

GW - 294

Annual  
MONITORING  
REPORTS

DATE:  
2008

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**PLAINS  
ALL AMERICAN**

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March 13, 2009

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

Re: Plains All American – 2008 Annual Monitoring Reports  
22 Sites in Lea County, New Mexico

Dear Mr. Hansen:

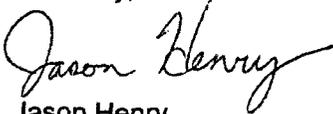
Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

<u>34 Junc. to Lea Sta.</u>	<u>1R-0386</u>	<u>Section 21, Township 20 South, Range 37 East, Lea County</u>
<u>34 Junction South</u>	<u>1R-0456</u>	<u>Section 02, Township 17 South, Range 36 East, Lea County</u>
<u>Bob Durham</u>	<u>AP-0016</u>	<u>Section 32, Township 19 South, Range 37 East, Lea County</u>
<u>Darr Angell #1</u>	<u>AP-007</u>	<u>Section 11, Township 15 South, Range 37 East, Lea County</u>
<u>Darr Angell #2</u>	<u>AP-007</u>	<u>Section 11, Township 15 South, Range 37 East, Lea County</u>
		<u>Section 14, Township 15 South, Range 37 East, Lea County</u>
<u>Darr Angell #4</u>	<u>AP-007</u>	<u>Section 11, Township 15 South, Range 37 East, Lea County</u>
		<u>Section 02, Township 15 South, Range 37 East, Lea County</u>
<u>Denton Station</u>	<u>1R-0234</u>	<u>Section 14, Township 15 South, Range 37 East, Lea County</u>
<u>HDO-90-23</u>	<u>AP-009</u>	<u>Section 06, Township 20 South, Range 37 East, Lea County</u>
<u>LF-59</u>	<u>1R-0103</u>	<u>Section 32, Township 19 South, Range 37 East, Lea County</u>
<u>Monument 2</u>	<u>1R-0110</u>	<u>Section 06, Township 20 South, Range 37 East, Lea County</u>
		<u>Section 07, Township 20 South, Range 37 East, Lea, County</u>
<u>Monument 10</u>	<u>1R-0119</u>	<u>Section 30, Township 19 South, Range 37 East, Lea County</u>
<u>Monument 11</u>	<u>1R-120</u>	<u>Section 30, Township 19 South, Range 37 East, Lea County</u>
<u>Monument 17</u>	<u>1R-123</u>	<u>Section 29, Township 19 South, Range 37 East, Lea County</u>
<u>Monument 18</u>	<u>1R-0124</u>	<u>Section 07, Township 20 South, Range 37 East, Lea County</u>
<u>Red Byrd #1</u>	<u>1R-0085</u>	<u>Section 01, Township 20 South, Range 36 East, Lea County</u>
<u>S. Mon. Gath. Sour</u>	<u>1R-951</u>	<u>Section 05, Township 20 South, Range 37 East, Lea County</u>
<u>SPS-11</u>	<u>GW-0140</u>	<u>Section 18, Township 18 South, Range 36 East, Lea County</u>
<u>Texaco Skelly F</u>	<u>1R-0420</u>	<u>Section 11, Township 21 South, Range 37 East, Lea County</u>
<u>TNM 97-04</u>	<u>GW-0294</u>	<u>Section 11, Township 16 South, Range 35 East, Lea County</u>
<u>TNM 97-17</u>	<u>AP-017</u>	<u>Section 21, Township 20 South, Range 37 East, Lea County</u>
<u>TNM 97-18</u>	<u>AP-0013</u>	<u>Section 28, Township 20 South, Range 37 East, Lea County</u>
<u>TNM 98-05A</u>	<u>AP-12</u>	<u>Section 26, Township 21 South, Range 37 East, Lea County</u>

Nova Safety and Environmental (Nova) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Nova personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

A handwritten signature in cursive script that reads "Jason Henry".

Jason Henry  
Remediation Coordinator  
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures



2008  
ANNUAL MONITORING REPORT

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**TNM 97-04**  
SE ¼ SE ¼ of SECTION 11, TOWNSHIP 16 SOUTH, RANGE 35 EAST  
LEA COUNTY, NEW MEXICO  
PLAINS EMS NUMBER: TNM 97-04  
NMOCD Reference GW-0294

PREPARED FOR:

**PLAINS MARKETING, L.P.**  
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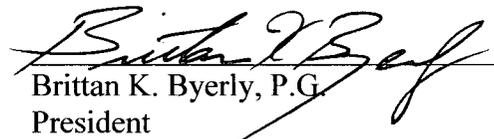


PREPARED BY:

**NOVA Safety and Environmental**  
2057 Commerce  
Midland, Texas 79703

February 2009

  
Ronald K. Rounsaville  
Project Manager

  
Brittan K. Byerly, P.G.  
President

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2B – Inferred Groundwater Gradient Map – June 2, 2008

2C – Inferred Groundwater Gradient Map – September 3, 2008

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Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – March 7, 2008

3B – Groundwater Concentration and Inferred PSH Extent Map – June 2, 2008

3C – Groundwater Concentration and Inferred PSH Extent Map – September 3, 2008

3D – Groundwater Concentrations and Inferred PSH Extent Map – December 10, 2008

### TABLES

Table 1 – 2008 Groundwater Elevation Data

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Table 2 – 2008 Concentrations of PAH in Groundwater

### APPENDICES

Appendix A – Release Notification and Corrective Action (Form C-141)

### ENCLOSED ON DATA DISK

2008 Annual Monitoring Report

2008 Tables 1, 2 and 3 – Groundwater Elevation, BTEX, TPH and PAH Concentration Data

2008 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

Historic Table 1 and 2 – Groundwater Elevation and BTEX, TPH, PAH Concentration Tables

Historic Table 1 and 2 – Groundwater Elevation and BTEX, TPH, PAH Concentration Tables

## **INTRODUCTION**

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. The TNM 97-04 Release Site (the site), which was formerly the responsibility of Texas New Mexico Pipeline Company (TNM), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2008 only. However, historic data tables as well as 2008 laboratory analytical reports are provided on the enclosed data disk. A Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2008 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were sampled as per a NMOCD directive.

## **SITE DESCRIPTION AND BACKGROUND INFORMATION**

The site is located in the SE 1/4 of the SE 1/4 of Section 11, Township 16 South, Range 35 East in Lea County, New Mexico. Initial site investigation activities were performed for TNM by other environmental consultants. No other specifics concerning the release are currently available. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A.

There are currently fourteen monitor wells (MW-2 through MW-7, and MW-9 through MW-16) and one recovery well (RW-1), on site. In October 2008, an *Enhanced Recovery System Workplan* was submitted and subsequently approved by the NMOCD. The automated system is scheduled for installation during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009. Manual PSH recovery is currently being performed on a weekly basis at the site.

## **FIELD ACTIVITIES**

### **Product Recovery Efforts**

A measurable thickness of PSH was present in six monitor wells (MW-2 through MW-6, and MW-9) and the recovery well (RW-1) during each quarter of the reporting period. The average thickness of PSH in monitor wells and recovery wells exhibiting PSH was 0.80 feet. The maximum thickness of PSH in monitor wells and recovery wells was 1.71 feet as recorded in monitor well MW-2 on January 10, 2008. PSH data for the 2008 gauging events can be found in Table 1. Approximately 494 gallons (approximately 12 barrels) of PSH was recovered from the site during the 2008 reporting period. A total of approximately 7,333 gallons (approximately 175 barrels) of PSH have been recovered since project inception.

## Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following reduced sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended in correspondences dated June 22, 2005 and May 5, 2006.

NMOCD Approved Sampling Schedule					
MW-1	Plugged & Abandoned	MW-7	Annual	MW-13	Quarterly
MW-2	Quarterly	MW-8	Plugged & Abandoned	MW-14	Quarterly
MW-3	Quarterly	MW-9	Quarterly	MW-15	Quarterly
MW-4	Quarterly	MW-10	Annual	MW-16	Semi-Annual
MW-5	Quarterly	MW-11	Annual	MW-17	Plugged & Abandoned
MW-6	Quarterly	MW-12	Annual	RW-1	Quarterly

The site monitor wells were gauged and sampled on March 7, June 2, September 3, and December 10, 2008. During each sampling event, monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Grundfos pump and dedicated tubing. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during each quarterly sampling event of 2008, are depicted on the Inferred Groundwater Gradient Maps, Figures 2A-2D. Groundwater elevation data for 2008 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Inferred Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.002 feet/foot to the southeast as measured between monitor well MW-9 and MW-13. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,921.87 and 2922.76 feet above mean sea level, in monitor well MW-13 on March 7, 2008 and in recovery well RW-1 on December 18, 2008, respectively.

## LABORATORY RESULTS

Monitor wells MW-2 through MW-6, MW-9 and recovery well RW-1 contained PSH and were not sampled during 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period. Plains, at the request of the NMOCD, collected groundwater samples below PSH levels in all monitor wells containing PSH during the 4<sup>th</sup> quarter sampling event.

Groundwater samples obtained during the quarterly sampling events of 2008 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. Monitoring wells containing

measurable amounts of PSH were analyzed for Total Petroleum Hydrocarbons (TPH) concentrations by EPA Method 8015M. A listing of BTEX and TPH constituent concentrations for 2008 are summarized in Table 2 and the PAH constituent concentrations for 2008 are summarized in Table 3. Copies of the laboratory reports generated for 2008 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

**Monitor well MW-2** is monitored on a quarterly schedule. Monitor well MW-2 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.56 feet, 1.38 feet and 1.40 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 13.80 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 5.20 mg/L. Ethylbenzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.864 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.70 mg/L. Analytical results indicated a total TPH result of 267.4 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for chrysene (0.0109 mg/L), naphthalene (0.232 mg/L), 1-methylnaphthalene (0.354 mg/L) and 2-methylnaphthalene (0.417 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0429 mg/L), phenanthrene (0.0587 mg/L) and dibenzofuran (0.0337 mg/L), which are below WQCC standards.

**Monitor well MW-3** is monitored on a quarterly schedule. Monitor well MW-3 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.56 feet, 1.31 feet and 1.41 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 10.10 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 6.40 mg/L. Ethylbenzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.040 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.80 mg/L. Analytical results indicated a total TPH result of 525 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for chrysene (0.00578 mg/L), naphthalene (0.192 mg/L), 1-methylnaphthalene (0.348 mg/L) and 2-methylnaphthalene (0.409 mg/L). Additional PAH constituents detected above MDLs include acenaphthylene (0.00934 mg/L), fluorene (0.024 mg/L), phenanthrene (0.0368 mg/L) and dibenzofuran (0.0228 mg/L), which are below WQCC standards.

**Monitor well MW-4** is monitored on a quarterly schedule. Monitor well MW-4 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.43 feet, 0.32 feet and 0.36 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.930 mg/L. Toluene

concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.996 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.613 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.620 mg/L. Analytical results indicated a total TPH result of 116.1 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0668 mg/L), 1-methylnaphthalene (0.0435 mg/L) and 2-methylnaphthalene (0.0423 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0039 mg/L), phenanthrene (0.00376 mg/L) and dibenzofuran (0.00414 mg/L), which are below WQCC standards.

**Monitor well MW-5** is monitored on a quarterly schedule. Monitor well MW-5 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.05 feet, 1.59 feet and 1.60 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 18.90 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 9.03 mg/L. Ethylbenzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.490 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 3.520 mg/L. Analytical results indicated a total TPH result of 139 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.192 mg/L), 1-methylnaphthalene (0.301 mg/L) and 2-methylnaphthalene (0.346 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.0424 mg/L) and dibenzofuran (0.0316 mg/L), which are below WQCC standards.

**Monitor well MW-6** is monitored on a quarterly schedule. Monitor well MW-6 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.29 feet, 0.40 feet and 1.18 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 26.00 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 3.950 mg/L. Ethylbenzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.230 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.850 mg/L. Analytical results indicated a total TPH result of 118.4 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0921 mg/L), 1-methylnaphthalene (0.0687 mg/L) and 2-methylnaphthalene (0.0744 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.00706 mg/L) and dibenzofuran (0.00635 mg/L), which are below WQCC standards.

**Monitor well MW-7** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX

constituent concentrations have been below NMOCD regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.0002 mg/L), which is below WQCC standards.

