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ANNUAL MONITORING REPORT

YEAR(S): 2005 2005 ANNUAL MONITORING REPORT

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HDO-90-23

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

PREPARED FOR:

PLAINS MARKETING, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002

ENTIRE REPORT

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March 2006

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safety and environmental

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ENCLOSED ON DATA DISK

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2005 Annual Monitoring Report 2005 Tables 1 and 2 – Groundwater Elevation and BTEX Concentration Data 2005 Figures 1, 2A-2D, 3A-3D, 4 Electronic Copies of Laboratory Reports Historic Groundwater Elevation Data Table Historic BTEX Concentration Table

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, having previously been managed by Environmental Technology Group, Inc (ETGI). The HDO-90-23 site, which was formally the responsibility of Texas New Mexico Pipeline Company (TNM), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2005 only. However, historic data tables as well as 2005 laboratory analytical reports are provided on the enclosed data disk. A Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each of four quarters in calendar year 2005 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 site is located in the NE 1/4 of the NW 1/4 of Section 6, Township 20 South, Range 37 East in Lea County. The HDO 90-23 release was discovered by TNM personnel and reported on March 27, 1990. According to the release report, an estimated 750 barrels of crude oil were released and 550 barrels were recovered. The release occurred from a 14-inch Texas-New Mexico Pipeline Company (TNM) pipeline and was attributed to structural failure associated with internal pipeline corrosion. Limited excavation occurred around the release point to repair the pipeline. The Release Notification and Corrective Action (Form C-141) is provided as Appendix A.

In February 1998, nine (9) soil borings were advanced and five monitoring wells were installed by a previous contractor to assess the subsurface conditions. In September 1999, three (3) additional monitor wells were installed. In the fall of 2002, monitor wells MW-9 through MW-15 were installed. In November 2004, two (2) additional monitor wells (MW-16 and MW-17) were installed to further delineate the southeast extent of the dissolved phase plume.

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

On September 14, 2005, monitor wells MW-1, MW-7, MW-10 and MW-11 were plugged and abandoned with NMOCD approval, by a driller licensed in the State of New Mexico.

Thirteen (13) groundwater monitor wells (MW-2 through MW-6, MW-8, MW-9 and MW-12 through MW-17) and two product recovery wells (RW-1 and RW-2) were onsite at close of the 2005 reporting period. The pneumatic product recovery system formerly operating on-site has been shut down based on product thickness decreases that are more efficiently managed by manual recovery techniques.

FIELD ACTIVITIES

A measurable thickness of PSH was detected in monitor wells MW-2, MW-4*, MW-6, MW-14, and recovery wells RW-1 and RW-2*, during the 2005 annual reporting period. A maximum PSH thickness of 0.70 feet in monitor well MW-6 was recorded on December 28, 2005 and is shown on Table 1. The average thickness of PSH in monitor wells containing PSH during 2005 was 0.15 feet. Absorbent socks were installed in monitor wells and recovery wells exhibiting PSH impact during the first and second quarters of 2005. The absorbent socks were removed during the third and fourth quarters of 2005. Approximately five (5) gallons of PSH were recovered from the site during the 2005 reporting period. Approximately 759 gallons (18 barrels) of PSH have been recovered through automated and manual recovery methods since project inception.

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended by NMOCD correspondence dated June 21, 2005.

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

* Gauging data collected on June 9, 2005 for monitor well MW-4 and on September 8, 2005 for recovery well RW-2 indicates a PSH thickness of 0.01 feet, this data appears to be incongruous based on prior and subsequent data and historical trends.

The site monitor wells were gauged and sampled on March 9, June 9, September 8, and December 13, 2005. During each sampling event, sampled monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy, Lovington, New Mexico utilizing a licensed disposal facility (NMOCD AO SWD-730).

Locations of the monitor wells and the inferred groundwater gradient, which were constructed utilizing measurements collected during the four (4) quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2005 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 0.0004 feet/foot to the southeast as measured between monitor wells MW-9 and MW-16. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3418.79 and 3420.89 feet above mean sea level, in monitor wells MW-4 on June 9, 2005 and MW-3 on August 9, 2005, respectively.

A groundwater gradient map generated from gauging data collected on August 9, 2005 indicates a "groundwater mounding effect" surrounding monitor well MW-3. This anomaly appears to be a result of the MAR produced water release. The groundwater gradient map constructed from the August 9, 2005 gauging data is provided as Figure 4

Currently, a total of thirteen (13) monitor wells and two (2) recovery wells are located on site.

LABORATORY RESULTS

Monitor wells MW-2 (second, third and fourth quarters), MW-4* (second quarter), MW-6 and recovery wells RW-1 (third quarter) and RW-2 *(third quarter) contained PSH and were not sampled.

Groundwater samples obtained during the sampling events of 2005 were delivered to TraceAnalysis, Inc. in Lubbock, Texas, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021b. A cumulative listing of BTEX constituent concentrations for 2005 is summarized in Table 2. Copies of the laboratory reports generated for 2005 are provided on the enclosed data disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

* Gauging data collected on June 9, 2005 for monitor well MW-4 and on September 8, 2005 for recovery well RW-2 indicates a PSH thickness of 0.01 feet, this data appears to be incongruous based on prior and subsequent data and historical trends.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2005 monitoring period indicate benzene and BTEX constituent concentrations were below NMOCD regulatory standards in monitor wells MW-4, MW-5, MW-8, MW-10, MW-11, MW-12, MW-13 (with the exception of first quarter), MW-16, and MW-17. The benzene concentration in monitor wells MW-3, MW-13 (first quarter only), MW-14, and MW-15 and recovery well RW-2 was above NMOCD regulatory standard for benzene, while total BTEX constituent concentrations were below NMOCD regulatory standards. The benzene and BTEX constituent concentrations in monitor wells MW-2 and recovery well RW-1 are above NMOCD regulatory standards.

On September 1, 2005, groundwater samples were collected from monitor wells MW-3, MW-5, MW-7, MW-10 and MW-13. The samples were delivered to TraceAnalysis in Lubbock, Texas for determination of chloride concentration by method E 300.0. The standard sampling protocol was employed in the collection and delivery of all samples. Review of the analytical results indicated chloride concentrations ranged from 52.5 mg/L at monitor well MW-10 to 26,100 mg/L at monitor well MW-3. The analytical results are summarized in Table 3 (2005 Chloride and Total Dissolved Solids Concentrations in Groundwater) and laboratory results are provided on the enclosed data disk.

On September 8, 2005, groundwater samples were collected from monitor wells MW-3, MW-5, MW-7, MW-10 and MW-13. The samples were delivered to TraceAnalysis in Lubbock, Texas for determination of Total Dissolved Solids (TDS) by method SM 2540C. The standard sampling protocol was employed in the collection and delivery of all samples. Review of the analytical results indicated TDS concentrations ranged from 545 mg/L at monitor well MW-7 to 32,200 mg/L at monitor well MW-3. The analytical results are summarized in Table 3 (2005 Chloride and Total Dissolved Solids Concentrations in Groundwater) and laboratory results are provided on the enclosed data disk.

On December 1, 2005, groundwater samples were collected from monitor wells MW-3, MW-4, MW-13 and MW-15. The samples were delivered to TraceAnalysis in Lubbock, Texas for determination of chloride concentration by method E 300.0. The standard sampling protocol was employed in the collection and delivery of all samples. Review of the analytical results indicated chloride concentrations ranged from 66.1 mg/L at monitor well MW-4 to 1,010 mg/L at monitor well MW-3. The analytical results are summarized in Table 3 (2005 Chloride and Total Dissolved Solids Concentrations in Groundwater) and laboratory results are provided on the enclosed data disk.

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

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of 2005. Currently, there are thirteen (13) groundwater monitor wells (MW-2 through MW-6, MW-8, MW-9 and MW-12 through MW-17) and two product recovery wells (RW-1 and RW-2) on-site.

The most recent Groundwater Gradient Map, Figure 2D indicates a general gradient of approximately 0.0004 feet/foot to the southeast.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2005 monitoring period indicates benzene and BTEX constituent concentrations are below NMOCD regulatory standards in nine (9) monitor wells. The benzene concentration in three (3) monitor wells and one (1) recovery well is above NMOCD regulatory standard, while total BTEX constituent concentrations are below NMOCD regulatory standards. The benzene and BTEX constituent concentrations in one (1) monitor well and one (1) recovery well are above NMOCD regulatory standards.

ANTICIPATED ACTIONS

Groundwater monitoring, sampling and annual reporting will continue in 2006.

LIMITATIONS

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

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-1	03/09/05	3,465.61	-	45.33	0.00	3,420.28
	06/09/05	3,465.61	-	45.34	0.00	3,420.27
	08/09/05	3,465.61	-	45.28	0.00	3,420.33
	09/01/05	3,465.61	-	45.19	0.00	3,420.42
	09/08/05	3,465.61	-	45.22	0.00	3,420.39
	09/13/05	Plugged and Abai	ndoned			
14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -			14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
MW-2	01/03/05	3,465.44	sheen	45.33	0.00	3,420.11
	01/10/05	3,465.44	sheen	45.20	0.00	3,420.24
	01/17/05	3,465.44	sheen	45.40	0.00	3,420.04
	01/24/05	3,465.44	sheen	45.36	0.00	3,420.08
	01/31/05	3,465.44	sheen	45.40	0.00	3,420.04
	02/07/05	3,465.44	sheen	45.36	0.00	3,420.08
	02/14/05	3,465.44	sheen	45.36	0.00	3,420.08
	02/21/05	3,465.44	sheen	45.40	0.00	3,420.04
	02/28/05	3,465.44	sheen	45.44	0.00	3,420.00
	03/07/05	3,465.44	sheen	45.44	0.00	3,420.00
	03/09/05	3,465.44	sheen	45.44	0.00	3,420.00
	03/16/05	3,465.44	sheen	45.44	0.00	3,420.00
	03/21/05	3,465.44	sheen	45.46	0.00	3,419.98
	03/28/05	3,465.44	sheen	45.45	0.00	3,419.99
	04/04/05	3,465.44	sheen	45.42	0.00	3,420.02
	04/13/05	3,465.44	sheen	45.48	0.00	3,419.96
	04/18/05	3,465.44	sheen	45.41	0.00	3,420.03
	05/23/05	3,465.44	sheen	45.41	0.00	3,420.03
	06/09/05	3,465.44	45.43	45.45	0.02	3,420.01
	06/21/05	3,465.44	sheen	45.47	0.00	3,419.97
	07/14/05	3,465.44	45.47	45.51	0.04	3,419.96
	07/26/05	3,465.44	sheen	45.51	0.00	3,419.93
	08/09/05	3,465.44	sheen	45.11	0.00	3,420.33
	08/25/05	3,465.44	sheen	45.02	0.00	3,420.42
	09/01/05	3,465.44	44.99	45.00	0.01	3,420.45
	09/08/05	3,465.44	45.09	45.11	0.02	3,420.35
	09/13/05	3,465.44	45.11	45.13	0.02	3,420.33
	09/26/05	3,465.44	45.25	45.29	0.04	3,420.18
	10/11/05	3,465.44	45.31	45.36	0.05	3,420.12
	10/25/05	3,465.44	45.25	45.27	0.02	3,420.19
	11/10/05	3,465.44	45.30	45.34	0.04	3,420.13
	11/14/05	3,465.44	45.32	45.37	0.05	3,420.11
	12/01/05	3,465.44	45.35	45.41	0.06	3,420.08
* * * *	12/28/05	3,465.44	45.42	45.51	0.09	3,420.01
2012.2	02/00/05	2 464 60	· · · · · · · · · · · · · · · · · · ·	44.70	0.00	2 410 00
<u>MW-3</u>	03/09/05	3,464.68	-	44.70	0.00	3,419.98
	06/09/05	5,464.68		44.77	0.00	<u>5,419.91</u>

