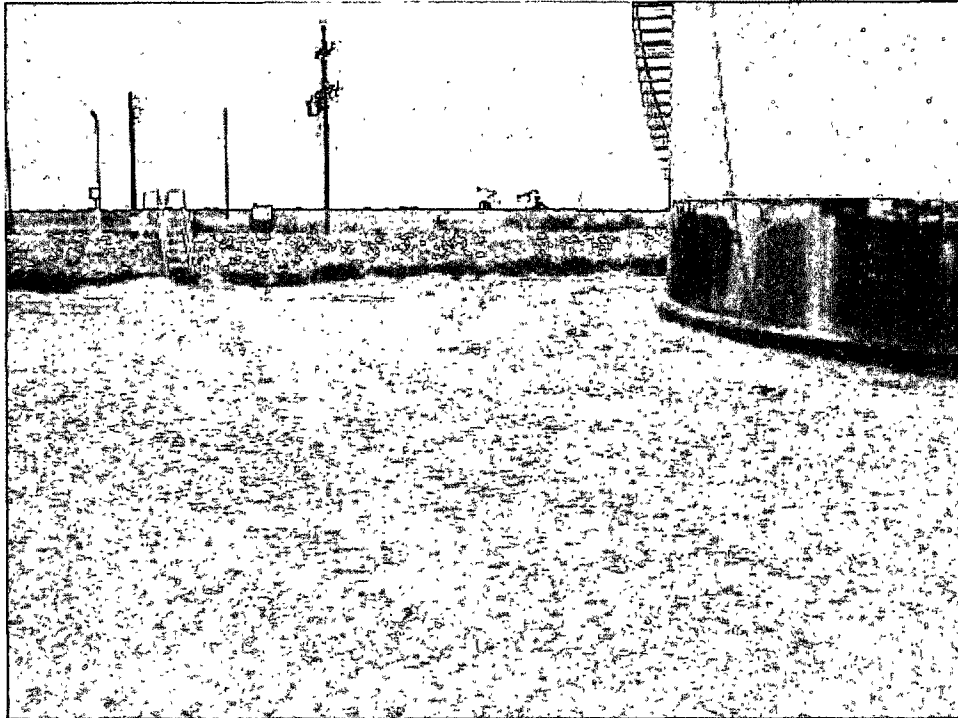


Soil Remediation Looking South, February 11, 2010

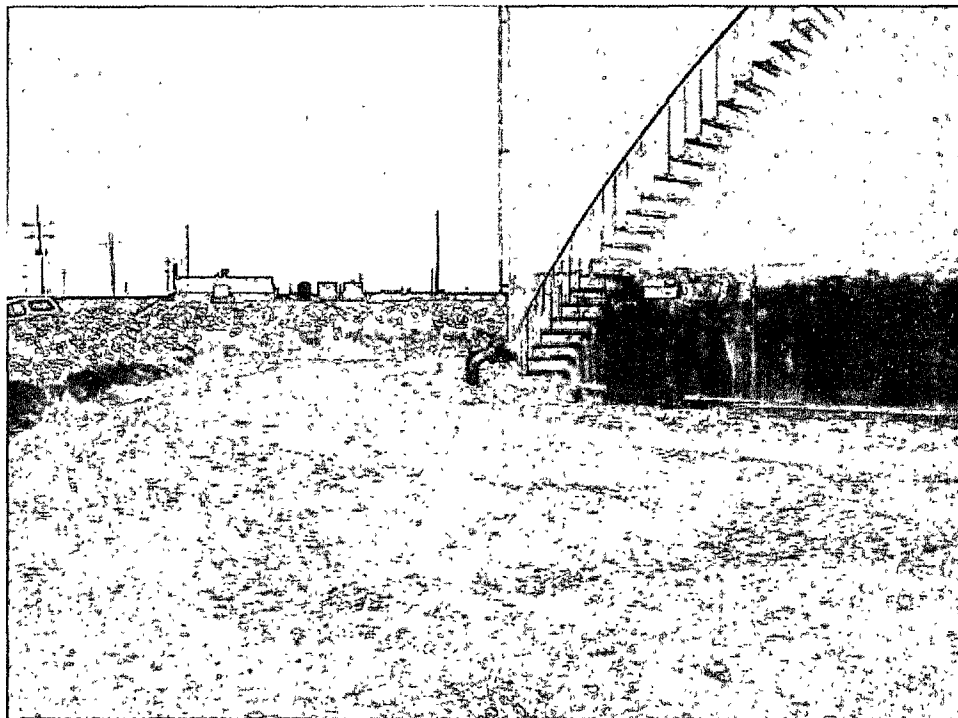


Soil Remediation Looking East, February 11, 2010

Photographic Documentation

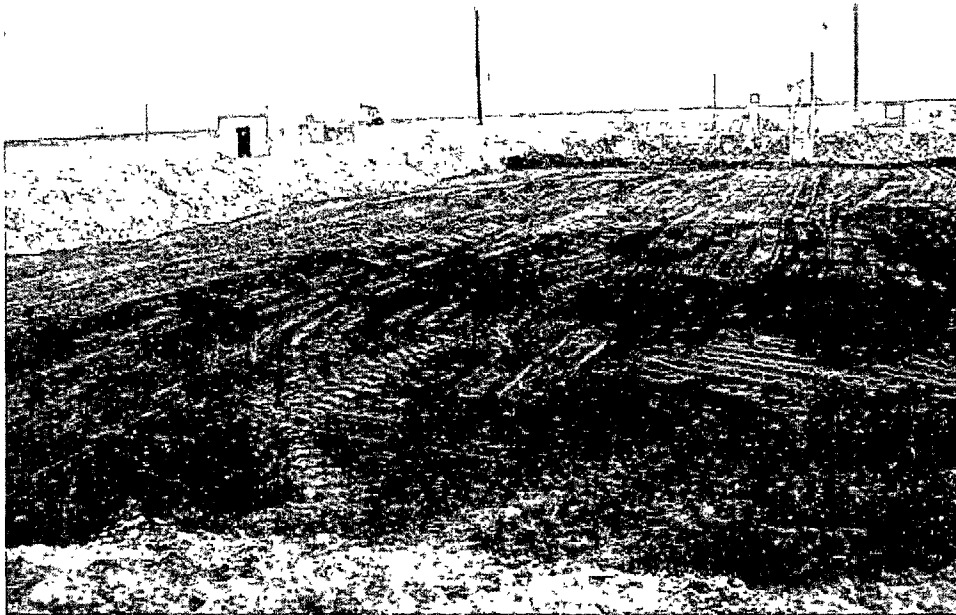


Soil Remediation Looking South, February 11, 2010