**Monitor well MW-9** is monitored on a quarterly schedule. Monitor well MW-9 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.48 feet, 0.29 feet and 0.56 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.240 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.850 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.633 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.790 mg/L. Analytical results indicated a total TPH result of 201.80 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.102 mg/L), 1-methylnaphthalene (0.122 mg/L) and 2-methylnaphthalene (0.138 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0134 mg/L), phenanthrene (0.016 mg/L) and dibenzofuran (0.0127 mg/L), which are below WQCC standards.

**Monitor well MW-10** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-11** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-12** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-13** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0279 mg/L in the 1<sup>st</sup> quarter to 1.200 mg/L during the 4<sup>th</sup> quarter of the reporting period. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.005 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0173 mg/L during the 2<sup>nd</sup> quarter of the reporting period. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.005 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0206 mg/L during the 3<sup>rd</sup> quarter of the reporting period. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event

indicated elevated concentrations above MDLs for fluorene (0.000294 mg/L) and dibenzofuran (0.00116 mg/L), which are below WQCC standards.

**Monitor well MW-14** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0264 mg/L during the 4<sup>th</sup> quarter to 0.0933 mg/L during the 3<sup>rd</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0310 mg/L during the 2<sup>nd</sup> quarter of 2008. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0609 mg/L during the 1<sup>st</sup> quarter to 0.2080 mg/L during the 3<sup>rd</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.399 mg/L during the 4<sup>th</sup> quarter to 0.787 mg/L during the 3<sup>rd</sup> quarter of 2008. Xylene concentrations were below the NMOCD regulatory standard during 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters and above the regulatory standard during the 4<sup>th</sup> quarter of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.00328 mg/L), 1-methylnaphthalene (0.00314 mg/L) and 2-methylnaphthalene (0.00298 mg/L), fluorene (0.000417 mg/L), phenanthrene (0.000311 mg/L) and dibenzofuran (0.000355 mg/L), which are below WQCC standards.

**Monitor well MW-15** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.556 mg/L during the 1<sup>st</sup> quarter to 4.310 mg/L during the 3<sup>rd</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from <0.05 mg/L during the 1<sup>st</sup> quarter to 0.348 mg/L during the 3<sup>rd</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.135 mg/L during the 1<sup>st</sup> quarter to 0.387 mg/L during the 3<sup>rd</sup> quarter of 2008. Xylene concentrations were below the NMOCD regulatory standard during the all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.00993 mg/L), 1-methylnaphthalene (0.00525 mg/L) and 2-methylnaphthalene (0.00386 mg/L), fluorene (0.000558 mg/L), phenanthrene (0.000384 mg/L) and dibenzofuran (0.000687 mg/L), which are below WQCC standards.

**Monitor well MW-16** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling events. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Recovery well RW-1** is monitored on a quarterly schedule. Recovery well RW-1 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.29 feet, 0.71 feet and 1.39 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 4<sup>th</sup> quarter of the reporting period with a concentration of 10.10 mg/L.

Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 2.440 mg/L. Ethylbenzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.792 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.500 mg/L. Analytical results indicated a total TPH result of 70.3 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.075 mg/L), 1-methylnaphthalene (0.0857 mg/L) and 2-methylnaphthalene (0.0912 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0085 mg/L), phenanthrene (0.0104 mg/L) and dibenzofuran (0.00817 mg/L), which are below WQCC standards.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

## **SUMMARY**

This report presents the results of monitoring activities for the 2008 annual monitoring period. There are currently fourteen monitor wells (MW-2 through MW-7, and MW-9 through MW-16) and one recovery well (RW-1) on site. Manual PSH recovery is currently being performed on a weekly basis at the site. Groundwater elevation contours generated from water level measurements indicate a general gradient of approximately 0.002 feet/foot to the southeast.

Six monitor wells (MW-2 through MW-6, MW-9) and the recovery well (RW-1) contained measurable PSH thicknesses during each quarterly sampling event of 2008 and were not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period. Approximately 494 gallons (approximately 12 barrels) of PSH was recovered from the site during the 2008 reporting period. A total of approximately 7,333 gallons (approximately 175 barrels) of PSH have been recovered since project inception. The average thickness of PSH in monitor wells and recovery wells displaying PSH was 0.80 feet. Generally, 2008 PSH thickness data indicates declining PSH thicknesses in the affected monitor and recovery wells.

Five monitor wells exhibited BTEX constituent concentrations below NMOCD regulatory standards. Three monitor wells (MW-13 through MW-15) exhibited one or more BTEX constituent concentrations above the NMOCD regulatory standards.

## **ANTICIPATED ACTIONS**

PSH recovery, quarterly groundwater monitoring and sampling will continue in 2009. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2010. In October 2008, an *Enhanced Recovery System Workplan* was submitted and subsequently approved by the NMOCD. The automated system is scheduled for installation during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009. Plains has scheduled the installation of a new well located down gradient of monitor well MW-13 for the 2<sup>nd</sup> quarter of 2009.

## LIMITATIONS

NOVA has prepared this Annual Monitoring Report 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 report 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 consent of NOVA and/or Plains.

## DISTRIBUTION

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New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

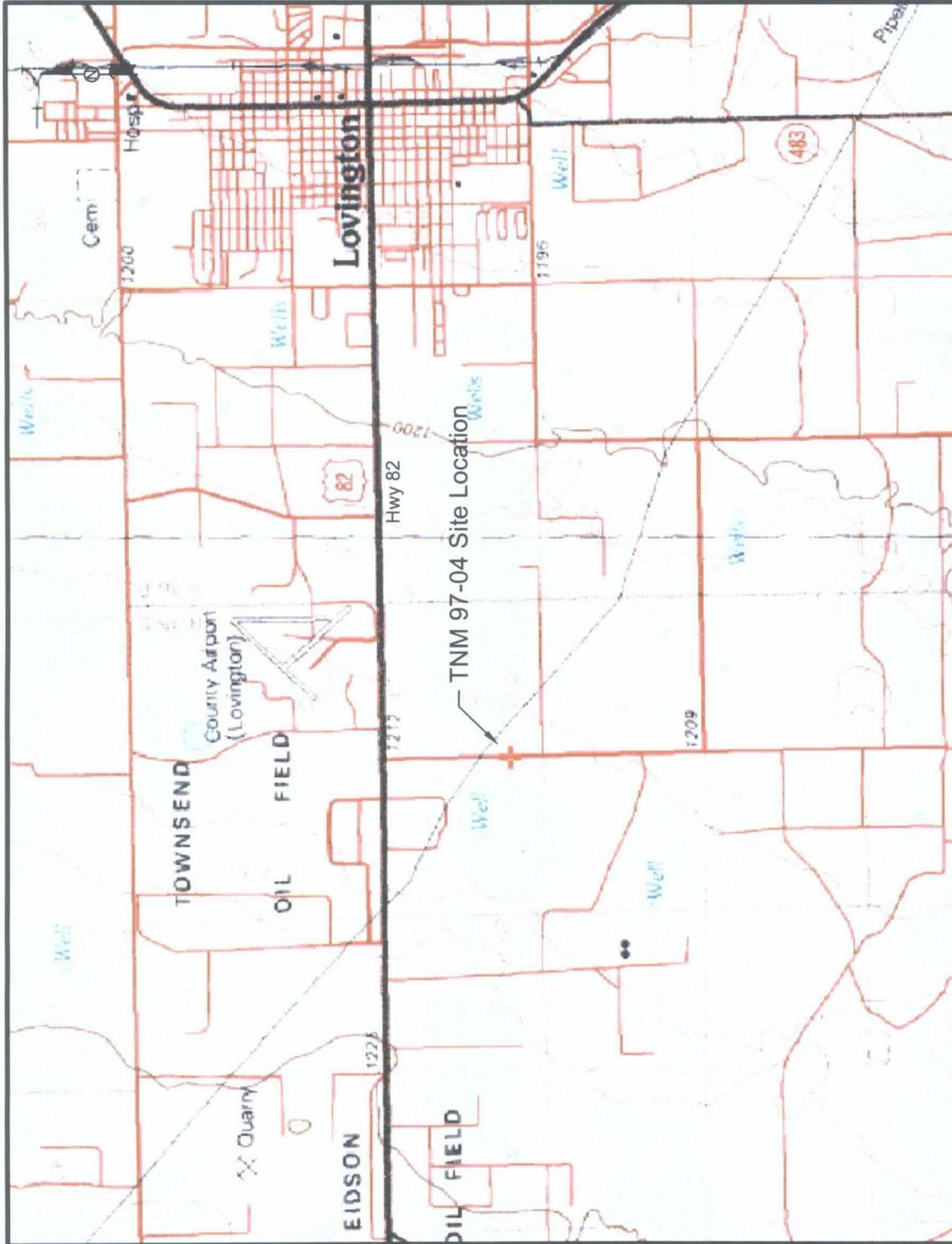
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Denver City, TX 79323  
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Plains Marketing, L.P.  
333 Clay Street  
Suite 1600  
Houston, TX 77002  
jpdann@paalp.com

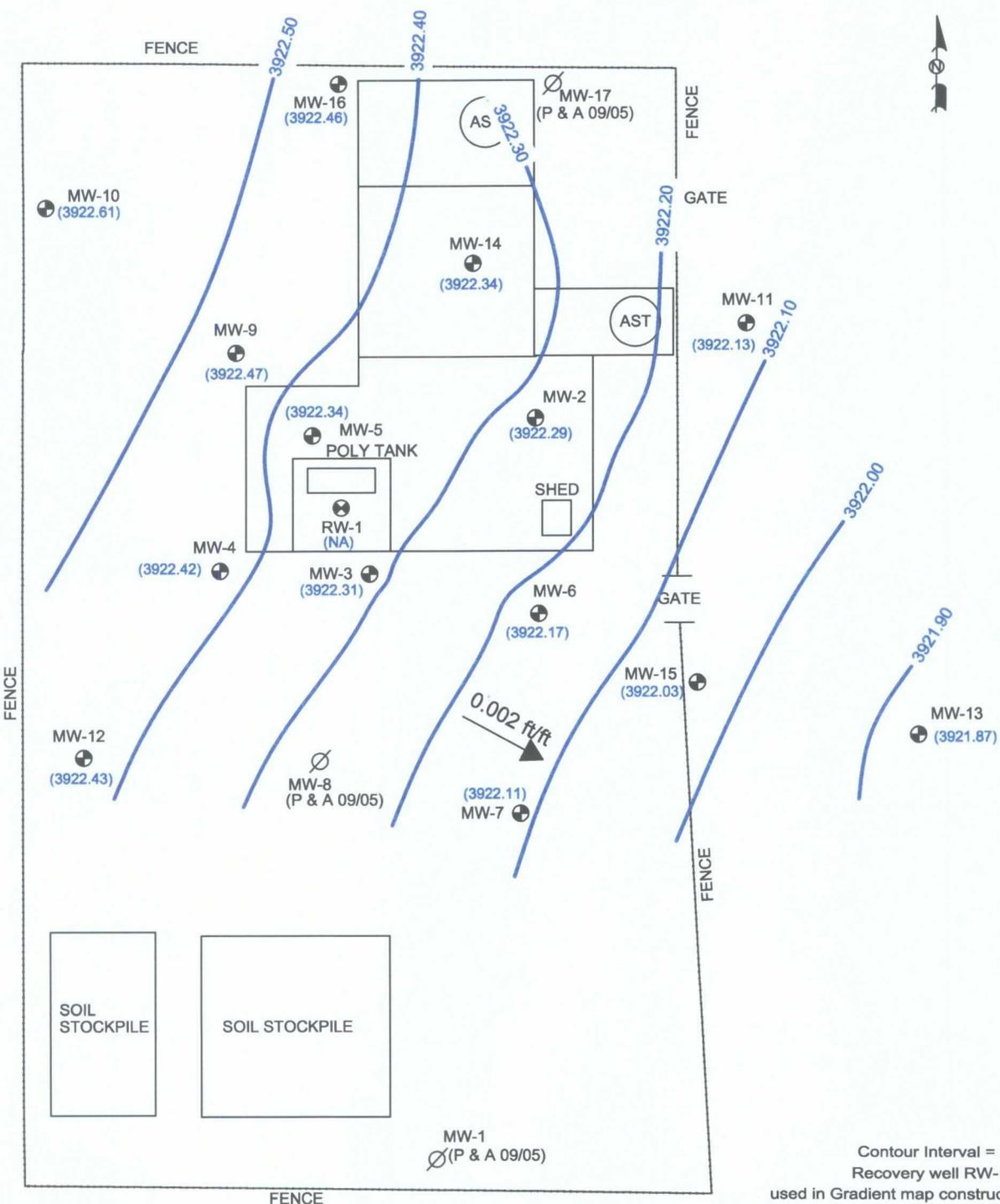
Copy 5:      NOVA Safety and Environmental  
2057 Commerce Street  
Midland, TX 79703  
rrounsaville@novatraining.cc

