1R - 103

Annual GW Mon. REPORTS

DATE:

2010

PLAINS ALL AMERICAN

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MAR 29 2011

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

March 23, 2011

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

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

Dear Mr. Hansen:

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

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

PLAINS
ALL AMERICAN

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

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

Sincerely,

Jason Henry
Remediation Coordinator
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures

2010
ANNUAL MONITORING REPORT

LF-59

LEA COUNTY, NEW MEXICO
NW ¼ SW ¼ SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST
PLAINS SRS NUMBER: TNM-LF-59
NMOCD FILE NUMBER: 1R-0103

UL: L

Prepared For:

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

NOVA
safety and environmental

Prepared By:

NOVA Safety and Environmental
2057 Commerce Street
Midland, Texas 79703

March 2011

Ronald K. Rounsaville
Senior Project Manager

Brittan K. Byerly, P.G.
President

TABLE OF CONTENTS

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. The LF-59 Pipeline Release Site (the site), which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. The Release Notification and Corrective Action Form (C-141) is provided as Appendix A. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2010 only. However, historic data tables as well as 2010 laboratory analytical reports are provided on the enclosed disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted only during the 1st, 3rd and 4th quarters of 2010 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Groundwater samples were not collected during the 2nd quarter sampling event as the NMOCD had approved annual sampling only for the site. However, due to increasing Chemicals of Concern (COC's) concentrations, Plains elected to revert to the previous sampling schedule. Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The LF-59 Site occurred as two separate releases of unknown volumes on unknown dates. The release occurred from an 8-inch pipeline and was attributed to structural failure associated with internal pipeline corrosion. Approximately 6,900 cubic yards of impacted soil was excavated, sorted, shredded and combined with fertilizer to enhance bioremediation rates. Approximately 550 cubic yards of caliche rock was also stockpiled on-site as a result of the previously referenced soil treatment activity. The soil was spread onto an on-site treatment cell for aeration in March 2003. Soil in the treatment cell was sampled for baseline concentrations of Total Petroleum Hydrocarbon (TPH) and Benzene, Toluene, Ethyl-benzene and Xylene (BTEX) constituent concentrations using EPA Methods 8015M and 8260b, respectively. The treatment cell was resampled on September 7, 2005. Analytical results of this sampling event indicate Total Petroleum Hydrocarbons (TPH) concentrations have decreased to levels ranging between <50 to 115 mg/Kg total TPH.

A *Soil Closure Strategy and Site Restoration Work Plan* (Work Plan) was submitted to the NMOCD in July 2006. The Work Plan proposed soil remediation activities intended to progress the site toward an NMOCD approved closure.

On September 20, 2007, Plains received approval from the NMOCD to commence the activities outlined in the Work Plan. Following the completion of the soil remediation activities, a *Soil*

Closure Request dated February 2010 was submitted to the NMOCD for approval. On February 19, 2010, Plains received an email from the NMOCD approving the *Soil Closure Request* at the LF-59 release site.

As required by the NMOCD, groundwater monitoring and sampling has continued at the site.

Currently, eight groundwater monitor wells (MW-1 through MW-8) are on-site.

FIELD ACTIVITIES

Groundwater Monitoring

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

NMOCD Approved Sampling Schedule			
MW-1	Quarterly	MW-5	Annually
MW-2	Quarterly	MW-6	Annually
MW-3	Annually	MW-7	Semi-Annually
MW-4	Quarterly	MW-8	Quarterly

The site monitor wells were gauged and sampled on the following dates: February 4, August 9, and November 1, 2010. Groundwater samples were not collected during the 2nd quarter sampling event as the NMOCD had approved annual sampling for the site. However, due to increasing COC's concentrations, Plains elected to revert to the previous sampling schedule. During each sampling event, sampled monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2010 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.046 feet/foot to the southwest as measured between groundwater monitor wells MW-3 and MW-7. This is consistent with data presented on Figures 2A and 2C from earlier in the year. The corrected groundwater elevations ranged between 3,546.53 and 3,553.72 feet above mean sea level, in MW-7 on February 4, 2010 and MW-5 on November 1, 2010, respectively.

LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2010 were delivered to Trace Analysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B. Polynuclear Aromatic Hydrocarbons (PAH) analysis was not conducted during the 2010 calendar year because historic sampling events have not indicated PAH concentrations above WQCC standards. A listing of BTEX constituent concentrations for 2010 are summarized in Table 2 and the Historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2010 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

Monitor well MW-1 is sampled on a quarterly schedule and was not sampled during the 2nd quarter sampling event. Analytical results indicate benzene concentrations ranged from 0.0311 mg/L during the 1st quarter to 0.1170 mg/L during the 3rd quarter of the reporting period. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during the 1st, 3rd and 4th quarters of 2010. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standard of 0.75 mg/L during the 1st, 3rd and 4th quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.0039 mg/L during the 3rd quarter of the reporting period. Ethyl-benzene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during the 1st, 3rd and 4th quarters of 2010. Xylene concentrations were below MDLs and NMOCD regulatory standards during the 1st, 3rd and 4th quarters of 2010. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-2 is sampled on a quarterly schedule and was not sampled during the 2nd quarter sampling event. Analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.0013 mg/L during the 3rd quarter of the reporting period. Benzene concentrations were below the NMOCD regulatory standards during the 1st, 3rd and 4th quarters of 2010. Toluene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.0013 mg/L during the 3rd quarter of the reporting period. Toluene concentrations were below NMOCD regulatory standards during the 1st, 3rd and 4th quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.001 mg/L during the 3rd quarter of the reporting period. Ethyl-benzene concentrations were below the NMOCD regulatory standards during the 1st, 3rd and 4th quarters of 2010. Xylene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.0027 mg/L during the 3rd quarter of the reporting period. Xylene concentrations were below NMOCD regulatory standards during the 1st, 3rd and 4th quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-3 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirty-two consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-4 is sampled on a quarterly schedule and was not sampled during the 2nd quarter sampling event. Analytical results indicate benzene, toluene and ethyl-benzene concentrations were below the MDL and NMOCD regulatory standards during the 1st, 3rd and 4th quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 1st and 4th quarters to 0.002 mg/L during the 3rd quarter of the reporting period. Xylene concentrations were below NMOCD regulatory standards during the 1st, 3rd and 4th quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-5 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirty-two consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-6 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-seven consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-7 is sampled on a semi-annual schedule and was not sampled during the 2nd quarter sampling event. Analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-eight consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

