

AP - 13

# ANNUAL MONITORING REPORT

YEAR(S):  
2013



2012  
ANNUAL MONITORING REPORT

**TNM 97-18**

SW ¼ NE ¼ of SECTION 28, TOWNSHIP 20 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO  
PLAINS SRS NUMBER: TNM 97-18-KNOWN  
NMOCD Reference AP-0013

PREPARED FOR:

**PLAINS MARKETING, L.P.**  
333 CLAY STREET, SUITE 1600  
HOUSTON, TEXAS 77002



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2013 MAR 28 A 11:07

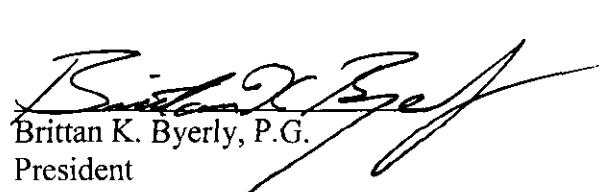
PREPARED BY:

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

March 2013

Nikki Green

Nikki Green  
Project Manager

  
Brittan K. Byerly, P.G.  
President



March 15, 2013

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2013 MAR 28 A II: 07

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

Re: Plains All American – 2012 Annual Monitoring Reports  
15 Sites in Lea County, New Mexico

Dear Mr. Hansen:

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

34 Junc. to Lea Sta.	1R-0386	Section 21, Township 20 South, Range 37 East, Lea County
34 Junction South	1R-0456	Section 02, Township 17 South, Range 36 East, Lea County
Bob Durham	AP-0016	Section 32, Township 19 South, Range 37 East, Lea County
HDO-90-23	AP-009	Section 06, Township 20 South, Range 37 East, Lea County
LF-59	1R-0103	Section 32, Township 19 South, Range 37 East, Lea County
Monument 2	1R-0110	Section 06, Township 20 South, Range 37 East, Lea County
		Section 07, Township 20 South, Range 37 East, Lea County
Monument 10	1R-0119	Section 30, Township 19 South, Range 37 East, Lea County
Monument 17	1R-123	Section 29, Township 19 South, Range 37 East, Lea County
Monument 18	1R-0124	Section 07, Township 20 South, Range 37 East, Lea County
SPS-11	GW-0140	Section 18, Township 18 South, Range 36 East, Lea County
Texaco Skelly F	1R-0420	Section 11, Township 21 South, Range 37 East, Lea County
TNM 97-04	GW-0294	Section 11, Township 16 South, Range 35 East, Lea County
TNM 97-17	AP-017	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	AP-0013	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	AP-12	Section 26, Township 21 South, Range 37 East, Lea County

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



PLAINS  
ALL AMERICAN

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

Sincerely,

Jason Henry  
Remediation Coordinator  
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

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**ENCLOSED ON DATA DISK**

2012 Annual Monitoring Report

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2012 Figures 1, 2A-2D, and 3A-3D

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Electronic Copies of Laboratory Reports

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## **INTRODUCTION**

On behalf of Plains Marketing, L.P., (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this 2012 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 97-18 Pipeline Release Site (the site), formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with figures, appendices, tables and text. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2012 only. Historic data is provided on the enclosed data disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2012 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 not sampled as per a NMOCD directive.

## **SITE DESCRIPTION AND BACKGROUND INFORMATION**

The TNM 97-18 release occurred on September 10, 1997. The site is located south of Monument, New Mexico in the Southwest ¼ of the Northeast ¼ of Section 28, Township 20 South, Range 37 East. According to Form C-141, an estimated 83 barrels of crude oil was released from the 16-inch pipeline of which none was recovered. The Release Notification and Corrective Action (Form C-141) is provided as Appendix B.

A *Soil Closure Work Plan* (Work Plan) was submitted to the NMOCD in August 2006. The Work Plan proposed soil remediation activities intended to progress the site toward an NMOCD approved closure.

In February 2008, Plains received approval from the NMOCD to commence the soil remediation activities outlined in the Work Plan. Following the completion of the soil remediation activities, a *Soil Closure Request* dated August 2010 was submitted to the NMOCD for approval. On January 26, 2011, Plains received an email from the NMOCD approving the *Soil Closure Request* at the TNM 97-18 release site.

Currently, there are 27 monitor wells (MW-1 through MW-30, excluding MW-13, MW-19, and MW-29, which have been plugged and abandoned) and two recovery wells (RW-1 and RW-2) onsite. A pneumatic product recovery system operated onsite incorporating three monitor wells (MW-4, MW-5 and MW-7) was discontinued at the end of 2006, due to declining PSH thicknesses on site.

## FIELD ACTIVITIES

### Product Recovery Efforts

A measurable thickness of PSH was detected in monitor well MW-7 during the 2012 annual reporting period. A maximum PSH thickness of 2.20 feet was recorded on May 23, 2012 and is shown on Table 1. The average thickness of PSH in monitor well MW-7 during 2012 was 1.02 feet. Approximately 35.6 gallons (0.85 barrels) of PSH was recovered from the site during the 2012 reporting period. A total of approximately 1,190 gallons (28.3 barrels) of PSH has been recovered since project inception.

### Groundwater Monitoring

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

NMOCD APPROVED SAMPLING SCHEDULE					
Location	Schedule	Location	Schedule	Location	Schedule
MW-1	Annually	MW-12	Annually	MW-23	Quarterly
MW-2	Quarterly	MW-13	Plugged and Abandoned	MW-24	Quarterly
MW-3	Quarterly	MW-14	Annually	MW-25	Quarterly
MW-4	Quarterly	MW-15	Annually	MW-26	Quarterly
MW-5	Quarterly	MW-16	Annually	MW-27	Quarterly
MW-6	Quarterly	MW-17	Quarterly	MW-28	Semi-Annually
MW-7	Quarterly	MW-18	Quarterly	MW-29	Plugged and Abandoned
MW-8	Annually	MW-19	Plugged and Abandoned	MW-30	Semi-Annually
MW-9	Annually	MW-20	Annually		
MW-10	Quarterly	MW-21	Annually	RW-1	Quarterly
MW-11	Annually	MW-22	Annually	RW-2	Quarterly

The site monitor wells were gauged and sampled on March 1, May 23, August 9 and November 20, 2012. During each sampling event, monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Grundfos pump and dedicated tubing. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during quarterly sampling events performed in 2012, are depicted on the Inferred Groundwater Gradient Map(s), Figures 2A-2D. Groundwater elevation data for 2012 is provided as Table 1. Historic groundwater elevation data beginning at project inception is enclosed on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient in a southeast direction as measured between MW-1 and MW-30. This is consistent with data

presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,466.82 to 3471.40 feet above mean sea level, in monitor well MW-30 on November 19, 2012 and in monitor well MW-5 on March 1, 2012, respectively.

## LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2012 were delivered to Trace Analysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B. Polynuclear Aromatic Hydrocarbons (PAH) analysis was conducted during the 2012 calendar year on monitor wells MW-2 through MW-6, MW-10, MW-17 and MW-18 and recovery wells RW-1 and RW-2. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC standards are sampled, with the exclusion of those wells containing measurable PSH thicknesses. A listing of BTEX constituent concentrations for 2012 are summarized in Table 2 and the historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2012 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 the NMOCD regulatory standard of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 mg/L for xylene, for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-1 has exhibited 48 consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-1 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-2** is sampled on a quarterly schedule. Analytical results indicate the benzene concentration ranged from 0.0728 mg/L during the 2<sup>nd</sup> quarter to 0.1940 mg/L during the 3<sup>rd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below laboratory MDL and the NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.01 mg/L during the 4<sup>th</sup> quarter to 0.0844 mg/L during the 1<sup>st</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.01 mg/L during the 4<sup>th</sup> quarter to 0.1440 mg/L during the 1<sup>st</sup> quarter of 2012. Xylene concentrations were below 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 WQCC Drinking Water Standards for phenanthrene (0.0306 mg/L), naphthalene (0.0202 mg/L), 1-methylnaphthalene (0.0664 mg/L), and 2-methylnaphthalene (0.0179 mg/L).

**Monitor well MW-3** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0054 mg/L during the 3<sup>rd</sup> quarter to 1.340 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Toluene concentrations were below laboratory MDL and the NMOCD regulatory standards during all four quarters of the reporting period.

Ethylbenzene concentrations ranged from <0.001 mg/L during the 3<sup>rd</sup> quarter to 0.0777 mg/L during the 2<sup>nd</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> quarters to 0.0382 mg/L during the 4<sup>th</sup> quarter of 2012. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event detected the PAH constituent 1-methylnaphthalene (0.0145 mg/L) above MDLs, which is below WQCC standards.

**Monitor well MW-4** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.0198 mg/L during the 3<sup>rd</sup> quarter to 1.310 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.050 mg/L during the 2<sup>nd</sup> quarter to 0.0437 during the 4<sup>th</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> to 0.1870 mg/L during the 4<sup>th</sup> quarter of 2012. Xylene concentrations were below 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 WQCC Drinking Water Standards for phenanthrene (0.0575 mg/L), naphthalene (0.0707 mg/L), 1-methylnaphthalene (0.292 mg/L), 2-methylnaphthalene (0.115 mg/L).

**Monitor well MW-5** is sampled on a quarterly schedule, but was not sampled during the 3<sup>rd</sup> quarter sampling events due to damaged well casing. Analytical results indicate benzene concentrations ranged from 1.210 mg/L during the 2<sup>nd</sup> quarter to 0.909 mg/L during the 4<sup>th</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all sampled quarters of the reporting period. Toluene concentrations were below the MDLs and NMOCD regulatory standards during all three sampled quarters of the reporting period. Ethylbenzene concentrations ranged from 0.4740 mg/L during the 1<sup>st</sup> quarter to 0.589 mg/L during the 4<sup>th</sup> quarter of 2012. Ethylbenzene was below NMOCD regulatory standards during all three quarters that were sampled of the reporting period. Xylene concentrations ranged from 0.2300 mg/L during the 4<sup>th</sup> quarter to 0.2680 mg/L during the 1<sup>st</sup> quarter during 2012. Xylene concentrations were below NMOCD regulatory standards during all three quarters that were sampled during the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0598 mg/L), 1-methylnaphthalene (0.142 mg/L), and 2-methylnaphthalene (0.122 mg/L).

**Monitor well MW-6** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.112 mg/L during the 4<sup>th</sup> quarter to 0.1480 mg/L during the 3<sup>rd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.005 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0064 mg/L during the 2<sup>nd</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.005 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.0121 mg/L during the 2<sup>nd</sup> quarter of 2012. Xylene concentrations were

below 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 WQCC Drinking Water Standards for naphthalene (0.0118 mg/L), 1-methylnaphthalene (0.0395 mg/L) and phenanthrene (0.0173 mg/L).

**Monitor well MW-7** is sampled on a quarterly schedule. Monitor well MW-7 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of the reporting period, due to the presence of PSH in the monitor well. PSH thicknesses of 0.66 feet, 2.20 feet, 1.20 feet and 1.26 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2012, respectively. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event due to the presence of PSH.

**Monitor well MW-8** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-8 has exhibited thirty-eight consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-8 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-9** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-9 has exhibited thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-9 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-10** is sampled on a quarterly schedule. Analytical results indicate the benzene concentration ranged from 0.2410 mg/L during the 3<sup>rd</sup> quarter to 0.8820 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated 1-methylnaphthalene (0.0.0228 mg/L) was above MDLs and below WQCC standards.

**Monitor well MW-11** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-11 has exhibited thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-11 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-12** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-12 has exhibited thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-12 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-14** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-14 has exhibited

thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-14 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-15** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-15 has exhibited thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-15 during the 4<sup>th</sup> quarter sampling event.

**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 for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-16 has exhibited thirty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-16 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-17** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0320 mg/L during the 3<sup>rd</sup> quarter to 2.320 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0206 mg/L during the 3<sup>rd</sup> quarter to 1.70 mg/L during the 1<sup>st</sup> quarter of 2012. Ethylbenzene concentrations were above NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> quarter to 2.350 mg/L during the 2nd quarter of 2012. Xylene concentrations were below 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 WQCC Drinking Water Standards for naphthalene (0.0483 mg/L), 1-methylnaphthalene (0.0577 mg/L), 2-methylnaphthalene (0.0254 mg/L), phenanthrene (0.00356 mg/L) and fluorene (0.00336 mg/L). Additional PAH constituents detected above MDLs include dibenzofuran (0.00557 mg/L), which is below WQCC standards.

**Monitor well MW-18** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0380 mg/L during the 3<sup>rd</sup> quarter to 3.220 mg/L during the 2<sup>nd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0235 mg/L during the 3<sup>rd</sup> quarter to 2.420 mg/L during the 2<sup>nd</sup> quarter of 2012. Ethylbenzene concentrations were above NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters of the reporting period. Xylene concentrations ranged from 0.0043 mg/L during the 3<sup>rd</sup> quarter to 1.330 mg/L during the 1<sup>st</sup> quarter of 2012. Xylene concentrations were below NMOCD regulatory standards during the 2<sup>nd</sup>, 3<sup>rd</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 WQCC Drinking Water Standards for phenanthrene (0.00222 mg/L), fluorene (0.00245 mg/L), naphthalene (0.0639 mg/L), 1-methylnaphthalene (0.0479 mg/L), 2-methylnaphthalene (0.0337 mg/L). Additional PAH constituents detected above MDLs include dibenzofuran (0.0045 mg/L), which are below WQCC standards.

**Monitor well MW-20** is sampled on an annual schedule and analytical results indicate benzene concentrations during the 4<sup>th</sup> quarter was 0.173 mg/L, which is above NMOCD regulatory standards. Toluene, ethylbenzene, and xylene concentrations were below the MDL and NMOCD regulatory standards for each during the 4<sup>th</sup> quarter sampling event. PAH analysis was not required on samples from MW-20 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-21** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-21 has exhibited 18 consecutive monitoring events below NMOCD regulatory limits before this reporting period. PAH analysis was not required on samples from MW-21 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-22** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. Monitor well MW-22 has exhibited 18 consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-22 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-23** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.336 mg/L during the 4<sup>th</sup> quarter to 0.4730 mg/L during the 2<sup>nd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene, ethylbenzene, and xylene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not required on samples from MW-23 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-24** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0626 mg/L during the 3<sup>rd</sup> quarter to 3.590 mg/L during the 2<sup>nd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.020 mg/L during the 1<sup>st</sup> quarter to 0.375 mg/L during the 4<sup>th</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.020 mg/L during the 1<sup>st</sup> quarter to 0.1310 mg/L during the 4<sup>th</sup> quarter of 2012. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not required on samples from MW-24 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-25** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0129 mg/L during the 3<sup>rd</sup> quarter to 0.9170 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene and ethylbenzene concentrations were below MDLs and NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from 0.002 mg/L during the 3<sup>rd</sup> quarter to <0.050 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2012. Xylene concentrations were below NMOCD regulatory standards during all

four quarters of the reporting period. PAH analysis was not required on samples from MW-25 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-26** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 4<sup>th</sup> quarters to 0.001 mg/L during the 2nd and 3<sup>rd</sup> quarters. Benzene concentrations were below NMOCD regulatory during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters to 0.0045 mg/L during the 3<sup>rd</sup> quarter of 2012. Xylene concentrations were below NMOCD regulatory standards for all four quarters of the reporting period. Monitor well MW-26 has exhibited thirteen consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-26 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-27** is sampled on a quarterly schedule and analytical results indicate benzene, toluene, and ethylbenzene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters to 0.003 mg/L during the 3<sup>rd</sup> quarter of 2012. Xylene concentrations were below NMOCD regulatory standards for all four quarters of the reporting period. Monitor well MW-27 has exhibited 43 consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-27 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-28** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Monitor well MW-28 has exhibited 14 consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-28 during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-30** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> and 4<sup>th</sup> quarters of the reporting period. Monitor well MW-30 has exhibited 25 consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not required on samples from MW-30 during the 4<sup>th</sup> quarter sampling event.

