

# Annual GW Mon. REPORTS





March 23, 2011

#### MAR 29 2011

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

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

<u>34 Junc. to Lea Sta</u>	<u>. 1R-0386 ′</u>	Section 21, Township 20 South, Range 37 East, Lea County
34 Junction South	<u>1R-0456 /</u>	Section 02, Township 17 South, Range 36 East, Lea County
Bob Durham	<u>AP-0016 /</u>	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
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	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	<sup>,</sup> 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
. <u> </u>	· .	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	·1R-123	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	/ 1R-951	Section 05, Township 20 South, Range 37 East, Lea County
SPS-11	GW-0140	Section 18, Township 18 South, Range 36 East, Lea County
Texaco Skelly F	<u>1R-0420</u>	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,

Senvi

Vason Henry V Remediation Coordinator Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

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#### 2010 ANNUAL MONITORING REPORT

MONUMENT 10 SE ¼ NE¼ Section 30, Township 19 South, Range 37 East LEA COUNTY, NEW MEXICO PLAINS SRS NUMBER: TNM MONUMENT-10 NMOCD Reference Number 1R-0119

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 2011

Ronald K. Rounsaville Senior Project Manager

Brittan K. Byerly, P.G., President



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#### **APPENDICES**

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 Tables 1, 2 and 3 - 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 Monument 10 Site (the site), formally the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with figures, attachments, tables and text. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2010 only. For reference, the Site Location Map is provided as Figure 1. Cumulative tables and laboratory data are provided on the enclosed data disk.

Groundwater monitoring was conducted each quarter of 2010 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

#### SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SE <sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> Section 30, Township 19 South, Range 37 East. No information with respect to the release date, volume of crude oil released or recovered, excavation volumes, or pipeline repair details is available. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A. The initial site investigation, consisting of the installation of seven groundwater monitor wells (MW-1 through MW-7), was performed by a previous consultant.

Seven groundwater monitor wells (MW-1 through MW-7) are currently on-site. Manual product recovery is being conducted weekly at monitor wells MW-2 and MW-3.

#### FIELD ACTIVITIES

#### **Product Recovery Efforts**

During the reporting period, monitor wells MW-2 and MW-3 exhibited measurable thicknesses of PSH during all four quarters of the reporting period. Monitor well MW-1 exhibited a measurable PSH thickness of 0.24 ft. during the 4<sup>th</sup> quarter of 2010. The average PSH thickness for the year from the two monitor wells displaying PSH was 2.11 feet. The maximum measured PSH thickness of 3.88 feet was observed in monitor well MW-3 on August 20, 2010. Approximately 261 gallons (approximately 6.2 barrels) of PSH were recovered from the site during the reporting period. Approximately 1,900 gallons (approximately 45 barrels) of PSH have been recovered from this site since the project inception.

Recovered PSH is reintroduced into the Plains transportation system at the Lea Station Facility, near Monument, New Mexico. Measurable thicknesses of PSH are recorded in Table 1 and Figures 3A-3D.

#### **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 correspondences dated June 22, 2005 and January 26, 2006.

NMOCD Approved Sampling Schedule								
MW-1	Annually							
MW-2	Quarterly							
MW-3	Quarterly							
MW-4	Annually							
MW-5	Annually							
MW-6	Semi-Annually							
MW-7	Semi-Annually							

The site monitor wells were gauged and sampled on February 5, May 3, August 2, and November 1, 2010. During each sampling event, monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Proactive Mini-Monsoon pump and dedicated tubing. 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 quarterly sampling events performed in 2010, are depicted on the Inferred Groundwater Gradient Maps, Figures 2A-2D. Groundwater elevation data for 2010 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 0.015 feet/foot to the southeast as measured between monitor wells MW-4 and MW-7. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,604.23 and 3,609.70 feet above mean sea level, in monitor well MW-7 on August 2, 2010 and monitor well MW-4 on November 1, 2010, respectively.

#### LABORATORY RESULTS

Monitor wells MW-2 and MW-3 contained PSH during all four quarters of the reporting period with PSH observed in monitor well MW-1 during the 4<sup>th</sup> Quarter 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 not conducted during the 2010 calendar year. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC standards will be sampled, with the exclusion of those wells containing measurable PSH thicknesses. A listing of BTEX constituent concentrations for 2010 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 sampled on an annual schedule. Monitor well MW-1 was not sampled during the  $4^{th}$  quarter of the reporting period, due to the presence of PSH. A PSH thickness of 0.24 feet was reported during the  $4^{th}$  quarter of 2010. PAH analysis was not conducted during the  $4^{th}$  quarter sampling event.

**Monitor well MW-2** is monitored on a quarterly schedule. Monitor well MW-2 was not sampled during the 4 quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 2.04 feet, 1.34 feet, 1.54 feet, and 2.19 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.

**Monitor well MW-3** is monitored on a quarterly schedule. Monitor well MW-3 was not sampled during the 4 quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 2.83 feet, 1.64 feet, 2.41 feet, and 3.22 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.

**Monitor well MW-4** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. Monitor well MW-4 has exhibited twenty-nine consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-5** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 4th quarter sampling event. Monitor well MW-5 has exhibited thirty-two consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-6** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 2nd and 4th quarter sampling events. Monitor well MW-6 has exhibited thirty-one consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-7** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory standards for each BTEX constituent during the 2nd and 4th quarter sampling events. Monitor well MW-7 has exhibited thirty-six consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

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.

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#### SUMMARY

This report presents the results of monitoring activities for the 2010 annual monitoring period. Currently, there are seven groundwater monitor wells present at the site. Three monitor wells (MW-1, MW-2 and MW-3) exhibited measurable thicknesses of PSH during at least one sampling event of the reporting period. MW-1 exhibited PSH during the 4<sup>th</sup> quarter event and was not sampled and MW-2 and MW-3 exhibited PSH during all four quarters of the reporting period and were not sampled. Manual product recovery occurs from monitor wells MW-2 and MW-3 on a weekly schedule. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.010 feet/foot to the southeast.

Approximately 261 gallons (approximately 6.2 barrels) of PSH were recovered from the site during the reporting period. Approximately 1,900 gallons (approximately 45 barrels) of PSH have been recovered from this site since the project inception.

Review of the laboratory analytical results of the groundwater samples obtained during the reporting period indicated BTEX constituent concentrations remain below applicable NMOCD regulatory standards in four of the seven site monitor wells. At this time, dissolved phase impact appears to be limited to monitor wells MW-1, MW-2 and MW-3.

#### **ANTICIPATED ACTIONS**

Quarterly monitoring, aggressive PSH recovery and groundwater sampling will continue in 2011. Manual product recovery and gauging well be conducted on a weekly schedule and will be adjusted according to site conditions.

An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2012.

