

AP - 12

**ANNUAL
MONITORING REPORT**

YEAR(S):

2009



2009
ANNUAL MONITORING REPORT

RECEIVED

FEB 16 2010

Environmental Bureau
Oil Conservation Division

TNM 98-05A
NE 1/4 NW 1/4 OF SECTION 26, TOWNSHIP 21 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: TNM-98-05A
NMOCD Reference AP-12

Prepared for:

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

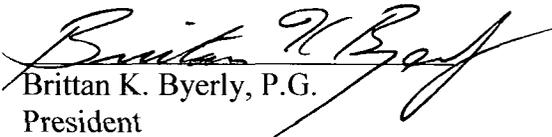


Prepared By:

NOVA Safety and Environmental
2057 Commerce Street
Midland, Texas 79703

February 2010


Ronald K. Rounsaville
Senior Project Manager


Brittan K. Byerly, P.G.
President

INTRODUCTION1

SITE DESCRIPTION AND BACKGROUND INFORMATION.....1

FIELD ACTIVITIES2

LABORATORY RESULTS3

SUMMARY5

ANTICIPATED ACTIONS6

LIMITATIONS6

DISTRIBUTION.....8

FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map – February 18, 2009

2B – Inferred Groundwater Gradient Map – May 19, 2009

2C – Inferred Groundwater Gradient Map – August 13, 2009

2D – Inferred Groundwater Gradient Map – November 11, 2009

Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – February 18, 2009

3B – Groundwater Concentration and Inferred PSH Extent Map – May 19, 2009

3C – Groundwater Concentration and Inferred PSH Extent Map – August 13, 2009

3D – Groundwater Concentrations and Inferred PSH Extent Map – November 11, 2009

TABLES

Table 1 – 2009 Groundwater Elevation Data

Table 2 – 2009 Concentrations of BTEX and TPH in Groundwater

Table 2 – 2009 Concentrations of PAH in Groundwater

APPENDICES

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

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

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

INTRODUCTION

NOVA Safety and Environmental (NOVA), on behalf of Plains Pipeline, L.P. (Plains), has prepared this 2009 Annual Groundwater 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. This report is intended to be viewed as a complete document with figures, attachments, tables, and text. The report presents the results of four quarterly groundwater monitoring/sampling events conducted at the TNM 98-05A crude oil Release Site (the site), located in Lea County, New Mexico. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. For reference, the Site Location Map is provided as Figure 1.

Groundwater gauging and sampling was conducted during each quarter of 2009 to assess the levels and extent of Phase Separated Hydrocarbons (PSH) and dissolved phase constituents. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells were not sampled if a measurable thickness of PSH were detected during gauging activities.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately two miles northeast of the city of Eunice, New Mexico. The legal description of the site is NE $\frac{1}{4}$, NW $\frac{1}{4}$, Section 26, Township 21 South, Range 37 East (Figure 1). On February 5, 1998, an estimated 38 barrels of crude oil were released from a six inch crude oil pipeline. Approximately four barrels of crude oil were recovered during the initial response activities. The release was attributed to internal corrosion of the pipeline. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. Approximately 3,300 cubic yards of impacted soil was excavated and applied to an on-site treatment cell. In December 2004, a Site Restoration Work Plan and Proposed Soil Closure Strategy Report was submitted to the NMOCD. The report was approved by the NMOCD in a letter dated June 2, 2005. In October 2005, additional excavation along the east sidewall was completed, the excavation was backfilled with remediated soil and the site was graded to match the surrounding topography. In December 2005, a Soil Closure Request was submitted to the NMOCD and this request was approved by the NMOCD in a letter dated January 31, 2006, which concurred that no further action was necessary with regard to soil remediation at the TNM-98-05A Site.

During the October 2005 excavation backfilling activities, monitor well MW-4 was damaged and could not be repaired. On January 9, 2006, Plains representatives requested NMOCD approval to plug and abandon monitor well MW-4. On January 19, 2006, NMOCD approved the request to plug and abandon the monitor well. On March 6, 2006, monitor well MW-4 was plugged and abandoned utilizing approved New Mexico Office of the State Engineer plugging and abandonment procedures.

Currently, there are ten monitor wells (MW-1 through MW-3 and MW-5 through MW-11) onsite. For reference, the analytical results are shown in Table 2, 2009 Concentrations of BTEX in Groundwater.

FIELD ACTIVITIES

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells. Table 1 displays the groundwater gauging data for the reporting period. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended by correspondence date January 19, 2006. The table below illustrates the current groundwater sampling schedule approved by the NMOCD.

Sample Location	Sampling Schedule
MW-1	Quarterly
MW-2	Quarterly
MW-3	Quarterly
MW-4	Plugged and Abandoned March 6, 2006
MW-5	Annual
MW-6	Semi-annual
MW-7	Semi-annual
MW-8	Annual
MW-9	Quarterly
MW-10	Quarterly
MW-11	Quarterly

Quarterly sampling events for the calendar year 2009 were performed on February 18, May 19, August 13, and November 11, 2009. Each quarterly sampling event consisted of gauging all wells and purging and sampling monitor wells as per the approved sampling schedule. During each sampling event, the monitor wells were purged of a minimum of three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

The most recent inferred groundwater gradient, Figure 2D, indicates a general gradient of approximately 0.005 feet/foot to the southeast as measured between monitor wells MW-1 and MW-6. This data is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,343.88 and 3,345.97 feet above mean sea level, in monitor well MW-6 on February 18, 2009 and November 11, 2009, respectively. Groundwater elevation data for the calendar year 2009 is provided in Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed disk.

LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2009 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethyl-benzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. A listing of BTEX 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 concentrations ranged from 0.640 mg/L during the 2nd quarter to 2.940 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four quarters of the reporting period. Toluene concentrations were below the MDL of 0.100 mg/L and below the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.511 mg/L during the 1st quarter to 1.460 mg/L during the 2nd quarter of 2009. Ethyl-benzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 2nd, 3rd and 4th quarters of the reporting period. Xylene concentrations ranged from <0.100 mg/L during the 1st and 3rd quarters to 2.000 mg/L during the 2nd quarter of 2009. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during the 2nd and 4th quarters and below the standards during the 1st and 3rd quarters of the reporting period. Laboratory analysis for PAH during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for 1-methylnaphthalene (0.0706 mg/L) and 2-methylnaphthalene (0.0474 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.0257 mg/L), phenanthrene (0.011 mg/L) and dibenzofuran (0.0103 mg/L), which are below the WQCC Drinking Water Standards.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.693 mg/L during the 4th quarter to 2.340 mg/L during the 2nd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.238 mg/L during the 1st quarter to 1.080 mg/L during the 2nd quarter of 2009. Ethyl-benzene concentrations were above the NMOCD regulatory standard during the 2nd and 3rd quarters of the reporting period. Xylene concentrations ranged from 0.100 mg/L during the 1st quarter to 1.500 mg/L during the 2nd quarter of 2009. Xylene concentrations were above the NMOCD regulatory standard during the 2nd and 3rd quarters and below the standards during the 1st and 4th quarters of the reporting period. Laboratory analysis for PAH during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards of naphthalene (0.0488 mg/L), 1-methylnaphthalene (0.0930 mg/L) and 2-methylnaphthalene (0.0735 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.0114 mg/L) and dibenzofuran (0.0116 mg/L), which are below the WQCC Drinking Water Standards.

Monitor well MW-3 is sampled on a quarterly schedule. Analytical results indicate BTEX constituent concentrations were below the MDL and/or NMOCD regulatory standards during all four quarters of the reporting period. Monitor well MW-3 has exhibited twenty-eight consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.00022 mg/L), which are below the WQCC Drinking Water Standards.

Monitor well MW-5 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2nd and 4th quarter sampling events. Monitor well MW-5 has exhibited twenty-eight consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-6 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2nd and 4th quarter sampling event. Monitor well MW-6 has exhibited thirty-two consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-7 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2nd and 4th quarter sampling event. Monitor well MW-7 has exhibited thirty-two consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

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 constituent during the 4th quarter sampling event. Monitor well MW-8 has exhibited twenty-four consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-9 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1st, 3rd and 4th quarters to 0.0078 mg/L during the 2nd quarter of 2009. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDLs and NMOCD regulatory standard during the all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1st quarter to 0.0201 mg/L during the 2nd and 3rd quarters of 2009. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.004 mg/L during the 1st quarter to 0.0306 mg/L during the 2nd quarter of 2009. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated

concentrations above MDLs for phenanthrene (0.00358 mg/L), which is below the WQCC Drinking Water Standards.

