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STAGE 2 WORKPLANS

DATE:

Oct. 2008

SOIL CLOSURE PROPOSAL

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BOB DURHAM

NE ¼ NW ¼ SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
NMOCD Reference Number AP-0016
Plains SRS #: TNM LF 2000-7

Prepared for:

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October 2008


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1.0 INTRODUCTION AND PURPOSE

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) has prepared this Soil Closure Proposal for the site known as Bob Durham (SRS # TNM LF 2000-7). The site is located in the NE ¼ of the NW ¼ of Section 32, Township 19 South, Range 37 East in Lea County, New Mexico. A site location map is provided as Figure 1.

The Bob Durham crude oil release was discovered in January 2000, while installing a polyethylene liner in the subject pipeline. During initial response activities, approximately 2,000 cubic yards (cy) of impacted soil was excavated from the release area. The impacted soil was reportedly transported to J & L Land Farm, located near Eunice, New Mexico. The initial excavation measured approximately 130 feet in length, 60 feet in width and approximately 16 feet below ground surface (bgs) at the deepest extent. The volume of crude oil release from the pipeline is unknown. During initial response activities, concluding in March 2000, approximately 108 barrels of crude oil was recovered. 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 D.

2.0 NMOCD- SITE CLASSIFICATION

The depth to groundwater at the site is approximately 15 feet bgs. Based on the NMOCD soil classification system, 20 points would be assigned to the site as a result of this criterion. There are receptor water wells located within 200 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
- BTEX - 50 mg/Kg
- TPH - 100 mg/Kg

3.0 BACKGROUND INFORMATION

From January 25 through June 28, 2000, a previous contractor installed thirty-six monitor wells and advanced three soil borings at the site. Soil samples were collected at five foot intervals as the monitor wells and soil borings were being installed / advanced. The analytical results of the soil samples indicated Total Petroleum Hydrocarbons (TPH) and Benzene, Toluene, Ethyl benzene and Xylene (BTEX) concentrations were below the NMOCD regulatory standard of 100 mg/Kg TPH, 10 mg/Kg benzene and 50 mg/Kg BTEX, in all of the installed monitor wells and advanced soil borings, with the exception of monitor wells MW-1, MW-5, MW-7, MW-8, MW-12, MW-16, MW-23 and soil boring SB-3. The analytical results of the soil samples indicated all thirty-six monitor wells and three soil borings exhibited benzene concentrations below the NMOCD regulatory standard of 10 mg/Kg.

Monitor well MW-1 is located adjacent to the reported release source and exhibited a TPH concentration of 5,499 mg/Kg and a BTEX concentration of 98.21 mg/Kg at five bgs in 2000. The soil sample collected at fifteen feet bgs indicated TPH, benzene and Total BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg, 10 mg/Kg and 50 mg/Kg, respectively. Monitor well MW-5 exhibited a TPH concentration of 221 mg/Kg and a BTEX concentration of 0.167 mg/Kg at fifteen feet bgs. Monitor well MW-7 exhibited a TPH concentration of 469 mg/Kg and a Total BTEX concentration of 1.439 mg/Kg at fifteen feet bgs. Monitor well MW-8 exhibited a TPH concentration of 124 mg/Kg and a Total BTEX concentration of 0.131 mg/Kg at fifteen feet bgs. Monitor well MW-12 exhibited a TPH concentration of 3,501 mg/Kg and a Total BTEX concentration of 11.99 mg/Kg at fifteen feet bgs and a TPH concentration of 967 mg/Kg and a Total BTEX concentration of 5.863 mg/Kg at twenty feet bgs. Monitor well MW-16 exhibited a TPH concentration less than the method detection limit (MDL) of 0.1 mg/Kg and a Total BTEX concentration of 0.797 mg/Kg at five feet bgs and TPH and Total BTEX concentrations less than the MDL of 0.1 mg/Kg at ten feet bgs. Monitor well MW-16 exhibited a TPH concentration of 2,826 mg/Kg and a Total BTEX concentration of 15.422 mg/Kg at twenty feet bgs. Monitor well MW-23 exhibited a TPH concentration of 349 mg/Kg and a Total BTEX concentration less than the MDL at fifteen feet bgs. The analytical results indicated soil boring SB-3 exhibited a TPH concentration of 463 mg/Kg and a Total BTEX concentration of 0.184 mg/Kg at ten feet bgs.

On June 17, 2002, monitor wells MW-37 and MW-38 and soil boring SB-4 were installed/advanced to complete the delineation of the site. The analytical results indicated TPH, benzene and Total BTEX concentrations were below the MDL of 10 mg/Kg, 0.025 mg/Kg and 0.025 mg/Kg, respectively in all of the submitted soil samples.

On September 13, 2005, monitor wells MW-17, MW-18, MW-19, MW-22, MW-34, MW-35 and MW-36 were plugged and abandoned with NMOCD approval.

4.0 RESULTS OF 2008 SOIL INVESTIGATION ACTIVITIES

The objective of the 2008 Soil Investigation was to re-evaluate those areas identified during the initial soil investigation conducted in 2000 as having TPH and/or BTEX concentrations above the NMOCD remediation guidelines for the site.

On July 14, 2008, five soil borings were advanced within 4 separate areas of concern previously identified in the *Site Investigation Work Plan* dated February 2008. Soil samples were collected at the same intervals as samples collected during the 2000 drilling and sampling activities. Soil boring SB-5 was advanced adjacent to soil boring location SB-3. Analytical results of soil samples collected from soil boring SB-5 exhibited a TPH concentration of 1,172 mg/Kg and a Total BTEX concentration of 0.4312 mg/Kg at 5 feet bgs. The soil samples collected at ten and fifteen feet bgs indicated TPH, benzene and Total BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg, 10 mg/Kg and 50 mg/Kg, respectively. Soil boring SB-6 was advanced adjacent to monitor well location MW-23. Analytical results of soil samples collected from soil boring SB-6 indicated TPH, benzene and BTEX concentrations were below the NMOCD regulatory standards at the five, ten and fifteen foot sample depths.

Soil boring SB-7 was advanced adjacent to monitor well location MW-7. Analytical results of soil samples collected from soil boring SB-7 indicated TPH, benzene and BTEX concentrations

were below the NMOCD regulatory standards at the five, ten and fifteen foot sample depths. Soil boring SB-8 was advanced to the southeast of monitor well location MW-1. Analytical results of soil samples collected from soil boring SB-8 exhibited a TPH concentration of 1,626 mg/Kg and a BTEX concentration of 4.901 mg/Kg at 5 feet bgs and a TPH concentration of 599 mg/Kg and a BTEX concentration of 0.866 mg/Kg at ten feet bgs. The soil sample collected at fifteen feet bgs indicated TPH, benzene and BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg, 10 mg/Kg and 50 mg/Kg, respectively. Soil boring SB-9 was advanced adjacent to monitor well location MW-12. Analytical results of soil samples collected from soil boring SB-9 indicated TPH, benzene and Total BTEX concentrations were below the NMOCD regulatory standards respectively, at the five and ten foot sample depths. The soil sample collected at fifteen feet bgs exhibited a TPH concentration of 147 mg/Kg and a BTEX concentration below the laboratory method detection limit of 0.010 mg/Kg.

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 are provided as Appendix A. Laboratory reports are included as Appendix B.

5.0 PROPOSED ACTIONS

Based on analytical results, Plains proposes a risk-based soil closure strategy to progress the site known as Bob Durham towards an NMOCD approved soil closure:

- Plains proposes to excavate an area east of the Plains pipelines including monitor well MW-1 and soil boring SB-8 (Excavation Area #1) to a depth of approximately fifteen feet bgs (groundwater level) to remove soils exhibiting TPH concentrations above the NMOCD regulatory standard. A map depicting the Proposed Areas of Excavation is provided as Figure 3. The limits of this excavation will be determined by field screening using a Photo Ionization Detector (PID) and visual and olfactory evaluation of the excavation sidewalls. Confirmation sidewall soil samples will be collected at fifty foot intervals from excavation sidewalls and analyzed for concentrations of BTEX and TPH. The proposed area of excavation defined by the area including monitor well MW-1 and soil boring SB-8 contains approximately 2,000 cubic yards (cy) of hydrocarbon impacted soil.
- An additional proposed area of excavation is centered on soil boring SB-3 (Excavation Area #2). Plains proposes to excavate this area to a depth of approximately ten feet bgs to remove soils exhibiting TPH concentrations above the NMOCD regulatory standard. The limits of this excavation will be determined by field screening using a PID and visual and olfactory evaluation of the excavation sidewalls. Confirmation sidewall soil samples will be collected at appropriate intervals from excavation sidewalls and analyzed for concentrations of BTEX and TPH. The proposed area of excavation centered on soil boring SB-3 contains approximately 680 cy of hydrocarbon impacted soil. Reference Figure 3 for the Proposed Areas of Excavation.
- Soil samples collected during the advancement of soil borings SB-9, adjacent to MW-12, exhibited elevated TPH concentrations due to the presence of PSH within the capillary

fringe zone. The elevated TPH concentrations appear to be an artifact of groundwater impact versus soil impact and will not be addressed in the Soil Closure Proposal.

- Soil samples collected during the advancement of soil borings SB-6 exhibited BTEX and TPH concentrations below laboratory method detection limits of 0.010 mg/Kg and 50 mg/Kg, respectively. In comparison of the soil samples collected at the 10 ft. interval from both the MW-23 soil boring and SB-6 soil boring, TPH concentrations have decreased below the laboratory method detection limits through natural attenuation.
- When the confirmation analytical results of excavation sidewalls indicate TPH concentrations are below the NMOCD regulatory standard of 100 mg/Kg TPH, Plains proposes a risk-based strategy for soil closure at the site. With NMOCD approval, a twenty-millimeter (mil) polyurethane liner, manufactured for this purpose, will be placed on the floor of the two excavation areas. A six-inch layer of non-impacted sand placed beneath the liner will cushion the liner. On completion of the liner installation, a six-inch layer of non-impacted sand will be placed on top the liner to cushion any sharp objects from puncturing the liner. This engineered control will inhibit vertical migration of contaminants below the liner, by the process of shedding moisture to the edge of the liner and beyond the maximum horizontal extent of underlying impacted soil. Monitor well locations within the excavation will be fitted with a forty mil protective boot to maintain the impermeability of the liner.
- Stockpile soil samples will be collected and analyzed for each 500 cy of impacted soil. On receipt of analytical results, the stockpiled soils exhibiting TPH concentrations in excess of 1,000 mg/Kg TPH will be blended with non-impacted, over-excavated soil and resampled until TPH concentrations are below 1,000 mg/Kg. When the analytical results indicate TPH concentrations are below 1,000 mg/Kg, the blending of the stockpiles will be complete. Plains will request NMOCD permission to backfill each of the excavation areas with blended soil. The upper one foot of the excavation will be backfilled with locally obtained non-impacted soil exhibiting a TPH concentration less than 100 mg/Kg and contoured to fit the surrounding topography. Areas disturbed by the excavation activities will be reseeded with vegetation acceptable to the landowner.
- The site monitor wells will be maintained for continued monitoring of groundwater, until such a time as the NMOCD permits the cessation of these activities.