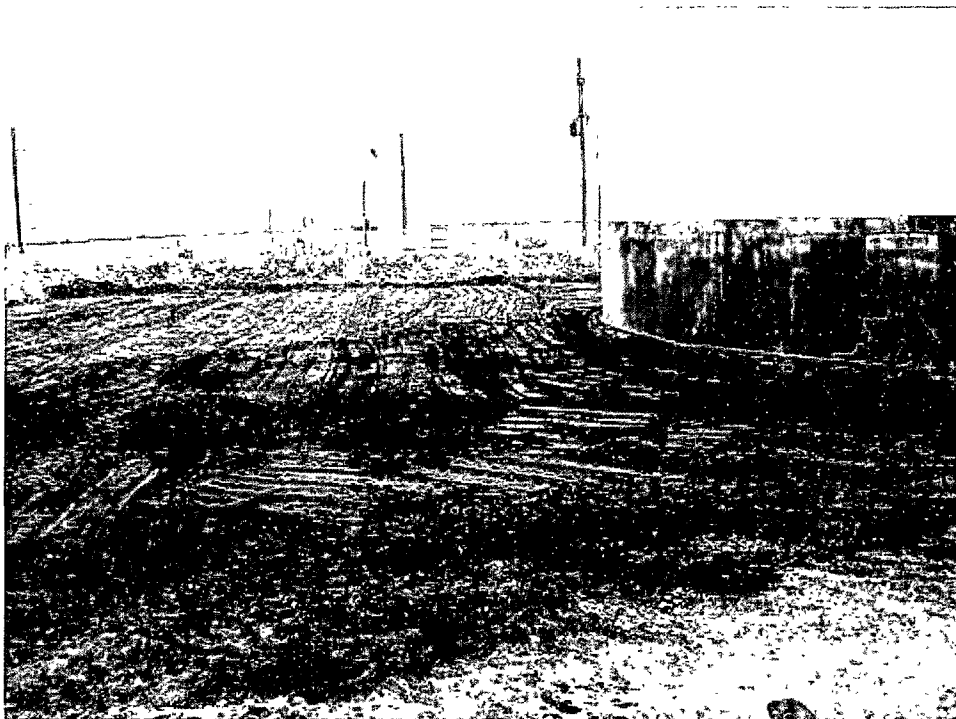


Soil Remediation Looking West, February 11, 2010

Photographic Documentation



Soil Remediation Looking South, February 11, 2010

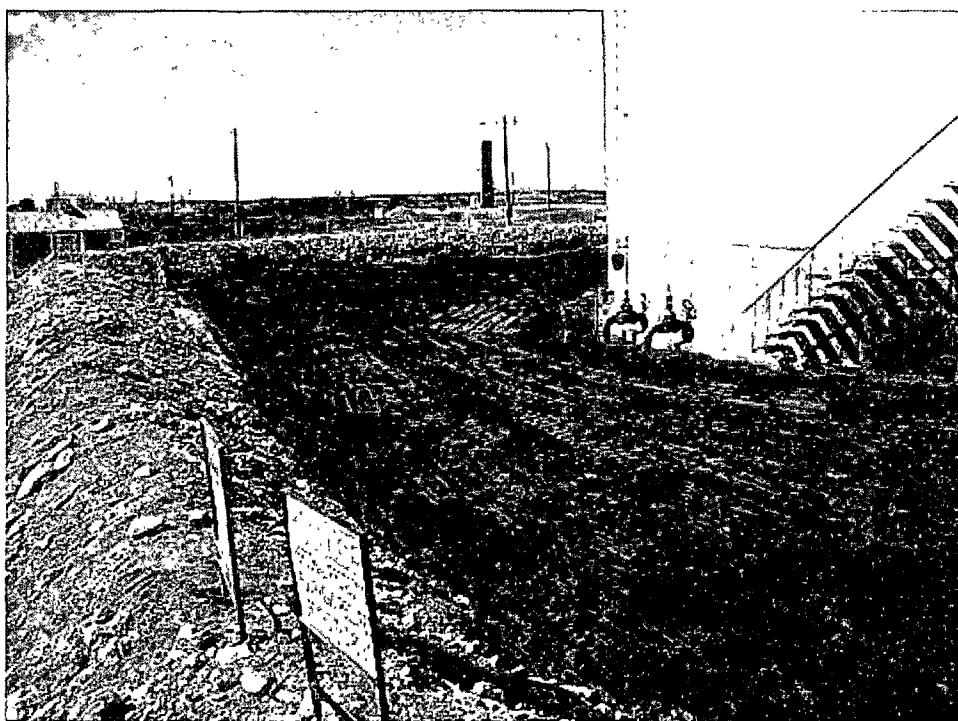


Soil Remediation Looking South, February 11, 2010