#### 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.

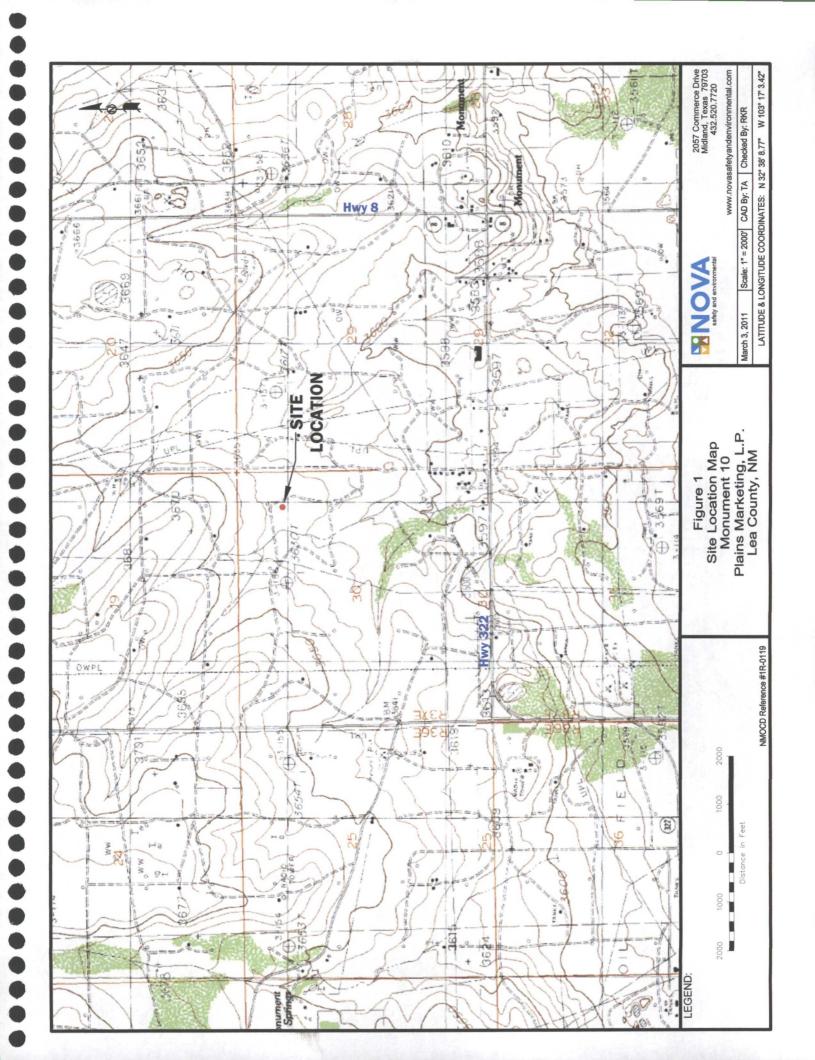
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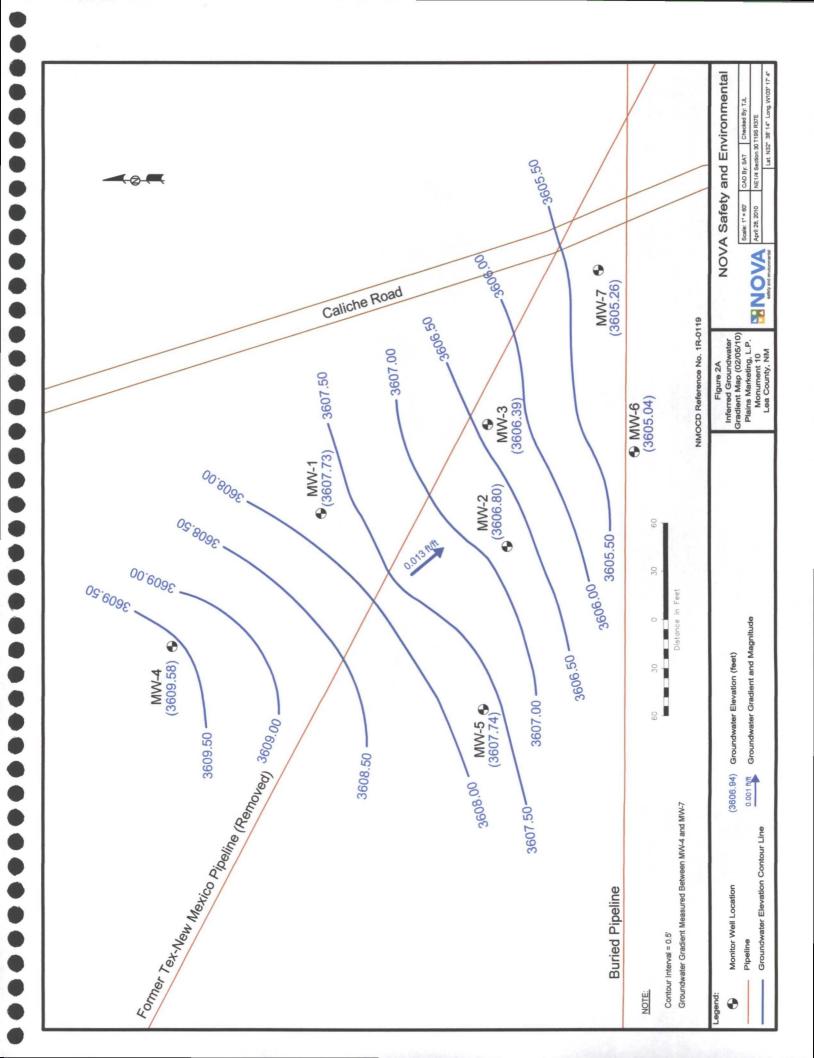
Copy 1:	Ed Hansen New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505
Copy 2:	Geoffrey R. Leking New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240
Copy 3:	Jason Henry Plains Marketing, L.P. 2530 State Highway 214 Denver City, TX 79323 jhenry@paalp.com
Copy 4:	Jeff Dann Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, TX 77002 jpdann@paalp.com
Copy 5:	NOVA Safety and Environmental 2057 Commerce Street Midland, TX 79703 rrounsaville@novatraining.cc

