

AP - 17

# ANNUAL MONITORING REPORT

YEAR(S):

2008



RECEIVED

2009 MAR 18 PM 1 25

**2008  
ANNUAL MONITORING REPORT**

**TNM 97-17**

NE 1/4 SW 1/4 SECTION 21, TOWNSHIP 20 SOUTH RANGE 37 EAST  
LEA COUNTY, NEW MEXICO  
PLAINS MARKETING SRS NUMBER: TNM 97-17  
NMOCD REFERENCE AP-017

PREPARED FOR:

**PLAINS MARKETING, L.P.**  
333 CLAY STREET SUITE 1600  
HOUSTON, TEXAS 77022



PREPARED BY:

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

**February 2009**

Ronald K. Rounsaville  
Project Manager

Brittan K. Byerly, P.G.  
President

## TABLE OF CONTENTS

INTRODUCTION .....	1
SITE DESCRIPTION AND BACKGROUND INFORMATION.....	1
FIELD ACTIVITIES .....	1
LABORATORY RESULTS .....	3
SUMMARY .....	11
ANTICIPATED ACTIONS .....	12
LIMITATIONS .....	12
DISTRIBUTION.....	14

### FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map – February 12, 2008

2B – Inferred Groundwater Gradient Map – May 13, 2008

2C – Inferred Groundwater Gradient Map – August 14, 2008

2D – Inferred Groundwater Gradient Map – November 12, 2008

Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – February 12, 2008

3B – Groundwater Concentration and Inferred PSH Extent Map – May 13, 2008

3C – Groundwater Concentration and Inferred PSH Extent Map – August 14, 2008

3D – Groundwater Concentrations and Inferred PSH Extent Map – November 12, 2008

### TABLES

Table 1 – 2008 Groundwater Elevation Data

Table 2 – 2008 Concentrations of BTEX and TPH in Groundwater

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 97-17 Pipeline Release Site, formally the responsibility of Enron Oil Trading and Transportation (EOTT) is the responsibility of Plains. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A. This report is intended to be viewed as a complete document with figures, attachments, tables and text. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2008 only. For reference, the Site Location Map is provided as Figure 1. Cumulative tables and laboratory data are provided on the enclosed data disk.

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 legal description of the site is NE 1/4 SW 1/4 Section 21, Township 20 South, Range 37 East, Lea County, New Mexico. The TNM 97-17 release was discovered by Texas New Mexico Pipe Line Company (TNM) and reported on August 19, 1997. An estimated 170 barrels of crude oil were released with 160 barrels recovered. The release occurred from a 16-inch pipeline and was attributed to structural failure associated with internal pipeline corrosion. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A. Following completion of repairs to the pipeline, approximately 1,160 cubic yards of impacted soil was excavated and stockpiled on-site pending treatment. The groundwater at this site ranges from approximately 17 to 21 feet below ground surface (bgs).

Twenty-eight groundwater monitor wells (MW-1 through MW-28) and six PSH recovery wells (RW-1 through RW-6) are currently on-site. A pneumatic product recovery system operated on-site, incorporating recovery well RW-6 and monitor wells MW-8, MW-14 and MW-15. The automated recovery system was decommissioned in the summer of 2007, due to declining PSH thickness, which cannot be efficiently recovered utilizing the automated recovery system. Currently, manual PSH recovery is performed on a weekly basis for monitor and recovery wells exhibiting PSH.

## **FIELD ACTIVITIES**

### **Product Recovery Efforts**

A measurable thickness of PSH was recorded on thirteen monitor wells or recovery wells during the reporting period. The average thickness of PSH in monitor wells and recovery wells

exhibiting PSH was 0.33 feet. The maximum thickness of PSH in monitor wells and recovery wells during the 2008 reporting period was 1.97 feet in monitor well MW-14 on September 17, 2008. In comparison, the maximum PSH thickness reported during the 2007 reporting period was 2.11 feet. Groundwater elevation data for the 2008 gauging events can be found in Table 1. Approximately 300 gallons (7.1 barrels) of PSH were recovered from the site during the reporting period. Approximately 1,990 gallons (approximately 47.4 barrels) of PSH has been recovered since project inception.

### Groundwater Monitoring

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

NMOCD APPROVED SAMPLING SCHEDULE					
Location	Schedule	Location	Schedule	Location	Schedule
MW-1	Annually	MW-13	Annually	MW-25	Semi-Annually
MW-2	Annually	MW-14	Quarterly	MW-26	Quarterly
MW-3	Annually	MW-15	Quarterly	MW-27	Semi-Annually
MW-4	Quarterly	MW-16	Annually	MW-28	Annually
MW-5	Quarterly	MW-17	Annually	RW-1	Quarterly
MW-6	Quarterly	MW-18	Annually	RW-2	Quarterly
MW-7	Quarterly	MW-19	Quarterly	RW-3	Quarterly
MW-8	Quarterly	MW-20	Quarterly	RW-4	Quarterly
MW-9	Quarterly	MW-21	Quarterly	RW-5	Quarterly
MW-10	Quarterly	MW-22	Semi-Annually	RW-6	Quarterly
MW-11	Annually	MW-23	Semi-Annually		
MW-12	Annually	MW-24	Annually		

The site monitor wells were gauged and sampled on February 12, May 13, August 14, and November 12, 2008. During each sampling event, the monitor wells were purged of a minimum of three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. 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 the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. 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 Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.003 feet/foot to the southeast as measured between monitor well MW-7 and MW-19. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,485.26 to 3,490.34 feet above mean sea level, in monitor well MW-1 on February 12, 2008 and on May 13, 2008, respectively.

## LABORATORY RESULTS

Monitor wells MW-4, MW-7 and MW-8, MW-14 and MW-19 and recovery wells RW-1, RW-5 and RW-6 contained measurable PSH throughout the 2008 reporting period. Recovery wells RW-2 and RW-3 and monitor wells MW-5, MW-6 and MW-15 contained measurable PSH during at least one or more quarters of the reporting period and were not sampled.

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-1** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 for xylene during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last thirty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-2** is sampled on an annual schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last thirty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-3** is sampled on an annual schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards, during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last thirty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**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, 0.15 feet and 0.51 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 0.806 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting

period with a concentration of 0.515 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.4430 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.492 mg/L. Analytical results indicated a total TPH result of 88.80 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.015 mg/L) and 2-methylnaphthalene (0.0131 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.00682 mg/L), fluorene (0.00238 mg/L), phenanthrene (0.00337 mg/L) and dibenzofuran (0.00239 mg/L), which are below WQCC standards.

**Monitor well MW-5** is sampled on a quarterly schedule. Monitor well MW-5 was not sampled during the 3<sup>rd</sup> quarter of the reporting period, due to the presence of 0.01 feet of PSH. Analytical results on groundwater samples collected during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters indicate benzene concentrations ranged from 0.0074 mg/L during the 4<sup>th</sup> quarter to 0.0210 mg/L during the 1<sup>st</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during the 1<sup>st</sup> and 2<sup>nd</sup> quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> and 4<sup>th</sup> quarters to 0.0012 mg/L during the 1<sup>st</sup> quarter of 2008. Toluene concentrations were below NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> and 4<sup>th</sup> quarters to 0.0077 mg/L during the 1<sup>st</sup> quarter of 2008. Ethylbenzene concentrations were below NMOCD regulatory standards during 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Xylene concentrations ranged from 0.0012 mg/L during the 2<sup>nd</sup> quarter to 0.0082 mg/L during the 1<sup>st</sup> quarter of 2008. Xylene concentrations were below NMOCD regulatory standards during 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for 1-methylnaphthalene (0.00183 mg/L), dibenzofuran (0.0023 mg/L), fluorine (0.00233 mg/L), and phenanthrene (0.00189 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 in the monitor well. PSH thicknesses of 0.04 feet, 0.15 feet and 0.23 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 0.0991 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.223 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.0810 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1910 mg/L. Analytical results indicated a total TPH result of 20.74 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.00782 mg/L), 1-methylnaphthalene (0.0115 mg/L), 2-methylnaphthalene (0.00712 mg/L), anthracene (0.00361 mg/L) and phenanthrene (0.00357 mg/L), which are below WQCC standards.

**Monitor well MW-7** is monitored on a quarterly schedule. Monitor well MW-7 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 in the monitor well. PSH thicknesses of 0.34 feet, 0.33 feet and 0.44 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 0.0991 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.223 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.0810 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1910 mg/L. Analytical results indicated a total TPH result of 28.01 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0285 mg/L) and 2-methylnaphthalene (0.0175 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.0106 mg/L), fluorene (0.00539 mg/L), phenanthrene (0.00582 mg/L) and anthracene (0.0059 mg/L), which are below WQCC standards.

**Monitor well MW-8** is monitored on a quarterly schedule. Monitor well MW-8 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 in the monitor well. PSH thicknesses of 0.39 feet, 0.31 feet and 0.48 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 0.238 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.154 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.147 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.159 mg/L. Analytical results indicated a total TPH result of 55.10 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0261 mg/L) and 2-methylnaphthalene (0.0168 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.0120 mg/L), phenanthrene (0.0045 mg/L) and anthracene (0.00454 mg/L), which are below WQCC standards.

**Monitor well MW-9** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0137 mg/L during the 3<sup>rd</sup> quarter to 0.0162 mg/L during the 1<sup>st</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during the all four quarters of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and the NMOCD regulatory standards 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 1-methylnaphthalene (0.000746 mg/L) and dibenzofuran (0.000341 mg/L), which are below WQCC standards.

**Monitor well MW-10** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0111 mg/L during the 4<sup>th</sup> quarter to 0.0291 mg/L during the 3<sup>rd</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during the 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 <0.001 mg/L during the 3<sup>rd</sup> and 4<sup>th</sup> quarters to 0.0136 mg/L during the 1<sup>st</sup> quarter of 2007. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of 2008. Xylene concentrations were below MDL and NMOCD regulatory standards



during all four quarters of 2008. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for 1-methylnaphthalene (0.00477 mg/L), fluorine (0.00344 mg/L), and phenanthrene (0.00296 mg/L), which are below WQCC standards.

**Monitor well MW-11** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-four consecutive quarters. 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 inadvertently sampled during the 2<sup>nd</sup> and 4<sup>th</sup> quarters of 2008. Analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling events. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. 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 an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-14** is monitored on a quarterly schedule. Monitor well MW-14 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 in the monitor well. PSH thicknesses of 0.67 feet, 0.51 feet and 0.73 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 0.318 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.136 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.388 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.262 mg/L. Analytical results indicated a total TPH result of 445.50 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0377 mg/L), 1-methylnaphthalene (0.147 mg/L) and 2-methylnaphthalene (0.137 mg/L). Additional PAH constituents detected above MDLs include fluorine (0.0233 mg/L), phenanthrene (0.0402 mg/L) and dibenzofuran (0.0289 mg/L), which are below WQCC standards.

**Monitor well MW-15** is monitored on a quarterly schedule. Monitor well MW-15 was not sampled during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH in the monitor well and was not sampled during the 4<sup>th</sup> quarter due to insufficient water volume in the

well. PSH thicknesses of 0.15 feet and 0.29 feet were reported during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2008, respectively. Analytical results on groundwater samples collected during the 1<sup>st</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard during the 1<sup>st</sup> quarter of the reporting period with a concentration of 0.161 mg/L. Toluene concentrations were below the MDL and NMOCD regulatory standards during the 1<sup>st</sup> quarter of the reporting period. Ethylbenzene concentrations were below NMOCD regulatory standards during the 1<sup>st</sup> quarter of the reporting period with a concentration of 0.2410 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 1<sup>st</sup> quarter of the reporting period with a concentration of 0.0531 mg/L. PAH analysis was not conducted during the 4<sup>th</sup> quarter of the reporting period due to insufficient water volume in the well.

**Monitor well MW-16** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-17** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-18** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-19** is monitored on a quarterly schedule. Monitor well MW-19 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 in the monitor well and was not sampled during the 4<sup>th</sup> quarter due to insufficient water volume in the well. PSH thicknesses of 0.23 feet, 0.09 feet, 0.15 feet and 0.05 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2008, respectively.

**Monitor well MW-20** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.2010 mg/L during the 1<sup>st</sup> quarter to 0.5350 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 the MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from <0.005 mg/L during the 3<sup>rd</sup> quarter to 0.0251 mg/L during the 2<sup>nd</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations were below the MDL and 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 1-methylnaphthalene (0.00351 mg/L), fluorine (0.000615 mg/L), phenanthrene (0.000318 mg/L) and dibenzofuran (0.000958 mg/L), which are below WQCC standards.

**Monitor well MW-21** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0017 mg/L during the 1<sup>st</sup> quarter to 0.0054 mg/L during the 4<sup>th</sup> quarter of 2008. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from <0.001 mg/L during the 4<sup>th</sup> quarter to 0.0040 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 <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0073 mg/L during the 4<sup>th</sup> quarter of 2008. 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 fluorine (0.000414 mg/L), phenanthrene (0.000203 mg/L), and dibenzofuran (0.00108 mg/L), which are below WQCC standards.

**Monitor well MW-22** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-23** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 2<sup>nd</sup> and 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-24** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-25** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-26** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0047 mg/L during the 1<sup>st</sup> quarter to 0.0071 mg/L during the 4<sup>th</sup> quarter of 2008. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from <0.001 mg/L during the 4<sup>th</sup> quarter to 0.0067 mg/L during the 1<sup>st</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.0001 mg/L during the 2<sup>nd</sup> quarter to 0.0082 mg/L during the 1<sup>st</sup> quarter of 2008. 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 1-methylnaphthalene (0.000204 mg/L), fluorine (0.000312 mg/L), phenanthrene (0.000308 mg/L), and dibenzofuran (0.000471 mg/L), which are below WQCC standards.

**Monitor well MW-27** is sampled on a semi-annual schedule. Analytical results indicate benzene concentrations were below the NMOCD regulatory standards with a concentration of 0.0011 mg/L on groundwater samples collected during the 2<sup>nd</sup> and 4<sup>th</sup> quarters. Analytical results indicate toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling events. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-28** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last twenty-five consecutive quarters. 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 in the monitor well. PSH thicknesses of 0.20 feet, 0.11 feet and 0.13 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 0.2180 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.117 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.0721 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.0853 mg/L. Analytical results indicated a total TPH result of 73.50 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0941 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.023 mg/L), which are below WQCC standards.

**Recovery well RW-2** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0521 mg/L during the 4<sup>th</sup> quarter to 0.0590 mg/L during the 2<sup>nd</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from 0.0161 mg/L during the 2<sup>nd</sup> quarter to 0.0280 mg/L during the 1<sup>st</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.010 mg/L during the 4<sup>th</sup> quarter to 0.0253 mg/L during the 1<sup>st</sup> quarter of 2008. 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 1-methylnaphthalene (0.00552 mg/L), fluorine (0.00424 mg/L), phenanthrene (0.00488 mg/L) and dibenzofuran (0.00476 mg/L), which are below WQCC standards.

