AP - 9

ANNUAL MONITORING REPORT

YEAR(S): 2008

2008
ANNUAL MONITORING REPORT

HDO-90-23

NE ¼, NW ¼, SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: HDO-90-23
NMOCD REFERENCE AP-009

PREPARED FOR:

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NOVA
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February 2009

Ronald K. Rounsaville
Project Manager

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President

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ENCLOSED ON DATA DISK

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 HDO-90-23 Site, which was formally the responsibility of Texas New Mexico Pipeline Company (TNM), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2008 only. However, historic data tables as well as 2008 laboratory analytical reports are provided on the enclosed data disk. A Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2008 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were sampled as per a NMOCD directive.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located in the NE 1/4 of the NW 1/4 of Section 6, Township 20 South, Range 37 East in Lea County. The HDO 90-23 release was discovered by TNM personnel and reported on March 27, 1990. According to the release report, an estimated 750 barrels of crude oil were released and 550 barrels were recovered. The release occurred from a 14-inch Texas-New Mexico Pipeline Company (TNM) pipeline and was attributed to structural failure associated with internal pipeline corrosion. Limited excavation occurred around the release point to repair the pipeline. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A.

In February 1998, nine soil borings were advanced and five monitoring wells were installed by a previous contractor to assess the subsurface conditions. In September 1999, three additional monitor wells were installed. In the fall of 2002, monitor wells MW-9 through MW-15 were installed. In November 2004, NOVA installed two additional monitor wells (MW-16 and MW-17) to further delineate the southeast extent of the dissolved phase plume.

On August 9, 2005, NOVA personnel discovered and documented a leaking produced water pipeline approximately 100 feet north of monitor well MW-3. The leaking pipeline was reported to NMOCD, Hobbs District Office on the same day. The pipeline was identified as a Mar Oil and Gas (MAR) Pipeline. A MAR employee was successful in closing an off site valve to stop the produced water flow. On August 12, 2005, MAR employees began limited excavation surrounding monitor well MW-3, stockpiling the soil on site. Since the activities of August 2005, the excavated soil has been stockpiled on site.

In February 2007, NOVA personnel discovered and documented a crude oil release approximately 500 feet northwest of monitor well MW-15. The release was associated with a production pump jack operated by MAR and to date this release has not been remediated.

Currently, thirteen groundwater monitor wells (MW-2 through MW-6, MW-8, MW-9 and MW-12 through MW-17) and two product recovery wells (RW-1 and RW-2) are onsite.

FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was detected in monitor wells MW-2, MW-6 and MW-15 during the 2008 annual reporting period. A maximum PSH thickness of 1.32 feet in monitor well MW-6 was recorded on September 25, 2008 and is shown on Table 1. The average thickness of PSH in monitor and recovery wells containing PSH during 2008 was 0.97 feet. Approximately twenty gallons of PSH were recovered from the site during the 2008 reporting period. Approximately 803 gallons (19.1 barrels) of PSH have been recovered through automated and manual recovery methods since project inception.

Groundwater Monitoring

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 June 21, 2005.

NMOCD Approved Sampling Schedule	
MW-1	Plugged and Abandoned
MW-2	Quarterly
MW-3	Quarterly
MW-4	Semi-Annually
MW-5	Semi-Annually
MW-6	Quarterly
MW-7	Plugged and Abandoned
MW-8	Annually
MW-9	Quarterly
MW-10	Plugged and Abandoned
MW-11	Plugged and Abandoned
MW-12	Quarterly
MW-13	Quarterly
MW-14	Quarterly
MW-15	Quarterly
MW-16	Quarterly
MW-17	Quarterly

The site monitor wells were gauged and sampled on February 8, May 9, August 13, and November 6, 2008. During each sampling event, sampled monitor wells were purged a minimum of three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed utilizing measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D. Groundwater elevation data for 2008 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 0.0009 feet/foot to the southeast as measured between monitor wells MW-2 and MW-17. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3,413.54 and 3,420.50 feet above mean sea level, in recovery well RW-1 and monitor well MW-15 on August 13, 2008.

Currently, thirteen monitor wells and two recovery wells are located on site.

LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2008 were delivered to TraceAnalysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B, and Polynuclear Aromatic Hydrocarbons (PAH) concentrations by EPA Method 8270C. Monitoring wells containing measurable amounts of PSH were analyzed for Total Petroleum Hydrocarbons (TPH) concentrations by EPA Method 8015M. A listing of BTEX and TPH constituent concentrations for 2008 are summarized in Table 2 and the PAH constituent concentrations for 2008 are summarized in Table 3. Copies of the laboratory reports generated for 2008 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D. Plains, at the request of the NMOCD, collected groundwater samples below PSH levels in all monitor wells containing PSH.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 1.93 mg/L during the 4th quarter to 2.85 mg/L during the 2nd quarter of 2008. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four quarters of the reporting period.. Toluene concentrations ranged from 0.0118 mg/L during the 4th quarter to 0.0613 mg/L during the 1st quarter of 2008. Toluene concentrations were below the NMOCD regulatory standards of 0.75 mg/L during all four quarters of 2008. Ethylbenzene concentrations ranged from 3.28 mg/L during the 1st quarter to 0.748 mg/L during the 4th quarter of 2008. Ethylbenzene concentrations were above the NMOCD regulatory standards of 0.75 mg/L during the 1st, 2nd and 3rd quarters and below the NMOCD regulatory standards during the 4th quarter of the reporting period. Xylene concentrations ranged from 1.08 mg/L during the 1st quarter to 0.0964 mg/L during the 4th quarter of the reporting period. Xylene concentrations were above NMOCD regulatory standards of 0.62 mg/L during the 3rd and 4th quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0729 mg/L), 1-methylnaphthalene (0.139 mg/L) and 2-methylnaphthalene (0.110 mg/L). Additional PAH constituents detected above MDLs include phenanthrene (0.0227 mg/L) and dibenzofuran (0.0175 mg/L), which are below WQCC standards.

Monitor well MW-3 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 3rd quarter to 0.0446 mg/L during the 2nd quarter of 2008. Benzene concentrations were above NMOCD regulatory standards during the 1st and 2nd quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 3rd quarter to 0.0463 mg/L during the 1st quarter of 2008. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from 0.0020 mg/L during the 4th quarter to 0.0034 mg/L during the 3rd quarter of 2008. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for 1-methylnaphthalene (0.0203 mg/L), dibenzofuran (0.0032 mg/L), fluorine (0.00202 mg/L), and phenanthrene (0.00152 mg/L), which are below WQCC standards.

Monitor well MW-4 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2nd and 4th quarter sampling events. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-seven consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-5 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2nd and 4th quarter sampling events. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last sixteen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-6 is monitored on a quarterly schedule. Monitor well MW-6 was not sampled during the 1st, 2nd and 3rd quarters of the reporting period, due to the presence of PSH in the monitor well. PSH thicknesses of 1.01 feet, 1.03 feet and 1.31 feet were reported during the 1st, 2nd and 3rd quarters of 2008, respectively. Benzene concentrations were above the NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 1.07 mg/L. Toluene concentrations were above the NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 0.776 mg/L. Ethylbenzene concentrations were above the NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 1.37 mg/L. Xylene concentrations were above the NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 2.8 mg/L. Analytical results indicated a total TPH result of 318.5 mg/L. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.238 mg/L), 1-methylnaphthalene (0.532 mg/L) and 2-methylnaphthalene (0.50 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.072 mg/L), phenanthrene (0.102 mg/L) and dibenzofuran (0.0833 mg/L), which are below WQCC standards.

Monitor well MW-8 is sampled on an annual schedule and analytical results indicate Benzene concentrations were below NMOCD regulatory standards during the 4th quarter of the reporting

period with a concentration of 0.0028 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 0.001 mg/L. Ethylbenzene concentrations were below the MDL during the 4th quarter of the reporting period. Xylene concentrations were below the NMOCD regulatory standards during the 4th quarter of the reporting period with a concentration of 0.0012 mg/L. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirty-five consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-9 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-12 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-five consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-13 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last fifteen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-14 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0045 mg/L during the 2nd and 3rd quarters to 0.0083 mg/L during the 4th quarter of 2008. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from 0.0011 mg/L during the 2nd quarter to 0.0053 mg/L during the 1st quarter of 2008. Toluene concentrations were below the NMOCD regulatory standards during all four quarters of 2008. Ethylbenzene concentrations ranged from 0.0865 mg/L during the 2nd quarter to 0.325 mg/L during the 4th quarter of 2008. Ethylbenzene concentrations were below the NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from 0.0213 mg/L during the 2nd quarter to 0.0780 mg/L during the 4th quarter of the reporting period. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for chrysene (0.000703 mg/L). Additional PAH constituents detected above MDLs include naphthalene (0.00638 mg/L), 1-methylnaphthalene (0.0141 mg/L), 2-methylnaphthalene (0.00647 mg/L), fluorene (0.000874 mg/L), phenanthrene (0.00465 mg/L) and dibenzofuran (0.00458 mg/L), which are below WQCC standards.

