1R - 123

Annual GW Mon. REPORTS

DATE:
2007

2007
ANNUAL MONITORING REPORT

MONUMENT 17

SE ¼ NW ¼ of SECTION 29, TOWNSHIP 19 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS EMS NUMBER: TNM MONUMENT-17-KNOWN
NMOCD REFERENCE: 1R-123

Prepared For:

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

NOVA
safety and environmental

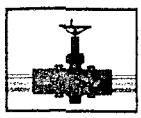
Prepared By:

NOVA Safety and Environmental
2057 Commerce Street
Midland, Texas 79703

March 2008

Ronald K. Rounsaville
Project Manager

Todd K. Choban, P.G.
Vice President Technical Services



RECEIVED
2008 APR 1 PM 2 07

March 28, 2008

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

Re: Plains All American – Annual Monitoring Reports
25 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:

TNM 97-17	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	Section 26, Township 21 South, Range 37 East, Lea County
TNM 98-05B	Section 26, Township 21 South, Range 37 East, Lea County
TNM 97-04	Section 11, Township 16 South, Range 35 East, Lea County
Texaco Skelly "F"	Section 21, Township 20 South, Range 37 East, Lea County
Darr Angell #2	Section 14, Township 15 South, Range 37 East, Lea County
LF-59	Section 32, Township 19 South, Range 37 East, Lea County
SPS-11	Section 18, Township 18 South, Range 36 East, Lea County
Monument #10	Section 32, Township 19 South, Range 37 East, Lea County
Monument #17	Section 29, Township 19 South, Range 37 East, Lea County
Monument #18	Section 7, Township 20 South, Range 37 East, Lea County
Lea Station to Monument 6"	Section 5, Township 20 South, Range 37 East, Lea County
34 Junction South Station	Section 2, Township 17 South, Range 36 East, Lea County
Bob Durham	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell #1	Section 11, Township 15 South, Range 37 East, Lea County
Darr Angell #4	Sections 2 and 11, Township 15 South, Range 37 East, Lea County
HDO 90-23	Section 6, Township 20 South, Range 37 East, Lea County
Junction 34 to Lea	Section 21, Township 20 South, Range 37 East, Lea County
Monument #2	Section 6, Township 20 South, Range 37 East, Lea County
Monument Barber 10" Sour	Section 32, Township 19 South, Range 37 East, Lea County
Monument #11	Section 30, Township 19 South, Range 37 East, Lea County
Red Byrd #1	Section 1, Township 20 South, Range 36 East, Lea County
South Monument Gathering	Section 5, Township 20 South, Range 37 East, Lea County
Denton Station	Section 14, Township 15 South, Range 37 East, Lea County

3112 West Highway 82 • Lovington, NM 88260 • (505) 396-3341

order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

TABLE OF CONTENTS

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities for the Monument 17 site (the site) were assumed by NOVA. The site, which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2007 only. Historic data tables as well as 2007 laboratory analytical reports are provided on the enclosed disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarterly sampling event of 2007 to assess the levels and extent of dissolved phase constituents and the presence of 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 feet were not sampled.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SE ¼ of the NW ¼ of Section 29, Township 19 South, Range 37 East. No Information with respect to the release date, volume of crude oil released or recovered, excavation volumes, or pipeline repair is currently available as the release occurred while the pipeline was operated by Texas New Mexico Pipeline Company (TNM). The Release Notification and Corrective Action Form (C-141) is provided as Appendix B. The initial site investigation, consisting of the installation of eight groundwater monitor wells (MW-1 through MW-8), was performed by previous consultants.

Currently, there are eight groundwater monitor wells (MW-1 through MW-5 and MW-7 through MW-9) present on site.

On August 17, 2007, NOVA advanced five soil borings to evaluate the degradation of hydrocarbon impacted soil within the source area. Analytical results of the soil samples collected during the advancement of the soil boring, during the 2007 reporting period are provided in Table 3, Concentrations of TPH and BTEX in Soil. A Soil Boring Location Map is presented as Figure 4. Boring logs and monitor well details are provided in Appendix A.

RECENT FIELD ACTIVITIES

Monitor well MW-7 was the only monitor well on site to exhibit a sheen throughout the 2007 reporting period. The remaining monitor wells did not exhibit measurable thicknesses of PSH during the reporting period. No measurable PSH was recovered from the site during the 2007 reporting period.

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 in NMOCD correspondence dated June 21, 2005:

NMOCD Approved Sampling Schedule					
MW-1	Quarterly	MW-4	Semi-Annual	MW-7	Quarterly
MW-2	Quarterly	MW-5	Annually	MW-8	Annually
MW-3	Quarterly	MW-6	Plugged and Abandoned	MW-9	Quarterly

The site monitor wells were gauged and sampled on March 16, May 16, August 20, and November 27, 2007. During each sampling event, sampled monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2007 is provided as Table 1. Historic groundwater elevation data is provided on the enclosed disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0002 feet/foot to the southeast as measured between groundwater monitor wells MW-8 and MW-9. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged from 3587.44 to 3588.58 feet above mean sea level, in monitor well MW-9 on November 27, 2007 and monitor well MW-5 on March 16, 2007, respectively.

LABORATORY RESULTS

Groundwater samples collected during the 2007 monitoring activities were delivered to Trace Analysis, Inc., Lubbock, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW846-8021b. A listing of BTEX constituent concentrations for 2007 is summarized in Table 2 and electronic copies of the laboratory reports generated during this reporting period are provided on the enclosed disk. The inferred extent of PSH on site and quarterly groundwater sampling results for benzene, toluene, ethylbenzene and xylene 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 0.0028 mg/L during the 4th quarter of 2007 to 0.0394 mg/L during the 3rd quarter of 2007. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during three of the four quarters of 2007. Toluene concentrations were below the laboratory method detection limit (MDL) of <0.001 mg/L during all four quarters of the reporting period. Toluene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four quarters of 2007. Ethylbenzene concentrations ranged from 0.001 mg/L during the 4th quarter to 0.0251 mg/L during the 3rd quarter. Ethylbenzene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four quarters of 2007. Xylene concentrations ranged from <0.001 mg/L during the 4th quarter to 0.0105 during the 3nd quarter

of 2007. Xylene concentrations were below the NMOCD regulatory standard of 0.62 mg/L during all four quarters.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1st and 2nd quarters of 2007 to 0.143 mg/L during the 3rd quarter of 2007. Benzene concentrations were above the NMOCD regulatory standard during one of the four quarters. Toluene concentrations were below the MDL of <0.001 mg/L during all four quarters of the reporting period. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Ethylbenzene concentrations were below the MDL of <0.001 mg/L during all four quarters of the reporting period. Ethylbenzene concentrations were below the NMOCD regulatory standard during all four quarters. Xylene concentrations ranged from <0.001 mg/L during the 1st, 2nd and 4th quarters to 0.0104 mg/L during the 3nd quarter of 2007. Xylene concentrations were below the NMOCD regulatory standard during all four quarters.

Monitor well MW-3 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 2nd quarter of 2007 to 0.0377 mg/L during the 3rd quarter of 2007. Benzene concentrations were above the NMOCD regulatory standard during one of the four quarters. Toluene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Ethylbenzene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period.

Monitor well MW-4 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-4 has exhibited 25 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-5 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 4th quarter sampling event. Monitor well MW-5 has exhibited 22 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-7 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 2nd, 3rd and 4th quarters of 2007 to 0.00016 mg/L during the 1st quarter of 2007. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Ethylbenzene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Monitor well MW-7 has exhibited 10 consecutive monitoring events below NMOCD regulatory limits.

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 22 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-9 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during all four (4) sampling events. Monitor well MW-9 has exhibited 5 consecutive monitoring events below NMOCD regulatory limits.

