

AP - 63

# ANNUAL MONITORING REPORT

YEAR(S):  
2009



2009  
ANNUAL MONITORING REPORT

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Environmental Bureau  
Oil Conservation Division

**34 JUNCTION SOUTH STATION**  
LEA COUNTY, NEW MEXICO  
NW ¼ SW ¼ SECTION 2, TOWNSHIP 17 SOUTH, RANGE 36 EAST  
PLAINS SRS NUMBER: 2005-00138  
NMOCD Reference 1R-0456

AP-63

PREPARED FOR:

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

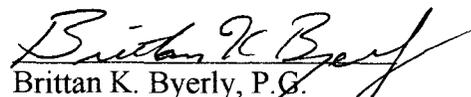


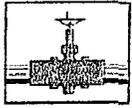
PREPARED BY:

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

February 2010

  
Ronald K. Rounsaville  
Senior Project Manager

  
Brittan K. Byerly, P.G.  
President



PLAINS  
ALL AMERICAN

March 22, 2010

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

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Oil Conservation Division

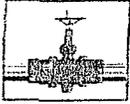
Re: Plains All American – 2009 Annual Monitoring Reports  
12 Sites in Lea County, New Mexico

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
Darr Angell #1	AP-007	Section 11, Township 15 South, Range 37 East, Lea County
Darr Angell #2	AP-007	Section 11, Township 15 South, Range 37 East, Lea County Section 14, Township 15 South, Range 37 East, Lea County
Darr Angell #4	AP-007	Section 11, Township 15 South, Range 37 East, Lea County Section 02, Township 15 South, Range 37 East, Lea County
Denton Station	1R-0234	Section 14, Township 15 South, Range 37 East, Lea County
HDO-90-23	AP-009	Section 06, Township 20 South, Range 37 East, Lea County
SPS-11	GW-0140	Section 18, Township 18 South, Range 36 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

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

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MAR 25 2000  
Environmental Bureau  
Oil Conservation Division

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

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### ENCLOSED ON DATA DISK

2009 Annual Monitoring Report

2009 Tables 1, 2 and 3 – Groundwater Elevation, BTEX, TPH and PAH Concentration Data

2009 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

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

## **INTRODUCTION**

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on or about August 8, 2006, project management responsibilities were assumed by NOVA, having previously been managed by Basin Environmental Service Technologies, LLC, (Basin). This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2009 only. However, historic data tables as well as 2009 laboratory analytical reports are provided on the enclosed data disk. A site location map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2009 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were sampled as per a NMOCD directive.

## **SITE DESCRIPTION AND BACKGROUND INFORMATION**

The legal description of the site is NW¼, SW¼, Section 2, Township 17 South, Range 36 East. The site is located on property owned by the State of New Mexico. The site latitude is 32° 51' 42.4" North and the site longitude is 103° 19' 54.4" West. Please reference Figure 1 for a Site Location Map. On June 10, 2005, Basin responded to a pipeline release on behalf of Plains. The release occurred as a result of the mechanical malfunction of an air eliminator check valve at an operational secondary metering station. Emergency response activities included the repair of the affected check valve and excavation of the hydrocarbon impacted soil. Approximately 15 barrels of crude oil were released from the pipeline and 0.5 barrels were recovered, resulting in a net loss of 14.5 barrels. The visibly stained surface area covers an area approximately 20 feet long by 20 feet wide. Excavation activities during the initial response activities covered an area within the fenced station approximately 20 feet long by 20 feet wide and one to four feet below ground surface (bgs). Approximately 100 cubic yards (cy) of excavated soil was placed on a polyethylene liner for future remedial activities. Please reference Appendix B for The Release Notification and Corrective Action (Form C-141).

Currently, there are fourteen (14) monitor wells and one (1) recovery well (RW-1) on site. An automated PSH recovery system, consisting of pneumatic total fluids pumps installed in monitor wells MW-3 and MW-9 and recovery well RW-1, was operational during the reporting period of 2009. Recovered PSH is temporarily stored in a poly tank and periodically re-injected into the Plains Pipeline transportation system located at the 34 Junction Metering Station.

*A Stage 1 and Stage 2 Abatement Plan* was submitted to the NMOCD in October 2006. The NMOCD has accepted the Abatement Plan as administratively complete and public notice approval is pending.

## FIELD ACTIVITIES

### Product Recovery Efforts

A measurable thickness of PSH was detected in monitor wells MW-3, MW-4, MW-8, MW-9, MW-10 and MW-11 and in recovery well RW-1 during the 2009 reporting period. The average thickness of PSH in monitor and recovery wells containing PSH during 2009 was 2.59 feet, with a maximum thickness of 9.91 feet occurring in recovery well RW-1 on January 23, 2009. Approximately 133 gallons (approximately 3.2 barrels) of PSH was recovered from the site during the 2009 reporting period. Approximately 2,592 gallons (approximately 61.7 barrels) of PSH have been recovered since the project inception. Measurable thicknesses of PSH are recorded in Table 1 and Figures 3A through 3D.

### Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule.

NMOCD APPROVED SAMPLING SCHEDULE					
Location	Schedule	Location	Schedule	Location	Schedule
MW-1	Quarterly	MW-6	Quarterly	MW-11	Quarterly
MW-2	Quarterly	MW-7	Quarterly	MW-12	Quarterly
MW-3	Quarterly	MW-8	Quarterly	MW-13	Quarterly
MW-4	Quarterly	MW-9	Quarterly	MW-14	Quarterly
MW-5	Quarterly	MW-10	Quarterly	RW-1	Quarterly

The site monitor wells were gauged and sampled on February 9, May 11, August 12, and November 24, 2009. During each sampling event, sampled monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four (4) quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2009 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0066 feet/foot to the east-northeast as measured between monitor wells MW-2 and MW-10. This is consistent with data presented from earlier in the year. The corrected groundwater elevation has ranged between 3,788.35 and 3,791.39 feet above mean sea level, in monitor wells MW-12 on November 24, 2009 and MW-8 on January 21, 2009, respectively.

## LABORATORY RESULTS

Monitor wells MW-3, MW-4, MW-8, MW-9, MW-10 and MW-11 and recovery well RW-1 contained PSH during all four quarters of the reporting period. Plains, at the request of the NMOCD, collected groundwater samples below PSH levels in all monitor wells containing PSH.

Groundwater samples obtained during the quarterly sampling events of 2009 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. Monitoring wells containing measurable amounts of PSH were analyzed for Total Petroleum Hydrocarbons (TPH) concentrations by EPA Method 8015M. A listing of BTEX and TPH constituent concentrations for 2009 are summarized in Table 2 and the PAH constituent concentrations for 2009 are summarized in Table 3. Copies of the laboratory reports generated for 2009 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 a quarterly schedule and analytical results indicate benzene, toluene and xylenes concentrations were below laboratory method detection limits (MDL) and the NMOCD regulatory standards of 0.01 mg/L for benzene, 0.75 mg/L for toluene and 0.62 mg/L for xylene during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters to 0.0059 mg/L during the 2<sup>nd</sup> quarter of 2009. Ethyl-benzene concentrations were below NMOCD regulatory standard of 0.75 mg/L during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-2** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-3** is monitored on a quarterly schedule. Monitor well MW-3 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.39 feet, 0.79 feet and 0.66 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009, respectively. Benzene concentrations were above the NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 7.540 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 8.970 mg/L. Ethyl-benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.550 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 5.020 mg/L. Analytical results indicated a total TPH result of 240.40 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.613 mg/L), 1-methylnaphthalene (1.36 mg/L) and 2-methylnaphthalene (1.82 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.149 mg/L), phenanthrene (0.163 mg/L), and dibenzofuran (0.0446 mg/L), which are below WQCC standards.

**Monitor well MW-4** is monitored / sampled on a quarterly schedule. Monitor well MW-4 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.72 feet, 0.50 feet and 0.74 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009, respectively. Benzene concentrations were above the NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 3.940 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 3.670 mg/L. Ethyl-benzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 0.5780 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period with a concentration of 1.630 mg/L. Analytical results indicated a total TPH result of 102.10 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0497 mg/L), 1-methylnaphthalene (0.0881 mg/L) and 2-methylnaphthalene (0.112 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.0111 mg/L), phenanthrene (0.0108 mg/L), and dibenzofuran (0.00327 mg/L), which are below WQCC standards.

**Monitor well MW-5** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.936 mg/L during the 3<sup>rd</sup> quarter to 6.830 mg/L during the 1<sup>st</sup> quarter of 2009. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.1630 mg/L during the 4<sup>th</sup> quarter of 2009. Toluene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.081 mg/L during the 4<sup>th</sup> quarter to 0.546 mg/L during the 2<sup>nd</sup> quarter of 2009. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 2<sup>nd</sup> quarter to 0.212 mg/L during the 3<sup>rd</sup> quarter of 2009. Xylene concentrations were below NMOCD regulatory standards, with the exception of the 4<sup>th</sup> quarter of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs

**Monitor well MW-6** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-7** is sampled on a quarterly schedule and analytical results indicate benzene, ethyl-benzene and xylenes concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters to 0.0014 mg/L during the 1<sup>st</sup> quarter of 2009. Toluene 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 no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-8** is monitored / sampled on a quarterly schedule. Monitor well MW-8 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.49 feet, 0.48 feet and 0.73 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009, respectively. Analytical results from groundwater samples collected during the 4<sup>th</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard with

a concentration of 1.740 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 4.450 mg/L. Ethyl-benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 0.7740 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 2.240 mg/L. Analytical results indicated a total TPH result of 204.20 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.637 mg/L) and 2-methylnaphthalene (0.824 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.273 mg/L), fluorene (0.0706 mg/L) and phenanthrene (0.0768 mg/L), which are below WQCC standards.

**Monitor well MW-9** is monitored on a quarterly schedule. Monitor well MW-9 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period due to the presence of PSH in the monitor well. PSH thicknesses of 7.73 feet, 7.78 feet and 7.64 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009, respectively. Analytical results from groundwater samples collected during the 4<sup>th</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard with a concentration of 10.40 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 9.180 mg/L. Ethyl-benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 1.260 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 4.070 mg/L. Analytical results indicated a total TPH result of 2,299.10 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (2.02 mg/L), 1-methylnaphthalene (4.59 mg/L), 2-methylnaphthalene (6.18 mg/L) and chrysene (0.0785 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.515 mg/L), phenanthrene (0.546 mg/L) and dibenzofuran (0.141 mg/L), which are below WQCC standards.

**Monitor well MW-10** is monitored / sampled on a quarterly schedule. Monitor well MW-10 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 6.88 feet, 0.48 feet and 0.42 feet were reported during the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2009, respectively. Analytical results from groundwater samples collected during the 4<sup>th</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard with a concentration of 6.45 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 5.39 mg/L. Ethyl-benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 0.802 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 2.380 mg/L. Analytical results indicated a total TPH result of 74.70 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.815 mg/L), 1-methylnaphthalene (1.91 mg/L), 2-methylnaphthalene (2.51 mg/L) and chrysene (0.0294 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.193 mg/L), phenanthrene (0.200 mg/L) and dibenzofuran (0.0526 mg/L), which are below WQCC standards.