**Recovery well RW-1** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.0056 mg/L during the 3<sup>rd</sup> quarter to 1.21 mg/L during the 1<sup>st</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 3<sup>rd</sup> quarter to 0.2590 mg/L during the 2<sup>nd</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> quarter to 0.1150 mg/L during the 2<sup>nd</sup> quarter of 2012. Xylene concentrations were below 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 WQCC Drinking Water

Standards for naphthalene (0.0206 mg/L), 1-methylnaphthalene (0.0592 mg/L) and 2-methylnaphthalene (0.0342 mg/L) and phenanthrene (0.0167 mg/L). Additional PAH constituents detected above MDLs include dibenzofuran (0.0139 mg/L), which is below WQCC standards.

**Recovery well RW-2** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.0135 mg/L during the 3<sup>rd</sup> quarter to 1.070 mg/L during the 2<sup>nd</sup> quarter of 2012. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> quarter to 0.3370 mg/L during the 2<sup>nd</sup> quarter of 2012. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1<sup>st</sup> quarters to 0.1150 mg/L during the 2<sup>nd</sup> quarter of 2012. Xylene concentrations were below 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 WQCC Drinking Water Standards for naphthalene (0.00971 mg/L), 1-methylnaphthalene (0.0287 mg/L), and 2-methylnaphthalene (0.0165 mg/L).

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 2012 annual monitoring period. Currently, there are 27 groundwater monitor wells (MW-1 through MW-30, excluding MW-13, MW-19, and MW-29 which have been plugged and abandoned) and two PSH recovery wells (RW-1 and RW-2) on-site. Manual over-pumping of wells exhibiting elevated hydrocarbon concentrations occurs on a weekly schedule. Groundwater elevation contours generated from water level measurements acquired indicated a general gradient to the southeast.

A measurable thickness of PSH was detected in monitor well MW-7 during the 2012 annual reporting period. A maximum PSH thickness of 2.20 feet was recorded on May 23, 2012 and is shown on Table 1. The average thickness of PSH in monitor well MW-7 during 2012 was 1.02 feet. Approximately 35.6 gallons (0.85 barrels) of PSH was recovered from the site during the 2012 reporting period. A total of approximately 1,190 gallons (28.3 barrels) of PSH has been recovered since project inception.

Review of the laboratory analytical results indicates 14 monitor wells exhibited BTEX constituent concentrations below the NMOCD regulatory standard during the reporting period. Analytical results on groundwater samples collected indicate PAH concentrations are demonstrating a stable trend in eight monitor and two recovery wells (MW-2 through MW-6, MW-10, MW-17 and MW-18, RW-1 and RW-2).

## **ANTICIPATED ACTIONS**

Quarterly monitoring and groundwater sampling will continue in 2013. Plains will modify the sampling schedule, per the NMOCD's Anticipated Actions Approval on November 14, 2012 (Appendix A), for the following monitor wells:

- Monitor well MW-26 is currently sampled on a quarterly schedule. Plains will modify the schedule to a semi-annual schedule.
- Monitor well MW-27 is currently sampled on a quarterly schedule. Plains will modify the schedule to a semi-annual schedule.
- Monitor well MW-28 is currently sampled on a semi-annual schedule. Plains will modify the schedule to an annual schedule.

Plains will begin air sparging during the first quarter of 2013 in monitor wells MW-21, MW-22, MW-23, MW-25, MW-27, and MW-28 to attenuate the down gradient edge of the dissolved phase plume. The diffusers are installed at a depth of approximately 38 feet bgs and operate at a pressure of approximately five psi per well.

Quarterly gauging and sampling will continue in 2013. Manual over pumping will occur weekly and will be adjusted according to site conditions. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2013.

Based on the results of the PAH analysis over the past several years, further PAH analysis be conducted only on those monitor and recovery wells (MW-2 through MW-6, MW-10, MW-17, MW-18 and RW-1 and RW-2) which have historically exhibited elevated constituents near or above the WQCC standards.

## **LIMITATIONS**

NOVA has prepared this 2012 Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

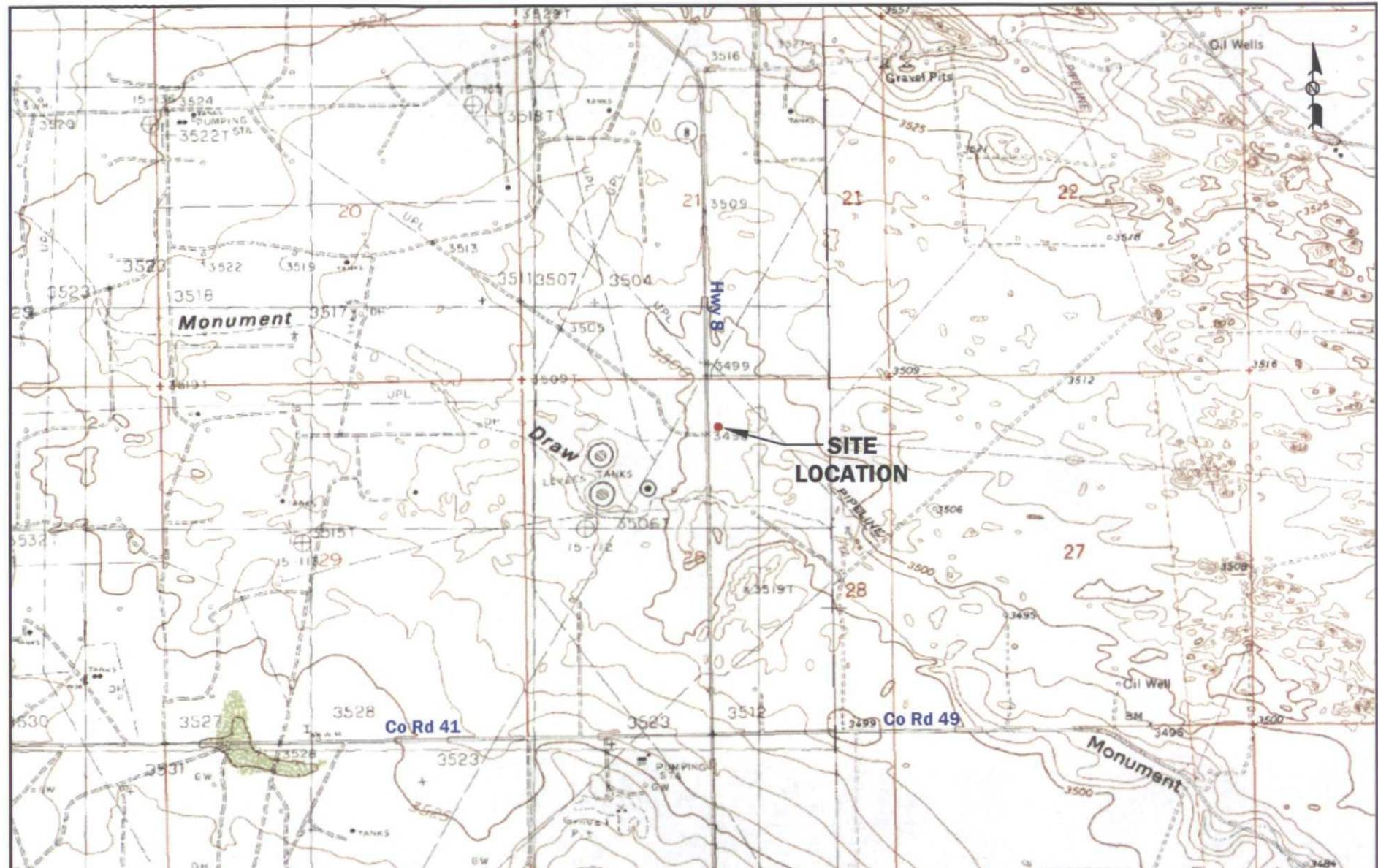
NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that 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.

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- Copy 5:      NOVA Safety and Environmental  
2057 Commerce Street  
Midland, TX 79703  
[rrounsaville@novatraining.cc](mailto:rrounsaville@novatraining.cc)

## **FIGURES**



**LEGEND:**

2000      1000      0      1000      2000

Distance in Feet

NMOCD Reference #AP-13

**Figure 1**  
**Site Location Map**  
**TNM 97-18**  
**Plains Marketing, L.P.**  
**Lea County, NM**

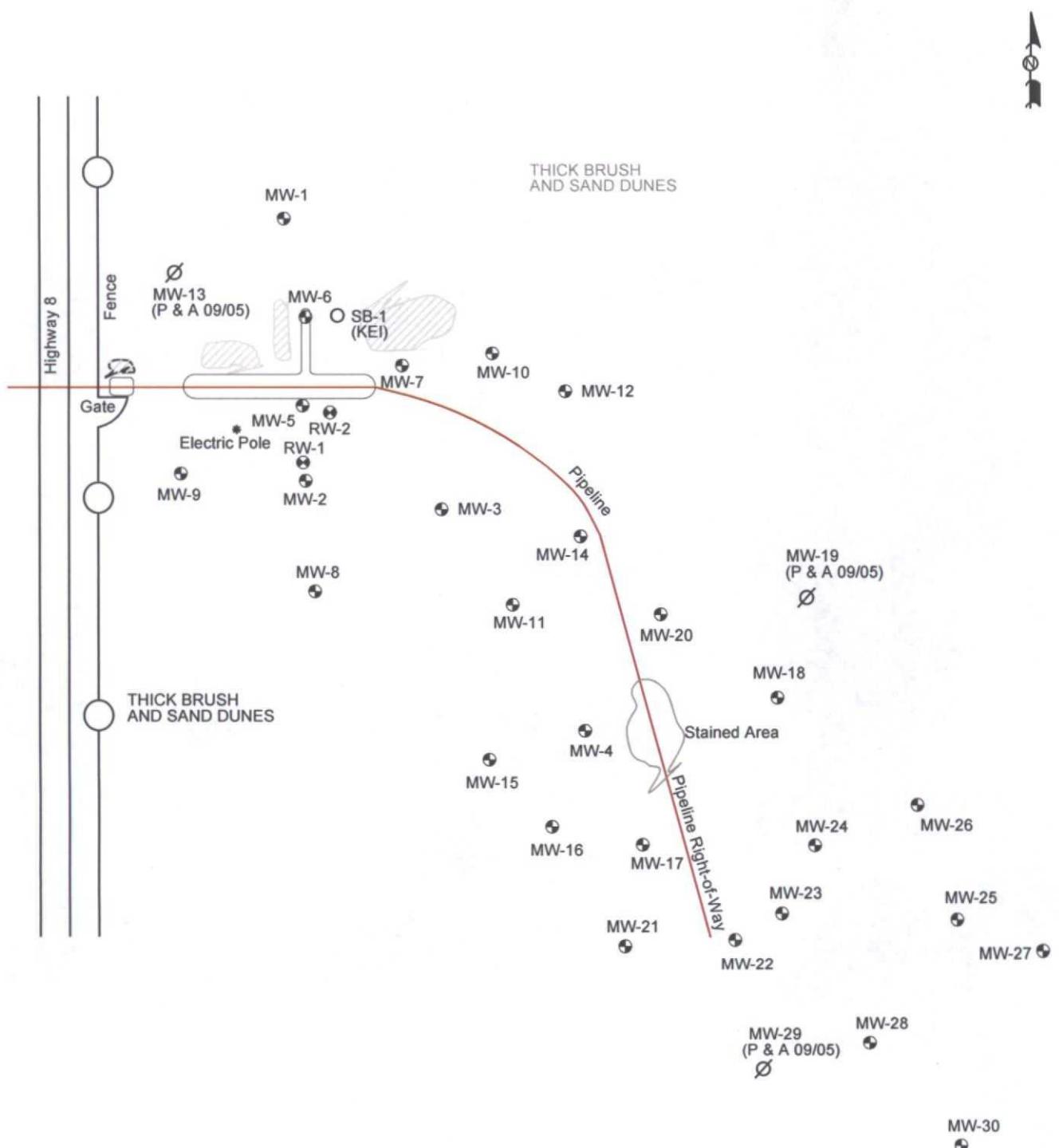


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March 3, 2011 | Scale: 1" = 2000' | CAD By: TA | Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 32' 57.00" W 103° 15' 22.00"

2057 Commerce Drive  
Midland, Texas 79703  
432.520.7720



**NOTE:**  
MW-13, MW-19 and MW-29 Were Plugged and Abandoned  
September 2005 Per NMOCD Approval

100 50 0 50 100  
Distance in Feet

LEGEND:	
● Monitor Well	■ Stockpile Soil
● Recovery Well	□ Excavated Area
○ Soil Boring	
● Geoprobe Location	∅ Well Plugged and Abandoned

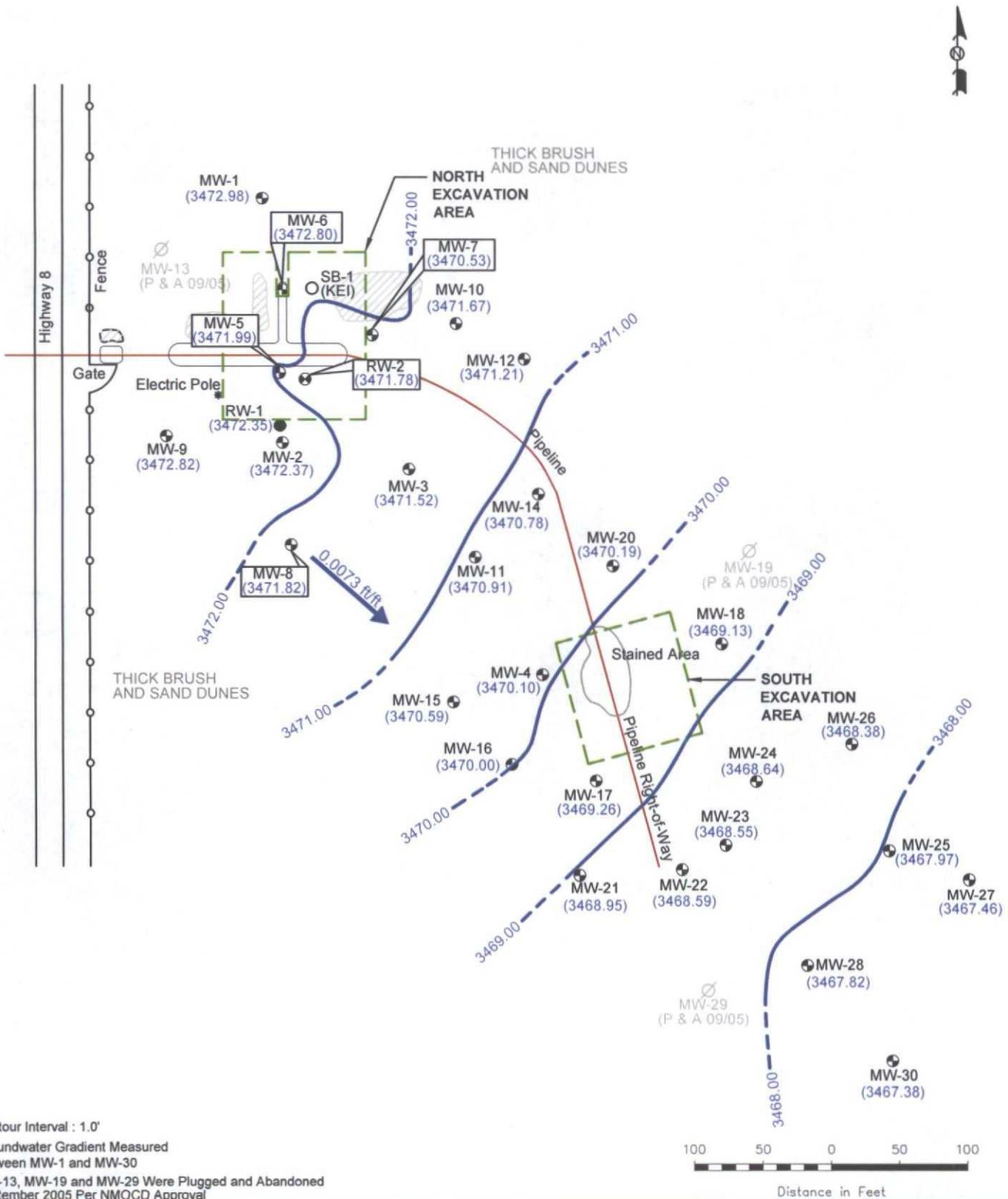
Figure 2  
Site Map  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM



