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**Annual GW Mon.  
REPORTS**

**DATE:**

**2007**

# ***Basin Environmental Service Technologies, LLC***

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Lovington, New Mexico 88260  
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MAR 25 PM 7 26

## **2007 ANNUAL MONITORING REPORT**

**FRISCO-SKELLY # 1  
NE ¼ NE ¼ SECTION 36, TOWNSHIP 16 SOUTH, RANGE 36 EAST  
LATITUDE 32°, 52', 20.0" NORTH, LONGITUDE 103°, 18', 12.2" WEST  
LEA COUNTY, NEW MEXICO  
PLAINS SRS NUMBER: 2004-00196  
NMOCD REF: 1R-0457**

PREPARED FOR:



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

PREPARED BY:

**BASIN ENVIRONMENTAL SERVICE TECHNOLOGIES, LLC  
2800 Plains Highway  
P. O. Box 301  
Lovington, New Mexico 88260**

**February 2008**

  
Ken Dutton  
Project Manager

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**PLAINS  
ALL AMERICAN**

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14 March 2008

Mr. Ed Hansen  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: Plains All American – Annual Monitoring Report  
1 Site 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 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 report for the following site:

Frisco Skelly # 1 Section 36, Township 16 South, Range 36 East, Lea County

Basin prepared this document and has vouched for its accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the document and interviewed Basin in order to verify the accuracy and completeness of this document. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Report for the above facility.

Should you have any questions or comments, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds  
Remediation Coordinator  
Plains All American

Enclosure

cc: Mr. Larry Johnson, NMOCD Hobbs District 1  
Mr. Patrick McMahon & City of Lovington

## INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Marketing, L.P., (Plains), prepared this annual report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. 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 2007 only. Additional soil related site activities and remedial work is summarized in several letters and reports previously submitted to the NMOCD. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during four (4) consecutive quarters of 2007 at the request of NMOCD and the City of Lovington to monitor the groundwater for dissolved phase constituents. The groundwater monitoring event consisted of measuring static water levels in the monitoring wells, checking for the presence of phase-separated hydrocarbons (PSH) atop the water column, and purging and sampling of each well exhibiting sufficient recharge.

## SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SE¼ SE¼ Section 36, Township 16 South, Range 36 East. The site latitude is 32°, 52', 20.0" North and the site longitude is 103°, 18', 12.2" West. On 20 September 2004, Basin responded to the pipeline release on behalf of Plains to repair the pipeline and excavate the impacted soil. The Frisco-Skelly #1 Pipeline was subsequently de-oiled, cold cut and capped. Approximately 25 barrels of crude oil were released from the Plains pipeline and 0 barrels were recovered. The site is characterized by a right-of-way for the pipeline in a pasture containing numerous oil production facilities and a refinery to the northeast. The initial visibly surface stained area included the release point covering an area approximately 42 feet long by 44 feet wide. Excavation activities during the emergency response and subsequent remediation of the site covered an area approximately 280 feet long by 190 feet wide and ranges from approximately 18 to 20 feet below ground surface (bgs), respectively. Excavated soil was placed on a 6-mil poly-liner for future remedial action.

Starting in January 2005, Plains and Basin representatives conducted several meetings with Mr. Patrick McMahon, legal counsel for the City of Lovington and Mr. Eddy Seay, Environmental Consultant for the City of Lovington, to discuss the remedial activities conducted to date and various scenarios for the remediation of the Frisco Skelly #1 release site. As part of this process, Plains conducted additional soil investigation activities to delineate the extent of soil impact, installed three (3) groundwater monitor wells to evaluate the potential impact to groundwater, and developed a Remediation Plan based on the results of the soil and groundwater investigation. The Remediation Plan was submitted to and subsequently approved by the NMOCD. The City of Lovington informed Plains that they are not in agreement with the approved scope of work as outlined in the NMOCD approved Remediation Plan. Therefore, soil remediation activities were not conducted in 2006 and through September of 2007. In June 2007, Basin, on behalf of Plains, submitted a Remediation Status Update to the City of Lovington, which was subsequently

approved. In September 2007, soil remediation activities were initiated as outlined in the City of Lovington approved Remediation Status Update plan. Currently, there are approximately 3000 cubic yards of soil remaining to be backfilled, which will complete the soil remediation activities and allow soil closure at the Frisco-Skelly crude oil release site.

As requested by the City of Lovington and agreed upon by Plains, three (3) groundwater monitoring wells were installed to evaluate the quality of groundwater. During the installation of the three (3) groundwater monitoring wells (April 2006), there were no visual signs of PSH and laboratory results of the selected soil samples did not indicate BTEX and TPH constituent concentrations above laboratory method detection limits for the soil samples submitted to the laboratory.

Currently, there are three (3) groundwater monitoring wells, MW-1 which is up gradient, MW-2 and MW-3, which are down gradient, on site.

### **FIELD ACTIVITIES**

The site monitoring wells were gauged and sampled on 15 March 2007, 30 May 2007, 24 September 2007 and 29 November 2007. During the quarterly sampling events, the monitoring wells, designated to be sampled, were purged of approximately three (3) 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 stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a trailer mounted polystyrene tank and disposed at an approved disposal in Monument, New Mexico.

Locations of the groundwater monitoring wells and the inferred groundwater elevations, which were constructed from the measurements collected during the quarterly monitoring events, are depicted on Figures 2A through 2D. The groundwater elevation data are provided as Table 1.

The Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.002 ft/ft. to the south-southwest as measured between groundwater monitor wells MW-3 and MW-2. The corrected groundwater elevation ranged between 3732.30 and 3732.45 feet, in MW-3 and MW-2, 29 November 2007, respectively.

### **LABORATORY RESULTS**

Groundwater samples were collected from the groundwater monitoring wells (MW-1, MW-2 and MW-3) during the quarterly monitoring events and were delivered to Environmental Laboratory of Texas, Odessa, Texas for determination of benzene, toluene, ethylbenzene and xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. A summary of BTEX constituent concentrations for 2007 is presented in Table 2 and the laboratory reports are provided as Appendix A.

Laboratory results for the three (3) site groundwater samples, obtained during the four (4) quarterly sampling periods, indicated that benzene and total BTEX constituent concentrations

were either not detected above laboratory method detection limits or were significantly below NMOCD thresholds for groundwater monitoring wells MW-1, MW-2 and MW-3, as depicted on Figures 3A through 3D.

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**

Based on the depth of the soil impact at this site, NMOCD and the City of Lovington requested quarterly groundwater sampling events be conducted at this site. This report presents the results of monitoring activities for the monitoring period. Currently, there are three (3) groundwater monitoring wells (MW-1, MW-2 and MW-3) on-site. The fourth (4<sup>th</sup>) quarter groundwater sampling event on 29 November 2007, indicates a general gradient of approximately 0.002 ft/ft to the south-southwest, as indicated on the Groundwater Gradient Map, Figure 2D.

Laboratory results for the three (3) site groundwater samples, obtained during the four (4) quarterly sampling periods, indicated that benzene and BTEX constituent concentrations were either not detected above laboratory method detection limits or were significantly below NMOCD thresholds for groundwater monitoring wells MW-1, MW-2 and MW-3.

## **ANTICIPATED ACTIONS**

Based on the laboratory results of the previous seven (7) consecutive quarterly groundwater monitoring events for the three (3) site groundwater monitoring wells, Plains proposes to conduct one (1) sampling event in the 1<sup>st</sup> quarter of 2008 and if the laboratory results indicate the groundwater samples are below NMOCD thresholds, a request to cease quarterly sampling and plugging and abandoning the three (3) groundwater monitoring wells will be submitted to NMOCD. Additionally, while conducting the 1<sup>st</sup> quarter 2008, groundwater monitoring event, analysis for chlorides for the three (3) groundwater monitoring wells will be accomplished as requested by NMOCD, Santa Fe. Approximately 3000 cubic yards of soil remaining on-site will be utilized as backfill, which will terminate the soil remediation activities at the Frisco-Skelly crude oil release site.

## **LIMITATIONS**

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

Basin has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin 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. Basin has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin 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 Basin and/or Plains.



