

**AP - 16**

**REPORT**

**DATE:**

**2006**



AP-16  
Report  
2006

**2006  
ANNUAL MONITORING REPORT**

**BOB DURHAM**  
LEA COUNTY, NEW MEXICO  
NW ¼ NW ¼, SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST  
PLAINS EMS NUMBER: TNM LF2000-07  
NMOCD File Number: AP-0016

PREPARED FOR:

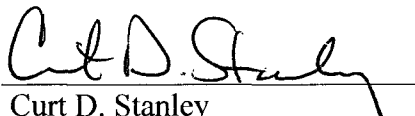
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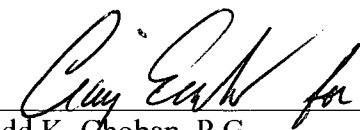


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**March 2007**

  
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### ENCLOSED ON DATA DISK

2006 Annual Monitoring Report

2006 Tables 1 and 2 - Groundwater Elevation and BTEX Concentration Data

2006 Figures 1, 2A-2B, and 3A-3B

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. The site was previously managed by Environmental Technology Group, Inc. (ETGI). The Bob Durham pipeline release site (the site), which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with figures, appendices, tables and text. The report presents the results of the four quarterly groundwater monitoring events conducted in calendar year 2006. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2006 to assess the extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitor event consisted of measuring static water levels in the monitor wells, checking for the presence of PSH on the water column, and the 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 site is located approximately two miles west of the city of Monument, New Mexico, in the NW ¼ of the NW ¼ of Section 32, Township 19 South, Range 37 East. The topography of the site is relatively flat with a slight topographic slope to the south. The site is located in a rural and residential area with a single-family residence located approximately 500 feet west of the release point. Generally, the surface consists of unconsolidated sand covered by sparse grasses and mesquite trees. Oil and gas production facilities are located adjacent to the site to the northeast and at a greater distance to the northwest.

The crude oil release was discovered during excavation activities associated with the installation of a polyethylene liner in the pipeline. During the initial response, an estimated 2,000 cubic yards of impacted soil was excavated and removed from the area immediately north of State Highway 322. EOTT personnel indicated the excavated soil was transported to J & L Landfarm, located near Eunice, New Mexico, for disposal. A previous contractor installed a total of 38 monitor wells to delineate the horizontal and vertical impact of the release.

Seven (7) groundwater monitor wells (MW-17 through 19, MW-22, MW-34 through 36) were plugged and abandoned in September 2005, with NMOCD approval.

Currently, thirty-one (31) groundwater monitor wells remain on-site (MW-1 through 16, MW-20, MW-21, MW-23 through MW-33, MW-37, and MW-38). An automated product recovery system, consisting of pneumatic pumps installed in monitor wells MW-5, MW-7, MW-12, and MW-16, operated at the site until mid-2004 when the system was removed from operation due to

decreasing PSH thicknesses. Recovery of PSH at the site is performed manually on a bi-monthly schedule.

## FIELD ACTIVITIES

A measurable thickness of PSH was observed in three (3) monitor wells (MW-4, MW-5, MW-12, during at least one quarterly monitoring event of the reporting period. The average thickness of PSH for 2006 is 0.21 feet per monitor well exhibiting PSH. The maximum thickness of PSH in monitor wells during the reporting period was 0.85 feet, as measured in MW-4 on June 15, 2006. PSH data for the 2006 gauging events can be found in Table 1 and on Figures 3A through 3D.

Approximately 12 gallons (0.29 barrels) of PSH was recovered from the site during the 2006 reporting period. Recovery of PSH at the site is now performed manually and is monitored on a bi-monthly basis. Approximately 839 gallons (approximately 20 barrels) of PSH has been recovered from the site by automated systems and by manual recovery methods 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 by NMOCD correspondence dated July 7, 2005.

NMOCD Approved Sampling Schedule							
MW-1	Quarterly	MW-11	Annual	MW-21	Annual	MW-31	Quarterly
MW-2	Quarterly	MW-12	Quarterly	MW-22	Plugged & Abnd	MW-32	Quarterly
MW-3	Quarterly	MW-13	Quarterly	MW-23	Quarterly	MW-33	Quarterly
MW-4	Quarterly	MW-14	Semi-Annual	MW-24	Semi-Annual	MW-34	Plugged & Abnd
MW-5	Quarterly	MW-15	Quarterly	MW-25	Annual	MW-35	Plugged & Abnd
MW-6	Quarterly	MW-16	Quarterly	MW-26	Quarterly	MW-36	Plugged & Abnd
MW-7	Quarterly	MW-17	Plugged & Abnd	MW-27	Semi-Annual	MW-37	Quarterly
MW-8	Quarterly	MW-18	Plugged & Abnd	MW-28	Quarterly	MW-38	Quarterly
MW-9	Quarterly	MW-19	Plugged & Abnd	MW-29	Annual		
MW-10	Quarterly	MW-20	Annual	MW-30	Annual		

The site monitor wells were gauged and sampled on March 21, June 22, September 7, and November 17, 2006. During each sampling event, monitor wells were purged of approximately three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Grundfos pump and dedicated tubing. 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).

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during quarterly sampling events performed in 2006, are depicted

on the Inferred Groundwater Gradient Maps, Figures 2A-2D. Groundwater elevation data for 2006 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 0.016 feet/foot to the south as measured between monitor wells MW-6 and MW-31. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3570.41 to 3584.60 feet above mean sea level, in MW-32 on January 25, 2006 and in MW-24 on September 7, 2006, respectively.

## **LABORATORY RESULTS**

Monitor well MW-5 contained PSH during the first quarter sampling event and was not sampled. Monitor wells MW-4 and MW-12 contained PSH during all four sampling events and were not sampled.

All groundwater samples collected during the reporting period were delivered to TraceAnalysis, Inc. in Lubbock, Texas for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) constituent analysis using EPA Method SW 846-8021b. Analytical results of BTEX constituent concentrations for 2006 are summarized on Table 2. Historical BTEX constituent concentrations and copies of the laboratory reports for 2006 are provided on the enclosed data disk. The quarterly groundwater analytical results are depicted on the Groundwater Concentration and Inferred PSH Extent Maps, Figures 3A-3D.

**Monitor well MW-1** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0410 mg/L during the 1<sup>st</sup> quarter to 0.0556 mg/L during the 2<sup>nd</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0394 mg/L during the 3<sup>rd</sup> quarter to 0.0729 mg/L during the 4<sup>th</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.0730 mg/L during the 2<sup>nd</sup> quarter to 0.1160 mg/L during the 4<sup>th</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-2** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0263 mg/L during the 4<sup>th</sup> quarter to 0.0722 mg/L during the 2<sup>nd</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.008 mg/L during the 4<sup>th</sup> quarter to 0.054 mg/L during the 2<sup>nd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.005 mg/L during the 1<sup>st</sup> quarter to 0.0046 mg/L during the 4<sup>th</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-3** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0028 mg/L during the 2<sup>nd</sup> quarter to 0.0091 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0101 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0104 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-4** is monitored on a quarterly schedule. Monitor well MW-4 was not sampled during any of the four (4) quarters of the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 0.19 feet, 0.52 feet, 0.04 feet and 0.07 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2006, respectively.

**Monitor well MW-5** is sampled on a quarterly schedule. The monitor well was not sampled during the 1<sup>st</sup> quarter sampling event, due to the presence of PSH (0.09 feet) in the monitor well. Analytical results from the three (3) remaining quarters of the reporting period indicate benzene concentrations ranged from 0.103 mg/L during the 2<sup>nd</sup> quarter to 0.0069 mg/L during the 4<sup>th</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during one (1) of the three (3) sampled quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during the three (3) sampled quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0036 mg/L during the 4<sup>th</sup> quarter to 0.080 mg/L during the 2<sup>nd</sup> quarter. Ethylbenzene concentrations were below the NMOCD regulatory standards during the three (3) sampled quarters of the reporting period. Xylene concentrations ranged from 0.0027 mg/L during the 4<sup>th</sup> quarter to 0.0694 mg/L during the 2<sup>nd</sup> quarter. Xylene concentrations were below NMOCD regulatory standards during the three (3) sampled quarters of the reporting period.

**Monitor well MW-6** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0023 mg/L during the 2<sup>nd</sup> quarter to 0.0118 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during three (3) of the four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0027 mg/L during the 2<sup>nd</sup> quarter to 0.0420 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.0035 mg/L during the 2<sup>nd</sup> quarter to 0.0717 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-7** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0011 mg/L during the 4<sup>th</sup> quarter to 0.0039 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four (4)

quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0023 mg/L during the 2<sup>nd</sup> quarter to 0.0066 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.0036 mg/L during the 2<sup>nd</sup> quarter to 0.0120 mg/L during the 1<sup>st</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-8** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 4<sup>th</sup> quarter to 0.0073 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarter to 0.003 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.0018 mg/L during the 2<sup>nd</sup> quarter to 0.0110 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-9** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each constituent all four (4) quarters of the reporting period.

**Monitor well MW-10** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.045 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during three (3) of the four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.052 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.063 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-11** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-12** is monitored on a quarterly schedule. Monitor well MW-12 was not sampled during any of the four (4) quarters of the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 0.25 feet, 0.29 feet, 0.36 feet and 0.46 feet were reported during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2006, respectively.



**Monitor well MW-13** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0058 mg/L during the 4<sup>th</sup> quarter to 0.0509 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during two (2) of the four (4) quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0023 mg/L during the 3<sup>rd</sup> and 4<sup>th</sup> quarters to 0.0360 mg/L during the 2<sup>nd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations were below the MDL and NMOCD regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-14** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> quarter sampling event. Analytical results indicate BTEX constituent concentrations were below MDL and NMOCD standards during the 4<sup>th</sup> quarter of the reporting period, with the exception of the xylene constituent which indicated a concentration of 0.0012 mg/L. (below NMOCD regulatory standard).