6.0 REPORTING

Plains is prepared to begin field activities and perform the corrective actions summarized in this Soil Closure Proposal, upon review and approval of the proposal by the NMOCD. Upon completion of the field activities summarized in this proposal, Plains will submit a Soil Closure Request to the NMOCD, documenting the results of confirmation soil samples, and final topography restoration activities. In this report, Plains will request the NMOCD grant closure to soil issues at the site. A groundwater closure request will follow after eight successive quarterly groundwater sampling events have demonstrated that hydrocarbon concentrations are below regulatory guidelines.

7.0 QA/QC PROCEDURES

7.1 Soil Sampling

Soil samples will be obtained utilizing single-use, disposable, latex gloves. Representative soil samples will be divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil samples will be placed in a disposable sample bag. The bag will be labeled and sealed for headspace analysis using a PID calibrated to a 100-ppm isobutylene standard. Each sample will be allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container will be filled to capacity to limit the amount of headspace present. Each container will be labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Soil samples will be delivered to Trace Analysis in Lubbock, Texas for BTEX and TPH analyses using the methods described below.

- BTEX concentrations in accordance with EPA Method SW846-8021B/5030
- TPH concentrations in accordance with EPA Method SW846-8015b

7.2 Decontamination of Equipment

Soil sampling tools such as small hand shovels will be washed with Liqui-Nox[®] detergent and rinsed with distilled water between soil sample locations.

7.3 Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form.

8.0 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.

9.0 DISTRIBUTION

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FIGURES



Figure 1
Site Location Map

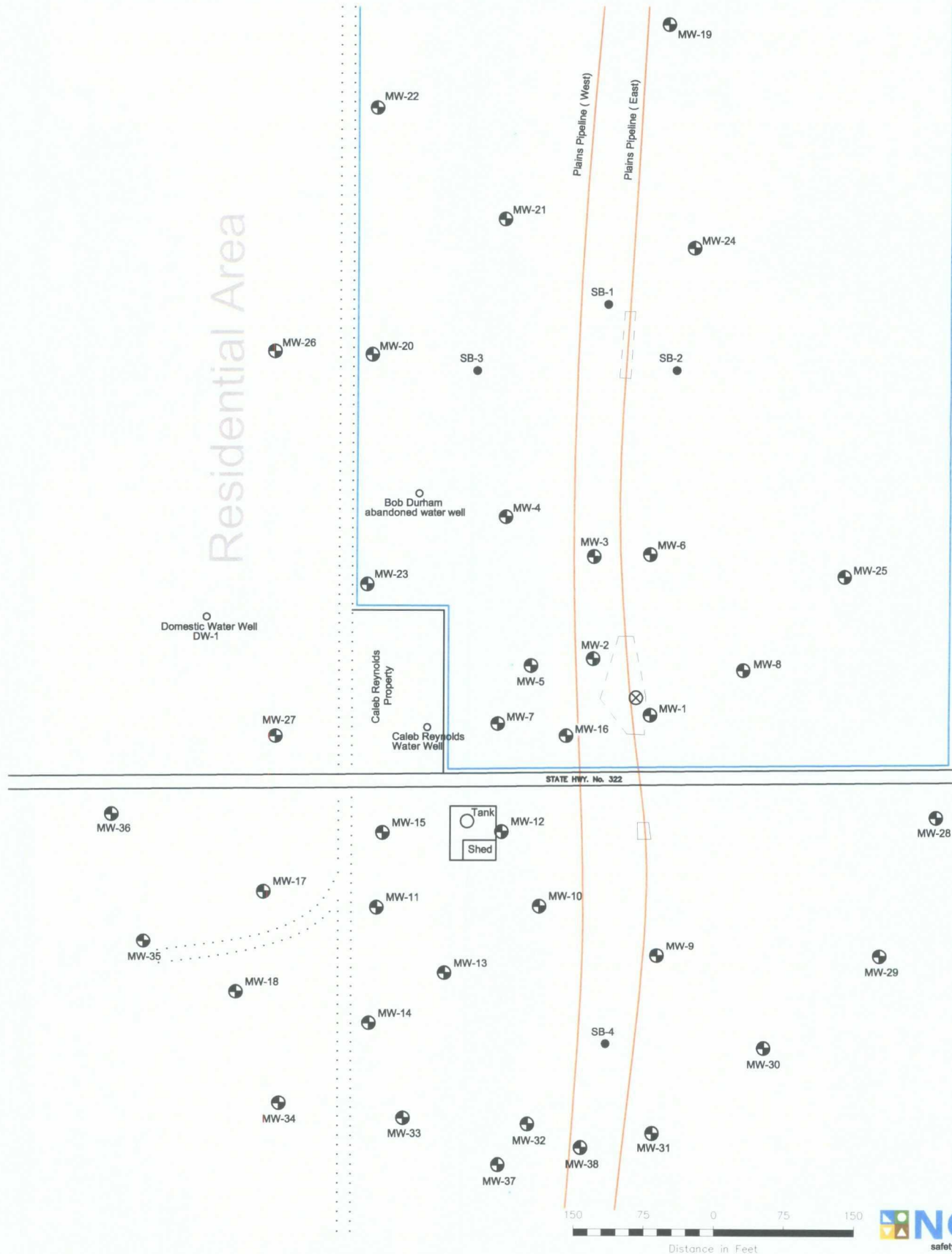
NOVA Safety and Environmental

NW1/4 NW1/4 Sec 32 T19S R37E Lat. 32° 37' 27" Long. 103° 16' 53"
 Drawn By: CDS | Prep. By: CDS
 February 20, 2005

Plains Marketing, L.P.
 Bob Durham
 Lea County, NM

NMOCD Reference # AP-016

Residential Area



LEGEND:

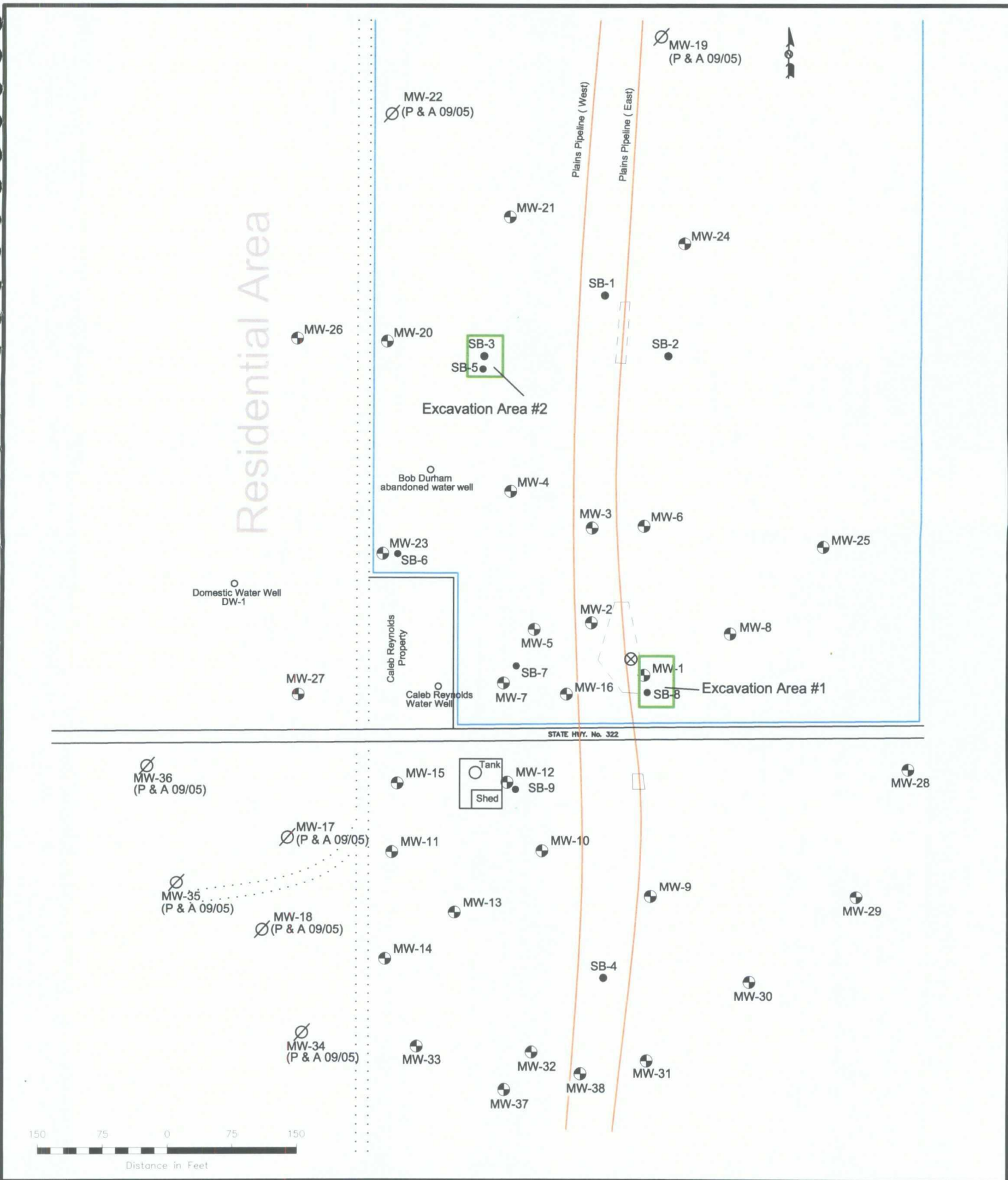
- Plains Monitor Well Locations
- Soil Boring Locations
- Excavation Areas
- Release Point
- Bob Durham Property Line
- Dirt Road