**Recovery well RW-3** is monitored / sampled on a quarterly schedule. Recovery well RW-3 was not sampled during the 3<sup>rd</sup> quarter of the reporting period, due to the presence of 0.01 feet of PSH in the monitor well. Recovery well RW-3 was sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Analytical results indicate benzene concentrations ranged from 0.1990 mg/L during the 2<sup>nd</sup> quarter to 0.4590 mg/L during the 1<sup>st</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of 2008. Ethylbenzene concentrations ranged from 0.0209 mg/L during the 2<sup>nd</sup> quarter to 0.0413 mg/L during the 4<sup>th</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Xylene concentrations ranged from 0.0129 mg/L during the 2<sup>nd</sup> quarter to 0.0471 mg/L during the 1<sup>st</sup> quarter of 2008. Xylene concentrations were below the NMOCD regulatory standard during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.000993 mg/L), 1-methylnaphthalene (0.00787 mg/L), fluorene (0.00212 mg/L), anthracene (0.000931 mg/L), phenanthrene (0.000922 mg/L) and dibenzofuran (0.0021 mg/L), which are below WQCC standards.

**Recovery well RW-4** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.3360 mg/L during the 2<sup>nd</sup> quarter to 0.4720 mg/L during the 1<sup>st</sup> quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from 0.0549 mg/L during the 2<sup>nd</sup> quarter to 0.1090 mg/L during the 1<sup>st</sup> quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.0391 mg/L during the 2<sup>nd</sup> quarter to 0.0866 mg/L during the 1<sup>st</sup> quarter of 2008. 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 naphthalene (0.00766 mg/L), 1-methylnaphthalene (0.0201 mg/L), 2-methylnaphthalene (0.00836 mg/L), fluorene (0.00391 mg/L), phenanthrene (0.00442 mg/L) and dibenzofuran (0.00372 mg/L), which are below WQCC standards.

**Recovery well RW-5** is monitored on a quarterly schedule. Recovery well RW-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 in the monitor well. PSH thicknesses of 0.27 feet, 0.31 feet and 0.35 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 0.1320 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.148 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1230 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1640 mg/L. Analytical results indicated a total TPH result of 16.91 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0266 mg/L) and 2-methylnaphthalene (0.0192 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.0172 mg/L), anthracene (0.00472 mg/L), and phenanthrene (0.00466 mg/L), which are below WQCC standards.

**Recovery well RW-6** is monitored on a quarterly schedule. Recovery well RW-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 in the monitor well. PSH thicknesses of 0.26 feet, 0.33 feet and 0.23 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 0.1060 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.133 mg/L. Ethylbenzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1270 mg/L. Xylene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.1370 mg/L. Analytical results indicated a total TPH result of 18.04 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0381 mg/L) and 2-methylnaphthalene (0.0245 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0106 mg/L), dibenzofuran (0.00901 mg/L), and phenanthrene (0.011 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. Currently, there are twenty-eight groundwater monitor wells (MW-1 through MW-28) and six product recovery wells (RW-1 through RW-6) on-site. A pneumatic product recovery system operated on-site, incorporating recovery well RW-6 and monitor wells MW-8, MW-14 and MW-15. The automated recovery system was decommissioned in the summer of 2007, due to declining PSH thickness, which cannot be efficiently recovered utilizing the automated recovery system. Currently, manual PSH recovery is performed on a weekly basis for monitor and

recovery wells exhibiting PSH. Approximately 300 gallons (7.1 barrels) of PSH were recovered from the site during the reporting period. Approximately 1,990 gallons (approximately 47.4 barrels) of PSH has been recovered since project inception.

During the reporting period, eight monitor wells (MW-4 through MW-8, MW-14, MW-15, MW-19) and four recovery wells (RW-1, RW-3, RW-5 and RW-6) contained measurable PSH during at least one or more quarters of the 2008 reporting period.

The average thickness of PSH in monitor wells and recovery wells exhibiting PSH was 0.33 feet. The maximum thickness of PSH in monitor wells and recovery wells during the 2008 reporting period was 1.97 feet in monitor well MW-14 on September 17, 2008. In comparison, the maximum PSH thickness reported during the 2007 reporting period was 2.11 feet.

Groundwater elevation contours generated from water level measurements acquired indicated a general gradient of approximately 0.003 feet/foot to the southeast.

Review of laboratory analytical results of the groundwater samples obtained during the 2008 monitoring period indicates the BTEX constituent concentrations are below applicable NMOCD standards in seventeen of the twenty-eight monitor wells currently on-site. Dissolved phase and phase separated hydrocarbon impact appears to be limited to monitor wells MW-5, MW-9, MW-10 and MW-20 and recovery wells RW-2, RW-3 and RW-4. Groundwater samples from monitor wells MW-4, MW-6 through MW-8 and MW-14 and recovery wells RW-1, RW-5 and RW-6 exhibited elevated TPH concentrations for GRO and DRO. Analytical results on groundwater samples collected indicate PAH distributions mirrored those of BTEX distributions over the site.

## **ANTICIPATED ACTIONS**

Quarterly gauging and sampling will continue in 2009. Manual product recovery will continue weekly and will be adjusted according to site conditions. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2010.

Soil remediation activities are scheduled to commence during the 2<sup>nd</sup> or 3<sup>rd</sup> quarter of 2009. A Soil Closure Request will be submitted to the NMOCD following the completion of these activities.

## **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**

- Copy 1      Ed Hansen  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505
- Copy 2:      Larry Johnson  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division, District 1  
1625 French Drive  
Hobbs, NM 88240
- Copy 3:      Jason Henry  
Plains Marketing, L.P.  
2530 State Highway 214  
Denver City, TX 79323  
jhenry@paalp.com
- Copy 4:      Jeff Dann  
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



Figure 1  
Site Location Map  
Plains Marketing, L.P.  
TNM 97-17  
Lea County, NM

Lat. N32° 33' 24"N Long. W103° 15' 37.3"W

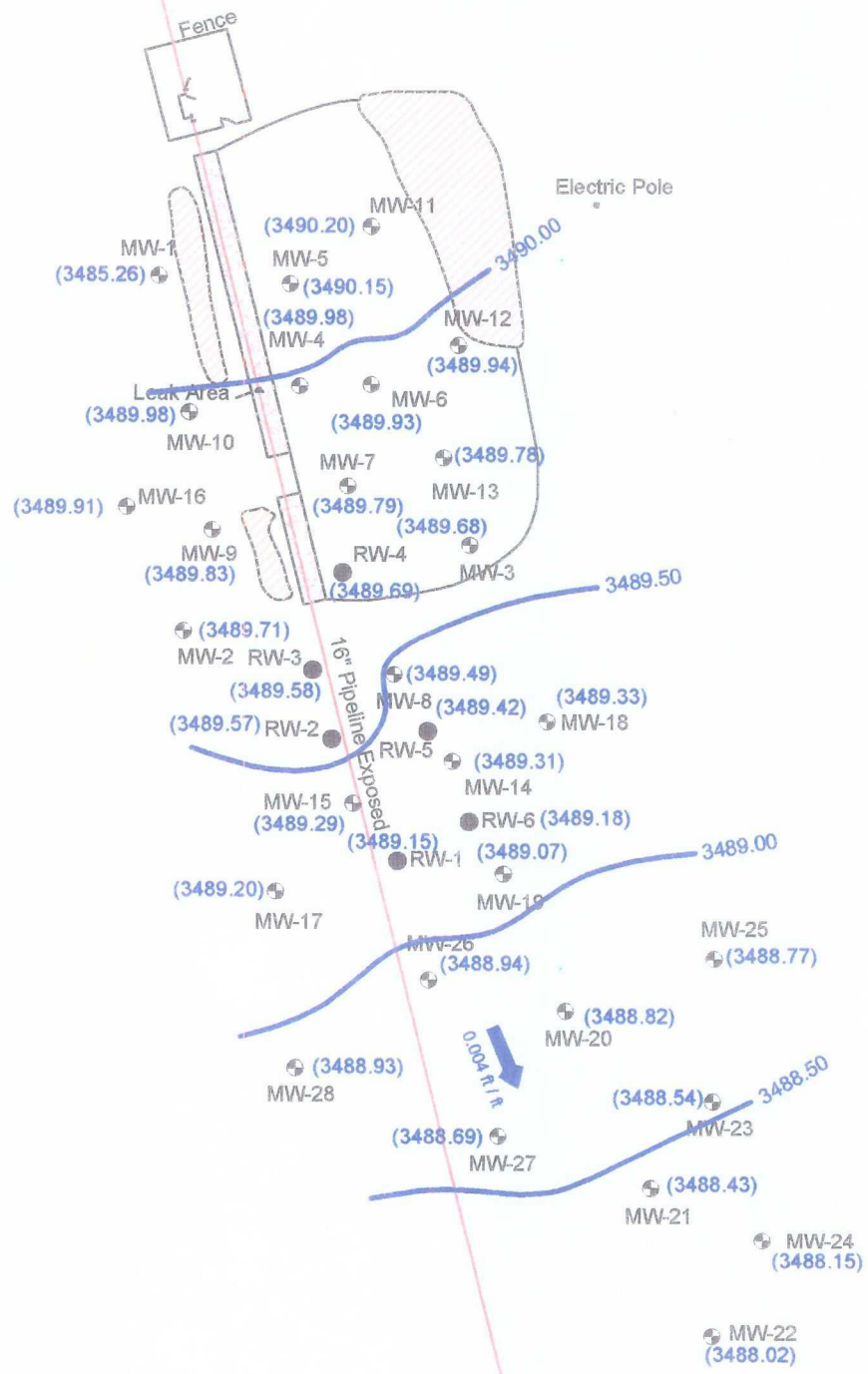
NMOSD Reference Number AP-017

NOVA Safety and Environmental

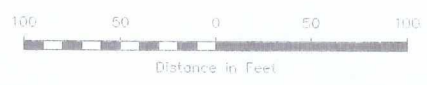


Scale: ITS  
Drawn By: CDS  
February 10, 2005  
NE 1/4 SW 1/4 Sec 21 T20S R37E

Prepared By: TIK



**NOTE:**  
Contour Interval = 0.50'  
GW Gradient Measured Between MW-7 and MW-22  
MW-1 Not Used In The Construction Of This Map



NMOCD Reference # AP-017

Legend:	⊕	Monitor Well Location
	●	Recovery Well Location
	(3489.72)	Groundwater Elevation in Feet
	[Hatched Box]	Stockpile Soil Area
	[Dashed Box]	Excavated Area
	→	Groundwater Gradient Direction and Magnitude

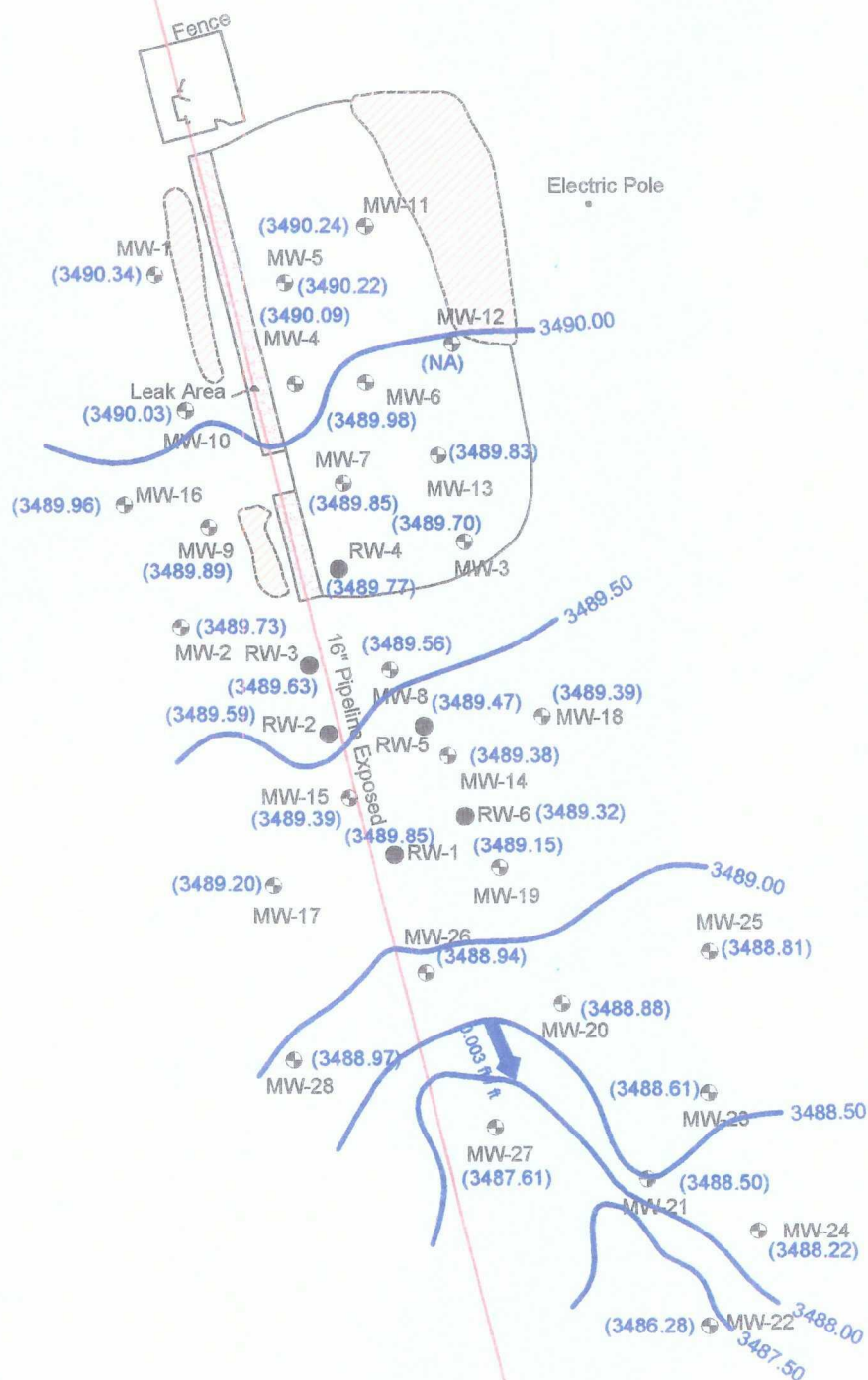


Figure 2A  
Inferred Groundwater  
Gradient Map  
(02/12/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 100'	CAD By: DGC	Checked By: CDS
October 16, 2008		





**NOTE:**

Contour Interval = 0.50'