**Monitor well MW-11** is sampled on a quarterly schedule. Monitor well MW-11 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.07 feet, 0.98 feet and 1.47 feet were reported during the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2009, respectively. Analytical results from groundwater samples collected during the 4<sup>th</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard with a

concentration of 1.290 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 2.920 mg/L. Ethyl-benzene concentrations were below NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 0.566 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 1.690 mg/L. Analytical results indicated a total TPH result of 34.10 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.303 mg/L), 1-methylnaphthalene (0.797 mg/L) and 2-methylnaphthalene (1.04 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.102 mg/L), phenanthrene (0.107 mg/L) and dibenzofuran (0.0276 mg/L), which are below WQCC standards.

**Monitor well MW-12** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-13** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 1.720 mg/L during the 1<sup>st</sup> quarter to 8.780 mg/L during the 4<sup>th</sup> quarter of 2009. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations were below the MDL and the NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.002 mg/L during the 1<sup>st</sup> quarter to 0.630 mg/L during the 3<sup>rd</sup> quarter of 2009. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.002 mg/L during the 1<sup>st</sup> quarter to 0.590 mg/L during the 3<sup>rd</sup> quarter of 2009. Xylene concentrations were below NMOCD regulatory standards during the 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 1-methylnaphthalene (0.0163 mg/L) and 2-methylnaphthalene (0.0180 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.0232 mg/L) and phenanthrene (0.000713 mg/L), which are below WQCC standards.

**Monitor well MW-14** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters to 0.0108 mg/L during the 3<sup>rd</sup> quarter of 2009. Benzene concentrations were below NMOCD regulatory standards during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters and above NMOCD regulatory standards during the 3<sup>rd</sup> quarter of the reporting period. Toluene, ethylbenzene and 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 no elevated concentrations were detected above the respective MDLs.

**Recovery well RW-1** is monitored on a quarterly schedule. Recovery well RW-1 was not sampled during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the reporting period, due to the presence of PSH in the monitor well. PSH thicknesses of 7.95 feet, 7.88 feet and 3.27 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2009, respectively. Analytical results from groundwater samples collected during the 4<sup>th</sup> quarter indicate benzene concentrations were above the NMOCD regulatory standard with a concentration of 10.60 mg/L. Toluene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 15.30 mg/L. Ethyl-benzene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a

concentration of 2.970 mg/L. Xylene concentrations were above NMOCD regulatory standards during the 4<sup>th</sup> quarter with a concentration of 9.470 mg/L. Analytical results indicated a total TPH result of 1,058.0 mg/L. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.678 mg/L), 1-methylnaphthalene (1.53 mg/L), 2-methylnaphthalene (2.02 mg/L) and chrysene (0.0270 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.171 mg/L), phenanthrene (0.176 mg/L) and dibenzofuran (0.0485 mg/L), which are below WQCC standards.

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

## **SUMMARY**

This report presents the results of monitoring activities for the 2009 annual monitoring period. Fourteen (14) groundwater monitor wells (MW-1 through MW-14) and one (1) PSH recovery wells (RW-1) are currently on-site. An automated recovery system was operational during the 2009 reporting period. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of 0.0066 feet/foot to the east-northeast.

Six monitor wells and one recovery well (MW-3, MW-4, MW-8 through MW-11 and RW-1) contained measurable thicknesses of PSH during the reporting period. The average thickness of PSH in monitor and recovery wells exhibiting PSH during 2009 was 2.59 feet. Approximately 133 gallons (approximately 3.2 barrels) of PSH was recovered from the site during the 2009 reporting period. Approximately 2,592 gallons (approximately 61.7 barrels) of PSH have been recovered since the project inception.

Review of laboratory analytical results of the groundwater samples obtained during the 2009 monitoring period indicates the BTEX constituent concentrations are below applicable NMOCD standards in five of the fourteen monitor wells. Monitor wells MW-3, MW-4, MW-8 through MW-11 and recovery well RW-1 consistently exhibited measurable thicknesses of PSH during gauging events. Dissolved phase and phase separated hydrocarbon impact appears to be limited to monitor wells MW-5, MW-13 and MW-14. Groundwater samples from monitor wells MW-3, MW-4, MW-8 and MW-9 and recovery well RW-1 exhibited elevated TPH concentrations for GRO and DRO. Review of PAH analysis indicates an increasing trend in constituent concentrations in monitor wells MW-3, MW-8 through MW-11 and MW-13 and recovery well RW-1 and a decreasing trend in monitor wells MW-4 and MW-5.

## **ANTICIPATED ACTIONS**

Groundwater monitoring and groundwater sampling will continue in 2010. The onsite automated recovery system will continue to operate and may be modified, as conditions require. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2011.

Based on the most recent analytical data, Plains is requesting NMOCD approval to install three additional monitor wells located downgradient of monitor wells MW-13 and MW-14 and north of MW-11. Two of the proposed monitor wells will be located approximately 125 feet east-

southeast of MW-13 and MW-14 and the third will be located approximately 100 feet north of MW-11. Figure 4 provides the locations of the proposed wells.

*A Stage 1 and Stage 2 Abatement Plan* was submitted to the NMOCD in October 2006. The NMOCD has accepted the Abatement Plan as administratively complete and public notice approval is pending.

Based on the results of the PAH analysis over the past several years, NOVA recommends that further PAH analysis be conducted only on those monitor wells (MW-3, MW-4, MW-8 through MW-11 and MW-13 and recovery well RW-1) which have historically exhibited elevated constituents near or above the WQCC standards.