## DISTRIBUTION

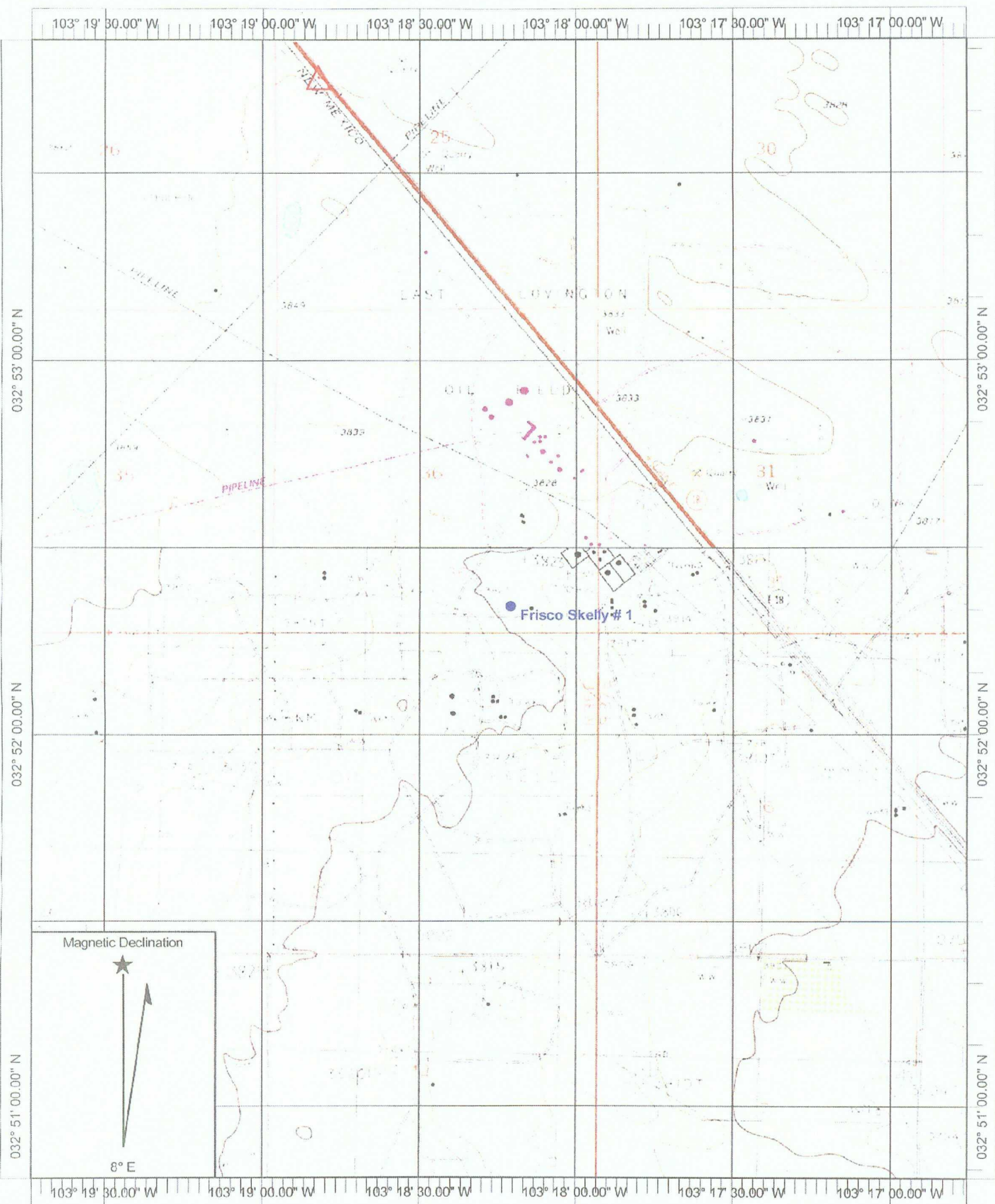
- Copy 1: Ed Hansen  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
[edwardj.hansen@state.nm.us](mailto:edwardj.hansen@state.nm.us)
- Copy 2: Larry Johnson  
New Mexico Oil Conservation Division  
1625 N. French Drive  
Hobbs, New Mexico 88240  
[Larry.Johnson@state.nm.us](mailto:Larry.Johnson@state.nm.us)
- Copy 3: Jeff Dann  
Plains Marketing, L.P.  
333 Clay Street  
Suite 1600  
Houston, Texas 77002  
[jpdann@paalp.com](mailto:jpdann@paalp.com)
- Copy 4: Camille Reynolds  
Plains Marketing, L.P.  
3112 Highway 82  
Lovington, New Mexico 88260  
[cjreynolds@paalp.com](mailto:cjreynolds@paalp.com)
- Copy 5 & 6: Mr. Patrick B. McMahon & City of Lovington  
Heidel, Samberson, Newell, Cox & McMahon Law Firm  
P. O. Drawer 1599  
311 North First  
Lovington, New Mexico 88260
- Copy 7: Basin Environmental Service Technologies, LLC  
P. O. Box 301  
Lovington, New Mexico 88260  
[kdutton@basinenv.com](mailto:kdutton@basinenv.com)

Copy Number: 1

# FIGURES

**FIGURE 1**

**SITE LOCATION MAP**



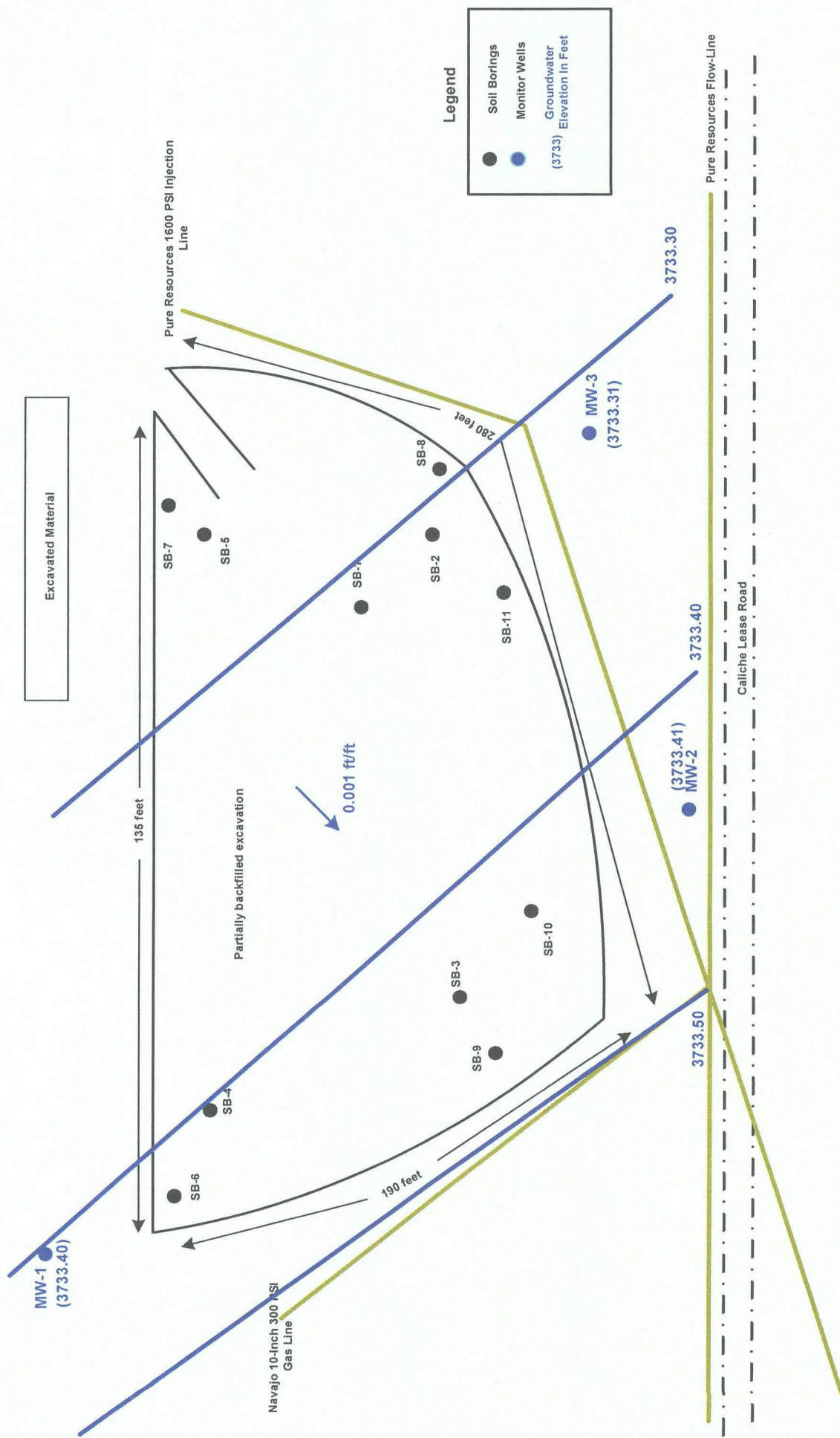
Name: LOVINGTON SE  
 Date: 1/30/2007  
 Scale: 1 inch equals 2000 feet

Location: 032° 52' 20.17" N 103° 18' 14.77" W NAD 27  
 Caption: Figure 1, Site Location Map  
 Plains Marketing, L. P.  
 Frisco Skelly # 1 Site

**FIGURE 2A**

**INFERRED GROUNDWATER  
GRADIENT MAP – 15 MARCH 2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



DESCRIPTION

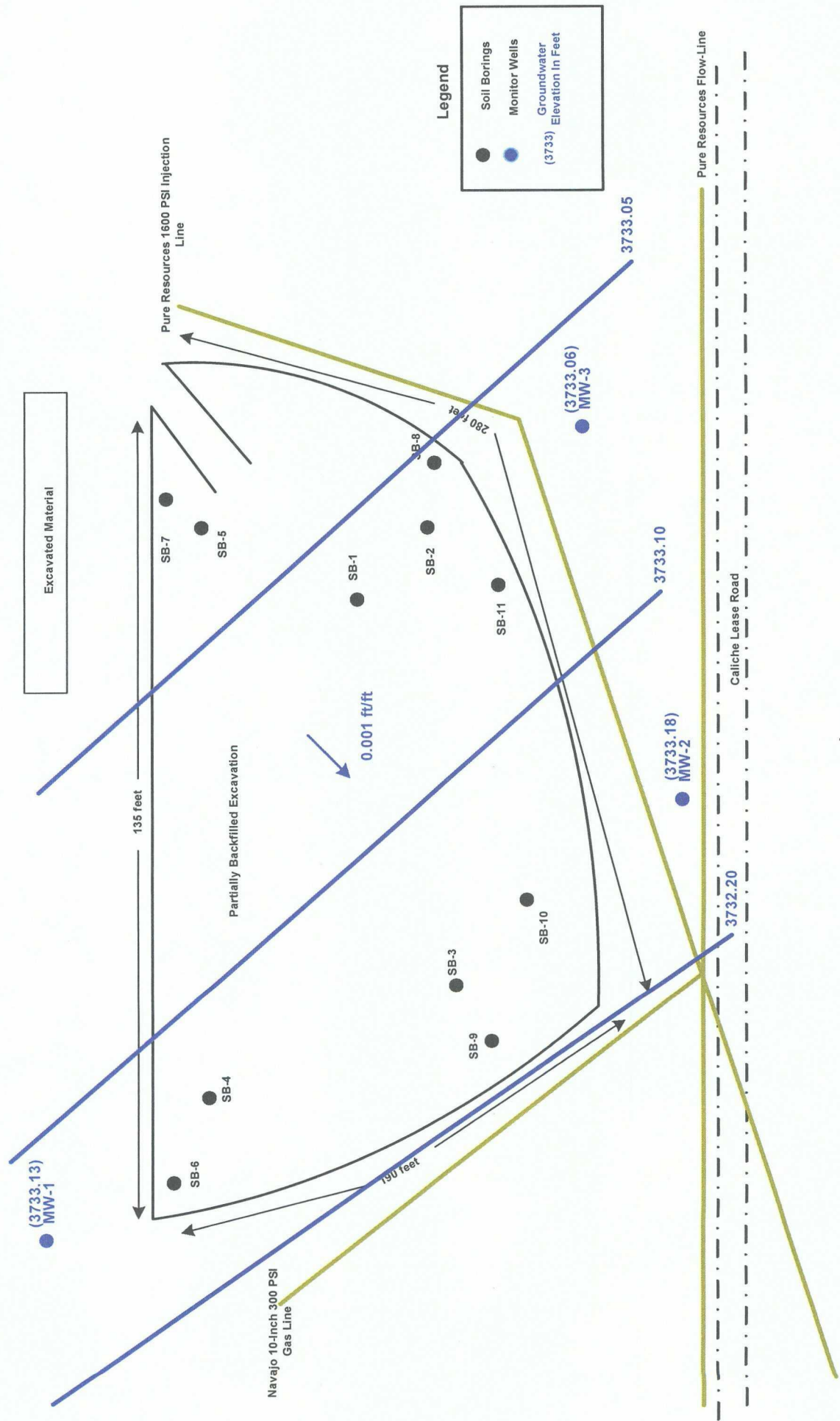
Figure 2A  
 Inferred Groundwater Gradient Map  
 15 March 2007