Monitor well MW-15 is monitored / sampled on a quarterly schedule. Monitor well MW-15 was not sampled in the 2nd quarter of the reporting period, due to the presence of PSH in the monitor well. Analytical results for the 1st, 3rd and 4th quarters of the reporting period indicate benzene concentrations were <0.001 mg/L. Benzene concentrations were below NMOCD regulatory standards during the three sampled quarters of the reporting period. Toluene, ethylbenzene and xylene constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the three sampled quarters of 2008, with the exception of the 1st quarter. The 1st quarter analytical results indicate an ethylbenzene concentration of 0.0063 mg/L and a xylene concentration of 0.0093 mg/L. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for 1-methylnaphthalene (0.00194 mg/L), 2-methylnaphthalene (0.000615 mg/L) and phenanthrene (0.000857 mg/L), which are below WQCC standards.

Monitor well MW-16 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-17 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during all four quarters of 2008. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last sixteen consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Recovery well RW-1 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0126 mg/L during the 3rd quarter to 1.06 mg/L during the 4th quarter of 2008. Benzene concentrations were above NMOCD regulatory standards all four quarters of the reporting period. Toluene concentrations ranged from <0.010 mg/L during the 2nd quarter to 0.0431 mg/L during the 4th quarter of 2008. Toluene concentrations were below the NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.005 mg/L during the 3rd quarter to 0.494 mg/L during the 1st quarter of 2008. Ethylbenzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from 0.0082 mg/L during the 3rd quarter to 0.249 mg/L during the 1st quarter of 2008. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.0187 mg/L), 1-methylnaphthalene (0.0136 mg/L), 2-methylnaphthalene (0.0106 mg/L), dibenzofuran (0.00117 mg/L), fluorine (0.00079 mg/L), and phenanthrene (0.000549 mg/L), which are below WQCC standards.

Recovery well RW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 3rd quarter to 0.264 mg/L during the 4th quarter of 2008. Benzene concentrations were above NMOCD regulatory standards during the

1st, 2nd and 4th quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 1st, 2nd and 3rd quarters to 0.0014 mg/L during the 4th quarter of 2008. Toluene concentrations were below the NMOCD regulatory standards during all four quarters of the reporting period. Ethylbenzene concentrations ranged from <0.001 mg/L during the 1st and 3rd quarters to 0.0204 mg/L during the 4th quarter of 2008. Ethylbenzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1st and 3rd quarters to 0.0187 mg/L during the 4th quarter of 2008. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for 1-methylnaphthalene (0.000774 mg/L), which are below WQCC standards.

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 annual monitoring period of 2008. Currently, there are thirteen groundwater monitor wells (MW-2 through MW-6, MW-8, MW-9 and MW-12 through MW-17) and two recovery wells (RW-1 and RW-2) on-site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0009 feet/foot to the southeast.

Monitor wells MW-6 (first, second, and third quarters) and MW-15 (second quarter only) contained PSH and were not sampled in one or more quarters during the reporting period. The average thickness of PSH in monitor and recovery wells containing PSH during 2008 was 0.97 feet.

Approximately twenty gallons of PSH were recovered from the site during the 2008 reporting period. Approximately 803 gallons (19.1 barrels) of PSH have been recovered through automated and manual recovery methods since project inception.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2008 monitoring period indicates BTEX constituent concentrations are below NMOCD regulatory standards in ten of the thirteen monitor wells and two recovery wells. Groundwater samples from monitor well MW-6 exhibited elevated TPH concentrations for GRO and DRO. Analytical results on groundwater samples collected indicate PAH distributions mirrored those of BTEX distributions over the site.

ANTICIPATED ACTIONS

Plains respectfully requests NMOCD approval to modify the sampling schedule for the following monitor well:

- Monitor well MW-9 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to a semi-annual schedule. This upgradient monitor well was

installed during the 1st quarter 2003 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-five consecutive quarters.

- Monitor well MW-16 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to an annual schedule. This down gradient monitor well was installed during the 4th quarter 2004 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last seventeen consecutive quarters. Down gradient monitoring is maintained by monitor well MW-17.

Groundwater monitoring, quarterly sampling, manual weekly PSH recovery will continue in 2009. An Annual Monitoring report will be submitted to the NMOCD before April 1, 2010.

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

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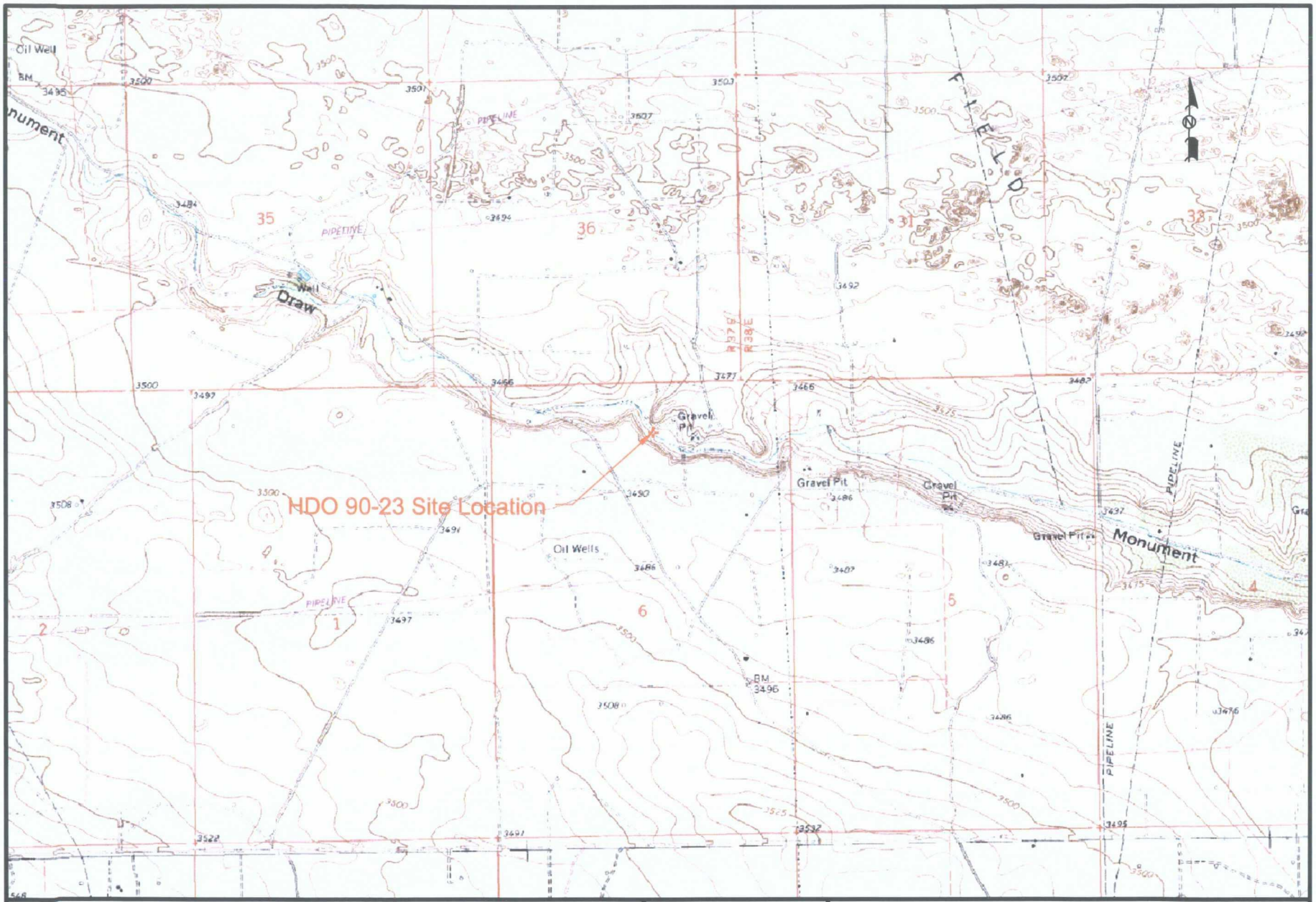
FIGURES



