

1R - 404

# REPORTS

DATE:

3/2006



2005  
ANNUAL MONITORING REPORT

*Report is on  
the L-Drive*

**LEA STATION TO MONUMENT 6 INCH**  
NE ¼ SE ¼ of SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO  
PLAINS EMS NUMBER: 2001-11056  
NMOCD File Number 1R-0404

PREPARED FOR:

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



PREPARED BY:

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March 2006

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## TABLE OF CONTENTS

INTRODUCTION.....	1
SITE DESCRIPTION AND BACKGROUND INFORMATION.....	1
FIELD ACTIVITIES.....	1
LABORATORY RESULTS.....	2
SUMMARY.....	3
ANTICIPATED ACTIONS.....	3
LIMITATIONS.....	3
DISTRIBUTION.....	4

### FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map March 09, 2005

2B – Inferred Groundwater Gradient Map June 10, 2005

2C – Inferred Groundwater Gradient Map September 12, 2005

2D – Inferred Groundwater Gradient Map December 06, 2005

Figure 3A – Groundwater Concentration and Inferred PSH Extent Map March 09, 2005

3B – Groundwater Concentration and Inferred PSH Extent Map June 10, 2005

3C – Groundwater Concentration and Inferred PSH Extent Map September 12, 2005

3D – Groundwater Concentration and Inferred PSH Extent Map December 06, 2005

### TABLES

Table 1 – 2005 Groundwater Elevation Data

Table 2 – 2005 Concentrations of BTEX in Groundwater

### APPENDICES

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

**ENCLOSED ON DATA DISK**

2005 Annual Monitoring Report

2005 Tables 1 and 2 - Groundwater Elevation and BTEX Concentration Data

2005 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

Historic Groundwater Elevation Tables

Historic BTEX Concentration Tables

## **INTRODUCTION**

On behalf of Plains Marketing, L.P., (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc. (ETGI). The Lea Station to Monument 6-Inch site, formally the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. This report is intended to be viewed as a complete document with figures, attachments, tables and text. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2005 only. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2005 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

## **SITE DESCRIPTION AND BACKGROUND INFORMATION**

The legal description of the site is NE  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 5, Township 20 South, Range 37 East, Lea County, New Mexico. A three-barrel release, with no recovery occurred on August 3, 2001. The surface expression of the release resulted in an irregularly shaped stained surface area measuring approximately 175 feet in length by 30 feet in width. EOTT conducted emergency response actions by excavating impacted soil from around the pipeline, locating the release point and repairing the pipeline. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A

Monitor wells MW-1 through MW-6 were installed by a previous consultant. Monitor wells MW-7 through MW-9 were installed under the direction of NOVA in November, 2004. Currently, there are nine (9) monitor wells (MW-1 through MW-9) on site.

## **FIELD ACTIVITIES**

During the 2005 reporting period, measurable PSH was not observed in any of the site monitor wells. The quantity of product steadily decreased since June 2004 to a sheen in December 2005. Monitor wells MW-2 and MW-3 exhibited a sheen throughout most of 2005, while monitor well MW-5 exhibited a sheen when gauged during third quarter sampling activities. The 2005 gauging data is provided in Table 1.

The site monitor wells were gauged and sampled on March 9, June 10, September 12, and December 06, 2005. The table below lists the sampling schedule for each monitor well. During each sampling event, the monitor wells were purged of approximately three well volumes of water or until the wells were dry using a disposable polyethylene bailer or electrical 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 by Key Energy utilizing a licensed disposal facility (NMOCD AO SWD-730).

In previous correspondence dated April 28, 2004, the NMOCD approved the current sampling schedule. The table below illustrates the current schedule.

<b>NMOCD APPROVED SAMPLING SCHEDULE</b>	
<b>Sample Location</b>	<b>Sampling Schedule</b>
MW-1	Annually
MW-2	Quarterly
MW-3	Annually
MW-4	Annually
MW-5	Quarterly
MW-6	Semi-Annually
MW-7	Quarterly
MW-8	Quarterly
MW-9	Quarterly

Locations of the monitor wells and the inferred groundwater gradient, constructed from measurements collected during quarterly sampling events, are depicted on Figures 2A-2D, the Inferred Groundwater Gradient Maps. The 2005 groundwater elevation data is provided as Table 1. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.007 feet/foot to the southeast as measured between MW-3 and MW-8. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3527.55 to 3529.18 feet above mean sea level, in MW-3 on January 5, 2005 and in MW-3 on October 25, 2005, respectively.

## **LABORATORY RESULTS**

Groundwater samples obtained during 2005 groundwater sampling events were delivered to Trace Analysis of Lubbock, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW 846-8021b. A listing of BTEX constituent concentrations for 2005 is summarized in Table 2 and electronic copies of the laboratory reports from this reporting period are provided on the enclosed data disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

Review of laboratory analytical results of the groundwater samples obtained during the 2005 monitoring period indicate that benzene and BTEX constituent concentrations are below NMOCD regulatory standards in all monitor wells, with the exception of monitor wells MW-5 and MW-9. Monitor wells MW-5 and MW-9 exhibited benzene concentrations above the NMOCD regulatory standard for benzene, but below the BTEX constituent standard, in the second quarter of 2005 only.

## **SUMMARY**

This report presents the results of groundwater monitoring activities for the annual monitoring period 2005. As discussed, above none of the site monitor wells exhibited measurable PSH during the reporting period.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.007 feet/foot to the southeast as measured between monitor wells MW-3 and MW-8.

As discussed above, benzene and BTEX constituent concentrations were below NMOCD regulatory standards in seven (7) monitor wells during 2005. Monitor wells MW-5 and MW-9 were below NMOCD regulatory standards for benzene and BTEX constituent concentrations when sampled during the first, third and fourth quarters but contained benzene concentrations just above the NMOCD regulatory standard in the second quarter of 2005.

## **ANTICIPATED ACTIONS**

Quarterly monitoring and sampling will continue in 2006. Gauging will continue on a monthly schedule and will be adjusted according to site conditions.

Additional soil investigation/remediation will be proposed to address any remaining soil impact issues and will be addressed under separate cover from this report.

## **LIMITATIONS**

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

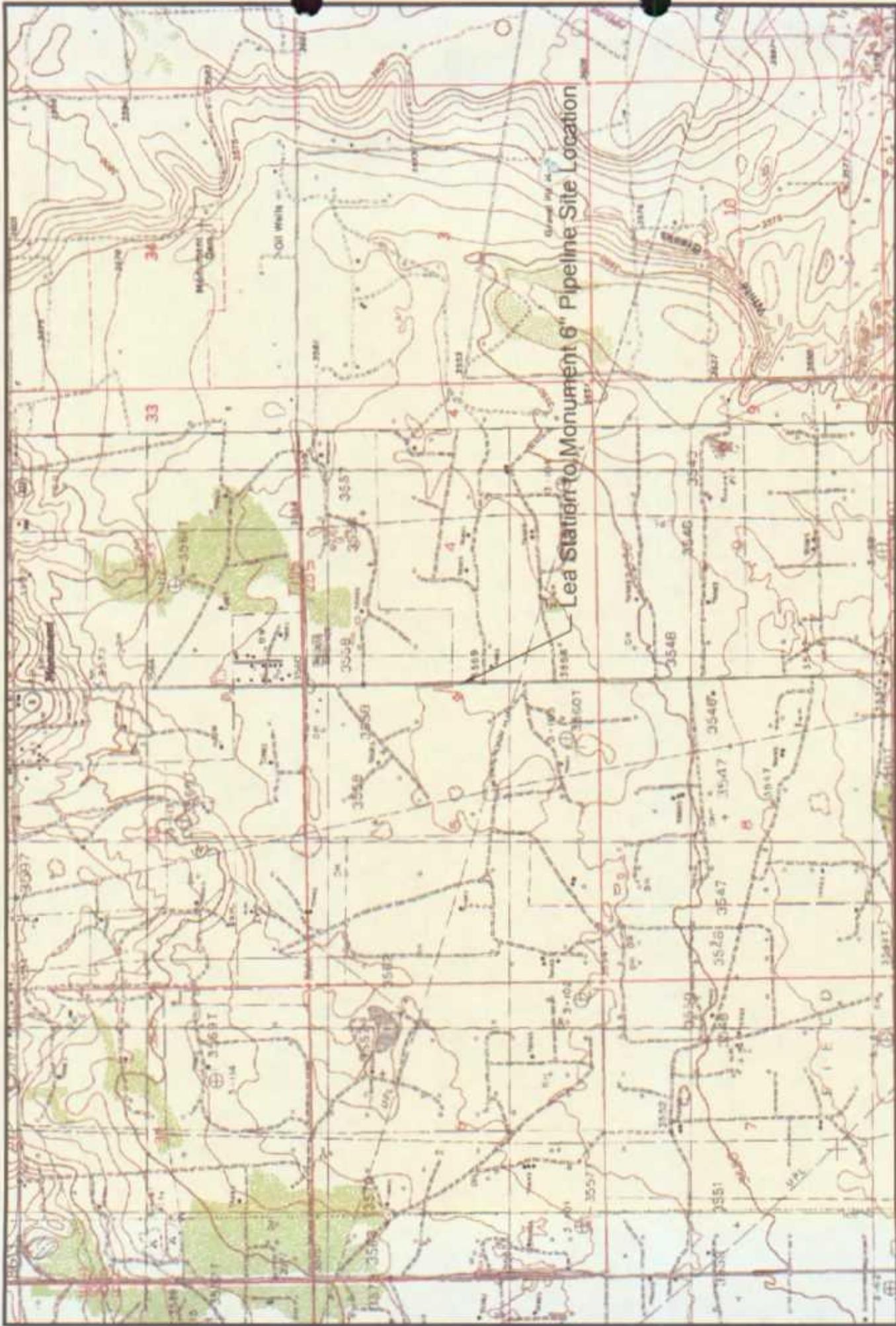
NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that 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 Martin  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
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Figures



Lea Station to Monument 6 Pipeline Site Location

Figure 1  
Site Location Map

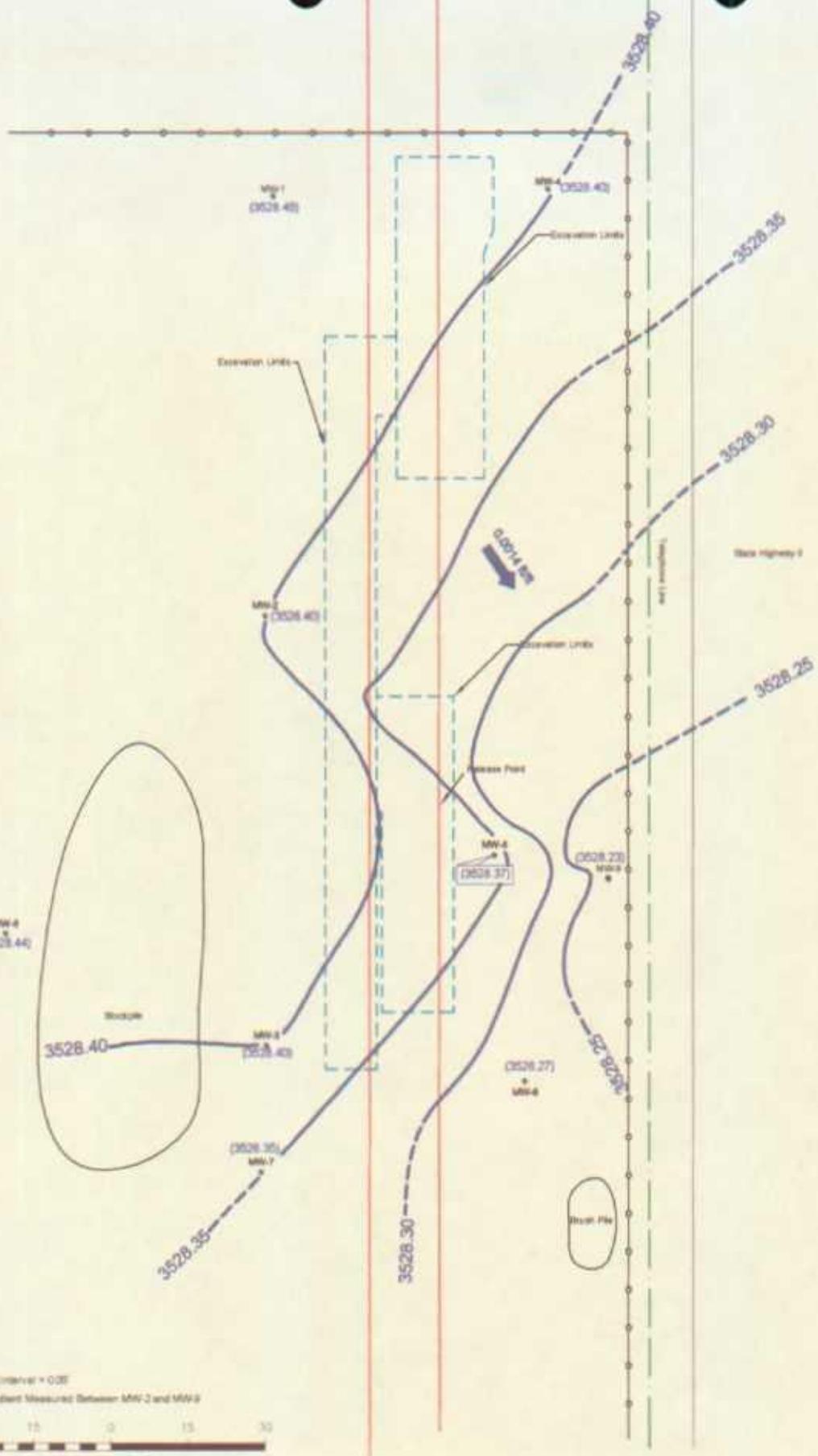
Plymouth Marketing, LP  
Lea Station to  
Monument 6 Pipeline  
Lea County, NM