**FIGURE 2B**

**INFERRED GROUNDWATER  
GRADIENT MAP – 30 MAY 2007**



Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



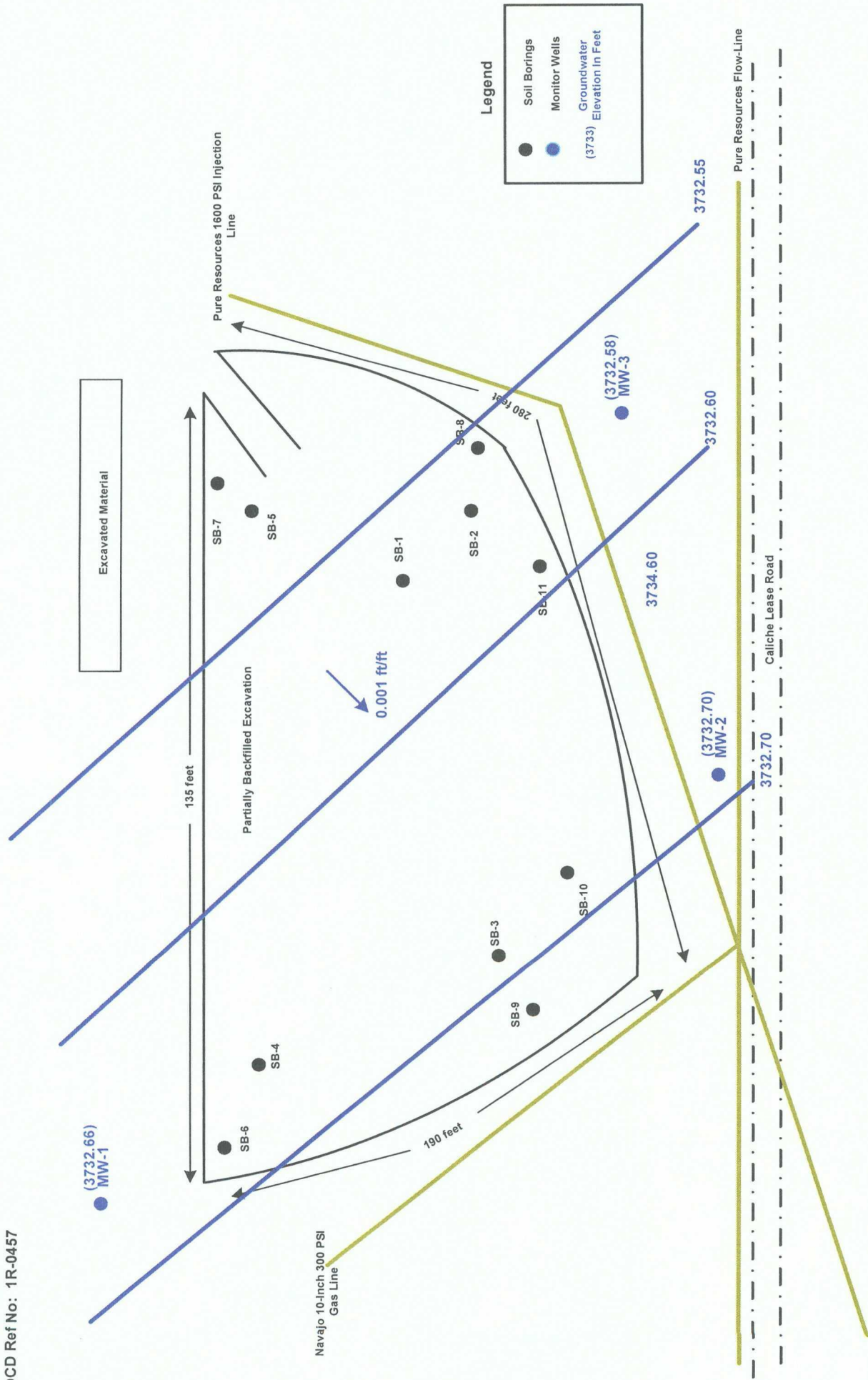
DESCRIPTION  
 Figure 2B  
 Inferred Groundwater Gradient Map  
 30 May 2007