GW Gradient Measured Between MW-7 and MW-19



NMOCD Reference # AP-017

**Legend:**

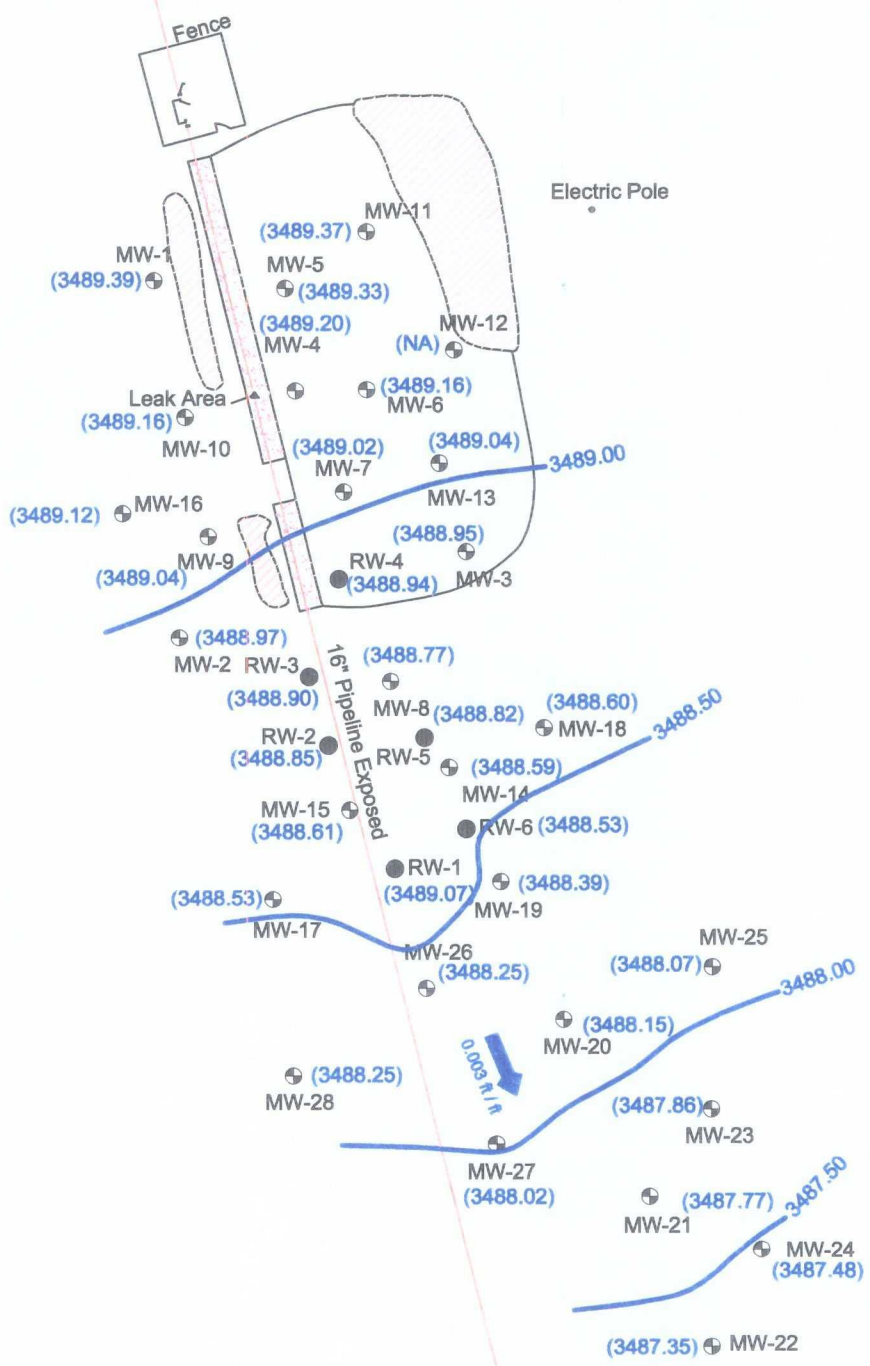
- Monitor Well Location
- Recovery Well Location
- Groundwater Elevation in Feet
- Stockpile Soil Area
- Excavated Area
- Groundwater Gradient Direction and Magnitude



**Figure 2B**  
Inferred Groundwater  
Gradient Map  
(05/13/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 100' CAD By: DGC Checked By: CDS  
October 16, 2008



**NOTE:**  
 Contour Interval = 0.50'  
 GW Gradient Measured Between MW-7 and MW-19



NMOCD Reference # AP-017

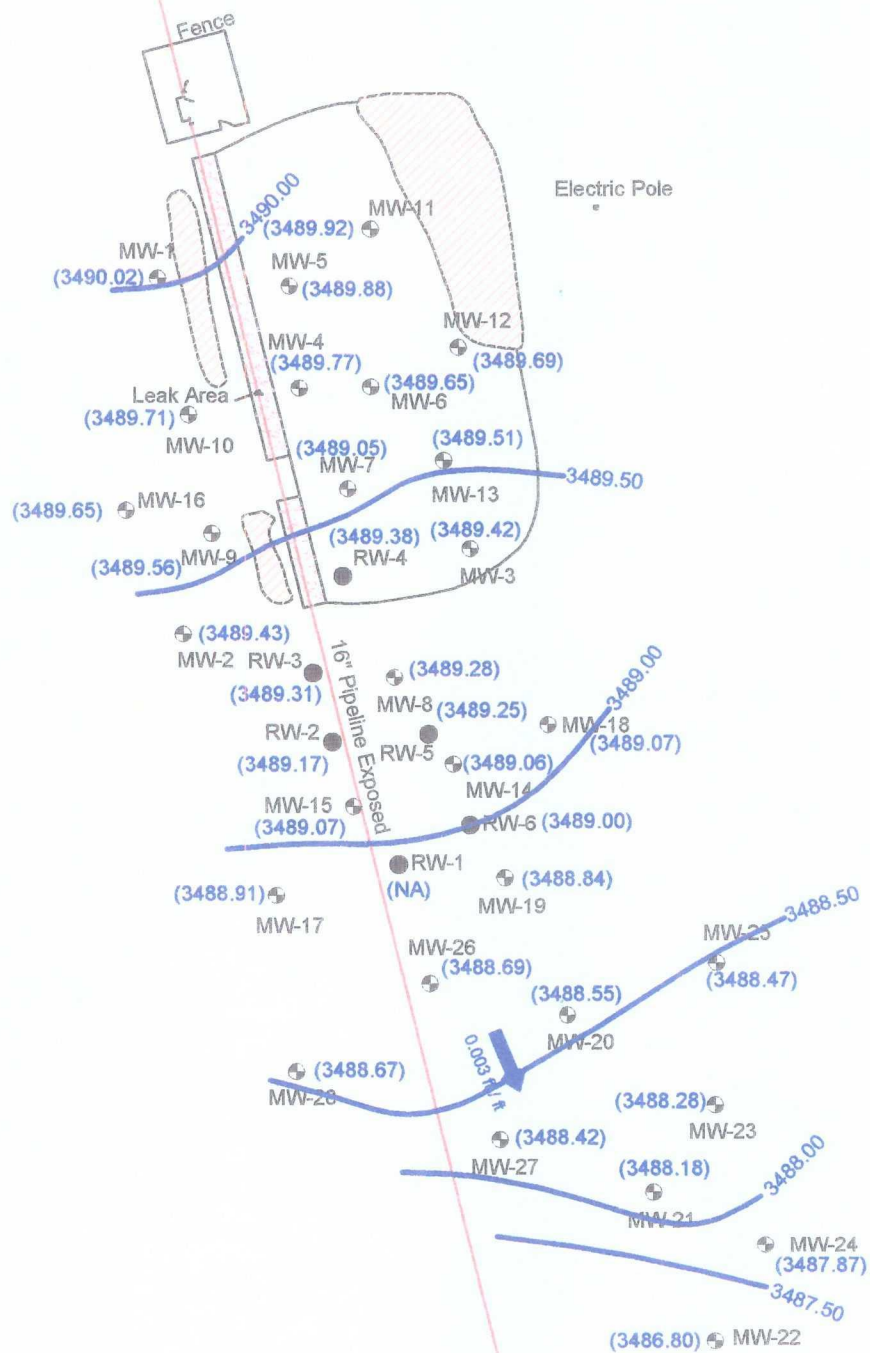
- Legend:**
- ⊕ Monitor Well Location
  - Recovery Well Location
  - (3489.39) Groundwater Elevation in Feet
  - Stockpile Soil Area
  - Excavated Area
  - 0.003 ft/ft Groundwater Gradient Direction and Magnitude



Figure 2C  
 Inferred Groundwater  
 Gradient Map  
 (08/14/08)  
 Plains Pipeline, L.P.  
 TNM 97-17  
 Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 100'	CAD By: DGC	Checked By: CDS
October 16, 2008		



**NOTE:**

Contour Interval = 0.50'

GW Gradient Measured Between MW-7 and MW-19



NMOCD Reference # AP-017

- Legend:**
- ⊕ Monitor Well Location
  - Recovery Well Location
  - (3489.72) Groundwater Elevation in Feet
  - Stockpile Soil Area
  - Excavated Area
  - Groundwater Gradient Direction and Magnitude

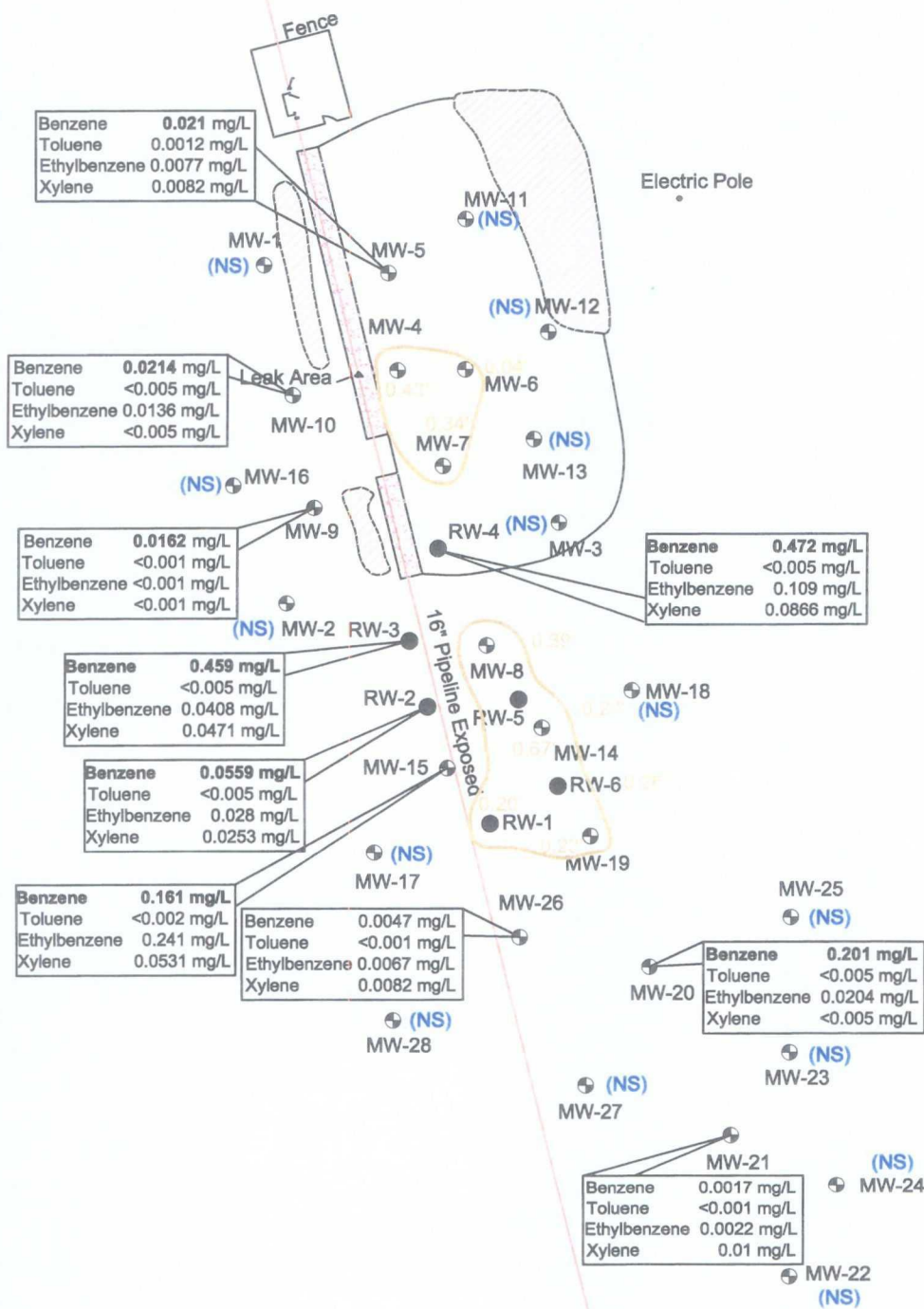


**Figure 2D**  
Inferred Groundwater  
Gradient Map  
(11/12/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 100' CAD By: DGC Checked By: RKR  
December 05, 2008





**NOTE:**

- **BOLD** Indicates Concentration Above NMOCD Regulatory Limit



NMOCD Reference # AP-017

**Legend:**

- Monitor Well Location
- Recovery Well Location
- Pipeline
- Inferred PSH Extent
- Thickness of PSH (feet)
- Stockpile Soil Area
- Excavated Area
- (NS) Not Sampled

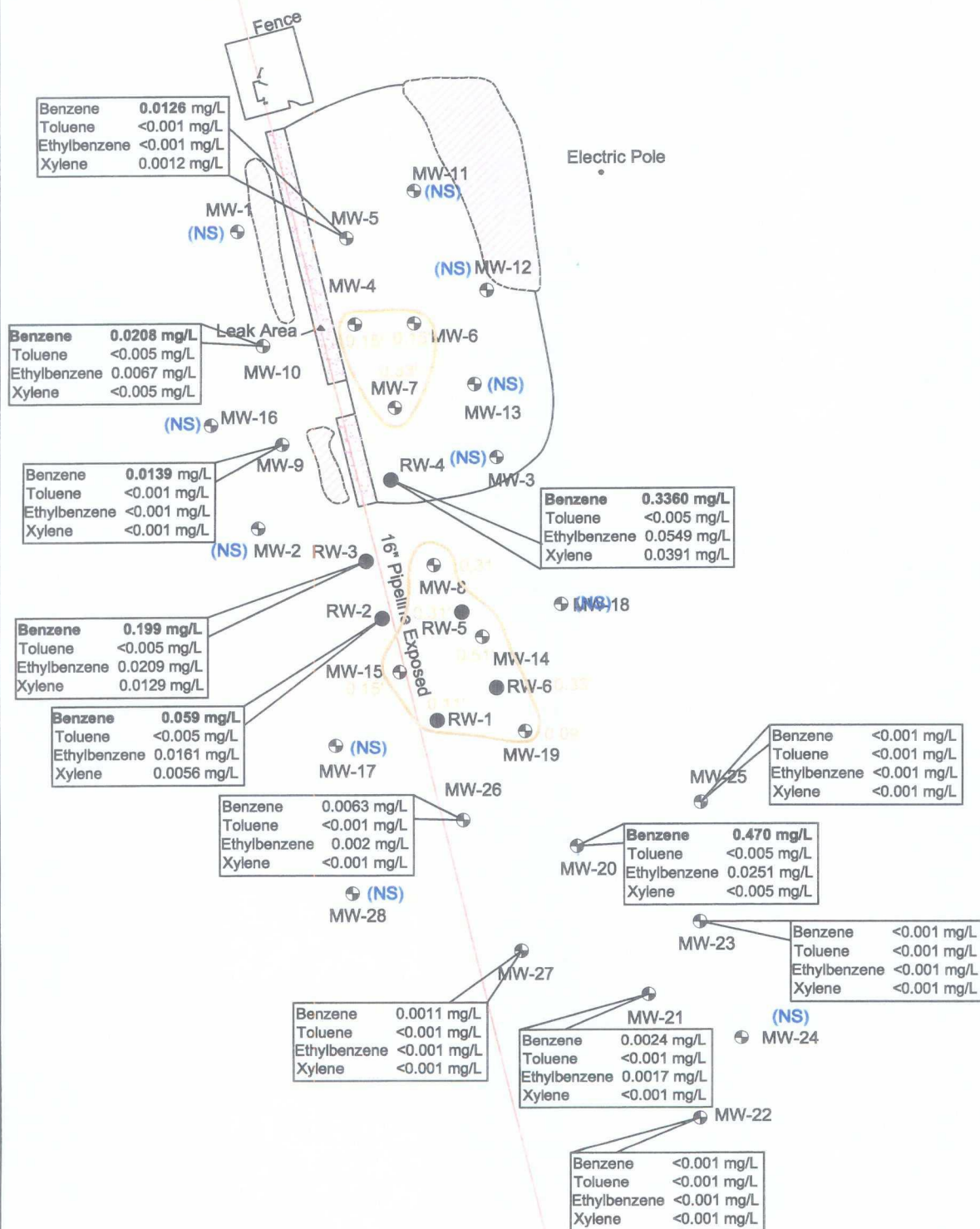


Figure 3A  
Groundwater Concentration  
and Inferred PSH Extent  
Map (02/12/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 100' CAD By: DGC Checked By: RKR  
October 16, 2008