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 2007 annual monitoring period. Currently, there are eight groundwater monitor wells present at the site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0002 feet/foot to the southeast. This is consistent with data presented on Figures 2A-2C from earlier in the year.

No measurable amount of PSH was recovered from the site during the 2007 reporting period. However, hydrocarbon sheen appears to be limited to monitor well MW-7 at this time.

A review of the laboratory analytical results for groundwater samples obtained during the reporting period and gauging data collected throughout the year indicates benzene concentrations were above applicable NMOCD regulatory standards in four of the eight monitor wells at some time during the reporting period. All other sample locations exhibited BTEX constituent concentrations below the applicable NMOCD regulatory standard for the reporting period.

Dissolved phase hydrocarbon impact has decreased throughout the reporting period and the historic trend is toward decreasing benzene and BTEX constituent concentrations.

ANTICIPATED ACTIONS

Monitor well gauging and groundwater sampling will continue in 2008. In the future, a Soil Closure Proposal will be submitted under separate cover.

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:
Camille Reynolds
Plains Marketing, L.P.
3112 Highway 82
Lovington, NM
cjreynolds@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

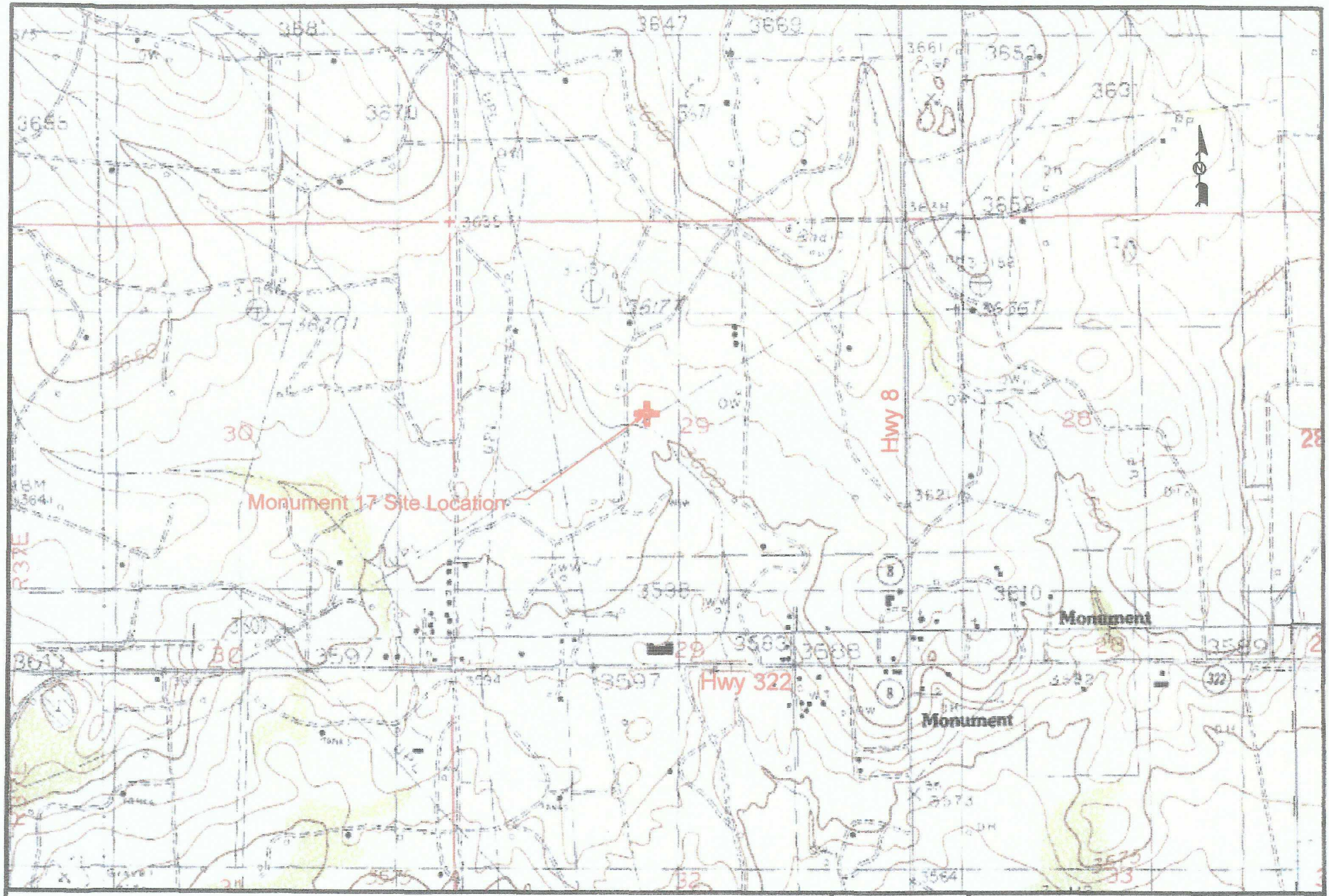
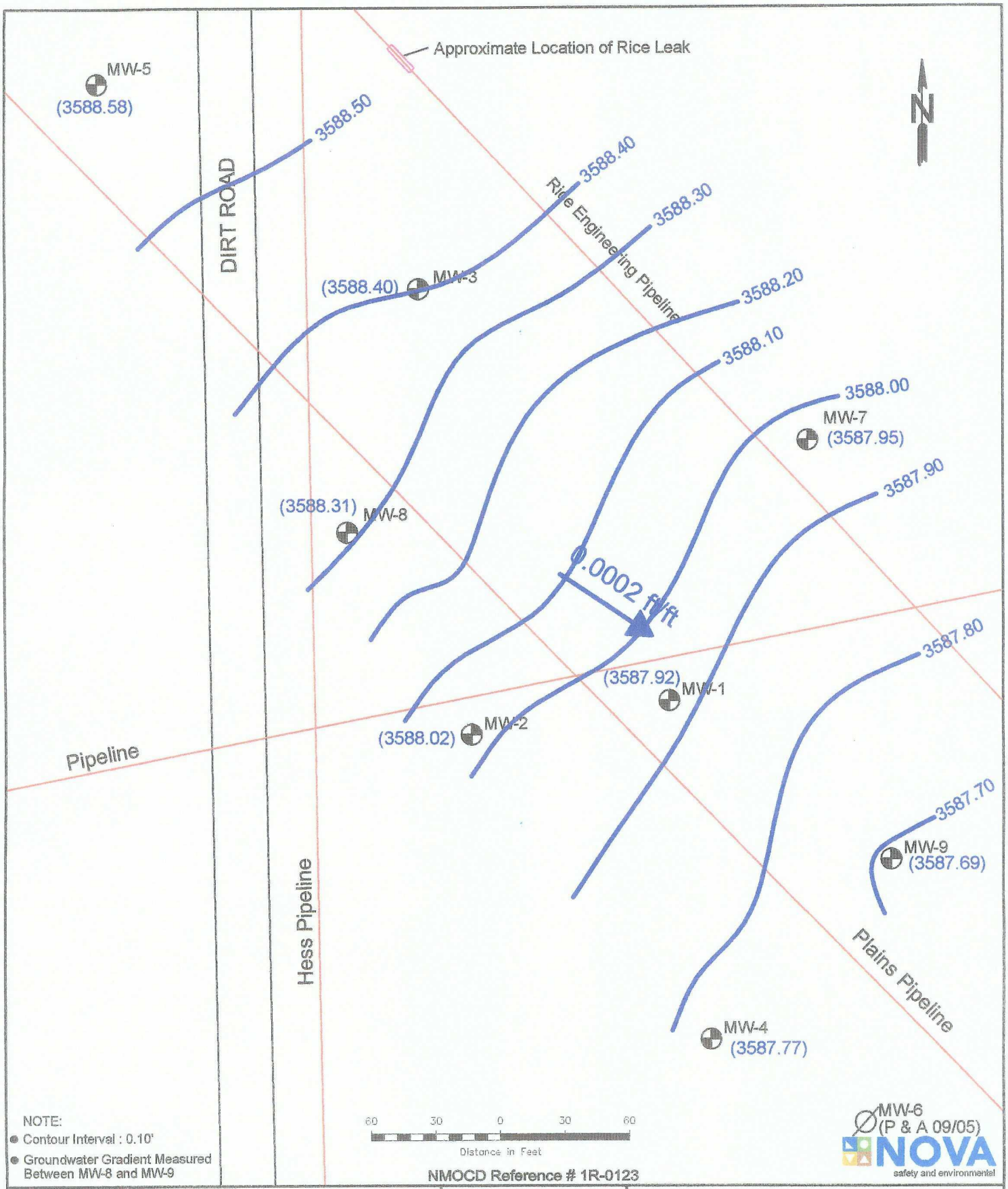