NE 1/4, SE 1/4, Sec. 5, T20N, R37E

NOVA Safety and Environmental



Issue No.	Rev. No.	Drawn By	Checked By	Date
001	001	CS	CS	10/15/10



**NOTE**  
 • Contour Interval = 0.05  
 • GW Gradient Measured Between MW-2 and MW-3



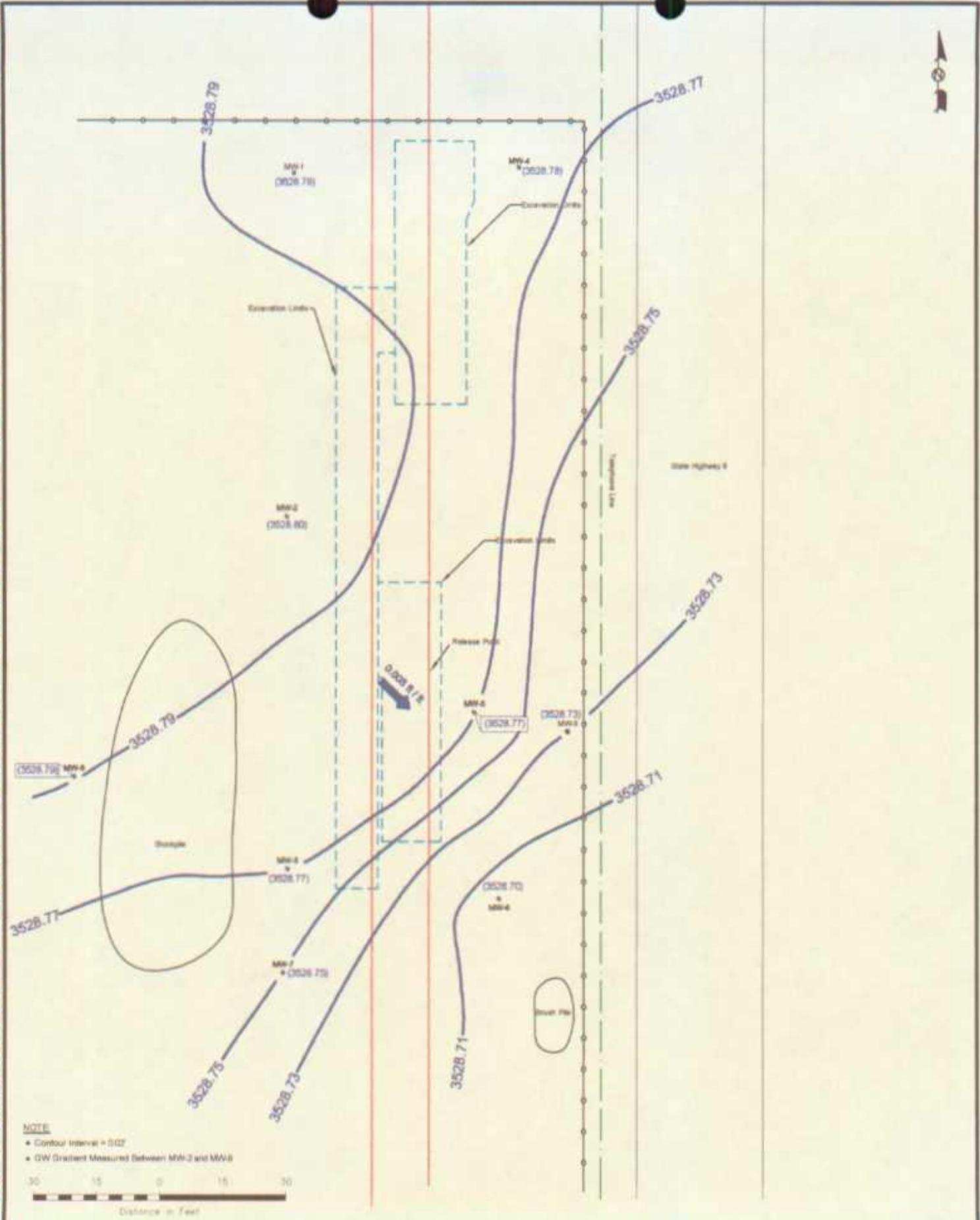
GeoProbe Sample Location	(3523.25)	Groundwater Elevation (feet)
Pipeline		Groundwater Elevation Contour Line
Fence		Groundwater Gradient Direction and Magnitude
Monitor Well Location		

Figure 2A  
 Inferred Groundwater Gradient Map (2/20/05)  
 Plains Pipeline, L.P.  
 Lee Station to Monument #7 Pipeline  
 Lee County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	Prep. By: DFM	Checked By: CCB
May 6, 2005	Lat. 32° 30' 5.4" N Long. 102° 12' 38.1" W	

NE 1/4, SE 1/4, Sec. 5, T20S, R37E



**NOTE**  
 • Contour Interval = 0.02  
 • GW Gradient Measured Between MW-3 and MW-8



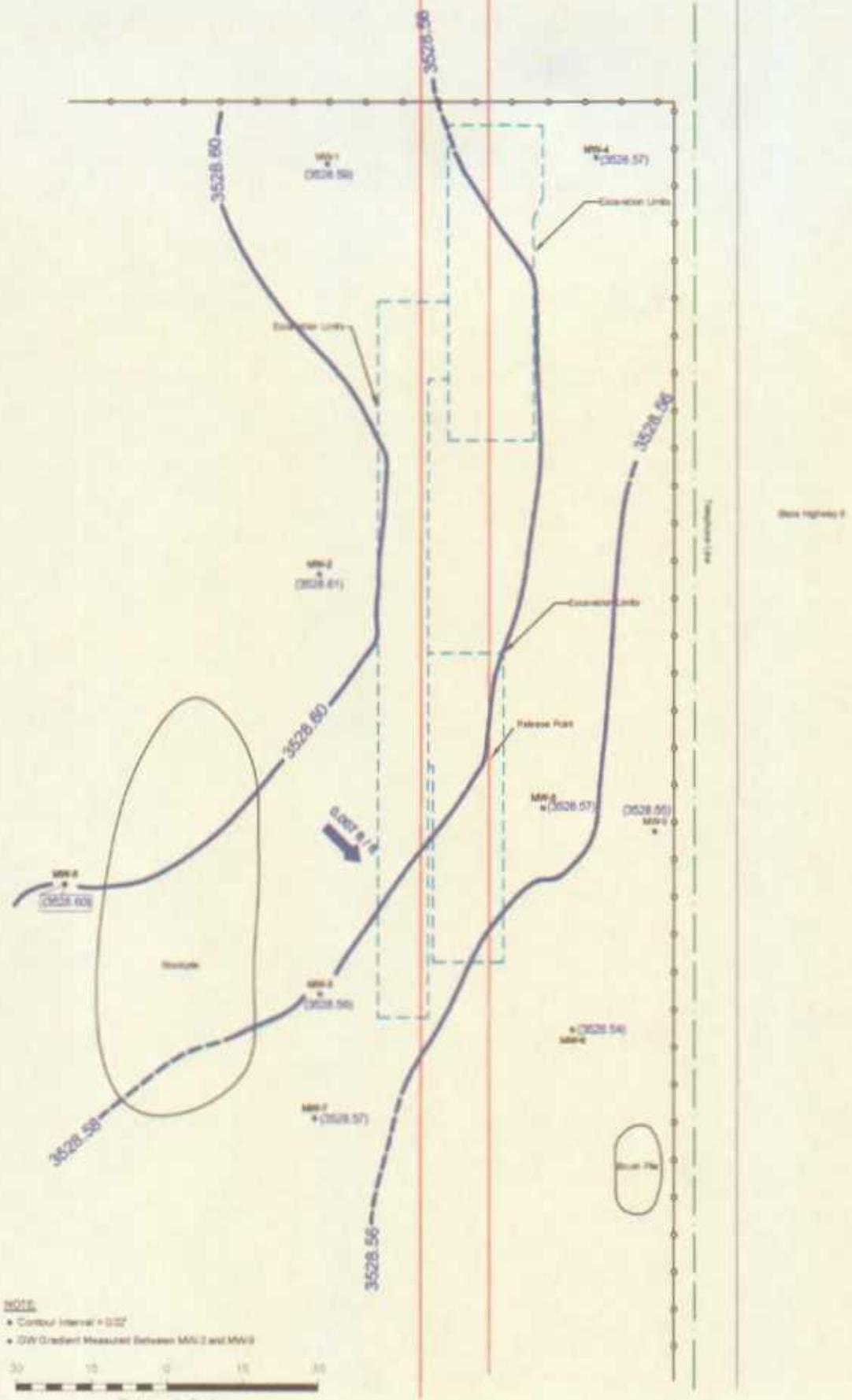
—	Pipeline	(3528.77)	Groundwater Elevation (feet)
—	Fence	—	Groundwater Elevation Contour Line
•	Monitor Well Location	→	Groundwater Gradient Direction and Magnitude

NE 1/4, SE 1/4, Sec. 5, T206, R07E

Figure 28  
 Inferred Groundwater Gradient Map (6/10/05)  
 Plains Pipeline, L.P.  
 Leak Station to Monument 8 Pipeline  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	Prep. By: CDM	Checked By: CDM
June 21, 2005	Lat: 32° 39' 5.4" N Long: 103° 19' 35.1" W	



**NOTE:**  
 • Contour Interval = 0.02'  
 • GW Gradient Measured Between MW-2 and MW-3



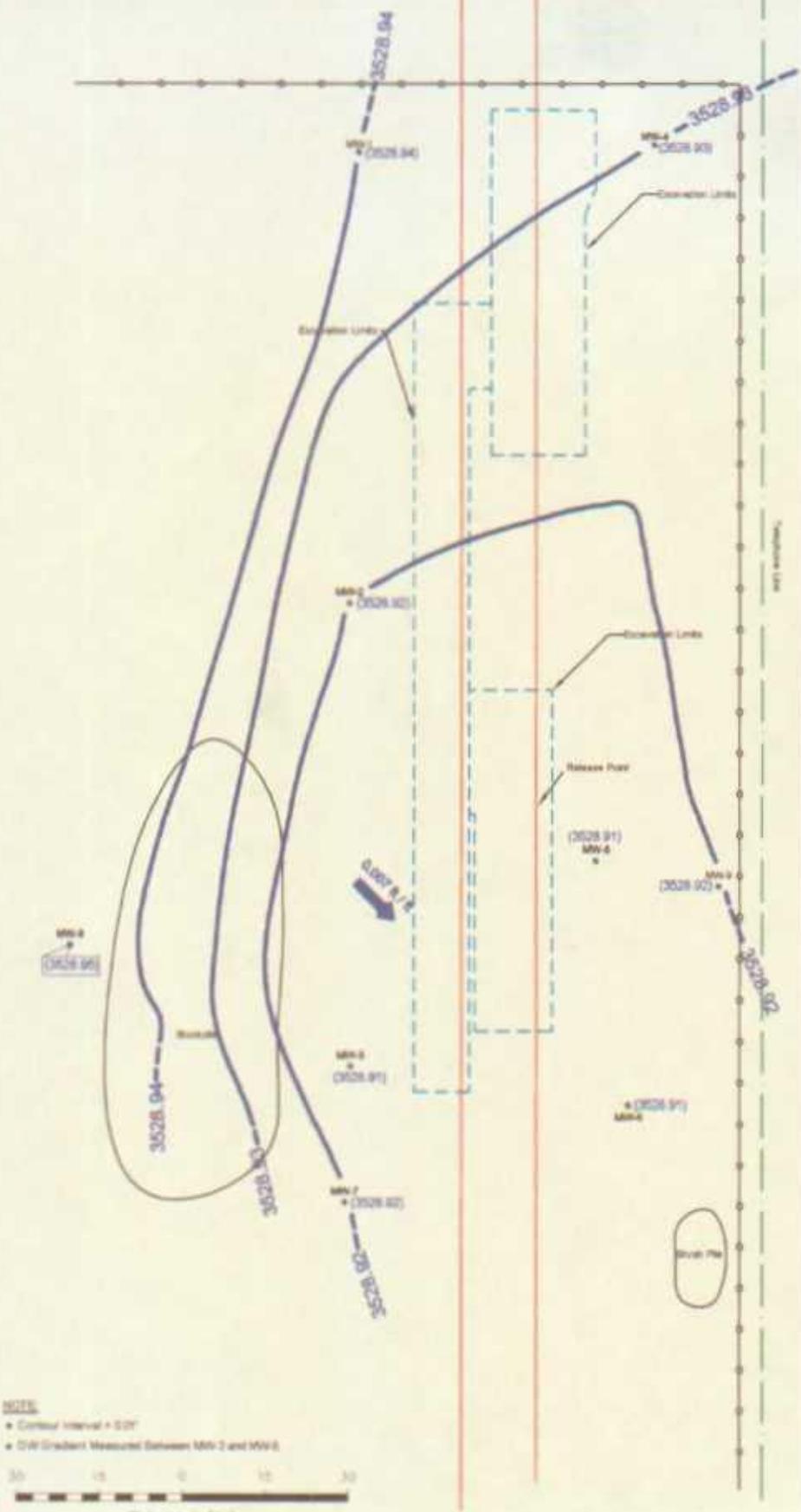
Legend	(3528.60)	Groundwater Elevation Contour
—	—	Groundwater Elevation Contour Line
—	→ 0.007 @ 1.8	Groundwater Gradient Direction and Magnitude
•		Monitor Well Location

Figure 2C  
 Inferred Groundwater Gradient Map (8/12/05)  
 Plains Pipeline, L.P.  
 Line Station to  
 Monument 87 Pipeline  
 Lee County, NE

**NOVA Safety and Environmental**

Scale 1" = 30'	Prep By GPM	Checked By CDE
December 28, 2005	Lat: 37° 58' 5.4" N	Long: 107° 12' 36.7" W

NE 1/4, SE 1/4, Sec. 5, T20S, R02E



NOTES:  
 • Contour Interval = 0.01'  
 • GW Gradient Measured Between MW-2 and MW-6