**Figure 2
Site Map**

Plains Marketing, L.P.
Bob Durham
Lea County, NM

NOVA Safety and Environmental

NW1/4 NW1/4 Sec 32 T19S R37E		Lat. 32° 37' 27" Long. 103° 16' 53"	
Scale: 1" = 150'	Drawn By: DPM	Prep. By: RKR	
March 07, 2005			



TABLES

Table 1

CONCENTRATIONS OF TPH & BTEX IN SOIL

Bob Durham
Plains Marketing, L.P.
Monument, New Mexico
All concentrations are in mg/Kg

SAMPLE DATE	SAMPLE LOCATION	SW 846-8015M GRO/DRO						SW 846-8021B, 5030					
		GRO C ₆ -C ₁₀	GRO C ₆ -C ₁₂	DRO >C ₁₀ -C ₂₈	DRO >C ₁₂ -C ₃₅	TPH C ₆ -C ₂₈	TPH C ₆ -C ₃₅	BENZENE	TOLUENE	ETHYL-BENZENE	M.P-XYLENES	O-XYLENES	BTEX
NMOCD REGULATORY STANDARD						100		10					50
1/25/2000	MW-1 (5')	1838	-	3661	-	5499	-	2.51	13.7	13.2	51.5	17.3	98.21
1/25/2000	MW-1 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/25/2000	MW-2 (5')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/25/2000	MW-2 (15')	<10	-	26	-	26	-	<0.100	0.106	<0.100	0.129	<0.100	0.235
1/25/2000	MW-3 (15')	<10	-	29	-	29	-	<0.100	0.143	<0.100	0.15	<0.100	0.293
1/25/2000	MW-4 (15')	<10	-	<10	-	<10	-	<0.100	0.105	<0.100	<0.100	<0.100	0.105
1/25/2000	MW-5 (15')	11	-	210	-	221	-	<0.100	<0.100	<0.100	0.167	<0.100	0.167
1/25/2000	MW-6 (15')	<10	-	37	-	37	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/25/2000	MW-7 (15')	49	-	420	-	469	-	<0.100	0.166	0.17	0.72	0.383	1.439
1/26/2000	MW-8 (15')	<10	-	124	-	124	-	<0.100	<0.100	<0.100	0.131	<0.100	0.131
1/26/2000	MW-9 (15')	<10	-	<10	-	<10	-	<0.100	0.452	0.312	0.978	0.583	2.325
1/26/2000	MW-10 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/26/2000	MW-11 (20')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/26/2000	MW-12 (15')	694	-	2807	-	3501	-	<0.100	1.1	1.57	6.16	3.16	11.99
1/26/2000	MW-12 (20')	104	-	863	-	967	-	<0.100	1.3	0.513	2.59	1.46	5.863
1/27/2000	MW-13 (5')	<10	-	<10	-	<10	-	<0.100	0.11	<0.100	<0.100	<0.100	0.11
1/27/2000	MW-13 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/27/2000	MW-14 (15')	<10	-	<10	-	<10	-	<0.100	0.216	0.543	0.264	0.143	1.166
1/27/2000	MW-15 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/27/2000	MW-16 (5')	<10	-	<10	-	<10	-	<0.100	0.114	0.107	0.314	0.262	0.797
1/27/2000	MW-16 (10')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
1/27/2000	MW-16 (15')	794	-	2032	-	2826	-	0.942	1.38	2.07	7.78	3.25	15.422
1/28/2000	SB-1 (15')	<10	-	17	-	17	-	<0.100	<0.100	<0.100	0.115	<0.100	0.115
2/7/2000	MW-17 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/7/2000	MW-18 (20')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/9/2000	MW-19 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/9/2000	MW-20 (15')	<10	-	<10	-	<10	-	<0.100	0.264	0.153	0.272	0.129	0.818
2/9/2000	SB-2 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	0.19	<0.100	0.19
2/9/2000	SB-2 (5')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/9/2000	SB-3 (10')	14	-	449	-	463	-	<0.100	<0.100	<0.100	0.184	<0.100	0.184
2/9/2000	SB-3 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/10/2000	MW-22 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/10/2000	MW-23 (15')	<10	-	349	-	349	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/10/2000	MW-23 (20')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/10/2000	MW-24 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
2/10/2000	MW-25 (15')	<10	-	<10	-	<10	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
6/7/2000	MW26SS (5')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW26SS (10')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW26C (15')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW26C (20')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW26C (29')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (5')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (10')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (15')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (20')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (27')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/7/2000	MW27C (29')	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28SS (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28SS (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28SS (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-28SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-29C (0-2)	<10	-	17	-	17	-	-	-	-	-	-	-
6/26/2000	MW-29SS (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-29SS (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-29SS (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-29C (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-29SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-30C (0-2)	<10	-	22	-	22	-	-	-	-	-	-	-
6/26/2000	MW-30C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-30C (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-

Table 1

CONCENTRATIONS OF TPH & BTEX IN SOIL

Bob Durham

Plains Marketing, L.P.

Monument, New Mexico

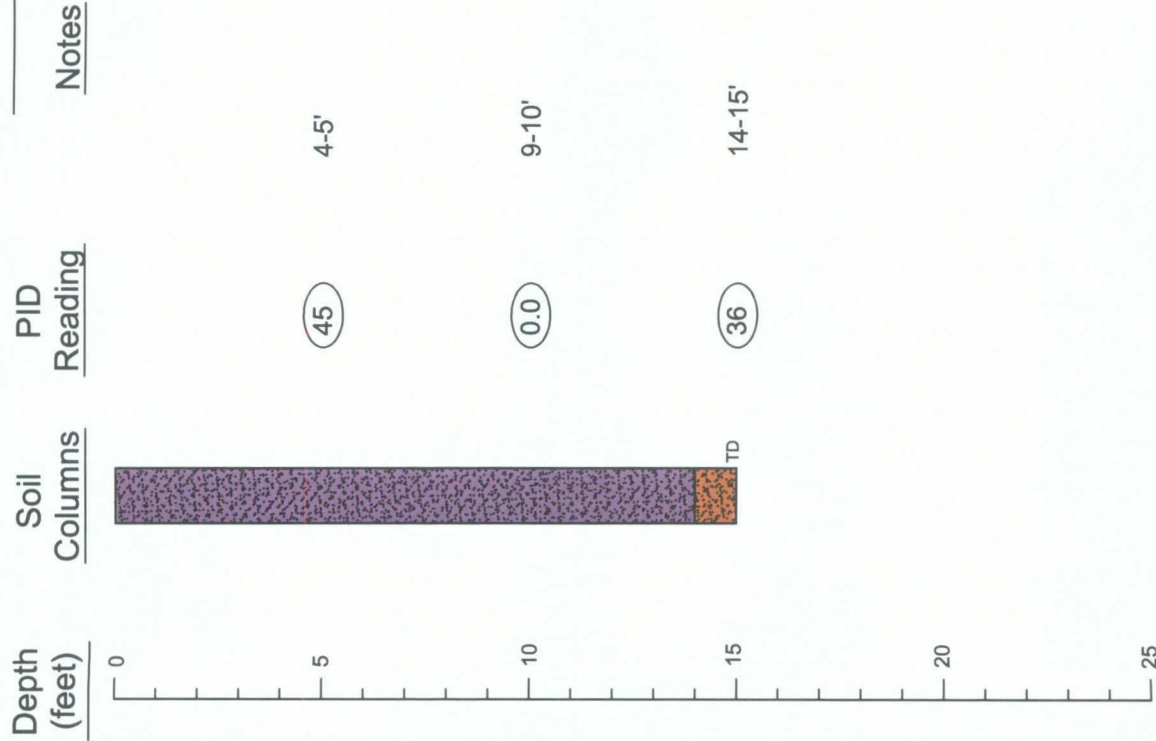
All concentrations are in mg/Kg

SAMPLE DATE	SAMPLE LOCATION	SW 846-8015M GRO/DRO						SW 846-8021B, 5030					
		GRO C ₆ -C ₁₀	GRO C ₄ -C ₁₂	DRO >C ₁₀ -C ₂₈	DRO >C ₁₂ -C ₃₅	TPH C ₆ -C ₂₈	TPH C ₆ -C ₃₅	BENZENE	TOLUENE	ETHYL-BENZENE	M.P.-XYLENES	O-XYLENES	BTEX
NMOCD REGULATORY STANDARD						100		10					50
6/26/2000	MW-30C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-30SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/26/2000	MW-30SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/30/2000	MW-31C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/30/2000	MW-31SS (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/30/2000	MW-31SS (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/30/2000	MW-31C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-31SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-31SS (21-23)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-32C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-32C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-32SS (8-10)	<10	-	18	-	18	-	-	-	-	-	-	-
6/27/2000	MW-32C (13-15)	<10	-	43	-	43	-	-	-	-	-	-	-
6/27/2000	MW-32SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-32SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33C (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/27/2000	MW-33SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34C (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-34SS (23-25)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35C (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35C (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-35SS (23)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36C (0-2)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36C (3-5)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36C (8-10)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36C (13-15)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36SS (18-20)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/28/2000	MW-36SS (230)	<10	-	<10	-	<10	-	-	-	-	-	-	-
6/17/2002	MW 37 15-17'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	MW 37 20-22'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	MW-38 10'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	MW-38 15'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	MW-38 20'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	SB-4 15'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
6/17/2002	SB-4 20'	-	<10	-	<10	-	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
7/14/2008	SB-5, 4-5' (SB-3)	72.3			1100		1172	<0.010	<0.010	0.0972	0.334		0.4312
7/14/2008	SB-5, 9-10' (SB-3)	8.42			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-5, 14-15' (SB-3)	3.00			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-6, 4-5' (MW-23)	1.2			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-6, 9-10' (MW-23)	<1.00			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-6, 14-15' (MW-23)	2.83			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-7, 4-5' (MW-7)	1.02			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-7, 9-10' (MW-7)	<1.00			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-7, 14-15' (MW-7)	1.89			70		72	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-8, 4-5' (MW-1)	416			1210		1626	<0.050	<0.050	0.921	3.98		4.901
7/14/2008	SB-8, 9-10' (MW-1)	425			174		599	<0.020	<0.020	0.119	0.747		0.866
7/14/2008	SB-8, 14-15' (MW-1)	12.2			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-9, 4-5' (MW-12)	2.25			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-9, 9-10' (MW-12)	1.04			<50		<50	<0.010	<0.010	<0.010	<0.010		<0.010
7/14/2008	SB-9, 14-15' (MW-12)	3.54			144		147	<0.010	<0.010	<0.010	<0.010		<0.010

APPENDICES

APPENDIX A:
Soil Boring Log Details

Soil Boring SB - 5



Legend

- Sand - (SP) - Brown, very fine grained, well sorted, dry, no odor, no stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, slight odor, slight stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, moderate to strong odor, moderate stain.
- Clay - (ML) - Red, sandy, silty, soft, moist to wet. (Red Bed - Triassic Dockum Group)
- Caliche - White, hard, interbedded with sand.