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-3	08/09/05	3,464.68	sheen	43.79	0.00	3,420.89
	09/01/05	3,464.68	-	44.32	0.00	3,420.36
	09/08/05	3,464.68	-	44.57	0.00	3,420.11
	12/01/05	3,464.68	-	44.80	0.00	3,419.88
· · · · · · · · · · · · · · · · · · ·	and the second			a se a me		
MW-4	03/09/05	3,465.76	-	45.89	0.00	3,419.87
*	06/09/05	3,465.76	46.96	47.05	0.09	3,418.79
	08/09/05	3,465.76	-	45.84	0.00	3,419.92
	09/01/05	3,465.76	-	45.67	0.00	3,420.09
	09/08/05	3,465.76	-	45.71	0.00	3,420.05
	11/10/05	3,465.76	-	45.83	0.00	3,419.93
	12/01/05	3,465.76	-	45.90	0.00	3,419.86
		and the second second				
MW-5	03/09/05	3,467.40	-	47.60	0.00	3,419.80
	06/09/05	3,467.40	-	47.67	0.00	3,419.73
	08/09/05	3,467.40	sheen	47.56	0.00	3,419.84
	09/01/05	3,467.40	-	47.43	0.00	3,419.97
	09/08/05	3,467.40	-	47.47	0.00	3,419.93
	12/01/05	3,467.40	-	47.66	0.00	3,419.74
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MW-6	01/03/05	3,465.42	45.21	45.47	0.26	3,420.17
	01/10/05	3,465.42	45.28	45.36	0.08	3,420.13
	01/17/05	3,465.42	45.21	45.59	0.38	3,420.15
	01/24/05	3,465.42	45.22	45.52	0.30	3,420.16
	01/31/05	3,465.42	45.23	45.47	0.24	3,420.15
	02/07/05	3,465.42	45.35	45.70	0.35	3,420.02
	02/14/05	3,465.42	45.25	45.48	0.23	3,420.14
	02/21/05	3,465.42	45.26	45.54	0.28	3,420.12
	02/28/05	3,465.42	45.28	45.40	0.12	3,420.12
	03/07/05	3,465.42	45.26	45.40	0.14	3,420.14
	03/09/05	3,465.42	45.26	45.40	0.14	3,420.14
	03/10/05	3,465.42	45.29	45.45	0.16	3,420.11
	03/21/05	3,403.42	45.20	45.55	0.29	3,420.12
	03/28/03	3,403.42	43.23	45.00	0.33	3,420.12
	04/04/03	3,403.42	45 20	45.25	0.00	3,420.17
	04/18/05	3 465 42	45.30	45.30	0.20	3 420.09
	05/23/05	3 465 47	45.25	45.40	0.15	3 420.15
	06/09/05	3 465 47	45 30	45 70	0.40	3 420.06
	06/21/05	3 465 42	45.35	45 75	0.40	3 420.00
	07/14/05	3 465 47	45 34	45 70	0.40	3 420.01
	07/26/05	3.465.42	45 37	45.63	0.26	3 420.03
	08/09/05	3.465.42	45.04	45.23	0.19	3.420.35
	08/25/05	3,465.42	44.94	45.10	0.16	3.420.46

2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	ДЕРТН ТО	ДЕРТН ТО	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-6	09/01/05	3,465.42	44.96	45.08	0.12	3,420.44
	09/08/05	3,465.42	45.01	45.34	0.33	3,420.36
	09/13/05	3,465.42	45.05	45.41	0.36	3,420.32
	09/26/05	3,465.42	45.14	45.34	0.20	3,420.25
	10/11/05	3,465.42	45.17	45.50	0.33	3,420.20
	10/25/05	3,465.42	45.14	45.65	0.51	3,420.20
	11/10/05	3,465.42	45.16	45.72	0.56	3,420.18
	11/14/05	3,465.42	45.17	45.75	0.58	3,420.16
	12/01/05	3,465.42	45.20	45.82	0.62	3,420.13
	12/28/05	3,465.42	45.26	45.96	0.70	3,420.06
MW-7	03/09/05	3,466.22	-	46.00	0.00	3,420.22
	06/09/05	3,466.22	-	46.01	0.00	3,420.21
	08/09/05	3,466.22	-	45.76	0.00	3,420.46
	09/01/05	3,466.22	-	45.77	0.00	3,420.45
	09/08/05	3,466.22	-	45.81	0.00	3,420.41
	09/13/05	Plugged and Abar	ndoned			
	03/09/05	3 467 61		47 58	0.00	3 420 03
101.00	06/09/05	3 467 61		47.64	0.00	3 419 97
	08/09/05	3 467 61		47.47	0.00	3 420 14
	09/01/05	3,467.61	_	47.34	0.00	3 420 27
<u> </u>	09/08/05	3,467.61		47.44	0.00	3.420.17
	12/01/05	3,467.61	-	47.63	0.00	3,419.98
	02/00/05	2 4 6 5 7 4	· · · ·			
MW-9	03/09/05	3,465.74	-	45.62	0.00	3,420.12
	06/09/05	3,465.74	-	45.66	0.00	3,420.08
	08/09/05	3,465.74	-	45.51	0.00	3,420.23
	09/01/05	3,403.74	-	45.44	0.00	3,420.30
	12/01/05	3,465.74	-	45.48	0.00	3,420.20
· .	12,01,05	5,105.71		15.05	0.00	3,420.11
MW-10	03/09/05	3,466.15	-	46.09	0.00	3,420.06
	06/09/05	3,466.15	-	46.12	0.00	3,420.03
	08/09/05	3,466.15	-	45.64	0.00	3,420.51
	09/01/05	3,466.15		45.82	0.00	3,420.33
	09/08/05	3,466.15	•	45.90	0.00	3,420.25
	09/13/05	Plugged and Abar	ndoned			
	03/09/05	3466.22	_	46.20	0.00	3 420 02
1.1.1.1.1	06/09/05	3466.22	_	46.23	0.00	3 410 00
	08/09/05	3466.22	_	46.14	0.00	3 420 08
	09/01/05	3466.22	_	46.03	0.00	3,420,19
	09/08/05	3466.22	-	46.07	0.00	3.420.15

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	ДЕРТН ТО	ДЕРТН ТО	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-11	09/13/05	Plugged and Aba	ndoned			
						· · · · · · · · · · · · · · · · · · ·
MW-12	03/09/05	3466.69	-	46.74	0.00	3,419.95
	06/09/05	3466.69	-	46.78	0.00	3,419.91
	08/09/05	3466.69	-	46.65	0.00	3,420.04
	09/01/05	3466.69	-	46.54	0.00	3,420.15
	09/08/05	3466.69	•	47.60	0.00	3,419.09
	12/01/05	3466.69	-	46.79	0.00	3,419.90
<u>(</u>				a de la composición d		
<u>MW-13</u>	03/09/05	3466.98	-	47.24	0.00	3,419.74
	06/09/05	3466.98	-	47.30	0.00	3,419.68
	08/09/05	3466.98	-	47.16	0.00	3,419.82
	09/01/05	3466.98	-	47.02	0.00	3,419.96
	09/08/05	3466.98	-	47.10	0.00	3,419.88
	12/01/05	3466.98	-	47.28	0.00	3,419.70
NUV 14	01/02/05	2466.50	-1	46.00	0.00	2 410 (2
<u>M</u> w-14	01/03/05	3400.50	sheen	46.88	0.00	3,419.62
	01/10/05	3400.30	sheen	46.70	0.00	3,419.80
	01/17/05	3400.30	sheen	46.90	0.00	3,419.60
	01/24/05	3466.50	sheen	40.90	0.00	3,419.00
	02/07/05	3466.50	sheen	40.91	0.00	3 419.59
	02/07/05	3466 50	sheen	46.00	0.00	3 419 60
	02/21/05	3466 50	sheen	46.89	0.00	3 419 61
	02/28/05	3466.50	sheen	46.91	0.00	3 419 59
	03/07/05	3466.50	sheen	46.86	0.00	3 419 64
	03/09/05	3466.50	sheen	46.86	0.00	3.419.64
	03/16/05	3466.50	sheen	46.92	0.00	3.419.58
	03/21/05	3466.50	sheen	46.88	0.00	3.419.62
	03/28/05	3466.50	sheen	46.87	0.00	3,419.63
	04/04/05	3466.50	sheen	46.88	0.00	3,419.62
	04/13/05	3466.50	sheen	46.91	0.00	3,419.59
	04/18/05	3466.50	sheen	46.86	0.00	3,419.64
	05/23/05	3466.50	46.92	46.96	0.04	3,419.57
	06/09/05	3466.50	46.92	46.93	0.01	3,419.58
	06/21/05	3466.50	46.99	47.03	0.04	3,419.50
	07/14/05	3466.50	sheen	47.03	0.00	3,419.47
	07/26/05	3466.50	sheen	47.01	0.00	3,419.49
	08/09/05	3466.50	sheen	46.88	0.00	3,419.62
	08/25/05	3466.50	sheen	46.73	0.00	3,419.77
	09/01/05	3466.50		46.71	0.00	3,419.79
	09/08/05	3466.50	-	46.76	0.00	3,419.74
	09/13/05	3466.50	sheen	46.76	0.00	3,419.74
	09/26/05		sheen	46.85	0.00	<u> </u>

2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-14	10/11/05	3466.50	46.87	46.97	0.10	3,419.62
	10/25/05	3466.50	46.84	46.90	0.06	3,419.65
	11/10/05	3466.50	46.85	47.02	0.17	3,419.62
	11/14/05	3466.50	46.87	46.97	0.10	3,419.62
	12/01/05	3466.50	46.89	47.08	0.19	3,419.58
	12/28/05	3466.50	46.95	47.25	0.30	3,419.51
	the state of the					
MW-15	03/09/05	3466.10	-	46.17	0.00	3,419.93
	06/09/05	3466.10	-	46.24	0.00	3,419.86
	08/09/05	3466.10	-	45.81	0.00	3,420.29
	09/01/05	3466.10	-	45.86	0.00	3,420.24
	09/08/05	3466.10	-	45.95	0.00	3,420.15
	12/01/05	3466.10	-	46.20	0.00	3,419.90
MW-16	03/09/05	3465.93	-	46.25	0.00	3,419.68
	06/09/05	3465.93	-	46.31	0.00	3,419.62
	08/09/05	3465.93	-	46.29	0.00	3,419.64
	09/01/05	3465.93	-	46.13	0.00	3,419.80
·	09/08/05	3465.93	-	46.15	0.00	3,419.78
	12/01/05	3465.93	-	46.27	0.00	3,419.66
 	03/00/05	3468 68	_	40.12	0.00	3 410 56
141 44 - 17	05/09/05	3468.68		49.12	0.00	3 419 40
	08/09/05	3468.68		49.19	0.00	3 419 50
	09/01/05	3468.68		49.03	0.00	3 419 65
	09/08/05	3468.68	-	49.05	0.00	3 419 63
	12/01/05	3468.68	_	49.16	0.00	3.419.52
RW-1	01/03/05	3465.02	sheen	45.04	0.00	3,419.98
	01/10/05	3465.02	sheen	44.80	0.00	3,420.22
	01/17/05	3465.02	sheen	45.07	0.00	3,419.95
	01/24/05	3465.02	sheen	45.07	0.00	3,419.95
	01/31/05	3465.02	sheen	45.08	0.00	3,419.94
	02/07/05	3465.02	sheen	45.06	0.00	3,419.96
	02/14/05	3465.02	sheen	45.07	0.00	3,419.95
	02/21/05	3465.02	sheen	45.07	0.00	3,419.95
	02/28/05	3465.02	sheen	45.10	0.00	3,419.92
	03/07/05	3465.02	sheen	45.04	0.00	3,419.98
	03/09/05	3465.02	-	45.04	0.00	3,419.98
	03/16/05	3465.02	sheen	45.11	0.00	3,419.91
	03/21/05	3465.02	sheen	45.10	0.00	3,419.92
	03/28/05	3465.02	sheen	45.09	0.00	3,419.93
	04/04/05	3465.02	sheen	45.09	0.00	3,419.93
	04/13/05	3465.02	sheen	45.11	0.00	3,419.91

