AP - _____ Darr Ange//*/ ANNUAL MONITORING REPORT

YEAR(S):



March 23, 2011

MAR 29 2011

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

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: Plains All American – 2010 Annual Monitoring Reports 20 Sites in Lea County, New Mexico

Dear Mr. Hansen:

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

34 Junc. to Lea Sta	<u>1R-0386 ′</u>	Section 21, Township 20 South, Range 37 East, Lea County
34 Junction South	1R-0456 /	Section 02, Township 17 South, Range 36 East, Lea County
Bob Durham	AP-0016 /	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell #1	<u>AP-007</u>	Section 11, Township 15 South, Range 37 East, Lea County
Darr Angell #2	AP-007 🗸	Section 11, Township 15 South, Range 37 East, Lea County
<u>,</u>	· · · · · · · · · · · · · · · · · · ·	Section 14, Township 15 South, Range 37 East, Lea County
Darr Angell #4	AP-007	Section 11, Township 15 South, Range 37 East, Lea County
		Section 02, Township 15 South, Range 37 East, Lea County
Denton Station	1R-0234 /	Section 14, Township 15 South, Range 37 East, Lea County
HDO-90-23	AP-009 🗸	Section 06, Township 20 South, Range 37 East, Lea County
LF-59	<u>·</u> 1R-0103	Section 32, Township 19 South, Range 37 East, Lea County
Monument 2) 1R-0110	Section 06, Township 20 South, Range 37 East, Lea County
·		Section 07, Township 20 South, Range 37 East, Lea, County
Monument 10	1R-0119	Section 30, Township 19 South, Range 37 East, Lea County
Monument 17	<u>1R-123</u>	Section 29, Township 19 South, Range 37 East, Lea County
Monument 18	, 1R-0124	Section 07, Township 20 South, Range 37 East, Lea County
S: Mon. Gath. Sour	<u>⁄.1R-951</u>	Section 05, Township 20 South, Range 37 East, Lea County
SPS-11	<u>GW-0140</u>	Section 18, Township 18 South, Range 36 East, Lea County
Texaco Skelly F	1R-0420	Section 11, Township 21 South, Range 37 East, Lea County
TNM 97-04	GW-0294	Section 11, Township 16 South, Range 35 East, Lea County
TNM 97-17	AP-017 /	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	AP-0013	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	(AP-12	Section 26, Township 21 South, Range 37 East, Lea County

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Nova Safety and Environmental (Nova) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American. I have personally reviewed the documents and interviewed Nova personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Henry ann

Vason Henry V Remediation Coordinator Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

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2010 ANNUAL MONITORING REPORT

DARR ANGELL #1 LEA COUNTY, NEW MEXICO NW ¼ SE ¼ SECTION 11, TOWNSHIP 15 SOUTH, RANGE 37 EAST PLAINS SRS #: DARR ANGELL 1 NMOCD REFERENCE NUMBER AP-007

Prepared For:

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

Prepared By:

NOVA Safety and Environmental 2057 Commerce Street Midland, Texas 79703

March 2010

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Ronald K. Rounsaville Senior Project Manager

Brittan K. Byerly, P.C. President



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3B – Groundwater Concentration and Inferred PSH Extent Map – May 26, 2010

3C - Groundwater Concentration and Inferred PSH Extent Map - August 23, 2010

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

ENCLOSED ON DATA DISK

2010 Annual Monitoring Report

2010 Tables 1, 2 and 3 – Groundwater Elevation, BTEX and PAH Concentration Data 2010 Figures 1, 2A-2D, and 3A-3D Electronic Copies of Laboratory Reports

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

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. The Darr Angell #1 Pipeline Release Site (the site), which was formerly responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2010 only. However, historic data tables as well as 2010 laboratory analytical reports are enclosed electronically. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2010 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 legal description of the site is NW ¼ SE ¼ Section 11, Township 15 South, Range 37 East. The release was discovered by EOTT employees and reported on May 1, 1997. According to the release report, an estimated 25 barrels of crude oil was released and 15 barrels were recovered during initial response actions. The release occurred from an 8-inch EOTT pipeline and was attributed to internal pipeline corrosion. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A.

Currently, there are twenty-one groundwater monitor wells (MW-1 through MW-21) and eleven product recovery wells (RW-1 through RW-11) on-site. An automated recovery system is currently operating on site. Monitor wells MW-1, MW-5, MW-9 and recovery wells RW-1, RW-2 through RW-9 and RW-11 use a total fluid pump for PSH recovery. Monitor and recovery wells exhibiting PSH, but not part of the automated recovery system, were recovered manually. Recovered product from the manually recovered wells was placed in one of the two storage frac tanks located on-site. Recovered product was periodically transported to the 34 Junction South Station facility for reinjection to the Plains Pipeline system. Recovered groundwater contained in the storage tanks was transported to a licensed disposal facility.

FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was recorded on nineteen monitor and recovery wells during the reporting period. The average thickness of PSH in recovery wells containing PSH during 2010 was 2.22 feet. A maximum PSH thickness of 8.22 feet was reported in monitor well MW-5 on

August 23, 2010. Approximately 435 gallons (10.4 barrels) of PSH were recovered from the site during the 2010 reporting period. A total of approximately 55,054 gallons (1,311 barrels) of PSH has been recovered since the start of product recovery. Measurable thicknesses of PSH are recorded in Table 1 and Figures 3A through 3D.

Groundwater Monitoring

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Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended in NMOCD correspondences dated June 20, 2005 and April 11, 2006.

	NMOCD Approved Sampling Schedule									
MW-1	Quarterly	MW-12	Quarterly	RW-1	Quarterly					
MW-2	Quarterly	MW-13	Quarterly	RW-2	Quarterly					
MW-3	Quarterly	MW-14	Quarterly	RW-3	Quarterly					
MW-4	Annually	MW-15	Annually	RW-4	Quarterly					
MW-5	Quarterly	MW-16	Annually	RW-5	Quarterly					
MW-6	Quarterly	MW-17	Quarterly	RW-6	Quarterly					
MW-7	Semi-Annually	MW-18	Annually	RW-7	Quarterly					
MW-8	Quarterly	MW-19	Quarterly	RW-8	Quarterly					
MW-9	Quarterly	MW-20	Annually	RW-9	Quarterly ·					
MW-10	Quarterly	MW-21	Quarterly	RW10	Quarterly					
MW-11	Annually			RW-11	Quarterly					

The site monitor wells were gauged and sampled on February 16, May 26, August 23, and November 22, 2010. During each sampling event, sampled monitor wells were purged a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were 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 from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2010 is provided as Table 1. Historic groundwater elevation data beginning at project inception is enclosed on the attached data disk.

The most recent Inferred Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.008 feet/foot to the southeast as measured between groundwater monitor wells MW-4 and MW-21. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3,722.24 and 3,728.72 feet above mean sea level, in recovery well RW-6 on May 26, 2010 and monitor well MW-4 on January 11, 2010, respectively.

LABORATORY RESULTS

Monitor wells MW-1, MW-5, MW-8 through MW-10, MW-13, MW-14 and all recovery wells (RW-1 through RW-11) contained measurable PSH throughout the reporting period and were not sampled during the four quarters of 2010. Monitor well MW-2 contained measurable PSH during three separate gauging events during the 1st, 2nd and 3rd quarters of 2010.

Groundwater samples obtained during the quarterly sampling events of 2010 were delivered to Trace Analysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B. Polynuclear Aromatic Hydrocarbons (PAH) analysis was conducted during the 2010 calendar year on monitor well MW-3. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC standards are sampled, with the exclusion of those wells containing measurable PSH thicknesses. A listing of BTEX constituent concentrations are summarized in Table 2 and the Historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2010 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

Monitor well MW-1 is monitored on a quarterly schedule. Monitor well MW-1 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.39 feet, 6.71 feet, 6.52 feet and 6.27 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Monitor well MW-2 is monitored on a quarterly schedule. Monitor well MW-2 was not sampled during the 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.06 feet, 0.03 feet and 0.03 feet were reported during the 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. Benzene concentrations were above the NMOCD regulatory standard during the 1^{st} quarter of the reporting period with a concentration of 0.056 mg/L. Toluene concentrations were below NMOCD regulatory standards during the 1^{st} quarter of the reporting period with a concentrations were below NMOCD regulatory standards during the 1^{st} quarter of the reporting period with a concentration of <0.010 mg/L. Ethyl-benzene concentrations were below NMOCD regulatory standards during the 1^{st} quarter of the reporting period with a concentration of 0.434 mg/L. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Monitor well MW-3 is monitored on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.0290 mg/L during the 3rd quarter to 0.1730 mg/L during the 1st quarter. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from 0.0210 mg/L during the 3rd quarter to 0.390 mg/L during the 1st quarter. Toluene concentrations were below the NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations were below the NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations were below NMOCD regulatory standards during the 1st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Auring the 1st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Auring the 1st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Auring the 1st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. The reporting period. Auring the 1st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. The reporting period. The reporting period during the 3st quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. The reporting period during the 3st quarter to 0.864 mg/L during the 3^s

the 2nd quarter to 1.550 mg/L during the 1st quarter of 2010. Xylene concentrations were above 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 naphthalene (0.0673 mg/L), 1-methylnaphthalene (0.0915 mg/L) and 2-methylnaphthalene (0.115 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.00899 mg/L), phenanthrene (0.0136 mg/L) and dibenzofuran (0.00579 mg/L), which are below WQCC standards.

Monitor well MW-4 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standards of 0.01 mg/L for benzene, 0.75 mg/L for toluene, 0.75 mg/L for ethylbenzene and 0.62 for xylene during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last thirty-five consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-5 is monitored on a quarterly schedule. Monitor well MW-5 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 4.50 feet, 8.08 feet, 8.22 feet and 8.08 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Monitor well MW-6 is monitored on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.763 mg/L during the 2^{nd} quarter to 1.100 mg/L during the 1^{st} quarter. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.020 mg/L during the 1^{st} quarter to 0.1230 mg/L during the 3^{rd} quarter of 2010. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from 0.0955 mg/L during the 2^{nd} quarter to 0.253 mg/L during the 3^{rd} quarter of 2010. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Analysis was not conducted during the 4^{th} quarter sampling event.

Monitor well MW-7 is sampled on a semi-annual schedule and was inadvertently sampled during the 3rd quarter of 2010. Analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 2nd, 3rd and 4th quarter sampling events. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-8 is monitored on a quarterly schedule. Monitor well MW-8 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.54 feet, 1.14 feet, 0.54 feet and 1.58 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

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Monitor well MW-9 is monitored on a quarterly schedule. Monitor well MW-9 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.31 feet, 7.08 feet, 6.95 feet and 6.95 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Monitor well MW-10 is monitored on a quarterly schedule. Monitor well MW-10 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.68 feet, 1.27 feet, 0.80 feet and 2.27 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Monitor well MW-11 is sampled on an annual schedule. Monitor well MW-11 was not sampled during the 4th quarter sampling event due to insufficient groundwater volume within the well for sampling.

Monitor well MW-12 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 4th quarter to 0.156 mg/L during the 1st quarter of 2010. Benzene concentrations were above NMOCD regulatory standards during the 1st and 2nd quarters of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-13 is monitored on a quarterly schedule. Monitor well MW-13 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.74 feet, >2.00 feet, >2.00 feet and >2.00 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Monitor well MW-14 is monitored on a quarterly schedule. Monitor well MW-14 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 2.52 feet, >3.00 feet, >3.00 feet and >3.00 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Monitor well MW-15 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-16 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. PAH analysis was not conducted during the 4th quarter sampling event.