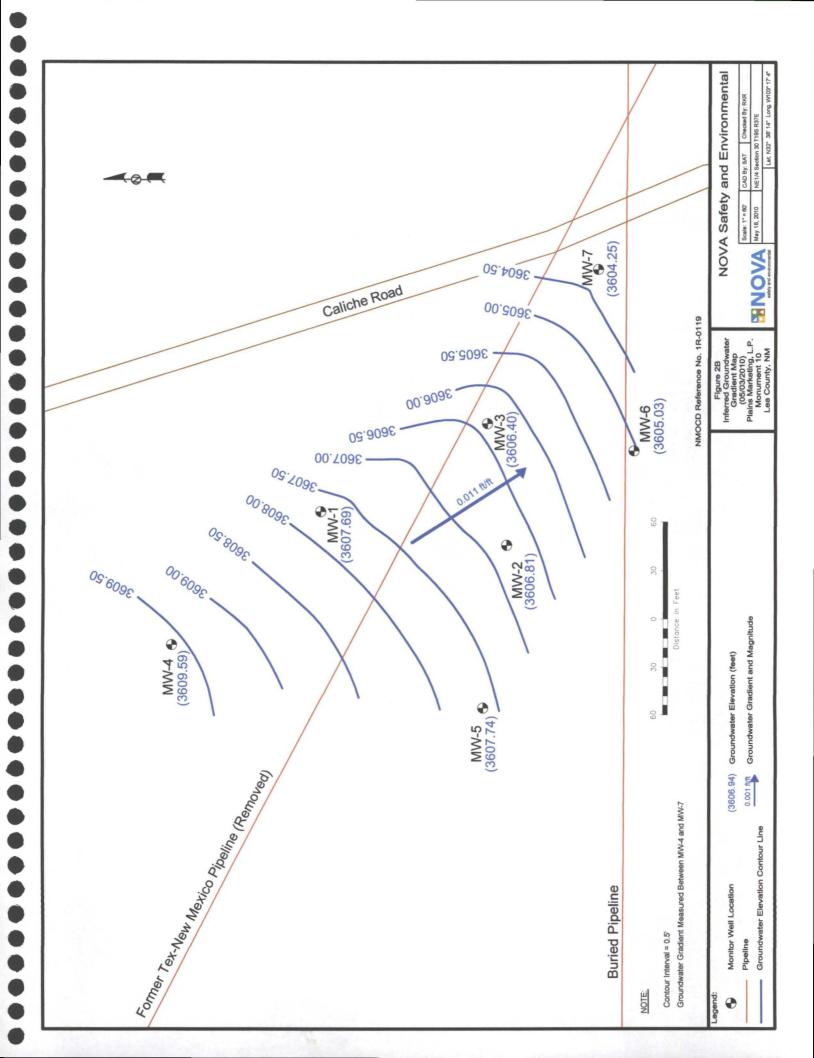
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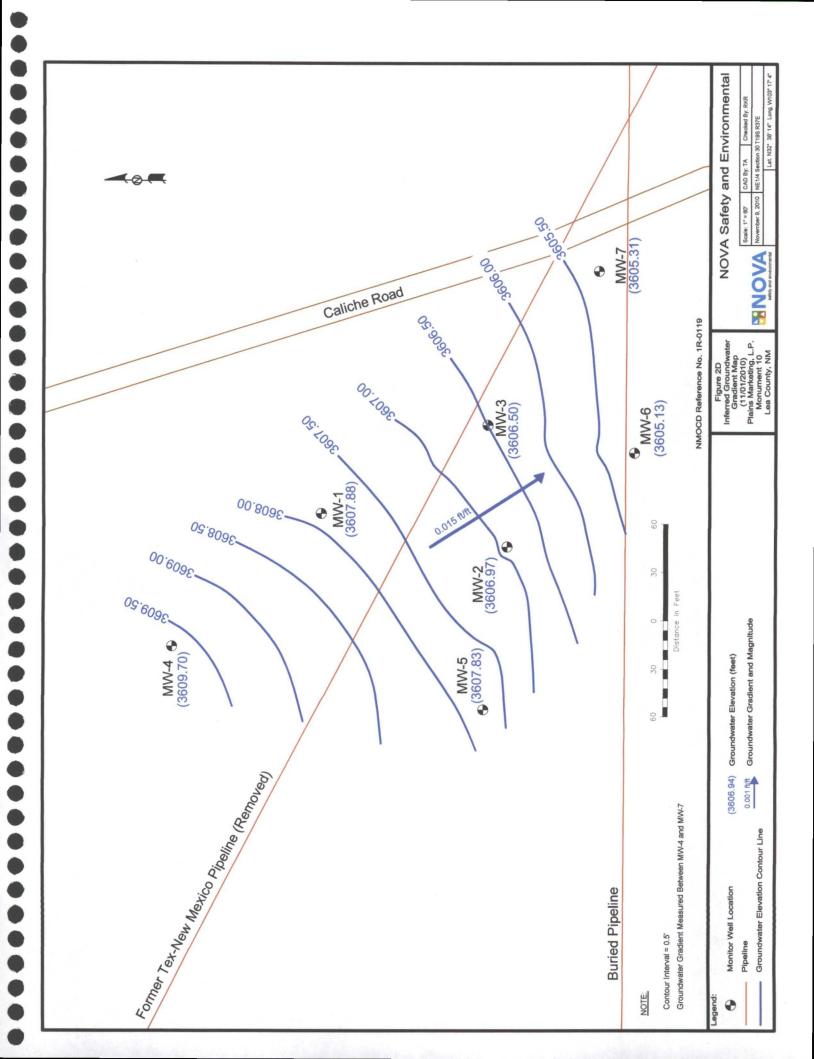
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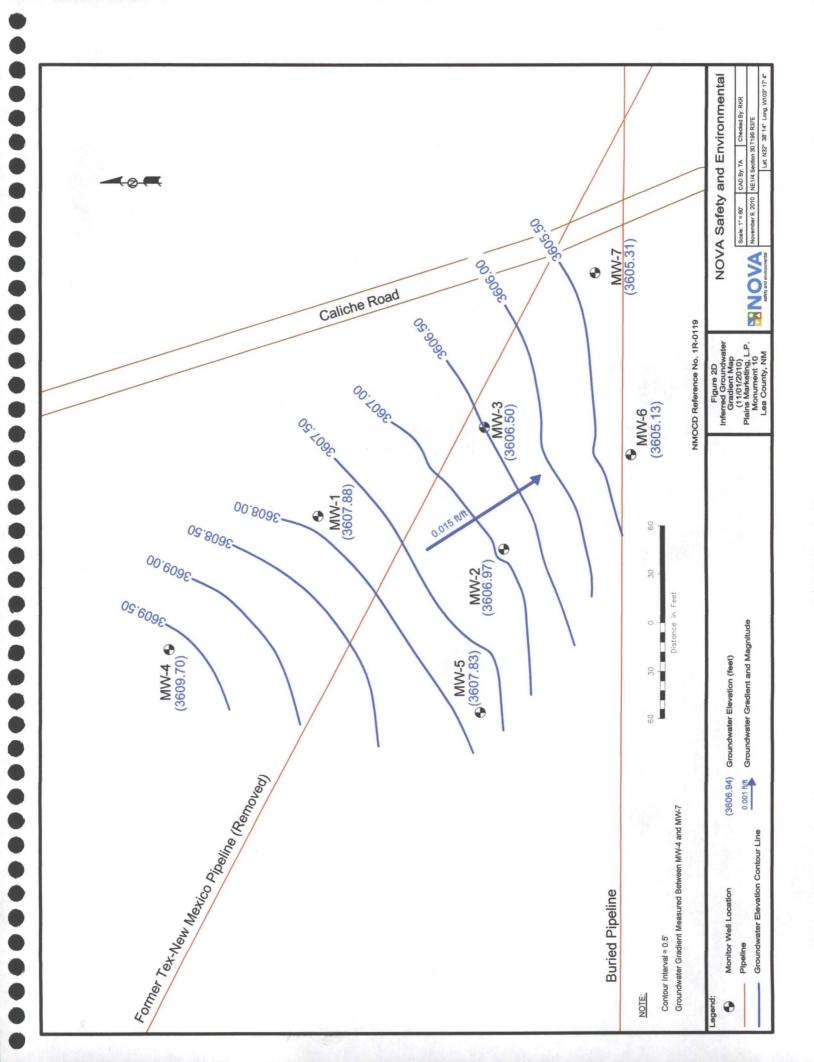
# Figures