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
RW-1	04/18/05	3465.02	sheen	45.19	0.00	3,419.83
	05/23/05	3465.02	sheen	45.12	0.00	3,419.90
	06/09/05	3465.02	-	45.15	0.00	3,419.87
	06/21/05	3465.02	sheen	45.19	0.00	3,419.83
	07/14/05	3465.02	sheen	45.20	0.00	3,419.82
	07/26/05	3465.02	sheen	45.20	0.00	3,419.82
	08/09/05	3465.02	-	44.85	0.00	3,420.17
	08/25/05	3465.02	sheen	44.72	0.00	3,420.30
	09/01/05	3465.02	-	44.77	0.00	3,420.25
	09/08/05	3465.02	44.83	44.84	0.01	3,420.19
	09/13/05	3465.02	sheen	44.86	0.00	3,420.16
	09/26/05	3465.02	sheen	44.97	0.00	3,420.05
	10/11/05	3465.02	sheen	45.05	0.00	3,419.97
	10/25/05	3465.02	sheen	45.00	0.00	3,420.02
	11/10/05	3465.02	-	45.01	0.00	3,420.01
	11/14/05	3465.02	sheen	45.06	0.00	3,419.96
	12/01/05	3465.02		45.09	0.00	3,419.93
	12/28/05	3465.02	sheen	45.14	0.00	3,419.88
RW-2	01/03/05	3465.21	sheen	45.15	0.00	3420.06
	01/10/05		sheen	44.96	0.00	3420.25
	01/17/05		sheen	45.18	0.00	3420.03
	01/24/05	3465.21	sheen	45.19	0.00	3420.02
	01/31/05	3465.21	sheen	45.21	0.00	3420.00
	02/07/05	3465.21	sheen	45.18	0.00	3420.03
	02/14/05	3465.21	sheen	45.19	0.00	3420.02
	02/21/05	3405.21	sneen	45.19	0.00	3420.02
	02/28/05	3465.21	sneen	45.23	0.00	3419.98
	03/07/05	3465.21	sneen	45.14	0.00	3420.07
	03/09/03	3403.21	-	45.14	0.00	3420.07
	03/10/05	3465.21	sheen	45.21	0.00	3420.00
	03/21/05	3465.21	sheen	45.20	0.00	3420.01
	03/28/05	3465.21	sheen	45.20	0.00	3420.01
	04/04/05	3465.21	sheen	45.21	0.00	3410.00
	04/13/05	3465.21	sheen	45.07	0.00	3420.14
	05/23/05	3465.21	sheen	45.23	0.00	3419.98
	06/09/05	3465.21	-	45.21	0.00	3420.00
	06/21/05	3465.21	sheen	45.24	0.00	3419.97
	07/14/05	3465.21	sheen	45.29	0.00	3419.92
	07/26/05	3465.21	sheen	45.32	0.00	3419.89
	08/09/05	3465.21		45.03	0.00	3420.18
	08/25/05	3465.21	sheen	44.87	0.00	3420.34
	09/01/05	3465.21	-	44.90	0.00	3420.31

2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
*	09/08/05	3465.21	44.97	44.98	0.01	3420.24
RW-2	09/13/05	3465.21	sheen	45.01	0.00	3420.20
	09/26/05	3465.21	sheen	45.11	0.00	3420.10
	10/11/05	3465.21	sheen	45.15	0.00	3420.06
	10/25/05	3465.21	sheen	45.13	0.00	3420.08
	11/14/05	3465.21	sheen	45.11	0.00	3420.10
	12/01/05	3465.21	-	45.34	0.00	3419.87
	12/28/05	3465.21	sheen	45.27	0.00	3419.94

Note: Elevations based on North American Vertical Datum of 1929.

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* Gauging data collected on this date indicates a PSH thickness of 0.01 feet, this data appears to be incongruous based on prior and subsequent data and historical trends.

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.

HDO 90-23

LEA COUNTY, NEW MEXICO

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SAMPLE SAMPLE SW 846-8012B, 5030				030		
LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOCD REG LIN	NMOCD REGULATORY LIMIT		0.75	0.75	0.	.62
MW-1	03/09/05	Not Sampled	I due to Samp	le Reduction		
	06/09/05	Not Sampled	I due to Samp	le Reduction		
	09/08/05	Not Sampled	I due to Samp	le Reduction		
	09/13/05	Plugged and	Abandoned			
	a de terre la companya de la company		1			
MW-2	03/09/05	5.320	< 0.05	1.870	1.	180
	06/09/05	Not Sampled	I Due to PSH	in Well		
	09/08/05	Not Sampled	Due to PSH	in Well		
	12/01/05	Not Sampled	Due to PSH	in Well		
MW-3	03/09/05	0.454	<0.005	0.008	<0	005
	06/09/05	0.371	<0.01	0.105	<(01
	09/08/05	0.083	<0.01	0.258	0	039
	12/01/05	0.102	<0.02	<0.02	<(02
			-0.02	0.02		
MW-4	03/09/05	Not Sampled	due to Samp	le Reduction	G	•
	06/09/05	Not Sampled	1			
	09/08/05	Not Sampled	due to Samp	le Reduction		
	12/01/05	< 0.001	<0.001	< 0.001	<0.001	
MW-5	03/09/05	Not Sampled	due to Samp	le Reduction		
	06/09/05	< 0.001	< 0.001	< 0.001	<0.	.001
	09/08/05	Not Sampled	due to Samp	le Reduction		
	12/01/05	Not Sampled	due to Well	Obstruction		
	· · · ·	1				
MW-6	03/09/05	Not Sampled	Due to PSH	in Well		
	06/09/05	Not Sampled	Due to PSH	in Well		
	09/08/05	Not Sampled	Due to PSH	in Well		
	12/01/05	Not Sampled	Due to PSH	in Well		
MW-7	03/09/05	Not Sampled	due to Samp	le Reduction		
	06/09/05	Not Sampled	due to Samp	le Reduction		
	09/08/05	Not Sampled	due to Samp	le Reduction		
	09/13/05	Plugged and	Abandoned			
		es d'Altre d'				
MW-8	03/09/05	Not Sampled	due to Samp	le Reduction		
	06/09/05	Not Sampled	due to Samp	le Reduction		
	09/08/05	Not Sampled	due to Samp	le Reduction		
	12/01/05	<0.001	<0.001	<0.001	<0.	.001
MW 0	03/00/05	<0.001	<0.001	<0.001		001
191 97 -7	06/00/05			<0.001	<0.	001
	00/09/05		<0.001	<0.001	<0.	001
	12/01/05	<0.001	<0.001	<0.001		001
	12/01/05	0.001	~0.001	<u>\0.001</u>	<0.	.001

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.

HDO 90-23

LEA COUNTY, NEW MEXICO

SAMPLE	SAMPLE			030		
LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOCD RE	GULATORY /IIT	0.01	0.75	0.75	0.	.62
MW-10	03/09/05	< 0.001	< 0.001	< 0.001	<0	.001
	06/09/05	< 0.001	< 0.001	< 0.001	<0	.001
	09/08/05	Not Sampled	I due to Samp	le Reduction		
	09/13/05	Plugged and	Abandoned			
· · · ·						
MW-11	03/09/05	< 0.001	< 0.001	< 0.001	<0	.001
	06/09/05	<0.001	<0.001	< 0.001	<0	.001
	09/08/05	Not Sampled	I due to Samp	le Reduction		
	09/13/05	Plugged and	Abandoned			
MW-12	03/09/05	< 0.001	< 0.001	<0.001	<0.	.001
	06/09/05	< 0.001	< 0.001	<0.001	<0.	.001
	09/08/05	< 0.001	< 0.001	< 0.001	<0	.001
	12/01/05	< 0.001	< 0.001	< 0.001	<0	.001
MW-13	03/09/05	0.0326	< 0.001	<0.001	<0.	.001
	06/09/05	0.0038	< 0.001	<0.001	<0.	.001
	09/08/05	< 0.001	< 0.001	<0.001	<0	.001
	12/01/05	< 0.001	< 0.001	< 0.001	<0	.001
MW-14	03/09/05	0.0263	< 0.005	0.0569	0.0	085
	06/09/05	Not Sampled	I due to PSH	in Well		
	09/08/05	0.0286	0.0062	0.111	0.0	882
	12/01/05	Not Sampled	I due to PSH i	in Well		
					11 - 11 A	
MW-15	03/09/05	0.0253	< 0.001	0.0048	<0	.001
	06/09/05	< 0.001	< 0.001	< 0.001	<0	.001
· · · · · · · · ·	09/08/05	Not Sampled	Due to Well	Obstruction		
	12/01/05	0.0128	< 0.001	< 0.00190	<0	.001
· · · ·		:				
MW-16	03/09/05	< 0.001	< 0.001	<0.001	<0	.001
	06/09/05	< 0.001	< 0.001	<0.001	<0	.001
	09/08/05	< 0.001	< 0.001	<0.001	<0	.001
	12/01/05	<0.001	< 0.001	< 0.001	<0	.001
MW-17	03/09/05	< 0.001	< 0.001	<0.001	<0	.001
	06/09/05	< 0.005	< 0.005	< 0.005	<0	.005
	09/08/05	Not Sampled	İ.	-	-	
	12/01/05	< 0.001	< 0.001	< 0.001	<0	.001
· • •					-	
RW-1	03/09/05	0.419	< 0.005	0.119	<0	.005
	06/09/05	2.390	0.437	1.020	0.	612
	09/08/05	Not Sampled	Due to PSH	in Well		

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. HDO 90-23

LEA COUNTY, NEW MEXICO

SAMPLE	SAMDI F	SW 846-8012B, 5030						
LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE		
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62			
RW-1	12/01/05	2.160	0.212	1.000	0.5	507		
RW-2	03/09/05	0.0393	< 0.005	0.019	<0.	005		
	06/09/05	0.106	< 0.005	0.0523	0.0	097		
	09/08/05	Not Sampled						
	12/01/05	0.0787	<0.001	0.0994	0.0	007		

2005 Concentrations of Chlorides and Total Dissolved Solids in Groundwater

PLAINS MARKETING, L.P. HDO 90-23

LEA COUNTY, NEW MEXICO

SAMPI F	SAMPI F		
LOCATION	DATE	Chlorides	TDS
MW-3	09/01/05	26100	
MW-5	09/01/05	260	
MW-7	09/01/05	56.6	
MW-10	09/01/05	52.5	
MW-13	09/01/05	160	
MW-3	09/08/05		32200
MW-5	09/08/05		974
MW-7	09/08/05		545
MW-10	09/08/05		635
MW-13	09/08/05		804
Dup	09/08/05		812
MW-3	12/1/05	1010	
MW-4	12/1/05	66.1	
MW-13	12/1/05	147	
MW-15	12/1/05	407	

Appendices

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

•					*.			
M/		OIL CO	ONSERVA	TION DIVI	510N	-		
° T u	DTIFICATI	ON OF FIRE	, DREAK	S. SPILLS	, LEAKS,	AND BLOW	OUTS	
				ADURESS				_
UPOXY FIL	UREAK	SHLL	LEAK	ELO-OUT	10x 2528,	Hobbs,	N.M. 882	40
YPE OF DRLC	F KUD	TAirk 1	PIFE	IGASU TO		lier•		
ACTUITY INELL	. IWELL		LINEX	IPLNT IN	FY	r., 11 111111111111111111111111111111111		
OCATION OF FIL	Trunk	Line RTER/QUAR-		15	EC. Th	P. RGE.	COUNTY	
DISTANCE AND DI	RECTION FR	SCRIPTICE)	NN/4 NE	1.0f Eunic	6 2 • 6 3 Mi	1 1 N.W. O	f Loop 18	3
ST TOWN OR PSC WIE AND HOUR	MIRCHI LAN	DTARK C		DATE AND	HOUR	/27/00	2.16 P M	
AS INSEMINTE	YES	NO NOT R	E-	IF YES,	NMOCC -	B. Pritc	hard	
IY NA	10CC - M.	Criswell	0	DATE	<u>SCC</u> 3/27/90:	NMOCC -	3:35 P.M	Maharan Antala F
YPE OF	SCC - C.	Johnson		QUARTITY	3/28/90:	VOLU	9:05 #.m	
SID ANY FLUIDS	REACH Y		QUARTI	TUP LUSS	100 8845	(GUYE)		DDLAS
IF YES, DESCRIP	E FULLY**							
ESCRIBE CAUSE	OF PROBLEM	AND REHEDIAL	ACTION	ТАКЕИ**				
								