**FIGURES**

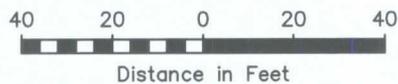


<p>Figure 1 Site Location Map Plains Marketing, L.P. TNM 97-04 Lee County, NM</p>	<p><b>NOVA Safety and Environment:</b></p>		
	<p>Scale: 1" = 5000'</p>	<p>Prep By: CDS</p>	<p>Checked By: CDS</p>
<p>NMOC Reference # GW-0294</p>			<p>February 26, 2005   SE 1/4, SE 1/4, Sec 11 T16S R05E Lat. N32° 55' 57.1" Long. W103° 25' 12.3"</p>





**Note**  
 Contour Interval = 0.10'  
 Recovery well RW-1 not used in Gradient map construction.  
 Groundwater Gradient Measured Between MW-9 and MW-15



NMOCD Reference # GW-0294



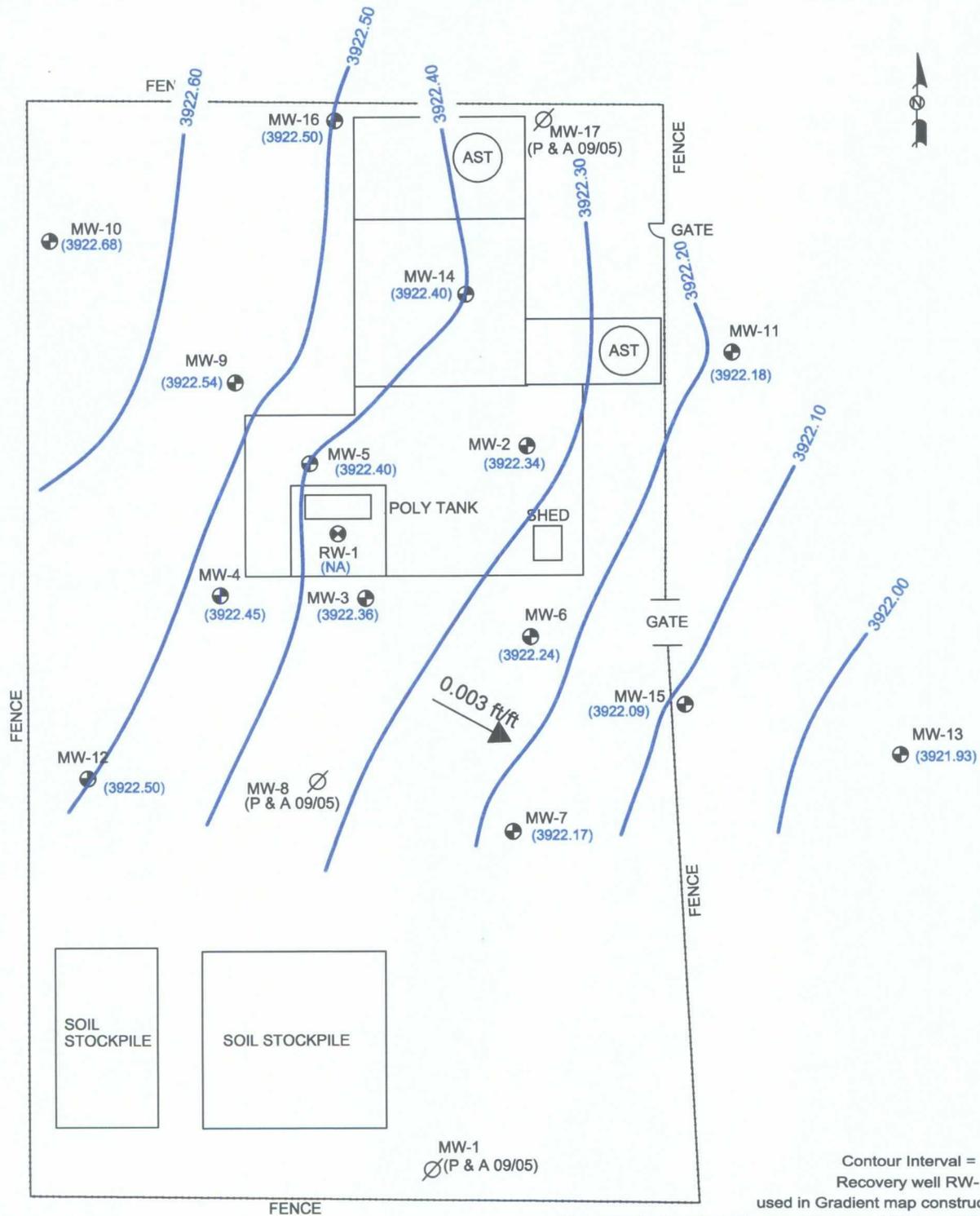
**LEGEND:**

	Monitor Well Location
	Groundwater Contour Lines
(3921.20)	Groundwater Elevation in Feet
(NA)	Not Available

Figure 2A  
 Inferred Groundwater Gradient Map  
 (03/07/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

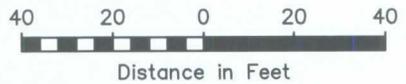
Scale: 1" = 40'	CAD By: DGC	Checked By: CDS
October 10, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



**Note**  
 Contour Interval = 0.10'  
 Recovery well RW-1 not used in Gradient map construction.  
 Groundwater Gradient Measured Between MW-9 and MW-15



NMOCD Reference # GW-0294



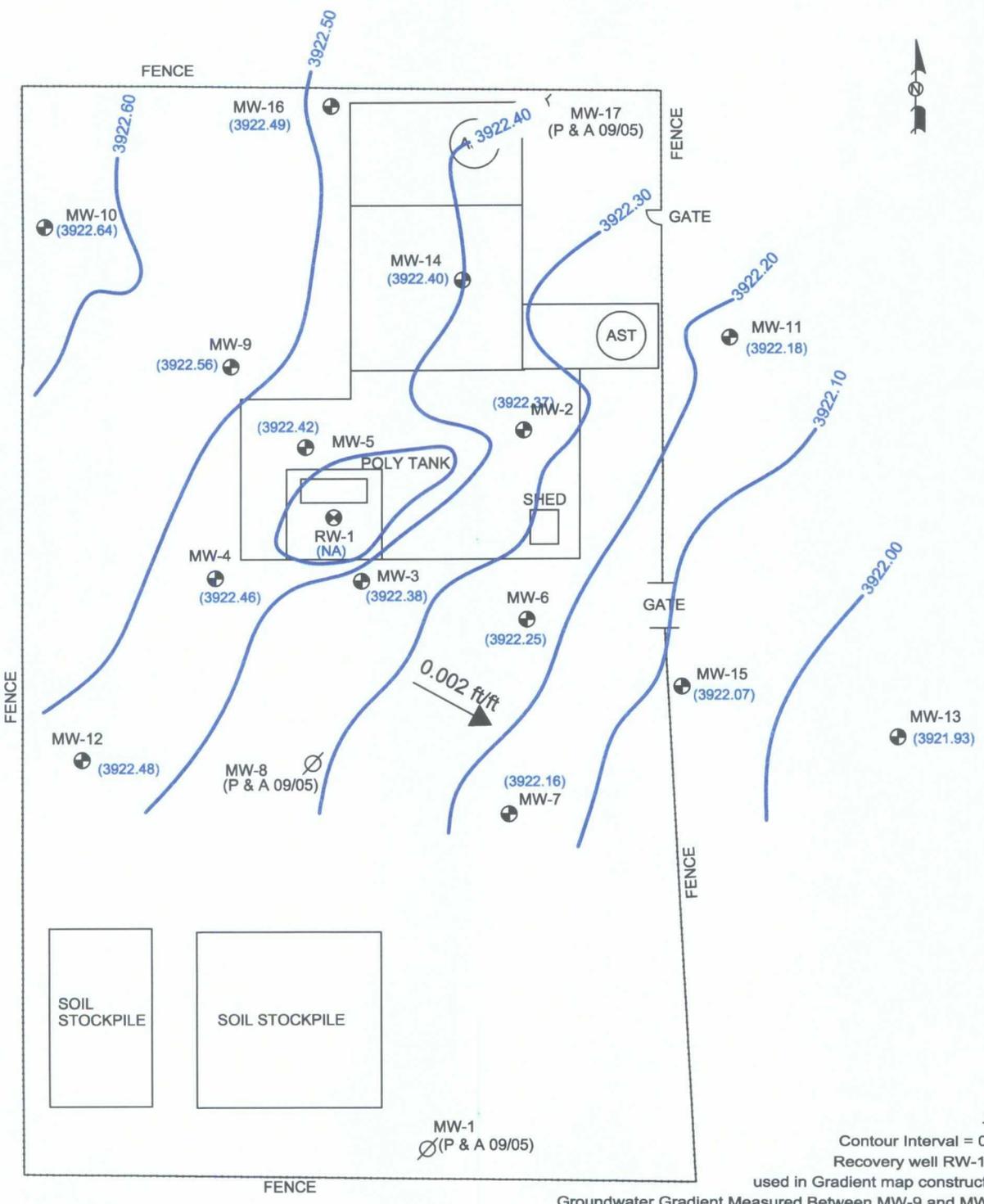
**LEGEND:**

	Monitor Well Location
	Groundwater Contour Lines
(3921.20)	Groundwater Elevation in Feet
(NA)	Not Available

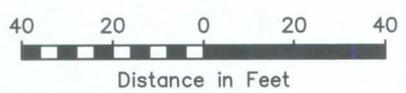
Figure 2B  
 Inferred Groundwater Gradient Map  
 (06/02/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: DGC	Checked By: CDS
October 10, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



**Note**  
 Contour Interval = 0.10'  
 Recovery well RW-1 not used in Gradient map construction.  
 Groundwater Gradient Measured Between MW-9 and MW-15