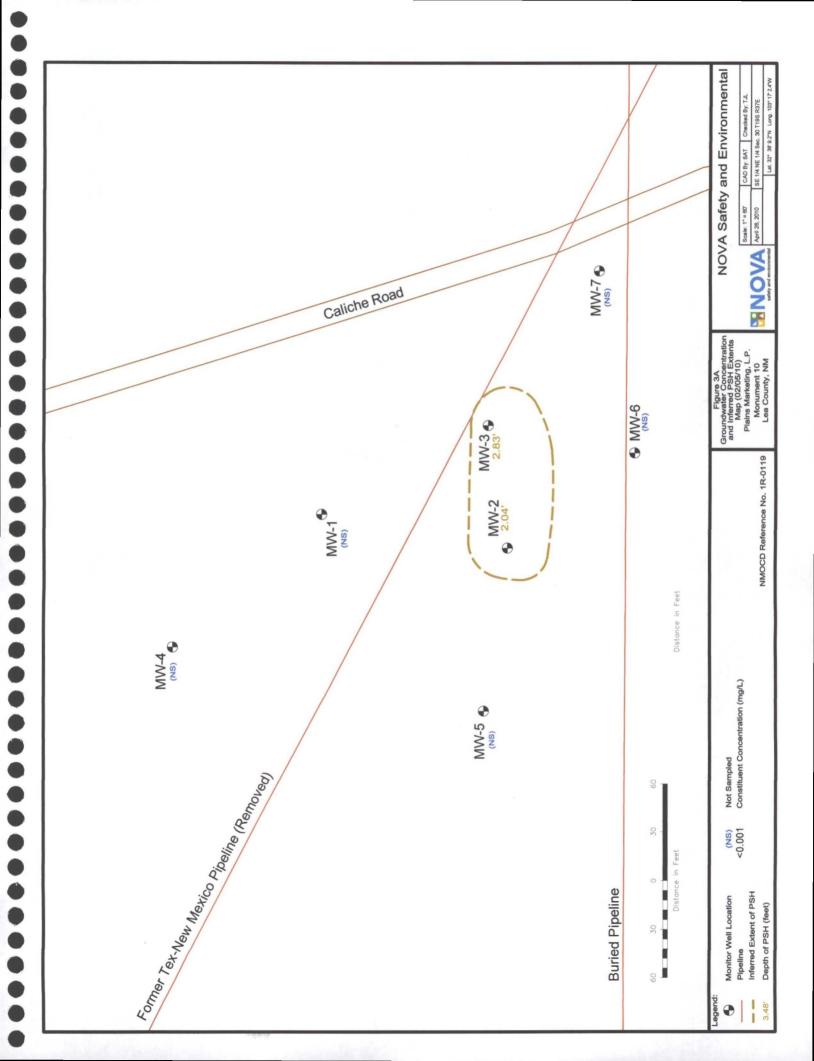


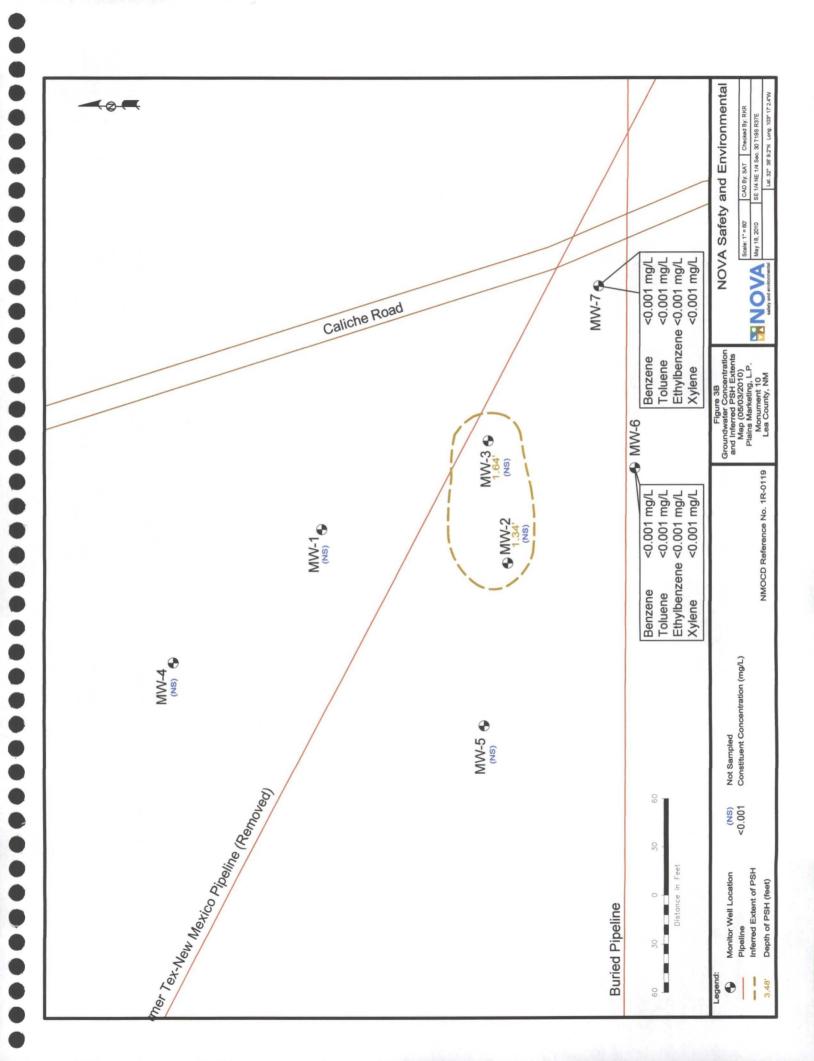


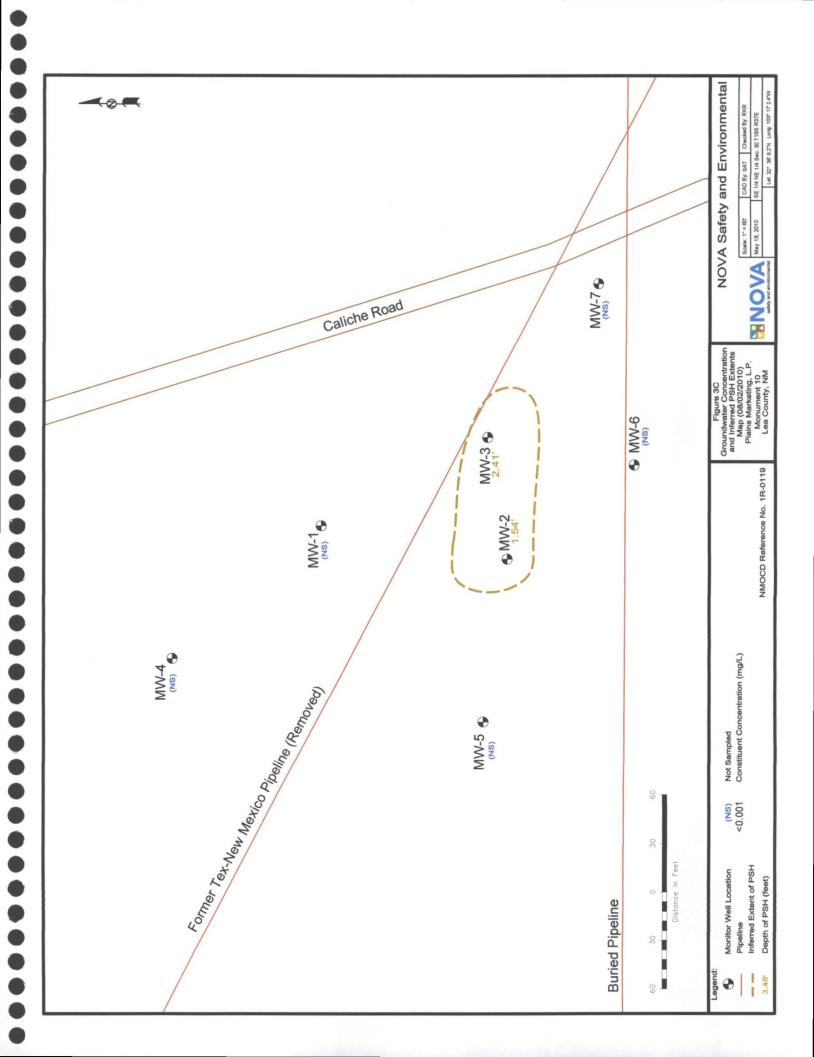


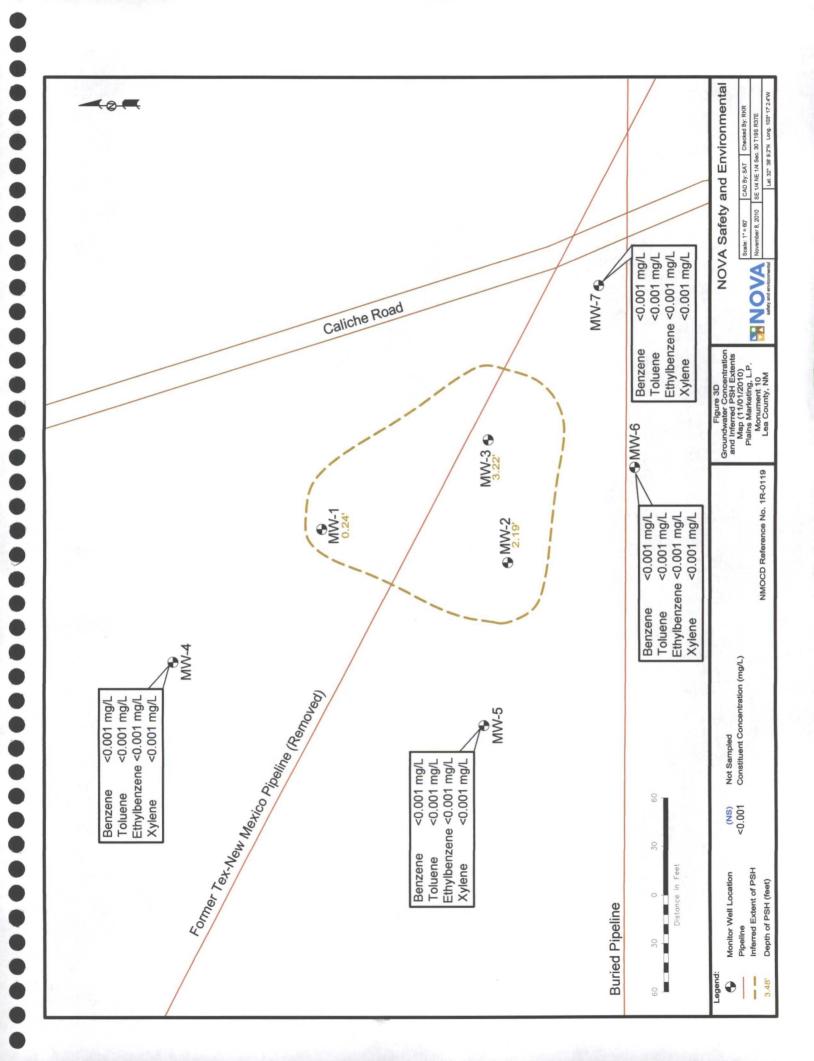












## Tables

#### **GROUNDWATER ELEVATION DATA - 2010**

#### PLAIN MARKETING, L.P. MONUMENT 10 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0119

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	1 1		PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	01/12/10	3,629.33	-	21.57		3,607.76
MW - 1	02/05/10	3,629.33	-	21.60		3,607.73
MW - 1	05/03/10	3,629.33	-	21.64		3,607.69
MW - 1	08/02/10	3,629.33	-	21.55		3,607.78
MW - 1	11/01/10	3,629.33	21.41	21.65	0.24	3,607.88
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MW - 2	01/12/10	3,629.43	22.32	24.11	1.79	3,606.84
MW - 2	01/21/10	3,629.43	22.27	24.41	2.14	3,606.84
MW - 2	02/05/10	3,629.43	22.32	24.36	2.04	3,606.80
MW - 2	02/18/10	3,629.43	22.22	24.62	2.40	3,606.85
MW - 2	02/25/10	3,629.43	22.44	23.64	1.20	3,606.81
MW - 2	03/01/10	3,629.43	22.37	24.54	2.17	3,606.73
MW - 2	03/04/10	3,629.43	22.36	23.56	1.20	3,606.89
MW - 2	03/09/10	3,629.43	22.39	24.51	2.12	3,606.72
MW - 2	03/11/10	3,629.43	22.40	24.16	1.76	3,606.77
MW - 2	03/15/10	3,629.43	22.38	23.74	1.36	3,606.85
MW - 2	03/16/10	3,629.43	22.30	23.74	1.30	3,606.81
MW - 2	03/22/10	3,629.43	22.41	23.89	1.48	3,606.80
MW - 2	03/30/10	3,629.43	22.33	24.39	2.06	3,606.79
MW - 2	04/05/10	3,629.43	22.39	23.96	1.57	3,606.80
MW - 2	04/08/10	3,629.43	22.35	23.73	1.37	3,606.86
MW - 2	04/12/10	3,629.43	22.30	24.02	1.72	3,606.87
MW - 2	04/12/10	3,629.43	22.30	23.99	1.68	3,606.87
MW - 2	04/28/10	3,629.43	22.31	24.34	1.00	3,606.78