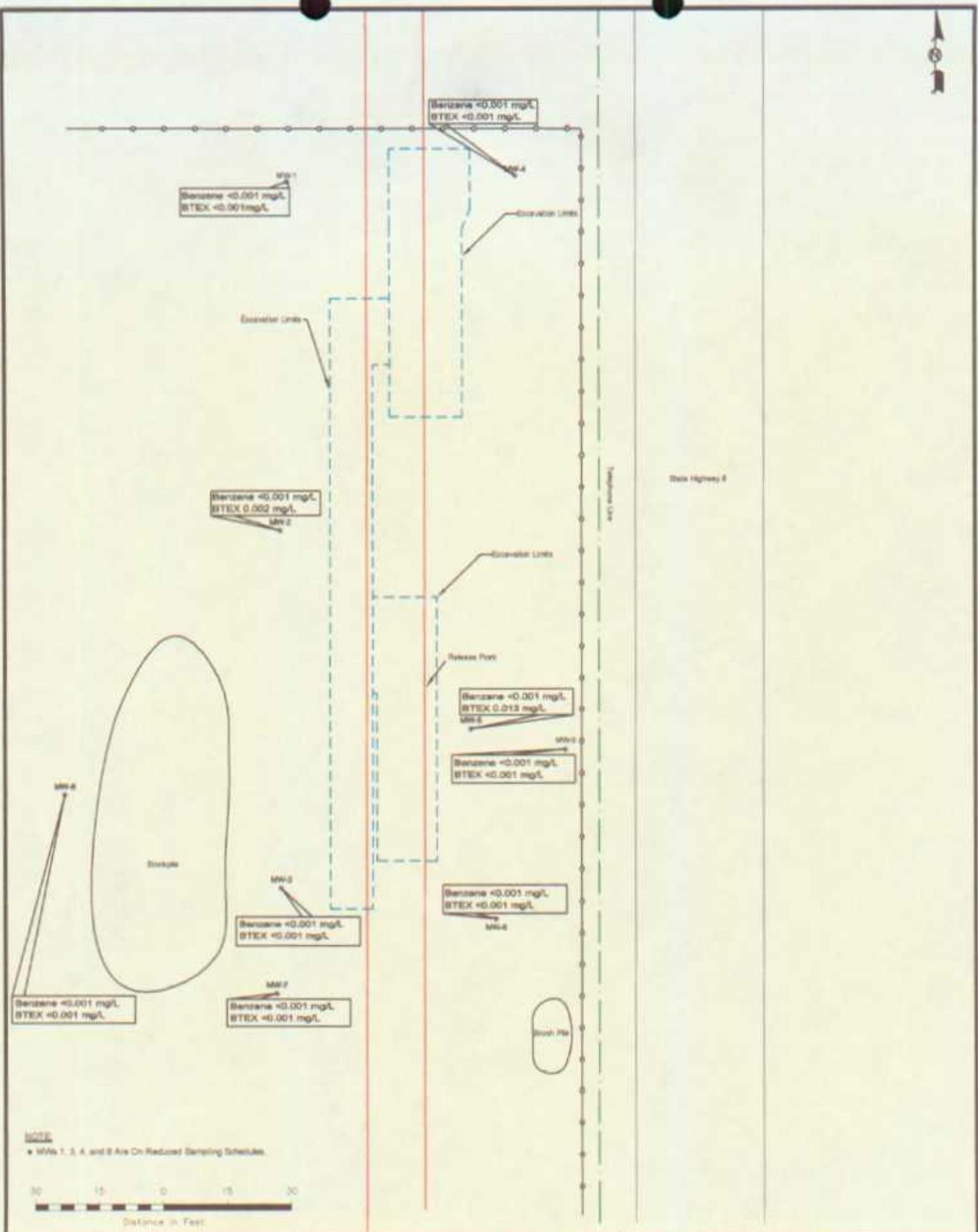
Legend	(3528.92) Groundwater Elevation (feet)
— Pipeline	Groundwater Elevation Contour Line
--- Fence	Groundwater Gradient Direction and Magnitude
• Monitor Well Location	

NE 1/4, SE 1/4, Sec. 5, T20S, R37E

Figure 2D  
 Inferred Groundwater Gradient Map (12/09/05)  
 Plena Pipeline, LP  
 L&E Station to  
 Monument #7 Pipeline  
 Lea County, NM

NOVA Safety and Environmental

Date: 7-1-07	Prep. By: DMG	Checked By: MRC
Drawn: J.T. BORG	Scale: 1" = 30'	Proj: 12" x 18" Long, 10" x 16" H



**Legend**

- GeoProbe Sample Location
- Monitor Well Location
- Pipeline
- Fence
- <0.001 Constituent Concentration (mg/L)

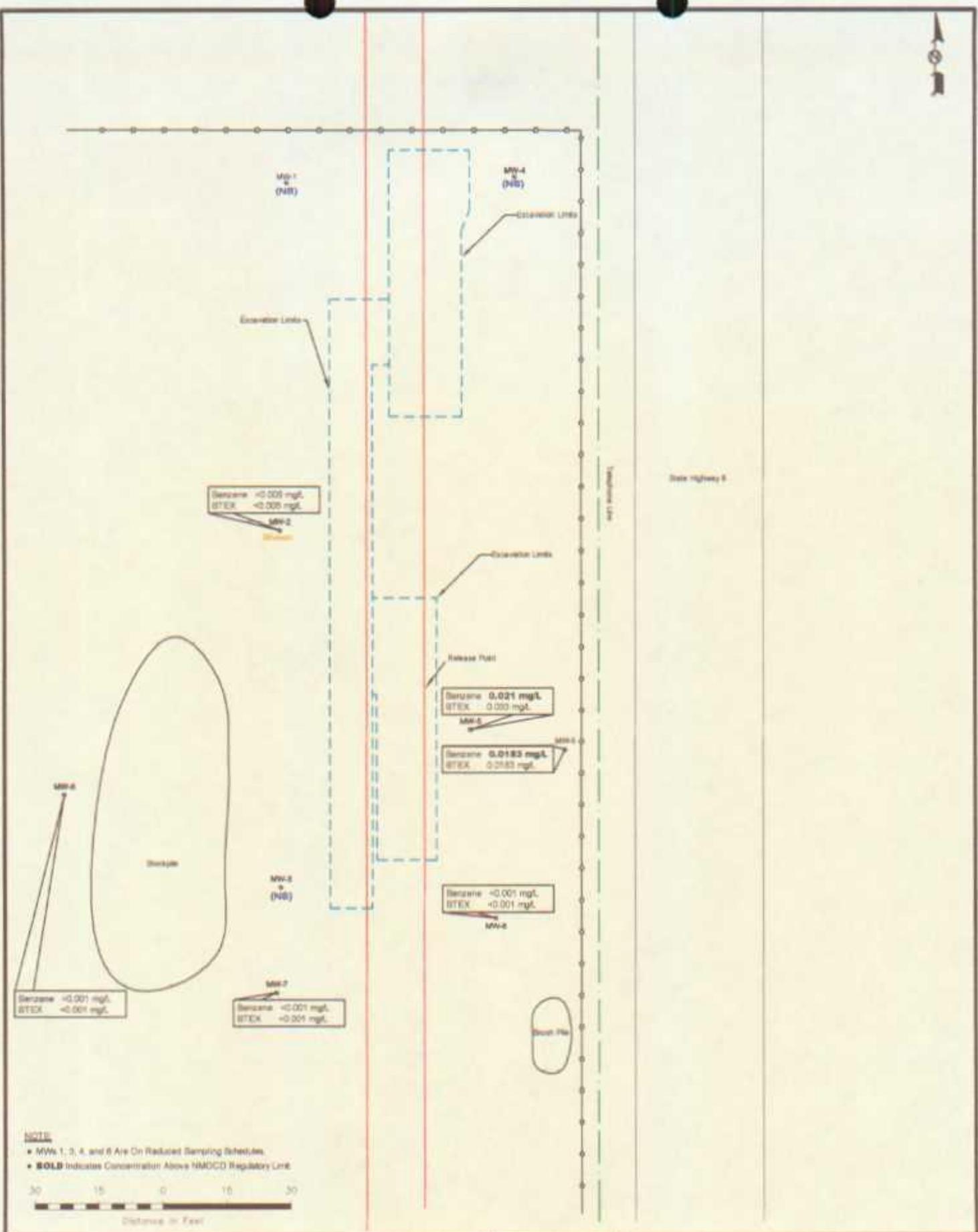
NE 1/4, SE 1/4, Sec. 5, T20S, R2E

**Figure 3A**  
 Groundwater Concentration and Inferred PSH Extent Map (2005)  
 Plains Pipeline, L.P.  
 Lee Station to Monument 2 Pipeline  
 Lee County, NM

**NOVA Safety and Environmental**

**NOVA**  
SAFETY AND ENVIRONMENTAL

Scale: 1" = 30'	Prep By: DPM	Checked By: CDE
Map No: 2005	Lat: 32° 38' 5.4" N Long: 102° 12' 55.1" W	



**Legend**

	GeofProbe Sample Location		Monitor Well Location
	Pipeline		(NS) Not Sampled
	Fence		

NE 1/4, SE 1/4, Sec 5, T20S, R10E

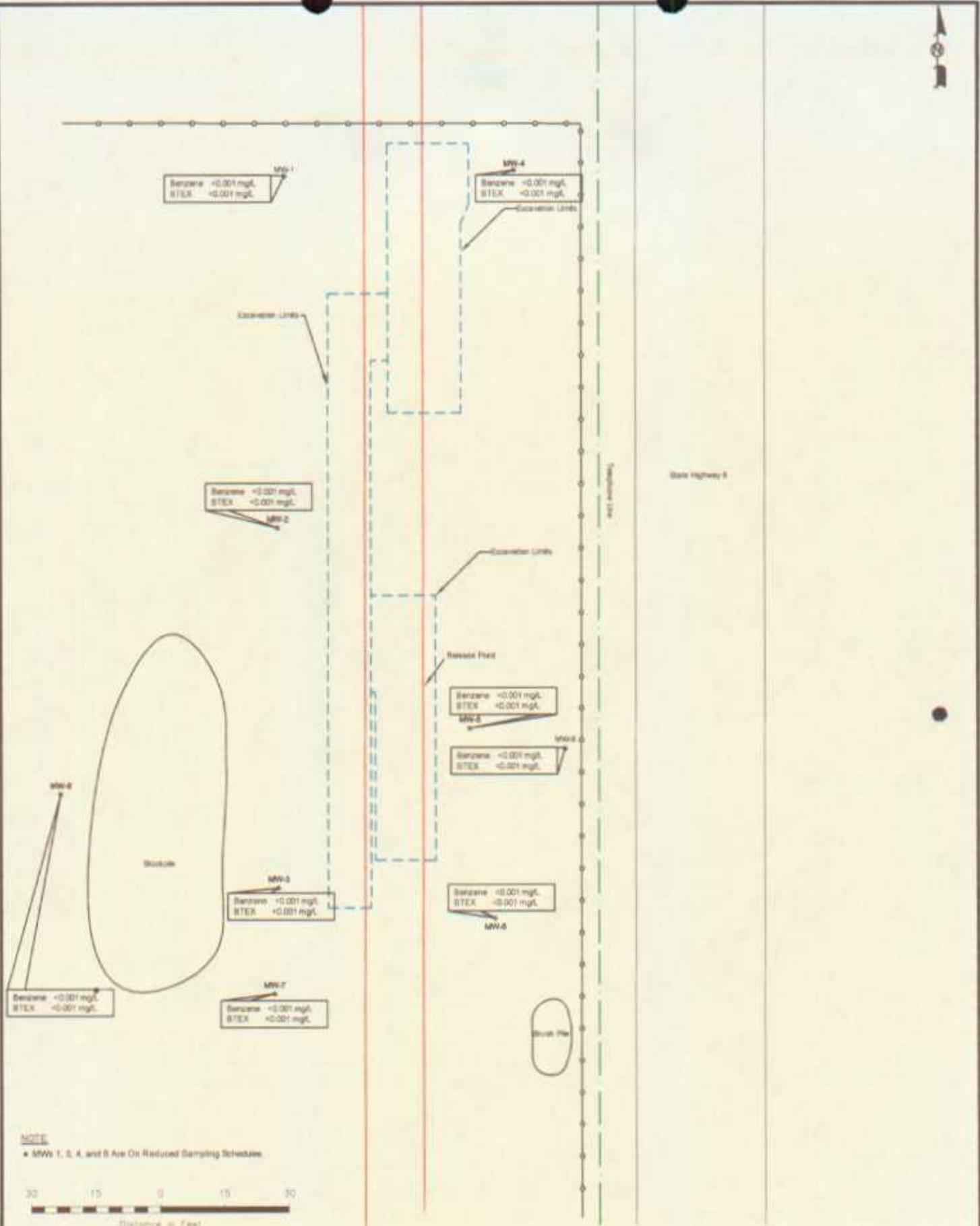
Figure 38  
Groundwater Concentration  
and Inferred PBN Estimation  
Map (8/10/06)  
Pains Pipeline, L.P.  
Leak Station to  
Monument 67 Pipeline  
Lee County, NM

NOVA Safety and Environmental



Scale: 1" = 30'	Prep By: DPM	Checked By: CDE
Date: 2/23/06	Lat: 37° 30' 8.4" N	Long: 107° 12' 58.7" W





**NOTE**  
 • MWs 1, 2, 4, and 8 Are On Reduced Sampling Schedules.



**Legend**

- Monitor Well Location
- Pipeline
- Fence

<0.001 Constituent Concentration (mg/L)

NE 1/4, SE 1/4, Sec. 5, T20S, R37E

Figure 3D  
 Groundwater Concentration  
 and Inflow (PI) Extent  
 Map (12/06/05)  
 Plains Pipeline, L.P.  
 Lee Station to  
 Mouth of P Pipeline  
 Lee County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	Prep. By: DPM	Checked By: MRS
January 27, 2006	Lat: 32° 38' 6.4"N	Long: 102° 10' 35.7"W



# Tables

TABLE 1

2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6" PIPELINE  
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	03/09/05	3562.67	-	34.22	0.00	3528.45
	06/10/05	3562.67	-	33.89	0.00	3528.78
	09/12/05	3562.67	-	34.08	0.00	3528.59
	12/06/05	3562.67	-	33.73	0.00	3528.94
MW-2	01/05/05	3563.00	Sheen	35.44	0.00	3527.56
	02/04/05	3563.00	Sheen	34.88	0.00	3528.12
	03/03/05	3563.00	Sheen	34.60	0.00	3528.40
	03/09/05	3563.00	-	34.60	0.00	3528.40
	04/07/05	3563.00	Sheen	34.41	0.00	3528.59
	05/24/05	3563.00	Sheen	34.22	0.00	3528.78
	06/10/05	3563.00	Sheen	34.20	0.00	3528.80
	06/23/05	3563.00	Sheen	34.27	0.00	3528.73
	07/27/05	3563.00	Sheen	34.49	0.00	3528.51
	08/26/05	3563.00	Sheen	34.55	0.00	3528.45
	09/12/05	3563.00	Sheen	34.39	0.00	3528.61
	09/28/05	3563.00	Sheen	34.33	0.00	3528.67
	10/25/05	3563.00	Sheen	34.24	0.00	3528.76
	11/16/05	3563.00	Sheen	34.14	0.00	3528.86
12/06/05	3563.00	Sheen	34.08	0.00	3528.92	
12/29/05	3563.00	Sheen	34.02	0.00	3528.98	
MW-3	01/05/05	3562.60	Sheen	35.05	0.00	3527.55
	02/04/05	3562.60	Sheen	34.53	0.00	3528.07
	03/03/05	3562.60	Sheen	34.25	0.00	3528.35
	03/09/05	3562.60	-	34.20	0.00	3528.40
	04/07/05	3562.60	Sheen	34.05	0.00	3528.55
	05/24/05	3562.60	Sheen	33.42	0.00	3529.18
	06/10/05	3562.60	-	33.83	0.00	3528.77
	06/23/05	3562.60	Sheen	33.89	0.00	3528.71
	07/27/05	3562.60	Sheen	34.10	0.00	3528.50
	08/26/05	3562.60	Sheen	34.17	0.00	3528.43
	09/12/05	3562.60	-	34.02	0.00	3528.58
	09/28/05	3562.60	Sheen	33.95	0.00	3528.65
	10/25/05	3562.60	Sheen	33.35	0.00	3529.25
	11/16/05	3562.60	Sheen	33.75	0.00	3528.85
12/06/05	3562.60	-	33.69	0.00	3528.91	
12/29/05	3562.60	Sheen	33.64	0.00	3528.96	

TABLE 1

2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6" PIPELINE  
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-4	03/09/05	3562.85	-	34.45	0.00	3528.40
	06/10/05	3562.85	-	34.07	0.00	3528.78
	09/12/05	3562.85	-	34.28	0.00	3528.57
	12/06/05	3562.85	-	33.92	0.00	3528.93
MW-5	03/09/05	3564.21	-	35.84	0.00	3528.37
	06/10/05	3564.21	-	35.44	0.00	3528.77
	09/12/05	3564.21	Sheen	35.64	0.00	3528.57
	12/06/05	3564.21	-	35.30	0.00	3528.91
MW-6	03/09/05	3563.29	-	35.02	0.00	3528.27
	06/10/05	3563.29	-	34.59	0.00	3528.70
	09/12/05	3563.29	-	34.75	0.00	3528.54
	12/06/05	3563.29	-	34.38	0.00	3528.91
MW-7	03/09/05	3562.79	-	34.44	0.00	3528.35
	06/10/05	3562.79	-	34.04	0.00	3528.75
	09/12/05	3562.79	-	34.22	0.00	3528.57
	12/06/05	3562.79	-	33.87	0.00	3528.92
MW-8	03/09/05	3563.79	-	35.35	0.00	3528.44
	06/10/05	3563.79	-	35.00	0.00	3528.79
	09/12/05	3563.79	-	35.19	0.00	3528.60
	12/06/05	3563.79	-	34.84	0.00	3528.95
MW-9	03/09/05	3563.91	-	35.68	0.00	3528.23
	06/10/05	3563.91	-	35.18	0.00	3528.73
	09/12/05	3563.91	-	35.36	0.00	3528.55
	12/06/05	3563.91	-	34.99	0.00	3528.92

Note: ND denotes no product detected during well gauging activity.  
Elevations based on the North American Vertical Datum of 1929.