Monitor well MW-10 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 6.000 mg/L during the 2nd quarter to 6.820 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and below the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 1.070 mg/L during the 2nd quarter to 1.750 mg/L during the 4th quarter of 2009. Ethyl-benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.271 mg/L during the 1st quarter to 1.740 mg/L during the 2nd quarter of 2009. Xylene concentrations were above the NMOCD regulatory standard during the 2nd, 3rd and 4th quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0474 mg/L), 1-methylnaphthalene (0.0934 mg/L) and 2-methylnaphthalene (0.0713 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.0101 mg/L) and dibenzofuran (0.0125 mg/L), which are below the WQCC Drinking Water Standards.

Monitor well MW-11 is sampled on a quarterly schedule. Analytical results indicate benzene concentrations were below MDL and NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 1st, 3rd and 4th quarters to 0.0096 mg/L during the 2nd quarter of 2009. Toluene concentrations were below the MDL the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1st, 3rd and 4th quarters to 0.0108 mg/L during the 2nd quarter of 2009. Ethyl-benzene concentrations were below the MDL the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1st, 3rd and 4th quarters to 0.0338 mg/L during the 2nd quarter of 2009. Xylene concentrations were below the MDL the NMOCD regulatory standard during all four quarters of the reporting period. Monitor well MW-11 has exhibited twenty consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

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 four groundwater monitoring and sampling events for the annual monitoring period of calendar year 2009. Currently, there are ten groundwater monitor wells (MW-1 through MW-3 and MW-5 through MW-11) onsite. The most recent inferred groundwater gradient indicates a general gradient of approximately 0.005 feet/foot to the southeast.

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells.

Benzene concentrations were above NMOCD regulatory standards in three monitor wells (MW-1, MW-2 and MW-10) during the reporting period. Benzene concentrations were below NMOCD regulatory standards in seven monitor wells.

Toluene concentrations were below NMOCD regulatory standards for all ten monitor wells during the four quarters of the 2009 reporting period.

Ethyl-benzene concentrations were above NMOCD regulatory standards for three monitor wells. Monitor well MW-10 exhibited elevated concentrations above NMOCD regulatory standards during all four quarters of 2009. Monitor well MW-1 exhibited one quarter below and three quarters above NMOCD regulatory standards during 2009 and monitor well MW-2 exhibited two quarters above and two quarters below NMOCD regulatory standards during 2009. Ethyl-benzene concentrations were below NMOCD regulatory standards for seven monitor wells for the 2009 reporting period.

Xylene concentrations were above NMOCD regulatory standards for three monitor wells. Monitor well MW-10 exhibited three quarters above and one quarter below NMOCD regulatory standards and monitor wells MW-1 and MW-2 exhibited two quarters above and two quarters below NMOCD regulatory standards. Xylene concentrations were below NMOCD regulatory standards for seven monitor wells for the 2009 reporting period. Review of PAH analysis indicates a decreasing trend in constituent concentrations in monitor wells MW-1, MW-3, MW-9 and MW-10 and an increasing trend in MW-2.

ANTICIPATED ACTIONS

Plains will continue to monitor and perform quarterly groundwater sampling activities at the site. 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-1, MW-2 and MW-10) which have historically exhibited elevated constituents near or above the WQCC standards.

An Annual Monitoring Report will be submitted to the NMOCD by April 1, 2011.

LIMITATIONS

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

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

recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

- Copy 1 Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
- Copy 2: Larry Johnson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240
- Copy 3: Jason Henry
Plains Marketing, L.P.
2530 State Highway 214
Denver City, TX 79323
jhenry@paalp.com
- Copy 4: Jeff Dann
Plains Marketing, L.P.
333 Clay Street
Suite 1600
Houston, TX 77002
jpdann@paalp.com
- Copy 5: NOVA Safety and Environmental
2057 Commerce Street
Midland, TX 79703
rrounsaville@novatraining.cc