Figure 1
Site Location Map
Plains Marketing, L.P.
Monument 17
Lea County, NM
NMOCD Ref. # 1R-123

NOVA Safety and Environmental

Scale: 1" = 1500'	Prep By: CDS	Checked By: TKC
March 24, 2008	Section 29 Township 19S Range 37E	
	32° 37' 57.7"N 103° 16' 31.6"W	



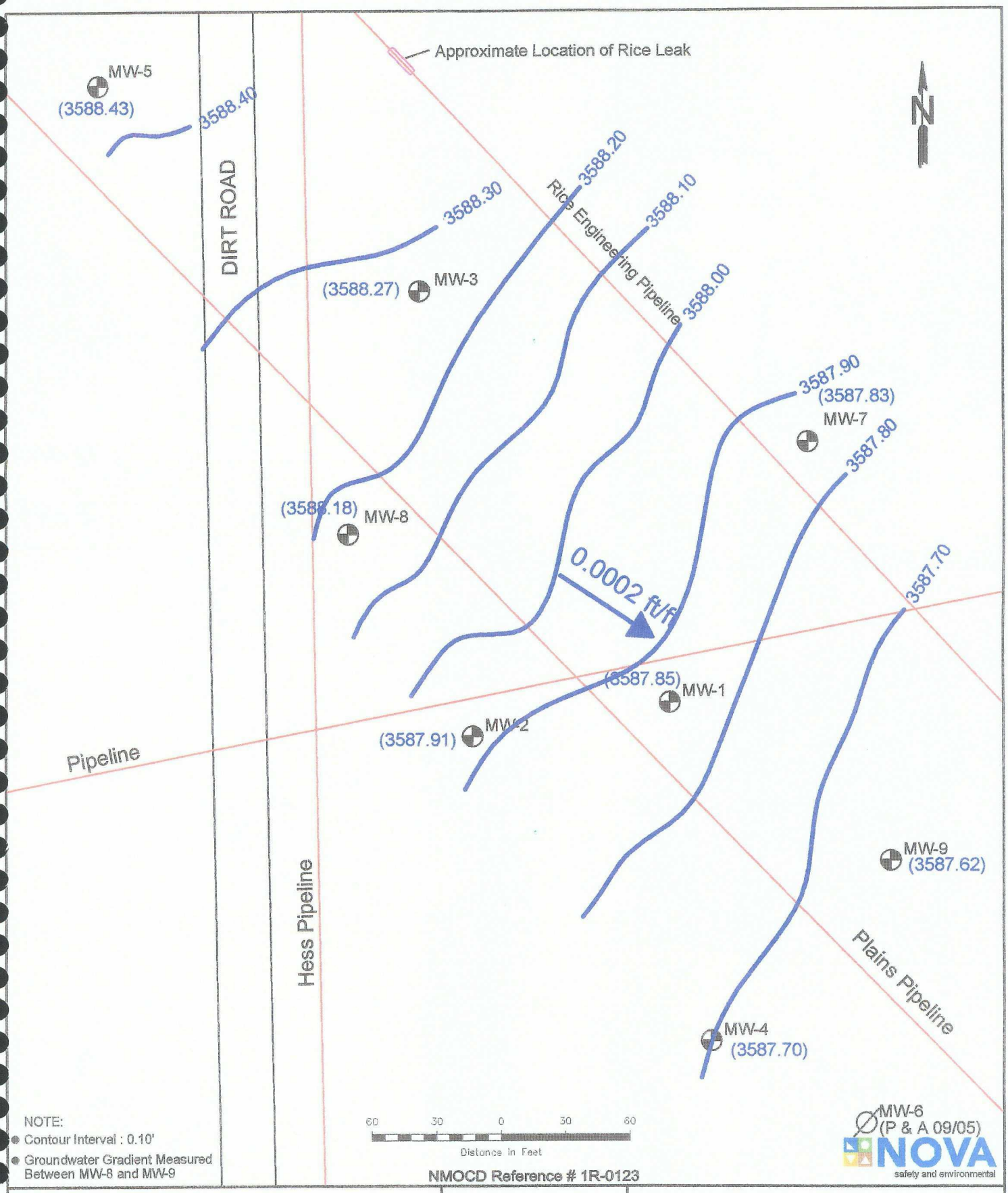
LEGEND:

- Monitor Well Locations
- Ground Water Contour Lines
- Plugged and Abandoned Well
- (3587.54) Groundwater Elevation
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2A
Inferred Groundwater Gradient Map (03/16/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA Safety and Environmental

January 22, 2008	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



NOTE:
- Contour Interval : 0.10'
- Groundwater Gradient Measured Between MW-8 and MW-9

NMOCD Reference # 1R-0123

NOVA safety and environmental

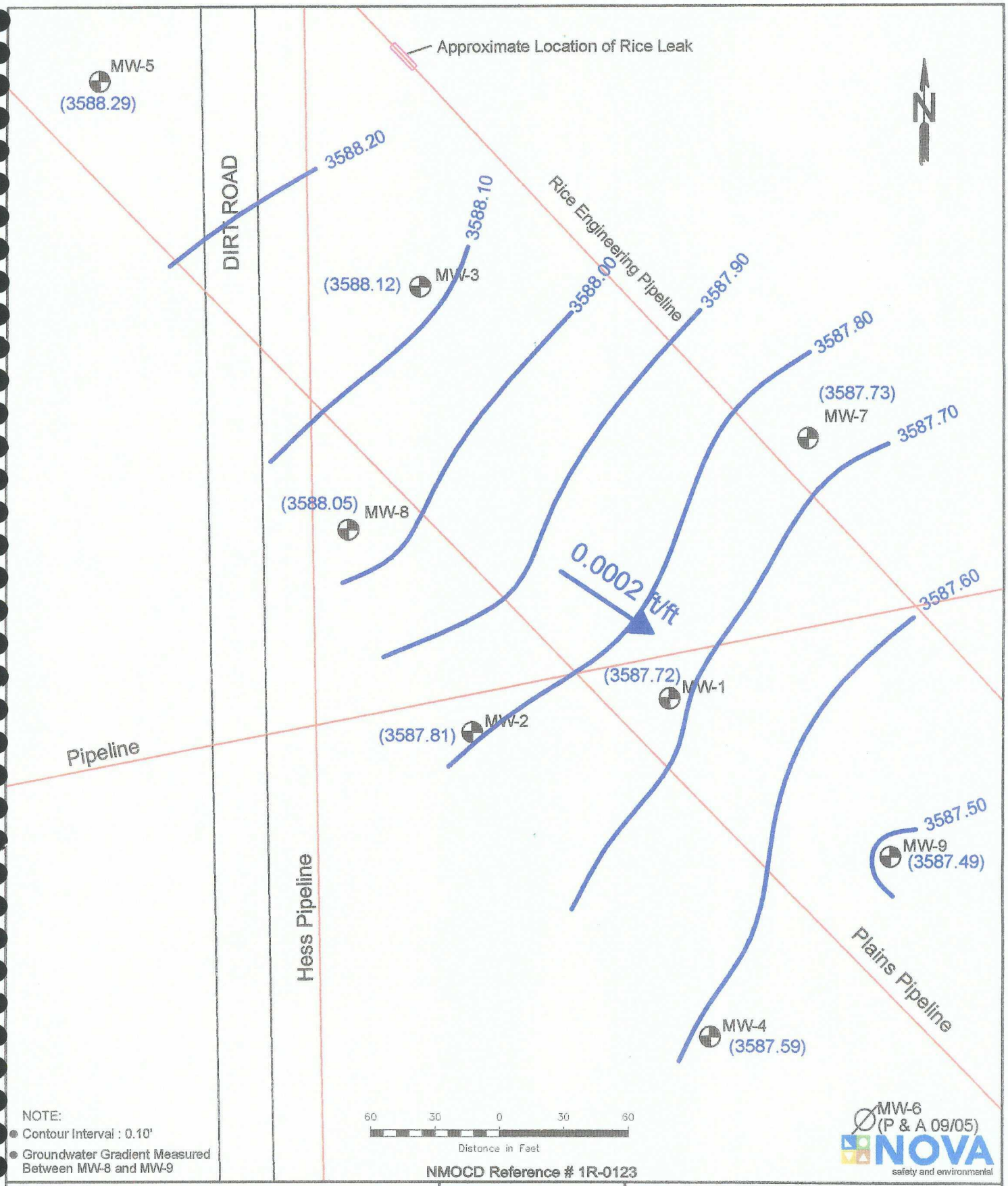
LEGEND:

- Monitor Well Locations
- Ground Water Contour Lines
- Plugged and Abandoned Well
- (3587.54) Groundwater Elevation
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2B
Inferred Groundwater Gradient Map (05/16/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA Safety and Environmental

January 22, 2008	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1" = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



NOTE:
- Contour Interval : 0.10'
- Groundwater Gradient Measured Between MW-8 and MW-9

NMOCD Reference # 1R-0123

NOVA safety and environmental

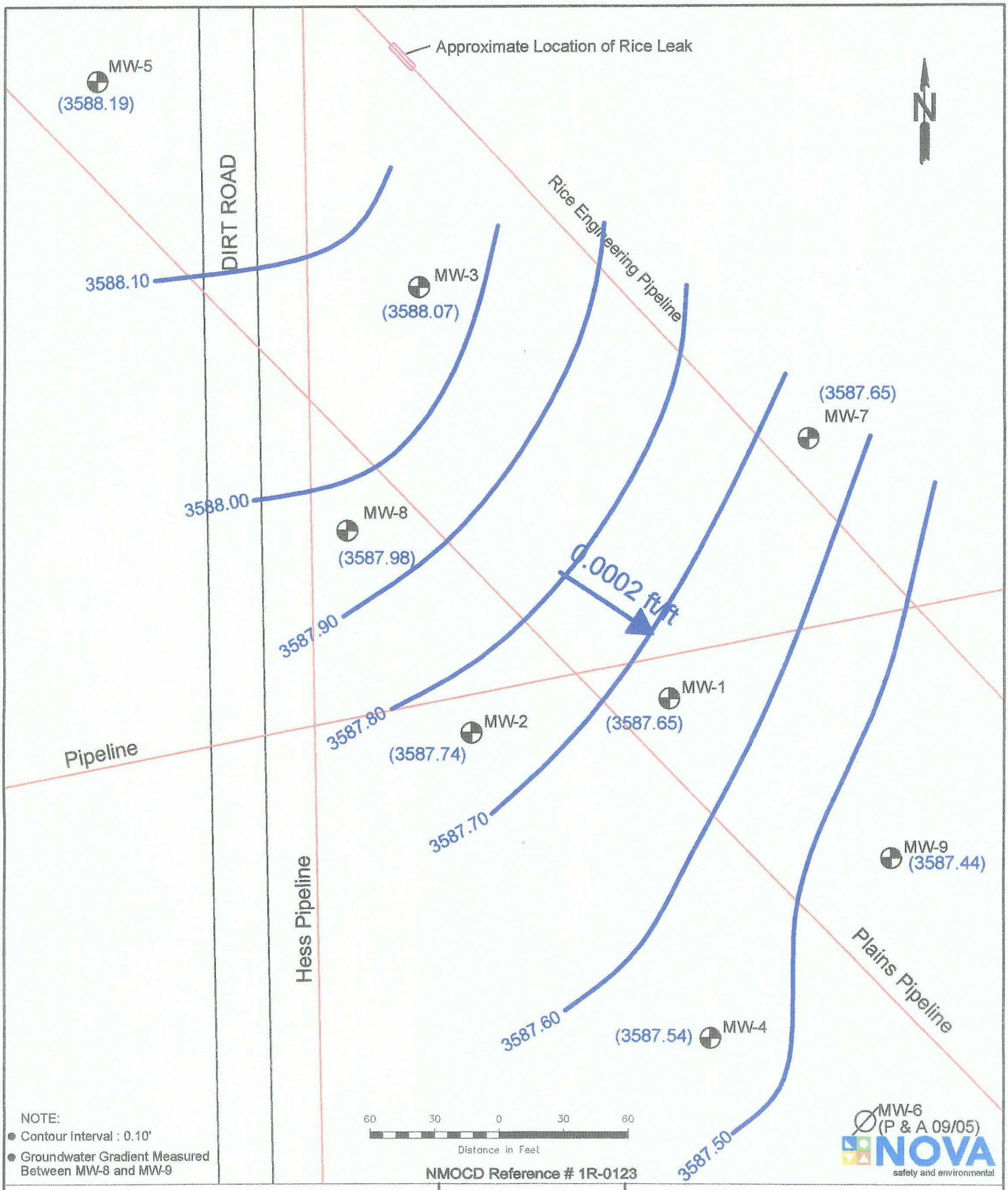
LEGEND:

- Monitor Well Locations
- *Ground Water Contour Lines*
- Plugged and Abandoned Well
- (3587.54) Groundwater Elevation
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2C
Inferred Groundwater Gradient Map (08/20/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA Safety and Environmental

January 22, 2008	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



NOTE:
- Contour Interval : 0.10'
- Groundwater Gradient Measured Between MW-8 and MW-9

LEGEND:

- Monitor Well Locations
- Ground Water Contour Lines
- Plugged and Abandoned Well
- (3587.54) Groundwater Elevation
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2D
Inferred Groundwater Gradient Map (11/27/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA Safety and Environmental