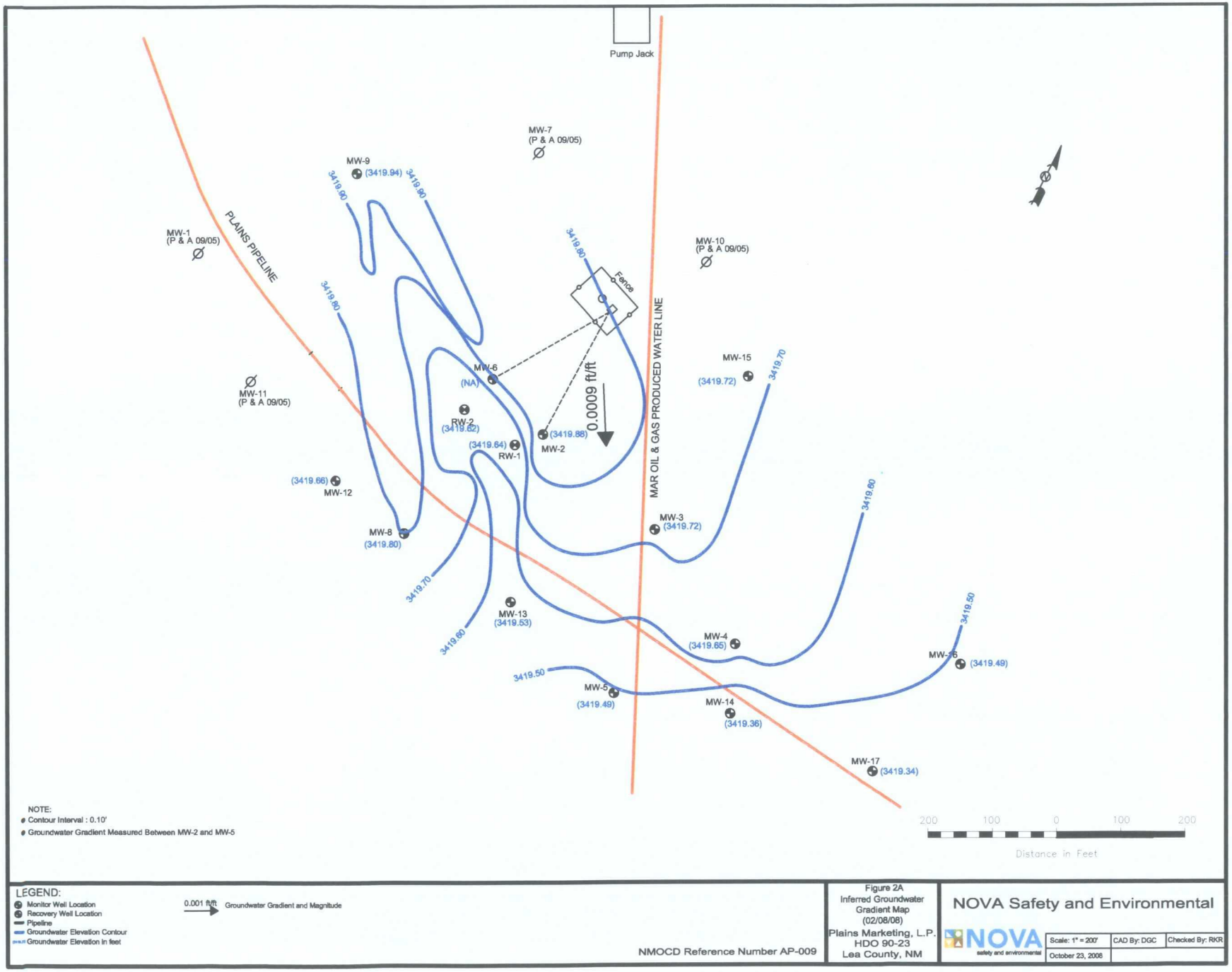
NMOCD Reference # AP-009

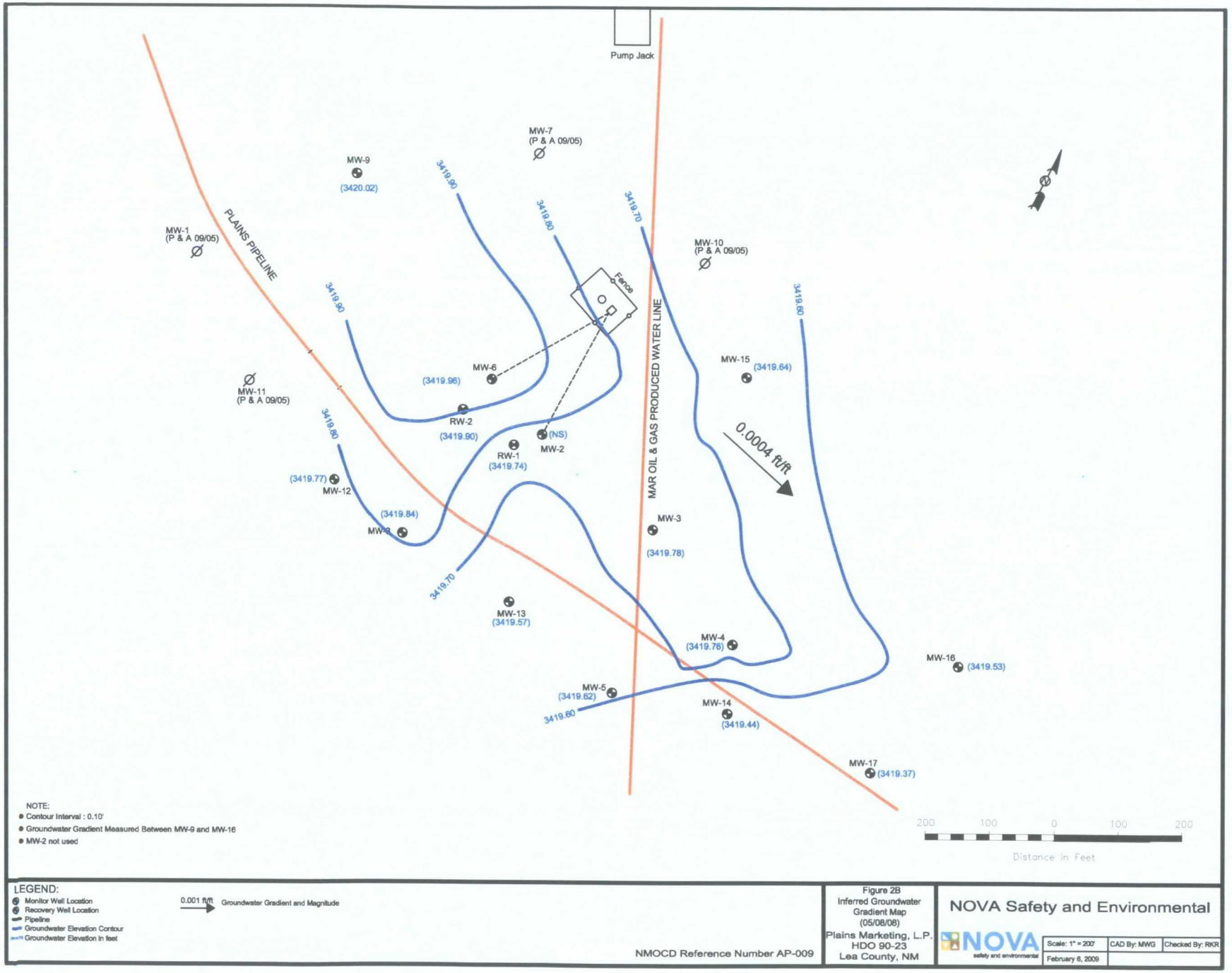
Figure 1
Site Location Map

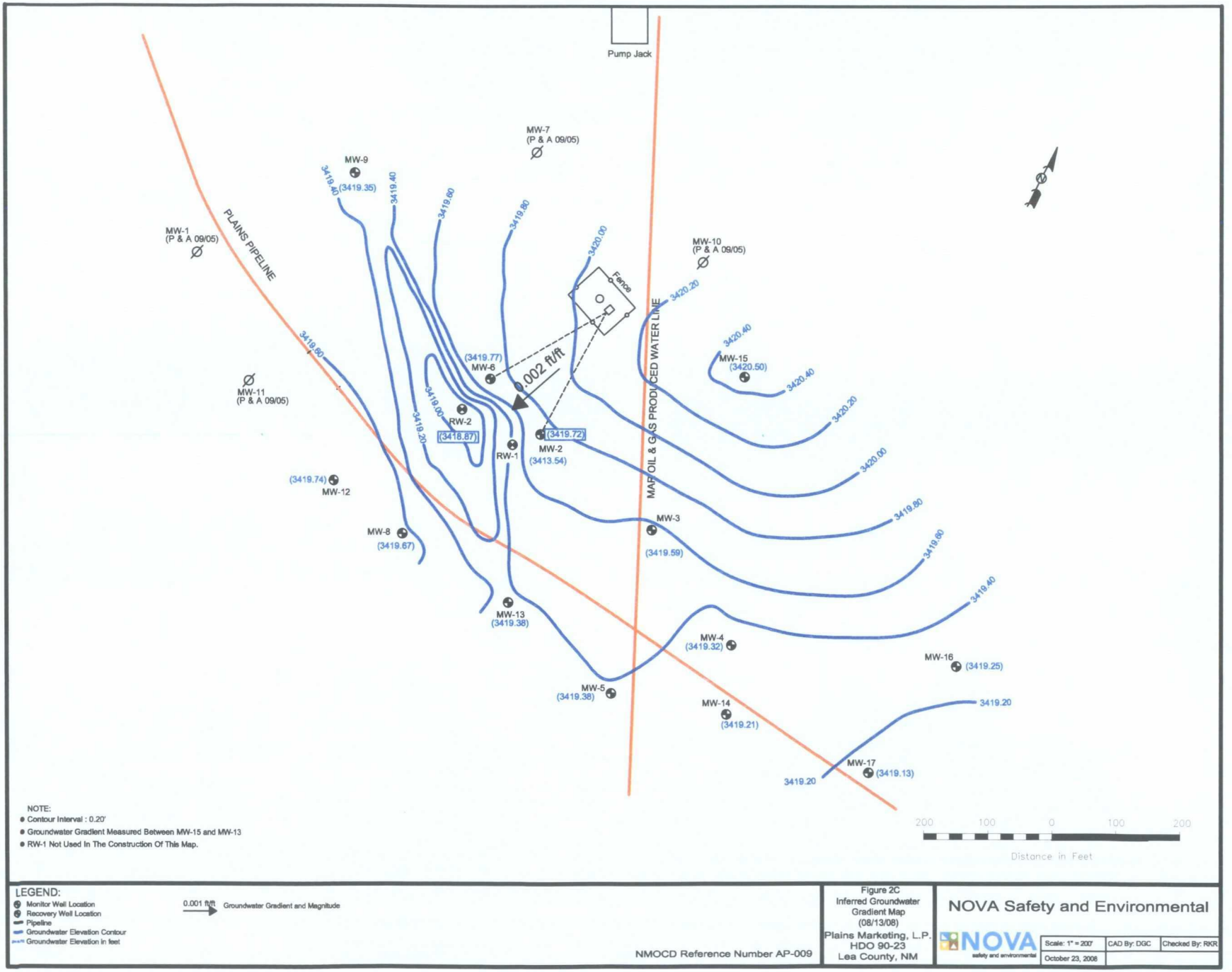
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