DESCRIBE AREA A	FFECIED AND	CLEANUP ACT	ION TAKE	==				
EINE CIANG ESCRIBE AREA A 45,000 SC	FFECIED AND	CLEANUP ACT	ION TAKE	ed tr edn	ipment d	enero-		
DESCRIBE AREA A 45,000 se Cattle in Oil soaked	FFECIED AND If past the area earth co	CLEARUP ACT ure land; a vered with	ION TAKE	g ft equ soil in p	ipment d	emage. of full	restorat	ion
25087BE AREA A 45,000 so Cattle in Oil soaked SECRIPTION F AREA	FFLCIED AND FFLCIED AND I ft past the area earth co FARMING	CLEARUP ACT ure land; a vered with	ION TAKE	sq ft equ soil in p URBAN	ipment d rospects OliER*	amage. of full	restorat	ion
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25000 SC Cattle in Oil soaked DESCRIPTION F AREA DURFACE DURFACE DURFACE DURFACE	FFLCIED AND FFLCIED AND I the area earth com FARMING SANDY L CONDITION	CLEARUP ACT ure land; d wered with GRAYI LOAM X IS PREVAILING	ION TAKE	sq ft equ soil in p URBAR ROCKY ATURE, FREC	ipment d rospects 010ER HET X IFITATION,	of full DRY Eic.)**	siúx	ion
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September 23, 2005

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

Re: Plains Pipeline – Plugging and Abandonment of Monitor Wells 8 Sites in Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your review the Plugging and Abandonment of Monitor Wells Reports for the following Plains sites:

Bob Durham Darr Angell #2 AP-9 HDO 90-23 TNM Monument 17 TNM Monument 18 TNM 97-04 TNM 97-18 SPS-11 Section 32, Township 19 South, Range 37 East, Lea County Sections 11 and 14, Township 15 South, Range 37 East, LeaCounty Section 6, Township 20 South, Range 37 East, Lea County Section 29, Township 19 South, Range 37 East, Lea County Section 7, Township 20 South, Range 37 East, Lea County Section 11, Township 16 South, Range 35 East, Lea County Section 28, Township 20 South, Range 37 East, Lea County Section 28, Township 20 South, Range 37 East, Lea County Section 18, Township 18 South, Range 36 East, Lea County

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

Sincerely,

bot for C.J.R.

Camille Reynolds Remediation Coordinator Plains Pipeline

Enclosures

September 16, 2005

Mr. Ed Martin New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

 Re: Notification of Plains Marketing, L.P. Plugging and Abandonment of Monitor Wells HDO 90-23 NE ¼, NW ¼, Section 6, T-20-S, R-37-E Lea County, NM

Dear Mr. Martin,

NOVA Safety and Environmental (NOVA), on behalf of Plains Marketing, L.P. (Plains) respectfully submits the following notification of plugging and abandonment of monitor wells at the Plains HDO 90-23 leak site (the site), located in the NE ¼, NW ¼, Section 6, T-20-S, R-37-E in Lea County, NM.

On September 14, 2005, four (4) monitor wells were plugged and abandoned at the site. Please reference your letter to Ms. Camille Reynolds of Plains Marketing L.P. dated June 21, 2005 regarding authorization to plug and abandon these wells.

The monitor wells were plugged and abandoned by Environmental Plus, Inc (EPI) of Eunice, New Mexico, a licensed water well driller in the State of New Mexico. The monitor wells were plugged utilizing guidelines set forth by the office of the New Mexico State Engineer. EPI removed and disposed of the monitor well covers, vaults, and the remains of the concrete pads.

Monitor well MW-1 was filled with approximately three (3) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

Monitor well MW-7 was filled with approximately two (2) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

Monitor well MW-10 was filled with approximately one (1) bag of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.
Monitor well MW-11 was filled with approximately three (3) bags of bentonite pellets to a depth of approximately one (1) foot below ground surface (bgs) and properly hydrated with water. Topsoil was placed above the former monitor well to complete the procedure.

The former monitor well locations are as follows:

- MW-1, 32 degrees, 31.208" N, 103 degrees, 12.086" W
- MW-7, 32 degrees, 31.205" N, 103 degrees, 12.048" W
- MW-10, 32 degrees, 31.202" N, 103 degrees, 12.034" W
- MW-11, 32 degrees, 31.187" N, 103 degrees, 12.079" W

Plains has completed the approved plugging and abandonment of the above referenced monitor wells as directed by the New Mexico Oil Conservation Division (NMOCD). Plains will continue to gauge and sample the remaining monitor wells at the site.

In the future, Plains may make additional requests to the NMOCD for plugging and abandonment of monitor well(s) at this site, as warranted.

Sincerely,

Curt D. Stanley Project Manager NOVA Safety and Environmental

cc:

Paul Sheeley / Larry Johnson, NMOCD, Hobbs, NM

Camille Reynolds, Plains Marketing, L.P., Lovington, NM cjreynolds@paalp.com Jeff Dann, Plains Marketing, L.P., Houston, TX jpdann@paalp.com NOVA Safety and Environmental, Midland, TX cstanley@novatraining.cc

Attachments: Attachment #1 – Form C-141 – Release Notification and Corrective Action

P. 01/01 200-403

OIL CONSERVATION DIVISION

J. Ma

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

	LS, LEAKS, KND BLUNDUTS				
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MAR Oil & Gas Corp.

505-989-1977 Fax 505-989-1987 P.O. Box 5155 21 Santa Fe, New Mexico 87502 Santa Fe

21 Bisbee Court, Suite H Santa Fe, New Mexico 87508

CERTIFIED MAIL: 7004 2510 0005 5237 6456 October 27, 2005

Douglas S. Kennedy Plains Marketing, L.P. P. O. Box 4648 Houston, TX 77210-4648

AP-9

Dear Mr. Kennedy:

The purpose of this correspondence is to respond to your September 29, 2005 letter to MAR Oil and Gas Corp. (MAR) regarding a produced water release at the Plains Marketing HDO-90-23 remediation site in Lea County, New Mexico. After reviewing the contents of your letter MAR needs more information to evaluate your concerns. Also, MAR will call your attention to some information you may not have.

In order to assess the facts better, it would be helpful if Plains Marketing provide the following:

- 1. Provide a map of the remediation area with the location of all monitoring wells and surface construction.
- Provide a map of the potentiometric surface of the affected groundwater aquifer and indicate the groundwater flow direction. Furthermore, provide information on changes in seasonal groundwater flow direction if any.
- 3. Provide information on any perched groundwater aquifers above the main aquifer.
- 4. Provide relevant laboratory analytical raw data. This data should be provided for a period of time before and after impact to the affected groundwater monitoring well. Please provide similar data on all groundwater monitoring wells in your remediation project.

Douglas S. Kennedy October 27, 2005 Page 2 of 2

To aide your understanding of possible source of elevated chloride content in your monitoring well (MW-3) the following items are listed:

- 1. The MAR pipeline leak you refer to in the September correspondence released approximately 15,120 gallons of brine water. Surface remediation was performed within 24 hours of the leak occurring. 8400 gallons were vacuumed and trucked away leaving 6720 gallons saturating the soil. After vacuuming the free liquid, approximately 2772 cubic feet of soil was removed from the release area. Soil samples were analyzed at the location beneath where soil remediation occurred. The New Mexico Oil Conservation Division (OCD) provided over-site for this remediation and actually commend MARs timeliness and effort.
- 2. There is a pipeline located closer to the MW-3 that has continuous dripping leak. The OCD is aware of this leaking pipeline and also has not identified the owner. This pipeline is a more likely candidate for the source of increased chloride in your monitoring well. A continuous release would more likely reach the aquifer than a spill and remediation within 24 hours.

I hope this information aids in the assessment of your remediation efforts. If you wish to continue evaluating the possibility of MARs surface spill impacting MW-3, please provide the information listed above.

Sincerely,

Clar

Duane C. Winkler VP Operations MAR Oil and Gas Corp.

Cc: Mr. Paul Sheeley, NMOCD District I Mr. Larry Johnson, NMOCD District I Mr. Ed Martin, NMOCD District IV September 29, 2005

Mr. Dwayne Winkler Mar Oil and Gas Corporation P.O. Box 5155 Santa Fe, New Mexico 87502

Re: Produced Water Release – August 9, 2005 Plains Marketing HDO-90-23 Remediation Site NE ¼ NW ¼ Section 6, Township 20S, Range 37E – Lea County, New Mexico

pp-

MARKETING, L.P

OIL CGA

Dear Mr. Winkler:

On August 9, 2005, Mar Oil and Gas Corporation (Mar) experienced a release of produced water from a pipeline at the above location, located about 7 miles northwest of the town of Eunice, New Mexico. This release was documented by NOVA Safety and Environmental field personnel, who were working for Plains Marketing, L.P. at a remediation site nearby (the HDO-90-23 site). The NOVA personnel observed a significant area of ponded produced water around a monitor well (MW-3), and significant staining and dead vegetation, at the HDO-90-23 location. In discussions between Mr. Willie Dean of Mar and NOVA personnel at the site that day, Mr. Dean indicated that several historical produced water spills had occurred in the HDO-90-23 area.

Plains is performing ongoing groundwater remediation activities at the HDO-90-23 site to address a historical crude oil release from a gathering line. No produced water was associated with the historical release, and the crude oil gathering line owned by Plains does not and has not transported produced water. In addition, residual crude oil impacts remain in surface and subsurface soils that may require remediation at a future date. Recent sampling and analysis of groundwater from the MW-3 well has indicated a very significant rise in chloride and total dissolved solids (TDS) concentration in the water. A groundwater sample collected from MW-3 on September 8, 2005 exhibited a chloride concentration of 26,100 mg/l and a TDS concentration of 32,200 mg/l, which are an order of magnitude higher than previous analytical results for this well. The September 2005 results indicate that the first water-bearing zone has been impacted from the recent produced water release. At this time, other monitor wells in the vicinity of the release have not demonstrated increased TDS concentrations; however, it is possible that additional salt impacts to groundwater are possible if the produced water migrates through the subsurface to the shallow water-bearing zone. In addition, surface and subsurface soils in the "footprint" of the August 2005 produced water release have been heavily contaminated with salt, which may preclude attempts to landfarm or bioremediate hydrocarbon impacts to these soils.



Mar Oil and Gas Corporation September 29, 2005 Page 2

Plains is continuing to evaluate the impact of the August 2005 produced water release on our remediation efforts, and would like to discuss what steps Mar is planning to take to address the soil and groundwater impacts associated with this release (and/or other historical releases). Please contact me at (713) 646-4610, or Camille Reynolds (Plains environmental coordinator in Lea County) at (505) 396-3341 at your earliest convenience to discuss these issues. Thank you for your attention to this problem.

Sincerely,

Thy MSK dy Douglas S Kennedy

Douglas S Kennedy / Manager of Remediation and Special Projects

cc: Mr. Paul Sheeley, NMOCD District I Mr. Ed Martin, NMOCD Santa Fe Ms. Camille Reynolds, Plains Marketing



NEW MEXICO ENERGY, MMERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

June 21, 2005

Ms. Camille Reynolds Plains All American 3112 West Highway 82 Lovington, NM 88260

Re: 2004 Annual Monitoring Report HDO-90-23 Release Site Located in the NE/4 NW/4 of Section 6, Township 20 South, Range 37 East Lea County, New Mexico Plains EMS Number: HDO-90-23 NMOCD Reference: AP-009

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the report shown above dated April 2005 and prepared on behalf of Plains Marketing, L.P. (Plains) by Nova Safety and Environmental. This report is accepted with the following understandings and conditions:

1. Groundwater monitoring and annual reporting will continue throughout 2005.

2. Monitor wells MW-1, MW-7, MW-10, and MW-11 may be plugged and abandonment using a slurry containing 3% - 5% bentonite.

 Sampling and reporting frequency of monitor well MW-8 may be reduced from quarterly to annually.
 Monitor well MW-9 shows as "NS" or "not sampled" on figures 3B, 3C, and 3D of the report. Also, this monitor well is not mentioned in the text of the report where sampling results are described. However, MW-9 is shown on Tables 1, 2, and 3 as if it were gauged and sampled. Please clarify this situation in a letter or an email to the undersigned.