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

Indicates samples selected for laboratory analysis.

Soil Boring Details

Date Drilled 02 / 09 / 00
 Plugged - Surface to TD with Bentonite and hydrated with deionized water

Soil Boring Log Details

Soil Boring SB - 5

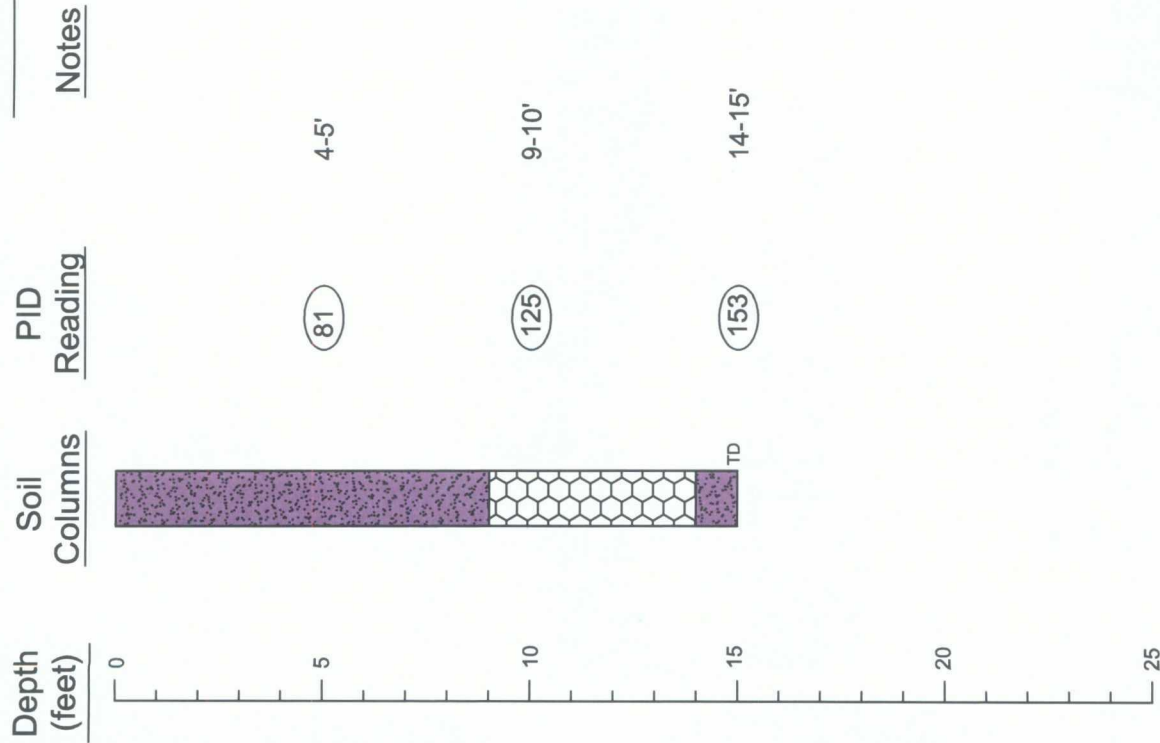
Plains Marketing, L.P. Bob Durham Lea County, NM

NOVA Safety and Environmental



Scale: NTS
 August 26, 2008
 CAD By: DGC
 Checked By: RKR

Soil Boring SB - 6



Legend

- Sand - (SP) - Brown, very fine grained, well sorted, dry, no odor, no stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, slight odor, slight stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, moderate to strong odor, moderate stain.
- Clay - (ML) - Red, sandy, silty, soft, moist to wet. (Red Bed - Triassic Dockum Group)
- Caliche - White, hard, interbedded with sand.

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

Indicates samples selected for laboratory analysis.

Soil Boring Details

Date Drilled 07/14/08
Plugged - Surface to TD with Bentonite and hydrated with deionized water

Soil Boring Log Details

Soil Boring SB - 6

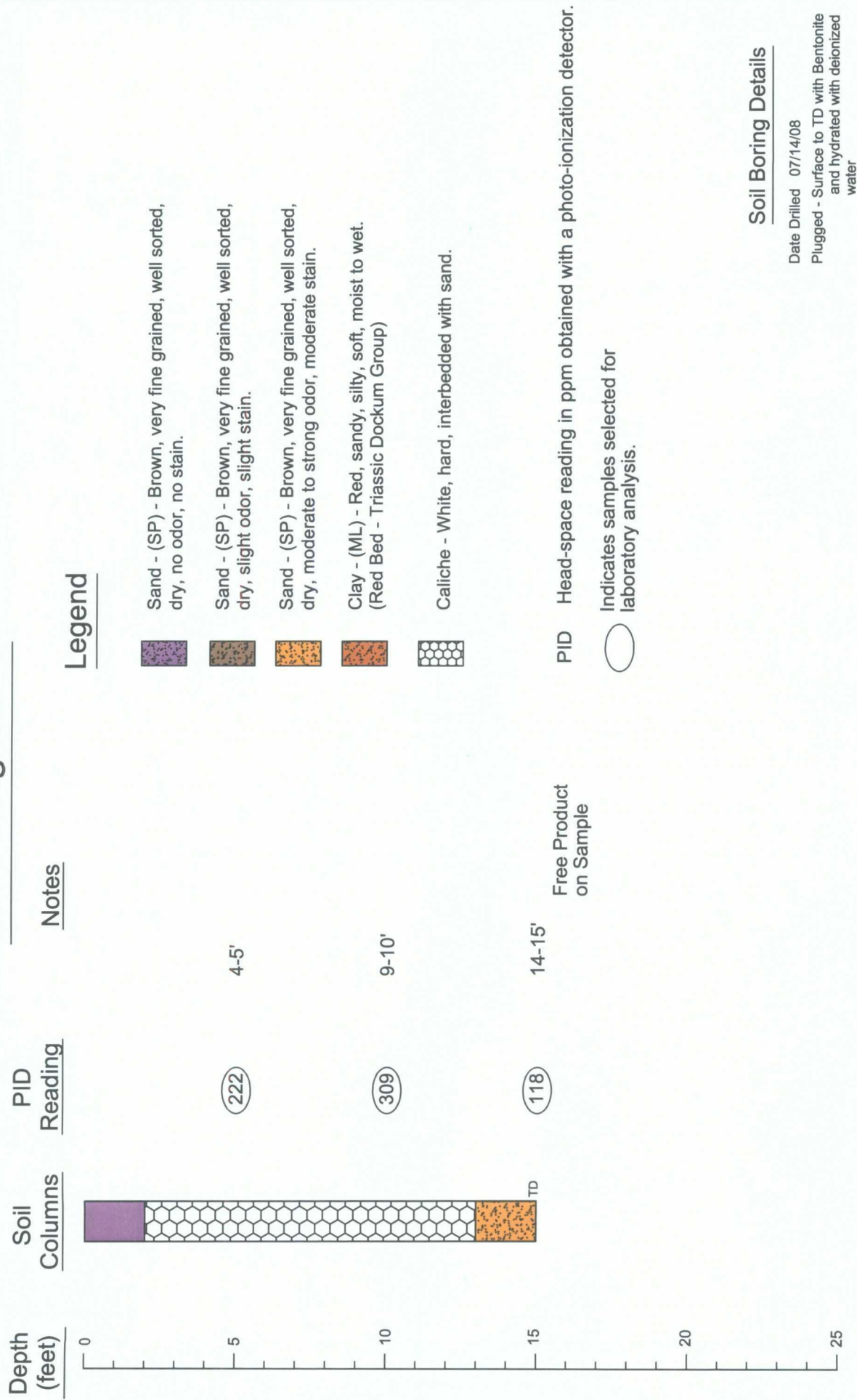
Plains Marketing, L.P. Bob Durham Lea County, NM



NOVA Safety and Environmental

Scale: NTS
August 26, 2008
CAD By: DGC
Checked By: RKR

Soil Boring SB - 7



Soil Boring Details

Date Drilled 07/14/08
 Plugged - Surface to TD with Bentonite and hydrated with deionized water

