# 1R - 120

## REPORTS

DATE: 4/11/2006



## NEW MEXICO ENERGY, MERALS and NATURAL RESOURCES DEPARTMENT

#### **BILL RICHARDSON**

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

April 11, 2006

Ms. Camille Reynolds Plains Marketing, L.P. 3112 West Highway 82 Lovington, NM 88260

RE:

2005 Annual Monitoring Report

Monument 11 Site

SE/4 NE/4 Section 30, Township 19 South, Range 37 East, and

Lea County, New Mexico

Plains EMS #: TNM Monument 11 NMOCD File Number 1R-120

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report, submitted by NOVA Safety and Environmental, on behalf of Plains Marketing, L.P. (Plains). This report is hereby accepted and approved with the following understandings and conditions:

- 1. Plains will continue groundwater monitoring, product recovery, using manual methods, and annual reporting throughout 2006.
- 2. Activities in 2006 will be reported to the NMOCD in the 2006 Annual Monitoring Report, due by April 1, 2007.
- 3. Plains will submit a soil investigation work plan during the third quarter of 2006.

NMOCD approval does not relieve Plains of liability 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 governmental agency.

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

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin

Environmental Bureau

Copy: NMOCD, Hobbs

Curt Stanley, NOVA



February 27, 2006

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

3 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:

Darr Angell #1
Darr Angell #4
Monument 11

Section 11, Township 15 South, Range 37 East, Lea County Sections 2 and 11, Township 15 South, Range 37 East, Lea County Section 30, Township 19 South, Range 37 East, Lea County

Nova prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains Ali 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 Ali American submits the enclosed Annual Monitoring Reports for the above facilities.

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

regnolds

Sincerely.

Camille Reynolds

Remediation Coordinator

Plains All American

CC:

Larry Johnson, NMOCD, Hobbs, NM

**Enclosures** 



#### 2005 ANNUAL MONITORING REPORT

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#### **MONUMENT 11**

LEA COUNTY, NEW MEXICO
SE ¼ NE ¼ SECTION 30, TOWNSHIP 19 SOUTH, RANGE 37 EAST
PLAINS EMS NUMBER: TNM MONUMENT-11
NMOCD Reference Number 1R-120

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

February, 2006

Curt D. Stanley

Project Manager

Todd K. Choban

Vice President Technical Services

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#### **ENCLOSED ON DATA DISK**

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

#### **INTRODUCTION**

On behalf of Plains Marketing, L.P., (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1<sup>st</sup> of each year. Beginning on May 29, 2004, project management responsibilities for the Monument 11 site (the site) were assumed by NOVA. The site was previously managed by Environmental Technology Group, Inc (ETGI). The site, which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This 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 presented on the enclosed disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2005 to assess the levels and extent of dissolved phase constituents and for the presence of Phase Separated Hydrocarbon (PSH) constituents. Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column, and purging and sampling of each scheduled well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

#### SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SE ¼ NE ¼ Section 30, Township 19 South, Range 37 East. No information with respect to the release date, volume of crude oil released and recovered, excavation dimensions or pipeline repair is available as this release occurred while the pipeline was operated by Texas New Mexico Pipeline Company (TNM). The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. The initial site investigation, which consisted of the installation of four (4) groundwater monitor wells (MW-1 through MW-4), was conducted by previous consultants.

On November 3, 2004, two (2) monitor wells were installed on the up gradient side of the impact zone to more fully delineate the extent of impact at the site. Six (6) groundwater monitor wells (MW-1 through MW-6) are currently on-site. Gauging occurs monthly for monitor well MW-4, the only monitor well to display measurable thicknesses of PSH in 2005.

#### FIELD ACTIVITIES

A measurable thickness of PSH was observed in monitor well MW-4 during the 2005 reporting period. Monitor well MW-4 exhibited a sheen throughout the reporting period and measurable PSH (0.01 feet) during the 2<sup>nd</sup> and 3<sup>rd</sup> quarter sampling events. No measurable PSH was recovered from the site during 2005. Approximately 12 gallons (0.3 barrels) of product have been recovered by 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 in NMOCD correspondence dated June 22, 2005:

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

The site monitor wells were gauged and sampled on March 11<sup>th</sup>, June 13<sup>th</sup>, September 12<sup>th</sup>, and December 6<sup>th</sup> of 2005. During each sampling event, monitor wells not containing PSH were purged of approximately three (3) well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos Pump. Groundwater was allowed to recharge and samples were 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 Hobbs, New Mexico utilizing a licensed disposal facility (OCD 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 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 0.007 ft./ft. to the southeast as measured between groundwater monitor wells MW-1 and MW-4. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevation has ranged between 3598.72 and 3603.29 feet above mean sea level, in MW-1 on December 6, 2005 and MW-5 on March 11, 2005, respectively.