MW - 2	05/03/10	3,629.43	22.33	23.76	1.34	3,606.81
MW - 2	05/05/10	3,629.43	22.32	23.63	1.34	3,606.91
MW - 2	05/12/10	3,629.43	22.32	23.59	1.31	3,606.89
MW - 2	05/12/10	3,629.43	22.33	23.53	1.24	3,606.93
MW - 2	05/21/10	3,629.43	22.32	23.52	1.18	3,606.90
MW - 2	05/28/10	3,629.43	22.33	24.58	2.36	3,606.86
MW - 2	06/04/10	3,629.43	22.37	23.55	1.18	3,606.88
MW - 2	06/07/10	3,629.43	22.33	24.51	2.18	3,606.77
MW - 2	06/09/10	3,629.43	22.36	23.72	1.36	3,606.87
MW - 2	06/16/10	3,629.43	22.32	23.89	1.57	3,606.87
MW - 2	06/29/10	3,629.43	22.32	23.91	1.55	3,606.84
MW - 2	07/09/10	3,629.43	21.64	23.96	2.32	3,607.44
MW - 2	07/16/10	3,629.43	21.57	24.35	2.78	3,607.44
MW - 2	07/23/10	3,629.43	21.73	23.79	2.06	3,607.39
MW - 2	07/30/10	3,629.43	21.75	23.86	2.06	3,607.32
MW - 2	08/02/10	3,629.43	22.33	23.80	1.54	3,606.87
MW - 2 MW - 2	08/02/10	3,629.43	22.33	23.53	1.54	3,607.27
		3,629.43	21.92	23.33	2.29	3,607.10
MW - 2	08/20/10					
MW - 2	08/27/10	3,629.43	22.04	23.86	1.82	3,607.12

#### **GROUNDWATER ELEVATION DATA - 2010**

#### PLAIN MARKETING, L.P. MONUMENT 10 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0119

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 2	09/03/10	3,629.43	22.08	24.17	2.09	3,607.04
MW - 2	09/10/10	3,629.43	22.14	23.77	1.63	3,607.05
MW - 2	09/17/10	3,629.43	22.11	23.96	1.85	3,607.04
MW - 2	09/23/10	3,629.43	21.88	24.35	2.47	3,607.18
MW - 2	10/01/10	3,629.43	21.89	24.34	2.45	3,607.17
MW - 2	10/08/10	3,629.43	22.19	24.40	2.21	3,606.91
MW - 2	10/13/10	3,629.43	22.24	23.95	1.71	3,606.93
MW - 2	11/01/10	3,629.43	22.13	24.32	2.19	3,606.97
MW - 2	11/05/10	3,629.43	22.15	23.46	1.31	3,607.08
MW - 2	11/12/10	3,629.43	22.23	23.82	1.59	3,606.96
