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**Annual GW Mon.  
REPORTS**

**DATE:**

**2008**



**2008  
ANNUAL MONITORING REPORT**

RECEIVED

JAN 28 2009

Environmental Bureau  
Oil Conservation Division

**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

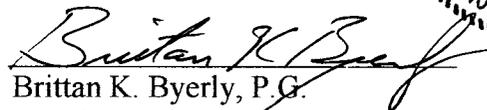


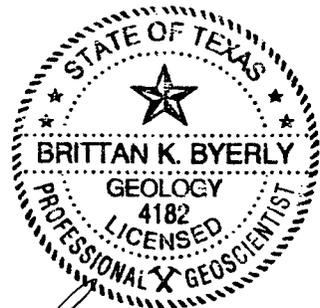
PREPARED BY:

NOVA Safety and Environmental  
2057 Commerce  
Midland, Texas 79703

January 2009

  
Ronald K. Rounsaville  
Project Manager

  
Brittan K. Byerly, P.G.  
President



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### ENCLOSED ON DATA DISK

2008 Annual Monitoring Report

2008 Tables 1, 2 and 3 – Groundwater Elevation, BTEX, TPH and PAH Concentration Data

2008 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

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

## **INTRODUCTION**

On behalf of Plains Marketing, L.P., (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. 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 2008 only. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2008 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 ¼ of the SE ¼ 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 initial response actions by excavating impacted soil from around the pipeline, locating the release point and repairing the pipeline.

The crude oil release occurred on August 3, 2001, and was estimated as three barrels, with none recovered. Final soil remediation activities for the site began in April 2008. An estimated 4,300 cubic yards of soil was brought to surface and combined with an existing 3,200 cubic yard soil stockpile excavated during the September 2001 emergency abatement activities for onsite remediation by mixing, blending and aeration methods. Following the completion of the soil remediation activities, a *Soil Closure Request*, dated September 2008, was submitted to the NMOCD for approval.

The Release Notification and Corrective Action (Form C-141) is provided as Appendix A

Currently, there are nine (9) monitor wells (MW-1 through MW-9) on site.

## **FIELD ACTIVITIES**

### **Groundwater Monitoring**

During the 2008 reporting period, measurable PSH or hydrocarbon sheen was not observed in any of the site monitor wells. The 2008 gauging data is provided in Table 1.

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

The site monitor wells were gauged and sampled on February 18, May 19, August 19, and December 4, 2008. During each sampling event the monitor wells were purged of a minimum of three well volumes of water or until the wells were dry using a 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 at a licensed disposal facility.

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 2008 groundwater elevation data is provided as Table 1.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0004 feet/foot to the east-southeast as measured between monitor wells MW-8 and MW-6. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3526.08 to 3530.00 feet above mean sea level, in monitor well MW-5 on December 8, 2008 and in monitor wells MW-3 and MW-8 on February 18, 2008, respectively.

### **LABORATORY RESULTS**

During the 2008 reporting period, measurable PSH or hydrocarbon sheen was not observed in any of the site monitor wells.

Groundwater samples obtained during the quarterly sampling events of 2008 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. Monitoring wells containing measurable amounts of PSH were analyzed for Total Petroleum Hydrocarbons (TPH) concentrations by EPA Method 8015M. A listing of BTEX and TPH constituent concentrations

for 2008 are summarized in Table 2 and the PAH constituent concentrations for 2008 are summarized in Table 3. Copies of the laboratory reports generated for 2008 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

**Monitor well MW-1** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the laboratory method detection limits (MDL) and NMOCD regulatory standard for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-seven consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-2** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated a detectable concentration above MDLs for dibenzofuran (0.00112 mg/L), which is below the WQCC Drinking Water Standards.

**Monitor well MW-3** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the laboratory method detection limits (MDL) and NMOCD regulatory standard for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-seven consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-4** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the laboratory method detection limits (MDL) and NMOCD regulatory standard for each BTEX constituent during the 4<sup>th</sup> quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-seven consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-5** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0035 mg/L during the 3<sup>rd</sup> quarter to 0.0082 mg/L during the 2<sup>nd</sup> quarter of 2008. Benzene concentrations were below NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarters to 0.0026 mg/L during the 3<sup>rd</sup> quarter of 2008. Toluene concentrations were below NMOCD regulatory standard during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 4<sup>th</sup> quarter to 0.0028 mg/L during the 2<sup>nd</sup> quarter of 2008. Ethylbenzene concentrations were below NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations

ranged from <0.001 mg/L during the 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters to 0.0061 mg/L during the 2<sup>nd</sup> quarter of 2008. Xylene concentrations were below NMOCD regulatory standard during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last fourteen consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.000508 mg/L), acenaphthene (0.000331 mg/L), phenanthrene (0.000486 mg/L), 1-methylnaphthalene (0.00055 mg/L), 2- methylnaphthalene (0.000214 mg/L) and dibenzofuran (0.00207 mg/L), which are below the WQCC Drinking Water Standards.

**Monitor well MW-6** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling events. Monitor well MW-6 has exhibited twenty-seven consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated a detectable concentration above MDLs for dibenzofuran (0.000674 mg/L), which is below the WQCC Drinking Water Standards.

**Monitor well MW-7** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-8** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-9** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last fourteen consecutive quarters. PAH analysis during the 4<sup>th</sup> quarter sampling event indicated a detectable concentration above MDLs for dibenzofuran (0.000719 mg/L), which is below the WQCC Drinking Water Standards.

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

## **SUMMARY**

This report presents the results of groundwater monitoring activities for the annual monitoring period 2008. As discussed above, none of the site monitor wells exhibited measurable PSH or hydrocarbon sheen during the 2008 reporting period.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0004 feet/foot to the east-southeast as measured between monitor wells MW-8 and MW-6.

As discussed above, BTEX and PAH constituent concentrations were below NMOCD regulatory standard in all nine monitor wells during the 2008 reporting period. BTEX concentrations have been below NMOCD regulatory standards for a minimum of ten consecutive quarters.

A Soil Closure Request Report dated September 2008, documenting the excavation, sampling and backfilling activities conducted at the site from April 2008 through August 2008, was submitted to the New Mexico Oil Conservation Division (Santa Fe). Plains is awaiting approval from the NMOCD in response to the Soil Closure Request.

## **ANTICIPATED ACTIONS**

As of the end of 2008, Plains had a minimum of ten consecutive quarters of groundwater monitoring data below NMOCD guidelines. Plains is requesting approval for termination of groundwater monitoring at this site including plugging and abandoning of the nine monitor wells. Therefore, Plains is requesting NMOCD approval for Final Site Closure (soil and groundwater) for the crude oil leak site known as Lea Station to Monument 6-Inch.