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 the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-18 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-19 is currently 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 the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-20 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-21 is currently 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 the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Recovery well RW-1 is monitored on a quarterly schedule. Recovery well RW-1 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of >2.00 feet, >2.00 feet, >2.00 feet and >2.00 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Recovery well RW-2 is monitored on a quarterly schedule. Recovery well RW-2 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.02 feet, 6.25 feet, 5.32 feet and 5.14 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Recovery well RW-3 is monitored on a quarterly schedule. Recovery well RW-3 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.60 feet, 1.53 feet, 0.72 feet and 0.73 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Recovery well RW-4 is monitored on a quarterly schedule. Recovery well RW-4 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of a sheen, 6.82 feet, 6.14 feet and 5.98 feet were reported during the 1st,

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 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Recovery well RW-5 is monitored on a quarterly schedule. Recovery well RW-5 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 3.56 feet, 5.92 feet, 6.96 feet and 6.88 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Recovery well RW-6 is monitored on a quarterly schedule. Recovery well RW-6 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 4.91 feet, 0.71 feet, 5.01 feet and 4.89 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Recovery well RW-7 is monitored on a quarterly schedule. Recovery well RW-7 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of a sheen, 5.57 feet, 5.57 feet and 5.57 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Recovery well RW-8 is monitored on a quarterly schedule. Recovery well RW-8 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 7.19 feet, 6.95 feet, 6.87 feet and 6.84 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

Recovery well RW-9 is monitored on a quarterly schedule. Recovery well RW-9 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.32 feet, 4.09 feet, 4.50 feet and 4.47 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Recovery well RW-10 is monitored on a quarterly schedule. Recovery well RW-10 was not sampled during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of the reporting period, due to the presence of PSH. PSH thicknesses of a sheen, 5.54 feet, 4.92 feet and 4.81 feet were reported during the 1^{st} , 2^{nd} , 3^{rd} and 4^{th} quarters of 2010, respectively. PAH analysis was not conducted during the 4^{th} quarter sampling event, due to the presence of PSH.

Recovery well RW-11 is monitored on a quarterly schedule. Recovery well RW-11 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 2.96 feet, 5.71 feet, 6.99 feet and 6.82 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2010, respectively. PAH analysis was not conducted during the 4th quarter sampling event, due to the presence of PSH.

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 2010 annual monitoring period. Twenty-one groundwater monitor wells (MW-1 through MW-21) and eleven product recovery wells (RW-1 through RW-11) are currently on-site. An automated recovery system operated on-site during the 2010 reporting period. Monitor wells MW-1, MW-5, MW-9 and recovery wells RW-1, RW-2, RW-4 through RW-9 and RW-11 use a total fluid pump for PSH recovery. Monitor and recovery wells exhibiting PSH, but not a part of the automated recovery system, were recovered manually. The most recent Inferred Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.008 feet/foot to the southeast.

Monitor wells MW-1, MW-5, MW-8 through MW-10, MW-13, MW-14 and all recovery wells (RW-1 through RW-11) contained measurable PSH and were not sampled during the four quarters of the reporting period. Monitor wells MW-11 was not sampled during the 4th quarter due to the lack of sufficient water volume in the wells.

Eighteen monitor and recovery wells contained measurable thicknesses of PSH during the reporting period. Approximately 435 gallons (10.4 barrels) of PSH was recovered from the site during the 2010 reporting period. A total of approximately 55,054 gallons (1,311 barrels) of PSH has been recovered since the start of product recovery.

The average thickness of PSH in recovery wells containing PSH during 2010 was 2.22 feet. In comparison, the average thickness of PSH in recovery wells containing PSH during 2009 was 2.37 feet. A maximum PSH thickness of 8.22 feet reported in monitor well MW-5 on August 23, 2010. Data indicates that the operation of the automated recovery system at the Darr Angell #1 Release Site has been successful in reducing observed PSH thicknesses in on-site monitor and recovery wells.

Review of laboratory analytical results of the groundwater samples obtained during the 2010 monitoring period indicate the BTEX constituent concentrations are below applicable NMOCD standards in nine of the thirty-two monitor and recovery wells currently on-site. The remaining twenty-three monitor / recovery wells contained measurable thicknesses of PSH and were not sampled or exhibited analytical results above the NMOCD regulatory standard during at least one quarterly monitoring event of 2010. Dissolved phase impact appears to be limited to monitor wells MW-3, MW-6 and MW-12 and to those monitor and recovery wells which exhibit PSH. Review of PAH analysis indicates an increasing trend in constituent concentrations in monitor well MW-3.

ANTICIPATED ACTIONS

Groundwater monitoring, weekly product recovery, automated system maintenance and optimization will continue through 2011. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2012.

Based on the results of the PAH analysis over the past several years, further PAH analysis be conducted only on those monitor wells (MW-2 and MW-3) which have historically exhibited elevated constituents near or above the WQCC standards.

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.

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Tables

GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
<u>M</u> W - 1	01/11/10	3787.62	60.40	66.83	6.43	3726.26
<u>M</u> W - 1	02/16/10	3787.62	60.81	62.20	1.39	3726.60
<u>M</u> Ŵ - 1	05/26/10	3787.62	60.94	67.65	6.71	3725.67
<u>MW - 1</u>	08/23/10	3787.62	61.03	67.55	6.52	3725.61
<u>MW - 1</u>	11/22/10	3787.62	61.05	67.32	6.27	3725.63
MW - 2	01/05/10	3788.19		60.97	0.00	3727.22
MW - 2	01/11/10	3788.19	-	60.99	0.00	3727.20
MVV - 2	01/19/10	3788.19	-	60.06	0.00	3728.13
	07/12/10	3788 10	-	61 15	0.00	3727.06
MVV - 2	02/12/10	3788 10	01.13	61.05	0.02	3727.00
MW - 2	02/18/10	3788 19	-	60.05	0.00	3728.14
MW - 2	03/02/10	3788 19		61 17	0.00	3727.02
MW - 2	03/08/10	3788.19	-	61.16	0.00	3727.03
MW - 2	03/17/10	3788.19		61.13	0.00	3727.06
MW - 2	03/23/10	3788.19		61.16	0.00	3727.03
MW - 2	03/30/10	3788.19	-	61.17	0.00	3727.02
MW - 2	04/06/10	3788.19	-	61.40	0.00	3726.79
MW - 2	04/13/10	3788.19	-	61.42	0.00	3726.77
MW - 2	04/19/10	3788.19	-	61.23	0.00	3726.96
MW - 2	04/26/10	3788.19	-	61.24	0.00	3726.95
<u>MW - 2</u>	05/03/10	3788.19	-	61.26	0.00	3726.93
<u>MW - 2</u>	05/10/10	3788.19	-	61.29	0.00	3726.90
<u>MW - 2</u>	05/17/10	3788.19	-	61.28	0.00	3726.91
MVV - 2	05/26/10	3788.19	60.89	60.95	0.06	3727.29
	06/02/10	3788.19	-	61.44	0.00	3720.75
	06/17/10	3788 10	-	61 30	0.00	3726.80
MW - 2	06/28/10	3788 19		61.30	0.00	3726.91
MW - 2	07/06/10	3788 19	-	61.25	0.00	3726.94
MW - 2	07/20/10	3788.19	-	61.45	0.00	3726.74
MW - 2	07/26/10	3788.19	-	61.38	0.00	3726.81
MW - 2	08/02/10	3788.19	-	61.41	0.00	3726.78
MW - 2	08/09/10	3788.19	-	61.35	0.00	3726.84
MW - 2	08/16/10	3788.19	-	61.40	0.00	3726.79
<u>M</u> W - 2	08/23/10	3788.19	61.31	61.34	0.03	3726.85
<u>MW - 2</u>	08/30/10	3788.19	-	61.42	0.00	3726.77
MW - 2	09/07/10	3788.19	-	61.36	0.00	3726.83
MW - 2	09/13/10	3/88.19	-	61.38	0.00	3726.81
	09/20/10	3788.19	-	61.41	0.00	3726.78
	10/04/10	3788 10	-	60.41		3727.02
MW - 2	10/10/10	3788 19		61 41	0.00	3726.78
MW - 2	10/18/10	3788.19	-	61.56	0.00	3726.63
MW - 2	10/26/10	3788.19	-	61.45	0.00	3726.74
MW - 2	11/01/10	3788.19		61.47	0.00	3726.72
MW - 2	11/09/10	3788.19	-	61.35	0.00	3726.84
MW - 2	11/15/10	3788.19	-	61.52	0.00	3726.67
MW - 2	11/22/10	3788.19	61.38	61.41	0.03	3726.81
<u>MW - 2</u>	11/30/10	3788.19	-	61.46	0.00	3726.73
MW - 2	12/06/10	3788.19	-	61.52	0.00	3726.67
<u>MW - 2</u>	12/14/10	3788.19	-	61.53	0.00	3726.66
MW - 2	12/20/10	3788.19	-	60.47	0.00	3/2/./2
<u>IVIVV - 2</u>	12/28/10	3/08.19	-	<u>۵</u> ۲.۱۵	U.UU	3120.01

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GROUNDWATER ELEVATION DATA - 2010

Plains Marketing, L.P. Darr Angel #1 Lea County, New Mexico NMOCD Reference Number AP-007

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	01/11/10	3789.03	-	61.82	0.00	3727.21
MW - 3	02/16/10	3789.03	-	61.97	0.00	3727.06
MW - 3	04/19/10	3789.03	-	62.04	0.00	3726.99
MW - 3	04/26/10	3789.03	-	62.06	0.00	3726.97
MW - 3	05/03/10	3789.03	-	62.04	0.00	3726.99
MW - 3	05/10/10	3789.03	-	62.08	0.00	3726.95
MW - 3	05/17/10	3789.03	-	62.07	0.00	3726.96
MW - 3	05/26/10	3789.03	-	61.85	0.00	3727.18
MW - 3	06/02/10	3789.03	-	62.03	0.00	3727.00
MW - 3	06/07/10	3789.03	-	62.06	0.00	3726.97
MW - 3	06/14/10	3789.03	-	62.08	0.00	3726.95
MW - 3	06/28/10	3789.03	-	62.10	0.00	3726.93
MW - 3	07/06/10	3789.03	-	62.09	0.00	3726.94
MW - 3	07/20/10	3789.03	-	62.10	0.00	3726.93
MW - 3	07/26/10	3789.03	-	62.78	0.00	3726.25
MW - 3	08/02/10	3789.03	-	61.22	0.00	3727.81
MW - 3	08/09/10	3789.03	-	62.17	0.00	3726.86
MW - 3	08/16/10	3789.03	-	61.80	0.00	3727.23
MW - 3	08/23/10	3789.03	-	61.19	0.00	3727.84
MW - 3	08/30/10	3789.03	- `	62.20	0.00	3726.83
MW - 3	09/07/10	3789.03	-	62.18	0.00	3726.85
MW - 3	09/13/10	3789.03	-	62.14	0.00	3726.89
MW - 3	09/20/10	3789.03	-	62.22	0.00	3726.81
MW - 3	09/27/10	3789.03	-	62.23	0.00	3726.80
MW - 3	10/04/10	3789.03	-	62.25	0.00	3726.78
MW - 3	10/10/10	3789.03	-	62.19	0.00	3726.84
MW - 3	10/18/10	3789.03	-	62.25	0.00	3726.78
MW - 3	10/26/10	3789.03	-	61.76	0.00	3727.27
MW - 3	11/01/10	3789.03	-	61.96	0.00	3727.07
MW - 3	11/09/10	3789.03	-	62.19	0.00	3726.84
MW - 3	11/15/10	3789.03	-	62.07	0.00	3726.96
MW - 3	11/22/10	3789.03	-	62.35	0.00	3726.68
MW - 3	11/30/10	3789.03	-	62.09	0.00	3726.94
MW - 3	12/06/10	3789.03	-	62.06	0.00	3726.97
MW - 3	12/14/10	3789.03	-	62.14	0.00	3726.89
MW - 3	12/20/10	3789.03	-	62.21	0.00	3726.82
MW - 3	12/28/10	3789.03	-	61.63	0.00	3727.40
MW - 4	01/11/10	3790.06	-	61.34	0.00	3728.72
MW - 4	02/16/10	3790.06	-	62.40	0.00	3727.66
MW - 4	05/26/10	3790.06	-	62.37	0.00	3727.69
<u>MW - 4</u>	08/23/10	3790.06	-	62.36	0.00	3/27.70
<u>MW - 4</u>	11/22/10	3790.06	-	62.36	0.00	3/2/./0
	04/44/20	0707 47	50.50	67.40	7.04	2706 70
MIVV - 5		3/8/.4/	59.59	07.43	1.84	3725.00
	02/16/10	3/0/.4/	50.00	67.24	4.50	3727.00
	09/20/10	3797 47	60.10	69.41	8 22	3726.05
	11/23/10	3797 47	60.19	69.20	8.09	3726.05
<u>C - VVIVI</u>	11/22/10	3/0/.4/	00.21	00.29	0.00	0120.00
	01/05/10	3786 91		60.59	0.00	3726 23
	01/05/10	3700.01	-	60.50	0.00	3720.23
	01/11/10	3/00.01	-	60.57	0.00	3726.24
MVV - 6	01/19/10	3/80.81		60.00	0.00	3726.20
MVV - 6	01/26/10	3/80.81		60.54	0.00	3726.20
MVV - 6		3/80.81	-	60.00	0.00	3720.21
MW - 6	02/16/10	J 3/86.81	-	00.66	L 0.00	3120.15