#### LABORATORY RESULTS

Groundwater samples collected during the 2005 monitoring 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 2005 is summarized in Table 2. Copies of the laboratory reports for 2005 are provided on the enclosed disk. The quarterly groundwater sample results for benzene and BTEX constituent concentrations are depicted on Figures 3A-3D.

Review of laboratory analytical results of the groundwater samples obtained during the 2005 monitoring period indicate that the benzene and total BTEX constituent concentrations remain below applicable NMOCD standards in all monitor wells.

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 2005 annual monitoring period. Currently, there are six (6) groundwater monitor wells (MW-1 through MW-6) on-site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.007 ft./ft. to the southeast.

Gauging data for the reporting period indicates PSH impact appears to be limited to monitor well MW-4. Monitor well MW-4 exhibited a sheen throughout the reporting period. On two occasions, a thickness of 0.01 feet of PSH was measured in MW-4. No measurable PSH was recovered from the site during 2005. Approximately 12 gallons (0.3 barrels) of PSH has been recovered by manual recovery methods since project inception.

Review of laboratory analytical results of all groundwater samples obtained during the 2005 monitoring period indicate the benzene and total BTEX constituent concentrations were below the applicable NMOCD standard in all monitor wells during the reporting period. Based on the laboratory data from groundwater samples collected from monitor well MW-4, it appears the sheen present on the groundwater has not caused the BTEX constituent concentrations to be elevated above the NMOCD criteria.

#### **ANTICIPATED ACTIONS**

Groundwater monitoring and annual reporting will continue in 2006. A Soil Investigation Work Plan will be submitted to the NMOCD 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**

Copy 1 Ed Martin

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 Paul Sheeley

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 1

1625 French Drive Hobbs, NM 88240

(Data disk only per Larry Johnson)