NMOCD acceptance of this report does not relieve Plains of responsibility should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other federal, state, or local governmental agency.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Masta

Edwin E. Martin Environmental Bureau

cc: NMOCD, Hobbs



March 29, 2005

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

Re: Plains All American – Annual Monitoring Reports 21 Sites in Lea County, New Mexico

Dear Mr. Martin:

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:

LF-59 TNM 97-04 HDO 90-23 Darr Angell 2 **SPS 11** TNM 97-17 TNM 97-18 **TNM 98-05A** Red Byrd #1 Bob Durham Monument Site 11 Darr Angell 1 TNM 98-05B Monument Site 2 Monument Site 10 Monument Site 17 Monument Site 18 Monument Barber 10" PL Darr Angell 4 Monument to Lea 6" Texaco Skelly "F"

Section 32, Township 19 South, Range 37 East, Lea County Section 11, Township 16 South, Range 35 East, Lea County Section 06, Township 20 South, Range 37 East, Lea County Section 11,14, Township 15 South, Range 37 East, Lea County Section 18, Township 18 South, Range 36 East, Lea County Section 21, Township 20 South, Range 37 East, Lea County Section 28, Township 20 South, Range 37 East, Lea County Section 26, Township 21 South, Range 37 East, Lea County Section 01, Township 20 South, Range 36 East, Lea County Section 31, 32, Township 19 South, Range 37 East, Lea County Section 30, Township 19 South, Range 37 East, Lea County Section 11, Township 15 South, Range 37 East, Lea County Section 26, Township 21 South, Range 37 East, Lea County Section 6, 7, Township 20 South, Range 37 East, Lea County Section 32, Township 19 South, Range 37 East, Lea County Section 29, Township 19 South, Range 37 East, Lea County Section 07, Township 20 South, Range 37 East, Lea County Section 32, Township 19 South, Range 37 East, Lea County Section 11, 02, Township 15 South, Range 37 East, Lea County Section 05, Township 20 South, Range 37 East, Lea County Section 21, Township 20 South, Range 37 East, Lea County



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 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 21 facilities.

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

Sincerely,

for CR

Camille Reynolds Remediation Coordinator Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

2004 ANNUAL MONITORING REPORT

 \mathbf{NO}

AP-09

HDO-90-23 NE ¼, NW ¼, SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS EMS NUMBER: HDO-90-23

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

sta

Curt Stanley Project Manager

safety and environmental

•

 April 2005

fri: Todd Choban

Vice President Technical Services

2057 Commerce Drive | Midland, Texas 79703 | 432 520-7720 | 432 520-7701 fax

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2004 Annual Monitoring Report
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2004 Figures 1, 2A-2D, 3A-3D
Electronic Copies of Laboratory Reports
Historic Groundwater Elevation Data Table
Historic BTEX Concentration Table
Historic Metals Table
Historic Semi-Volatiles Table

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, having previously been managed by Environmental Technology Group, Inc (ETGI). The HDO-90-23 site, which was formally the responsibility of Texas New Mexico Pipeline Company (TNM), then EOTT (Link), 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 2004 only. However, historic data tables as well as 2004 laboratory analytical reports are enclosed on the enclosed data disk. A Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during four quarterly events in calendar year 2004 to assess the levels and extent of dissolved phase and Phase-Separated Hydrocarbon (PSH) constituents. 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 site is located in the NE 1/4 of the NW 1/4 of Section 6, Township 20 South, Range 37 East in Lea County. The HDO 90-23 release was discovered by TNM personnel and reported on March 27, 1990. According to the release report, an estimated 750 barrels of crude oil were released and 550 were recovered. The release occurred from a 14-inch Texas-New Mexico Pipeline Company pipeline and was attributed to structural failure associated with internal pipeline corrosion. Limited excavation occurred around the release point to repair the pipeline.

In February 1998, nine soil borings were advanced at the site and five monitoring wells were completed in order to assess the subsurface conditions. On behalf of EOTT, ETGI completed three additional monitoring wells at the site in September 1999. In the fall of 2002 ETGI installed monitor wells MW-9 through MW-15. These wells were installed at the site in order to more completely define the extent of soil and ground water impact.

The location is situated in Monument Draw and is surrounded by steep hills approximately 80 to 100 feet high. The surrounding area is composed of ranch lands with few or no improvements. No residences or surface water bodies were observed within 1,000 feet of the site.

In the site vicinity, the near surface is composed primarily of unconsolidated sands, silt and some finer materials associated with the Tertiary Ogallala Formation. Consolidated limestones and caliche are exposed on the margins of drainage channels, such as Monument Draw. These channels are generally dry except during storm events. Alluvial, unconfined ground water is typically present in these sands at varying depths and generally flows from the north to the south. These aquifers are typically characterized by relatively high hydraulic conductivity and transmissivity.

The Ogallala is underlain by the Triassic Dockum Formation, commonly referred to as the "red beds". While there are sand lenses within the Dockum, it is more typically characterized by red silts and shales in which detectable ground water is often absent or limited in extent. Where ground water is present, the aquifer is usually characterized by relatively low hydraulic conductivity and transmissivity.

At the site, which is located in Monument Draw, the subsurface is composed of approximately 30 feet of sand which overlies a silty red clay layer that appears to correspond to the Dockum Formation. The top of the Dockum Formation represents an erosional surface on which the sands were later deposited.

The ground water table occurs within the clay layer at the site. This fact, and the fact that the ground water gradient has a shallow slope, probably results in a low seepage velocity in the aquifer.

Fifteen groundwater monitor wells (MW-1 through MW-15) and two product recovery wells (RW-1 and RW-12) were onsite as of January 1, 2004. The pneumatic product recovery system formerly operating on-site incorporating two monitor wells has been turned off because product thicknesses have decreased to levels manageable with manual recovery techniques.

FIELD ACTIVITIES

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.

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

The site monitor wells were gauged and sampled on February 18, May 12, August 23-25, and December 7-8, 2004. During each sampling event, sampled monitor wells were purged of

approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy, Lovington, New Mexico utilizing a licensed disposal facility (NMOCD AO SWD-730).

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four (4) quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2004 is provided as Table 1. Historic groundwater elevation data beginning at project inception is enclosed on the attached data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.007 ft./ft. to the southeast as measured between MW-7 and MW-14. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3417.45 and 3421.05 feet above mean sea level, MW-4 on May 3, 2004 and MW-14 on July 21, 2004, respectively.

A measurable thickness of PSH was detected in monitor wells MW-1, MW-2, MW-4, MW-6, MW-14, and recovery wells RW-1 and RW-2, during the 2004 annual reporting period. A maximum PSH thickness of 2.51 feet in monitor well MW-6 was recorded on March 23, 2004 and is shown on Table 1. The average thickness of PSH in monitor wells containing PSH during the first, second, third and fourth quarters of 2004 were 0.85 feet, 0.84 feet, 0.37 feet, and 0.20 feet, respectively. In January 2004 monitor well MW-6 had a maximum PSH thickness of 1.89 and in December 2004 the maximum PSH thickness was 0.31 feet. Measurable PSH thicknesses have not been detected since October 2004 in monitor wells MW-2 and MW-4 and since July 2004 in recovery wells RW-1 and RW-2. Absorbent booms were installed in monitor wells and recovery wells exhibiting PSH impact. Approximately 14 gallons of PSH were recovered from the site during the 2004 reporting period. Approximately 754 gallons (18 barrels) of PSH have been recovered through automated and manual recovery methods since project inception.

On December 2 and 4, 2004, monitor wells MW-16 and MW-17, respectively were installed by NOVA to further delineate the extent of impacted groundwater down gradient of monitor well MW-14. Currently, a total of 17 monitor wells and 2 recovery wells are located on site.

LABORATORY RESULTS

Groundwater samples obtained during the February 18, May 12 and August 23-25, 2004 monitoring events were delivered to AnalySys, Inc. in Austin, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021b. Groundwater samples obtained during the December 7-8, 2004 monitoring event was delivered to TraceAnalysis, Inc. in Lubbock, Texas for BTEX using EPA Method 2021b. A cumulative listing of BTEX constituent concentrations for 2004 is summarized in Table 2. Copies of the laboratory reports generated for 2004 are provided on the attached data disk. The

quarterly groundwater sample results for benzene and BTEX concentrations are depicted on Figures 3A-3D.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2004 monitoring period indicate that the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in monitor wells MW-1, MW-4, MW-7, MW-8, MW-10, MW-11, MW-12, MW-16, MW-17 and recovery well RW-2. The benzene concentration in monitor wells MW-5, MW-13, MW-14, and MW-15 is above NMOCD regulatory standard for benzene, while total BTEX constituent concentrations are below NMOCD regulatory standards. The benzene and BTEX constituent concentrations in monitor wells MW-2, MW-3 and recovery well RW-1 are above NMOCD regulatory standards. Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

In accordance with the NMOCD letter dated March 6, 2001, additional groundwater samples were collected during the December 2004 monitoring event and analyzed for concentrations of semi-volatiles and New Mexico Water Quality Control Commission (WQCC) metals.

Review of laboratory analytical results for semi-volatile constituents revealed that Naphthalene concentrations were above the NMOCD regulatory limit in monitor well MW-2. Semi-volatile constituents results for all well locations sampled can be found in Table 3.

Review of laboratory analytical results for WQCC metals constituents revealed concentrations above NMOCD regulatory limits as follows: aluminum in 14 well locations, barium in 7 well locations, chromium in 1 well location, iron in all well locations, manganese in 11 well locations, and boron in 4 locations. Metal constituent results for all well locations sampled can be found in Table 4. Review of the metals analysis indicates that elevated concentrations of these metals are present in upgradient and downgradient non-impacted wells as well as impacted wells. The Southern High Plains, Permian Basin and the Trans Pecos geographical areas of southeastern New Mexico can contain naturally occurring concentrations of these metals in soil and groundwater above national averages. Future groundwater sampling events for WQCC metals will involve filtering of samples upon arrival at the laboratory prior to analysis.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of 2004. Currently, there are seventeen (17) groundwater monitor wells (MW-1 through MW-17) on-site and two (2) recovery wells (RW-1 and 2). NOVA installed MW-16 and MW-17 on December 2 and 4, 2004, respectively. The most recent Groundwater Gradient Map, Figure 2D indicates a general gradient of approximately 0.007 ft/ft to the southeast.

A measurable thickness of PSH was detected in monitor wells MW-1, MW-2, MW-4, MW-6, MW-14, and recovery wells RW-1 and RW-2, during the 2004 annual reporting period. A maximum PSH thickness of 2.51 feet in monitor well MW-6 was recorded on March 23, 2004 and is shown on Table 1. The average thickness of PSH in monitor wells containing PSH during

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the first, second, third and fourth quarters of 2004 were 0.85 feet, 0.84 feet, 0.37 feet, and 0.20 feet, respectively. In January 2004 monitor well MW-6 had a maximum PSH thickness of 1.89 and in December 2004 the maximum PSH thickness was 0.31 feet. Measurable PSH thicknesses have not been detected since October 2004 in monitor wells MW-2 and MW-4 and since July 2004 in recovery wells RW-1 and RW-2. Where present, measurable PSH fluctuates in the monitor wells and recovery wells, but in general decreased significantly in the 3rd and 4th Quarters of 2004. Recovered PSH has declined at the site and absorbent booms have been installed in wells exhibiting PSH.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2004 monitoring period indicate that the benzene and BTEX constituent concentrations are below NMOCD regulatory standards in 9 monitor wells and one recovery well. The benzene concentration in 4 monitor wells is above NMOCD regulatory standard, while total BTEX constituent concentrations are below NMOCD regulatory standards. The benzene and BTEX constituent concentrations in 2 monitor wells and 1 recovery well are above NMOCD regulatory standards.

The Release Notification and Corrective Action (Form C-141) is provided as Appendix A.

ANTICIPATED ACTIONS

Groundwater monitoring and annual reporting will continue in 2005. The analytical results of groundwater monitor wells installed in December, 2004 indicate that additional horizontal delineation is not required. Analytical results for groundwater samples collected on December 10, 2004, indicate that groundwater was below the method detection threshold for both benzene and total BTEX in monitor wells MW-16 and MW-17.