TABLE 2

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6" PIPELINE  
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-3021B, 5030			
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62
MW-1	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	Not Sampled Due to Sample Reduction			
	09/12/05	Not Sampled Due to Sample Reduction			
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-2	03/09/05	<0.001	<0.001	<0.001	0.0019
	06/10/05	<0.005	<0.005	<0.005	<0.005
	09/12/05	<0.005	<0.005	<0.005	<0.005
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-3	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	Not Sampled Due to Sample Reduction			
	09/12/05	Not Sampled Due to Sample Reduction			
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-4	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	Not Sampled Due to Sample Reduction			
	09/12/05	Not Sampled Due to Sample Reduction			
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-5	03/09/05	<0.001	<0.001	<0.001	0.0128
	06/10/05	0.021	<0.01	<0.01	0.0119
	09/12/05	<0.005	<0.005	<0.005	0.0059
	12/06/05	<0.001	<0.001	<0.001	0.0014
MW-6	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	<0.001	<0.001	<0.001	<0.001
	09/12/05	Not Sampled Due to Sample Reduction			
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-7	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	<0.001	<0.001	<0.001	<0.001
	09/12/05	<0.001	<0.001	<0.001	<0.001
	12/06/05	<0.001	<0.001	<0.001	<0.001

TABLE 2

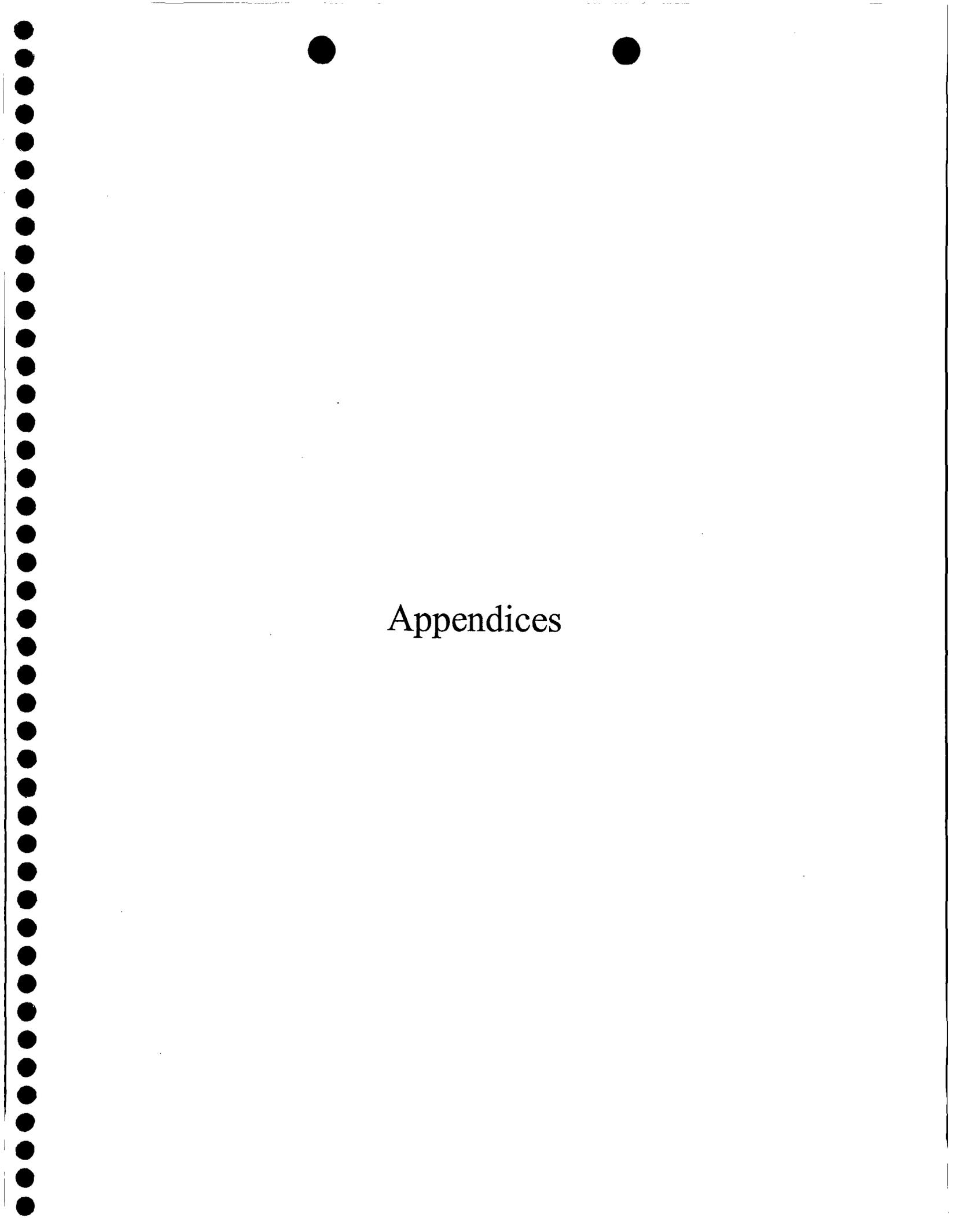
2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
 LEA STATION TO MONUMENT 6" PIPELINE  
 LEA COUNTY, NEW MEXICO

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		0.01	0.75	0.75	0.62
MW-8	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	<0.001	<0.001	<0.001	<0.001
	09/12/05	<0.001	<0.001	<0.001	<0.001
	12/06/05	<0.001	<0.001	<0.001	<0.001
MW-9	03/09/05	<0.001	<0.001	<0.001	<0.001
	06/10/05	<b>0.0183</b>	<0.01	<0.01	<0.01
	09/12/05	<0.005	<0.005	<0.005	<0.005
	12/06/05	<0.001	<0.001	<0.001	<0.001

Note: EB denotes Equipment Blank collected during sampling event.



Appendices

Appendix A:  
Notification of Release 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

Form C-141  
Revised October 10, 2003

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

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 Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	Lea to Monument 6"	Facility Type:	6" Steel Pipeline

Surface Owner:	Laughlin Estate	Mineral Owner		Lease No.	
----------------	-----------------	---------------	--	-----------	--

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	5	20S	37E					Lea

Latitude 32 degrees 36' 06.4" Longitude 103 degrees 15' 56.1"

**NATURE OF RELEASE**

Type of Release: Crude Oil	Volume of Release: 3 barrels	Volume Recovered 0 barrels
Source of Release: 6" Steel Pipeline	Date and Hour of Occurrence 8/03/01	Date and Hour of Discovery 14:00
Was Immediate Notice Given? Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required <input type="checkbox"/>	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Internal corrosion of 6" steel pipeline. A clamp was installed on the line to mitigate the release.

Describe Area Affected and Cleanup Action Taken.\* A clamp was installed on the line to mitigate the release. The aerial extent of surface impact was approximately 10' x 80'.

**NOTE: This information was obtained from historical EOTT files, Plains acquired EOTT/Link on April 1, 2004 and Plains assumes this information to be correct.**

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.

OIL CONSERVATION DIVISION

Signature:	Approved by District Supervisor:		
Printed Name: Camille Reynolds	Approval Date:	Expiration Date:	
Title: Remediation Coordinator	Conditions of Approval:		
E-mail Address: cgreynolds@paalp.com			Attached <input type="checkbox"/>
Date: 3/21/2005	Phone: (505)441-0965		

\* Attach Additional Sheets If Necessary



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Mark E. Fesmire, P.E.**  
Director  
Oil Conservation Division

July 7, 2005

Ms. Camille Reynolds  
Plains All American  
3112 West Highway 82  
Lovington, NM 88260

Re: 2004 Annual Monitoring Report  
Lea Station to Monument 6 Inch  
NE/4 SE/4 of Section 5, Township 20 South, Range 37 East  
Lea County, New Mexico  
Plains Marketing, L.P. EMS Number 2001-11056  
NMOCD File Number 1R-0404

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the report shown above, and it is accepted with the following understandings and conditions:

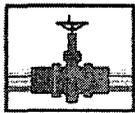
1. Quarterly and annual monitoring and sampling will continue throughout 2005.
2. Passive product recovery and gauging will continue on a monthly schedule that may be adjusted according to site conditions.
3. Plains Marketing, L.P. (Plains) is preparing a plan to address any remaining soil impact issues and will forward it under separate cover.

NMOCD acceptance of the subject report does not relieve Plains of responsibility should its operations at this site prove to have been detrimental to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other federal, state, or local governmental entity.

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin  
Environmental Bureau

cc: NMOCD, Hobbs



# PLAINS ALL AMERICAN

March 29, 2005

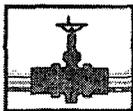
Mr. Ed Martin  
New Mexico Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

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

Dear Mr. Martin:

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:

LF-59	Section 32, Township 19 South, Range 37 East, Lea County
TNM 97-04	Section 11, Township 16 South, Range 35 East, Lea County
HDO 90-23	Section 06, Township 20 South, Range 37 East, Lea County
Darr Angell 2	Section 11, 14, Township 15 South, Range 37 East, Lea County
SPS 11	Section 18, Township 18 South, Range 36 East, Lea County
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
Red Byrd # 1	Section 01, Township 20 South, Range 36 East, Lea County
Bob Durham	Section 31, 32, Township 19 South, Range 37 East, Lea County
Monument Site 11	Section 30, Township 19 South, Range 37 East, Lea County
Darr Angell 1	Section 11, Township 15 South, Range 37 East, Lea County
TNM 98-05B	Section 26, Township 21 South, Range 37 East, Lea County
Monument Site 2	Section 6, 7, Township 20 South, Range 37 East, Lea County
Monument Site 10	Section 32, Township 19 South, Range 37 East, Lea County
Monument Site 17	Section 29, Township 19 South, Range 37 East, Lea County
Monument Site 18	Section 07, Township 20 South, Range 37 East, Lea County
Monument Barber 10" PL	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell 4	Section 11, 02, Township 15 South, Range 37 East, Lea County
Monument to Lea 6"	Section 05, Township 20 South, Range 37 East, Lea County
Texaco Skelly "F"	Section 21, Township 20 South, Range 37 East, Lea County



**PLAINS  
ALL AMERICAN**

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 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 21 facilities.

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

Sincerely,

*Camille Reynolds for CR*

Camille Reynolds  
Remediation Coordinator  
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures



2004

ANNUAL MONITORING REPORT

IR-404

LEA STATION TO MONUMENT 6 INCH  
NE ¼ SE ¼ of SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO  
PLAINS MARKETING, L.P. EMS NUMBER: 2001-11056

PREPARED FOR:

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



PREPARED BY:

NOVA Safety and Environmental  
2057 Commerce  
Midland, Texas 79703

April 2005

*Rebecca Haskell*  
Rebecca Haskell  
Project Manager

*Todd K. Choban*  
for: Todd K. Choban  
Vice-President Technical Services

## TABLE OF CONTENTS

INTRODUCTION.....	1
SITE DISCRPTION AND BACKGROUND INFORMATION.....	1
FIELD ACTIVITIES.....	1
LABORATORY RESULTS.....	2
SUMMARY.....	3
ANTICIPATED ACTIONS.....	3
LIMITATIONS.....	3
DISTRUBUTION.....	5

### FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map February 23, 2004

2B – Inferred Groundwater Gradient Map May 13, 2004

2C – Inferred Groundwater Gradient Map September 07, 2004

2D – Inferred Groundwater Gradient Map December 15, 2004

Figure 3A – Groundwater Concentration and Inferred PSH Extent Map February 23, 2004

3B – Groundwater Concentration and Inferred PSH Extent Map May 13, 2004

3C – Groundwater Concentration and Inferred PSH Extent Map September 07, 2004

3D – Groundwater Concentration and Inferred PSH Extent Map November 11 and  
December 15, 2004

### TABLES

Table 1 – Groundwater Elevation Data

Table 2 – Concentrations of BTEX in Groundwater

### APPENDICES

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

### ENCLOSED ON DATA DISK

2004 Annual Monitoring Report

2004 Tables 1 and 2 - Groundwater Elevation and BTEX Concentration Data

2004 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

Historic Groundwater Elevation Tables

Historic BTEX Concentration Tables

## **INTRODUCTION**

On behalf of Plains Marketing, L.P., (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc. (ETGI). The Lea Station to Monument 6-Inch site, formally the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. This report is intended to be viewed as a complete document with figures, attachments, tables and text. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2004 only. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during five monitoring events in calendar year 2004 to assess the levels and extent of dissolved phase and Phase Separated Hydrocarbon (PSH) constituents. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

## **SITE DESCRIPTION AND BACKGROUND INFORMATION**

The legal description of the site is NE  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 5, Township 20 South, Range 37 East, Lea County, New Mexico. The site subsurface is composed primarily of unconsolidated sands, which vary in color from brown to tan with minor amounts of red. The sands are very fine grained, poorly sorted and contain calcareous nodules or caliche debris at depth. A limited amount of caliche, common in the area, is also present at the site.

A three-barrel release occurred on August 3, 2001. It resulted in an irregularly shaped stained area measuring approximately 175 feet in length by 30 feet in width. EOTT conducted emergency response actions by excavating impacted soil from around the pipeline, locating the leak point and repairing the line.