January 22, 2008	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		

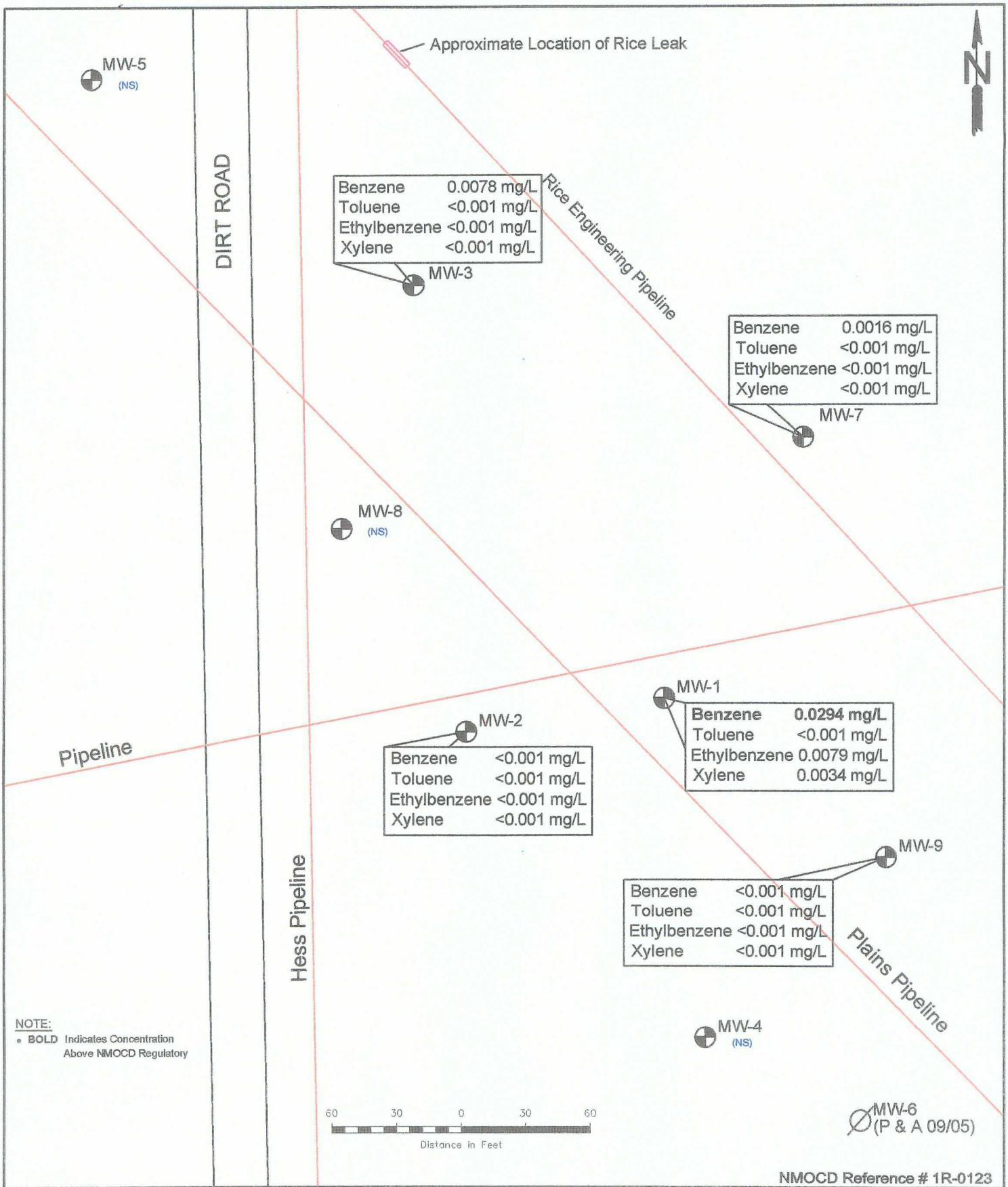


Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (03/16/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Septmeber 25, 2007	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1" = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		

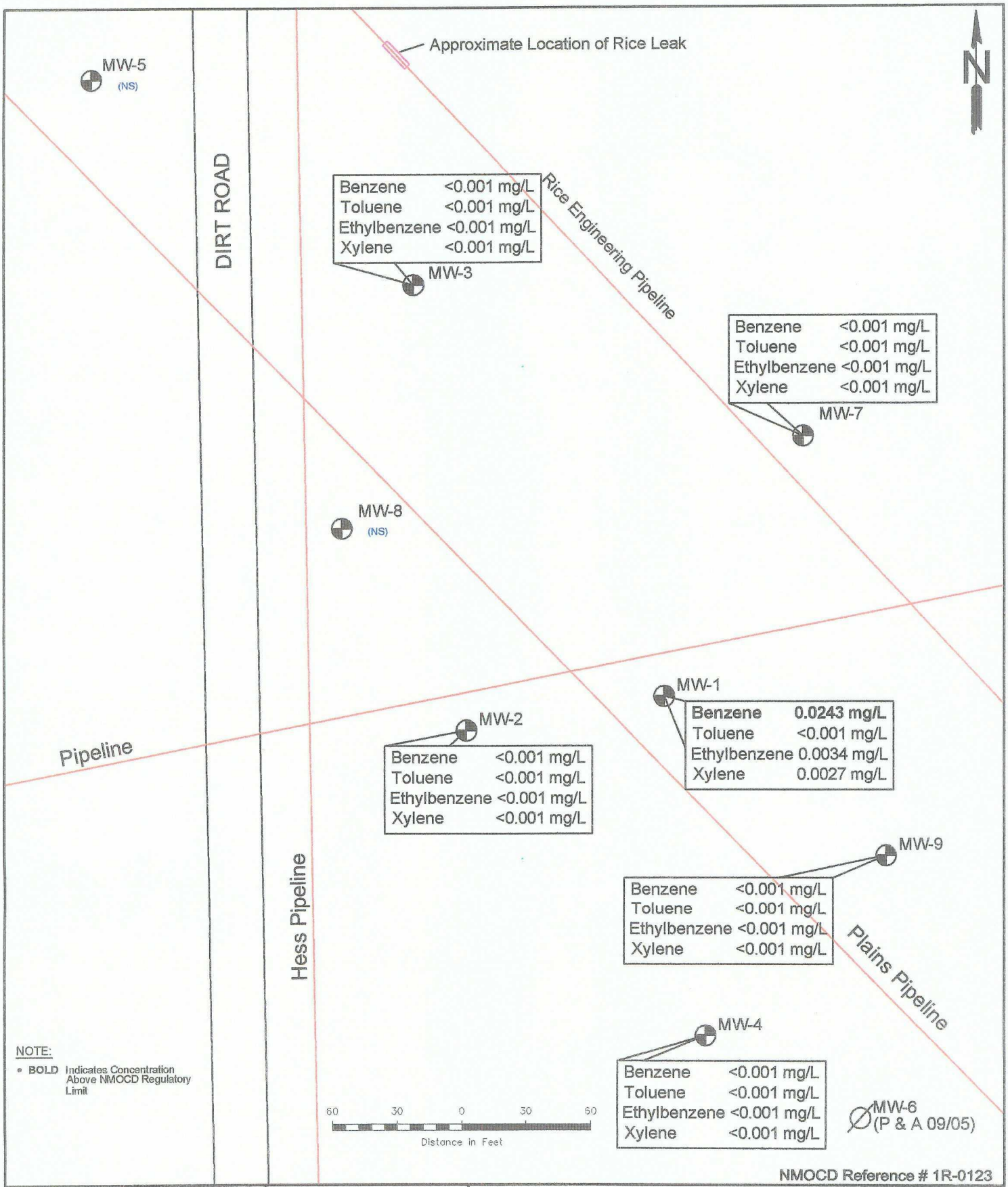
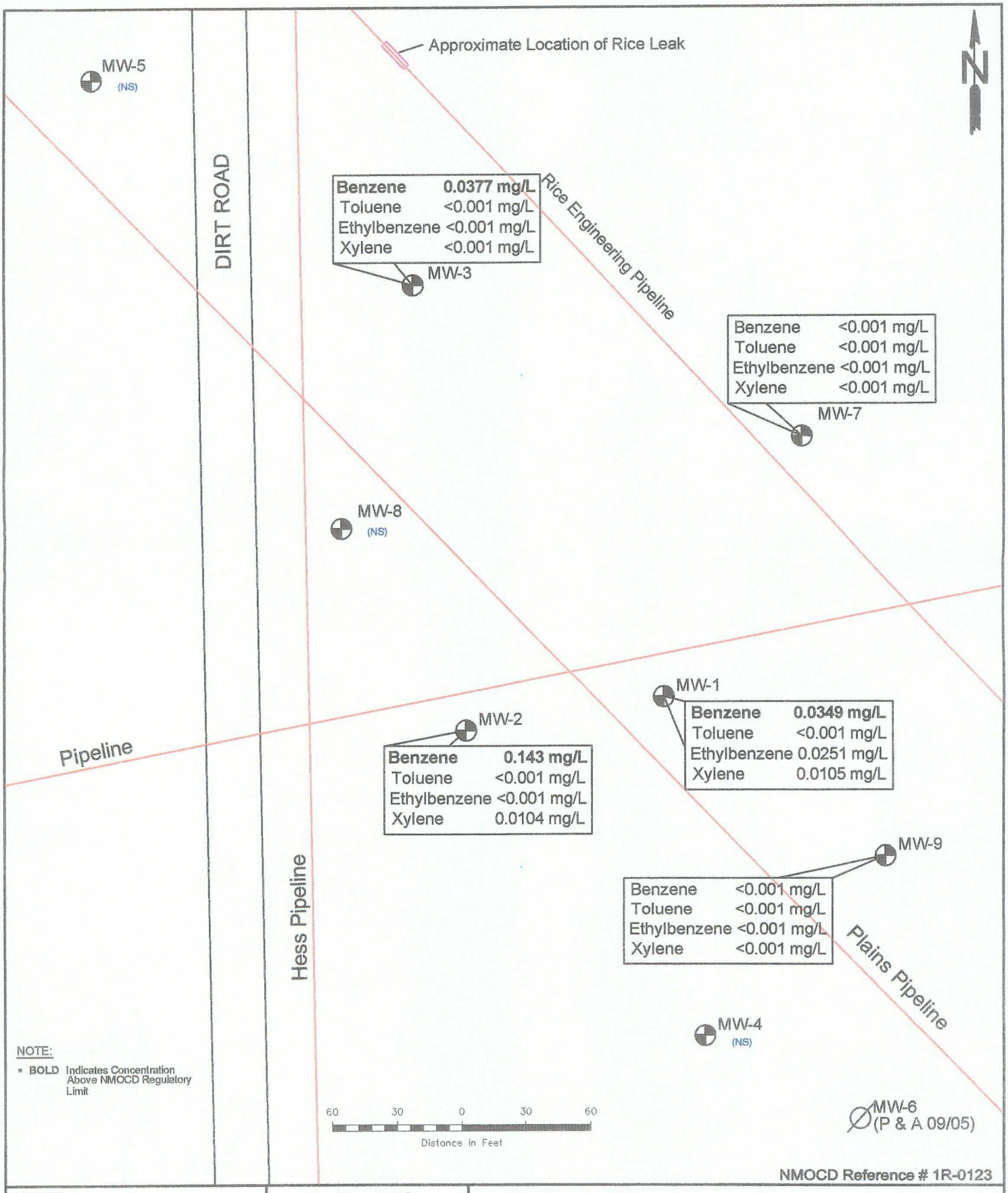


Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (05/16/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental

Septmeber 25, 2007	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



LEGEND:

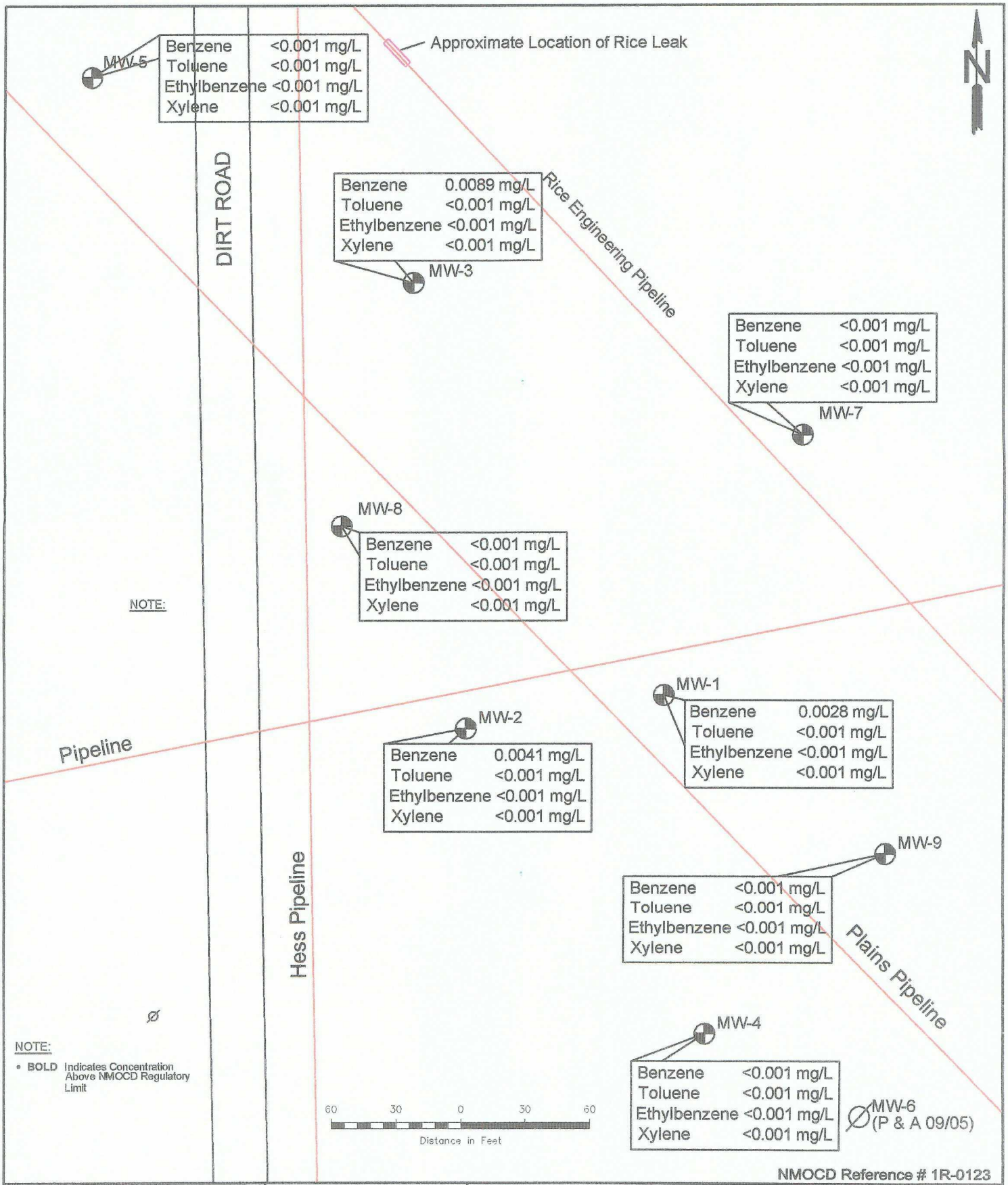
- Monitor Well Location
- Plugged and Abandoned Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (08/20/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Septmeber 25, 2007	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



NMOCD Reference # 1R-0123

LEGEND:

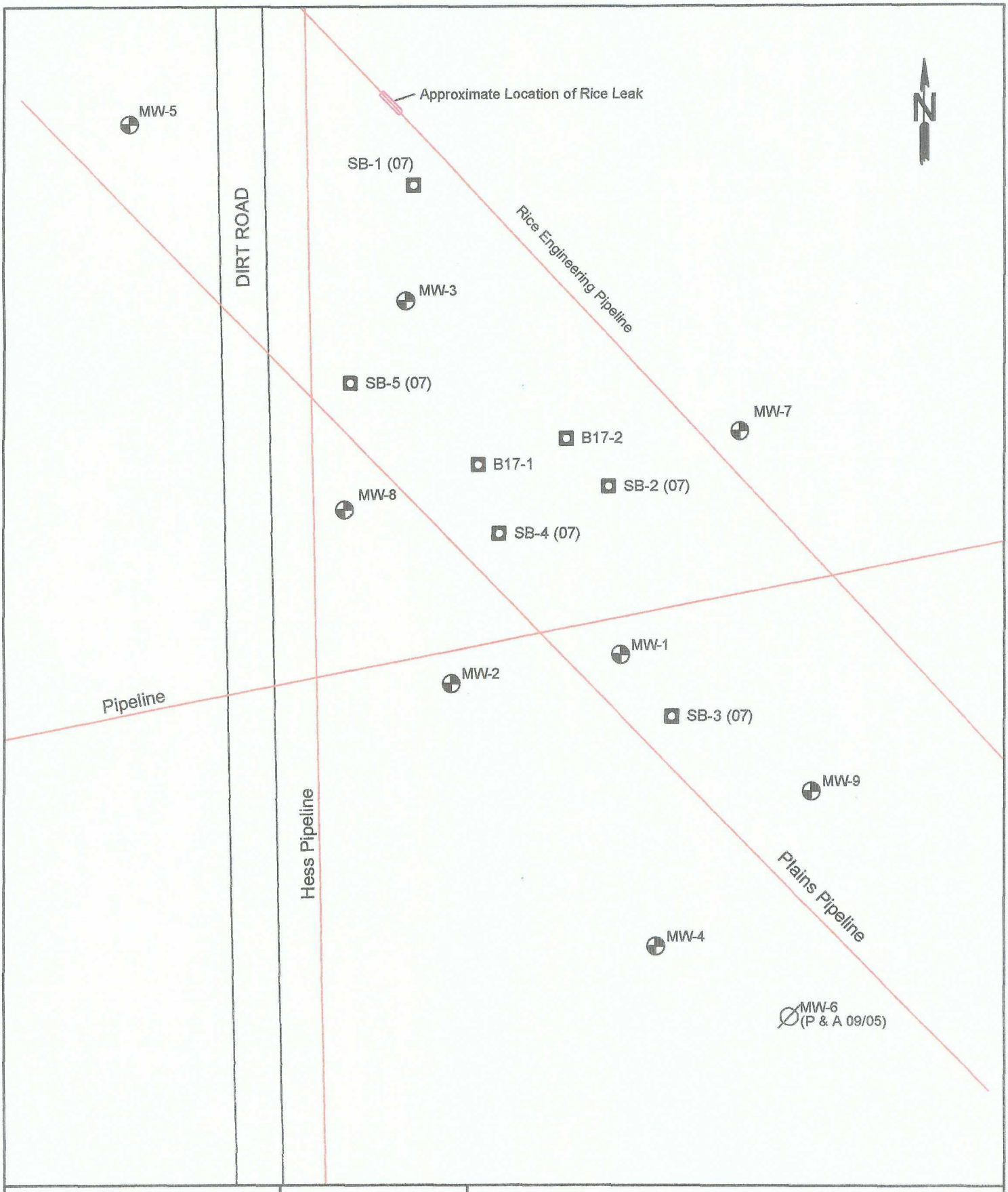
- Monitor Well Location
- Plugged and Abandoned Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/27/07)
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

January 22, 2008	Lat. N32° 37' 57.7" Long. W103° 16' 31.6"	
Scale: 1' = 60'	CAD By: DGC	Checked By: CDS
SE1/4 NW1/4 Sec.29 T19S R37E		



LEGEND:

- Monitor Well Locations
- *Soil Boring Location*
- PSB-4 Proposed Soil Boring Location
- Pipeline

Figure 4
Soil Boring Location Map

Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Scale: 1' = 70'	Prep By: CS	Checked By: TKC
September 2, 2004		

Tables

TABLE 1

2007 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference No. 1R-123

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	*03/16/07*	3,607.16	-	19.24	0.00	3,587.92
	05/16/07	3,607.16	-	19.31	0.00	3,587.85
	08/20/07	3,607.16	-	19.44	0.00	3,587.72
	11/27/07	3,607.16	-	19.51	0.00	3,587.65
MW-2	*03/16/07*	3,607.08	-	19.06	0.00	3,588.02
	05/16/07	3,607.08	-	19.17	0.00	3,587.91
	08/20/07	3,607.08	-	19.27	0.00	3,587.81
	11/27/07	3,607.08	-	19.34	0.00	3,587.74
MW-3	*03/16/07*	3,608.43	-	20.03	0.00	3,588.40
	05/16/07	3,608.43	-	20.16	0.00	3,588.27
	08/20/07	3,608.43	-	20.31	0.00	3,588.12
	11/27/07	3,608.43	-	20.36	0.00	3,588.07
MW-4	*03/16/07*	3,606.12	-	18.35	0.00	3,587.77
	05/16/07	3,606.12	-	18.42	0.00	3,587.70
	08/20/07	3,606.12	-	18.53	0.00	3,587.59
	11/27/07	3,606.12	-	18.58	0.00	3,587.54
MW-5	*03/16/07*	3,610.17	-	21.59	0.00	3,588.58
	05/16/07	3,610.17	-	21.74	0.00	3,588.43
	08/20/07	3,610.17	-	21.88	0.00	3,588.29
	11/27/07	3,610.17	-	21.98	0.00	3,588.19
MW-7	02/07/07	3,607.38	sheen	19.29	0.00	3,588.09
	03/16/07	3,607.38	sheen	19.43	0.00	3,587.95
	05/16/07	3,607.38	-	19.55	0.00	3,587.83
	05/18/07	3,607.38	-	19.22	0.00	3,588.16
	08/20/07	3,607.38	sheen	19.65	0.00	3,587.73
	10/05/07	3,607.38	sheen	19.60	0.00	3,587.78
	10/18/07	3,607.38	sheen	19.66	0.00	3,587.72
	11/09/07	3,607.38	sheen	19.68	0.00	3,587.70
	11/27/07	3,607.38	sheen	19.73	0.00	3,587.65

TABLE 1

2007 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference No. 1R-123

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-8	*03/16/07*	3,607.99	-	19.68	0.00	3,588.31
	05/16/07	3,607.99	-	19.81	0.00	3,588.18
	08/20/07	3,607.99	-	19.94	0.00	3,588.05
	11/27/07	3,607.99	-	20.01	0.00	3,587.98
MW-9	*03/16/07*	3,606.83	-	19.14	0.00	3,587.69
	05/16/07	3,606.83	-	19.21	0.00	3,587.62
	08/20/07	3,606.83	-	19.34	0.00	3,587.49
	11/27/07	3,606.83	-	19.39	0.00	3,587.44

Elevations based on the North America Vertical Datum of 1929.

TABLE 2

2007 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference No. 1R-123

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	Methods:SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o-XYLENE
NMOCD Regulatory Limit		0.01	0.75	0.75	Total XYLENES 0.62	
MW-1	03/16/07	**0.0294**	<0.001	0.0079	0.0034	
	05/16/07	**0.0243**	<0.001	0.0034	0.0027	
	08/20/07	**0.0349**	<0.001	0.0251	0.0105	
	11/27/07	0.0028	<0.001	0.001	<0.001	
MW-2	03/16/07	<0.001	<0.001	<0.001	<0.001	
	05/16/07	<0.001	<0.001	<0.001	<0.001	
	08/20/07	**0.143**	<0.001	<0.001	0.0104	
	11/27/07	0.0041	<0.001	<0.001	<0.001	
MW-3	03/16/07	0.0078	<0.001	<0.001	<0.001	
	05/16/07	<0.001	<0.001	<0.001	<0.001	
	08/20/07	**0.0377**	<0.001	<0.001	<0.001	
	11/27/07	0.0089	<0.001	<0.001	<0.001	
MW-4	03/16/07	Not Sampled on Current sample schedule				
	05/16/07	<0.001	<0.001	<0.001	<0.001	
	08/20/07	Not Sampled on Current sample schedule				
	11/27/07	<0.001	<0.001	<0.001	<0.001	
MW-5	03/16/07	Not Sampled on Current sample schedule				
	05/16/07	Not Sampled on Current sample schedule				
	08/20/07	Not Sampled on Current sample schedule				
	11/27/07	<0.001	<0.001	<0.001	<0.001	
MW-7	03/16/07	0.0016	<0.001	<0.001	<0.001	
	05/16/07	<0.001	<0.001	<0.001	<0.001	
	08/20/07	<0.001	<0.001	<0.001	<0.001	
	11/27/07	<0.001	<0.001	<0.001	<0.001	
MW-8	03/16/07	Not Sampled on Current sample schedule				
	05/16/07	Not Sampled on Current sample schedule				
	08/20/07	Not Sampled on Current sample schedule				
	11/27/07	<0.001	<0.001	<0.001	<0.001	
MW-9	03/16/07	<0.001	<0.001	<0.001	<0.001	
	05/16/07	<0.001	<0.001	<0.001	<0.001	
	08/20/07	<0.001	<0.001	<0.001	<0.001	
	11/27/07	<0.001	<0.001	<0.001	<0.001	

Note: m, p and o Xylenes combined when analyzed by Trace Laboratories, Inc. only.