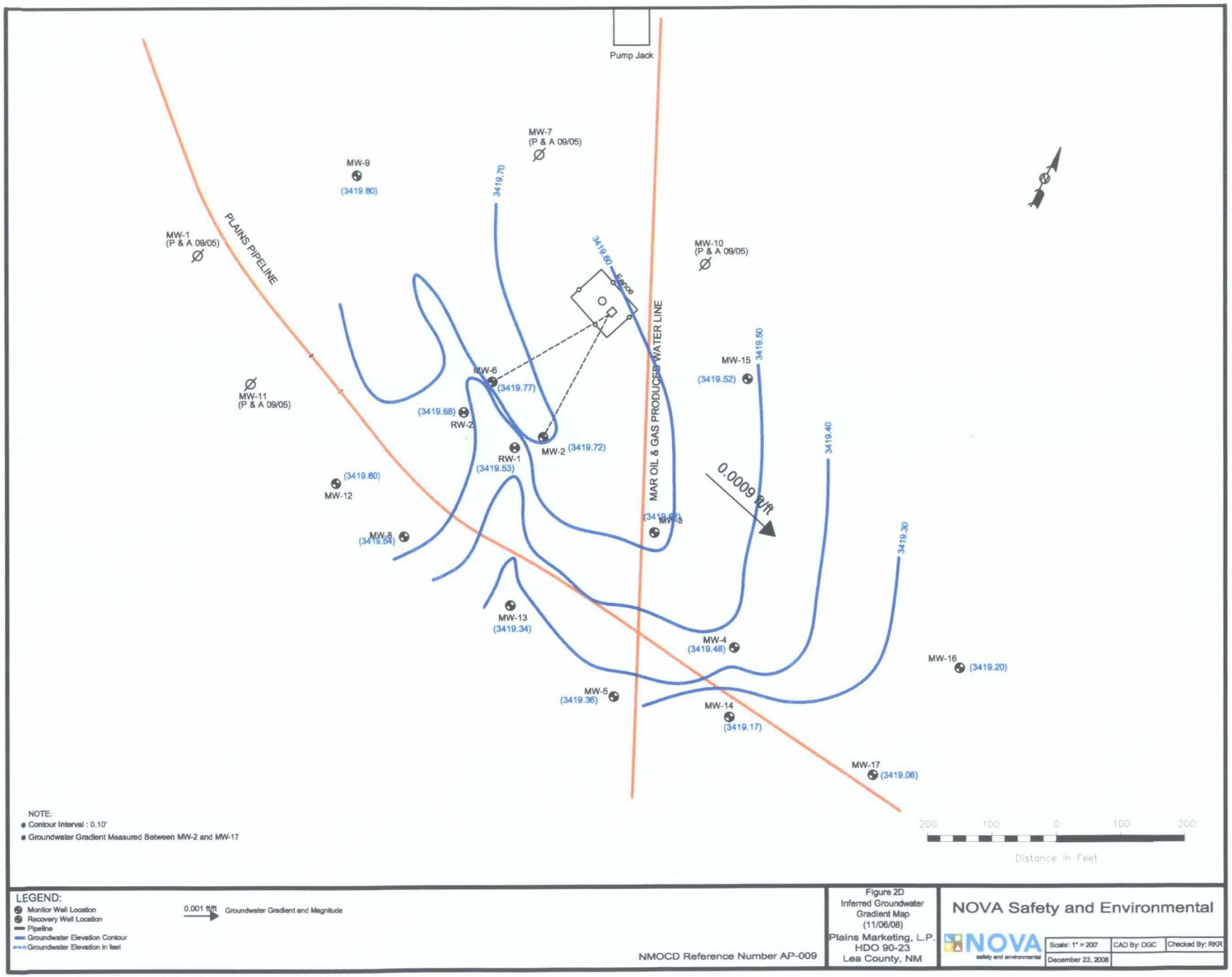
NOVA Safety and Environmental

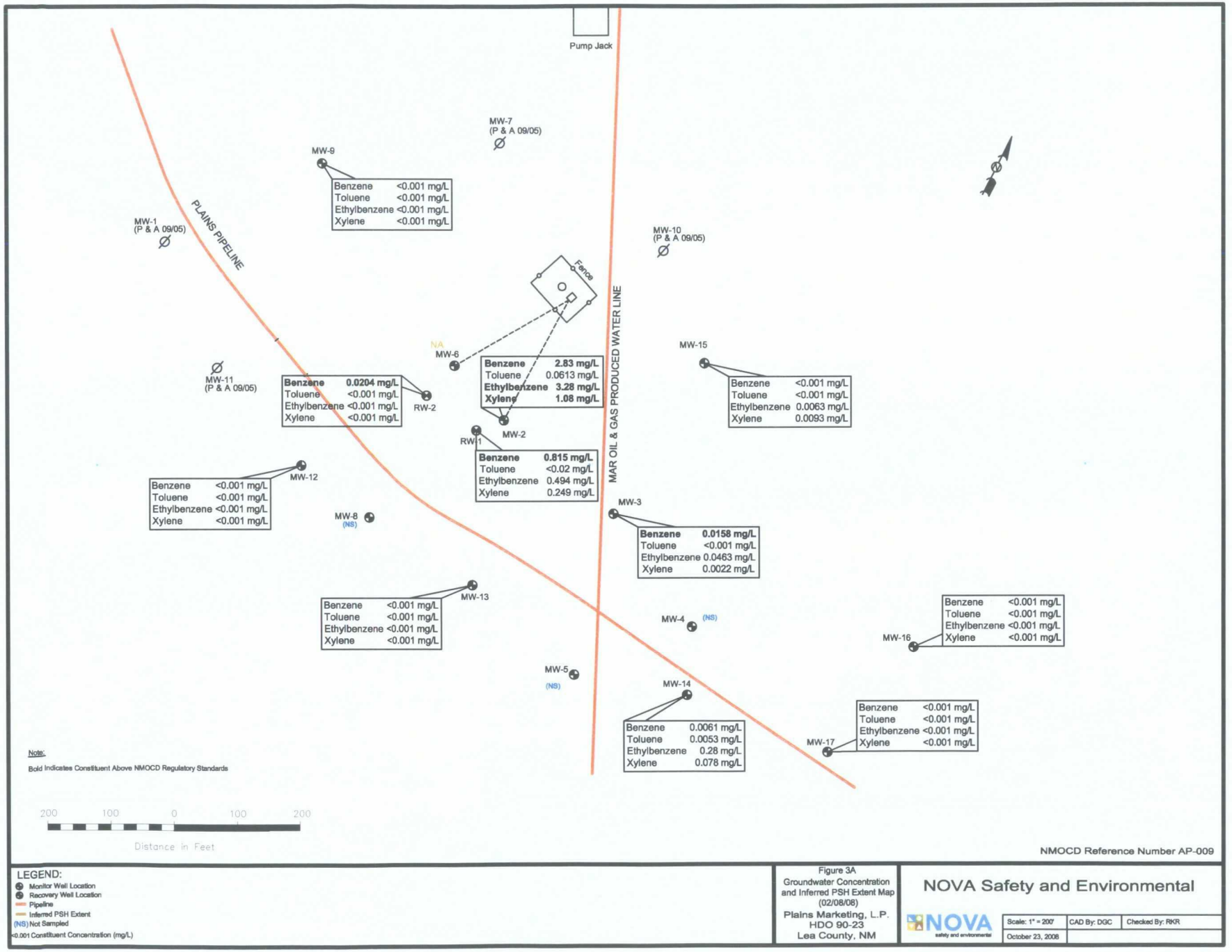
NOVA safety and environmental	NE1/4 NW1/4 Sec 6 T20S R37E		February 20, 2005
	Scale: NTS	Prep By: CDS	Checked By: TKC


Pump Jack
MW-7
(P & A 09/05)
MW-9
(3419.94)
3419.90
3419.90
MW-1
(P & A 09/05)
PLAINS PIPELINE
3419.90
3419.90
MW-10
(P & A 09/05)
Fence
MAR OIL & GAS PRODUCED WATER LINE
MW-15
(3419.72)
3419.70
MW-6
(NA)
MW-11
(P & A 09/05)
0.0009 ft/ft
RW-2
(3419.62)
(3419.88)
MW-2
(3419.64)
RW-1
(3419.66)
MW-12
MW-3
(3419.72)
3419.60
MW-8
(3419.80)
3419.70
MW-13
(3419.53)
3419.60
MW-4
(3419.65)
3419.50
MW-16
(3419.49)
3419.50
MW-5
(3419.49)
MW-14
(3419.36)
MW-17
(3419.34)
NOTE:
Contour Interval : 0.10'
Groundwater Gradient Measured Between MW-2 and MW-5
200
100
0
100
200
Distance in Feet
LEGEND:
Monitor Well Location
Recovery Well Location
Pipeline
Groundwater Elevation Contour
Groundwater Elevation in feet
0.001 ft/ft
Groundwater Gradient and Magnitude
NMOCD Reference Number AP-009
Figure 2A
Inferred Groundwater Gradient Map
(02/08/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 200'
CAD By: DGC
Checked By: RKR
October 23, 2008