**Monitor well MW-15** is sampled on a quarterly schedule and analytical results indicate benzene concentrations were below the MDL and NMOCD regulatory standard all four (4) quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters to 0.002 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> quarters to 0.002 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-16** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0084 mg/L during the 4<sup>th</sup> quarter to 0.0411 mg/L during the 2<sup>nd</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during three (3) of the four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.02 mg/L during the 1<sup>st</sup> quarter to 0.0326 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.02 mg/L during the 1<sup>st</sup> quarter to 0.0307 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-20** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-21** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-23** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the all four (4) quarters of the reporting period.

**Monitor well MW-24** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling event.

**Monitor well MW-25** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-26** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the all four (4) quarters of the reporting period.

**Monitor well MW-27** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> quarter sampling event.

**Monitor well MW-28** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the all four (4) quarters of the reporting period.

**Monitor well MW-29** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-30** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-31** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the all four (4) quarters of the reporting period.

**Monitor well MW-32** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0098 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.009 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.0165 mg/L during the 3<sup>rd</sup> quarter of 2006.

Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-33** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the all four (4) quarters of the reporting period.

**Monitor well MW-37** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.006 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.004 mg/L during the 3<sup>rd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.014 mg/L during the 3<sup>rd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

**Monitor well MW-38** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0145 mg/L during the 4<sup>th</sup> quarter to 0.0249 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.028 mg/L during the 3<sup>rd</sup> quarter to 0.170 mg/L during the 2<sup>nd</sup> quarter. Ethylbenzene concentrations were below NMOCD regulatory standards during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.0022 mg/L during the 4<sup>th</sup> quarter to 0.0791 mg/L during the 2<sup>nd</sup> quarter of 2006. Xylene concentrations were below regulatory standards during all four (4) quarters of the reporting period.

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 2006 annual monitoring period. Currently, there are thirty one (31) groundwater monitor wells (MW-1 through MW-16, MW-20, MW-21, MW-23 through MW-33, MW-37, and MW-38) on-site. Seven (7) monitor wells (MW-17 through MW-19, MW-22, and MW-34 through MW-36) were plugged and abandoned in September, 2005. Recovery of PSH at the site is performed manually on a bi-monthly basis. Groundwater elevation contours generated from water level measurements acquired during the reporting period indicate a general groundwater gradient of approximately 0.016 feet/foot to the south.

As discussed above, three (3) monitor wells contained measurable PSH thicknesses in 2006. The average thickness of PSH for 2006 is 0.21 feet per monitor well exhibiting PSH. Approximately 12 gallons (0.29 barrels) of PSH was recovered from the site during the 2006 reporting period. Recovery of PSH at the site is now performed manually and is monitored on a bi-monthly basis. Approximately 839 gallons (approximately 20 barrels) of PSH has been recovered from the site by automated systems and by manual recovery methods since project inception. Generally, PSH monitoring data from 2006 indicates a stable or declining PSH thickness in the affected monitor wells and a noted decrease in the number of monitor wells exhibiting PSH (from 9 to 3 monitor wells).

Review of laboratory analytical results of the groundwater samples obtained during the 2005 reporting period indicates BTEX constituent concentrations were below NMOCD regulatory standards in twenty one (21) of the thirty one (31) monitor wells. Eight (8) monitor wells displayed concentrations of BTEX above the applicable NMOCD regulatory standard at some time in 2006. BTEX constituent analytical results indicate decreasing dissolved phase trend at the site in 2006

### **ANTICIPATED ACTIONS**

Plains respectfully requests NMOCD approval to plug and abandon the following monitor wells:

- Monitor well MW-26 and MW-27; these monitor wells were installed in 2002 and analytical results indicate the monitor wells have never been impacted. Cross gradient monitoring (west) is maintained by monitor wells MW-11, 15 and 23.
- Monitor wells MW-14, MW-9, MW-29, MW-28, MW-20 and MW-25 were installed in 2002 and analytical results indicate these monitor wells have never been impacted. Monitor wells MW-9 and MW-14 have redundant monitor points down gradient at monitor wells MW-33, MW-37, MW-38, MW-31 and MW-30. The plugging and abandonment of monitor wells MW-29, MW-28 and MW-25 still allows for cross gradient (east) monitoring utilizing monitor wells MW-30 and MW-8. The plugging and abandonment of monitor MW-20 has redundant up gradient monitoring point at monitor well MW-21.

Quarterly monitoring and groundwater sampling will continue in 2007. Manual PSH recovery and gauging will continue on a bi-weekly schedule and will be adjusted according to site conditions. An Annual Monitoring Report will be submitted to the NMOCD by April 1, 2008.

### **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.

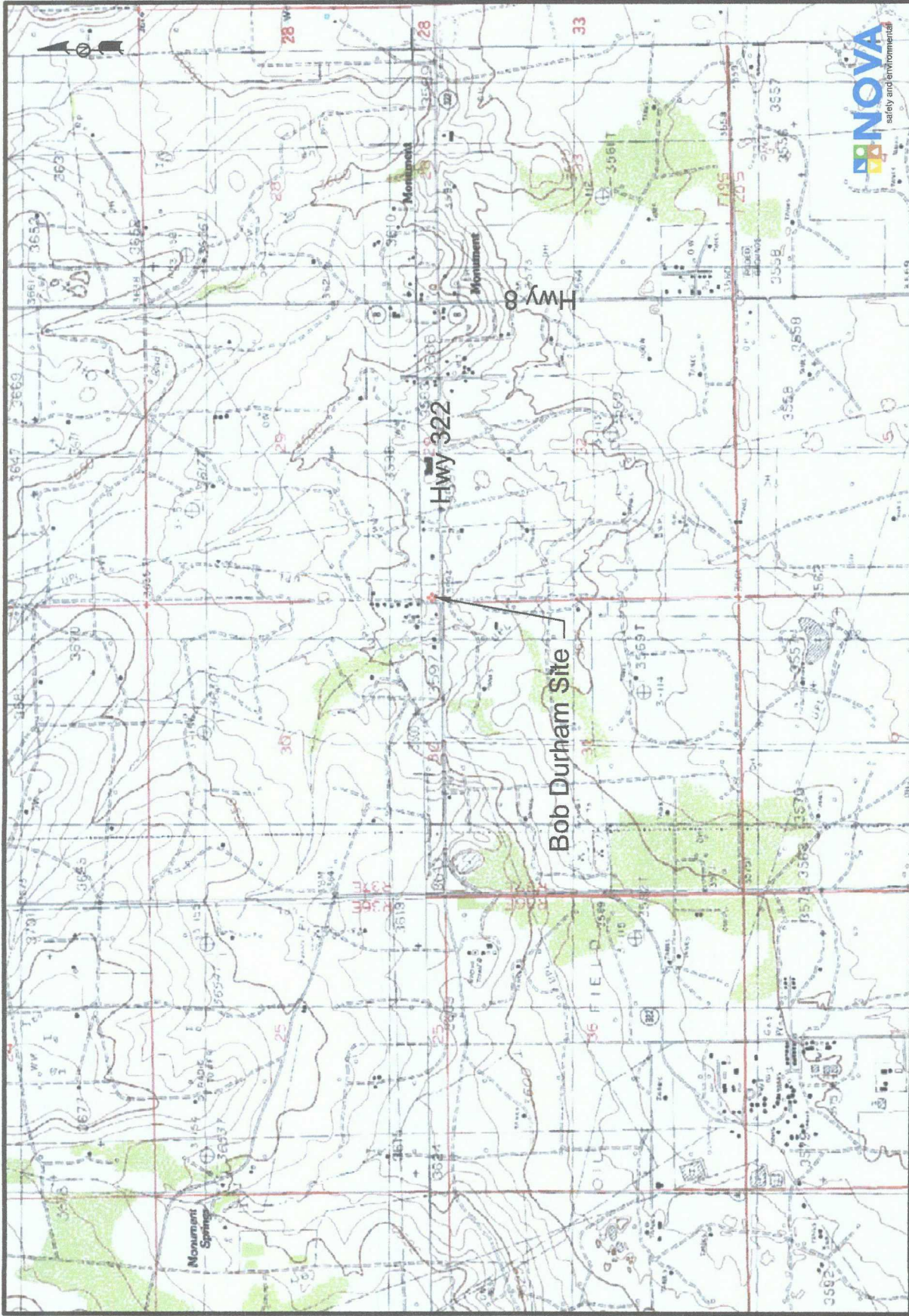
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## FIGURES