Monitor well MW-8 is sampled on a quarterly schedule and was not sampled during the 2nd quarter sampling event. Analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards during the 1st, 3rd and 4th quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-one consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

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

SUMMARY

This report presents the results of three groundwater monitoring and sampling events for the annual monitoring period of calendar year 2010. Eight groundwater monitor wells (MW-1 through MW-8) are currently on-site. During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.046 feet/foot to the southwest as measured between groundwater monitor wells MW-3 and MW-7. This is consistent with data presented on Figures 2A and 2C from earlier in the year.

A review of the laboratory analytical results for groundwater samples collected from monitor well MW-1 indicates benzene concentrations have demonstrated a fluctuating trend above the NMOCD regulatory standard during the 1st, 3rd and 4th quarters of the reporting period and toluene, ethylbenzene and xylene concentrations were below NMOCD regulatory standards. Groundwater samples collected from the remaining seven monitor wells exhibited BTEX constituent concentrations below the NMOCD regulatory standard during the 1st, 3rd and 4th quarters of the reporting period.

ANTICIPATED ACTIONS

Based on the results of the PAH analysis over the past several years, no further PAH analysis will be conducted at the site.

Groundwater monitoring and quarterly sampling will continue through 2011. An annual groundwater monitoring report will be submitted by April 1, 2012.

LIMITATIONS

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

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

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

DISTRIBUTION

Copy 1
Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
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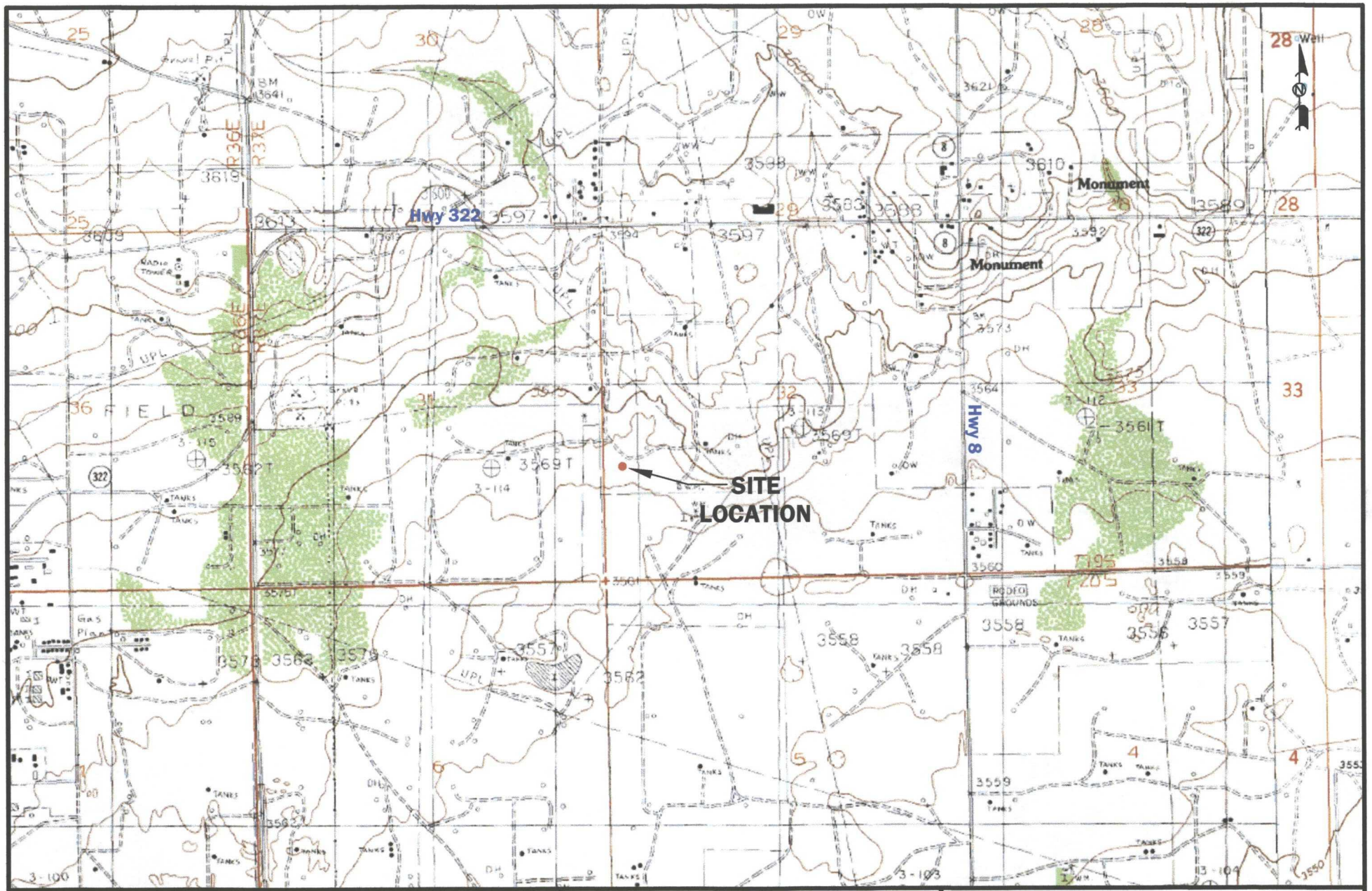
rrounsaville@novatraining.cc