## **LIMITATIONS**

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

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

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

**DISTRIBUTION**

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# Figures

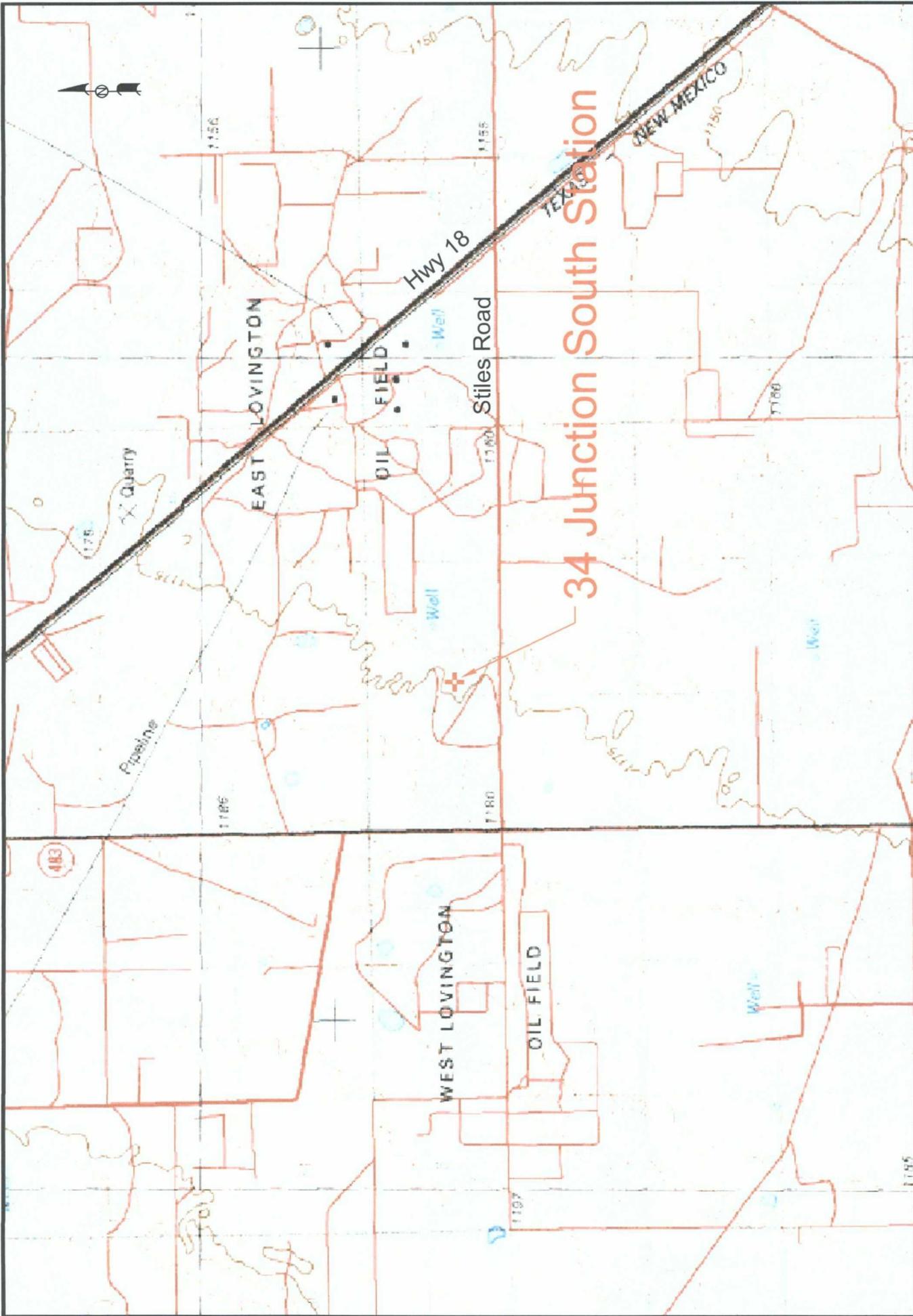


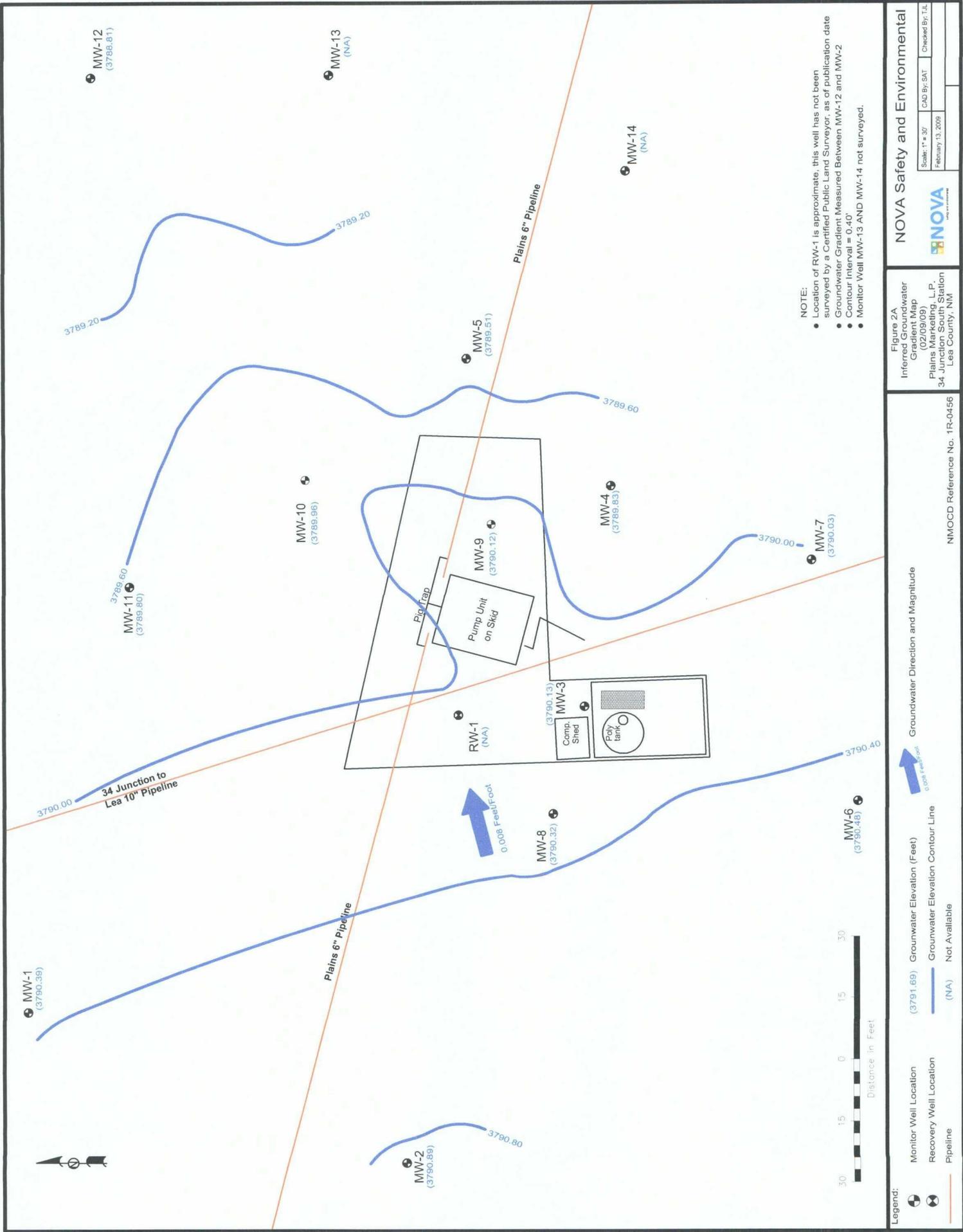
Figure 1  
 Site Location Map  
 Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM

NMOCD Reference # 1R-0456

NOVA Safety and Environmental

NOVA  
 Safety and Environmental

Scale: 1" = 4000'  
 October 17, 2006  
 Prep By: CDS | Checked By: TKC  
 Lat: 32° 51' 42.4" N Long: 103° 19' 54.4" W



NOTE:

- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-12 and MW-2
- Contour Interval = 0.40'
- Monitor Well MW-13 AND MW-14 not surveyed.

Figure 2A  
 Inferred Groundwater  
 Gradient Map  
 Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM

NMOC Reference No. 1R-0456

NOVA Safety and Environmental

Scale: 1" = 30'  
 CAD By: SAT  
 Checked By: TJE  
 February 13, 2009

Legend:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- Groundwater Elevation (Feet)
- Groundwater Elevation Contour Line
- (NA) Not Available

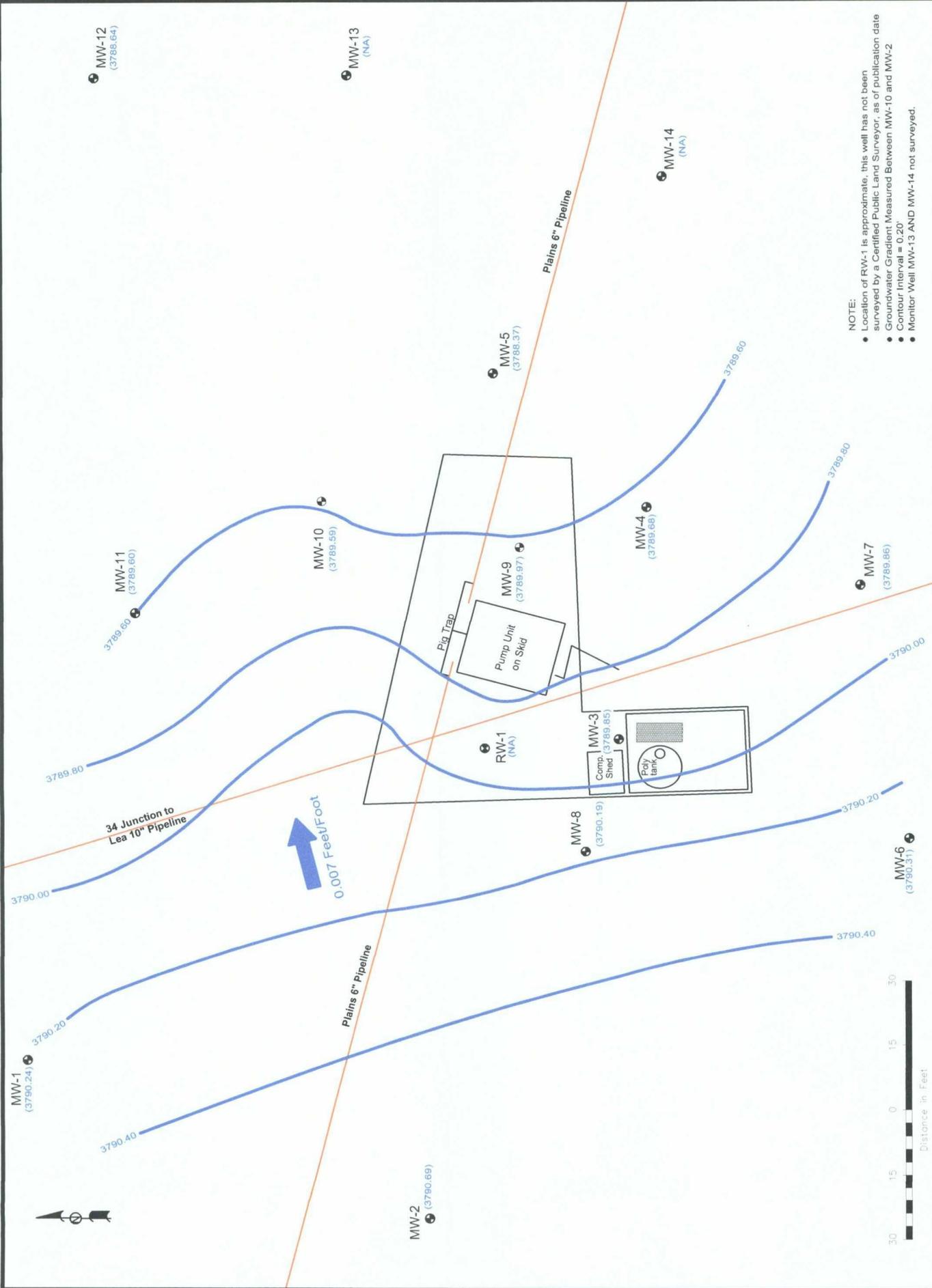


Distance in Feet

Groundwater Direction and Magnitude  
 0.008 Feet/Foot



Groundwater Direction and Magnitude  
 0.008 Feet/Foot



NOTE:

- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-10 and MW-2
- Contour Interval = 0.20'
- Monitor Well MW-13 AND MW-14 not surveyed.

**Legend:**

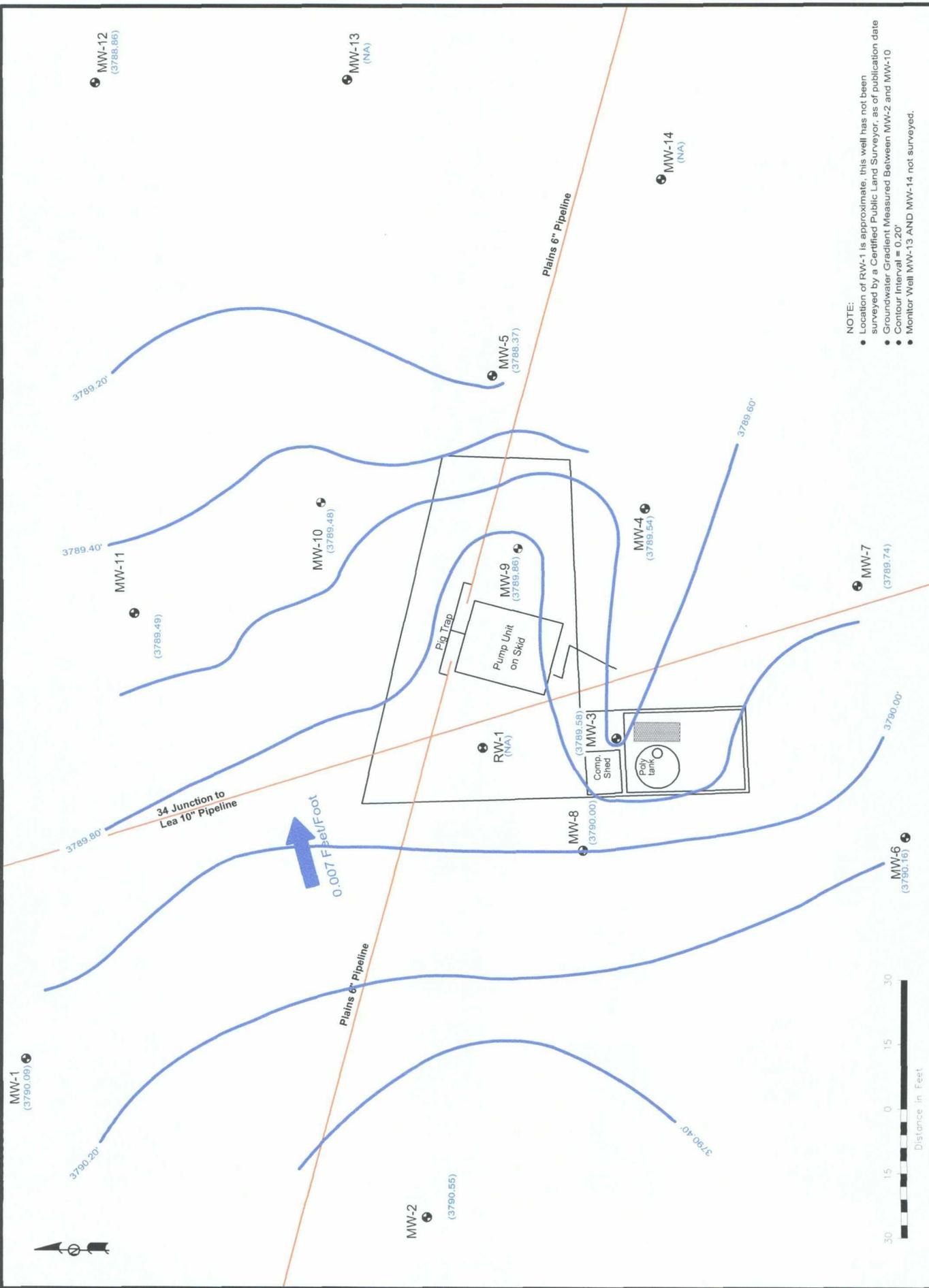
- Monitor Well Location
- Recovery Well Location
- Pipeline
- Groundwater Elevation (Feet)
- Groundwater Elevation Contour Line
- Not Available

**Figure 2B**  
 Inferred Groundwater Gradient Map  
 (05/11/09)  
 Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM

Scale: 1" = 30'  
 August 27, 2008  
 CAD By: SAT  
 Checked By: RBR

NOVA Safety and Environmental

NMOC Reference No. 1R-0456



**NOTE:**

- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-10
- Contour Interval = 0.20'
- Monitor Well MW-13 AND MW-14 not surveyed.