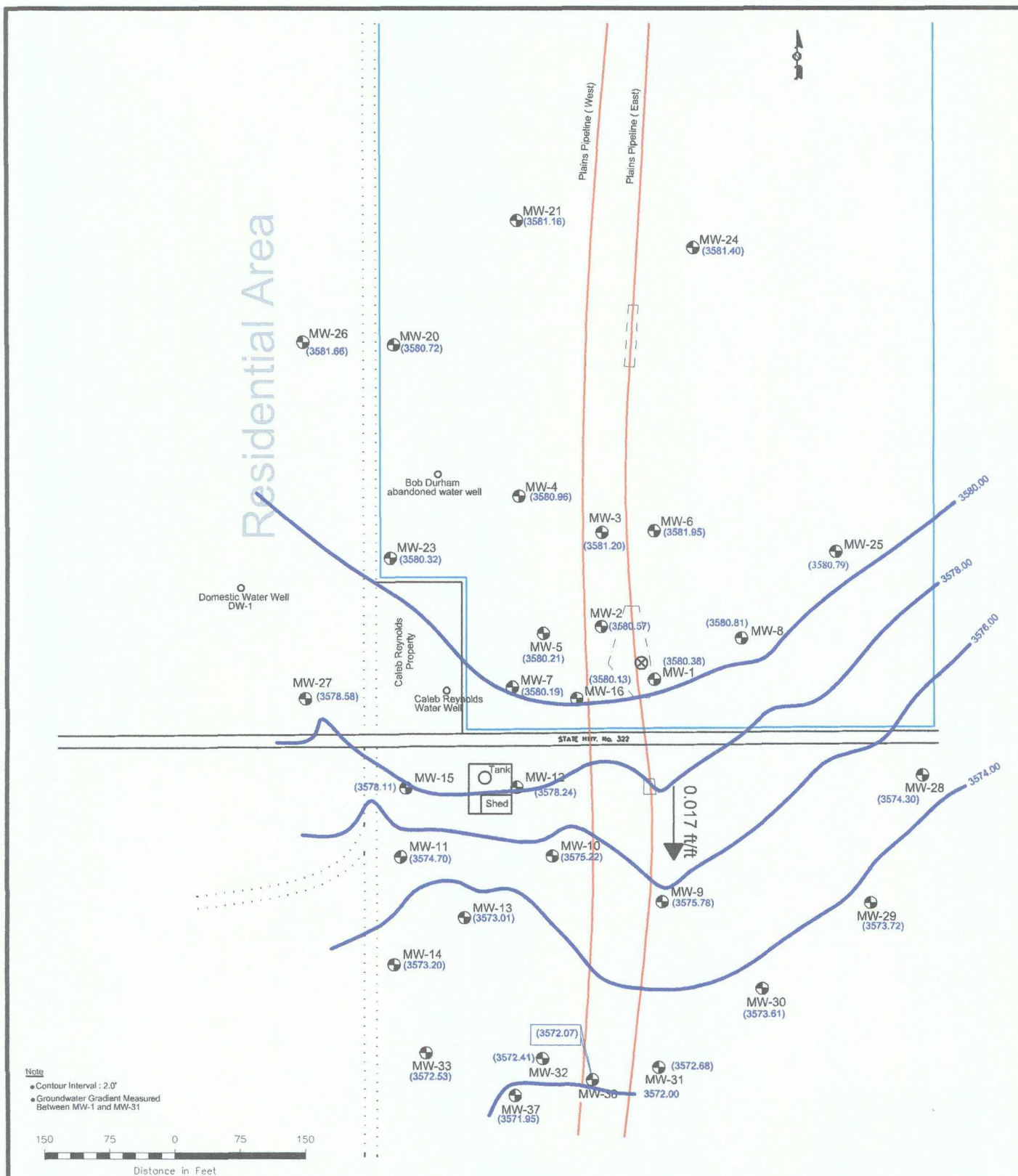
NOVA Safety and Environmental

Figure 1  
Site Location Map

NW1/4 NW1/4 Sec 32 T19S R37E | Lat. 32° 37' 27" Long. 103° 16' 53"  
 Drawn By: CDS | Prep. By: CDS  
 February 20, 2005

Plains Marketing, L.P.  
 Bob Durham  
 Lea County, NM

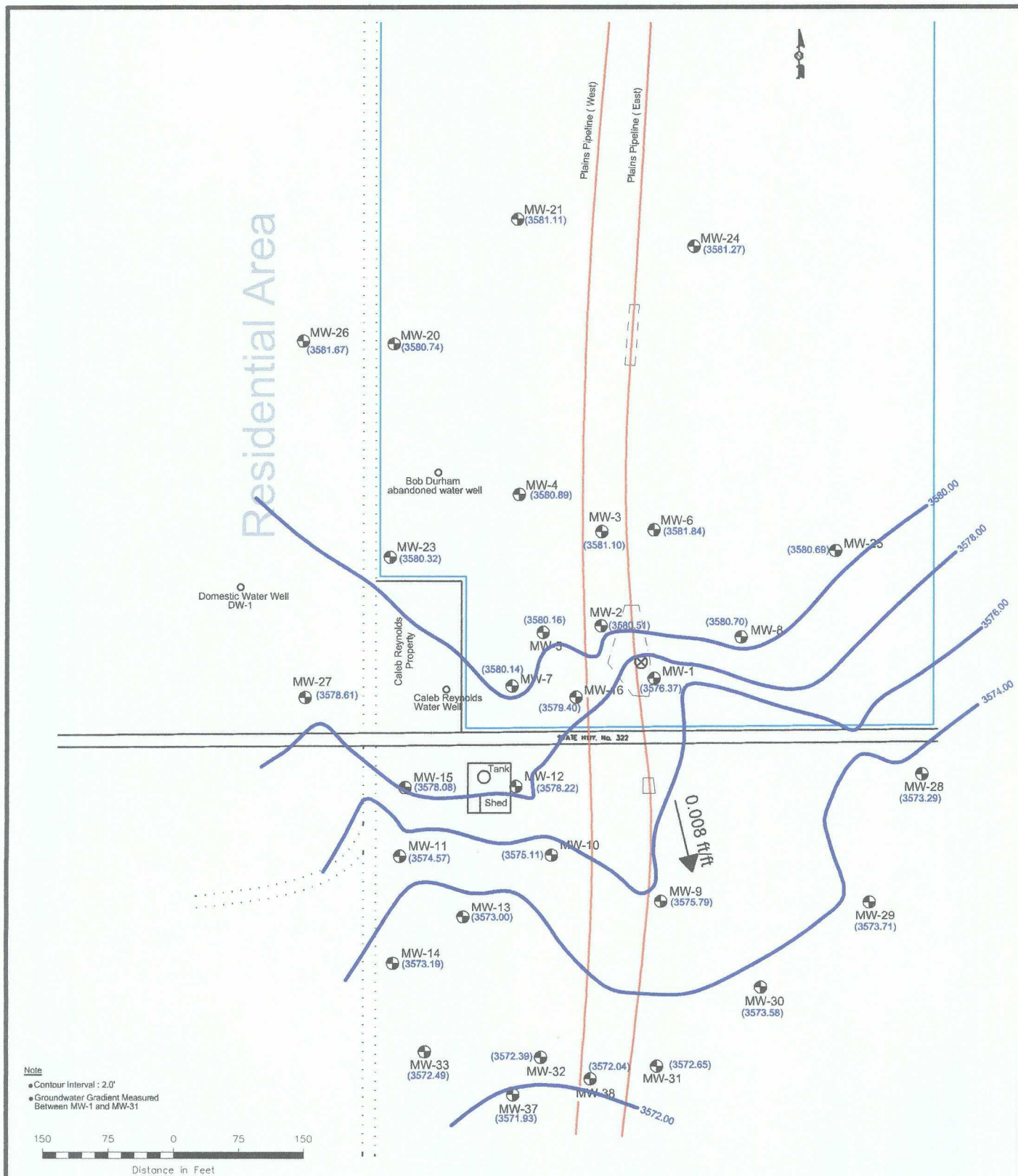




## NOVA Safety and Environmental



NW1/4 NW1/4 Sec 32 T19S R37E	32° 37' 27"N 103° 16' 53"W
Scale: 1" = 150'	CAD By: DGC
May 24, 2006	Checked By: CDS



**LEGEND:**

- Monitor Well Location
- ⊗ Release Point
- Plains Pipeline L.P.
- Groundwater Elevation Contour Line
- Groundwater Gradient and Magnitude

- (3572.46) Groundwater Elevation (feet)
- ... Road
- - - Excavation Areas
- Soil Boring Locations
- Bob Durham Property Line

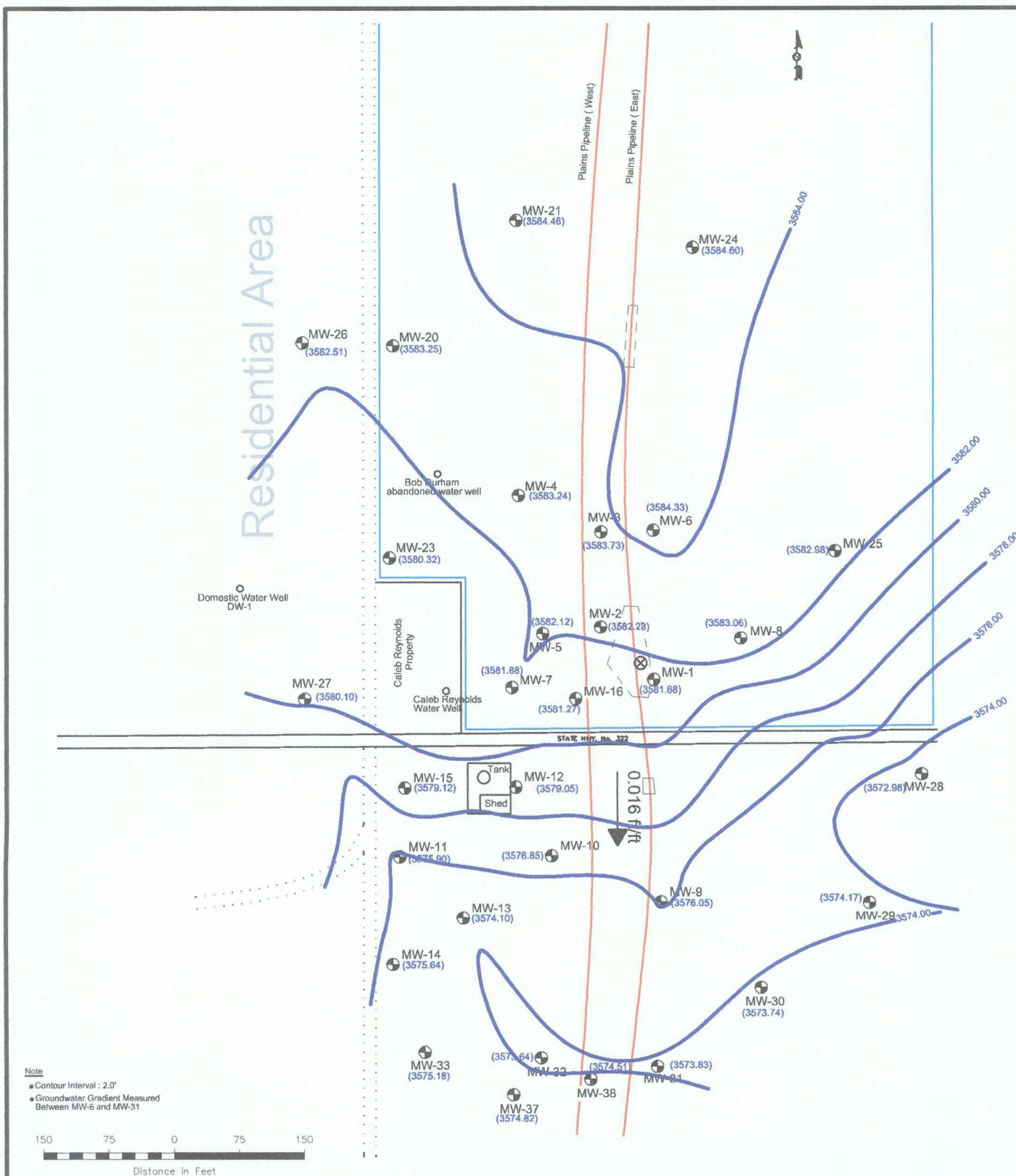
**Figure 2B**  
Inferred  
Groundwater Gradient  
Map (6/22/06)  
Plains Marketing, L.P.  
Bob Durham  
Lea County, NM