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March 19, 2013	Scale: 1" = 100'	CAD By: CAS	Checked By: RKR
Lat. N 32° 32' 56.97"	Long. W 103° 15' 22.47"	SW1/4 NE1/4 Sec 28 T20S R37E	



NOTE:

Contour Interval : 1.0'

Groundwater Gradient Measured  
Between MW-1 and MW-30

MW-13, MW-19 and MW-29 Were Plugged and Abandoned  
September 2005 Per NMOCD Approval

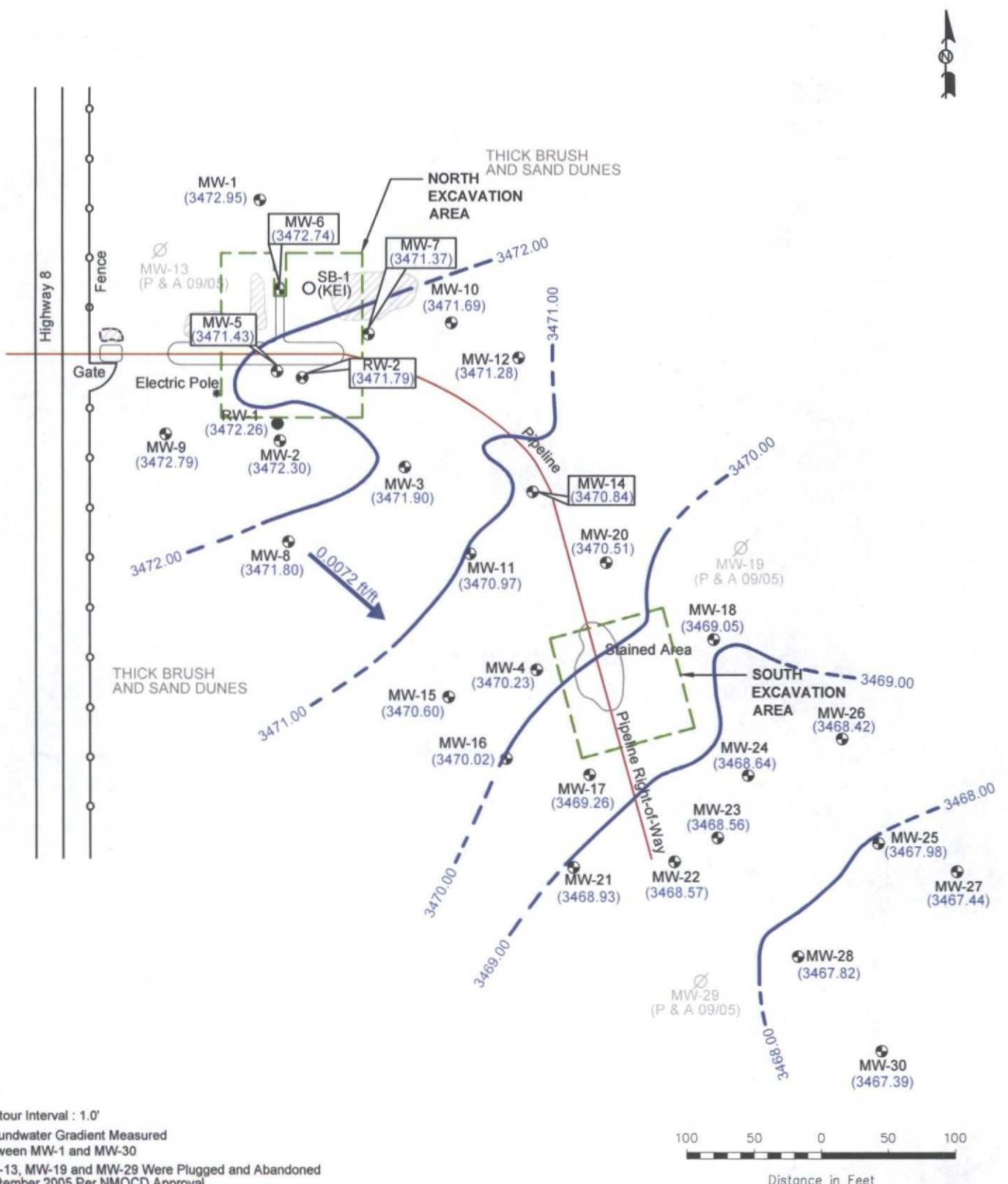


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April 11, 2012 | Scale: 1" = 100' | CAD By: TA | Checked By: RKR  
Lat. N 32° 32' 56.97" Long. W 103° 15' 22.47" | SW1/4 NE1/4 Sec 28 T20S R37E

LEGEND:		Stockpile Soil	Inferred Groundwater Gradient Map (3/1/2012)	Figure 2A Inferred Groundwater Gradient Map (3/1/2012)	NOVA safety and environmental	2057 Commerce Drive Midland, Texas 79703 432.520.7720
● Monitor Well						
● Recovery Well						
○ Soil Boring						
● Geoprobe Location						
∅ Well Plugged and Abandoned						
	■ Excavated Area					
	→ Groundwater Gradient and Magnitude					
	(3470.53)					
	Groundwater Elevation in Feet					
	Groundwater Contour Line					



LEGEND:	
● Monitor Well	Stockpile Soil
● Recovery Well	Excavated Area
○ Soil Boring	Groundwater Gradient and Magnitude
● Geoprobe Location	(3470.53) Groundwater Elevation in Feet
∅ Well Plugged and Abandoned	Groundwater Contour Line

Figure 2B  
Inferred Groundwater  
Gradient Map  
(5/23/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM

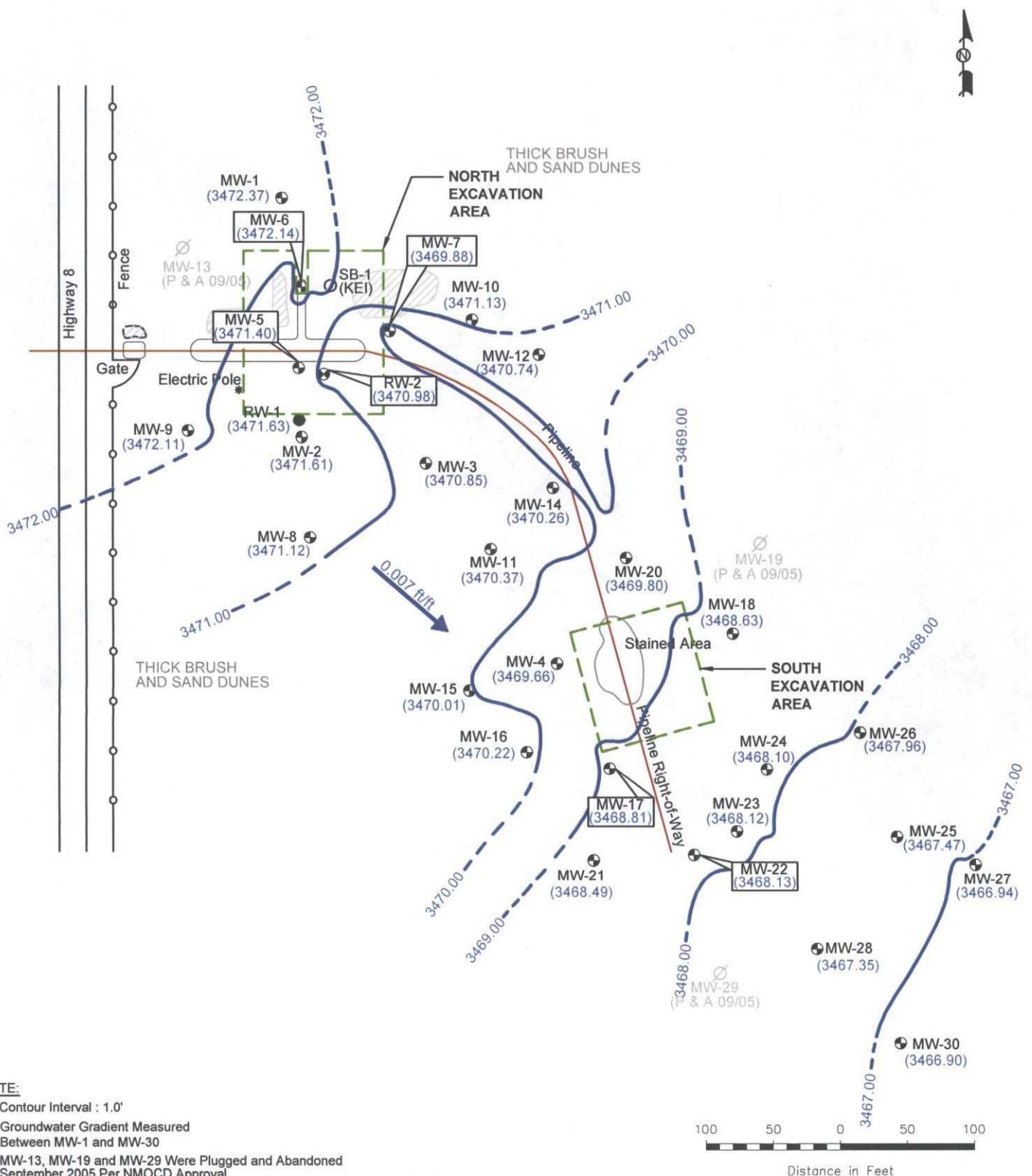


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June 7, 2012 | Scale: 1" = 100' | CAD By: TA | Checked By: RKR  
Lat. N 32° 32' 56.97" Long. W 103° 15' 22.47" SW1/4 NE1/4 Sec 28 T20S R37E

100 50 0 50 100  
Distance in Feet



#### NOTE:

Contour Interval : 1.0'

Groundwater Gradient Measured  
Between MW-1 and MW-30

MW-13, MW-19 and MW-29 Were Plugged and Abandoned  
September 2005 Per NMOCD Approval



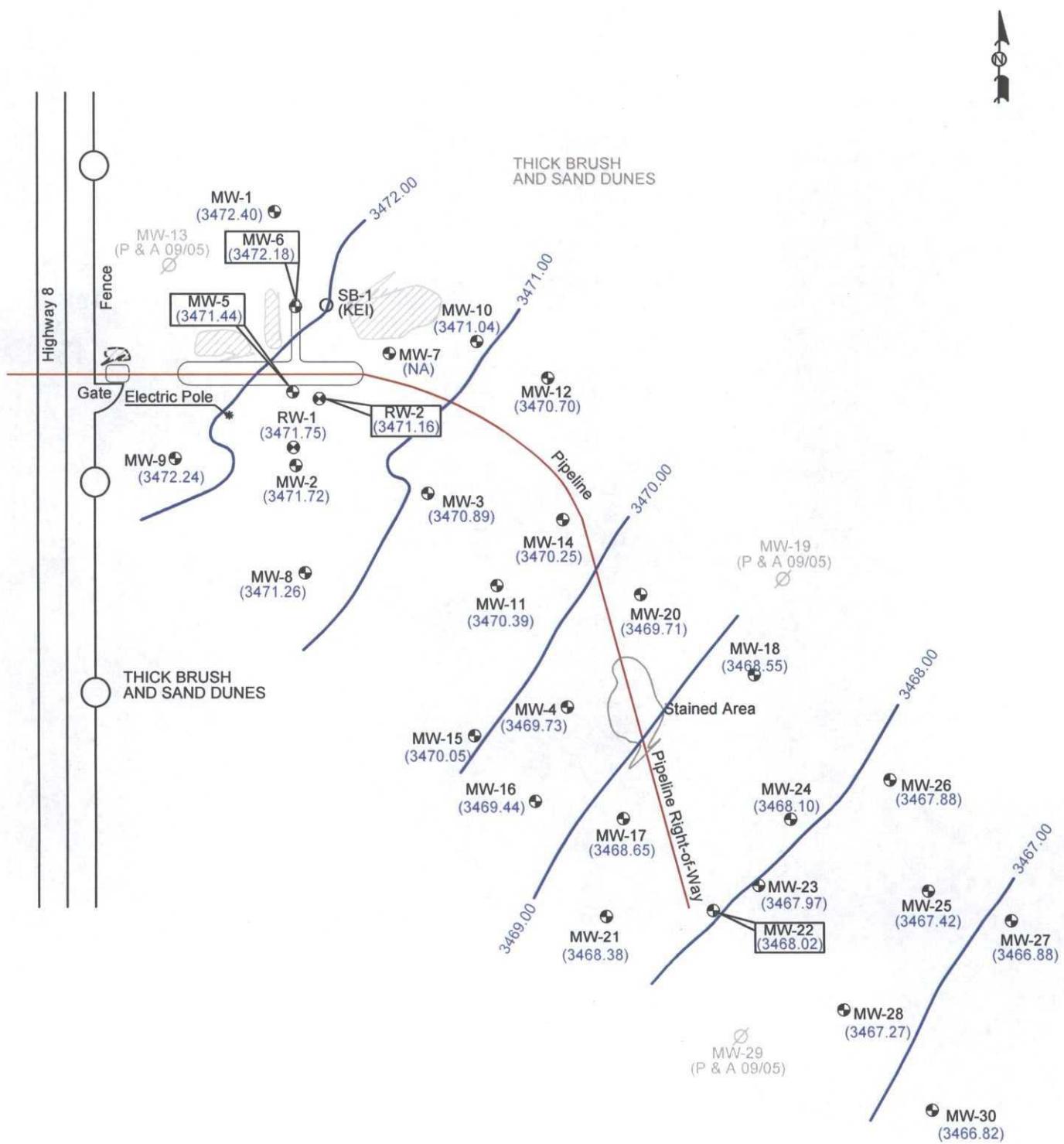
Figure 2C  
Inferred Groundwater  
Gradient Map  
(8/9/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM

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September 19, 2012	Scale: 1" = 100'	CAD By: TA	Checked By: RKR
Lat. N 32° 32' 56.67"	Long. W 103° 15' 22.47"	SW1/4 NE1/4 Sec 28 T20S R37E	

LEGEND:		Stockpile Soil		
●	Monitor Well			
●	Recovery Well			
○	Soil Boring			
●	Geoprobe Location			
∅	Well Plugged and Abandoned			
		Excavated Area		
		Groundwater Gradient and Magnitude		
		(3470.53)	Groundwater Elevation in Feet	
			Groundwater Contour Line	