Plains, requests approval to plug and abandon monitor wells MW-1, MW-7, MW-10 and MW-11, these wells have exhibited analytical results below NMOCD regulatory standards for benzene and BTEX during at least 9 consecutive sampling events. Plains, bases this request on the following considerations:

- Up gradient control along the northern perimeter of the leak zone is provided by monitor well MW-9
- Monitor well MW-1 has exhibited dissolved phase concentrations below the NMOCD regulatory standard for 12 consecutive sampling events and is redundant.
- Monitor well MW-7 has exhibited dissolved phase concentrations below the NMOCD regulatory standard for 20 consecutive sampling events and is redundant.
- Monitor well MW-10 has exhibited dissolved phase concentrations below the NMOCD regulatory standard for 9 consecutive sampling events and is redundant to MW-15.
- Monitor Well MW-11 has exhibited dissolved phase concentrations below the NMOCD regulatory standard for 9 consecutive sampling events. This side gradient monitor well is in close proximity to MW-12, which provides side control to the leak zone.

The monitor wells will be plugged and abandoned by a licensed water well driller as pursuant to the State of New Mexico's monitor well plugging and abandonment regulations.

Plains also requests a reduction in the sampling frequency of monitor well MW-8 from Quarterly to Annual. Monitor well MW-8 has exhibited dissolved concentrations below regulatory standards for twenty seven (27) consecutive sampling events.

LIMITATIONS

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

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

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Tables

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GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF			DOT	CORRECTED
WELL NUMPED	DATE	CASING	DEPTH TO PRODUCT	DEPTH TO WATED	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	FRODUCT	WATER	THICKNESS	ELEVATION
<u>MW-1</u>	05/12/04	3,465.61	-	46.26	0.00	3,419.35
	07/13/04	3,465.61	47.84	48.23	0.39	3,417.71
	07/21/04	3,465.61	47.44	47.80	0.36	3,418.12
	08/23/04	3,465.61		45.74	0.00	3,419.87
	12/07/04	3,465.61	-	45.26	0.00	3,420.35
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MW-2	01/02/04	3,465.44		46.64	0.00	3,418.80
	01/06/04	3,465.44	-	46.65	0.00	3,418.79
	01/27/04	3,465.44	-	47.09	0.00	3,418.35
	02/02/04	3,465.44	-	47.13	0.00	3,418.31
	02/18/04	3,465.44	46.62	46.74	0.12	3,418.80
	02/23/04	3,465.44	46.66	46.68	0.02	3,418.78
	03/01/04	3,465.44		46.67	0.00	3,418.77
	03/10/04	3,465.44	_	46.65	0.00	3,418.79
	03/15/04	3,465.44	46.62	46.66	0.04	3,418.81
	03/23/04	3,465.44	47.07	47.14	0.07	3,418.36
	03/30/04	3,465.44	47.09	47.17	0.08	3,418.34
	04/07/04	3,465.44	47.09	47.15	0.06	3,418.34
	04/12/04	3,465.44	47.06	47.15	0.09	3,418.37
	04/15/04	3,465.44	-	46.99	0.00	3,418.45
	04/19/04	3,465.44	-	46.46	0.00	3,418.98
	05/03/04	3,465.44	-	46.65	0.00	3,418.79
	05/11/04	3,465.44	-	46.76	0.00	3,418.68
	05/12/04	3,465.44	-	46.35	0.00	3,419.09
	06/09/04	3,465.44	46.30	46.37	0.07	3,419.13
	06/16/04	3,465.44	46.32	46.36	0.04	3,419.11
	06/22/04	3,465.44	46.27	46.56	0.29	3,419.13
	07/13/04	3,465.44	46.26	46.56	0.30	3,419.14
	07/21/04	3,465.44	45.69	46.05	0.36	3,419.70
	08/11/04	3,465.44	45.73	46.00	0.27	3,419.67
	08/17/04	3,465.44	45.74	46.18	0.44	3,419.63
	08/23/04	3,465.44	45.81	45.85	0.04	3,419.62
	09/13/04	3,465.44	45.99	46.00	0.01	3,419.45
	09/20/04	3,465.44	45.86	45.93	0.07	3,419.57
	09/29/04	3,465.44	46.02	46.07	0.05	3,419.41
	10/04/04	3,465.44	45.96	45.98	0.02	3,419.48
	10/12/04	3,465.44	44.70	44.77	0.07	3,420.73

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GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	10/19/04	3,465.44	sheen	44.84	0.00	3,420.60
	10/25/04	3,465.44	sheen	44.92	0.00	3,420.52
	11/01/04	3,465.44	sheen	45.20	0.00	3,420.24
	11/09/04	3,465.44	sheen	45.17	0.00	3,420.27
	11/17/04	3,465.44	sheen	45.30	0.00	3,420.14
	12/07/04	3,465.44	sheen	45.25	0.00	3,420.19
	12/13/04	3,465.44	sheen	45.30	0.00	3,420.14
	12/20/04	3,465.44	sheen	45.29	0.00	3,420.15
	12/30/04	3,465.44	sheen	45.36	0.00	3,420.08
MW-3	02/18/04	3,464.68		46.00	0.00	3,418.68
	05/12/04	3,464.68		45.64	0.00	3,419.04
	08/23/04	3,464.68		45.10	0.00	3,419.58
	12/07/04	3,464.68		44.58	0.00	3,420.10
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MW-4	02/18/04	3,465.76	<u>-</u>	47.22	0.00	3,418.54
	05/03/04	3,465.76	48.28	48.50	0.22	3,417.45
	05/12/04	3,465.76		46.96	0.00	3,418.80
	08/23/04	3,465.76		46.46	0.00	3,419.30
	12/07/04	3,465.76	-	45.81	0.00	3,419.95
MW-5	02/18/04	3,467.40		48.88	0.00	3,418.52
	05/12/04	3,467.40		48.64	0.00	3,418.76
	08/23/04	3,467.40		48.15	0.00	3,419.25
	12/07/04	3,467.40		47.55	0.00	3,419.85
		Balling and Balling an				
MW-6	01/02/04	3,465.42	46.28	47.95	1.67	3,418.89
	01/06/04	3,465.42	46.26	47.83	1.57	3,418.92
	01/27/04	3,465.42	46.74	48.63	1.89	3,418.40
	02/02/04	3,465.42	46.81	48.62	1.81	3,418.34
	02/18/04	3,465.42	46.25	47.74	1.49	3,418.95
	02/23/04	3,465.42	46.36	47.09	0.73	3,418.95
	03/01/04	3,465.42	46.37	47.08	0.71	3,418.94
	03/10/04	3,465.42	46.34	47.09	0.75	3,418.97
	03/15/04	3,465.42	46.15	48.56	2.41	3,418.91
	03/23/04	3,465.42	46.65	49.16	2.51	3,418.39
	03/30/04	3,465.42	46.69	49.10	2.41	3,418.37

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GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	04/07/04	3,465.42	46.64	49.12	2.48	3,418.41
	04/12/04	3,465.42	46.62	49.10	2.48	3,418.43
	04/15/04	3,465.42	46.62	48.75	2.13	3,418.48
	04/19/04	3,465.42	46.08	48.04	1.96	3,419.05
	05/03/04	3,465.42	46.28	48.19	1.91	3,418.85
	05/11/04	3,465.42	46.46	47.73	1.27	3,418.77
	05/12/04	3,465.42	46.09	47.27	1.18	3,419.15
	06/09/04	3,465.42	45.98	47.59	1.61	3,419.20
	06/16/04	3,465.42	45.99	47.60	1.61	3,419.19
	06/22/04	3,465.42	45.96	48.00	2.04	3,419.15
	07/07/04	3,465.42	45.92	48.01	2.09	3,419.19
	07/13/04	3,465.42	45.98	47.99	2.01	3,419.14
	07/21/04	3,465.42	45.57	46.46	0.89	3,419.72
	08/11/04	3,465.42	45.58	46.49	0.91	3,419.70
	08/17/04	3,465.42	45.65	46.54	0.89	3,419.64
·	08/23/04	3,465.42	45.60	46.12	0.52	3,419.74
	09/13/04	3,465.42	45.67	46.24	0.57	3,419.66
	09/20/04	3,465.42	45.65	45.99	0.34	3,419.72
	09/29/04	3,465.42	45.99	46.50	0.51	3,419.35
	10/04/04	3,465.42	45.89	46.52	0.63	3,419.44
	10/12/04	3,465.42	44.75	45.00	0.25	3,420.63
	10/19/04	3,465.42	44.80	45.16	0.36	3,420.57
	10/25/04	3,465.42	44.89	45.06	0.17	3,420.50
	11/01/04	3,465.42	45.05	45.25	0.20	3,420.34
L	11/09/04	3,465.42	45.03	45.11	0.08	3,420.38
	11/17/04	3,465.42	45.08	45.41	0.33	3,420.29
·	12/07/04	3,465.42	45.12	45.41	0.29	3,420.26
	12/13/04	3,465.42	45.19	45.45	0.26	3,420.19
	12/20/04	3,465.42	45.22	45.40	0.18	3,420.17
	12/30/04	3,465.42	45.19	45.50	0.31	3,420.18
		and a second second second			han san je	
<u>MW-7</u>	02/18/04	3,466.22		47.19	0.00	3,419.03
	05/12/04	3,466.22		46.96	0.00	3,419.26
	08/23/04	3,466.22	<u> </u>	46.45	0.00	3,419.77
	12/07/04	3,466.22	<u> </u>	45.90	0.00	3,420.32
	an an Arthur Anna an Arthur Anna an Arthur Anna an Arthur Anna an Arthur Anna an Arthur Anna an Arthur Anna an Anna an Anna an	<i>"</i> """				
MW-8	02/18/04	3,467.61	<u> </u>	48.83	0.00	3,418.78

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GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	05/12/04	3,467.61	-	48.57	0.00	3,419.04
	08/23/04	3,467.61	-	48.09	0.00	3,419.52
	12/07/04	3,467.61	_	47.49	0.00	3,420.12
and the second						
MW-9	02/18/04	3465.74		46.81	0.00	3,418.93
	05/12/04	3465.74	-	46.60	0.00	3,419.14
	08/23/04	3465.74	-	46.09	0.00	3,419.65
	12/04/04	3,465.74	-	45.53	0.00	3,420.21
d Aller States (1995) adamse States (1995)						4.
MW-10	02/18/04	3466.15		47.32	0.00	3,418.83
	05/12/04	3466.15	_	47.07	0.00	3,419.08
	08/23/04	3466.15	<u> </u>	46.57	0.00	3,419.58
	12/07/04	3,466.15		45.98	0.00	3,420.17
				a an an an an an an an an an an an an an		
MW-11	02/18/04	3466.22		47.39	0.00	3,418.83
	05/12/04	3466.22	-	47.18	0.00	3,419.04
	08/23/04	3466.22	-	46.69	0.00	3,419.53
	12/07/04	3466.22	-	46.12	0.00	3,420.10
	al director di secondo di secondo di secondo di secondo di secondo di secondo di secondo di secondo di secondo Secondo di secondo di se Secondo di secondo di s					
MW-12	02/18/04	3466.69	-	47.95	0.00	3,418.74
	05/12/04	3466.69	-	47.74	0.00	3,418.95
	08/23/04	3466.69	-	47.23	0.00	3,419.46
	12/07/04	3466.69		46.67	0.00	3,420.02
ulla est. L'estre : L'have have	an the Arman States and States and States and States and States and States and States and States and States and					
MW-13	02/18/04	3466.98	-	48.51	0.00	3,418.47
	05/12/04	3466.98		48.27	0.00	3,418.71
	08/23/04	3466.98		47.75	0.00	3,419.23
	12/07/04	3466.98	-	47.17	0.00	3,419.81
						· · ·
MW-14	01/02/04	3466.50	48.11	48.60	0.49	3,418.32
	01/06/04	3466.50	48.10	48.64	0.54	3,418.32
	01/27/04	3466.50	48.55	49.15	0.60	3,417.86
	02/02/04	3466.50	48.57	49.23	0.66	3,417.83
	02/18/04	3466.50	48.11	48.67	0.56	3,418.31
	02/23/04	3466.50	48.31	48.65	0.34	3,418.14
	03/01/04	3466.50	48.33	48.68	0.35	3,418.12
	03/10/04	3466.50	48.34	48.63	0.29	3,418.12