NMOCD Reference # GW-0294 **NOVA** safety and environmental

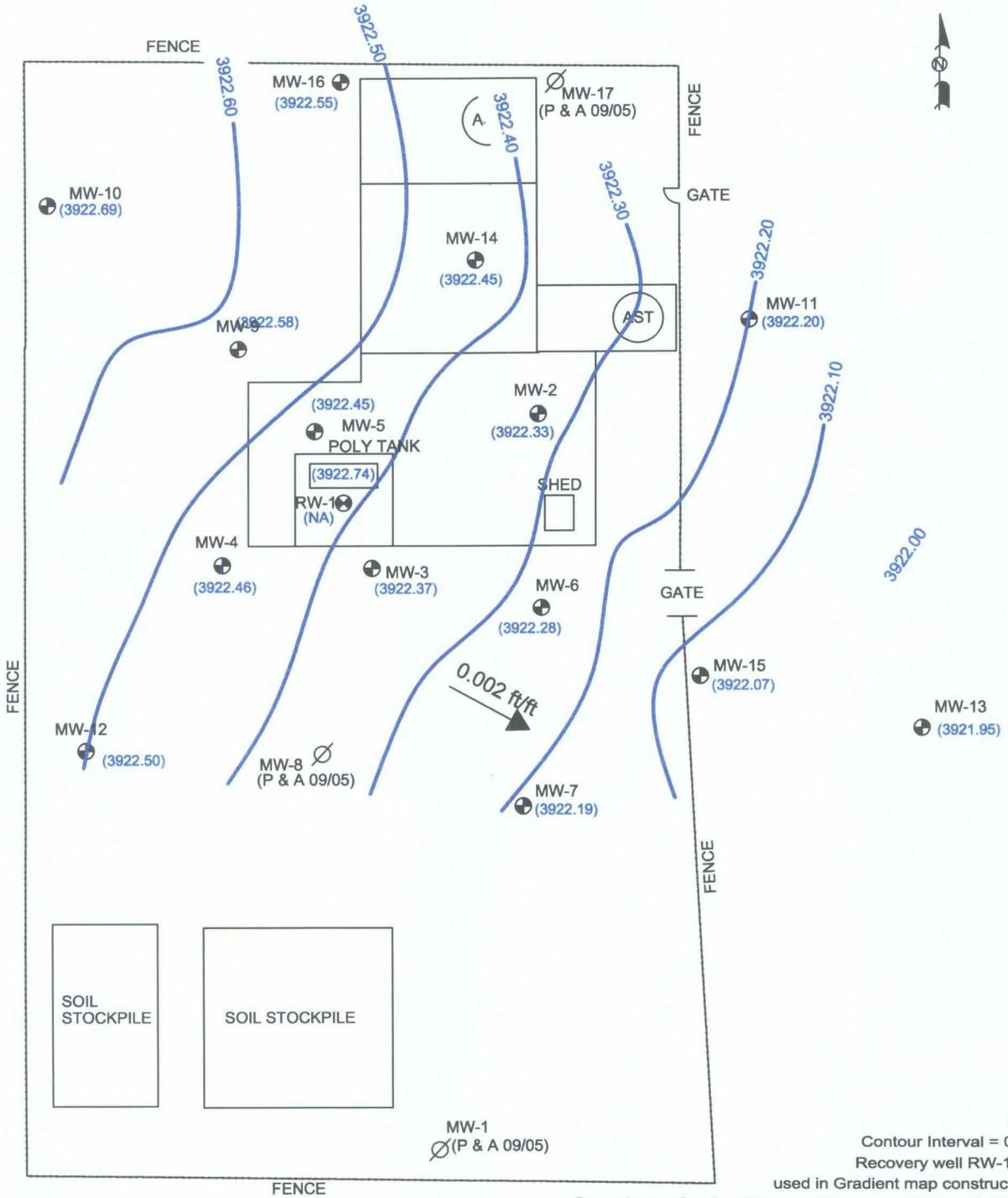
**LEGEND:**

- Monitor Well Location
- Groundwater Contour Lines
- (3921.20) Groundwater Elevation in Feet
- (NA) Not Available

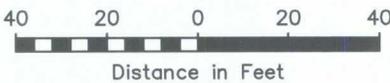
Figure 2C  
 Inferred Groundwater Gradient Map  
 (09/03/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: DGC	Checked By: CDS
October 10, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



**Note**  
 Contour Interval = 0.10'  
 Recovery well RW-1 not used in Gradient map construction.  
 Groundwater Gradient Measured Between MW-9 and MW-15



NMOCD Reference # GW-0294



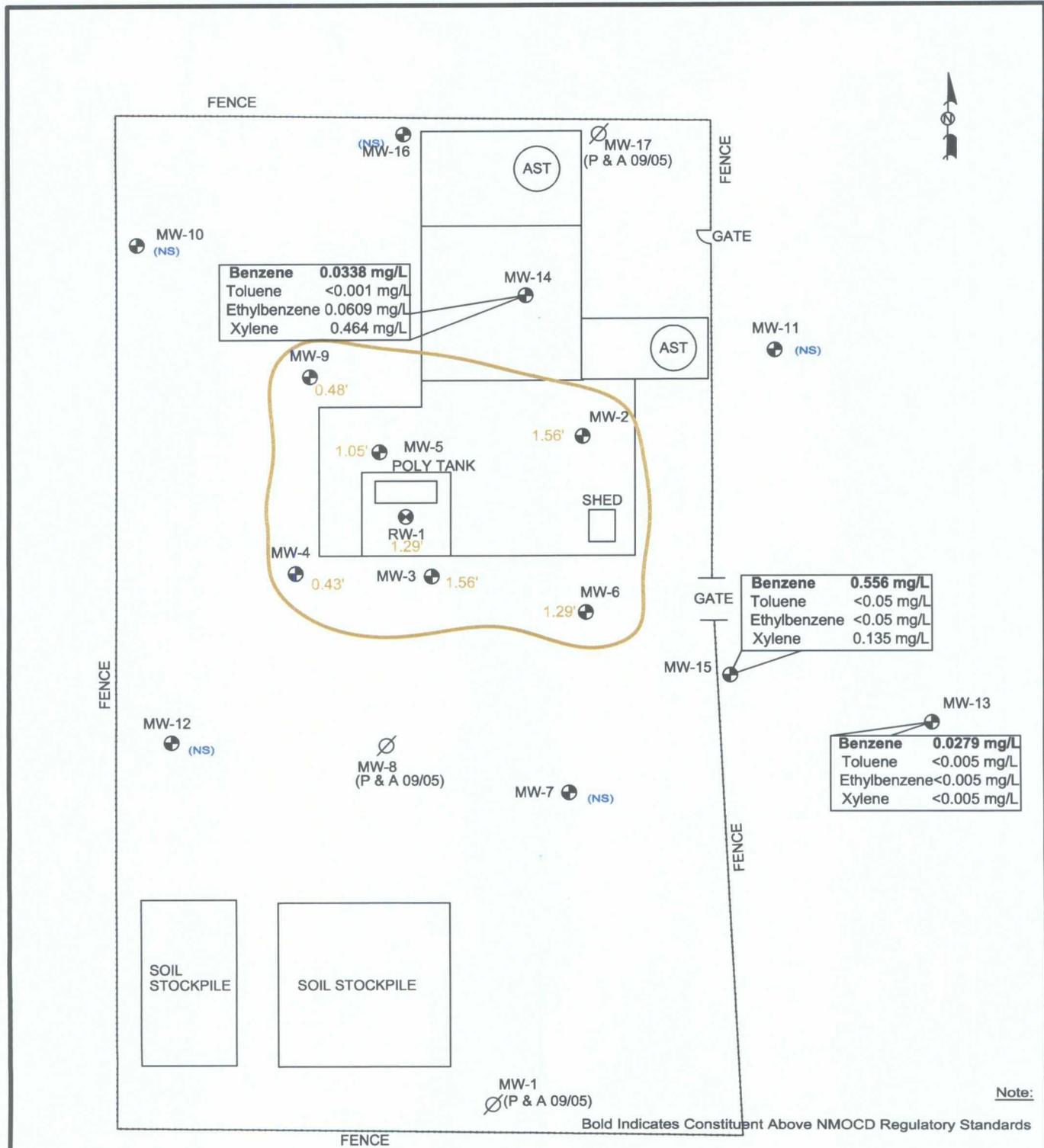
**LEGEND:**

- ⊕ Monitor Well Location
- Groundwater Contour Lines
- (3921.20) Groundwater Elevation In Feet
- (NA) Not Available

Figure 2D  
 Inferred Groundwater Gradient Map  
 (12/08/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

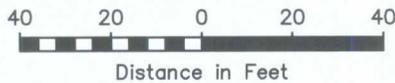
**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: DGC	Checked By: RKR
December 15, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



Note:

Bold Indicates Constituent Above NMOCD Regulatory Standards



NMOCD Reference # GW-0294



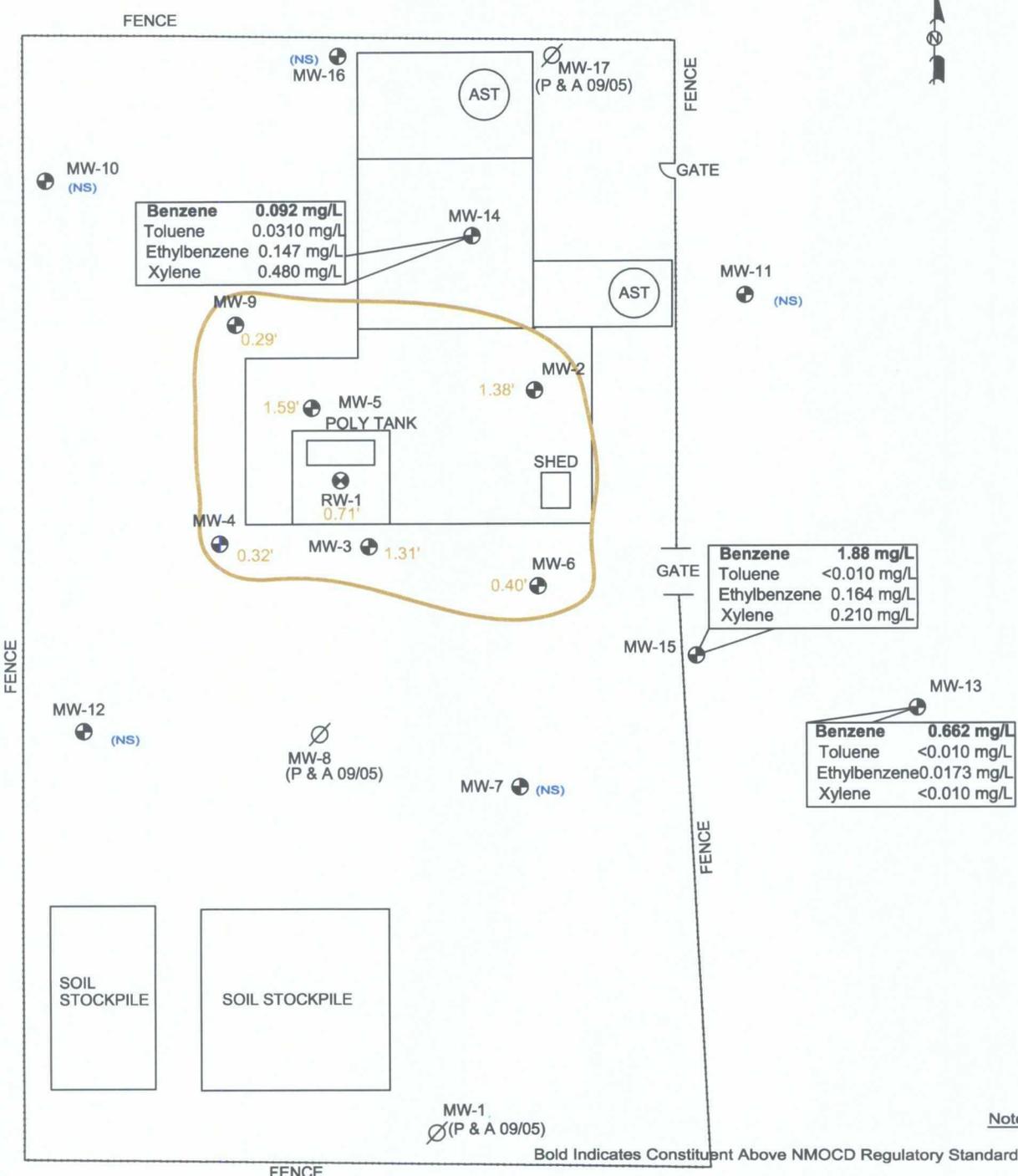
LEGEND:

- Monitor Well Location
- Inferred PSH Extent
- <0.001 Constituent Concentration (mg/L)
- 2.42' Thickness of PSH (feet)
- (NS) Not Sampled

Figure 3A  
Groundwater Concentration  
and Inferred PSH Extent Map  
(03/07/08)  
Plains Marketing, L.P.  
TNM 97-04  
Lea County, NM

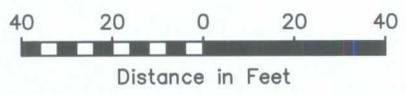
NOVA Safety and Environmental

Scale: 1" = 40'	CAD By: DGC	Checked By: RKR
October 10, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



Note:

Bold Indicates Constituent Above NMOCD Regulatory Standards



NMOCD Reference # GW-0294



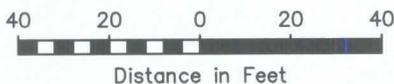
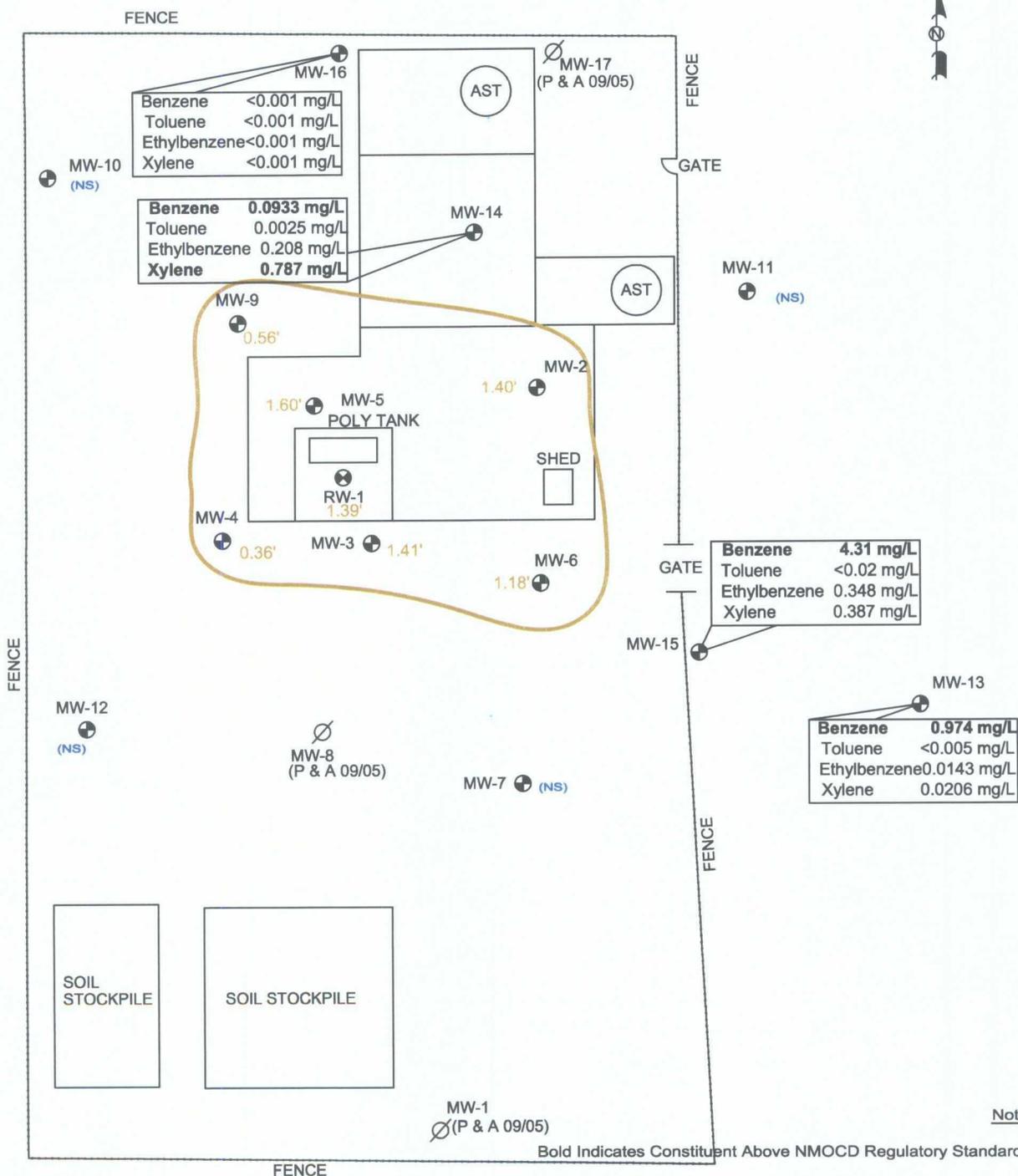
**LEGEND:**

	Monitor Well Location	<b>2.42'</b> Thickness of PSH (feet)
	Inferred PSH Extent	<b>(NS)</b> Not Sampled
<0.001	Constituent Concentration (mg/L)	

Figure 3B  
 Groundwater Concentration  
 and Inferred PSH Extent Map  
 (06/02/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: DGC	Checked By: RKR
October 10, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



NMOCD Reference # GW-0294



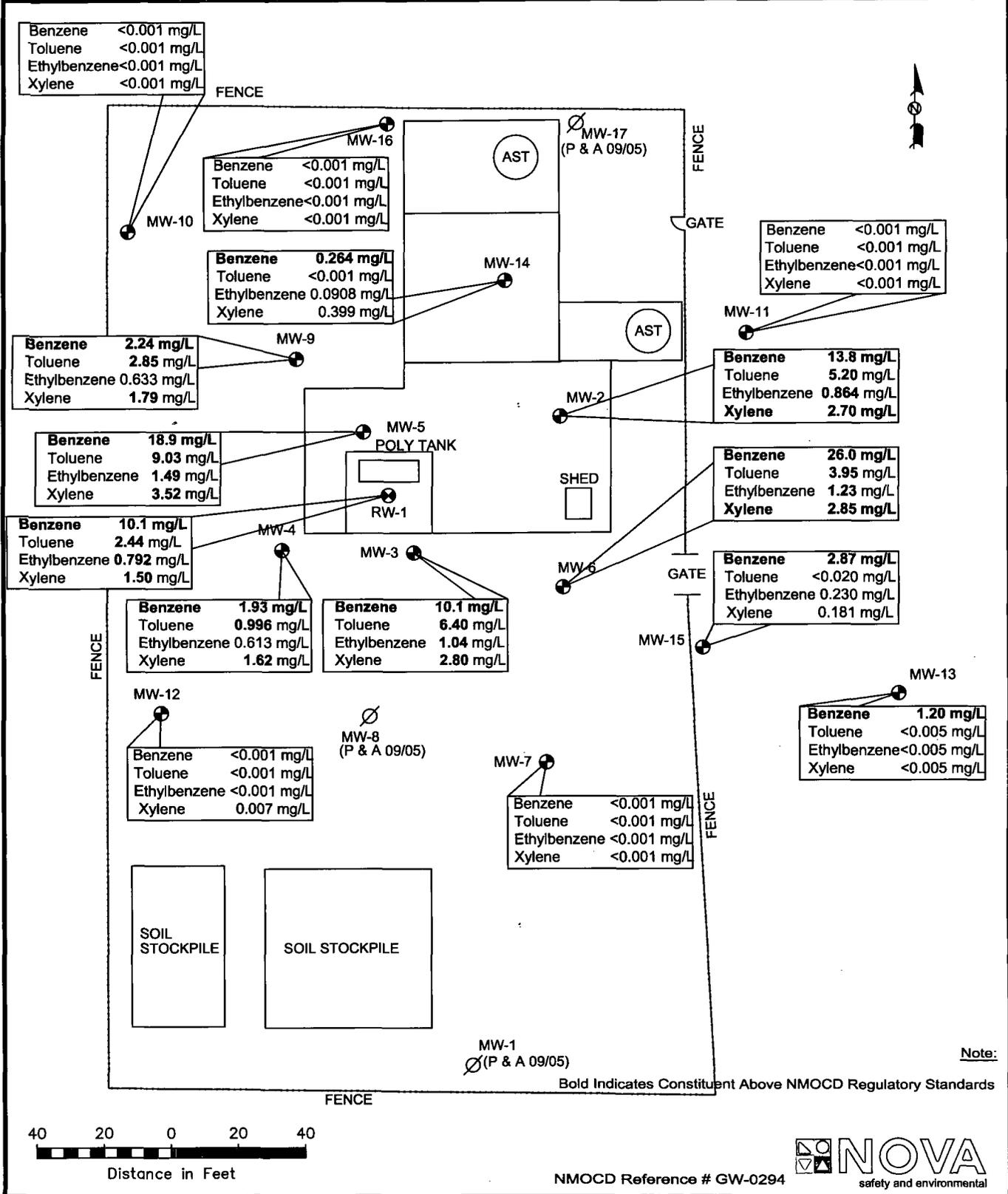
**LEGEND:**

- Monitor Well Location
- Inferred PSH Extent
- 2.42' Thickness of PSH (feet)
- (NS) Not Sampled
- <0.001 Constituent Concentration (mg/L) \* = <0.001 mg/L

**Figure 3C**  
 Groundwater Concentration and Inferred PSH Extent Map (09/03/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: MWG	Checked By: RKR
January 01, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		



**LEGEND:**

- Monitor Well Location
- Inferred PSH Extent
- (P & A 09/05) Not Sampled
- 2.42' Thickness of PSH (feet)
- (NS) Not Sampled

<0.001 Constituent Concentration (mg/L) \* = <0.001 mg/L

**Figure 3D**  
 Groundwater Concentration and Inferred PSH Extent Map (12/08/08)  
 Plains Marketing, L.P.  
 TNM 97-04  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 40'	CAD By: MWG	Checked By: RKR
January 01, 2008	NW1/4 SE1/4 Sec 18 T18S R36E	
Lat. N32° 44' 50.3" Long. W103° 23' 38.5"		

**TABLES**

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	01/10/08	3974.62	52.08	53.79	1.71	3922.28
MW - 2	01/17/08	3974.62	52.10	53.79	1.69	3922.27
MW - 2	01/22/08	3974.62	52.08	53.74	1.66	3922.29
MW - 2	02/06/08 #1	3974.62	52.10	53.71	1.61	3922.28
MW - 2	02/06/08 #2	3974.62	52.32	52.79	0.47	3922.23
MW - 2	02/12/08#1	3974.62	52.11	53.72	1.61	3922.27
MW - 2	02/12/08#2	3974.62	52.34	52.68	0.34	3922.23
MW - 2	02/20/08 #1	3974.62	52.11	53.70	1.59	3922.27
MW - 2	02/20/08 #2	3974.62	52.30	52.78	0.48	3922.25
MW - 2	02/27/08 #1	3974.62	52.11	53.67	1.56	3922.28
MW - 2	02/27/08 #2	3974.62	52.28	52.87	0.59	3922.25
MW - 2	03/07/08	3974.62	52.10	53.66	1.56	3922.29
MW - 2	03/12/08 #1	3974.62	52.10	53.66	1.56	3922.29
MW - 2	03/12/08 #2	3974.62	52.29	52.30	0.01	3922.33
MW - 2	03/20/08 #1	3974.62	52.10	53.65	1.55	3922.29
MW - 2	03/20/08#2	3974.62	52.29	52.76	0.47	3922.26
MW - 2	03/23/08 #1	3974.62	52.09	53.64	1.55	3922.30
MW - 2	03/23/08 #2	3974.62	52.30	52.31	0.01	3922.32
MW - 2	04/2/08 #1	3974.62	52.09	53.60	1.51	3922.30
MW - 2	04/2/08 #2	3974.62	52.23	52.89	0.66	3922.29
MW - 2	04/9/08 #1	3974.62	52.09	53.59	1.50	3922.31
MW - 2	04/9/08 #2	3974.62	52.23	52.92	0.69	3922.29
MW - 2	04/16/08	3974.62	52.06	53.57	1.51	3922.33
MW - 2	04/23/08	3974.62	52.08	53.57	1.49	3922.32
MW - 2	04/30/08	3974.62	52.08	53.55	1.47	3922.32
MW - 2	05/29/08	3974.62	52.07	53.50	1.43	3922.34
MW - 2	06/02/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	06/03/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	06/11/08	3974.62	52.07	53.52	1.45	3922.33
MW - 2	06/18/08	3974.62	52.07	53.52	1.45	3922.33
MW - 2	06/23/08	3974.62	52.08	53.48	1.40	3922.33
MW - 2	07/01/08	3974.62	52.09	53.51	1.42	3922.32
MW - 2	07/09/08	3974.62	52.09	53.51	1.42	3922.32
MW - 2	07/15/08	3974.62	52.08	53.45	1.37	3922.33
MW - 2	07/22/08	3974.62	52.08	53.48	1.40	3922.33
MW - 2	08/02/08	3974.62	52.08	53.38	1.30	3922.35
MW - 2	08/13/08	3974.62	52.08	53.46	1.38	3922.33
MW - 2	09/03/08	3974.62	52.04	53.44	1.40	3922.37
MW - 2	09/11/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	09/19/08	3974.62	52.05	53.41	1.36	3922.37
MW - 2	09/26/08	3974.62	52.06	53.41	1.35	3922.36
MW - 2	10/10/08	3974.62	52.06	53.41	1.35	3922.36
MW - 2	10/17/08	3974.62	52.08	53.37	1.29	3922.35
MW - 2	10/21/08	3974.62	52.17	53.35	1.18	3922.27

