

1R - 120

**Annual GW Mon.
REPORTS**

DATE:

2007



2007
ANNUAL MONITORING REPORT

RECEIVED
2008 APR 1 PM 2 05

MONUMENT 11
LEA COUNTY, NEW MEXICO
SE ¼ NE ¼ SECTION 30, TOWNSHIP 19 SOUTH, RANGE 37 EAST
PLAINS EMS NUMBER: TNM MONUMENT-11
NMOCD Reference Number 1R-120

Prepared For:

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



Prepared By:

NOVA Safety and Environmental
2057 Commerce Street
Midland, Texas 79703

March 2008


Ronald K. Rounsaville
Project Manager


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



RECEIVED

March 28, 2008

2008 APR 1 PM 2 07

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

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

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

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

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

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

Sincerely,

A handwritten signature in black ink that reads "Camille Reynolds". The signature is written in a cursive, flowing style.

Camille Reynolds
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

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Figure 2A – Inferred Groundwater Gradient Map – February 22, 2007

2B – Inferred Groundwater Gradient Map – May 17, 2007

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Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – February 22, 2007

3B – Groundwater Concentration and Inferred PSH Extent Map – May 17, 2007

3C – Groundwater Concentration and Inferred PSH Extent Map – August 28, 2007

3D – Groundwater Concentration and Inferred PSH Extent Map – November 26, 2007

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TABLES

Table 1 – 2007 Groundwater Elevation Data

Table 2 – 2007 Concentrations of Benzene and BTEX in Groundwater

Table 3 – 2007 Concentrations of TPH and BTEX in Soil

APPENDICES

Appendix A – Boring Logs and Monitor Well Details

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

ENCLOSED ON DATA DISK

2007 Annual Monitoring Report

2007 Tables 1 and 2 - Groundwater Elevation and BTEX Concentration Data

2007 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

Historic Table 1 and 2 - Groundwater Elevation and 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 1st of each year. Beginning on May 29, 2004, project management responsibilities for the Monument 11 site (the site) were assumed by NOVA. The site was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2007 only. However, historic data tables as well as 2007 laboratory analytical reports are presented on the enclosed disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2007 to assess the levels and extent of dissolved phase constituents and for the presence of Phase Separated Hydrocarbon (PSH) constituents. Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each scheduled 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 SE ¼ NE ¼ Section 30, Township 19 South, Range 37 East. No information with respect to the release date, volume of crude oil released and recovered, excavation dimensions or pipeline repair is available as this release occurred while the pipeline was operated by Texas New Mexico Pipeline Company (TNM). The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. The initial site investigation, which consisted of the installation of four groundwater monitor wells (MW-1 through MW-4), was conducted by previous consultants.

Six groundwater monitor wells (MW-1 through MW-6) are currently on-site. Gauging and PSH recovery occurs monthly for monitor well MW-4, the only monitor well to display measurable thicknesses of PSH in 2007.

On August 15, 2007, NOVA advanced four soil borings to evaluate the degradation of hydrocarbon impacted soil within the source area. Analytical results of the soil samples collected during the advancement of the soil borings during the 2007 reporting period are provided in Table 3, Concentrations of TPH and BTEX in Soil. Boring logs and monitor well details are provided in Appendix A. A Soil Boring Location Map is presented as Figure 4.

RECENT FIELD ACTIVITIES

A measurable thickness of PSH was observed in monitor well MW-4 during the 2007 reporting period. Monitor well MW-4 exhibited a sheen throughout the reporting period and measurable PSH (greater than 0.01 feet) during the 2nd quarter sampling event. Less than one gallon of PSH

was recovered from the site during 2007. Approximately 14 gallons (0.36 barrels) of product have been recovered since project inception.

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended in NMOCD correspondence dated June 22, 2005:

NMOCD Approved Sampling Schedule	
MW-1	Quarterly
MW-2	Annually
MW-3	Annually
MW-4	Quarterly
MW-5	Quarterly
MW-6	Quarterly

The site monitor wells were gauged and sampled on February 22, May 17, August 28, and November 26, 2007. During each sampling event, monitor wells not containing PSH were purged of a minimum of three (3) well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. Groundwater was allowed to recharge and samples were collected 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 contained in a polystyrene tank and disposed of at a licensed disposal facility.

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

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.012 feet/foot to the southeast as measured between groundwater monitor wells MW-5 and MW-1. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3598.66 and 3601.84 feet above mean sea level, in MW-1 and MW-5 on February 22, 2007, respectively.

LABORATORY RESULTS

Groundwater samples collected during the 2007 monitoring events were delivered to Trace Analysis, Inc., of Lubbock, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW846-8021b. A listing of BTEX constituent concentrations for 2007 is summarized in Table 2. Copies of the laboratory reports for 2007 are provided on the enclosed disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

Monitor well MW-1 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below laboratory method detection limits (MDL) and the NMOCD regulatory standard of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 mg/L for xylene, for each BTEX constituent during the 4th quarter sampling event. Monitor well MW-1 has exhibited 10 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-2 is sampled on an annual schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below MDL of 0.001 mg/L. BTEX constituent concentrations were below NMOCD regulatory limits during the 4th quarter sampling event. Monitor well MW-2 has exhibited 21 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-3 is sampled on an annual schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below MDL of 0.001 mg/L. BTEX constituent concentrations were below NMOCD regulatory limits during the 4th quarter sampling event. Monitor well MW-3 has exhibited 21 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-4 is sampled on a quarterly schedule and analytical results indicate benzene and toluene concentrations were below MDL of 0.001 mg/L, ethylbenzene concentrations ranged from 0.0027 mg/l during the 2nd quarter to 0.0097 mg/L during the 1st quarter and xylene concentrations ranged from 0.0023 mg/L during the 4th quarter to 0.0954 mg/L during the 1st quarter. PSH thicknesses of 0.14 feet and 0.02 feet was recorded in monitor well MW-4 during the 1st and 2nd quarters, respectively.