Soil Boring Log Details

Soil Boring SB - 7

Plains Marketing, L.P. Bob Durham Lea County, NM

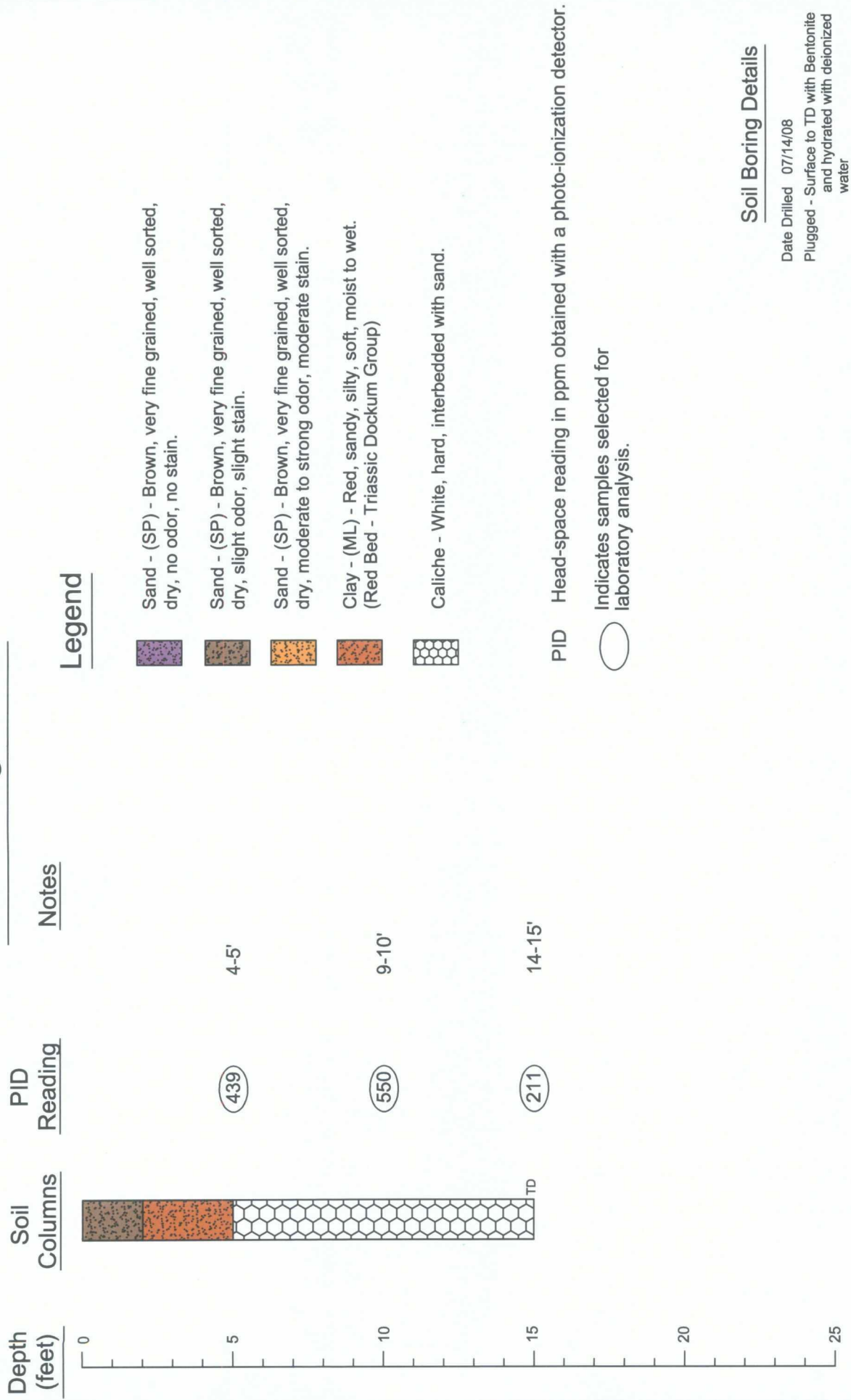


NOVA Safety and Environmental

Scale: NTS CAD By: DGC Checked By: RKR

August 26, 2008

Soil Boring SB - 8



Soil Boring Details

Date Drilled 07/14/08
 Plugged - Surface to TD with Bentonite and hydrated with deionized water

Soil Boring Log Details

Soil Boring SB - 8

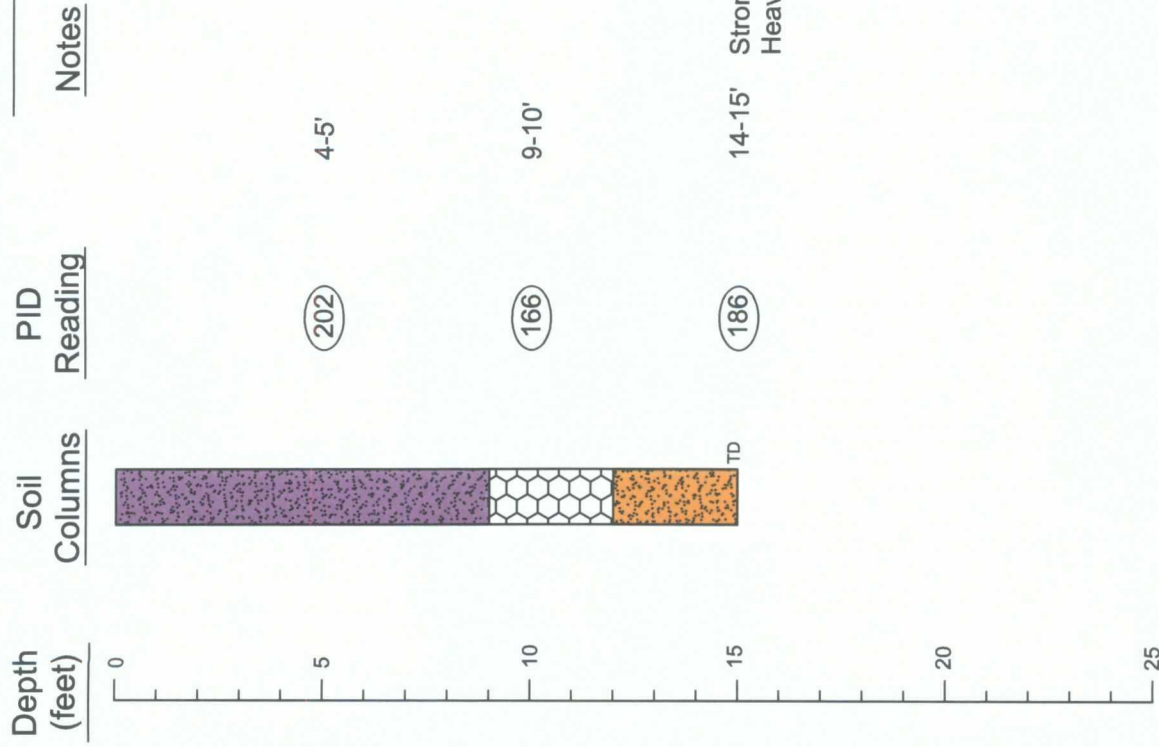
Plains Marketing, L.P. Bob Durham Lea County, NM

NOVA Safety and Environmental



Scaler: NTS
 August 26, 2008
 CAD By: DGC
 Checked By: RKR

Soil Boring SB - 9



Legend

- Sand - (SP) - Brown, very fine grained, well sorted, dry, no odor, no stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, slight odor, slight stain.
- Sand - (SP) - Brown, very fine grained, well sorted, dry, moderate to strong odor, moderate stain.
- Clay - (ML) - Red, sandy, silty, soft, moist to wet. (Red Bed - Triassic Dockum Group)
- Caliche - White, hard, interbedded with sand.

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

○ Indicates samples selected for laboratory analysis.

Soil Boring Details

Date Drilled 07/14/08
Plugged - Surface to TD with Bentonite and hydrated with deionized water

Soil Boring Log Details

Soil Boring SB - 9

Plains Marketing, L.P. Bob Durham Lea County, NM



NOVA Safety and Environmental

Scale: NTS CAD By: DGC Checked By: RKR
August 26, 2008



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) BOB DURHAM SB-5				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) PLAINS MARKETING LP				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 333 CLAY STREET, SUITE 1600				CITY HOUSTON		STATE TX	ZIP 77078
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 37	SECONDS 31.00 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LONGITUDE 103	16	54.00 W				
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS FROM MONUMENT CAFE GO W ON MONUMENT HWY TO GPS #								
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP ☐ NORTH ☐ SOUTH	RANGE ☐ EAST ☐ WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY				MAP NUMBER		TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD1478		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 7-14-08		DRILLING ENDED 7-14-08		DEPTH OF COMPLETED WELL (FT) 0	BORE HOLE DEPTH (FT) 15	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: ☒ AIR ☐ MUD ☐ ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (FT)		BORE HOLE DIA. (IN) 5	CASING MATERIAL N/A	CONNECTION TYPE (CASING) N/A	INSIDE DIA. CASING (IN) N/A	CASING WALL THICKNESS (IN) N/A	SLOT SIZE (IN) N/A
	FROM 0	TO 15						
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)				YIELD (GPM)
	FROM	TO						
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA							TOTAL ESTIMATED WELL YIELD (GPM)	

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 1 OF 2	

5. SEAL AND PUMP	TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP - WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	2				
	2	15	5	3 BAGS OF 3/8 PLUG		TOPLOAD	
6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?		
	FROM	TO					
	0	2	2	BROWN FINE SAND - CLAY - CALICHE	☐ YES	☒ NO	
	2	5	3	CALICHE - TAN FINE SAND -(DENCE) SANDSTONE	☐ YES	☒ NO	
	5	11	6	TAN FINE SAND - SANDSTONE	☐ YES	☒ NO	
	11	15	4	TAN FINE SAND - (DENCE) SANDSTONE	☐ YES	☒ NO	
	TD	15			☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
	ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL						
	7. TEST & ADDITIONAL INFO	WELL TEST METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER - SPECIFY:					
TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.							
ADDITIONAL STATEMENTS OR EXPLANATIONS: SOIL BORING ONLY- SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING							
8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING: _____ SIGNATURE OF DRILLER <u>8-12-08</u> _____ DATE						



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) BOB DURHAM SB-6				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) PLAINS MARKETING LP				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 333 CLAY STREET, SUITE 1600				CITY HOUSTON		STATE TX	ZIP 77078
	WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LATITUDE 32	37	31.00 N				
	LONGITUDE 103	16	54.00 W					
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS FROM MONUMENT CAFE GO W ON MONUMENT HWY TO GPS #								
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP ☐ NORTH ☐ SOUTH	RANGE ☐ EAST ☐ WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY				MAP NUMBER		TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD1478		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 7-14-08		DRILLING ENDED 7-14-08		DEPTH OF COMPLETED WELL (FT) 0	BORE HOLE DEPTH (FT) 15	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: ☒ AIR ☐ MUD ☐ ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (FT)		BORE HOLE DIA. (IN) 5	CASING MATERIAL N/A	CONNECTION TYPE (CASING) N/A	INSIDE DIA. CASING (IN) N/A	CASING WALL THICKNESS (IN) N/A	SLOT SIZE (IN) N/A
	FROM 0	TO 15						
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
	FROM	TO						
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED WELL YIELD (GPM)		

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP - WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	2				
		2	15				

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?	
	FROM	TO				
	0	1	1	BROWN FINE SAND - CLAY - CALICHE	☐ YES	☒ NO
	1	11	10	TAN FINE SAND - SANDSTONE - CALICHE	☐ YES	☒ NO
	11	15	4	TAN FINE SAND - (DENCE) SANDSTONE	☐ YES	☒ NO
	TD	15			☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
					☐ YES	☐ NO
	ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL					

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER - SPECIFY:				
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	ADDITIONAL STATEMENTS OR EXPLANATIONS: SOIL BORING ONLY- SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING					

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 _____ SIGNATURE OF DRILLER	<u>8-12-08</u> _____ DATE



