AP - 12

REPORTS

DATE:

5A-2006

AP-12 Report 5A.2006

2006 ANNUAL MONITORING REPORT

TNM 98-05A NE 1/4 NW 1/4 OF SECTION 26, TOWNSHIP 21 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS EMS NUMBER: TNM-98-05A NMOCD Reference AP-12

Prepared for:

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

Prepared By:

NOVA Safety and Environmental 2057 Commerce Street Midland, Texas 79703

March 2007

Curt D. Stanley

Project Manager

Todd K. Choban, P.G.

safety and environmental

TABLE OF CONTENTS

INTRODUCTION	1
SITE DESCRIPTION AND BACKGROUND INFORMATION	1
FIELD ACTIVITIES	2
LABORATORY RESULTS	3
SUMMARY	5
ANTICIPATED ACTIONS	6
LIMITATIONS	6
DISTRIBUTION	7

FIGURES

3

Figure 1 – Site Location Map
Figure 2A – Inferred Groundwater Gradient Map March 6, 2006
Figure 2B – Inferred Groundwater Gradient Map June 5, 2006
Figure 2C – Inferred Groundwater Gradient Map September 11, 2006
Figure 2D – Inferred Groundwater Gradient Map November 21, 2006
Figure 3A – Groundwater Concentration and Inferred PSH Map March 6, 2006

Figure 3B – Groundwater Concentration and Inferred PSH Map June 5, 2006

Figure 3C - Groundwater Concentration and Inferred PSH Map September 11, 2006

Figure 3D - Groundwater Concentration and Inferred PSH Map November 21, 2006

TABLES

Table 1 – 2006 Groundwater Elevation Data Table 2 – 2006 Concentrations of BTEX in Groundwater

APPENDICES

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

ENCLOSED ON DATA DISK

2006 Annual Report (Text) 2006 Tables Figures 1, 2A-2D, 3A-3D Electronic Copy of Laboratory Reports Historical Groundwater Elevation Tables Historical Groundwater BTEX Analytical Results

INTRODUCTION

NOVA Safety and Environmental (NOVA), on behalf of Plains Pipeline, L.P. (Plains), has prepared this 2006 Annual Groundwater 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). This report is intended to be viewed as a complete document with figures, attachments, tables, and text. The report presents the results of four quarterly groundwater monitoring/sampling events conducted at the TNM 98-05A crude oil release site (the site), located in Lea County, New Mexico. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. For reference, the Site Location Map is provided as Figure 1.

Groundwater gauging and sampling was conducted during each quarter of 2006 to assess the levels and extent of Phase Separated Hydrocarbons (PSH) and dissolved phase constituents. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells are not sampled if a measurable thickness of PSH is detected during gauging activities.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately two miles northeast of the city of Eunice, New Mexico. The legal description of the site is NE ¹/₄, NW ¹/₄, Section 26, Township 21 South, Range 37 East (Figutre 1). On February 5, 1998 an estimated 38 barrels of crude oil was released from a six (6) inch crude oil pipeline. Approximately four (4) barrels of crude oil were recovered during the emergency response activities. The release was attributed to internal corrosion of the pipeline. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. Approximately 3,300 cubic yards of impacted soil was excavated and applied to an on-site treatment cell. In December 2004, a Site Restoration Work Plan and Proposed Soil Closure Strategy Report was submitted to the NMOCD. The report was approved by the NMOCD in a letter dated June 2, 2005. In October 2005, additional excavation along the east sidewall was completed, the excavation was backfilled with remediated soil and the site was graded to match the surrounding topography. In December 2005, a Soil Closure Request was submitted to the NMOCD in a letter dated January 31, 2006. Plains proposes no further action with regard to soil remediation at the TNM-98-05A site.