Please note PSH thicknesses of 0.14 feet and 0.02 feet were recorded in monitor well MW-4 during the 1st and 2nd quarters of the reporting period, respectively. Monitor well MW-4 was sampled each of the four quarters based on historic analytical results, which indicate groundwater samples collected from monitor well MW-4 and the sheen measurable PSH observed in this well have not resulted in the elevation of BTEX constituent concentrations above the NMOCD regulatory standard.

Monitor well MW-5 is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below MDL of 0.001 mg/L. BTEX constituent concentrations were below NMOCD regulatory limits during all four quarters of the 2007 reporting period. Monitor well MW-5 has exhibited 14 consecutive monitoring events below NMOCD regulatory limits.

Monitor well MW-6 is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethylbenzene and xylene concentrations were below MDL of 0.001 mg/L. BTEX constituent concentrations were below NMOCD regulatory limits during all four quarters of the 2007 reporting period. Monitor well MW-6 has exhibited 14 consecutive monitoring events below NMOCD regulatory limits.

Review of laboratory analytical results of the groundwater samples obtained during the 2007 monitoring period indicate the benzene and total BTEX constituent concentrations remain below applicable NMOCD standards in all monitor well samples submitted for analysis.

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

SUMMARY

This report presents the results of monitoring activities for the 2007 annual monitoring period. Currently, there are six groundwater monitor wells (MW-1 through MW-6) on-site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.012 feet/foot to the southeast.

Gauging data for the reporting period indicates PSH impact appears to be limited to monitor well MW-4. Monitor well MW-4 exhibited a sheen throughout the reporting period. PSH thicknesses ranged from a sheen to 0.14 feet. Less than one gallon of PSH was recovered from the site during 2007 reporting period. Approximately 14 gallons (0.36 barrels) of PSH have been recovered by manual recovery methods since project inception.

Review of laboratory analytical results of the groundwater samples obtained during the 2007 monitoring period indicate the benzene and total BTEX constituent concentrations were below the applicable NMOCD standard in all monitor wells during the reporting period. Based on the laboratory analytical data from groundwater samples collected from monitor well MW-4, the sheen and measurable PSH observed in this monitor well has not resulted in the elevation of BTEX constituent concentrations above the NMOCD criteria during the 2007 reporting period.

ANTICIPATED ACTIONS

Groundwater monitoring and annual reporting will continue in 2008.

A Soil Closure Proposal will be submitted to the NMOCD in the future. The Proposal will report the results of the Soil Investigation Work Plan and propose a strategy to remediate the remaining soil issues at the site.

A 2008 annual monitoring report will be submitted to the NMOCD by April 1, 2009.

LIMITATIONS

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

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the

genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

- Copy 1 Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
- Copy 2: Larry Johnson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240
(Data disk only per Larry Johnson)
- 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
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jpdann@paalp.com
- Copy 5: NOVA Safety and Environmental
2057 Commerce Street
Midland, TX 79703
rrounsaville@novatraining.cc