Figures

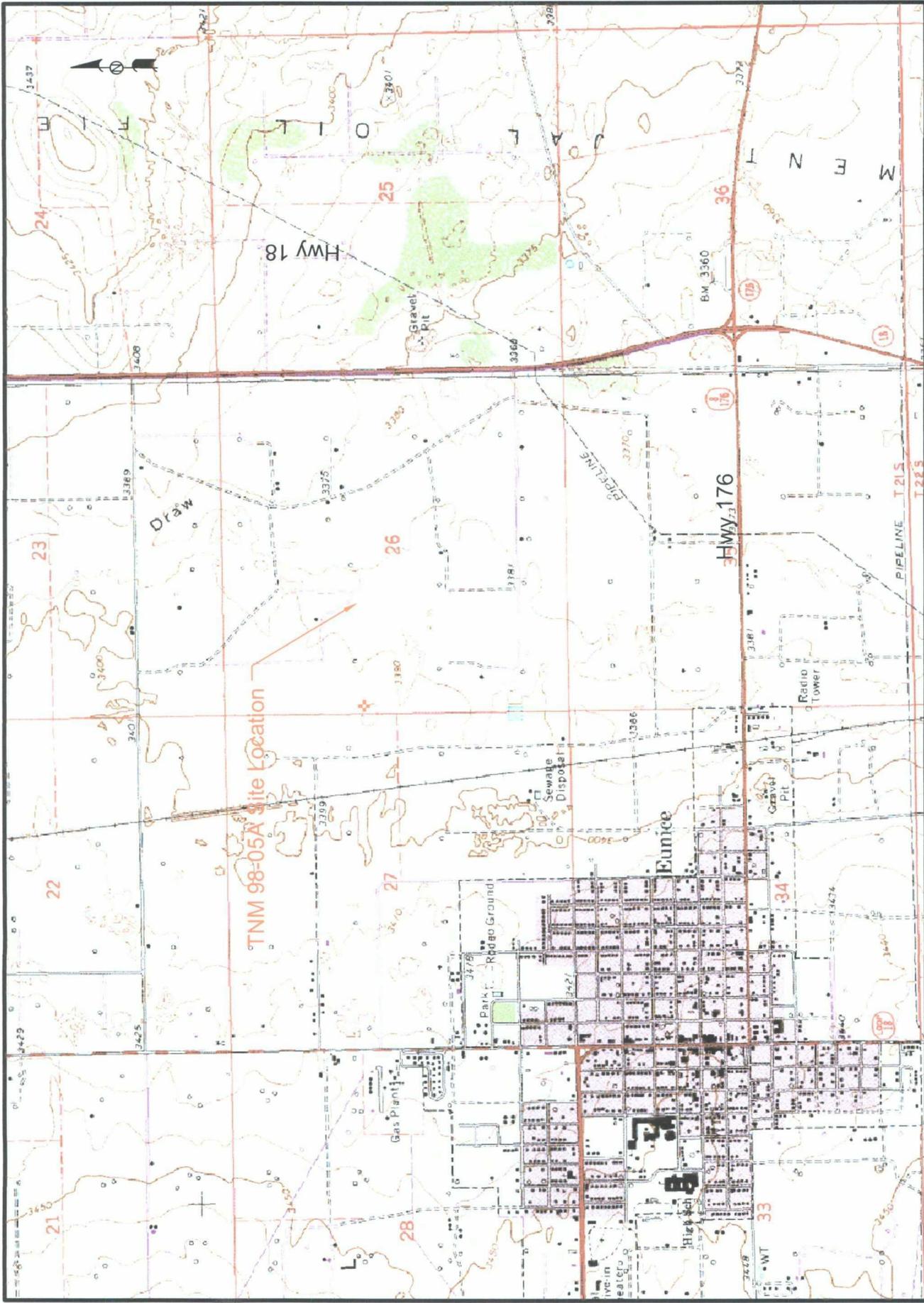


Figure 1
 Site Location Map
 Plains Marketing, L.P.
 TNM 98-05A
 Lea County, NM

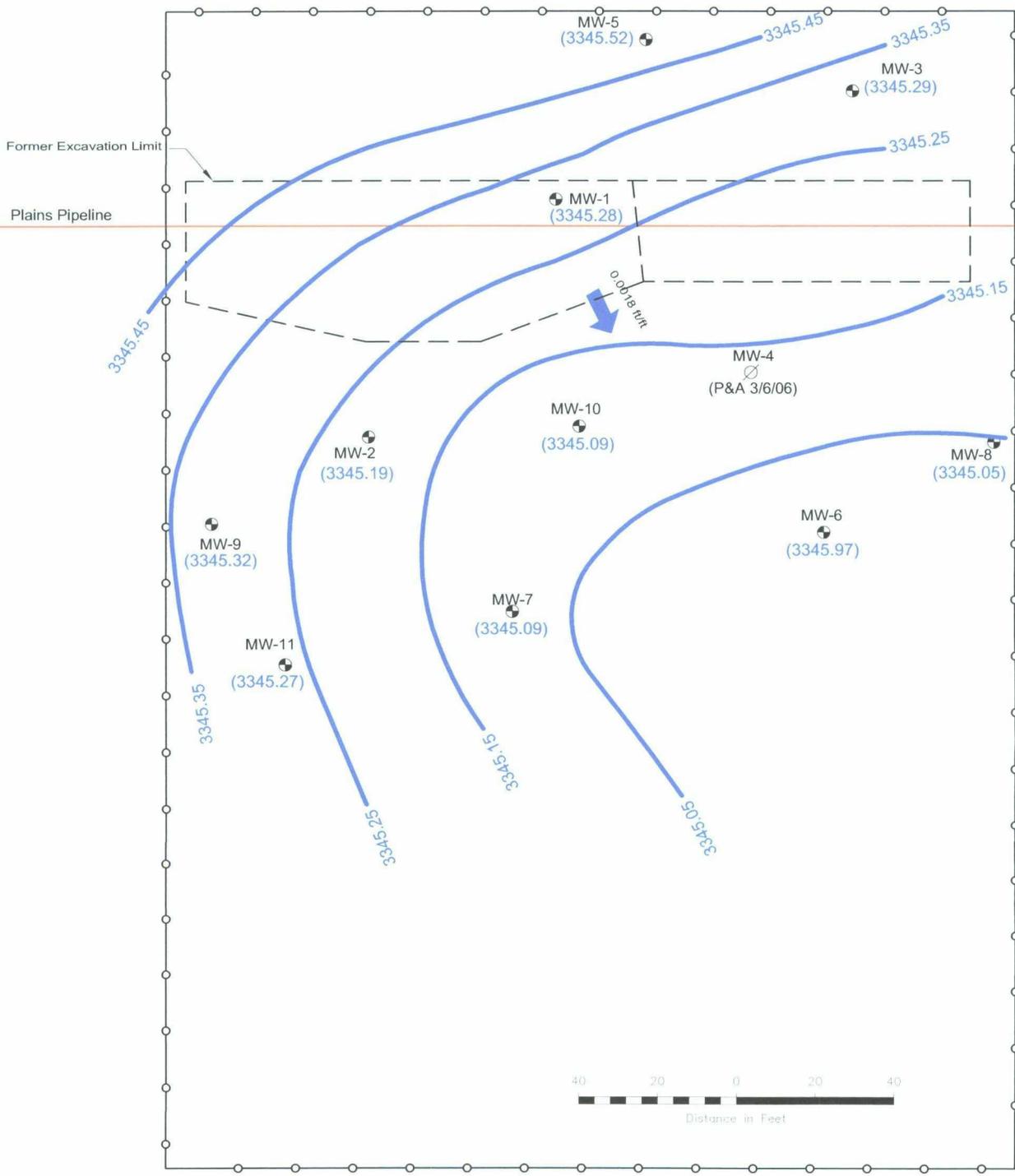
NMOCD Reference # AP-12

NOVA
 safety and environmental

NOVA Safety and Environmental

Scale: NTS	Prep By: CDS	Checked By: CE
February 24, 2005		
NE 1/4 NW 1/4 Sec 26 T21S R37E		
Lat. N32° 27' 03.9" Long. W103° 08' 29.2"		

Note: MW-6 not used to determine gradient. Gradient measured between MW-1 and MW-8.
Contour Intervals: = 0.10'



Legend:

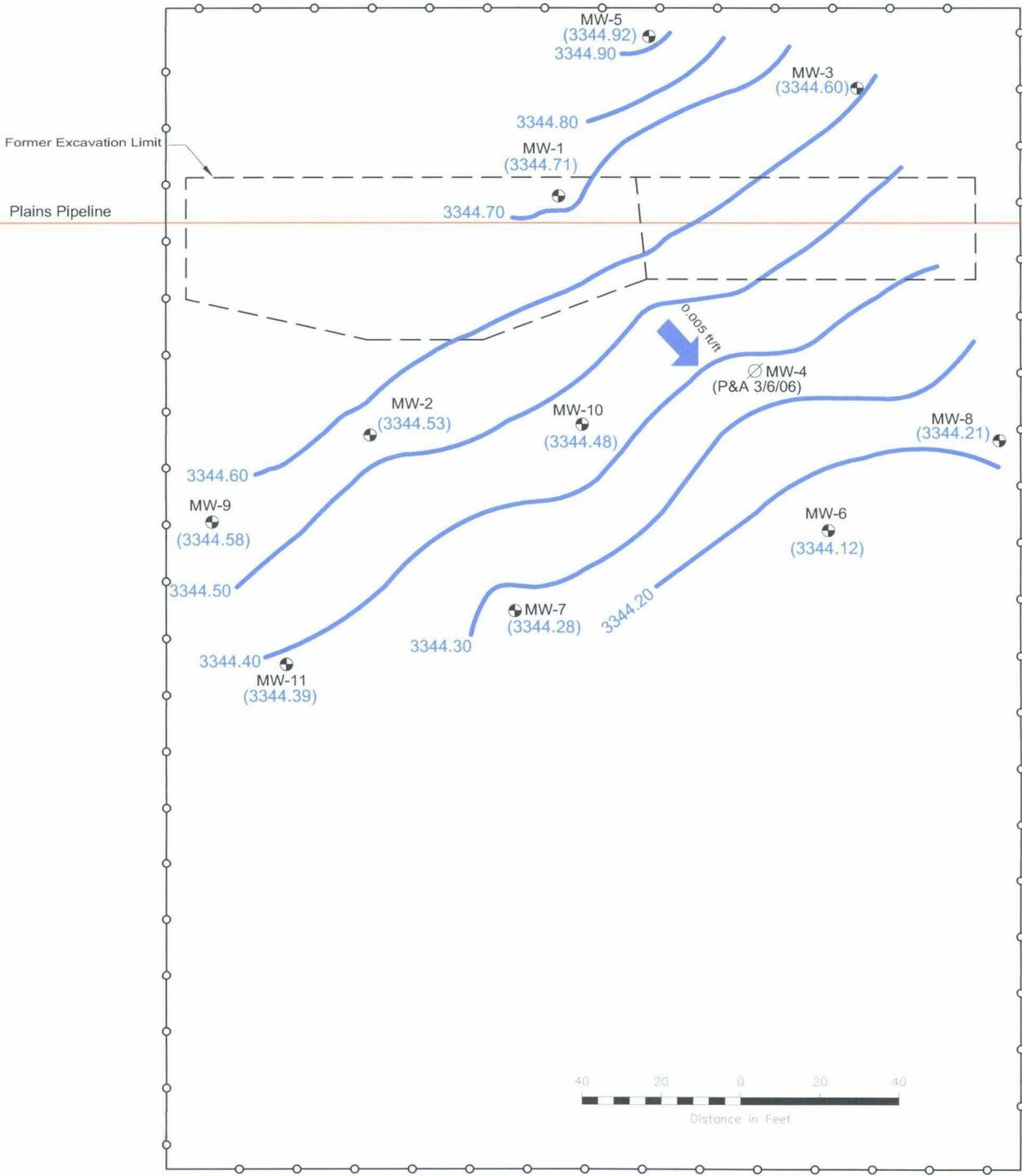
	Monitor Well Location		(3728.80) Groundwater Elevation (feet)
	Fence		0.001 ft/ft Groundwater Gradient and Magnitude
	Pipeline		
	Former Excavation Limits		

Figure 2A
Inferred Groundwater
Groundwater Gradient Map
 (02/18/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

NOVA Safety and Environmental

NE1/4 NW1/4 Sec 26 T21S R37E	32° 27' 03.9"N 103° 08' 29.2"W
Scale: 1" = 40'	Cad By: SAT
February 05, 2010	Checked By: RKR

Note: Groundwater Gradient measured between MW-1 and MW-6.
 Contour Intervals: = 0.10'



- Legend:
- Monitor Well Location
 - Fence
 - Pipeline
 - Former Excavation Limits
 - (3728.80) Groundwater Elevation (feet)
 - Groundwater Elevation Contour Line
 - 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2B
 Inferred Groundwater
 Groundwater Gradient Map
 (05/19/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