During the October 2005 excavation backfilling activities, monitor well MW-4 was damaged and could not be repaired. On January 9, 2006, Plains representatives requested NMOCD approval to plug and abandon monitor well MW-4. On January 19, 2006, NMOCD approved the request to plug and abandon the monitor well. On March 6, 2006, monitor well MW-4 was plugged and abandoned utilizing approved New Mexico Office of the State Engineer plugging and abandonment procedures.

During the October 2005 excavation backfilling activities, the upper fifteen (15) feet of casing in monitor well MW-1 was inadvertently pushed out of vertical alignment. The vertical

displacement of the casing did not allow a standard size bailer to be used for groundwater sampling during the fourth quarter of 2005. On January 12, 2006, monitor well MW-1 was sampled utilizing a small diameter bailer, the results of the sampling event were included in the 2005 Annual Monitoring Report. The analytical results of the January 12, 2006 sampling event will not be reiterated in this report. For reference, the analytical results are shown in Table 2, 2006 Concentrations of BTEX in Groundwater.

Currently, there are ten (10) monitor wells (MW- through MW-3 and MW-5 through MW-11) onsite.

FIELD ACTIVITIES

0

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells. A sheen was reported in monitor wells MW-1, MW-2, MW-9 and MW-10 throughout most of the reporting period. Table 1 displays the groundwater gauging data for the reporting period. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

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 correspondence date January 19, 2006. The table below illustrates the current groundwater sampling schedule approved by the NMOCD.

Sample Location	Sampling Schedule
MW-1	Quarterly
MW-2	Quarterly
MW-3	Quarterly
MW-4	Plugged and Abandoned March 6, 2006
MW-5	Annual
MW-6	Semi-annual
MW-7	Semi-annual
MW-8	Annual
MW-9	Quarterly
MW-10	Quarterly
MW-11	Quarterly

Quarterly sampling events for the calendar year 2006 were performed on March 6, June 5, September 11, and November 21, 2006. Each quarterly sampling event consisted of gauging all wells and purging and sampling monitor wells as per the approved sampling schedule. During each sampling event, the 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 of Lovington, New Mexico, utilizing a licensed disposal facility (NMOCD AO SWD-730).

The most recent inferred groundwater gradient, Figure 2D, indicates a general gradient of approximately 0.004 feet/foot to the southeast as measured between monitor wells MW-5 and MW-6. This data is consistent with data presented on Figures 2A through 2C from earlier in the year. Groundwater elevation data for the calendar year 2006 is provided in Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed disk.

LABORATORY RESULTS

Groundwater samples collected during the 2006 groundwater sampling events were delivered to Trace Analysis, Inc. of Lubbock, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW846-8021b. A listing of BTEX constituent concentrations for 2006 is summarized in Table 2. Copies of the laboratory reports for 2006 are provided on the enclosed disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A-3D.

Monitor well MW-1 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 6.17 mg/L during the 4th quarter to 9.96 mg/L during the 1st quarter of 2006. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four (4) quarters of the reporting period. Toluene concentrations ranged from 0.0763 mg/L during the 3rd quarter to <0.2 mg/L during the 2nd quarter of 2006. Toluene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 1.32 mg/L during the 4th quarter to 2.42 mg/L during the 3rd quarter of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 3rd quarter of 2006. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting period. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during the 1st quarter of 2006. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting period. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting period. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting period.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 4.19 mg/L during the 3rd quarter to 6.34 mg/L during the 4th quarter of 2006. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four (4) quarters of the reporting period. Toluene concentrations ranged from <0.01 mg/L during the 4th quarter to 2.26 mg/L during the 1st quarter of 2006. Toluene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 1st and 2nd quarters and below the standards during the 3rd and 4th quarters of the reporting period. Ethylbenzene concentrations ranged from 1.26 mg/L during the 3rd quarter to 2.12 mg/L during the 1st quarter of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 1st quarter of 2006. Toluene concentrations ranged from 1.26 mg/L during the 3rd quarter to 2.12 mg/L during the 1st quarter of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during all four (4) quarters of the reporting period. Xylene concentrations ranged from 1.14 mg/L during the 4th quarter to 3.06 mg/L during the 1st quarter of 2006. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting period.