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GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	02/18/10	3786.81	-	60.63	0.00	3726.18
MW - 6	03/02/10	3786.81	-	60.64	0.00	3726.17
MW - 6	03/08/10	3786.81	-	60.66	0.00	3726.15
MW - 6	03/17/10	3786.81	-	60.71	0.00	3726.10
MW - 6	03/23/10	3786.81	-	60.70	0.00	3726.11
MW - 6	03/30/10	3786.81	-	60.69	0.00	3726.12
MW - 6	04/06/10	3786.81	-	60.73	0.00	3726.08
MW - 6	04/13/10	3786.81	-	60.72	0.00	3726.09
MW - 6	04/19/10	3786.81	-	60.73	0.00	3726.08
MW - 6	04/26/10	3786.81	-	60.71	0.00	3726.10
MW - 6	05/03/10	3786.81	-	60.70	0.00	3726.11
MW - 6	05/10/10	3786.81	-	60.76	0.00	3726.05
MW - 6	05/17/10	3786.81	-	60.75	0.00	3726.06
MW - 6	05/26/10	3786.81	-	60.61	0.00	3726.20
MW - 6	06/02/10	3786.81	-	60.80	0.00	3726.01
MW - 6	06/07/10	3786.81	-	60.81	0.00	3726.00
MW - 6	06/14/10	3786.81	-	60.78	0.00	3726.03
MW - 6	06/28/10	3786.81	-	60.82	0.00	3725.99
MW ~ 6	07/06/10	3786.81	-	60.85	0.00	3725.96
MW - 6	07/20/10	3786.81	-	61.84	0.00	3724.97
MW - 6	07/26/10	3786.81	1	60.86	0.00	3725.95
MW - 6	08/02/10	3786.81	-	60.88	0.00	3725.93
MW - 6	08/09/10	3786.81	-	61.88	0.00	3724.93
MW - 6	08/16/10	3786.81	-	60.90	0.00	3725.91
MW - 6	08/23/10	3786.81	-	60.89	0.00	3725.92
MW - 6	08/30/10	3786.81	-	60.93	0.00	3725.88
MW - 6	09/07/10	3786.81	-	60.90	0.00	3725.91
MW - 6	09/13/10	3786.81	-	.60.93	0.00	3725.88
MW - 6	09/20/10	3786.81	-	60.93	0.00	3725.88
MW - 6	09/27/10	3786.81	-	60.91	0.00	3725.90
MW - 6	10/04/10	3786.81	-	60.96	0.00	3725.85
MW - 6	10/10/10	3786.81	-	60.95	0.00	3725.86
MW - 6	10/18/10	3786.81	-	61.00	0.00	3725.81
MW - 6	10/26/10	3786.81	-	60.94	. 0.00	3725.87
MW - 6	11/01/10_	3786.81	-	60.96	0.00	3725.85
MW - 6	11/09/10	3786.81	-	60.89	0.00	3725.92
MW - 6	11/15/10	3786.81	-	61.23	0.00	3725.58
MW - 6	11/22/10	3786.81	-	61.08	0.00	3725.73
MW - 6	11/30/10	3786.81	-	61.02	0.00	3725.79
MW - 6	12/06/10	3786.81	-	61.79	0.00	3725.02
MW - 6	12/14/10	3786.81	-	61.76	0.00	3725.05
MW - 6	12/20/10	3/86.81	-	60.92	0.00	3725.89
MW - 6	12/28/10	3/86.81	-	60.86	0.00	3125.95
	01/11/10	3796.90		60.03	0.00	3725 80
	01/11/10	3796.02	-	60.00	0.00	3725.03
	05/26/10	3786.92	-	60.02	0.00	3725.00
	03/20/10	3786.92	-	60.92	0.00	3725.00
	11/22/10	3786.92		60.92	0.00	3725.87
	1112210	0100.02			0.00	0, 20,01
	01/05/10	3788 24	60.88	62 32	1 44	3727 14
	01/11/10	3788.24	61 01	61.84	0.83	3727.14
	01/10/10	3789.24	61.01	61 70	0.05	3727.11
	01/19/10	3789.04	60.04	61 72	1.60	3727.05
	02/12/10	3789.04	60.04	62.53	1.03	3727.06
	02/12/10	3799.04	61 12	61 66	0.54	3727.00
IVIVV - O	02/10/10	J100.24	01.12	01.00	0.04	5121.04

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GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 8	02/18/10	3788.24	61.10	61.84	0.74	3727.03
MW - 8	03/02/10	3788.24	61.04	62.14	1.10	3727.04
MW - 8	03/08/10	3788.24	61.02	62.13	1.11	3727.05
MW - 8	03/17/10	3788.24	61.00	62.47	1.47	3727.02
MW - 8	03/23/10	3788.24	61.02	62.47	1.45	3727.00
MW - 8	03/30/10	3788.24	61.04	62.46	1.42	3726.99
MW - 8	04/06/10	3788.24	60.86	62.06	1.20	3727.20
MW - 8	04/13/10	3788.24	60.83	62.04	1.21	3727.23
MW - 8	04/19/10	3788.24	61.07	62.37	1.30	3726.98
MW - 8	04/26/10	3788.24	61.0 9	62.36	1.27	3726.96
MW - 8	05/26/10	3788.24	61.24	62.38	1.14	3726.83
MW - 8	06/02/10	3788.24	61.06	62.70	1.64	3726.93
MW - 8	06/07/10	3788.24	61.08	62.68	1.60	3726.92
MW - 8	06/14/10	3788.24	61.16	62.36	1.20	3726.90
MW - 8	07/06/10	3788.24	61.24	62.18	0.94	3726.86
MW - 8	07/20/10	3788.24	61.20	62.47	1.27	3726.85
MW - 8	07/26/10	3788.24	61.35	61.86	0.51	3726.81
MW - 8	08/02/10	3788.24	61.34	61.92	0.58	3726.81
MW - 8	08/09/10	3788.24	61.27	62.28	1.01	3726.82
MW - 8	08/16/10	3788.24	61.36	61.92	0.56	3726.80
MW - 8	08/23/10	3788.24	61.38	61.92	0.54	3726.78
MW - 8	08/30/10	3788.24	61.30	62.24	0.94	3726.80
MW - 8	09/07/10	3788.24	61.30	62.34	1.04	3726.78
MW - 8	09/13/10	3788.24	61.40	61.93	0.53	3726.76
MW - 8	09/20/10	3788.24	61.33	62.34	1.01	3726.76
MW - 8	09/27/10	3788.24	61.39	62.26	0.87	3726.72
MW - 8	10/04/10	3788.24	61.35	62.44	1.09	3726.73
MW - 8	10/10/10	3788.24	61.36	62.41	1.05	3726.72
MW - 8	10/18/10	3788.24	61.45	62.08	0.63	3726.70
MW - 8	10/26/10	3788.24	61.32	62.21	0.89	3726.79
MW - 8	11/01/10	3788.24	61.31	61.95	0.64	3726.83
MW - 8	11/09/10	3788.24	61.29	62.24	0.95	3726.81
MW - 8	11/15/10	3788.24	61.29	62.14	0.85	3726.82
MW - 8	11/22/10	3788.24	61.98	63.56	1.58	3726.02
MW - 8	11/30/10	3788.24	61.42	61.89	0.47	3726.75
MW - 8	12/06/10	3788.24	61.25	62.33	1.08	3726.83
MW - 8	12/14/10	3788.24	61.23	62.41	1.18	3726.83
MW - 8	12/20/10	3788.24	61.26	62.40	1.14	3726.81
MW - 8	12/28/10	3788.24	61.17	62.11	0.94	3726.93
MW - 9	01/11/10	3788.33	60.33	ND		#VALUE!
MW - 9	02/16/10	3788.33	61.70	63.01	1.31	3726.43
MW - 9	05/26/10	3788.33	60.21	67.29	7.08	3727.06
MW - 9	08/23/10	3788.33	60.46	67.41	6.95	3726.83
MW - 9	11/22/10	3788.33	60.46	67.41	6.95	3726.83
			.			0700.6.1
MW - 10	01/05/10	3788.46	61.59	63.11	1.52	3726.64
MW - 10	01/11/10	3788.46	61.75	62.57	0.82	3726.59
MW - 10	01/19/10	3788.46	61.71	62.59	0.88	3726.62
MW - 10	01/26/10	3788.46	61.66	62.61	0.95	3/26.66
MW - 10	02/12/10	3788.46	61.92	63.03	1.11	3726.37
MW - 10	02/16/10	3788.46	61.63	63.31	1.68	3726.58
MW - 10	02/18/10	3788.46	61.62	63.43	1.81	3726.57
MW - 10	03/02/10	3788.46	61.65	61.78	0.13	3726.79
MW - 10	03/08/10	3788.46	61.66	61.76	0.10	3726.79
MW - 10	03/17/10	3788.46	61.63	61.79	0.16	3726.81

GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 10	03/23/10	3788.46	61.61	61.79	0.18	3726.82
MW - 10	03/30/10	3788.46	61.60	61.77	0.17	3726.83
MW - 10	04/06/10	3788.46	61.68	63.48	1.80	3726.51
MW - 10	04/13/10	3788.46	61.69	63.45	1.76	3726.51
MW - 10	04/19/10	3788.46	61.79	62.99	1.20	3726.49
MW - 10	04/26/10	3788.46	61.82	62.97	1.15	3726.47
MW - 10	05/03/10	3788.46	61.83	62.99	1.16	3726.46
MW - 10	05/10/10	3788.46	61.85	62.97	1.12	3726.44
MW - 10	05/17/10	3788.46	61.87	62.95	1.08	3726.43
MW - 10	05/26/10	3788.46	61.52	62.79	1.27	3726.75
MW - 10	06/02/10	3788.46	61.55	62.76	1.21	3726.73
MW - 10	06/07/10	3788.46	61.55	62.73	1.18	3726.73
MW - 10	06/14/10	3788.46	61.76	63.63	1.87	3726.42
MW - 10	06/28/10	3788.46	61.78	63.58	1.80	3726.41
MW - 10	07/06/10	3788.46	61.89	63.26	1.37	3726.36
MW - 10	07/20/10	3788.46	62.85	63.50	0.65	3725.51
MW - 10	07/26/10	3788.46	62.00	62.84	0.84	3726 33
MW - 10	08/02/10	3788.46	62.00	62.91	0.91	3726 32
MW - 10	08/09/10	3788.46	62.01	62.90	0.89	3726 32
MW - 10	08/16/10	3788 46	62.01	62.86	0.85	3726 32
MW - 10	08/23/10	3788.46	62.03	62.83	0.80	3726.31
MW - 10	08/30/10	3788.46	62.02	62.91	0.89	3726.31
MW - 10	09/07/10	3788.46	62.03	63.05	1.02	3726.28
MW - 10	09/13/10	3788.46	61.94	63.37	1.43	3726 31
MW - 10	09/20/10	3788.46	61.89	63,79	1.90	3726.29
MW - 10	09/27/10	3788.46	61.90	63.43	1.53	3726.33
MW - 10	10/04/10	3788.46	62.04	63.19	1.15	3726.25
MW - 10	10/10/10	3788 46	62.10	62.96	0.86	3726.23
MW - 10	10/18/10	3788.46	61.96	63.04	1.08	3726 34
MW - 10	10/26/10	3788.46	62.00	62 89	0.89	3726 33
MW - 10	11/01/10	3788.46	62.02	62.87	0.85	3726.31
MW - 10	11/09/10	3788.46	62.02	63.03	1.02	3726.30
MW - 10	11/15/10	3788.46	62.35	63 29	0.94	3725.97
MW - 10	11/22/10	3788.46	62.06	64.33	2 27	3726.06
MW - 10	11/30/10	3788.46	61.93	63.26	1 33	3726 33
MW - 10	12/06/10	3788.46	62.81	63 39	0.58	3725.56
MW - 10	12/14/10	3788.46	62.72	63 54	0.82	3725.62
MW - 10	12/20/10	3788 46	62.04	63.24	1.20	3726.24
MW - 10	12/28/10	3788.46	62.05	63.02	0.97	3726.26
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MW - 11	01/11/10	3789.55	-	62.45	0.00	3727.10
MW - 11	02/16/10	3789.55		62.52	0.00	3727.03
MW - 11	05/26/10	3789.55	-	62.49	0.00	3727.06
MW - 11	08/23/10	3789.55	-	62.48	0.00	3727.07
MW - 11	11/22/10	3789.55			ELL IS DRY	
MW - 12	01/11/10	3787.81		61.65	0.00	3726.16
MW - 12	02/16/10	3787.81		61.72	0.00	3726.09
MW - 12	04/19/10	3787.81	-	61.80	0.00	3726.01
MW - 12	04/26/10	3787.81	-	61.79	0.00	3726.02
MW - 12	05/03/10	3787.81	-	61.78	0.00	3726.03
MW - 12	05/10/10	3787.81	-	61.81	0.00	3726.00
MW - 12	05/17/10	3787.81	-	61.80	0.00	3726.01
MW - 12	05/26/10	3787.81	-	61.67	0.00	3726.14
MW - 12	06/02/10	3787.81	-	61.69	0.00	3726.12
MW - 12	06/07/10	3787.81	-	61.67	0.00	3726.14

GROUNDWATER ELÉVATION DATA - 2010

Plains Marketing, L.P. Darr Angel #1 Lea County, New Mexico NMOCD Reference Number AP-007

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 12	06/28/10	3787.81	_	61.66	0.00	3726.15
MW - 12	07/06/10	3787.81	-	61.67	0.00	3726.14
MW - 12	08/23/10	3787.81	-	61.67	0.00	3726.14
MW - 12	11/22/10	3787.81	-	61.67	0.00	3726.14
MW - 13	01/05/10	3788.55	61.25	ND	0.00	#VALUE!
MW - 13	01/11/10	3788.55	61.50	ND	0.00	#VALUE!
MW - 13	01/19/10	3788.55	61.12	ND	0.00	#VALUE!
MW - 13	01/26/10	3788.55	61.48	ND	0.00	#VALUE!
MW - 13	02/12/10	3788.55	61.24	ND	0.00	#VALUE!
MW - 13	02/16/10	3788.55	61.74	63.48	1.74	3726.55
MW - 13	02/18/10	3788.55	61.54	ND	0.00	#VALUE!
MW - 13	03/02/10	3788.55	61.35	ND	0.00	#VALUE!
MW - 13	03/08/10	3788.55	61.33	ND	0.00	#VALUE!
MW - 13	03/17/10	3788.55	60.24	ND	0.00	#VALUE!
MW - 13	03/23/10	3788.55	61.41	ND	0.00	#VALUE!
MW - 13	03/30/10	3788.55	61.42	ND	0.00	#VALUE!
MW - 13	04/06/10	3788.55	61.29	ND	0.00	#VALUE!
MW - 13	04/13/10	3788.55	61.30	ND	0.00	#VALUE!
MW - 13	04/19/10	3788.55	61.29	ND	0.00	#VALUE!
MW - 13	04/26/10	3788.55	61.31	ND	0.00	#VALUE!
MW - 13	05/03/10	3788.55	61.33	ND	0.00	#VALUE!
MW - 13	05/10/10	3788.55	61.22	ND	0.00	#VALUE!
MW - 13	05/17/10	3788.55	61.25	ND	0.00	#VALUE!
MW - 13	05/26/10	3788.55	61.27	ND	0.00	#VALUE!
MW - 13	06/02/10	3788.55	61.29	ND	0.00	#VALUE!
MW - 13	06/07/10	3788.55	61.28	ND	0.00	#VALUE!
MW - 13	06/14/10	3788.55	61.24	ND	0.00	#VALUE!
MW - 13	06/28/10	3788.55	61.29	ND	0.00	#VALUE!
MW - 13	07/06/10	3788.55	61.29	ND	0.00	#VALUE!
MW - 13	07/20/10	3788.55	61.30	ND	0.00	#VALUE!
MW - 13	07/26/10	3788.55	61.36	ND	0.00	#VALUE!
MW - 13	08/02/10	3788.55	61.41	ND	0.00	#VALUE!
MW - 13	08/09/10	3788.55	61.40	ND	0.00	#VALUE!
MW - 13	08/16/10	3788.55	61.43	ND	0.00	#VALUE!
MW - 13	08/23/10	3788.55	61.42	ND	0.00	#VALUE!
MW - 13	08/30/10	3788.55	61.44	ND	0.00	#VALUE!
MW - 13	09/07/10	3788.55	61.44	ND	0.00	#VALUE!
MW - 13	09/13/10	3788.55	61.50	ND	0.00	#VALUE!
MW - 13	09/20/10	3788.55	61.41	ND	0.00	#VALUE!
MW - 13	09/27/10	3788.55	61.47	ND	0.00	#VALUE!
MW - 13	10/04/10	3788.55	61.43	ND	0.00	#VALUE!
MW - 13	10/10/10	3788.55	61.48	ND	0.00	#VALUE!
MW - 13	10/18/10	3788.55	61.46	ND	0.00	#VALUE!
MW - 13	10/26/10	3788.55	61.45	ND	0.00	#VALUE!
MW - 13	11/01/10	3788.55	61.41	ND	0.00	#VALUE!
MW - 13	11/09/10	3788.55	61.42	ND	0.00	#VALUE!
MW - 13	11/15/10	3788.55	61.33	ND	0.00	#VALUE!
MW - 13	11/22/10	3788.55	61.49	ND	0.00	#VALUE!
MW - 13	11/30/10	3788.55	61.46	ND	0.00	#VALUE!
MW - 13	12/06/10	3788.55	61.36	ND	0.00	#VALUE!
MW - 13	12/14/10	3788.55	61.09	ND	0.00	#VALUE!
MW - 13	12/20/10	3788.55	61.48	ND	0.00	#VALUE!
MW - 13	12/28/10	3788.55	61.51	ND	0.00	#VALUE!
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GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	01/05/10	3788.72	60.52	63.15	2.63	3727.81
<u>MW - 14</u>	01/11/10	3788.72	60.54	63.15	2.61	3727.79
MW - 14	01/19/10	3788.72	60.55	63.15	2.60	3727.78
MW - 14	01/26/10	3788.72	60.56	63.15	2.59	3727.77
MW - 14	02/12/10	3788.72	60.60	63.14	2.54	3727.74
MW - 14	02/16/10	3788.72	60.64	63.16	2.52	3727.70
<u>MW - 14</u>	02/18/10	3788.72	60.61	63.14	2.53	3727.73
MW - 14	03/02/10	3788.72	60.61	63.15	2.54	3727.73
MW - 14	03/08/10	3788.72	60.60	63.13	2.53	3727.74
MW - 14	03/17/10	3788.72	60.65	63.08	2.43	3727.71
MW - 14	03/23/10	3788.72	60.64	63.15	2.51	3727.70
MW - 14	03/30/10	3788.72	60.65	63.13	2.48	3727.70
MW - 14	04/06/10	3788.72	60.67	63.39	2.72	3727.64
MW - 14	04/13/10	3788.72	60.68	63.37	2.69	3727.64
<u>MW - 14</u>	04/19/10	3788.72	60.69	ND	0.00	#VALUE!
MW - 14	04/26/10	3788.72	60.67	ND	0.00	#VALUE!
MW - 14	05/03/10	3788.72	60.69	ND	0.00	#VALUE!
MW - 14	05/10/10	3788.72	60.62	ND	0.00	#VALUE!
MW - 14	05/17/10	3788.72	60.60	ND	0.00	#VALUE!
MW - 14	05/26/10	3788.72	60.58	ND	0.00	#VALUE!
MW - 14	06/02/10	3788.72	60.56	ND	0.00	#VALUE!
MW - 14	06/07/10	3788.72	60.55	ND	0.00	#VALUE!
MW - 14	06/14/10	3788.72	60.76	ND	0.00	#VALUE!
MW - 14	06/28/10	3788.72	60.80	ND	0.00	#VALUE!
MW - 14	07/06/10	3788.72	60.80	ND	0.00	#VALUE!
<u>MW - 14</u>	07/20/10	3788.72	60.81	ND	0.00	#VALUE!
<u>MW - 14</u>	07/26/10	3788.72	60.82	ND	0.00	#VALUE!
<u>MW -</u> 14	08/02/10	3788.72	60.83	ND	0.00	#VALUE!
<u>MW -</u> 14	08/09/10	3788.72	60.84	ND	0.00	#VALUE!
<u>MW - 14</u>	08/16/10	3788.72	61.85	ND	0.00	#VALUE!
<u>MW - 14</u>	08/23/10	3788.72	60.85	ND	0.00	#VALUE!
<u>MW - 14</u>	08/30/10	3788.72	60.87	ND	0.00	#VALUE!
<u>MW - 14</u>	09/07/10	3788.72	60.89	ND	0.00	#VALUE!
<u>MW - 14</u>	09/13/10	3788.72	60.90	ND	0.00	#VALUE!
<u>MW - 14</u>	09/20/10	3788.72	60.24	ND	0.00	#VALUE!
<u>MW - 14</u>	09/27/10	3788.72	60.52	ND	0.00	#VALUE!
<u>MW - 14</u>	10/04/10	3788.72	60.94	ND	0.00	#VALUE!
<u>MW - 14</u>	10/10/10	3788.72	60.94	ND	0.00	#VALUE!
<u>MW - 14</u>	10/18/10	3788.72	60.95	ND	0.00	#VALUE!
<u>MW - 14</u>	10/26/10	3788.72	60.84	ND	0.00	#VALUE!
<u>MW - 14</u>	11/01/10	3788.72	60.84	ND	0.00	#VALUE!
<u>MW - 14</u>	11/09/10	3788.72	60.91	ND	0.00	#VALUE!
<u>MVV - 14</u>	11/15/10	3788.72	60.90	ND	0.00	#VALUE!
<u>MVV - 14</u>	11/22/10	3788.72	61.02	ND	0.00	#VALUE!
	11/30/10	3/88.72	60.93	ND	0.00	#VALUE!
	12/06/10	3/88./2	60.88	ND	0.00	#VALUE!
<u>IVIVV - 14</u>	12/14/10	3/88.72	60.76	ND	0.00	#VALUE!
	12/20/10	3/88./2	60.99		0.00	#VALUE!
<u>IVIVV - 14</u>	12/28/10	3/88.72	60.79	ND	<u> </u>	#VALUE!
		0700.05		04.00	0.00	0707.00
<u>IVIVV - 15</u>	01/11/10	3/88.95		61.92	0.00	3/2/.03
<u>MVV - 15</u>	02/16/10	3/88.95	-	61.98	0.00	3/26.9/
MVV - 15	05/26/10	3788.95	-	61.87	0.00	3727.08
<u>MVV - 15</u>	08/23/10	3788.95	-	61.87	0.00	3/27.08
<u>MVV - 15</u>	11/22/10	3788.95	-	61.89	0.00	3/27.06