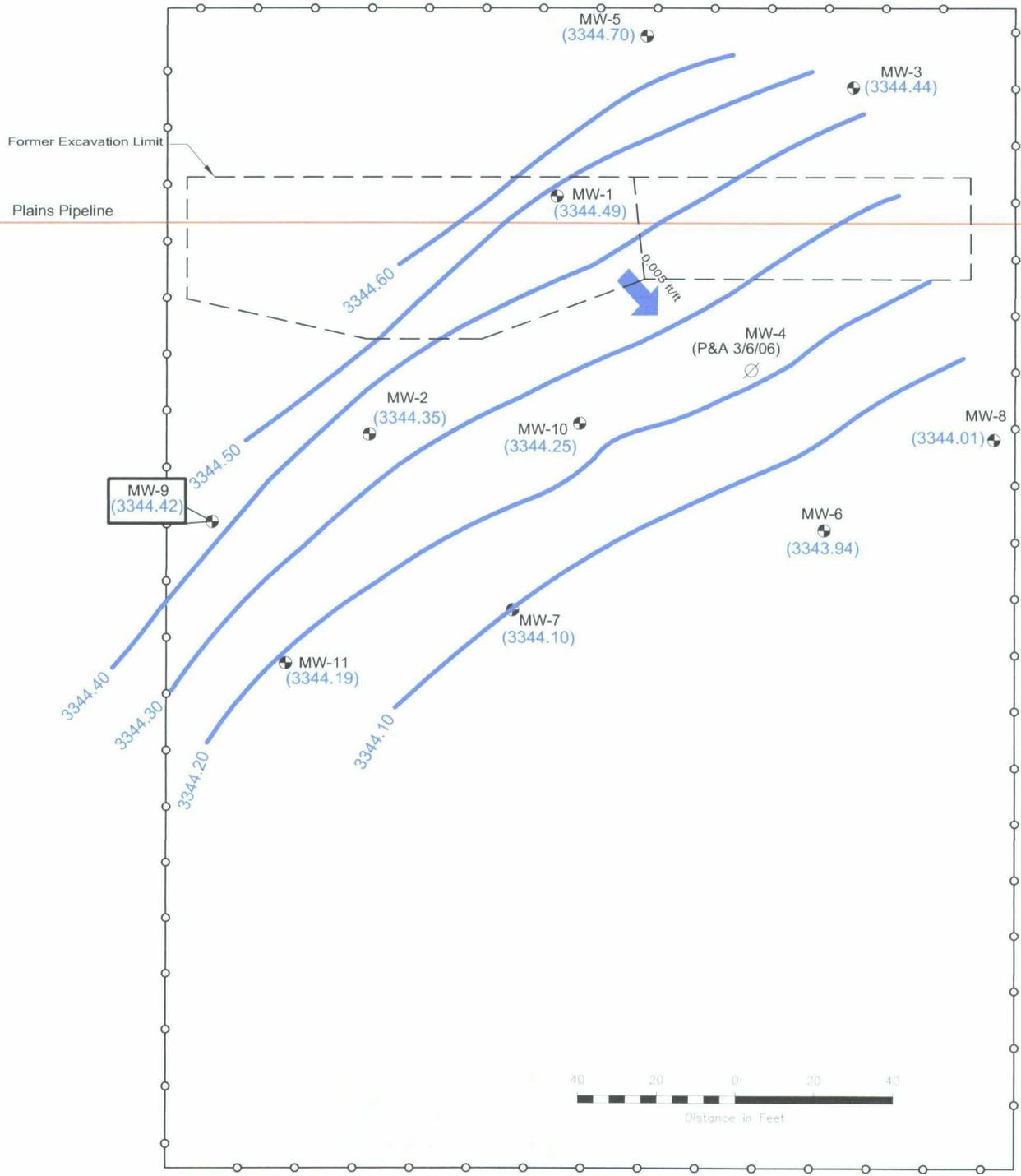
NOVA Safety and Environmental

NE1/4 NW1/4 Sec 26 T21S R37E | 32° 27' 03.9"N 103° 08' 29.2"W

Scale: 1" = 40' | Prep By: SAT | Checked By: T.J.L.

June 4, 2009

Note: Groundwater Gradient measured between MW-1 and MW-6.
 Contour Intervals: = 0.10'



Legend:

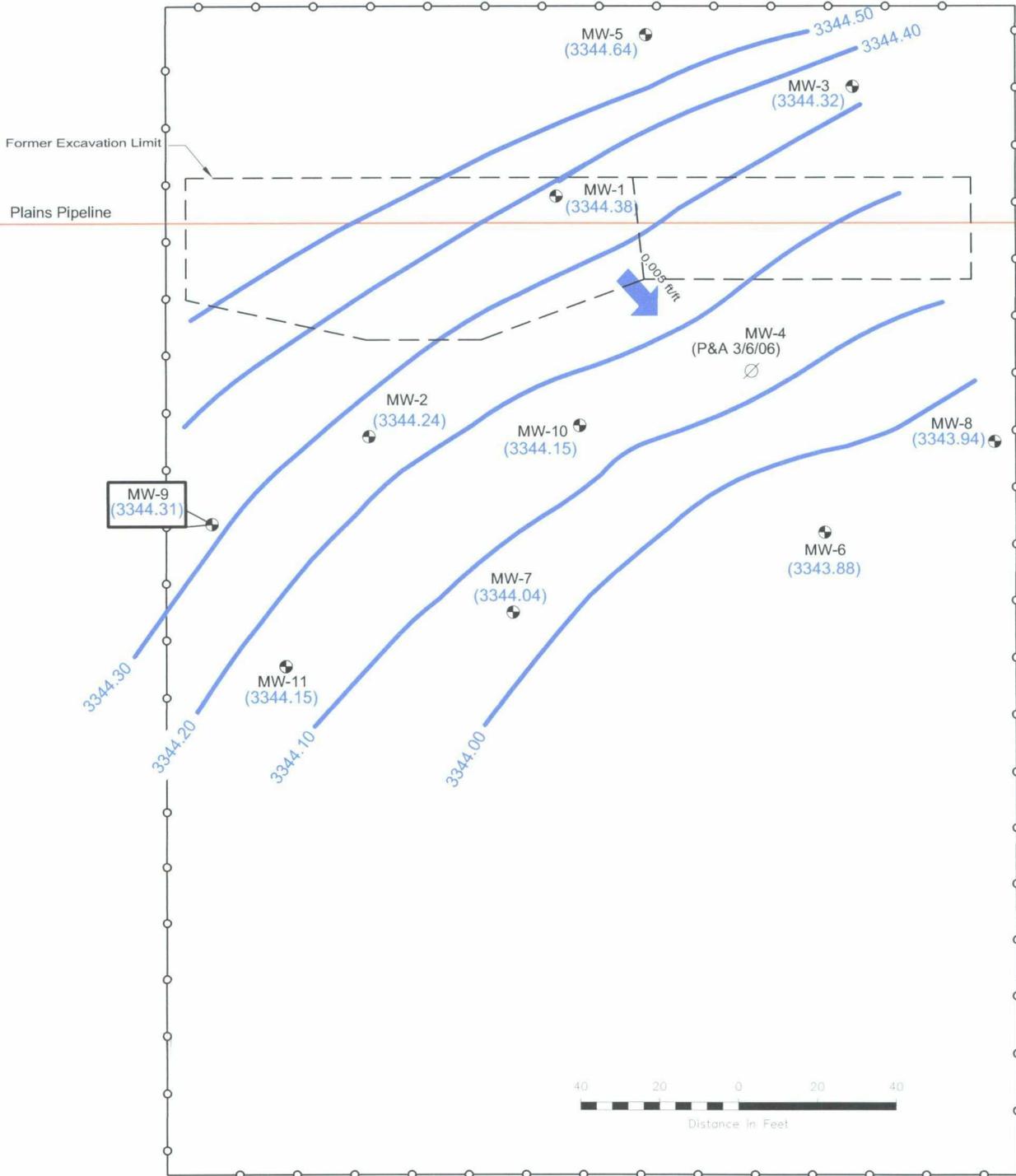
- Monitor Well Location
- Fence
- Pipeline
- Former Excavation Limits
- Groundwater Elevation Contour Line
- Groundwater Gradient and Magnitude

Figure 2C
 Inferred Groundwater
 Groundwater Gradient Map
 (08/13/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

NOVA Safety and Environmental

NE1/4 NW1/4 Sec 26 T21S R37E 32° 27' 03.9"N 103° 08' 29.2"W
 Scale: 1" = 40' Prep By: SAT Checked By: RKR
 October 14, 2009

Note: Groundwater Gradient measured between MW-1 and MW-6.
 Contour intervals: = 0.10'



Legend:

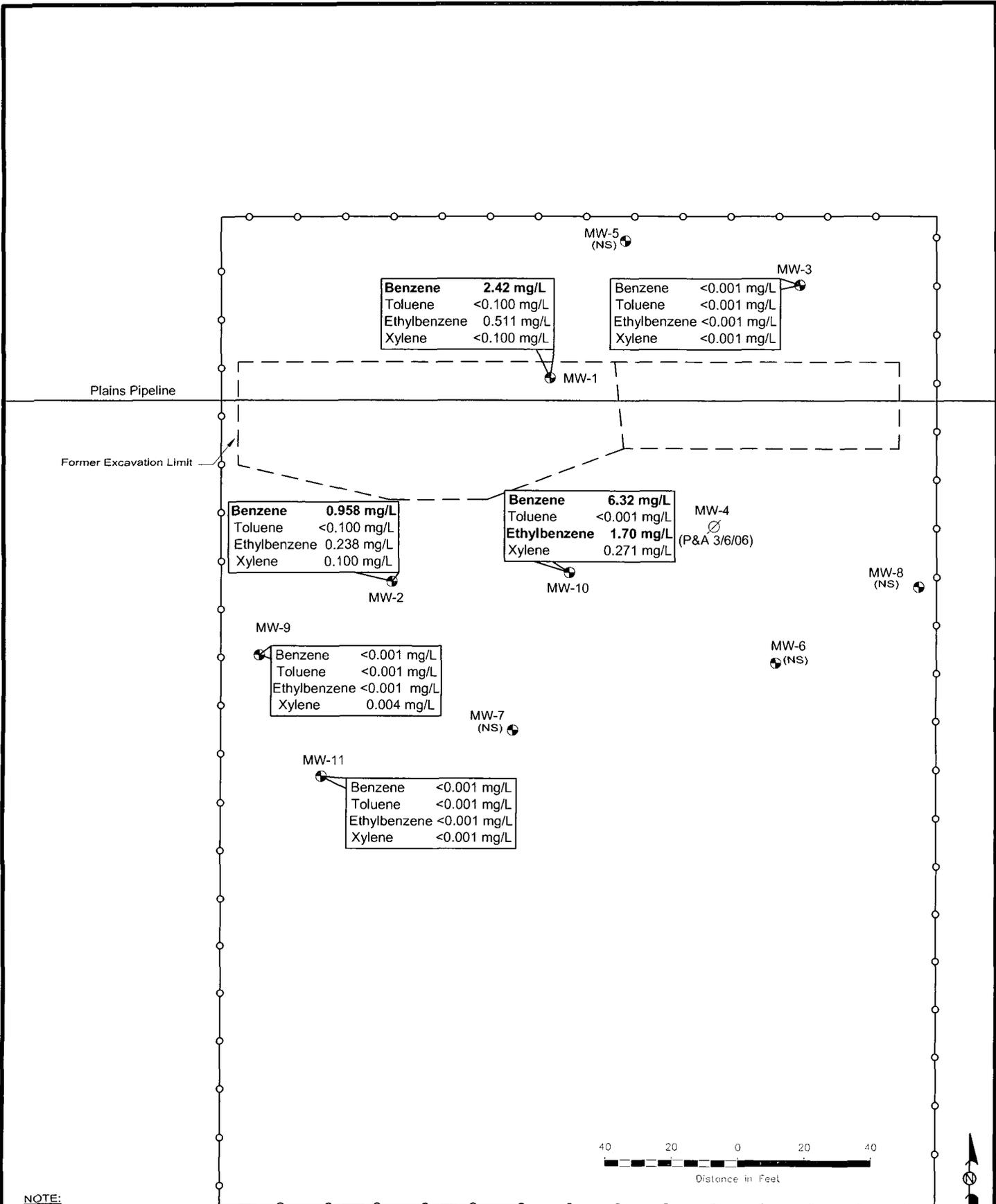
- Monitor Well Location
- Fence
- Pipeline
- Former Excavation Limits
- (3728.80) Groundwater Elevation (feet)
- Groundwater Elevation Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2D
 Inferred Groundwater
 Groundwater Gradient Map
 (1/11/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

NOVA Safety and Environmental



NE1/4 NW1/4 Sec 26 T21S R37E		32° 27' 03.9"N 103° 08' 29.2"W	
Scale: 1" = 40'	Cad By: SAT	Checked By: RKR	
February 08, 2010			



NOTE:
BOLD Indicates Concentration Above the NMOC Regulatory Standard

Legend:

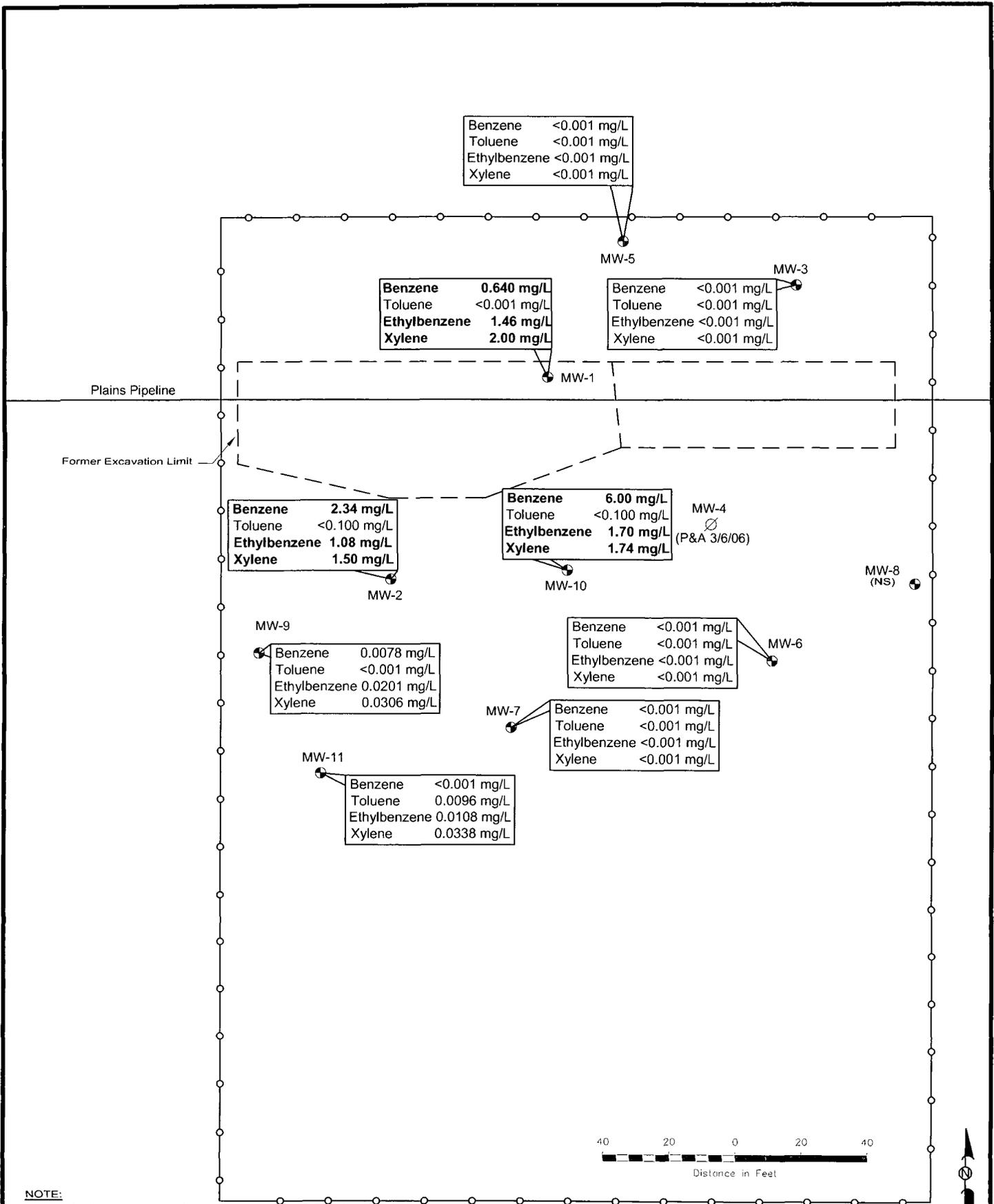
	Monitor Well Location	<0.001	Constituent Concentration in mg/L
	Plugged and Abandoned	(NS)	Not Sampled
	Former Excavation Limits		
	Fence		

Figure 3A
 Groundwater Concentration
 and Inferred PSH Extent
 (02/18/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOC Ref# AP-12

NOVA Safety and Environmental

NOVA
 safety and environmental

NE1/4 NW1/4 Sec 26 T21S R37E	32° 27' 03.9"N 103° 08' 29.2"W
Scale: 1" = 40'	CAD By: SAT
Checked By: T.J.L.	June 4, 2009