## **FIELD ACTIVITIES**

The site monitor wells were gauged and sampled on February 23, May 13, September 7, and December 15, 2004. Monitor wells MW-7, MW-8, and MW-9 were drilled on November 7, 2004 and sampled on November 11, 2004. There was a reduction in sampling during 2004 for monitor wells MW-1, MW-3, MW-4, and MW-6 as per NMOCD approval. The table below lists the sampling schedule for each monitor well. During each sampling event the monitor wells were purged of approximately three well volumes of water or until the wells were dry using a new rope and disposable polyethylene bailer or electrical 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 by Key Energy utilizing a licensed disposal facility (NMOCD AO SWD-730).

In previous correspondence dated April 28, 2004, the NMOCD approved the current sampling schedule. The table below illustrates the current schedule.

<b>NMOCD APPROVED SAMPLING SCHEDULE</b>	
<b>Sample Location</b>	<b>Sampling Schedule</b>
MW-1	Annually
MW-2	Quarterly
MW-3	Annually
MW-4	Annually
MW-5	Quarterly
MW-6	Semi-Annually
MW-7	Quarterly
MW-8	Quarterly
MW-9	Quarterly

Locations of the monitor wells and the inferred groundwater gradient, constructed from measurements collected during quarterly sampling events are depicted on Figures 2A-2D, the Inferred Groundwater Gradient Maps. Cumulative groundwater elevation data is provided as Table 1. Groundwater elevation contours generated from water level measurements acquired during the first three quarterly sampling events of 2004, indicate that the groundwater gradient is flat within the tolerance of the measuring instrument and the fourth quarter groundwater elevation contours indicated a general gradient of approximately 0.002 ft/ft to the southeast. The corrected groundwater elevations ranged between 3515.81 to 3526.62 feet above mean sea level, in MW-5 on June 23, 2004 and in MW-1 on December 14, 2004, respectively. Newly installed monitor wells MW-7 through MW-9 were not gauged during the fourth quarter sampling event due to a recent sampling event, which occurred after well development.

During the second quarter sampling event, PSH was detected in monitor wells MW-2 and MW-3, both of which had previously been free of PSH. In monitor well MW-2, a measurable quantity of PSH was detected 11 times out of 13 gauging events with an average of 0.24 feet. The amount of product has steadily decreased since June 2004 to a sheen in December 2004. Monitor well MW-3 had measurable PSH three out of 12 gauging events with an average of 0.02 feet of PSH. The last gauging event for MW-3 in which a measurable amount of PSH was detected was on June 30, 2004. Monitor well MW-5 has had a sheen throughout most of 2004 with one occurrence of measurable PSH. Recovery of PSH at the site is achieved using passive recovery and is monitored on a weekly basis. The 2004 gauging data is provided in Table 1.

## **LABORATORY RESULTS**

Groundwater samples obtained during the February 23, May 13, and September 07, 2004 monitoring events were delivered to AnalySys Inc. in Austin, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW 846-8260b. Groundwater samples obtained during the November 11 and December 15,

2004 sampling events were sent to TraceAnalysis, Inc. in Lubbock, Texas for BTEX using EPA Method SW 846-8021B. A listing of BTEX constituent concentrations for 2004 is summarized in Table 2 and electronic copies of the laboratory reports from this reporting period are provided on the enclosed data disk. The inferred extent of PSH and quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

Review of laboratory analytical results of the groundwater samples obtained during the 2004 monitoring period indicate that benzene and BTEX constituent concentrations are below NMOCD regulatory standards in monitor wells MW-1, MW-4, MW-5, MW-6, MW-7, MW-8, and MW-9. Groundwater samples collected from monitor well MW-2 were below NMOCD regulatory standards for benzene and BTEX when it was sampled during the first and fourth quarters but contained limited PSH during the second and third quarters. Groundwater samples collected from monitor well MW-3 was below NMOCD regulatory standards for benzene and BTEX during the first, third, and fourth quarter sampling events. Monitor well MW-3 was mistakenly only sampled three times during 2004 even though it is on an annual schedule.

## **SUMMARY**

This report presents the results of groundwater monitoring activities for the annual monitoring period 2004. As discussed above, three monitor wells (MW-2, MW-3 and MW-5) contained measurable PSH thicknesses and/or sheen in 2004.

Groundwater elevation contours generated from water level measurements acquired during the quarterly sampling events of 2004, indicate that the groundwater gradient is flat within the tolerance of the measuring instrument.

As discussed above, benzene and BTEX constituent concentrations were below NMOCD regulatory standards in eight monitor wells during 2004. Monitor well MW-2 was below NMOCD regulatory standards for benzene and BTEX when it was sampled during the first and fourth quarters but contained PSH during the second and third quarters.

## **ANTICIPATED ACTIONS**

Quarterly monitoring and sampling will continue in 2005. Passive product recovery and gauging will continue on a monthly schedule and will be adjusted according to site conditions.

Additional soil investigation/remediation will be proposed to address any remaining soil impact issues and will be addressed under separate cover from this report.

## **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 Martin  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

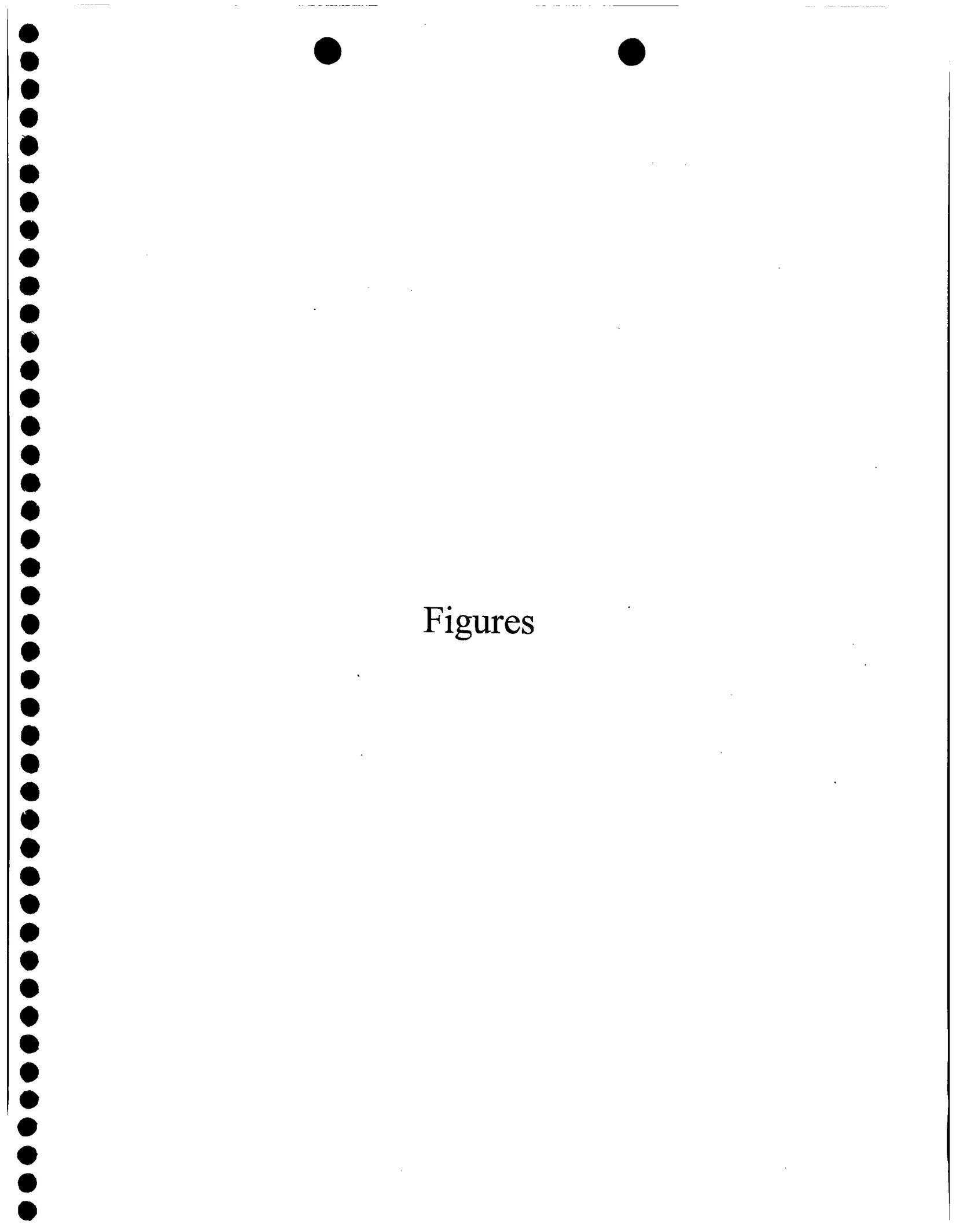
Copy 2:      Paul Sheeley and Larry Johnson  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division, District 1  
1625 French Drive  
Hobbs, NM 88240

Copy 3:      Camille Reynolds  
Plains Marketing, L.P.  
3112 Highway 82  
Lovington, NM  
cjreynolds@paalp.com

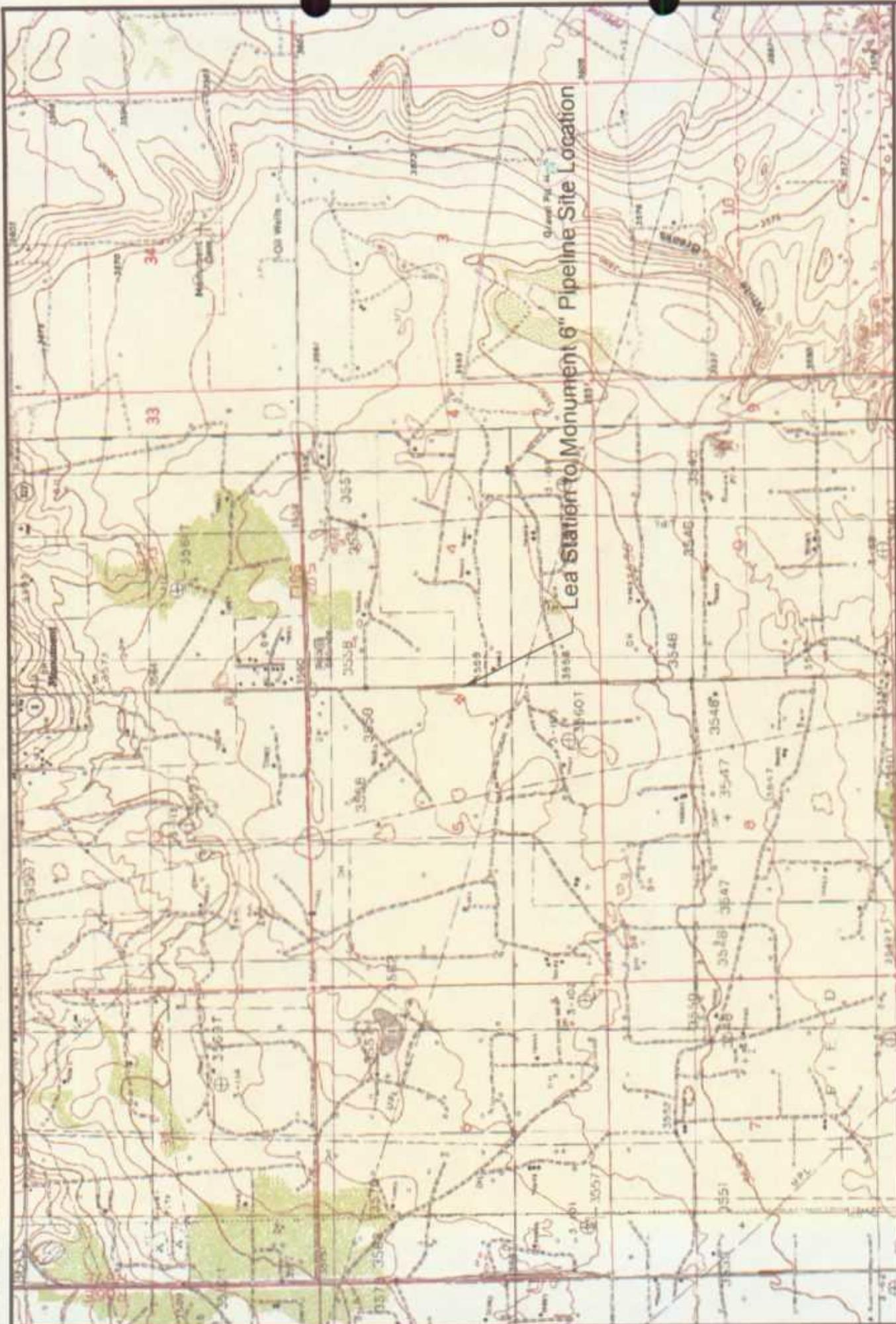
Copy 4:      Jeff Dann  
Plains Marketing, L.P.  
333 Clay Street  
Suite 1600  
Houston, TX 77002  
jpdann@paalp.com

Copy 5:      NOVA Safety and Environmental  
2057 Commerce Street  
Midland, TX 79703  
rhaskell@novatraining.cc

Copy Number:



Figures



Lea Station to Monument 6 Pipeline Site Location

Figure 1  
Site Location  
Map

Plains Marketing, L.P.  
Lea Station to  
Monument 6 Pipeline  
Lea County, NM

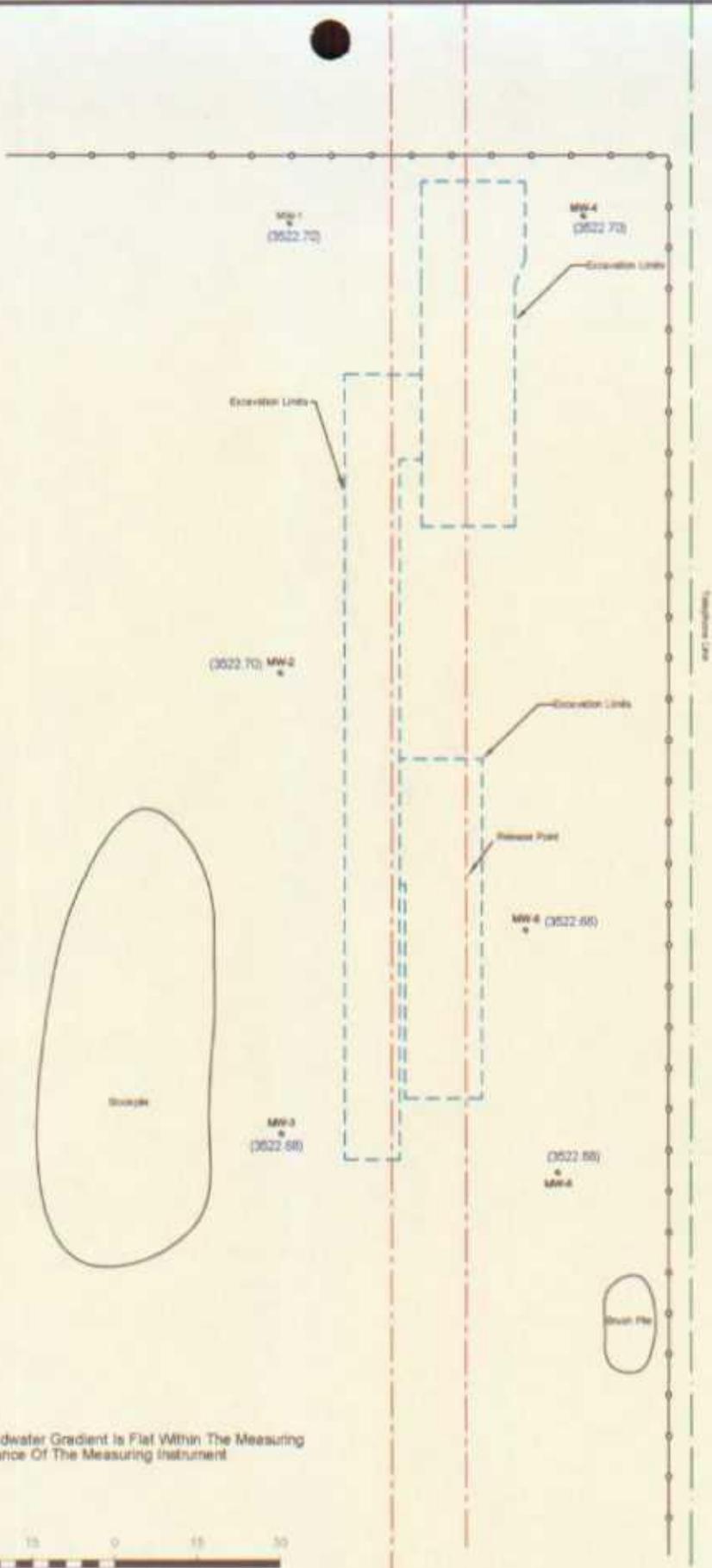
NOVA Safety and Environmental



Form 073 Rev. 01/03  
January 10, 2003  
File No. 2205  
Created by: TSC  
Lat: 32° 36' 8.47" Long: 107° 10' 36.17"

NE 1/4, SE 1/4, Sec. 6 T20N, R37E

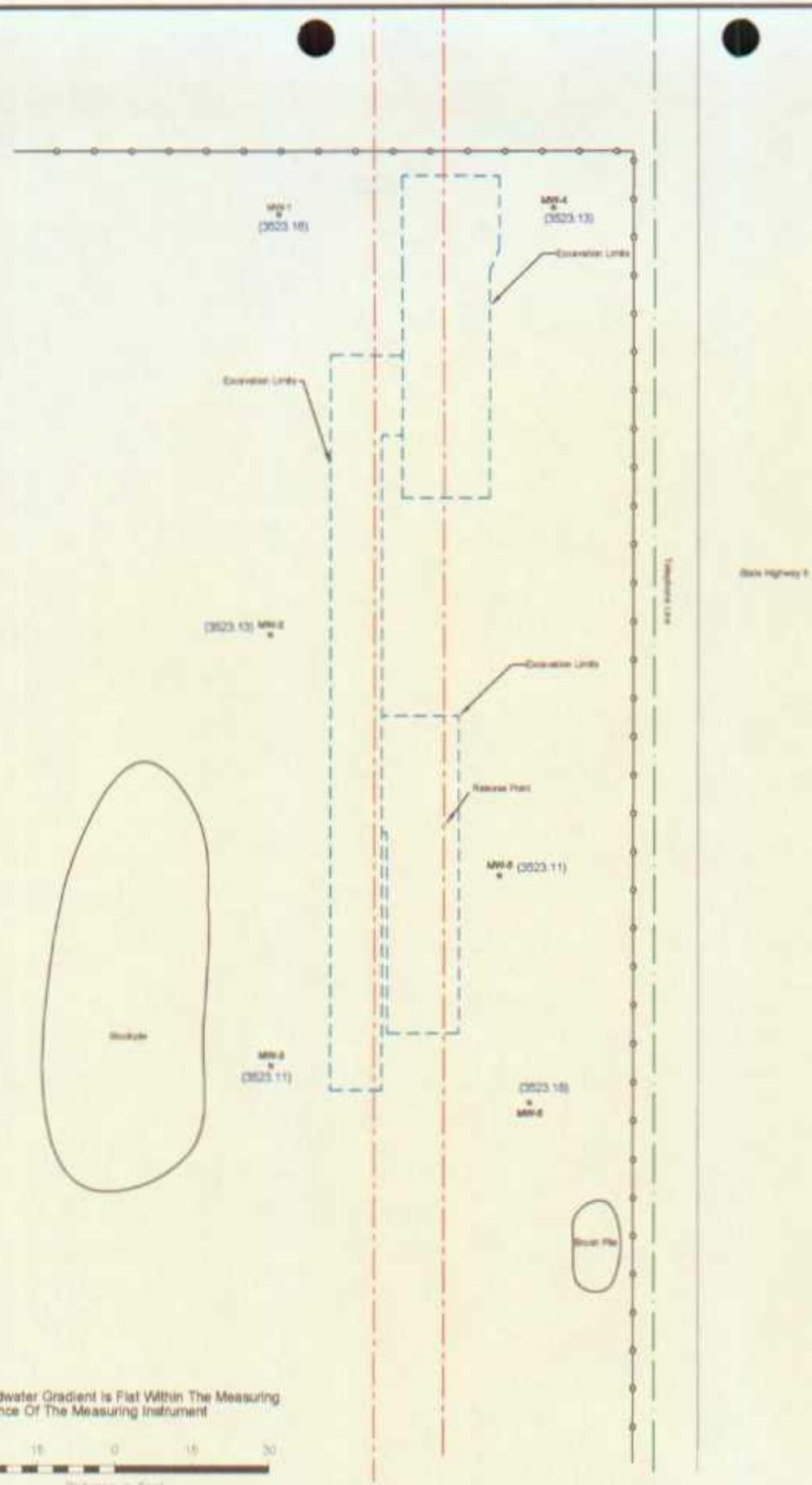




NOTE:  
 • Groundwater Gradient is Flat Within The Measuring Tolerance Of The Measuring Instrument



<b>Legend</b> ● Groundwater Sample Location --- Pipeline ○ Monitor Well Location — Fence (3522.30) Groundwater Elevation (in Feet)		<b>Figure 2A</b> Inferred Groundwater Gradient Map (22304) Plains Pipeline, L.P. Lee Station 50 Monument 6" Pipeline Lee County, NM	<b>NOVA Safety and Environmental</b> 
NE 1/4, SE 1/4, Sec. 5, T20N, R07E		Scale: 1" = 30' Date: March 17, 2005 Lat: 32° 30' 5.47N Long: 107° 10' 35.1"	Prep By: DPM Checked By: R06

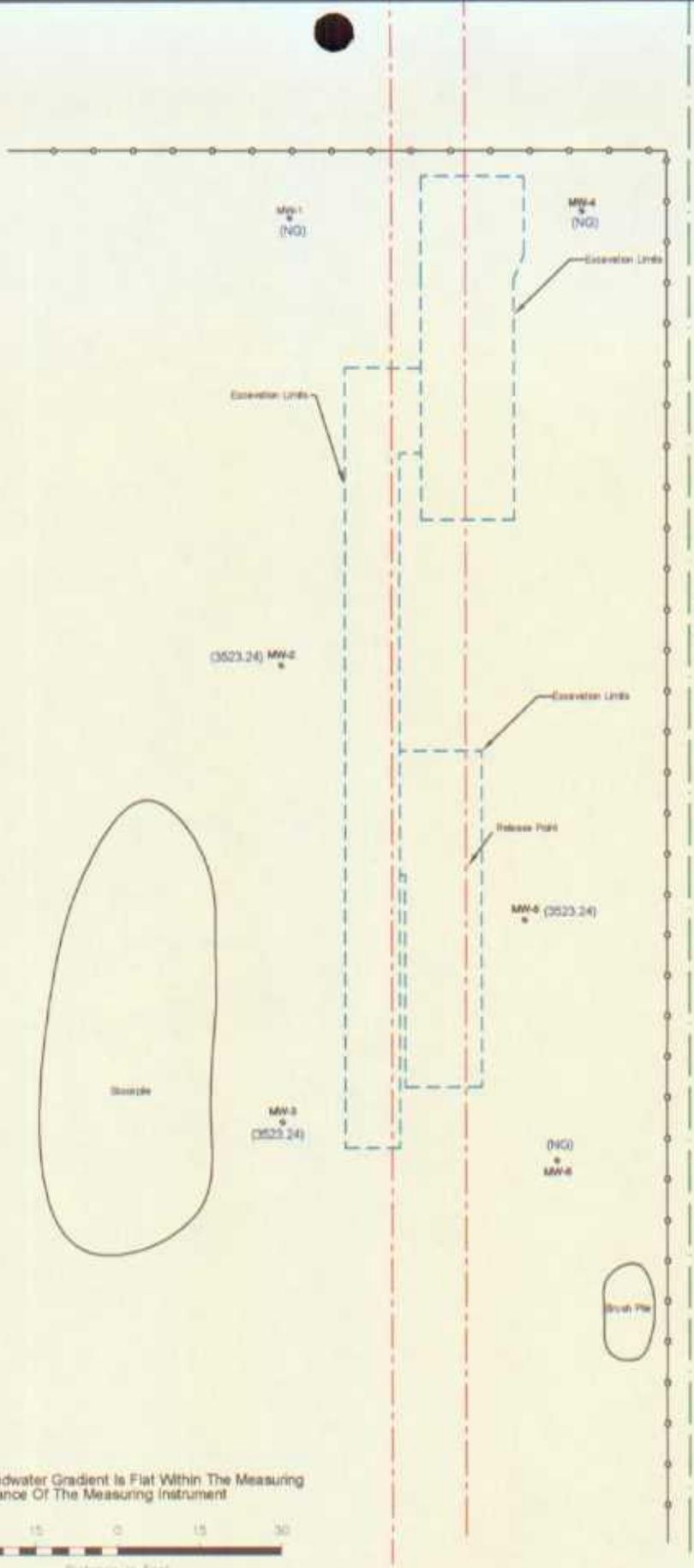


NOTE  
 • Groundwater Gradient is Flat Within The Measuring Tolerance Of The Measuring Instrument



Legend: ● Geoprobe Sample Location --- Pipeline ○ Fence ● (3523.35) Groundwater Elevation (In Feet)	Figure 20 Inferred Groundwater Gradient Map (5/13/04) Plains Pipeline, L.P. Lee Station to Monument #1 Pipeline Lee County, NM	<b>NOVA Safety and Environmental</b> 		
		Scale: 1" = 30' March 17, 2005	Prep. By: JPM Lat: 37° 36' 8.47N Long: 107° 12' 55.1"	Checked By: WSM

NE 1/4, SE 1/4, Sec. 5, T20S, R07E



NOTE:  
 • Groundwater Gradient is Flat Within The Measuring Tolerance Of The Measuring Instrument



Legend:

	GeoProbe Sample Location		Monitor Well Location
	Pipeline		Not Gauged
	Fence		
(3523.25)	Groundwater Elevation (In Feet)		

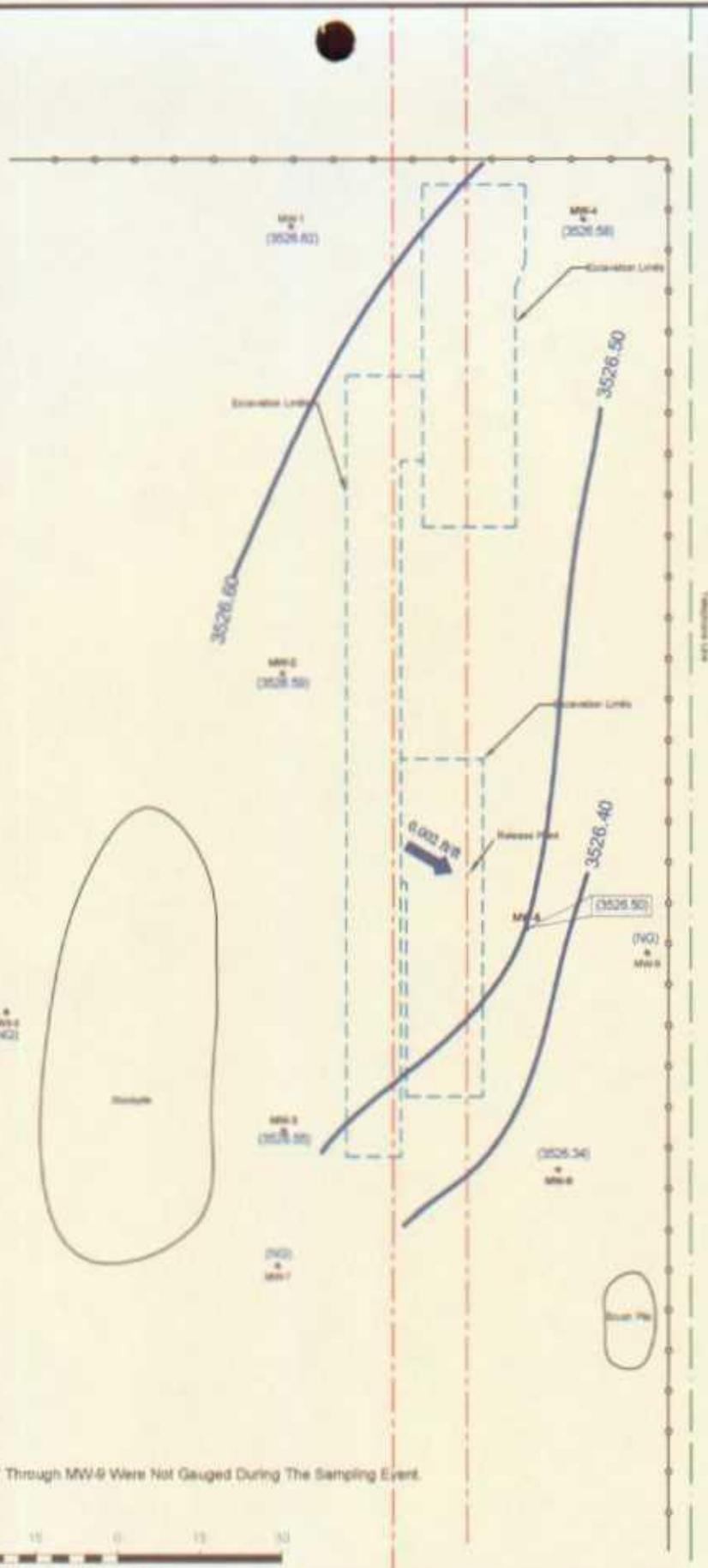
NE 1A, SE 1A, Sec. 5, T20S, R37E

Figure 2C  
 Inferred Groundwater Gradient  
 Map (W7D4)  
 Plains Pipeline, L.P.  
 Lea Station 30  
 Monument 6" Pipeline  
 Lea County, NM