Figures



LEGEND:

2000 1000 0 1000 2000

Distance in Feet

NMOCD Reference #1R-0103

Figure 1
Site Location Map
LF-59
Plains Marketing, L.P.
Lea County, NM

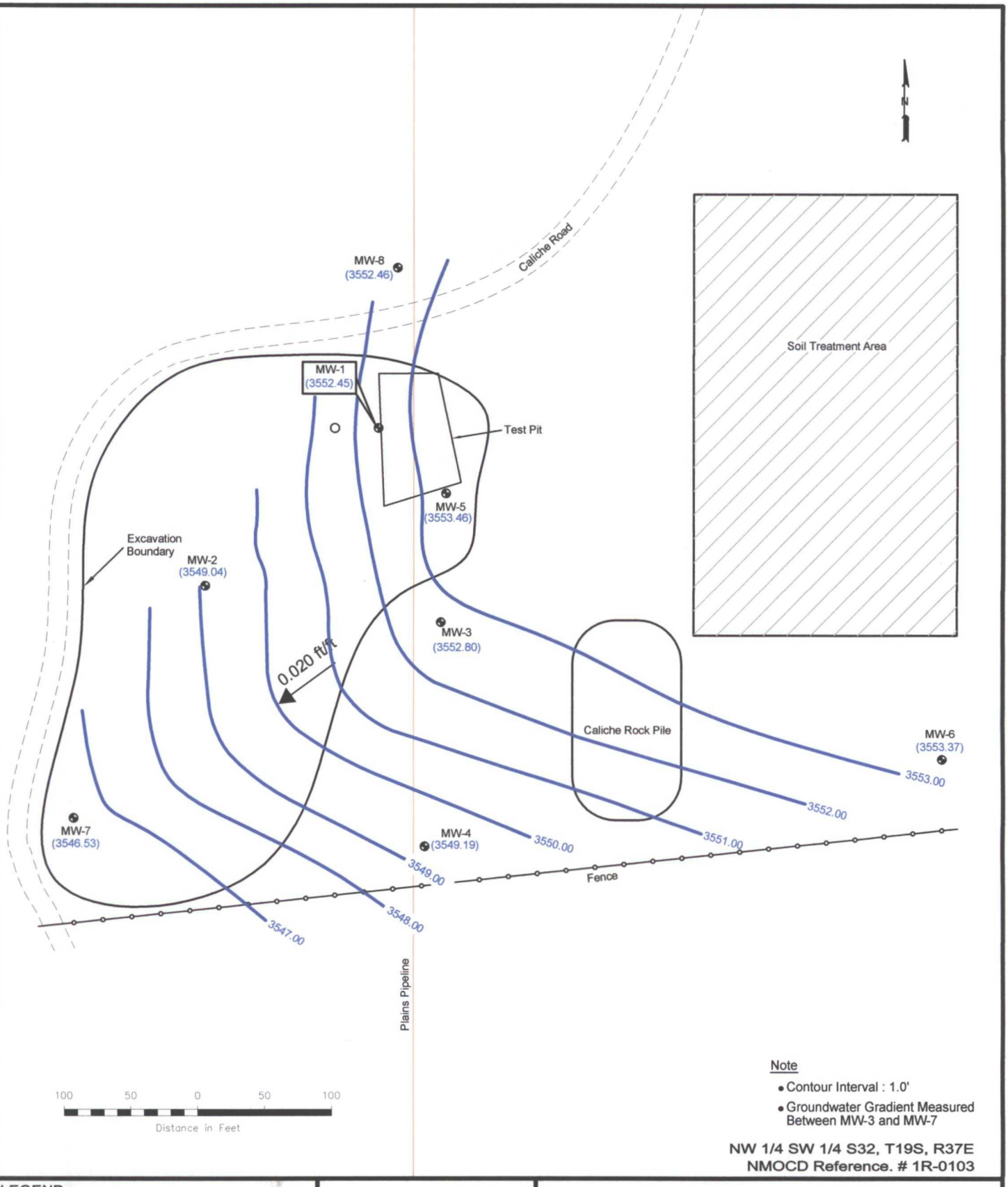
NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

February 28, 2011	Scale: 1" = 2000'	CAD By: TA	Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 36' 50.1" W 103° 16' 47.6"