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GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WEIT	DATE	TOP OF CASING	рертн то	рертн то	рси	CORRECTED CROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
	03/15/04	3466.50	48.12	48.42	0.30	3,418.34
	03/23/04	3466.50	48.61	48.96	0.35	3,417.84
	03/30/04	3466.50	48.65	48.94	0.29	3,417.81
	04/07/04	3466.50	48.60	49.15	0.55	3,417.82
	04/12/04	3466.50	48.60	49.01	0.41	3,417.84
	04/15/04	3466.50	48.57	48.86	0.29	3,417.89
	04/19/04	3466.50	48.04	48.34	0.30	3,418.42
	05/11/04	3466.50	48.28	48.61	0.33	3,418.17
	05/12/04	3466.50	47.91	48.22	0.31	3,418.54
	06/09/04	3466.50	47.83	48.13	0.30	3,418.63
	06/16/04	3466.50	47.84	48.09	0.25	3,418.62
	06/22/04	3466.50	47.85	48.24	0.39	3,418.59
	06/29/04	3466.50	47.84	48.22	0.38	3,418.60
	07/07/04	3466.50	47.86	48.25	0.39	3,418.58
	07/13/04	3466.50	47.84	48.23	0.39	3,418.60
	07/21/04	3466.50	45.45	45.46	0.01	3,421.05
	08/11/04	3466.50	47.42	47.69	0.27	3,419.04
	08/17/04	3466.50	47.44	47.75	0.31	3,419.01
	08/23/04	3466.50	47.44	47.49	0.05	3,419.05
	09/13/04	3466.50	47.42	47.51	0.09	3,419.07
	09/20/04	3466.50	47.4	47.45	0.05	3,419.09
	09/29/04	3466.50	47.45	47.54	0.09	3,419.04
	10/04/04	3466.50	47.35	47.52	0.17	3,419.12
	10/12/04	3466.50	46.8	46.9	0.10	3,419.69
	10/19/04	3466.50	46.64	46.73	0.09	3,419.85
	10/25/04	3466.50	46.7	46.73	0.03	3,419.80
	11/01/04	3466.50	sheen	46.79	0.00	3,419.71
	11/09/04	3466.50	sheen	46.76	0.00	3,419.74
	11/17/04	3466.50	sheen	46.8	0.00	3,419.70
	12/07/04	3466.50	sheen	46.82	0.00	3,419.68
	12/13/04	3466.50	sheen	46.88	0.00	3,419.62
	12/20/04	3466.50	sheen	46.81	0.00	3,419.69
	12/30/04	3466.50	sheen	46.9	0.00	3,419.60
and the second second		al construction of a	· .			
MW-15	02/18/04	3466.10		47.46	0.00	3,418.64
	05/12/04	3466.10		47.19	0.00	3,418.91
	08/23/04	3466.10		46.66	0.00	3,419.44

5 of 7

GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	12/07/04	3466.10	_	46.04	0.00	3,420.06
in with fast year of the fast and the fast year of the fast			т. цр. . 1	an a ta an		
MW-16	12/07/04			46.21	0.00	
	12/10/04			46.25	0.00	
	i i an an fair					
MW-17	12/07/04			49.1	0.00	
	12/10/04			49.13	0.00	
					e en glen ek	
RW-1	02/18/04	3465.02		46.30	0.00	3,418.72
	04/15/04	3465.02		46.75	0.00	3,418.27
	04/19/04	3465.02	-	46.15	0.00	3,418.87
	05/12/04	3465.02	-	46.03	0.00	3,418.99
	06/22/04	3465.02	46.02	46.03	0.01	3,419.00
	07/07/04	3465.02	46.01	46.02	0.01	3,419.01
	07/13/04	3465.02	46.01	46.02	0.01	3,419.01
	07/21/04	3465.02	45.45	45.46	0.01	3,419.57
	08/11/04	3465.02	-	45.49	0.00	3,419.53
	08/17/04	3465.02	SHEEN	45.53	0.00	3,419.49
	08/23/04	3465.02	-	45.49	0.00	3,419.53
	09/13/04	3465.02	SHEEN	45.50	0.00	3,419.52
	09/20/04	3465.02		45.51	0.00	3,419.51
	09/29/04	3465.02	SHEEN	45.60	0.00	3,419.42
	10/04/04	3465.02	SHEEN	45.57	0.00	3,419.45
	10/12/04	3465.02	SHEEN	44.41	0.00	3,420.61
	10/19/04	3465.02	SHEEN	44.50	0.00	3,420.52
	10/25/04	3465.02	SHEEN	44.54	0.00	3,420.48
	11/01/04	3465.02	SHEEN	44.81	0.00	3,420.21
	11/09/04	3465.02	SHEEN	44.79	0.00	3,420.23
	11/17/04	3465.02	SHEEN	44.91	0.00	3,420.11
	12/07/04	3465.02		44.95	0.00	3,420.07
	12/13/04	3465.02	SHEEN	45.00	0.00	3,420.02
	12/20/04	3465.02	SHEEN	44.94	0.00	3,420.08
	12/30/04	3465.02	SHEEN	45.04	0.00	3,419.98
		all and general				
RW-2	02/18/04	3465.21		46.42	0.00	3418.79
	04/15/04	3465.21		46.87	0.00	3418.34
L	04/19/04	3465.21	<u> </u>	46.27	0.00	3418.94
GROUNDWATER ELEVATION DATA FOR 2004

PLAINS MARKETING, L.P. HDO 90 - 23 LEA COUNTY, NEW MEXICO

		TOP OF				CORRECTED
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	GROUNDWATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
	05/12/04	3465.21	-	46.26	0.00	3418.95
	06/22/04	3465.21	46.13	46.14	0.01	3419.0785
	07/07/04	3465.21	46.12	46.13	0.01	3419.0885
	07/13/04	3465.21	46.12	46.13	0.01	3419.0885
	07/21/04	3465.21	45.60	45.61	0.01	3419.6085
	08/11/04	3465.21	-	45.62	0.00	3419.59
	08/17/04	3465.21	SHEEN	45.66	0.00	3419.55
	08/23/04	3465.21		45.59	0.00	3419.62
	09/13/04	3465.21	SHEEN	45.65	0.00	3419.56
	09/20/04	3465.21	-	45.60	0.00	3419.61
	09/29/04	3465.21	SHEEN	45.70	0.00	3419.51
	10/04/04	3465.21	SHEEN	45.63	0.00	3419.58
	10/12/04	3465.21	-	44.67	0.00	3420.54
	10/19/04	3465.21	SHEEN	44.76	0.00	3420.45
	10/25/04	3465.21	SHEEN	44.79	0.00	3420.42
	11/01/04	3465.21	SHEEN	45.20	0.00	3420.01
	11/09/04	3465.21	SHEEN	44.91	0.00	3420.3
	11/17/04	3465.21	SHEEN	45.02	0.00	3420.19
	12/07/04	3465.21	-	45.02	0.00	3420.19
	12/13/04	3465.21	SHEEN	45.15	0.00	3420.06
	12/20/04	3465.21	SHEEN	45.09	0.00	3420.12
	12/30/04	3465.21	SHEEN	45.12	0.00	3420.09

Note: Elevations based on North American Vertical Datum of 1929.

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CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004

PLAINS MARKETING, L.P. HDO 90-23

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LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

	ſ			SW 846-8012B, 5	030	
SAMPLE	SAMPLE DATE	DENGENIN	TOLUEN	ETHYL-	m, p -	0 -
LOCATION		BENZENE	Е	BENZENE	XYLENES	XYLENE
NMOCD REG	ULATORY LIMIT	0.01	0.75	0.75	TOTAL	XYLENES
		0.01	0.75	0.75	0.	67
<u>MW-1</u>	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/07/04	<0.00500	<0.00500	<0.00500	<0.0	0500
<u> </u>	05/10/04	0.000		A A A A	0.016	0.053
<u>MW-2</u>	05/12/04	8.930	0.019	2.040	0.916	0.052
	12/08/04	9.850	0.202	2.610	1.	/80
	02/19/04	2 000	<0.001	0.210	0.015	<0.001
<u>MW-3</u>	02/18/04	2.900	<0.001	0.218	0.015	
	08/25/04	0.930	<0.001	1.440	0.100	0.022
	08/23/04	0.019	<.001	0.794	0.023	0.00189
	07/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
<u>W4</u>	12/07/04	<0.001	<0.001		<0.002	0100
	12/07/04	<0.00100	<0.00100	<0.00100		
MW 5	07/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
IVI W-5	12/07/04	0.001	<0.001	<0.001	<0.002	0100
	12/07/04	0.0175	<0.00100	<0.00100	<0.0	
MW 6		<u> </u>	1	a prime i		·
IVI W - 0						
MW 7	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
VV-/	12/07/04	<0.001	<0.001	<0.001	<0.002	0100
	12/07/04	<0.00100	<0.00100	<0.00100		
MANY 9	02/18/04	<0.001	<0.001	<0.001	<0.003	<0.001
IVI W-0	02/18/04		<0.001	<0.001	<0.002	
MIVO	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
IVI w-9	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/07/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/07/04	~0.00100	<0.00100	<0.00100	<0.0	
MOV 10	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
<u>Ww-10</u>	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
	09/22/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/7/2004	<0.001	<0.001	<0.001	<0.002	
	12/1/2004	~0.00100	<0.00100	<0.00100		
MW 11	02/19/04	<0.001	<0.001	<0.001	<0.002	<0.001
<u></u>	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
	09/22/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/7/2004	<0.001	<0.001	<0.001	<0.002	0100
in the co	12/112004	~0.00100	<0.00100	<0.00100		
MW-12	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
1111-12	05/12/04		<0.001	<0.001		<0.001
<u> </u>	08/23/04	<0.001	<0.001		<0.002	<0.001
	12/7/2004	<0.001	<0.001	<0.001	<0.002	0100
	12/1/2004	-0.00100	<0.00100	<0.00100	-0.0	
MW-13	02/18/04	<0.001	<0.001	<0.001	<0.002	<0.001
111,1-15	05/12/04	<0.001	<0.001	<0.001	<0.002	<0.001
	08/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	12/7/2004	0.0349	<0.00100	<0.00100	<0.0	0100
and the second sec					1	1
MW-14	12/07/04	0.0622	<0.0200	0.0858	<0	0200
	1			1	1	1
MW-15	02/18/04	<0.001	< 0.001	< 0.001	< 0.002	<0.001
r	05/12/04	< 0.001	< 0.001	< 0.001	<0.002	<0.001
	08/25/04	< 0.001	< 0.001	<0.001	< 0.002	< 0.001
	12/07/04	0.336	< 0.00100	0.0561	0.	067
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CONCENTRATIONS OF BTEX IN GROUNDWATER FOR 2004

PLAINS MARKETING, L.P.