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

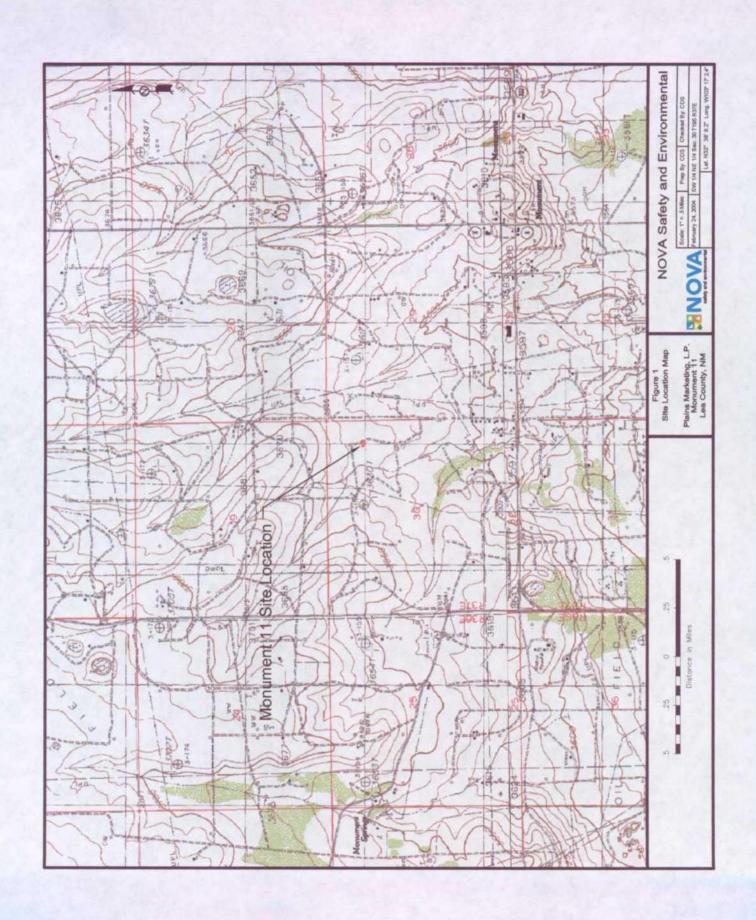
Houston, TX 77002 jpdann@paalp.com

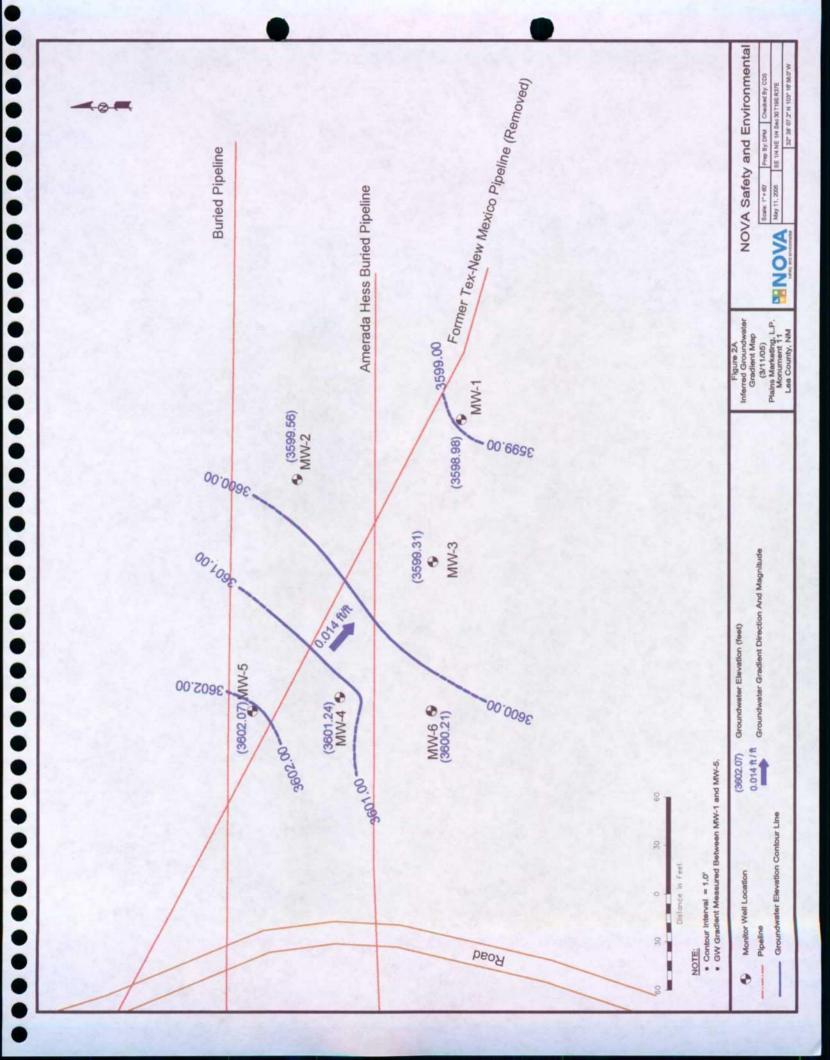
Copy 5: NOVA Safety and Environmental

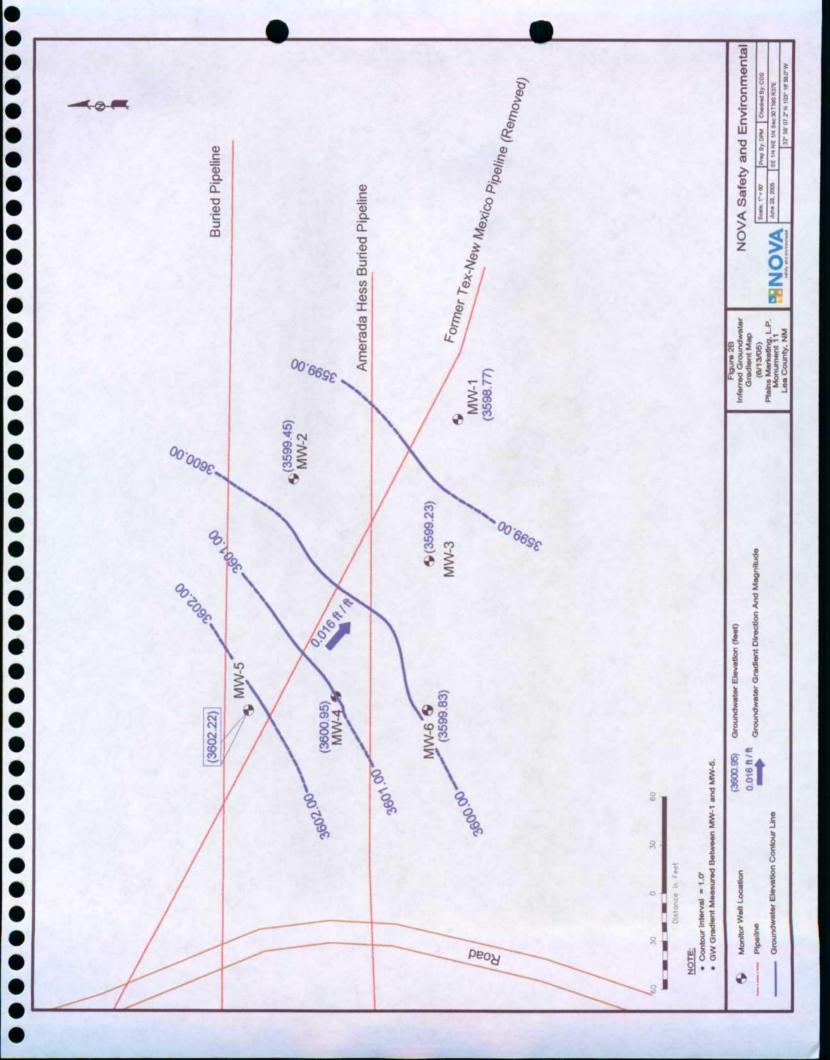
2057 Commerce Street Midland, TX 79703

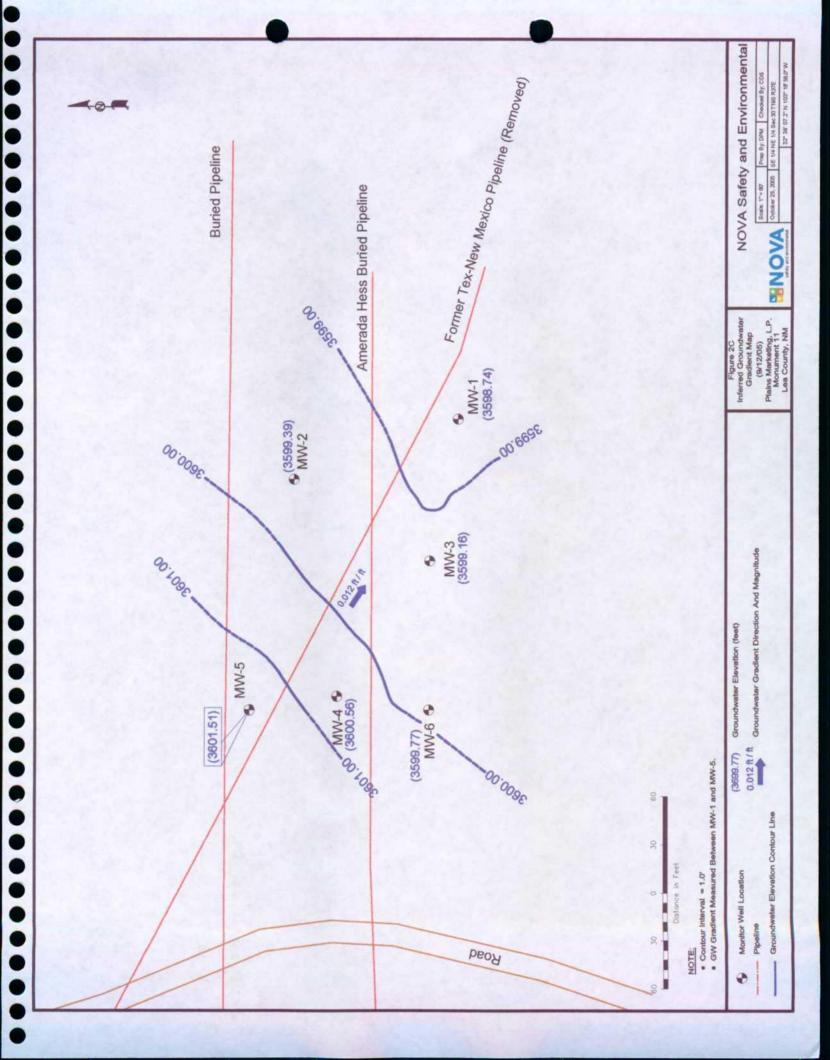
cstanley@novatraining.cc

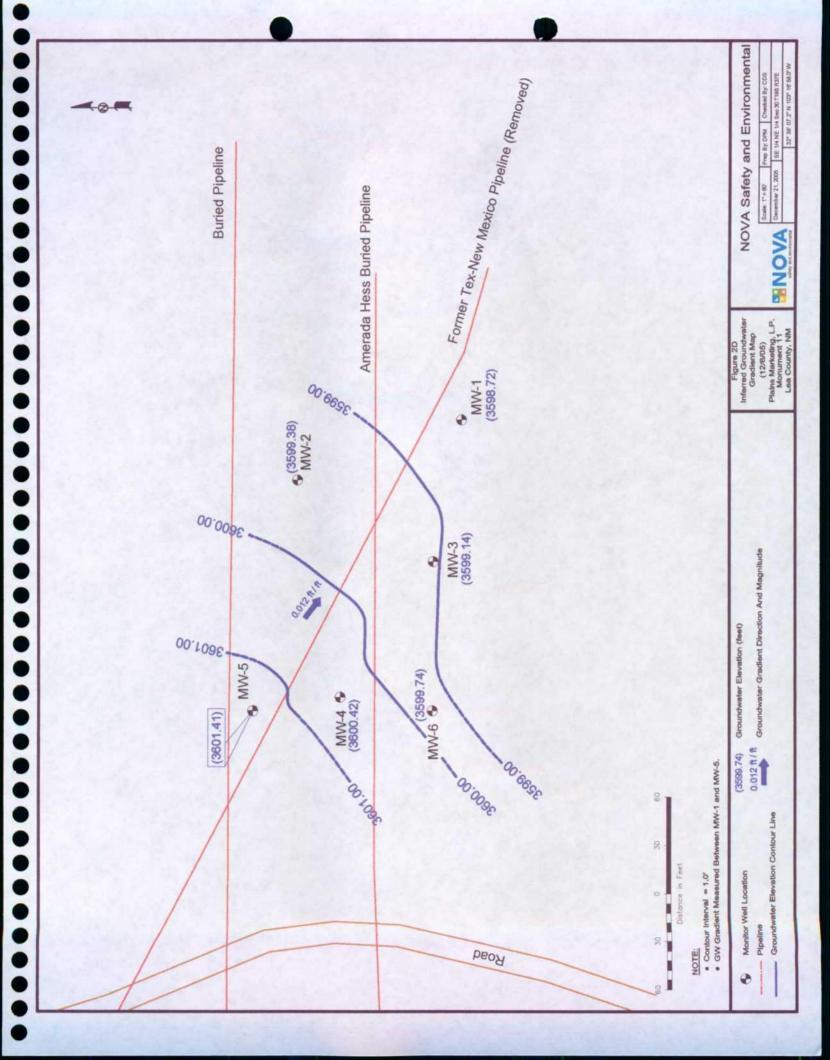
Figures

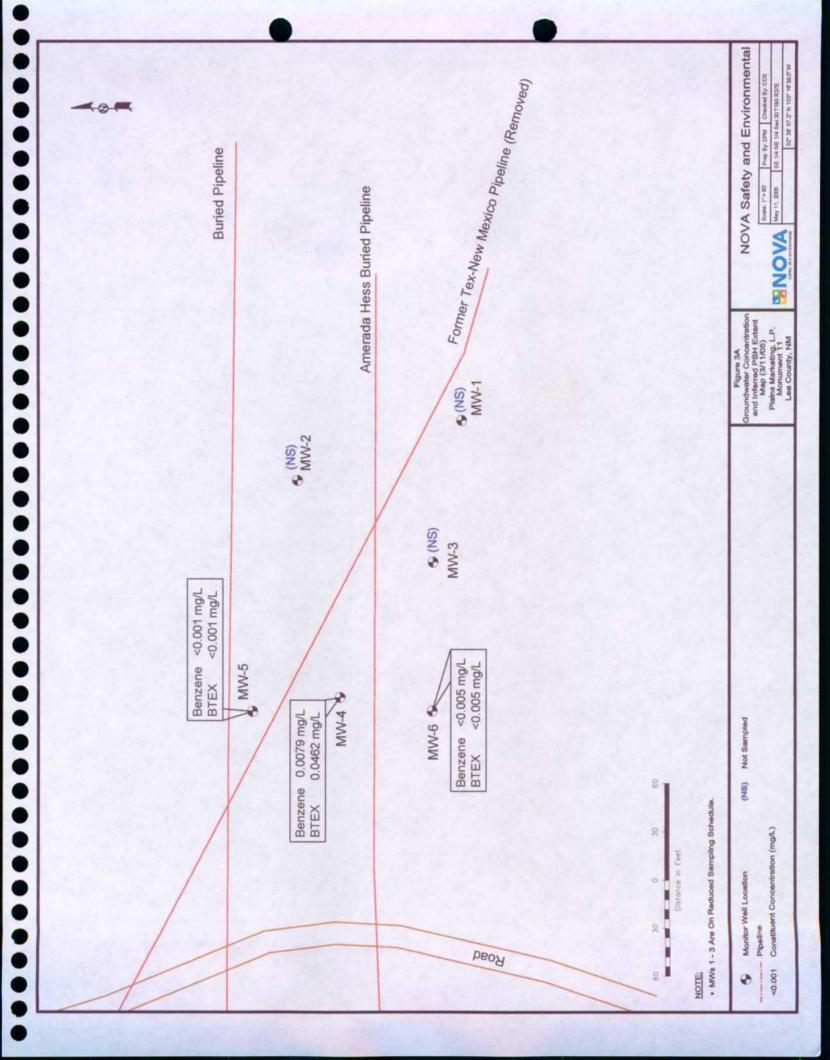