MW - 2	11/19/10	3,629.43	22.45	24.05	1.60	3,606.74
MW - 3	01/12/10	3,628.90	21.12	24.65	3.53	3,607.25
MW - 3	01/21/10	3,628.90	22.03	25.00	2.97	3,606.42
MW - 3	02/05/10	3,628.90	22.09	24.92	2.83	3,606.39
MW - 3	02/18/10	3,628.90	21.97	25.22	3.25	3,606.44
MW - 3	02/25/10	3,628.90	22.23	24.08	1.85	3,606.39
MW - 3	03/01/10	3,628.90	22.11	25.16	3.05	3,606.33
MW - 3	03/04/10	3,628.90	22.17	23.97	1.80	3,606.46
MW - 3	03/09/10	3,628.90	22.13	25.11	2.98	3,606.32
MW - 3	03/11/10	3,628.90	22.15	24.89	2.74	3,606.34
MW - 3	03/15/10	3,628.90	22.22	23.95	1.73	3,606.42
MW - 3	03/16/10	3,628.90	22.26	23.90	1.64	3,606.39
MW - 3	03/22/10	3,628.90	22.21	23.97	1.76	3,606.43
MW - 3	03/30/10	3,628.90	22.09	24.99	2.90	3,606.38
MW - 3	04/05/10	3,628.90	22.19	24.41	2.22	3,606.38
MW - 3	04/08/10	3,628.90	22.25	23.92	1.67	3,606.40
MW - 3	04/12/10	3,628.90	22.13	23.40	1.27	3,606.58
MW - 3	04/15/10	3,628.90	22.15	23.39	1.24	3,606.56
MW - 3	04/28/10	3,628.90	22.09	24.88	2.79	3,606.39
MW - 3	05/03/10	3,628.90	22.25	<u>23.89</u>	1.64	3,606.40
MW - 3	05/05/10	3,628.90	22.05	24.05	2.00	3,606.55
MW - 3	05/12/10	3,628.90	22.07	24.00	1.93	3,606.54
MW - 3	05/14/10	3,628.90	22.05	23.97	1.92	3,606.56
MW - 3	05/21/10	3,628.90	22.03	23.96	1.93	3,606.58
MW - 3	05/28/10	3,628.90	22.00	25.07	3.07	3,606.44
MW - 3	06/04/10	3,628.90	22.02	23.97	1.95	3,606.59
MW - 3	06/07/10	3,628.90	22.12	24.94	2.82	3,606.36
MW - 3	06/09/10	3,628.90	22.17	23.95	1.78	3,606.46
MW - 3	06/16/10	3,628.90	22.11	24.55	2.44	3,606.42
MW - 3	06/29/10	3,628.90	22.13	24.53	2.40	3,606.41
MW - 3	07/09/10	3,628.90	21.34	23.39	2.05	3,607.25
MW - 3	07/16/10	3,628.90	21.44	23.64	2.20	3,607.13