**NOVA Safety and Environmental**

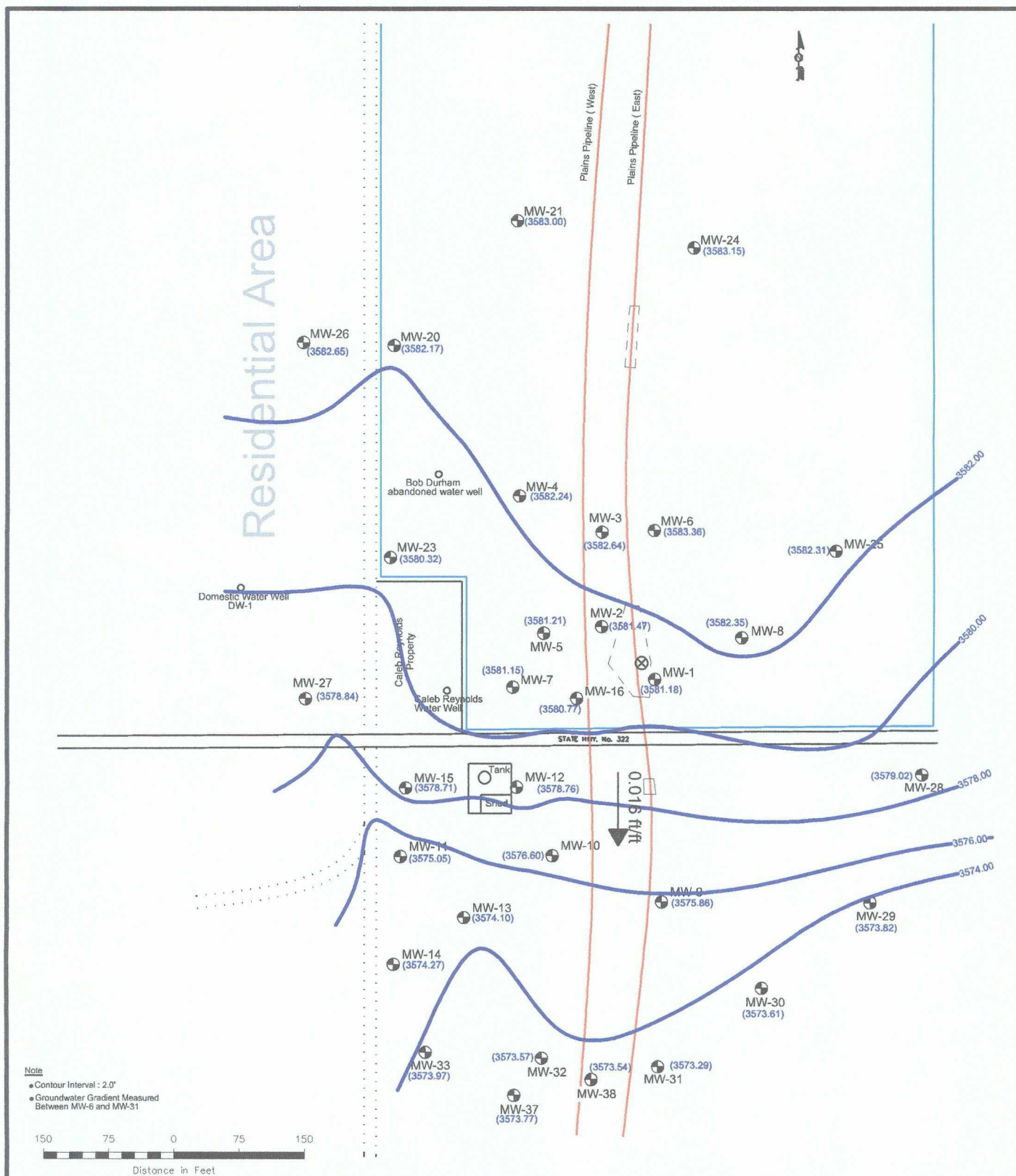



NW1/4 NW1/4 Sec 32 T19S R37E	32° 37' 27"N 103° 16' 53"W
Scale: 1" = 150'	CAD By: DGC
July 12, 2006	Checked By: CDS





<b>LEGEND:</b> Monitor Well Location Release Point Plains Pipeline L.P. Groundwater Elevation Contour Line Groundwater Gradient and Magnitude		(3572.46) Groundwater Elevation (feet) Road Excavation Areas Soil Boring Locations Bob Durham Property Line	<b>Figure 2C</b> Inferred Groundwater Gradient Map (09/06/06) Plains Marketing, L.P. Bob Durham Lea County, NM	<b>NOVA Safety and Environmental</b> 	NW1/4 NW1/4 Sec 32 T19S R37E Scale: 1" = 150' February 12, 2007	32° 37' 27"N 103° 16' 53"W CAD By: DGC Checked By: CDS
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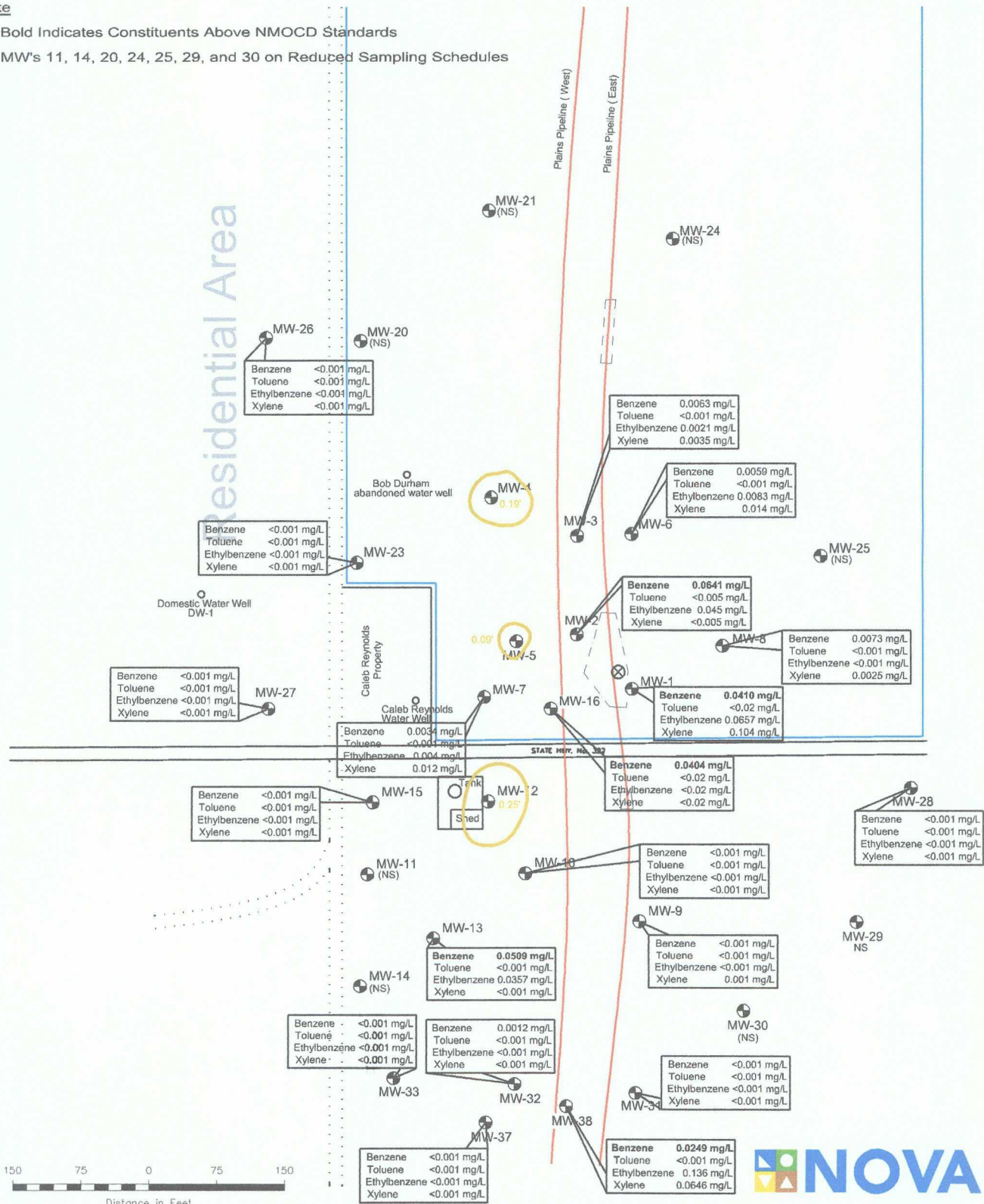


<b>LEGEND:</b> ● Monitor Well Location ⊗ Release Point — Plains Pipeline L.P. — Groundwater Elevation Contour Line → Groundwater Gradient and Magnitude		(3572.46) Groundwater Elevation (feet) . . . . . Road — Excavation Areas ● Soil Boring Locations — Bob Durham Property Line	<b>Figure 2D</b> Inferred Groundwater Gradient Map (11/17/06) Plains Marketing, L.P. Bob Durham Lea County, NM	<b>NOVA Safety and Environmental</b> 	NW1/4 NW1/4 Sec 32 T19S R37E Scale: 1" = 150' January 16, 2007	32° 37' 27"N 103° 16' 53"W CAD By: DGC Checked By: CDS
--	--	---	--	--	--	--



# Note

- Bold Indicates Constituents Above NMOC Standards
- MW's 11, 14, 20, 24, 25, 29, and 30 on Reduced Sampling Schedules



## LEGEND:

- Soil Boring Locations
- Plains Proposed Monitoring Well Locations
- Plains Monitoring Well Locations
- ⊗ Release Point
- NG Not Gauged
- Excavation Areas
- Bob Durham Property Line
- ... Dirt Road
- PSH Extent
- (NS) Not Sampled