**FIGURE 2C**

**INFERRED GROUNDWATER  
GRADIENT MAP – 24 SEPTEMBER  
2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



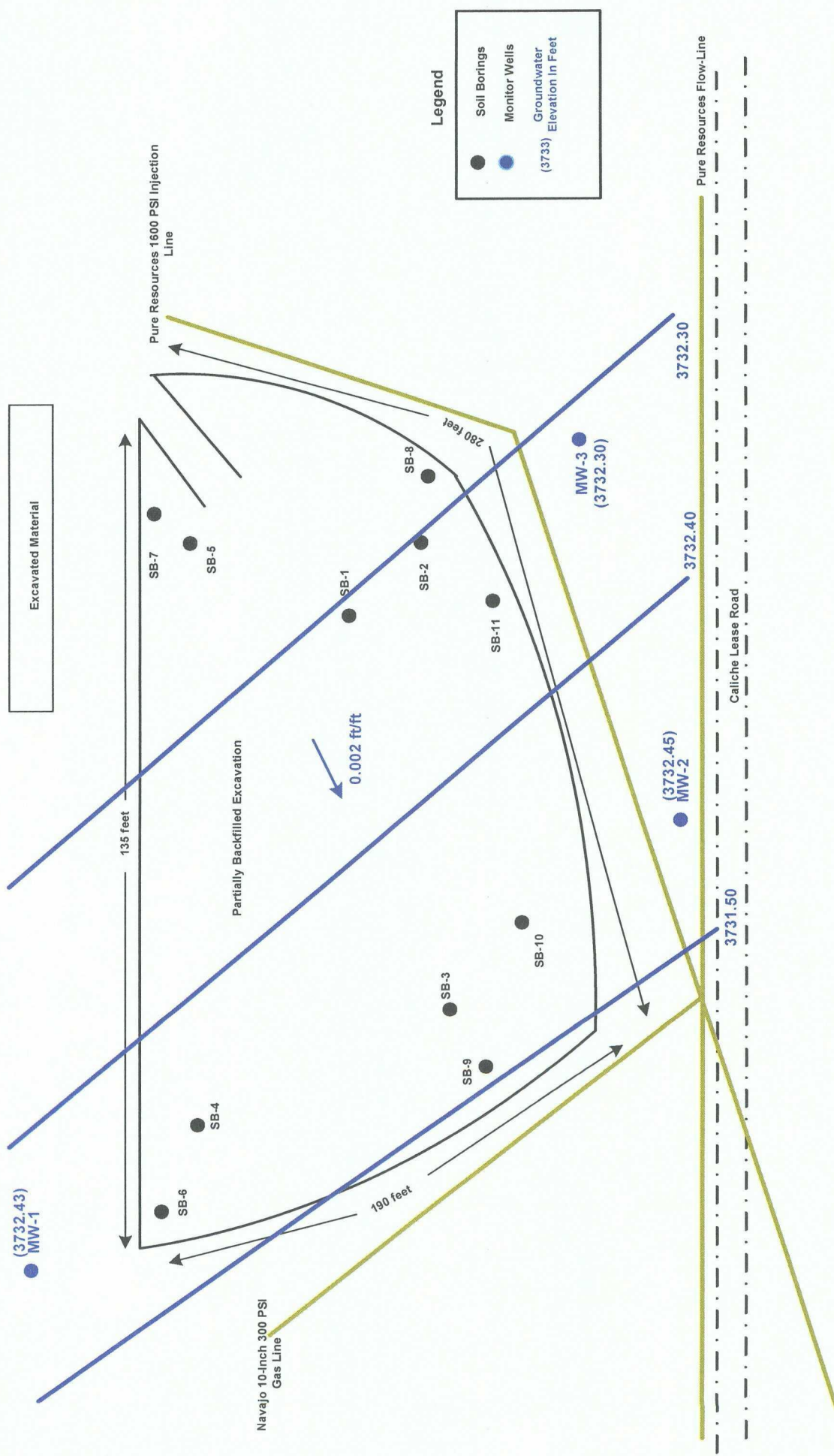
DESCRIPTION

Figure 2C  
 Inferred Groundwater Gradient Map  
 24 September 2007

**FIGURE 2D**

**INFERRED GROUNDWATER  
GRADIENT MAP – 29 NOVEMBER  
2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



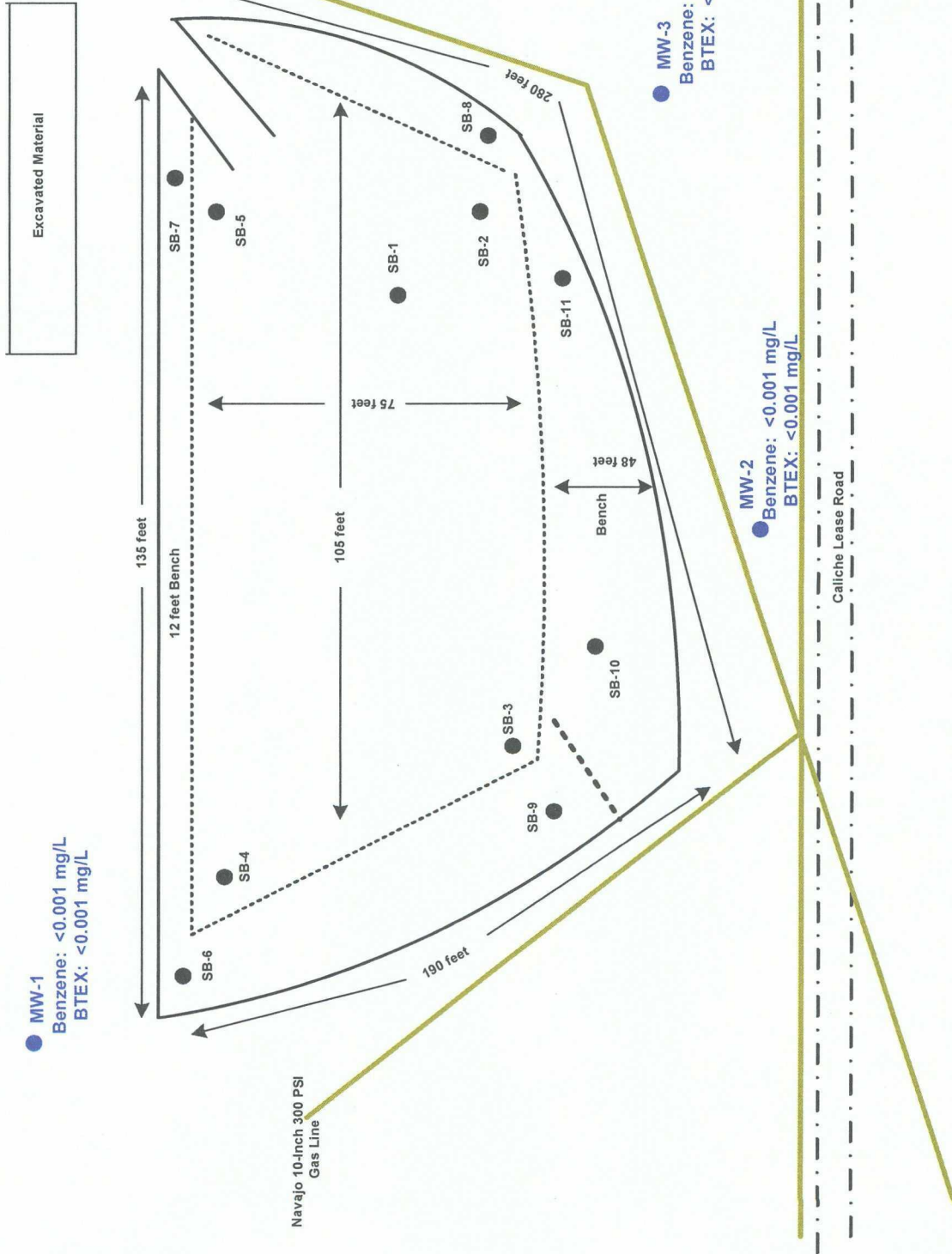
DESCRIPTION

Figure 2D  
 Inferred Groundwater Gradient Map  
 29 November 2007

**FIGURE 3A**

**GROUNDWATER CONCENTRATION  
MAP – 15 MARCH 2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRs: 2004-00196  
 NMOCD Ref No: 1R-0457



DESCRIPTION

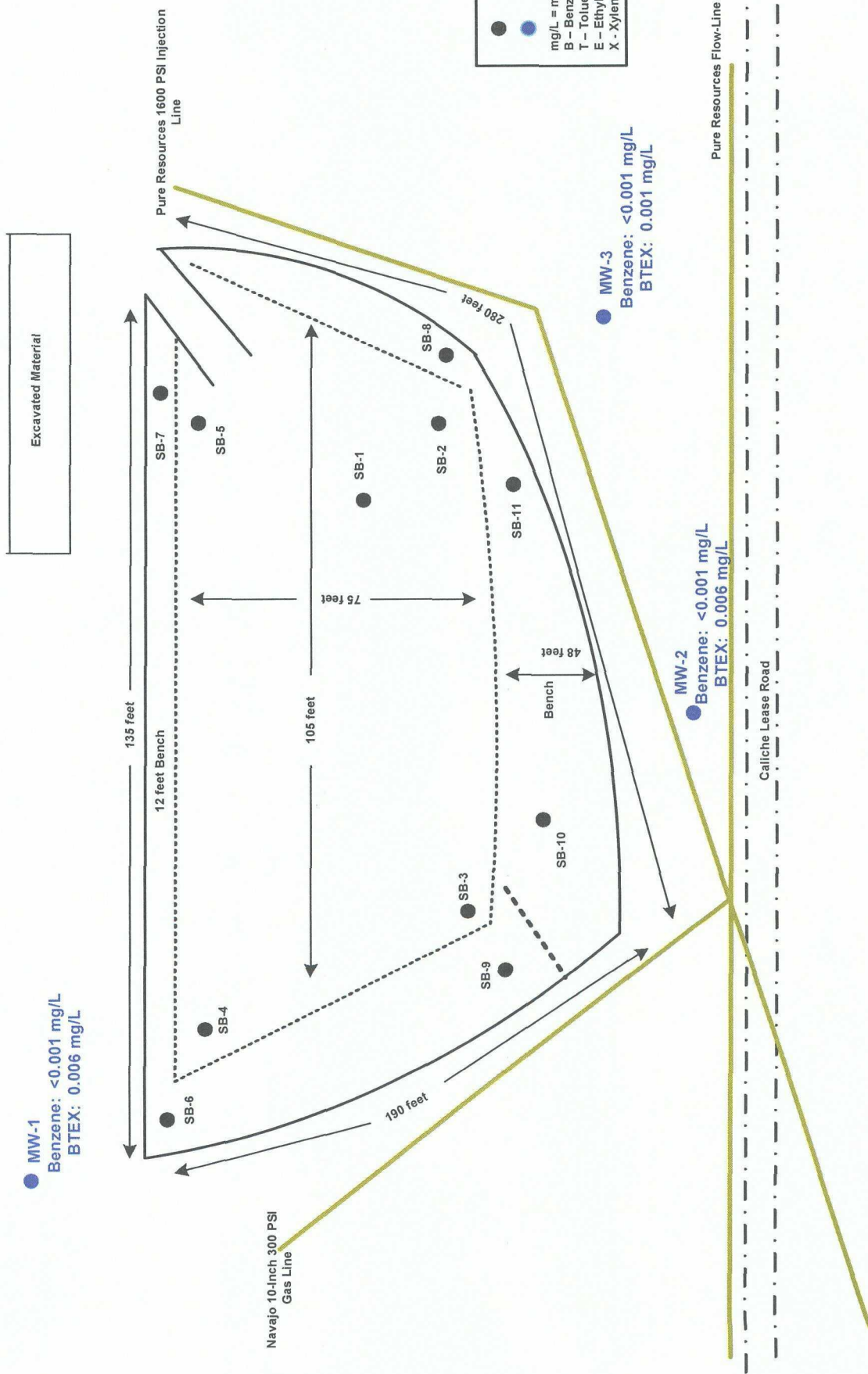
Figure 3A  
 Groundwater Concentration Map  
 15 March 2007

**FIGURE 3B**

**GROUNDWATER CONCENTRATION  
MAP – 30 MAY 2007**



Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



**Legend**

- Soil Borings
- Monitor Wells
- mg/L = milligrams per liter
- B - Benzene
- T - Toluene
- E - Ethylbenzene
- X - Xylenes

