AP - 9

STAGE 2 REPORTS

DATE: March 2010

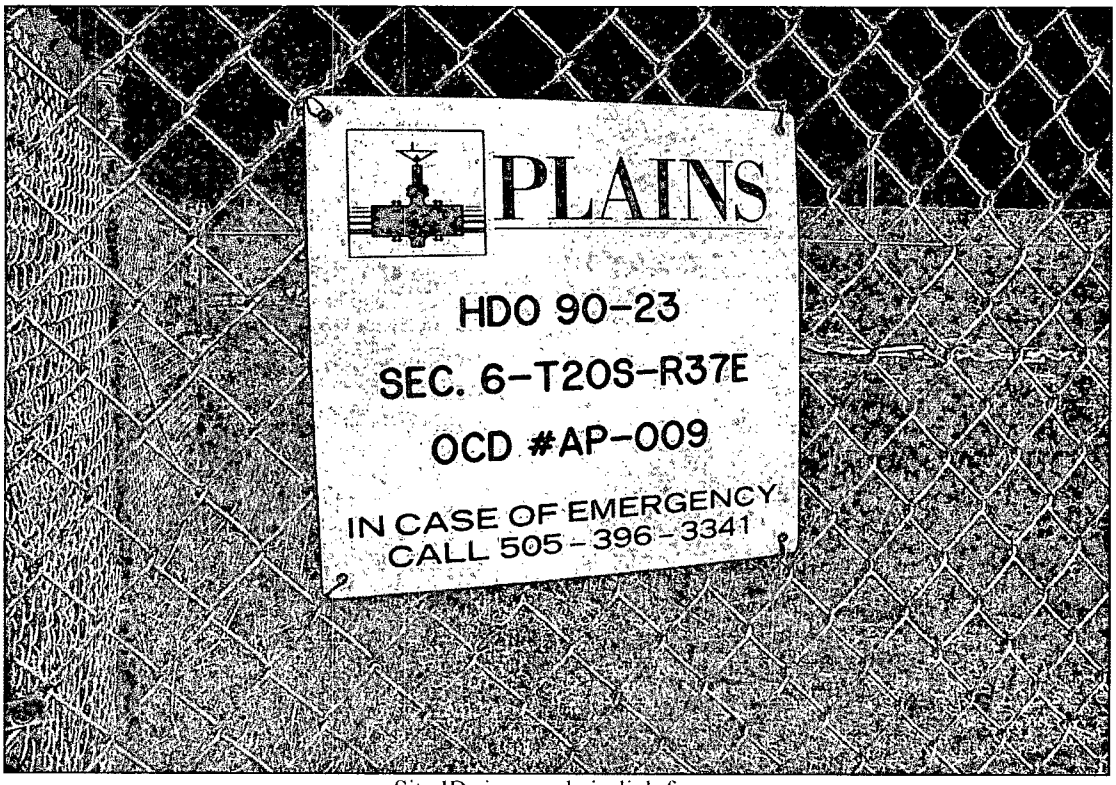
Hansen, Edward J., EMNRD

From: Jason Henry [JHenry@paalp.com]
Sent: Tuesday, June 01, 2010 3:26 PM
To: Hansen, Edward J., EMNRD
Cc: Jeffrey P Dann
Subject: Plains HDO 90-23 site (AP-009)
Attachments: HDO 90-23 Site Photos May 2010 and Soil Boring Details.pdf

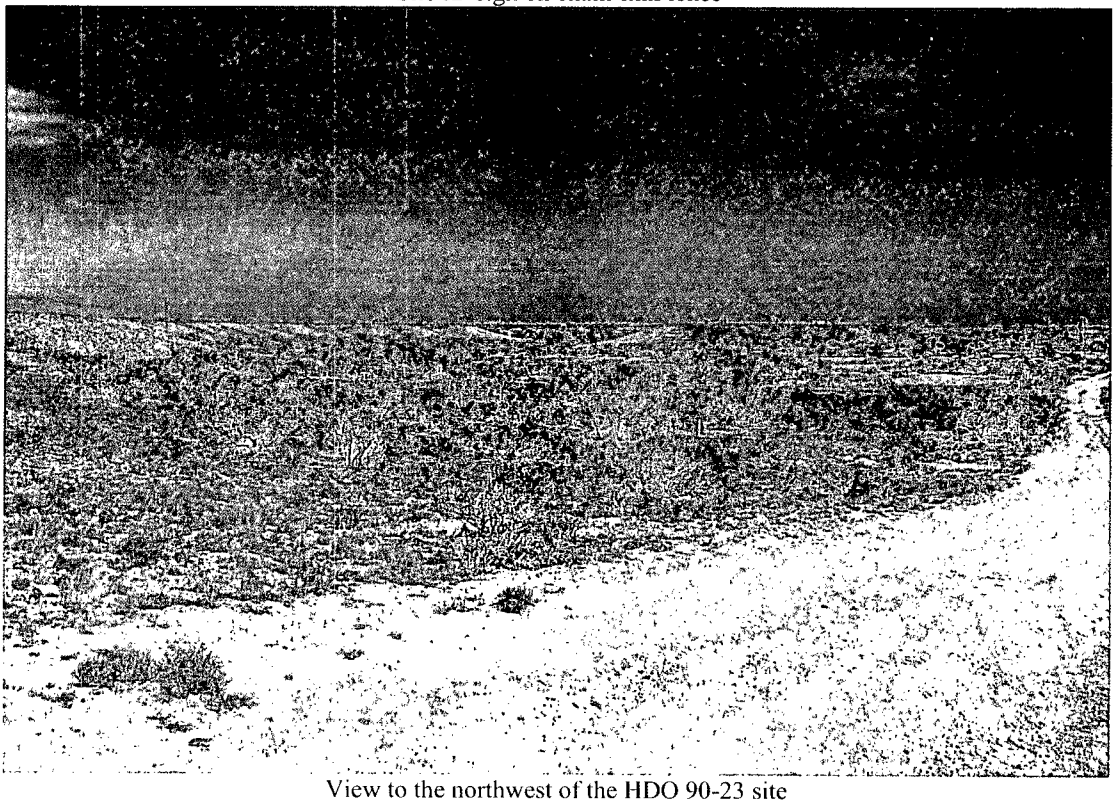
Ed,

As per your request, attached are some recent HDO 90-23 site photos and the 11/12/2009 Soil Boring Logs. Nova is still researching the location of the HA sample from 04/07/2003.