Pump Jack
MW-7
(P & A 09/05)
MW-9
(3420.02)
MW-1
(P & A 09/05)
PLAINS PIPELINE
3419.90
3419.80
3419.70
MW-10
(P & A 09/05)
Fence
MAR OIL & GAS PRODUCED WATER LINE
3419.90
3419.80
MW-15
(3419.64)
MW-6
(3419.96)
MW-11
(P & A 09/05)
RW-2
(3419.90)
(NS)
MW-2
RW-1
(3419.74)
0.0004 ft/ft
3419.80
(3419.77)
MW-12
(3419.84)
MW-8
MW-3
(3419.78)
3419.70
MW-13
(3419.57)
MW-4
(3419.76)
MW-16
(3419.53)
MW-5
(3419.62)
3419.60
MW-14
(3419.44)
MW-17
(3419.37)
NOTE:
Contour Interval : 0.10'
Groundwater Gradient Measured Between MW-9 and MW-16
MW-2 not used
200
100
0
100
200
Distance in Feet
LEGEND:
Monitor Well Location
Recovery Well Location
Pipeline
Groundwater Elevation Contour
Groundwater Elevation in feet
0.001 ft/ft
Groundwater Gradient and Magnitude
NMOCD Reference Number AP-009
Figure 2B
Inferred Groundwater Gradient Map
(05/08/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 200'
CAD By: MWG
Checked By: RKR
February 6, 2009


Pump Jack
MW-7
(P & A 09/05)
MW-9
(3419.35)
MW-1
(P & A 09/05)
PLAINS PIPELINE
MW-10
(P & A 09/05)
Fence
MAP OIL & GAS PRODUCED WATER LINE
MW-15
(3420.50)
(3419.77)
MW-6
0.002 ft/ft
MW-11
(P & A 09/05)
RW-2
(3418.87)
RW-1
(3419.72)
MW-2
(3413.54)
(3419.74)
MW-12
MW-3
(3419.59)
MW-8
(3419.67)
MW-13
(3419.38)
MW-4
(3419.32)
MW-16
(3419.25)
MW-5
(3419.38)
MW-14
(3419.21)
MW-17
(3419.13)
3419.40
3419.60
3419.80
3420.00
3420.20
3420.40
3419.00
3419.20
NOTE:
Contour Interval : 0.20'
Groundwater Gradient Measured Between MW-15 and MW-13
RW-1 Not Used In The Construction Of This Map.
200
100
0
100
200
Distance in Feet
LEGEND:
Monitor Well Location
Recovery Well Location
Pipeline
Groundwater Elevation Contour
Groundwater Elevation in feet
0.001 ft/ft
Groundwater Gradient and Magnitude
NMOCD Reference Number AP-009
Figure 2C
Inferred Groundwater Gradient Map
(08/13/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 200'
CAD By: DGC
Checked By: RKR
October 23, 2008


Pump Jack
MW-7
(P & A 09/05)
MW-9
(3419.80)
3419.70
MW-1
(P & A 09/05)
PLAINS PIPELINE
3419.60
Fence
MW-10
(P & A 09/05)
MAR OIL & GAS PRODUCED WATER LINE
MW-15
3419.50
(3419.52)
MW-6
(3419.77)
MW-11
(P & A 09/05)
(3419.68)
RW-2
MW-2
(3419.72)
RW-1
(3419.53)
3419.40
0.0009 ft/ft
(3419.60)
MW-12
MW-8
(3419.64)
(3419.62)
MW-3
3419.30
MW-13
(3419.34)
MW-4
(3419.48)
MW-16
(3419.20)
MW-5
(3419.36)
MW-14
(3419.17)
MW-17
(3419.06)
NOTE:
Contour Interval : 0.10'
Groundwater Gradient Measured Between MW-2 and MW-17
200
100
0
100
200
Distance in Feet
LEGEND:
Monitor Well Location
Recovery Well Location
Pipeline
Groundwater Elevation Contour
(3419) Groundwater Elevation in feet
0.001 ft/ft
Groundwater Gradient and Magnitude
NMOCD Reference Number AP-009
Figure 2D
Inferred Groundwater Gradient Map
(11/06/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 200'
CAD By: DGC
Checked By: RKR
December 23, 2008


Pump Jack
MW-7
(P & A 09/05)
MW-9
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-1
(P & A 09/05)
PLAINS PIPELINE
MW-10
(P & A 09/05)
Fence
MAR OIL & GAS PRODUCED WATER LINE
NA
MW-6
Benzene 2.83 mg/L
Toluene 0.0613 mg/L
Ethylbenzene 3.28 mg/L
Xylene 1.08 mg/L
MW-15
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene 0.0063 mg/L
Xylene 0.0093 mg/L
MW-11
(P & A 09/05)
Benzene 0.0204 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
RW-2
MW-2
RW-1
Benzene 0.815 mg/L
Toluene <0.02 mg/L
Ethylbenzene 0.494 mg/L
Xylene 0.249 mg/L
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-12
MW-8
(NS)
MW-3
Benzene 0.0158 mg/L
Toluene <0.001 mg/L
Ethylbenzene 0.0463 mg/L
Xylene 0.0022 mg/L
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-13
MW-4
(NS)
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-16
MW-5
(NS)
MW-14
Benzene 0.0061 mg/L
Toluene 0.0053 mg/L
Ethylbenzene 0.28 mg/L
Xylene 0.078 mg/L
Benzene <0.001 mg/L
Toluene <0.001 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.001 mg/L
MW-17
Note:
Bold Indicates Constituent Above NMOCD Regulatory Standards
200 100 0 100 200
Distance in Feet
NMOCD Reference Number AP-009
LEGEND:
Monitor Well Location
Recovery Well Location
Pipeline
Inferred PSH Extent
(NS) Not Sampled
<0.001 Constituent Concentration (mg/L)
Figure 3A
Groundwater Concentration and Inferred PSH Extent Map
(02/08/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM
NOVA Safety and Environmental
NOVA safety and environmental
Scale: 1" = 200'
CAD By: DGC
Checked By: RKR
October 23, 2008

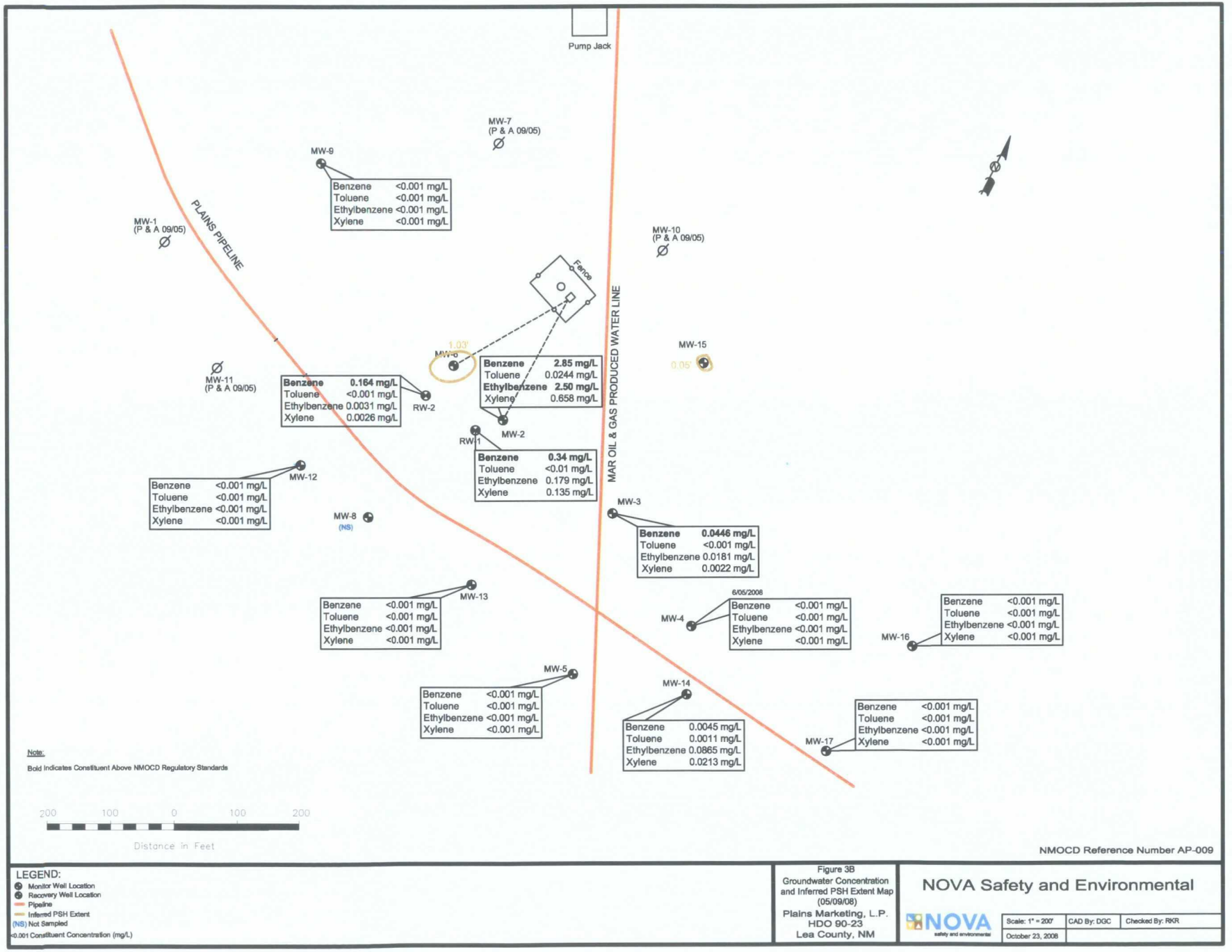


Figure 3B
Groundwater Concentration and Inferred PSH Extent Map
(05/09/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 200'	CAD By: DGC	Checked By: RKR
October 23, 2008		