DESCRIPTION

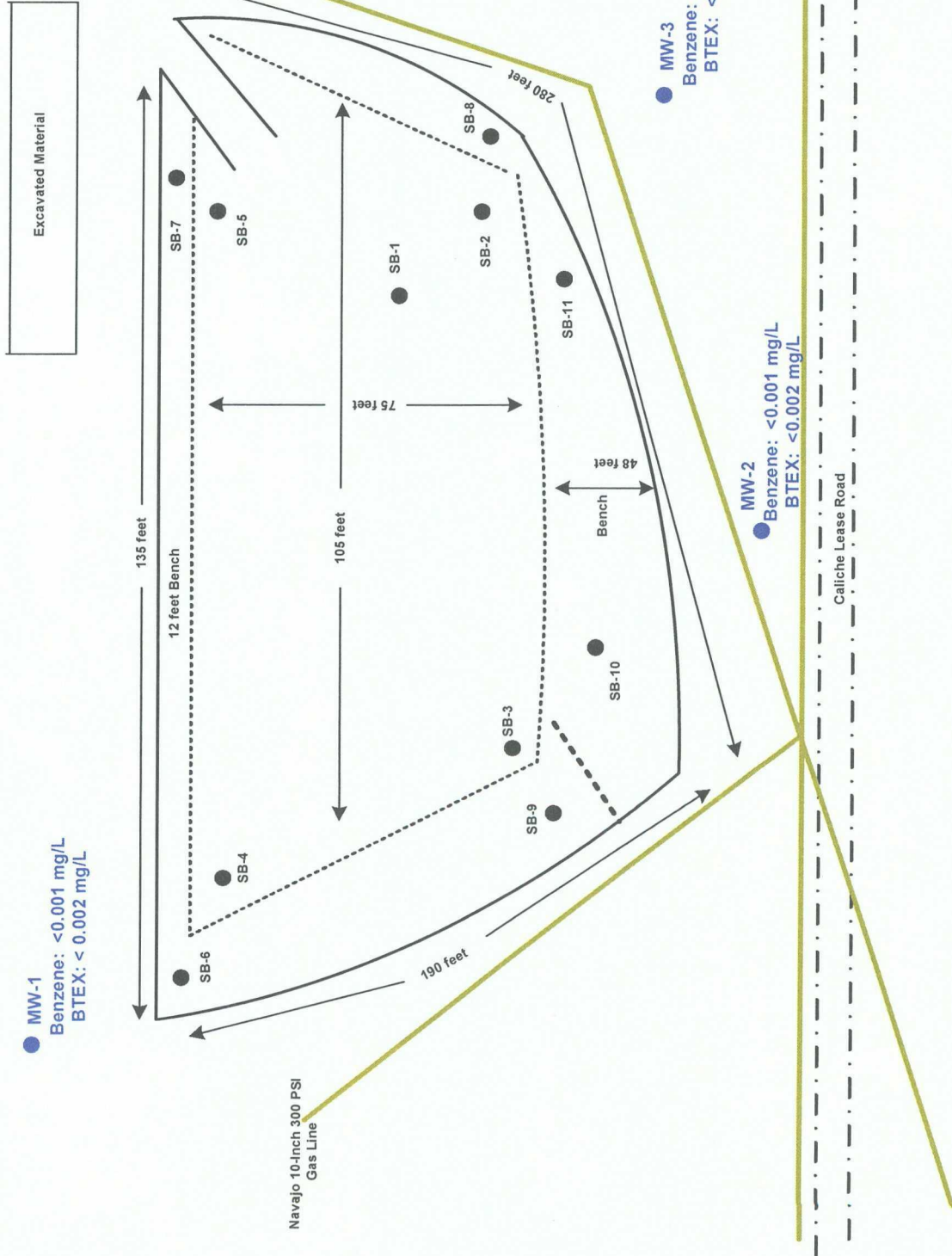
Figure 3B  
 Groundwater Concentration Map  
 30 May 2007



**FIGURE 3C**

**GROUNDWATER CONCENTRATION  
MAP – 24 SEPTEMBER 2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



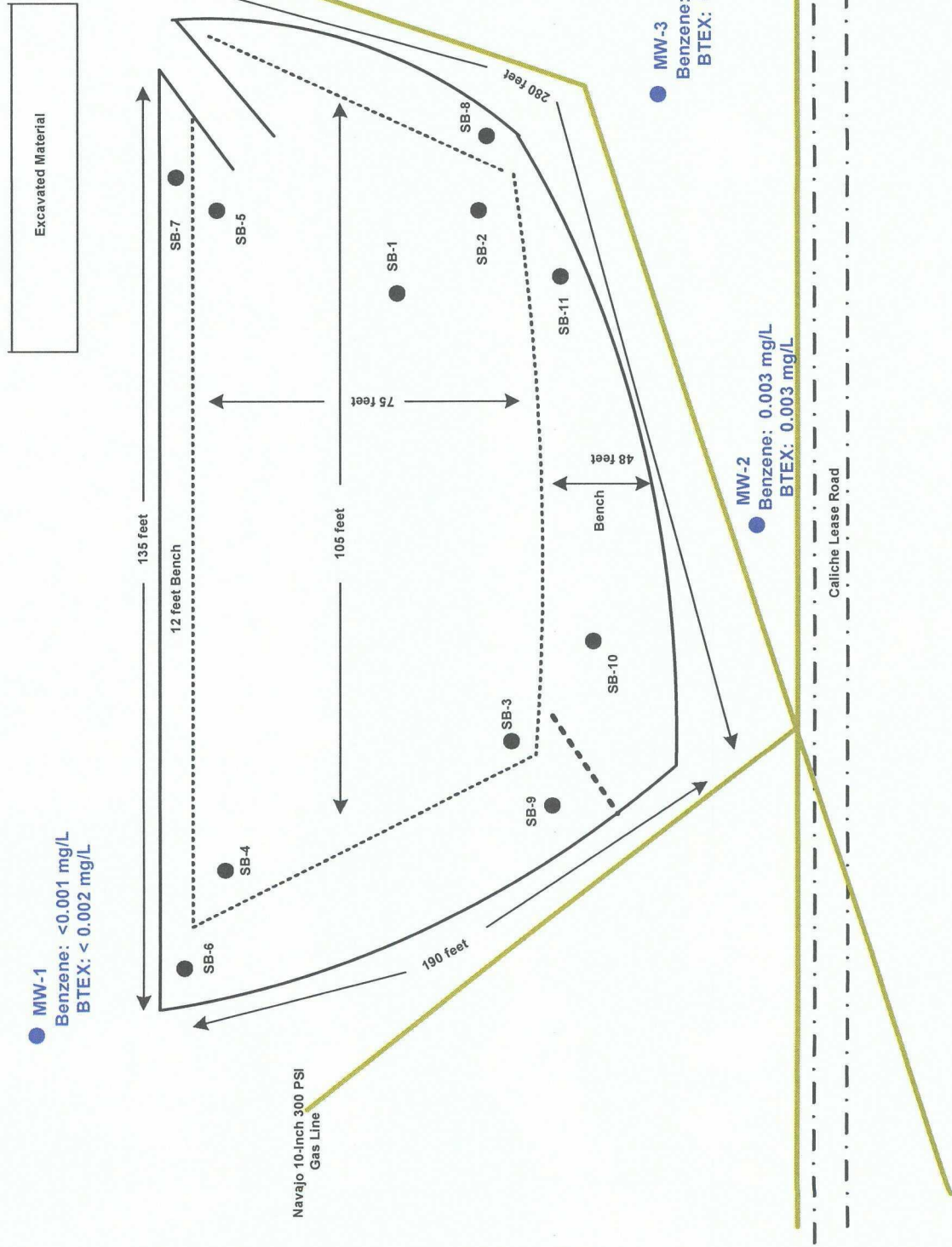
DESCRIPTION

Figure 3C  
 Groundwater Concentration Map  
 24 September 2007

**FIGURE 3D**

**GROUNDWATER CONCENTRATION  
MAP – 29 NOVEMBER 2007**

Plains Marketing, L. P.  
 Frisco Skelly # 1  
 NE/NE S36, T16S, R36E  
 Lea County, NM  
 Plains SRS: 2004-00196  
 NMOCD Ref No: 1R-0457



**Legend**

Soil Borings  
 Monitor Wells

mg/L = milligrams per liter  
 B - Benzene  
 T - Toluene  
 E - Ethylbenzene  
 X - Xylenes



# TABLES

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

TABLE 1

## GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.  
 FRISCO-SKELLY # 1  
 LEA COUNTY, NEW MEXICO  
 PLAINS SRS NO: 2004-00196  
 NMOCD REFERENCE NO: 1R-0457

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	04/20/06	3,823.92	-	89.36	0.00	3,734.56
	09/18/06	3,823.92	-	90.03	0.00	3,733.89
	12/26/06	3,823.92	-	90.14	0.00	3,733.78
	03/15/07	3,823.92	-	90.52	0.00	3,733.40
	05/30/07	3,823.92	-	90.79	0.00	3,733.13
	09/24/07	3,823.92	-	91.26	0.00	3,732.66
	11/29/07	3,823.92	-	91.49	0.00	3,732.43
MW - 2	04/20/06	3,823.96	-	89.20	0.00	3,734.76
	09/18/06	3,823.96	-	89.90	0.00	3,734.06
	12/26/06	3,823.96	-	90.13	0.00	3,733.83
	03/15/07	3,823.96	-	90.55	0.00	3,733.41
	05/30/07	3,823.96	-	90.78	0.00	3,733.18
	09/24/07	3,823.96	-	91.26	0.00	3,732.70
	11/29/07	3,823.96	-	91.51	0.00	3,732.45
MW - 3	04/20/06	3,823.30	-	88.63	0.00	3,734.67
	09/18/06	3,823.30	-	89.35	0.00	3,733.95
	12/26/06	3,823.30	-	89.58	0.00	3,733.72
	03/15/07	3,823.30	-	89.99	0.00	3,733.31
	05/30/07	3,823.30	-	90.24	0.00	3,733.06
	09/24/07	3,823.30	-	90.72	0.00	3,732.58
	11/29/07	3,823.30	-	91.00	0.00	3,732.30

**TABLE 2**

**CONCENTRATIONS OF BENZENE  
AND BTEX IN GROUNDWATER**



TABLE 2

## CONCENTRATIONS OF BENZENE &amp; BTEX

PLAINS MARKETING, L.P.