## **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  
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New Mexico Energy, Minerals and Natural Resources Department  
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# Figures



Figure 1  
Site Location  
Map

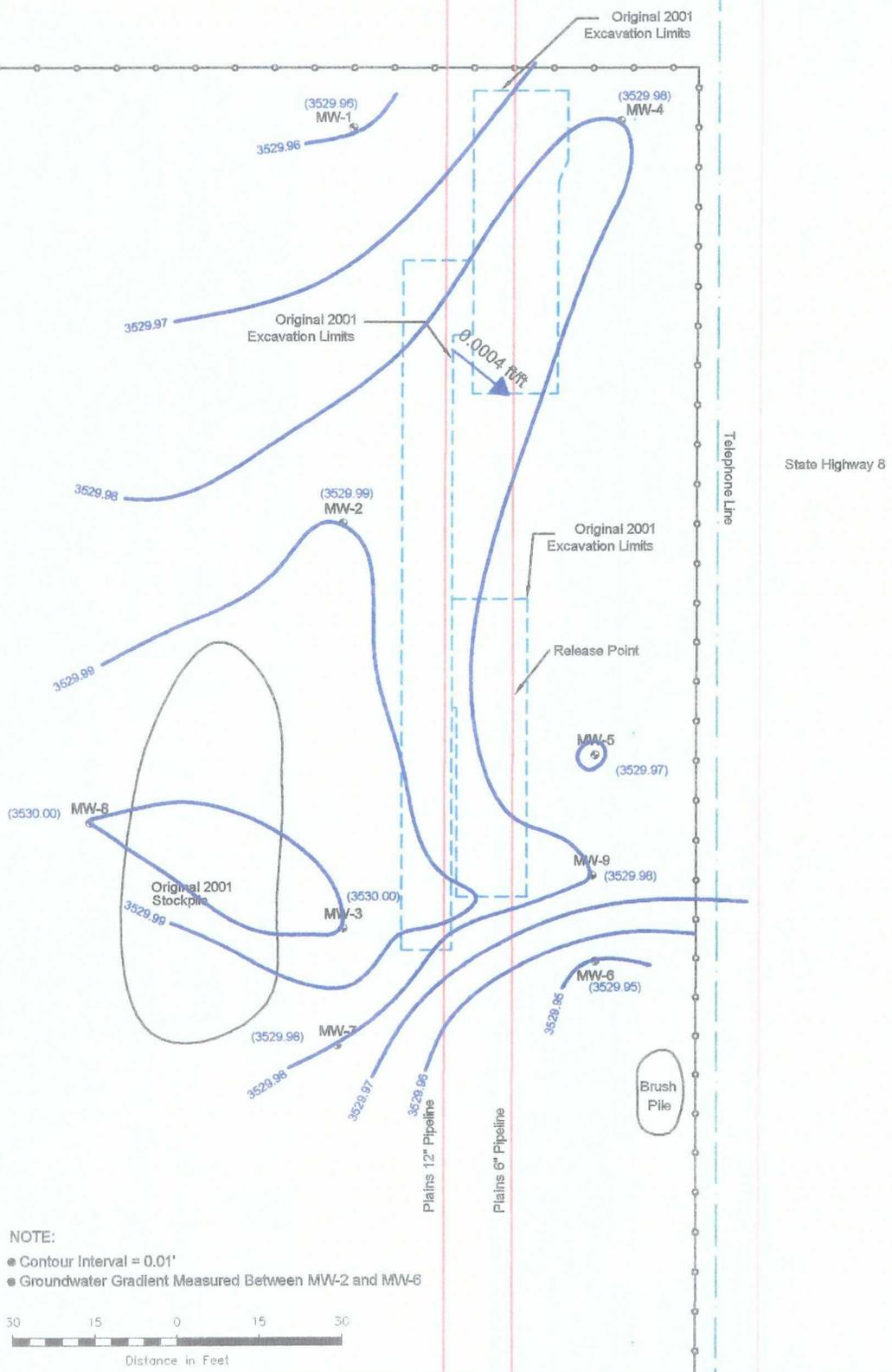
Plains Marketing, L.P.  
Lea Station to  
Monument 6-Inch  
Lea County, NM

NMOC Reference # 1R-0404  
NE 1/4, SE 1/4, Sec. 5 T20S, R37E

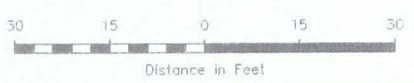
NOVA Safety and Environmental



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February 10, 2005 | Lat. 32° 36' 0.47N | Long. 105° 18' 05.1"



NOTE:  
 ● Contour Interval = 0.01'  
 ● Groundwater Gradient Measured Between MW-2 and MW-6



NMOCD Reference Number 1R-0404

Legend:

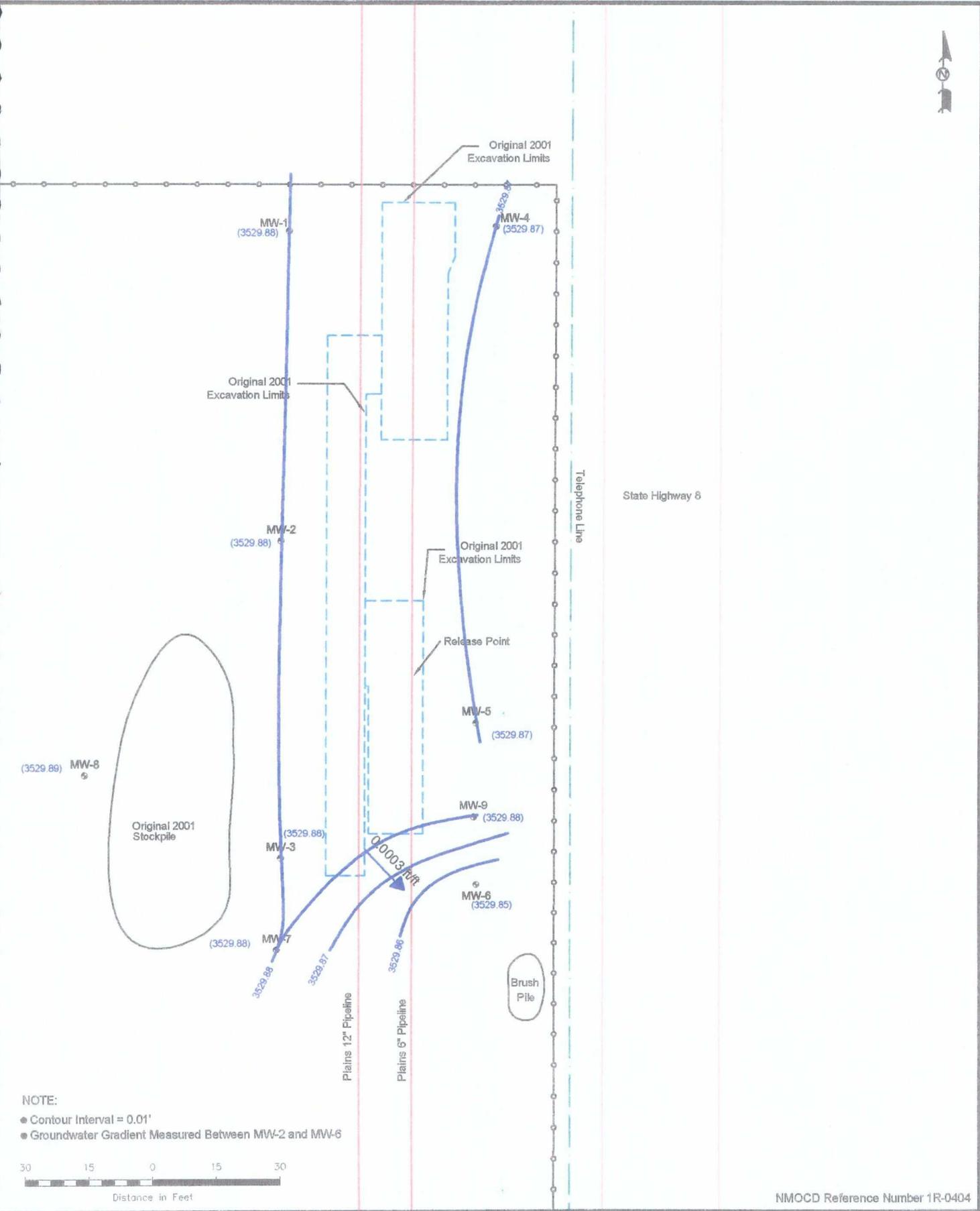
- Monitor Well Location
- (3523.35) Groundwater Elevation (In Feet)
- Groundwater Gradient Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude
- Pipeline
- Fence