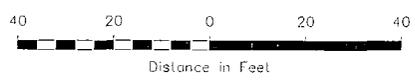
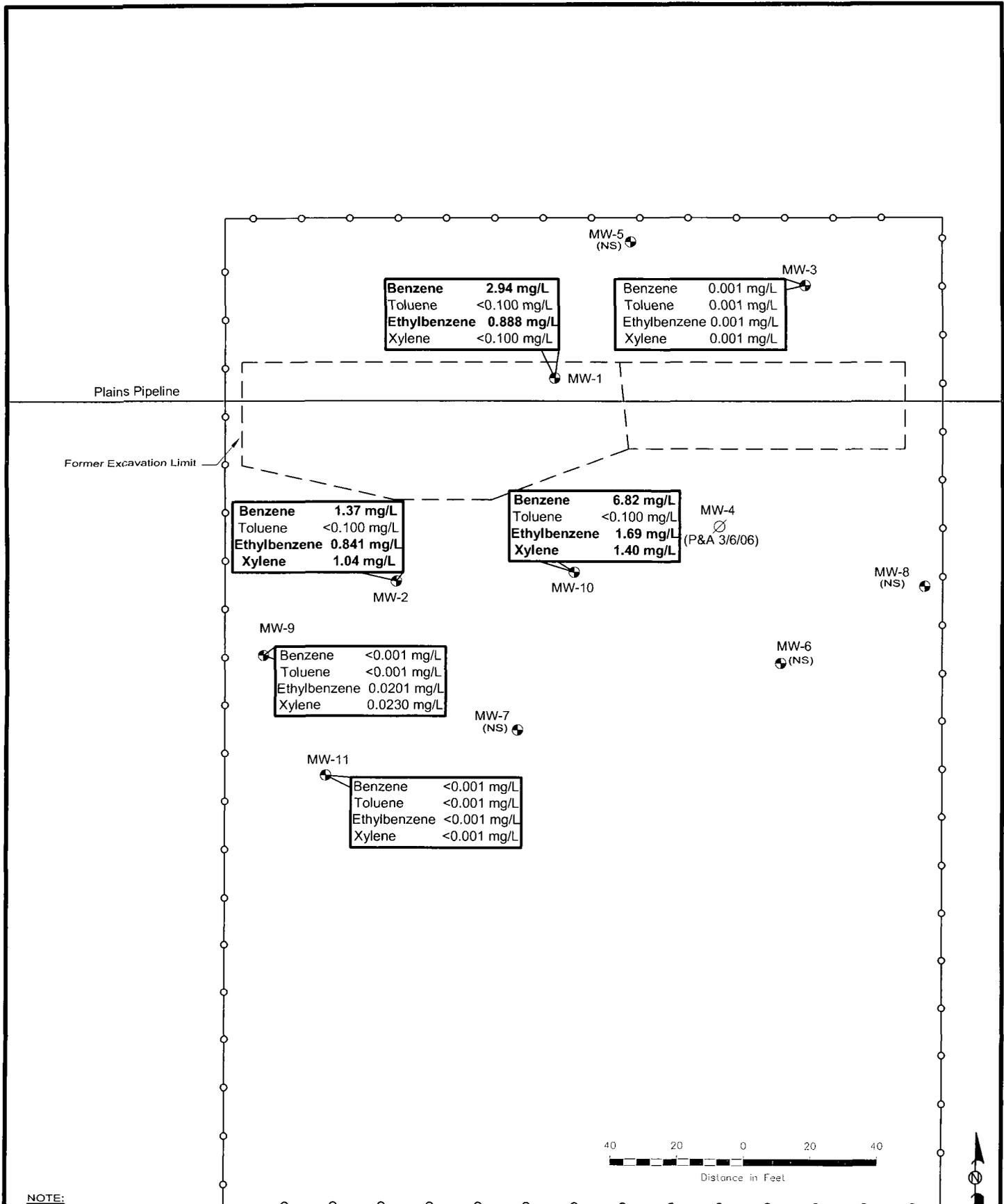
Legend:

	Monitor Well Location	<0.001	Constituent Concentration in mg/L
	Plugged and Abandoned	(NS)	Not Sampled
	Former Excavation Limits		
	Fence		

Figure 3B
 Groundwater Concentration
 and Inferred PSH Extent
 (05/19/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

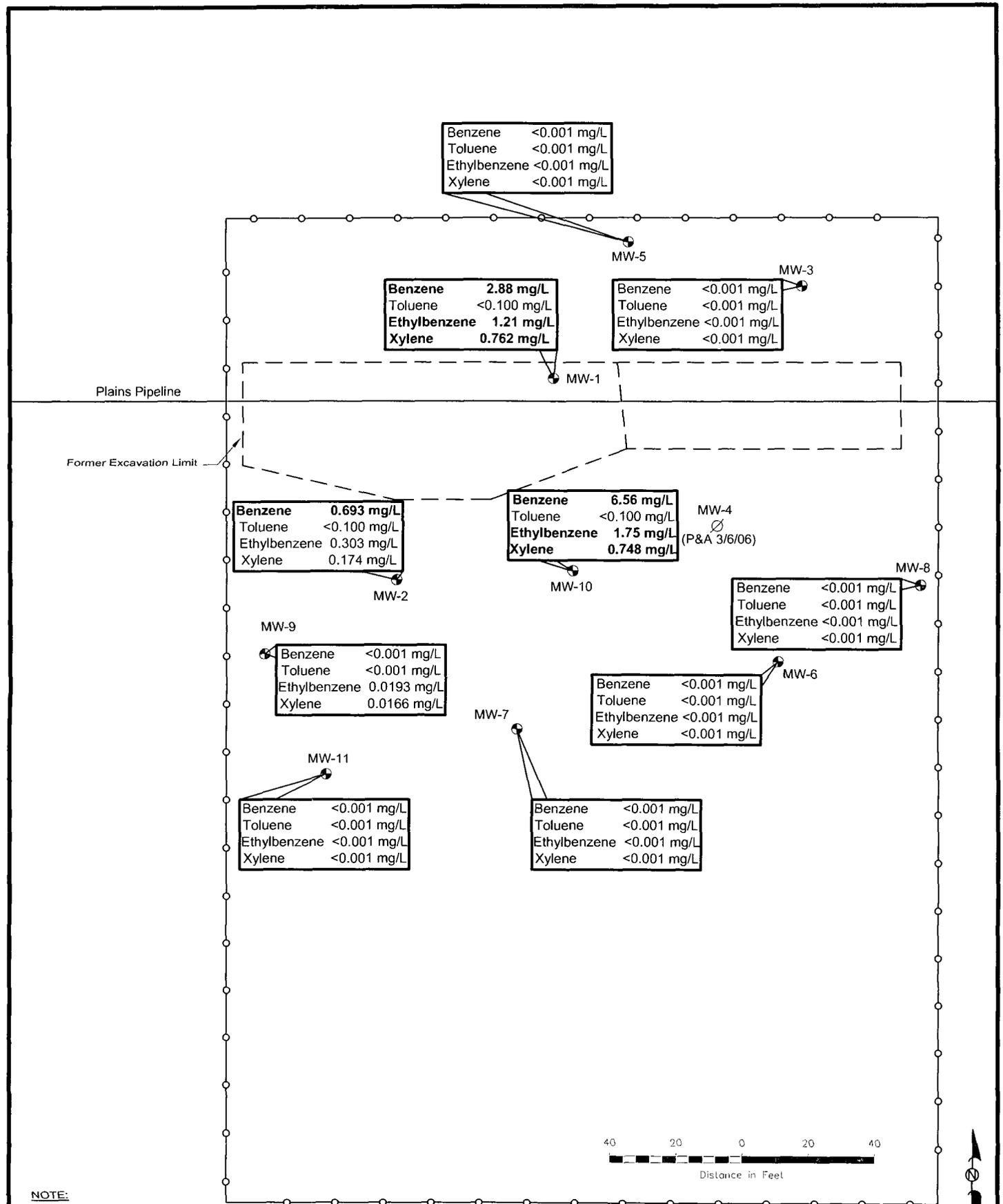
NOVA Safety and Environmental

NE1/4 NW1/4 Sec 26 T21S R37E 32° 27' 03.9"N 103° 08' 29.2"W
 Scale: 1" = 40' CAD By: SAT Checked By: RKR
 February 05, 2010



NOTE:
BOLD Indicates Concentration Above the NMOC Regulatory Standard
 * = 0.001

<p>Legend:</p> <ul style="list-style-type: none"> Monitor Well Location Plugged and Abandoned Former Excavation Limits Fence 	<p>Figure 3C Groundwater Concentration and Inferred PSH Extent (08/13/2009) Plains Marketing, L.P. TNM98-05A Lea County, NM NMOC Ref# AP-12</p>	<p>NOVA Safety and Environmental</p> <p>NE1/4 NW1/4 Sec 26 T21S R37E 32° 27' 03.9"N 103° 08' 29.2"W</p> <p>Scale: 1" = 40' CAD By: SAT Checked By: RKR</p> <p>October 16, 2009</p>
---	--	---



NOTE:

BOLD Indicates Concentration Above the NMOCD Regulatory Standard
 * = 0.001

Legend:

- Monitor Well Location
- Plugged and Abandoned
- Former Excavation Limits
- Fence
- <0.001 Constituent Concentration in mg/L
- (NS) Not Sampled