**NOVA Safety and Environmental**

Scale: 1" = 30'  
 CAD By: SAT | Checked By: RRS  
 September 17, 2009

**NOVA**  
INCORPORATED

Figure 2C  
 Inferred Groundwater  
 Gradient Map  
 (08/12/09)  
 Plains Marketing, L.P.,  
 34 Junction South Station  
 Lea County, NM

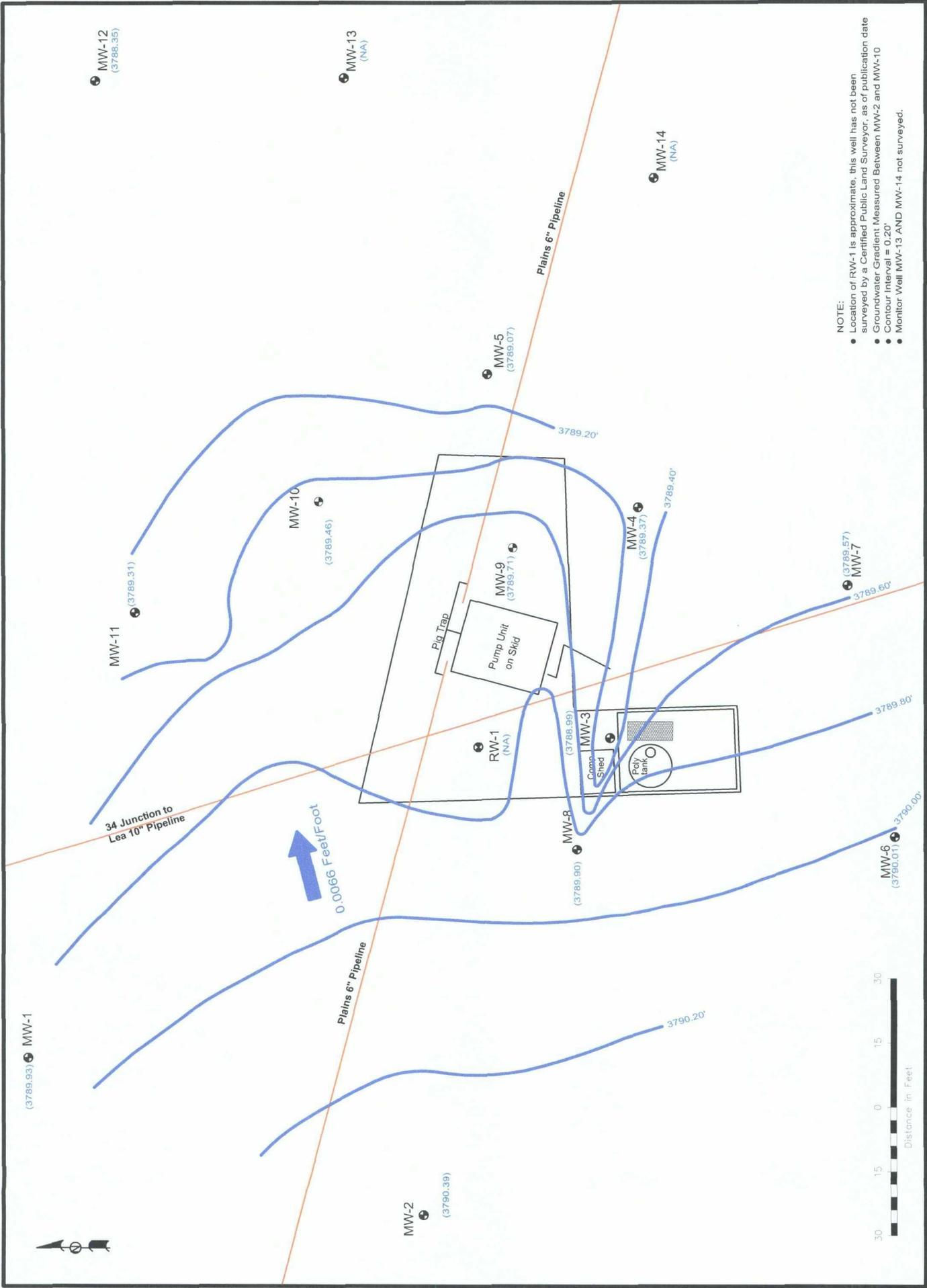
NMOC Reference No. 1R-0456

**Legend:**

- Monitor Well Location
- ⊗ Recovery Well Location
- Pipeline
- (3791.69) Groundwater Elevation (Feet)
- (NA) Groundwater Elevation Contour Line
- (NA) Not Available

Groundwater Direction and Magnitude  
 0.007 Feet/Foot





NOTE:

- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-10
- Contour Interval = 0.20'
- Monitor Well MW-13 AND MW-14 not surveyed.

Figures 2D  
 Inferred Groundwater  
 Gradient Map  
 (11/24/09)  
 Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 30'  
 CAD By: SAT  
 Checked By: RWR  
 December 30, 2009

NMOCD Reference No. 1R-0456

Groundwater Direction and Magnitude

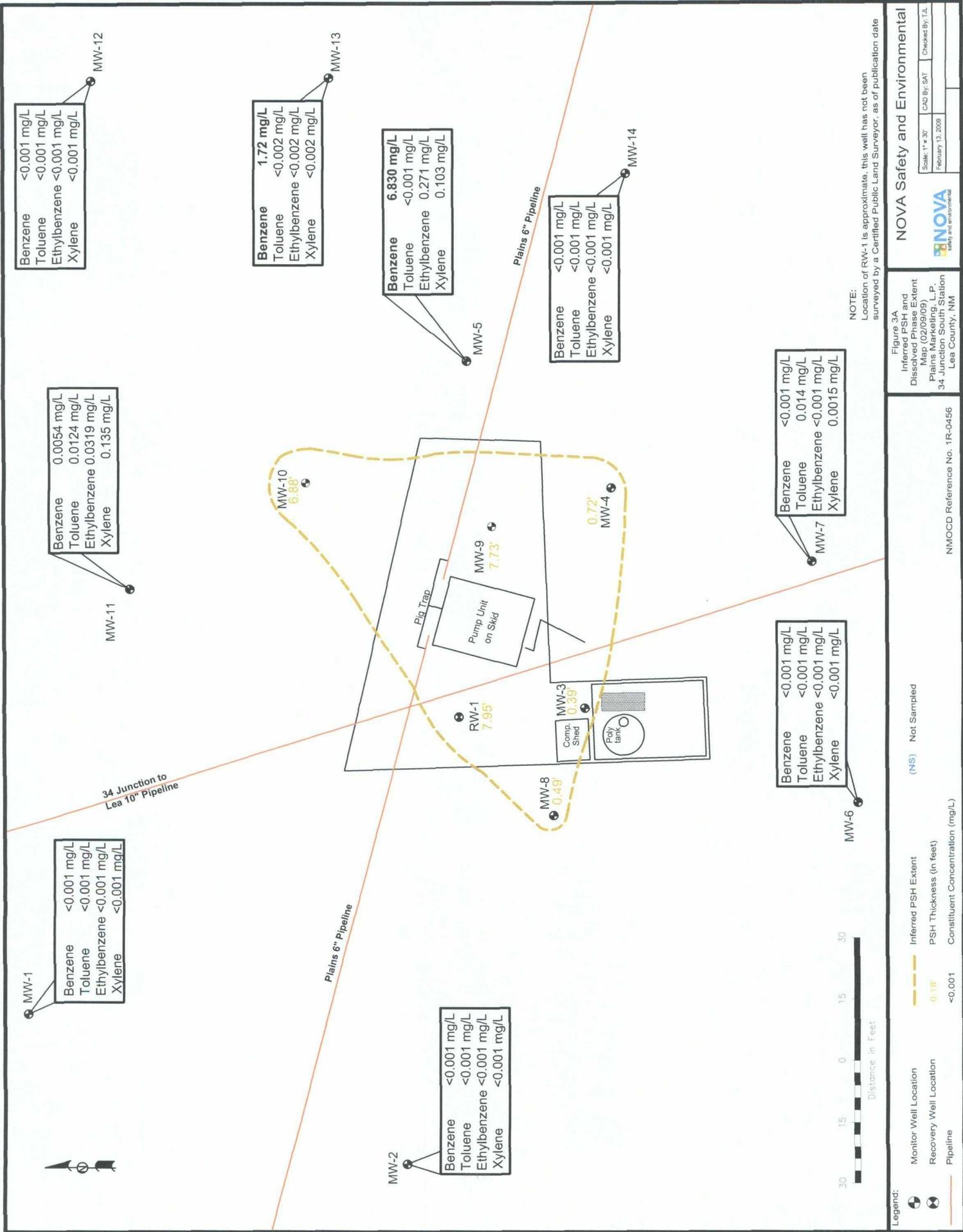
0.0066 Feet/Foot

Legend:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- Groundwater Elevation (Feet)
- Groundwater Elevation Contour Line
- (NA) Not Available

Distance in Feet

30 15 0 15 30



MW-12

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-13

Benzene	1.72 mg/L
Toluene	<0.002 mg/L
Ethylbenzene	<0.002 mg/L
Xylene	<0.002 mg/L

MW-5

Benzene	6.830 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	0.271 mg/L
Xylene	0.103 mg/L

MW-14

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-11

Benzene	0.0054 mg/L
Toluene	0.0124 mg/L
Ethylbenzene	0.0319 mg/L
Xylene	0.135 mg/L

MW-10  
6.88'

MW-9  
7.73'

MW-4  
0.72'

MW-7

Benzene	<0.001 mg/L
Toluene	0.014 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	0.0015 mg/L

34 Junction to  
Lea 10" Pipeline

MW-1

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

Plains 6" Pipeline

MW-2

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-3  
0.39'

MW-8  
0.49'

MW-6

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L



Distance in Feet

Monitor Well Location  
Recovery Well Location  
Pipeline

Inferred PSH Extent  
PSH Thickness (in feet)  
Constituent Concentration (mg/L)

(NS) Not Sampled

MW-10  
6.88'

MW-9  
7.73'

MW-4  
0.72'

MW-3  
0.39'

MW-8  
0.49'