HDO 90-23

LEA COUNTY, NEW MEXICO

			5	SW 846-8012B, 5	030	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUEN E	ETHYL- BENZENE	m, p - XYLENES	o - Xylene
NIMOOD REG		0.01	0.75	0 75	TOTAL 2	XYLENES
	ULATORI LIMIT	0.01	0./5	0.75	0.	67
MW-16	12/10/2004	< 0.001	< 0.001	< 0.001	<0.	001
and the second	age State State			e de la composición de la composición de la composición de la composición de la composición de la composición d	· •••• [4]	
MW-17	12/10/2004	< 0.005	< 0.005	< 0.005	<0.	005
	a grande de la composition					
RW-1	02/18/04	1.320	0.001	0.668	0.026	0.003
	05/12/04	1.500	0.003	0.850	0.031	0.010
	08/25/04	0.980	0.029	0.341	0.116	0.065
	12/08/04	0.680	< 0.0200	0.210	<0.0	0200
an than	and the second second second second second second second second second second second second second second second		ing the	i and see		arar a
RW-2	02/18/04	0.14	< 0.001	0.737	0.132	0.002
	05/12/04	0.17	< 0.001	0.379	0.0748	0.00193
	08/25/04	0.166	<.001	0.104	0.0325	0.00319
	12/08/04	0.122	< 0.00500	0.0665	<0.0	0500
	in the second					÷.,

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CONCENTRATIONS OF METALS IN GROUNDWATER FOR 2004

PLAINS MARKETING, L.P. HDO 90-23 LEA COUNTY, NM

All water concentrations are irported n mg/L EPA SW846-60108, 7470

Strontium											Ţ														Γ				Π		Π
Boron	0.75	2.45		4.64		5.24	, .	0.5		.542	499		0.206		.120		.639		.469		0.30		0.1		015		.704		.770		.427
Sinc	┢	079		1490		0250		.0250		0250	0630	2	0800		0420 1		0760 0		0770 0		0520		0620		0340 0		0380 0		0310 1		0270 0
muibo2	$\left \right $	6.4 0		580 0.		620 <0		64		2	21 0		3.3 0.		2.5 0.		4.8 0.		0.0 0.0		87 0.		5.9 0.		97 0.		4.1 0.		53.0 0.		34 0.
Silver	.05	0125 7	: - : -	0125 1		0125 1		0125		0125	0125		0125 6		0125 7		0125 7		0125 8		0125		0125 9		0125		0125 8		0125 10		0125 2
BOUIS		00 <0.		00 <0		.00 <0.		.40 <0.		9 9	00 00		.00 .00		.00 <0.		00.		.00 <0.		.00 <0.		.00 <0.		.00 ≤0	. :	.00 <0.		.0× 00.		00 0
	2	500 130		500 112		500 112		500 98		<u>66</u>	500 137	-	500 115		500 125		500 120		00 124		500 124		500 104		00 133		500 117		00 155		00 125
muin9192	0.0	7 <0.05	-	0.0> 0		<0.05	•	0.0≥ 0	-	0;0 0;0	<0.05	: 	<0.05		≤0.05		≤0.05		<0.05		<0.05		30.05		<0.05		<0.05		<0.05		<0.05
muizzr104		50 8.67		0.91		50 52.1		5.60		0.01	0 12.6		13		0 12.8		18.5		12.2		0 12.6		19.3		0 10.2		0 12.5		0 14.7		0 21.8
	0.20	0 <0.02		0 0.03		0 < 0.025		0 <0.02		0<0.02	0 < 0.02		0 0.035		0 <0.02		0 0.027		0 0.025	1.1	0 <0.025		0 0.027		0 <0.025		0 <0.025		0 <0.025	-	0 < 0.025
munsbdyloM	1.0	2 <0.050		2 <0.050		2 <0.050		2 <0.050		<0.025	2 < 0.050		2 <0.050		2 <0.050	:-	2 < 0.050		2 <0.050		2 <0.050		2 <0.050		2 <0.050		2 <0.050		2 <0.050		2 <0.050
Mercury	0.002	<0.000		<0.000		<0.000		<0.000		0.0012	<0.000		<0.000		<0.000		<0.000	: :	<0.0002		<0.0002		<0.000		<0.0002		<0.0002	-	<0.0002		<0.0002
Manganese	0.20	0.1370		0.274	са. С.	0.043		0.0340		<0.0250	0.2740		0.3350		0.258		0.529		0.339		0.3080		0.465		0.28		0.282		0.444		0.2490
mvisənyaM		25.1	4	129.0		58		26.6		59.3	42.5		45.4		54.7		58.1		40.5		55.6	, 1 	76.6		59.3		55.7		105.0	-	113.00
ЬвэЛ	0.05	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100	<0.0100		< 0.0100		<0.0100		<0.0100		<0.0100	2	<0.0100		<0.0100		<0.0100	1	<0.0100	- 21	<0.0100		<0.0100
norl	1.00	10.600		24.0	,	8.21		2.40		6.3	22		21.3		22.5		38.9		22.1		23.3		39.7		16.6	т. Х	20.8	1	32.2		22.9
Copper	1.00	<0.0125		0.106		<0.0125		<0.0125		<u> 0.0125</u>	0.0310		0.0170		0.0160		0.0330		0.0180		0.0160		0.0240		0.0170		0.0180		0.0160	1	0.0150
tlado.D	0.05	<0.0200		<0.0200		<0.0200		<0.0200		0.0200	¢0.0200		≤0.0200	2 (£0.0200		<0.0200		0.0200		0.0200		0.0200		:0.0200		0.0200		0.0200		0.0200
muimond)	0.05	0.024		0.0140	1. A.	0.0100		0.0100		0.0100	0.0270		0.0370		0.0400		0.0570 <		0.0480		0.0410 <	а. 1 с.	0.0450		0.0220		0.0320 <		0.0310 <	-	0410
muiole)		540.0		217		43.0 <	<u></u>	95.8 <		217.0 <	243.0 (408.0 (416.0	-	548 (316.0 (415.0 (-	658.0 (311 (-	380.0 (455 (+	498
muimbaO	0.01	00500		00500		00500		00500		00200	00500		00500		00500	-	00500		00500		00500	_	00500		00500		00500		00500		00500
៣ព្រះនង	00	240 <0		0.0 <0		149 <0		189 <0		₹ 8	09 		730 <0.		51 60	-	21		81		090		0.0		99 ≤0.	-	t94 0.	-	<u>.0> 06</u>	-	8 9
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	5.(15.		4 <1		4 0		4		4	4 28	-	4 26		4 27	-	4		4 26		4 25		4 48		4 19.	_	4 23		4 28	-	04
SAMPI DATE	andard	12/07/0		12/08/0		12/07/0		12/07/0	0, 20, 0,	12/07/0	12/07/0		12/07/0		12/07/0		12/07/0		12/07/0		12/07/0		12/07/0		12/07/0	-	12/07/0		12/08/0		12/08/
SAMPLE LOCATION	wQCC St	MW-1		MW-2		MW-3		MW-4	2	S-WM	7-WM		MW-8		0-WM		01-WM		II-MM		MW-12		MW-13		MW-14		MW-15		RW-1		RW-2

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CONCENTRATIONS OF SEMI-VOLATILES IN GROUNDWATER FOR 2004

PLAINS MARKETING, L.P. HDO 90-23 LEA COUNTY, NEW MEXICO

All results are reported in mg/L. EPA SW846-8270C, 3510

Pyrene		<0.0002	 <0.0002	<0.0002		<0.0002		<0.0002	 <0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
Ράεπαπέδτεπε		<0.0002	0.052	0.0027		<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	0.0391	<0.0002		<0.0002	<0.0002	
əαsladıdqa√	0.03	<0.0002	0.215	0.00099		<0.0002	- 2	<0.0002	<0.0002	<0.0002		2000.0>	<0.0002	 <0.0002	<0.0002		<0.0002	0.0277	<0.0002		<0.0002	0.00333	
9n9tyq(b9-E,2,1]on9bul		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	0000	<0.002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
Fluorene		<0.0002	0.0348	0.00392	142	<0.0002		<0.0002	<0.0002	<0.0002		20.002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	 <0.0002	1 1 I I I	<0.0002	<0.0002	
Яјиогалеђеве		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	 <0.0002	<0.0002	0000 0	2000.02	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
Dibenz[a,h]anthracene		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	00000	7000.0>	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	 <0.0002		<0.0002	<0.0002	
Сргузеве		<0.0002	<0.0002	<0.0002	1.	<0.0002		<0.0002	<0.0002	<0.0002	00000	70000	<0.0002	<0.0002	<0.0002		<0.0002	 <0.0002	<0.0002		<0.0002	<0.0002	
Велго[k]Яиогядthene		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	0000	7000.02	<0.0002	<0.0002	<0.0002		<0.0002	 <0.0002	<0.0002		<0.0002	<0.0002	
9n9lY19q[i,d,g]ozn9d		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	 <0.0002	00000	7000.02	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
Benzo[b]fluoranthene		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	 <0.0002	0000 0	7000.02	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
Benzo[a]pyrene	0.0007	<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	0000 0	2000.02	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	 <0.0002		<0.0002	<0.0002	
Benzo[a]anthracene		<0.0002	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002	0000 0	7000.0>	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
эпээвтийиА		<0.0002	0.0527	0.0003		<0.0002		<0.0002	<0.0002	<0.0002	0000 0-	7000.0>	<0.0002	<0.0002	<0.0002		<0.0002	 0.00974	<0.0002		<0.0002	<0.0002	
эпэіүлібдвпээ.А		<0.0002	 0.00546	0.00061		<0.0002		<0.0002	 <0.0002	<0.0002	0000 0-		<0.0002	<0.0002	<0.0002		<0.0002	 <0.0002	<0.0002		<0.0002	<0.0002	
эпэйійдяпээА		<0.0002	0.00208	0.00048		<0.0002		<0.0002	<0.0002	<0.0002	00000	2000.02	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
SAMPLE DATE	andard	12/07/04	12/08/04	12/07/04		12/07/04		12/04/04	12/07/04	12/07/04	10/20/01	12/01/04	12/07/04	12/07/04	12/07/04		12/07/04	12/07/04	12/07/04		12/08/04	12/08/04	
SAMPLE	WQCC St	I-WM	MW-2	MW-3		MW-4		MW-5	9-MM	MW-8	0 1117	4-WW	MW-10	II-MM	MW-12		MW-13	MW-14	MW-15		RW-1	RW-2	

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Appendices

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Appendix A Notification of Release and Corrective Action

NE DE	TEXAS-	NEW MED	CTCO P	TPE T.	THE CO	ADDRESS	Box 353	5 140		
POXT	FIRE	URLAK	5	TLL	LEAK X	ELOZOUT		ic R*	DDE, N.Z	I. 88240
THE OF	DALG	r kud Well	TA:	K II		GASU PLNT	GIL	OTHER.		
GE OF	14*	Trunk I	Line							
CATION O A SECTIO	E FACIL	TTY COULD	ITER/QU GRIPTI	NR- Dil) N	N/4 NE	14	SEC. 6	тыр. 21	RGE. 37	COUNTY
STARCE A	nu dike R pochi	CTIGH FRO Nent Lànd	im near M <mark>ark</mark>	- 6 M	i. NNW	of Euni	ce 4 3	Mi. N	.W. of L	00p 18
TE AND H	UUR Ce U	Inknown				DATE AND	NOUR VERY	3/27	/90 2:1	5 P.M.
S INSEDI	ate CN?	YES X	кО	DUIRED	•	TO MHOM	NMOCC SCC	- B. J - D. 1	Pritchar Truiillo	d
io:	NMOC	с - М. с - С.	Crisw	rell Ion		AND HOUR	3/27/9 3/28/9	0: NM(CC - 3:	35 P.M. 05 B.M.
PE OF UID LOST	\$c	our Cruć				DF LOSS	750 BB	LS	VOLUME R COVERED	E- 550 BBLS
D ANY FL	UIDS REA	ACH YE	5	X CH	QUANTI	Ŷ				
SCRIBE C Extern Line c SCRIBE A	AUSE OF al Cor lamped REA AFFI	PROBLEM TOBION Off CIED AND	AND REI	UP ACTI	ACTION T	AKEN				
SCRIBE C Extern Line C SCRIBE A 45,00 Cattl Oil soa	AUSE OF al Cox lamped REA AFF(0 sq f e in t ked ea	PROBLEM TOBION Off CIED AND TO PASTU The area with cou	AND RE	UP ACTI Ind; 4 with	ON TAKEN	AKEN**	uipment	dame; ts of	Pe. full re	storation
SCRIBE C Extern Line C SCRIBE A 45,00 Cattl Dil Soa SCRIPTIO AREA	AUSE OF al Cor lamped REA AFFO 0 sq 1 e in t ked es	PROBLEM TOBION Off CIED ARD T PASTU TARAING	CLEAN CLEAN are la vered	JP ACTI Ind; 41 with RRAZIN	ACTION T ON TAKEN 0,000 s 12esh 4 G X	AKEN** sqfteq poil in URBAN	uipment prospec	dame; ts of R*	₩. full re	storation
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