Figures

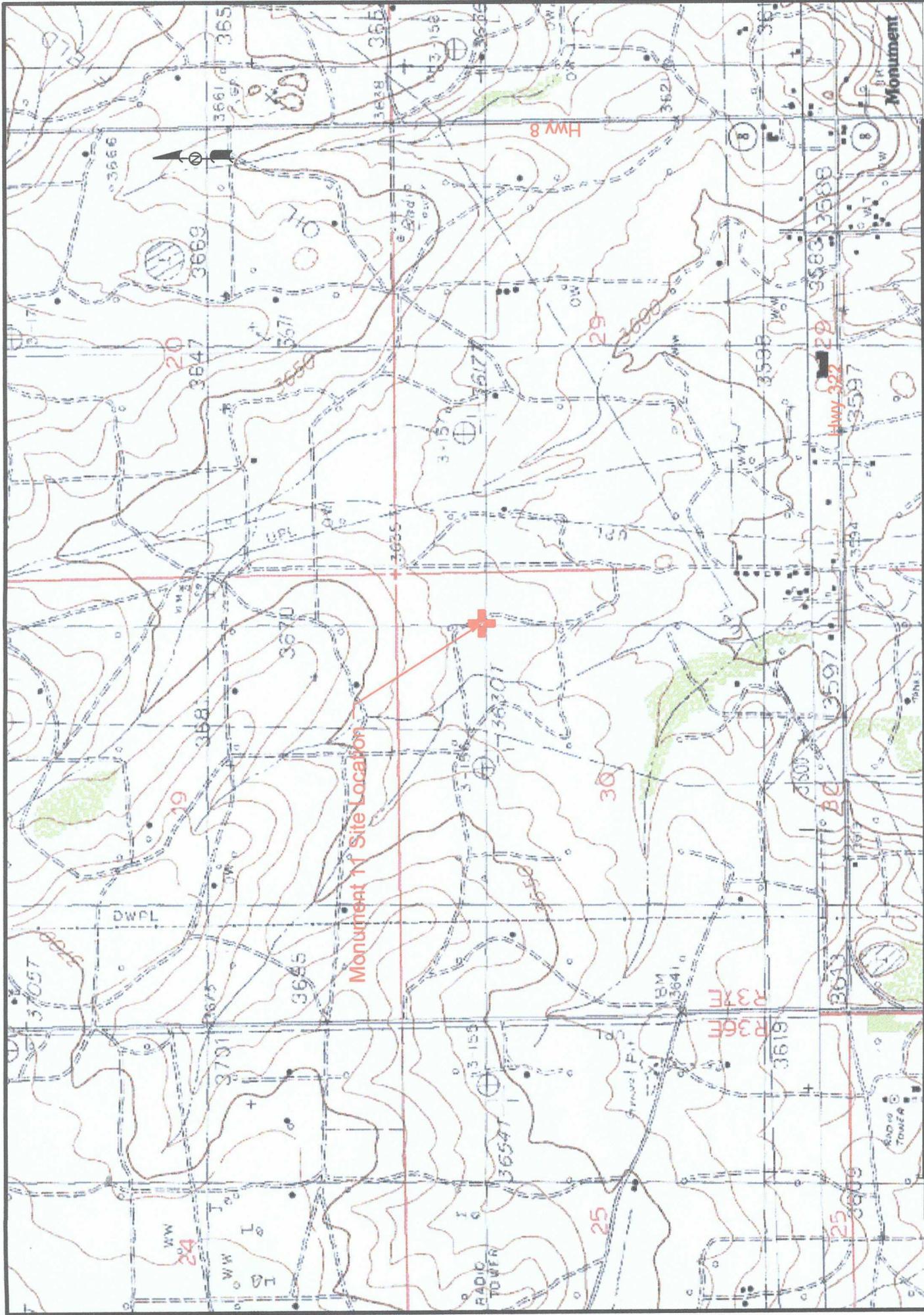
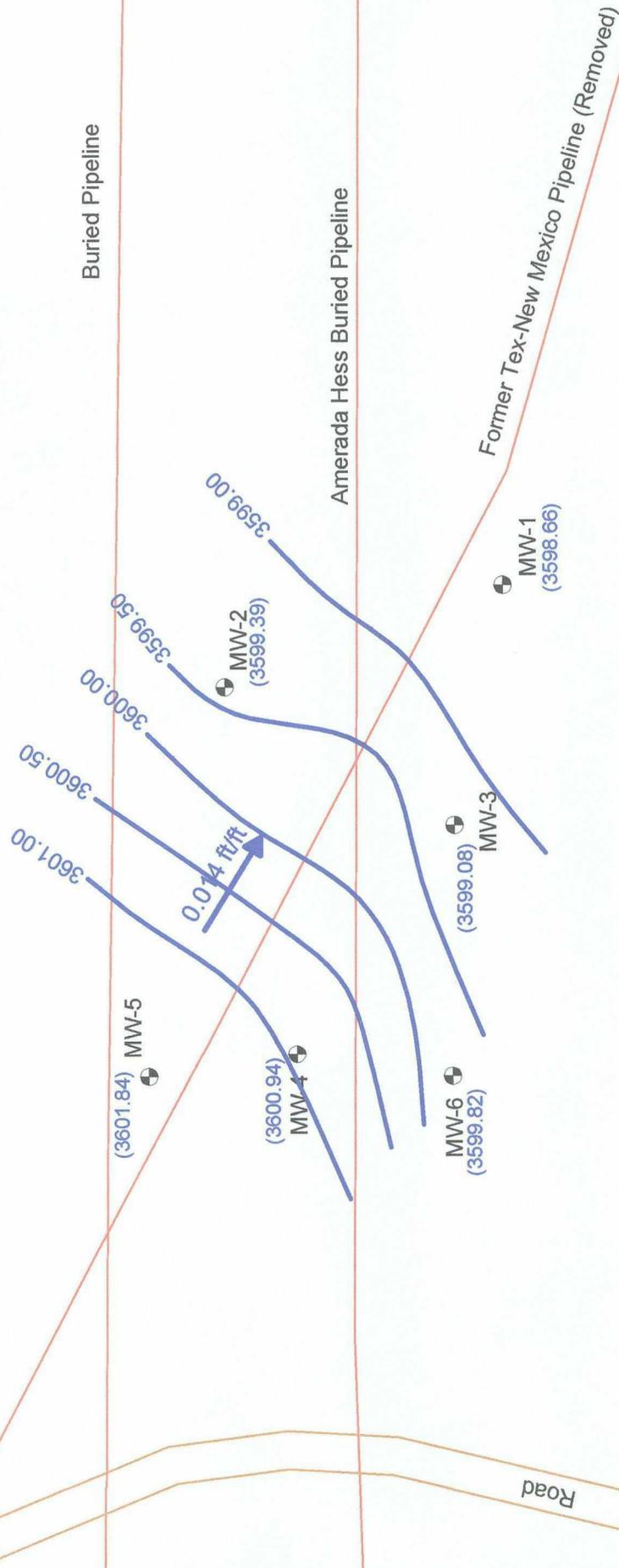
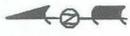


Figure 1
 Site Location Map
 Plains Marketing, L.P.
 Monument 11
 Lea County, NM
 NMOCD Ref. # 1R-0120

NOVA
 safety and environmental

Scale: 1" = 1500'
 March 24, 2008
 SW 1/4 NE 1/4 Sec. 30 T18S R37E
 Lat. N32° 38' 9.2" Long. W103° 17' 2.4"

NOVA Safety and Environmental
 Prep By: CDS | Checked By: CDS



NOTE:

- Contour Interval = 1.0'
- GW Gradient Measured Between MW-5 and MW-1.