NOTE:  
Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

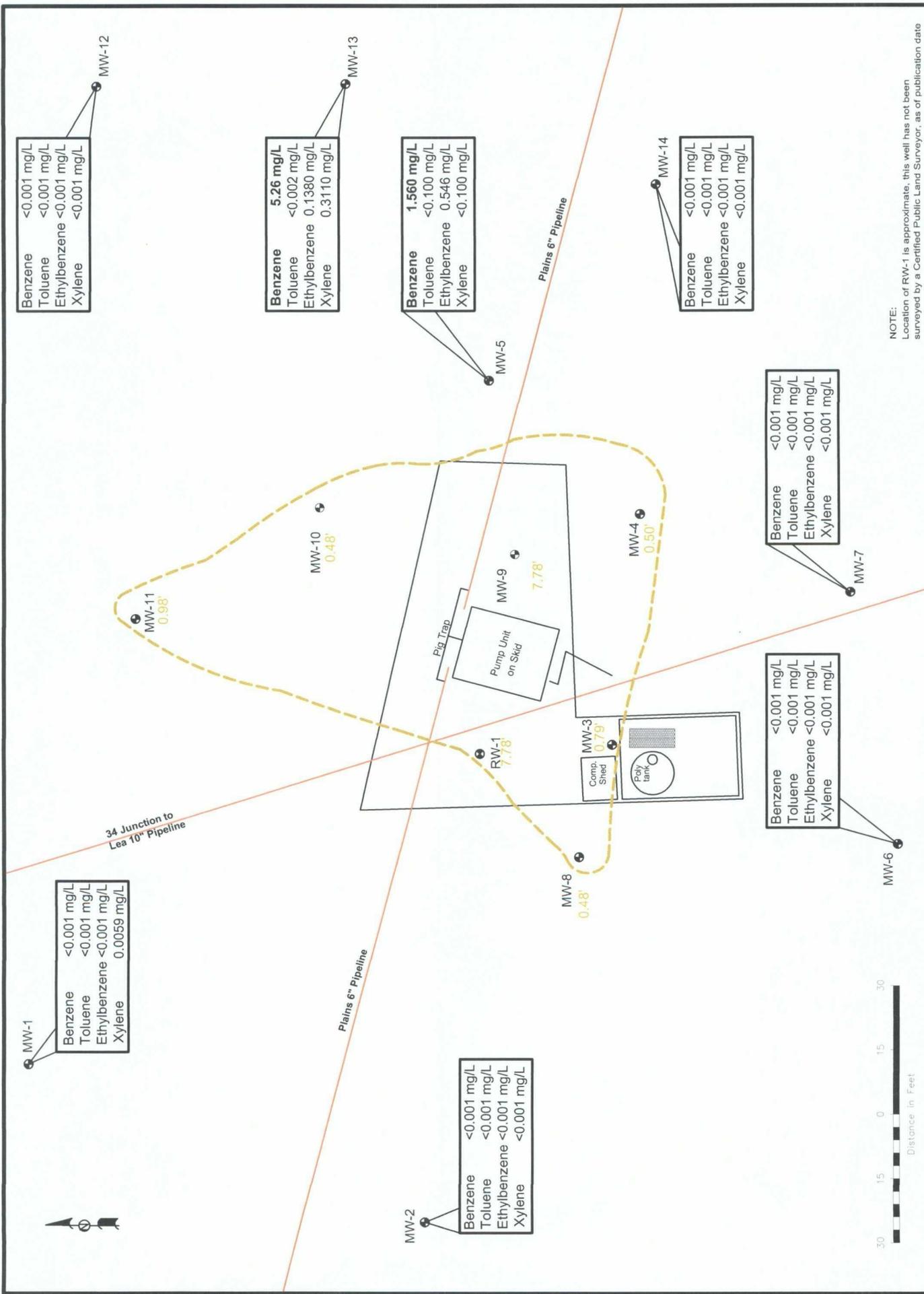
Figure 3A  
Inferred PSH and  
Dissolved Phase Extent  
Map (02/09/09)  
Pipe Recovery Unit  
34 Junction South Station  
Lea County, NM

NOVA  
safety and environmental

Scale: 1" = 30'  
CAD By: SAT  
Checked By: TL  
February 13, 2009

NMOC Reference No. 1R-0456

NOVA Safety and Environmental



NOTE:  
 Location of RW-1 is approximate, this well has not been  
 surveyed by a Certified Public Land Surveyor, as of publication date

Figures 3B  
 Inferred PSH and  
 Dissolved Phase Extent  
 Map (05/11/09)  
 Plains Marketing, L.P.,  
 34 Junction South Station  
 Lea County, NM

NOVA  
 safety and environmental

Scale: 1" = 30'  
 August 19, 2009  
 CAD By: SAT  
 Checked By: RCR

NMOC Reference No. 1R-0456

Legend:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- Inferred PSH Extent
- PSH Thickness (in feet)
- Constituent Concentration (mg/L)
- (NS) Not Sampled

0.18'  
 <0.001

Distance in Feet  
 0 15 30

MW-1  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene 0.0059 mg/L

MW-12  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-13  
 Benzene 5.26 mg/L  
 Toluene <0.002 mg/L  
 Ethylbenzene 0.1380 mg/L  
 Xylene 0.3110 mg/L

MW-2  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-5  
 Benzene 1.560 mg/L  
 Toluene <0.100 mg/L  
 Ethylbenzene 0.546 mg/L  
 Xylene <0.100 mg/L

MW-8  
 0.48'

MW-3  
 0.79'

MW-4  
 0.50'

MW-9  
 7.78'

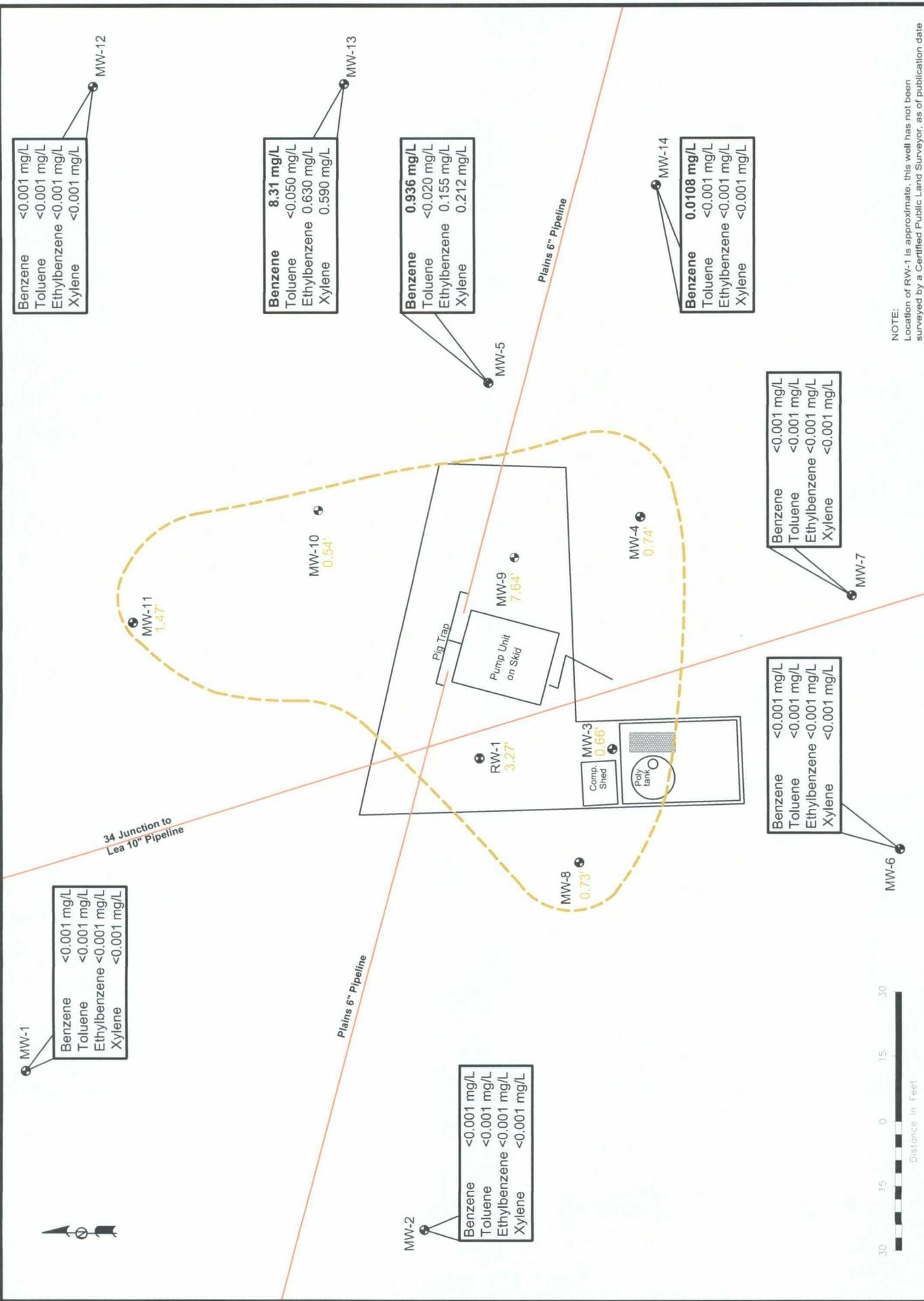
MW-11  
 0.98'

MW-10  
 0.48'

MW-6  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-7  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-14  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L



NOTE:  
 Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

**NOVA Safety and Environmental**  
 Scale: 1" = 30'  
 CAD By: SAT  
 Checked By: RKR  
 September 17, 2008

Figure 3C  
 Inferred PSH and Dissolved Phase Extent Map (08/12/09)  
 Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM

NMOCED Reference No. 1R-0456



- Legend:**
- Monitor Well Location
  - Recovery Well Location
  - Pipeline
  - (NS) Not Sampled
  - Inferred PSH Extent
  - PSH Thickness (in feet)
  - Constituent Concentration (mg/L)

MW-1  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-12  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-2  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-13  
 Benzene 8.31 mg/L  
 Toluene <0.050 mg/L  
 Ethylbenzene 0.630 mg/L  
 Xylene 0.590 mg/L

MW-5  
 Benzene 0.936 mg/L  
 Toluene <0.020 mg/L  
 Ethylbenzene 0.155 mg/L  
 Xylene 0.212 mg/L

MW-14  
 Benzene 0.0108 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-6  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-7  
 Benzene <0.001 mg/L  
 Toluene <0.001 mg/L  
 Ethylbenzene <0.001 mg/L  
 Xylene <0.001 mg/L

MW-11  
 1.47'

MW-10  
 0.54'

MW-9  
 7.64'

MW-4  
 0.74'

MW-8  
 0.73'

MW-3  
 0.66'

RW-1  
 3.27'