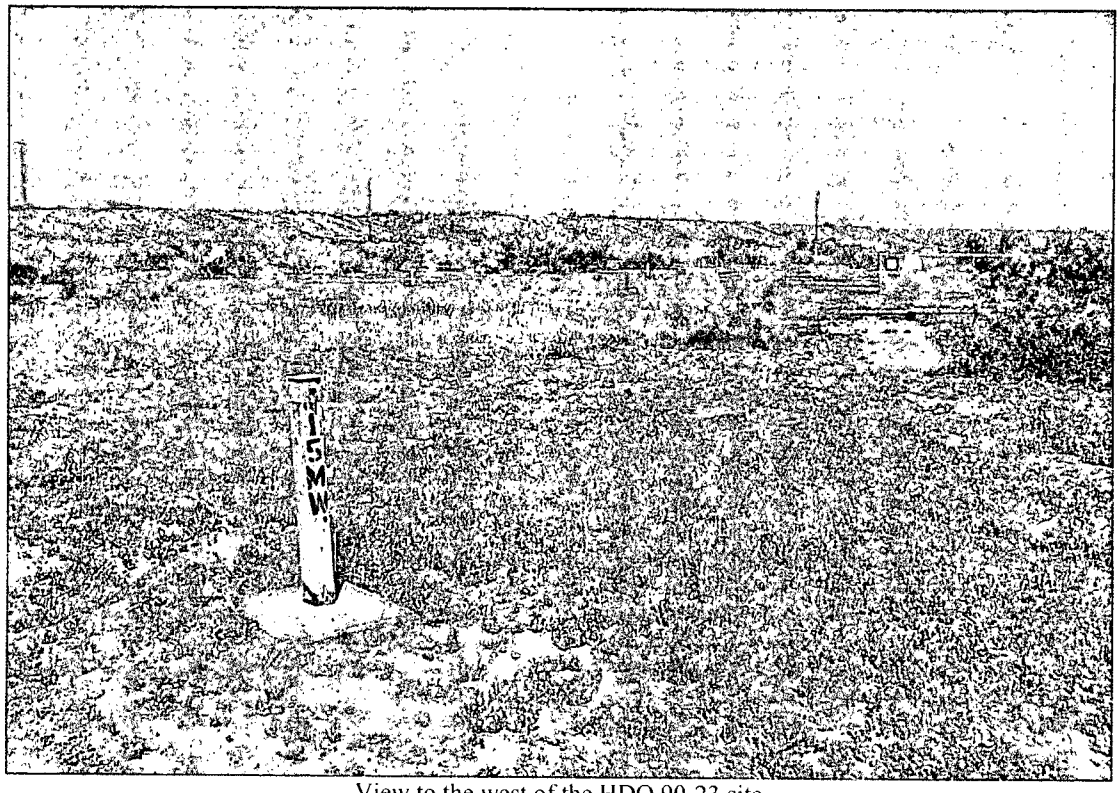
Thank you,
Jason Henry



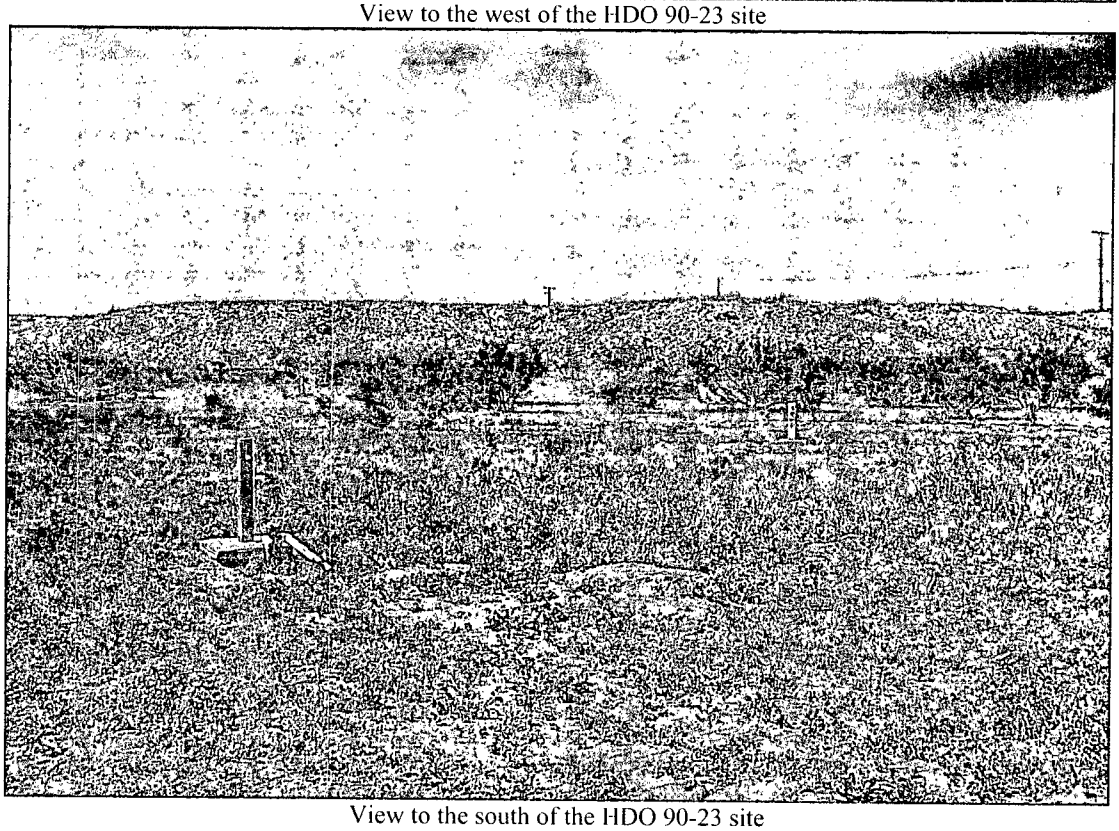
Site ID sign on chain-link fence



View to the northwest of the HDO 90-23 site

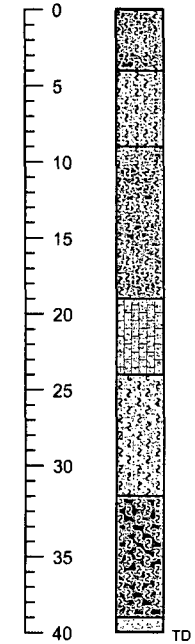


View to the west of the HDO 90-23 site



View to the south of the HDO 90-23 site

Soil Boring Log SB-F



Soil Description

0 - 4' - Sand, Silty, Dark brown. Very fine grained, Dry

4' - 9' - Sand, Silty, Very Dark Gray

9' - 19' - Sand, Silty, Dark Brown, Very fine grained, Dry

19' - 24' - Sand, with Caliche, Lt. Gray

24' - 32'- Sand, Silty, Tan, Very fine grained, Dry.

32' - 39'- Sand, Silty, Reddish Brown, Very fine grained, Dry.

39'- 40' - Sand, with Poorly Sorted Ground
TD = 40'

Soil Boring Details

Date Drilled: 11-12-09

Depth of Boring: 40 ft

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

(1.2) Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

▼ Indicates the groundwater interface.

Legend:

Clay | Caliche | Sand | Caliche Fragments | Gravel | Silt

Soil Boring SB-F
Log Details
Plains - HDO 90-23
SRS# HDO 90-23
Plains Pipeline, L.P.
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

Scale: NTS	Drawn By: SAT	Checked By: RKR
December 26, 2009		

Soil Boring Log SB-G

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain
0 - 5		416	Moderate Odor	
5 - 10		5144	Strong Odor	Dark Staining
10 - 15		1762		
15 - 20		3170		
20 - 25		883	Strong Odor	Moderate Staining
25 - 30		457	None	
30 - 35		338	None	
35 - 40	TD	908		

Soil Description

0 - 6' - Sand, Silty, Brown with calcarueous modules, Dry.

6' - 17' - Sand, Silty, Dark Gray, with Tan, Very fine grained, Dry

17' - 27' - Sand, Silty, Tan, Very fine grained, Dry.

27' - 32'- Sand, Silty, Tan,Lt. Reddish Brown, & Very fine grained, Dry.

32' - 40' - Sand, Silty, Dark Reddish Brown, Very fine grained. TD = 40'

Soil Boring Details

Date Drilled: 11-12-09

Depth of Boring: 40 ft

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

(1.2) Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

▼ Indicates the groundwater interface.

Legend:

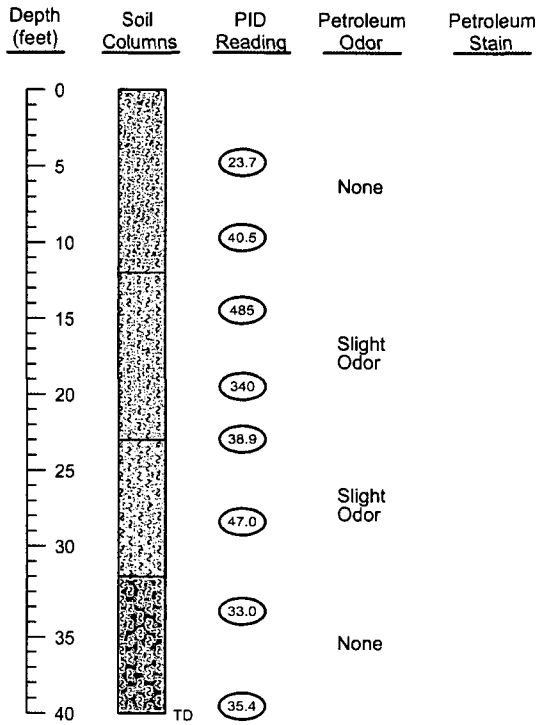
Clay | Caliche | Sand | Caliche Fragments | Gravel | Silt

Soil Boring SB-G
Log Details
Plains - HDO 90-23
SRS# HDO 90-23
Plains Pipeline, L.P.
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

Scale: NTS	Drawn By: SAT	Checked By: RKR
December 11, 2009		

Soil Boring Log SB-H



Soil Description

0 - 12' - Sand, Silty, Brown. Very fine grained, Dry.

12' - 23' - Sand, Silty, Lt. Brown. Very fine grained, Dry

23' - 32' - Sand, Silty, Tan, Very fine grained, Dry.

32' - 40' - Sand, Silty, Lt. Reddish Brown. Very fine grained.
TD = 40'

Soil Boring Details

Date Drilled: 11-12-09

Depth of Boring: 40 ft

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

(1.2) Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

▼ Indicates the groundwater interface.

Legend:

Clay | Caliche | Sand
Caliche Fragments | Gravel | Silt

Soil Boring SB-H
Log Details
Plains - HDO-90-23
SRS# HDO-90-23
Plains Pipeline, L.P.
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
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Scale: NTS	Drawn By: SAT	Checked By: RKR
December 26, 2009		

Soil Boring Log SB-I

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain
0				
5		8.7	None	None
10	TD	7.2		

Soil Description

0' - 10' - Sand, Silty, Lt. Reddish Brown.
Very fine grained.
TD = 10'

Soil Boring Details

Date Drilled: 11-12-09
Depth of Boring: 10 ft

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

7:30pm 8pm
$\frac{12}{4}$ 5:30am-6:16am

(1.2) Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

▼ Indicates the groundwater interface.

Legend:

Clay | Caliche | Sand
Caliche Fragments | Gravel | Silt

Soil Boring SB-I
Log Details
Plains - HDO-90-23
SRS# HDO-90-23
Plains Pipeline, L.P.
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

Scale: NTS	Drawn By: SAT	Checked By: RKR
December 28, 2009		

Soil Boring Log SB-J

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain
0				
5		19.3	None	None
10	TD	7.4		

Soil Description

0' - 10' - Sand, Silty, Brown to Lt. Brown.
Very fine grained.
TD = 10'

Soil Boring Details

Date Drilled: 11-12-09
Depth of Boring: 10 ft

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

7:30pm 8pm
12/4 5:30am-6:16am

(1.2) Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

▼ Indicates the groundwater interface.

Legend:

Clay | Caliche | Sand
Caliche Fragments | Gravel | Silt

Soil Boring SB-J
Log Details
Plains - HDO-90-23
SRS# HDO-90-23
Plains Pipeline, L.P.
Lea County, NM

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432.520.7720
www.novasafetyandenvironmental.com

Scale: NTS	Drawn By: SAT	Checked By: RKR
December 28, 2009		

SOIL CLOSURE REQUEST

HDO-90-23

NE ¼ NW ¼ SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
NMOCD Reference Number AP-009
Plains SRS #: HDO-90-23

RECEIVED
MAR 25 2010
Environmental Bureau
Oil Conservation Division

Prepared for:

PLAINS MARKETING, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002

NOVA safety and environmental

Prepared by:

NOVA Safety and Environmental
2057 Commerce Drive
Midland, Texas 79703

March 2010

Ronald K. Rounsaville
Senior Project Manager

Brittan K. Byerly, P.G.
President

PLAINS
MARKETING L.P.

March 22, 2010

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RECEIVED
MAR 25 2010
Environmental Bureau
Oil Conservation Division

RE: Plains Marketing, L.P. HDO-90-23 Site
NMOCD Reference # AP-009
Unit Letter C of Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Dear Mr. Hansen:

Plains Marketing, L.P. is pleased to submit the attached *Soil Closure Request*, dated March 2010, for the HDO-90-23 site. This site is located in Section 6 of Township 20 South, and Range 37 East of Lea County, New Mexico. This document details the soil investigation activities performed at the site during November 2009.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry
Remediation Coordinator
Plains Marketing, L.P.