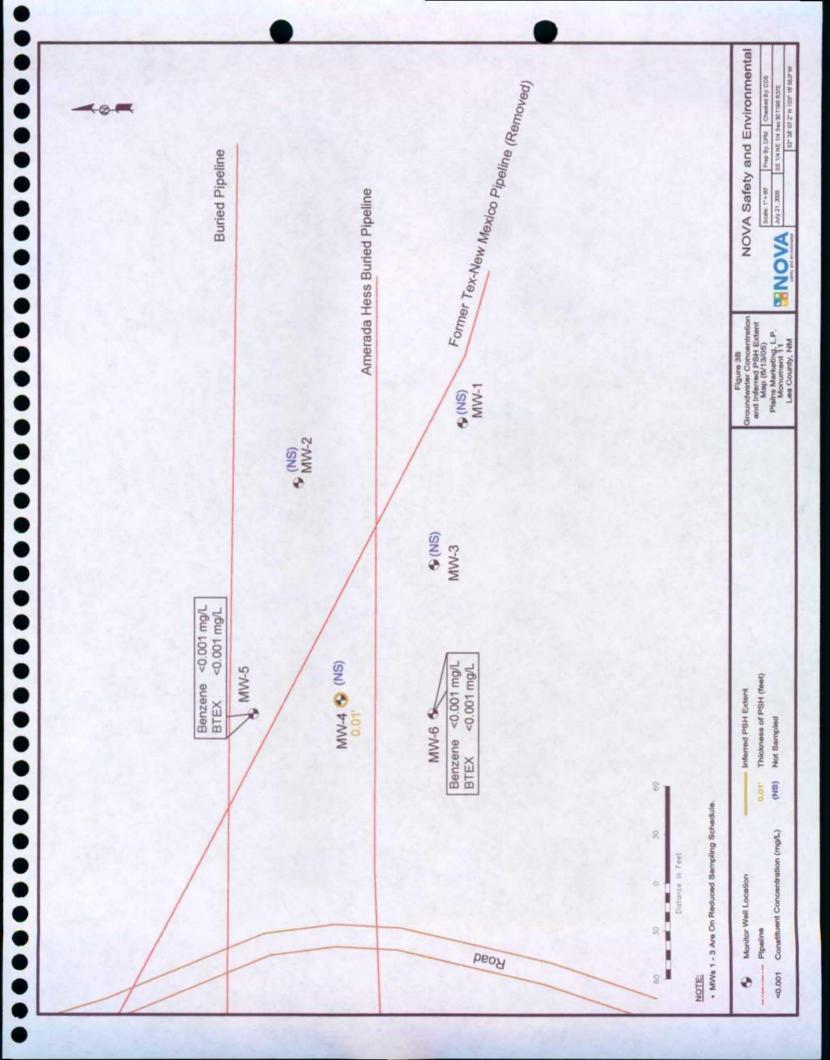


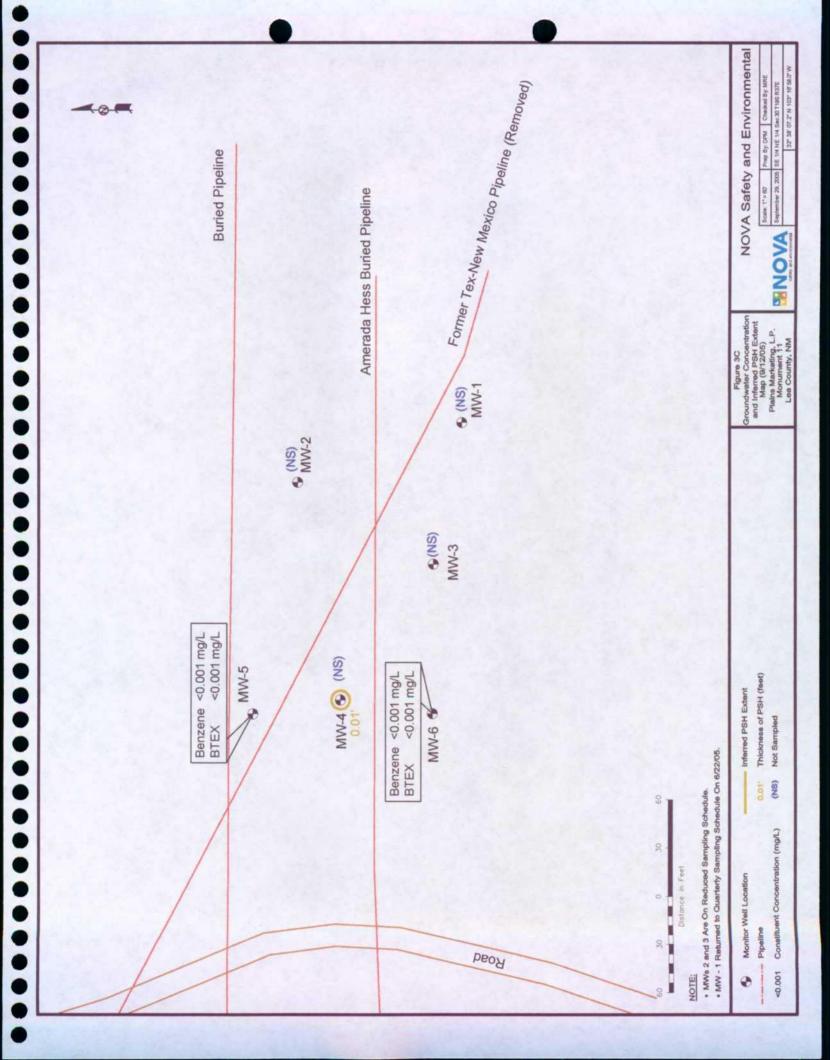


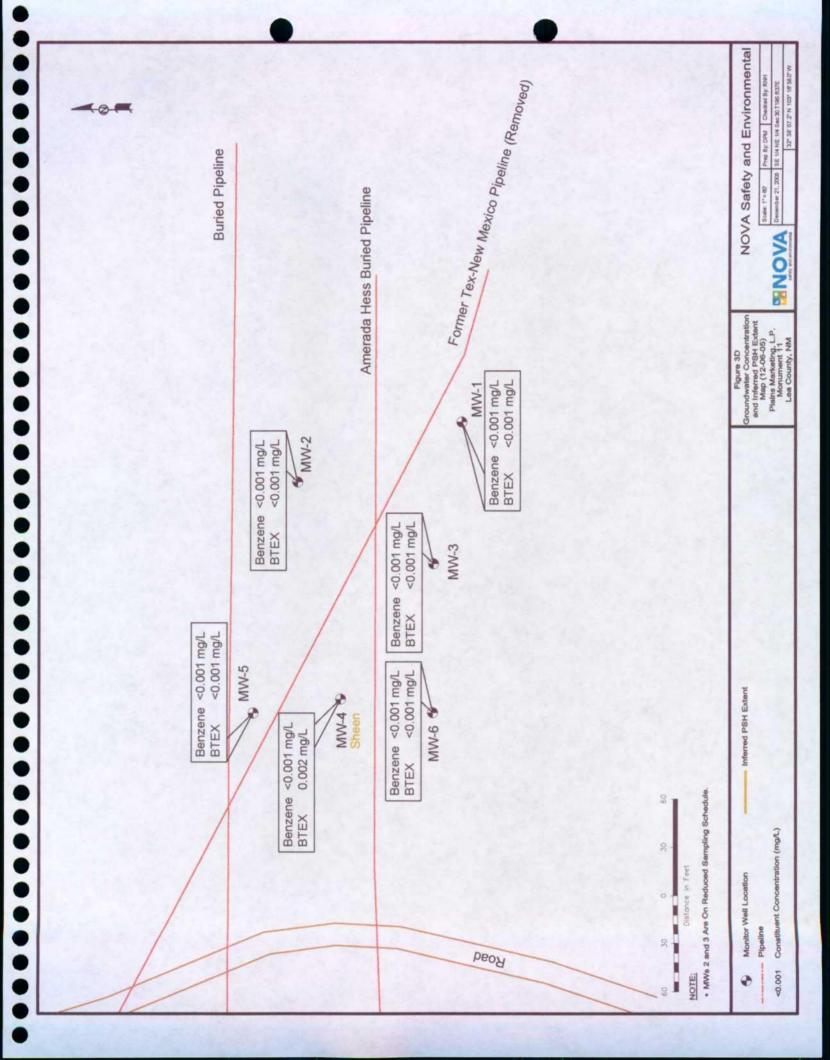












Tables

### TABLE 1 2005 GROUNDWATER ELEVATION DATA

## PLAINS MARKETING, L.P. MONUMENT 11 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	03/11/05	3,624.90	-	25.92	0.00	3,598.98
	06/13/05	3,624.90	-	26.13	0.00	3,598.77
	09/12/05	3,624.90	_	26.17	0.00	3,598.73
	12/06/05	3,624.90	-	26.18	0.00	3,598.72
and the						