NOVA Safety and Environmental



Scale: 1" = 30'	Prep By: DPM	Checked By: RSR
March 17, 2005	Lat: 32° 36' 8.4"N Long: 107° 12' 35.1"	

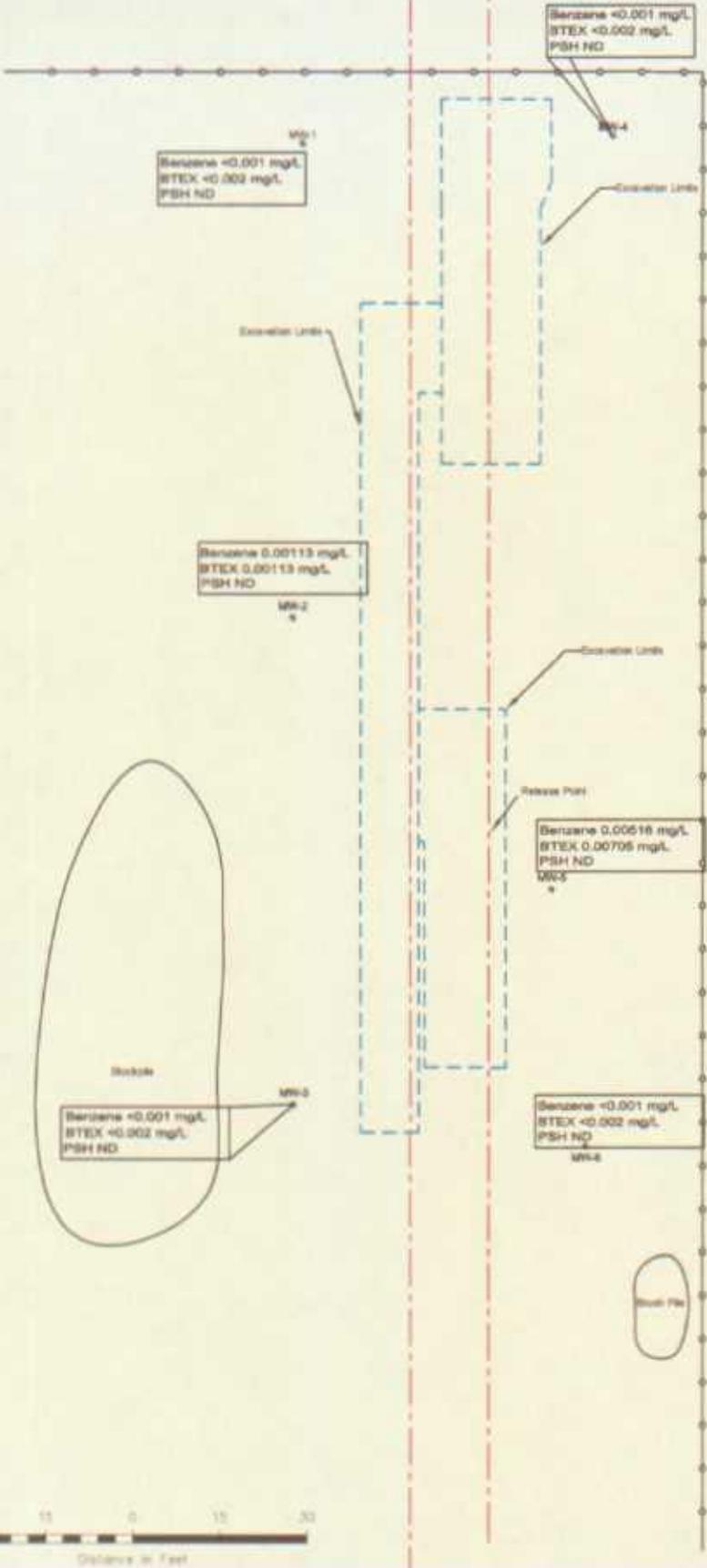


State Highway 8

NOTE:  
 • MW-7 Through MW-9 Were Not Gauged During The Sampling Event.



<b>Legend</b> GeoProbe Sample Location ● Pipeline --- Fence --- (3526.35) Groundwater Elevation (ft)	Monitor Well Location ● NG NG Gauge	<b>Figure 2D</b> Inferred Groundwater Gradient Map (12/15/04) Plains Pipeline, LP Lee Station to Monmouth 8" Pipeline Lee County, NM	<b>NOVA Safety and Environmental</b> 				
		NE 1/4, SE 1/4, Sec. 5, T20S, R37E	<table border="1"> <tr> <td>Scale: 1" = 30'</td> <td>Prep By: JMS</td> <td>Checked By: JMS</td> </tr> <tr> <td>North: 17, 2005</td> <td>Lat: 37° 36' 5.41" N</td> <td>Long: 107° 18' 58.7"</td> </tr> </table>	Scale: 1" = 30'	Prep By: JMS	Checked By: JMS	North: 17, 2005
Scale: 1" = 30'	Prep By: JMS	Checked By: JMS					
North: 17, 2005	Lat: 37° 36' 5.41" N	Long: 107° 18' 58.7"					



State Highway 2

4811 Inventory 1

**Legend**

- Geoprobe Sample Location
- Pipeline
- Fence
- Monitor Well Location
- ND Not Detected

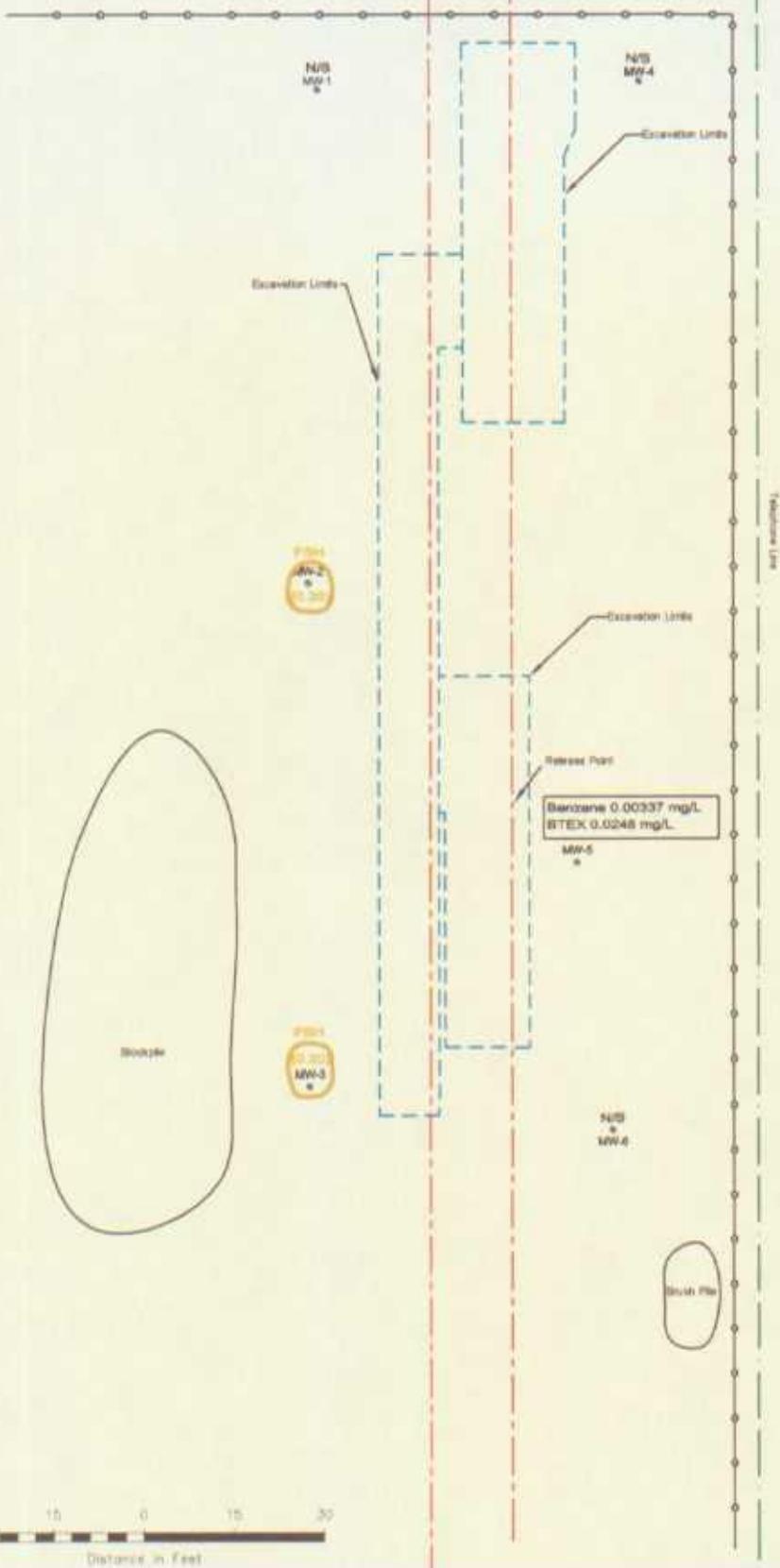
NE 1/4, SE 1/4, Sec. 5, T20N, R37E

Figure 3A  
Groundwater Concentration  
and Inferred PSH Extent  
Map (2/25/04)  
Pines Pipeline, L.P.  
Leak Station 10  
Monument 8 Pipeline  
Lea County, NM

NOVA Safety and Environmental



Scale 1" = 30'	Prep By DPA	Checked By BSH
Map# 17-340	Lat. 32° 36' 6.4"N	Long. 102° 19' 55.1"W



**Legend**

GeoProbe Sample Location	Monitor Well Location
Pipeline	PSH Extent
Fence	
Not Sampled	

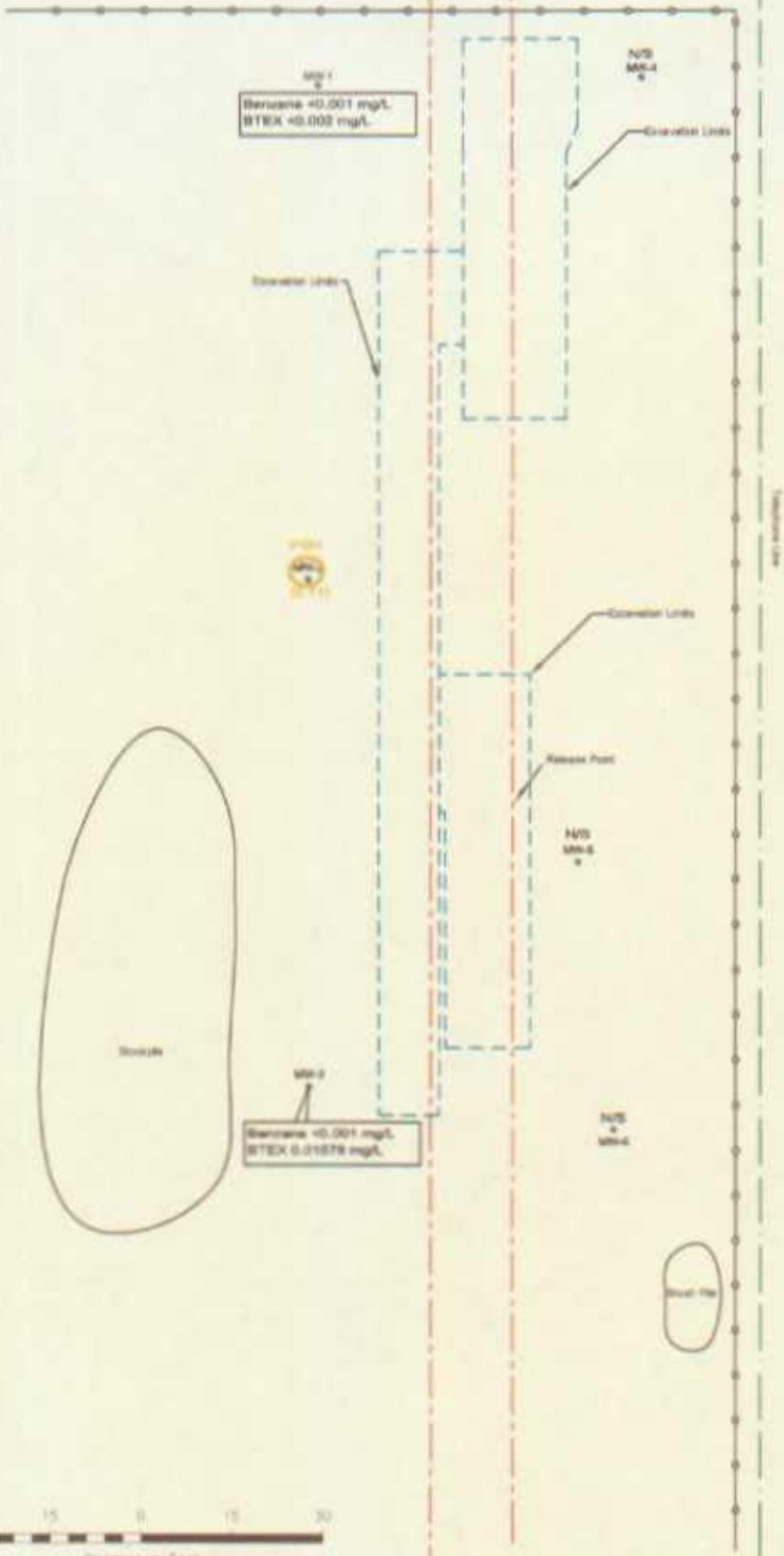
NE 1/4, SE 1/4, Sec. 5, T20S, R37E

Figure 3B  
Groundwater Concentration  
and Inferred PSH Extent  
Map (5/13/04)  
Palms Pipeline, L.P.  
Lea Station to  
Monument 8 Pipeline  
Lea County, NM

**NOVA Safety and Environmental**



Scale: 1" = 30'	Prep By: GPM	Checked By: RHR
March 17, 2005	Lat: 32° 38' 5.4" N Long: 102° 12' 35.1" W	