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

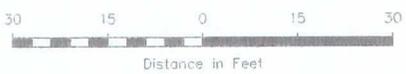
Figure 2A  
 Inferred Groundwater Gradient Map (02/18/05)  
 Plains Pipeline, L.P.  
 Lea Station to Monument 6" Pipeline  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'    CAD By: DGC    Checked By: CDS  
 October 14, 2008    Lat. 32° 38' 6.4"N    Long. 103° 19' 55.1"



NOTE:  
 ● Contour Interval = 0.01'  
 ● Groundwater Gradient Measured Between MW-2 and MW-6



NMOCD Reference Number 1R-0404

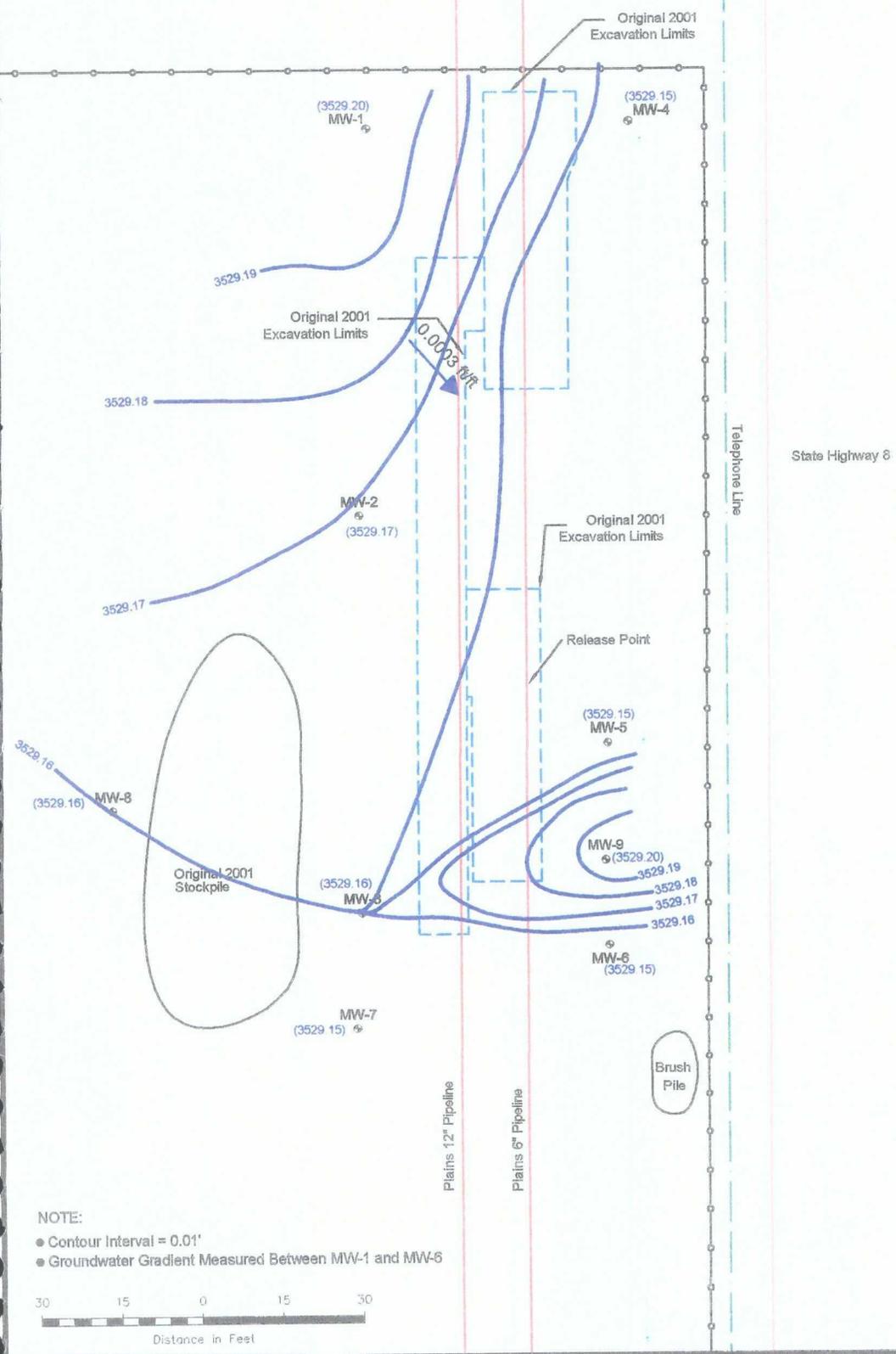
●	Monitor Well Location	(3523.35)	Groundwater Elevation (In Feet)
—	Pipeline	—	Groundwater Gradient Contour Line
—	Fence	→	Groundwater Gradient and Magnitude

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

Figure 2B  
 Inferred Groundwater Gradient Map (05/19/08)  
 Plains Pipeline, L.P.  
 Lea Station to Monument 6" Pipeline  
 Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	CAD By: DGC	Checked By: CDS
October 14, 2008	Lat. 32° 38' 8.4"N	Long. 103° 18' 55.1"W



NMOCD Reference Number 1R-0404

Legend:

- Monitor Well Location
- (3523.35) Groundwater Elevation (in Feet)
- Groundwater Gradient Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude
- Pipeline
- Fence