Monitor Well Location
 Pipeline
 Groundwater Elevation Contour Line
 Soil Boring Location

(3599.74) Groundwater Elevation (feet)
 0.001 ft/ft Groundwater Gradient and Magnitude

NMOCED REF. # 1R-0120

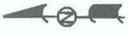
Figure 2A
 Inferred Groundwater
 Gradient Map
 (02/22/07)
 Plains Marketing, L.P.
 Monument 11
 Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 60'
 January 22, 2008
 SE 1/4 NE 1/4 Sec. 30 T18S R37E
 32° 35' 07.2" N 103° 16' 58.0" W

CAD By: DGC
 Checked By: CDS

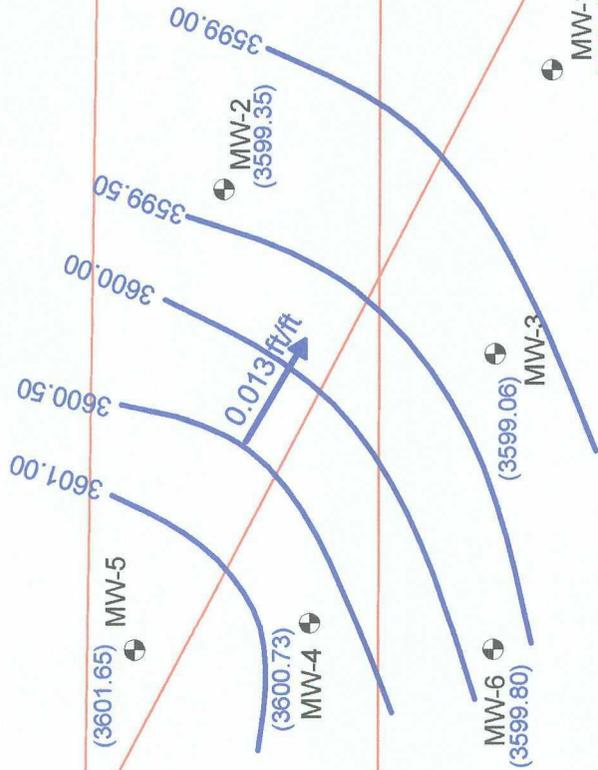
NOVA
 safety and environmental



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)



NOTE:

- Contour Interval = 0.5'
- GW Gradient Measured Between MW-5 and MW-1.



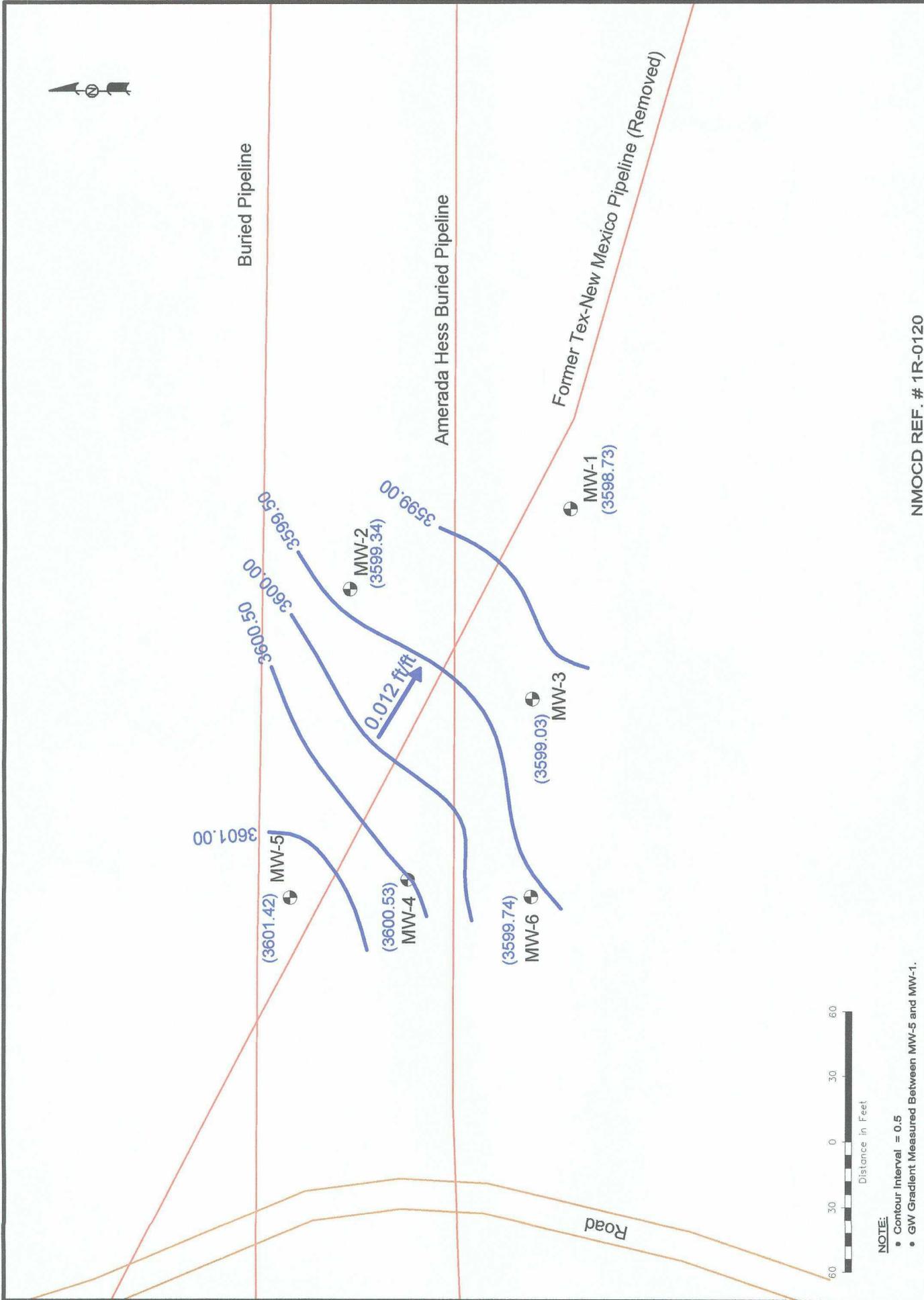
NMOCDF REF. # 1R-0120

Figure 2B
Inferred Groundwater
Gradient Map
(05/17/07)
Plains Marketing, L.P.
Monument 11
Lea County, NM

NOVA Safety and Environmental



Scale: 1" = 60'
CAD By: DGC
Checked By: CBS
January 22, 2008
SE 1/4 NE 1/4 Sec. 30 T18S R37E
32° 38' 07.2" N 103° 16' 53.0" W



NOTE:

- Contour Interval = 0.5
- GW Gradient Measured Between MW-5 and MW-1.