Monitor well MW-3 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1^{st} , 3^{rd} and 4^{th} quarters to 0.0012 mg/L during the 2^{nd} quarter of 2006. Benzene concentrations were below the NMOCD regulatory

standard of 0.01 mg/L during all four (4) quarters of the reporting period. Toluene concentrations were below the laboratory detection limit (MDL) and the NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations were below the laboratory detection limit (MDL) and the NMOCD regulatory standard during all four (4) quarters of the reporting period. Xylene concentrations were below the laboratory detection limit (MDL) and the NMOCD regulatory detection limit (MDL) and the NMOCD regulatory standard during all four (4) quarters of the reporting period. Xylene concentrations were below the laboratory detection limit (MDL) and the NMOCD regulatory standard during all four (4) quarters of the reporting period.

8

•

9

•

Monitor well MW-5 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 4th quarter sampling event.

Monitor well MW-6 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2^{nd} and 4^{th} quarter sampling event.

Monitor well MW-7 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2nd and 4th quarter sampling event.

Monitor well MW-8 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 4th quarter sampling event.

Monitor well MW-9 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0073 mg/L during the 3^{rd} quarter to 0.0173 mg/L during the 1^{st} quarter of 2006. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during the 1^{st} , 2^{nd} and 4^{th} quarters and below the standard during the 3^{rd} quarter of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 3^{rd} and 4^{th} quarter of 2006. Toluene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during the all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0539 mg/L during the 4^{th} quarter to 0.245 mg/L during the 2^{nd} quarter of 2006. Ethylbenzene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four (4) quarters of the reporting period. Xylene concentrations ranged from 0.039 mg/L during the 2^{nd} quarter of 2006. Ethylbenzene to 0.369 mg/L during the 2^{nd} quarter of 2006. Xylene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during the 4^{th} quarter to 0.369 mg/L during the 2^{nd} quarter of 2006. Xylene concentrations were below the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting the 2^{nd} quarter of 2006. Xylene concentrations were below the NMOCD regulatory standard of 0.62 mg/L during all four (4) quarters of the reporting the 2^{nd} quarter of 2006.

Monitor well MW-10 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 2.05 mg/L during the 2^{nd} quarter to 6.56 mg/L during the 4^{th} quarter of 2006. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four (4) quarters of the reporting period. Toluene concentrations ranged from <0.1 mg/L during the 4^{th} quarter to 0.351 mg/L during the 1^{st} quarter of 2006. Toluene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.792 mg/L during the 2^{nd} quarter to 1.42 mg/L during the 3^{rd} and 4^{th} quarters of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 2^{nd} quarter to 1.42 mg/L during the 3^{rd} and 4^{th} quarters of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during the 2^{nd} quarter to 1.42 mg/L during the 3^{rd} and 4^{th} quarters of 2006. Ethylbenzene concentrations were above the NMOCD regulatory standard of 0.75 mg/L during all four (4) quarters of 2006.

Xylene concentrations ranged from 0.46 mg/L during the 2^{nd} quarter to 1.19 mg/L during the 4^{th} quarter of 2006. Xylene concentrations were above the NMOCD regulatory standard of 0.62 mg/L during the 1^{st} , 3^{rd} and 4^{th} quarters and below the standard during the 2^{nd} quarter of the reporting period.

Monitor well MW-11 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during each of the four (4) quarterly sampling events.

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 four groundwater monitoring and sampling events for the annual monitoring period of calendar year 2006. Currently, there are ten (10) groundwater monitor wells (MW-1 through MW-3 and MW-5 through MW-11) onsite. The most recent inferred groundwater gradient indicates a general gradient of approximately 0.004 feet/foot to the southeast.

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells. A sheen was reported in monitor wells MW-1, MW-2, MW-9 and MW-10 throughout most of the reporting period.