FRISCO SKELLY

LEA COUNTY, NEW MEXICO

PLAINS SRS NO. 2004-00196

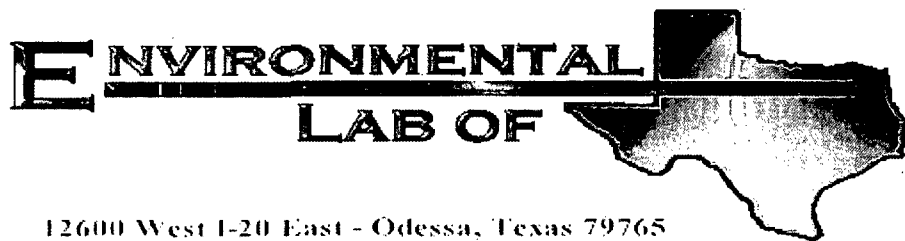
NMOCD REFERENCE NO: 1R-0457

SAMPLE LOCATION	SAMPLE DATE	DATE ANALYZED	METHODS: EPA SW 846-8021B, 5030				CHLORIDES	
			BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	(mg/L)
MW-1	04/20/06	04/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	09/18/06	09/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	12/26/06	12/31/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	03/15/07	03/27/07	<0.001	<0.001	<0.001	<0.001	<0.001	
	05/30/07	06/09/07	<0.001	0.006	<0.001	<0.001	<0.001	
	09/24/07	10/01/07	<0.001	<0.001	<0.001	<0.002	<0.001	
	11/29/07	12/06/07	<0.001	<0.002	<0.001	<0.002	<0.001	
MW-2	04/20/06	04/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	09/18/06	09/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	12/26/06	12/31/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	03/15/07	03/27/07	<0.001	<0.001	<0.001	<0.001	<0.001	
	05/30/07	06/09/07	<0.001	0.006	<0.001	<0.001	<0.001	
	09/24/07	10/01/07	<0.001	<0.001	<0.001	<0.002	<0.001	
	11/29/07	12/06/07	0.003	<0.002	<0.001	<0.002	<0.001	
MW-3	04/20/06	04/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	09/18/06	09/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	12/26/06	12/31/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	03/15/07	03/27/07	<0.001	<0.001	<0.001	<0.001	<0.001	
	05/30/07	06/09/07	<0.001	0.006	<0.001	<0.001	<0.001	
	09/24/07	10/01/07	<0.001	<0.001	<0.001	<0.002	<0.001	
	11/29/07	12/06/07	0.003	<0.002	<0.001	<0.002	<0.001	
	04/20/06	04/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	09/18/06	09/27/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	12/26/06	12/31/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	03/15/07	03/27/07	<0.001	<0.001	<0.001	<0.001	<0.001	
	05/30/07	06/09/07	<0.001	0.001	<0.001	<0.001	<0.001	
	09/24/07	10/01/07	<0.001	<0.001	<0.001	<0.002	<0.001	
	11/29/07	12/06/07	0.001	<0.002	<0.001	<0.002	<0.001	
NMOCD CRITERIA			0.01	0.75	0.75	TOTAL XYLENES 0.62		

# APPENDICES

**APPENDIX A**

**LABORATORY REPORTS**



A Xenco Laboratories Company

12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Frisco Skelly

Project Number: 2004-00196

Location: Lea County, NM

Lab Order Number: 7C20008

Report Date: 03/28/07

Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	7C20008-01	Water	03/15/07 10:20	03-20-2007 11:30
MW-2	7C20008-02	Water	03/15/07 11:10	03-20-2007 11:30
MW-3	7C20008-03	Water	03/15/07 11:45	03-20-2007 11:30

Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (7C20008-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC72601	03/26/07	03/27/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		99.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.0 %	80-120		"	"	"	"	
<b>MW-2 (7C20008-02) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC72601	03/26/07	03/27/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		106 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.8 %	80-120		"	"	"	"	
<b>MW-3 (7C20008-03) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC72601	03/26/07	03/27/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		106 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.2 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC72601 - EPA 5030C (GC)**

**Blank (EC72601-BLK1)**

Prepared & Analyzed: 03/26/07

Benzene	ND	0.00100	mg/L						
Toluene	ND	0.00100	"						
Ethylbenzene	ND	0.00100	"						
Xylene (p/m)	ND	0.00100	"						
Xylene (o)	ND	0.00100	"						
Surrogate: <i>a,a,a</i> -Trifluorotoluene	40.8		ug/l	50.0		81.6	80-120		
Surrogate: 4-Bromofluorobenzene	40.6		"	50.0		81.2	80-120		

**LCS (EC72601-BS1)**

Prepared & Analyzed: 03/26/07

Benzene	0.0442	0.00100	mg/L	0.0500		88.4	80-120		
Toluene	0.0431	0.00100	"	0.0500		86.2	80-120		
Ethylbenzene	0.0419	0.00100	"	0.0500		83.8	80-120		
Xylene (p/m)	0.0890	0.00100	"	0.100		89.0	80-120		
Xylene (o)	0.0450	0.00100	"	0.0500		90.0	80-120		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	40.5		ug/l	50.0		81.0	80-120		
Surrogate: 4-Bromofluorobenzene	43.5		"	50.0		87.0	80-120		

**Calibration Check (EC72601-CCV1)**

Prepared & Analyzed: 03/26/07

Benzene	45.8		ug/l	50.0		91.6	80-120		
Toluene	44.4		"	50.0		88.8	80-120		
Ethylbenzene	45.9		"	50.0		91.8	80-120		
Xylene (p/m)	89.2		"	100		89.2	80-120		
Xylene (o)	45.9		"	50.0		91.8	80-120		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	40.8		"	50.0		81.6	80-120		
Surrogate: 4-Bromofluorobenzene	43.9		"	50.0		87.8	80-120		

**Duplicate (EC72601-DUP1)**

Source: 7C23001-10

Prepared & Analyzed: 03/26/07

Benzene	ND	0.00100	mg/L	ND				20	
Toluene	0.00353	0.00100	"	0.00330			6.73	20	
Ethylbenzene	0.000521	0.00100	"	0.000349			39.5	20	R4
Xylene (p/m)	0.00502	0.00100	"	0.00430			15.5	20	
Xylene (o)	0.00123	0.00100	"	0.000981			22.5	20	R5
Surrogate: <i>a,a,a</i> -Trifluorotoluene	41.0		ug/l	50.0		82.0	80-120		
Surrogate: 4-Bromofluorobenzene	42.4		"	50.0		84.8	80-120		

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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch EC72601 - EPA 5030C (GC)**

**Matrix Spike (EC72601-MS1)**

**Source: 7C23001-10**

**Prepared & Analyzed: 03/26/07**

Benzene	0.0449	0.00100	mg/L	0.0500	ND	89.8	80-120			
Toluene	0.0470	0.00100	"	0.0500	0.00330	87.4	80-120			
Ethylbenzene	0.0424	0.00100	"	0.0500	0.000349	84.1	80-120			
Xylene (p/m)	0.0924	0.00100	"	0.100	0.00430	88.1	80-120			
Xylene (o)	0.0464	0.00100	"	0.0500	0.000981	90.8	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	40.0		ug/l	50.0		80.0	80-120			
Surrogate: 4-Bromofluorobenzene	44.7		"	50.0		89.4	80-120			

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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

### Notes and Definitions

R5 RPD is outside of historic values  
R4 Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By: 

Date: 3/28/2007

Brent Barron, Laboratory Director/Corp. Technical Director  
Celey D. Keene, Org. Tech Director  
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer  
Jeanne Mc Murrey, Inorg. Tech Director

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# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Plains  
 Date/ Time: 3/24/07 11:30  
 Lab ID #: 7020008  
 Initials: OK

### Sample Receipt Checklist

Client Initials

1	Temperature of container/ cooler?	Yes	No	<u>1.0</u> °C	
2	Shipping container in good condition?	<u>Yes</u>	No		
3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
5	Chain of Custody present?	<u>Yes</u>	No		
6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
11	Containers supplied by ELOT?	<u>Yes</u>	No		
12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
13	Samples properly preserved?	<u>Yes</u>	No	See Below	
14	Sample bottles intact?	<u>Yes</u>	No		
15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>	
20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

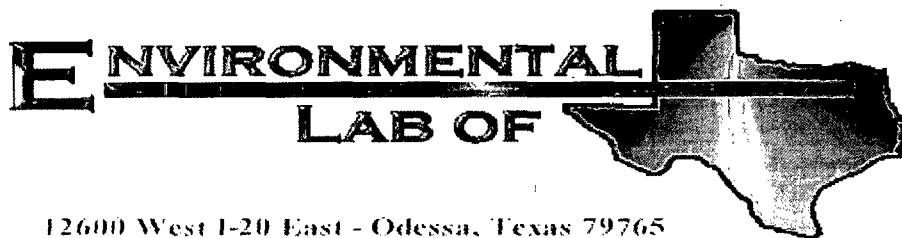
### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- ☐ See attached e-mail/ fax
  - ☐ Client understands and would like to proceed with analysis
  - ☐ Cooling process had begun shortly after sampling event



12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Frisco Skelly # 1

Project Number: 2004-00196

Location: Lea County, NM

Lab Order Number: 7F06014

Report Date: 06/11/07

Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly # 1  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	7F06014-01	Water	05/30/07 11:00	06-06-2007 12:21
MW-2	7F06014-02	Water	05/30/07 11:55	06-06-2007 12:21
MW-3	7F06014-03	Water	05/30/07 13:10	06-06-2007 12:21

Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly # 1  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (7F06014-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EF70802	06/08/07	06/09/07	EPA 8021B	
<b>Toluene</b>	<b>0.00648</b>	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		111 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.6 %	80-120		"	"	"	"	
<b>MW-2 (7F06014-02) Water</b>									
Benzene	ND	0.00100	mg/L	1	EF70802	06/08/07	06/09/07	EPA 8021B	
<b>Toluene</b>	<b>0.00616</b>	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		113 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	80-120		"	"	"	"	
<b>MW-3 (7F06014-03) Water</b>									
Benzene	ND	0.00100	mg/L	1	EF70802	06/08/07	06/09/07	EPA 8021B	
<b>Toluene</b>	<b>0.00161</b>	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		88.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		78.0 %	80-120		"	"	"	"	S-04