34 Junction to Lea 10" Pipeline

Plains 6" Pipeline

Plains 6" Pipeline

Pig Trap

Pump Unit on Skid

Comp. Shed

Poly tank





# Tables

TABLE 1

## 2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
34 JUNCTION SOUTH STATION  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	FSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	02/09/09	3,850.68	-	60.29	0.00	3,790.39
MW - 1	05/11/09	3,850.68	-	60.44	0.00	3,790.24
MW - 1	08/12/09	3,850.68	-	60.59	0.00	3,790.09
MW - 1	11/24/09	3,850.68	-	60.75	0.00	3,789.93
MW - 2	02/09/09	3,850.67	-	59.83	0.00	3,790.84
MW - 2	05/11/09	3,850.67	-	59.98	0.00	3,790.69
MW - 2	08/12/09	3,850.67	-	60.12	0.00	3,790.55
MW - 2	11/24/09	3,850.67	-	60.28	0.00	3,790.39
MW - 3	02/09/09	3,850.43	60.24	60.63	0.39	3,790.13
MW - 3	03/26/09	3,850.43	59.93	60.38	0.45	3,790.43
MW - 3	05/11/09	3,850.43	60.46	61.25	0.79	3,789.85
MW - 3	06/16/09	3,850.43	60.19	65.12	4.93	3,789.50
MW - 3	08/12/09	3,850.43	60.75	61.41	0.66	3,789.58
MW - 3	11/24/09	3,850.43	61.22	62.71	1.49	3,788.99
MW - 4	01/07/09	3,850.26	60.19	62.24	2.05	3,789.76
MW - 4	01/14/09	3,850.26	60.15	60.31	0.16	3,790.09
MW - 4	01/21/09	3,850.26	60.28	60.90	0.62	3,789.89
MW - 4	01/23/09	3,850.26	60.38	60.72	0.34	3,789.83
MW - 4	01/30/09	3,850.26	60.30	61.00	0.70	3,789.86
MW - 4	02/09/09	3,850.26	60.32	61.04	0.72	3,789.83
MW - 4	02/19/09	3,850.26	60.35	61.05	0.70	3,789.81
MW - 4	03/04/09	3,850.26	60.40	61.09	0.69	3,789.76
MW - 4	03/06/09	3,850.26	60.34	61.28	0.94	3,789.78
MW - 4	03/11/09	3,850.26	60.36	61.28	0.92	3,789.76
MW - 4	03/17/09	3,850.26	60.69	61.12	0.43	3,789.51
MW - 4	03/19/09	3,850.26	60.37	61.15	0.78	3,789.77
MW - 4	03/24/09	3,850.26	60.35	61.38	1.03	3,789.76
MW - 4	03/26/09	3,850.26	60.48	60.82	0.34	3,789.73
MW - 4	04/03/09	3,850.26	60.38	61.21	0.83	3,789.76
MW - 4	04/08/09	3,850.26	60.37	61.20	0.83	3,789.77
MW - 4	04/15/09	3,850.26	60.31	61.75	1.44	3,789.73
MW - 4	04/17/09	3,850.26	60.35	61.18	0.83	3,789.79
MW - 4	04/21/09	3,850.26	60.34	61.16	0.82	3,789.80
MW - 4	04/24/09	3,850.26	60.24	62.18	1.94	3,789.73
MW - 4	04/29/09	3,850.26	60.50	60.99	0.49	3,789.69
MW - 4	05/06/09	3,850.26	60.49	61.11	0.62	3,789.68
MW - 4	05/11/09	3,850.26	60.51	61.01	0.50	3,789.68
MW - 4	05/14/09	3,850.26	60.51	61.01	0.50	3,789.68
MW - 4	05/28/09	3,850.26	60.36	61.82	1.46	3,789.68
MW - 4	06/02/09	3,850.26	60.56	61.00	0.44	3,789.63
MW - 4	06/09/09	3,850.26	60.54	61.11	0.57	3,789.63
MW - 4	06/16/09	3,850.26	60.51	61.26	0.75	3,789.64
MW - 4	06/22/09	3,850.26	60.58	61.05	0.47	3,789.61
MW - 4	06/30/09	3,850.26	60.59	61.22	0.63	3,789.58
MW - 4	07/06/09	3,850.26	60.51	61.07	0.56	3,789.67
MW - 4	07/10/09	3,850.26	61.53	61.98	0.45	3,788.66
MW - 4	07/13/09	3,850.26	60.68	60.91	0.23	3,789.55
MW - 4	07/17/09	3,850.26	60.64	60.98	0.34	3,789.57
MW - 4	07/20/09	3,850.26	60.62	61.09	0.47	3,789.57
MW - 4	07/28/09	3,850.26	60.62	61.35	0.73	3,789.53
MW - 4	07/30/09	3,850.26	60.66	61.20	0.54	3,789.52
MW - 4	08/04/09	3,850.26	60.60	61.29	0.69	3,789.56
MW - 4	08/12/09	3,850.26	60.61	61.35	0.74	3,789.54
MW - 4	08/20/09	3,850.26	60.63	61.54	0.91	3,789.49
MW - 4	08/26/09	3,850.26	60.64	61.40	0.76	3,789.51
MW - 4	09/02/09	3,850.26	60.65	61.92	1.27	3,789.42
MW - 4	09/09/09	3,850.26	60.66	61.36	0.70	3,789.50
MW - 4	09/14/09	3,850.26	60.71	61.20	0.49	3,789.48
MW - 4	09/21/09	3,850.26	60.65	61.55	0.90	3,789.48
MW - 4	10/01/09	3,850.26	60.71	61.65	0.94	3,789.41
MW - 4	10/08/09	3,850.26	60.71	61.69	0.98	3,789.40
MW - 4	10/16/09	3,850.26	60.74	61.79	1.05	3,789.36
MW - 4	10/20/09	3,850.26	60.73	61.70	0.97	3,789.38

TABLE 1

## 2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
34 JUNCTION SOUTH STATION  
LEA COUNTY, NEW MEXICO  
NMOCDF REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	FSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	10/27/09	3,850.26	60.74	61.68	0.94	3,789.38
MW - 4	10/30/09	3,850.26	60.67	61.82	1.15	3,789.42
MW - 4	11/06/09	3,850.26	60.71	61.69	0.98	3,789.40
MW - 4	11/11/09	3,850.26	60.80	61.21	0.41	3,789.40
MW - 4	11/18/09	3,850.26	60.76	61.35	0.59	3,789.41
MW - 4	11/24/09	3,850.26	60.81	61.37	0.56	3,789.37
MW - 5	02/09/09	3,849.77	-	60.26	0.00	3,789.51
MW - 5	05/11/09	3,849.77	-	61.40	0.00	3,788.37
MW - 5	08/12/09	3,849.77	-	60.59	0.00	3,789.18
MW - 5	11/24/09	3,849.77	-	60.70	0.00	3,789.07
MW - 6	02/09/09	3,851.10	-	60.62	0.00	3,790.48
MW - 6	05/11/09	3,851.10	-	60.79	0.00	3,790.31
MW - 6	08/12/09	3,851.10	-	60.94	0.00	3,790.16
MW - 6	11/24/09	3,851.10	-	61.09	0.00	3,790.01
MW - 7	02/09/09	3,847.03	-	57.00	0.00	3,790.03
MW - 7	05/11/09	3,847.03	-	57.17	0.00	3,789.86
MW - 7	08/12/09	3,847.03	-	57.29	0.00	3,789.74
MW - 7	11/24/09	3,847.03	-	57.46	0.00	3,789.57
MW - 8	01/07/09	3,851.00	60.43	61.60	1.17	3,790.39
MW - 8	01/14/09	3,851.00	59.49	61.20	1.71	3,791.25
MW - 8	01/21/09	3,851.00	59.49	60.27	0.78	3,791.39
MW - 8	01/23/09	3,851.00	60.56	61.04	0.48	3,790.37
MW - 8	01/30/09	3,851.00	60.48	61.41	0.93	3,790.38
MW - 8	02/09/09	3,851.00	60.61	61.10	0.49	3,790.32
MW - 8	02/19/09	3,851.00	60.50	61.65	1.15	3,790.33
MW - 8	03/04/09	3,851.00	60.54	61.59	1.05	3,790.30
MW - 8	03/08/09	3,851.00	60.96	61.50	0.54	3,789.96
MW - 8	03/11/09	3,851.00	60.63	61.20	0.57	3,790.28
MW - 8	03/17/09	3,851.00	60.78	61.15	0.37	3,790.16
MW - 8	03/19/09	3,851.00	60.63	61.32	0.69	3,790.27
MW - 8	03/24/09	3,851.00	60.68	61.60	0.92	3,790.18
MW - 8	03/26/09	3,851.00	60.62	60.98	0.36	3,790.33
MW - 8	04/03/09	3,851.00	60.61	61.45	0.84	3,790.26
MW - 8	04/08/09	3,851.00	60.62	61.42	0.80	3,790.26
MW - 8	04/15/09	3,851.00	60.48	62.24	1.76	3,790.26
MW - 8	04/17/09	3,851.00	60.60	61.37	0.77	3,790.28
MW - 8	04/21/09	3,851.00	60.61	61.35	0.74	3,790.28
MW - 8	04/24/09	3,851.00	60.39	62.70	2.31	3,790.26
MW - 8	04/29/09	3,851.00	60.68	61.35	0.67	3,790.22
MW - 8	05/06/09	3,851.00	60.68	61.42	0.74	3,790.21
MW - 8	05/11/09	3,851.00	60.74	61.22	0.48	3,790.19
MW - 8	05/14/09	3,851.00	60.74	61.22	0.48	3,790.19
MW - 8	05/28/09	3,851.00	60.52	62.30	1.78	3,790.21
MW - 8	06/02/09	3,851.00	60.74	61.30	0.56	3,790.18
MW - 8	06/09/09	3,851.00	60.74	61.41	0.67	3,790.16
MW - 8	06/16/09	3,851.00	60.74	61.52	0.78	3,790.14
MW - 8	06/22/09	3,851.00	60.77	61.44	0.67	3,790.13
MW - 8	06/30/09	3,851.00	60.76	61.60	0.84	3,790.11
MW - 8	07/06/09	3,851.00	60.70	61.39	0.69	3,790.20
MW - 8	07/10/09	3,851.00	60.78	61.75	0.97	3,790.07
MW - 8	07/13/09	3,851.00	60.91	61.23	0.32	3,790.04
MW - 8	07/17/09	3,851.00	60.29	60.64	0.35	3,790.66
MW - 8	07/20/09	3,851.00	60.81	61.46	0.65	3,790.09
MW - 8	07/28/09	3,851.00	60.25	61.82	1.57	3,790.51
MW - 8	07/30/09	3,851.00	60.79	61.74	0.95	3,790.07
MW - 8	08/04/09	3,851.00	60.85	61.43	0.58	3,790.06
MW - 8	08/12/09	3,851.00	60.89	61.62	0.73	3,790.00
MW - 8	08/20/09	3,851.00	60.84	61.69	0.85	3,790.03
MW - 8	08/26/09	3,851.00	60.80	61.80	1.00	3,790.05
MW - 8	09/02/09	3,851.00	60.86	61.70	0.84	3,790.01
MW - 8	09/09/09	3,851.00	60.89	61.70	0.81	3,789.99
MW - 8	09/14/09	3,851.00	60.92	61.44	0.52	3,790.00