Benzene concentrations were above NMOCD regulatory standards for four (4) monitor wells (monitor well MW-9 exhibited one (1) quarter below and three (3) quarters above NMOCD regulatory standards) during the reporting period. Benzene concentrations were below NMOCD regulatory standards for six (6) monitor wells.

Toluene concentrations were above NMOCD regulatory standards for one (1) monitor well during two (2) of the four quarters of the reporting period. Toluene concentrations for nine (9) monitor wells were below regulatory standards for the 2006 reporting period.

Ethylbenzene concentrations were above NMOCD regulatory standards for three (3) monitor wells during the reporting period. Ethylbenzene concentrations were below NMOCD regulatory standards for seven (7) monitor wells for the 2006 reporting period.

Xylene concentrations were above NMOCD regulatory standards for three (3) monitor wells (monitor well MW-9 exhibited one (1) quarter below and three (3) quarters above NMOCD regulatory standards). Xylene concentrations were below NMOCD regulatory standards for seven (7) monitor wells for the 2006 reporting period.

ANTICIPATED ACTIONS

Plains, respectfully requests NMOCD approval to modify the groundwater sampling schedule for monitor well MW-5. The current approval schedule for monitor well MW-5 requires groundwater sampling on an annual schedule. Plains proposes to change the groundwater sampling frequency for monitor well MW-5 to semi-annual sampling. The basis for this request is the upgradient position of monitor well MW-5 in relation to monitor well MW-1.

Plains will continue to monitor and perform quarterly groundwater sampling activities at the site. An Annual Monitoring Report will be submitted to the NMOCD by April 1, 2008. Plains will submit a groundwater and site closure request to the NMOCD when groundwater analytical results demonstrate groundwater contaminant concentrations are below the regulatory standards for the required eight (8) consecutive quarters.

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

Copy 1	Ben Stone New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505
Copy 2:	Larry Johnson and Patricia Caperton New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240
Copy 3:	Camille Reynolds Plains Marketing, L.P. 3112 Highway 82 Lovington, NM cjreynolds@paalp.com
Copy 4:	Jeff Dann Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, TX 77002 jpdann@paalp.com
Copy 5:	NOVA Safety and Environmental 2057 Commerce Street Midland, TX 79703 cstanley@novatraining.cc

FIGURES

0 0 **A** • 1 1 -1 0 • \$ •



•

•

•

0

.

0

0

•

0

















.

(†) (†)

2 4 •

2006 GROUNDWATER ELEVATION DATA

a

0

1

æ

E.