Note

- Contour Interval : 1.0'
- Groundwater Gradient Measured Between MW-3 and MW-7

NW 1/4 SW 1/4 S32, T19S, R37E
NMOCD Reference. # 1R-0103

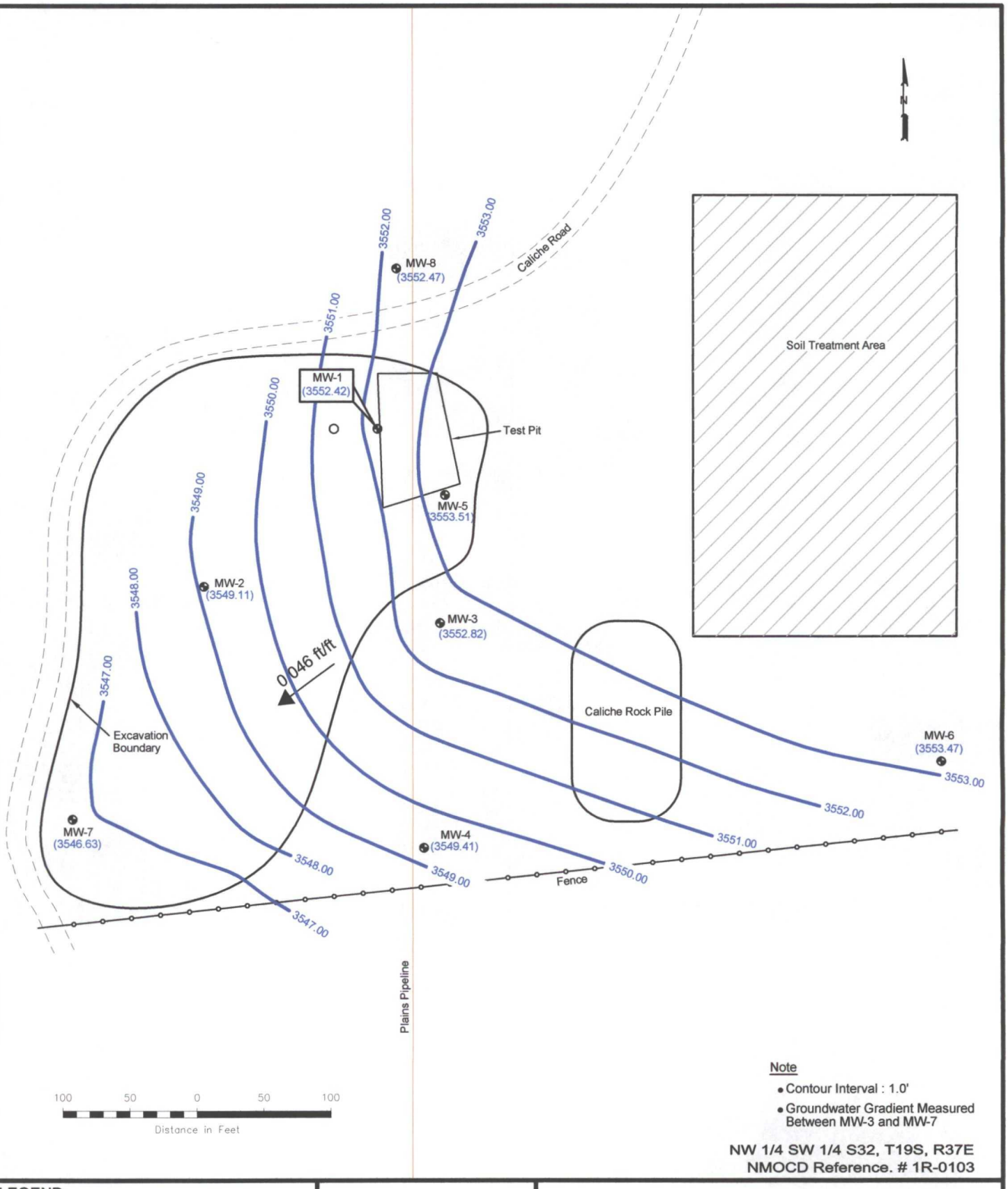
LEGEND:

- Monitor Well Location
- (3547.11) Groundwater Elevation in Feet
- Groundwater Elevation Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2A
NMOCD
Inferred Groundwater Gradient Map
(02/04/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
NW1/4 SW1/4 Sec32 T19S R37E	CAD By: SAT	Checked By: RKR
May 05, 2010		



Note

- Contour Interval : 1.0'
- Groundwater Gradient Measured Between MW-3 and MW-7

NW 1/4 SW 1/4 S32, T19S, R37E
NMOCD Reference. # 1R-0103

LEGEND:

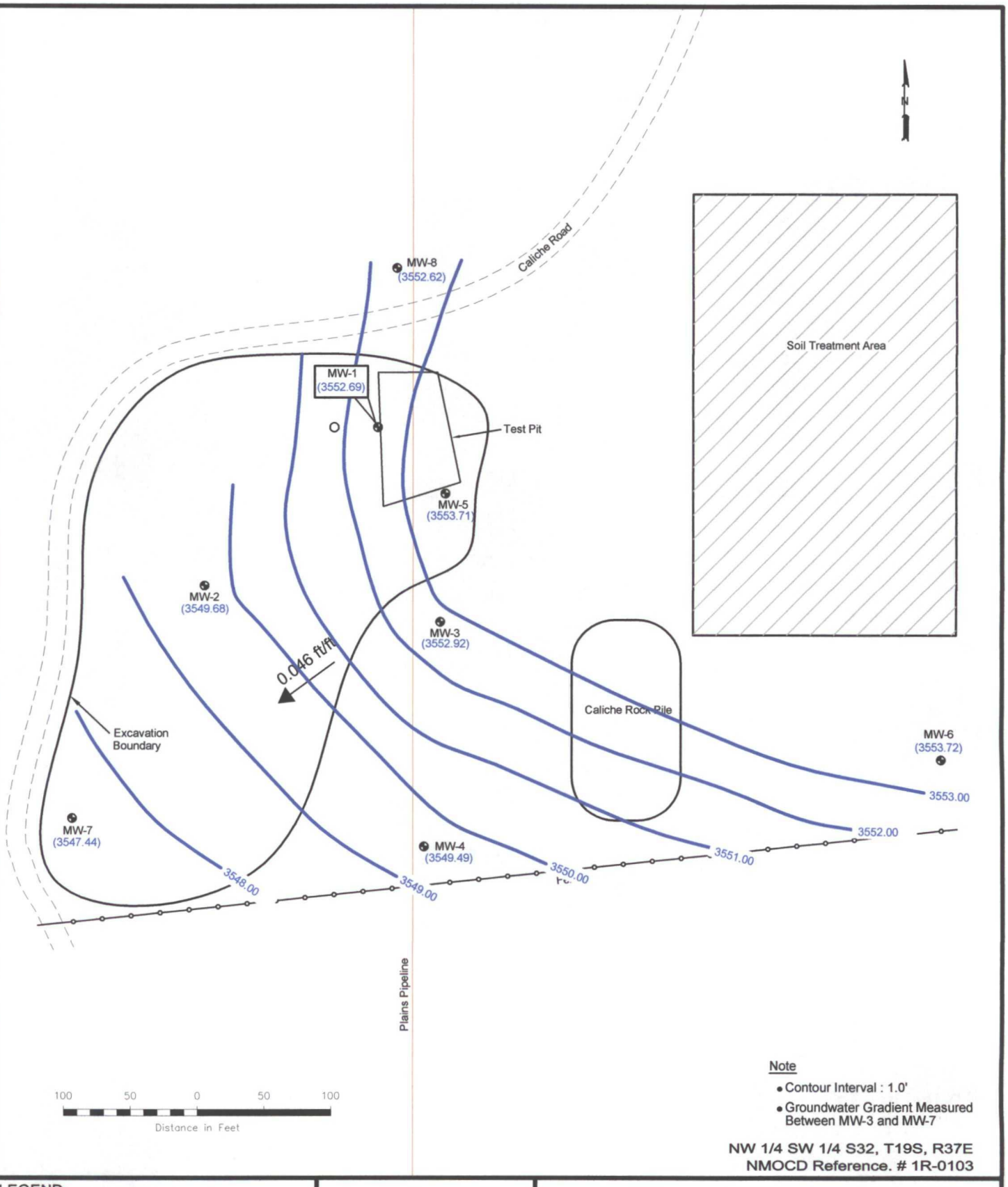
- Monitor Well Location
- (3547.11) Groundwater Elevation in Feet
- Groundwater Elevation Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2C
NMOCD
Inferred Groundwater Gradient Map
(08/09/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