Figure 3D
 Groundwater Concentration
 and Inferred PSH Extent
 (11/11/2009)
 Plains Marketing, L.P.
 TNM98-05A
 Lea County, NM
 NMOCD Ref# AP-12

NOVA Safety and Environmental



NE14 NW1/4 Sec 26 T21S R37E	32° 27' 03.9"N 103° 08' 29.2"W
Scale: 1" = 40'	CAD By: SAT
February 05, 2010	Checked By: RKR



Tables

TABLE 1

2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP
TNM 98-05A
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-12

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	02/18/09	3391.62	-	46.34	0.00	3,345.28
MW - 1	03/03/09	3391.62	-	46.19	0.00	3,345.43
MW - 1	03/10/09	3391.62	-	46.43	0.00	3,345.19
MW - 1	03/18/09	3391.62	-	46.55	0.00	3,345.07
MW - 1	03/27/09	3391.62	-	46.55	0.00	3,345.07
MW - 1	04/07/09	3391.62	-	46.69	0.00	3,344.93
MW - 1	04/14/09	3391.62	-	46.75	0.00	3,344.87
MW - 1	04/28/09	3391.62	-	46.83	0.00	3,344.79
MW - 1	05/19/09	3391.62	-	46.91	0.00	3,344.71
MW - 1	05/27/09	3391.62	-	47.04	0.00	3,344.58
MW - 1	06/04/09	3391.62	-	47.02	0.00	3,344.60
MW - 1	06/12/09	3391.62	-	47.08	0.00	3,344.54
MW - 1	06/18/09	3391.62	-	47.12	0.00	3,344.50
MW - 1	06/30/09	3391.62	-	46.20	0.00	3,345.42
MW - 1	07/07/09	3391.62	-	47.14	0.00	3,344.48
MW - 1	07/14/09	3391.62	-	47.15	0.00	3,344.47
MW - 1	07/21/09	3391.62	-	47.21	0.00	3,344.41
MW - 1	07/28/09	3391.62	-	47.14	0.00	3,344.48
MW - 1	08/07/09	3391.62	-	47.16	0.00	3,344.46
MW - 1	08/13/09	3391.62	-	47.13	0.00	3,344.49
MW - 1	08/21/09	3391.62	-	47.17	0.00	3,344.45
MW - 1	08/27/09	3391.62	-	47.21	0.00	3,344.41
MW - 1	09/10/09	3391.62	-	47.20	0.00	3,344.42
MW - 1	09/18/09	3391.62	-	47.22	0.00	3,344.40
MW - 1	09/29/09	3391.62	-	47.16	0.00	3,344.46
MW - 1	10/06/09	3391.62	-	47.17	0.00	3,344.45
MW - 1	10/20/09	3391.62	-	47.16	0.00	3,344.46
MW - 1	10/27/09	3391.62	-	47.17	0.00	3,344.45
MW - 1	11/11/09	3391.62	-	47.24	0.00	3,344.38
MW - 2	02/18/09	3390.85	-	45.66	0.00	3,345.19
MW - 2	03/03/09	3390.85	-	45.65	0.00	3,345.20
MW - 2	03/10/09	3390.85	-	45.83	0.00	3,345.02
MW - 2	03/18/09	3390.85	-	45.91	0.00	3,344.94
MW - 2	03/27/09	3390.85	-	45.92	0.00	3,344.93
MW - 2	04/07/09	3390.85	-	46.09	0.00	3,344.76
MW - 2	04/14/09	3390.85	-	46.12	0.00	3,344.73
MW - 2	04/28/09	3390.85	-	46.22	0.00	3,344.63
MW - 2	05/19/09	3390.85	-	46.32	0.00	3,344.53
MW - 2	05/27/09	3390.85	-	46.42	0.00	3,344.43
MW - 2	06/04/09	3390.85	-	46.41	0.00	3,344.44
MW - 2	06/12/09	3390.85	-	46.46	0.00	3,344.39
MW - 2	06/18/09	3390.85	-	46.52	0.00	3,344.33
MW - 2	06/30/09	3390.85	-	45.63	0.00	3,345.22
MW - 2	07/07/09	3390.85	-	46.52	0.00	3,344.33
MW - 2	07/14/09	3390.85	-	46.53	0.00	3,344.32
MW - 2	07/21/09	3390.85	-	46.58	0.00	3,344.27
MW - 2	07/28/09	3390.85	-	46.51	0.00	3,344.34
MW - 2	08/07/09	3390.85	-	46.53	0.00	3,344.32
MW - 2	08/13/09	3390.85	-	46.50	0.00	3,344.35
MW - 2	08/21/09	3390.85	-	46.53	0.00	3,344.32
MW - 2	08/27/09	3390.85	-	46.56	0.00	3,344.29
MW - 2	09/10/09	3390.85	-	46.56	0.00	3,344.29
MW - 2	09/18/09	3390.85	-	46.54	0.00	3,344.31
MW - 2	09/29/09	3390.85	-	46.53	0.00	3,344.32
MW - 2	10/06/09	3390.85	-	46.54	0.00	3,344.31
MW - 2	10/20/09	3390.85	-	46.55	0.00	3,344.30
MW - 2	10/27/09	3390.85	-	46.56	0.00	3,344.29
MW - 2	11/11/09	3390.85	-	46.61	0.00	3,344.24

TABLE 1

2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP
TNM 98-05A
LEA COUNTY, NEW MEXICO
NMCD REFERENCE NUMBER AP-12

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 3	02/18/09	3391.08	-	45.79	0.00	3,345.29
MW - 3	05/19/09	3391.08	-	46.48	0.00	3,344.60
MW - 3	07/07/09	3391.08	-	46.64	0.00	3,344.44
MW - 3	07/14/09	3391.08	-	46.66	0.00	3,344.42
MW - 3	07/28/09	3391.08	-	46.65	0.00	3,344.43
MW - 3	08/07/09	3391.08	-	46.66	0.00	3,344.42
MW - 3	08/13/09	3391.08	-	46.64	0.00	3,344.44
MW - 3	09/10/09	3391.08	-	46.72	0.00	3,344.36
MW - 3	09/18/09	3391.08	-	46.76	0.00	3,344.32
MW - 3	09/29/09	3391.08	-	46.66	0.00	3,344.42
MW - 3	10/06/09	3391.08	-	46.68	0.00	3,344.40
MW - 3	10/20/09	3391.08	-	46.69	0.00	3,344.39
MW - 3	10/27/09	3391.08	-	46.68	0.00	3,344.40
MW - 3	11/11/09	3391.08	-	46.76	0.00	3,344.32
MW - 5	02/18/09	3391.53	-	46.01	0.00	3,345.52
MW - 5	05/19/09	3391.53	-	46.61	0.00	3,344.92
MW - 5	08/13/09	3391.53	-	46.83	0.00	3,344.70
MW - 5	11/11/09	3391.53	-	46.89	0.00	3,344.64
MW - 6	02/18/09	3391.14	-	45.17	0.00	3,345.97
MW - 6	05/19/09	3391.14	-	47.02	0.00	3,344.12
MW - 6	08/13/09	3391.14	-	47.20	0.00	3,343.94
MW - 6	11/11/09	3391.14	-	47.26	0.00	3,343.88
MW - 7	02/18/09	3391.21	-	46.12	0.00	3,345.09
MW - 7	05/19/09	3391.21	-	46.93	0.00	3,344.28
MW - 7	08/13/09	3391.21	-	47.11	0.00	3,344.10
MW - 7	11/11/09	3391.21	-	47.17	0.00	3,344.04
MW - 8	02/18/09	3391.14	-	46.09	0.00	3,345.05
MW - 8	05/19/09	3391.14	-	46.93	0.00	3,344.21
MW - 8	08/13/09	3391.14	-	47.13	0.00	3,344.01
MW - 8	11/11/09	3391.14	-	47.20	0.00	3,343.94
MW - 9	02/18/09	3391.47	-	46.15	0.00	3,345.32
MW - 9	03/03/09	3391.47	-	46.28	0.00	3,345.19
MW - 9	03/10/09	3391.47	-	46.38	0.00	3,345.09
MW - 9	03/18/09	3391.47	-	46.44	0.00	3,345.03
MW - 9	03/27/09	3391.47	-	46.45	0.00	3,345.02
MW - 9	04/07/09	3391.47	-	46.62	0.00	3,344.85
MW - 9	04/14/09	3391.47	-	46.64	0.00	3,344.83
MW - 9	04/28/09	3391.47	-	46.77	0.00	3,344.70
MW - 9	05/19/09	3391.47	-	46.89	0.00	3,344.58
MW - 9	06/18/09	3391.47	-	47.09	0.00	3,344.38
MW - 9	06/30/09	3391.47	-	46.26	0.00	3,345.21
MW - 9	07/07/09	3391.47	-	47.09	0.00	3,344.38
MW - 9	07/14/09	3391.47	-	47.10	0.00	3,344.37
MW - 9	07/28/09	3391.47	-	47.12	0.00	3,344.35
MW - 9	08/07/09	3391.47	-	47.14	0.00	3,344.33
MW - 9	08/13/09	3391.47	-	47.05	0.00	3,344.42
MW - 9	09/10/09	3391.47	-	47.10	0.00	3,344.37
MW - 9	09/18/09	3391.47	-	47.17	0.00	3,344.30
MW - 9	09/29/09	3391.47	-	47.14	0.00	3,344.33
MW - 9	10/06/09	3391.47	-	47.13	0.00	3,344.34
MW - 9	10/20/09	3391.47	-	47.11	0.00	3,344.36
MW - 9	10/27/09	3391.47	-	47.10	0.00	3,344.37
MW - 9	11/11/09	3391.47	-	47.16	0.00	3,344.31