CC: Larry Johnson, NMOCD, Hobbs Office

Enclosure

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION AND PURPOSE

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Soil Closure Request for the site known as HDO-90-23 (HDO). The site is located in the NE 1/4 of the NW 1/4 of Section 6, Township 20 South, Range 37 East in Lea County, New Mexico. A Site Location Map is provided as Figure 1.

The HDO 90-23 Release was discovered by Texas-New Mexico Pipe Line Company (TNM) personnel and reported on March 27, 1990. According to the release report, an estimated 750 barrels of crude oil were released and 550 barrels were recovered. The release occurred from a 14-inch TNM pipeline and was attributed to structural failure associated with internal pipeline corrosion. Limited excavation was reported around the release point to repair the pipeline. A site map depicting the locations of the soil borings, initial excavation, the locations of monitor wells and other site details, is provided as Figure 2. The Release Notification and Corrective Action (Form C-141) is provided as Appendix C.

2.0 NMOCD– SITE CLASSIFICATION

The depth to groundwater at the site is approximately 46 feet below ground surface (bgs). Based on the NMOCD soil classification system, 20 points would be assigned to the site as a result of this criterion. There is one groundwater production well located within 1,000 feet of the site. Based on the NMOCD Soil Classification System, 20 points would be assigned to the site as a result of this criterion. There are no surface-water features identified within a one-mile radius of the site. Based on the NMOCD Soil Classification System, 0 points would be assigned to the site as a result of this criterion. The NMOCD guidelines indicate that the site would have a Ranking Score of >19. The soil action levels for a site with a Ranking Score of >19 points are as follows:

- Benzene - 10 mg/Kg
- Benzene, Toluene, Ethyl benzene, and total Xylenes (BTEX) - 50 mg/Kg
- Total Petroleum Hydrocarbons (TPH) - 100 mg/Kg

3.0 BACKGROUND INFORMATION

The initial site investigation consisted of the installation of nine soil borings and five monitoring wells by a previous contractor to assess the subsurface conditions. In September 1999, Environmental Technical Group, Inc. (ETGI), advanced one soil boring (SB-10), ten geoprobe soil borings (GP-1 through GP-10), and installed three additional monitor wells (MW-6, MW-7 and MW-8) to define the extent of petroleum impacted soil and groundwater. In September 1999, a Subsurface Investigation Report/Stage 2 Abatement Plan (Abatement Plan) was submitted to the NMOCD. The Abatement Plan recommended chemical oxidation of petroleum impacted soils by the use of high-pressure injection of a hydrogen peroxide solution. On June 14, 2000, following the injection of approximately 23,000 gallons of hydrogen peroxide solution into the subsurface impacted soils, five soil borings (SB-A through SB-E) were advanced to document the status of soil remediation as a result of the chemical oxidation. Analytical results indicated soil TPH concentrations had been reduced by an average of 94% from the 1999

analytical data. In the fall of 2002, monitor wells MW-9 through MW-15 were installed. A summary of soil analytical data is presented as Table 1.

Currently, thirteen groundwater monitor wells (MW-2 through MW-6, MW-8, MW-9 and MW-12 through MW-17) and two product recovery wells (RW-1 and RW-2) are onsite. Please refer to Figure 2 Site Map for locations of existing monitor wells. The most recent groundwater data can be found in the 2008 Annual Groundwater Monitoring Report for the site. The 2009 Annual Groundwater Monitoring Report will be submitted to the NMOCD prior to April 1, 2010.

4.0 COMPARATIVE RESULTS OF 2009 SOIL BORINGS

The objective of the 2009 Soil Investigation was to re-evaluate those areas having TPH and/or BTEX concentrations above the NMOCD remediation guidelines identified during the soil investigations conducted during the 1990 through 2004 investigation and remediation activities.

On November 11, 2009, five soil borings were advanced within five areas of concern identified in the *Site Investigation Work Plan* dated June 2009. Soil samples were collected at the same intervals as samples collected during the 1990 through 2004 drilling and sampling activities. Soil borings SB-F, SB-G, and SB-H were each advanced to a total depth of 40 feet below ground surface (bgs).

Analytical results of soil samples collected from soil boring SB-F exhibited TPH concentrations above NMOCD standards (at 5, 10, 15, 20, and 25 feet bgs) ranging from 554 mg/Kg at 20 feet to 852 mg/Kg at 25 feet and Total BTEX concentrations below NMOCD standards ranging from 0.547 mg/Kg at 5 feet to 6.5152 mg/Kg at 15 feet bgs. The soil samples collected at 5, 10, 15, 20 and 25 feet bgs indicates TPH concentrations above the NMOCD regulatory standard of 100 mg/Kg. Benzene and BTEX concentrations were below the NMOCD regulatory standards of 10 mg/Kg and 50 mg/Kg, respectively. The soil samples collected at 30, 35, and 40 feet exhibited PID readings of 104, 71.1 and 53.8, respectively and were not analyzed.

Soil boring SB-F is comparable in location to monitor well MW-6 and soil boring SB-A. Monitor well MW-6 was installed in September of 1999, and was sampled at 5-7 feet bgs, 25-27 feet bgs, and 40-42 feet bgs. The maximum TPH concentration was found at 5-7 feet bgs (6891 mg/kg) with a BTEX of 281.10 mg/kg. Soil boring SB-A was drilled and sampled in June of 2000. Soil samples were collected at approximately five foot intervals to a final sample at 45-47 feet bgs. The maximum concentration of TPH detected in SB-A occurred in the 10-12 foot bgs sample at 3144 mg/kg. Soil boring SB-A maximum BTEX concentration of 104.07 mg/kg was detected in the 5-7 foot bgs sample. Compared to the concentrations of TPH and BTEX detected in SB-F of 852 mg/kg and 6.5152 mg/kg, respectively, the reduction in contaminant concentrations in this area from 1999 to 2009 indicate that natural attenuation is effective and ongoing.

Soil boring SB-G was located adjacent to monitor well MW-2. Analytical results of soil samples collected from soil boring SB-G exhibited TPH concentrations above NMOCD standards (at 5, 10, 15, 20, 25, 30, 35 and 40 feet bgs) ranging from 257 mg/Kg at 5 feet to 1,800 mg/Kg at 40 feet and BTEX concentrations below NMOCD standards ranging from 0.706 mg/Kg at 35 feet to 9.08 mg/Kg at 10 feet bgs. The soil samples collected at 5, 10, 15, 20, 25, 30, 35 and 40 feet bgs indicated TPH concentrations above the NMOCD regulatory standard of 100 mg/Kg. Benzene

and Total BTEX concentrations were below the NMOCD regulatory standards of 10 mg/Kg and 50 mg/Kg, respectively.

Soil boring SB-G can be compared to previous data collected in monitor well MW-2 and recovery well RW-1. Monitor well MW-2 was installed in February of 1998. A total of three soil samples were collected from monitor well MW-2, with the maximum concentration of 6560 mg/kg TPH detected in the 15-17 feet bgs sample. Recovery well RW-1 was installed in December of 2002. During installation of recovery well RW-1, soil samples were collected on five foot intervals to a total depth of 45 feet bgs. No TPH were detected in any of the samples collected within recovery well RW-1 (this is considered to be anomalous data). The maximum concentration of BTEX detected in RW-1 was 1.18 mg/kg at 10 feet bgs.

Soil boring SB-C can also be compared to soil boring SB-G, installed and sampled in June of 2000, and located approximately 60 feet southeast of soil boring SB-G. The maximum concentration of TPH detected in SB-C was 2979 mg/kg at 30-32 feet bgs. The maximum concentration of BTEX was 286.8 mg/kg at 5-7 feet bgs. Comparison of the 2009 analytical data collected from soil boring SB-G to the data collected in the same area from 1998 to 2000, indicate that the levels of TPH and BTEX have dramatically reduced over that time span.

Soil boring SB-H was located approximately 75 feet south of recovery well RW-2 and 75 feet west of recovery well RW-1. Analytical results of soil samples collected from soil boring SB-H exhibited TPH concentrations above NMOCD standards at 15 feet bgs (1,473 mg/Kg) and 20 feet bgs (998.8 mg/Kg) and BTEX concentrations below NMOCD standards at 15 feet bgs (1.146 mg/Kg) and 20 feet bgs (0.325 mg/Kg). The soil samples collected at 15 and 20 feet bgs indicated TPH concentrations above the NMOCD regulatory standard of 100 mg/Kg. Benzene and BTEX concentrations were below the NMOCD regulatory standards of 10 mg/Kg and 50 mg/Kg, respectively. The soil samples collected at 5, 10, 25, 30, 35, and 40 feet bgs exhibited PID readings below 50 ppm and were not analyzed.

Soil boring SB-H can be compared to the results reported for recovery wells RW-1 and RW-2. Soil boring SB-H is also located in a central location to the four other areas of concern addressed by the 2009 drilling event. The analytical results derived from soil boring SB-H confirm the analytical results from soil borings SB-F and SB-G: that the known subsurface vadose zone contaminant is defined in area and has decreased significantly over the site during the previous 10 years.

Soil borings SB-I and SB-J were each advanced to a total depth of 10 feet below ground surface (bgs). Soil boring SB-I was advanced adjacent to monitor well location MW-12 in the vicinity of former soil boring location SB-D. Analytical results of soil samples collected from soil boring SB-I indicated TPH, benzene and BTEX concentrations were below laboratory method detection limits and below the NMOCD regulatory standards at the five foot sample depth. Results from soil sampling during the installation of soil boring SB-D in June of 2000 and monitor well MW-12 installed in December of 2002 detected TPH and BTEX contamination in SB-D of 3042 mg/kg and 64.43 mg/kg, respectively at 0-2 feet bgs. The results of the sample collected at 4-5 feet bgs in November of 2009 from soil boring SB-I did not contain any TPH or BTEX above method detection limits, indicating that the area around soil borings SB-D, SB-I, and monitor well MW-12 has attenuated and should be eliminated from the soil concerns identified at the site.