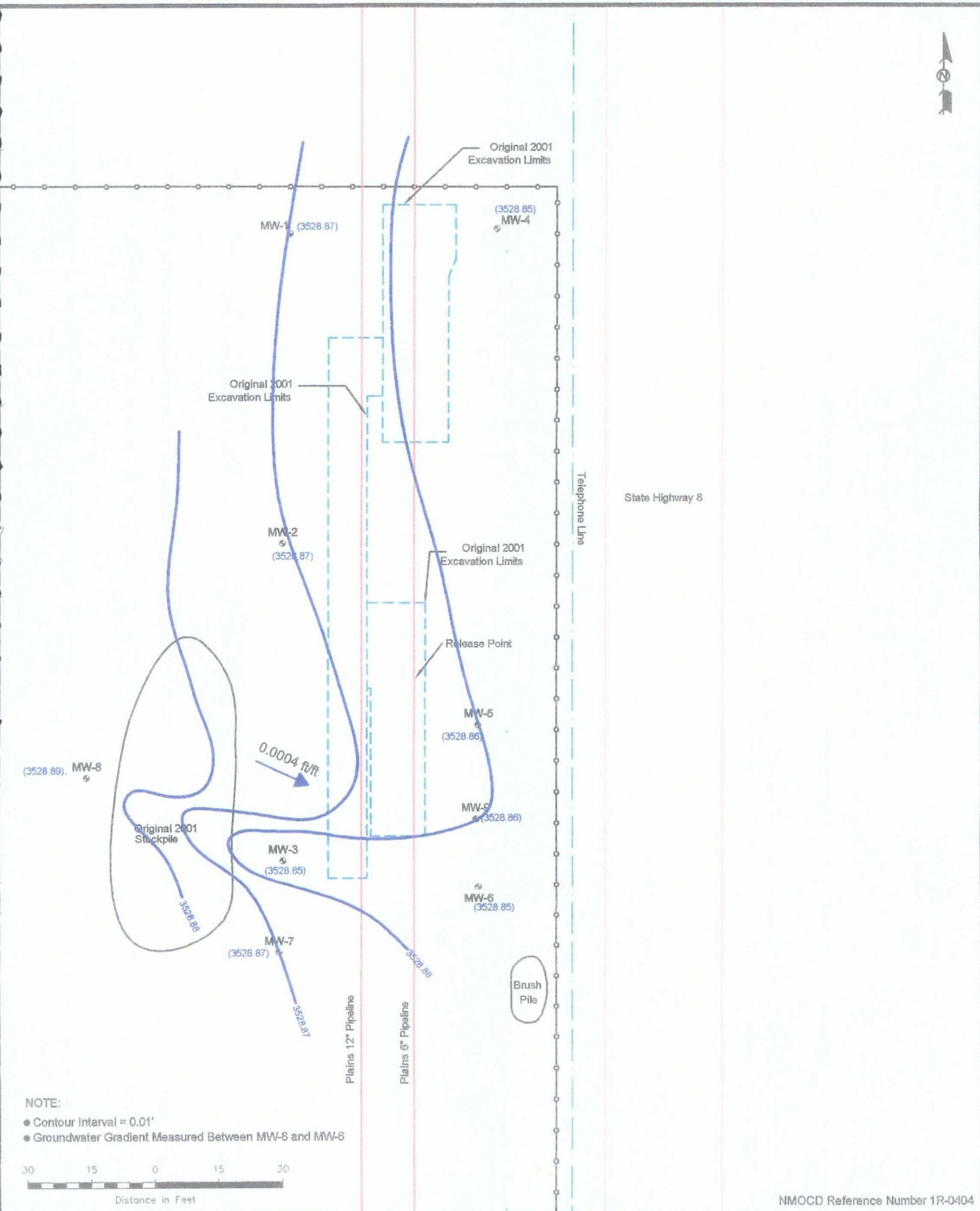
NE 1/4, SE 1/4, Sec. 5, T20S, R37E

Figure 2C  
 Inferred Groundwater Gradient Map (08/19/08)  
 Plains Pipeline, L.P.  
 Lea Station to Monument 6" Pipeline  
 Lea County, NM

**NOVA Safety and Environmental**

**NOVA**  
 safety and environmental

Scale: 1" = 30'	CAD By: DGC	Checked By: CDS
October 15, 2008	Lat. 32° 36' 6.4"N	Long. 103° 19' 55.1"

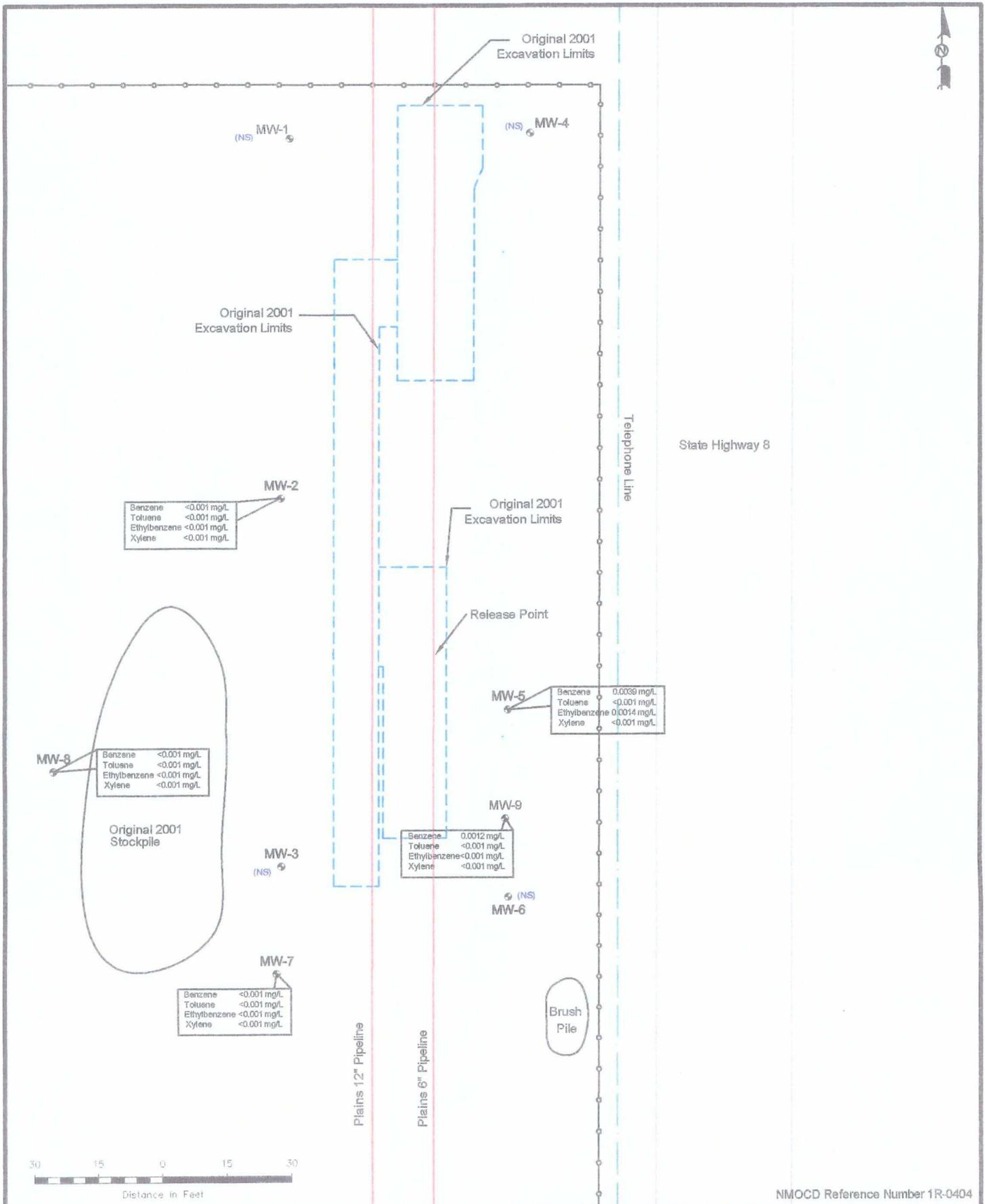


NOTE:  
 ● Contour Interval = 0.01'  
 ● Groundwater Gradient Measured Between MW-8 and MW-6