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) BOB DURHAM SB-7				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) PLAINS MARKETING LP				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 333 CLAY STREET, SUITE 1600				CITY HOUSTON		STATE TX	ZIP 77078
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 37	SECONDS 31.00 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS FROM MONUMENT CAFE GO W ON MONUMENT HWY TO GPS #								
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP ☐ NORTH ☐ SOUTH	RANGE ☐ EAST ☐ WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY					MAP NUMBER	TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD1478		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 7-14-08		DRILLING ENDED 7-14-08		DEPTH OF COMPLETED WELL (FT) 0	BORE HOLE DEPTH (FT) 15	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: ☒ AIR ☐ MUD ☐ ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (FT) FROM TO		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	0 15		5	N/A	N/A	N/A	N/A	N/A
4. WATER BEARING STRATA	DEPTH (FT) FROM TO		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)				YIELD (GPM)
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED WELL YIELD (GPM)		

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 1 OF 2	

5. SEAL AND PUMP	TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP - WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	2				
		2	15				
		5	.5 BAGS OF CEMENT		TOPLOAD		
		5	3 BAGS OF 3/8 PLUG		TOPLOAD		

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?		
	FROM	TO					
	0	1	1	BROWN FINE SAND - CLAY	☐ YES	☒ NO	
	1	12	11	TAN FINE SAND - SANDSTONE - CALICHE	☐ YES	☒ NO	
	12	15	3	TAN FINE SAND - (DENCE) SANDSTONE	☐ YES	☒ NO	
	TD	15			☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
					☐ YES	☐ NO	
	ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL						

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER - SPECIFY:				
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	ADDITIONAL STATEMENTS OR EXPLANATIONS: SOIL BORING ONLY- SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING					

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING.	
	 SIGNATURE OF DRILLER	<u>8-12-08</u> DATE

FOR USE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 2 OF 2	



WELL RECORD & LOG

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1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) BOB DURHAM SB-8				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) PLAINS MARKETING LP				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 333 CLAY STREET, SUITE 1600				CITY HOUSTON		STATE TX	ZIP 77078
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 37	SECONDS 31.00	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE 103		16	54.00			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS FROM MONUMENT CAFE GO W ON MONUMENT HWY TO GPS #								
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP ☐ NORTH ☐ SOUTH	RANGE ☐ EAST ☐ WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY				MAP NUMBER		TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD1478		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 7-14-08		DRILLING ENDED 7-14-08		DEPTH OF COMPLETED WELL (FT) 0	BORE HOLE DEPTH (FT) 15	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: ☒ AIR ☐ MUD ☐ ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (FT) FROM TO		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	0 15							
	5		N/A	N/A	N/A	N/A	N/A	
4. WATER BEARING STRATA	DEPTH (FT) FROM TO		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED WELL YIELD (GPM)		

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP - WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	2	5	.5 BAGS OF CEMENT		TOPLOAD
		2	15	5	3 BAGS OF 3/8 PLUG		TOPLOAD

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?	
	FROM	TO				
	0	9	9	TAN FINE SAND - SANDSTONE - CALICHE	☐ YES ☒ NO	
	9	10	1	TAN FINE SAND - SANDSTONE	☐ YES ☒ NO	
	10	15	5	TAN FINE SAND - (DENCE) SANDSTONE - CALICHE	☐ YES ☒ NO	
	TD	15			☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
					☐ YES ☐ NO	
	ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL					

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER - SPECIFY:				
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	ADDITIONAL STATEMENTS OR EXPLANATIONS: SOIL BORING ONLY- SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING					

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:				
	 _____ SIGNATURE OF DRILLER		8-12-18 _____ DATE		

FOR USE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER	
LOCATION			PAGE 2 OF 2



WELL RECORD & LOG

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1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) BOB DURHAM SB-9				OSE FILE NUMBER(S)				
	WELL OWNER NAME(S) PLAINS MARKETING LP				PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 333 CLAY STREET, SUITE 1600				CITY HOUSTON		STATE TX	ZIP 77078	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 32	SECONDS 37	26.00 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LONGITUDE	103	16	54.00 W				
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS FROM MONUMENT CAFE GO W ON MONUMENT HWY TO GPS #									
2. OPTIONAL	(2.5 ACRE) 1/4	(10 ACRE) 1/4	(40 ACRE) 1/4	(160 ACRE) 1/4	SECTION	TOWNSHIP ☐ NORTH ☐ SOUTH	RANGE ☐ EAST ☐ WEST		
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT		
	HYDROGRAPHIC SURVEY					MAP NUMBER	TRACT NUMBER		
3. DRILLING INFORMATION	LICENSE NUMBER WD1478		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION			
	DRILLING STARTED 7-14-08		DRILLING ENDED 7-14-08		DEPTH OF COMPLETED WELL (FT) 0	BORE HOLE DEPTH (FT) 15	DEPTH WATER FIRST ENCOUNTERED (FT)		
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A			
	DRILLING FLUID: ☒ AIR ☐ MUD ☐ ADDITIVES - SPECIFY:								
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:								
	DEPTH (FT) FROM TO		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)	
	0 15								
4. WATER BEARING STRATA	DEPTH (FT) FROM TO		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)				YIELD (GPM)	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED WELL YIELD (GPM)			

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP: ☐ SUBMERSIBLE ☐ JET ☐ NO PUMP - WELL NOT EQUIPPED ☐ TURBINE ☐ CYLINDER ☐ OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	2				
		2	15				

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
	FROM	TO			
	0	1	1	BROWN FINE SAND - CLAY	☐ YES ☒ NO
	1	12	11	TAN FINE SAND - SANDSTONE - CALICHE	☐ YES ☒ NO
	12	15	3	TAN FINE SAND - (DENCE) SANDSTONE - CALICHE	☐ YES ☒ NO
	TD	15			☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO
					☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER - SPECIFY:
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	ADDITIONAL STATEMENTS OR EXPLANATIONS: SOIL BORING ONLY- SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING	

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 _____ SIGNATURE OF DRILLER	8-12-08 _____ DATE

APPENDIX B:
Laboratory Analytical Reports



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•688•6301 FAX 432•688•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5250
E-Mail: lab@traceanalysis.com

NELAP Certifications

Lubbock T104704219-08-TX El Paso T104704221-08-TX Midland T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: July 23, 2008

Work Order: 8071628



Project Location: Monument, Lea County, NM
Project Name: Bob Durham
Project Number: TNM LF 2000-07

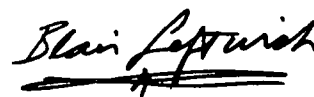
Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
167191	SB-5 4'-5'	soil	2008-07-14	10:00	2008-07-16
167192	SB-5 9'-10'	soil	2008-07-14	10:07	2008-07-16
167193	SB-5 14'-15'	soil	2008-07-14	10:13	2008-07-16
167194	SB-6 4'-5'	soil	2008-07-14	10:36	2008-07-16
167195	SB-6 9'-10'	soil	2008-07-14	10:39	2008-07-16
167196	SB-6 14'-15'	soil	2008-07-14	10:45	2008-07-16
167197	SB-7 4'-5'	soil	2008-07-14	10:56	2008-07-16
167198	SB-7 9'-10'	soil	2008-07-14	11:02	2008-07-16
167199	SB-7 14'-15'	soil	2008-07-14	11:08	2008-07-16
167200	SB-8 4'-5'	soil	2008-07-14	11:15	2008-07-16
167201	SB-8 9'-10'	soil	2008-07-14	11:18	2008-07-16
167202	SB-8 14'-15'	soil	2008-07-14	11:12	2008-07-16

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
167203	SB-9 4'-5'	soil	2008-07-14	11:35	2008-07-16
167204	SB-9 9'-10'	soil	2008-07-14	11:39	2008-07-16
167205	SB-9 14'-15'	soil	2008-07-14	11:46	2008-07-16

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.

This report consists of a total of 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Bob Durham were received by TraceAnalysis, Inc. on 2008-07-16 and assigned to work order 8071628. Samples for work order 8071628 were received intact at a temperature of 3.2 deg. C.

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

Test	Method
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8071628 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.

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

Page Number: 4 of 31
Monument, Lea County, NM

Analytical Report

Sample: 167191 - SB-5 4'-5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50474
Prep Batch: 43301

Analytical Method: S 8021B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.0972	mg/Kg	1	0.0100
Xylene		0.334	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.944	mg/Kg	1	1.00	94	68 - 136.9
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	48.2 - 155

Sample: 167191 - SB-5 4'-5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1100	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹	421	mg/Kg	1	100	421	10 - 250.4

Sample: 167191 - SB-5 4'-5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50475
Prep Batch: 43301

Analytical Method: S 8015B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

continued ...

¹High surrogate recovery due to peak interference.

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

Page Number: 5 of 31
Monument, Lea County, NM

sample 167191 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
GRO		72.3	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.21	mg/Kg	1	1.00	121	63.8 - 141

Sample: 167192 - SB-5 9'-10'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50474
Prep Batch: 43301

Analytical Method: S 8021B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.928	mg/Kg	1	1.00	93	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.955	mg/Kg	1	1.00	96	48.2 - 155

Sample: 167192 - SB-5 9'-10'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

Page Number: 6 of 31
Monument, Lea County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	100	119	10 - 250.4

Sample: 167192 - SB-5 9'-10'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50475
Prep Batch: 43301

Analytical Method: S 8015B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		8.42	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.14	mg/Kg	1	1.00	114	63.8 - 141

Sample: 167193 - SB-5 14'-15'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50474
Prep Batch: 43301

Analytical Method: S 8021B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.927	mg/Kg	1	1.00	93	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.946	mg/Kg	1	1.00	95	48.2 - 155

Report Date: July 23, 2008
TNM LF 2000-07

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Sample: 167193 - SB-5 14'-15'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		124	mg/Kg	1	100	124	10 - 250.4

Sample: 167193 - SB-5 14'-15'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50475
Prep Batch: 43301

Analytical Method: S 8015B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	3.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.16	mg/Kg	1	1.00	116	63.8 - 141

Sample: 167194 - SB-6 4'-5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50474
Prep Batch: 43301

Analytical Method: S 8021B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.926	mg/Kg	1	1.00	93	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.948	mg/Kg	1	1.00	95	48.2 - 155

Sample: 167194 - SB-6 4'-5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		104	mg/Kg	1	100	104	10 - 250.4

Sample: 167194 - SB-6 4'-5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50475
Prep Batch: 43301

Analytical Method: S 8015B
Date Analyzed: 2008-07-18
Sample Preparation: 2008-07-17

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.20	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	63.8 - 141

Sample: 167195 - SB-6 9'-10'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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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)		0.952	mg/Kg	1	1.00	95	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.952	mg/Kg	1	1.00	95	48.2 - 155

Sample: 167195 - SB-6 9'-10'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		140	mg/Kg	1	100	140	10 - 250.4