Soil boring SB-J was advanced adjacent to former soil boring locations GP-9 and SB-B. Analytical results of soil samples collected from soil boring SB-J indicated TPH, benzene and BTEX concentrations were below laboratory method detection limits and below the NMOCD regulatory standards at the five foot sample depth.

Geoprobe GP-9 was advanced and sampled in September of 1999. Analytical results derived from the sample obtained from 15-16 feet bgs indicated that no detectable TPH was present but that 0.876 mg/kg BTEX was present. Soil boring SB-D was advanced in June of 2000, with samples collected at 0-2 feet bgs and 45-47 feet bgs containing TPH above NMOCD regulatory standards (221 mg/kg and 607 mg/kg, respectively). Total BTEX detections in soil boring SB-D occurred at sample depths of 0-2 feet bgs (1.173 mg/kg), 5-7 feet bgs (0.225 mg/kg), 10-12 feet bgs (0.384 mg/kg), 30-32 feet bgs (0.725 mg/kg), 35-37 feet bgs (0.143 mg/kg), 40-42 feet bgs (0.207 mg/kg), and 45-47 feet bgs (0.615 mg/kg). A comparison of soil boring SB-J with the 1999 and 2000 data indicate that the near surface detections have degraded and that remaining concentrations of contaminant do not exceed or are close to satisfying NMOCD regulatory standards.

A summary of the Concentrations of BTEX and TPH in Soil is provided as Table 1. Lithologic and Soil Boring logs for the five soil borings from November of 2009 are provided as Appendix A. Laboratory reports are included as Appendix B.

5.0 CONCLUSIONS

Based on analytical results, Plains proposes that monitored natural attenuation is progressing at the site known as HDO-90-23, and towards NMOCD regulatory standards for closure of the soil contamination issues. Soil data indicates that the soil above NMOCD standards is located in the vicinity of monitor wells MW-2 and MW-6, and recovery wells RW-1 and RW-2. This area also contains the majority of the remaining groundwater impact at the site. Groundwater data indicate that the groundwater plume is decreasing over the site, and that in the areas of monitor wells MW-2 and MW-6, and recovery wells RW-1 and RW-2 the groundwater plume is attenuating with time as well. Based upon the data collected from 1998 to 2009 in soil and groundwater, Plains respectfully requests that the NMOCD grant closure of the soil issues at HDO-90-23.

- The site monitor wells will be maintained and monitored until the NMOCD grants closure of the groundwater.

6.0 REPORTING

An Annual Groundwater Monitoring Report will be prepared and submitted to the NMOCD prior to April 1 of each year until closure of the site is granted by the NMOCD.

7.0 LIMITATIONS

NOVA has prepared this Soil Closure Proposal to the best of its ability. No other warranty, expressed or implied, is made or intended. NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has

not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This Soil Closure Proposal has been prepared for the benefit of Plains. The information contained in this report including all exhibits and attachments may not be used by any other party without the express written consent of NOVA and/or Plains.

8.0 DISTRIBUTION

Copy 1:
Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
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Santa Fe, NM 87505

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Larry Johnson
New Mexico Oil Conservation Division (District 1)
1625 French Drive
Hobbs, NM 88240

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Copy 5:
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2057 Commerce Drive
Midland, TX 79703
rrounsaville@novatraining.cc

FIGURES

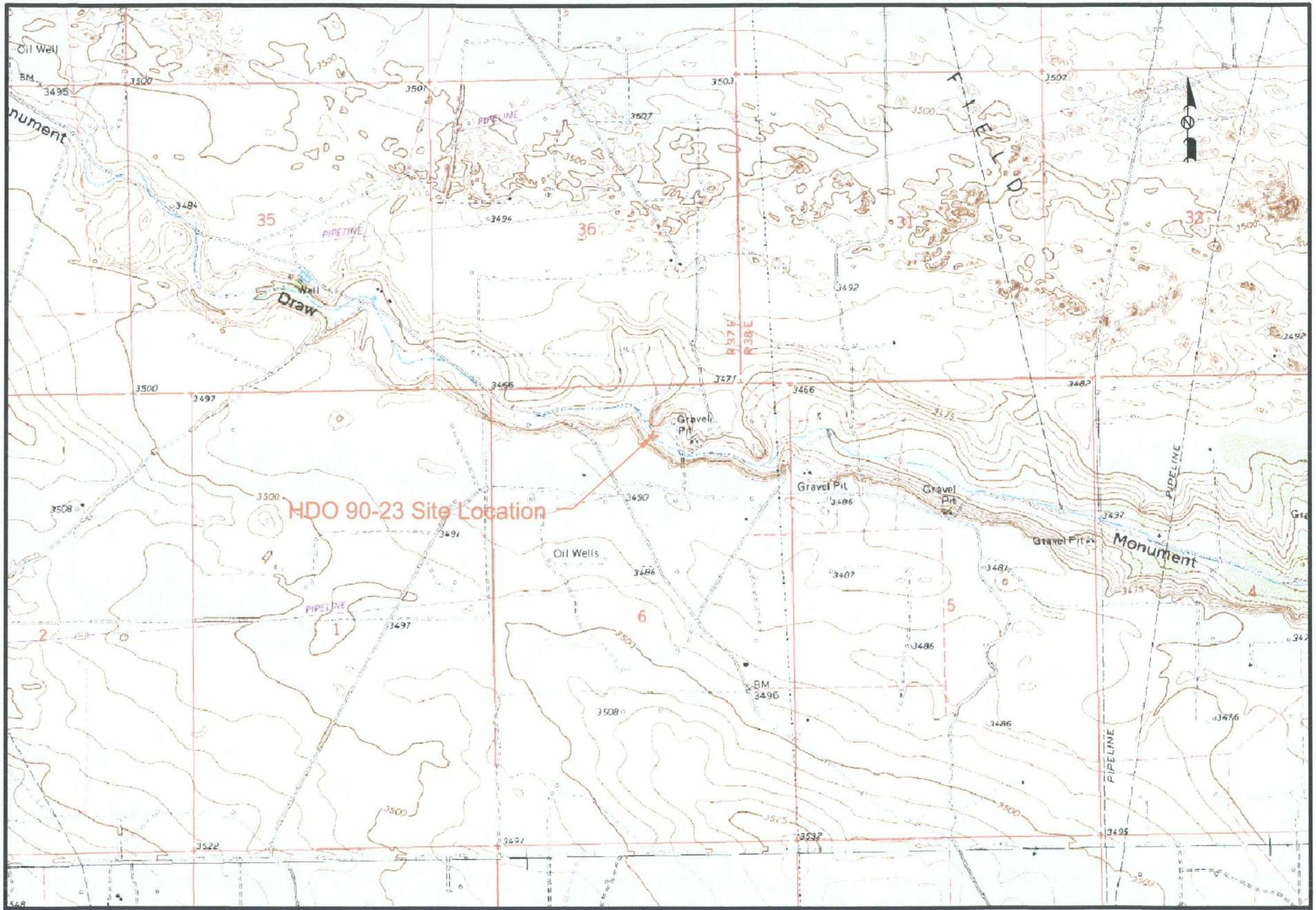


Figure 1
Site Location Map

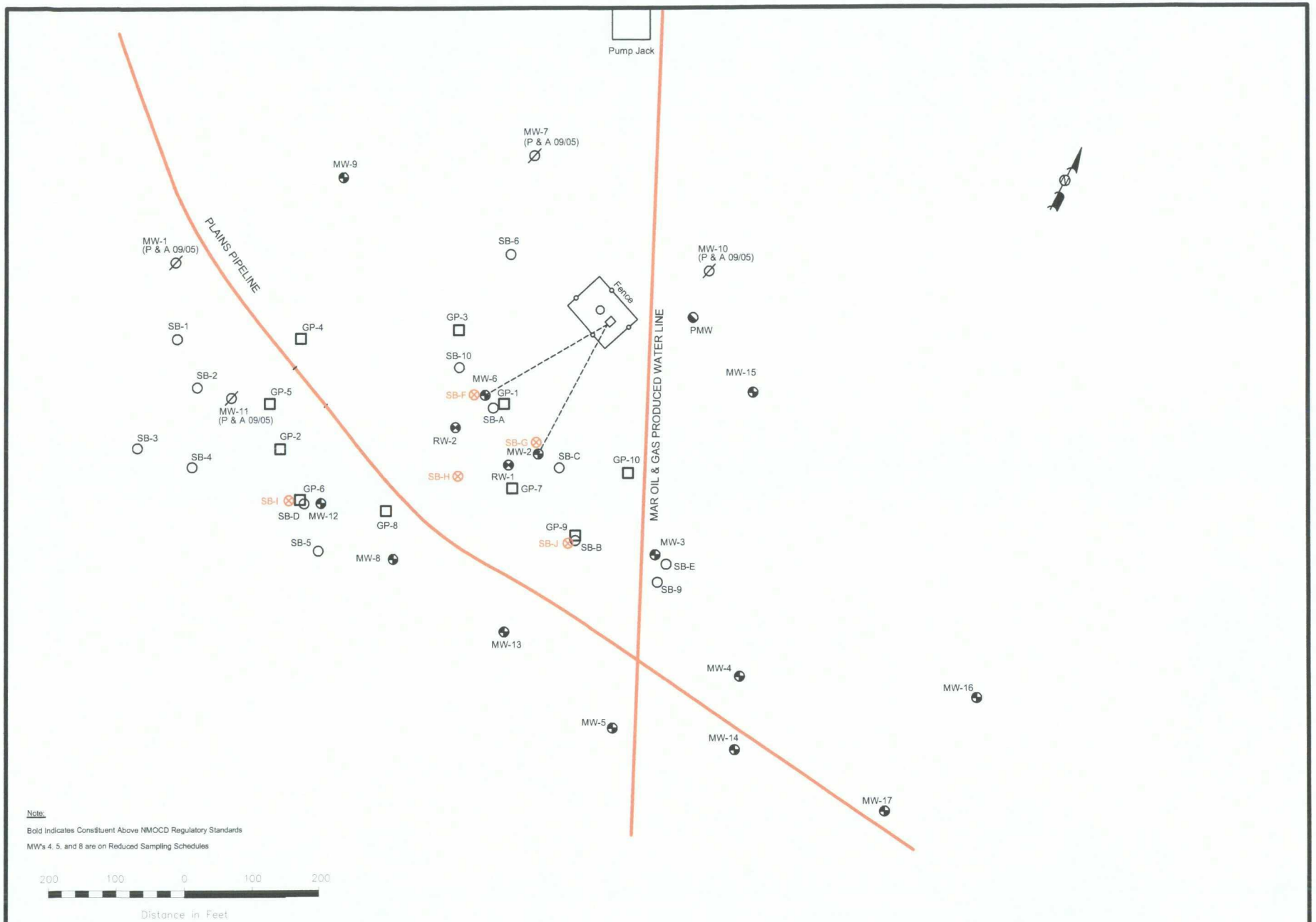
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