NMOCD Reference Number 1R-0404

<p>Legend:</p> <ul style="list-style-type: none"> <li>● Monitor Well Location</li> <li>— Pipeline</li> <li>○ Fence</li> <li>(3523.35) Groundwater Elevation (In Feet)</li> <li>— Groundwater Gradient Contour Line</li> <li>0.001 ft/ft Groundwater Gradient and Magnitude</li> </ul>		<p>Figure 2D          Inferred Groundwater Gradient Map (12/04/03)          Plains Pipeline, L.P.          Lea Station to Monument 6" Pipeline          Lea County, NM</p>		<p><b>NOVA Safety and Environmental</b></p> <p>Scale: 1" = 30'    CAD By: DGC    Checked By: CDS          December 9, 2003    Lat. 32° 36' 6.4"N Long. 103° 15' 55.1"</p>	
<p>NE 1/4, SE 1/4, Sec. 5, T20S, R37E</p>			<p>NOVA          safety and environmental</p>		



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

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

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

Benzene 0.0012 mg/L  
Toluene <0.001 mg/L  
Ethylbenzene <0.001 mg/L  
Xylene <0.001 mg/L

Benzene 0.0039 mg/L  
Toluene <0.001 mg/L  
Ethylbenzene 0.0014 mg/L  
Xylene <0.001 mg/L

Legend:

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

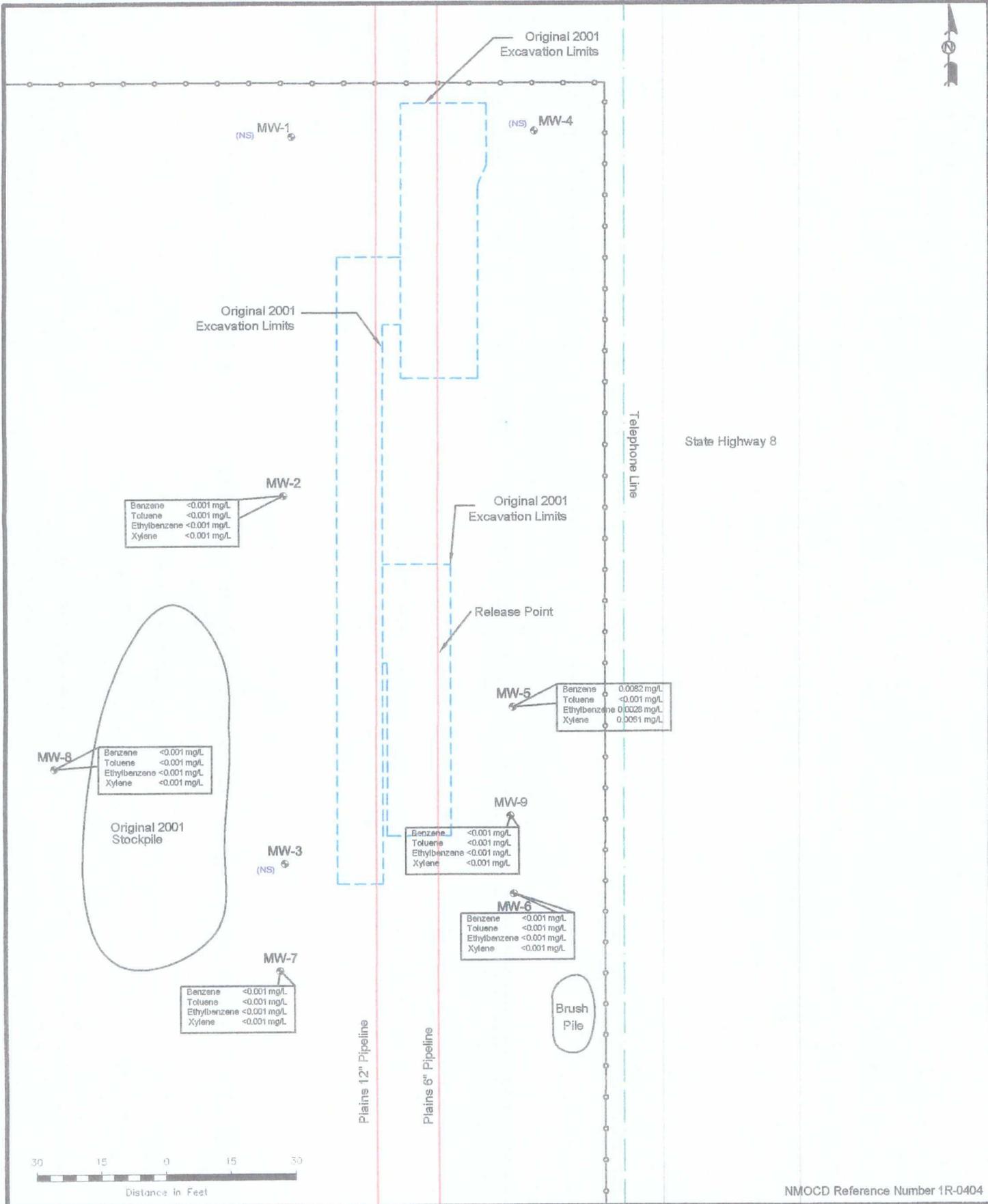
NE 1/4, SE 1/4, Sec. 5, T20S, R37E

Figure 3A  
Groundwater Concentration  
and Inferred PSH Extent  
(02/18/08)  
Plains Pipeline, L.P.  
Lea Station to  
Monument 6" Pipeline  
Lea County, NM

NOVA Safety and Environmental



Scale: 1" = 30'	CAD By: DGC	Checked By: CDS
October 15, 2008	Lat. 32° 38' 6.47" N	Long. 103° 19' 55.1" W