TABLE 1

2009 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP
 TNM 98-05A
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE NUMBER AP-12

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 10	02/18/09	3391.26	-	46.17	0.00	3,345.09
MW - 10	03/03/09	3391.26	-	46.11	0.00	3,345.15
MW - 10	03/10/09	3391.26	-	46.29	0.00	3,344.97
MW - 10	03/18/09	3391.26	-	46.38	0.00	3,344.88
MW - 10	03/27/09	3391.26	-	46.44	0.00	3,344.82
MW - 10	04/07/09	3391.26	-	46.54	0.00	3,344.72
MW - 10	04/14/09	3391.26	-	45.59	0.00	3,345.67
MW - 10	04/28/09	3391.26	-	46.68	0.00	3,344.58
MW - 10	05/19/09	3391.26	-	46.78	0.00	3,344.48
MW - 10	05/27/09	3391.26	-	46.86	0.00	3,344.40
MW - 10	06/04/09	3391.26	-	46.87	0.00	3,344.39
MW - 10	06/12/09	3391.26	-	46.93	0.00	3,344.33
MW - 10	06/18/09	3391.26	-	46.96	0.00	3,344.30
MW - 10	06/30/09	3391.26	-	46.13	0.00	3,345.13
MW - 10	07/07/09	3391.26	-	47.02	0.00	3,344.24
MW - 10	07/14/09	3391.26	-	47.04	0.00	3,344.22
MW - 10	07/21/09	3391.26	-	47.05	0.00	3,344.21
MW - 10	07/28/09	3391.26	-	47.04	0.00	3,344.22
MW - 10	08/07/09	3391.26	-	47.05	0.00	3,344.21
MW - 10	08/13/09	3391.26	-	47.01	0.00	3,344.25
MW - 10	08/21/09	3391.26	-	47.04	0.00	3,344.22
MW - 10	08/27/09	3391.26	-	47.08	0.00	3,344.18
MW - 10	09/10/09	3391.26	-	47.06	0.00	3,344.20
MW - 10	09/18/09	3391.26	-	47.09	0.00	3,344.17
MW - 10	09/29/09	3391.26	-	47.05	0.00	3,344.21
MW - 10	10/06/09	3391.26	-	47.07	0.00	3,344.19
MW - 10	10/20/09	3391.26	-	47.10	0.00	3,344.16
MW - 10	10/27/09	3391.26	-	47.11	0.00	3,344.15
MW - 10	11/11/09	3391.26	-	47.11	0.00	3,344.15
MW - 11	02/18/09	3390.73	-	45.46	0.00	3,345.27
MW - 11	05/19/09	3390.73	-	46.34	0.00	3,344.39
MW - 11	08/13/09	3390.73	-	46.54	0.00	3,344.19
MW - 11	11/11/09	3390.73	-	46.58	0.00	3,344.15

* Complete Historical Tables are presented on the attached CD.

TABLE 2

2009 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
 TNM 98-05 A
 LEA COUNTY, NEW MEXICO
 NMOCD Reference #AP-12

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030			
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES
NMOCD Regulatory Limit		0.0100	0.7500	0.7500	0.6200
MW - 1	02/18/09	2.420	<0.001	0.511	<0.100
MW - 1	05/19/09	0.640	<0.001	1.460	2.000
MW - 1	08/13/09	2.940	<0.100	0.888	<0.100
MW - 1	11/11/09	2.880	<0.100	1.210	0.762
MW - 2	02/18/09	0.958	<0.100	0.238	0.100
MW - 2	05/19/09	2.340	<0.100	1.080	1.500
MW - 2	08/13/09	1.370	<0.100	0.841	1.040
MW - 2	11/11/09	0.693	<0.100	0.303	0.174
MW - 3	02/18/09	<0.001	<0.001	<0.001	<0.001
MW - 3	05/19/09	<0.001	<0.001	<0.001	<0.001
MW - 3	08/13/09	<0.001	<0.001	<0.001	<0.001
MW - 3	11/11/09	<0.001	<0.001	<0.001	<0.001
MW - 5	02/18/09	Not Sampled due to sample reduction			
MW - 5	05/19/09	<0.001	<0.001	<0.001	<0.001
MW - 5	08/13/09	Not Sampled due to sample reduction			
MW - 5	11/11/09	<0.001	<0.001	<0.001	<0.001
MW - 6	02/18/09	Not Sampled due to sample reduction			
MW - 6	05/19/09	<0.001	<0.001	<0.001	<0.001
MW - 6	08/13/09	Not Sampled due to sample reduction			
MW - 6	11/11/09	<0.001	<0.001	<0.001	<0.001
MW - 7	02/18/09	Not Sampled due to sample reduction			
MW - 7	05/19/09	<0.001	<0.001	<0.001	<0.001
MW - 7	08/13/09	Not Sampled due to sample reduction			
MW - 7	11/11/09	<0.001	<0.001	<0.001	<0.001
MW - 8	02/18/09	Not Sampled due to sample reduction			
MW - 8	05/19/09	Not Sampled due to sample reduction			
MW - 8	08/13/09	Not Sampled due to sample reduction			
MW - 8	11/11/09	<0.001	<0.001	<0.001	<0.001
MW - 9	02/18/09	<0.001	<0.001	<0.001	0.0040
MW - 9	05/19/09	0.0078	<0.001	0.0201	0.0306
MW - 9	08/13/09	<0.001	<0.001	0.0201	0.0230
MW - 9	11/11/09	<0.001	<0.001	0.0193	0.0166

TABLE 2

2009 - CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
 TNM 98-05 A
 LEA COUNTY, NEW MEXICO
 NMOCD Reference #AP-12

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD Regulatory Limit		0.0100	0.7500	0.7500	0.6200	
MW - 10	02/18/09	6.320	<0.001	1.070	0.271	
MW - 10	05/19/09	6.000	<0.100	1.700	1.740	
MW - 10	08/13/09	6.820	<0.100	1.690	1.400	
MW - 10	11/11/09	6.560	<0.100	1.750	0.748	
MW - 11	02/18/09	<0.001	<0.001	<0.001	<0.001	
MW - 11	05/19/09	<0.001	0.0096	0.0108	0.0338	
MW - 11	08/13/09	<0.001	<0.001	<0.001	<0.001	
MW - 11	11/11/09	<0.001	<0.001	<0.001	<0.001	

* Complete Historical tables are presented on the attached CD.



Appendices

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

District I - (505) 393-8161
 P.O. Box 1940
 Hobbs, NM 88241-1980
 District II - (505) 748-1383
 111 South First
 Artesia, NM 88210
 District III - (505) 834-6178
 3000 Rio Arriba Road
 Las Alamos, 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

98-05A

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		Telephone No. 915-947-9000	
Facility Name San Angelo, TX 76908		Facility Type pipe line	
Surface Owner Nadine Owen	Mineral Owner	Lease No.	

LOCATION OF RELEASE

Unit/Center	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	26	21S	37E					LaB

NATURE OF RELEASE

Type of Release Sour Crude	Volume of Release 38 barrels	Volume Recovered 4 barrels
Source of Release 6" gathering line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 2/5/98; 10:25 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Linda Williams (Clerk #4)	
By Whom? Johnny W. Chapman	Date and Hour 2/5/98; 3:00 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	

If a Watercourse was Impacted, Describe Fully:
N/A

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

Describe Area Affected and Cleanup Action Taken:
Approximately 1260 sq. ft. pasture land.
Contaminated soil will be excavated and put on plastic.

Describe General Conditions Prevailing (Temperature, Precipitation, etc.):
Cloudy; 60 degrees

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Edwin H. Gripp</i>		OIL CONSERVATION DIVISION	
Printed Name: Edwin H. Gripp		Approved by District Supervisor	
Title: District Manager		Approval Date	Expiration Date
Date: 2/12/98	Phone: 915-947-9000	Conditions of Approval	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

State Game Commission Hazardous Waste Section