**Legend**

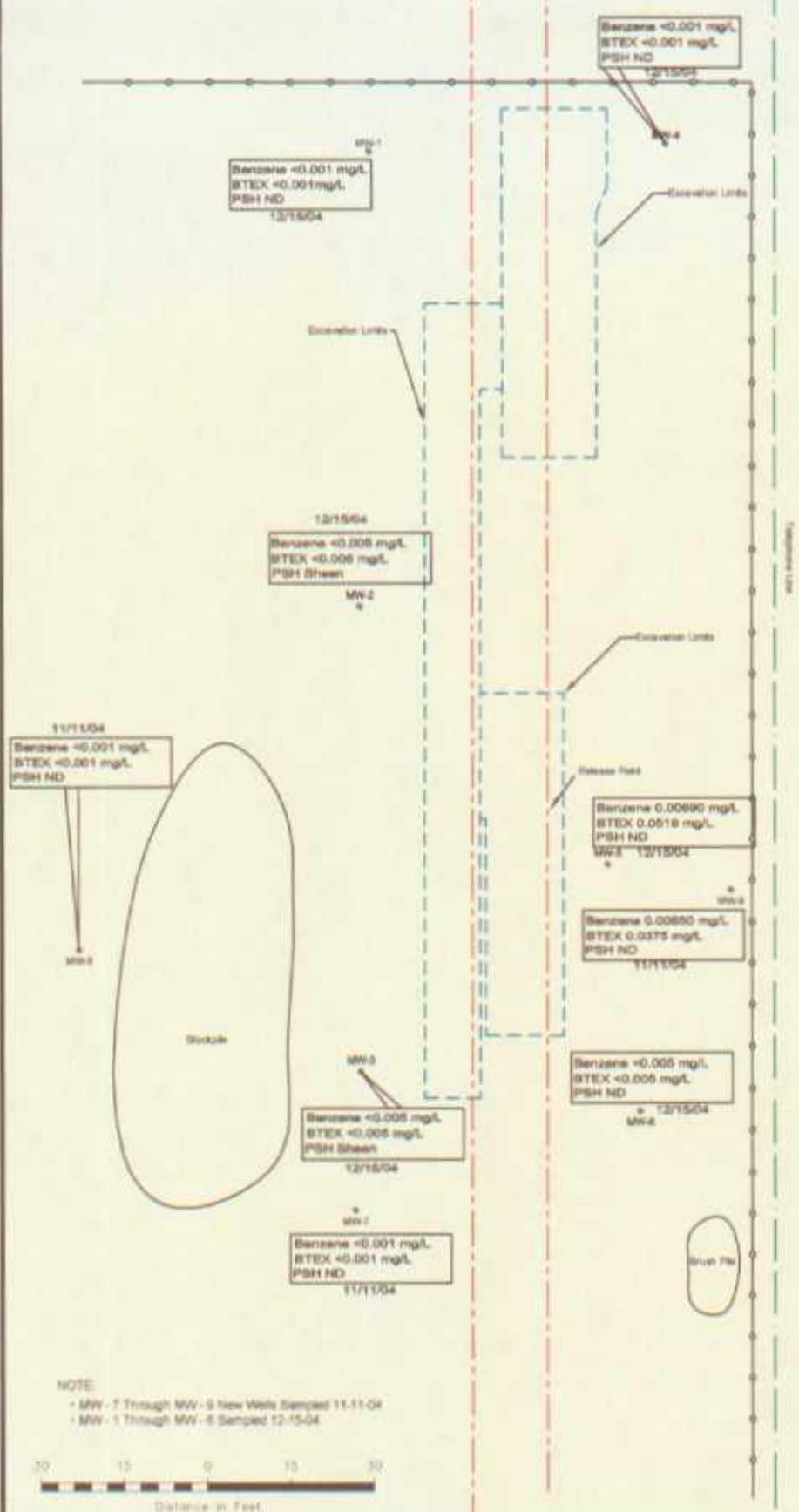
- GeoProbe Sample Location
- Pipeline
- Fence
- N/S Not Sampled
- Monitor Well Location
- PGH Ejector

NE 1/4, SE 1/4, Sec. 5, T20N, R37E

Figure 3C  
Groundwater Concentration  
and Inferred Pipal Extent  
Map (3/7/04)  
Pains Pipeline, L.P.  
Lee Station to  
Mouth of Pipeline  
Lee County, NM

**NOVA Safety and Environmental**

Date: 11-27	Prep By: DMH	Checked By: NWH
Scale: 1" = 300'	Lat: 32° 30' 4.45" Long: 100° 12' 38.11"	



State Highway 1

421 (vertical)

**Legend:**  
 - Grey Probe Sample Location  
 - Monitor Well Location  
 - Excavation Limits  
 - Pipeline  
 - Fence  
 - ND Not Detected

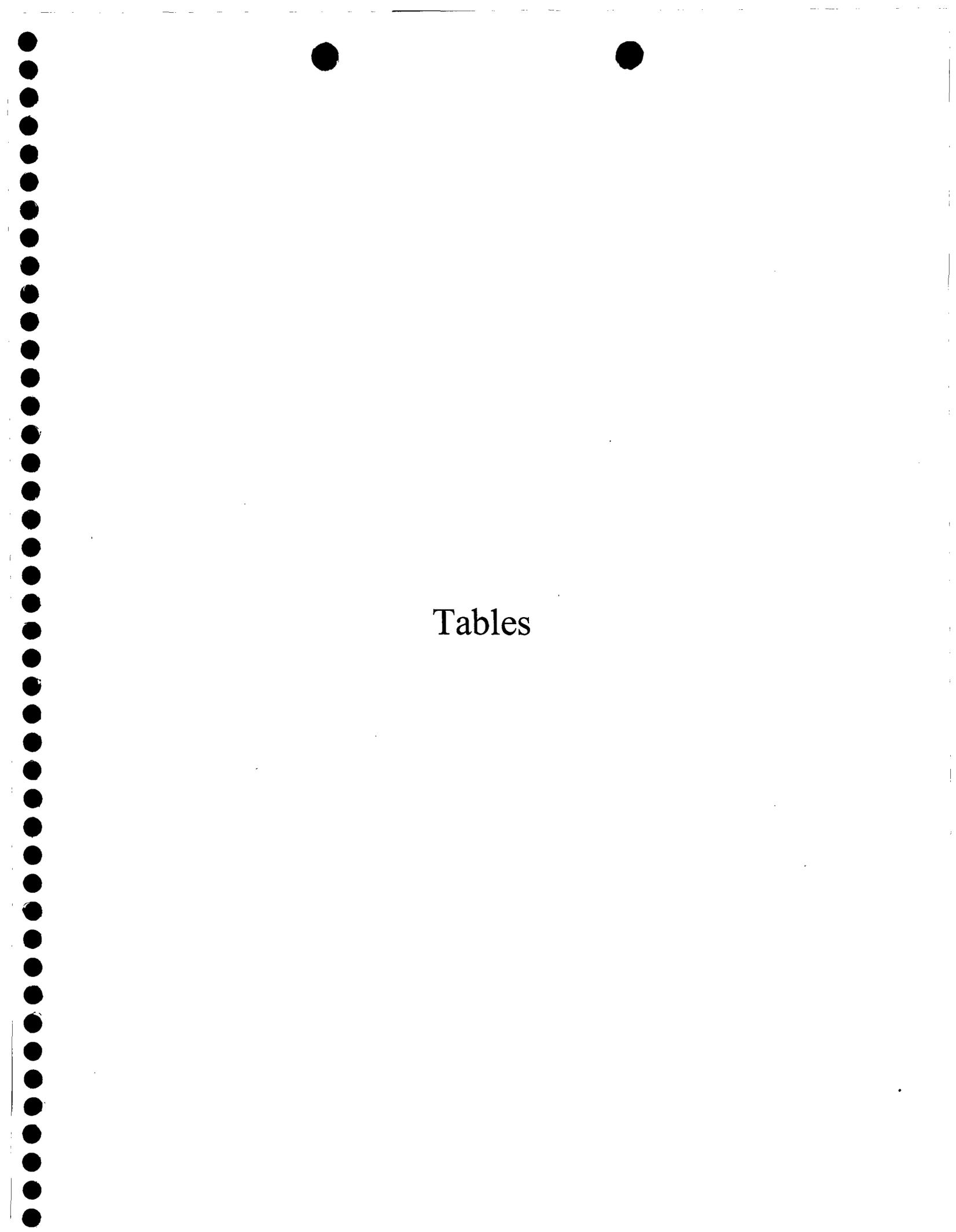
NE 1/4, SE 1/4, Sec. 5, T20S, R37E

**Figure 3D**  
 Groundwater Concentration and inferred PSH (East) Map (11/11/04 and 12/15/04)  
 Plains Pipeline, L.P.  
 Lee Station to Monument 67 Pipeline  
 Lee County, NM

NOVA Safety and Environmental



Scale: 1" = 30'	Prep By: GPM	Checked By: BSM
March 17, 2005	Lat: 32° 30' 5.4" N	Long: 102° 12' 50.7" W



Tables

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
**FOR 2004**

**PLAINS MARKETING, L.P.**  
**LEA STATION TO MONUMENT 6" PIPELINE**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	02/23/04	3562.67	ND	39.97	0.00	3522.70
	05/13/04	3562.67	ND	39.51	0.00	3523.16
	12/14/04	3562.67	ND	36.05	0.00	3526.62
MW - 2	02/23/04	3563.00	ND	40.30	0.00	3522.70
	05/13/04	3563.00	39.84	40.04	0.20	3523.13
	06/10/04	3563.00	39.6	39.73	0.13	3523.38
	06/23/04	3563.00	37.71	39.60	1.89	3525.01
	06/30/04	3563.00	39.57	39.73	0.16	3523.41
	07/15/04	3563.00	39.58	39.71	0.13	3523.40
	09/07/04	3563.00	39.74	39.85	0.11	3523.24
	09/14/04	3563.00	39.76	39.95	0.19	3523.21
	09/21/04	3563.00	39.8	39.91	0.11	3523.18
	10/13/04	3563.00	39.63	39.76	0.13	3523.35
	11/11/04	3563.00	37.99	38.07	0.08	3525.00
	12/08/04	3563.00	37.07	37.09	0.02	3525.93
	12/14/04	3563.00	Sheen	36.41	0.00	3526.59
MW - 3	02/23/04	3562.60	ND	39.92	0.00	3522.68
	05/13/04	3562.60	39.46	39.66	0.20	3523.11
	06/23/04	3562.60	39.22	39.23	0.01	3523.38
	06/30/04	3562.60	39.19	39.20	0.01	3523.41
	07/15/04	3562.60	ND	39.22	0.00	3523.38
	09/07/04	3562.60	Sheen	39.36	0.00	3523.24
	09/14/04	3562.60	Sheen	39.40	0.00	3523.20
	09/21/04	3562.60	Sheen	39.42	0.00	3523.18
	10/13/04	3562.60	Sheen	39.29	0.00	3523.31
	11/11/04	3562.60	Sheen	37.61	0.00	3524.99
	12/08/04	3562.60	Sheen	36.72	0.00	3525.88
	12/14/04	3562.60	Sheen	36.05	0.00	3526.55
MW - 4	02/23/04	3562.85	ND	40.15	0.00	3522.70
	05/13/04	3562.85	ND	39.72	0.00	3523.13
	12/14/04	3562.85	ND	36.27	0.00	3526.58
MW - 5	01/24/04	3564.21	ND	42.01	0.00	3522.20
	02/18/04	3564.21	ND	41.67	0.00	3522.54
	02/23/04	3564.21	ND	41.53	0.00	3522.68
	04/09/04	3564.21	ND	42.00	0.00	3522.21
	05/13/04	3564.21	ND	41.10	0.00	3523.11

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
**FOR 2004**

**PLAINS MARKETING, L.P.**  
**LEA STATION TO MONUMENT 6" PIPELINE**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	06/10/04	3564.21	40.83	40.84	0.01	3523.38
	06/23/04	3564.21	ND	48.40	0.00	3515.81
	06/30/04	3564.21	Sheen	48.37	0.00	3515.84
	07/15/04	3564.21	Sheen	40.83	0.00	3523.38
	09/07/04	3564.21	ND	40.97	0.00	3523.24
	12/14/04	3564.21	ND	37.71	0.00	3526.50
MW - 6	02/23/04	3563.29	ND	40.61	0.00	3522.68
	05/13/04	3563.29	ND	40.11	0.00	3523.18
	12/14/04	3563.29	ND	36.95	0.00	3526.34
MW-7	11/09/04		ND	37.87	0.00	
	11/11/04		ND	37.81	0.00	
MW-8	11/09/04		ND	38.82	0.00	
	11/11/04		ND	38.76	0.00	
MW-9	11/09/04		ND	39.03	0.00	
	11/11/04		ND	39.00	0.00	

*Note: ND denotes no product detected during well gauging activity.  
Elevations based on the North American Vertical Datum of 1929.*

TABLE 2

CONCENTRATIONS OF BTEX IN GROUNDWATER  
FOR 2004

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6" PIPELINE  
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
Regulatory limit		0.01 mg/L	0.75 mg/L	0.75mg/L	0.62 mg/L	
MW-1	02/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	09/07/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW-2	02/23/04	0.00113	0.001	<0.001	<0.002	<0.001
	12/15/04	<0.005	<0.005	<0.005	<0.005	
MW-3	02/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	09/07/04	<0.001	<0.001	0.00377	0.0098	0.00219
	12/16/04	<0.005	<0.005	<0.005	<0.005	
MW-4	02/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW-5	02/23/04	0.005	<0.001	0.00189	<0.002	<0.001
	05/13/04	0.003	<0.001	0.00637	0.0132	0.00186
	12/15/04	0.009	<0.005	0.013	0.03	
MW-6	02/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/15/04	<0.005	<0.005	<0.005	<0.005	
MW-7	11/11/04	<0.001	<0.001	<0.001	<0.001	
MW-8	11/11/04	<0.001	<0.001	<0.001	<0.001	
MW-9	11/11/04	0.0065	<0.005	0.008	0.023	



# Appendices

Appendix A  
Notification of Release and Corrective  
Action

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 Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	Lea to Monument 6"	Facility Type:	6" Steel Pipeline

Surface Owner:	Laughlin Estate	Mineral Owner	Lease No.
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	5	20S	37E					Lea

Latitude 32 degrees 36' 06.4" Longitude 103 degrees 15' 56.1"

**NATURE OF RELEASE**

Type of Release: Crude Oil	Volume of Release: 3 barrels	Volume Recovered 0 barrels
Source of Release: 6" Steel Pipeline	Date and Hour of Occurrence 8/03/01	Date and Hour of Discovery 14:00
Was Immediate Notice Given? Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required <input type="checkbox"/>	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Internal corrosion of 6" steel pipeline. A clamp was installed on the line to mitigate the release.

Describe Area Affected and Cleanup Action Taken.\* A clamp was installed on the line to mitigate the release. The aerial extent of surface impact was approximately 10' x 80'.

**NOTE: This information was obtained from historical EOTT files, Plains acquired EOTT/Link on April 1, 2004 and Plains assumes this information to be correct.**

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.

**OIL CONSERVATION DIVISION**

Signature:	Approved by District Supervisor:		
Printed Name: Camille Reynolds	Approval Date:	Expiration Date:	
Title: Remediation Coordinator	Conditions of Approval:		
E-mail Address: cjreynolds@paalp.com			Attached <input type="checkbox"/>
Date: 3/21/2005	Phone: (505)441-0965		

\* Attach Additional Sheets If Necessary