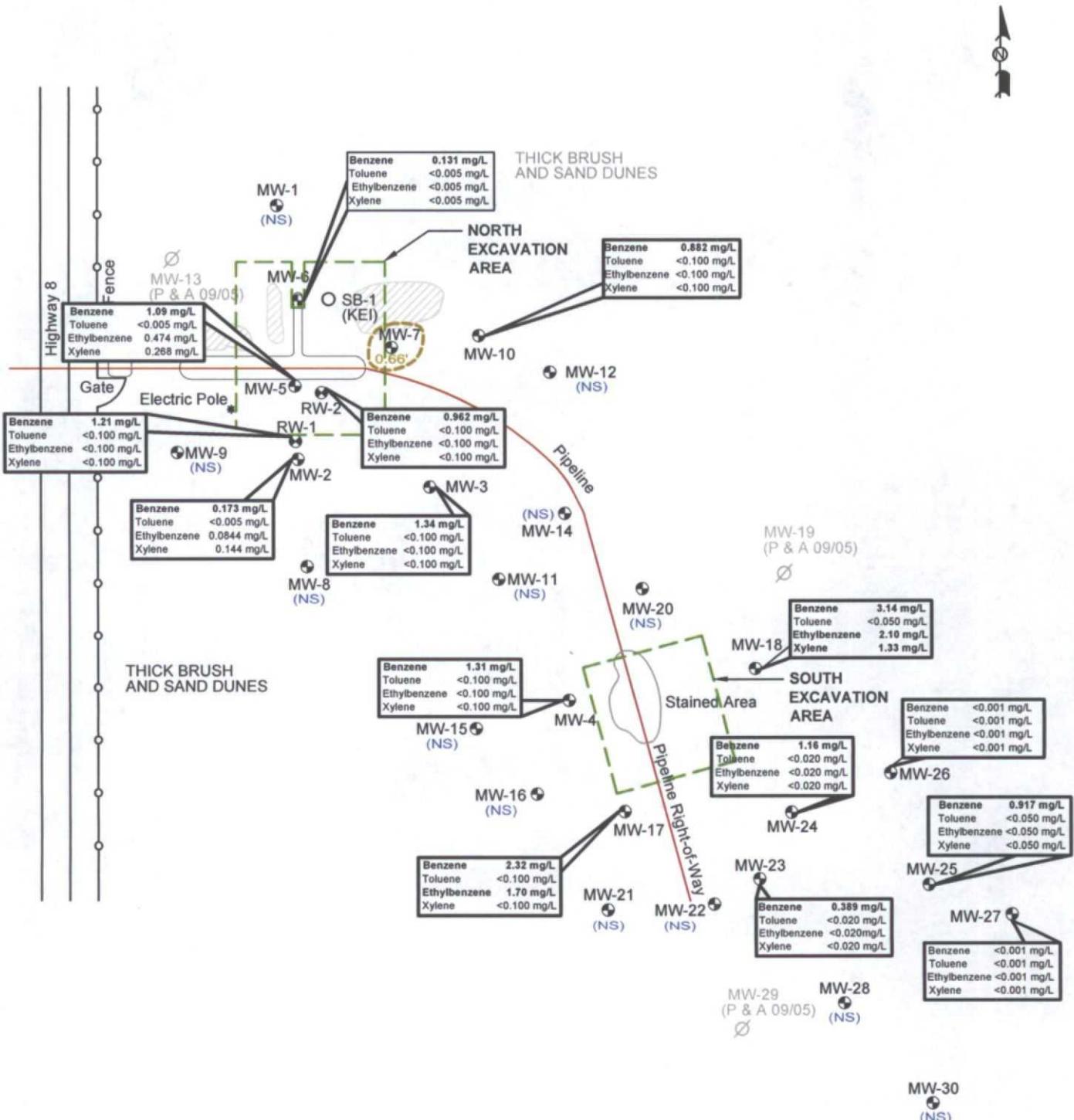


#### NOTE:

MW-7 was not surveyed after soil remediation activities and, therefore, was not incorporated in the construction of this gradient map.

100 50 0 50 100  
Distance in Feet

Legend:		Groundwater Gradient and Magnitude (3470.53)	Figure 2D Inferred Groundwater Gradient Map (11/20/2012)	2057 Commerce Drive Midland, Texas 79703
●	Monitor Well	Groundwater Elevation in Feet		
●	Recovery Well	Groundwater Contour Line		
○	Soil Boring	Well Plugged and Abandoned		
●	Geoprobe Location	Stockpile Soil	NMOCD Reference # AP-0013 Plains Marketing, L.P. TNM 97-18 Lea County, NM	www.novasafetyandenvironmental.com
		Excavated Area	February 25, 2013 Scale: 1" - 100' CAD By: CAS Checked By: RKR	
			Lat. N 32° 32' 56.97" Long. W 103° 15' 22.47"	



#### NOTE:

- **BOLD** Indicates Concentration Above NMOCD Regulatory Standard
- MW-13, MW-19 and MW-29 Were Plugged and Abandoned September 2005 Per NMOCD Approval



LEGEND:	
● Monitor Well	<0.001 Constituent Concentration (mg/L)
● Recovery Well	Stockpile Soil
○ Soil Boring	Excavated Area
● Geoprobe Location	(NS) Not Sampled
∅ Well Plugged and Abandoned	0.18' Thickness of PSH (feet)

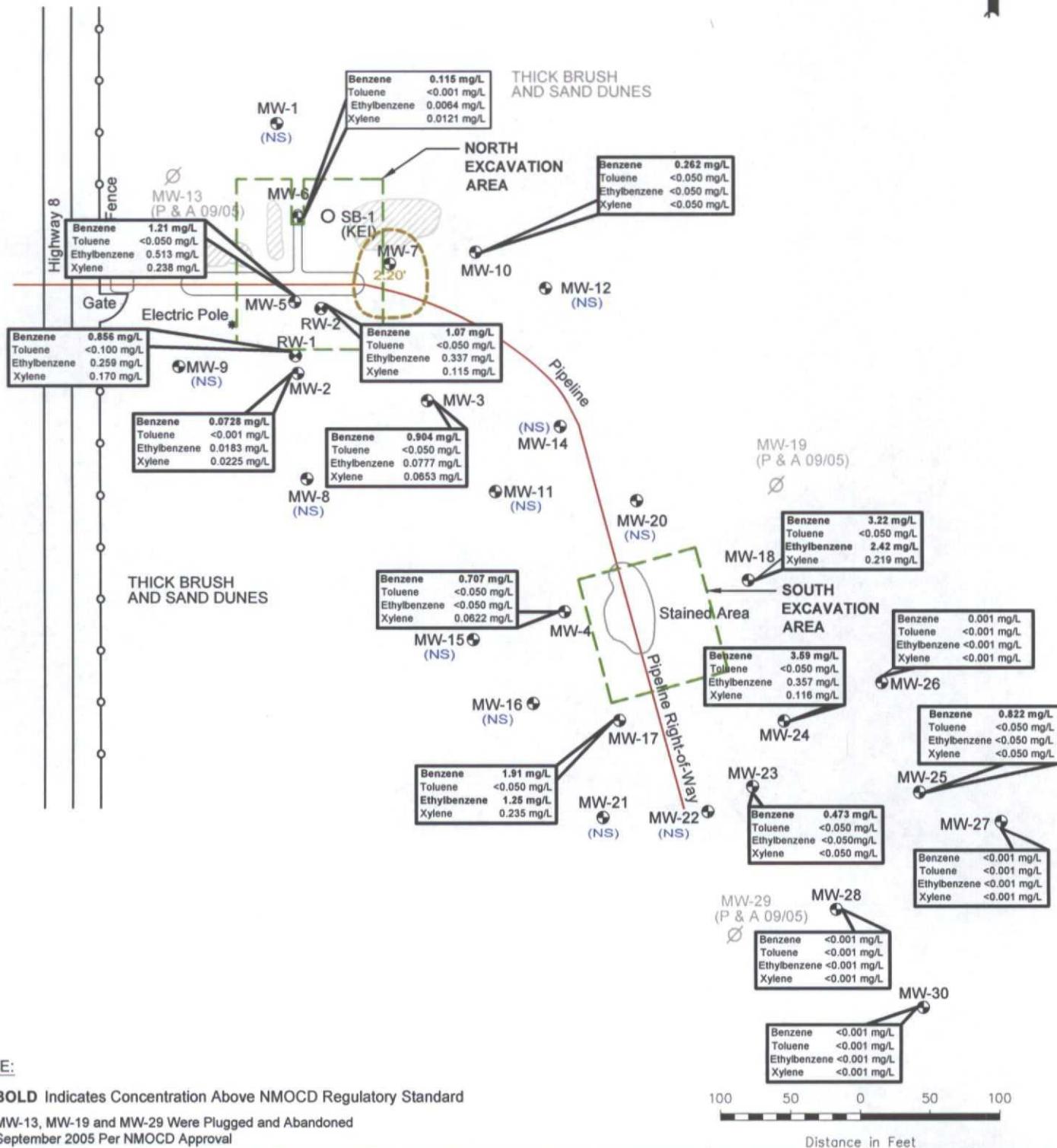
Figure 3A  
Groundwater Concentration and Inferred PSH Extent Map (3/1/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM



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April 11, 2012	Scale: 1" = 100'	CAD By: TA	Checked By: RKR
Lat. N 32° 32' 56.97"	Long. W 103° 15' 22.47"	SW1/4 NE1/4 Sec 28 T20S R37E	



NOTE:

- **BOLD** Indicates Concentration Above NMOCD Regulatory Standard
- MW-13, MW-19 and MW-29 Were Plugged and Abandoned September 2005 Per NMOCD Approval

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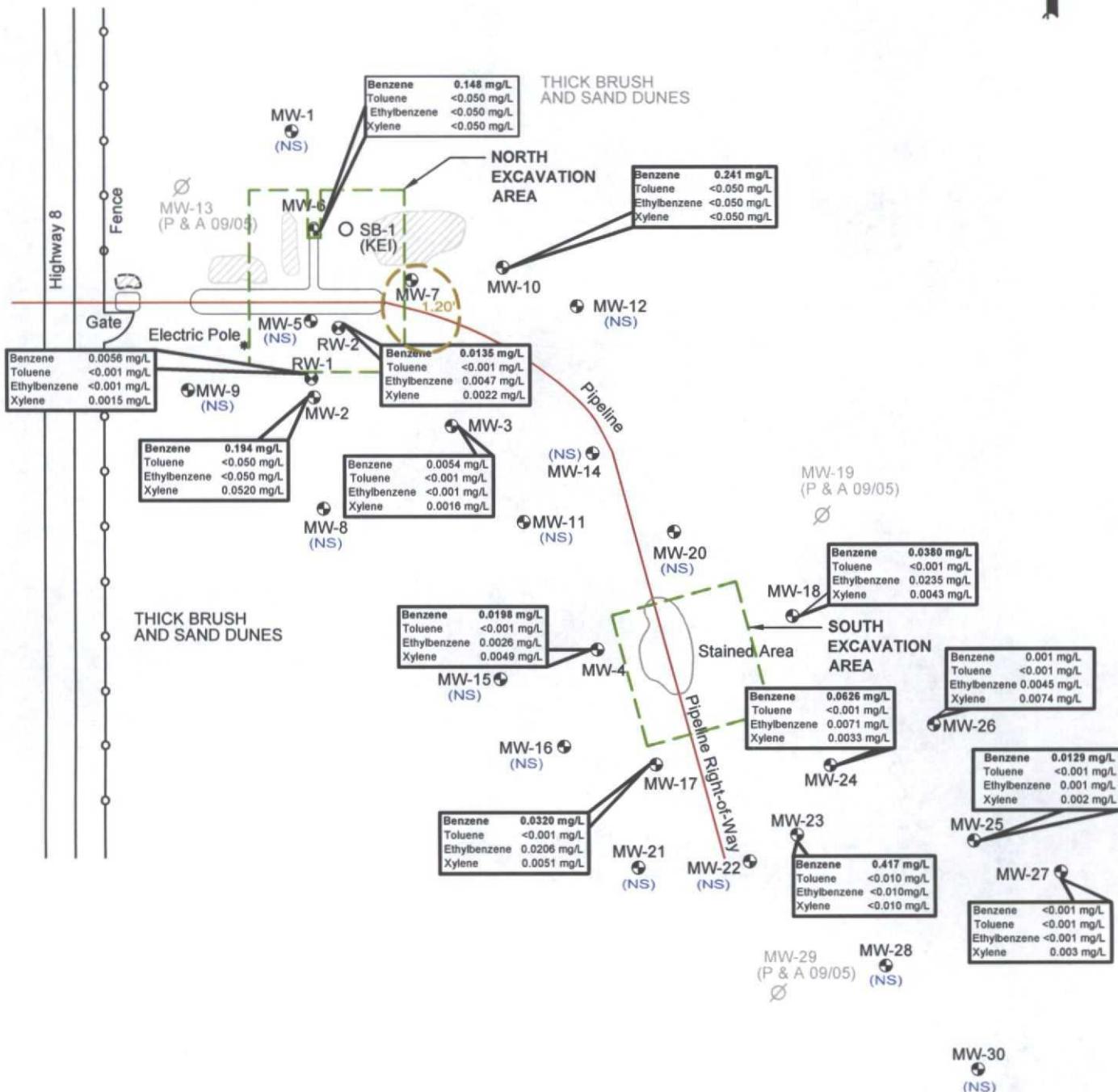
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June 7, 2012 | Scale: 1" = 100' | CAD By: TA | Checked By: RKR  
Lat. N 32° 32' 56.97" Long. W 103° 15' 22.47" | SW1/4 NE1/4 Sec 28 T20S R37E

LEGEND:	
● Monitor Well	<0.001 Constituent Concentration (mg/L)
● Recovery Well	Stockpile Soil
○ Soil Boring	Excavated Area
● Geoprobe Location	(NS) Not Sampled
∅ Well Plugged and Abandoned	Inferred PSH Extent
	0.18' Thickness of PSH (feet)

**Figure 3B**  
Groundwater Concentration  
and Inferred PSH Extent  
Map (5/23/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM



NOTE:

- **BOLD** Indicates Concentration Above NMOCD Regulatory Standard
- MW-13, MW-19 and MW-29 Were Plugged and Abandoned September 2005 Per NMOCD Approval



LEGEND:	<0.001 Constituent Concentration (mg/L)
● Monitor Well	Stockpile Soil
● Recovery Well	Excavated Area
○ Soil Boring	(NS) Not Sampled
● Geoprobe Location	Inferred PSH Extent
∅ Well Plugged and Abandoned	0.18' Thickness of PSH (feet)

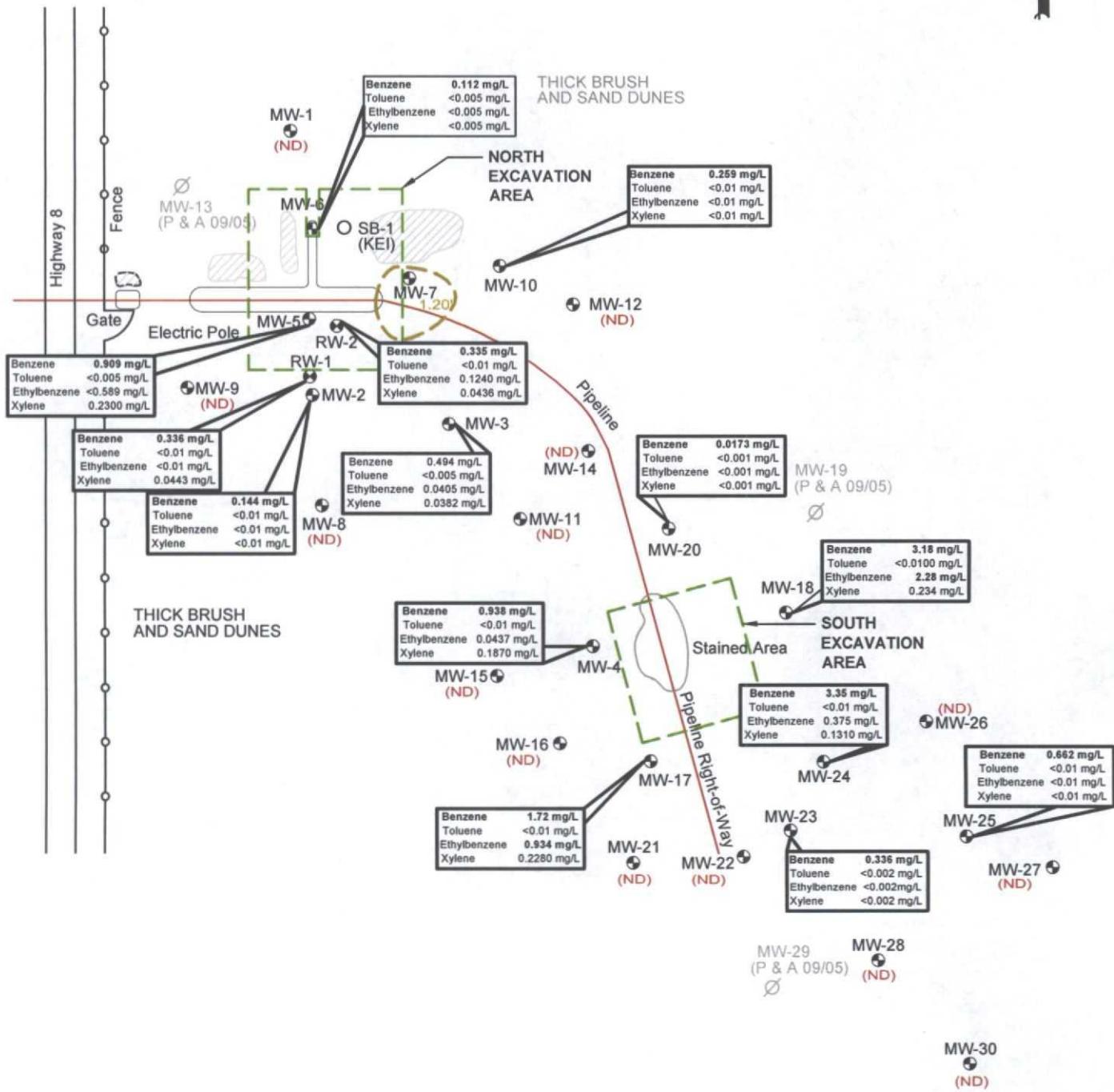
Figure 3C  
Groundwater Concentration and Inferred PSH Extent Map (8/9/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM



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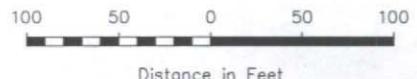
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September 19, 2012	Scale: 1" = 100'	CAD By: TA	Checked By: RKR
Lat. N 32° 32' 56.97"	Long. W 103° 15' 22.47"	SW1/4 NE1/4 Sec 28 T20S R37E	



#### NOTE:

- BOLD** Indicates Concentration Above NMOCD Regulatory Standard
- MW-13, MW-19 and MW-29 Were Plugged and Abandoned September 2005 Per NMOCD Approval



LEGEND:	<0.001 Constituent Concentration (mg/L)
● Monitor Well	Stockpile Soil
● Recovery Well	Excavated Area
○ Soil Boring	(ND) Not Detected
● Geoprobe Location	Inferred PSH Extent
∅ Well Plugged and Abandoned	0.18' Thickness of PSH (feet)

Figure 3D  
Groundwater Concentration  
and Inferred PSH Extent  
Map (11/20/2012)  
NMOCD Reference # AP-0013  
Plains Marketing, L.P.  
TNM 97-18  
Lea County, NM



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March 19, 2013 | Scale: 1" = 100' | CAD By: CAS | Checked By: RKR  
Lat. N 32° 32' 56.97" Long. W 103° 15' 22.47"

## **TABLES**

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSI THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	03/01/12	3500.17	-	27.19	0.00	3472.98
MW - 1	05/23/12	3500.17	-	27.22	0.00	3472.95
MW - 1	08/09/12	3500.17	-	27.80	0.00	3472.37
MW - 1	11/20/12	3500.17	-	27.77	0.00	3472.40
MW - 2	01/05/12	3499.19	-	27.08	0.00	3472.11
MW - 2	01/18/12	3499.19	-	27.01	0.00	3472.18
MW - 2	01/27/12	3499.19	-	26.99	0.00	3472.20
MW - 2	02/02/12	3499.19	-	26.93	0.00	3472.26
MW - 2	02/10/12	3499.19	-	27.07	0.00	3472.12
MW - 2	02/15/12	3499.19	-	26.99	0.00	3472.20
MW - 2	03/01/12	3499.19	-	26.82	0.00	3472.37
MW - 2	03/07/12	3499.19	-	26.88	0.00	3472.31
MW - 2	03/14/12	3499.19	-	26.91	0.00	3472.28
MW - 2	03/19/12	3499.19	-	26.87	0.00	3472.32
MW - 2	03/26/12	3499.19	-	26.84	0.00	3472.35
MW - 2	04/04/12	3499.19	-	26.88	0.00	3472.31
MW - 2	04/11/12	3499.19	-	26.87	0.00	3472.32
MW - 2	04/17/12	3499.19	-	26.89	0.00	3472.30
MW - 2	04/25/12	3499.19	-	26.82	0.00	3472.37
MW - 2	05/23/12	3499.19	-	26.89	0.00	3472.30
MW - 2	05/31/12	3499.19	-	27.05	0.00	3472.14
MW - 2	06/06/12	3499.19	-	27.03	0.00	3472.16
MW - 2	06/13/12	3499.19	-	27.14	0.00	3472.05
MW - 2	06/20/12	3499.19	-	27.06	0.00	3472.13
MW - 2	07/11/12	3499.19	-	27.05	0.00	3472.14
MW - 2	07/18/12	3499.19	-	27.52	0.00	3471.67
MW - 2	08/02/12	3499.19	-	27.44	0.00	3471.75
MW - 2	08/09/12	3499.19	-	27.58	0.00	3471.61
MW - 2	08/16/12	3499.19	-	27.70	0.00	3471.49
MW - 2	10/02/12	3499.19	-	27.81	0.00	3471.38
MW - 2	10/10/12	3499.19	-	27.71	0.00	3471.48
MW - 2	10/17/12	3499.19	-	27.54	0.00	3471.65
MW - 2	10/26/12	3499.19	-	27.67	0.00	3471.52
MW - 2	11/01/12	3499.19	-	27.54	0.00	3471.65
MW - 2	11/20/12	3499.19	-	27.47	0.00	3471.72
MW - 2	12/13/12	3499.19	-	27.49	0.00	3471.70
MW - 2	12/18/12	3499.19	-	27.32	0.00	3471.87
MW - 3	01/05/12	3500.05	-	28.74	0.00	3471.31
MW - 3	01/18/12	3500.05	-	28.68	0.00	3471.37
MW - 3	01/27/12	3500.05	-	28.72	0.00	3471.33
MW - 3	02/02/12	3500.05	-	28.65	0.00	3471.40
MW - 3	02/10/12	3500.05	-	28.67	0.00	3471.38
MW - 3	02/15/12	3500.05	-	28.70	0.00	3471.35
MW - 3	03/01/12	3500.05	-	28.53	0.00	3471.52
MW - 3	03/07/12	3500.05	-	28.56	0.00	3471.49
MW - 3	03/14/12	3500.05	-	28.58	0.00	3471.47
MW - 3	03/19/12	3500.05	-	28.50	0.00	3471.55
MW - 3	03/26/12	3500.05	-	28.51	0.00	3471.54
MW - 3	04/04/12	3500.05	-	28.54	0.00	3471.51
MW - 3	04/11/12	3500.05	-	28.50	0.00	3471.55
MW - 3	04/17/12	3500.05	-	28.59	0.00	3471.46
MW - 3	04/25/12	3500.05	-	28.47	0.00	3471.58
MW - 3	05/23/12	3500.05	-	28.15	0.00	3471.90
MW - 3	05/31/12	3500.05	-	28.63	0.00	3471.42
MW - 3	06/06/12	3500.05	-	28.66	0.00	3471.39
MW - 3	06/13/12	3500.05	-	28.86	0.00	3471.19
MW - 3	06/20/12	3500.05	-	28.63	0.00	3471.42
MW - 3	07/11/12	3500.05	-	28.76	0.00	3471.29
MW - 3	07/18/12	3500.05	-	28.84	0.00	3471.21
MW - 3	08/02/12	3500.05	-	29.03	0.00	3471.02
MW - 3	08/09/12	3500.05	-	29.20	0.00	3470.85
MW - 3	08/16/12	3500.05	-	29.37	0.00	3470.68
MW - 3	10/02/12	3500.05	-	29.41	0.00	3470.64
MW - 3	10/10/12	3500.05	-	29.31	0.00	3470.74

**TABLE I**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOC REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	10/17/12	3500.05	-	29.20	0.00	3470.85
MW - 3	10/26/12	3500.05	-	29.37	0.00	3470.68
MW - 3	11/01/12	3500.05	-	29.15	0.00	3470.90
MW - 3	11/20/12	3500.05	-	29.16	0.00	3470.89
MW - 3	12/13/12	3500.05	-	28.65	0.00	3471.40
MW - 3	12/18/12	3500.05	-	28.96	0.00	3471.09
MW - 4	01/05/12	3498.38	-	28.44	0.00	3469.94
MW - 4	01/18/12	3498.38	-	28.39	0.00	3469.99
MW - 4	01/27/12	3498.38	-	28.46	0.00	3469.92
MW - 4	02/02/12	3498.38	-	28.51	0.00	3469.87
MW - 4	02/10/12	3498.38	-	28.51	0.00	3469.87
MW - 4	02/15/12	3498.38	-	28.66	0.00	3469.72
MW - 4	03/01/12	3498.38	-	28.28	0.00	3470.10
MW - 4	03/07/12	3498.38	-	28.29	0.00	3470.09
MW - 4	03/14/12	3498.38	-	28.26	0.00	3470.12
MW - 4	03/19/12	3498.38	-	28.16	0.00	3470.22
MW - 4	03/26/12	3498.38	-	28.22	0.00	3470.16
MW - 4	04/04/12	3498.38	-	28.29	0.00	3470.09
MW - 4	04/11/12	3498.38	-	28.18	0.00	3470.20
MW - 4	04/17/12	3498.38	-	28.29	0.00	3470.09
MW - 4	04/25/12	3498.38	-	28.08	0.00	3470.30
MW - 4	05/23/12	3498.38	-	28.15	0.00	3470.23
MW - 4	05/31/12	3498.38	-	28.23	0.00	3470.15
MW - 4	06/06/12	3498.38	-	28.36	0.00	3470.02
MW - 4	06/13/12	3498.38	-	28.30	0.00	3470.08
MW - 4	06/20/12	3498.38	-	28.09	0.00	3470.29
MW - 4	07/11/12	3498.38	-	28.51	0.00	3469.87
MW - 4	07/18/12	3498.38	-	28.59	0.00	3469.79
MW - 4	08/02/12	3498.38	-	28.56	0.00	3469.82
MW - 4	08/09/12	3498.38	-	28.72	0.00	3469.66
MW - 4	08/16/12	3498.38	-	28.85	0.00	3469.53
MW - 4	10/02/12	3498.38	-	29.00	0.00	3469.38
MW - 4	10/10/12	3498.38	-	28.98	0.00	3469.40
MW - 4	10/17/12	3498.38	-	28.71	0.00	3469.67
MW - 4	10/26/12	3498.38	-	28.96	0.00	3469.42
MW - 4	11/01/12	3498.38	-	28.89	0.00	3469.49
MW - 4	11/20/12	3498.38	-	28.65	0.00	3469.73
MW - 4	12/13/12	3498.38	-	29.06	0.00	3469.32
MW - 4	12/18/12	3498.38	-	28.53	0.00	3469.85
MW - 5	01/05/12	3500.12	-	28.42	0.00	3471.70
MW - 5	01/18/12	3500.12	-	28.17	0.00	3471.95
MW - 5	03/01/12	3500.12	-	28.13	0.00	3471.99
MW - 5	05/23/12	3500.12	-	28.19	0.00	3471.93
MW - 5	08/09/12	3500.12	-	28.72	0.00	3471.40
MW - 5	11/20/12	3500.12	-	28.68	0.00	3471.44
MW - 6	01/05/12	3499.82	-	27.24	0.00	3472.58
MW - 6	01/18/12	3499.82	-	27.15	0.00	3472.67
MW - 6	01/27/12	3499.82	-	27.18	0.00	3472.64
MW - 6	02/02/12	3499.82	-	27.12	0.00	3472.70
MW - 6	02/10/12	3499.82	-	27.24	0.00	3472.58
MW - 6	02/15/12	3499.82	-	27.18	0.00	3472.64
MW - 6	03/01/12	3499.82	-	27.02	0.00	3472.80
MW - 6	03/07/12	3499.82	-	27.09	0.00	3472.73
MW - 6	03/14/12	3499.82	-	27.09	0.00	3472.73
MW - 6	03/19/12	3499.82	-	27.02	0.00	3472.80
MW - 6	03/26/12	3499.82	-	27.03	0.00	3472.79
MW - 6	04/04/12	3499.82	-	27.09	0.00	3472.73
MW - 6	04/11/12	3499.82	-	27.02	0.00	3472.80
MW - 6	04/17/12	3499.82	-	27.05	0.00	3472.77
MW - 6	04/25/12	3499.82	-	26.99	0.00	3472.83
MW - 6	05/23/12	3499.82	-	27.08	0.00	3472.74
MW - 6	05/31/12	3499.82	-	27.19	0.00	3472.63
MW - 6	06/06/12	3499.82	-	27.19	0.00	3472.63

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	06/13/12	3499.82	-	27.28	0.00	3472.54
MW - 6	06/20/12	3499.82	-	27.22	0.00	3472.60
MW - 6	07/11/12	3499.82	-	27.25	0.00	3472.57
MW - 6	07/18/12	3499.82	-	27.32	0.00	3472.50
MW - 6	08/02/12	3499.82	-	27.58	0.00	3472.24
MW - 6	08/09/12	3499.82	-	27.68	0.00	3472.14
MW - 6	08/16/12	3499.82	-	27.79	0.00	3472.03
MW - 6	10/02/12	3499.82	-	27.91	0.00	3471.91
MW - 6	10/10/12	3499.82	-	27.88	0.00	3471.94
MW - 6	10/17/12	3499.82	-	27.73	0.00	3472.09
MW - 6	10/26/12	3499.82	-	27.83	0.00	3471.99
MW - 6	11/01/12	3499.82	-	27.70	0.00	3472.12
MW - 6	11/20/12	3499.82	-	27.64	0.00	3472.18
MW - 6	12/13/12	3499.82	-	27.59	0.00	3472.23
MW - 6	12/18/12	3499.82	-	27.55	0.00	3472.27
MW - 7	01/05/12	3498.33	27.89	28.74	0.85	3470.31
MW - 7	01/18/12	3498.33	27.79	28.80	1.01	3470.39
MW - 7	01/27/12	3498.33	27.78	29.00	1.22	3470.37
MW - 7	02/02/12	3498.33	27.72	28.65	0.93	3470.47
MW - 7	02/10/12	3498.33	27.93	28.86	0.93	3470.26
MW - 7	02/15/12	3498.33	27.82	28.54	0.72	3470.40
MW - 7	03/01/12	3498.33	27.70	28.36	0.66	3470.53
MW - 7	03/07/12	3498.33	27.74	28.35	0.61	3470.50
MW - 7	03/14/12	3498.33	27.81	28.49	0.68	3470.42
MW - 7	03/26/12	3498.33	27.74	28.32	0.58	3470.50
MW - 7	04/11/12	3498.33	27.73	28.39	0.66	3470.50
MW - 7	04/17/12	3498.33	27.81	28.44	0.63	3470.43
MW - 7	04/25/12	3498.33	28.31	28.71	0.40	3469.96
MW - 7	05/23/12	3498.33	26.63	28.83	2.20	3471.37
MW - 7	06/06/12	3498.33	27.82	28.87	1.05	3470.35
MW - 7	06/13/12	3498.33	27.97	28.68	0.71	3470.25
MW - 7	06/20/12	3498.33	27.91	28.60	0.69	3470.32
MW - 7	07/11/12	3498.33	27.93	28.59	0.66	3470.30
MW - 7	07/18/12	3498.33	28.00	28.67	0.67	3470.23
MW - 7	08/02/12	3498.33	28.14	29.47	1.33	3469.99
MW - 7	08/09/12	3498.33	28.27	29.47	1.20	3469.88
MW - 7	08/16/12	3498.33	28.34	29.60	1.26	3469.80
MW - 7	10/02/12	3498.33	28.48	29.93	1.45	3469.63
MW - 7	10/10/12	3498.33	28.49	29.82	1.33	3469.64
MW - 7	10/17/12	3498.33	28.26	29.76	1.50	3469.85
MW - 7	10/26/12	3498.33	28.49	29.77	1.28	3469.65
MW - 7	11/01/12	3498.33	28.29	29.64	1.35	3469.84
MW - 7	11/20/12	3498.33	28.25	29.51	1.26	3469.89
MW - 7	12/13/12	3498.33	28.18	29.65	1.47	3469.93
MW - 7	12/18/12	3498.33	28.07	29.36	1.29	3470.07
MW - 8	03/01/12	3502.23	-	30.41	0.00	3471.82
MW - 8	05/23/12	3502.23	-	30.43	0.00	3471.80
MW - 8	08/09/12	3502.23	-	31.11	0.00	3471.12
MW - 8	11/20/12	3502.23	-	30.97	0.00	3471.26
MW - 9	03/01/12	3502.24	-	29.42	0.00	3472.82
MW - 9	05/23/12	3502.24	-	29.45	0.00	3472.79
MW - 9	08/09/12	3502.24	-	30.13	0.00	3472.11
MW - 9	11/20/12	3502.24	-	30.00	0.00	3472.24
MW - 10	01/05/12	3499.42	-	27.96	0.00	3471.46
MW - 10	01/18/12	3499.42	-	27.87	0.00	3471.55
MW - 10	01/27/12	3499.42	-	27.96	0.00	3471.46
MW - 10	02/02/12	3499.42	-	27.88	0.00	3471.54
MW - 10	02/10/12	3499.42	-	28.02	0.00	3471.40
MW - 10	02/15/12	3499.42	-	27.96	0.00	3471.46
MW - 10	03/01/12	3499.42	-	27.75	0.00	3471.67
MW - 10	03/07/12	3499.42	-	27.75	0.00	3471.67
MW - 10	03/14/12	3499.42	-	27.75	0.00	3471.67