MW-2	03/11/05	3,624.91	-	25.35	0.00	3,599.56
	06/13/05	3,624.91	-	25.46	0.00	3,599.45
	09/12/05	3,624.91	-	25.52	0.00	3,599.39
	12/06/05	3,624.91	-	25.53	0.00	3,599.38
MW-3	03/11/05	3,623.90	_	24.68	0.00	3,599.22
	06/13/05	3,623.90	-	24.76	0.00	3,599.14
	09/12/05	3,623.90	_	24.83	0.00	3,599.07
	12/06/05	3,623.90	-	24.85	0.00	3,599.05
				·		
MW-4	01/10/05	3,624.02	sheen	21.69	0.00	3,602.33
	01/17/05	3,624.02	sheen	21.90	0.00	3,602.12
	01/24/05	3,624.02	sheen	22.06	0.00	3,601.96
	01/31/05	3,624.02	sheen	22.34	0.00	3,601.68
	02/07/05	3,624.02	sheen	22.49	0.00	3,601.53
	02/14/05	3,624.02	sheen	22.62	0.00	3,601.40
	02/21/05	3,624.02	sheen	22.69	0.00	3,601.33
	02/28/05	3,624.02	sheen	22.79	0.00	3,601.23
	03/07/05	3,624.02	sheen	22.70	0.00	3,601.32
	03/11/05	3,624.02	-	22.78	0.00	3,601.24
	04/04/05	3,624.02	sheen	22.91	0.00	3,601.11
	05/23/05	3,624.02	sheen	23.02	0.00	3,601.00
	06/13/05	3,624.02	23.07	23.08	0.01	3,600.95
	06/21/05	3,624.02	sheen	23.19	0.00	3,600.83
	07/26/05	3,624.02	sheen	23.40	0.00	3,600.62
	08/24/05	3,624.02	sheen	23.48	0.00	3,600.54
	09/12/05	3,624.02	23.46	23.47	0.01	3,600.56
	09/26/05	3,624.02	sheen	23.54	0.00	3,600.48
	10/25/05	3,624.02	sheen	23.60	0.00	3,600.42
	11/14/05	3,624.02	sheen	23.60	0.00	3,600.42
	12/06/05	3,624.02	sheen	23.60	0.00	3,600.42
	12/28/05	3,624.02	sheen	23.68	0.00	3,600.34
MW-5	03/11/05	3,625.24		21.95	0.00	3,603.29