- Monitor Well Location
- Pipeline
- Groundwater Elevation Contour Line
- Soil Boring Location
- Groundwater Elevation (feet)
- Groundwater Gradient and Magnitude

NMOCDF REF. # 1R-0120

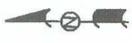
Figure 2C
Inferred Groundwater
Gradient Map
(08/28/07)
Plains Marketing, L.P.
Monument 11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 60'

CAD By: DGC	Checked By: CDS
January 22, 2008	SE 1/4 NE 1/4 Sec 30 T18S R37E

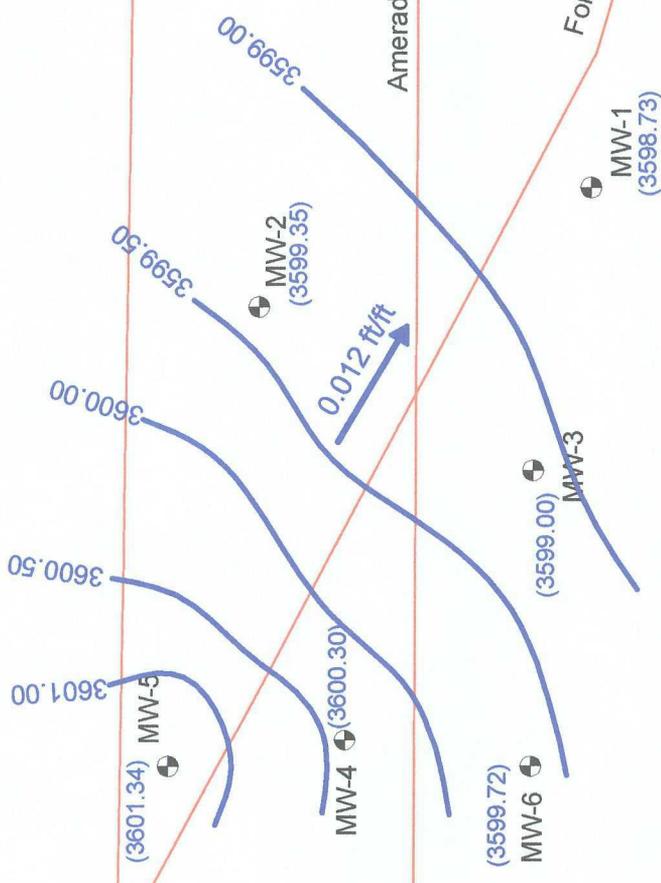
32° 38' 07.2" N 103° 16' 58.0" W



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)



NOTE:

- Contour Interval = 0.5'
- GW Gradient Measured Between MW-5 and MW-1.

- Monitor Well Location
- Pipeline
- Groundwater Elevation Contour Line
- Soil Boring Location

(3599.74) Groundwater Elevation (feet)
 0.001 ft/ft Groundwater Gradient and Magnitude

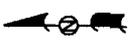
NMOC Reference No. 1R-0120

Figure 2D
 Inferred Groundwater
 Gradient Map
 (11/26/07)
 Plains Marketing, L.P.
 Monument 11
 Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 60'	CAD By: DGC	Checked By: CDS
January 22, 2008	SE 1/4 NE 1/4 Sec 30 T16S R37E	32° 38' 07.2" N 103° 16' 58.0" W





Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)

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

MW-5

Benzene <0.001 mg/L
 Toluene <0.001 mg/L
 Ethylbenzene 0.006 mg/L
 Xylene 0.074 mg/L

MW-4

0.14'

(NS) MW-2

(NS) MW-3

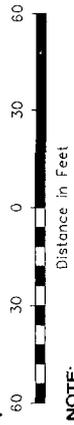
MW-6

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

MW-1

Road



NOTE:
 • Bold Indicates Concentration Above NMOCD Regulatory Standards.

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

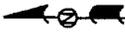
NMOCD REF. # 1R-0120

Figure 3A
 Groundwater Concentration
 and Inferred PSH Extent
 Map (02/22/07)
 Phillips Marketing, L.P.
 Measurement 1
 Lea County, NM

NOVA
 safety and environmental

NOVA Safety and Environmental

Scale: 1" = 60'
 January 23, 2008
 CAD By: DGC
 Checked By: CDS
 SE 1/4 NE 1/4 Sec 30 T16S R37E
 32° 38' 07.2" N 103° 16' 58.0" W



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)

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

MW-5

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	0.0027 mg/L
Xylene	0.0306 mg/L

MW-4

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

MW-6

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

MW-1

(NS) MW-2

(NS) MW-3

Road



NOTE:

• Bold Indicates Concentration Above NMOCD Regulatory Standards.

Monitor Well Location

Pipeline

(NS) Not Sampled

<0.001 Constituent Concentration (mg/L)

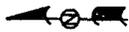
Figure 3B
Groundwater Concentration
and Inferred PSH Extent
Map (05/17/07)
Plains Marketing, L.P.
Monument 11
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 87'
January 23, 2008
CAD By: DGC
Checked By: CDS
SE 1/4 NE 1/4 Sec 30 T18S R37E
32° 38' 07.2" N 103° 16' 50.7" W



NMOCD REF. # 1R-0120



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)

MW-5

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

MW-4

Benzene	<0.005 mg/L
Toluene	<0.005 mg/L
Ethylbenzene	<0.005 mg/L
Xylene	<0.005 mg/L

MW-6

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

MW-1

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

(NS) MW-2

(NS) MW-3



NOTE:
 • Bold Indicates Concentration Above NMOCD Regulatory Standards.