**NOTE:**

- **BOLD** Indicates Concentration Above NMOC Regulatory Limit



NMOC Reference # AP-017

**Legend:**

	Monitor Well Location	<0.001	Constituent Concentration (mg/L)
	Recovery Well Location		
	Pipeline		
	Inferred PSH Extent		
	Thickness of PSH (feet)	(NS)	Not Sampled
	Stockpile Soil Area		
	Excavated Area		
	Not Sampled		



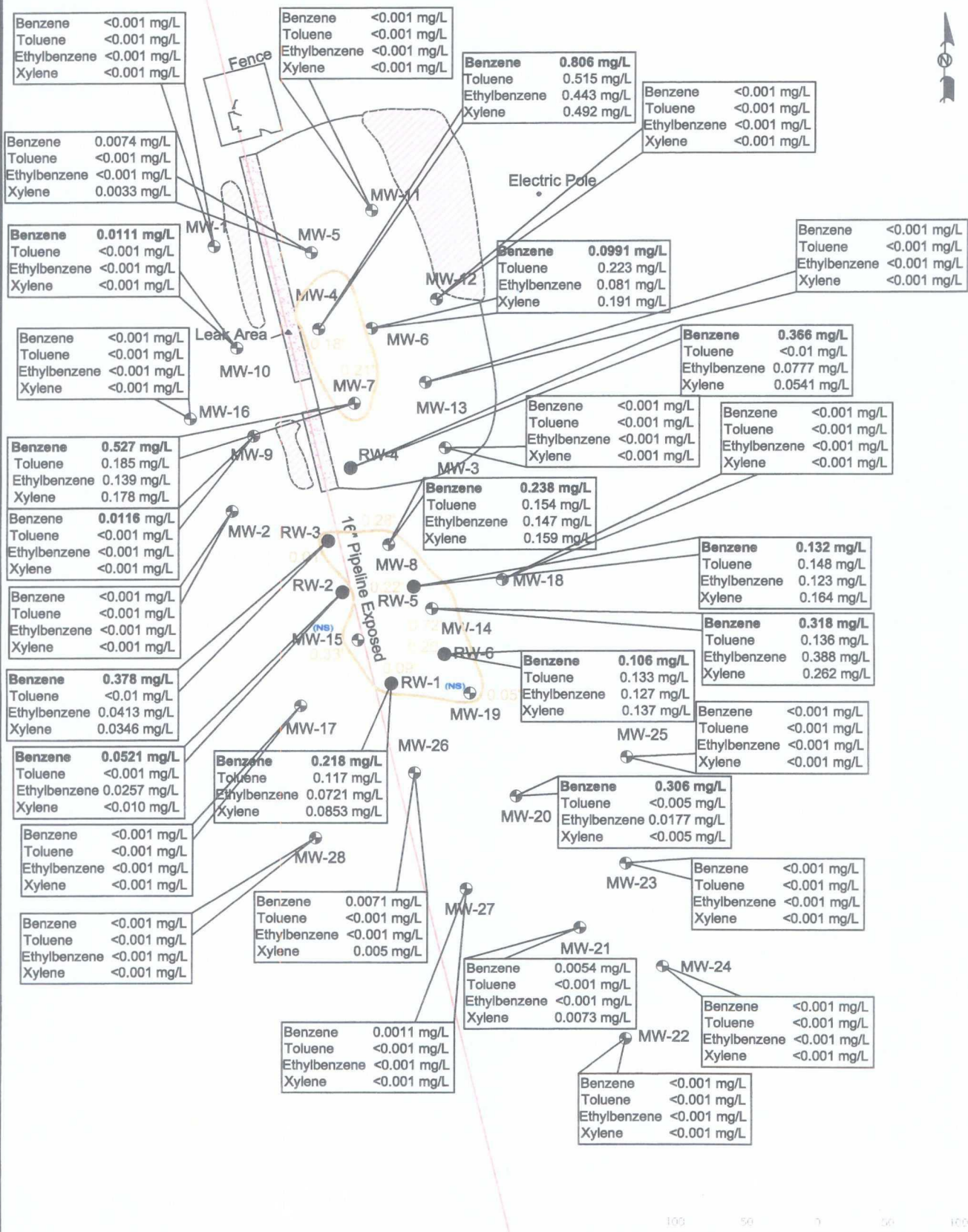
Figure 3B  
Groundwater Concentration  
and Inferred PSH Extent  
Map (05/13/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 100' CAD By: DGC Checked By: RKR  
October 16, 2008







NOTE:

• **BOLD** Indicates Concentration Above NMOC Regulatory Limit

NMOC Reference # AP-017

**Legend:**

- Monitor Well Location
- Recovery Well Location
- Pipeline
- Inferred PSH Extent
- Thickness of PSH (feet)
- Stockpile Soil Area
- Excavated Area
- (NS) Not Sampled

**Figure 3D**  
Groundwater Concentration  
and Inferred PSH Extent  
Map (11/12/08)  
Plains Pipeline, L.P.  
TNM 97-17  
Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 100' CAD By: DGC Checked By: RKR  
December 18, 2008

## TABLES

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
LEA COUNTY, NEW MEXICO  
PLAINS MARKETING, L.P.  
NMOC REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	02/12/08	3510.90	-	25.64	0.00	3485.26
MW - 1	05/13/08	3510.90	-	20.56	0.00	3490.34
MW - 1	08/14/08	3510.90	-	21.51	0.00	3489.39
MW - 1	11/12/08	3510.90	-	20.88	0.00	3490.02
MW - 2	02/12/08	3509.23	-	19.52	0.00	3489.71
MW - 2	05/13/08	3509.23	-	19.50	0.00	3489.73
MW - 2	08/14/08	3509.23	-	20.26	0.00	3488.97
MW - 2	11/12/08	3509.23	-	19.80	0.00	3489.43
MW - 3	02/12/08	3508.82	-	19.14	0.00	3489.68
MW - 3	05/13/08	3508.82	-	19.12	0.00	3489.70
MW - 3	08/14/08	3508.82	-	19.87	0.00	3488.95
MW - 3	11/12/08	3508.82	-	19.40	0.00	3489.42
MW - 4	01/09/08	3509.15	19.13	19.35	0.22	3489.99
MW - 4	01/16/08	3509.15	19.16	19.50	0.34	3489.94
MW - 4	01/21/08	3509.15	19.14	19.43	0.29	3489.97
MW - 4	01/30/08	3509.15	19.09	19.23	0.14	3490.04
MW - 4	02/12/08	3509.15	19.11	19.54	0.43	3489.98
MW - 4	02/14/08	3509.15	19.10	19.27	0.17	3490.02
MW - 4	02/20/08	3509.15	sheen	19.09	0.00	3490.06
MW - 4	02/28/08	3509.15	19.08	19.23	0.15	3490.05
MW - 4	03/05/08	3509.15	19.10	19.24	0.14	3490.03
MW - 4	03/13/08	3509.15	19.07	19.21	0.00	3489.94
MW - 4	03/19/08	3509.15	19.11	19.14	0.03	3490.04
MW - 4	03/24/08	3509.15	19.07	19.15	0.08	3490.07
MW - 4	04/02/08	3509.15	19.08	19.13	0.05	3490.06
MW - 4	04/07/08	3509.15	19.08	19.09	0.01	3490.07
MW - 4	04/14/08	3509.15	19.06	19.13	0.07	3490.08
MW - 4	04/23/08	3509.15	19.05	19.11	0.06	3490.09
MW - 4	05/07/08	3509.15	19.04	19.19	0.15	3490.09
MW - 4	05/13/08	3509.15	19.04	19.19	0.15	3490.09
MW - 4	05/14/08	3509.15	19.05	19.09	0.04	3490.09
MW - 4	05/19/08	3509.15	19.09	19.12	0.03	3490.06
MW - 4	06/09/08	3509.15	19.36	19.56	0.20	3489.76
MW - 4	06/16/08	3509.15	19.08	19.18	0.10	3490.06
MW - 4	06/23/08	3509.15	19.54	20.22	0.68	3489.51
MW - 4	06/30/08	3509.15	19.64	20.02	0.38	3489.45
MW - 4	07/14/08	3509.15	19.65	20.45	0.80	3489.38
MW - 4	07/22/08	3509.15	19.73	20.48	0.75	3489.31
MW - 4	07/29/08	3509.15	19.70	20.74	1.04	3489.29
MW - 4	08/04/08	3509.15	19.70	21.12	1.42	3489.24
MW - 4	08/11/08	3509.15	19.79	20.77	0.98	3489.21
MW - 4	08/14/08	3509.15	19.87	20.38	0.51	3489.20
MW - 4	08/18/08	3509.15	19.82	20.65	0.83	3489.21
MW - 4	08/28/08	3509.15	19.72	20.72	1.00	3489.28
MW - 4	09/17/08	3509.15	19.35	21.00	1.65	3489.55
MW - 4	09/29/08	3509.15	19.43	19.88	0.45	3489.65
MW - 4	10/06/08	3509.15	19.48	19.74	0.26	3489.63
MW - 4	10/13/08	3509.15	19.52	19.72	0.20	3489.60
MW - 4	10/20/08	3509.15	19.43	19.61	0.18	3489.69
MW - 4	10/29/08	3509.15	19.39	19.63	0.24	3489.72
MW - 4	10/30/08	3509.15	19.42	19.51	0.09	3489.72
MW - 4	11/06/08	3509.15	19.38	19.52	0.14	3489.75
MW - 4	11/12/08	3509.15	19.35	19.53	0.18	3489.77
MW - 4	11/13/08	3509.15	19.35	19.53	0.18	3489.77
MW - 4	12/16/08	3509.15	19.30	19.51	0.21	3489.82
MW - 5	01/16/08	3509.96	-	19.88	0.00	3490.08
MW - 5	01/21/08	3509.96	-	19.86	0.00	3490.10
MW - 5	01/30/08	3509.96	-	19.78	0.00	3490.18
MW - 5	02/08/08	3509.96	-	19.84	0.00	3490.12
MW - 5	02/12/08	3509.96	-	19.81	0.00	3490.15
MW - 5	02/14/08	3509.96	-	19.83	0.00	3490.13
MW - 5	02/28/08	3509.96	-	19.82	0.00	3490.14
MW - 5	03/05/08	3509.96	-	19.82	0.00	3490.14

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	03/13/08	3509.96	-	19.78	0.00	3490.18
MW - 5	03/19/08	3509.96	-	19.79	0.00	3490.17
MW - 5	05/07/08	3509.96	-	19.73	0.00	3490.23
MW - 5	05/13/08	3509.96	-	19.74	0.00	3490.22
MW - 5	06/30/08	3509.96	20.40	20.41	0.01	3489.56
MW - 5	08/14/08	3509.96	20.62	20.72	0.10	3489.33
MW - 5	08/18/08	3509.96	20.62	20.63	0.01	3489.34
MW - 5	08/28/08	3509.96	-	20.56	0.00	3489.40
MW - 5	09/17/08	3509.96	-	20.27	0.00	3489.69
MW - 5	09/29/08	3509.96	-	20.21	0.00	3489.75
MW - 5	10/06/08	3509.96	-	20.23	0.00	3489.73
MW - 5	10/13/08	3509.96	-	20.28	0.00	3489.68
MW - 5	10/20/08	3509.96	-	20.21	0.00	3489.75
MW - 5	10/29/08	3509.96	-	20.18	0.00	3489.78
MW - 5	11/06/08	3509.96	-	20.10	0.00	3489.86
MW - 5	11/12/08	3509.96	-	20.08	0.00	3489.88
MW - 5	11/13/08	3509.96	-	20.08	0.00	3489.88
MW - 6	01/09/08	3507.94	17.90	18.16	0.26	3490.00
MW - 6	01/16/08	3507.94	18.04	18.30	0.26	3489.86
MW - 6	01/21/08	3507.94	18.01	18.38	0.37	3489.87
MW - 6	01/30/08	3507.94	18.00	18.04	0.04	3489.93
MW - 6	02/08/08	3507.94	18.00	18.04	0.04	3489.93
MW - 6	02/12/08	3507.94	18.00	18.04	0.04	3489.93
MW - 6	02/14/08	3507.94	17.99	18.02	0.03	3489.95
MW - 6	02/20/08	3507.94	18.00	18.03	0.03	3489.94
MW - 6	02/28/08	3507.94	17.98	17.99	0.01	3489.96
MW - 6	03/05/08	3507.94	17.98	18.01	0.03	3489.96
MW - 6	03/13/08	3507.94	17.96	18.04	0.00	3489.90
MW - 6	03/19/08	3507.94	17.97	18.09	0.12	3489.95
MW - 6	03/24/08	3507.94	17.94	18.02	0.08	3489.99
MW - 6	04/02/08	3507.94	17.94	18.10	0.16	3489.98
MW - 6	04/07/08	3507.94	17.94	18.04	0.10	3489.99
MW - 6	04/14/08	3507.94	17.94	18.03	0.09	3489.99
MW - 6	04/23/08	3507.94	17.93	18.01	0.08	3490.00
MW - 6	05/07/08	3507.94	17.94	18.09	0.15	3489.98
MW - 6	05/13/08	3507.94	17.94	18.09	0.15	3489.98
MW - 6	05/14/08	3507.94	17.93	18.00	0.07	3490.00
MW - 6	05/19/08	3507.94	17.92	17.98	0.06	3490.01
MW - 6	06/09/08	3507.94	18.22	18.47	0.25	3489.68
MW - 6	06/16/08	3507.94	17.95	18.12	0.17	3489.96
MW - 6	06/23/08	3507.94	17.52	18.88	1.36	3490.22
MW - 6	06/30/08	3507.94	18.52	18.82	0.30	3489.38
MW - 6	07/14/08	3507.94	18.58	18.76	0.18	3489.33
MW - 6	07/22/08	3507.94	18.62	18.76	0.14	3489.30
MW - 6	08/04/08	3507.94	18.98	19.12	0.14	3488.94
MW - 6	08/11/08	3507.94	18.74	18.80	0.06	3489.19
MW - 6	08/14/08	3507.94	18.75	18.98	0.23	3489.16
MW - 6	08/18/08	3507.94	18.76	18.84	0.08	3489.17
MW - 6	08/28/08	3507.94	18.69	18.75	0.06	3489.24
MW - 6	09/17/08	3507.94	18.45	18.65	0.20	3489.46
MW - 6	09/29/08	3507.94	18.35	18.40	0.05	3489.58
MW - 6	10/06/08	3507.94	18.39	18.45	0.06	3489.54
MW - 6	10/13/08	3507.94	18.44	18.57	0.13	3489.48
MW - 6	10/20/08	3507.94	18.41	18.43	0.02	3489.53
MW - 6	10/29/08	3507.94	18.23	18.30	0.07	3489.70
MW - 6	10/30/08	3507.94	18.33	18.34	0.01	3489.61
MW - 6	11/06/08	3507.94	-	18.30	0.00	3489.64
MW - 6	11/12/08	3507.94	-	18.29	0.00	3489.65
MW - 6	11/13/08	3507.94	-	18.25	0.00	3489.69
MW - 6	12/16/08	3507.94	18.22	18.23	0.00	3489.71
MW - 7	01/09/08	3507.08	17.25	17.58	0.33	3489.78
MW - 7	01/16/08	3507.08	17.29	17.64	0.35	3489.74
MW - 7	01/21/08	3507.08	17.31	17.72	0.41	3489.71
MW - 7	01/30/08	3507.08	17.23	17.54	0.31	3489.80
MW - 7	02/08/08	3507.08	17.24	17.58	0.34	3489.79