### TABLE 1 2005 GROUNDWATER ELEVATION DATA

## PLAINS MARKETING, L.P. MONUMENT 11 LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-5	06/13/05	3,625.24	-	23.02	0.00	3,602.22
	09/12/05	3,625.24	-	23.73	0.00	3,601.51
	12/06/05	3,625.24	-	23.83	0.00	3,601.41
MW-6	03/11/05	3,623.71	-	23.81	0.00	3,599.90
	06/13/05	3,623.71	-	23.88	0.00	3,599.83
	9/12/2005	3,623.71	-	23.94	0.00	3,599.77
	12/6/2005	3,623.71	-	23.97	0.00	3,599.74

#### TABLE 2

#### 2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

## PLAINS MARKETING, L.P. MONUMENT 11 LEA COUNTY, NEW MEXICO

All concentrations are in mg/L

All concentrations are in mg/L								
SAMPLE	SAMPLE DATE	SW 846 - 8260						
DATE		BENZENE	TOLUENE	ETHYL-	m, p -	0 -		
	Ļ <u> </u>			BENZENE	XYLENES	XYLENE		
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62			
MW-1	03/11/05	Not Sampled	Due to Samp	ole Reduction				
	06/13/05	Not Sampled Due to Sample Reduction Not Sampled Due to Sample Reduction						
	09/12/05							
	12/06/05	< 0.001	< 0.001	< 0.001	<0.0	001		
					·			
MW-2	03/11/05	Not Sampled	Due to Samp	le Reduction				
	06/13/05	Not Sampled	Due to Samp					
	09/12/05	Not Sampled	Due to Samp					
	12/06/05	< 0.001	< 0.001	< 0.001	<0.0	001		
					*-			
MW-3	03/11/05	Not Sampled	Due to Samp					
	06/13/05	Not Sampled	Due to Samp					
	09/12/05	Not Sampled	Due to Samp					
	12/06/05	< 0.001	< 0.001	< 0.001	< 0.001			
MW-4	03/11/05	0.008	0.006	< 0.005	0.0	32		
	06/13/05	Not Sampled	Due to PSH					
	09/12/05	Not Sampled	Due to PSH	in Well				
	12/06/05			< 0.001	0.0	02		
	1.0							
MW-5	03/11/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	06/13/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	09/12/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	12/06/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	: 1				1.			
MW-6	03/11/05	< 0.005	< 0.005	< 0.005	<0.0	005		
	06/13/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	09/12/05	< 0.001	< 0.001	< 0.001	<0.0	001		
	12/06/05	< 0.001	< 0.001	< 0.001	<0.0	001		

Appendices

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

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

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

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

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

#### **Release Notification and Corrective Action OPERATOR** x Initial Report Final Report Plains Pipeline, LP Name of Company Contact: Camille Reynolds 3705 E. Hwy 158, Midland, TX 79706 Address: Telephone No. 505-441-0965 Facility Name Facility Type: Monument # 11 Pipeline Surface Owner: Mineral Owner Lease No. New Mexico State Land Office LOCATION OF RELEASE Unit Letter Section Township Feet from the North/South Line Feet from the East/West Line County Range 30 19S 37E Α Lea Latitude 32 degrees 38' 9.2" Longitude 103 degrees 17' 2.4" NATURE OF RELEASE Type of Release: Unknown Volume of Release: Unknown Volume Recovered Unknown Source of Release: Date and Hour of Occurrence Date and Hour of Discovery Unknown Was Immediate Notice Given? If YES, To Whom? Yes No Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* Describe Area Affected and Cleanup Action Taken.\* NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by District Supervisor: Printed Name: Camille Reynolds

Approval Date:

(505)441-0965

Conditions of Approval:

Expiration Date:

Attached [

Remediation Coordinator

cjreynolds@paalp.com

Phone:

Title:

E-mail Address:

Date: 3/21/2005

<sup>\*</sup> Attach Additional Sheets If Necessary