PLAINS MARKETING, LP TNM 98-05A LEA COUNTY, NEW MEXICO

WEIT	DATE	TOP OF CASINC	DEDTH TO	DEPTH TO	DCH	CORRECTED
NUMBED	MEASUDED	FI EVATION	BDODUCT	WATED	THICKNESS	GROUND WATER
NUMBER	WIEASUKED	ELEVATION	PRODUCT	WAIER	THICKNESS	ELEVATION
MW-1	01/12/06	3391.62	-	46.47	0.00	3,345.15
	01/18/06	3391.62	sheen	46.56	0.00	3,345.06
	02/15/06	3391.62	sheen	46.40	0.00	3,345.22
	03/06/06	3391.62	-	46.50	0.00	3,345.12
_	03/20/06	3391.62	sheen	46.57	0.00	3,345.05
	04/13/06	3391.62	sheen	46.39	0.00	3,345.23
	04/19/06	3391.62	sheen	46.50	0.00	3,345.12
	05/25/06	3391.62	sheen	46.24	0.00	3,345.38
	06/05/06	3391.62	sheen	46.22	0.00	3,345.40
	09/11/06	3391.62	sheen	46.71	0.00	3,344.91
	10/31/06	3391.62	sheen	46.91	0.00	3,344.71
	11/16/06	3391.62	sheen	46.80	0.00	3,344.82
	11/21/06	3391.62	sheen	46.76	0.00	3,344.86
MW-2	01/18/06	3390.85	sheen	45.89	0.00	3,344.96
	02/15/06	3390.85	sheen	45.71	0.00	3,345.14
	03/06/06	3390.85	sheen	45.83	0.00	3,345.02
	03/20/06	3390.85	sheen	45.90	0.00	3,344.95
	04/13/06	3390.85	sheen	45.72	0.00	3,345.13
Ň	04/19/06	3390.85	sheen	45.81	0.00	3,345.04
	05/25/06	3390.85	sheen	45.55	0.00	3,345.30
	06/05/06	3390.85	sheen	45.52	0.00	3,345.33
	09/11/06	3390.85	sheen	46.08	0.00	3,344.77
	10/31/06	3390.85	sheen	46.30	0.00	3,344.55
	11/16/06	3390.85	sheen	46.13	0.00	3,344.72
	11/21/06	3390.85	sheen	46.97	0.00	3,343.88
MW-3	03/06/06	3391.08	-	45.96	0.00	3,345.12
	06/05/06	3391.08	-	45.65	0.00	3,345.43
	09/11/06	3391.08	-	46.16	0.00	3,344.92
	11/21/06	3391.08	-	46.25	0.00	3,344.83
				[]		
MW-4	01/18/06	3391.94	DRY			····
	02/15/06	3391.94	DRY			
	03/06/06	Plugged and Abandon	ed			
	0.5 /0.5 /0.5	0001.50				
<u>MW-5</u>	06/05/06	3391.53	-	46.01	0.00	3,345.52
	09/11/06	3391.53	-	46.47	0.00	3,345.06
	11/21/06	3391.53		46.63	0.00	3,344.90
	0.6/0.5/0.6	2201.14		46.00	0.55	
MW-6	00/05/06	3391.14	-	45.99	0.00	3,345.15
	09/11/06	3391.14	-	46.62	0.00	3,344.52
	11/21/00	3391.14	-	46.68	0.00	3,344.46
NUU 7	06/05/06	2201.21		45.00	0.00	2.0.17.77
MW-/	00/05/06	3391.21	-	45.98	0.00	3,345.23
	09/11/06	3391.21	-	46.58	0.00	3,344.63

2006 GROUNDWATER ELEVATION DATA

.

6

14

PLAINS MARKETING, LP TNM 98-05A LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-7	11/21/06	3391.21	-	46.61	0.00	3,344.60
MW-8	06/05/06	3391.14		47.89	0.00	3,343.25
	09/11/06	3391.14	-	46.54	0.00	3,344.60
	11/21/06	3391.14	-	46.63	0.00	3,344.51
MW-9	03/06/06	3391.47	sheen	46.43	0.00	3,345.04
	04/13/06	3391.47	sheen	46.25	0.00	3,345.22
	04/19/06	3391.47	sheen	46.40	0.00	3,345.07
	05/25/06	3391.47	sheen	46.17	0.00	3,345.30
	06/05/06	3391.47	-	46.12	0.00	3,345.35
	09/11/06	3391.47	-	46.66	0.00	3,344.81
	10/31/06	3391.47	sheen	46.88	0.00	3,344.59
	11/16/06	3391.47	sheen	46.69	0.00	3,344.78
	11/21/06	3391.47	sheen	46.68	0.00	3,344.79
MW-10	01/18/06	3391.26	sheen	46.33	0.00	3,344.93
	02/15/06	3391.26	sheen	46.15	0.00	3,345.11
	03/06/06	3391.26	sheen	46.27	0.00	3,344.99
	03/20/06	3391.26	sheen	46.35	0.00	3,344.91
	04/13/06	3391.26	sheen	46.13	0.00	3,345.13
	04/19/06	3391.26	sheen	46.24	0.00	3,345.02
	05/25/06	3391.26	sheen	45.98	0.00	3,345.28
	06/05/06	3391.26	sheen	45.95	0.00	3,345.31
	09/11/06	3391.26	sheen	46.49	0.00	3,344.77
	10/31/06	3391.26	sheen	46.75	0.00	3,344.51
	11/16/06	3391.26	sheen	46.58	0.00	3,344.68
	11/21/06	3391.26	sheen	46.55	0.00	3,344.71
MW-11	03/06/06	3390.73	-	45.83	0.00	3,344.90
	04/13/06	3390.73	-	45.72	0.00	3,345.01
	06/05/06	3390.73	-	45.01	0.00	3,345.72
	09/11/06	3390.73	-	46.07	0.00	3,344.66
	11/21/06	3390.73	-	46.08	0.00	3,344.65