Environmental Lab of Texas

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly # 1  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EF70802 - EPA 5030C (GC)</b>									
<b>Blank (EF70802-BLK1)</b>									
Prepared & Analyzed: 06/08/07									
Benzene	ND	0.00100	mg/L						
Toluene	ND	0.00100	"						
Ethylbenzene	ND	0.00100	"						
Xylene (p/m)	ND	0.00100	"						
Xylene (o)	ND	0.00100	"						
Surrogate: a,a,a-Trifluorotoluene	54.1		ug/l	50.0		108	80-120		
Surrogate: 4-Bromofluorobenzene	45.4		"	50.0		90.8	80-120		
<b>LCS (EF70802-BS1)</b>									
Prepared & Analyzed: 06/08/07									
Benzene	0.0548	0.00100	mg/L	0.0500		110	80-120		
Toluene	0.0556	0.00100	"	0.0500		111	80-120		
Ethylbenzene	0.0543	0.00100	"	0.0500		109	80-120		
Xylene (p/m)	0.101	0.00100	"	0.100		101	80-120		
Xylene (o)	0.0569	0.00100	"	0.0500		114	80-120		
Surrogate: a,a,a-Trifluorotoluene	54.6		ug/l	50.0		109	80-120		
Surrogate: 4-Bromofluorobenzene	51.7		"	50.0		103	80-120		
<b>Calibration Check (EF70802-CCV1)</b>									
Prepared: 06/08/07 Analyzed: 06/09/07									
Benzene	0.0576		mg/L	0.0500		115	80-120		
Toluene	0.0567		"	0.0500		113	80-120		
Ethylbenzene	0.0537		"	0.0500		107	80-120		
Xylene (p/m)	0.0999		"	0.100		99.9	80-120		
Xylene (o)	0.0573		"	0.0500		115	80-120		
Surrogate: a,a,a-Trifluorotoluene	57.9		ug/l	50.0		116	80-120		
Surrogate: 4-Bromofluorobenzene	53.0		"	50.0		106	80-120		
<b>Matrix Spike (EF70802-MS1)</b>									
Source: 7F06019-03 Prepared: 06/08/07 Analyzed: 06/09/07									
Benzene	0.0598	0.00100	mg/L	0.0500	ND	120	80-120		
Toluene	0.0593	0.00100	"	0.0500	ND	119	80-120		
Ethylbenzene	0.0584	0.00100	"	0.0500	ND	117	80-120		
Xylene (p/m)	0.107	0.00100	"	0.100	ND	107	80-120		
Xylene (o)	0.0614	0.00100	"	0.0500	ND	123	80-120		M1
Surrogate: a,a,a-Trifluorotoluene	58.4		ug/l	50.0		117	80-120		
Surrogate: 4-Bromofluorobenzene	56.2		"	50.0		112	80-120		

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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly # 1  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch EF70802 - EPA 5030C (GC)**

**Matrix Spike Dup (EF70802-MSD1)**

**Source: 7F06019-03**

Prepared: 06/08/07 Analyzed: 06/09/07

Benzene	0.0565	0.00100	mg/L	0.0500	ND	113	80-120	6.01	20	
Toluene	0.0566	0.00100	"	0.0500	ND	113	80-120	5.17	20	
Ethylbenzene	0.0556	0.00100	"	0.0500	ND	111	80-120	5.26	20	
Xylene (p/m)	0.102	0.00100	"	0.100	ND	102	80-120	4.78	20	
Xylene (o)	0.0584	0.00100	"	0.0500	ND	117	80-120	5.00	20	
Surrogate: a,a,a-Trifluorotoluene	58.3		ug/l	50.0		117	80-120			
Surrogate: 4-Bromofluorobenzene	54.2		"	50.0		108	80-120			

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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Frisco Skelly # 1  
Project Number: 2004-00196  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

M1 The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

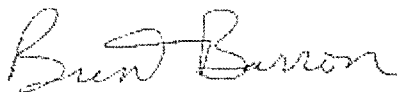
RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

6/11/2007

Brent Barron, Laboratory Director/Corp. Technical Director  
Celey D. Keene, Org. Tech Director  
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer  
Jeanne Mc Murrey, Inorg. Tech Director

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## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**12600 West I-20 East  
Odessa, Texas 79765**

**Phone: 432-563-1800**  
**Fax: 432-563-1713**

PAGE 01 OF 01

Project Name: FRISCO-SKELLY #1

Project #: 2004-00196

**Project Loc:** Lea County, NM

PO #: PAA - C. J. Reynolds

**Fax No: (505) 396-1429**

**Report Format:**

e-mail: [kdutton@basinenv.com](mailto:kdutton@basinenv.com)

[illegible]

# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Plains  
 Date/ Time: 6.6.07 12:21  
 Lab ID #: 7FOG014  
 Initials: AL

### Sample Receipt Checklist

Client Initials

#1 Temperature of container/ cooler?	<u>Yes</u>	No	<u>4.5</u> °C	
#2 Shipping container in good condition?	<u>Yes</u>	No		
#3 Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	<u>Not Present</u>	
#4 Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5 Chain of Custody present?	<u>Yes</u>	No		
#6 Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7 Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8 Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11 Containers supplied by ELOT?	<u>Yes</u>	No		
#12 Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13 Samples properly preserved?	<u>Yes</u>	No	See Below	
#14 Sample bottles intact?	<u>Yes</u>	No		
#15 Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16 Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17 Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18 All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19 Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>	
#20 VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax  
☐ Client understands and would like to proceed with analysis  
☐ Cooling process had begun shortly after sampling event

# **Analytical Report 290374**

**for**

## **PLAINS ALL AMERICAN EH&S**

**Project Manager: Camille Reynolds**

**Frisco-Skelly # 1**

**2004-00196**

**02-OCT-07**



**12600 West I-20 East Odessa, Texas 79765**

**A Xenco Laboratories Company**

Texas certification numbers:

Houston, TX T104704215

Florida certification numbers:

Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Midland - Corpus Christi - Atlanta



02-OCT-07

Project Manager: **Camille Reynolds**  
**PLAINS ALL AMERICAN EH&S**  
1301 S. COUNTY ROAD 1150  
Midland, TX 79706

Reference: XENCO Report No: **290374**  
**Frisco-Skelly # 1**  
Project Address: Lea County, NM

**Camille Reynolds:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 290374. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 290374 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink, appearing to read "Brent Barron", written over a horizontal line.

**Brent Barron**

Odessa Laboratory Director

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## Sample Cross Reference 290374

PLAINS ALL AMERICAN EH&S, Midland, TX

Frisco-Skelly # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Sep-24-07 10:50		290374-001
MW-2	W	Sep-24-07 11:40		290374-002
MW-3	W	Sep-24-07 13:00		290374-003



Certificate of Analysis Summary 290374  
PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: 2004-00196

Contact: Camille Reynolds

Project Location: Lea County, NM

Project Name: Frisco-Skelly # 1

Date Received in Lab: Thu Sep-27-07 02:30 pm


Report Date: 02-OCT-07

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	290374-001	290374-002	290374-003	
	Field Id: Depth: Matrix: Sampled:	MW-1 WATER Sep-24-07 10:50	MW-2 WATER Sep-24-07 11:40	MW-3 WATER Sep-24-07 13:00	
BTEX by EPA 8021B	Extracted:	Oct-01-07 12:00	Oct-01-07 12:00	Oct-01-07 12:00	
	Analyzed:	Oct-01-07 14:20	Oct-01-07 14:37	Oct-01-07 14:53	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	
		ND 0.0010	ND 0.0010	ND 0.0010	
Benzene		ND 0.0010	ND 0.0010	ND 0.0010	
Toluene		ND 0.0010	ND 0.0010	ND 0.0010	
Ethylbenzene		ND 0.0010	ND 0.0010	ND 0.0010	
m,p-Xylene		ND 0.0020	ND 0.0020	ND 0.0020	
o-Xylene		ND 0.0010	ND 0.0010	ND 0.0010	
Total Xylenes		ND	ND	ND	
Total BTEX		ND	ND	ND	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron  
Odessa Laboratory Director



## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.

\* Outside XENCO'S scope of NELAC Accreditation

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(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555





## Form 2 - Surrogate Recoveries

Project Name: Frisco-Skelly # 1

Work Order #: 290374

Project ID: 2004-00196

Lab Batch #: 705455

Sample: 290374-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 705455

Sample: 290374-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 705455

Sample: 290374-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 705455

Sample: 499946-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0334	0.0300	111	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 705455

Sample: 499946-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 \times A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Frisco-Skelly # 1

Work Order #: 290374

Project ID: 2004-00196

Lab Batch #: 705455

Sample: 499946-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries

Project Name: Frisco-Skelly # 1

Work Order #: 290374

Analyst: SHE

Lab Batch ID: 705455

Date Prepared: 10/01/2007

Sample: 499946-1-BKS

Project ID: 2004-00196

Date Analyzed: 10/01/2007

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/L											
Analytes	BTEX by EPA 8021B										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	ND	0.1000	0.0948	95	0.1	0.0896	90	6	70-125	25
	Toluene	ND	0.1000	0.0951	95	0.1	0.0894	89	6	70-125	25
	Ethylbenzene	ND	0.1000	0.0972	97	0.1	0.0917	92	6	71-129	25
	m,p-Xylene	ND	0.2000	0.1925	96	0.2	0.1821	91	6	70-131	25
o-Xylene	ND	0.1000	0.0963	96	0.1	0.0907	91	6	71-133	25	

Relative Percent Difference RPD =  $200 \cdot (D-F) / (D+F)$   
Blank Spike Recovery [D] =  $100 \cdot (C) / [B]$   
Blank Spike Duplicate Recovery [G] =  $100 \cdot (F) / [E]$   
All results are based on MDL and Validated for QC Purposes



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Basin / Plains  
 Date/ Time: 9-27-07 2:30  
 Lab ID #: 290374  
 Initials: AL

### Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<u>41.0</u> °C	
#2	Shipping container in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#3	Custody Seals intact on shipping container/ cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Present	
#5	Chain of Custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#11	Containers supplied by ELOT?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#12	Samples in proper container/ bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#13	Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#14	Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#15	Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#16	Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#18	All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#19	Subcontract of sample(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<del>Not Applicable</del>	
#20	VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- ☐ See attached e-mail/ fax
  - ☐ Client understands and would like to proceed with analysis
  - ☐ Cooling process had begun shortly after sampling event

# **Analytical Report 293981**

**for**

**PLAINS ALL AMERICAN EH&S**

**Project Manager: JIMMY BRYANT**

**Frisco-Skelly #1**

**2004-00196**

**10-DEC-07**



**12600 West I-20 East Odessa, Texas 79765**

**A Xenco Laboratories Company**

**Texas certification numbers:**

**Houston, TX T104704215**

**Florida certification numbers:**

**Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675**

**Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America**

**Midland - Corpus Christi - Atlanta**



10-DEC-07

Project Manager: **JIMMY BRYANT**  
**PLAINS ALL AMERICAN EH&S**  
1301 S. COUNTY ROAD 1150  
Midland, TX 79706