NOVA safety and environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
NW1/4 SW1/4 Sec32 T19S R37E	CAD By: TA	Checked By: RKR
September 7, 2010		



Note

- Contour Interval : 1.0'
- Groundwater Gradient Measured Between MW-3 and MW-7

NW 1/4 SW 1/4 S32, T19S, R37E
NMOCD Reference. # 1R-0103

LEGEND:

- Monitor Well Location
- (3547.11) Groundwater Elevation in Feet
- Groundwater Elevation Contour Line
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2D
NMOCD
Inferred Groundwater
Gradient Map
(11/01/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
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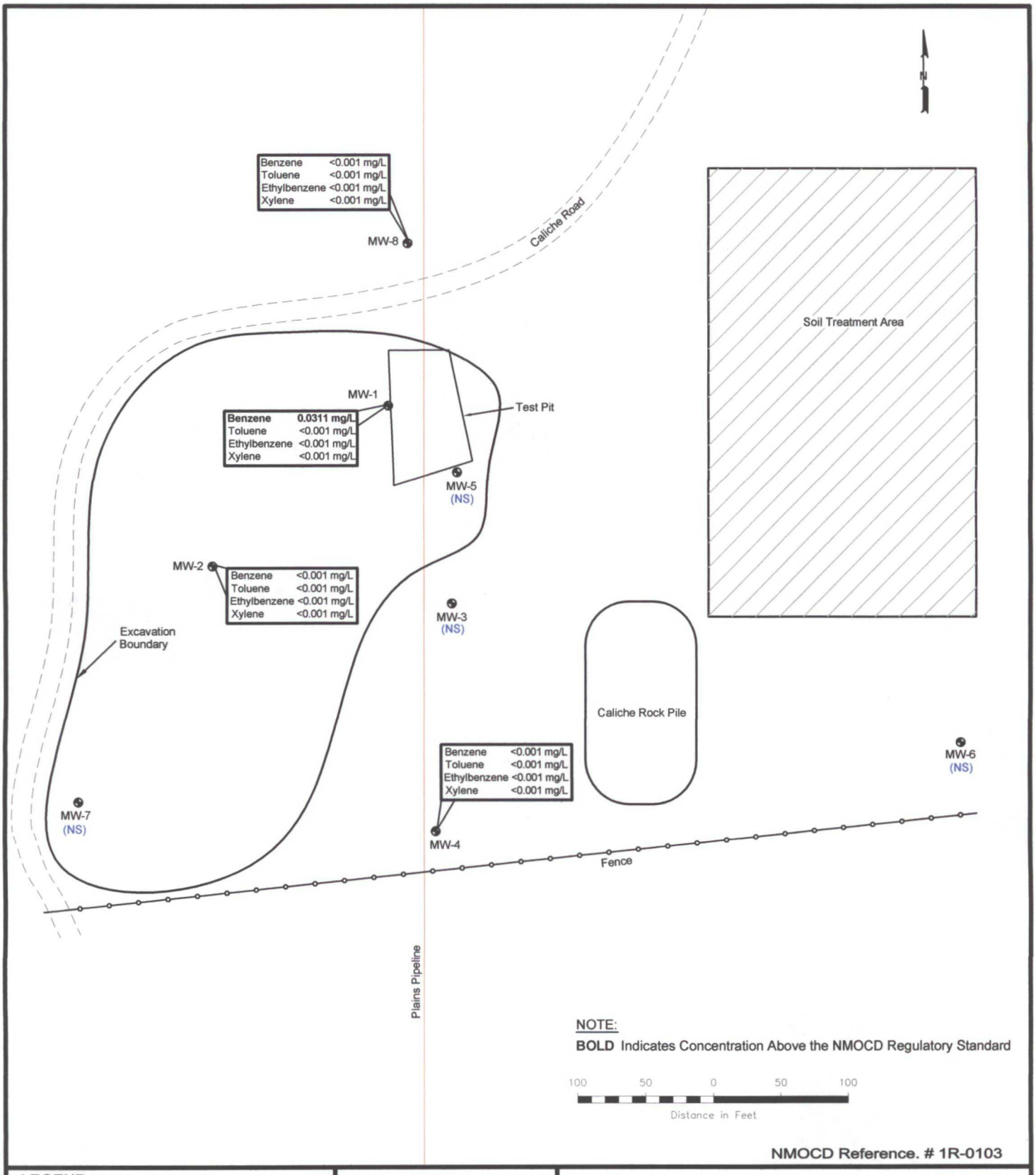
November 8, 2010		