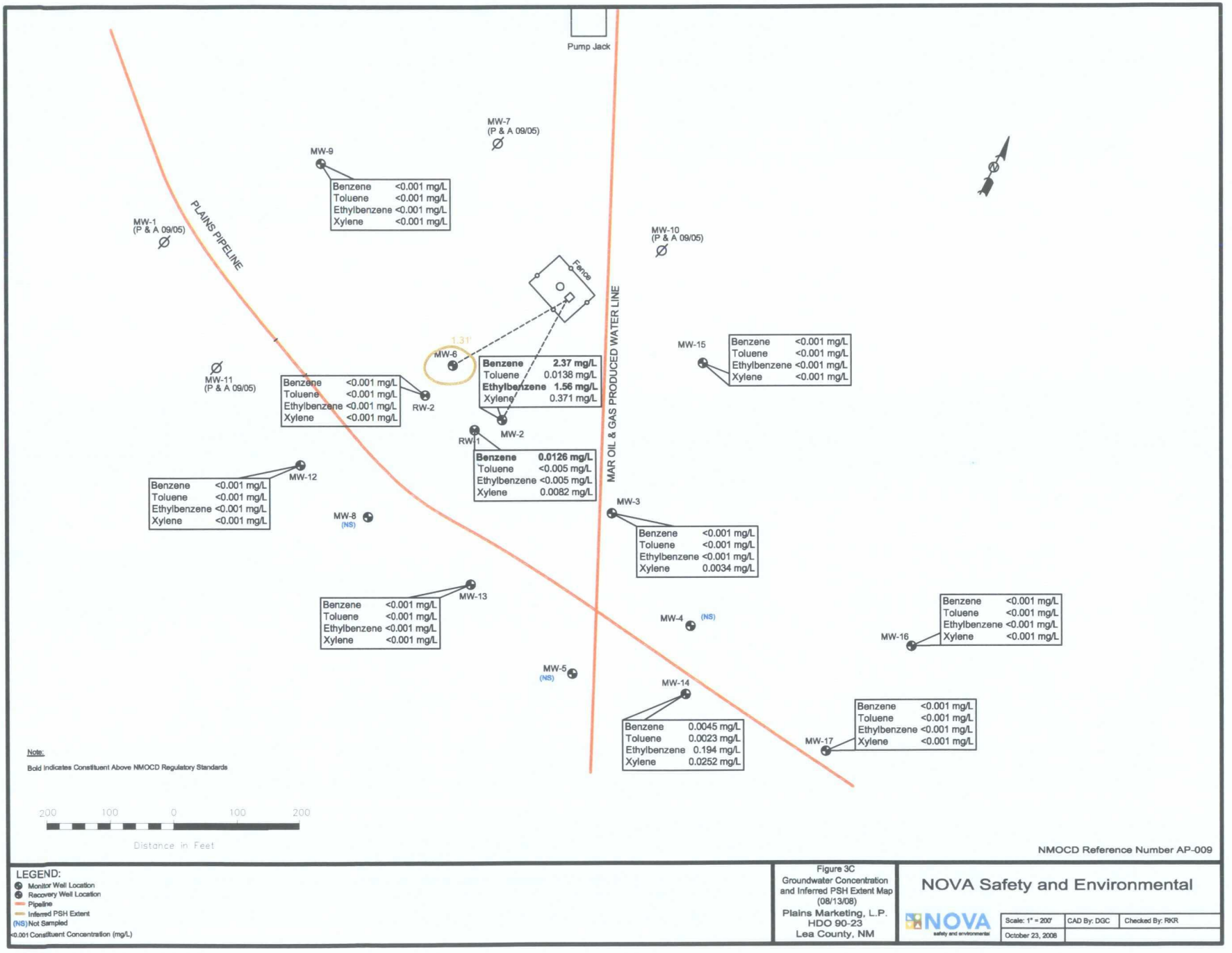


Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (08/13/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 200'	CAD By: DGC	Checked By: RKR
October 23, 2008		

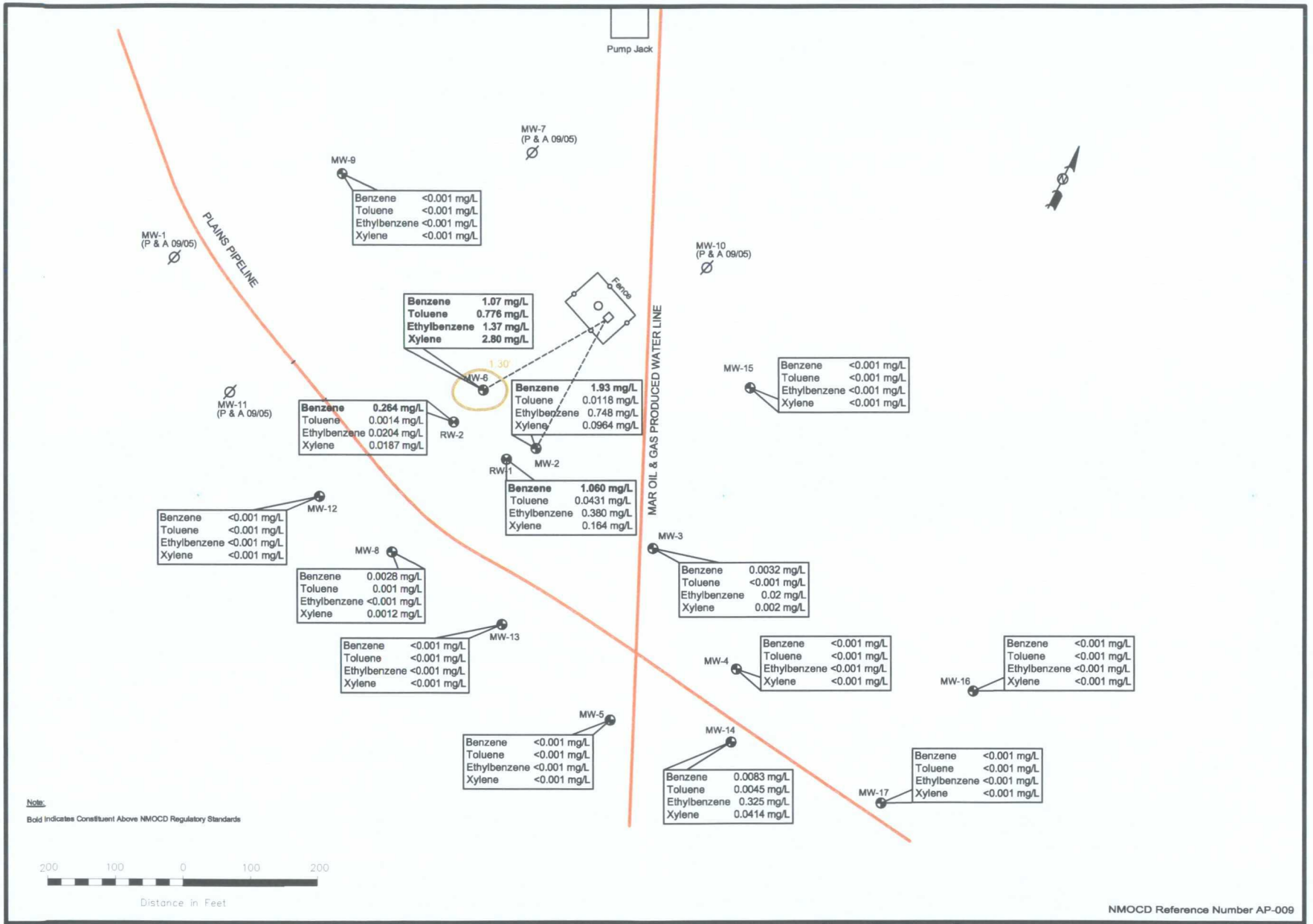


Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/06/08)
Plains Marketing, L.P.
HDO 90-23
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 200'	CAD By: DGC	Checked By: RKR
December 23, 2008		

TABLES

TABLE 1

2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
HDO 90 - 23
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-009