NMOCD Reference # AP-009

NOVA Safety and Environmental

NOVA safety and environmental

NE1/4 NW1/4 Sec 6 T20S R37E		February 20, 2005
Scale: NTS	Prep By: CDS	Checked By: TKC



LEGEND:

- Monitor Well Location
- Recovery Well Location
- Soil Boring Locations (1999-2000)
- Soil Boring Locations (2009)
- Pipeline
- Geoprobe Boring Locations (1999)

Figure 2
Soil Boring
Location Map
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 200'	CAD By: SAT	Checked By: RKR
December 03, 2009		

TABLES

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS PIPELINE, L.P.

HDO 90-23

MONUMENT (LEA COUNTY), NEW MEXICO

All concentrations are reported in mg/kg

SAMPLE LOCATION	SAMPLE DATE	8015M			SW 846-8021B, 5030				
		GRO C_6-C_{12}	DRO >C_{12}-C_{35}	TOTAL C_6-C_{35}	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX
MW-2, 10'-12'	02/03/98	–	–	**2,830**	NA	NA	NA	NA	0
MW-2, 15'-17'	02/03/98	–	–	**6,560**	NA	NA	NA	NA	0
MW-2, 40'-42'	02/03/98	–	–	**157**	NA	NA	NA	NA	0
MW-3, 5'-7'	02/23/98	–	–	**1,960**	NA	NA	NA	NA	0
MW-3, 25'-27'	02/23/98	–	–	70	NA	NA	NA	NA	0
MW-3, 40'-42'	02/23/98	–	–	**1,040**	NA	NA	NA	NA	0
MW-6, 5'-7'	09/02/99	**3,460**	**3,431**	**6,891**	6.69	22.04	108.9	143.47	**281.1**
MW-6, 25'-27'	09/02/99	**1,322**	**1,443**	**2,765**	2.45	27.49	31.98	44.77	**106.69**
MW-6, 40'-42'	09/02/99	46	**395**	**441**	<0.100	0.132	0.354	1.217	1.703
MW-7, 10'-12'	09/02/99	<10.0	53	53	<0.100	<0.100	<0.100	0.166	0.166
MW-7, 40'-42'	09/02/99	<10.0	15	15	0.139	<0.100	0.106	0.125	0.37
SB-10, 10'-12'	09/02/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	0.115	0.115
SB-10, 40'-42'	09/02/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	0.472	0.472
GP-2, 10'-12'	09/02/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	0.1	0.1
GP-3, 22'-23'	09/03/99	<10.0	<10.0	<10.0	<0.100	0.12	<0.100	0.107	0.227
GP-4, 14'-16'	09/03/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	0.104	0.104
GP-5, 12'-14'	09/03/99	**2,870**	**4,557**	**7,427**	3.67	39.29	69.56	89.55	**202.07**
GP-6, 14'-16'	09/03/99	<10.0	**217**	**217**	<0.100	0.262	0.127	0.447	0.836
GP-8, 10'-12'	09/03/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	0.102	0.102
GP-9, 15'-16'	09/03/99	<10.0	<10.0	<10.0	<0.100	0.237	0.111	0.528	0.876
GP-10, 15'-16'	09/03/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
MW-8, 10'-12'	09/03/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
MW-8, 40'-42'	09/03/99	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-A, 0'-2'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	0.145	0.269	0.414
SB-A, 5'-7'	06/14/00	**583**	**1,026**	**1,609**	0.608	2.67	45.5	55.29	**104.068**
SB-A, 10'-12'	06/14/00	**623**	**2,521**	**3,144**	<0.100	1.4	5.65	10.13	17.18
SB-A, 15'-17'	06/14/00	**361**	**2,079**	**2,440**	<0.100	1.44	4.08	8.80	14.32
SB-A, 20'-22'	06/14/00	**157**	**1,399**	**1,556**	<0.100	1.25	2.58	5.04	8.87
SB-A, 25'-27'	06/14/00	<10.0	35	35	<0.100	0.189	<0.100	<0.100	0.189
SB-A, 30'-32'	06/14/00	<10.0	18	18	<0.100	<0.100	<0.100	<0.100	0
SB-A, 35'-37'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.198	0.100	0.102	0.4
SB-A, 40'-42'	06/14/00	<10.0	58	58	<0.100	0.174	<0.100	<0.100	0.174
SB-A, 45'-47'	06/14/00	10	**595**	**605**	<0.100	<0.100	<0.100	<0.100	0
SB-B, 0'-2'	06/14/00	<10.0	**221**	**221**	0.118	0.285	0.191	0.579	1.173
SB-B, 5'-7'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.113	<0.100	0.112	0.225
SB-B, 10'-12'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.202	<0.100	0.182	0.384
SB-B, 15'-17'	06/14/00	<10.0	14	14	<0.100	<0.100	<0.100	<0.100	0
SB-B, 20'-22'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-B, 25'-27'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-B, 30'-32'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.130	0.225	0.37	0.725
SB-B, 35'-37'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.143	<0.100	<0.100	0.143
SB-B, 40'-42'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.207	<0.100	<0.100	0.207
SB-B, 45'-47'	06/14/00	16	**591**	**607**	<0.100	0.230	0.188	0.197	0.615
SB-C, 0'-2'	06/14/00	<10.0	10	10	<0.100	<0.100	<0.100	<0.100	0
SB-C, 5'-7'	06/14/00	**412**	**476**	**888**	**16.7**	**14.6**	**133**	**122.5**	**286.8**
SB-C, 10'-12'	06/14/00	41	**464**	**505**	<0.100	0.513	1.34	1.997	3.85
SB-C, 15'-17'	06/14/00	<10.0	92	92	0.268	0.205	1.16	1.426	3.059
SB-C, 20'-22'	06/14/00	<10.0	**352**	**352**	<0.100	0.161	0.352	0.593	1.106
SB-C, 25'-27'	06/14/00	**150**	**2,461**	**2,611**	0.313	4.48	6.13	9.12	20.043
SB-C, 30'-32'	06/14/00	**175**	**2,979**	**3,154**	<0.100	2.32	3.68	5.79	11.79
SB-C, 35'-37'	06/14/00	**106**	**2,464**	**2,570**	0.203	3.14	4.12	5.96	13.423
SB-C, 40'-42'	06/14/00	**310**	**2,470**	**2,780**	0.575	6.45	8.36	12.57	27.955
SB-C, 45'-47'	06/14/00	<10.0	**483**	**483**	<0.100	0.365	0.392	0.642	1.399

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS PIPELINE, L.P.

HDO 90-23

MONUMENT (LEA COUNTY), NEW MEXICO

All concentrations are reported in mg/kg

SAMPLE LOCATION	SAMPLE DATE	8015M			SW 846-8021B, 5030				
		GRO C_6-C_{12}	DRO >C_{12}-C_{35}	TOTAL C_6-C_{35}	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX
SB-D, 0'-2'	06/14/00	**264**	**2,778**	**3,042**	2.0	20.7	16.9	24.83	**64.43**
SB-D, 5'-7'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.273	0.702	0.927	1.902
SB-D, 10'-12'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.235	0.667	0.668	1.57
SB-D, 15'-17'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-D, 20'-22'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-D, 25'-27'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-D, 30'-32'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	0.116	<0.100	0.116
SB-D, 35'-37'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-D, 40'-42'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-D, 45'-47'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 0'-2'	06/14/00	<10.0	36	36	<0.100	<0.100	0.173	0.474	0.647
SB-E, 5'-7'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 10'-12'	06/14/00	<10.0	<10.0	<10.0	<0.100	0.238	0.277	0.288	0.803
SB-E, 15'-17'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 20'-22'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 25'-27'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 30'-32'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 35'-37'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 40'-42'	06/14/00	<10.0	24	24	<0.100	<0.100	<0.100	<0.100	0
SB-E, 45'-47'	06/14/00	<10.0	**263**	**263**	<0.100	<0.100	<0.100	<0.100	0
SB-E, 50'-52'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
SB-E, 55'-57'	06/14/00	<10.0	<10.0	<10.0	<0.100	<0.100	<0.100	<0.100	0
RW-1 5'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 10'	12/18/02	<10.0	<10.0	<10.0	0.064	0.08	0.38	0.653	1.177
RW-1 15'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 20'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 25'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 30'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 35'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 40'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-1 45'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 5'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 10'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 15'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 20'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 25'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 30'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 35'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 40'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
RW-2 45'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 5'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 10'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 15'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 20'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 25'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 30'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 35'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 40'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 45'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-9 50'	12/18/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS PIPELINE, L.P.