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97-17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 7	02/12/08	3507.08	17.24	17.58	0.34	3489.79
MW - 7	02/14/08	3507.08	17.23	17.51	0.28	3489.81
MW - 7	02/20/08	3507.08	17.21	17.50	0.29	3489.83
MW - 7	02/28/08	3507.08	17.22	17.54	0.32	3489.81
MW - 7	03/05/08	3507.08	17.23	17.63	0.40	3489.79
MW - 7	03/13/08	3507.08	17.19	17.57	0.38	3489.83
MW - 7	03/19/08	3507.08	17.23	17.60	0.37	3489.79
MW - 7	03/24/08	3507.08	17.19	17.58	0.39	3489.83
MW - 7	04/02/08	3507.08	17.18	17.52	0.34	3489.85
MW - 7	04/07/08	3507.08	17.18	17.52	0.34	3489.85
MW - 7	04/14/08	3507.08	17.19	17.48	0.29	3489.85
MW - 7	04/23/08	3507.08	17.19	17.52	0.33	3489.84
MW - 7	05/07/08	3507.08	17.18	17.51	0.33	3489.85
MW - 7	05/13/08	3507.08	17.18	17.51	0.33	3489.85
MW - 7	05/14/08	3507.08	17.20	17.50	0.30	3489.84
MW - 7	05/19/08	3507.08	17.19	17.42	0.23	3489.86
MW - 7	06/09/08	3507.08	17.46	17.95	0.49	3489.55
MW - 7	06/16/08	3507.08	17.24	17.50	0.26	3489.80
MW - 7	06/23/08	3507.08	17.70	18.35	0.65	3489.28
MW - 7	06/30/08	3507.08	17.76	18.25	0.49	3489.25
MW - 7	07/14/08	3507.08	17.82	18.36	0.54	3489.18
MW - 7	07/22/08	3507.08	17.87	18.36	0.49	3489.14
MW - 7	07/29/08	3507.08	17.88	18.40	0.52	3489.12
MW - 7	08/04/08	3507.08	17.90	18.49	0.59	3489.09
MW - 7	08/11/08	3507.08	17.75	18.41	0.66	3489.23
MW - 7	08/14/08	3507.08	17.99	18.43	0.44	3489.02
MW - 7	08/18/08	3507.08	17.96	18.38	0.42	3489.06
MW - 7	08/28/08	3507.08	17.91	18.30	0.39	3489.11
MW - 7	09/17/08	3507.08	17.65	18.01	0.36	3489.38
MW - 7	09/29/08	3507.08	17.61	17.96	0.35	3489.42
MW - 7	10/06/08	3507.08	17.62	17.97	0.35	3489.41
MW - 7	10/13/08	3507.08	17.69	18.05	0.36	3489.34
MW - 7	10/20/08	3507.08	17.60	17.89	0.29	3489.44
MW - 7	10/29/08	3507.08	17.53	17.75	0.22	3489.52
MW - 7	10/30/08	3507.08	17.56	17.76	0.20	3489.49
MW - 7	11/06/08	3507.08	17.54	17.76	0.22	3489.51
MW - 7	11/12/08	3507.08	17.50	17.71	0.21	3489.55
MW - 7	11/13/08	3507.08	17.50	17.71	0.21	3489.55
MW - 7	12/16/08	3507.08	17.48	17.70	0.22	3489.57
MW - 8	01/09/08	3506.39	16.82	17.36	0.54	3489.49
MW - 8	01/16/08	3506.39	16.88	17.33	0.45	3489.44
MW - 8	01/21/08	3506.39	16.89	17.56	0.67	3489.40
MW - 8	01/30/08	3506.39	16.81	17.15	0.34	3489.53
MW - 8	02/08/08	3506.39	16.84	17.27	0.43	3489.49
MW - 8	02/12/08	3506.39	16.84	17.23	0.39	3489.49
MW - 8	02/14/08	3506.39	16.84	17.16	0.32	3489.50
MW - 8	02/20/08	3506.39	16.80	17.12	0.32	3489.54
MW - 8	02/28/08	3506.39	16.81	17.15	0.34	3489.53
MW - 8	03/05/08	3506.39	16.81	17.24	0.43	3489.52
MW - 8	03/13/08	3506.39	16.79	17.14	0.35	3489.55
MW - 8	03/19/08	3506.39	16.83	17.15	0.32	3489.51
MW - 8	03/24/08	3506.39	16.78	17.17	0.39	3489.55
MW - 8	04/02/08	3506.39	16.79	17.16	0.37	3489.54
MW - 8	04/07/08	3506.39	16.76	17.12	0.36	3489.58
MW - 8	04/14/08	3506.39	16.82	17.16	0.34	3489.52
MW - 8	04/23/08	3506.39	16.76	17.11	0.35	3489.58
MW - 8	05/07/08	3506.39	16.78	17.09	0.31	3489.56
MW - 8	05/13/08	3506.39	16.78	17.09	0.31	3489.56
MW - 8	05/14/08	3506.39	16.76	17.13	0.37	3489.57
MW - 8	05/19/08	3506.39	16.80	17.14	0.34	3489.54
MW - 8	06/09/08	3506.39	17.04	17.57	0.53	3489.27
MW - 8	06/16/08	3506.39	16.79	17.12	0.33	3489.55
MW - 8	06/23/08	3506.39	17.25	17.67	0.42	3489.08
MW - 8	06/30/08	3506.39	17.32	17.78	0.46	3489.00
MW - 8	07/14/08	3506.39	17.35	17.76	0.41	3488.98
MW - 8	07/22/08	3506.39	17.40	17.80	0.40	3488.93

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
LEA COUNTY, NEW MEXICO  
PLAINS MARKETING, L.P.  
NMOC REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 8	07/29/08	3506.39	17.43	17.92	0.49	3488.89
MW - 8	08/04/08	3506.39	17.45	18.08	0.63	3488.85
MW - 8	08/11/08	3506.39	17.50	18.06	0.56	3488.81
MW - 8	08/14/08	3506.39	17.55	18.03	0.48	3488.77
MW - 8	08/18/08	3506.39	17.51	17.96	0.45	3488.81
MW - 8	08/28/08	3506.39	17.43	17.91	0.48	3488.89
MW - 8	09/02/08	3506.39	17.28	17.74	0.46	3489.04
MW - 8	09/17/08	3506.39	17.15	18.00	0.85	3489.11
MW - 8	09/29/08	3506.39	17.19	17.71	0.52	3489.12
MW - 8	10/06/08	3506.39	17.17	17.69	0.52	3489.14
MW - 8	10/13/08	3506.39	17.24	17.65	0.41	3489.09
MW - 8	10/20/08	3506.39	17.11	17.34	0.23	3489.25
MW - 8	10/29/08	3506.39	17.07	17.41	0.34	3489.27
MW - 8	10/30/08	3506.39	17.10	17.38	0.28	3489.25
MW - 8	11/06/08	3506.39	17.10	17.40	0.30	3489.25
MW - 8	11/12/08	3506.39	17.07	17.35	0.28	3489.28
MW - 8	11/13/08	3506.39	17.07	17.35	0.28	3489.28
MW - 8	12/16/08	3506.39	17.02	17.42	0.40	3489.31
MW - 9	02/12/08	3509.36	-	19.53	0.00	3489.83
MW - 9	05/13/08	3509.36	-	19.47	0.00	3489.89
MW - 9	08/14/08	3509.36	-	20.32	0.00	3489.04
MW - 9	11/12/08	3509.36	-	19.80	0.00	3489.56
MW - 10	01/09/08	3509.91	-	19.96	0.00	3489.95
MW - 10	01/16/08	3509.91	-	19.91	0.00	3490.00
MW - 10	01/21/08	3509.91	-	19.97	0.00	3489.94
MW - 10	01/30/08	3509.91	-	19.94	0.00	3489.97
MW - 10	02/08/08	3509.91	-	19.95	0.00	3489.96
MW - 10	02/12/08	3509.91	-	19.93	0.00	3489.98
MW - 10	02/14/08	3509.91	-	19.96	0.00	3489.95
MW - 10	02/28/08	3509.91	-	19.93	0.00	3489.98
MW - 10	03/05/08	3509.91	-	19.94	0.00	3489.97
MW - 10	03/13/08	3509.91	-	19.91	0.00	3490.00
MW - 10	03/19/08	3509.91	-	19.92	0.00	3489.99
MW - 10	03/24/08	3509.91	-	19.88	0.00	3490.03
MW - 10	05/07/08	3509.91	-	19.88	0.00	3490.03
MW - 10	05/13/08	3509.91	-	19.88	0.00	3490.03
MW - 10	06/30/08	3509.91	-	20.58	0.00	3489.33
MW - 10	08/14/08	3509.91	-	20.75	0.00	3489.16
MW - 10	08/18/08	3509.91	-	20.81	0.00	3489.10
MW - 10	08/28/08	3509.91	-	20.68	0.00	3489.23
MW - 10	09/17/08	3509.91	-	20.37	0.00	3489.54
MW - 10	09/29/08	3509.91	-	20.31	0.00	3489.60
MW - 10	10/06/08	3509.91	-	20.32	0.00	3489.59
MW - 10	10/13/08	3509.91	-	20.39	0.00	3489.52
MW - 10	10/20/08	3509.91	-	20.31	0.00	3489.60
MW - 10	10/29/08	3509.91	-	20.27	0.00	3489.64
MW - 10	11/06/08	3509.91	-	20.24	0.00	3489.67
MW - 10	11/12/08	3509.91	-	20.20	0.00	3489.71
MW - 10	11/13/08	3509.91	-	20.20	0.00	3489.71
MW - 11	02/12/08	3509.27	-	19.07	0.00	3490.20
MW - 11	05/13/08	3509.27	-	19.03	0.00	3490.24
MW - 11	08/14/08	3509.27	-	19.90	0.00	3489.37
MW - 11	11/12/08	3509.27	-	19.35	0.00	3489.92
MW - 12	02/12/08	3508.63	-	18.69	0.00	3489.94
MW - 12	06/05/08	3508.63	-	18.70	0.00	3489.93
MW - 12	08/14/08	3508.63	DID NOT GAUGE		0.00	3508.63
MW - 12	11/12/08	3508.63	-	18.94	0.00	3489.69
MW - 13	02/12/08	3507.96	-	18.18	0.00	3489.78
MW - 13	05/13/08	3507.96	-	18.13	0.00	3489.83
MW - 13	08/14/08	3507.96	-	18.92	0.00	3489.04
MW - 13	11/12/08	3507.96	-	18.45	0.00	3489.51



TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17

LEA COUNTY, NEW MEXICO

PLAINS MARKETING, L.P.

NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	01/09/08	3507.46	18.04	18.85	0.81	3489.30
MW - 14	01/16/08	3507.46	18.10	18.88	0.78	3489.24
MW - 14	01/30/08	3507.46	18.01	18.90	0.89	3489.32
MW - 14	02/08/08	3507.46	18.13	19.06	0.93	3489.19
MW - 14	02/12/08	3507.46	18.05	18.72	0.67	3489.31
MW - 14	02/14/08	3507.46	18.06	18.75	0.69	3489.30
MW - 14	02/20/08	3507.46	18.01	18.56	0.55	3489.37
MW - 14	02/28/08	3507.46	18.02	18.69	0.67	3489.34
MW - 14	03/05/08	3507.46	18.02	18.60	0.58	3489.35
MW - 14	03/13/08	3507.45	18.00	18.64	0.64	3489.35
MW - 14	03/19/08	3507.46	18.04	18.62	0.58	3489.33
MW - 14	03/24/08	3507.46	18.02	18.63	0.61	3489.35
MW - 14	04/02/08	3507.46	18.02	18.59	0.57	3489.35
MW - 14	04/07/08	3507.46	17.99	18.31	0.32	3489.42
MW - 14	04/14/08	3507.46	18.02	18.45	0.43	3489.38
MW - 14	04/23/08	3507.46	17.98	18.51	0.53	3489.40
MW - 14	05/07/08	3507.46	18.00	18.51	0.51	3489.38
MW - 14	05/13/08	3507.46	18.00	18.51	0.51	3489.38
MW - 14	05/14/08	3507.46	18.00	18.55	0.55	3489.38
MW - 14	05/19/08	3507.46	18.02	18.55	0.53	3489.36
MW - 14	06/09/08	3507.46	18.28	18.98	0.70	3489.08
MW - 14	06/16/08	3507.46	18.02	19.07	1.05	3489.28
MW - 14	06/23/08	3507.46	18.45	19.43	0.98	3488.86
MW - 14	06/30/08	3507.46	18.53	19.25	0.72	3488.82
MW - 14	07/14/08	3507.46	18.54	19.58	1.04	3488.76
MW - 14	07/22/08	3507.46	18.74	20.02	1.28	3488.53
MW - 14	07/29/08	3507.46	18.64	19.31	0.67	3488.72
MW - 14	08/04/08	3507.46	18.66	19.79	1.13	3488.63
MW - 14	08/11/08	3507.46	18.72	19.53	0.81	3488.62
MW - 14	08/14/08	3507.46	18.76	19.49	0.73	3488.59
MW - 14	08/18/08	3507.46	18.72	19.46	0.74	3488.63
MW - 14	08/28/08	3507.46	18.63	19.61	0.98	3488.68
MW - 14	09/02/08	3507.46	18.52	19.46	0.94	3488.80
MW - 14	09/17/08	3507.46	18.29	20.26	1.97	3488.87
MW - 14	09/29/08	3507.46	18.32	20.26	1.94	3488.85
MW - 14	10/06/08	3507.46	18.30	20.02	1.72	3488.90
MW - 14	10/13/08	3507.46	18.36	19.82	1.46	3488.88
MW - 14	10/20/08	3507.46	18.23	19.80	1.57	3488.99
MW - 14	10/29/08	3507.46	18.31	19.34	1.03	3489.00
MW - 14	10/30/08	3507.46	18.33	18.78	0.45	3489.06
MW - 14	11/06/08	3507.46	18.29	19.10	0.81	3489.05
MW - 14	11/12/08	3507.46	18.29	19.01	0.72	3489.06
MW - 14	11/13/08	3507.46	18.29	19.01	0.72	3489.06
MW - 14	12/16/08	3507.46	18.35	19.26	0.91	3488.97
MW - 15	01/09/08	3506.48	17.15	17.40	0.25	3489.29
MW - 15	01/16/08	3506.48	17.18	17.58	0.40	3489.24
MW - 15	01/30/08	3506.48	-	17.15	0.00	3489.33
MW - 15	02/08/08	3506.48	-	17.36	0.00	3489.12
MW - 15	02/12/08	3506.48	-	17.19	0.00	3489.29
MW - 15	02/14/08	3506.48	17.16	17.20	0.04	3489.31
MW - 15	02/20/08	3506.48	17.12	17.14	0.02	3489.36
MW - 15	02/28/08	3506.48	17.13	17.22	0.09	3489.34
MW - 15	03/05/08	3506.48	17.12	17.29	0.17	3489.33
MW - 15	03/13/08	3506.48	17.11	17.27	0.16	3489.35
MW - 15	03/19/08	3506.48	17.13	17.30	0.17	3489.32
MW - 15	03/24/08	3506.48	17.09	17.22	0.13	3489.37
MW - 15	04/02/08	3506.48	17.11	17.20	0.09	3489.36
MW - 15	04/07/08	3506.48	17.09	17.19	0.10	3489.38
MW - 15	04/14/08	3506.48	17.11	17.12	0.01	3489.37
MW - 15	04/23/08	3506.48	17.07	17.20	0.13	3489.39
MW - 15	05/07/08	3506.48	17.08	17.26	0.18	3489.37
MW - 15	05/13/08	3506.48	17.07	17.22	0.15	3489.39
MW - 15	05/14/08	3506.48	17.07	17.22	0.15	3489.39
MW - 15	05/19/08	3506.48	17.10	17.25	0.15	3489.36
MW - 15	06/09/08	3506.48	17.35	17.69	0.34	3489.08
MW - 15	06/16/08	3506.48	17.12	17.15	0.03	3489.36