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	10/30/08	3974.62	52.05	53.36	1.31	3922.37
MW - 2	11/04/08	3974.62	52.08	53.36	1.28	3922.35
MW - 2	11/18/08	3974.62	52.08	53.36	1.28	3922.35
MW - 2	11/25/08	3974.62	52.08	53.35	1.27	3922.35
MW - 2	11/25/08	3974.62	52.71	52.72	0.01	3921.91
MW - 2	12/10/08	3974.62	52.09	53.44	1.35	3922.33
MW - 2	12/18/08	3974.62	52.05	53.34	1.29	3922.38
MW - 3	03/07/08	3974.60	52.06	53.62	1.56	3922.31
MW - 3	05/29/08	3974.60	52.04	53.41	1.37	3922.35
MW - 3	06/02/08	3974.60	52.04	53.35	1.31	3922.36
MW - 3	06/03/08	3974.60	52.04	53.35	1.31	3922.36
MW - 3	08/02/08	3974.60	52.05	53.45	1.40	3922.34
MW - 3	09/03/08	3974.60	52.01	53.42	1.41	3922.38
MW - 3	09/19/08	3974.60	52.13	53.38	1.25	3922.28
MW - 3	09/26/08	3974.60	52.08	53.38	1.30	3922.33
MW - 3	10/10/08	3974.60	52.01	53.34	1.33	3922.39
MW - 3	10/17/08	3974.60	52.04	53.32	1.28	3922.37
MW - 3	10/21/08	3974.60	52.06	53.33	1.27	3922.35
MW - 3	10/30/08	3974.60	52.03	53.30	1.27	3922.38
MW - 3	11/04/08	3974.60	52.03	53.26	1.23	3922.39
MW - 3	11/18/08	3974.60	52.03	53.30	1.27	3922.38
MW - 3	11/25/08	3974.60	52.06	53.33	1.27	3922.35
MW - 3	12/10/08	3974.60	52.04	53.29	1.25	3922.37
MW - 3	12/18/08	3974.60	52.02	53.31	1.29	3922.39
MW - 4	01/10/08	3974.53	52.05	52.60	0.55	3922.40
MW - 4	01/17/08	3974.53	52.09	52.60	0.51	3922.36
MW - 4	01/22/08	3974.53	52.08	52.58	0.50	3922.38
MW - 4	02/06/08 #1	3974.53	52.09	52.55	0.46	3922.37
MW - 4	02/06/08 #2	3974.53	52.15	52.25	0.10	3922.37
MW - 4	2/12/08 #1	3974.53	52.09	52.56	0.47	3922.37
MW - 4	2/12/08 #2	3974.53	52.16	52.24	0.08	3922.36
MW - 4	2/20/08 #1	3974.53	52.07	52.25	0.18	3922.43
MW - 4	2/20/08 #2	3974.53	52.14	52.25	0.11	3922.37
MW - 4	2/27/08 #1	3974.53	52.08	52.51	0.43	3922.39
MW - 4	2/27/08 #2	3974.53	52.12	52.25	0.13	3922.39
MW - 4	03/07/08	3974.53	52.05	52.48	0.43	3922.42
MW - 4	03/12/08 #1	3974.53	52.05	52.48	0.43	3922.42
MW - 4	03/12/08 #2	3974.53	52.11	52.21	0.10	3922.41
MW - 4	03/20/08 #1	3974.53	52.06	52.47	0.41	3922.41
MW - 4	03/20/08 #2	3974.53	52.11	52.13	0.02	3922.42
MW - 4	03/23/08 #1	3974.53	52.06	52.47	0.41	3922.41
MW - 4	03/23/08 #2	3974.53	52.11	52.22	0.11	3922.40

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.

TNM 97-04 (TOWNSEND)

LEA COUNTY, NEW MEXICO

NMOC D REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	04/2/08 #1	3974.53	52.07	52.45	0.38	3922.40
MW - 4	04/2/08 #2	3974.53	52.09	52.26	0.17	3922.41
MW - 4	04/9/08 #1	3974.53	52.05	52.45	0.40	3922.42
MW - 4	04/9/08 #2	3974.53	52.09	52.26	0.17	3922.41
MW - 4	04/16/08	3974.53	52.06	52.42	0.36	3922.42
MW - 4	04/23/08	3974.53	52.05	52.45	0.40	3922.42
MW - 4	04/30/08	3974.53	52.05	52.41	0.36	3922.43
MW - 4	05/29/08	3974.53	52.05	52.38	0.33	3922.43
MW - 4	06/02/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	06/03/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	06/11/08	3974.53	52.03	52.38	0.35	3922.45
MW - 4	06/18/08	3974.53	52.04	52.38	0.34	3922.44
MW - 4	06/23/08	3974.53	52.03	52.36	0.33	3922.45
MW - 4	07/01/08	3974.53	52.05	52.38	0.33	3922.43
MW - 4	07/09/08	3974.53	52.05	52.39	0.34	3922.43
MW - 4	07/15/08	3974.53	52.03	52.37	0.34	3922.45
MW - 4	07/22/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	08/02/08	3974.53	52.02	52.38	0.36	3922.46
MW - 4	08/13/08	3974.53	52.02	52.55	0.53	3922.43
MW - 4	09/03/08	3974.53	52.02	52.38	0.36	3922.46
MW - 4	09/11/08	3974.53	52.03	52.38	0.35	3922.45
MW - 4	09/19/08	3974.53	52.01	52.33	0.32	3922.47
MW - 4	09/26/08	3974.53	52.02	52.33	0.31	3922.46
MW - 4	10/10/08	3974.53	52.02	52.33	0.31	3922.46
MW - 4	10/17/08	3974.53	52.02	52.29	0.27	3922.47
MW - 4	10/21/08	3974.53	52.04	52.30	0.26	3922.45
MW - 4	10/30/08	3974.53	52.02	52.30	0.28	3922.47
MW - 4	11/04/08	3974.53	52.02	52.32	0.30	3922.47
MW - 4	11/18/08	3974.53	52.04	52.30	0.26	3922.45
MW - 4	11/25/08	3974.53	52.05	52.29	0.24	3922.44
MW - 4	12/10/08	3974.53	52.03	52.32	0.29	3922.46
MW - 4	12/18/08	3974.53	52.03	52.30	0.27	3922.46
MW - 5	03/07/08	3974.27	51.77	52.82	1.05	3922.34
MW - 5	03/12/08 #1	3974.27	51.77	52.82	1.05	3922.34
MW - 5	03/12/08 #2	3974.27	51.82	52.50	0.68	3922.35
MW - 5	03/20/08 #1	3974.27	51.78	52.83	1.05	3922.33
MW - 5	03/20/08 #2	3974.27	51.81	52.57	0.76	3922.35
MW - 5	03/23/08 #1	3974.27	51.84	52.88	1.04	3922.27
MW - 5	03/23/08 #2	3974.27	51.82	52.39	0.57	3922.36
MW - 5	04/2/08 #1	3974.27	51.79	52.99	1.20	3922.30
MW - 5	04/2/08 #2	3974.27	51.76	52.62	0.86	3922.38
MW - 5	04/9/08 #1	3974.27	51.71	53.11	1.40	3922.35
MW - 5	04/9/08 #2	3974.27	51.79	52.65	0.86	3922.35

TABLE 1

2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	04/16/08	3974.27	51.73	52.82	1.09	3922.38
MW - 5	04/30/08	3974.27	51.78	52.97	1.19	3922.31
MW - 5	05/29/08	3974.27	51.63	53.27	1.64	3922.39
MW - 5	06/02/08	3974.27	51.63	53.22	1.59	3922.40
MW - 5	06/03/08	3974.27	51.63	53.22	1.59	3922.40
MW - 5	06/11/08	3974.27	51.62	53.25	1.63	3922.41
MW - 5	06/18/08	3974.27	51.62	53.26	1.64	3922.40
MW - 5	06/23/08	3974.27	51.63	53.23	1.60	3922.40
MW - 5	07/01/08	3974.27	51.61	53.22	1.61	3922.42
MW - 5	07/09/08	3974.27	51.65	53.26	1.61	3922.38
MW - 5	07/15/08	3974.27	51.60	53.22	1.62	3922.43
MW - 5	07/22/08	3974.27	51.63	53.21	1.58	3922.40
MW - 5	08/02/08	3974.27	51.62	53.22	1.60	3922.41
MW - 5	08/13/08	3974.27	51.62	53.21	1.59	3922.41
MW - 5	09/03/08	3974.27	51.61	53.21	1.60	3922.42
MW - 5	09/11/08	3974.27	51.61	53.20	1.59	3922.42
MW - 5	09/19/08	3974.27	51.60	53.16	1.56	3922.44
MW - 5	09/26/08	3974.27	51.60	53.16	1.56	3922.44
MW - 5	10/10/08	3974.27	51.61	53.18	1.57	3922.42
MW - 5	10/17/08	3974.27	51.61	53.13	1.52	3922.43
MW - 5	10/21/08	3974.27	51.89	53.26	1.37	3922.17
MW - 5	10/30/08	3974.27	51.60	53.11	1.51	3922.44
MW - 5	11/04/08	3974.27	51.61	53.13	1.52	3922.43
MW - 5	11/18/08	3974.27	51.61	53.10	1.49	3922.44
MW - 5	11/25/08	3974.27	51.61	53.12	1.51	3922.43
MW - 5	12/10/08	3974.27	51.59	53.13	1.54	3922.45
MW - 5	12/18/08	3974.27	51.60	53.11	1.51	3922.44
MW - 6	03/07/08	3974.72	52.36	53.65	1.29	3922.17
MW - 6	03/12/08 #1	3974.72	52.36	53.65	1.29	3922.17
MW - 6	03/12/08#2	3974.72	52.50	52.67	0.17	3922.19
MW - 6	03/20/08 #1	3974.72	52.45	53.09	0.64	3922.17
MW - 6	03/20/08#2	3974.72	52.42	53.12	0.70	3922.20
MW - 6	03/23/08 #1	3974.72	52.43	53.02	0.59	3922.20
MW - 6	03/23/08 #2	3974.72	52.51	52.61	0.10	3922.20
MW - 6	04/2/08 #1	3974.72	52.50	52.98	0.48	3922.15
MW - 6	04/2/08 #2	3974.72	52.49	52.72	0.23	3922.20
MW - 6	04/9/08 #1	3974.72	52.41	52.95	0.54	3922.23
MW - 6	04/9/08 #2	3974.72	52.48	52.65	0.17	3922.21
MW - 6	04/16/08	3974.72	52.42	52.97	0.55	3922.22
MW - 6	04/23/08	3974.72	52.44	52.91	0.47	3922.21
MW - 6	04/30/08	3974.72	52.42	52.93	0.51	3922.22
MW - 6	05/29/08	3974.72	52.39	52.96	0.57	3922.24
MW - 6	06/02/08	3974.72	52.42	52.82	0.40	3922.24