HDO 90-23

MONUMENT (LEA COUNTY), NEW MEXICO

All concentrations are reported in mg/kg

SAMPLE LOCATION	SAMPLE DATE	8015M			SW 846-8021B, 5030				
		GRO C_6-C_{12}	DRO >C_{12}-C_{35}	TOTAL C_6-C_{35}	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX
MW-10 5'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 10'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 15'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 20'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 25'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 30'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 35'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 40'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 45'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-10 50'	12/29/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 5'	12/30/02	<10.0	<10.0	<10.0	<0.025	0.026	0.028	0.056	0.11
MW-11 10'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 15'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 20'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 25'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 30'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 35'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 40'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 45'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-11 50'	12/30/02	<10.0	23.5	23.5	<0.025	<0.025	<0.025	<0.025	0
MW-12 5'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 10'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 15'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 20'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 25'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 30'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 35'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 40'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 45'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 50'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-12 55'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 5'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 10'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 15'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 20'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 25'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 30'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 35'	12/30/02	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 40'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 45'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-13 50'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 5'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 10'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 15'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 20'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 25'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 30'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 35'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 40'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 45'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-14 50'	01/02/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS PIPELINE, L.P.

HDO 90-23

MONUMENT (LEA COUNTY), NEW MEXICO

All concentrations are reported in mg/kg

SAMPLE LOCATION	SAMPLE DATE	8015M			SW 846-8021B, 5030				
		GRO C_6-C_{12}	DRO >C_{12}-C_{35}	TOTAL C_6-C_{35}	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX
MW-15 5'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 10'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 15'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 20'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 25'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 30'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 35'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 40'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 45'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-15 50'	01/03/03	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	0
MW-16@25'	12/02/04	<1	<50		<0.01	<0.01	<0.01	<0.01	0
MW-16@40'	12/02/04	<1	<50		<0.01	<0.01	<0.01	<0.01	0
MW-17@30'	12/02/04	<1	<50		<0.01	<0.01	<0.01	<0.01	0
MW-17@40'	12/04/04	<1	<50		<0.01	<0.01	<0.01	<0.01	0
HA 1'	04/07/03	**2070**	**3870**	**5940**					<20.0
HA 2'	04/07/03	**3570**	**5680**	**9250**					<20.0
HA 3'	04/07/03	**2510**	**3020**	**5530**					<20.0
SB-F, 4-5'	11/12/09	208	365	**573**	<0.050	<0.050	0.547	<0.05	0.547
SB-F, 9-10'	11/12/09	288	342	**630**	<0.050	0.0982	3.99	0.944	5.0322
SB-F, 14-15'	11/12/09	381	380	**761**	0.0812	<0.050	5.59	0.844	6.5152
SB-F, 19-20'	11/12/09	101	453	**554**	<0.050	<0.050	1.02	<0.05	1.02
SB-F, 24-25'	11/12/09	126	726	**852**	<0.050	0.216	1.35	1.72	3.286
SB-G, 4-5'	11/12/09	125	132	**257**	<0.050	<0.050	0.653	0.0599	0.7129
SB-G, 9-10'	11/12/09	377	342	**719**	<0.100	<0.100	6.67	2.41	9.08
SB-G, 14-15'	11/12/09	150	253	**403**	<0.050	<0.050	2.36	0.346	2.706
SB-G, 19-20'	11/12/09	168	1020	**1188**	<0.050	<0.050	2.04	0.318	2.358
SB-G, 24-25'	11/12/09	216	1200	**1416**	<0.100	0.128	2.19	2.54	4.858
SB-G, 29-30'	11/12/09	65	1560	**1625**	<0.050	<0.050	0.584	0.671	1.255
SB-G, 34-35'	11/12/09	46.5	1300	**1346.5**	<0.050	<0.050	0.287	0.419	0.706
SB-G, 39-40'	11/12/09	190	1610	**1800**	<0.050	0.466	2.57	2.57	5.606
SB-H, 14-15'	11/12/09	133	1340	**1473**	<0.050	<0.050	0.602	0.544	1.146
SB-H, 19-20'	11/12/09	47.8	951	**998.8**	<0.050	<0.050	0.169	0.156	0.325
SB-I, 4-5'	11/12/09	<1.00	<50.0	0	<0.010	<0.010	<0.010	<0.010	<0.010
SB-J, 4-5'	11/12/09	<1.00	<50.0	0	<0.010	<0.010	<0.010	<0.010	<0.010

APPENDICES

APPENDIX A
Soil Boring Logs Details

APPENDIX B
Laboratory Analytical Report

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: November 17, 2009

Work Order: 9111301

Project Location: Lea County, NM
Project Name: TNM-HDO-90-23
Project Number: TNM-HDO-90-23

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
214727	SB-F, 4-5'	soil	2009-11-12	09:41	2009-11-12
214728	SB-F, 9-10'	soil	2009-11-12	09:49	2009-11-12
214729	SB-F, 14-15'	soil	2009-11-12	09:56	2009-11-12
214730	SB-F, 19-20'	soil	2009-11-12	10:10	2009-11-12
214731	SB-F, 24-25'	soil	2009-11-12	10:20	2009-11-12
214732	SB-G, 4-5'	soil	2009-11-12	10:55	2009-11-12
214733	SB-G, 9-10'	soil	2009-11-12	11:07	2009-11-12
214734	SB-G, 14-15'	soil	2009-11-12	11:15	2009-11-12
214735	SB-G, 19-20'	soil	2009-11-12	11:25	2009-11-12
214736	SB-G, 24-25'	soil	2009-11-12	11:32	2009-11-12

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
214737	SB-G, 29-30'	soil	2009-11-12	11:40	2009-11-12
214738	SB-G, 34-35'	soil	2009-11-12	11:49	2009-11-12
214739	SB-G, 39-40'	soil	2009-11-12	11:57	2009-11-12
214740	SB-H, 14-15'	soil	2009-11-12	12:32	2009-11-12
214741	SB-H, 19-20'	soil	2009-11-12	12:44	2009-11-12
214742	SB-I, 4-5'	soil	2009-11-12	13:36	2009-11-12
214743	SB-J, 4-5'	soil	2009-11-12	13:55	2009-11-12

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project TNM-HDO-90-23 were received by TraceAnalysis, Inc. on 2009-11-12 and assigned to work order 9111301. Samples for work order 9111301 were received intact at a temperature of 2.6 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	55801	2009-11-13 at 13:00	65318	2009-11-13 at 11:05
TPH DRO - NEW	Mod. 8015B	55796	2009-11-13 at 11:04	65303	2009-11-13 at 11:04
TPH GRO	S 8015B	55801	2009-11-13 at 13:00	65319	2009-11-13 at 11:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9111301 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 214727 - SB-F, 4-5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.547**	mg/Kg	5	0.0100
Xylene		<0.0500	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.50	mg/Kg	5	5.00	110	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.26	mg/Kg	5	5.00	105	43.1 - 138.4

Sample: 214727 - SB-F, 4-5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**365**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[1]	143	mg/Kg	1	100	143	70 - 130

Sample: 214727 - SB-F, 4-5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

continued ...

[1] High surrogate recovery due to peak interference.

sample 214727 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**208**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.49	mg/Kg	5	5.00	110	65.3 - 115
4-Bromofluorobenzene (4-BFB)	[2]	6.84	mg/Kg	5	5.00	137	61.7 - 121.1

Sample: 214728 - SB-F, 9-10'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		**0.0982**	mg/Kg	5	0.0100
Ethylbenzene		**3.99**	mg/Kg	5	0.0100
Xylene		**0.944**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.51	mg/Kg	5	5.00	110	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)	[3]	6.69	mg/Kg	5	5.00	134	43.1 - 138.4

Sample: 214728 - SB-F, 9-10'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**342**	mg/Kg	5	50.0

[2]High surrogate recovery due to peak interference.
[3]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[4]	138	mg/Kg	5	100	138	70 - 130

Sample: 214728 - SB-F, 9-10'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**288**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.48	mg/Kg	5	5.00	110	65.3 - 115
4-Bromofluorobenzene (4-BFB)	[5]	7.17	mg/Kg	5	5.00	143	61.7 - 121.1

Sample: 214729 - SB-F, 14-15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.0812**	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**5.59**	mg/Kg	5	0.0100
Xylene		**0.844**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.46	mg/Kg	5	5.00	109	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)	[6]	6.97	mg/Kg	5	5.00	139	43.1 - 138.4

Sample: 214729 - SB-F, 14-15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

[4]High surrogate recovery due to peak interference.
[5]High surrogate recovery due to peak interference.
[6]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**380**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[7]	146	mg/Kg	1	100	146	70 - 130

Sample: 214729 - SB-F, 14-15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**381**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.42	mg/Kg	5	5.00	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)	[8]	7.88	mg/Kg	5	5.00	158	61.7 - 121.1

Sample: 214730 - SB-F, 19-20'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**1.02**	mg/Kg	5	0.0100
Xylene		<0.0500	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.37	mg/Kg	5	5.00	107	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.12	mg/Kg	5	5.00	102	43.1 - 138.4

[7]High surrogate recovery due to peak interference.
[8]High surrogate recovery due to peak interference.

Sample: 214730 - SB-F, 19-20'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**453**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[9]	144	mg/Kg	1	100	144	70 - 130

Sample: 214730 - SB-F, 19-20'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**101**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.39	mg/Kg	5	5.00	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.54	mg/Kg	5	5.00	111	61.7 - 121.1

Sample: 214731 - SB-F, 24-25'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		**0.216**	mg/Kg	5	0.0100
Ethylbenzene		**1.35**	mg/Kg	5	0.0100
Xylene		**1.72**	mg/Kg	5	0.0100

[9]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.47	mg/Kg	5	5.00	109	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.28	mg/Kg	5	5.00	106	43.1 - 138.4

Sample: 214731 - SB-F, 24-25'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**726**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[10]	160	mg/Kg	1	100	160	70 - 130

Sample: 214731 - SB-F, 24-25'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**126**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.47	mg/Kg	5	5.00	109	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.37	mg/Kg	5	5.00	107	61.7 - 121.1

Sample: 214732 - SB-G, 4-5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

[10] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.653**	mg/Kg	5	0.0100
Xylene		**0.0599**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.54	mg/Kg	5	5.00	111	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.32	mg/Kg	5	5.00	106	43.1 - 138.4

Sample: 214732 - SB-G, 4-5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**132**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[11]	133	mg/Kg	1	100	133	70 - 130

Sample: 214732 - SB-G, 4-5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**125**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[12]	5.55	mg/Kg	5	5.00	111	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.46	mg/Kg	5	5.00	109	61.7 - 121.1

[11] High surrogate recovery due to peak interference.
[12] High surrogate recovery due to peak interference.