**Figure 3A**  
Groundwater Concentration and Inferred PSH Extent Map (3/21/06)

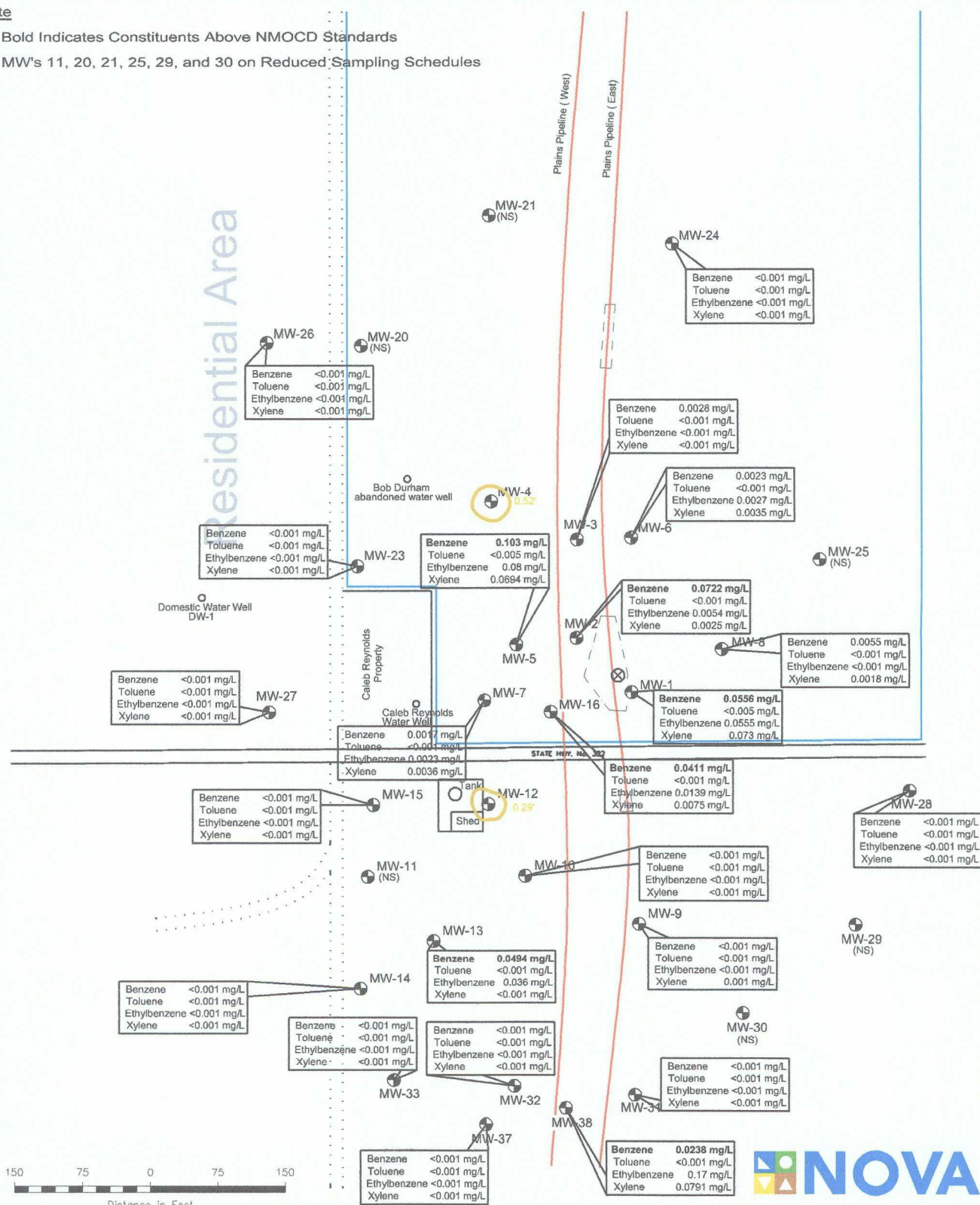
Plains Marketing, L.P.  
Bob Durham  
Lea County, NM

## NOVA Safety and Environmental

NW1/4 NW1/4 Sec 32 T19S R37E	Lat. 32° 37' 27" Long. 103° 16' 53"
Scale: 1" = 150'	CAD By: DGC
May 22, 2006	Checked By: DCS

# Note

- Bold Indicates Constituents Above NMOC Standards
- MW's 11, 20, 21, 25, 29, and 30 on Reduced Sampling Schedules



## LEGEND:

- Soil Boring Locations
- Plains Proposed Monitoring Well Locations
- ⊕ Plains Monitoring Well Locations
- ⊗ Release Point
- NG Not Gauged
- Excavation Areas
- Bob Durham Property Line
- ... Dirt Road
- PSH Extent
- (NS) Not Sampled

**Figure 3B**  
Groundwater Concentration  
and Inferred PSH Extent  
Map (06/22/06)

Plains Marketing, L.P.  
Bob Durham  
Lea County, NM

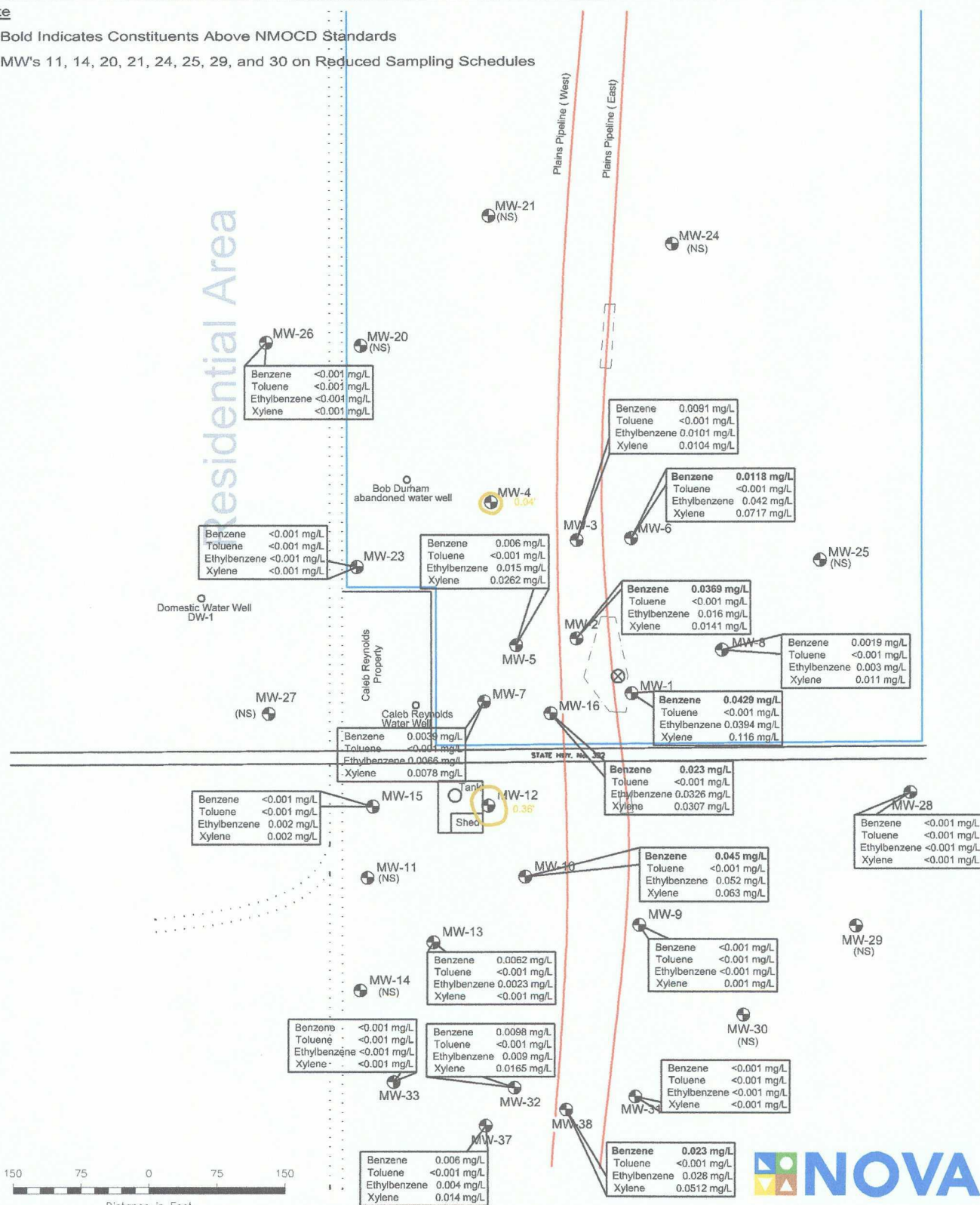
## NOVA Safety and Environmental

NW1/4 NW1/4 Sec 32 T19S R37E	Lat. 32° 37' 27" Long. 103° 16' 53"
Scale: 1" = 150'	CAD By: DGC
Checked By: CDS	
July 24, 2006	



# Note

- Bold Indicates Constituents Above NMOC Standards
- MW's 11, 14, 20, 21, 24, 25, 29, and 30 on Reduced Sampling Schedules



## LEGEND:

- Soil Boring Locations
- Plains Proposed Monitoring Well Locations
- ⊕ Plains Monitoring Well Locations
- ⊗ Release Point
- NG Not Gauged
- (NS) Not Sampled
- Excavation Areas
- Bob Durham Property Line
- ... Dirt Road
- PSH Extent

**Figure 3C**  
Groundwater Concentration  
and Inferred PSH Extent  
Map (09/07/06)

Plains Marketing, L.P.  
Bob Durham  
Lea County, NM

## NOVA Safety and Environmental

NW1/4 NW1/4 Sec 32 T19S R37E Lat. 32° 37' 27" Long. 103° 16' 53"

Scale: 1" = 150'