Photographic Documentation

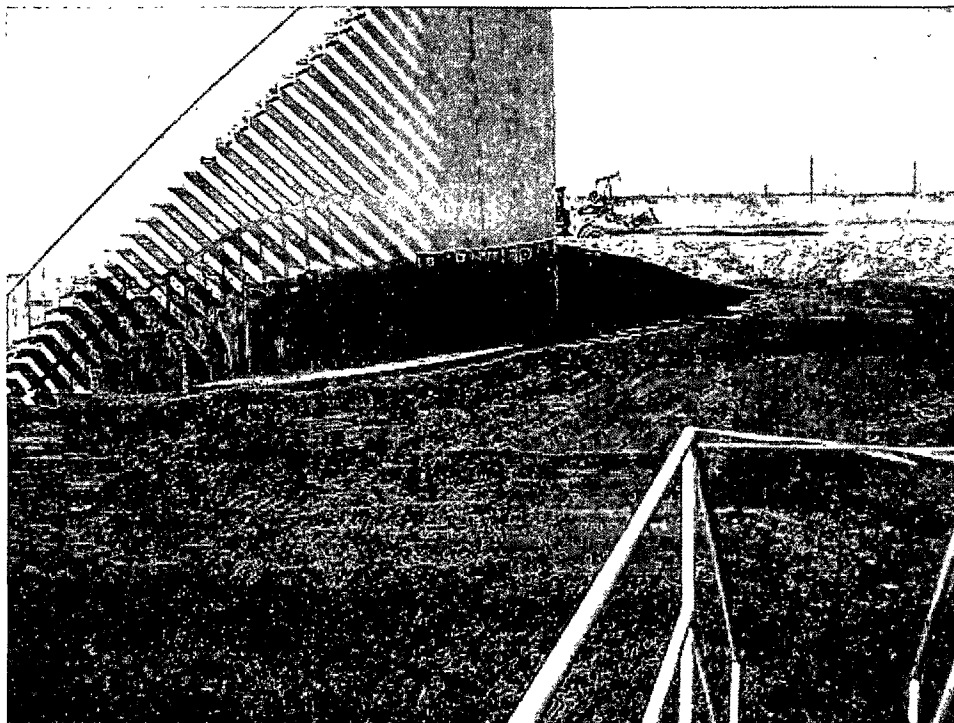


Soil Remediation Looking East, February 11, 2010



Soil Remediation Looking West, February 11, 2010

Photographic Documentation



Soil Remediation Looking North, February 11, 2010



Soil Remediation Looking Northeast, February 11, 2010