GROUNDWATER ÊLÊVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 16	01/11/10	3789.61	-	62.34	0.00	3727.27
MW - 16	02/16/10	3789.61	· _	62.39	0.00	3727.22
MW - 16	05/26/10	3789.61	-	62.36	0.00	·3727.25
MW - 16	08/23/10	3789.61	-	62.37	0.00	3727.24
MW - 16	11/22/10	3789.61	-	62.38	0.00	3727.23
MW - 17	01/11/10	3787.95	-	61.60	0.00	3726.35
MW - 17	02/16/10	3787.95	-	61.66	0.00	3726.29
MW - 17	05/26/10	3787.95	- ·	61.59	0.00	3726.36
MW - 17	08/23/10	3787.95	-	61.61	. 0.00	3726.34
MW - 17	11/22/10	3787.95	-	61.61	0.00	3726.34
MW - 18	01/11/10	3788.82	-	62.08	0.00	3726.74
MW - 18	02/16/10	3788.82	-	62.14	0.00	3726.68
MW - 18	05/26/10	3788.82	-	62.08	0.00	3726.74
<u>MW - 18</u>	08/23/10	3788.82	-	62.09	0.00	3726.73
<u>MW - 18</u>	11/22/10	3788.82	-	62.10	0.00	3726.72
<u> </u>	01/11/10	<u>3787.51</u>	-	61.60	0.00	3725.91
MW - 19	02/16/10	<u>3</u> 787.51		61.65	0.00	3725.86
<u>M</u> W - 19	05/26/10	3787.51		61.61	0.00	3725.90
<u>MW - 19</u>	08/23/10	3787.51	-	61.60	0.00	3725.91
<u>M</u> W - 19	11/22/10	3787.51	-	61.60	0.00	3725.91
<u>MW - 20</u>	01/11/10	3788.53	-	61.78	0.00	3726.75
<u>MW - 20</u>	02/16/10	3788.53	-	61.83	0.00	3726.70
<u>MW - 20</u>	05/26/10	3788.53	-	61.79	0.00	
<u>MW - 20</u>	08/23/10	3788.53	-	61.81	0.00	3726.72
<u> </u>	11/22/10	3788.53	-	61.81	0.00	3726.72
<u>MW - 21</u>	01/11/10	3786.46	-	61.63	0.00	3/24.83
<u>MW - 21</u>	02/16/10	3786.46	-	61.96	0.00	3724.50
<u>M</u> W - 21	05/26/10	3786.46	-	61.59	0.00	3724.87
<u>MW - 21</u>	08/23/10	3786.46	-	61.58	0.00	3724.88
<u>M</u> W - 21	11/22/10	3786.46	-	61.59	0.00	3724.87
RW - 1	01/11/10	3788.33	59.86	ND	0.00	#VALUE!
RW - 1	02/16/10	3788.33	59.92	ND	0.00	#VALUE!
	05/26/10	3/88.33	59.74		0.00	#VALUE!
	08/23/10	3788.33	59.74		0.00	#VALUE!
<u> </u>	11/22/10	3/88.33	59.79		0.00	#VALUE!
	01/11/10	2709.09	60.55	67.03	6 49	3707 46
<u>RVV-2</u>	01/11/10	3799.09	63.03	63.05	0.40	3725.05
	02/10/10	3799.09	60.95	67.10	6.02	3727.10
	03/20/10	3788 08	61.82	67.10	5 32	3726.36
- RM 2	11/22/10	3789 09	61.86	67.00	5.52	3726 35
<u></u>	11/2/10	0.30	01.00	01.00	<u> </u>	0120.00
	01/05/10	3789.05	61 61	63 23	1 62	3727 10
	01/11/10	3799 05	61 72	62.61	0.88	3727.10
	01/10/10	3789 05	61 70	62.01	0.80	3727.03
	01/19/10	3799.05	61 79	62.05	0.00	3727.04
	01/20/10	3780 05	61 66	63.53	1.03	3727.03
	02/12/10	3700.90	61 95	62 45	1.07	3727.01
FVV - 3	02/10/10	3799 05	61 92	62.40	0.00	3726.00
	02/10/10	3700.90	61 02	62.09	0.00	3727.00
XVV - 3	03/02/10	3/00.90	01.03	02.04	0.01	

GROUNDWATER ELEVATION DATA - 2010

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 3	03/08/10	3788.95	61.84	62.63	0.79	3726.99
<u>R</u> W - 3	03/17/10	3788.95	61.49	64.30	2.81	3727.04
	03/23/10	3788.95	61.47	64.31	2.84	3727.05
<u>RW-3</u>	03/30/10	3788.95	61.48	64.31	2.83	3727.05
RW - 3	04/06/10	3788.95	61.47	64.62	3.15	3727.01
RW - 3	04/13/10	3788.95	61.49	64.59	3.10	3727.00
PIN - 3	04/19/10	3788.95	61.76	63.43	1.67	3726.94
	04/20/10	3788.05	61.70	63.30	1.02	3726.95
RW-3	05/17/10	3788.05	61.81	63.34	1.49	3726.09
RW-3	05/26/10	3788.95	61.64	63.17	1.53	3727.08
RW-3	06/02/10	3788.95	61.67	63 15	1.00	3727.06
RW-3	06/07/10	3788 95	61.66	63.17	1.51	3727.06
RW - 3	06/14/10	3788.95	61.31	65.89	4 58	3726.95
RW - 3	06/28/10	3788.95	61.85	63.55	1.70	3726.85
RW - 3	07/06/10	3788.95	61.99	63.04	1.05	3726.80
RW - 3	07/20/10	3788.95	61.85	63.78	1.93	3726.81
RW - 3	07/26/10	3788.95	62.05	62.83	0.78	3726.78
RW - 3	08/02/10	3788.95	62.02	62.95	0.93	3726.79
RW - 3	08/09/10	3788.95	61.91	63.51	1.60	3726.80
	08/16/10	3788.95	62.05	62.98	0.93	3726.76
RW - 3	08/23/10	3788.95	62.19	62.91	0.72	3726.65
<u>RW - 3</u>	08/30/10	3788.95	62.08	62.91	0.83	3726.75
<u> </u>	09/07/10	3788.95	61.98	63.47	1.49	3726.75
<u>RW - 3</u>	09/13/10	3788.95	62.08	62.93	0.85	3726.74
<u>RW - 3</u>	09/20/10	3788.95	61.96	63.61	1.65	3726.74
<u>RW - 3</u>	09/27/10	3788.95	62.01	63.44	1.43	3726.73
<u>RW - 3</u>	10/04/10	3788.95	61.97	63.74	1.77	3726.71
RW - 3	10/10/10	3788.95	62.11	63.07	0.96	3726.70
$\frac{RW-3}{EVA(-3)}$	10/18/10	3788.95	62.03	63.08	1.05	3/26.76
$\frac{P(W-3)}{D(W-3)}$	10/26/10	3788.95	61.93	63.20	1.33	3726.82
$\frac{1}{1}$	11/01/10	3788.05	62.02	63.11	0.90	3726.60
$\frac{1}{8}$	11/15/10	3788.95	61.97	63.11	1.14	3726.85
$\frac{100-3}{100}$	11/22/10	3788.95	62.23	62.96	0.73	3726.61
BW-3	11/30/10	3788.95	62 11	62.92	0.70	3726.72
RW-3	12/06/10	3788.95	61.87	62.47	0.60	3726.99
RW - 3	12/14/10	3788.95	61.82	62.93	1.11	3726.96
RW - 3	12/20/10	3788.95	61.82	63.64	1.82	3726.86
RW - 3	12/28/10	3788.95	61.94	63.01	1.07	3726.85
<u>RW - 4</u>	01/11/10	3788.15	60.60	ND	#VALUE!	#VALUE!
<u>R</u> W - 4	02/16/10	3788.15	sheen	62.66	0.00	3725.49
RW - 4	05/26/10	3788.15	60.51	67.33	6.82	3726.62
RW - 4	08/23/10	3788.15	61.19	67.33	6.14	3726.04
<u>RW - 4</u>	11/22/10	3788.15	61.21	67.19	5.98	3726.04
			o.1 75	07.00		
VW - 5	01/11/10	3788.83	61.75	67.63	5.88	3726.20
	02/16/10	3788.83	62.49	60.05	3.56	3/25.81
KW - 5	05/26/10	3788.83	60.04	67.00	5.92	3/20.12
<u>RVV - 5</u>	08/23/10	3/88.83	60.94	67.90	0.90	3726.84
<u>rvv-5</u>	11/22/10	3/00.03	00.90	07.04	55.0	3120.04
	01/11/10	3789 03	61 61	86.08	5 37	3726 51
BW 6	01/11/10	3789 02	61.09	66.90	<u> </u>	3726.01
	02/10/10	3789 03	66 59	67.20	4.91	3720.21
	03/20/10	3788 03	62 /1	67 /2	<u> </u>	3725.77
	11/22/10	3788 03	62.41	67.32	4.80	3725.77
	11/2/10	5750.35	02.40	07.02		0120.11

GROUNDWATER ELEVATION DATA - 2010

Plains Marketing, L.P. Darr Angel #1 Lea County, New Mexico NMOCD Reference Number AP-007

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 7	01/11/10	3789.07	61.72	67.88	6.16	3726.43
RW - 7	02/16/10	3789.07	sheen	64.70	0.00	3724.37
RW - 7	05/26/10	3789.07	60.75	66.32	5.57	3727.48
RW - 7	08/23/10	3789.07	60.76	66.33	5.57	3727.47
RW - 7	11/22/10	3789.07	60.76	66.33	5.57	3727.47
RW - 8	01/11/10	3788.48	61.10	ND	0.00	#VALUE!
RW - 8	02/16/10	3788.48	61.51	68.70	7.19	3725.89
RW - 8	05/03/10	3788.48	61.11	62.39	1.28	3727.18
RW - 8	05/10/10	3788.48	61.13	62.36	1.23	3727.17
RW - 8	05/17/10	3788.48	61.15	62.35	1.20	3727.15
RW - 8	05/26/10	3788.48	60.57	67.52	6.95	3726.87
RW - 8	06/28/10	3788.48	61.04	63.04	2.00	3727.14
RW - 8	08/23/10	3788.48	61.69	68.56	6.87	3725.76
RW - 8	11/22/10	3788.48	61.66	68.50	6.84	3725.79
RW - 9	01/11/10	3788.92	61.10	65.93	4.83	3727.10
RW - 9	02/16/10	3788.92	62.71	64.03	⁷ 1.32	3726.01
RW - 9	05/26/10	3788.92	61.28	65.37	4.09	3727.03
RW - 9	08/23/10	3788.92	62.64	67.14	4.50	3725.61
RW - 9	11/22/10	3788.92	62.65	67.12	4.47	3725.60
RW - 10	01/11/10	3788.72		PUMP IN W	ELL	3788.72
RW - 10	02/16/10	3788.72	sheen	62.72	0.00	3726.00
RW - 10	05/26/10	3788.72	60.77	66.31	5.54	3727.12
RW - 10	08/23/10	3788.72	61.61	66.53	4.92	3726.37
RW - 10	11/22/10	3788.72	61.65	66.46	4.81	3726.35
RW - 11	01/11/10	3788.43		PUMP IN WI	ELL	3788.43
RW - 11	02/16/10	3788.43	61.94	64.90	2.96	3726.05
RW - 11	05/03/10	3788.43	61.81	63.37	1.56	3726.39
RW - 11	05/26/10	3788.43	61.43	67.14	5.71	3726.14
RW - 11	08/23/10	3788.43	61.50	68.49	6.99	3725.88
RW - 11	11/22/10	3788.43	61.53	68.35	6.82	3725.88

* Complete Historical data Tables are presented on the attached CD. ND = No Water detected during gauging of well.

CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGEL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007

All concentrations are reported in mg/L

			METH	IODS: SW 846-	8260b	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - Xylene
NMOCD Reg	ulatory Limit	0.01	0.75	0.75	0.	62
MW - 1	02/16/10	Not Sampled	Due to PSH i	n Well		
MW - 1	05/26/10	Not Sampled	Due to PSH i	n Well		
MW - 1	08/23/10	Not Sampled	Due to PSH i	n Well		
MW - 1	11/22/10	Not Sampled	Due to PSH i	n Well		
MW - 2	02/16/10	0.056	< 0.010	0.400	0.4	134
MW - 2	05/26/10	Not Sampled	Due to PSH i	n Well		
MW - 2	08/23/10	Not Sampled	Due to PSH i	n Well		
MW - 2	11/22/10	Not Sampled	Due to PSH i	n Well		
		`				
MW - 3	02/16/10	0.1730	0.3900	0.587	1.	55
MW - 3	05/26/10	0.0541	0.0429	0.477	• 0.8	364
MW - 3	08/23/10	0.0290	0.0210	0.461	0.9)38
MW - 3	11/22/10	0.0672	0.0282	0.353	0.8	388
MW - 4	02/16/10	Not Sampled	on Current S	ample Schedu	ile	
MW - 4	05/26/10	Not Sampled	on Current S	ample Schedu	ile	
MW - 4	08/23/10	Not Sampled	on Current S	ample Schedu	ile	
MW - 4	11/22/10	<0.001	<0.001	<0.001	<0	001
	11/22/10	-0.001	-0.001			
MW - 5	02/16/10	Not Sampled	Due to PSH i	n Well		
MW - 5	05/26/10	Not Sampled	Due to PSH i	n Well		
MW = 5	03/20/10	Not Sampled	Due to PSH i	n Well		
MW = 5	11/22/10	Not Sampled	Due to PSH i	n Well		
101 00 - 5	11/22/10	Not Sampled				
MW - 6	02/16/10	1 100	<0.020	<0.020	0	142
MW - 6	05/26/10	0.763	<0.020	0.0477	0.0	955
MW - 6	08/23/10	0.787	<0.020	0.1230	0.0	253
$\frac{1}{MW} = 6$	11/22/10	1 000	<0.010	0.0372	0.0	957
14144 - 0	11/22/10	1.000	-0.010	0.0372	0.0	
MW - 7	02/16/10	Not Sampled	on Current St	i ample Schedi	ıle	
MW = 7	05/26/10			< 0.001	<u> <0</u>	001
$\frac{1}{M} = 7$	08/23/10	<0.001	<0.001	<0.001	<0.	001
$\frac{1}{1} \frac{1}{1} \frac{1}$		<0.001	<0.001	<0.001	< <u>.</u> <0	001
1VI VÝ - /	11/22/10	~0.001	~0.001		-0.	
	02/16/10	Not Sampled	Due to DSU i	n Well		
	05/26/10	Not Sampled	Due to DCU :	n Well		
	09/22/10	Not Sampled	Due to PCU :	n Well	<u> </u>	
1V1 VV - 0		Not Sampled	Due to DCU :	n Well		
<u>IVI VY - Ö</u>	11/22/10	inor Sampled				
					1	

CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGEL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007

All concentrations are reported in mg/L

			METH	IODS: SW 846-	82 60b	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOCD Reg	gulatory Limit	0.01	0.75	0.75	0.	62
MW - 9	02/16/10	Not Sampled	Due to PSH is	n Well		
MW - 9	05/26/10	Not Sampled	Due to PSH i	n Well		
MW - 9	08/23/10	Not Sampled	Due to PSH is	n Well		
MW - 9	11/22/10	Not Sampled	Due to PSH is	n Well		
MW - 10	02/16/10	Not Sampled	Due to PSH in	n Well		
MW - 10	05/26/10	Not Sampled	Due to PSH in	n Well		
MW - 10	08/23/10	Not Sampled	Due to PSH in	n Well		
MW - 10	11/22/10	Not Sampled	Due to PSH in	n Well		
MW - 11	02/16/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 11	05/26/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 11	08/23/10	Not Sampled	on Current Sa	ample Schedu	ile	
MW - 11	11/22/10	Not Sampled	Due to Insuff	icient Water i	in Well	
MW - 12	02/16/10	0.156	< 0.010	< 0.010	<0.	010
MW - 12	05/26/10	0.054	< 0.010	<0.010	<0.	010
MW - 12	08/23/10	0.0076	< 0.001	< 0.001	<0.	001
MW - 12	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 13	02/16/10	Not Sampled	Due to PSH in	n Well		
MW - 13	05/26/10	Not Sampled	Due to PSH in	n Well		
MW - 13	08/23/10	Not Sampled	Due to PSH is	n Well		
<u>MW - 13</u>	11/22/10	Not Sampled	Due to PSH i	n Well		
MW - 14	02/16/10	Not Sampled	Due to PSH is	n Well		
<u>MW - 14</u>	05/26/10	Not Sampled	Due to PSH i	n Well		
MW - 14	08/23/10	Not Sampled	Due to PSH i	n Well		
MW - 14	11/22/10	Not Sampled	Due to PSH i	n Well		
MW - 15	02/16/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 15	05/26/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 15	08/23/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 15	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 16	02/16/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 16	05/26/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 16	08/23/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 16	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001

CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGEL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007

All concentrations are reported in mg/L

			METH	IODS: SW 846-	8260Ъ	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOCD Reg	ulatory Limit	0.01	0.75	0.75	0.	62
<u>MW</u> - 17	02/16/10	< 0.001	<0.001	<0.001	<0.	001
<u>MW</u> - 17	05/26/10	< 0.001	< 0.001	< 0.001	<0.	001
<u>MW</u> - 17	08/23/10	< 0.001	< 0.001	< 0.001	<0.	001
<u>MW</u> - 17	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 18	02/16/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 18	05/26/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 18	08/23/10	Not Sampled	on Current Sa	ample Schedu	ıle	
MW - 18	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 19	02/16/10	< 0.001	<0.001	< 0.001	<0.	001
MW - 19	05/26/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 19	08/23/10	< 0.001	< 0.001	< 0.001	<0	001
MW - 19	11/22/10	< 0.001	< 0.001	< 0.001	<0.	001
MW - 20	02/16/10	Not Sampled	on Current Sa	ample Schedu	ile	
MW - 20	05/26/10	Not Sampled	on Current Sa	ample Schedu	le	
MW - 20	08/23/10	Not Sampled	on Current S	mple Schedu	le	
MW - 20	11/22/10	<0.001	<0.001	<0.001	<0	001
		0.001	0.001			
MW - 21	02/16/10	<0.001	<0.001	<0.001	<0	001
MW - 21	05/26/10	<0.001	<0.001	<0.001	<0	001
MW - 21	08/23/10	<0.001	<0.001	<0.001	<0	001
MW - 21	11/22/10	<0.001	<0.001	<0.001	<0	001
	11/20/10	0.001	0.001	0.001		
RW - 1	02/16/10	Not Sampled	Due to PSH i	n Well		
RW - 1	05/26/10	Not Sampled	Due to PSH i	n Well		
RW - 1	08/23/10	Not Sampled	Due to PSH i	n Well		
RW - 1	11/22/10	Not Sampled	Due to PSH i	n Well		
RW - 2	02/16/10	Not Sampled	Due to PSH i	n Well		
RW - 2	05/26/10	Not Sampled	Due to PSH i	n Well		
RW - 2	08/23/10	Not Sampled	Due to PSH i	n Well		
RW-2	11/22/10	Not Sampled	Due to PSH i	n Well		
	11/22/10	rior Sampleu				
DW 2	02/16/10	Not Sampled		n Well		
$\overline{\mathbf{D}\mathbf{W}}$ - 5	02/10/10	Not Sampled	Due to DCU :	n Well		
PW_{2}	09/22/10	Not Sampled	Due to DCU i	n Well		
$\frac{RW-3}{DW-2}$	11/22/10	Not Sampled	Due to DSU :			
<u> </u>	11/22/10	TNOT Sampled				

CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGEL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007

All concentrations are reported in mg/L

			METH	IODS: SW 846-	8260b	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOÇD Reg	ulatory Limit	0.01	0.75	0.75	0.	62
RW - 4	02/16/10	Not Sampled	Due to PSH is	n Well		
RW - 4	05/26/10	Not Sampled	Due to PSH in	n Well		
RW - 4	08/23/10	Not Sampled	Due to PSH in	n Well		
RW - 4	11/22/10	Not Sampled	Due to PSH in	n Well	-	
RW - 5	02/16/10	Not Sampled	Due to PSH in	n Well		
RW - 5	05/26/10	Not Sampled	Due to PSH in	n Well		
RW - 5	08/23/10	Not Sampled	Due to PSH in	n Well		
RW - 5	11/22/10	Not Sampled	Due to PSH in	n Well		
RW - 6	02/16/10	Not Sampled	Due to PSH in	n Well		
RW - 6	05/26/10	Not Sampled	Due to PSH in	n Well		
RW - 6	08/23/10	Not Sampled	Due to PSH i	n Well		
RW - 6	11/22/10	Not Sampled	Due to PSH i	n Well		
RW - 7	02/16/10	Not Sampled	Due to PSH i	n Well		
RW - 7	05/26/10	Not Sampled	Due to PSH is	n Well		
RW - 7	08/23/10	Not Sampled	Due to PSH in	n Well		
RW - 7	11/22/10	Not Sampled	Due to PSH in	n Well		
RW - 8	02/16/10	Not Sampled	Due to PSH is	n Well		
RW - 8	05/26/10	Not Sampled	Due to PSH in	n Well		
RW - 8	08/23/10	Not Sampled	Due to PSH is	n Well		
RW - 8	11/22/10	Not Sampled	Due to PSH i	n Well		
RW - 9	02/16/10	Not Sampled	Due to PSH is	n Well		
RW - 9	05/26/10	Not Sampled	Due to PSH is	n Well		
RW - 9	08/23/10	Not Sampled	Due to PSH is	n Well		
RW - 9	11/22/10	Not Sampled	Due to PSH i	n Well		
RW - 10	02/16/10	Not Sampled	Due to PSH i	n Well		
RW - 10	05/26/10	Not Sampled	Due to PSH i	n Well		
RW - 10	08/23/10	Not Sampled	Due to PSH is	n Well		
RW - 10	11/22/10	Not Sampled	Due to PSH i	n Well		
RW - 11	02/16/10	Not Sampled	Due to PSH i	n Well		
RW - 11	05/26/10	Not Sampled	Due to PSH i	n Well		
RW - 11	08/23/10	Not Sampled	Due to PSH i	n Well		
RW - 11	11/22/10	Not Sampled	Due to PSH i	n Well		

* Complete Historical data Tables are presented on the attached CD.