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	06/03/08	3974.72	52.42	52.82	0.40	3922.24
MW - 6	06/11/08	3974.72	52.40	52.99	0.59	3922.23
MW - 6	06/18/08	3974.72	52.43	52.89	0.46	3922.22
MW - 6	06/23/08	3974.72	52.42	52.79	0.37	3922.24
MW - 6	07/01/08	3974.72	52.41	52.97	0.56	3922.23
MW - 6	07/09/08	3974.72	52.42	52.95	0.53	3922.22
MW - 6	07/15/08	3974.72	52.42	52.85	0.43	3922.24
MW - 6	07/22/08	3974.72	52.38	53.00	0.62	3922.25
MW - 6	08/02/08	3974.72	52.36	53.10	0.74	3922.25
MW - 6	08/13/08	3974.72	52.36	53.18	0.82	3922.24
MW - 6	09/03/08	3974.72	52.29	53.47	1.18	3922.25
MW - 6	09/11/08	3974.72	52.41	52.91	0.50	3922.24
MW - 6	09/19/08	3974.72	52.40	52.89	0.49	3922.25
MW - 6	09/26/08	3974.72	52.38	52.92	0.54	3922.26
MW - 6	10/10/08	3974.72	52.39	52.91	0.52	3922.25
MW - 6	10/17/08	3974.72	52.41	52.81	0.40	3922.25
MW - 6	10/21/08	3974.72	52.42	52.74	0.32	3922.25
MW - 6	10/30/08	3974.72	52.38	52.90	0.52	3922.26
MW - 6	11/04/08	3974.72	52.42	52.78	0.36	3922.25
MW - 6	11/18/08	3974.72	52.37	53.05	0.68	3922.25
MW - 6	11/25/08	3974.72	52.40	52.87	0.47	3922.25
MW - 6	12/10/08	3974.72	52.33	53.09	0.76	3922.28
MW - 6	12/18/08	3974.72	52.31	53.19	0.88	3922.28
MW - 7	03/07/08	3974.60	-	52.49	0.00	3922.11
MW - 7	06/02/08	3974.60	-	52.43	0.00	3922.17
MW - 7	09/03/08	3974.60	-	52.44	0.00	3922.16
MW - 7	12/08/08	3974.60	-	52.41	0.00	3922.19
MW - 9	01/10/08	3975.06	52.49	53.18	0.69	3922.47
MW - 9	01/17/08	3975.06	52.50	53.13	0.63	3922.47
MW - 9	01/22/08	3975.06	52.49	53.12	0.63	3922.48
MW - 9	02/06/08 #1	3975.06	52.53	52.97	0.44	3922.46
MW - 9	02/06/08 #2	3975.06	52.50	52.66	0.16	3922.54
MW - 9	02/12/08 #1	3975.06	52.54	52.90	0.36	3922.47
MW - 9	02/12/08 #2	3975.06	52.60	52.63	0.03	3922.46
MW - 9	02/20/08 #1	3975.06	52.52	52.93	0.41	3922.48
MW - 9	02/20/08 #2	3975.06	52.58	52.68	0.10	3922.47
MW - 9	02/27/08 #1	3975.06	52.52	52.91	0.39	3922.48
MW - 9	02/27/08 #2	3975.06	52.57	52.66	0.09	3922.48
MW - 9	03/07/08	3975.06	52.52	53.00	0.48	3922.47
MW - 9	03/12/08 #1	3975.06	52.52	53.00	0.48	3922.47
MW - 9	03/12/08 #2	3975.06	52.56	52.66	0.10	3922.49
MW - 9	03/20/08 #1	3975.06	52.50	52.92	0.42	3922.50

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	03/20/08#2	3975.06	52.54	52.70	0.16	3922.50
MW - 9	03/23/08 #1	3975.06	52.49	52.89	0.40	3922.51
MW - 9	03/23/08 #2	3975.06	52.55	52.63	0.08	3922.50
MW - 9	04/2/08 #1	3975.06	52.51	52.86	0.35	3922.50
MW - 9	04/2/08 #2	3975.06	52.54	52.68	0.14	3922.50
MW - 9	04/9/08 #1	3975.06	52.48	52.87	0.39	3922.52
MW - 9	04/9/08 #2	3975.06	52.53	52.72	0.19	3922.50
MW - 9	04/16/08	3975.06	52.48	52.89	0.41	3922.52
MW - 9	04/23/08	3975.06	52.49	52.86	0.37	3922.51
MW - 9	04/30/08	3975.06	52.47	52.90	0.43	3922.53
MW - 9	05/29/08	3975.06	52.48	52.85	0.37	3922.52
MW - 9	06/02/08	3975.06	52.48	52.77	0.29	3922.54
MW - 9	06/03/08	3975.06	52.48	52.77	0.29	3922.54
MW - 9	06/11/08	3975.06	52.47	52.87	0.40	3922.53
MW - 9	06/18/08	3975.06	52.47	52.89	0.42	3922.53
MW - 9	06/23/08	3975.06	52.49	52.78	0.29	3922.53
MW - 9	07/01/08	3975.06	52.48	52.86	0.38	3922.52
MW - 9	07/09/08	3975.06	52.59	52.86	0.27	3922.43
MW - 9	07/15/08	3975.06	52.48	52.80	0.32	3922.53
MW - 9	07/22/08	3975.06	52.47	52.85	0.38	3922.53
MW - 9	08/02/08	3975.06	52.46	52.90	0.44	3922.53
MW - 9	08/13/08	3975.06	52.45	52.88	0.43	3922.55
MW - 9	09/03/08	3975.06	52.42	52.98	0.56	3922.56
MW - 9	09/11/08	3975.06	52.46	52.85	0.39	3922.54
MW - 9	09/19/08	3975.06	52.44	52.82	0.38	3922.56
MW - 9	09/26/08	3975.06	52.46	52.81	0.35	3922.55
MW - 9	10/10/08	3975.06	52.44	52.81	0.37	3922.56
MW - 9	10/17/08	3975.06	52.47	52.78	0.31	3922.54
MW - 9	10/21/08	3975.06	52.46	52.70	0.24	3922.56
MW - 9	10/30/08	3975.06	52.45	52.78	0.33	3922.56
MW - 9	11/04/08	3975.06	52.46	52.75	0.29	3922.56
MW - 9	11/18/08	3975.06	52.46	52.84	0.38	3922.54
MW - 9	11/25/08	3975.06	52.46	52.76	0.30	3922.56
MW - 9	12/10/08	3975.06	52.42	52.84	0.42	3922.58
MW - 9	12/18/08	3975.06	52.43	52.80	0.37	3922.57
MW - 10	03/07/08	3975.02	-	52.41	0.00	3922.61
MW - 10	06/02/08	3975.02	-	52.34	0.00	3922.68
MW - 10	09/03/08	3975.02	-	52.38	0.00	3922.64
MW - 10	12/08/08	3975.02	-	52.33	0.00	3922.69
MW - 11	03/07/08	3975.30	-	53.17	0.00	3922.13
MW - 11	06/02/08	3975.30	-	53.12	0.00	3922.18
MW - 11	09/03/08	3975.30	-	53.12	0.00	3922.18

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 TNM 97-04 (TOWNSEND)  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 11	12/08/08	3975.30	-	53.10	0.00	3922.20
MW - 12	03/07/08	3974.55	-	52.12	0.00	3922.43
MW - 12	06/02/08	3974.55	-	52.05	0.00	3922.50
MW - 12	09/03/08	3974.55	-	52.07	0.00	3922.48
MW - 12	12/08/08	3974.55	-	52.05	0.00	3922.50
MW - 13	03/07/08	3975.00	-	53.13	0.00	3921.87
MW - 13	06/02/08	3975.00	-	53.07	0.00	3921.93
MW - 13	09/03/08	3975.00	-	53.07	0.00	3921.93
MW - 13	12/08/08	3975.00	-	53.05	0.00	3921.95
MW - 14	03/07/08	3976.15	-	53.81	0.00	3922.34
MW - 14	06/02/08	3976.15	-	53.75	0.00	3922.40
MW - 14	09/03/08	3976.15	-	53.75	0.00	3922.40
MW - 14	12/08/08	3976.15	-	53.70	0.00	3922.45
MW - 15	03/07/08	3974.69	-	52.66	0.00	3922.03
MW - 15	06/02/08	3974.69	-	52.60	0.00	3922.09
MW - 15	09/03/08	3974.69	-	52.62	0.00	3922.07
MW - 15	12/08/08	3974.69	-	52.62	0.00	3922.07
MW - 16	03/07/08	3975.12	-	52.66	0.00	3922.46
MW - 16	06/02/08	3975.12	-	52.62	0.00	3922.50
MW - 16	09/03/08	3975.12	-	52.63	0.00	3922.49
MW - 16	12/08/08	3975.12	-	52.57	0.00	3922.55
RW - 1	01/10/08	3970.79	47.90	49.50	1.60	3922.65
RW - 1	01/17/08	3970.79	47.92	49.37	1.45	3922.65
RW - 1	01/22/08	3970.79	47.90	49.43	1.53	3922.66
RW - 1	02/06/08	3970.79	47.90	49.05	1.15	3922.72
RW - 1	02/12/08 #1	3970.79	48.01	48.91	0.90	3922.65
RW - 1	02/12/08 #2	3970.79	48.19	48.21	0.02	3922.60
RW - 1	02/27/08 #1	3970.79	48.00	48.98	0.98	3922.64
RW - 1	02/27/08 #2	3970.79	48.15	48.21	0.06	3922.63
RW - 1	03/07/08	3970.79	47.92	49.21	1.29	3922.68
RW - 1	03/12/08 #1	3970.79	47.92	49.21	1.29	3922.68
RW - 1	03/12/08 #2	3970.79	48.04	48.31	0.27	3922.71
RW - 1	03/20/08#1	3970.79	48.23	48.50	0.27	3922.52
RW - 1	03/20/08#2	3970.79	48.10	48.45	0.35	3922.64
RW - 1	03/23/08 #1	3970.79	47.99	48.99	1.00	3922.65
RW - 1	03/23/08 #2	3970.79	48.17	48.21	0.04	3922.61
RW - 1	04/2/08 #1	3970.79	47.98	48.92	0.94	3922.67
RW - 1	04/2/08 #2	3970.79	48.09	48.42	0.33	3922.65

**TABLE 1**

**2008 - GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.  
TNM 97-04 (TOWNSEND)  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER GW-0294**

<b>WELL NUMBER</b>	<b>DATE MEASURED</b>	<b>TOP OF CASING ELEVATION</b>	<b>DEPTH TO PRODUCT</b>	<b>DEPTH TO WATER</b>	<b>PSH THICKNESS</b>	<b>CORRECTED GROUNDWATER ELEVATION</b>
RW - 1	04/9/08 #1	3970.79	47.95	48.98	1.03	3922.69
RW - 1	04/9/08 #2	3970.79	48.12	48.15	0.03	3922.67
RW - 1	04/16/08	3970.79	47.98	48.87	0.89	3922.68
RW - 1	04/23/08	3970.79	47.98	48.91	0.93	3922.67
RW - 1	04/30/08	3970.79	47.92	49.07	1.15	3922.70
RW - 1	05/29/08	3970.79	47.97	48.85	0.88	3922.69
RW - 1	06/02/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	06/03/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	06/11/08	3970.79	47.91	48.99	1.08	3922.72
RW - 1	06/18/08	3970.79	47.96	48.84	0.88	3922.70
RW - 1	06/23/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	07/01/08	3970.79	47.94	49.02	1.08	3922.69
RW - 1	07/09/08	3970.79	47.95	48.91	0.96	3922.70
RW - 1	07/15/08	3970.79	47.98	48.76	0.78	3922.69
RW - 1	07/22/08	3970.79	47.94	49.00	1.06	3922.69
RW - 1	08/02/08	3970.79	47.92	48.96	1.04	3922.71
RW - 1	08/13/08	3970.79	47.90	49.03	1.13	3922.72
RW - 1	09/03/08	3970.79	47.83	49.22	1.39	3922.75
RW - 1	09/11/08	3970.79	47.94	48.86	0.92	3922.71
RW - 1	09/19/08	3970.79	47.91	48.85	0.94	3922.74
RW - 1	09/26/08	3970.79	47.89	49.00	1.11	3922.73
RW - 1	10/10/08	3970.79	47.91	48.84	0.93	3922.74
RW - 1	10/17/08	3970.79	47.74	47.93	0.19	3923.02
RW - 1	10/21/08	3970.79	47.95	48.52	0.57	3922.75
RW - 1	10/30/08	3970.79	47.89	48.95	1.06	3922.74
RW - 1	11/04/08	3970.79	48.00	48.61	0.61	3922.70
RW - 1	11/18/08	3970.79	47.91	49.03	1.12	3922.71
RW - 1	11/25/08	3970.79	47.90	49.12	1.22	3922.71
RW - 1	11/25/08	3970.79	48.70	48.72	0.02	3922.09
RW - 1	12/10/08	3970.79	47.87	49.05	1.18	3922.74
RW - 1	12/18/08	3970.79	47.84	49.10	1.26	3922.76