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMOC D REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	06/23/08	3506.48	17.55	17.98	0.43	3488.87
MW - 15	06/30/08	3506.48	17.60	17.98	0.38	3488.82
MW - 15	07/14/08	3506.48	17.65	18.12	0.47	3488.76
MW - 15	07/22/08	3506.48	17.70	18.14	0.44	3488.71
MW - 15	07/29/08	3506.48	17.74	17.96	0.22	3488.71
MW - 15	08/04/08	3506.48	17.75	18.14	0.39	3488.67
MW - 15	08/11/08	3506.48	17.79	18.17	0.38	3488.63
MW - 15	08/14/08	3506.48	17.83	18.12	0.29	3488.61
MW - 15	08/18/08	3506.48	17.80	18.08	0.28	3488.64
MW - 15	08/28/08	3506.48	17.74	18.08	0.34	3488.69
MW - 15	09/17/08	3506.48	17.45	18.03	0.58	3488.94
MW - 15	09/29/08	3506.48	17.44	18.13	0.69	3488.94
MW - 15	10/06/08	3506.48	17.46	18.50	1.04	3488.86
MW - 15	10/13/08	3506.48	17.55	17.93	0.38	3488.87
MW - 15	10/20/08	3506.48	17.39	17.84	0.45	3489.02
MW - 15	10/29/08	3506.48	17.39	17.95	0.56	3489.01
MW - 15	10/30/08	3506.48	17.42	17.80	0.38	3489.00
MW - 15	11/06/08	3506.48	17.40	17.55	0.15	3489.06
MW - 15	11/12/08	3506.48	17.36	17.69	0.33	3489.07
MW - 15	11/13/08	3506.48	17.36	17.69	0.33	3489.07
MW - 15	12/16/08	3506.48	17.38	17.60	0.22	3489.07
MW - 16	02/12/08	3509.38	-	19.47	0.00	3489.91
MW - 16	05/13/08	3509.38	-	19.42	0.00	3489.96
MW - 16	08/14/08	3509.38	-	20.26	0.00	3489.12
MW - 16	11/12/08	3509.38	-	19.73	0.00	3489.65
MW - 17	06/20/02	3507.56	-	19.87	0.00	3487.69
MW - 17	09/26/02	3507.56	-	20.30	0.00	3487.26
MW - 17	11/12/02	3507.56	-	20.23	0.00	3487.33
MW - 17	02/12/03	3507.56	-	19.88	0.00	3487.68
MW - 17	05/14/03	3507.56	-	20.09	0.00	3487.47
MW - 17	08/21/03	3507.56	-	20.74	0.00	3486.82
MW - 17	12/10/03	3507.56	-	20.71	0.00	3486.85
MW - 17	05/11/04	3507.56	-	19.63	0.00	3487.93
MW - 17	08/25/04	3507.56	-	19.96	0.00	3487.60
MW - 17	12/02/04	3507.56	-	19.23	0.00	3488.33
MW - 17	03/08/05	3507.56	-	18.74	0.00	3488.82
MW - 17	06/08/05	3507.56	-	18.28	0.00	3489.28
MW - 17	09/15/05	3507.56	-	18.43	0.00	3489.13
MW - 17	12/12/05	3507.56	-	18.28	0.00	3489.28
MW - 17	03/16/06	3507.56	-	18.25	0.00	3489.31
MW - 17	06/15/06	3507.56	-	18.60	0.00	3488.96
MW - 17	09/18/06	3507.56	-	18.40	0.00	3489.16
MW - 17	11/30/06	3507.56	-	18.39	0.00	3489.17
MW - 17	02/27/07	3507.56	-	18.22	0.00	3489.34
MW - 17	05/22/07	3507.56	-	18.03	0.00	3489.53
MW - 17	08/15/07	3507.56	-	18.67	0.00	3488.89
MW - 17	11/06/07	3507.56	-	18.51	0.00	3489.05
MW - 17	02/12/08	3507.56	-	18.36	0.00	3489.20
MW - 17	05/13/08	3507.56	-	18.36	0.00	3489.20
MW - 17	08/14/08	3507.56	-	19.03	0.00	3488.53
MW - 17	11/12/08	3507.56	-	18.65	0.00	3488.91
MW - 18	02/12/08	3509.12	-	19.79	0.00	3489.33
MW - 18	05/13/08	3509.12	-	19.73	0.00	3489.39
MW - 18	08/14/08	3509.12	-	20.52	0.00	3488.60
MW - 18	11/12/08	3509.12	-	20.05	0.00	3489.07
MW - 19	01/09/08	3507.28	18.21	18.39	0.18	3489.04
MW - 19	01/16/08	3507.28	18.18	18.42	0.24	3489.06
MW - 19	01/30/08	3507.28	18.15	18.25	0.10	3489.12
MW - 19	02/08/08	3507.28	18.18	18.41	0.23	3489.07
MW - 19	02/12/08	3507.28	18.18	18.41	0.23	3489.07
MW - 19	02/14/08	3507.28	18.15	18.34	0.19	3489.10
MW - 19	02/20/08	3507.28	18.13	18.27	0.14	3489.13
MW - 19	02/28/08	3507.28	18.13	18.28	0.15	3489.13

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 19	03/05/08	3507.28	18.15	18.41	0.26	3489.09
MW - 19	03/13/08	3507.28	18.13	18.31	0.18	3489.12
MW - 19	03/19/08	3507.28	18.16	18.36	0.20	3489.09
MW - 19	03/24/08	3507.28	18.12	18.24	0.12	3489.14
MW - 19	04/02/08	3507.28	18.11	18.22	0.11	3489.15
MW - 19	04/07/08	3507.28	18.11	18.12	0.01	3489.17
MW - 19	04/14/08	3507.28	18.11	18.12	0.01	3489.17
MW - 19	04/23/08	3507.28	18.09	18.18	0.09	3489.18
MW - 19	05/07/08	3507.28	18.12	18.26	0.14	3489.14
MW - 19	05/13/08	3507.28	18.12	18.21	0.09	3489.15
MW - 19	05/14/08	3507.28	18.11	18.21	0.10	3489.16
MW - 19	05/19/08	3507.28	18.06	18.09	0.03	3489.22
MW - 19	06/09/08	3507.28	18.38	18.62	0.24	3488.86
MW - 19	06/16/08	3507.28	18.14	18.17	0.03	3489.14
MW - 19	06/23/08	3507.28	18.58	18.81	0.23	3488.67
MW - 19	06/30/08	3507.28	18.66	18.88	0.22	3488.59
MW - 19	07/14/08	3507.28	18.69	18.86	0.17	3488.56
MW - 19	07/22/08	3507.28	18.75	18.77	0.02	3488.53
MW - 19	07/29/08	3507.28	18.76	18.92	0.16	3488.50
MW - 19	08/04/08	3507.28	18.81	18.98	0.17	3488.44
MW - 19	08/11/08	3507.28	18.84	18.87	0.03	3488.44
MW - 19	08/14/08	3507.28	18.87	19.02	0.15	3488.39
MW - 19	08/18/08	3507.28	18.87	18.98	0.11	3488.39
MW - 19	08/28/08	3507.28	18.82	18.91	0.09	3488.45
MW - 19	09/17/08	3507.28	18.60	18.65	0.05	3488.67
MW - 19	09/29/08	3507.28	18.55	18.59	0.04	3488.72
MW - 19	10/06/08	3507.28	18.58	18.66	0.08	3488.69
MW - 19	10/13/08	3507.28	18.59	18.70	0.11	3488.67
MW - 19	10/20/08	3507.28	18.53	18.59	0.06	3488.74
MW - 19	10/29/08	3507.28	18.46	18.51	0.05	3488.81
MW - 19	10/30/08	3507.28	18.49	18.50	0.01	3488.79
MW - 19	11/06/08	3507.28	18.48	18.51	0.03	3488.80
MW - 19	11/12/08	3507.28	18.43	18.48	0.05	3488.84
MW - 19	11/13/08	3507.28	18.43	18.48	0.05	3488.84
MW - 19	12/16/08	3507.28	18.37	18.39	0.02	3488.91
MW - 20	02/12/08	3508.43	-	19.61	0.00	3488.82
MW - 20	05/13/08	3508.43	-	19.55	0.00	3488.88
MW - 20	08/14/08	3508.43	-	20.28	0.00	3488.15
MW - 20	11/12/08	3508.43	-	19.88	0.00	3488.55
MW - 21	02/12/08	3506.98	-	18.55	0.00	3488.43
MW - 21	05/13/08	3506.98	-	18.48	0.00	3488.50
MW - 21	08/14/08	3506.98	-	19.21	0.00	3487.77
MW - 21	11/12/08	3506.98	-	18.80	0.00	3488.18
MW - 22	02/12/08	3505.61	-	17.59	0.00	3488.02
MW - 22	05/13/08	3505.61	-	19.33	0.00	3486.28
MW - 22	08/14/08	3505.61	-	18.26	0.00	3487.35
MW - 22	11/12/08	3505.61	-	18.81	0.00	3486.80
MW - 23	02/12/08	3509.79	-	21.25	0.00	3488.54
MW - 23	05/13/08	3509.79	-	21.18	0.00	3488.61
MW - 23	08/14/08	3509.79	-	21.93	0.00	3487.86
MW - 23	11/12/08	3509.79	-	21.51	0.00	3488.28
MW - 24	02/12/08	3509.68	-	21.53	0.00	3488.15
MW - 24	05/13/08	3509.68	-	21.46	0.00	3488.22
MW - 24	08/14/08	3509.68	-	22.20	0.00	3487.48
MW - 24	11/12/08	3509.68	-	21.81	0.00	3487.87
MW - 25	02/12/08	3509.65	-	20.88	0.00	3488.77
MW - 25	05/13/08	3509.65	-	20.84	0.00	3488.81
MW - 25	08/14/08	3509.65	-	21.58	0.00	3488.07
MW - 25	11/12/08	3509.65	-	21.18	0.00	3488.47
MW - 26	02/12/08	3507.49	-	18.55	0.00	3488.94

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMOC REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 26	05/13/08	3507.49	-	18.55	0.00	3488.94
MW - 26	08/14/08	3507.49	-	19.24	0.00	3488.25
MW - 26	11/12/08	3507.49	-	18.80	0.00	3488.69
MW - 27	02/12/08	3507.66	-	18.97	0.00	3488.69
MW - 27	05/13/08	3507.66	-	20.05	0.00	3487.61
MW - 27	08/14/08	3507.66	-	19.64	0.00	3488.02
MW - 27	11/12/08	3507.66	-	19.24	0.00	3488.42
MW - 28	02/12/08	3508.37	-	19.44	0.00	3488.93
MW - 28	05/13/08	3508.37	-	19.40	0.00	3488.97
MW - 28	08/14/08	3508.37	-	20.12	0.00	3488.25
MW - 28	11/12/08	3508.37	-	19.70	0.00	3488.67
RW - 1	01/09/08	3507.27	18.07	18.26	0.19	3489.17
RW - 1	01/16/08	3507.27	18.13	18.48	0.35	3489.09
RW - 1	01/30/08	3507.27	18.06	18.25	0.19	3489.18
RW - 1	02/08/08	3507.27	18.10	18.32	0.22	3489.14
RW - 1	02/12/08	3507.27	18.09	18.29	0.20	3489.15
RW - 1	02/14/08	3507.27	18.10	18.21	0.11	3489.15
RW - 1	02/20/08	3507.27	18.08	18.18	0.10	3489.18
RW - 1	03/13/08	3507.27	18.08	18.12	0.04	3489.18
RW - 1	03/19/08	3507.27	18.09	18.18	0.09	3489.85
RW - 1	03/24/08	3507.27	18.05	18.14	0.09	3489.89
RW - 1	04/02/08	3507.27	18.06	18.12	0.06	3489.94
RW - 1	04/07/08	3507.27	18.07	18.11	0.04	3489.97
RW - 1	04/14/08	3507.27	18.05	18.12	0.07	3489.93
RW - 1	04/23/08	3507.27	18.05	18.11	0.06	3489.95
RW - 1	05/07/08	3507.27	18.05	18.16	0.11	3489.85
RW - 1	05/13/08	3507.27	18.05	18.16	0.11	3489.85
RW - 1	05/14/08	3507.27	18.08	18.11	0.03	3489.98
RW - 1	05/19/08	3507.27	18.10	18.12	0.02	3489.98
RW - 1	06/09/08	3507.27	18.32	18.44	0.12	3489.56
RW - 1	06/16/08	3507.27	18.01	18.12	0.11	3489.89
RW - 1	06/23/08	3507.27	18.49	18.96	0.47	3488.69
RW - 1	06/30/08	3507.27	18.56	18.67	0.11	3489.34
RW - 1	07/14/08	3507.27	18.61	18.63	0.02	3489.47
RW - 1	07/22/08	3507.27	18.72	18.82	0.10	3489.20
RW - 1	07/29/08	3507.27	18.71	18.80	0.09	3489.23
RW - 1	08/04/08	3507.27	18.74	18.85	0.11	3489.16
RW - 1	08/11/08	3507.27	18.80	18.81	0.01	3489.30
RW - 1	08/14/08	3507.27	18.80	18.93	0.13	3489.06
RW - 1	08/18/08	3507.27	18.79	18.92	0.13	3489.07
RW - 1	08/28/08	3507.27	18.76	18.85	0.09	3489.18
RW - 1	09/17/08	3507.27	18.53	18.64	0.11	3489.37
RW - 1	09/29/08	3507.27	18.51	18.63	0.12	3489.37
RW - 1	10/06/08	3507.27	18.51	18.64	0.13	3489.35
RW - 1	10/13/08	3507.27	18.54	18.59	0.05	3489.48
RW - 1	10/20/08	3507.27	18.41	18.49	0.08	3489.55
RW - 1	10/29/08	3507.27	18.39	18.47	0.08	3489.57
RW - 1	10/30/08	3507.27	18.44	18.45	0.01	3489.66
RW - 1	11/06/08	3507.27	18.36	18.42	0.06	3489.64
RW - 1	11/12/08	3507.27	18.34	18.43	0.09	3489.60
RW - 1	11/13/08	3507.27	18.34	18.43	0.09	3489.60
RW - 1	12/16/08	3507.27	18.36	18.43	0.07	3489.62
RW - 2	01/09/08	3507.45	-	17.94	0.00	3489.51
RW - 2	01/16/08	3507.45	-	17.89	0.00	3489.56
RW - 2	01/21/08	3507.45	-	18.01	0.00	3489.44
RW - 2	01/30/08	3507.45	-	17.89	0.00	3489.56
RW - 2	02/08/08	3507.45	-	17.92	0.00	3489.53
RW - 2	02/12/08	3507.45	17.88	17.89	0.01	3489.57
RW - 2	02/14/08	3507.45	-	17.97	0.00	3489.48
RW - 2	02/20/08	3507.45	-	17.88	0.00	3489.57
RW - 2	02/28/08	3507.45	-	17.98	0.00	3489.47
RW - 2	03/05/08	3507.45	-	17.98	0.00	3489.47
RW - 2	03/13/08	3507.45	-	17.96	0.00	3489.49