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

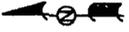
NMOCD REF. # 1R-0120

Figure 3C
 Groundwater Concentration
 and Inferred PSH Extent
 Map (08/28/07)
 Plains Marketing, L.P.
 Monument 11
 Lea County, NM

NOVA Safety and Environmental



Scale: 1" = 60'
 CAD By: DGC
 Checked By: CDS
 September 25, 2007
 SE 1/4 NE 1/4 Sec 30 T18S R37E
 32° 38' 07.2" N 103° 16' 58.0" W



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)

MW-5

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

MW-2

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

MW-4

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	0.0023 mg/L

MW-6

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

MW-3

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	0.0018 mg/L

MW-1

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

Road



NOTE:
 • Bold Indicates Concentration Above NIMCOD Regulatory Standards.

Monitor Well Location
 Pipeline
 Inferred PSH Extent
 (NS) Not Sampled
 Constituent Concentration (mg/L)
 <0.001

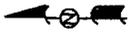
NMCOCD REF. # 1R-0120

Figure 3D
 Groundwater Concentration
 and Inferred PSH Extent
 Map (11/26/07)
 Plains Marketing, L.P.
 Monument 11
 Lea County, NM

NOVA
 Safety and Environmental

Scale: 1" = 80'
 January 23, 2008
 SE 1/4 NE 1/4 Sec 20 T10S R37E
 32° 36' 07.2" N 103° 16' 56.0" W

CAD By: DGC
 Checked By: CDS



Buried Pipeline

Amerada Hess Buried Pipeline

Former Tex-New Mexico Pipeline (Removed)

MW-5

MW-2

SB B11-3

SB B11-1

SB-1 (07)

SB-2 (07)

SB B11-2

SB B11-7

SB-3 (07)

SB B11-10

SB B11-5

SB B11-4

SB B11-8

SB B11-6

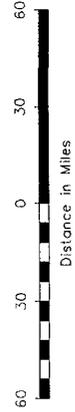
SB B11-9

MW-6

MW-3

MW-1

Road



NOTE:
Soil Boring Locations Are Estimated Pre 1999 Data.

- LEGEND:
- Monitor Well Location
 - Proposed Soil Boring
 - Soil Boring Location
 - Pipeline

Figure 4
Soil Boring
Location Map
Plains Marketing, L.P.
Monument 11
Lea County, NM

NOVA Safety and Environmental

NOVA
SAFETY AND ENVIRONMENTAL

Scale: 1" = 60'	Prep By: DPM	Checked By: BB
February 21, 2006	NE1/4, Section 30 T19S R37E	
Lat. N32° 38' 14" Long. W103° 17' 4"		

Tables

TABLE 1
GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 11
LEA COUNTY, NEW MEXICO
NMOCD Reference No. 1R-120

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/22/07	3,624.90	-	26.24	0.00	3,598.66
	05/17/07	3,624.90	-	26.22	0.00	3,598.68
	08/28/07	3,624.90	-	26.17	0.00	3,598.73
	11/26/07	3,624.90	-	26.17	0.00	3,598.73
MW-2	02/22/07	3,624.91	-	25.52	0.00	3,599.39
	05/17/07	3,624.91	-	25.56	0.00	3,599.35
	08/28/07	3,624.91	-	25.57	0.00	3,599.34
	11/26/07	3,624.91	-	25.56	0.00	3,599.35
MW-3	02/02/07	3,623.90	-	24.82	0.00	3,599.08
	05/17/07	3,623.90	-	24.84	0.00	3,599.06
	08/28/07	3,623.90	-	24.87	0.00	3,599.03
	11/26/07	3,623.90	-	24.90	0.00	3,599.00
MW-4	02/22/07	3,624.02	23.06	23.20	0.14	3,600.94
	03/05/07	3,624.02	23.05	23.11	0.06	3,600.96
	03/27/07	3,624.02	23.15	23.19	0.04	3,600.86
	05/08/07	3,624.02	23.22	23.38	0.16	3,600.78
	05/17/07	3,624.02	23.29	23.31	0.02	3,600.73
	06/11/07	3,624.02	23.34	23.52	0.18	3,600.65
	07/11/07	3,624.02	sheen	23.49	0.00	3,600.53
	08/28/07	3,624.02	sheen	23.49	0.00	3,600.53
	09/18/07	3,624.02	sheen	23.68	0.00	3,600.34
	10/19/07	3,624.02	23.53	23.55	0.02	3,600.49
	11/09/07	3,624.02	sheen	23.71	0.00	3,600.31
	11/26/07	3,624.02	sheen	23.72	0.00	3,600.30
MW-5	02/22/07	3,625.24	-	23.40	0.00	3,601.84
	05/17/07	3,625.24	-	23.59	0.00	3,601.65
	08/28/07	3,625.24	-	23.82	0.00	3,601.42
	11/26/07	3,625.24	-	23.90	0.00	3,601.34
MW-6	02/22/07	3,623.71	-	23.89	0.00	3,599.82
	05/17/07	3,623.71	-	23.91	0.00	3,599.80
	08/28/07	3,623.71	-	23.97	0.00	3,599.74
	11/26/07	3,623.71	-	23.99	0.00	3,599.72