Reference: XENCO Report No: **293981**  
**Frisco-Skelly #1**  
Project Address: Lea County, NM

**JIMMY BRYANT:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 293981. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

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We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Brent Barron, II**  
Odessa Laboratory Manager

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## Sample Cross Reference 293981

PLAINS ALL AMERICAN EH&S, Midland, TX

Frisco-Skelly #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Nov-29-07 12:43		293981-001
MW-2	W	Nov-29-07 13:44		293981-002
MW-3	W	Nov-29-07 14:50		293981-003





Certificate of Analysis Summary 293981  
PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: 2004-00196  
Contact: JIMMY BRYANT  
Project Location: Lea County, NM


Project Name: Frisco-Skelly #1

Date Received in Lab: Tue Dec-04-07 12:45 pm  
Report Date: 10-DEC-07  
Project Manager: Brent Barron, II

Analysis Requested		Lab Id: Field Id: Depth: Matrix: Sampled:	293981-001 MW-1 WATER Nov-29-07 12:43	293981-002 MW-2 WATER Nov-29-07 13:44	293981-003 MW-3 WATER Nov-29-07 14:50	
BTEX by EPA 8021B		Extracted: Analyzed: Units/RL:	Dec-06-07 12:45 Dec-06-07 16:27 mg/L RL	Dec-05-07 11:30 Dec-06-07 00:42 mg/L RL	Dec-05-07 11:30 Dec-06-07 00:59 mg/L RL	
Benzene			ND 0.0010	0.0033 0.0010	0.0012 0.0010	
Toluene			ND 0.0020	ND 0.0020	ND 0.0020	
Ethylbenzene			ND 0.0010	ND 0.0010	ND 0.0010	
m,p-Xylenes			ND 0.0020	ND 0.0020	ND 0.0020	
o-Xylene			ND 0.0010	ND 0.0010	ND 0.0010	
Xylenes, Total			ND	ND	ND	
Total BTEX			ND	0.0033	0.0012	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron  
Odessa Laboratory Director



## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
  - B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
  - D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
  - E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
  - F** RPD exceeded lab control limits.
  - J** The target analyte was positively identified below the MQL and above the SQL.
  - U** Analyte was not detected.
  - L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
  - H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
  - K** Sample analyzed outside of recommended hold time.
- \* Outside XENCO'S scope of NELAC Accreditation

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(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



## Form 2 - Surrogate Recoveries

Project Name: Frisco-Skelly #1

Work Order #: 293981

Project ID: 2004-00196

Lab Batch #: 709872

Sample: 293981-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0249	0.0300	83	80-120	

Lab Batch #: 709872

Sample: 293981-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 709872

Sample: 502211-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 709872

Sample: 502211-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 709872

Sample: 502211-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Frisco-Skelly #1

Work Order #: 293981

Project ID: 2004-00196

Lab Batch #: 710056

Sample: 293896-054 S / MS

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 710056

Sample: 293896-054 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 710056

Sample: 293981-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 710056

Sample: 502290-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 710056

Sample: 502290-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Frisco-Skelly #1

Work Order #: 293981

Project ID: 2004-00196

Lab Batch #: 710056

Sample: 502290-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

### SURROGATE RECOVERY STUDY

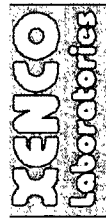
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries

Project Name: Frisco-Skelly #1

Work Order #: 293981

Analyst: SHE

Lab Batch ID: 709872

Sample: 502211-1-BKS

Date Prepared: 12/05/2007

Batch #: 1

Project ID: 2004-00196

Date Analyzed: 12/05/2007

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/L												
BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.0970	97	0.1	0.0936	94	4	70-125	25	
Toluene		ND	0.1000	0.0953	95	0.1	0.0933	93	2	70-125	25	
Ethylbenzene		ND	0.1000	0.0955	96	0.1	0.0934	93	2	71-129	25	
m,p-Xylenes		ND	0.2000	0.1863	93	0.2	0.1821	91	2	70-131	25	
o-Xylene		ND	0.1000	0.0956	96	0.1	0.0935	94	2	71-133	25	

Analyst: SHE

Lab Batch ID: 710056

Sample: 502290-1-BKS

Date Prepared: 12/06/2007

Batch #: 1

Date Analyzed: 12/06/2007

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/L												
BTEX by EPA 8021B		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.0870	87	0.1	0.0889	89	2	70-125	25	
Toluene		ND	0.1000	0.0872	87	0.1	0.0892	89	2	70-125	25	
Ethylbenzene		ND	0.1000	0.0907	91	0.1	0.0924	92	2	71-129	25	
m,p-Xylenes		ND	0.2000	0.1781	89	0.2	0.1813	91	2	70-131	25	
o-Xylene		ND	0.1000	0.0895	90	0.1	0.0918	92	3	71-133	25	

Relative Percent Difference RPD =  $200 \times |(D-F)/(D+F)|$

Blank Spike Recovery [D] =  $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries

Project Name: Frisco-Skelly #1

Work Order #: 293981

Lab Batch ID: 710056

Date Analyzed: 12/06/2007

Reporting Units: mg/L

Project ID: 2004-00196

QC-Sample ID: 293896-054 S

Batch #: 1 Matrix: Water

Date Prepared: 12/06/2007

Analyst: SHE

Reporting Units: mg/L											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	0.0054	0.1000	0.0859	81	0.1000	0.0860	81	0	70-125	25
	Toluene	ND	0.1000	0.0858	86	0.1000	0.0863	86	0	70-125	25
	Ethylbenzene	ND	0.1000	0.0892	89	0.1000	0.0900	90	1	71-129	25
	m,p-Xylenes	ND	0.2000	0.1740	87	0.2000	0.1758	88	1	70-131	25
	o-Xylene	ND	0.1000	0.0901	90	0.1000	0.0910	91	1	71-133	25

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(D-G)/(D+G)

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQ = Estimated Quantitation Limit

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Phone: 432-563-1800**  
**Fax: 432-563-1713**

Project Name: FRISCO-SKELLY #1

**Project #: 2004-00196**

**Project Loc:** Lea County, NM

PO #: PAA - C. J. Reynolds

Fax No: (505) 396-1429

kdition@basinenv.com

Preservation & # of Containers	Matrix
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[illegible][illegible]

Laboratory Comments:

12-2007	Date	12-4-07
	Date	
	Date	12-4-07

Sample Containers Intact?  
VOCs Free of Headspace?  
Labels on container(s)  
Custody seals on container(s)  
Custody seals on cooler(s)  
Sample Hand Delivered  
by Sampler/Client Rep. ?

**Temperature Upon Receipt:**



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Basin Enviro. / PAINO  
 Date/ Time: 12/04/07 12:45  
 Lab ID #: 293981  
 Initials: gma

### Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	Yes	No	° C	
#2 Shipping container in good condition?	Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5 Chain of Custody present?	Yes	No		
#6 Sample instructions complete of Chain of Custody?	Yes	No		
#7 Chain of Custody signed when relinquished/ received?	Yes	No		
#8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont / Lid	
#9 Container label(s) legible and intact?	Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11 Containers supplied by ELOT?	Yes	No		
#12 Samples in proper container/ bottle?	Yes	No	See Below	
#13 Samples properly preserved?	Yes	No	See Below	
#14 Sample bottles intact?	Yes	No		
#15 Preservations documented on Chain of Custody?	Yes	No		
#16 Containers documented on Chain of Custody?	Yes	No		
#17 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18 All samples received within sufficient hold time?	Yes	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	Not Applicable	
#20 VOC samples have zero headspace?	Yes	No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Check all that Apply:

☐  
☐  
☐

See attached e-mail/ fax  
 Client understands and would like to proceed with analysis  
 Cooling process had begun shortly after sampling event

## **APPENDIX B**

# **RELEASE NOTIFICATION AND CORRECTIVE ACTION (FORM C-141)**

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

State of New Mexico  
Energy Minerals and Natural Resources

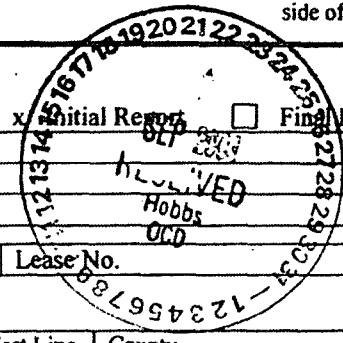
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

Name of Company Plains Marketing, LP	Contact Camille Reynolds	
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965	
Facility Name Frisco Skelly #1	Facility Type 4" Steel Pipeline	
Surface Owner City of Lovington	Mineral Owner	

LOCATION OF RELEASE

Unit Letter P	Section 36	Township 16S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32° 52'20.0" Longitude 103° 18'12.2"

NATURE OF RELEASE

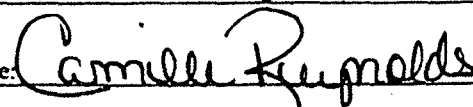
Type of Release Crude Oil	Volume of Release 25 barrels	Volume Recovered 0 barrels
Source of Release 4" Steel Pipeline	Date and Hour of Occurrence 9-20-04 @ 08:45	Date and Hour of Discovery 9-20-04 @ 9:00
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	
By Whom? Camille Reynolds	Date and Hour 9-20-04 @ 15:10	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* External corrosion of the 4" steel pipeline. A line clamp was installed to mitigate the release. The line is a 4 inch steel transmission pipeline that produces approximately 20 to 30 barrels of crude oil per day. The pressure on the line is 28 psi and the gravity of the sweet crude oil is 39. The sweet crude has an H<sub>2</sub>S content of <10 ppm

Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 1,848 ft<sup>2</sup>.

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: 		OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds		Approved by District Supervisor:	
Title: Remediation Coordinator		Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9-22-04 Phone: 505-441-0965			