2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. TNM 98-05 A LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

CAMPLE		SW 846-8021B, 5030					SW		
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - o - XYLENES XYLEN				
NMOCD Reg	ulatory Limit	0.01	0.75	0.75	0.62				
MW-1	01/12/06	1	0.242	0.774	0.5	534			
	03/06/06	9.96	< 0.1	2.24	1.	64			
	06/05/06	7.08	<0.2	1.66	1.	22			
	09/11/06	7.86	0.0763	2.42	1.	44			
	11/21/06	6.17	<0.1	1.32	1	.2			
		3							
MW-2	03/06/06	6.28	2.26	2.12	3.	06			
	06/05/06	4.35	1.66	1.69	1.	92			
	09/11/06	4.19	0.25	1.26	1.	25			
	11/21/06	6.34	<0.1	1.38	1.	14			
MW-3	03/06/06	< 0.001	< 0.001	< 0.001	<0.	001			
	06/05/06	0.0012	< 0.001	< 0.001	<0.	001			
	09/11/06	< 0.001	< 0.001	< 0.001	<0.	001			
	11/21/06	< 0.001	< 0.001	< 0.001	<0.	001			
MW-4 03/06/06 Plugged and Abandoned									
MW-5	03/06/06	Not Sampled	on Current Sa	mpling Sched	ule				
	06/05/06	Not Sampled	on Current Sa	mpling Sched	ule				
	09/11/06	Not Sampled	on Current Sa	mpling Sched	ule				
	11/21/06	0.0011	< 0.001	0.0014	<0.	001			
MW-6	03/06/06	Not Sampled	on Current Sa	mpling Sched	ule				
	06/05/06	< 0.001	< 0.001	< 0.001	<0.	001			
	09/11/06	< 0.001	< 0.001	< 0.001	<0.	001			
	11/21/06	< 0.001	< 0.001	< 0.001	<0.	001			
MW-7	03/06/06	Not Sampled	on Current Sa	mpling Sched	ule				
	06/05/06	< 0.001	< 0.001	< 0.001	<0.	001			
	09/11/06	< 0.001	< 0.001	< 0.001	< 0.001				
	11/21/06	< 0.001	< 0.001	< 0.001	<0.	001			
MW-8	03/06/06	Not Sampled	on Current Sa	mpling Sched	ule				
	06/05/06	Not Sampled	on Current Sa	mpling Sched	le				

575

1 of 2

2006 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS MARKETING, L.P. TNM 98-05 A LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/L

	CANADY D	÷	SW 846-8021B, 5030			
SAMPLE LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
NMOCD Reg	ulatory Limit	0.01	0.75	0.75	5 0.62	
MW-8	09/11/06	Not Sampled	on Current Sa	ampling Sched	ule	
	11/21/06	< 0.001	< 0.001	< 0.001	<0.	001
MW-9	03/06/06	0.0173	0.039	0.194	0.2	.47
	06/05/06	0.033	< 0.005	0.245	0.3	69
	09/11/06	0.0073	< 0.001	0.0981	0.1	34
	11/21/06	0.0128	< 0.001	0.0539	0.0192	
MW-10	03/06/06	4.93	0.351	1.39	1.	.4
	06/05/06	2.05	0.0457	0.792	0.4	46
	09/11/06	5.45	0.105	1.42	1.	07
	11/21/06	6.56	<0.1	1.42	1.	19
MW-11	03/06/06	< 0.001	< 0.001	< 0.001	< 0.001	
	06/05/06	< 0.001	< 0.001	< 0.001	<0.	001
	09/11/06	< 0.001	< 0.001	< 0.001	<0.	001
	11/21/06	< 0.001	<0.001	< 0.001	<0.	001