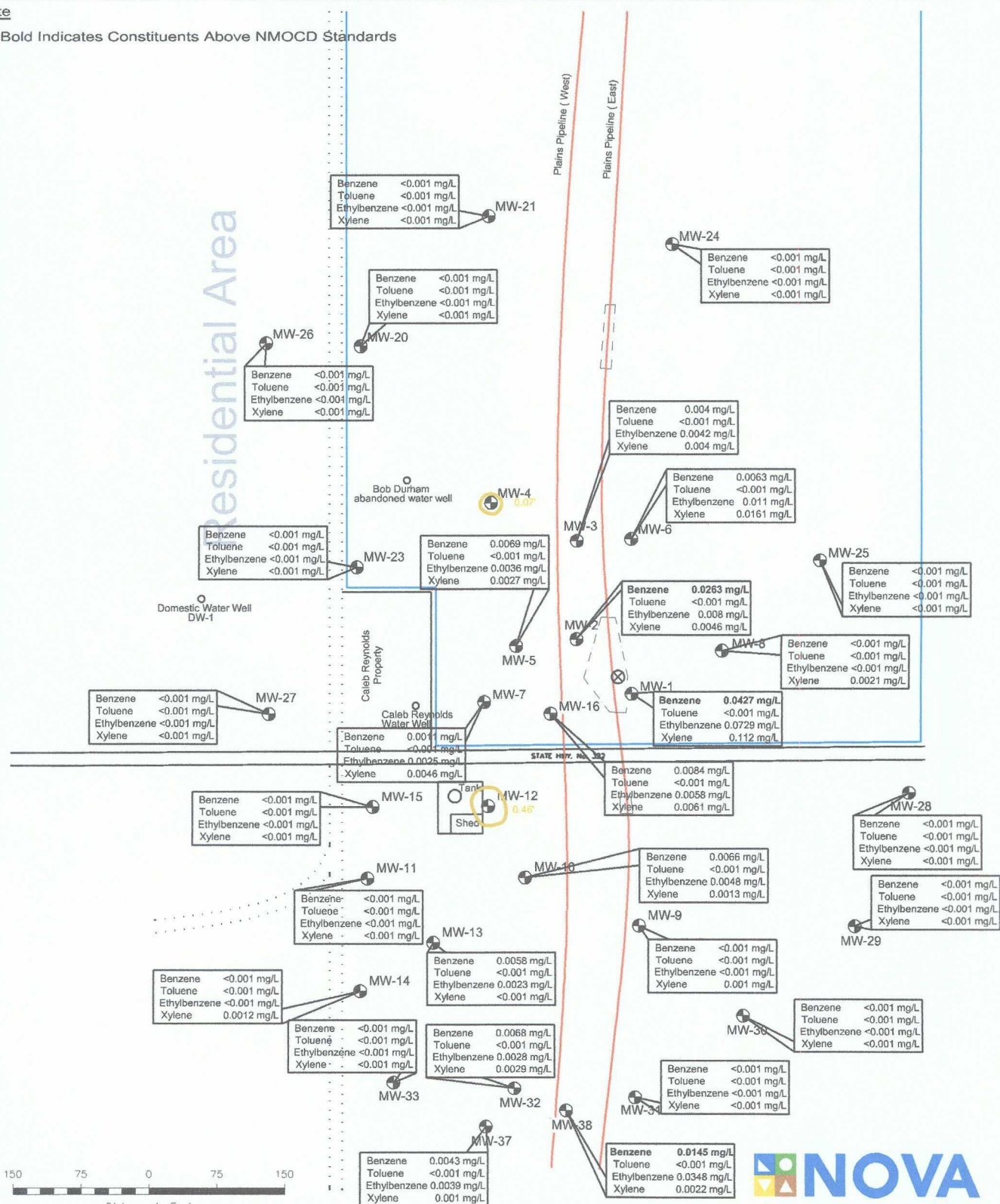
CAD By: DGC

Checked By: CDS

January 31, 2007

**Note**

- Bold Indicates Constituents Above NMOCD Standards



**LEGEND:**

- Soil Boring Locations
- Plains Proposed Monitoring Well Locations
- Plains Monitoring Well Locations
- ⊗ Release Point
- NG Not Gauged
- Excavation Areas
- Bob Durham Property Line
- Dirt Road
- PSH Extent
- (NS) Not Sampled

**Figure 3D**  
Groundwater Concentration  
and Inferred PSH Extent  
Map (11/17/06)

Plains Marketing, L.P.  
Bob Durham  
Lea County, NM

**NOVA Safety and Environmental**

NW1/4 NW1/4 Sec 32 T19S R37E Lat. 32° 37' 27" Long. 103° 16' 53"

Scale: 1" = 150' CAD By: DGC Checked By: CDS

January 31, 2007



## **TABLES**

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	01/12/06	3,595.30	sheen	14.89	0.00	3,580.41
	01/25/06	3,595.30	sheen	14.90	0.00	3,580.40
	02/08/06	3,595.30	sheen	14.92	0.00	3,580.38
	02/23/06	3,595.30	sheen	14.95	0.00	3,580.35
	03/08/06	3,595.30	sheen	14.91	0.00	3,580.39
	03/21/06	3,595.30	sheen	14.92	0.00	3,580.38
	03/24/06	3,595.30	sheen	14.97	0.00	3,580.33
	03/30/06	3,595.30	sheen	14.94	0.00	3,580.36
	04/19/06	3,595.30	sheen	14.90	0.00	3,580.40
	05/03/06	3,595.30	sheen	14.93	0.00	3,580.37
	06/02/06	3,595.30	sheen	14.93	0.00	3,580.37
	06/15/06	3,595.30	sheen	14.96	0.00	3,580.34
	06/22/06	3,595.30	-	14.94	0.00	3,580.36
	06/29/06	3,595.30	sheen	14.97	0.00	3,580.33
	07/14/06	3,595.30	sheen	14.91	0.00	3,580.39
	07/28/06	3,595.30	sheen	14.94	0.00	3,580.36
	08/11/06	3,595.30	sheen	14.92	0.00	3,580.38
	09/07/06	3,595.30	-	13.62	0.00	3,581.68
	09/16/06	3,595.30	sheen	13.70	0.00	3,581.60
	10/04/06	3,595.30	sheen	13.66	0.00	3,581.64
	11/17/06	3,595.30	-	14.12	0.00	3,581.18
MW-2	01/12/06	3,595.64	sheen	15.03	0.00	3,580.61
	01/25/06	3,595.64	sheen	15.02	0.00	3,580.62
	02/08/06	3,595.64	sheen	15.00	0.00	3,580.64
	02/23/06	3,595.64	sheen	15.08	0.00	3,580.56
	03/08/06	3,595.64	sheen	15.03	0.00	3,580.61
	03/21/06	3,595.64	15.07	15.08	0.01	3,580.57
	03/24/06	3,595.64	sheen	15.10	0.00	3,580.54
	03/30/06	3,595.64	sheen	15.09	0.00	3,580.55
	04/19/06	3,595.64	sheen	15.02	0.00	3,580.62
	05/03/06	3,595.64	sheen	15.08	0.00	3,580.56
	06/02/06	3,595.64	sheen	15.12	0.00	3,580.52
	06/15/06	3,595.64	sheen	15.13	0.00	3,580.51
	06/22/06	3,595.64	-	15.13	0.00	3,580.51
	06/29/06	3,595.64	sheen	15.11	0.00	3,580.53
	07/14/06	3,595.64	sheen	15.15	0.00	3,580.49
	07/28/06	3,595.64	sheen	15.19	0.00	3,580.45
	08/11/06	3,595.64	sheen	15.18	0.00	3,580.46
	09/07/06	3,595.64	-	13.41	0.00	3,582.23

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-2	09/16/06	3,595.64	sheen	13.71	0.00	3,581.93
	10/04/06	3,595.64	sheen	13.45	0.00	3,582.19
	11/17/06	3,595.64	sheen	14.17	0.00	3,581.47
MW-3	03/21/06	3,596.22	-	15.02	0.00	3,581.20
	06/22/06	3,596.22	sheen	15.12	0.00	3,581.10
	09/07/06	3,596.22	-	12.49	0.00	3,583.73
	11/17/06	3,596.22	-	13.58	0.00	3,582.64
MW-4	01/12/06	3,596.60	15.56	15.90	0.34	3,580.99
	01/25/06	3,596.60	15.60	15.85	0.25	3,580.96
	02/08/06	3,596.60	15.62	15.83	0.21	3,580.95
	02/23/06	3,596.60	15.59	15.80	0.21	3,580.98
	03/08/06	3,596.60	15.60	15.75	0.15	3,580.98
	03/21/06	3,596.60	15.61	15.80	0.19	3,580.96
	03/24/06	3,596.60	15.68	16.09	0.41	3,580.86
	03/30/06	3,596.60	15.62	15.69	0.07	3,580.97
	04/19/06	3,596.60	sheen	15.59	0.00	3,581.01
	05/03/06	3,596.60	15.66	15.72	0.06	3,580.93
	06/02/06	3,596.60	15.62	16.18	0.56	3,580.90
	06/15/06	3,596.60	15.63	16.48	0.85	3,580.84
	06/22/06	3,596.60	15.63	16.15	0.52	3,580.89
	06/29/06	3,596.60	15.65	16.32	0.67	3,580.85
	07/14/06	3,596.60	15.67	16.16	0.49	3,580.86
	07/28/06	3,596.60	15.79	16.18	0.39	3,580.75
	08/11/06	3,596.60	15.71	16.02	0.31	3,580.84
	09/07/06	3,596.60	13.35	13.39	0.04	3,583.24
	09/16/06	3,596.60	13.69	13.75	0.06	3,582.90
	10/04/06	3,596.60	13.40	13.44	0.04	3,583.19
	11/17/06	3,596.60	14.35	14.42	0.07	3,582.24
MW-5	01/12/06	3,596.56	sheen	16.22	0.00	3,580.34
	01/25/06	3,596.56	sheen	16.28	0.00	3,580.28
	02/08/06	3,596.56	sheen	16.29	0.00	3,580.27
	02/23/06	3,596.56	sheen	16.33	0.00	3,580.23
	03/08/06	3,596.56	sheen	16.25	0.00	3,580.31
	03/21/06	3,596.56	16.34	16.43	0.09	3,580.21
	03/24/06	3,596.56	16.41	16.43	0.02	3,580.15
	03/30/06	3,596.56	16.38	16.40	0.02	3,580.18