*\* Complete Historical Tables are presented on the attached CD.*

TABLE 2

## 2008 - CONCENTRATIONS OF BTEX AND TPH IN GROUNDWATER

PLAINS PIPELINE, L.P.  
TNM 97-04  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		EPA SW 846-8021B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
<b>NMOCD Regulatory Limit</b>				<b>0.0100</b>	<b>0.75</b>	<b>0.75</b>	<b>Total XYLENES 0.62</b>	
MW - 2	03/07/08			Not Sampled Due to PSH in Well				
MW - 2	06/02/08			Not Sampled Due to PSH in Well				
MW - 2	09/03/08			Not Sampled Due to PSH in Well				
MW - 2	12/10/08	54.40	213.00	<b>13.80</b>	<b>5.20</b>	<b>0.864</b>	<b>2.70</b>	
MW - 3	03/07/08			Not Sampled Due to PSH in Well				
MW - 3	06/02/08			Not Sampled Due to PSH in Well				
MW - 3	09/03/08			Not Sampled Due to PSH in Well				
MW - 3	12/10/08	51.00	474.00	<b>10.10</b>	<b>6.40</b>	<b>1.040</b>	<b>2.80</b>	
MW - 4	03/07/08			Not Sampled Due to PSH in Well				
MW - 4	06/02/08			Not Sampled Due to PSH in Well				
MW - 4	09/03/08			Not Sampled Due to PSH in Well				
MW - 4	12/10/08	12.10	104.00	<b>1.930</b>	<b>0.996</b>	0.613	<b>1.62</b>	
MW - 5	03/07/08			Not Sampled Due to PSH in Well				
MW - 5	06/02/08			Not Sampled Due to PSH in Well				
MW - 5	09/03/08			Not Sampled Due to PSH in Well				
MW - 5	12/10/08	82.60	56.40	<b>18.90</b>	<b>9.030</b>	<b>1.490</b>	<b>3.52</b>	
MW - 6	03/07/08			Not Sampled Due to PSH in Well				
MW - 6	06/02/08			Not Sampled Due to PSH in Well				
MW - 6	09/03/08			Not Sampled Due to PSH in Well				
MW - 6	12/10/08	81.80	36.60	<b>26.00</b>	<b>3.950</b>	<b>1.230</b>	<b>2.85</b>	
MW - 7	03/07/08			Not Sampled Due to Sample Reduction				
MW - 7	06/02/08			Not Sampled Due to Sample Reduction				
MW - 7	09/03/08			Not Sampled Due to Sample Reduction				
MW - 7	12/08/08			<0.001	<0.001	<0.001	<0.001	
MW - 9	03/07/08			Not Sampled Due to PSH in Well				
MW - 9	06/02/08			Not Sampled Due to PSH in Well				
MW - 9	09/03/08			Not Sampled Due to PSH in Well				
MW - 9	12/10/08	20.80	181.00	<b>2.240</b>	<b>2.850</b>	0.633	<b>1.79</b>	
MW - 10	03/07/08			Not Sampled Due to Sample Reduction				
MW - 10	06/02/08			Not Sampled Due to Sample Reduction				
MW - 10	09/03/08			Not Sampled Due to Sample Reduction				
MW - 10	12/08/08			<0.001	<0.001	<0.001	<0.001	
MW - 11	03/07/08			Not Sampled Due to Sample Reduction				
MW - 11	06/02/08			Not Sampled Due to Sample Reduction				
MW - 11	09/03/08			Not Sampled Due to Sample Reduction				
MW - 11	12/08/08			<0.001	<0.001	<0.001	<0.001	

TABLE 2

2008 - CONCENTRATIONS OF BTEX AND TPH IN GROUNDWATER

PLAINS PIPELINE, L.P.  
 TNM 97-04  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		EPA SW 846-8021B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
<b>NMOCD Regulatory Limit</b>				<b>0.0100</b>	<b>0.75</b>	<b>0.75</b>	<b>Total XYLENES</b>	
							<b>0.62</b>	
MW - 12	03/07/08			Not Sampled Due to Sample Reduction				
MW - 12	06/02/08			Not Sampled Due to Sample Reduction				
MW - 12	09/03/08			Not Sampled Due to Sample Reduction				
MW - 12	12/08/08			<0.001	<0.001	<0.001	0.007	
MW - 13	03/07/08			<b>0.0279</b>	<0.005	<0.005	<0.005	
MW - 13	06/02/08			<b>0.6620</b>	<0.010	0.0173	<0.010	
MW - 13	09/03/08			<b>0.9740</b>	<0.005	0.0143	0.0206	
MW - 13	12/08/08			<b>1.200</b>	<0.005	<0.005	<0.005	
MW - 14	03/07/08			<b>0.0338</b>	<0.001	0.0609	0.464	
MW - 14	06/02/08			<b>0.0920</b>	0.0310	0.1470	0.480	
MW - 14	09/03/08			<b>0.0933</b>	0.0025	0.2080	<b>0.787</b>	
MW - 14	12/08/08			<b>0.0264</b>	<0.001	0.0908	0.399	
MW - 15	03/07/08			<b>0.556</b>	<0.05	<0.05	0.135	
MW - 15	06/02/08			<b>1.880</b>	<0.010	0.164	0.210	
MW - 15	09/03/08			<b>4.310</b>	<0.020	0.348	0.387	
MW - 15	12/08/08			<b>2.870</b>	<0.020	0.230	0.181	
MW - 16	03/07/08			Not Sampled Due to Sample Reduction				
MW - 16	06/02/08			Not Sampled Due to Sample Reduction				
MW - 16	09/03/08			<0.001	<0.001	<0.001	<0.001	
MW - 16	12/08/08			<0.001	<0.001	<0.001	<0.001	
RW - 1	03/07/08			Not Sampled Due to PSH in Well				
RW - 1	06/02/08			Not Sampled Due to PSH in Well				
RW - 1	09/03/08			Not Sampled Due to PSH in Well				
RW - 1	12/10/08	38.20	32.10	<b>10.10</b>	<b>2.440</b>	<b>0.792</b>	<b>1.50</b>	

\* Complete Historical Tables are provided on the attached CD.

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.  
 TNM 97-04 TOWNSEND  
 LEA COUNTY, NEW MEXICO  
 NMOCID REFERENCE NUMBER GW-0294

All water concentrations are reported in mg/L  
 EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.	MW-2	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0002 mg/L	-	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	-	0.0004 mg/L	0.03 mg/L	-	-	-	0.03 mg/L	-	
	MW-3	<0.000184	0.00934	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00578	<0.000184	0.024	<0.000184	0.192	0.0368	<0.000184	0.348	0.409	0.0228	
	MW-4	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0039	<0.000184	0.0668	0.00376	<0.000184	0.0435	0.0423	0.00414	
	MW-5	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	0.192	0.0424	<0.000935	0.301	0.346	0.0316	
	MW-6	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0921	0.00706	<0.000184	0.0687	0.0744	0.00635	
	MW-7	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	MW-9	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	0.0134	<0.000926	0.102	0.016	<0.000926	0.122	0.138	0.0127	
	MW-10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	MW-11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.  
 TNM 97-04 TOWNSEND  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER GW-0294

All water concentrations are reported in mg/L

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[ghi]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	-	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	-	-	0.0004 mg/L	0.03 mg/L	-	-	-	0.03 mg/L	-
	MW-12	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
MW-13	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000294	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00116
MW-14	12/08/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.000417	<0.000185	<0.000185	0.000328	0.000311	<0.000185	0.000314	0.00298	0.000355
MW-15	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000558	<0.000184	<0.000184	0.000993	0.000384	<0.000184	0.000525	0.00386	0.000687
MW-16	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
RW-1	12/10/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00085	<0.000184	<0.000184	0.0075	0.0104	<0.000184	0.0857	0.0912	0.000817

# APPENDICES

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

## DISTRICT I

P.O. BOX 1980, HOBBS, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

SUBMIT 2 COPIES TO  
APPROPRIATE DISTRICT  
OFFICE IN ACCORDANCE  
WITH RULE 115 PRINTED  
ON BACK SIDE OF FORM

## DISTRICT II

P.O. DRAWER DD, ARTESIA, NM 88211-  
0719

## OIL CONSERVATION DIVISION

## DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

*Initial Report*

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

OPERATOR Texas-New Mexico Pipe Line Company			ADDRESS P. O. Box 60023, San Angelo, TX 76905			TELEPHONE (915) 947-9000	
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRUG WELL	PROD WELL	TANK BTRY	PIPE LINE X	GASO PLANT	OIL RFY	OTHER*
FACILITY NAME: 4" gathering line							
LOCATION OF FACILITY Qtr/Qtr Sec. or Footage. SW/4 SW/4 SE/4 SE/4							
		SEC. 10	11	TWP. 11S	16S	RGE. 32E	COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK 2 miles west of Lovington							
DATE AND HOUR OF OCCURRENCE Unknown				DATE AND HOUR OF DISCOVERY April 16, 1997 4:00 p.m.			
WAS IMMEDIATE NOTICE GIVEN?		YES	NO	NOT REQUIRED X	IF YES, TO WHOM Wayne Price		
BY WHOM B. D. Chapman (reported that quantity may be more than 10 barrels)				DATE AND HOUR April 25, 1997 9:00 a.m.			
TYPE OF FLUID LOST Sweet Crude		QUANTITY OF LOSS Unknown (*see note below)		VOLUME RECOVERED None			
DID ANY FLUIDS REACH A WATERCOURSE?		YES	NO X	QUANTITY			
IF YES, DESCRIBE FULLY**							
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** External Corrosion. Leak successfully clamped off.							
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** Approximately 1500 sq.ft. pasture land. Will remediate on site. *Originally estimated at 10 barrels. Under investigation. An amended report will be issued when quantity is determined.							
DESCRIPTION OF AREA		FARMING	GRAZING X	URBAN	OTHER*		
SURFACE CONDITION		SANDY	SANDY LOAM	CLAY	ROCKY X	WET	DRY X SNOW
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** 75 degrees, clear							
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF							
SIGNED <i>[Signature]</i>		PRINTED NAME AND TITLE Edwin H. Gripp, District Manager			DATE April 25, 1997		

\*\*ATTACH ADDITIONAL SHEETS IF NECESSARY

State Corp. Commission  
Pipe Line DivisionHazardous Waste Section  
NM Environmental Improvement Div.

TNM-97-04

BDC

837/827-2885 89: 03  
 District I - (505) 393-6751  
 P. O. Box 1570  
 Hobbs, NM 88241-1980  
 District II - (505) 748-1283  
 311 South First  
 Moriaria, NM 88210  
 District III - (505) 334-6178  
 100 Rio Grande Road  
 Aztec, NM 87410  
 District IV - (505) 827-7191

4326823713

**State of New Mexico**  
**Energy, Minerals and Natural Resources Department**  
**Oil Conservation Division**  
 2040 South Pacheco Street  
 Santa Fe, New Mexico 87505  
 (505) 827-7131

TNM-97-04

Form C-141  
 Originated 2/13/97

Submit 2 copies to  
 Appropriate District  
 Office in accordance  
 with Rule 116 on  
 back side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report     Final Report

Name Texas-New Mexico Pipe Line Company	Contact Edwin H. Gripp
Address Box 60028, San Angelo, TX 76906	Telephone No. (915) 947-9000
Facility Name 4" gathering line	Facility Type pipeline

Surface Owner Larry Megert	Mineral Owner	Lease No.
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(corrected location)

LOCATION OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	11	16S	35E					Lea

**NATURE OF RELEASE**

Type of Release Sweet Crude	Volume of Release (revised) 488 barrels	Volume Recovered 5 barrels
Source of Release 4" gathering line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 4/16/97 4:00 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Wayne Price	
By Whom? Billy D. Chapman	Date and Hour 4/25/97 9:00 a.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.

Describe Cause of Problem and Remedial Action Taken.  
External Corrosion. Leak successfully clamped off.

Describe Area Affected and Cleanup Action Taken.  
Approximately 1500 sq.ft. pasture land. Will remediate on site.

Describe General Conditions Prevailing (Temperature, Precipitation, etc.).  
75 degrees; clear.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		<b>OIL CONSERVATION DIVISION</b>	
Signature <i>Edwin H. Gripp</i>	Printed Name Edwin H. Gripp	Approved by District Supervisor	Approval Date
Title District Manager	Phone 915-947-9001	Expiration Date	Attached <input type="checkbox"/>
Date August 12, 1997	Conditions of Approval		

\* Attach Additional Sheets If Necessary  
 BDC JAS  
 State Corp. Commission  
 Pipe Line Division  
 Hazardous Waste Section  
 NM Environmental Improvement Div.

TNM-97-04