NMOCD Reference. # 1R-0103

LEGEND:

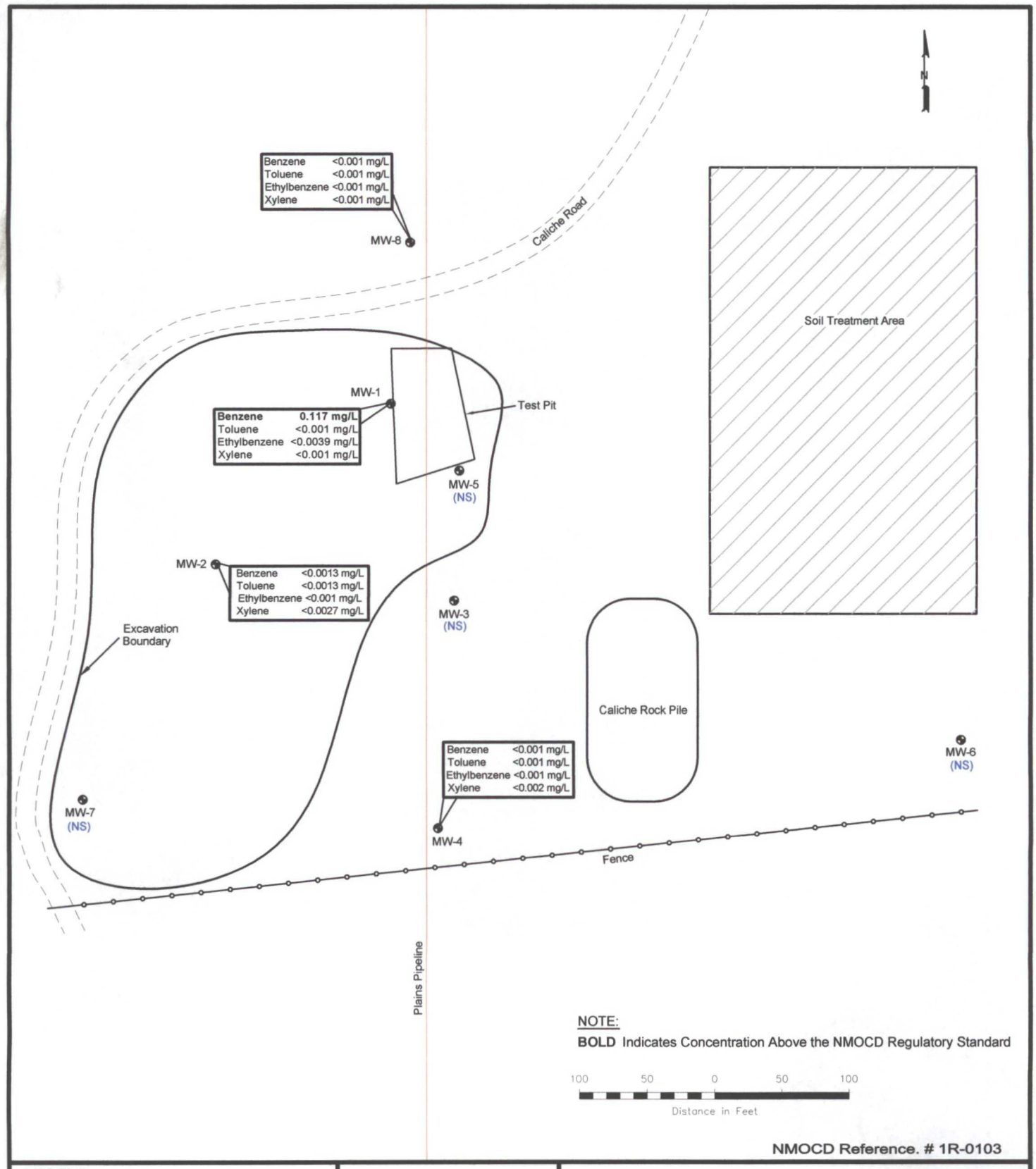
- Monitor Well Location
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3A
NMOCD
Groundwater Concentration
Inferred PSH Extent
Map (02/04/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

NOVA safety and environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
NW1/4 SW1/4 Sec32 T19S R37E	CAD By: SAT	Checked By: RKR
May 05, 2010		



NMOCD Reference. # 1R-0103

LEGEND:

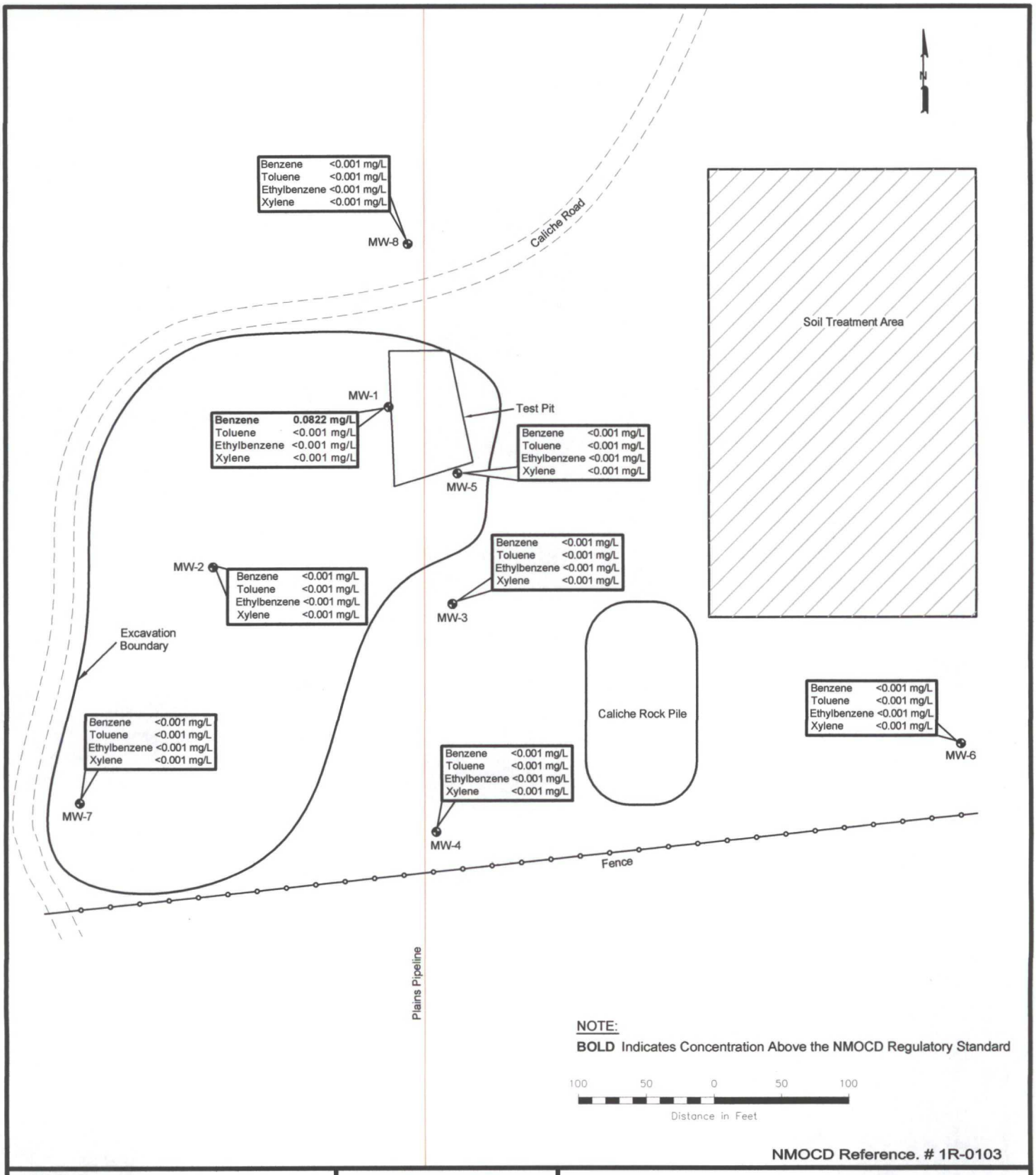
- Monitor Well Location
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3C
NMOCD
Groundwater Concentration
Inferred PSH Extent
Map (08/09/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

NOVA safety and environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
NW1/4 SW1/4 Sec32 T19S R37E	CAD By: TA	Checked By: RKR
September 7, 2010		



NMOCD Reference. # 1R-0103

LEGEND:

- Monitor Well Location
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3D
NMOCD
Groundwater Concentration
Inferred PSH Extent
Map (11/01/10)
Plains Marketing, L.P.
LF - 59
Monument, NM

NOVA Safety and Environmental

NOVA safety and environmental

Lat. 32° 36' 50.1"N Long 103° 16' 49.6"W		Scale: 1"=100'
NW1/4 SW1/4 Sec32 T19S R37E	CAD By: TA	Checked By: RKR
November 8, 2010		

Tables

TABLE 1

GROUNDWATER ELEVATION DATA - 2010

PLAINS MARKETING, L.P.
LF - 59
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0103

SAMPLE LOCATION	SAMPLE DATE	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	01/05/10	3,572.21	-	19.79	0.00	3,552.42
MW - 1	*01/21/10*	3,572.21	-	19.70	0.00	3,552.51
MW - 1	*02/04/10*	3,572.21	-	19.70	0.00	3,552.51
MW - 1	03/03/10	3,572.21	-	19.78	0.00	3,552.43
MW - 1	04/16/10	3,572.21	-	19.76	0.00	3,552.45
MW - 1	*08/09/10*	3,572.21	-	19.79	0.00	3,552.42
MW - 1	*11/01/10*	3,572.21	-	19.52	0.00	3,552.69
MW - 2	01/05/10	3,571.46	-	22.40	0.00	3,549.06
MW - 2	*02/04/10*	3,571.46	-	22.42	0.00	3,549.04
MW - 2	*08/09/10*	3,571.46	-	22.35	0.00	3,549.11
MW - 2	*11/01/10*	3,571.46	-	21.78	0.00	3,549.68
MW - 3	01/05/10	3,573.46	-	20.66	0.00	3,552.80
MW - 3	*02/04/10*	3,573.46	-	20.66	0.00	3,552.80
MW - 3	*08/09/10*	3,573.46	-	20.64	0.00	3,552.82
MW - 3	*11/01/10*	3,573.46	-	20.54	0.00	3,552.92
MW - 4	01/05/10	3,570.15	-	20.86	0.00	3,549.29
MW - 4	01/21/10	3,570.15	-	20.79	0.00	3,549.36
MW - 4	*02/04/10*	3,570.15	-	20.61	0.00	3,549.54
MW - 4	03/03/10	3,570.15	-	20.98	0.00	3,549.17
MW - 4	04/16/10	3,570.15	-	20.96	0.00	3,549.19
MW - 4	*08/09/10*	3,570.15	-	20.74	0.00	3,549.41
MW - 4	*11/01/10*	3,570.15	-	20.66	0.00	3,549.49
MW - 5	01/05/10	3,572.92	-	19.46	0.00	3,553.46
MW - 5	*02/04/10*	3,572.92	-	19.46	0.00	3,553.46
MW - 5	*08/09/10*	3,572.92	-	19.41	0.00	3,553.51
MW - 5	*11/01/10*	3,572.92	-	19.21	0.00	3,553.71
MW - 6	01/05/10	3,572.11	-	18.74	0.00	3,553.37
MW - 6	*02/04/10*	3,572.11	-	18.74	0.00	3,553.37
MW - 6	*08/09/10*	3,572.11	-	18.64	0.00	3,553.47
MW - 6	*11/01/10*	3,572.11	-	18.39	0.00	3,553.72
MW - 7	01/05/10	3,569.75	-	23.22	0.00	3,546.53
MW - 7	*02/04/10*	3,569.75	-	23.22	0.00	3,546.53
MW - 7	*08/09/10*	3,569.75	-	23.12	0.00	3,546.63
MW - 7	*11/01/10*	3,569.75	-	22.31	0.00	3,547.44
MW - 8	01/05/10	3,573.59	-	21.14	0.00	3,552.45
MW - 8	*02/04/10*	3,573.59	-	21.13	0.00	3,552.46
MW - 8	*08/09/10*	3,573.59	-	21.12	0.00	3,552.47
MW - 8	*11/01/10*	3,573.59	-	20.97	0.00	3,552.62