**TABLE I**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 10	03/19/12	3499.42	-	27.67	0.00	3471.75
MW - 10	03/26/12	3499.42	-	27.68	0.00	3471.74
MW - 10	04/04/12	3499.42	-	27.77	0.00	3471.65
MW - 10	04/11/12	3499.42	-	27.74	0.00	3471.68
MW - 10	04/17/12	3499.42	-	27.81	0.00	3471.61
MW - 10	04/25/12	3499.42	-	27.68	0.00	3471.74
MW - 10	05/23/12	3499.42	-	27.73	0.00	3471.69
MW - 10	05/31/12	3499.42	-	27.85	0.00	3471.57
MW - 10	06/06/12	3499.42	-	27.75	0.00	3471.67
MW - 10	06/13/12	3499.42	-	27.91	0.00	3471.51
MW - 10	06/20/12	3499.42	-	27.89	0.00	3471.53
MW - 10	07/11/12	3499.42	-	27.98	0.00	3471.44
MW - 10	07/18/12	3499.42	-	28.06	0.00	3471.36
MW - 10	08/02/12	3499.42	-	28.10	0.00	3471.32
MW - 10	08/09/12	3499.42	-	28.29	0.00	3471.13
MW - 10	08/16/12	3499.42	-	28.37	0.00	3471.05
MW - 10	10/02/12	3499.42	-	28.59	0.00	3470.83
MW - 10	10/10/12	3499.42	-	28.60	0.00	3470.82
MW - 10	10/17/12	3499.42	-	28.48	0.00	3470.94
MW - 10	10/26/12	3499.42	28.49	28.50	0.01	3470.93
MW - 10	11/01/12	3499.42		29.39	0.00	3470.03
MW - 10	11/20/12	3499.42		28.38	0.00	3471.04
MW - 10	12/13/12	3499.42		28.41	0.00	3471.01
MW - 10	12/18/12	3499.42		28.20	0.00	3471.22
MW - 11	03/01/12	3498.18	-	27.27	0.00	3470.91
MW - 11	05/23/12	3498.18	-	27.21	0.00	3470.97
MW - 11	08/09/12	3498.18	-	27.81	0.00	3470.37
MW - 11	11/20/12	3498.18	-	27.79	0.00	3470.39
MW - 12	03/01/12	3499.66	-	28.45	0.00	3471.21
MW - 12	05/23/12	3499.66	-	28.38	0.00	3471.28
MW - 12	08/09/12	3499.66	-	28.92	0.00	3470.74
MW - 12	11/20/12	3499.66	-	28.96	0.00	3470.70
MW - 14	03/01/12	3498.54	-	27.76	0.00	3470.78
MW - 14	05/23/12	3498.54	-	27.70	0.00	3470.84
MW - 14	08/09/12	3498.54	-	28.28	0.00	3470.26
MW - 14	11/20/12	3498.54	-	28.29	0.00	3470.25
MW - 15	03/01/12	3500.65	-	30.06	0.00	3470.59
MW - 15	05/23/12	3500.65	-	30.05	0.00	3470.60
MW - 15	08/09/12	3500.65	-	30.64	0.00	3470.01
MW - 15	11/20/12	3500.65	-	30.60	0.00	3470.05
MW - 16	03/01/12	3501.45	-	31.45	0.00	3470.00
MW - 16	05/23/12	3501.45	-	31.43	0.00	3470.02
MW - 16	08/09/12	3501.45	-	31.23	0.00	3470.22
MW - 16	11/20/12	3501.45	-	32.01	0.00	3469.44
MW - 17	01/05/12	3498.32	-	29.29	0.00	3469.03
MW - 17	01/18/12	3498.32	-	29.23	0.00	3469.09
MW - 17	01/27/12	3498.32	-	29.25	0.00	3469.07
MW - 17	02/02/12	3498.32	-	29.20	0.00	3469.12
MW - 17	02/10/12	3498.32	-	29.27	0.00	3469.05
MW - 17	02/15/12	3498.32	-	29.18	0.00	3469.14
MW - 17	03/01/12	3498.32	-	29.06	0.00	3469.26
MW - 17	03/07/12	3498.32	-	29.05	0.00	3469.27
MW - 17	03/14/12	3498.32	-	29.19	0.00	3469.13
MW - 17	03/19/12	3498.32	-	29.00	0.00	3469.32
MW - 17	03/26/12	3498.32	-	29.07	0.00	3469.25
MW - 17	04/04/12	3498.32	-	29.09	0.00	3469.23
MW - 17	04/11/12	3498.32	-	29.10	0.00	3469.22
MW - 17	04/17/12	3498.32	-	29.09	0.00	3469.23
MW - 17	04/25/12	3498.32	-	29.01	0.00	3469.31
MW - 17	05/23/12	3498.32	-	29.06	0.00	3469.26

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 17	05/31/12	3498.32	-	29.12	0.00	3469.20
MW - 17	06/06/12	3498.32	-	29.11	0.00	3469.21
MW - 17	06/13/12	3498.32	-	29.21	0.00	3469.11
MW - 17	06/20/12	3498.32	-	29.09	0.00	3469.23
MW - 17	07/11/12	3498.32	-	29.29	0.00	3469.03
MW - 17	07/18/12	3498.32	-	29.37	0.00	3468.95
MW - 17	08/02/12	3498.32	-	29.43	0.00	3468.89
MW - 17	08/09/12	3498.32	-	29.52	0.00	3468.80
MW - 17	08/16/12	3498.32	-	29.60	0.00	3468.72
MW - 17	10/02/12	3498.32	-	29.81	0.00	3468.51
MW - 17	10/10/12	3498.32	-	29.81	0.00	3468.51
MW - 17	10/17/12	3498.32	-	29.59	0.00	3468.73
MW - 17	10/26/12	3498.32	-	29.78	0.00	3468.54
MW - 17	11/01/12	3498.32	-	29.69	0.00	3468.63
MW - 17	11/20/12	3498.32	-	29.67	0.00	3468.65
MW - 17	12/13/12	3498.32	-	29.64	0.00	3468.68
MW - 17	12/18/12	3498.32	-	29.48	0.00	3468.84
MW - 18	01/05/12	3597.25	-	28.49	0.00	3568.76
MW - 18	01/18/12	3597.25	-	28.39	0.00	3568.86
MW - 18	01/27/12	3597.25	-	28.39	0.00	3568.86
MW - 18	02/02/12	3597.25	-	28.36	0.00	3568.89
MW - 18	02/10/12	3597.25	-	28.40	0.00	3568.85
MW - 18	02/15/12	3597.25	-	28.35	0.00	3568.90
MW - 18	03/01/12	3597.25	-	28.12	0.00	3569.13
MW - 18	03/07/12	3597.25	-	28.24	0.00	3569.01
MW - 18	03/14/12	3597.25	-	28.26	0.00	3568.99
MW - 18	03/19/12	3597.25	-	28.22	0.00	3569.03
MW - 18	03/26/12	3597.25	-	28.23	0.00	3569.02
MW - 18	04/04/12	3597.25	-	28.24	0.00	3569.01
MW - 18	04/11/12	3597.25	-	28.21	0.00	3569.04
MW - 18	04/17/12	3597.25	-	28.19	0.00	3569.06
MW - 18	04/25/12	3597.25	-	28.16	0.00	3569.09
MW - 18	05/23/12	3597.25	-	28.20	0.00	3569.05
MW - 18	05/31/12	3597.25	-	28.23	0.00	3569.02
MW - 18	06/06/12	3597.25	-	28.18	0.00	3569.07
MW - 18	06/13/12	3597.25	-	28.26	0.00	3568.99
MW - 18	06/20/12	3597.25	-	27.99	0.00	3569.26
MW - 18	07/11/12	3597.25	-	28.35	0.00	3568.90
MW - 18	07/18/12	3597.25	-	28.43	0.00	3568.82
MW - 18	08/02/12	3597.25	-	28.51	0.00	3568.74
MW - 18	08/09/12	3597.25	-	28.62	0.00	3568.63
MW - 18	08/16/12	3597.25	-	28.71	0.00	3568.54
MW - 18	10/02/12	3597.25	-	28.93	0.00	3568.32
MW - 18	10/10/12	3597.25	-	28.87	0.00	3568.38
MW - 18	10/17/12	3597.25	-	28.68	0.00	3568.57
MW - 18	10/26/12	3597.25	-	28.87	0.00	3568.38
MW - 18	11/01/12	3597.25	-	28.91	0.00	3568.34
MW - 18	11/20/12	3597.25	-	28.70	0.00	3568.55
MW - 18	12/13/12	3597.25	-	28.69	0.00	3568.56
MW - 18	12/18/12	3597.25	-	28.62	0.00	3568.63
MW - 20	03/01/12	3496.59	-	26.40	0.00	3470.19
MW - 20	05/23/12	3496.59	-	26.08	0.00	3470.51
MW - 20	08/09/12	3496.59	-	26.79	0.00	3469.80
MW - 20	11/20/12	3496.59	-	26.88	0.00	3469.71
MW - 21	03/01/12	3503.03	-	34.08	0.00	3468.95
MW - 21	05/23/12	3503.03	-	34.10	0.00	3468.93
MW - 21	08/09/12	3503.03	-	34.54	0.00	3468.49
MW - 21	11/20/12	3503.03	-	34.65	0.00	3468.38
MW - 22	03/01/12	3500.05	-	31.46	0.00	3468.59
MW - 22	05/23/12	3500.05	-	31.48	0.00	3468.57
MW - 22	08/09/12	3500.05	-	31.92	0.00	3468.13
MW - 22	11/20/12	3500.05	-	32.03	0.00	3468.02

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSI THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 23	01/05/12	3498.88	-	30.53	0.00	3468.35
MW - 23	01/18/12	3498.88	-	30.47	0.00	3468.41
MW - 23	01/27/12	3498.88	-	30.48	0.00	3468.40
MW - 23	02/02/12	3498.88	-	30.39	0.00	3468.49
MW - 23	02/10/12	3498.88	-	30.46	0.00	3468.42
MW - 23	02/15/12	3498.88	-	30.39	0.00	3468.49
MW - 23	03/01/12	3498.88	-	30.33	0.00	3468.55
MW - 23	03/07/12	3498.88	-	30.33	0.00	3468.55
MW - 23	03/14/12	3498.88	-	30.35	0.00	3468.53
MW - 23	03/19/12	3498.88	-	30.31	0.00	3468.57
MW - 23	03/26/12	3498.88	-	30.29	0.00	3468.59
MW - 23	04/04/12	3498.88	-	30.34	0.00	3468.54
MW - 23	04/11/12	3498.88	-	30.33	0.00	3468.55
MW - 23	04/17/12	3498.88	-	30.34	0.00	3468.54
MW - 23	04/25/12	3498.88	-	30.27	0.00	3468.61
MW - 23	05/23/12	3498.88	-	30.32	0.00	3468.56
MW - 23	05/31/12	3498.88	-	30.38	0.00	3468.50
MW - 23	06/06/12	3498.88	-	30.34	0.00	3468.54
MW - 23	06/13/12	3498.88	-	30.45	0.00	3468.43
MW - 23	06/20/12	3498.88	-	30.38	0.00	3468.50
MW - 23	07/11/12	3498.88	-	30.56	0.00	3468.32
MW - 23	07/18/12	3498.88	-	30.63	0.00	3468.25
MW - 23	08/02/12	3498.88	-	30.71	0.00	3468.17
MW - 23	08/09/12	3498.88	-	30.76	0.00	3468.12
MW - 23	08/16/12	3498.88	-	30.88	0.00	3468.00
MW - 23	10/02/12	3498.88	-	31.08	0.00	3467.80
MW - 23	10/10/12	3498.88	-	31.01	0.00	3467.87
MW - 23	10/17/12	3498.88	-	30.89	0.00	3467.99
MW - 23	10/26/12	3498.88	-	31.02	0.00	3467.86
MW - 23	11/01/12	3498.88	-	30.94	0.00	3467.94
MW - 23	11/20/12	3498.88	-	30.91	0.00	3467.97
MW - 23	12/13/12	3498.88	-	30.84	0.00	3468.04
MW - 23	12/18/12	3498.88	-	30.74	0.00	3468.14
MW - 24	01/05/12	3498.79	-	30.30	0.00	3468.49
MW - 24	01/18/12	3498.79	-	30.25	0.00	3468.54
MW - 24	01/27/12	3498.79	-	30.26	0.00	3468.53
MW - 24	02/02/12	3498.79	-	30.20	0.00	3468.59
MW - 24	02/10/12	3498.79	-	30.31	0.00	3468.48
MW - 24	02/15/12	3498.79	-	30.24	0.00	3468.55
MW - 24	03/01/12	3498.79	-	30.15	0.00	3468.64
MW - 24	03/07/12	3498.79	-	30.14	0.00	3468.65
MW - 24	03/14/12	3498.79	-	30.19	0.00	3468.60
MW - 24	03/19/12	3498.79	-	30.13	0.00	3468.66
MW - 24	03/26/12	3498.79	-	30.13	0.00	3468.66
MW - 24	04/04/12	3498.79	-	30.13	0.00	3468.66
MW - 24	04/11/12	3498.79	-	30.11	0.00	3468.68
MW - 24	04/17/12	3498.79	-	30.14	0.00	3468.65
MW - 24	04/25/12	3498.79	-	30.09	0.00	3468.70
MW - 24	05/23/12	3498.79	-	30.15	0.00	3468.64
MW - 24	05/31/12	3498.79	-	30.19	0.00	3468.60
MW - 24	06/06/12	3498.79	-	30.17	0.00	3468.62
MW - 24	06/13/12	3498.79	-	30.33	0.00	3468.46
MW - 24	06/20/12	3498.79	-	30.21	0.00	3468.58
MW - 24	07/11/12	3498.79	-	30.38	0.00	3468.41
MW - 24	07/18/12	3498.79	-	30.46	0.00	3468.33
MW - 24	08/02/12	3498.79	-	30.54	0.00	3468.25
MW - 24	08/09/12	3498.79	-	30.69	0.00	3468.10
MW - 24	08/16/12	3498.79	-	30.71	0.00	3468.08
MW - 24	10/02/12	3498.79	-	30.90	0.00	3467.89
MW - 24	10/10/12	3498.79	-	30.86	0.00	3467.93
MW - 24	10/17/12	3498.79	-	30.71	0.00	3468.08
MW - 24	10/26/12	3498.79	-	30.84	0.00	3467.95
MW - 24	11/01/12	3498.79	-	30.72	0.00	3468.07
MW - 24	11/20/12	3498.79	-	30.69	0.00	3468.10