TABLE 3
2007 CONCENTRATIONS OF TPH AND BTEX IN SOIL

MONUMENT #17
PLAINS MARKETING, L.P.
MONUMENT, NEW MEXICO
NMOCD Reference No. 1R-123

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (feet)	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M GRO/DRO		
			BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	GRO C6-C10 (mg/kg)	DRO >C10-C25 (mg/kg)	Total TPH C6-C25 (mg/Kg)
SB1- @ 15'	08/17/07	15'	--	--	--	--		<50.0	<1.00	0
SB-2 @ 10'	08/17/07	10'	0.44	2.83	10.2	11.7		223	216	439
SB-2 @ 15'	08/17/07	15'	--	--	--	--		<50.0	16.4	16.4
SB-3 @ 10'	08/17/07	10'	--	--	--	--		<50.0	<1.00	0
SB-4 @ 10'	08/17/07	10'	<0.05	<0.05	12.6	11.1		1990	525	2515
SB-4 @ 15'	08/17/07	15'	--	--	--	--		575	205	780
SB-5 @ 10'	08/17/07	10'	<0.01	<0.01	2.27	2.53		476	110	586
SB-5 @ 15'	08/17/07	15'	--	--	--	--		2650	350	3000

Appendices

Appendix A
Soil Boring Logs

Soil Boring SB-1

Depth (feet)	Soil Columns	PID	Odor	Stain	Soil Description
0			None	None	Topsoil, black and caliche fragments, grey with chert nodules.
			None	None	Caliche, grey and sand, brown.
5			None	None	Sand, brown, with some caliche fragments, grey.
			None	None	Caliche, grey.
10			None	None	Sand, brown with some caliche fragments.
			None	None	Clay, dark brown, moist.
		⬭	None	None	Sand, brown and caliche, grey, dry.
15	TD				

Soil Boring Details

Date Drilled 08/17/07

Depth of Soil Boring 15 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

NMOCD Reference No. 1R-0123

Soil Boring Log And Details

Soil Boring SB-1

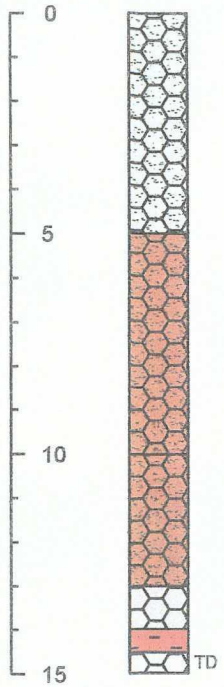
Plains Marketing, L.P. Monument 17 Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Scale: NTS	CAD By: DGC	Checked By: CDS
February 25, 2008		

Soil Boring SB-2



Depth (feet)	PID	Odor	Stain	Soil Description
0		Strong	Moderate to Strong	Caliche, greenish and sand, grey.
5		Moderate to Strong	None	Caliche, brown to grey and sand, brown.
10		Moderate	None	Caliche, brown to grey and sand, brownish grey.
	⬭	Moderate	None	Caliche, grey.
		Moderate	None	Clay, dark red, silty.
15		Moderate	None	Caliche, white to grey.

Soil Boring Details

Date Drilled 08/17/07

Depth of Soil Boring 15 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

NMOCD Reference No. 1R-0123

Soil Boring Log And Details

Soil Boring SB-2

Plains Marketing, L.P. Monument 17 Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Scale: NTS	CAD By: DGC	Checked By: CDS
February 25, 2008		

Soil Boring SB-3

Depth (feet)	Soil Columns	PID	Odor	Stain	Soil Description
0			None	None	Topsoil and caliche fragments, white and sand, brown. (Backfill?)
5		⬭	None	None	Sand, brown with gravel and caliche fragments, white to grey.
10			None	None	Caliche, grey and sand, dark red, moist
15	TD				

Soil Boring Details

Date Drilled 08/17/07

Depth of Soil Boring 12 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

NMOCD Reference No. 1R-0123

Soil Boring Log And Details

Soil Boring SB-3

Plains Marketing, L.P. Monument 17 Lea County, NM

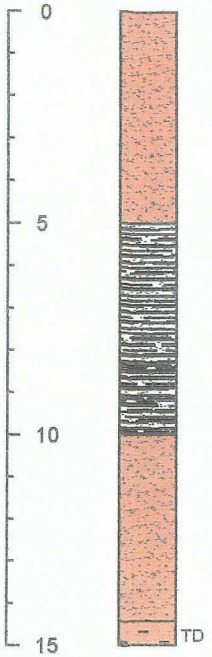
NOVA safety and environmental

NOVA Safety and Environmental

Scale: NTS	CAD By: DGC	Checked By: CDS
February 25, 2008		

Soil Boring SB-4

Depth (feet)	Soil Columns	PID	Odor	Stain	Soil Description
0			Moderate to Strong	Slight to Very Dark	Sand, brown to grey with caliche fragments, grey.
5		⬭	Very Strong	VeryDark	Sand, black, very heavy staining from 5 - 8'.
10		⬭	Strong	Moderate	Sand, brown, moderate staining.
15	TD		Strong	Moderate	Clay, dark brown.



Soil Boring Details

Date Drilled 08/17/07

Depth of Soil Boring 15 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

NMOCD Reference No. 1R-0123

Soil Boring Log And Details

Soil Boring SB-4

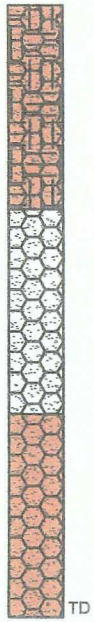
Plains Marketing, L.P. Monument 17 Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Scale: NTS	CAD By: DGC	Checked By: CDS
February 25, 2008		

Soil Boring SB-5

Depth (feet)	Soil Columns	PID	Odor	Stain	Soil Description
0			Moderate to Heavy	Moderate	Topsoil and caliche fragments, grey sand, brown to grey.
5		⬭	Heavy	Moderate	Caliche, greenish brown, sand, greenish grey.
10		⬭	Moderate	Slight to Moderate	Caliche, grey and sand, brown.
15	TD				

Soil Boring Details

Date Drilled 08/17/07

Depth of Soil Boring 15 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.

NMOCD Reference No. 1R=0123

Soil Boring Log And Details

Soil Boring SB-5

Plains Marketing, L.P. Monument 17 Lea County, NM

NOVA safety and environmental

NOVA Safety and Environmental

Scale: NTS	CAD By: DGC	Checked By: CDS
February 25, 2008		

Appendix B
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

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	Monument # 17	Facility Type:	Pipeline

Surface Owner:	Mineral Owner	Lease No.
New Mexico State Land Office		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	29	19S	37E					Lea

Latitude 32 degrees 37' 57.7" N **Longitude** 103 degrees 16' 31.6" W

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered
Source of Release:	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*
NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable.

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:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 3/21/2005 Phone: (505)441-0965		

* Attach Additional Sheets If Necessary