NMOCD Reference Number 1R-0404

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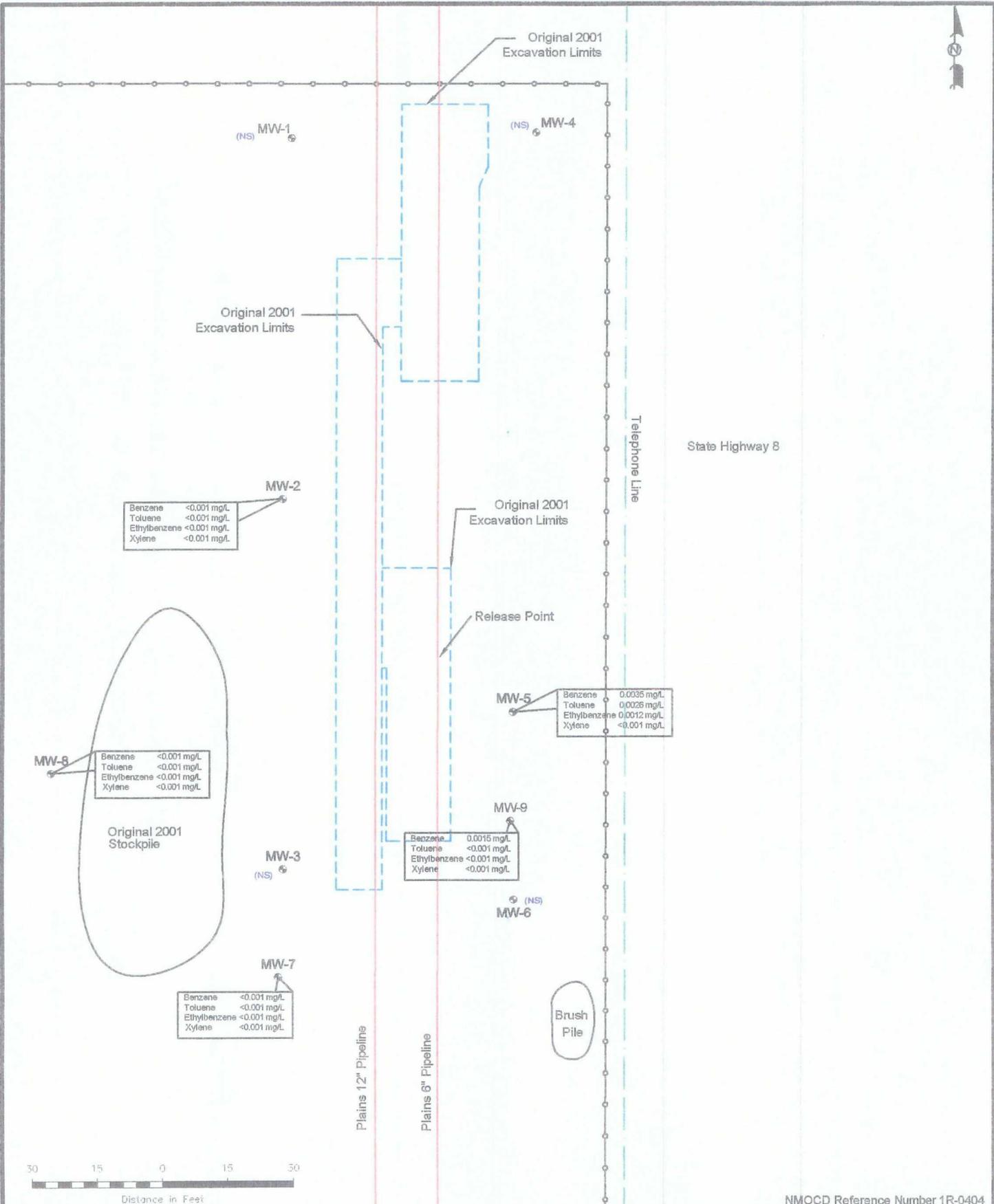
- Pipeline
- Fence
- (NS) Not Sampled
- Monitor Well Location
- <0.001 Constituent Concentration (mg/L)

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

Figure 3B  
Groundwater Concentration  
and Inferred PSH Extent  
(05/19/08)  
Plains Pipeline, L.P.  
Lea Station to  
Monument 6" Pipeline  
Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	CAD By: DGC	Checked By: CDS
October 15, 2008	Lat. 32° 36' 6.4"N	Long. 103° 15' 53.1"



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

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

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

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

Benzene 0.0035 mg/L  
Toluene 0.0026 mg/L  
Ethylbenzene 0.0012 mg/L  
Xylene <0.001 mg/L

Legend:

● Monitor Well Location

— Pipeline

○ Fence

(NS) Not Sampled

<0.001 Constituent Concentration (mg/L)

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

Figure 3C  
Groundwater Concentration  
and Inferred PSH Extent  
(08/19/08)

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

NOVA Safety and Environmental

Scale: 1" = 30'

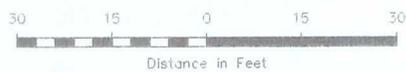
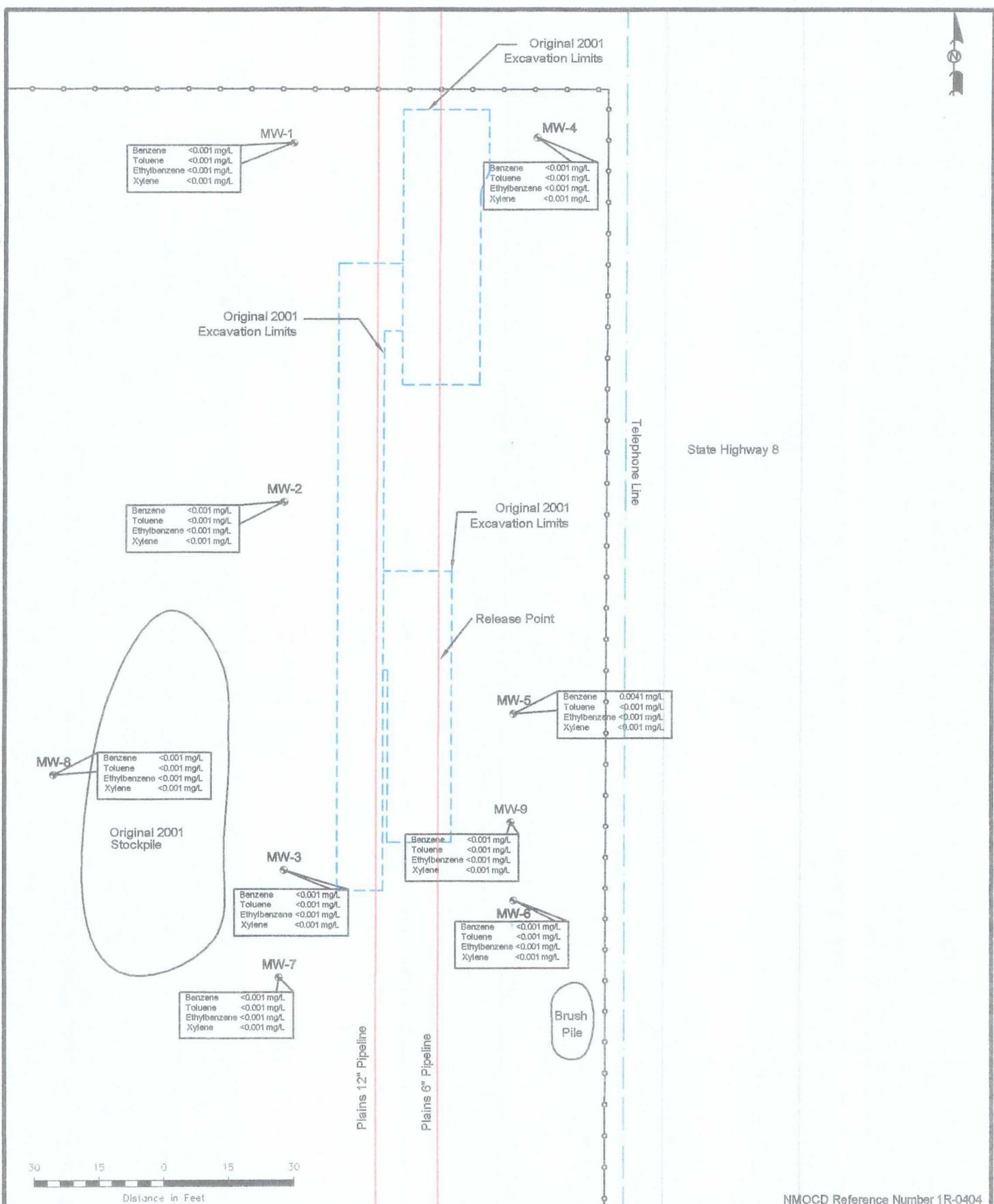
CAD By: DGC