2 of 3

#### **GROUNDWATER ELEVATION DATA - 2010**

#### PLAIN MARKETING, L.P. MONUMENT 10 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0119

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 3	07/23/10	3,628.90	21.52	24.03	2.51	3,607.00
MW - 3	07/30/10	3,628.90	21.57	24.20	2.63	3,606.94
MW - 3	08/02/10	3,628.90	22.13	24.54	2.41	3,606.41
MW - 3	08/04/10	3,628.90	21.66	24.08	2.42	3,606.88
MW - 3	08/20/10	3,628.90	20.77	24.65	3.88	3,607.55
MW - 3	08/27/10	3,628.90	21.86	24.37	2.51	3,606.66
MW - 3	09/03/10	3,628.90	21.83	24.86	3.03	3,606.62
MW - 3	09/10/10	3,628.90	21.88	24.46	2.58	3,606.63
MW - 3	09/17/10	3,628.90	21.85	24.52	2.67	3,606.65
MW - 3	09/23/10	3,628.90	22.06	23.85	1.79	3,606.57
MW - 3	10/01/10	3,628.90	22.08	23.83	1.75	3,606.56
MW - 3	10/08/10	3,628.90	21.85	25.15	3.30	3,606.56
MW - 3	10/13/10	3,628.90	21.92	24.68	2.76	3,606.57
MW - 3	11/01/10	3,628.90	21.92	25.14	3.22	3,606.50
MW - 3	11/05/10	3,628.90	21.86	24.53	2.67	3,606.64
MW - 3	11/12/10	3,628.90	21.28	24.61	3.33	3,607.12
MW - 3	11/19/10	3,628.90	21.82	25.40	3.58	3,606.54
MW - 4	01/12/10	3,629.97	-	20.39	0.00	3,609.58
MW - 4	02/05/10	3,629.97	-	20.39	0.00	3,609.58
MW - 4	05/03/10	3,629.97	-	20.38	0.00	3,609.59
MW - 4	08/02/10	3,629.97	-	20.40	0.00	3,609.57
MW - 4	11/01/10	3,629.97		20.27	0.00	3,609.70
MW - 5	01/12/10	3,629.36	-	21.62	0.00	3,607.74
MW - 5	02/05/10	3,629.36	-	21.62	0.00	3,607.74
MW - 5	05/03/10	3,629.36	-	21.62	0.00	3,607.74
MW - 5	08/02/10	3,629.36	<b>_</b> · ·	21.63	0.00	3,607.73
MW - 5	11/01/10	3,629.36	-	21.53	0.00	3,607.83
MW - 6	01/12/10	3,629.17	-	24.00	0.00	3,605.17
MW - 6	02/05/10	3,629.17	-	24.13	0.00	. 3,605.04
MW - 6	05/03/10	3,629.17	-	24.14	0.00	3,605.03
MW - 6	08/02/10	3,629.17	-	24.14	0.00	3,605.03
MW - 6	11/01/10	3,629.17	_	24.04	0.00	3,605.13
MW - 7	01/12/10	3,628.07		22.81	0.00	3,605.26
MW - 7	02/05/10	3,628.07	-	22.81	0.00	3,605.26
MW - 7	05/03/10	3,628.07	-	23.82	0.00	3,604.25
MW - 7	08/02/10	3,628.07	-	23.84	0.00	3,604.23
MW - 7	11/01/10	3,628.07	-	22.76	0.00	3,605.31

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

3 of 3

#### **CONCENTRATIONS OF BTEX IN GROUNDWATER - 2010**

#### PLAINS MARKETING, L.P. MONUMENT 10 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER 1R-0119

Results are reported in mg/L.

	Results are reported in mg/L. Methods: EPA SW 846-8021, 5030												
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p -	0 - XYLENE							
NMOCD REG		0.01	0.75	0.75	0.62								
MW - 1	02/05/10	Not Sampled o	n Current Samp	le Schedule									
MW - 1	05/03/10	Not Sampled o	n Current Samp	le Schedule									
MW - 1	08/02/10	Not Sampled o	n Current Samp	le Schedule									
MW - 1	11/01/10	Not sampled D	ue to PSH in W	ell									
MW - 2	02/05/10	Not sampled D	ue to PSH in W	ell									
MW - 2	05/03/10	Not sampled D	ue to PSH in W	ell									
MW - 2	08/02/10	Not sampled D	ue to PSH in W	ell									
MW - 2	11/01/10	Not sampled D	ue to PSH in W	ell									
MW - 3	02/05/10	Not sampled D	ue to PSH in W	ell									
MW - 3	05/03/10	Not sampled D	ue to PSH in W	ell									
MW - 3	08/02/10	Not sampled D	ue to PSH in W	ell									
MW - 3	11/01/10	Not sampled D	ue to PSH in W	ell									
MW - 4	02/05/10	Not Sampled of	n Current Samp	le Schedule									
MW - 4	05/03/10	Not Sampled of											
MW - 4	08/02/10	Not Sampled of	n Current Samp	le Schedule									
MW - 4	11/01/10	< 0.001	< 0.001	< 0.001	<0.0	)01							
MW - 5	02/05/10	Not Sampled of	n Current Samp	le Schedule									
MW - 5	05/03/10	Not Sampled of	n Current Samp	le Schedule									
MW - 5	08/02/10	Not Sampled o	n Current Samp	le Schedule									
MW - 5	11/01/10	< 0.001	<0,001	< 0.001	<0.0	)01							
MW - 6	02/05/10	Not Sampled or		le Schedule									
MW - 6	05/03/10	<0.001	< 0.001	<0.001	<0.0	001							
MW - 6	08/02/10	Not Sampled o	n Current Samp	le Schedule									
MW - 6	11/01/10	< 0.001	< 0.001	< 0.001	<0.0	)01							
MW - 7	02/05/10	Not Sampled on Current Sample Schedule											
MW - 7	05/03/10	< 0.001	< 0.001	< 0.001	<0.0	)01							
MW - 7	08/02/10	Not Sampled o		le Schedule									
MW - 7	11/01/10	<0,001	< 0.001	< 0.001	<0.0	)01							