Sample: 214733 - SB-G, 9-10'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.100	mg/Kg	10	0.0100
Toluene		<0.100	mg/Kg	10	0.0100
Ethylbenzene		**6.67**	mg/Kg	10	0.0100
Xylene		**2.41**	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		11.1	mg/Kg	10	10.0	111	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		11.8	mg/Kg	10	10.0	118	43.1 - 138.4

Sample: 214733 - SB-G, 9-10'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**342**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[13]	142	mg/Kg	1	100	142	70 - 130

Sample: 214733 - SB-G, 9-10'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**377**	mg/Kg	10	1.00

[13]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		11.1	mg/Kg	10	10.0	111	65.3 - 115
4-Bromofluorobenzene (4-BFB)		13.4	mg/Kg	10	10.0	134	61.7 - 121.1

Sample: 214734 - SB-G, 14-15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**583**	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**2.36**	mg/Kg	5	0.0100
Xylene		**0.346**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.46	mg/Kg	5	5.00	109	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.55	mg/Kg	5	5.00	111	43.1 - 138.4

Sample: 214734 - SB-G, 14-15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**253**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[14]	140	mg/Kg	1	100	140	70 - 130

Sample: 214734 - SB-G, 14-15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

[14] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**150**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.46	mg/Kg	5	5.00	109	65.3 - 115
4-Bromofluorobenzene (4-BFB)	[15]	6.27	mg/Kg	5	5.00	125	61.7 - 121.1

Sample: 214735 - SB-G, 19-20'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**2.04**	mg/Kg	5	0.0100
Xylene		**0.318**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.39	mg/Kg	5	5.00	108	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.57	mg/Kg	5	5.00	111	43.1 - 138.4

Sample: 214735 - SB-G, 19-20'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1020**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[16]	170	mg/Kg	1	100	170	70 - 130

[15] High surrogate recovery due to peak interference.
[16] High surrogate recovery due to peak interference.

Sample: 214735 - SB-G, 19-20'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**168**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.38	mg/Kg	5	5.00	108	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.07	mg/Kg	5	5.00	101	61.7 - 121.1

Sample: 214736 - SB-G, 24-25'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.100	mg/Kg	10	0.0100
Toluene		**0.128**	mg/Kg	10	0.0100
Ethylbenzene		**2.19**	mg/Kg	10	0.0100
Xylene		**2.54**	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.8	mg/Kg	10	10.0	108	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		10.2	mg/Kg	10	10.0	102	43.1 - 138.4

Sample: 214736 - SB-G, 24-25'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1200**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[17]	173	mg/Kg	1	100	173	70 - 130

Sample: 214736 - SB-G, 24-25'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**216**	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.9	mg/Kg	10	10.0	109	65.3 - 115
4-Bromofluorobenzene (4-BFB)		10.4	mg/Kg	10	10.0	104	61.7 - 121.1

Sample: 214737 - SB-G, 29-30'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.584**	mg/Kg	5	0.0100
Xylene		**0.671**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.50	mg/Kg	5	5.00	110	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.08	mg/Kg	5	5.00	102	43.1 - 138.4

Sample: 214737 - SB-G, 29-30'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

[17] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1560**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[18]	196	mg/Kg	1	100	196	70 - 130

Sample: 214737 - SB-G, 29-30'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**65.0**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.50	mg/Kg	5	5.00	110	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.92	mg/Kg	5	5.00	118	61.7 - 121.1

Sample: 214738 - SB-G, 34-35'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.287**	mg/Kg	5	0.0100
Xylene		**0.419**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.37	mg/Kg	5	5.00	107	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		4.88	mg/Kg	5	5.00	98	43.1 - 138.4

[18]High surrogate recovery due to peak interference.

Sample: 214738 - SB-G, 34-35'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1300**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[19]	190	mg/Kg	1	100	190	70 - 130

Sample: 214738 - SB-G, 34-35'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**46.5**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		5.37	mg/Kg	5	5.00	107	65.3 - 115
4-Bromofluorobenzene (4-BFB)		4.79	mg/Kg	5	5.00	96	61.7 - 121.1

Sample: 214739 - SB-G, 39-40'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		**0.466**	mg/Kg	5	0.0100
Ethylbenzene		**2.57**	mg/Kg	5	0.0100
Xylene		**2.57**	mg/Kg	5	0.0100

[19] High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[20]	10.4	mg/Kg	5	5.00	208	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)	[21]	9.68	mg/Kg	5	5.00	194	43.1 - 138.4

Sample: 214739 - SB-G, 39-40'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1610**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[22]	194	mg/Kg	1	100	194	70 - 130

Sample: 214739 - SB-G, 39-40'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**190**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[23]	10.3	mg/Kg	5	5.00	206	65.3 - 115
4-Bromofluorobenzene (4-BFB)	[24]	9.94	mg/Kg	5	5.00	199	61.7 - 121.1

Sample: 214740 - SB-H, 14-15'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

[20] High surrogate recovery due to peak interference.
[21] High surrogate recovery due to peak interference.
[22] High surrogate recovery due to peak interference.
[23] High surrogate recovery due to peak interference.
[24] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.602**	mg/Kg	5	0.0100
Xylene		**0.544**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[25]	6.72	mg/Kg	5	5.00	134	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		6.27	mg/Kg	5	5.00	125	43.1 - 138.4

Sample: 214740 - SB-H, 14-15'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1340**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[26]	179	mg/Kg	1	100	179	70 - 130

Sample: 214740 - SB-H, 14-15'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**133**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[27]	6.51	mg/Kg	5	5.00	130	65.3 - 115
4-Bromofluorobenzene (4-BFB)		6.04	mg/Kg	5	5.00	121	61.7 - 121.1

[25] High surrogate recovery due to peak interference.
[26] High surrogate recovery due to peak interference.
[27] High surrogate recovery due to peak interference.

Sample: 214741 - SB-H, 19-20'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		**0.169**	mg/Kg	5	0.0100
Xylene		**0.156**	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[28]	6.20	mg/Kg	5	5.00	124	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		5.51	mg/Kg	5	5.00	110	43.1 - 138.4

Sample: 214741 - SB-H, 19-20'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**951**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[29]	162	mg/Kg	1	100	162	70 - 130

Sample: 214741 - SB-H, 19-20'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**47.8**	mg/Kg	5	1.00

[28] High surrogate recovery due to peak interference.
[29] High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[30]	6.10	mg/Kg	5	5.00	122	65.3 - 115
4-Bromofluorobenzene (4-BFB)		5.78	mg/Kg	5	5.00	116	61.7 - 121.1

Sample: 214742 - SB-I, 4-5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		1.94	mg/Kg	1	2.00	97	43.1 - 138.4

Sample: 214742 - SB-I, 4-5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	[31]	138	mg/Kg	1	100	138	70 - 130

Sample: 214742 - SB-I, 4-5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

[30] High surrogate recovery due to peak interference.
[31] High surrogate recovery due to peak interference.

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.20	mg/Kg	1	2.00	110	65.3 - 115
4-Bromofluorobenzene (4-BFB)		1.88	mg/Kg	1	2.00	94	61.7 - 121.1

Sample: 214743 - SB-J, 4-5'

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	1	0.0100
Toluene		<0.0100		mg/Kg	1	0.0100
Ethylbenzene		<0.0100		mg/Kg	1	0.0100
Xylene		<0.0100		mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	64.4 - 121.2
4-Bromofluorobenzene (4-BFB)		1.93	mg/Kg	1	2.00	96	43.1 - 138.4

Sample: 214743 - SB-J, 4-5'

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	Sample Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		114	mg/Kg	1	100	114	70 - 130

Sample: 214743 - SB-J, 4-5'

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	65319	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	Sample Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.20	mg/Kg	1	2.00	110	65.3 - 115
4-Bromofluorobenzene (4-BFB)		1.88	mg/Kg	1	2.00	94	61.7 - 121.1

Method Blank (1) QC Batch: 65303

QC Batch:	65303	Date Analyzed:	2009-11-13	Analyzed By:	kg
Prep Batch:	55796	QC Preparation:	2009-11-13	Prepared By:	kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		95.8	mg/Kg	1	100	96	70 - 130

Method Blank (1) QC Batch: 65318

QC Batch:	65318	Date Analyzed:	2009-11-13	Analyzed By:	AG
Prep Batch:	55801	QC Preparation:	2009-11-13	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.16	mg/Kg	1	2.00	108	64.9 - 132.7
4-Bromofluorobenzene (4-BFB)		1.84	mg/Kg	1	2.00	92	43.9 - 131.9

Method Blank (1) QC Batch: 65319

QC Batch: 65319 | Date Analyzed: 2009-11-13 | Analyzed By: AG
Prep Batch: 55801 | QC Preparation: 2009-11-13 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.18	mg/Kg	1	2.00	109	66.2 - 125
4-Bromofluorobenzene (4-BFB)		1.80	mg/Kg	1	2.00	90	62 - 120.5

Laboratory Control Spike (LCS-1)