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
LEA COUNTY, NEW MEXICO  
PLAINS MARKETING, L.P.  
NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 2	03/19/08	3507.45	-	17.98	0.00	3489.47
RW - 2	03/24/08	3507.45	-	18.92	0.00	3488.53
RW - 2	04/02/08	3507.45	-	17.90	0.00	3489.55
RW - 2	04/14/08	3507.45	-	17.92	0.00	3489.53
RW - 2	05/07/08	3507.45	-	17.87	0.00	3489.58
RW - 2	05/13/08	3507.45	-	17.86	0.00	3489.59
RW - 2	05/14/08	3507.45	-	17.97	0.00	3489.48
RW - 2	06/09/08	3507.45	-	18.14	0.00	3489.31
RW - 2	06/16/08	3507.45	-	17.84	0.00	3489.61
RW - 2	06/23/08	3507.45	-	18.32	0.00	3489.13
RW - 2	06/30/08	3507.45	18.45	18.52	0.07	3488.99
RW - 2	07/14/08	3507.45	-	18.56	0.00	3488.89
RW - 2	07/29/08	3507.45	-	18.59	0.00	3488.86
RW - 2	08/04/08	3507.45	-	18.61	0.00	3488.84
RW - 2	08/14/08	3507.45	-	18.60	0.00	3488.85
RW - 2	08/18/08	3507.45	-	18.74	0.00	3488.71
RW - 2	08/28/08	3507.45	-	18.63	0.00	3488.82
RW - 2	09/17/08	3507.45	-	18.45	0.00	3489.00
RW - 2	09/29/08	3507.45	-	18.35	0.00	3489.10
RW - 2	10/06/08	3507.45	-	18.30	0.00	3489.15
RW - 2	10/13/08	3507.45	-	18.41	0.00	3489.04
RW - 2	10/20/08	3507.45	-	18.23	0.00	3489.22
RW - 2	10/29/08	3507.45	-	18.15	0.00	3489.30
RW - 2	11/06/08	3507.45	-	18.25	0.00	3489.20
RW - 2	11/12/08	3507.45	-	18.28	0.00	3489.17
RW - 2	11/13/08	3507.45	-	18.28	0.00	3489.17
RW - 3	01/09/08	3507.86	-	18.36	0.00	3489.50
RW - 3	01/16/08	3507.86	-	18.36	0.00	3489.50
RW - 3	01/21/08	3507.86	-	18.38	0.00	3489.48
RW - 3	01/30/08	3507.86	-	18.24	0.00	3489.62
RW - 3	02/08/08	3507.86	-	18.32	0.00	3489.54
RW - 3	02/12/08	3507.86	-	18.28	0.00	3489.58
RW - 3	02/14/08	3507.86	-	18.29	0.00	3489.57
RW - 3	02/20/08	3507.86	-	18.26	0.00	3489.60
RW - 3	02/28/08	3507.86	-	18.29	0.00	3489.57
RW - 3	03/05/08	3507.86	-	18.28	0.00	3489.58
RW - 3	03/13/08	3507.89	-	18.27	0.00	3489.62
RW - 3	03/19/08	3507.86	-	18.29	0.00	3489.57
RW - 3	03/24/08	3507.86	-	18.32	0.00	3489.54
RW - 3	04/02/08	3507.86	-	18.26	0.00	3489.60
RW - 3	04/14/08	3507.86	-	18.26	0.00	3489.60
RW - 3	05/07/08	3507.86	-	18.19	0.00	3489.67
RW - 3	05/13/08	3507.86	-	18.18	0.00	3489.68
RW - 3	05/14/08	3507.86	-	18.26	0.00	3489.60
RW - 3	06/09/08	3507.86	-	18.26	0.00	3489.60
RW - 3	06/16/08	3507.86	-	18.17	0.00	3489.69
RW - 3	06/23/08	3507.86	-	18.80	0.00	3489.06
RW - 3	06/30/08	3507.86	18.78	18.79	0.01	3489.08
RW - 3	07/14/08	3507.86	-	18.92	0.00	3488.94
RW - 3	07/29/08	3507.86	-	18.96	0.00	3488.90
RW - 3	08/04/08	3507.86	-	19.00	0.00	3488.86
RW - 3	08/14/08	3507.86	18.96	18.97	0.01	3488.90
RW - 3	08/18/08	3507.86	-	19.05	0.00	3488.81
RW - 3	08/28/08	3507.86	-	18.98	0.00	3488.88
RW - 3	09/17/08	3507.86	-	18.75	0.00	3489.11
RW - 3	09/29/08	3507.86	-	18.66	0.00	3489.20
RW - 3	10/06/08	3507.86	-	18.67	0.00	3489.19
RW - 3	10/13/08	3507.86	-	18.71	0.00	3489.15
RW - 3	10/20/08	3507.86	-	18.61	0.00	3489.25
RW - 3	10/29/08	3507.86	-	18.53	0.00	3489.33
RW - 3	11/06/08	3507.86	-	18.58	0.00	3489.28
RW - 3	11/12/08	3507.86	-	18.56	0.00	3489.30
RW - 3	11/13/08	3507.86	-	18.56	0.00	3489.30
RW - 4	01/09/08	3507.22	-	17.56	0.00	3489.66
RW - 4	01/16/08	3507.22	-	17.62	0.00	3489.60

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17

LEA COUNTY, NEW MEXICO

PLAINS MARKETING, L.P.

NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 4	01/21/08	3507.22	-	17.63	0.00	3489.59
RW - 4	01/30/08	3507.22	-	17.46	0.00	3489.76
RW - 4	02/08/08	3507.22	-	17.56	0.00	3489.66
RW - 4	02/12/08	3507.22	-	17.53	0.00	3489.69
RW - 4	02/14/08	3507.22	-	17.54	0.00	3489.68
RW - 4	02/20/08	3507.22	-	17.49	0.00	3489.73
RW - 4	02/28/08	3507.22	-	17.53	0.00	3489.69
RW - 4	03/05/08	3507.22	-	17.57	0.00	3489.65
RW - 4	03/13/08	3507.22	-	17.50	0.00	3489.72
RW - 4	03/19/08	3507.22	-	17.52	0.00	3489.70
RW - 4	03/24/08	3507.22	-	17.51	0.00	3489.71
RW - 4	04/02/08	3507.22	-	17.51	0.00	3489.71
RW - 4	04/14/08	3507.22	-	17.50	0.00	3489.72
RW - 4	05/07/08	3507.22	-	17.47	0.00	3489.75
RW - 4	05/13/08	3507.22	-	17.45	0.00	3489.77
RW - 4	05/14/08	3507.22	-	17.49	0.00	3489.73
RW - 4	06/09/08	3507.22	-	18.02	0.00	3489.20
RW - 4	06/16/08	3507.22	-	17.52	0.00	3489.70
RW - 4	06/23/08	3507.22	-	17.92	0.00	3489.30
RW - 4	06/30/08	3507.22	18.07	18.08	0.01	3489.15
RW - 4	07/14/08	3507.22	-	18.17	0.00	3489.05
RW - 4	07/29/08	3507.22	-	18.17	0.00	3489.05
RW - 4	08/04/08	3507.22	-	18.20	0.00	3489.02
RW - 4	08/14/08	3507.22	-	18.28	0.00	3488.94
RW - 4	08/18/08	3507.22	-	18.25	0.00	3488.97
RW - 4	08/28/08	3507.22	-	18.22	0.00	3489.00
RW - 4	09/17/08	3507.22	-	17.95	0.00	3489.27
RW - 4	09/29/08	3507.22	-	17.96	0.00	3489.26
RW - 4	10/06/08	3507.22	-	17.97	0.00	3489.25
RW - 4	10/13/08	3507.22	-	17.92	0.00	3489.30
RW - 4	10/20/08	3507.22	-	18.10	0.00	3489.12
RW - 4	10/29/08	3507.22	-	17.77	0.00	3489.45
RW - 4	11/06/08	3507.22	-	17.81	0.00	3489.41
RW - 4	11/12/08	3507.22	-	17.84	0.00	3489.38
RW - 4	11/13/08	3507.22	-	17.84	0.00	3489.38
RW - 5	01/09/08	3506.91	17.46	17.86	0.40	3489.39
RW - 5	01/16/08	3506.91	17.38	17.90	0.52	3489.45
RW - 5	01/30/08	3506.91	17.40	17.81	0.41	3489.45
RW - 5	02/08/08	3506.91	17.44	17.72	0.28	3489.43
RW - 5	02/12/08	3506.91	17.45	17.72	0.27	3489.42
RW - 5	02/14/08	3506.91	17.43	17.68	0.25	3489.44
RW - 5	02/20/08	3506.91	17.38	17.51	0.13	3489.51
RW - 5	02/28/08	3506.91	17.40	17.55	0.15	3489.49
RW - 5	03/05/08	3506.91	17.41	17.57	0.16	3489.48
RW - 5	03/13/08	3506.91	17.41	17.57	0.16	3489.48
RW - 5	03/19/08	3506.91	17.45	17.61	0.16	3489.44
RW - 5	03/24/08	3506.91	17.37	17.51	0.14	3489.52
RW - 5	04/03/08	3506.91	17.46	17.58	0.12	3489.43
RW - 5	04/07/08	3506.91	17.36	17.45	0.09	3489.54
RW - 5	04/14/08	3506.91	17.48	17.60	0.12	3489.41
RW - 5	04/23/08	3506.91	17.34	17.52	0.18	3489.54
RW - 5	05/07/08	3506.91	17.39	17.70	0.31	3489.47
RW - 5	05/13/08	3506.91	17.39	17.70	0.31	3489.47
RW - 5	05/14/08	3506.91	17.37	17.51	0.14	3489.52
RW - 5	05/19/08	3506.91	17.40	17.56	0.16	3489.49
RW - 5	06/09/08	3506.91	17.64	17.92	0.28	3489.23
RW - 5	06/16/08	3506.91	17.46	17.57	0.11	3489.43
RW - 5	06/23/08	3506.91	17.89	18.35	0.46	3488.95
RW - 5	06/30/08	3506.91	17.93	18.19	0.26	3488.94
RW - 5	07/14/08	3506.91	17.95	18.18	0.23	3488.93
RW - 5	07/22/08	3506.91	18.01	18.28	0.27	3488.86
RW - 5	07/29/08	3506.91	18.03	18.09	0.06	3488.87
RW - 5	08/04/08	3506.91	18.08	18.46	0.38	3488.77
RW - 5	08/11/08	3506.91	18.11	18.45	0.34	3488.75
RW - 5	08/14/08	3506.91	18.04	18.39	0.35	3488.82
RW - 5	08/18/08	3506.91	18.13	18.41	0.28	3488.74

TABLE 1

## 2008 - GROUNDWATER ELEVATION DATA

TNM 97- 17  
 LEA COUNTY, NEW MEXICO  
 PLAINS MARKETING, L.P.  
 NMOCD REFERENCE NUMBER AP-017

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 5	08/28/08	3506.91	18.00	18.53	0.53	3488.83
RW - 5	09/02/08	3506.91	17.89	18.34	0.45	3488.95
RW - 5	09/17/08	3506.91	17.65	18.71	1.06	3489.10
RW - 5	09/29/08	3506.91	17.75	18.45	0.70	3489.06
RW - 5	10/06/08	3506.91	17.76	18.24	0.48	3489.08
RW - 5	10/13/08	3506.91	17.82	18.10	0.28	3489.05
RW - 5	10/20/08	3506.91	17.69	17.94	0.25	3489.18
RW - 5	10/29/08	3506.91	17.03	17.95	0.92	3489.74
RW - 5	10/30/08	3506.91	17.71	17.84	0.13	3489.18
RW - 5	11/06/08	3506.91	17.67	18.00	0.33	3489.19
RW - 5	11/12/08	3506.91	17.63	17.85	0.22	3489.25
RW - 5	11/13/08	3506.91	17.63	17.85	0.22	3489.25
RW - 5	12/16/08	3506.91	17.65	18.00	0.35	3489.21
RW - 6	01/09/08	3507.45	18.17	18.64	0.47	3489.21
RW - 6	01/16/08	3507.45	18.12	18.74	0.62	3489.24
RW - 6	01/30/08	3507.45	18.17	18.71	0.54	3489.20
RW - 6	02/08/08	3507.45	18.22	18.64	0.42	3489.17
RW - 6	02/12/08	3507.45	18.23	18.49	0.26	3489.18
RW - 6	02/14/08	3507.45	18.21	18.43	0.22	3489.21
RW - 6	02/20/08	3507.45	18.14	18.32	0.18	3489.28
RW - 6	02/28/08	3507.45	18.13	18.44	0.31	3489.27
RW - 6	03/05/08	3507.45	18.16	18.39	0.23	3489.26
RW - 6	03/13/08	3507.45	18.11	18.32	0.21	3489.31
RW - 6	03/19/08	3507.45	18.15	18.36	0.21	3489.27
RW - 6	03/24/08	3507.45	18.12	18.38	0.26	3489.29
RW - 6	04/02/08	3507.45	18.12	18.31	0.19	3489.30
RW - 6	04/07/08	3507.45	18.10	18.26	0.16	3489.33
RW - 6	04/14/08	3507.45	18.09	18.33	0.24	3489.32
RW - 6	04/23/08	3507.45	18.08	18.30	0.22	3489.34
RW - 6	05/07/08	3507.45	18.08	18.41	0.33	3489.32
RW - 6	05/13/08	3507.45	18.08	18.41	0.33	3489.32
RW - 6	05/14/08	3507.45	18.14	18.35	0.21	3489.28
RW - 6	05/19/08	3507.45	18.14	18.33	0.19	3489.28
RW - 6	06/09/08	3507.45	18.39	18.86	0.47	3488.99
RW - 6	06/16/08	3507.45	18.12	18.32	0.20	3489.30
RW - 6	06/23/08	3507.45	18.60	18.97	0.37	3488.79
RW - 6	06/30/08	3507.45	18.67	18.98	0.31	3488.73
RW - 6	07/14/08	3507.45	18.72	18.96	0.24	3488.69
RW - 6	07/22/08	3507.45	18.78	19.05	0.27	3488.63
RW - 6	07/29/08	3507.45	18.75	19.03	0.28	3488.66
RW - 6	08/04/08	3507.45	18.89	19.17	0.28	3488.52
RW - 6	08/11/08	3507.45	18.85	19.14	0.29	3488.56
RW - 6	08/14/08	3507.45	18.89	19.12	0.23	3488.53
RW - 6	08/18/08	3507.45	18.91	19.17	0.26	3488.50
RW - 6	08/28/08	3507.45	18.79	19.08	0.29	3488.62
RW - 6	09/02/08	3507.45	18.75	18.96	0.21	3488.67
RW - 6	09/17/08	3507.45	18.56	19.04	0.48	3488.82
RW - 6	09/29/08	3507.45	18.54	18.91	0.37	3488.85
RW - 6	10/06/08	3507.45	18.55	18.81	0.26	3488.86
RW - 6	10/13/08	3507.45	18.57	18.80	0.23	3488.85
RW - 6	10/20/08	3507.45	18.49	18.69	0.20	3488.93
RW - 6	10/29/08	3507.45	18.49	18.74	0.25	3488.92
RW - 6	10/30/08	3507.45	18.62	18.80	0.18	3488.80
RW - 6	11/06/08	3507.45	18.48	18.70	0.22	3488.94
RW - 6	11/12/08	3507.45	18.42	18.62	0.20	3489.00
RW - 6	11/13/08	3507.45	18.42	18.62	0.20	3489.00
RW - 6	12/16/08	3507.45	18.46	18.84	0.38	3488.93

Elevations based on the North American Vertical Datum of 1929.