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

1 of 1

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**TABLE 3** 

# POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

# PLAINS MARKETING, L.P. MONUMENT 10 LEA COUNTY, NEW MEXICO NMOCD REFERENCE NUMBER R1-0119

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	Dibenzofuran		143	0922	Γ		0.0612	0.0119			0.269	0.0113			<0.000183	0184			0183	0185			0183	0184			0338	0184	٦
			0.00143	2 <0.000922	_		0.0	0.0			0.2	0.0			_	4 < 0.000184			3 <0.000183	5 <0.000185		AR 20. 11	3 <0.000183	4 < 0.000184		200	_	4 <0.000184	
	οα9Ικήταατχήτ9Μ-Σ		0.000251	<0.000922			0.337	0.0699		1998-1992-1992-1992-1992-1992-1992-1992-	1.79	0.0896			<0.000183	<0.000184			<0.000183	<0.000185		推动引渡	<0.000183	<0.000184			<0.000186	<0.000184	
	1-Methylnaphthalene	J\2m £0.0	0.00226	<0.000922			0.429	0.112			1.85	0.105			<0.000183	<0.000184			<0.000183	<0.000185		いたのである。	<0.000183	<0.000184			0.00034	<0.000184	
	ənəlatitıqaN		0.000386	<0.000922			0.0899	0.0190		S. S	0.468	0.0178			<0.000183	<0.000184	-		<0.000183	<0.000185			<0.000183	<0.000184				<0.000184	
	Pyrene		<0.000185	<0.000922			<0.0229	<0.00184			<0.0917	<0.000926		<u> 14 See See See See See See See See See Se</u>	<0.000183	<0.000184			<0.000183	<0.000185			<0.000183	<0.000184			<0.000186	<0.000184	-
	ราย เป็น เป็น เป็น เป็น เป็น เป็น เป็น เป็น		0.000887	<0.000922			0.114	0.0198			0.473	0.0216 <		er teres a	<0.000183 <	<0.000184 <			<0.000183	<0.000185		調整なな説	<0.000183 <	<0.000184 <			0.000237 <	<0.000184	-
	anəryq(bɔ-گردi)onəbnl	.000,0 ±000.0	<0.000185	<0.000922		163236	<0.0229	<0.00184		aran i	<0.0917	<0.000926			<0.000183 <	<0.000184 <	_			<0.000185 <		であたの調整	<0.000183 <	<0.000184 <				<0.000184 <	
	Fluorene		0.000788 <	<0.000922 <			0.0786	0.0152 <			0.373	0.0134 <			<0.000183 <	<0.000184 <				<0.000185 <			<0.000183 <	<0.000184 <				<0.000184 <	
3510	Fluoranthene		<0.000185 (	<0.000922 <		THE .	<0.0229	<0.00184		<b>*****</b>	<0.0917	<0.000926			<0.000183 <	<0.000184 <	_			<0.000185 <			<0.000183 <	<0.000184 <				<0.000184 <	-
EPA SW846-8270C, 3510	9n92k1d3nk[d,8]sn9did	Дуат £000.0	<0.000185 <	<0.000922 <		394	_	<0.00184 <				<0.000926 <			<0.000183 <	<0.000184 <				<0.000185 <		北京都島第	<0.000183 <	<0.000184 <			<0.000186 <0.000186	<0.000184 <	
EPA SW846-8270	ခၿခန္ကရဘ	J\gm 2000.0	<0.000185 <	<0.000922 <		い いいちょう いっちょう いっちょう いっちょう しんちょう しんちょ しんちょう しんちょ しんちょ しんちょ しん しんちょう しんちょ しんちょ しんちょ しん しんちょ しん しんちょ しんちょ しんち		<0.00184 <			<0.0917	<0.000926			<0.000183 <	<0.000184 <		restant d	<0.000183 <	<0.000185 <		TELEVISIO	<0.000183 <	<0.000184 <				<0.000184 <	
	9n9dtnaroufi[A]osn9U	J\gm 2000.0	<0.000185 <	<0.000922 <	Event.		-	184	cvent.	建沙达属的	<0.0917	0926	vent.		<0.000183	0184	cvent.		<0.000183 <	0185	Svent.		<0.000183 <	<0.000184 <	Event.		<0.000186 <0.000186	0184	Event.
	Benzo[g,h,i]perylene		<0.000185 <	<0.000922 <	Monitoring I		<0.0229	<0.00184	Monitoring Event		<0.0917	<0.000926	Monitoring Event		<0.000183	<0.000184 <	Monitoring Event		<0.000183	<0.000185	Monitoring Event		<0.000183	<0.000184 <	Monitoring I		<0.000186 <	<0.000184	Monitoring h
	Benzo[b]fluoranthene	J\2m 2000.0	<0.000185 <	<0.000922	- L		<0.0229		>		<0.0917		5		<0.000183		~				∣≻		<0.000183	<0.000184	$\sim$	「おんのか」を見ていた。			<u>~ II</u>
	Benzo[a]pyrene	Л\дт 7000.0	<0.000185	<0.000922	Not Sampled as part of Quarterly			<0.00184	Not Sampled as part of Quarterl		<0.0917	<0.000926	Not Sampled as part of Quarterly		<0.000183	<0.000184	Not Sampled as part of Quarterly		<0.000183	<0.000185	Not Sampled as part of Quarterly	1. A.	<0.000183	<0.000184	Not Sampled as part of Quarterly		<0.000186	<0.000184	Not Sampled as part of Quarterly
	Benzo[a]anthracene	J\gm 1000.0	<0.000185	<0.000922 <0.000922	Not Samp			<0.00184	Not Sam	《《王宗派派》	<0.0917	<0.000926	Not Samp		<0.000183 <0.000183	<0.000184	Not Sam	a a contraction and a contraction of the contractio	<0.000183	<0.000185	Not Sam	A STATE OF STATE	<0.000183	<0.000184	Not Samp		<0.000186	<0.000184 <0.000184 <0.000184	Not Sam
	ənəosyntaA		<0.000185					<0.00184		1.18% 在年後	<0.0917			調査の	<0.000183					<0.000185		988 MARTI		<0.000184			<0.000186		
	9n9lyftfqan92A		<0.000185	<0.000922 <0.000922		What we	_	<0.00184			<0.0917	<0.000926 <0.000926			<0.000183 <0.000183	<0.000184 <0.000184				<0.000185			<0.000183 <0.000183	<0.000184			<0.000186 <0.000186 <0.000186 <0.000186 <0.000186 <0.000186	<0.000184	
	sasdidqaassA		<0.000185	<0.000922				<0.00184			<0.0917	<0.000926			<0.000183	<0.000184		R. Contraction of the	_	<0.000185			<0.000183	<0.000184			<0.000186	<0.000184 <0.000184 <0.000184	
	SAMPLE DATE	taminant M ng water ions 1- 103.A.	> 80/61/11	11/06/09 <	11/01/10		11/19/08		11/01/10	1644 245 4.1 2.	11/19/08		11/01/10	a se	> 80/61/11	• 60/90/11	11/01/10	et ter d	11/19/08 -	11/06/09	11/01/10	19 22 22 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	11/19/08	11/06/09	11/01/10	30276	_	+	11/01/10
	SAMPLE S LOCATION	Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1- 101.UU and 3-103.A.	I-MM				MW-2			10	MW-3				MW-4				MW-5				MW-6				MW-7		-

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# Appendices

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

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

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

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

#### **Release Notification and Corrective Action**

			OPERATOR		x In	itial Report	Final Report
Name of Compa	ny Plains Pipeline, LP		Contact:	Camille Reyno	lds		
Address:	3705 E. Hwy 158, Midland, T	X 79706	Telephone No.	505-441-0965			
Facility Name	Monument #10		Facility Type:	Steel Pipeline			
<u> </u>				·····	Ţ	<u></u>	
Surface Owner:	New Mexico State Land	Mineral Owner			Leas	e No.	
							1

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Н	30	19S	37E					Lea

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

#### NATURE OF RELEASE Type of Release: Volume of Release: Volume Recovered Source of Release: Date and Hour of Occurrence Date and Hour of Discovery Unknown Was Immediate Notice Given? If YES, To Whom? Yes 🗌 No 🗋 Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. 🗌 Yes 🖾 No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* Describe Area Affected and Cleanup Action Taken.\* NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. **OIL CONSERVATION DIVISION** Signature: Approved by District Supervisor: Printed Name: Camille Reynolds Approval Date: Expiration Date: Title: Remediation Coordinator E-mail Address: Conditions of Approval: cjreynolds@paalp.com Attached 🗌

\* Attach Additional Sheets If Necessary

Date: 3/21/2005

Phone:

(505)441-0965