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGELL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007 All wate contentrations or reported in mgL

	Dibenzofturan		0.0106	0.0436		0.00174	0.00314		0.00292	0.00191	0.00579	0.000184	0.000184		0.0201	0.00767		0.00251	0.00125		0.000185	0.000184		0.0861	0.0566	
	รกร\ธภาสุธกไ∨ุก้ารไ∕\2		0.250	1.09		0.0302	0.0528		0.0625	0.0451	0.115	<0.000184 <	<0.000184 <		0.372	0.194		0.015	0.00426		<0.000185 <	<0.000184 <		1.86	1.14	ſ
	ənəladınqaniydısM-1	J\ym £0.0	0.173	0.748		0.0234	0.0536		0.0455	0.0396	0.0915	<0.000184 <	<0.000184 <		0.261	0.137		0.0339	0.0133		<0.000185 <	<0.000184 <		1.26	0.839	
	anslatinga ^N		0.122	0.350		0.0285	0.0435		0.0601	0.0372	0.0673	<0.000184	<0.000184		0.136	0.0779		0.0217	0.00437		<0.000185	<0.000184		0.529	0.359	
	Pyrene		<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	<0.000184	•	<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
	Phenanthrene		0.0205	0.106		0.00282	0.00625		0.0037	0.00262	0.0136	<0.000184	<0.000184		0.0427	0.0172		0.00322	0.00144		<0.000185	<0.000184		0.188	0.113	
	ənəryq(bɔ-€,2,1]onəbnI	Дап 2 000.0	<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
	Fluorene		0.0167	0.0719		0.00255	0.00482		0.00377	0.00242	0.00899	<0.000184	<0.000184		0.0326	0.0122		0.00321	0.00129		<0.000185	<0.000184		0.135	0.0789	
. 3510	Fluoranthene		<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
70/70-0404	Dibenz[a,h]anthracene		<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
ELA O M	Сргузепе	.Л\дт 2000.0	<0.000183	0.0164		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	0.00262		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	0.0165	
	Benzo[k]fluoranthene	Л\зт 2000.0	<0.000183	<0.000922	Event.	<0.000183	<0.000184	SH	<0.000184	<0.000184	<0.000186	<0.000184	<0.000184	Event.	<0.000917	<0.000184	Event.	<0.000184	<0.000184	Event.	<0.000185	<0.000184	Event.	<0.000184	<0.000917	
	analynaq[i,fi,g]osnaß		<0.000183	<0.000922	Monitoring	<0.000183	<0.000184	resence of F	<0.000184	<0.000184	<0.000186	<0.000184	<0.000184	Monitoring	<0.000917	<0.000184	Monitoring	<0.000184	<0.000184	Monitoring	<0.000185	<0.000184	Monitoring	<0.000184	<0.000917	
	Benzo[b]fluoranthene	J\gm 2000.0	<0.000183	<0.000922	of Quarterly	<0.000183	<0.000184	PAH due to I	<0.000184	<0.000184	<0.000186	<0.000184	<0.000184	of Quarterly	<0.000917	<0.000184	of Quarterly	<0.000184	<0.000184	t of Quarterly	<0.000185	<0.000184	t of Quarterly	<0.000184	<0.000917	
	Benzo[a]pyrene	.I\gm 7000.0	<0.000183	<0.000922	npled as part	<0.000183	<0.000184	sampled for	<0.000184	<0.000184	<0.000186	<0.000184	<0.000184	npled as part	<0.000917	<0.000184	npled as part	<0.000184	<0.000184	npled as part	<0.000185	<0.000184	npled as part	<0.000184	<0.000917	
	9n92ertitns[s]02n9H	J\ym 1000.0	<0.000183	<0.000922	Not Sar	<0.000183	<0.000184	Not :	<0.000184	<0.000184	<0.000186	<0.000184	<0.000184	Not Sa	<0.000917	<0.000184	Not Sat	<0.000184	<0.000184	Not Sar	<0.000185	<0.000184	Not Sar	<0.000184	<16000.0>	
	Апійгяселе		<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		0.0424	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
	ənəlyithenəəA		0.00485	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		0.00806	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
	จกจกำกัqยกจว A		<0.000183	<0.000922		<0.000183	<0.000184		<0.000184	<0.000184	<0.000186	<0.000184	<0.000184		<0.000917	<0.000184		<0.000184	<0.000184		<0.000185	<0.000184		<0.000184	<0.000917	
	SAMPLE DATE	ntaminant M WQCC r tions 1- .103.A.	11/24/08	12/08/09	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08	12/08/09	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08	12/07/09	11/22/10	11/25/08	12/08/09	
	SAMPLE LOCATION	Maximum Co Levels from N Drinking wate standards Sect 101.UU and 3.	I-WM			MW-2			MW-3			MW-4			MW-5			MW-6			MW-7			8-WM		

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POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGELL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007 All water concentrations are reported in mg/L.

										EPA SW8	46-8270C, 3	510								
SAMPLE LOCATION	SAMPLE DATE	өпөййдвпөэА	อกอโซก์ให้กุลกอวA	, Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[l,ti,g]perylene	ənəfinarouli[J]oznəE	эцэхүлд	Dibenz[h,s]กร[ก,s]	Fluoranthene	Fluorene	ənəıyq(bɔ-&,£,1}onəbnl	Phenanthrene	Pyrene	ənəlaritiqaN	ənəlsatınqsafiyitəM-1	ənəlefitiqenlyitəM-2	nsuioznadia
Maximum Cc Levels from N Drinking wate standards See 101.UU and 3	ntaminant M WQCC er tions 1- -103.A.				J\gm 1000.0	J\ym 7000.0	Л\дт 2000.0		J\ym 2000.0	J\ym 2000.0	J\gm £000.0			J\gm \$000.0				J\gm £0.0		
6-WW	11/25/08	<0.000184	0.00163	<0.000184	<0.000184 •	<0.000184 <	<0.000184 <	0.000184 <	0.000184 0	00172 <	0.000184	0.000184 0	.00846 <0	.000184	0.0104 <0	000184	0.0641	0.0851	0.112 0	.00578
	12/07/09	Not Sampled	due to insuffi	Icient water \	volume														_	
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	rent.											
MW-10	11/24/08	<0.000922	<0.000922	<0.000922	<0.000922 +	<0.000922 <	<0.000922 <	0.000922 <).000922 <(0.000922 <	0.000922	0.000922	0.0382 <0	.000922	0.0512 <0	000922	0.212	0.382	0.537	0.0286
	12/08/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917 <	0.000917	0.000917	0.0357 <	0.000917	0.000917	0.172 <0	000917	0.245 <0	000917	0.856	1.89	2.64	0.112
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	rent.							_				
																		+		
MW-11	11/24/08	<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 <(000185 <0	.000185
	12/07/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184 <	0.000184 <	0.000184 <(0.000184	0.000184 <	0.000184 <(000184 <0	.000184 <(000184 <0	000184 <0	0.000184 <(0.000184 <(.000184 <0	.000184
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	rent.					_						
MW-12	11/24/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183 <	0.000183 <	D.000183 <(0.000183	0.000183 <	0.000183 0.	000696 <0	.000183 <0	000183 <0	0.000183 0.	000648 0	.000372 <(000183 0	.00145
	12/07/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184 <	<0.000184 <	0.000184 <	0.000184 <(0.000184	0.000184 <	0.000184 <(000184 <0	.000184 <0	.000184 <0	0.000184 0.	.000615 <(0.000184 <(000184 0	000706
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	rent.											
MW-13	11/24/08	Not Sampled	due to insuff	ficient water v	volume						•								_	
	12/07/09	Not Sampled	due to insuff	ficient water v	volume															
	11/22/10				Not Sam	pled as part o	of Quarterly N	Ionitoring Ev	'ent.											
MW-14	11/24/08	Not Sampled	due to insuff	ficient water	volume															
	12/07/09	Not Sampled	due to insuff	Ticient water	volume															
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	'ent.											
MW-15	11/24/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183 <	<0.000183 <	0.000183 <	0.000183 <(0.000183 <	0.000183 <	0.000183 <(000183 <0	000183 <0	000183 <0	0.000183 <0).000183 <(0.000183 <(000183 <0	.000183
	12/07/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184 <	<0.000184 <	0.000184 <	0.000184 <(0.000184 <	0.000184 <	0.000184 <(000184 <0	.000184 <0	000184 <0	0.000184 <0	.000184 <	0.000184 <(000184 <(000184
	11/22/10				Not Sam	pled as part o	of Quarterly N	fonitoring Ev	'ent.											
MW-16	11/24/08	<0.000185	<0.000185	0.000888	0.000959	0.000847	0.000814	0.00102 0	0 0879 0	> 856000.	0.000185	0.0013 0.	000417	0.001 0	.00076	0.0012 <0	0.000185 0	000216 0	000313 <0	.000185
	12/07/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184 <	0.000184 <	0.000184 <(0.000184	0.000184 <	0.000184 <(000184 <0	.000184 <0	000184 <0	000184 <0	000184 <(0.000184 <(000184 <(000184
	11/22/10				Not Sam	pled as part c	of Quarterly h	fonitoring Ev	'ent.					•					_	
						1 1														

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGELL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007