Checked By: CDS

October 15, 2008

Lat. 32° 39' 6.4"N Long. 103° 15' 55.1"

NMOCED Reference Number 1R-0404



NMOC Reference Number 1R-0404

**Legend:**

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

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

Figure 3D  
Groundwater Concentration  
and Inferred PSH Extent  
(12/04/08)  
Plains Pipelines, L.P.  
Lea Station to  
Monument 6" Pipeline  
Lea County, NM

**NOVA Safety and Environmental**

Scale: 1" = 30'	CAD By: DGC	Checked By: RKR
December 15, 2008	Lat. 32° 38' 8.4"N Long. 103° 19' 55.1"	

# Tables

TABLE 1

## GROUNDWATER ELEVATION DATA - 2007 / 2008

PLAINS MARKETING, L.P.  
 LEA STATION TO MONUMENT 6 INCH  
 LEA COUNTY, NEW MEXICO  
 NMOCD REFERENCE NUMBER 1R-0404

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/22/07	3562.67	-	32.32	0.00	3530.35
MW-1	05/14/07	3562.67	-	32.22	0.00	3530.45
MW-1	08/10/07	3562.67	-	32.67	0.00	3530.00
MW-1	11/15/07	3562.67	-	32.73	0.00	3529.94
MW-1	02/18/08	3562.67	-	32.71	0.00	3529.96
MW-1	05/19/08	3562.67	-	32.79	0.00	3529.88
MW-1	08/19/08	3562.67	-	33.47	0.00	3529.20
MW-1	12/04/08	3562.67	-	33.80	0.00	3528.87
MW-2	02/22/07	3563.00	-	32.67	0.00	3530.33
MW-2	05/14/07	3563.00	-	32.49	0.00	3530.51
MW-2	08/10/07	3563.00	-	33.00	0.00	3530.00
MW-2	11/15/07	3563.00	-	33.05	0.00	3529.95
MW-2	02/18/08	3563.00	-	33.01	0.00	3529.99
MW-2	05/19/08	3563.00	-	33.12	0.00	3529.88
MW-2	08/19/08	3563.00	-	33.83	0.00	3529.17
MW-2	12/04/08	3563.00	-	34.13	0.00	3528.87
MW-2	12/19/08	3563.00	-	34.13	0.00	3528.87
MW-2	12/22/08	3563.00	-	34.16	0.00	3528.84
MW-3	02/22/07	3562.60	-	32.28	0.00	3530.32
MW-3	05/14/07	3562.60	-	32.18	0.00	3530.42
MW-3	08/10/07	3562.60	-	32.61	0.00	3529.99
MW-3	11/15/07	3562.60	-	32.66	0.00	3529.94
MW-3	02/18/08	3562.60	-	32.60	0.00	3530.00
MW-3	05/19/08	3562.60	-	32.72	0.00	3529.88
MW-3	08/19/08	3562.60	-	33.44	0.00	3529.16
MW-3	12/04/08	3562.60	-	33.75	0.00	3528.85
MW-4	02/22/07	3562.85	-	32.54	0.00	3530.31
MW-4	05/14/07	3562.85	-	32.44	0.00	3530.41
MW-4	08/10/07	3562.85	-	32.86	0.00	3529.99
MW-4	11/15/07	3562.85	-	32.93	0.00	3529.92
MW-4	02/18/08	3562.85	-	32.87	0.00	3529.98
MW-4	05/19/08	3562.85	-	32.98	0.00	3529.87
MW-4	08/19/08	3562.85	-	33.70	0.00	3529.15
MW-4	12/04/08	3562.85	-	34.00	0.00	3528.85
MW-5	02/22/07	3564.21	-	33.91	0.00	3530.30
MW-5	05/14/07	3564.21	-	33.72	0.00	3530.49
MW-5	08/10/07	3564.21	-	34.23	0.00	3529.98
MW-5	11/15/07	3564.21	-	34.28	0.00	3529.93
MW-5	02/18/08	3564.21	-	34.24	0.00	3529.97

TABLE 1

## GROUNDWATER ELEVATION DATA - 2007 / 2008

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6 INCH  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER 1R-0404

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-5	05/19/08	3564.21	-	34.34	0.00	3529.87
MW-5	08/19/08	3564.21	-	35.06	0.00	3529.15
MW-5	12/04/08	3564.21	-	35.35	0.00	3528.86
MW-5	12/08/08	3564.21	-	38.13	0.00	3526.08
MW-5	12/16/08	3564.21	-	35.04	0.00	3529.17
MW-5	12/19/08	3564.21	-	35.34	0.00	3528.87
MW-5	12/22/08	3564.21	-	35.37	0.00	3528.84
MW-6	02/22/07	3563.29	-	33.04	0.00	3530.25
MW-6	05/14/07	3563.29	-	32.89	0.00	3530.40
MW-6	08/10/07	3563.29	-	33.32	0.00	3529.97
MW-6	11/15/07	3563.29	-	33.37	0.00	3529.92
MW-6	02/18/08	3563.29	-	33.34	0.00	3529.95
MW-6	05/19/08	3563.29	-	33.44	0.00	3529.85
MW-6	08/19/08	3563.29	-	34.14	0.00	3529.15
MW-6	12/04/08	3563.29	-	34.44	0.00	3528.85
MW-7	02/22/07	3562.79	-	32.48	0.00	3530.31
MW-7	05/14/07	3562.79	-	32.36	0.00	3530.43
MW-7	08/10/07	3562.79	-	32.80	0.00	3529.99
MW-7	11/15/07	3562.79	-	32.86	0.00	3529.93
MW-7	02/18/08	3562.79	-	32.81	0.00	3529.98
MW-7	05/19/08	3562.79	-	32.91	0.00	3529.88
MW-7	08/19/08	3562.79	-	33.64	0.00	3529.15
MW-7	12/04/08	3562.79	-	33.92	0.00	3528.87
MW-8	02/22/07	3563.79	-	33.48	0.00	3530.31
MW-8	05/14/07	3563.79	-	33.36	0.00	3530.43
MW-8	08/10/07	3563.79	-	33.80	0.00	3529.99
MW-8	11/15/07	3563.79	-	33.84	0.00	3529.95
MW-8	02/18/08	3563.79	-	33.79	0.00	3530.00
MW-8	05/19/08	3563.79	-	33.90	0.00	3529.89
MW-8	08/19/08	3563.79	-	34.63	0.00	3529.16
MW-8	12/04/08	3563.79	-	34.90	0.00	3528.89
MW-9	02/22/07	3563.91	-	33.60	0.00	3530.31
MW-9	05/14/07	3563.91	-	33.42	0.00	3530.49
MW-9	08/10/07	3563.91	-	33.94	0.00	3529.97
MW-9	11/15/07	3563.91	-	33.99	0.00	3529.92
MW-9	02/18/08	3563.91	-	33.93	0.00	3529.98
MW-9	05/19/08	3563.91	-	34.03	0.00	3529.88
MW-9	08/19/08	3563.91	-	34.71	0.00	3529.20
MW-9	12/04/08	3563.91	-	35.05	0.00	3528.86

**TABLE 1**

**GROUNDWATER ELEVATION DATA - 2007 / 2008**

**PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6 INCH  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER 1R-0404**