Sample: 167195 - SB-6 9'-10'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		1.15	mg/Kg	1	1.00	115	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.15	mg/Kg	1	1.00	115	63.8 - 141

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Sample: 167196 - SB-6 14'-15'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.916	mg/Kg	1	1.00	92	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.928	mg/Kg	1	1.00	93	48.2 - 155

Sample: 167196 - SB-6 14'-15'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		111	mg/Kg	1	100	111	10 - 250.4

Sample: 167196 - SB-6 14'-15'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	2.83	mg/Kg	1	1.00

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	63.8 - 141

Sample: 167197 - SB-7 4'-5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.914	mg/Kg	1	1.00	91	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.936	mg/Kg	1	1.00	94	48.2 - 155

Sample: 167197 - SB-7 4'-5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		124	mg/Kg	1	100	124	10 - 250.4

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Sample: 167197 - SB-7 4'-5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.02	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	63.8 - 141

Sample: 167198 - SB-7 9'-10'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.928	mg/Kg	1	1.00	93	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.938	mg/Kg	1	1.00	94	48.2 - 155

Sample: 167198 - SB-7 9'-10'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		117	mg/Kg	1	100	117	10 - 250.4

Sample: 167198 - SB-7 9'-10'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		1.12	mg/Kg	1	1.00	112	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	63.8 - 141

Sample: 167199 - SB-7 14'-15'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.917	mg/Kg	1	1.00	92	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.923	mg/Kg	1	1.00	92	48.2 - 155

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Sample: 167199 - SB-7 14'-15'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		70.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		105	mg/Kg	1	100	105	10 - 250.4

Sample: 167199 - SB-7 14'-15'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.89	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	1	1.00	112	63.8 - 141

Sample: 167200 - SB-8 4'-5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		0.921	mg/Kg	5	0.0100
Xylene		3.98	mg/Kg	5	0.0100

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.51	mg/Kg	5	5.00	90	68 - 136.9
4-Bromofluorobenzene (4-BFB)		5.58	mg/Kg	5	5.00	112	48.2 - 155

Sample: 167200 - SB-8 4'-5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1210	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	256	mg/Kg	1	100	256	10 - 250.4

Sample: 167200 - SB-8 4'-5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		416	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	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		6.78	mg/Kg	5	5.00	136	63.8 - 141

Sample: 167201 - SB-8 9'-10'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

²High surrogate recovery due to peak interference.

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Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		<0.0200	mg/Kg	2	0.0100
Ethylbenzene		0.119	mg/Kg	2	0.0100
Xylene		0.747	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.85	mg/Kg	2	2.00	92	68 - 136.9
4-Bromofluorobenzene (4-BFB)		2.14	mg/Kg	2	2.00	107	48.2 - 155

Sample: 167201 - SB-8 9'-10'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		425	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		113	mg/Kg	1	100	113	10 - 250.4

Sample: 167201 - SB-8 9'-10'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		174	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.21	mg/Kg	2	2.00	110	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		2.51	mg/Kg	2	2.00	126	63.8 - 141

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Sample: 167202 - SB-8 14'-15'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.951	mg/Kg	1	1.00	95	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.989	mg/Kg	1	1.00	99	48.2 - 155

Sample: 167202 - SB-8 14'-15'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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-Triacontane		119	mg/Kg	1	100	119	10 - 250.4

Sample: 167202 - SB-8 14'-15'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		12.2	mg/Kg	1	1.00

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.20	mg/Kg	1	1.00	120	63.8 - 141

Sample: 167203 - SB-9 4'-5'

Laboratory: Midland

Analysis: BTEX

QC Batch: 50595

Prep Batch: 43396

Analytical Method: S 8021B

Date Analyzed: 2008-07-21

Sample Preparation: 2008-07-21

Prep Method: S 5035

Analyzed By: DC

Prepared By: DC

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)		0.910	mg/Kg	1	1.00	91	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.920	mg/Kg	1	1.00	92	48.2 - 155

Sample: 167203 - SB-9 4'-5'

Laboratory: Midland

Analysis: TPH DRO

QC Batch: 50434

Prep Batch: 43283

Analytical Method: Mod. 8015B

Date Analyzed: 2008-07-17

Sample Preparation: 2008-07-17

Prep Method: N/A

Analyzed By: LD

Prepared By: LD

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-Triacontane		117	mg/Kg	1	100	117	10 - 250.4

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Sample: 167203 - SB-9 4'-5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	2.25	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	63.8 - 141

Sample: 167204 - SB-9 9'-10'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.901	mg/Kg	1	1.00	90	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.916	mg/Kg	1	1.00	92	48.2 - 155

Sample: 167204 - SB-9 9'-10'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

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

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		100	mg/Kg	1	100	100	10 - 250.4

Sample: 167204 - SB-9 9'-10'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.04	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	63.8 - 141

Sample: 167205 - SB-9 14'-15'

Laboratory: Midland
Analysis: BTEX
QC Batch: 50595
Prep Batch: 43396

Analytical Method: S 8021B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

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)		0.899	mg/Kg	1	1.00	90	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	1	1.00	91	48.2 - 155

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Sample: 167205 - SB-9 14'-15'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 50434
Prep Batch: 43283

Analytical Method: Mod. 8015B
Date Analyzed: 2008-07-17
Sample Preparation: 2008-07-17

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		144	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		118	mg/Kg	1	100	118	10 - 250.4

Sample: 167205 - SB-9 14'-15'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 50597
Prep Batch: 43396

Analytical Method: S 8015B
Date Analyzed: 2008-07-21
Sample Preparation: 2008-07-21

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	3.54	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	63.8 - 141

Method Blank (1) QC Batch: 50434

QC Batch: 50434
Prep Batch: 43283

Date Analyzed: 2008-07-17
QC Preparation: 2008-07-17

Analyzed By: LD
Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		70.8	mg/Kg	1	100	71	30.9 - 146.4

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Method Blank (1) QC Batch: 50474

QC Batch: 50474
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL		Units	RL
		Result			
Benzene		<0.00580		mg/Kg	0.01
Toluene		<0.00470		mg/Kg	0.01
Ethylbenzene		<0.00530		mg/Kg	0.01
Xylene		<0.0136		mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	48.3 - 132.5
4-Bromofluorobenzene (4-BFB)		0.931	mg/Kg	1	1.00	93	37.7 - 128.9

Method Blank (1) QC Batch: 50475

QC Batch: 50475
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL		Units	RL
		Result			
GRO		0.836		mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	39.2 - 135.2
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	16.8 - 138.1

Method Blank (1) QC Batch: 50595

QC Batch: 50595
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL		Units	RL
		Result			
Benzene		<0.00580		mg/Kg	0.01
Toluene		<0.00470		mg/Kg	0.01
Ethylbenzene		<0.00530		mg/Kg	0.01
Xylene		<0.0136		mg/Kg	0.01

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.936	mg/Kg	1	1.00	94	48.3 - 132.5
4-Bromofluorobenzene (4-BFB)		0.915	mg/Kg	1	1.00	92	37.7 - 128.9

Method Blank (1) QC Batch: 50597

QC Batch: 50597
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.746	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	39.2 - 135.2
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	16.8 - 138.1

Laboratory Control Spike (LCS-1)

QC Batch: 50434
Prep Batch: 43283

Date Analyzed: 2008-07-17
QC Preparation: 2008-07-17

Analyzed By: LD
Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	235	mg/Kg	1	250	<15.8	94	27.8 - 152.1

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	245	mg/Kg	1	250	<15.8	98	27.8 - 152.1	4	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
n-Triacontane	103	107	mg/Kg	1	100	103	107	38 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 50474
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.958	mg/Kg	1	1.00	<0.00580	96	73.3 - 116.6
Toluene	0.963	mg/Kg	1	1.00	<0.00470	96	78.6 - 115.1
Ethylbenzene	0.967	mg/Kg	1	1.00	<0.00530	97	77.4 - 114.9
Xylene	2.89	mg/Kg	1	3.00	<0.0136	96	78.2 - 114.7

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.09	mg/Kg	1	1.00	<0.00580	109	73.3 - 116.6	13	20
Toluene	1.10	mg/Kg	1	1.00	<0.00470	110	78.6 - 115.1	13	20
Ethylbenzene	1.09	mg/Kg	1	1.00	<0.00530	109	77.4 - 114.9	12	20
Xylene	3.28	mg/Kg	1	3.00	<0.0136	109	78.2 - 114.7	13	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.953	1.00	mg/Kg	1	1.00	95	100	45 - 124.2
4-Bromofluorobenzene (4-BFB)	0.897	0.946	mg/Kg	1	1.00	90	95	47.2 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 50475
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.64	mg/Kg	1	10.0	0.836	88	57.5 - 106.4

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	10.4	mg/Kg	1	10.0	0.836	96	57.5 - 106.4	8	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.08	1.12	mg/Kg	1	1.00	108	112	63.8 - 134.3
4-Bromofluorobenzene (4-BFB)	1.02	1.05	mg/Kg	1	1.00	102	105	53.3 - 123.6

Laboratory Control Spike (LCS-1)

QC Batch: 50595
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.914	mg/Kg	1	1.00	<0.00580	91	73.3 - 116.6
Toluene	0.927	mg/Kg	1	1.00	<0.00470	93	78.6 - 115.1
Ethylbenzene	0.929	mg/Kg	1	1.00	<0.00530	93	77.4 - 114.9
Xylene	2.79	mg/Kg	1	3.00	<0.0136	93	78.2 - 114.7

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	0.988	mg/Kg	1	1.00	<0.00580	99	73.3 - 116.6	8	20
Toluene	0.997	mg/Kg	1	1.00	<0.00470	100	78.6 - 115.1	7	20
Ethylbenzene	1.00	mg/Kg	1	1.00	<0.00530	100	77.4 - 114.9	7	20
Xylene	3.00	mg/Kg	1	3.00	<0.0136	100	78.2 - 114.7	7	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)	0.939	0.971	mg/Kg	1	1.00	94	97	45 - 124.2
4-Bromofluorobenzene (4-BFB)	0.944	0.965	mg/Kg	1	1.00	94	96	47.2 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 50597
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	10.0	mg/Kg	1	10.0	0.746	92	57.5 - 106.4

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
GRO	10.6	mg/Kg	1	10.0	0.746	98	57.5 - 106.4	6	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)	1.14	1.14	mg/Kg	1	1.00	114	114	63.8 - 134.3
4-Bromofluorobenzene (4-BFB)	1.15	1.16	mg/Kg	1	1.00	115	116	53.3 - 123.6