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-5	04/19/06	3,596.56	sheen	16.32	0.00	3,580.24
	05/03/06	3,596.56	sheen	16.38	0.00	3,580.18
	06/02/06	3,596.56	sheen	16.39	0.00	3,580.17
	06/15/06	3,596.56	sheen	16.41	0.00	3,580.15
	06/22/06	3,596.56	sheen	16.40	0.00	3,580.16
	06/29/06	3,596.56	sheen	16.29	0.00	3,580.27
	07/14/06	3,596.56	16.46	16.49	0.03	3,580.10
	07/28/06	3,596.56	sheen	17.86	0.00	3,578.70
	08/11/06	3,596.56	sheen	16.56	0.00	3,580.00
	09/07/06	3,596.56	-	14.44	0.00	3,582.12
	09/16/06	3,596.56	sheen	14.72	0.00	3,581.84
	10/04/06	3,596.56	sheen	14.50	0.00	3,582.06
	11/17/06	3,596.56	sheen	15.35	0.00	3,581.21
MW-6	03/21/06	3,596.66	sheen	14.71	0.00	3,581.95
	06/22/06	3,596.66	sheen	14.82	0.00	3,581.84
	09/07/06	3,596.66	-	12.33	0.00	3,584.33
	09/16/06	3,596.66	sheen	12.64	0.00	3,584.02
	10/04/06	3,596.66	sheen	12.38	0.00	3,584.28
	11/17/06	3,596.66	-	13.30	0.00	3,583.36
MW-7	01/12/06	3,596.96	sheen	16.65	0.00	3,580.31
	01/25/06	3,596.96	sheen	16.70	0.00	3,580.26
	02/08/06	3,596.96	sheen	16.72	0.00	3,580.24
	02/23/06	3,596.96	sheen	16.78	0.00	3,580.18
	03/08/06	3,596.96	sheen	16.68	0.00	3,580.28
	03/21/06	3,596.96	sheen	16.77	0.00	3,580.19
	03/24/06	3,596.96	sheen	16.85	0.00	3,580.11
	03/30/06	3,596.96	sheen	16.82	0.00	3,580.14
	04/19/06	3,596.96	sheen	16.67	0.00	3,580.29
	05/03/06	3,596.96	sheen	16.82	0.00	3,580.14
	06/02/06	3,596.96	sheen	16.83	0.00	3,580.13
	06/15/06	3,596.96	sheen	16.88	0.00	3,580.08
	06/22/06	3,596.96	-	16.82	0.00	3,580.14
	06/29/06	3,596.96	sheen	16.69	0.00	3,580.27
	07/14/06	3,596.96	sheen	16.92	0.00	3,580.04
	07/28/06	3,596.96	sheen	17.54	0.00	3,579.42
	08/11/06	3,596.96	sheen	16.99	0.00	3,579.97
	09/07/06	3,596.96	-	15.08	0.00	3,581.88

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-7	09/16/06	3,596.96	-	15.39	0.00	3,581.57
	10/04/06	3,596.96	sheen	15.11	0.00	3,581.85
	11/17/06	3,596.96	-	15.81	0.00	3,581.15
MW-8	03/21/06	3,597.35	sheen	16.54	0.00	3,580.81
	06/22/06	3,597.35	sheen	16.65	0.00	3,580.70
	09/07/06	3,597.35	-	14.29	0.00	3,583.06
	09/16/06	3,597.35	-	14.35	0.00	3,583.00
	10/04/06	3,597.35	sheen	14.34	0.00	3,583.01
	11/17/06	3,597.35	-	15.00	0.00	3,582.35
MW-9	03/21/06	3,593.95	-	18.17	0.00	3,575.78
	06/22/06	3,593.95	-	18.16	0.00	3,575.79
	09/07/06	3,593.95	-	17.90	0.00	3,576.05
	11/16/06	3,593.95	-	18.09	0.00	3,575.86
MW-10	03/21/06	3,594.97	sheen	19.75	0.00	3,575.22
	06/22/06	3,594.97	-	19.86	0.00	3,575.11
	09/07/06	3,594.97	-	18.12	0.00	3,576.85
	11/17/06	3,594.97	-	18.37	0.00	3,576.60
MW-11	03/21/06	3,593.77	-	19.07	0.00	3,574.70
	06/22/06	3,593.77	-	19.20	0.00	3,574.57
	09/07/06	3,593.77	-	17.87	0.00	3,575.90
	11/16/06	3,593.77	-	18.72	0.00	3,575.05
MW-12	01/12/06	3,596.39	18.01	18.26	0.25	3,578.34
	01/25/06	3,596.39	18.07	18.30	0.23	3,578.29
	02/08/06	3,596.39	18.08	18.32	0.24	3,578.27
	02/23/06	3,596.39	18.10	18.30	0.20	3,578.26
	03/08/06	3,596.39	18.08	18.30	0.22	3,578.28
	03/21/06	3,596.39	18.11	18.36	0.25	3,578.24
	03/24/06	3,596.39	18.06	18.28	0.22	3,578.30
	03/30/06	3,596.39	18.17	18.43	0.26	3,578.18
	04/19/06	3,596.39	18.02	18.25	0.23	3,578.34
	05/03/06	3,596.39	18.13	18.40	0.27	3,578.22
	06/02/06	3,596.39	18.04	18.37	0.33	3,578.30
	06/15/06	3,596.39	18.18	18.72	0.54	3,578.13
	06/22/06	3,596.39	18.13	18.42	0.29	3,578.22

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-12	06/29/06	3,596.39	17.97	18.22	0.25	3,578.38
	07/14/06	3,596.39	18.17	18.44	0.27	3,578.18
	07/28/06	3,596.39	18.25	18.54	0.29	3,578.10
	08/11/06	3,596.39	17.61	18.01	0.40	3,578.72
	09/07/06	3,596.39	17.29	17.65	0.36	3,579.05
	09/16/06	3,596.39	17.42	17.89	0.47	3,578.90
	10/04/06	3,596.39	17.34	17.71	0.37	3,578.99
	11/17/06	3,596.39	17.56	18.02	0.46	3,578.76
MW-13	03/21/06	3,592.71	sheen	19.70	0.00	3,573.01
	06/22/06	3,592.71	sheen	19.71	0.00	3,573.00
	07/28/06	3,592.71	-	19.77	0.00	3,572.94
	08/11/06	3,592.71	-	15.63	0.00	3,577.08
	09/07/06	3,592.71	-	17.57	0.00	3,575.14
	09/16/06	3,592.71	-	17.66	0.00	3,575.05
	10/04/06	3,592.71	sheen	17.63	0.00	3,575.08
	11/17/06	3,592.71	-	18.61	0.00	3,574.10
MW-14	03/21/06	3,592.73	-	19.53	0.00	3,573.20
	06/22/06	3,592.73	-	19.54	0.00	3,573.19
	09/07/06	3,592.73	-	17.09	0.00	3,575.64
	11/16/06	3,592.73	-	18.46	0.00	3,574.27
MW-15	03/21/06	3,595.93	-	17.82	0.00	3,578.11
	06/22/06	3,595.93	-	17.85	0.00	3,578.08
	09/07/06	3,595.93	-	16.81	0.00	3,579.12
	11/17/06	3,595.93	-	17.22	0.00	3,578.71
MW-16	01/12/06	3,595.72	sheen	15.50	0.00	3,580.22
	01/25/06	3,595.72	sheen	15.52	0.00	3,580.20
	02/08/06	3,595.72	sheen	15.51	0.00	3,580.21
	02/23/06	3,595.72	sheen	15.53	0.00	3,580.19
	03/08/06	3,595.72	sheen	15.52	0.00	3,580.20
	03/21/06	3,595.72	sheen	15.59	0.00	3,580.13
	03/24/06	3,595.72	sheen	15.64	0.00	3,580.08
	03/30/06	3,595.72	sheen	15.63	0.00	3,580.09
	04/19/06	3,595.72	sheen	15.53	0.00	3,580.19
	05/03/06	3,595.72	sheen	15.64	0.00	3,580.08
	06/02/06	3,595.72	sheen	15.34	0.00	3,580.38

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-19	06/15/06	3,595.72	sheen	15.68	0.00	3,580.04
	06/22/06	3,595.72	-	16.32	0.00	3,579.40
	06/29/06	3,595.72	sheen	15.41	0.00	3,580.31
	07/14/06	3,595.72	sheen	15.72	0.00	3,580.00
	07/28/06	3,595.72	sheen	15.74	0.00	3,579.98
	08/11/06	3,595.72	sheen	15.78	0.00	3,579.94
	09/07/06	3,595.72	-	14.45	0.00	3,581.27
	09/16/06	3,595.72	sheen	14.68	0.00	3,581.04
	10/04/06	3,595.72	sheen	14.49	0.00	3,581.23
	11/17/06	3,595.72	-	14.95	0.00	3,580.77
MW-20	03/21/06	3,597.64	-	16.92	0.00	3,580.72
	06/22/06	3,597.64	-	16.90	0.00	3,580.74
	09/07/06	3,597.64	-	14.39	0.00	3,583.25
	11/17/06	3,597.64	-	15.47	0.00	3,582.17
MW-21	03/21/06	3,596.88	-	15.72	0.00	3,581.16
	06/22/06	3,596.88	-	15.77	0.00	3,581.11
	09/07/06	3,596.88	-	12.42	0.00	3,584.46
	11/17/06	3,596.88	-	13.88	0.00	3,583.00
MW-23	03/21/06	3,598.07	-	17.62	0.00	3,580.32
	06/22/06	3,598.07	-	17.60	0.00	3,580.32
	09/07/06	3,598.07	-	15.82	0.00	3,580.32
	11/16/06	3,598.07	-	16.68	0.00	3,580.32
MW-24	03/21/06	3,598.01	-	16.61	0.00	3,581.40
	06/22/06	3,598.01	-	16.74	0.00	3,581.27
	09/07/06	3,598.01	-	13.41	0.00	3,584.60
	11/17/06	3,598.01	-	14.86	0.00	3,583.15
MW-25	03/21/06	3,599.25	-	18.46	0.00	3,580.79
	06/22/06	3,599.25	-	18.56	0.00	3,580.69
	09/07/06	3,599.25	-	16.27	0.00	3,582.98
	11/16/06	3,599.25	-	16.94	0.00	3,582.31
MW-26	03/21/06	3,596.26	-	14.6	0.00	3,581.66
	06/22/06	3,596.26	-	14.59	0.00	3,581.67
	09/07/06	3,596.26	-	13.75	0.00	3,582.51

TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-26	11/17/06	3,596.26	-	13.61	0.00	3,582.65
MW-27	03/21/06	3,592.64	-	14.06	0.00	3,578.58
	06/22/06	3,592.64	-	14.03	0.00	3,578.61
	09/07/06	3,592.64	-	12.54	0.00	3,580.10
	11/17/06	3,592.64	-	13.80	0.00	3,578.84
MW-28	03/21/06	3,598.02	-	23.72	0.00	3,574.30
	06/22/06	3,598.02	-	24.73	0.00	3,573.29
	09/07/06	3,598.02	-	25.04	0.00	3,572.98
	11/16/06	3,598.02	-	19.00	0.00	3,579.02
MW-29	03/21/06	3,595.29	-	21.57	0.00	3,573.72
	06/22/06	3,595.29	-	21.58	0.00	3,573.71
	09/07/06	3,595.29	-	21.12	0.00	3,574.17
	11/17/06	3,595.29	-	21.47	0.00	3,573.82
MW-30	03/21/06	3,595.74	-	22.13	0.00	3,573.61
	06/22/06	3,595.74	-	22.16	0.00	3,573.58
	09/07/06	3,595.74	-	22.00	0.00	3,573.74
	11/16/06	3,595.74	-	22.13	0.00	3,573.61
MW-31	03/21/06	3,593.77	-	21.09	0.00	3,572.68
	06/22/06	3,593.77	-	21.12	0.00	3,572.65
	09/07/06	3,593.77	-	19.94	0.00	3,573.83
	11/17/06	3,593.77	-	20.48	0.00	3,573.29
MW-32	01/12/06	3,592.11	sheen	17.60	0.00	3,574.51
	01/25/06	3,592.11	sheen	21.70	0.00	3,570.41
	02/08/06	3,592.11	sheen	19.69	0.00	3,572.42
	02/23/06	3,592.11	sheen	19.70	0.00	3,572.41
	03/08/06	3,592.11	sheen	19.72	0.00	3,572.39
	03/21/06	3,592.11	sheen	19.70	0.00	3,572.41
	03/24/06	3,592.11	sheen	19.73	0.00	3,572.38
	03/30/06	3,592.11	sheen	19.71	0.00	3,572.40
	04/19/06	3,592.11	sheen	19.69	0.00	3,572.42
	05/03/06	3,592.11	sheen	19.69	0.00	3,572.42
	06/02/06	3,592.11	sheen	19.71	0.00	3,572.40
	06/15/06	3,592.11	sheen	19.75	0.00	3,572.36



TABLE 1

## 2006 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-32	06/22/06	3,592.11	sheen	19.72	0.00	3,572.39
	06/29/06	3,592.11	sheen	19.98	0.00	3,572.13
	07/14/06	3,592.11	-	19.73	0.00	3,572.38
	07/28/06	3,592.11	sheen	19.79	0.00	3,572.32
	08/11/06	3,592.11	sheen	19.79	0.00	3,572.32
	09/07/06	3,592.11	-	18.47	0.00	3,573.64
	09/16/06	3,592.11	sheen	17.76	0.00	3,574.35
	10/04/06	3,592.11	sheen	18.51	0.00	3,573.60
	11/17/06	3,592.11	-	18.54	0.00	3,573.57
MW-33	03/21/06	3,592.55	-	20.02	0.00	3,572.53
	06/22/06	3,592.55	-	20.06	0.00	3,572.49
	09/07/06	3,592.55	-	17.37	0.00	3,575.18
	11/16/06	3,592.55	-	18.58	0.00	3,573.97
MW-37	03/21/06	3,592.00	-	20.05	0.00	3,571.95
	06/22/06	3,592.00	-	20.07	0.00	3,571.93
	09/07/06	3,592.00	-	17.18	0.00	3,574.82
	11/17/06	3,592.00	-	18.23	0.00	3,573.77
MW-38	03/21/06	3,592.14	sheen	20.07	0.00	3572.07
	06/22/06	3,592.14	sheen	20.10	0.00	3572.04
	07/28/06	3,592.14	sheen	19.14	0.00	3573
	08/11/06	3,592.14	-	20.17	0.00	3571.97
	09/07/06	3,592.14	-	17.63	0.00	3574.51
	09/16/06	3,592.14	-	17.71	0.00	3574.43
	10/04/06	3,592.14	sheen	17.67	0.00	3574.47
	11/17/06	3,592.14	-	18.60	0.00	3573.54

Note: NM denotes well not gauged due to access restrictions.  
Elevations based on North American Vertical Datum of 1929.

TABLE 2

## 2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

*Results 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-1	03/21/06	0.0410	<0.02	0.0657	0.1040	
	06/22/06	0.0556	<0.005	0.0555	0.0730	
	09/07/06	0.0429	<0.001	0.0394	0.1160	
	11/17/06	0.0427	<0.001	0.0729	0.1120	
MW-2	03/21/06	0.0641	<0.005	0.045	<0.005	
	06/22/06	0.0722	<0.001	0.054	0.0025	
	09/07/06	0.0369	<0.001	0.016	0.0141	
	11/16/06	0.0263	<0.001	0.008	0.0046	
MW-3	03/21/06	0.0063	<0.001	0.0021	0.0035	
	06/22/06	0.0028	<0.001	<0.001	<0.001	
	09/07/06	0.0091	<0.001	0.0101	0.0104	
	11/17/06	0.0040	<0.001	0.0042	0.0040	
MW-4	03/21/06	Not Sampled Due to PSH in Well				
	06/22/06	Not Sampled Due to PSH in Well				
	09/07/06	Not Sampled Due to PSH in Well				
	11/17/06	Not Sampled Due to PSH in Well				
MW-5	03/21/06	Not Sampled Due to PSH in Well				
	06/22/06	0.103	<0.005	0.080	0.0694	
	09/07/06	0.006	<0.001	0.015	0.0262	
	11/17/06	0.0069	<0.001	0.0036	0.0027	
MW-6	03/21/06	0.0059	<0.001	0.0083	0.0140	
	06/22/06	0.0023	<0.001	0.0027	0.0035	
	09/07/06	0.0118	<0.001	0.0420	0.0717	
	11/17/06	0.0063	<0.001	0.0110	0.0161	
MW-7	03/21/06	0.0034	<0.001	0.0040	0.0120	
	06/22/06	0.0017	<0.001	0.0023	0.0036	
	09/07/06	0.0039	<0.001	0.0066	0.0078	
	11/17/06	0.0011	<0.001	0.0025	0.0046	
MW-8	03/21/06	0.0073	<0.001	<0.001	0.0025	

TABLE 2

## 2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

Results 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	06/22/06	0.0055	<0.001	<0.001	0.0018	
	09/07/06	0.0019	<0.001	0.003	0.0110	
	11/17/06	<0.001	<0.001	<0.001	0.0021	
MW-9	03/21/06	<0.001	<0.001	<0.001	0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-10	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	0.045	<0.001	0.052	0.063	
	11/17/06	0.0066	<0.001	0.0048	0.0013	
MW-11	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-12	03/21/06	Not Sampled Due to PSH in Well				
	06/22/06	Not Sampled Due to PSH in Well				
	09/07/06	Not Sampled Due to PSH in Well				
	11/16/06	Not Sampled Due to PSH in Well				
MW-13	03/21/06	0.0509	<0.001	0.0357	<0.001	
	06/22/06	0.0494	<0.001	0.0360	<0.001	
	09/07/06	0.0062	<0.001	0.0023	<0.001	
	11/17/06	0.0058	<0.001	0.0023	<0.001	
MW-14	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	Not Sampled on Current Sample Schedule				
	11/16/06	<0.001	<0.001	<0.001	0.0012	
MW-15	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	

TABLE 2

## 2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

*Results are reported in mg/L.*

SAMPLE LOCATION		SAMPLE DATE	SW 846-8021B, 5030			
			BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES
NMOCD REGULATORY LIMIT			0.01	0.75	0.75	0.62
MW-15	09/07/06	<0.001	<0.001	0.002	0.002	
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-16	03/21/06	0.0404	<0.02	<0.02	<0.02	
	06/22/06	0.0411	<0.001	0.0139	0.0075	
	09/07/06	0.0230	<0.001	0.0326	0.0307	
	11/17/06	0.0084	<0.001	0.0058	0.0061	
MW-20	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-21	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-23	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-24	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	Not Sampled on Current Sample Schedule				
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-25	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-26	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	

TABLE 2

## 2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

*Results 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-26	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-27	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	Not Sampled on Current Sample Schedule				
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-28	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-29	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-30	03/21/06	Not Sampled on Current Sample Schedule				
	06/22/06	Not Sampled on Current Sample Schedule				
	09/07/06	Not Sampled on Current Sample Schedule				
	11/16/06	<0.001	<0.001	<0.001	<0.001	
MW-31	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	
	11/17/06	<0.001	<0.001	<0.001	<0.001	
MW-32	03/21/06	0.0012	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	0.0098	<0.001	0.009	0.0165	
	11/17/06	0.0068	<0.001	0.0028	0.0029	
MW-33	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	<0.001	<0.001	<0.001	<0.001	
	11/17/06	<0.001	<0.001	<0.001	<0.001	

TABLE 2

## 2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.  
BOB DURHAM  
MONUMENT, NEW MEXICO

*Results 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-37	03/21/06	<0.001	<0.001	<0.001	<0.001	
	06/22/06	<0.001	<0.001	<0.001	<0.001	
	09/07/06	0.006	<0.001	0.004	0.014	
	11/17/06	0.0043	<0.001	0.0039	0.001	
MW-38	03/21/06	0.0249	<0.001	0.136	0.0646	
	06/22/06	0.0238	<0.001	0.170	0.0791	
	09/07/06	0.0230	<0.001	0.028	0.0512	
	11/17/06	0.0145	<0.001	0.0348	0.0022	

Note: EB-1 denotes an equipment blank collected on sampling date.