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	*02/08/08*	3,465.44	-	45.56	0.00	3,419.88
MW - 2	02/15/08	3,465.44	-	45.53	0.00	3,419.91
MW - 2	02/22/08	3,465.44	-	45.56	0.00	3,419.88
MW - 2	04/04/08	3,465.44	-	45.56	0.00	3,419.88
MW - 2	*05/08/08*	3,465.44	-	46.51	0.00	3,418.93
MW - 2	05/16/08	3,465.44	-	45.55	0.00	3,419.89
MW - 2	06/05/08	3,465.44	-	45.52	0.00	3,419.92
MW - 2	06/27/08	3,465.44	-	45.67	0.00	3,419.77
MW - 2	07/15/08	3,465.44	-	45.68	0.00	3,419.76
MW - 2	08/12/08	3,465.44	-	45.72	0.00	3,419.72
MW - 2	*08/13/08*	3,465.44	-	45.72	0.00	3,419.72
MW - 2	09/25/08	3,465.44	-	45.72	0.00	3,419.72
MW - 2	09/30/08	3,465.44	45.69	45.70	0.01	3,419.75
MW - 2	10/08/08	3,465.44	-	45.71	0.00	3,419.73
MW - 2	10/24/08	3,465.44	-	45.70	0.00	3,419.74
MW - 2	*11/06/08*	3,465.44	-	45.72	0.00	3,419.72
MW - 2	11/08/08	3,465.44	-	45.70	0.00	3,419.74
MW - 3	*02/08/08*	3,464.68	-	44.96	0.00	3,419.72
MW - 3	02/15/08	3,464.68	-	44.95	0.00	3,419.73
MW - 3	02/22/08	3,464.68	-	44.95	0.00	3,419.73
MW - 3	04/04/08	3,464.68	-	44.94	0.00	3,419.74
MW - 3	*05/08/08*	3,464.68	-	44.90	0.00	3,419.78
MW - 3	05/16/08	3,464.68	-	44.94	0.00	3,419.74
MW - 3	06/27/08	3,464.68	-	45.01	0.00	3,419.67
MW - 3	*08/13/08*	3,464.68	-	45.09	0.00	3,419.59
MW - 3	09/30/08	3,464.68	-	45.02	0.00	3,419.66
MW - 3	10/08/08	3,464.68	-	45.10	0.00	3,419.58
MW - 3	10/24/08	3,464.68	-	44.90	0.00	3,419.78
MW - 3	*11/06/08*	3,464.68	-	45.06	0.00	3,419.62
MW - 4	*02/08/08*	3,465.76	-	46.11	0.00	3,419.65
MW - 4	*05/08/08*	3,465.76	-	46.00	0.00	3,419.76
MW - 4	*06/05/08*	3,465.76	-	46.40	0.00	3,419.36
MW - 4	*08/13/08*	3,465.76	-	46.44	0.00	3,419.32
MW - 4	*11/06/08*	3,465.76	-	46.28	0.00	3,419.48
MW - 5	*02/08/08*	3,467.40	-	47.91	0.00	3,419.49
MW - 5	*05/08/08*	3,467.40	-	47.78	0.00	3,419.62
MW - 5	*08/13/08*	3,467.40	-	48.02	0.00	3,419.38
MW - 5	*11/06/08*	3,467.40	-	48.04	0.00	3,419.36
MW - 6	02/15/08	3,465.42	45.33	46.34	1.01	3,419.94
MW - 6	02/22/08	3,465.42	45.33	46.29	0.96	3,419.95
MW - 6	04/04/08	3,465.42	45.33	46.32	0.99	3,419.94
MW - 6	*05/08/08*	3,465.42	45.31	46.34	1.03	3,419.96
MW - 6	05/16/08	3,465.42	45.33	46.31	0.98	3,419.94

TABLE 1

2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
HDO 90 - 23
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-009

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	06/05/08	3,465.42	45.31	46.30	0.99	3,419.96
MW - 6	06/27/08	3,465.42	45.38	46.48	1.10	3,419.88
MW - 6	07/15/08	3,465.42	45.42	46.61	1.19	3,419.82
MW - 6	08/12/08	3,465.42	45.45	46.76	1.31	3,419.77
MW - 6	*08/13/08*	3,465.42	45.45	46.76	1.31	3,419.77
MW - 6	09/25/08	3,465.42	45.49	46.81	1.32	3,419.73
MW - 6	09/30/08	3,465.42	45.47	46.68	1.21	3,419.77
MW - 6	10/08/08	3,465.42	45.47	46.73	1.26	3,419.76
MW - 6	10/24/08	3,465.42	45.43	46.73	1.30	3,419.80
MW - 6	*11/06/08*	3,465.42	45.46	46.76	1.30	3,419.77
MW - 6	11/08/08	3,465.42	45.43	46.38	0.95	3,419.85
MW - 8	*02/08/08*	3,467.61	-	47.81	0.00	3,419.80
MW - 8	*05/08/08*	3,467.61	-	47.77	0.00	3,419.84
MW - 8	*08/13/08*	3,467.61	-	47.94	0.00	3,419.67
MW - 8	*11/06/08*	3,467.61	-	47.97	0.00	3,419.64
MW-9	*02/08/08*	3,465.74	-	45.80	0.00	3,419.94
MW-9	*05/08/08*	3,465.74	-	45.72	0.00	3,420.02
MW-9	*08/13/08*	3,465.74	-	46.39	0.00	3,419.35
MW-9	*11/06/08*	3,465.74	-	45.94	0.00	3,419.80
MW - 12	*02/08/08*	3466.69	-	47.03	0.00	3,419.66
MW - 12	*05/08/08*	3466.69	-	46.92	0.00	3,419.77
MW - 12	*08/13/08*	3466.69	-	46.95	0.00	3,419.74
MW - 12	*11/06/08*	3466.69	-	47.09	0.00	3,419.60
MW - 13	*02/08/08*	3466.98	-	47.45	0.00	3,419.53
MW - 13	*05/08/08*	3466.98	-	47.41	0.00	3,419.57
MW - 13	*08/13/08*	3466.98	-	47.60	0.00	3,419.38
MW - 13	*11/06/08*	3466.98	-	47.64	0.00	3,419.34
MW - 14	*02/08/08*	3466.50	-	47.14	0.00	3,419.36
MW - 14	02/15/08	3466.50	-	47.11	0.00	3,419.39
MW - 14	02/22/08	3466.50	-	47.10	0.00	3,419.40
MW - 14	04/04/08	3466.50	-	47.09	0.00	3,419.41
MW - 14	*05/08/08*	3466.50	-	47.06	0.00	3,419.44
MW - 14	05/16/08	3466.50	-	47.10	0.00	3,419.40
MW - 14	06/05/08	3466.50	-	47.09	0.00	3,419.41
MW - 14	06/27/08	3466.50	-	47.13	0.00	3,419.37
MW - 14	07/15/08	3466.50	-	47.24	0.00	3,419.26
MW - 14	08/12/08	3466.50	-	47.29	0.00	3,419.21
MW - 14	*08/13/08*	3466.50	-	47.29	0.00	3,419.21
MW - 14	09/25/08	3466.50	-	47.34	0.00	3,419.16
MW - 14	09/30/08	3466.50	-	47.33	0.00	3,419.17
MW - 14	10/08/08	3466.50	-	47.37	0.00	3,419.13
MW - 14	10/24/08	3466.50	-	47.32	0.00	3,419.18

TABLE 1

2008 - GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
HDO 90 - 23
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-009

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	*11/06/08*	3466.50	-	47.33	0.00	3,419.17
MW - 14	11/08/08	3466.50	-	47.24	0.00	3,419.26
MW - 15	*02/08/08*	3466.10	-	46.38	0.00	3,419.72
MW - 15	*05/08/08*	3466.10	46.45	46.50	0.05	3,419.64
MW - 15	05/16/08	3466.10	46.38	46.48	0.10	3,419.71
MW - 15	06/05/08	3466.10	-	46.41	0.00	3,419.69
MW - 15	06/27/08	3466.10	-	46.49	0.00	3,419.61
MW - 15	07/15/08	3466.10	-	46.53	0.00	3,419.57
MW - 15	08/12/08	3466.10	-	45.60	0.00	3,420.50
MW - 15	*08/13/08*	3466.10	-	45.60	0.00	3,420.50
MW - 15	09/25/08	3466.10	-	46.60	0.00	3,419.50
MW - 15	09/30/08	3466.10	-	46.61	0.00	3,419.49
MW - 15	10/08/08	3466.10	-	46.62	0.00	3,419.48
MW - 15	10/24/08	3466.10	-	46.60	0.00	3,419.50
MW - 15	*11/06/08*	3466.10	-	46.58	0.00	3,419.52
MW - 15	11/08/08	3466.10	-	46.60	0.00	3,419.50
MW-16	*02/08/08*	3465.93	-	46.44	0.00	3,419.49
MW-16	*05/08/08*	3465.93	-	46.40	0.00	3,419.53
MW-16	*08/13/08*	3465.93	-	46.68	0.00	3,419.25
MW-16	*11/06/08*	3465.93	-	46.73	0.00	3,419.20
MW-17	*02/08/08*	3468.68	-	49.34	0.00	3,419.34
MW-17	*05/08/08*	3468.68	-	49.31	0.00	3,419.37
MW-17	*08/13/08*	3468.68	-	49.55	0.00	3,419.13
MW-17	*11/06/08*	3468.68	-	49.62	0.00	3,419.06
RW - 1	*02/08/08*	3465.02	-	45.38	0.00	3,419.64
RW - 1	*05/08/08*	3465.02	-	45.28	0.00	3,419.74
RW - 1	*08/13/08*	3465.02	-	51.48	0.00	3,413.54
RW - 1	09/30/08	3465.02	-	45.57	0.00	3,419.45
RW - 1	10/08/08	3465.02	-	45.52	0.00	3,419.50
RW - 1	10/24/08	3465.02	-	45.48	0.00	3,419.54
RW - 1	*11/06/08*	3465.02	-	45.49	0.00	3,419.53
RW - 2	*02/08/08*	3465.21	-	45.59	0.00	3419.62
RW - 2	*05/08/08*	3465.21	-	45.31	0.00	3419.90
RW - 2	*08/13/08*	3465.21	-	46.34	0.00	3418.87
RW - 2	09/30/08	3465.21	-	45.55	0.00	3419.66
RW - 2	10/08/08	3465.21	-	45.53	0.00	3419.68
RW - 2	10/24/08	3465.21	-	45.53	0.00	3419.68
RW - 2	*11/06/08*	3465.21	-	45.53	0.00	3419.68

Note: Elevations based on North American Vertical Datum of 1929.
** Complete Historical Tables provided on the attached CD.*

TABLE 2

2008 - CONCENTRATIONS OF BTEX AND TPH IN GROUNDWATER

PLAINS MARKETING, L.P.