Matrix Spike (MS-1) Spiked Sample: 167191

QC Batch: 50434
Prep Batch: 43283

Date Analyzed: 2008-07-17
QC Preparation: 2008-07-17

Analyzed By: LD
Prepared By: LD

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	1410	mg/Kg	1	250	1100	124	18 - 179.5

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	1250	mg/Kg	1	250	1100	60	18 - 179.5	12	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-Triacontane ^{3 4}	421	425	mg/Kg	1	100	421	425	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 167280

QC Batch: 50474
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.997	mg/Kg	1	1.00	<0.00580	100	62.2 - 134.3
Toluene	1.02	mg/Kg	1	1.00	<0.00470	102	62.6 - 145.4
Ethylbenzene	1.04	mg/Kg	1	1.00	<0.00530	104	64.6 - 146.4
Xylene	3.14	mg/Kg	1	3.00	<0.0136	104	64.3 - 148.8

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	0.973	mg/Kg	1	1.00	<0.00580	97	62.2 - 134.3	2	20
Toluene	1.00	mg/Kg	1	1.00	<0.00470	100	62.6 - 145.4	2	20
Ethylbenzene	1.03	mg/Kg	1	1.00	<0.00530	103	64.6 - 146.4	1	20
Xylene	3.12	mg/Kg	1	3.00	<0.0136	104	64.3 - 148.8	1	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)	0.944	0.922	mg/Kg	1	1	94	92	38.8 - 127.5
4-Bromofluorobenzene (4-BFB)	0.940	0.920	mg/Kg	1	1	94	92	49.3 - 142.4

³High surrogate recovery due to peak interference.

⁴High surrogate recovery due to peak interference.

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Matrix Spike (MS-1) Spiked Sample: 167194

QC Batch: 50475
Prep Batch: 43301

Date Analyzed: 2008-07-18
QC Preparation: 2008-07-17

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	10.7	mg/Kg	1	10.0	1.2023	95	10 - 139.3

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	11.8	mg/Kg	1	10.0	1.2023	106	10 - 139.3	10	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)	1.06	1.05	mg/Kg	1	1	106	105	21.3 - 119
4-Bromofluorobenzene (4-BFB)	1.11	1.13	mg/Kg	1	1	111	113	52.5 - 154

Matrix Spike (MS-1) Spiked Sample: 167566

QC Batch: 50595
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	⁵ 1.94	mg/Kg	1	1.00	<0.00580	194	62.2 - 134.3
Toluene	⁶ 2.00	mg/Kg	1	1.00	<0.00470	200	62.6 - 145.4
Ethylbenzene	⁷ 2.07	mg/Kg	1	1.00	0.047	202	64.6 - 146.4
Xylene	⁸ 6.21	mg/Kg	1	3.00	0.0672	205	64.3 - 148.8

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	⁹ 1.12	mg/Kg	1	1.00	<0.00580	112	62.2 - 134.3	54	20
Toluene	¹⁰ 1.14	mg/Kg	1	1.00	<0.00470	114	62.6 - 145.4	55	20
Ethylbenzene	¹¹ 1.18	mg/Kg	1	1.00	0.047	113	64.6 - 146.4	55	20

continued ...

⁵Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁶Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁷Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁸Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹⁰MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

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matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Xylene	¹² 3.54	mg/Kg	1	3.00	0.0672	116	64.3 - 148.8	55	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)	0.941	0.879	mg/Kg	1	1	94	88	38.8 - 127.5
4-Bromofluorobenzene (4-BFB)	0.977	0.904	mg/Kg	1	1	98	90	49.3 - 142.4

Matrix Spike (MS-1) Spiked Sample: 167231

QC Batch: 50597
Prep Batch: 43396

Date Analyzed: 2008-07-21
QC Preparation: 2008-07-21

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	¹³ 18.2	mg/Kg	1	10.0	<0.739	182	10 - 139.3

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 22.3	mg/Kg	1	10.0	<0.739	223	10 - 139.3	20	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)	1.10	1.10	mg/Kg	1	1	110	110	21.3 - 119
4-Bromofluorobenzene (4-BFB)	1.17	1.16	mg/Kg	1	1	117	116	52.5 - 154

Standard (ICV-1)

QC Batch: 50434

Date Analyzed: 2008-07-17

Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	85 - 115	2008-07-17

¹²MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

¹³Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁴Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

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Standard (CCV-1)

QC Batch: 50434

Date Analyzed: 2008-07-17

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	85 - 115	2008-07-17

Standard (CCV-2)

QC Batch: 50434

Date Analyzed: 2008-07-17

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	236	94	85 - 115	2008-07-17

Standard (CCV-3)

QC Batch: 50434

Date Analyzed: 2008-07-17

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	85 - 115	2008-07-17

Standard (ICV-1)

QC Batch: 50474

Date Analyzed: 2008-07-18

Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0951	95	85 - 115	2008-07-18
Toluene		mg/Kg	0.100	0.0960	96	85 - 115	2008-07-18
Ethylbenzene		mg/Kg	0.100	0.0949	95	85 - 115	2008-07-18
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2008-07-18

Standard (CCV-1)

QC Batch: 50474

Date Analyzed: 2008-07-18

Analyzed By: DC

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

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Monument, Lea County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0920	92	85 - 115	2008-07-18
Toluene		mg/Kg	0.100	0.0927	93	85 - 115	2008-07-18
Ethylbenzene		mg/Kg	0.100	0.0912	91	85 - 115	2008-07-18
Xylene		mg/Kg	0.300	0.274	91	85 - 115	2008-07-18

Standard (ICV-1)

QC Batch: 50475

Date Analyzed: 2008-07-18

Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.08	108	85 - 115	2008-07-18

Standard (CCV-1)

QC Batch: 50475

Date Analyzed: 2008-07-18

Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.15	115	85 - 115	2008-07-18

Standard (ICV-1)

QC Batch: 50595

Date Analyzed: 2008-07-21

Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0971	97	85 - 115	2008-07-21
Toluene		mg/Kg	0.100	0.0978	98	85 - 115	2008-07-21
Ethylbenzene		mg/Kg	0.100	0.0973	97	85 - 115	2008-07-21
Xylene		mg/Kg	0.300	0.293	98	85 - 115	2008-07-21

Standard (CCV-1)

QC Batch: 50595

Date Analyzed: 2008-07-21

Analyzed By: DC

Report Date: July 23, 2008
TNM LF 2000-07

Work Order: 8071628
Bob Durham

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Monument, Lea County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0925	92	85 - 115	2008-07-21
Toluene		mg/Kg	0.100	0.0936	94	85 - 115	2008-07-21
Ethylbenzene		mg/Kg	0.100	0.0928	93	85 - 115	2008-07-21
Xylene		mg/Kg	0.300	0.280	93	85 - 115	2008-07-21

Standard (ICV-1)

QC Batch: 50597

Date Analyzed: 2008-07-21

Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.12	112	85 - 115	2008-07-21

Standard (CCV-1)

QC Batch: 50597

Date Analyzed: 2008-07-21

Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.14	114	85 - 115	2008-07-21

TraceAnalysis, Inc.

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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 ENV.** Phone #: **432-520-7720**
Address: (Street, City, Zip) Fax #:

Contact Person: **Ron Rounsaville** E-mail: **rrounsaville@novatraining.cc**
Invoice to: **PLAINS**
(If different from above)

Project #: **TNM LF 2000-07** Project Name: **Bob Durham**
Project Location (including state): **Monument, Lea Co. NM** Sample Signature: *Ron Rounsaville*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	DATE	TIME
16791	SB-5, 4-5'	1	4oz	X							X	7/14/08	1000
192	SB-5, 9-10'	1		X							X		1007
193	SB-5, 14-15'	1		X							X		1013
194	SB-6, 4-5'	1		X							X		1036
195	SB-6, 9-10'	1		X							X		1039
196	SB-6, 14-15'	1		X							X		1045
197	SB-7, 4-5'	1		X							X		1056
198	SB-7, 9-10'	1		X							X		1102
199	SB-7, 14-15'	1		X							X	7/14/08	1108
200													

Relinquished by: *Ron Rounsaville* Company: **NOVA ENV.** Date: **7/16/08** Time: **11:55** Temp: **3.2**
Relinquished by: **Wendell THAE** Company: **THAE** Date: **7/16/08** Time: **11:55** Temp: **3.2**
Relinquished by: Company: Date: Time: Temp:

REMARKS: **all tests - midland**

LAB USE ONLY

TPH 418.1 / TX1005 Ex(C35) ☒
TPH 8015 GRO / DRO / TVHC ☒
PAH 8270C / 625 ☒
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 ☒
TCLP Metals Ag As Ba Cd Cr Pb Se Hg ☒
TCLP Volatiles ☒
TCLP Semi Volatiles ☒
TCLP Pesticides ☒
RCI ☒
GC/MS Vol. 8260B / 624 ☒
GC/MS Semi. Vol. 8270C / 625 ☒
PCBs 8082 / 608 ☒
Pesticides 8081A / 608 ☒
BOD, TSS, pH ☒
Moisture Content ☒
Turn Around Time if different from standard ☒

☐ 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.

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Carrier # **Carry dn**

TraceAnalysis, Inc.

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Ft Worth, Texas 76116
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LAB Order ID #

Page 2 of 2

Company Name: NOVA ENV.		Phone #: 432-520-7720	
Address: (Street, City, Zip)		Fax #:	
Contact Person: Ron Rowanville	E-mail: rowanville@novatrainig.cc		
Invoice to: (If different from above)	Project #:		
Project #:	Project Name: TAM LF2000-07		
Project Location (Including state): LEA CO. NM	Sampler Signature: <i>Roll Rowanville</i>		

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		Turn Around Time if different from standard	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE		TIME
1067300	SB-8, 4-5'	1	4oz	X												
201	SB-8, 9-10'	1		X												
202	SB-8, 14-15'	1		X												
203	SB-9, 4-5'	1		X												
204	SB-9, 9-10'	1		X												
205	SB-9, 14-15'	1		X												

LAB USE ONLY	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCBs 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard
	X	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished by: <i>Roll Rowanville</i>	Company: <i>NOVA ENV.</i>	Date: <i>7/16/08</i>	Time: <i>11:55</i>	Received by: <i>Shelley Thompson</i>	Company: <i>TRACE</i>	Date: <i>7/16/08</i>	Time: <i>11:55</i>	Temp °C: <i>32</i>
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:

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.

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