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOC REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 24	12/13/12	3498.79	-	30.64	0.00	3468.15
MW - 24	12/18/12	3498.79	-	30.55	0.00	3468.24
MW - 25	01/05/12	3498.08	-	30.31	0.00	3467.77
MW - 25	01/18/12	3498.08	-	30.29	0.00	3467.79
MW - 25	01/27/12	3498.08	-	30.25	0.00	3467.83
MW - 25	02/02/12	3498.08	-	30.18	0.00	3467.90
MW - 25	02/10/12	3498.08	-	30.27	0.00	3467.81
MW - 25	02/15/12	3498.08	-	30.21	0.00	3467.87
MW - 25	03/01/12	3498.08	-	30.11	0.00	3467.97
MW - 25	03/07/12	3498.08	-	30.11	0.00	3467.97
MW - 25	03/14/12	3498.08	-	30.13	0.00	3467.95
MW - 25	03/19/12	3498.08	-	30.09	0.00	3467.99
MW - 25	03/26/12	3498.08	-	30.08	0.00	3468.00
MW - 25	04/04/12	3498.08	-	30.12	0.00	3467.96
MW - 25	04/11/12	3498.08	-	30.08	0.00	3468.00
MW - 25	04/17/12	3498.08	-	30.11	0.00	3467.97
MW - 25	04/25/12	3498.08	-	30.05	0.00	3468.03
MW - 25	05/23/12	3498.08	-	30.10	0.00	3467.98
MW - 25	05/31/12	3498.08	-	30.14	0.00	3467.94
MW - 25	06/06/12	3498.08	-	30.19	0.00	3467.89
MW - 25	06/13/12	3498.08	-	30.27	0.00	3467.81
MW - 25	06/20/12	3498.08	-	30.19	0.00	3467.89
MW - 25	07/11/12	3498.08	-	30.34	0.00	3467.74
MW - 25	07/18/12	3498.08	-	30.42	0.00	3467.66
MW - 25	08/02/12	3498.08	-	30.54	0.00	3467.54
MW - 25	08/09/12	3498.08	-	30.61	0.00	3467.47
MW - 25	08/16/12	3498.08	-	30.31	0.00	3467.77
MW - 25	10/02/12	3498.08	-	30.88	0.00	3467.20
MW - 25	10/10/12	3498.08	-	30.81	0.00	3467.27
MW - 25	10/17/12	3498.08	-	30.67	0.00	3467.41
MW - 25	10/26/12	3498.08	-	30.79	0.00	3467.29
MW - 25	11/01/12	3498.08	-	30.66	0.00	3467.42
MW - 25	11/20/12	3498.08	-	30.66	0.00	3467.42
MW - 25	12/13/12	3498.08	-	30.57	0.00	3467.51
MW - 25	12/18/12	3498.08	-	30.55	0.00	3467.53
MW - 26	03/01/12	3499.18	-	30.80	0.00	3468.38
MW - 26	05/23/12	3499.18	-	30.76	0.00	3468.42
MW - 26	08/09/12	3499.18	-	31.22	0.00	3467.96
MW - 26	11/20/12	3499.18	-	31.30	0.00	3467.88
MW - 27	03/01/12	3498.03	-	30.57	0.00	3467.46
MW - 27	05/23/12	3498.03	-	30.59	0.00	3467.44
MW - 27	08/09/12	3498.03	-	31.09	0.00	3466.94
MW - 27	11/20/12	3498.03	-	31.15	0.00	3466.88
MW - 28	03/01/12	3498.69	-	30.87	0.00	3467.82
MW - 28	05/23/12	3498.69	-	30.87	0.00	3467.82
MW - 28	08/09/12	3498.69	-	31.34	0.00	3467.35
MW - 28	11/20/12	3498.69	-	31.42	0.00	3467.27
MW - 30	03/01/12	3498.65	-	31.27	0.00	3467.38
MW - 30	05/23/12	3498.65	-	31.26	0.00	3467.39
MW - 30	08/09/12	3498.65	-	31.75	0.00	3466.90
MW - 30	11/20/12	3498.65	-	31.83	0.00	3466.82
RW - 1	01/05/12	3498.89	-	26.76	0.00	3472.13
RW - 1	01/18/12	3498.89	-	26.75	0.00	3472.14
RW - 1	01/27/12	3498.89	-	26.72	0.00	3472.17
RW - 1	02/02/12	3498.89	-	26.79	0.00	3472.10
RW - 1	02/10/12	3498.89	-	26.75	0.00	3472.14
RW - 1	02/15/12	3498.89	-	27.39	0.00	3471.50
RW - 1	03/01/12	3498.89	-	26.54	0.00	3472.35
RW - 1	03/07/12	3498.89	-	26.57	0.00	3472.32
RW - 1	03/14/12	3498.89	-	26.65	0.00	3472.24

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	03/19/12	3498.89	-	26.63	0.00	3472.26
RW - 1	03/26/12	3498.89	-	26.53	0.00	3472.36
RW - 1	04/04/12	3498.89	-	26.52	0.00	3472.37
RW - 1	04/11/12	3498.89	-	26.54	0.00	3472.35
RW - 1	04/25/12	3498.89	-	26.49	0.00	3472.40
RW - 1	05/23/12	3498.89	-	26.63	0.00	3472.26
RW - 1	05/31/12	3498.89	-	26.75	0.00	3472.14
RW - 1	06/06/12	3498.89	-	26.80	0.00	3472.09
RW - 1	06/13/12	3498.89	-	27.40	0.00	3471.49
RW - 1	06/20/12	3498.89	-	27.36	0.00	3471.53
RW - 1	07/18/12	3498.89	-	26.85	0.00	3472.04
RW - 1	08/02/12	3498.89	-	27.23	0.00	3471.66
RW - 1	08/09/12	3498.89	-	27.26	0.00	3471.63
RW - 1	08/16/12	3498.89	-	27.36	0.00	3471.53
RW - 1	10/02/12	3498.89	-	27.58	0.00	3471.31
RW - 1	10/10/12	3498.89	-	27.40	0.00	3471.49
RW - 1	10/17/12	3498.89	-	27.27	0.00	3471.62
RW - 1	10/26/12	3498.89	-	27.30	0.00	3471.59
RW - 1	11/01/12	3498.89	-	28.12	0.00	3470.77
RW - 1	11/20/12	3498.89	-	27.14	0.00	3471.75
RW - 1	12/13/12	3498.89	-	27.19	0.00	3471.70
RW - 1	12/18/12	3498.89	-	27.00	0.00	3471.89
RW - 2	01/05/12	3498.99	-	27.49	0.00	3471.50
RW - 2	01/18/12	3498.99	-	27.34	0.00	3471.65
RW - 2	01/27/12	3498.99	-	27.44	0.00	3471.55
RW - 2	02/02/12	3498.99	-	27.35	0.00	3471.64
RW - 2	02/10/12	3498.99	-	27.44	0.00	3471.55
RW - 2	02/15/12	3498.99	-	26.66	0.00	3472.33
RW - 2	03/01/12	3498.99	-	27.21	0.00	3471.78
RW - 2	03/07/12	3498.99	-	27.30	0.00	3471.69
RW - 2	03/14/12	3498.99	-	27.38	0.00	3471.61
RW - 2	03/19/12	3498.99	-	27.34	0.00	3471.65
RW - 2	03/26/12	3498.99	-	27.26	0.00	3471.73
RW - 2	04/04/12	3498.99	-	27.27	0.00	3471.72
RW - 2	04/11/12	3498.99	-	27.27	0.00	3471.72
RW - 2	04/25/12	3498.99	-	27.20	0.00	3471.79
RW - 2	05/23/12	3498.99	-	27.23	0.00	3471.76
RW - 2	05/31/12	3498.99	-	27.35	0.00	3471.64
RW - 2	06/06/12	3498.99	-	27.49	0.00	3471.50
RW - 2	06/13/12	3498.99	-	27.65	0.00	3471.34
RW - 2	06/20/12	3498.99	-	27.61	0.00	3471.38
RW - 2	07/18/12	3498.99	-	27.52	0.00	3471.47
RW - 2	08/02/12	3498.99	-	27.96	0.00	3471.03
RW - 2	08/09/12	3498.99	-	28.01	0.00	3470.98
RW - 2	08/16/12	3498.99	-	28.09	0.00	3470.90
RW - 2	10/02/12	3498.99	-	28.30	0.00	3470.69
RW - 2	10/10/12	3498.99	-	28.07	0.00	3470.92
RW - 2	10/17/12	3498.99	-	28.01	0.00	3470.98
RW - 2	10/26/12	3498.99	-	28.26	0.00	3470.73
RW - 2	11/01/12	3498.99	-	27.25	0.00	3471.74
RW - 2	11/20/12	3498.99	-	27.83	0.00	3471.16
RW - 2	12/13/12	3498.99	-	27.92	0.00	3471.07
RW - 2	12/18/12	3498.99	-	27.68	0.00	3471.31

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

**TABLE 2**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NM**  
**NMOCD REFERENCE NUMBER AP-0013**

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	SW 846-8012B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
<b>NMOCD REGULATORY LIMIT</b>		<b>0.010</b>	<b>0.750</b>	<b>0.750</b>	<b>0.620</b>	
MW - 1	03/01/12	Not Sampled on Current Sample Schedule				
MW - 1	05/23/12	Not Sampled on Current Sample Schedule				
MW - 1	08/09/12	Not Sampled on Current Sample Schedule				
MW - 1	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 2	03/01/12	<b>0.1730</b>	<0.005	0.0844	0.1440	
MW - 2	05/23/12	<b>0.0728</b>	<0.001	0.0183	0.0225	
MW - 2	08/09/12	<b>0.1940</b>	<0.05	<0.05	0.0520	
MW - 2	11/20/12	<b>0.144</b>	<0.01	<0.01	<0.01	
MW - 3	03/01/12	<b>1.3400</b>	<0.100	<0.100	<0.100	
MW - 3	05/23/12	<b>0.9040</b>	<0.050	0.0777	0.0653	
MW - 3	08/09/12	<b>0.0054</b>	<0.001	<0.001	0.0016	
MW - 3	11/20/12	<b>0.494</b>	<0.005	0.0405	0.0382	
MW - 4	03/01/12	<b>1.3100</b>	<0.100	<0.100	<0.100	
MW - 4	05/23/12	<b>0.7070</b>	<0.050	<0.050	0.0622	
MW - 4	08/09/12	<b>0.0198</b>	<0.001	0.0026	0.0049	
MW - 4	11/20/12	<b>0.938</b>	<0.01	0.0437	0.1870	
MW - 5	03/01/12	<b>1.0900</b>	<0.005	0.4740	0.2680	
MW - 5	05/23/12	<b>1.2100</b>	<0.050	0.5130	0.2380	
MW - 5	08/09/12	Well Bent - Did Not Sample				
MW - 5	11/20/12	<b>0.909</b>	<0.005	0.589	0.2300	
MW - 6	03/01/12	<b>0.1310</b>	<0.005	<0.005	<0.005	
MW - 6	05/23/12	<b>0.1150</b>	<0.001	0.0064	0.0121	
MW - 6	08/09/12	<b>0.1480</b>	<0.05	<0.05	<0.05	
MW - 6	11/20/12	<b>0.112</b>	<0.005	<0.005	<0.005	
MW - 7	03/01/12	Not Sampled Due to PSH in Well				
MW - 7	05/23/12	Not Sampled Due to PSH in Well				
MW - 7	08/09/12	Not Sampled Due to PSH in Well				
MW - 7	11/20/12	Not Sampled Due to PSH in Well				
MW - 8	03/01/12	Not Sampled on Current Sample Schedule				
MW - 8	05/23/12	Not Sampled on Current Sample Schedule				
MW - 8	08/09/12	Not Sampled on Current Sample Schedule				
MW - 8	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 9	03/01/12	Not Sampled on Current Sample Schedule				
MW - 9	05/23/12	Not Sampled on Current Sample Schedule				
MW - 9	08/09/12	Not Sampled on Current Sample Schedule				

**TABLE 2**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NM**  
**NMOCD REFERENCE NUMBER AP-0013**

*All concentrations are reported in mg/L*

		SW 846-8012B, 5030				
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.010	0.750	0.750	0.620	
MW - 9	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 10	03/01/12	0.8820	<0.100	<0.100	<0.100	
MW - 10	05/23/12	0.2620	<0.050	<0.050	<0.050	
MW - 10	08/09/12	0.2410	<0.050	<0.050	<0.050	
MW - 10	11/20/12	0.259	<0.01	<0.01	<0.01	
MW - 11	03/01/12	Not Sampled on Current Sample Schedule				
MW - 11	05/23/12	Not Sampled on Current Sample Schedule				
MW - 11	08/09/12	Not Sampled on Current Sample Schedule				
MW - 11	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 12	03/01/12	Not Sampled on Current Sample Schedule				
MW - 12	05/23/12	Not Sampled on Current Sample Schedule				
MW - 12	08/09/12	Not Sampled on Current Sample Schedule				
MW - 12	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 14	03/01/12	Not Sampled on Current Sample Schedule				
MW - 14	05/23/12	Not Sampled on Current Sample Schedule				
MW - 14	08/09/12	Not Sampled on Current Sample Schedule				
MW - 14	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 15	03/01/12	Not Sampled on Current Sample Schedule				
MW - 15	05/23/12	Not Sampled on Current Sample Schedule				
MW - 15	08/09/12	Not Sampled on Current Sample Schedule				
MW - 15	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 16	03/01/12	Not Sampled on Current Sample Schedule				
MW - 16	05/23/12	Not Sampled on Current Sample Schedule				
MW - 16	08/09/12	Not Sampled on Current Sample Schedule				
MW - 16	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 17	03/01/12	2.3200	<0.100	1.7000	<0.100	
MW - 17	05/23/12	1.9100	<0.050	1.2500	0.2350	
MW - 17	08/09/12	0.0320	<0.001	0.0206	0.0051	
MW - 17	11/20/12	1.72	<0.01	0.934	0.2280	
MW - 18	03/01/12	3.1400	<0.0500	2.1000	1.3300	
MW - 18	05/23/12	3.2200	<0.0500	2.4200	0.2190	
MW - 18	08/09/12	0.0380	<0.001	0.0235	0.0043	
MW - 18	11/20/12	3.18	<0.01	2.280	0.234	
MW - 20	03/01/12	Not Sampled on Current Sample Schedule				

**TABLE 2**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NM**  
**NMOCD REFERENCE NUMBER AP-0013**

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	SW 846-8012B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.010	0.750	0.750	0.620	
MW - 20	05/23/12	Not Sampled on Current Sample Schedule				
MW - 20	08/09/12	Not Sampled on Current Sample Schedule				
MW - 20	11/20/12	0.0173	<0.001	<0.001	<0.001	
MW - 21	03/01/12	Not Sampled on Current Sample Schedule				
MW - 21	05/23/12	Not Sampled on Current Sample Schedule				
MW - 21	08/09/12	Not Sampled on Current Sample Schedule				
MW - 21	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 22	03/01/12	Not Sampled on Current Sample Schedule				
MW - 22	05/23/12	Not Sampled on Current Sample Schedule				
MW - 22	08/09/12	Not Sampled on Current Sample Schedule				
MW - 22	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 23	03/01/12	0.3890	<0.0200	<0.0200	<0.0200	
MW - 23	05/23/12	0.4730	<0.050	<0.050	<0.050	
MW - 23	08/09/12	0.4170	<0.01	<0.01	<0.01	
MW - 23	11/20/12	0.336	<0.002	<0.002	<0.002	
MW - 24	03/01/12	1.1600	<0.020	<0.020	<0.020	
MW - 24	05/23/12	3.5900	<0.050	0.3570	0.1160	
MW - 24	08/09/12	0.0626	<0.001	0.0071	0.0033	
MW - 24	11/20/12	3.35	<0.01	0.375	0.1310	
MW - 25	03/01/12	0.9170	<0.0500	<0.0500	<0.0500	
MW - 25	05/23/12	0.8220	<0.0500	<0.0500	<0.0500	
MW - 25	08/09/12	0.0129	<0.001	0.0010	0.0020	
MW - 25	11/20/12	0.662	<0.01	<0.01	<0.01	
MW - 26	03/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 26	05/23/12	0.00100	<0.001	<0.001	<0.001	
MW - 26	08/09/12	0.00100	<0.001	0.00450	0.00740	
MW - 26	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 27	03/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 27	05/23/12	<0.001	<0.001	<0.001	<0.001	
MW - 27	08/09/12	<0.001	<0.001	<0.001	0.0030	
MW - 27	11/20/12	<0.001	<0.001	<0.001	<0.001	
MW - 28	03/01/12	Not Sampled on Current Sample Schedule				
MW - 28	05/23/12	<0.001	<0.001	<0.001	<0.001	
MW - 28	08/09/12	Not Sampled on Current Sample Schedule				
MW - 28	11/20/12	<0.001	<0.001	<0.001	<0.001	