	Dibenzofuran		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	Lo Topo.o.	<0.000184	<0.000184		<0.000183	<0.000184						0.0964		0.0633	0.130	
	2-Methylnaphthalene		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.02	<0.000184	<0.000184		<0.000183	<0.000184						2.60		1.31	3.29	
	ənəlarlıdaniyitə?V-1	J\ym £0.0	<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184		<0.000184	<0.000184		<0.000183	<0.000184						1.74		0.888	2.27	
	analentinge ^N		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.05	<0.000184	<0.000184		<0.000183	<0.000184						0.798		0.400	1.02	
	Pyrene		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	10100000	<0.000184	<0.000184		<0.000183	<0.000184						<0.00184		<0.000917	<0.00183	
	Phenanthrene		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184		<0.000184	<0.000184		<0.000183	<0.000184						0.256		0.129	0.321	
	эпэтүq(bэ-C,2,1]опэbлI		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.00	<0.000184	<0.000184		<0.000183	<0.000184						<0.00184		<0.000917	<0.00183	
	Fluorene		<0.000185	<0.000184		0.000245	<0.000184		<0.000184	<0.000184	101000.00	<0.000184	<0.000184		<0.000183	<0.000184						0.162		0.0966	0.210	
, 3510	Fluoranthene		<0.000185	<0.000184		0.000216	<0.000184		<0.000184	<0.000184	101000.00	<0.000184	<0.000184		<0.000183	<0.000184						<0.00184		<0.000917	<0.00183	
/846-8270C	Dibenz[a,h]anthracene	J\2m £000.0	<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.00	<0.000184	<0.000184		<0.000183	<0.000184						<0.00184		<0.000917	<0.00183	
EPA SV	Сргузепе	Д\дт 2000.0	<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000-01	<0.000184	<0.000184		<0.000183	<0.000184						0.0379		0.0218	0.0506	
	Benzo[k]fluoranthene	J\2m 2000.0	<0.000185	<0.000184	Event.	<0.000187	<0.000184	Event.	<0.000184	<0.000184	Event.	<0.000184	<0.000184	Event.	<0.000183	<0.000184	Event.			Event.		<0.00184	Event.	<0.000917	<0.00183	
	Benzo[8,ħ,l]perylene		<0.000185	<0.000184	Monitoring	<0.000187	<0.000184	Monitoring	<0.000184	<0.000184	Monitoring	<0.000184	<0.000184	Monitoring.	<0.000183	<0.000184	Monitoring			Monitoring		<0.00184	Monitoring	<0.000917	<0.00183	
	Benzo(b)fluoranthene	Л\дт 2 000.0	<0.000185	<0.000184	of Quarterly	<0.000187	<0.000184	of Quarterly	<0.000184	<0.000184	of Quarterly	<0.000184	<0.000184	of Quarterly	<0.000183	<0.000184	of Quarterly			of Quarterly		<0.00184	of Quarterly	<0.000917	<0.00183	
	Benzo(a)pyrene	J\gm 7000.0	<0.000185	<0.000184	pled as part	<0.000187	<0.000184	pled as part	<0.000184	<0.000184	pled as part	<0.000184	<0.000184	pled as part	<0.000183	<0.000184	pled as part			npled as part		<0.00184	pled as part	<0.000917	<0.00183	
	Benzo[a]anthracene		<0.000185	<0.000184	Not San	<0.000187	<0.000184	Not San	<0.000184	<0.000184	Not San	<0.000184	<0.000184	Not San	<0.000183	<0.000184	Not San	volume	volume	Not San	volume	<0.00184	Not San	<0.000917	<0.00183	
	эпээгийл А.		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.01	<0.000184	<0.000184		<0.000183	<0.000184		ficient water	ficient water		ficient water	<0.00184		<0.000917	<0.00183	
	Асепарійцуіепе		<0.000185	<0.000184		<0.000187	<0.000184		<0.000184	<0.000184	101000.05	<0.000184	<0.000184		<0.000183	<0.000184		due to insufi	due to insufi		due to insufi	<0.00184		<0.000917	<0.00183	
	ənənfiriqenəəA		<0.000185	<0.000184		<0.000187	<0.000184		<0.0001.84	<0.000184	1000000	<0.000184	<0.000184		<0.000183	<0.000184		Vot Sampled	Vot Sampled		Vot Sampled	<0.00184		<0.000917	<0.00183	
	DATE	ataminant M WQCC r ions 1- 103.A.	11/24/08	12/07/09	11/22/10	11/24/08	12/07/09	11/22/10	11/74/08	10/12/11	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08	12/07/09	11/22/10	11/24/08 1	12/07/09	11/22/10	11/25/08 1	12/08/09	11/22/10	11/25/08	12/08/09	
	SAMPLE 1	Maximum Con Levels from NN Drinking water standards Secti 101.UU and 3-:	MW-17			MW-18			MW-19			MW-20			MW-21			RW-1			RW-2			RW-3		

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P. DARR ANGELL #1 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER AP-007 All water concentration are reported in mg/L EVEN 5 KWW34.6 077007.45

-			i -			100 C		<u> </u>		1	1	<u> </u>	<u> </u>	1949	<u> </u>							1	1	 1	T	1	100	1	T	
	ns:uloznədi(I			0.00772			0.013	0.0426			0.0751	0.0180			0.0709	0.531		0.214	0.294		0.0448	0.0576			0.00344			0.0269		
	2-Mainaphthalene			0.184			0.254	1.07			1.93	0.462			1.55	13.1		4.15	7.19		0.841	1.24			0.0898			0.441		
	1-Methylanlyisene	J\ym £0.0		0.134			0.17	0.726			1.33	0.327			1.07	9.15		2.87	5.04		0.587	0.890			0.0674			0.322		
	ənəlatinqaN			0.0801			0.132	0.338			0.564	0.175			0.477	3.95		1.17	2.16		0.294	0.402			0.0478			0.145		
	Pyrene	 		<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183			<0.000183			<0.00017		
	Phenanthrene			0.0161			0.0273	0.105			0.167	0.0456			0.143	1.28		0.436	0.704		0.0838	0.117			0.00643			0.0571		
	ənəryq(bɔ-£,£,1]onəbnl	.0004 mg/L		<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183			<0.000183			<0.00017		
	Fluorene			0.011			0.0218	0.0726			0.126	0.0330			0.106	0.844		0.342	0.480		0.064	0.0795			0.00496			0.0426		
ATCC -	Fluoranthene			<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183			<0.000183			216000 0>		
10/72-0404	Dibenz[a,h]anthracene	J\gm £000.0		<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183			<0.000183			<0.00017		
LFA 3V	Сугдене	J\gm 2000.0		0.00224			<0.000917	0.0166	× .		0.0286	0.0110			0.0254	0.191		<0.00459	0.116		<0.000917	0.0186			<0.000183			0.0105		
	Benzo[k]Nuoranthene	J\gm 2000.0		<0.000183	Event.		<0.000917	<0.000917	Event.		<0.000917	<0.000922	Event.		<0.000922	<0.00862	Event.	<0.00459	<0.00461	Event.	<0.000917	<0.00183	Event.		<0.000183	Event		216000 0>		Event.
	Benzo[g,h,l]perylene			<0.000183	Monitoring		<0.000917	<0.000917	Monitoring		<0.000917	<0.000922	Monitoring		<0.000922	<0.00862	Monitoring	<0.00459	<0.00461	Monitoring	<0.000917	<0.00183	Monitoring		<0.000183	Monitorine		<0.00017		Monitoring
	Benzo[b](luoranthene	J\gm 2000.0		<0.000183	of Quarterly		<0.000917	<0.000917	of Quarterly		<0.000917	<0.000922	of Quarterly		<0.000922	<0.00862	of Quarterly	<0.00459	<0.00461	of Quarterly	<0.000917	<0.00183	of Quarterly		<0.000183	t of Ouarterly		<0.000 T		t of Quarterly
	Benzo[a]pyrene	J\gm 7000.0		<0.000183	npled as part		<0.000917	<0.000917	npled as part		<0.000917	<0.000922	npled as part		<0.000922	<0.00862	npled as part	<0.00459	<0.00461	npled as part	<0.000917	<0.00183	npled as part		<0.000183	npled as part		<0.00017		npled as part
	Benzo[s]anthracene	. Ц\дт 1000.0	volume	<0.000183	Not Sar		<0.000917	<0.000917	Not Sar		<0.000917	<0.000922	Not Sar		<0.000922	<0.00862	Not Sar	<0.00459	<0.00461	Not Sar	<0.000917	<0.00183	Not Sar	r volume	<0.000183	Not Sar	- -	216000 0>	11	Not Sar
	ənəərifin A		Ticient water	<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183		ficient water	<0.000183			<0.00017	n stuck in we	
	อกรโขที่มีที่สุดกรวA		due to insuf	<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183		due to insu	<0.000183			<0.00017	due to pum	
	ənəffiqenə2A		Not Sampled	<0.000183			<0.000917	<0.000917			<0.000917	<0.000922			<0.000922	<0.00862		<0.00459	<0.00461		<0.000917	<0.00183		Not Sampled	<0.000183			0 0062	Not Sampled	
	DATE	ntaminant M WQCC r tions 1- -103.A.	11/25/08	12/08/09	11/22/10		11/25/08	12/08/09	11/22/10		11/25/08	12/08/09	11/22/10		11/25/08	12/08/09	11/22/10	11/25/08	12/08/09	11/22/10	11/25/08	12/08/09	11/22/10	11/25/08	12/08/09	01/00/11	111221	11/75/08	12/08/09	11/22/10
	SAMPLE	Maximum Co Levels from N Drinking wate standards Sec 101.UU and 3	RW-4				RW-5				RW-6		、 、		RW-7			RW-8			RW-9			RW-10				RW-11		

.

Appendices

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

CONTRACTOR NOTACTOR NOTRACTOR NOTRACTOR NOTACTOR NO	., NM 38741 1980 cma, NM 88211-0719 Arece, NM 87410	State of Energy, Minerals and OIL CONSER P.C Santa Fe, New	f New Mexico Vatural Resources Department VATION DIVISION Box 2088 Mexico 87504-2088	SUBMIT 2 C APPROPRIJ OFFICE IN WITH RULL ON BACK S	COPIES TO ITE DISTRICT ACCORDANCE I 116 PRINTED IDE OF FORM
CPERATOR EO	NOTIFICATIC TTENErgy E BREAS	DN OF FIRE, BREA Roline Ispil II	KS, SPILLS, LEAKS, A ADORESS FO BOY / 60 EAK BLOWOUT	ND BLOWOUTS	TELEPHONE # <u>915[6872640</u>
TTYE OF DRI FACILITY WE FACILITY NAME	G PROD 1	TANK PIPE	GASO OIL PLNT RFY	OTHER*	
OEQE Sec. or Foo DESTANCE AND TOPIN OR PROM	SCIEF DERECTION FROM NEA ENENT LANDMARK	WEST 22 miles e	of Louington offor	Uichs Hury	<u>lea</u>
DATE AND HOU OF OCCURRENCE	15/1/97 2:0	NO AM	OF DISCOVERY	Jume 0	
NOTICE GIVENT	ennih Fr	OUTRED T	DATE AND HOUR 2 - QUANTITY 2-1	<u>2-97</u> 101	<u>m</u> 1560k
FLUID LOST DID ANY FLUID A WATERCOURS	S REACH YES	NOV		√/)/⊃ COVERED	
DESCRIBE CAU HUTT	SE OF PROBLEM AND R NAL CONTO	Remedial action tai $X \mathcal{E} \mathcal{M} = \mathcal{C} \mathcal{L}$	center emped y un	ll heplac	e pipe
DESCRIBE CAUS Inter DESCRIBE ARE ANLA E Mith &	SE OF PROBLEM AND R May Corres A AFFECTED AND CLE S VOCKY HO Yea F	REMEDIAL ACTION TAI LON – CL ANUP ACTION TAKEN WILL L UNL L MAGARM	cen emped & uu ie excaent	ll heplac	e pipe Ossed
DESCRIBE CAUS JULIA DESCRIBE ARE MARA E MARA E DESCRIPTION OF AREA SURFACE CONDITIONS DESCRIBE GEN	SE OF PROBLEM AND R MAL COULD A AFFECTED AND CLE D VOCKY MO GAL FARMING SANDY SAN LOA ERAL CONDITIONS PRI	REMEDIAL ACTION TAK LOW - CL ANUP ACTION TAKEN WILL C WILL C ORAZINO 11 TOY CLAY M EVAILING (TEMPERAT	CEN** CEN** CEN** CEN** CEN* CEN*COTHER REAN [ROCKY [WE JRE PRECIPITATION, ETC.)	ll heplac 2d & de y	e pipe Occed
DESCRIBE CAUS JUNTER DESCRIBE ARE MARA E MARA E DESCRIPTION OF AREA SURFACE CONDITIONS DESCRIBE GEN DESCRIBE GEN ULUAR	SE OF PROBLEM AND R MAL COULD A AFFECTED AND CLE D VO CAL HO YAC H FARMINO SANDY SAN ERAL CONDITIONS PRE	REMEDIAL ACTION TA LOW - CL ANUP ACTION TAKEN WILL B WILL B ORAZINO - I DY CLAY M EVALLING (TEMPERAT	CEN++ Comped y un Centration etc.) REAN OTHER REAN OTHER REAN OTHER REAN OTHER REAN OTHER	ll le plac eq & de y T DRY	e pipe Occed

CONTRACTOR OF STREET