TABLE 1

## 2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 8	09/21/09	3,851.00	60.88	61.76	0.88	3,789.99
MW - 8	10/01/09	3,851.00	60.90	61.93	1.03	3,789.95
MW - 8	10/08/09	3,851.00	60.95	61.76	0.81	3,789.93
MW - 8	10/16/09	3,851.00	61.00	61.91	0.91	3,789.86
MW - 8	10/20/09	3,851.00	61.02	61.89	0.87	3,789.85
MW - 8	10/27/09	3,851.00	61.03	61.88	0.85	3,789.84
MW - 8	10/30/09	3,851.00	60.86	62.22	1.36	3,789.94
MW - 8	11/06/09	3,851.00	60.93	61.72	0.79	3,789.95
MW - 8	11/11/09	3,851.00	60.99	61.55	0.56	3,789.93
MW - 8	11/18/09	3,851.00	60.98	61.65	0.67	3,789.92
MW - 8	11/24/09	3,851.00	60.92	62.13	1.21	3,789.90
MW - 9	01/07/09	3,851.04	59.61	67.75	8.14	3,790.21
MW - 9	01/14/09	3,851.04	59.78	67.23	7.45	3,790.14
MW - 9	01/23/09	3,851.04	59.74	67.53	7.79	3,790.13
MW - 9	01/30/09	3,851.04	59.74	67.42	7.68	3,790.15
MW - 9	02/09/09	3,851.04	59.76	67.49	7.73	3,790.12
MW - 9	03/26/09	3,851.04	60.68	64.08	3.40	3,789.85
MW - 9	05/11/09	3,851.04	59.90	67.68	7.78	3,789.97
MW - 9	05/28/09	3,851.04	59.91	67.72	7.81	3,789.96
MW - 9	06/16/09	3,851.04	59.96	67.71	7.75	3,789.92
MW - 9	06/22/09	3,851.04	59.98	67.69	7.71	3,789.90
MW - 9	06/30/09	3,851.04	59.96	67.91	7.95	3,789.89
MW - 9	07/06/09	3,851.04	59.95	67.76	7.81	3,789.92
MW - 9	07/13/09	3,851.04	60.00	67.78	7.78	3,789.87
MW - 9	07/28/09	3,851.04	60.06	67.80	7.74	3,789.82
MW - 9	08/12/09	3,851.04	60.03	67.67	7.64	3,789.86
MW - 9	10/30/09	3,851.04	60.26	67.71	7.45	3,789.66
MW - 9	11/06/09	3,851.04	60.27	67.61	7.34	3,789.67
MW - 9	11/11/09	3,851.04	60.25	67.80	7.55	3,789.66
MW - 9	11/18/09	3,851.04	60.26	67.76	7.50	3,789.66
MW - 9	11/24/09	3,851.04	60.29	67.21	6.92	3,789.71
MW - 10	01/23/09	3,851.07	60.49	65.37	4.88	3,789.85
MW - 10	02/09/09	3,851.07	60.08	66.96	6.88	3,789.96
MW - 10	03/26/09	3,851.07	61.24	64.73	3.49	3,789.31
MW - 10	05/11/09	3,851.07	61.41	61.89	0.48	3,789.59
MW - 10	06/16/09	3,851.07	60.30	67.04	6.74	3,789.76
MW - 10	06/22/09	3,851.07	61.10	63.56	2.46	3,789.60
MW - 10	06/30/09	3,851.07	61.12	63.84	2.72	3,789.54
MW - 10	07/06/09	3,851.07	61.17	63.32	2.15	3,789.58
MW - 10	07/13/09	3,851.07	61.26	63.03	1.77	3,789.54
MW - 10	07/17/09	3,851.07	60.99	64.38	3.39	3,789.57
MW - 10	08/04/09	3,851.07	61.62	62.04	0.42	3,789.39
MW - 10	08/12/09	3,851.07	61.51	62.05	0.54	3,789.48
MW - 10	10/30/09	3,851.07	61.58	62.40	0.82	3,789.37
MW - 10	11/06/09	3,851.07	61.35	63.42	2.07	3,789.41
MW - 10	11/11/09	3,851.07	60.91	65.50	4.59	3,789.47
MW - 10	11/18/09	3,851.07	60.52	67.05	6.53	3,789.57
MW - 10	11/24/09	3,851.07	60.86	65.88	5.02	3,789.46
MW - 11	02/09/09	3,850.96	61.23	61.30	0.07	3,789.72
MW - 11	03/04/09	3,850.96	61.22	61.69	0.47	3,789.67
MW - 11	03/08/09	3,850.96	61.23	61.53	0.30	3,789.69
MW - 11	03/11/09	3,850.96	61.25	61.57	0.32	3,789.66
MW - 11	03/19/09	3,850.96	61.19	61.91	0.72	3,789.66
MW - 11	03/24/09	3,850.96	61.15	62.14	0.99	3,789.66
MW - 11	04/03/09	3,850.96	61.14	62.11	0.97	3,789.67
MW - 11	04/08/09	3,850.96	61.16	62.13	0.97	3,789.65
MW - 11	04/15/09	3,850.96	61.04	62.76	1.72	3,789.66
MW - 11	04/17/09	3,850.96	61.18	62.15	0.97	3,789.63
MW - 11	04/21/09	3,850.96	61.17	62.13	0.96	3,789.65
MW - 11	04/24/09	3,850.96	60.97	62.12	1.15	3,789.82
MW - 11	04/29/09	3,850.96	61.18	62.29	1.11	3,789.61
MW - 11	05/06/09	3,850.96	61.14	62.39	1.25	3,789.63
MW - 11	05/11/09	3,850.96	61.21	62.19	0.98	3,789.60

TABLE 1

## 2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOCDF REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 11	05/14/09	3,850.96	61.22	62.19	0.97	3,789.59
MW - 11	06/02/09	3,850.96	60.84	63.84	3.00	3,789.67
MW - 11	06/09/09	3,850.96	61.11	62.80	1.69	3,789.60
MW - 11	06/16/09	3,850.96	61.16	62.72	1.56	3,789.57
MW - 11	06/22/09	3,850.96	61.15	62.81	1.66	3,789.56
MW - 11	06/30/09	3,850.96	61.19	62.68	1.49	3,789.55
MW - 11	07/06/09	3,850.96	61.23	62.26	1.03	3,789.58
MW - 11	07/10/09	3,850.96	61.19	62.80	1.61	3,789.53
MW - 11	07/13/09	3,850.96	61.32	62.22	0.90	3,789.51
MW - 11	07/17/09	3,850.96	61.24	62.68	1.44	3,789.50
MW - 11	07/20/09	3,850.96	61.31	62.28	0.97	3,789.50
MW - 11	07/28/09	3,850.96	61.23	62.20	0.97	3,789.58
MW - 11	07/30/09	3,850.96	61.21	62.96	1.75	3,789.49
MW - 11	08/04/09	3,850.96	61.08	63.40	2.32	3,789.53
MW - 11	08/12/09	3,850.96	61.25	62.72	1.47	3,789.49
MW - 11	08/20/09	3,850.96	61.26	62.83	1.57	3,789.46
MW - 11	08/26/09	3,850.96	61.31	62.33	1.02	3,789.50
MW - 11	09/02/09	3,850.96	61.27	62.86	1.59	3,789.45
MW - 11	09/09/09	3,850.96	61.27	62.93	1.66	3,789.44
MW - 11	09/14/09	3,850.96	61.34	62.74	1.40	3,789.41
MW - 11	09/21/09	3,850.96	61.31	62.90	1.59	3,789.41
MW - 11	10/01/09	3,850.96	61.25	63.34	2.09	3,789.40
MW - 11	10/08/09	3,850.96	61.31	63.20	1.89	3,789.37
MW - 11	10/16/09	3,850.96	61.31	63.35	2.04	3,789.34
MW - 11	10/20/09	3,850.96	61.32	63.36	2.04	3,789.33
MW - 11	10/27/09	3,850.96	61.34	63.35	2.01	3,789.32
MW - 11	10/30/09	3,850.96	61.15	63.86	2.71	3,789.40
MW - 11	11/06/09	3,850.96	61.31	63.14	1.83	3,789.38
MW - 11	11/11/09	3,850.96	61.41	62.80	1.39	3,789.34
MW - 11	11/18/09	3,850.96	61.39	62.95	1.56	3,789.34
MW - 11	11/24/09	3,850.96	61.43	62.87	1.44	3,789.31
MW - 12	02/09/09	3,850.45	-	61.64	0.00	3,788.81
MW - 12	05/11/09	3,850.45	-	61.81	0.00	3,788.64
MW - 12	08/12/09	3,850.45	-	61.95	0.00	3,788.50
MW - 12	11/24/09	3,850.45	-	62.10	0.00	3,788.35
MW - 13	02/09/09		-	61.63		
MW - 13	05/11/09		-	61.78		
MW - 13	08/12/09		-	61.91		
MW - 13	11/24/09		-	62.08		
MW - 14	02/09/09		-	61.48		
MW - 14	05/11/09		-	61.64		
MW - 14	08/12/09		-	61.78		
MW - 14	11/24/09		-	61.93		
RW - 1	01/07/09		58.64	66.55	7.91	
RW - 1	01/14/09	-	58.65	66.59	7.94	
RW - 1	01/23/09	-	58.61	68.52	9.91	
RW - 1	01/30/09	-	58.61	66.51	7.90	
RW - 1	02/09/09	-	58.68	66.63	7.95	
RW - 1	02/19/09	-	60.35	61.05	0.70	
RW - 1	03/04/09	-	59.72	68.01	8.29	
RW - 1	03/08/09	-	58.69	66.63	7.94	
RW - 1	03/11/09	-	58.72	66.63	7.91	
RW - 1	03/17/09	-	59.83	68.04	8.21	
RW - 1	03/19/09	-	58.71	66.64	7.93	
RW - 1	03/24/09	-	58.75	66.53	7.78	
RW - 1	03/26/09	-	59.87	67.92	8.05	
RW - 1	04/03/09	-	58.73	66.73	8.00	
RW - 1	04/08/09	-	58.73	66.69	7.96	
RW - 1	04/15/09	-	58.75	66.69	7.94	
RW - 1	04/17/09	-	58.70	66.61	7.91	
RW - 1	04/21/09	-	58.71	66.60	7.89	
RW - 1	04/24/09	-	58.81	62.40	3.59	

TABLE 1

2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	04/29/09	-	58.79	66.72	7.93	
RW - 1	05/06/09	-	58.81	66.68	7.87	
RW - 1	05/11/09	-	58.82	66.70	7.88	
RW - 1	05/14/09	-	58.82	66.70	7.88	
RW - 1	05/28/09	-	58.85	66.78	7.93	
RW - 1	06/02/09	-	58.85	66.73	7.88	
RW - 1	06/09/09	-	58.87	66.74	7.87	
RW - 1	06/16/09	-	58.85	66.74	7.89	
RW - 1	06/22/09	-	58.89	66.79	7.90	
RW - 1	06/30/09	-	58.88	66.80	7.92	
RW - 1	07/06/09	-	58.86	66.81	7.95	
RW - 1	07/10/09	-	-60.41	63.40	2.99	
RW - 1	08/12/09	-	59.73	63.00	3.27	
RW - 1	11/24/09	-	60.23	61.99	1.76	