HDO 90-23

LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT				**0.01**	**0.75**	**0.750**	**0.620**	
MW - 2	*02/09/08*			**2.83**	0.0613	**3.28**	**1.08**	
MW - 2	*05/09/08*			**2.85**	0.0244	**2.5**	**0.658**	
MW - 2	*08/13/08*			**2.37**	0.0138	**1.560**	0.3710	
MW - 2	*11/06/08*			**1.93**	0.0118	0.748	0.0964	
MW - 3	*02/09/08*			**0.0158**	<0.001	0.0463	0.0022	
MW - 3	*05/09/08*			**0.0446**	<0.001	0.0181	0.0022	
MW - 3	*08/13/08*			<0.001	<0.001	<0.001	0.0034	
MW - 3	*11/06/08*			0.0032	<0.001	0.0200	0.0020	
MW - 4	*02/08/08*			Not Sampled on Current Sample Schedule				
MW - 4	*06/05/08*			<0.001	<0.001	<0.001	<0.001	
MW - 4	*08/13/08*			Not Sampled on Current Sample Schedule				
MW - 4	*11/11/08*			<0.001	<0.001	<0.001	<0.001	
MW - 5	*02/08/08*			Not Sampled on Current Sample Schedule				
MW - 5	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 5	*08/13/08*			Not Sampled on Current Sample Schedule				
MW - 5	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
MW - 6	*02/09/08*			Not Sampled due to PSH in Well				
MW - 6	*05/09/08*			Not Sampled due to PSH in Well				
MW - 6	*08/13/08*			Not Sampled due to PSH in Well				
MW - 6	*11/06/08*	84.5	234	**1.07**	**0.776**	**1.37**	**2.8**	
MW - 8	*02/08/08*			Not Sampled on Current Sample Schedule				
MW - 8	*05/09/08*			Not Sampled on Current Sample Schedule				
MW - 8	*08/13/08*			Not Sampled on Current Sample Schedule				
MW - 8	*11/06/08*			0.0028	0.001	<0.001	0.0012	
MW - 9	*02/08/08*			<0.001	<0.001	<0.001	<0.001	
MW - 9	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 9	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
MW - 9	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
MW - 12	*02/08/08*			<0.001	<0.001	<0.001	<0.001	
MW - 12	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 12	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
MW - 12	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
MW - 13	*02/08/08*			<0.001	<0.001	<0.001	<0.001	
MW - 13	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 13	*08/19/08*			<0.001	<0.001	<0.001	<0.001	
MW - 13	*11/06/08*			<0.001	<0.001	<0.001	<0.001	

TABLE 2

2008 - CONCENTRATIONS OF BTEX AND TPH IN GROUNDWATER

PLAINS MARKETING, L.P.

HDO 90-23

LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8015M		SW 846-8012B, 5030				
		GRO C6-C12 mg/L	DRO C12-C35 mg/L	BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT				**0.01**	**0.75**	**0.750**	**0.620**	
MW - 14	*02/09/08*			0.0061	0.0053	0.28	0.078	
MW - 14	*05/09/08*			0.0045	0.0011	0.0865	0.0213	
MW - 14	*08/13/08*			0.0045	0.0023	0.1940	0.0252	
MW - 14	*11/06/08*			0.0083	0.0045	0.3250	0.0414	
MW - 15	*02/09/08*			<0.001	<0.001	0.0063	0.0093	
MW - 15	*05/09/08*			Not Sampled due to PSH in Well				
MW - 15	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
MW - 15	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
MW - 16	*02/08/08*			<0.001	<0.001	<0.001	<0.001	
MW - 16	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 16	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
MW - 16	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
MW - 17	*02/08/08*			<0.001	<0.001	<0.001	<0.001	
MW - 17	*05/09/08*			<0.001	<0.001	<0.001	<0.001	
MW - 17	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
MW - 17	*11/06/08*			<0.001	<0.001	<0.001	<0.001	
RW - 1	*02/08/08*			**0.815**	<0.020	0.494	0.249	
RW - 1	*05/09/08*			**0.34**	<0.01	0.179	0.135	
RW - 1	*08/13/08*			**0.0126**	<0.005	<0.005	0.0082	
RW - 1	*11/06/08*			**1.06**	0.0431	0.380	0.164	
RW - 2	*02/08/08*			**0.0204**	<0.001	<0.001	<0.001	
RW - 2	*05/09/08*			**0.164**	<0.001	0.0031	0.0026	
RW - 2	*08/13/08*			<0.001	<0.001	<0.001	<0.001	
RW - 2	*11/06/08*			**0.264**	0.0014	0.0204	0.0187	

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

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.
TNM HDO-90-23
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-009

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510																	
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	—	**0.0001 mg/L**	**0.0007 mg/L**	**0.0002 mg/L**	—	**0.0002 mg/L**	**0.0002 mg/L**	**0.0003 mg/L**	—	—	**0.0004 mg/L**	**0.03 mg/L**	—	—	**0.03 mg/L**		—
MW-2	11/06/08	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	**0.0729**	0.0227	<0.000922	**0.139**	**0.11**	0.0175
MW-3	11/06/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00202	<0.000183	<0.000183	0.00152	<0.000183	0.0203	<0.000183	0.0032
MW-4	11/11/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
MW-5	11/11/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
MW-6	11/06/08	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.072	<0.0188	**0.238**	0.102	<0.0188	**0.532**	**0.5**	0.0833
MW-8	11/06/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
MW-9	11/06/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
MW-12	11/06/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
MW-13	11/06/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
MW-14	11/06/08	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	**0.000703**	<0.000186	<0.000186	0.000874	<0.000186	0.00638	0.00465	<0.000186	0.0141	0.00647	0.00458

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER - 2008

PLAINS MARKETING, L.P.
TNM HDO-90-23
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER AP-009

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510																	
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		–	–	–	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	–	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	–	–	0.0004 mg/L	0.03 mg/L	–	–	0.03 mg/L		–
MW-15	11/06/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000857	<0.000184	0.00194	0.000615	<0.000184
MW-16	11/06/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
MW-17	11/06/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
RW-1	11/06/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00079	<0.000184	0.0187	0.000549	<0.000184	0.0136	0.0106	0.00117
RW-2	11/06/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.000774	<0.000185	<0.000185

APPENDICES

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

OIL CONSERVATION DIVISION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR	TEXAS-NEW MEXICO PIPE LINE CO				ADDRESS	P. O. Box 2528, Hobbs, N.M. 88240	
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE X	GASO PLNT	OIL RFY	OTHER*
NAME OF FACILITY	14" Trunk Line						
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)	NW/4 NE/4			SEC. 6	TWP. 21	RGE. 37	COUNTY Lea
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK	6 Mi. NNW of Eunice & 3 Mi. N.W. of Loop 18						
DATE AND HOUR OF OCCURRENCE	Unknown			DATE AND HOUR OF DISCOVERY	3/27/90 2:15 P.M.		
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT REQUIRED	IF YES, TO WHOM	NMOCC - B. Pritchard SCC - D. Trujillo		
BY WHOM	NMOCC - M. Criswell SCC - C. Johnson			DATE AND HOUR	3/27/90: NMOCC - 3:35 P.M. 3/28/90: SCC - 9:05 A.M.		
TYPE OF FLUID LOST	Sour Crude			QUANTITY OF LOSS	750 BBLS	VOLUME RECOVERED	550 BBLS
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X		QUANTITY			

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

External Corrosion

Line clamped off

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

45,000 sq ft pasture land; 40,000 sq ft equipment damage.
Cattle in the area
Oil soaked earth covered with fresh soil in prospects of full restoration

DESCRIPTION OF AREA	FARMING	GRAZING X	URBAN	OTHER*			
SURFACE CONDITIONS	SANDY	SANDY LOAM X	CLAY	ROCKY	WET X	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

55°

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNED B. L. Lemicky TITLE Dist. Manager DATE 3/28/90

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

HDO 90-23

cc: Hazardous Waste Section
N.M. Environmental Improvement Div.

90-063530