TABLE 2

## 2008 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-17  
LEA COUNTY, NM  
NMOCD REFERENCE NUMBER AP-017

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p, -XYLENES	o -XYLENE
NMOCD Regulatory Limit				0.010	0.75	0.75	0.62	
MW - 1	02/12/08			Not Sampled on Current Sample Schedule				
MW - 1	05/13/08			Not Sampled on Current Sample Schedule				
MW - 1	08/14/08			Not Sampled on Current Sample Schedule				
MW - 1	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 2	02/12/08			Not Sampled on Current Sample Schedule				
MW - 2	05/13/08			Not Sampled on Current Sample Schedule				
MW - 2	08/14/08			Not Sampled on Current Sample Schedule				
MW - 2	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 3	02/12/08			Not Sampled on Current Sample Schedule				
MW - 3	05/13/08			Not Sampled on Current Sample Schedule				
MW - 3	08/14/08			Not Sampled on Current Sample Schedule				
MW - 3	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 4	02/12/08			Not Sampled Due to PSH in Well				
MW - 4	05/13/08			Not Sampled Due to PSH in Well				
MW - 4	08/14/08			Not Sampled Due to PSH in Well				
MW - 4	11/12/08	30.4	58.4	0.8060	0.515	0.4430	0.4920	
MW - 5	02/12/08			0.0210	0.0012	0.0077	0.0082	
MW - 5	05/13/08			0.0126	<0.001	<0.001	0.0012	
MW - 5	08/14/08			Not Sampled Due to PSH in Well				
MW - 5	11/12/08			0.0074	<0.001	<0.001	0.0033	
MW - 6	02/12/08			Not Sampled Due to PSH in Well				
MW - 6	05/13/08			Not Sampled Due to PSH in Well				
MW - 6	08/14/08			Not Sampled Due to PSH in Well				
MW - 6	11/12/08	4.54	16.2	0.0991	0.223	0.0810	0.1910	
MW - 7	02/12/08			Not Sampled Due to PSH in Well				
MW - 7	05/13/08			Not Sampled Due to PSH in Well				
MW - 7	08/14/08			Not Sampled Due to PSH in Well				
MW - 7	11/12/08	4.41	23.6	0.527	0.185	0.1390	0.1780	
MW - 8	02/12/08			Not Sampled Due to PSH in Well				
MW - 8	05/13/08			Not Sampled Due to PSH in Well				
MW - 8	08/14/08			Not Sampled Due to PSH in Well				
MW - 8	11/12/08	6.80	48.3	0.238	0.154	0.147	0.159	



TABLE 2

## 2008 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
 TNM 97-17  
 LEA COUNTY, NM  
 NMOCD REFERENCE NUMBER AP-017

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p, -XYLENES	o -XYLENE
NMOCD Regulatory Limit				0.010	0.75	0.75	0.62	
MW - 9	02/12/08			0.0162	<0.001	<0.001	<0.001	
MW - 9	05/13/08			0.0139	<0.001	<0.001	<0.001	
MW - 9	08/14/08			0.0137	<0.001	<0.001	<0.001	
MW - 9	11/12/08			0.0116	<0.001	<0.001	<0.001	
MW - 10	02/12/08			0.0214	<0.005	0.0136	<0.005	
MW - 10	05/13/08			0.0208	<0.005	0.0067	<0.005	
MW - 10	08/14/08			0.0291	<0.001	<0.001	<0.001	
MW - 10	11/12/08			0.0111	<0.001	<0.001	<0.001	
MW - 11	02/12/08			Not Sampled on Current Sample Schedule				
MW - 11	05/13/08			Not Sampled on Current Sample Schedule				
MW - 11	08/14/08			Not Sampled on Current Sample Schedule				
MW - 11	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 12	02/12/08			Not Sampled on Current Sample Schedule				
MW - 12	06/05/08			<0.001	<0.001	<0.001	<0.001	
MW - 12	08/14/08			Not Sampled on Current Sample Schedule				
MW - 12	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 13	02/12/08			Not Sampled on Current Sample Schedule				
MW - 13	05/13/08			Not Sampled on Current Sample Schedule				
MW - 13	08/14/08			Not Sampled on Current Sample Schedule				
MW - 13	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 14	02/12/08			Not Sampled Due to PSH in Well				
MW - 14	05/13/08			Not Sampled Due to PSH in Well				
MW - 14	08/14/08			Not Sampled Due to PSH in Well				
MW - 14	11/12/08	24.5	421	0.3180	0.136	0.3880	0.2620	
MW - 15	02/12/08			0.1610	<0.002	0.2410	0.0531	
MW - 15	05/13/08			Not Sampled Due to PSH in Well				
MW - 15	08/14/08			Not Sampled Due to PSH in Well				
MW - 15	11/12/08			Not Sampled Due to Insufficient Water in Well				
MW - 16	02/12/08			Not Sampled on Current Sample Schedule				
MW - 16	05/13/08			Not Sampled on Current Sample Schedule				
MW - 16	08/14/08			Not Sampled on Current Sample Schedule				
MW - 16	11/12/08			<0.001	<0.001	<0.001	<0.001	

TABLE 2

## 2008 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-17  
LEA COUNTY, NM  
NMOCD REFERENCE NUMBER AP-017

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p, -XYLENES	o -XYLENE
NMOCD Regulatory Limit				0.010	0.75	0.75	0.62	
MW - 17	02/12/08			Not Sampled on Current Sample Schedule				
MW - 17	05/13/08			Not Sampled on Current Sample Schedule				
MW - 17	08/14/08			Not Sampled on Current Sample Schedule				
MW - 17	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 18	02/12/08			Not Sampled on Current Sample Schedule				
MW - 18	05/13/08			Not Sampled on Current Sample Schedule				
MW - 18	08/14/08			Not Sampled on Current Sample Schedule				
MW - 18	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 19	02/12/08			Not Sampled Due to PSH in Well				
MW - 19	05/13/08			Not Sampled Due to PSH in Well				
MW - 19	08/14/08			Not Sampled Due to PSH in Well				
MW - 19	11/12/08			Not Sampled Due to Insufficient Water in Well				
MW - 20	02/12/08			0.2010	<0.005	0.0204	<0.005	
MW - 20	05/13/08			0.4700	<0.005	0.0251	<0.005	
MW - 20	08/14/08			0.5350	<0.005	<0.005	<0.005	
MW - 20	11/12/08			0.3060	<0.005	0.0177	<0.005	
MW - 21	02/12/08			0.0017	<0.001	0.0022	0.0010	
MW - 21	05/13/08			0.0024	<0.001	0.0017	<0.001	
MW - 21	08/14/08			0.0038	<0.001	0.0040	0.0072	
MW - 21	11/12/08			0.0054	<0.001	<0.001	0.0073	
MW - 22	02/12/08			Not Sampled on Current Sample Schedule				
MW - 22	05/13/08			<0.001	<0.001	<0.001	<0.001	
MW - 22	08/14/08			Not Sampled on Current Sample Schedule				
MW - 22	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 23	02/12/08			Not Sampled on Current Sample Schedule				
MW - 23	05/13/08			<0.001	<0.001	<0.001	<0.001	
MW - 23	08/14/08			Not Sampled on Current Sample Schedule				
MW - 23	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 24	02/12/08			Not Sampled on Current Sample Schedule				
MW - 24	05/13/08			Not Sampled on Current Sample Schedule				
MW - 24	08/14/08			Not Sampled on Current Sample Schedule				
MW - 24	11/12/08			<0.001	<0.001	<0.001	<0.001	

TABLE 2

## 2008 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-17  
LEA COUNTY, NM  
NMOCD REFERENCE NUMBER AP-017

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p, -XYLENES	o -XYLENE
NMOCD Regulatory Limit				0.010	0.75	0.75	0.62	
MW - 25	02/12/08			Not Sampled on Current Sample Schedule				
MW - 25	05/13/08			<0.001	<0.001	<0.001	<0.001	
MW - 25	08/14/08			Not Sampled on Current Sample Schedule				
MW - 25	11/12/08			<0.001	<0.001	<0.001	<0.001	
MW - 26	02/12/08			0.0047	<0.001	0.0067	0.0082	
MW - 26	05/13/08			0.0063	<0.001	0.0020	<0.001	
MW - 26	08/14/08			0.0050	<0.001	0.0022	0.0065	
MW - 26	11/12/08			0.0071	<0.001	<0.001	0.0050	
MW - 27	02/12/08			Not Sampled on Current Sample Schedule				
MW - 27	05/13/08			0.0011	<0.001	<0.001	<0.001	
MW - 27	08/14/08			Not Sampled on Current Sample Schedule				
MW - 27	11/12/08			0.0011	<0.001	<0.001	<0.001	
MW - 28	02/12/08			Not Sampled on Current Sample Schedule				
MW - 28	05/13/08			Not Sampled on Current Sample Schedule				
MW - 28	08/14/08			Not Sampled on Current Sample Schedule				
MW - 28	11/12/08			<0.001	<0.001	<0.001	<0.001	
RW - 1	02/12/08			Not Sampled Due to PSH in Well				
RW - 1	05/13/08			Not Sampled Due to PSH in Well				
RW - 1	08/14/08			Not Sampled Due to PSH in Well				
RW - 1	11/12/08	2.70	70.8	0.2180	0.117	0.0721	0.0853	
RW - 2	02/12/08			0.0559	<0.005	0.0280	0.0253	
RW - 2	05/13/08			0.0590	<0.005	0.0161	0.0056	
RW - 2	08/14/08			0.0535	<0.001	0.0169	0.0094	
RW - 2	11/12/08			0.0521	<0.001	0.0257	<0.010	
RW - 3	02/12/08			0.4590	<0.005	0.0408	0.0471	
RW - 3	05/13/08			0.1990	<0.005	0.0209	0.0129	
RW - 3	08/14/08			Not Sampled Due to PSH in Well				
RW - 3	11/12/08			0.3780	<0.010	0.0413	0.0346	
RW - 4	02/12/08			0.4720	<0.005	0.1090	0.0866	
RW - 4	05/13/08			0.3360	<0.005	0.0549	0.0391	
RW - 4	08/14/08			0.3960	<0.005	0.0885	0.0679	
RW - 4	11/12/08			0.3660	<0.010	0.0777	0.0541	

TABLE 2

## 2008 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
 TNM 97-17  
 LEA COUNTY, NM  
 NMOCD REFERENCE NUMBER AP-017

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p, -XYLENES	o -XYLENE
NMOCD Regulatory Limit				0.010	0.75	0.75	0.62	
RW - 5	02/12/08			Not Sampled Due to PSH in Well				
RW - 5	05/13/08			Not Sampled Due to PSH in Well				
RW - 5	08/14/08			Not Sampled Due to PSH in Well				
RW - 5	11/12/08	2.61	14.3	0.1320	0.148	0.1230	0.1640	
RW - 6	02/12/08			Not Sampled Due to PSH in Well				
RW - 6	05/13/08			Not Sampled Due to PSH in Well				
RW - 6	08/14/08			Not Sampled Due to PSH in Well				
RW - 6	11/12/08	4.14	13.9	0.1060	0.133	0.1270	0.1370	

**Taste**

ITNM 97-17

**NMOC D REFERENCE NUMBER AP-017**

*All water concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylanthracene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101, UTU 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-23	11/12/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
MW-24	11/12/08	<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
MW-25	11/12/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
MW-26	11/12/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000312	<0.000183	<0.000183	0.000308	<0.000183	0.000204	<0.000183	0.000471
MW-27	11/12/08	<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
MW-28	11/12/08	<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
RW-1	11/12/08	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	0.023	<0.0184	0.0941	<0.0184	<0.0184
RW-2	11/12/08	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	0.00424	<0.00184	<0.00184	0.00488	<0.00184	0.00352	<0.00184	0.00476
RW-3	11/12/08	<0.000922	<0.000922	0.000931	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.00212	<0.000922	0.000993	0.000922	<0.000922	0.00787	<0.000922	0.0021
RW-4	11/12/08	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	0.00391	<0.00184	0.00766	0.00442	<0.00184	0.0201	0.00836	0.00372
RW-5	11/12/08	<0.00184	<0.00184	0.00472	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	0.0172	0.00466	<0.00184	0.0266	0.0192	<0.00184
RW-6	11/12/08	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	0.0106	<0.00184	<0.00184	0.011	<0.00184	0.0381	0.0245	0.00901





# TABLE 3

TINM 97-17

**NMOC D REFERENCE NUMBER AP-017**

**NMOC D REFERENCE NUMBER AP-017**

*All water concentrations are reported in mg/L*

EPA SW846-8270C-3510

[illegible]

## **APPENDICES**



**APPENDIX A:**  
**Form C-141**

District I - (505) 393-6161  
P.O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 South First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Bratos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

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

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 <i>Vacuum Jet to Gal Main Line</i>	Facility Type <i>pipe line</i>
Surface Owner <i>Millard Dech</i>	Mineral Owner
Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	<i>21</i>	<i>20S</i>	<i>37E</i>					<i>Lea</i>

NATURE OF RELEASE

Type of Release <i>Down crude</i>	Volume of Release <i>170 barrels</i>	Volume Recovered <i>160 barrels</i>
Source of Release <i>8" pipeline on scraper trap began</i>	Date and Hour of Occurrence <i>Unknown</i>	Date and Hour of Discovery <i>CST 8-13-97 3:00 PM</i>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>Delmar T. Irwin</i>	
By Whom? <i>Johnny W. Chapman</i>	Date and Hour <i>8-13-97 4:45 pm CST</i>	
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 changed off.*

Describe Area Affected and Cleanup Action Taken.\*

*Approximately 360 sq. ft. scraper trap area.  
Contaminated soil was removed*

Describe General Conditions Prevailing (Temperature, Precipitation, etc.).\*

*Clear 90°*

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature <i>E. H. Gripp</i>		OIL CONSERVATION DIVISION	
Printed Name: Edwin H. Gripp		Approved by District Supervisor:	
Title: District Manager		Approval Date:	Expiration Date:
Date: 8-14-97	Phone: 915-947-9001	Conditions of Approval:	Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary

State Corp. Commission  
Pipe Line Division

Hazardous Waste Section  
NM Environmental Improvement Div.

TNM-97-17

JWC JAS