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

TABLE 2

CONCENTRATIONS OF BTEX IN GROUNDWATER - 2010

PLAINS MARKETING, L.P.
LF - 59
LEA COUNTY, NEW MEXICO
NMOCD Reference Number 1R-0103

All results are reported in mg/L.

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030					BTEX
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p-XYLENES	o-XYLENE	
NMOCD Regulatory Limit		0.01	0.75	0.75	0.62		
MW - 1	02/04/10	**0.0311**	<0.001	<0.001	<0.001		0.031
MW - 1	Not Sampled During 2nd Quarter						
MW - 1	08/09/10	**0.1170**	<0.001	0.0039	<0.001		0.121
MW - 1	11/01/10	**0.0822**	<0.001	<0.001	<0.001		0.082
MW - 2	02/04/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 2	Not Sampled During 2nd Quarter						
MW - 2	08/09/10	0.0013	0.0013	0.001	0.0027		0.006
MW - 2	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 3	02/04/10	Not Sampled on Current Sample Schedule					
MW - 3		Not Sampled on Current Sample Schedule					
MW - 3	08/09/10	Not Sampled on Current Sample Schedule					
MW - 3	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 4	02/04/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 4	Not Sampled During 2nd Quarter						
MW - 4	08/09/10	<0.001	<0.001	<0.001	0.002		0.002
MW - 4	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 5	02/04/10	Not Sampled on Current Sample Schedule					
MW - 5		Not Sampled on Current Sample Schedule					
MW - 5	08/09/10	Not Sampled on Current Sample Schedule					
MW - 5	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 6	02/04/10	Not Sampled on Current Sample Schedule					
MW - 6		Not Sampled on Current Sample Schedule					
MW - 6	08/09/10	Not Sampled on Current Sample Schedule					
MW - 6	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 7	02/04/10	Not Sampled on Current Sample Schedule					
MW - 7	Not Sampled During 2nd Quarter						
MW - 7	08/09/10	Not Sampled on Current Sample Schedule					
MW - 7	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 8	02/04/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 8	Not Sampled During 2nd Quarter						
MW - 8	08/09/10	<0.001	<0.001	<0.001	<0.001		<0.001
MW - 8	11/01/10	<0.001	<0.001	<0.001	<0.001		<0.001

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

TABLE 3

POLYCYCLIC AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
TNM LF-59
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0103

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510																		
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	—	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	—	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	—	—	0.0004 mg/L	—	—	0.03 mg/L			—
MW-1	11/07/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.0006	<0.000183	0.000691	<0.000183	0.00214	0.00479	0.00232	<0.000183
	11/09/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-2	11/07/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/09/09	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-3	11/07/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/09/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-4	11/07/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.00207	<0.000185	0.00103	<0.000185	0.000684	0.00413	0.000546	0.00128
	11/09/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00078	<0.000184	<0.000184	0.00173	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-5	11/07/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185
	11/09/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-6	11/07/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/09/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
		Not Sampled as part of Quarterly Monitoring Event.																		

TABLE 3

POLYCYCLIC AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
TNM LF-59
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0103

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510																		
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	—	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	—	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	—	—	0.0004 mg/L	—	—	0.03 mg/L			—
MW-7	11/07/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/09/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-8	11/07/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/09/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		

Appendices

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

811 South First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

STATE Byrd LF. 1999-59

Submit 2 copies to Appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name: LOTT Energy Pipeline	Contact: Lennah Frost
Address: PO Box 1660	Telephone No.: 915/6843467
Facility Name:	Facility Type: Pipeline

Surface Owner	Mineral Owner	Lease No.
State of New Mexico		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	32	19S	37E					Lea

NATURE OF RELEASE

Type of Release: Crude oil	Volume of Release: 260 bbls / Volume Recovered: 200 bbls
Source of Release: Crude oil Pipeline	Date and Hour of Occurrence: 7/18/99 1pm / Date and Hour of Discovery: 7/18/99 1PM
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? Chris Williams
By Whom? Lennah Frost	Date and Hour: 7/18/99 - 2:30p
Was a Watercourse Reached? ☐ Yes ☒ No	If Yes, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully. (Attach Additional Sheets If Necessary)

Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sheets If Necessary)
Internal Corrosion - Leak clamped off will replace pipe ASAP

Describe Area Affected and Cleanup Action Taken (Attach Additional Sheets If Necessary)
Spill occurred in a previously remediated site. Will evaluate for cleanup this week

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.

Signature: Lennah Frost	**OIL CONSERVATION DIVISION**
Printed Name: Lennah Frost	Approved by District Supervisor:
Title: Sr. ENV. ENG	Approval Date: / Expiration Date:
Date: 7-20-99 Phone: 915/6843467	Conditions of Approval: / Attached ☐