QC Batch: 65303 | Date Analyzed: 2009-11-13 | Analyzed By: kg
Prep Batch: 55796 | QC Preparation: 2009-11-13 | Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	220	mg/Kg	1	250	<5.86	88	57.4 - 133.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	220	mg/Kg	1	250	<5.86	88	57.4 - 133.4	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	118	119	mg/Kg	1	100	118	119	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 65318 | Date Analyzed: 2009-11-13 | Analyzed By: AG
Prep Batch: 55801 | QC Preparation: 2009-11-13 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.93	mg/Kg	1	2.00	<0.00410	96	75.4 - 115.7
Toluene	1.93	mg/Kg	1	2.00	<0.00310	96	78.4 - 113.6
Ethylbenzene	1.90	mg/Kg	1	2.00	<0.00240	95	76 - 114.2
Xylene	5.69	mg/Kg	1	6.00	<0.00650	95	76.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.96	mg/Kg	1	2.00	<0.00410	98	75.4 - 115.7	2	20
Toluene	1.96	mg/Kg	1	2.00	<0.00310	98	78.4 - 113.6	2	20
Ethylbenzene	1.93	mg/Kg	1	2.00	<0.00240	96	76 - 114.2	2	20
Xylene	5.78	mg/Kg	1	6.00	<0.00650	96	76.9 - 113.6	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.20	2.14	mg/Kg	1	2.00	110	107	65 - 132.9
4-Bromofluorobenzene (4-BFB)	1.94	1.88	mg/Kg	1	2.00	97	94	43.8 - 134.9

Laboratory Control Spike (LCS-1)

QC Batch: 65319 | Date Analyzed: 2009-11-13 | Analyzed By: AG
Prep Batch: 55801 | QC Preparation: 2009-11-13 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.4	mg/Kg	1	20.0	<0.396	77	52.5 - 114.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	15.3	mg/Kg	1	20.0	<0.396	76	52.5 - 114.3	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.18	2.21	mg/Kg	1	2.00	109	110	66.2 - 128.7
4-Bromofluorobenzene (4-BFB)	1.88	1.89	mg/Kg	1	2.00	94	94	64.1 - 127.4

Matrix Spike (MS-1) Spiked Sample: 214248

QC Batch: 65303 | Date Analyzed: 2009-11-13 | Analyzed By: kg
Prep Batch: 55796 | QC Preparation: 2009-11-13 | Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	129	mg/Kg	1	250	<5.86	52	35.2 - 167.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	139	mg/Kg	1	250	<5.86	56	35.2 - 167.1	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane [32]	127	136	mg/Kg	1	100	127	136	70 - 130

Matrix Spike (MS-1) Spiked Sample: 214355

QC Batch: 65318 | Date Analyzed: 2009-11-13 | Analyzed By: AG
Prep Batch: 55801 | QC Preparation: 2009-11-13 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.93	mg/Kg	1	2.00	<0.00410	96	57.7 - 140.7
Toluene	1.96	mg/Kg	1	2.00	<0.00310	98	53.4 - 146.6
Ethylbenzene	2.04	mg/Kg	1	2.00	<0.00240	102	62.1 - 141.6
Xylene	6.07	mg/Kg	1	6.00	<0.00650	101	61.2 - 142.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.08	mg/Kg	1	2.00	<0.00410	104	57.7 - 140.7	8	20
Toluene	2.11	mg/Kg	1	2.00	<0.00310	106	53.4 - 146.6	7	20
Ethylbenzene	2.16	mg/Kg	1	2.00	<0.00240	108	62.1 - 141.6	6	20
Xylene	6.45	mg/Kg	1	6.00	<0.00650	108	61.2 - 142.7	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.07	2.18	mg/Kg	1	2	104	109	62.7 - 129.6
4-Bromofluorobenzene (4-BFB)	1.89	1.94	mg/Kg	1	2	94	97	49.6 - 136.7

Matrix Spike (MS-1) Spiked Sample: 214248

QC Batch: 65319 | Date Analyzed: 2009-11-13 | Analyzed By: AG
Prep Batch: 55801 | QC Preparation: 2009-11-13 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.9	mg/Kg	1	20.0	<0.396	80	10 - 198.3

[32] High surrogate recovery due to peak interference.

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	14.6	mg/Kg	1	20.0	<0.396	73	10 - 198.3	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.12	2.13	mg/Kg	1	2	106	106	65.5 - 123
4-Bromofluorobenzene (4-BFB)	1.90	1.91	mg/Kg	1	2	95	96	58.6 - 140

Standard (CCV-1)

QC Batch: 65303 Date Analyzed: 2009-11-13 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	261	104	80 - 120	2009-11-13

Standard (CCV-2)

QC Batch: 65303 Date Analyzed: 2009-11-13 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	261	104	80 - 120	2009-11-13

Standard (CCV-3)

QC Batch: 65303 Date Analyzed: 2009-11-13 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	281	112	80 - 120	2009-11-13

Standard (CCV-4)

QC Batch: 65303 Date Analyzed: 2009-11-13 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	277	111	80 - 120	2009-11-13

Standard (CCV-1)

QC Batch: 65318 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0952	95	80 - 120	2009-11-13
Toluene		mg/Kg	0.100	0.0945	94	80 - 120	2009-11-13
Ethylbenzene		mg/Kg	0.100	0.0942	94	80 - 120	2009-11-13
Xylene		mg/Kg	0.300	0.282	94	80 - 120	2009-11-13

Standard (CCV-2)

QC Batch: 65318 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	80 - 120	2009-11-13
Toluene		mg/Kg	0.100	0.0982	98	80 - 120	2009-11-13
Ethylbenzene		mg/Kg	0.100	0.0957	96	80 - 120	2009-11-13
Xylene		mg/Kg	0.300	0.286	95	80 - 120	2009-11-13

Standard (CCV-3)

QC Batch: 65318 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0957	96	80 - 120	2009-11-13
Toluene		mg/Kg	0.100	0.0944	94	80 - 120	2009-11-13
Ethylbenzene		mg/Kg	0.100	0.0870	87	80 - 120	2009-11-13
Xylene		mg/Kg	0.300	0.271	90	80 - 120	2009-11-13

Standard (CCV-1)

QC Batch: 65319 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.980	98	80 - 120	2009-11-13

Standard (CCV-2)

QC Batch: 65319 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.989	99	80 - 120	2009-11-13

Standard (CCV-3)

QC Batch: 65319 Date Analyzed: 2009-11-13 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.962	96	80 - 120	2009-11-13

LAB Order ID # 9111301

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above) Plains
Project #: HDO-90-23
Project Name: HDO-90-23
Project Location (including state): LEA CO, NM
Sampler Signature: Rachel Rounsaville

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
214727	SB-F, 4-5'	1	4oz		X							X		11/12	0941		X		X														
728	SB-F, 9-10'	1	"		X							X		11/12	0949		X		X														
729	SB-F, 14-15'	1			X							X			0956		X		X														
730	SB-F, 19-20'	1			X							X			1010		X		X														
731	SB-F, 24-25'	1			X							X			1020		X		X														
732	SB-G, 4-5'	1			X							X			1055		X		X														
733	SB-G, 9-10'	1			X							X			1107		X		X														
734	SB-G, 14-15'	1			X							X			1115		X		X														
735	SB-G, ~~19~~-19-20'	1			X							X			1125		X		X														
736	SB-G, 24-25'	1			X							X			1132		X		X														
737	SB-G, 29-30	1			X							X			1140		X		X														

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Rachel Rounsaville		11-12-09	1455		Trace	11/12/09	16:55	INST ___ OBS 2.6 °C COR ___ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ___ OBS ___ °C COR ___ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ___ OBS ___ °C COR ___ °C

LAB USE ONLY
Intact Y N
Headspace Y / N / NA
Log-in-Review

REMARKS: * All tests-Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-in

ORIGINAL COPY

LAB Order ID # 9111301

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
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8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: NOVA — Phone #:

Address: (Street, City, Zip) — Fax #:

Contact Person: Ron Rounsaville — E-mail:

Invoice to: (If different from above) PLAINS

Project #: HDO-90-23 — Project Name: HDO-90-23

Project Location (including state): Lea Co, NM — Sampler Signature: Ron Rounsaville

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
214738	SB-G, 34-35	1	4oz		X							X		11/12	1149	X	X		X														
739	SB-G, 39-40	1			X							X			1157	X	X		X														
740	SB-H, 14-15	1			X							X			1232	X	X		X														
741	SB-H, 19-20	1			X							X			1244	X	X		X														
742	SB-I, 4-5'	1			X							X			1336	X	X		X														
743	SB-J, 4-5'	1			X							X			1355	X	X		X														

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Ron Rounsaville		11-12-09	1655		Trace	11/12/09	1655	INST ____ OBS 2.6 °C COR ____ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ____ OBS ____ °C COR ____ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST ____ OBS ____ °C COR ____ °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in-Review ____

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry in

ORIGINAL COPY

APPENDIX C
Release Notification and Corrective Action
(Form C-141)

OIL CONSERVATION DIVISION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR	TEXAS-NEW MEXICO PIPE LINE CO				ADDRESS	P. O. Box 2528, Hobbs, N.M. 88240	
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE X	GASO PLNT	OIL RFY	OTHER*
NAME OF FACILITY	14" Trunk Line						
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)	NW/4 NE/4				SEC. 6	TWP. 21	RGE. 37 COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK	6 Mi. NNW of Eunice & 3 Mi. N.W. of Loop 18						
DATE AND HOUR OF OCCURRENCE	Unknown				DATE AND HOUR OF DISCOVERY	3/27/90 2:15 P.M.	
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT REQUIRED		IF YES, TO WHOM	NMOCC - B. Pritchard SCC - D. Trujillo	
BY WHOM	NMOCC - M. Criswell SCC - C. Johnson				DATE AND HOUR	3/27/90; NMOCC - 3:35 P.M. 3/28/90; SCC - 9:05 a.m.	
TYPE OF FLUID LOST	Sour Crude				QUANTITY OF LOSS	750 BBLS	VOLUME RECOVERED 550 BBLS
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

External Corrosion

Line clamped off

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

45,000 sq ft pasture land; 40,000 sq ft equipment damage.
Cattle in the area
Oil soaked earth covered with fresh soil in prospects of full restoration

DESCRIPTION OF AREA	FARMING	GRAZING X	URBAN	OTHER*			
SURFACE CONDITIONS	SANDY	SANDY LOAM X	CLAY	ROCKY	WET X	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

55°

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNED B.L. Lephicky TITLE Dist. Manager DATE 3/28/90

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

HDO 90-23

cc: Hazardous Waste Section
N.M. Environmental Improvement Div.

90-063530