TABLE 2

2007 CONCENTRATIONS OF BTEX IN GROUNDWATER

**PLAINS MARKETING, L.P.
MONUMENT 11
LEA COUNTY, NEW MEXICO
NMOCD Reference No. 1R-120**

All concentrations are in mg/L

SAMPLE DATE	SAMPLE DATE	SW 846 - 8260				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
MW-1	02/22/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/17/07	<0.001	<0.001	<0.001	<0.001	<0.001
	08/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	11/26/07	<0.001	<0.001	<0.001	<0.001	<0.001
MW-2	02/22/07	Not sampled on current sampling schedule				
	05/17/07	Not sampled on current sampling schedule				
	08/28/07	Not sampled on current sampling schedule				
	11/26/07	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	02/22/07	Not sampled on current sampling schedule				
	05/17/07	Not sampled on current sampling schedule				
	08/28/07	Not sampled on current sampling schedule				
	11/26/07	<0.001	<0.001	<0.001	0.0018	
MW-4	01/08/07	<0.001	<0.001	0.0097	0.0954	
	02/22/07	<0.001	<0.001	0.006	0.074	
	05/17/07	<0.001	<0.001	0.0027	0.0306	
	08/28/07	<0.005	<0.005	<0.005	<0.005	
	11/26/07	<0.001	<0.001	<0.001	0.0023	
MW-5	02/22/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/17/07	<0.001	<0.001	<0.001	<0.001	<0.001
	08/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	11/26/07	<0.001	<0.001	<0.001	<0.001	<0.001
MW-6	02/22/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/17/07	<0.001	<0.001	<0.001	<0.001	<0.001
	08/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	11/26/07	<0.001	<0.001	<0.001	<0.001	<0.001

Table 3

2007 CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.

Monument 11

MONUMENT (LEA COUNTY), NEW MEXICO

NMOC Reference No. 1R-120

All concentrations are reported in mg/Kg

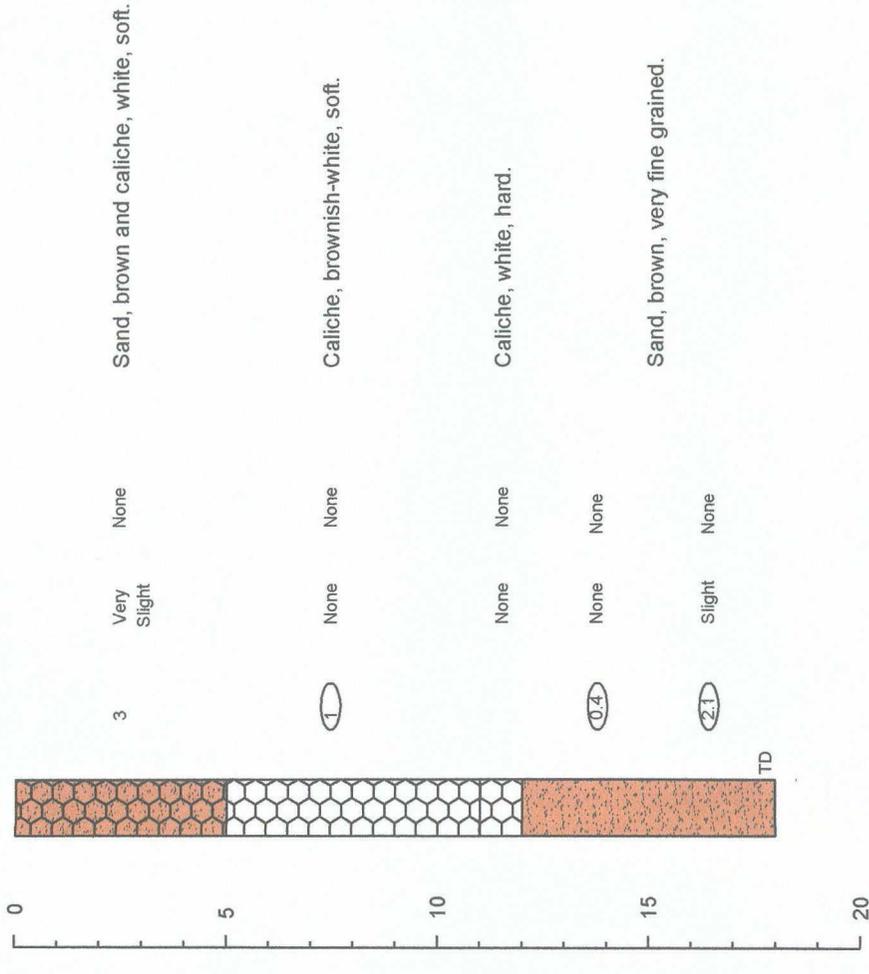
SAMPLE LOCATION	SAMPLE DATE	DEPTH (feet)	8015M			SW 846-8021B, 5030				
			DRO C6-C12	GRO >C12-C35	TOTAL C6-C35	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX
SB-1 @ 18'	08/15/07	18'	<50.0	1.97	<50.0	n/a	n/a	n/a	n/a	n/a
SB-2 @ 10'	08/15/07	10'	908	211	1119	<0.01	<0.01	0.568	1.04	1.608
SB-2 @ 18'	08/15/07	18'	166	52.9	218.9	n/a	n/a	n/a	n/a	n/a
SB-3 @ 10'	08/15/07	10'	<50.0	4.21	<50.0	n/a	n/a	n/a	n/a	n/a
SB-3 @ 18'	08/15/07	18'	<50.0	2.34	<50.0	n/a	n/a	n/a	n/a	n/a
SB-4 @ 18'	08/15/07	18'	<50.0	<1.00	<50.0	n/a	n/a	n/a	n/a	n/a

Appendices

Appendix A
Soil Boring Logs

Soil Boring SB-1

Soil Columns PID Odor Stain Soil Description



Soil Boring Details

Date Drilled 08/15/07
 Depth of Soil Boring 18 ft

○ Indicates samples selected for Laboratory Analysis.