<b>SAMPLE LOCATION</b>	<b>SAMPLE DATE</b>	<b>TOP OF CASING ELEVATION</b>	<b>DEPTH TO PRODUCT</b>	<b>DEPTH TO WATER</b>	<b>PSH THICKNESS</b>	<b>CORRECTED GROUNDWATER ELEVATION</b>
MW-9	12/08/08	3563.91	-	37.56	0.00	3526.35
MW-9	12/16/08	3563.91	-	35.34	0.00	3528.57
MW-9	12/16/08	3563.91	-	35.05	0.00	3528.86
MW-9	12/22/08	3563.91	-	35.21	0.00	3528.70

*Elevations based on the North American Vertical Datum of 1929.*

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

TABLE 2

## CONCENTRATIONS OF BTEX IN GROUNDWATER - 2007 / 2008

**PLAINS MARKETING, L.P.**  
**LEA STATION TO MONUMENT 6" PIPELINE**  
**LEA COUNTY, NEW MEXICO**  
**NMOCD REFERENCE NUMBER 1R-0404**

*All concentrations are reported in mg/L*

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	m, p - XYLENES (mg/Kg)	o - XYLENE (mg/Kg)
<b>NMOCD REGULATORY LIMIT</b>		<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>0.62</b>	
MW - 1	02/22/07	Not Sampled on Current Sample Schedule				
MW - 1	05/14/07	Not Sampled on Current Sample Schedule				
MW - 1	08/10/07	Not Sampled on Current Sample Schedule				
MW - 1	11/15/07	<0.001	<0.001	<0.001	<0.001	
MW - 1	02/18/08	Not Sampled on Current Sample Schedule				
MW - 1	05/19/08	Not Sampled on Current Sample Schedule				
MW - 1	08/19/08	Not Sampled on Current Sample Schedule				
MW - 1	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	02/22/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	05/14/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	08/10/07	<0.001	<0.001	<0.001	<0.001	
MW - 2	11/15/07	<0.001	<0.001	<0.001	0.0025	
MW - 2	02/18/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	05/19/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	08/19/08	<0.001	<0.001	<0.001	<0.001	
MW - 2	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW - 3	02/22/07	Not Sampled on Current Sample Schedule				
MW - 3	05/14/07	Not Sampled on Current Sample Schedule				
MW - 3	08/10/07	Not Sampled on Current Sample Schedule				
MW - 3	11/15/07	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 3	02/18/08	Not Sampled on Current Sample Schedule				
MW - 3	05/19/08	Not Sampled on Current Sample Schedule				
MW - 3	08/19/08	Not Sampled on Current Sample Schedule				
MW - 3	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW - 4	02/22/07	Not Sampled on Current Sample Schedule				
MW - 4	05/14/07	Not Sampled on Current Sample Schedule				
MW - 4	08/10/07	Not Sampled on Current Sample Schedule				
MW - 4	11/15/07	<0.001	<0.001	<0.001	<0.001	
MW - 4	02/18/08	Not Sampled on Current Sample Schedule				
MW - 4	05/19/08	Not Sampled on Current Sample Schedule				
MW - 4	08/19/08	Not Sampled on Current Sample Schedule				
MW - 4	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW - 5	02/22/07	<0.001	<0.001	0.0016	0.0016	
MW - 5	05/14/07	<0.001	<0.001	<0.001	0.0038	
MW - 5	08/10/07	<0.001	<0.001	<0.001	<0.001	
MW - 5	11/15/07	0.0035	<0.001	<0.001	0.0016	
MW - 5	02/18/08	0.0039	<0.001	0.0014	<0.001	

TABLE 2

CONCENTRATIONS OF BTEX IN GROUNDWATER - 2007 / 2008

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6" PIPELINE  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER 1R-0404

All concentrations are reported in mg/L.

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	m, p - XYLENES (mg/Kg)	o - XYLENE (mg/Kg)
<b>NMOCD REGULATORY LIMIT</b>		<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>0.62</b>	
MW - 5	05/19/08	0.0082	<0.001	0.0028	0.0061	
MW - 5	08/19/08	0.0035	0.0026	0.0012	<0.001	
MW - 5	12/04/08	0.0041	<0.001	<0.001	<0.001	
MW - 6	02/22/07	Not Sampled on Current Sample Schedule				
MW - 6	05/14/07	<0.001	<0.001	<0.001	<0.001	
MW - 6	08/10/07	Not Sampled on Current Sample Schedule				
MW - 6	11/15/07	0.0024	<0.001	<0.001	<0.001	
MW - 6	02/18/08	Not Sampled on Current Sample Schedule				
MW - 6	05/19/08	<0.001	<0.001	<0.001	<0.001	
MW - 6	08/19/08	Not Sampled on Current Sample Schedule				
MW - 6	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW-7	02/22/07	<0.001	<0.001	<0.001	<0.001	
MW-7	05/14/07	<0.001	<0.001	<0.001	<0.001	
MW-7	08/10/07	<0.001	<0.001	<0.001	<0.001	
MW-7	11/15/07	<0.005	<0.005	<0.005	<0.005	
MW-7	02/18/08	<0.001	<0.001	<0.001	<0.001	
MW-7	05/19/08	<0.001	<0.001	<0.001	<0.001	
MW-7	08/19/08	<0.001	<0.001	<0.001	<0.001	
MW-7	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW-8	02/22/07	<0.001	<0.001	<0.001	<0.001	
MW-8	05/14/07	<0.001	<0.001	<0.001	<0.001	
MW-8	08/10/07	<0.001	<0.001	<0.001	<0.001	
MW-8	11/15/07	<0.001	<0.001	<0.001	0.0016	
MW-8	02/18/08	<0.001	<0.001	<0.001	<0.001	
MW-8	05/19/08	<0.001	<0.001	<0.001	<0.001	
MW-8	08/19/08	<0.001	<0.001	<0.001	<0.001	
MW-8	12/04/08	<0.001	<0.001	<0.001	<0.001	
MW-9	02/22/07	<0.001	<0.001	<0.001	<0.001	
MW-9	05/14/07	<0.001	<0.001	<0.001	<0.001	
MW-9	08/10/07	<0.001	<0.001	<0.001	<0.001	
MW-9	11/15/07	0.0016	<0.001	<0.001	<0.001	
MW-9	02/18/08	0.0012	<0.001	<0.001	<0.001	
MW-9	05/19/08	<0.001	<0.001	<0.001	<0.001	
MW-9	08/19/08	0.0015	<0.001	<0.001	<0.001	
MW-9	12/04/08	<0.001	<0.001	<0.001	<0.001	

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

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.  
LEA STATION TO MONUMENT 6 INCH  
LEA COUNTY, NEW MEXICO  
NMOC REFERENCE NUMBER 1R-0404

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e,h,j]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.																					
MW-1	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-2	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-3	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-4	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-5	12/04/08	0.000331	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-6	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-7	12/04/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-8	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
MW-9	12/04/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0002 mg/L	0.0003 mg/L	Fluoranthene	Fluorene	0.0004 mg/L	0.03 mg/L	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	



# Appendices

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

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

State of New Mexico  
Energy Minerals and Natural Resources

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.	
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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:			
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 <input type="checkbox"/>
Date: 3/21/2005	Phone: (505)441-0965		

\* Attach Additional Sheets If Necessary