Concentrations in bold exceed NMOCD Groundwater Cleanup Limits

APPENDICES

•

.

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

A

Â.

1/27/2005 07:29 FAX 5053862754	LINKENERGY				1002/004
Istrict 1 - (305) 393-6101 State O. Box 1940 Energy Minerals 1 0 bbs, NM \$2241-1980 Energy Minerals 1 (strict II - (505) 748-1283 Oil C 11 South First Oil C resta, NM \$4310 204 istrict III - (305) 334-6178 Sant 1000 Rus Barrow Road Sant tee, NM \$7410 1157-7131	c of New and Natural onservatio 0 South Pach a Fc, New Me (505) 827-7	v Mexico Resources De n Division see Street sice 97505 7131	-tment 98	- 05a	Form C. 14 Friginated 2/13/9 Submit 2 copies t Appropriate Discric Price in accordance with Rule 116 or back side of form
Release Not	ification and	Corrective Actio	n 		
Texas-New Mexico Pipe Line Company		Contact		Illal Report	E Finel Report
Box 60028		Edwin H. G Ricphone Na	ripp		
San Angelo, TX 76906		915-947-90 Fedlicy Type	00		
		pipe lin	e		
Nadine Owan	l Owner		Le.	ise Na.	
IOC	ATION OF F	ELEASE			
26 215 37E	YSoath Line Yes	time the Ranyviert Li			
N	TURE OF RE	LEASE	<u> </u>		
Sour Crude		Whome of Polynes		Valuence Second	
6" gathering line		Date and Hour of Cent	mence [4 Darre	Discovery
as Immediate Notice Given?		UNKNOWN II YRS, To When?		2/5/98;	10:25 a.m.
Whom W. Chapman		Linda Willia Date and Nava	Ms (Cler	(#4)	
Ar a Wasserstume Routhed		2/5/98; 3:00 1/ Yis, Values Investi	p.m.		
A Wildronuse was Innanyad Darmithe Batera		N/A			
N/A					
Internal Corrosion				가락하는 가방에 있다. 같은 아이들에서 같은 것이 같이 같이 같이 있다.	
eak successfully clamped off.					
Mathe Are Alferiad and Cranup Action Trian .			en er i Billingen. Anti-setter Anti-setter Anti-setter		
pproximately 1260 sq.ft. pasture land. Contaminated soil will be excavated and p	out on plas	tlç.			
adibe General Conditions Fromiling (Itemperature, Fredplission, etc.).* Cloudy: 60 degrees					
reby caruly that the information given above is true and complete to the b terreference and helped		014.00	MERVATION	DIVISION	
Lawin H. Grippi V	Approve Dirotex (t by Iupervisoe			
Ulstrict Manader	Adamin's	Dia	Recinette	n Dane	
2/12/98 Phere 915-947-9	000 Condit	ON Of Astronal	Lannan		
2/12/98 Phone 915-947-9 Nitech Addidonal Shoots II Necessary	000 Condi	form of Approval.		Attached	Watta Sarting
Ulstrict Manager 2/12/98 Phone 015-947-9 Nitech Addidonal Shoots II Necessary	000 Cendid	aru of Approval:		Attachoi [Hatardou	Waste Section
Ulstrict Manager 2/12/98 Phore 015-947-9 Nitech Additional Shoots II Necessary	000 Condu	anu af Approval:		Attached [Wasie Section

8

3 8 Ð,

6

6