**TABLE 2**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER - 2012**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**LEA COUNTY, NM**  
**NMOCD REFERENCE NUMBER AP-0013**

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	SW 846-8012B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULARY LIMIT		0.010	0.750	0.750	0.620	
MW - 30	03/01/12	Not Sampled on Current Sample Schedule				
MW - 30	05/23/12	<0.001	<0.001	<0.001	<0.001	
MW - 30	08/09/12	Not Sampled on Current Sample Schedule				
MW - 30	11/20/12	<0.001	<0.001	<0.001	<0.001	
RW - 1	03/01/12	<b>1.2100</b>	<0.100	<0.100	<0.100	
RW - 1	05/23/12	<b>0.8560</b>	<0.100	0.2590	0.1700	
RW - 1	08/09/12	<b>0.0056</b>	<0.001	<0.001	0.0015	
RW - 1	11/20/12	<b>0.336</b>	<0.01	<0.01	0.0443	
RW - 2	03/01/12	<b>0.9620</b>	<0.100	<0.100	<0.100	
RW - 2	05/23/12	<b>1.0700</b>	<0.050	0.3370	0.1150	
RW - 2	08/09/12	<b>0.0135</b>	<0.001	0.0047	0.0022	
RW - 2	11/20/12	<b>0.335</b>	<0.01	0.1240	0.0436	

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

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-18MONUMENT, NEW MEXICO  
NMOCD REFERENCE NUMBER AP-0013*All water concentrations are reported in mg/L.*

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[a]pyrene	Benz[b]fluoranthene	Benz[ghi]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Florene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	0.001 mg/L	0.0001 mg/L	0.0007 mg/L	0.001 mg/L	—	0.001 mg/L	0.0002 mg/L	0.0003 mg/L	0.001 mg/L	0.001 mg/L	0.0004 mg/L	0.001 mg/L	0.001 mg/L	0.03 mg/L	—	—	—	
MW-1	11/13/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-2	11/13/08	<0.00917	<0.00917	<b>0.0389</b>	<0.00917	<0.00917	<0.00917	<0.00917	<0.00917	<0.00917	<0.00917	<0.00917	<0.00917	<b>0.0256</b>	<0.00917	<b>0.0385</b>	<0.00917	<b>0.0778</b>	<b>0.179</b>	<b>0.180</b>	0.028
	11/23/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<b>0.0451</b>	<0.000922	<b>0.00667</b>	<0.000922	0.0133	<b>0.0304</b>	<b>0.0217</b>	0.00353
	11/18/10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.00419</b>	<0.000184	0.00164	0.0065	0.00198	0.00219		
	12/14/11	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<b>0.00495</b>	<0.000188	0.0154	<b>0.0292</b>	0.0174	0.00412		
	11/20/12	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<0.00948	<b>0.0306</b>	<0.00948	<b>0.0202</b>	0.0664	0.0179	<0.00948		
MW-3	11/13/08	<0.000184	0.000464	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.00202</b>	<0.000184	<b>0.00241</b>	<0.000184	0.00606	0.0137	0.00483	0.00215
	11/23/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<b>0.00996</b>	<0.000922	<b>0.0108</b>	<0.000922	0.0294	<b>0.0707</b>	<b>0.0332</b>	0.00908
	11/18/10	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000552	<0.000183	0.00091	<0.000183	0.00239	0.00485	0.000925	0.000708
	12/14/11	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<b>0.00294</b>	<0.000188	0.00586	0.0197	0.00399	0.00269		
	11/20/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	0.0145	<0.00190	<0.00190	
MW-4	11/13/08	<0.00463	<0.00463	<0.00463	<0.00463	<0.00463	<0.00463	<0.00463	<b>0.00752</b>	<0.00463	<0.00463	<0.00463	<0.00463	<b>0.0307</b>	<0.00463	<b>0.0292</b>	<b>0.164</b>	<b>0.0532</b>	0.024		
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.0166</b>	<0.000184	<b>0.00161</b>	<0.000184	0.0107	<b>0.0229</b>	<b>0.00588</b>	0.00198
	11/18/10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.00174</b>	<0.000184	<b>0.00117</b>	<0.000184	0.0101	<b>0.0162</b>	<b>0.00576</b>	0.00232
	12/14/11	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<b>0.0124</b>	<0.000187	<b>0.0177</b>	0.077	<b>0.0227</b>	0.0103		
	11/20/12	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<b>0.0575</b>	<0.00952	<b>0.0707</b>	<b>0.292</b>	0.115	<0.00952		
MW-5	11/13/08	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<0.00183	<b>0.00478</b>	<0.00183	<b>0.00528</b>	<0.00183	0.0309	<b>0.0417</b>	<b>0.0354</b>	0.00485
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<b>0.00201</b>	<0.000184	<b>0.00176</b>	<0.000184	0.0216	<b>0.0285</b>	<b>0.023</b>	0.00268
	11/18/10	Not Sampled due to well obstruction.																			
	12/16/11	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<b>0.00665</b>	<0.000183	<b>0.0281</b>	0.038	<b>0.0347</b>	0.00581		
	11/20/12	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<b>0.0598</b>	<0.00952	<b>0.142</b>	0.122	<0.00952			

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-18MONUMENT, NEW MEXICO  
NMOCD REFERENCE NUMBER AP-0013*All water concentrations are reported in mg/L.*

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[al]pyrene	Benz[a]jfluoranthene	Benz[g,h,i]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.	—	—	—	0.001 mg/L	0.0001 mg/L	0.0007 mg/L	0.001 mg/L	—	0.0002 mg/L	0.0003 mg/L	0.001 mg/L	0.001 mg/L	0.0004 mg/L	0.001 mg/L	0.001 mg/L	0.03 mg/L	—	—	—	
MW-6	11/13/08	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	<0.00185	0.00814	<0.00185	0.0282	0.0434	0.0336	0.00709	
	11/23/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0116	<0.000922	0.00817	0.0327	0.00836	0.00702	
	11/18/10	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00342	<0.000183	<0.000183	0.00393	<0.000183	0.00253	
	12/14/11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0151	<0.000184	0.00838	0.0349	0.0078	0.010	
	11/20/12	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	0.0173	<0.00952	0.0118	0.0395	<0.00952	<0.00952	
MW-7	11/13/08	<0.00922	<0.00922	<b>0.0744</b>	<0.00922	<0.00922	<0.00922	<0.00922	<b>0.0189</b>	<0.00922	<0.00922	<b>0.0648</b>	<0.00922	<b>0.0735</b>	<0.00922	<b>0.058</b>	<b>0.267</b>	<b>0.236</b>	<0.00922	
	11/23/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<b>0.0136</b>	<0.000917	<b>0.0184</b>	<0.000917	<b>0.0245</b>	<b>0.102</b>	<b>0.0863</b>	0.0100	
	11/18/10	Not Sampled due to the presence of PSH.																		
	12/14/11	Not Sampled due to the presence of PSH.																		
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																		
MW-8	11/13/08	<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	<0.000185	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																		
MW-9	11/13/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																		
MW-10	11/13/08	<0.000184	<0.000184	0.0108	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0096	<0.000184	0.0107	<0.000184	0.00225	0.0289	<0.000184
	11/23/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.00664	<0.000922	0.00726	<0.000922	0.00304	0.0277	<0.000922
	11/18/10	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	0.00245	<0.000186	0.00321	<0.000186	0.00209	0.0146	0.000504
	12/14/11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00496	<0.000184	0.0031	0.0193	0.0015	0.00373	
	11/20/12	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	0.0228	<0.00952	

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-18

MONUMENT, NEW MEXICO

NMOCD REFERENCE NUMBER AP-0013

*All water concentrations are reported in mg/L*

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[a]pyrene	Benz[b]fluoranthene	Benz[g,h,i]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3- <i>cd</i> ]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		---	---	0.001 mg/L	0.0001 mg/L	0.0007 mg/L	0.001 mg/L	---	0.0001 mg/L	0.0002 mg/L	0.0003 mg/L	0.001 mg/L	0.0004 mg/L	0.001 mg/L	0.001 mg/L	0.03 mg/L			---		
MW-11	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-12	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000345	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-14	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-15	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/23/09	<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	<0.000185	<0.000185	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-16	11/13/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-18

MONUMENT, NEW MEXICO

NMOCD REFERENCE NUMBER AP-0013

All water concentrations are reported in mg/L

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzol[a]anthracene	Benzol[a]pyrene	Benzol[b]fluoranthene	Benzol[g,h,i]perylene	Benzol[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
<b>Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.</b>																					
MW-17	11/13/08	<0.000184	0.00022	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000306	<0.000184	<0.000184	0.00266	<0.000184	0.0023	<0.000184	0.0322	0.0261	0.0203	0.00292	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00162	<0.000184	0.00138	<0.000184	0.0371	0.0300	0.0229	0.00205	
	11/18/10	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	0.00107	<0.000186	0.000848	<0.000186	0.0155	0.0153	0.00854	0.00153	
	12/14/11	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	<0.000189	0.00153	<0.000189	0.00133	<0.000189	0.0281	0.0384	0.0143	0.00238	
	11/20/12	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	0.00336	<0.000190	0.00356	<0.000190	0.0483	0.0577	0.0254	0.00557	
MW-18	11/13/08	<0.000183	0.000247	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00205	<0.000183	0.00123	<0.000183	0.0422	0.0326	0.021	0.00262	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00163	<0.000184	0.00166	<0.000184	0.0328	0.0282	0.0192	0.00186	
	11/18/10	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	0.00112	<0.000186	0.000842	<0.000186	0.0247	0.0191	0.012	0.00162	
	12/14/11	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00147	<0.000183	0.00131	<0.000183	0.0278	0.0276	0.0157	0.00242	
	11/20/12	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	0.00245	<0.000190	0.00222	<0.000190	0.0639	0.0479	0.0337	0.0045	
MW-20	11/13/08	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	0.000303	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-21	11/13/08	<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	<0.000185	<0.000185	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-22	11/13/08	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
TNM 97-18MONUMENT, NEW MEXICO  
NMOCD REFERENCE NUMBER AP-0013*All water concentrations are reported in mg/L.*

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[ghi]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
<b>Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.</b>																					
MW-23	11/13/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000404	<0.000184	0.000367	0.00169	<0.000184	0.000831		
	11/23/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000404	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-24	11/13/08	<0.000184	<0.000184	0.000461	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000601	<0.000184	0.000453	<0.000184	0.00391	0.00634	0.00168	0.000818
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-25	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000236
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-26	11/13/08	<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	0.000315	<0.000184	0.000323	0.0015	<0.000184	0.00135	
	11/23/09	<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	0.000766	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			
MW-27	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/23/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																			
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																			
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																			

TABLE 3

**POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER**  
**PLAINS MARKETING, L.P.**  
**TNM 97-18**  
**MONUMENT, NEW MEXICO**  
**NMOCRD REFERENCE NUMBER AP-0013**

*All water concentrations are reported in mg/L*

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[a]pyrene	Benz[b]fluoranthene	Benz[g,h]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		---	---	0.001 mg/L	0.0001 mg/L	0.0007 mg/L	0.001 mg/L	---	0.001 mg/L	0.0002 mg/L	0.0003 mg/L	0.001 mg/L	0.0004 mg/L	0.001 mg/L	0.001 mg/L	0.001 mg/L	0.03 mg/L	0.000185	0.000185	---
MW-28	11/13/08	<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	<0.000185	<0.000185
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																		
MW-30	11/13/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/23/09	<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	<0.000185	<0.000185
	11/18/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/14/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/20/12	Not Sampled as part of Quarterly Monitoring Event.																		
RW-1	11/13/08	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	<0.00459	0.0156	<0.00459	0.0224	<0.00459	0.058	0.100	0.0979	0.0141
	11/23/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00328	<0.000184	0.00392	<0.000184	0.0327	0.0366	0.0296	0.00341
	11/18/10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00152	<0.000184	0.00281	<0.000184	0.00745	0.00615	0.00481	0.00187
	12/14/11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0135	<0.000184	0.0444	<0.000184	0.0785	0.0613	0.0101	
	11/20/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	0.0167	<0.00190	0.0206	<0.00190	0.0592	0.0342	0.0139	
RW-2	11/13/08	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	<0.00461	0.0194	<0.00461	0.0243	<0.00461	0.0508	0.118	0.106	0.0182
	11/23/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00385	<0.000183	0.00386	<0.000183	0.0206	0.0413	0.0227	0.00346
	11/18/10	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	0.00403	<0.000188	0.0059	<0.000188	0.0114	0.0181	0.00745	0.00428
	12/14/11	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	0.00418	<0.000187	0.0148	<0.000187	0.0308	0.0154	0.00361	
	11/20/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	0.00971	<0.00190	0.0287	<0.00190	0.0165	<0.00190		

## **APPENDICES**

**APPENDIX A:**  
**Annual Monitoring Report (2011) Anticipated  
Actions Approval – (November 13, 2012)**

## **Jonathan Repman**

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**From:** Jason Henry <JHenry@paalp.com>  
**Sent:** Wednesday, November 14, 2012 2:22 PM  
**To:** 'Camille Bryant'  
**Subject:** FW: Anticipated Actions Approval (2011 Report) (AP-13) - Plains TNM 97-18 Release Site

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**From:** Hansen, Edward J., EMNRD [mailto:[edwardj.hansen@state.nm.us](mailto:edwardj.hansen@state.nm.us)]  
**Sent:** Wednesday, November 14, 2012 11:58 AM  
**To:** Jason Henry  
**Cc:** Leking, Geoffrey R, EMNRD; Jeffrey P Dann  
**Subject:** Anticipated Actions Approval (2011 Report) (AP-13) - Plains TNM 97-18 Release Site

**RE: Annual Monitoring Report (2011) for the Plains Marketing's  
TNM 97-18 Release Site (AP-13)  
Unit G, Section 28, T20S, R37E, NMPM, Lea County, New Mexico  
Anticipated Actions Approval**

Dear Mr. Henry:

The New Mexico Oil Conservation Division (OCD) has received Plains' report (including proposed "Anticipated Actions") the above-referenced site (dated March 2012). The above-referenced report, submitted in partial fulfillment of 19.15.30.19 NMAC (Rule 30.19, formally, Rule 19.K), indicates that Plains has partially met the requirements of 19.15.30.9 NMAC for this site. Therefore, the OCD hereby approves the Anticipated Actions for the TNM 97-18 Release Site.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

**APPENDIX B:**  
**Release Notification and**  
**Corrective Action (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 Brazos Road  
 Aztec, NM 87410  
 District IV - (505) 827-7131

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

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 16" main line	Facility Type Pipeline	
Surface Owner Millard Ranch Estates	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
28	205	37E						Lea

NATURE OF RELEASE

Type of Release Sour crude	Volume of Release 83 barrels	Volume Recovered none
Source of Release 16" main line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 9-10-97 4:30 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Elizabeth	
By Whom? Mike Pearce	Date and Hour 9-11-97 1:30 pm	
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:

Internal Corrosion  
Leak successfully clamped off.

Describe Area Affected and Cleanup Action Taken:

3600 sq. ft. pasture land.  
Contaminated soil will be excavated.

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

95° cloudy

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
Signature: *Edwin H. Gripp*

OIL CONSERVATION DIVISION

Printed Name: Edwin H. Gripp	Approved by District Supervisor:		
Title: District Manager	Approval Date	Expiration Date	
Date: 9-11-97	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-97-18 JWC JAS