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

Completion Notes

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

NMOCD Reference No. 1R-0120

Soil Boring Log And Details

Soil Boring SB-1

Plains Marketing, L.P. Monument 11

Lea County, NM

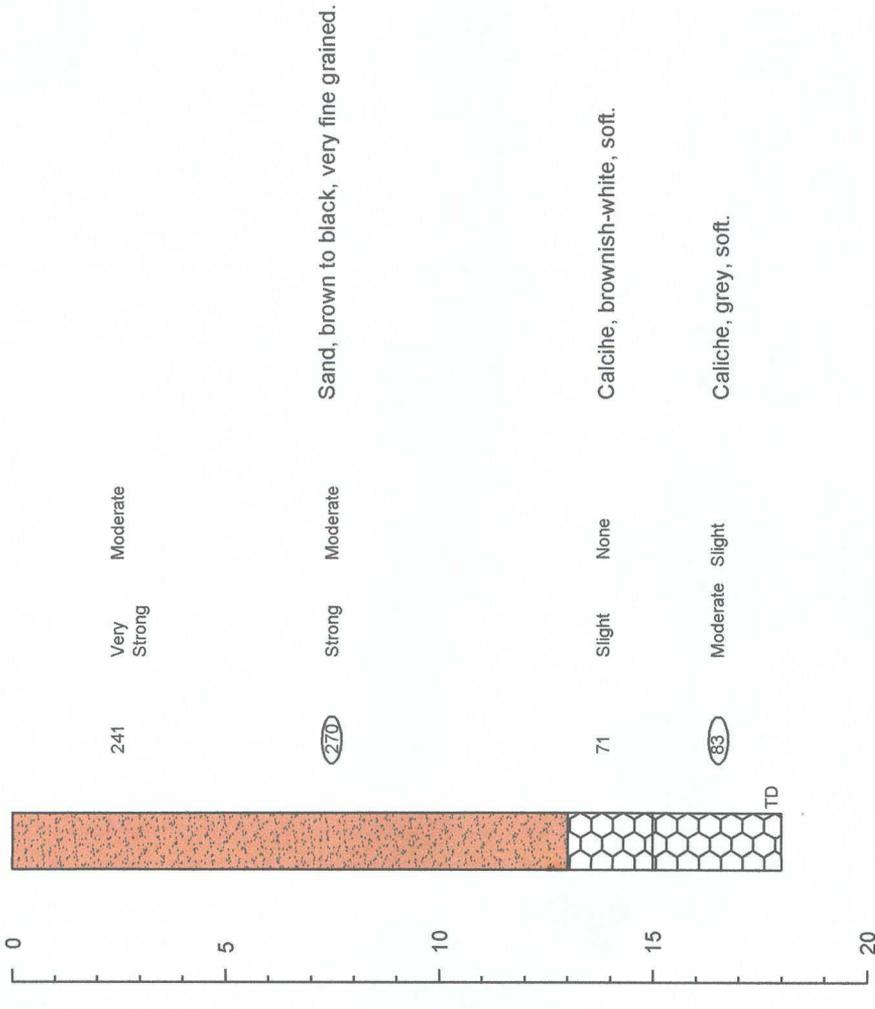


NOVA Safety and Environmental

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

Soil Boring SB-2

Depth (feet) Soil Columns PID Odor Stain Soil Description



Soil Boring Details

Date Drilled 08/15/07
 Depth of Soil Boring 18 ft.

○ Indicates samples selected for Laboratory Analysis.
 PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

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

NMOCD Reference No. 1R-0120

Soil Boring Log And Details

Soil Boring SB-2

Plains Marketing, L.P. Monument 11 Lea County, NM



NOVA Safety and Environmental

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

Soil Boring SB-3

Depth (feet)	Soil Columns	PID	Odor	Stain	Soil Description
0		6	Slight	None	Caliche, white, soft.
5		NA	Slight	None	Sand, brown.
10		(15)	Slight	None	Sand, brown, medium grain with caliche fragments, white to grey.
15		5	None	None	Caliche, white, soft, sand, brown, very fine grained.
15.1		(5.1)	None	None	Caliche, white, soft (no sand).
20		TD			

Soil Boring Details

Date Drilled 08/15/07
 Depth of Soil Boring 18 ft

○ Indicates samples selected for Laboratory Analysis.

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

Completion Notes

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

NMOCD Reference No. 1R-0120

Soil Boring Log And Details

Soil Boring SB-3

Plains Marketing, L.P. Monument 11

Lea County, NM

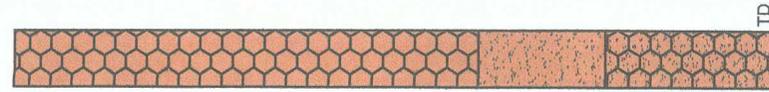


NOVA Safety and Environmental

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

Soil Boring SB-4

Depth (feet) Soil Columns PID Odor Stain Soil Description



Soil Boring Details

Date Drilled 08/15/07
 Depth of Soil Boring 18 ft

3.4	None	None	None	Caliche, white to brown, soft.
2.8	None	None	None	
NA	None	None	None	
NA	None	None	None	Sand, brown, very fine grained.
2.6	None	None	None	Caliche, white, soft with sand, brown, very fine grained.
<u>(0.9)</u>	None	None	None	

○ Indicates samples selected for Laboratory Analysis.
 PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

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

NMOCD Reference No. 1R-0120

Soil Boring Log And Details

Soil Boring SB-4

Plains Marketing, L.P. Monument 11 Lea County, NM



NOVA Safety and Environmental

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

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

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name	Monument # 11	Facility Type:	Pipeline

Surface Owner: New Mexico State Land Office	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
A	30	19S	37E					Lea

Latitude 32 degrees 38' 9.2" **Longitude** 103 degrees 17' 2.4"

NATURE OF RELEASE

Type of Release: Unknown	Volume of Release: Unknown	Volume Recovered Unknown
Source of Release:	Date and Hour of Occurrence Unknown	Date and Hour of Discovery
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.*

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

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

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

* Attach Additional Sheets If Necessary