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

TABLE 2

## 2009 - CONCENTRATIONS OF BENZENE IN GROUNDWATER

PLAINS MARKETING, L.P.  
34 JUNCTION SOUTH STATION  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NO. 1R-0456

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		Methods: EPA SW 846-8021, 5030				
		TPH GRO C <sub>6</sub> -C <sub>12</sub>	TPH DRO >C <sub>12</sub> -C <sub>35</sub>	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT				0.01	0.75	0.75	0.62	
MW - 1	02/09/09			<0.001	<0.001	<0.001	<0.001	
MW - 1	05/11/09			<0.001	<0.001	0.0059	<0.001	
MW - 1	08/12/09			<0.001	<0.001	<0.001	<0.001	
MW - 1	11/24/09			<0.001	<0.001	<0.001	<0.001	
MW - 2	02/09/09			<0.001	<0.001	<0.001	<0.001	
MW - 2	05/11/09			<0.001	<0.001	<0.001	<0.001	
MW - 2	08/12/09			<0.001	<0.001	<0.001	<0.001	
MW - 2	11/24/09			<0.001	<0.001	<0.001	<0.001	
MW - 3	02/09/09			Not sampled Due to PSH in Well				
MW - 3	05/11/09			Not sampled Due to PSH in Well				
MW - 3	08/12/09			Not sampled Due to PSH in Well				
MW - 3	11/24/09	68.4	172.0	7.540	8.970	1.550	5.020	
MW - 4	02/09/09			Not sampled Due to PSH in Well				
MW - 4	05/11/09			Not sampled Due to PSH in Well				
MW - 4	08/12/09			Not sampled Due to PSH in Well				
MW - 4	11/24/09	25.3	77.8	3.940	3.670	0.5780	1.630	
MW - 5	02/09/09			6.830	<0.001	0.271	0.103	
MW - 5	05/11/09			1.560	<0.100	0.546	<0.100	
MW - 5	08/12/09			0.936	<0.0200	0.155	0.212	
MW - 5	11/24/09			1.320	0.1630	0.081	0.060	
MW - 6	02/09/09			<0.001	<0.001	<0.001	<0.001	
MW - 6	05/11/09			<0.001	<0.001	<0.001	<0.001	
MW - 6	08/12/09			<0.001	<0.001	<0.001	<0.001	
MW - 6	11/24/09			<0.001	<0.001	<0.001	<0.001	
MW - 7	02/09/09			<0.001	0.0014	<0.001	<0.001	
MW - 7	05/11/09			<0.001	<0.001	<0.001	<0.001	
MW - 7	08/12/09			<0.001	<0.001	<0.001	<0.001	
MW - 7	11/24/09			<0.001	<0.001	<0.001	<0.001	
MW - 8	02/09/09			Not sampled Due to PSH in Well				
MW - 8	05/11/09			Not sampled Due to PSH in Well				
MW - 8	08/12/09			Not sampled Due to PSH in Well				
MW - 8	11/24/09	24.2	180.0	1.740	4.450	0.774	2.240	
MW - 9	02/09/09			Not sampled Due to PSH in Well				
MW - 9	05/11/09			Not sampled Due to PSH in Well				
MW - 9	08/12/09			Not sampled Due to PSH in Well				
MW - 9	11/24/09	59.1	2240.0	10.40	9.180	1.260	4.070	
MW - 10	02/09/09			Not sampled Due to PSH in Well				
MW - 10	05/11/09			Not sampled Due to PSH in Well				
MW - 10	08/12/09			Not sampled Due to PSH in Well				
MW - 10	11/24/09	33.4	41.3	6.450	5.390	0.802	2.380	

TABLE 2

2009 - CONCENTRATIONS OF BENZENE IN GROUNDWATER

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NO. 1R-0456

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		Methods: EPA SW 846-8021, 5030				
		TPH GRO C <sub>6</sub> -C <sub>12</sub>	TPH DRO >C <sub>12</sub> -C <sub>35</sub>	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
<b>NMOCD REGULATORY LIMIT</b>				<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>0.62</b>	
MW - 11	02/09/09			Not sampled Due to PSH in Well				
MW - 11	05/11/09			Not sampled Due to PSH in Well				
MW - 11	08/12/09			Not sampled Due to PSH in Well				
MW - 11	11/24/09	17.6	16.5	<b>1.290</b>	<b>2.920</b>	0.566	<b>1.690</b>	
MW - 12	02/09/09			<0.001	<0.001	<0.001	<0.001	
MW - 12	05/11/09			<0.001	<0.001	<0.001	<0.001	
MW - 12	08/12/09			<0.001	<0.001	<0.001	<0.001	
MW - 12	11/24/09			<0.001	<0.001	<0.001	<0.001	
MW - 13	02/09/09			<b>1.720</b>	<0.002	<0.002	<0.002	
MW - 13	05/11/09			<b>5.260</b>	<0.002	0.1380	0.3110	
MW - 13	08/12/09			<b>8.310</b>	<0.050	0.6300	0.590	
MW - 13	11/24/09			<b>8.780</b>	<0.050	0.2910	<0.050	
MW - 14	02/09/09			<0.001	<0.001	<0.001	<0.001	
MW - 14	05/11/09			<0.001	<0.001	<0.001	<0.001	
MW - 14	08/12/09			<b>0.0108</b>	<0.001	<0.001	<0.001	
MW - 14	11/24/09			<0.001	<0.001	<0.001	<0.001	
RW - 1	02/09/09			Not sampled Due to PSH in Well				
RW - 1	05/11/09			Not sampled Due to PSH in Well				
RW - 1	08/12/09			Not sampled Due to PSH in Well				
RW - 1	11/24/09	<b>138.0</b>	<b>920.0</b>	<b>10.60</b>	<b>15.30</b>	<b>2.970</b>	<b>9.470</b>	

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

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER IR-0456

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[e]k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylanthracene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.	11/11/08	<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
	11/24/09	<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
MW - 1	11/11/08	<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
	11/24/09	<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
MW - 2	11/11/08	<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
	11/24/09	<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
MW - 3	11/11/08	Not sampled	Due to Insufficient Water Volume																	
	11/24/09	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	0.149	<0.000926	0.613	0.163	<0.000926	1.36	1.82		0.0446
MW - 4	11/11/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.0156	<0.000183	0.0853	0.0149	<0.000183	0.177	0.222		<0.000183
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.0111	<0.000183	<0.000183	0.0497	0.0108	<0.000183	0.0881	0.112		0.00327
MW - 5	11/11/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000526	<0.000183	0.00143	0.00042	<0.000183	0.00401	0.00032		0.000337
	11/24/09	<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
MW - 6	11/11/08	<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
	11/24/09	<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
MW - 7	11/11/08	<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
	11/24/09	<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
MW - 8	11/11/08	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0332	<0.000922	0.124	0.0301	<0.000922	0.270	0.334		<0.000922
	11/24/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	0.0706	<0.000917	0.273	0.0768	<0.000917	0.637	0.824		<0.000917
MW - 9	11/11/08	Not sampled	Due to Insufficient Water Volume																	
	11/24/09	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	0.515	<0.00184	2.02	0.546	<0.00184	4.59	6.18		0.141
MW - 10	11/11/08	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	0.0618	<0.000962	0.308	0.0709	<0.000962	0.773	0.987		0.0194
	11/24/09	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	0.193	<0.000962	0.815	0.200	<0.000962	1.91	2.51		0.0562

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 NMOC REFERENCE NUMBER IR-0456

All water concentrations are reported in mg/L

EPA SW846-8270C, 3510

SAMPLE LOCATION	SAMPLE DATE	Contaminant	Concentration (mg/L)	Standard (mg/L)	Ratio
MW - 11	11/11/08	Acenaphthene	<0.000192	<0.000192	<0.000192
	11/24/09		<0.000917	<0.000917	<0.000917
MW - 12	11/11/08	Acenaphthylene	<0.000184	<0.000184	<0.000184
	11/24/09		<0.000183	<0.000183	<0.000183
MW - 13	11/11/08	Anthracene	<0.000184	<0.000184	<0.000184
	11/24/09		<0.000184	<0.000184	<0.000184
MW - 14	11/11/08	Benz[a]anthracene	<0.000183	<0.000183	<0.000183
	11/24/09		<0.000183	<0.000183	<0.000183
RW - 1	11/11/08	Benz[a]pyrene	Not sampled	<0.000922	<0.000922
	11/24/09		Not sampled	<0.000922	<0.000922
MW - 11	11/11/08	Benz[b]fluoranthene	<0.000192	<0.000192	<0.000192
			11/24/09	<0.000917	<0.000917
MW - 12	11/11/08	Benz[k]fluoranthene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 13	11/11/08	Chrysene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 14	11/11/08	Dibenz[a,h]anthracene	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
MW - 11	11/11/08	Fluorene	<0.000192	<0.000192	<0.000192
			11/24/09	<0.000917	<0.000917
MW - 12	11/11/08	Fluoranthene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 13	11/11/08	Indeno[1,2,3-cd]pyrene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 14	11/11/08	Naphthalene	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
MW - 11	11/11/08	Phenanthrene	<0.000192	<0.000192	<0.000192
			11/24/09	<0.000917	<0.000917
MW - 12	11/11/08	Pyrene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 13	11/11/08	2-Methylnaphthalene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 14	11/11/08	1-Methylnaphthalene	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
MW - 11	11/11/08	Dibenzofuran	<0.000192	<0.000192	<0.000192
			11/24/09	<0.000917	<0.000917
MW - 12	11/11/08	2-Methylnaphthalene	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 13	11/11/08	1-Methylnaphthalene	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
MW - 14	11/11/08	Dibenzofuran	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
RW - 1	11/11/08	Dibenzofuran	Not sampled	<0.000922	<0.000922
			11/24/09	Not sampled	<0.000922
MW - 11	11/11/08	Dibenzofuran	<0.000192	<0.000192	<0.000192
			11/24/09	<0.000917	<0.000917
MW - 12	11/11/08	Dibenzofuran	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 13	11/11/08	Dibenzofuran	<0.000184	<0.000184	<0.000184
			11/24/09	<0.000183	<0.000183
MW - 14	11/11/08	Dibenzofuran	<0.000183	<0.000183	<0.000183
			11/24/09	<0.000183	<0.000183
RW - 1	11/11/08	Dibenzofuran	Not sampled	<0.000922	<0.000922
			11/24/09	Not sampled	<0.000922

# Appendices

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

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

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 of Company Plains Marketing, LP	Contact Camille Reynolds
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965
Facility Name 34 Junction South Station	Facility Type Meter Facility

Surface Owner State Land Office	Mineral Owner	Lease No.
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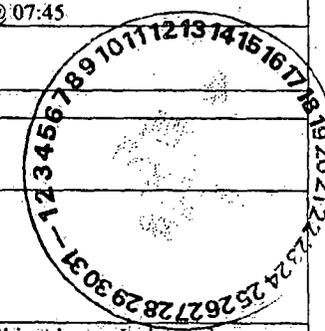
**LOCATION OF RELEASE**

Unit Letter M	Section 2	Township 17S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32° 51' 42.4" Longitude 103° 19' 54.4"

**NATURE OF RELEASE**

Type of Release Crude Oil	Volume of Release 15 barrels	Volume Recovered .5 barrels
Source of Release Malfunction of check valve on air eliminator	Date and Hour of Occurrence 6-10-05 @ 07:00	Date and Hour of Discovery 6-10-05 @ 07:45
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheely	
By Whom? Camille Reynolds	Date and Hour 6-10-05 @ 13:31	
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.\* Mechanical malfunction of check valve on air eliminator resulted in release. Isolated air eliminator off of metering system. The station produces approximately 100 barrels of sweet crude oil per day. The pressure on the line is <10 psi and the gravity on the sweet crude is 42.5, the H2S content is <10 ppm.

Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 1,620 square feet.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Camille Reynolds</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	
Date: 6-13-05	Phone: 505-441-0965	Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary