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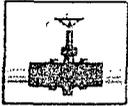
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**Annual GW Mon.  
REPORTS**

**DATE:**

**2010**



**PLAINS  
ALL AMERICAN**

RECEIVED OGD

2011 APR -1 A 12:52

March 30, 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  
4 Sites in Lea County, New Mexico  
1 Site in Eddy 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:

Lovington Gathering WTI	1RP-838	Section 06, T17S, R37E, Lea County
Red Byrd #1	1R-0085	Section 01, T20S, R36E, Lea County
DCP Plant to Lea Sta. 6" #2	1R-2136	Section 31, T20S, R37E, Lea County
DCP Plant to Lea Sta. 6" Sec.31	1R-2166	Section 31, T20S, R37E, Lea County
Ballard Grayburg 5-Inch	2R-0053	Section 10, T18S, R29E, Eddy County

Basin Environmental Service Technologies, LLC (Basin) 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 Basin 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

# *Basin Environmental Service Technologies, LLC*

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## **2010 ANNUAL MONITORING REPORT**

### **RED BYRD #1**

**Unit Letter "H" (SENE), Section 1, Township 20 South, Range 36 East  
Latitude 32° 36' 10.15" North, Longitude 103° 18' 00.35" West  
Lea County, New Mexico  
Plains SRS Number: TNM Red Byrd #1  
NMOCD Reference Number: 1RP-0085**

Prepared for:



Plains Marketing, LP  
333 Clay Street, Suite 1600  
Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC  
P. O. Box 301  
Lovington, New Mexico 88260

**March 2011**

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Ben J. Arguijo  
Project Manager

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## INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), 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 1st 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 2010 only. For reference, a "Site Location Map" is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2010 to assess the levels and extent of dissolved phase constituents and Phase-Separated Hydrocarbon (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 feet were not sampled.

## SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately four (4) miles southwest of the town of Monument, New Mexico. The legal description of the site is Unit Letter "H" (SENE), Section 1, Township 20 South, Range 36 East. The geographic coordinates of the site are 32° 36' 10.15" North latitude and 103° 18' 00.35" West longitude.

In January 2000, evidence of a historical release was discovered by the landowner, Mr. Red Byrd, and brought to the attention of Enron Oil Trading and Transportation (EOTT), who acquired the pipeline from Texas New Mexico Pipeline Company in 1999. On January 1, 2009, Basin assumed oversight of groundwater daily operations, sampling, and reporting at the release site.

Approximately 8,900 cubic yards (cy) of impacted soil was excavated, shredded, and blended with nutrients. Approximately 3,700 cy of the impacted soil was transported to Plains Lea Station Landfarm (Discharge Permit #GW-351) to be used as berm material. On completion of excavation activities, confirmation soil samples were collected from the excavation and stockpiles. Review of laboratory analytical results indicated soil samples collected from the excavation were less than NMOCD regulatory standards. The excavation was backfilled with the blended soil, approximately 3,500 cubic yards of topsoil was transported to the site, and the area was contoured to topographic grade.

At the Red Byrd #1 site, two areas of hydrocarbon impact related to the Plains pipeline have been identified as Red Byrd #1 and Red Byrd Ranch Historical. The first area of impact (Red Byrd #1) is the subject of this Annual Monitoring Report and is centered on and around monitor well MW-1. The second area of impact (Red Byrd Ranch Historical – 1R 1299) related to the Plains pipeline is centered on monitor well MW-12. The soil issues at the Red Byrd #1 and Red Byrd Ranch Historical sites have been remediated, and groundwater monitoring and sampling are ongoing. For the purpose of groundwater monitoring, the remaining activities at the site are conducted at Red Byrd #1.

In May 2008, Plains submitted a *Site Investigation Report* to the NMOCD. The *Site Investigation Report* documented the delineation and remediation activities to date at the site(s). In the report, Plains presented evidence indicating there are likely additional sources of dissolved-phase contaminants (including petroleum hydrocarbons, chlorides, and total dissolved solids), which are or have contributed to the groundwater issues at the Red Byrd #1 site. These contaminants, outside of the Plains pipelines, have not been fully identified.

On May 29, 2008, in correspondence to Plains, the NMOCD recommended the installation of one (1) monitor well (MW-19), located to the southeast of existing monitor well MW-15 to delineate the groundwater contaminant plume down-gradient of monitor well MW-15. On July 15, 2008, Plains installed monitor well MW-19 to a depth of approximately forty-five (45) feet below ground surface (bgs).

On November 17, 2008, Plains assigned excavation oversight of the Red Byrd Ranch Historical release site to Basin. On December 10, 2008, Basin resumed excavation activities at the release site, and on September 9, 2009, backfilling and restoration activities at the Red Byrd Ranch Historical release site were completed.

During sampling conducted in the first quarter of 2009, additional groundwater samples were collected from each of the nineteen (19) on-site monitor wells and analyzed for concentrations of chloride and total dissolved solids (TDS). The analytical results indicated elevated TDS concentrations, in excess of 10,000 mg/L, were present in fifteen (15) monitor wells. Monitor wells located up-gradient of the Red Byrd #1 and Red Byrd Ranch Historical releases exhibited elevated TDS concentrations, as well as the monitor wells associated with the release(s). Based on the up-gradient position of the monitor wells containing elevated TDS and the presence of numerous (20-plus) pipelines in the area, abandoned pits located northwest and south of the releases, numerous facility and drilling pads, production wells, a refinery and a chemical plant all within one half mile of the release site, there are multiple potential responsible parties contributing to the contaminant plume. The New Mexico Water Quality Control Commission (NMWQCC) regulations state groundwater exhibiting TDS concentrations in excess of 10,000 mg/L is not abatable.

On September 9, 2009, Plains requested NMOCD approval to plug and abandon monitor wells exhibiting TDS concentrations exceeding 10,000 mg/L (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14, MW-15, MW-16, and MW-19). Plains requested monitor wells associated with the ongoing groundwater issues at the Red Byrd Ranch Historical release (MW-6, MW-7, MW-11, MW-12, MW-17, and MW-18) be placed on a semi-annual sampling schedule to monitor the Red Byrd Ranch Historical PSH plume.

On October 2, 2009, Plains received NMOCD approval to reduce the sampling frequency for monitor wells MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18, and MW-19 to a semi-annual schedule, and plug and abandon monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14, and MW-15.

In October 2009, a *Red Byrd Ranch Historical Remediation Summary and Soil Closure Request* was submitted to the NMOCD Santa Fe Office. On December 9, 2009, Plains received

correspondence from the NMOCD Santa Fe Office, indicating the report was accepted and no further soil remediation was required at the site.

On October 29, 2009, monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14, and MW-15 were plugged and abandoned by a State of New Mexico licensed water well driller, as approved by the NMOCD. Following the plugging activities, plugging reports were submitted to the NMOCD Santa Fe Office.

Currently, eight (8) monitor wells (MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18, and MW-19) are located on the Red Byrd #1 site. Monitor wells MW-6, MW-7, MW-11, MW-16, MW-17, and MW-19 are gauged quarterly and sampled on a semi-annual schedule. Monitor well MW-12 is gauged weekly but not sampled due to the presence of PSH. Monitor well MW-18 is gauged quarterly but not sampled due to the presence of a hydrocarbon sheen in the monitor well.

## **FIELD ACTIVITIES**

### **Product Recovery Efforts**

A measurable thickness of PSH was detected in monitor well MW-12 during the initial site investigation. Basin began manual, weekly gauging and recovery of PSH from MW-12 in January 2009. Approximately 154.5 gallons (3.7 barrels) of PSH has been recovered from MW-12 since recovery operations began in 2009, and approximately 51 gallons (1.2 barrels) of PSH was recovered from MW-12 during the 2010 reporting period. The average PSH thickness measured in MW-12 during the reporting period was 1.37 feet, and the maximum PSH thickness was 2.41 feet on June 29, 2010. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Monument, New Mexico.

### **Groundwater Monitoring**

The on-site monitor wells were gauged and sampled on May 24 and November 12, 2010. During these semi-annual sampling events, the monitoring wells were purged of a minimum of 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 bailers. 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 of at an NMOCD-approved disposal facility near Monument, New Mexico.

Locations of the groundwater monitoring wells and the inferred groundwater elevations, which were constructed from measurements collected during each quarter of 2010, are depicted in Figures 2A through 2D. The "Groundwater Gradient Map" from the most recent gauging event (Figure 2D, November 12, 2010) indicates a general gradient of approximately 0.01 feet/foot to the southeast as measured between groundwater monitor wells MW-18 and MW-19.

On November 12, 2010, the corrected groundwater elevation ranged between 3,530.48 and 3,534.68 feet above mean sea level in monitor wells MW-6 and MW-18, respectively. The "2010 Groundwater Elevation Data" is provided as Table 1:

## **LABORATORY RESULTS**

Groundwater samples collected from the monitor wells during the semi-annual sampling events (May and November 2010) were delivered to Xenco Laboratories in Odessa, Texas, for determination of benzene, toluene, ethylbenzene, and total xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. A summary of benzene and BTEX constituent concentrations is presented in Table 2, "2010 Concentrations of Benzene & BTEX in Groundwater". Laboratory analytical reports are provided as Appendix A. "Groundwater Concentration & Inferred PSH Extent" maps are provided as Figures 2A and 2B.

For the purposes of this annual monitoring report, 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 (NMAC). However, it should be noted that, due to the TDS concentrations in the groundwater, the closure criteria for this site is not based on the standards noted above, but on the absence of PSH.

Monitor well MW-2 was plugged on November 9, 2006. Monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14, and MW-15 were plugged and abandoned on October 29, 2009.

### **Monitor well MW-6**

Laboratory analytical results indicated benzene concentrations ranged from 0.0025 mg/L in November 2010 to 0.0113 mg/L in May 2010. Toluene concentrations ranged from 0.0025 mg/L in November 2010 to 0.0295 mg/L in May 2010. Ethylbenzene concentrations ranged from less than the laboratory MDL in November 2010 to 0.0035 mg/L in May 2010. Total xylene concentrations ranged from less than the laboratory MDL in November 2010 to 0.0071 mg/L in May 2010. Benzene concentrations exceeded NMOCD regulatory standards in May 2010. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

### **Monitor well MW-7**

Laboratory analytical results indicated benzene concentrations ranged less than the laboratory MDL in November 2010 to 0.0015 mg/L in May 2010. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in both the May and November 2010 sampling events. Benzene and BTEX constituent concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

### **Monitor well MW-11**

Laboratory analytical results indicated benzene concentrations ranged from 0.0142 mg/L in November 2010 to 0.0465 mg/L in May 2010. Toluene concentrations ranged from less than the laboratory MDL in May 2010 to 0.0030 mg/L in November 2010. Ethylbenzene concentrations ranged from 0.0052 mg/L in November 2010 to 0.0052 mg/L in May 2010. Total xylene concentrations ranged from 0.0065 mg/L in May 2010 to 0.0137 mg/L in November 2010. Benzene concentrations exceeded NMOCD regulatory standards in both the May and November 2010 sampling events. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

### **Monitor well MW-12**

Monitor well MW-12 was not sampled during the 2010 reporting period due to the presence of PSH in the monitor well.

### **Monitor well MW-16**

Laboratory analytical results indicated benzene concentrations ranged from 0.0141 mg/L in November 2010 to 0.0271 mg/L in May 2010. Toluene concentrations ranged from less than the laboratory MDL in May 2010 to 0.0033 mg/L in November 2010. Ethylbenzene concentrations ranged from 0.0155 mg/L in November 2010 to 0.0176 mg/L in May 2010. Total xylene concentrations ranged from 0.0132 mg/L in May 2010 to 0.0190 mg/L in November 2010. Benzene concentrations exceeded NMOCD regulatory standards in both the May and November 2010 sampling events. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

### **Monitor well MW-17**

Laboratory analytical results indicated benzene concentrations ranged from 0.0020 mg/L in November 2010 to 0.0424 mg/L in May 2010. Toluene concentrations were less than the laboratory MDL in both the May and November 2010 sampling events. Ethylbenzene concentrations ranged from less than the laboratory MDL in November 2010 to 0.0194 mg/L in May 2010. Total xylene concentrations ranged from less than the laboratory MDL in November 2010 to 0.0139 in May 2010. Benzene concentrations exceeded NMOCD regulatory standards in May 2010. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

### **Monitor well MW-18**

Monitor well MW-18 was not sampled during the 2010 reporting period due to the presence of hydrocarbon sheen in the monitor well.

## **Monitor well MW-19**

Laboratory analytical results indicated benzene concentrations ranged from 0.0013 mg/L in May 2010 to 0.0015 mg/L in November 2010. Toluene and total xylene concentrations were less than the appropriate laboratory MDL in both the May and November 2010 sampling events. Ethylbenzene concentrations ranged from 0.0021 mg/L in November 2010 to 0.0032 mg/L in May 2010. Benzene and BTEX constituent concentrations were less than NMOCD regulatory standards in both the May and November 2010 sampling events.

## **SUMMARY**

This report presents the results of monitoring activities for the 2010 annual monitoring period. Currently, there are eight (8) groundwater monitor wells (MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18, and MW-19) on-site.

On October 29, 2009, monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14 and MW-15 were plugged and abandoned by a State of New Mexico licensed water well driller, as approved by the NMOCD. Following the plugging activities, plugging reports were submitted to the NMOCD Santa Fe Office. Monitor well MW-2 had previously been abandoned on November 9, 2006.

The "Groundwater Gradient Map" from the most recent gauging event (Figure 2D, November 12, 2010) indicates a general gradient of approximately 0.01 feet/foot to the southeast as measured between groundwater monitor wells MW-18 and MW-19.

A measurable thickness of PSH was detected in monitor well MW-12 during the initial site investigation and throughout the 2010 reporting period. Basin began manual, weekly gauging and recovery of PSH from MW-12 in January 2009. Approximately 154.5 gallons (3.7 barrels) of PSH has been recovered from MW-12 since recovery operations began in 2009, and approximately 51 gallons (1.2 barrels) of PSH was recovered from MW-12 during the 2010 reporting period. The average PSH thickness measured in MW-12 during the reporting period was 1.37 feet, and the maximum PSH thickness was 2.41 feet on November 29, 2010.

Review of laboratory analytical results generated from analysis of the groundwater samples collected during the 2010 reporting period indicates benzene concentrations were above NMOCD regulatory standards in two (2) of the eight (8) on-site monitor wells during the November 2010 sampling event.

## **ANTICIPATED ACTIONS**

PSH recovery from monitor well MW-12 will continue on a weekly schedule. All fluids recovered from MW-12 will be disposed of at an NMOCD-permitted disposal facility. Monitor wells MW-6, MW-7, MW-11, MW-12, and MW-16 through MW-19 will be monitored and sampled quarterly. Results from the 2011 sampling events will be reported in the 2011 *Annual Monitoring Report*, which will be submitted to the NMOCD by April 1, 2012.

## LIMITATIONS

Basin Environmental Service Technologies, LLC, 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 on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein 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 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 Marketing, LP. 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 Environmental Service Technologies, LLC, and/or Plains Marketing, LP.

**DISTRIBUTION**

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jpdann@paalp.com

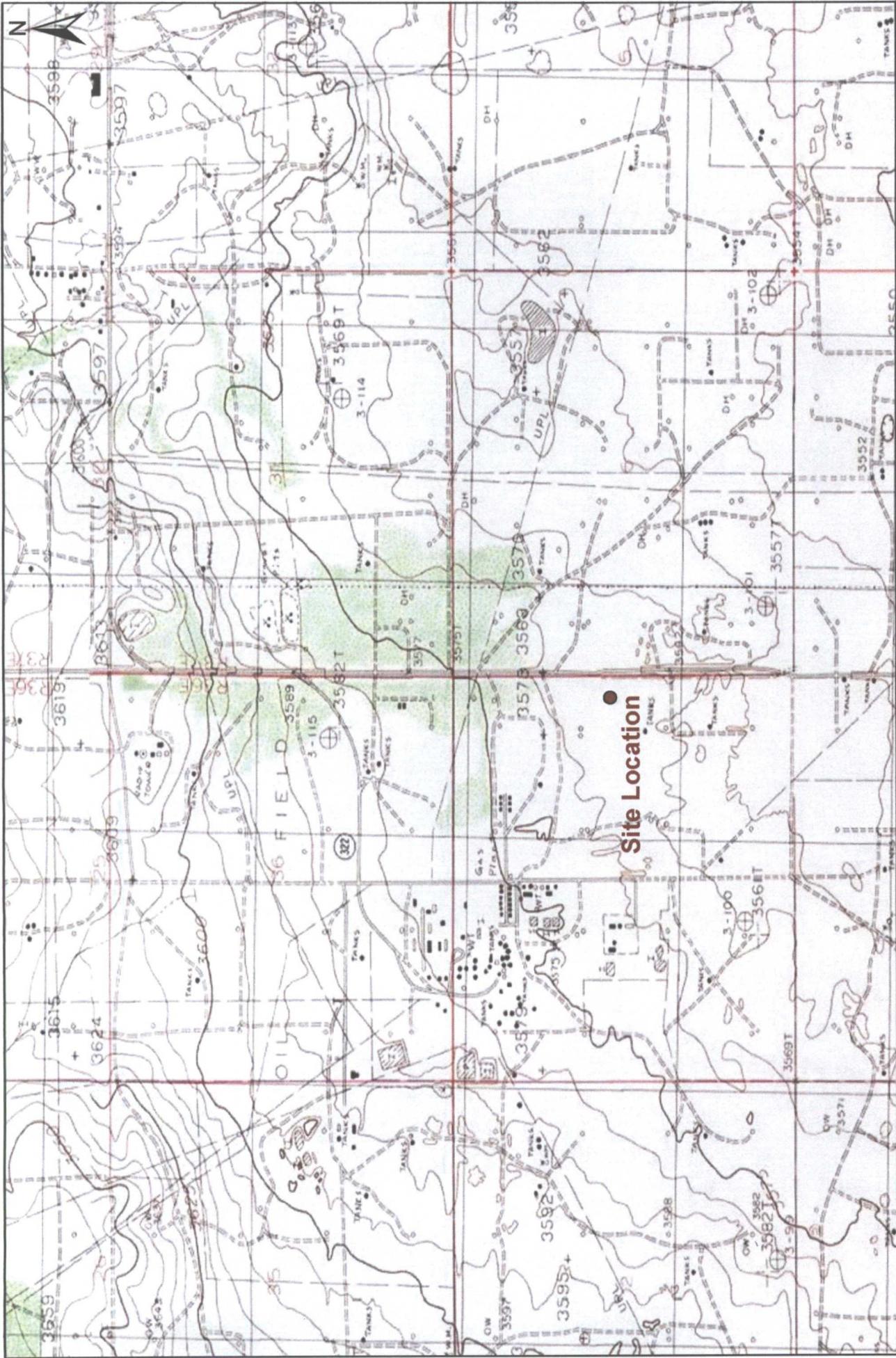
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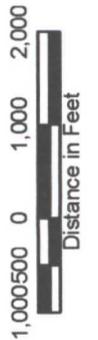


# Figures

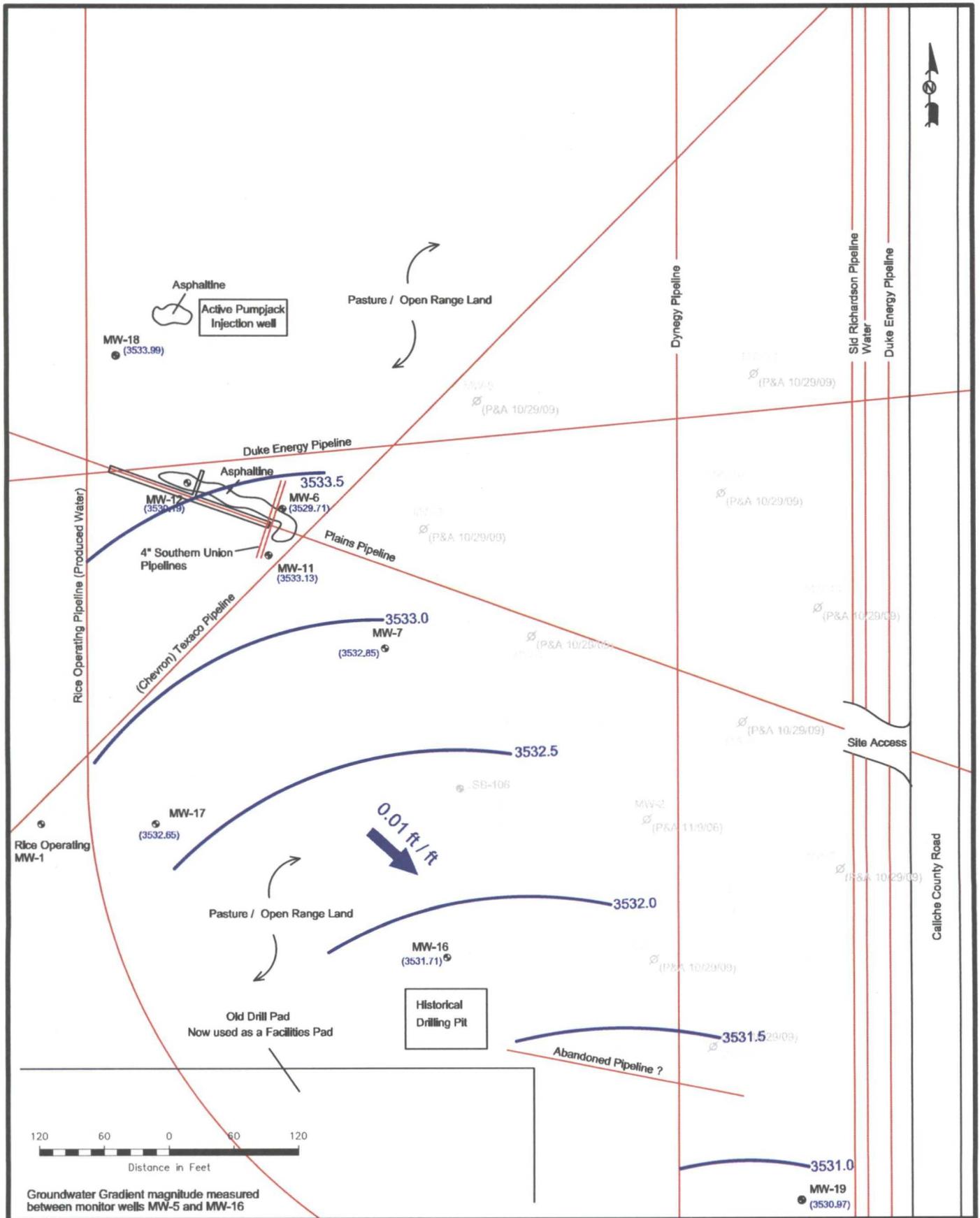


**Basin Environmental Service Technologies, LLC**

**Figure 1**  
**Site Location Map**  
 Plains Pipeline, LP  
 Red Byrd #1  
 Lea County, New Mexico  
 SRS # TNN Red Byrd #1  
 1RP-0085



Drawn By: BJA	Checked By: BRB
March 29, 2011	Scale: 1" = 2000'



Groundwater Gradient magnitude measured between monitor wells MW-5 and MW-16

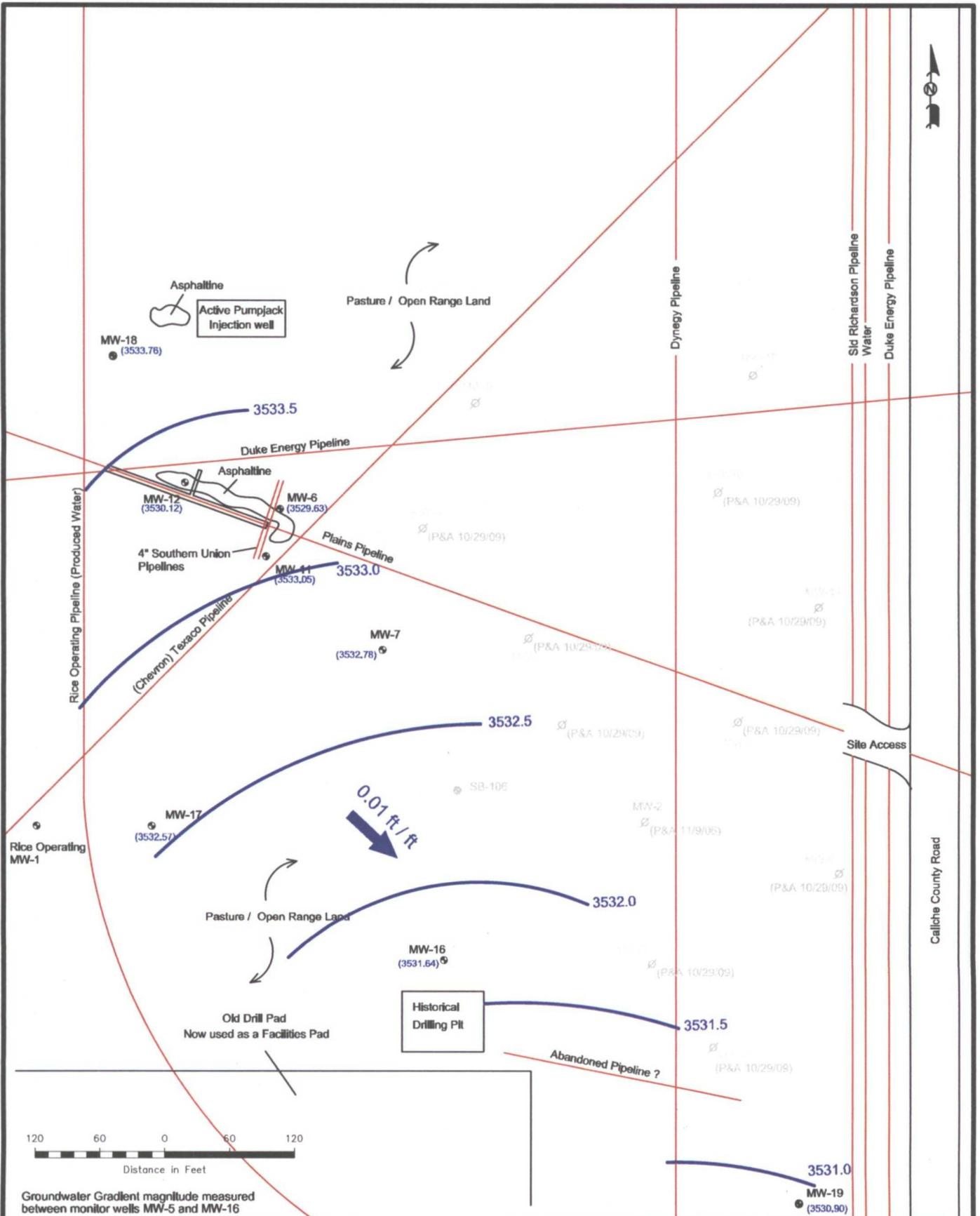
- Legend:**
- Excavation
  - Deep Excavation
  - Monitor Well Location (3473.00)
  - Pipeline NG
  - Groundwater Contour Line
  - Groundwater Elevation In Feet
  - Not Gauged
  - Groundwater Gradient and Magnitude

**Figure 2A**  
Inferred Groundwater Gradient Map (3/16/10)

Plains Marketing, L.P.  
Red Byrd No. 1  
Lea County, NM

**Basin Environmental Service Technologies, LLC**

SE1/4 NE1/4 Sec 1 T20S R36E	32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: BJA Checked By: BRR
March 28, 2011	



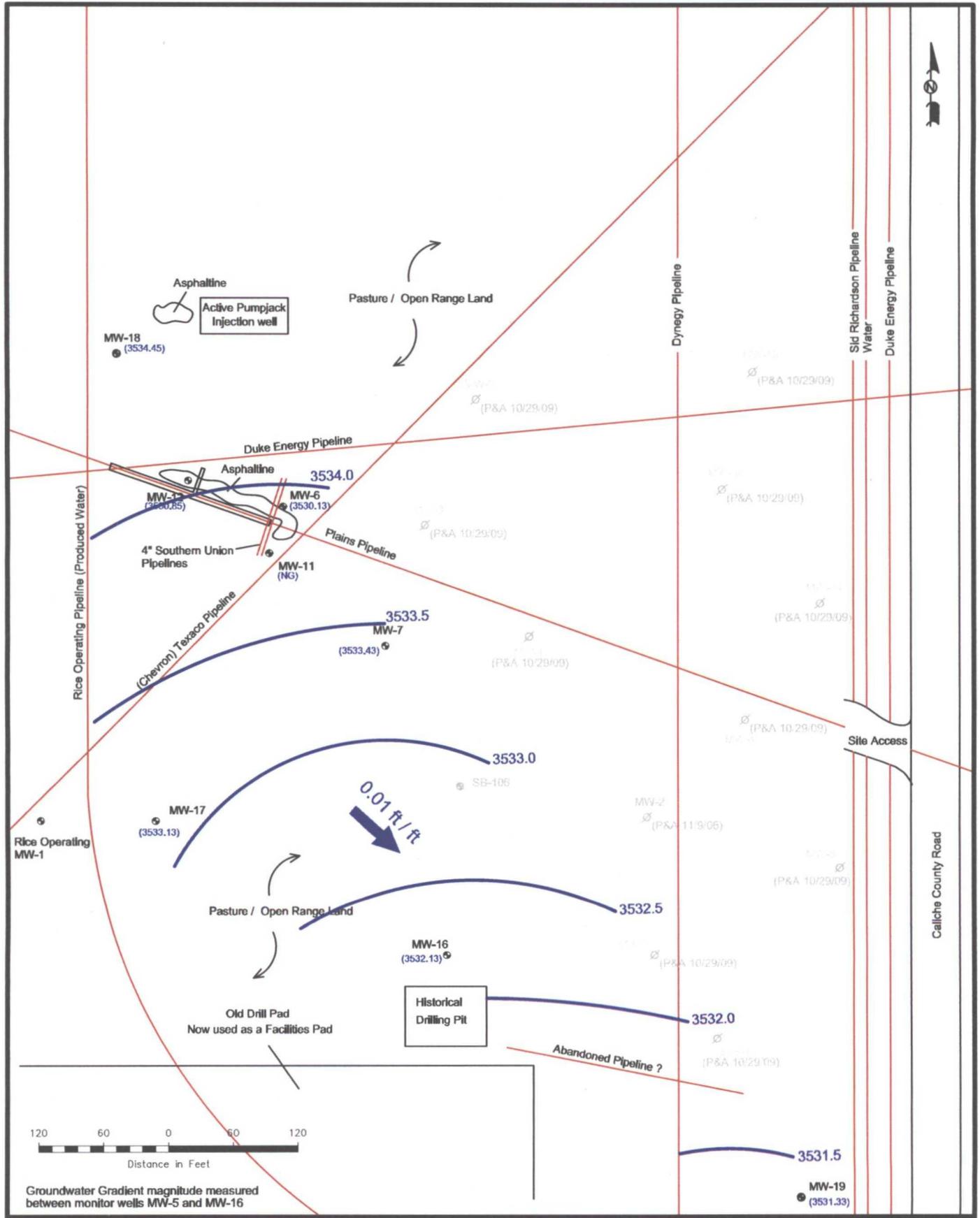
Groundwater Gradient magnitude measured between monitor wells MW-5 and MW-16

Legend:	Excavation	Deep Excavation
Monitor Well Location (3473.00)	Groundwater Elevation In Feet	Not Gauged
Pipeline	Groundwater Contour Line	Groundwater Gradient and Magnitude

Figure 2B  
Inferred Groundwater  
Gradient Map (5/24/10)  
Plains Marketing, L.P.  
Red Byrd No. 1  
Lea County, NM

Basin Environmental Service Technologies, LLC

SE 1/4 NE 1/4 Sec 1 T205 R30E	32° 38' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: BJA Checked By: BRB
March 26, 2011	



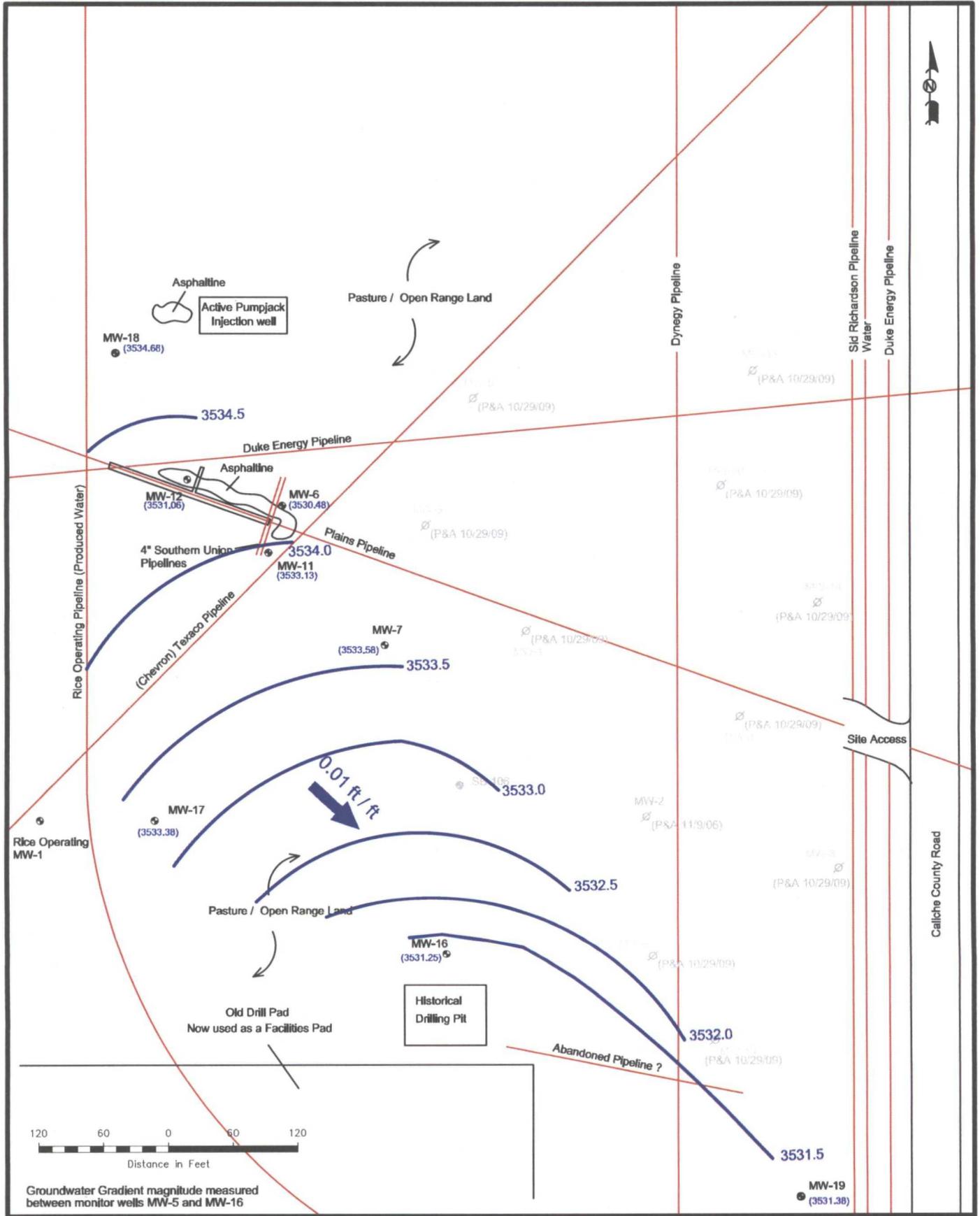
**Legend:**

	Excavation		Deep Excavation
	Monitor Well Location (3473.00)		Groundwater Elevation in Feet
	Pipeline NG		Not Gauged
	Groundwater Contour Line		Groundwater Gradient and Magnitude

**Figure 2C**  
**Inferred Groundwater Gradient Map (10/1/10)**  
 Plains Marketing, L.P.  
 Red Byrd No. 1  
 Lea County, NM

**Basin Environmental Service Technologies, LLC**

SE1/4 NE1/4 Sec 1 T206 R38E	32° 30' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: BJA Checked By: BRB
March 28, 2011	



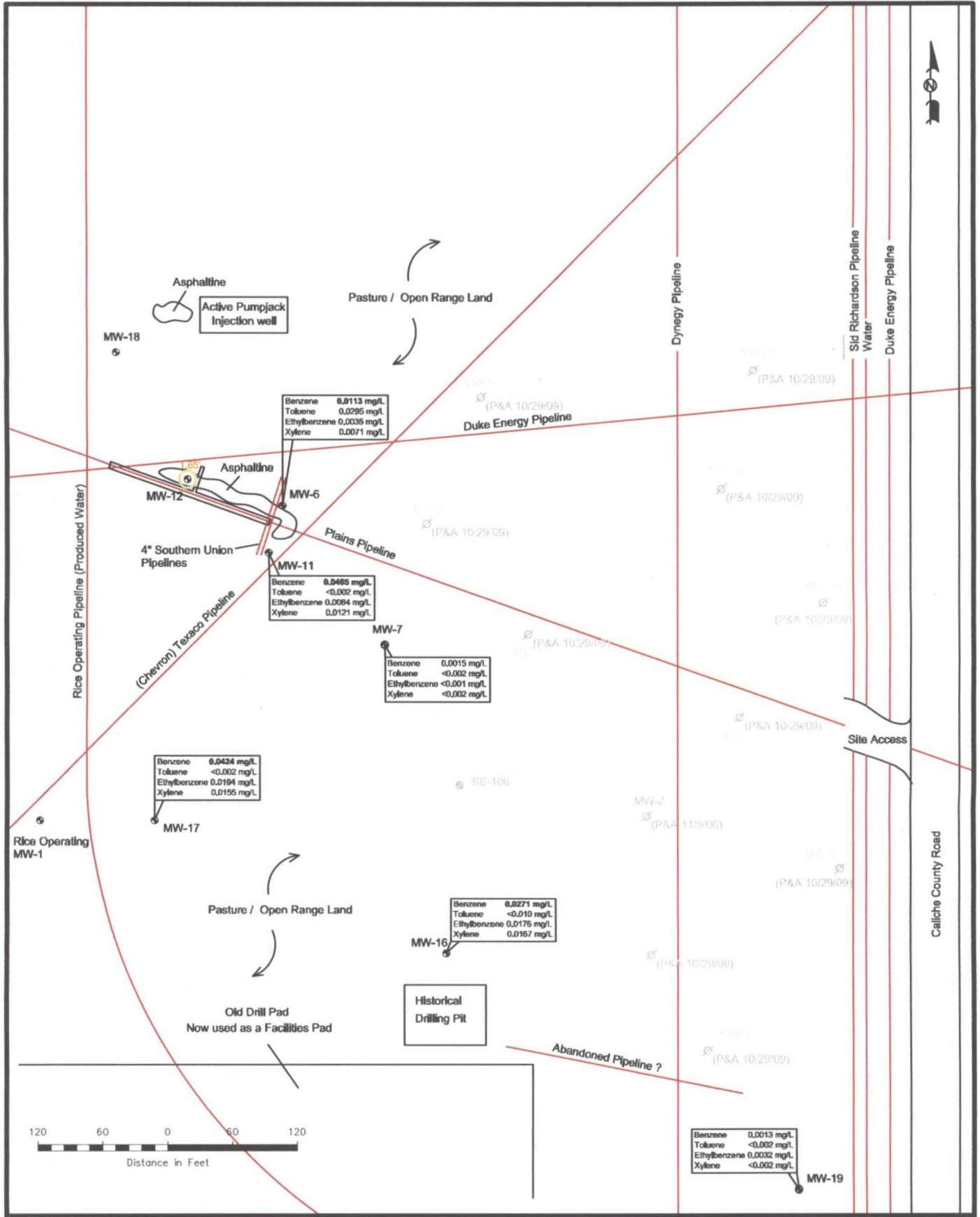
Groundwater Gradient magnitude measured between monitor wells MW-5 and MW-16

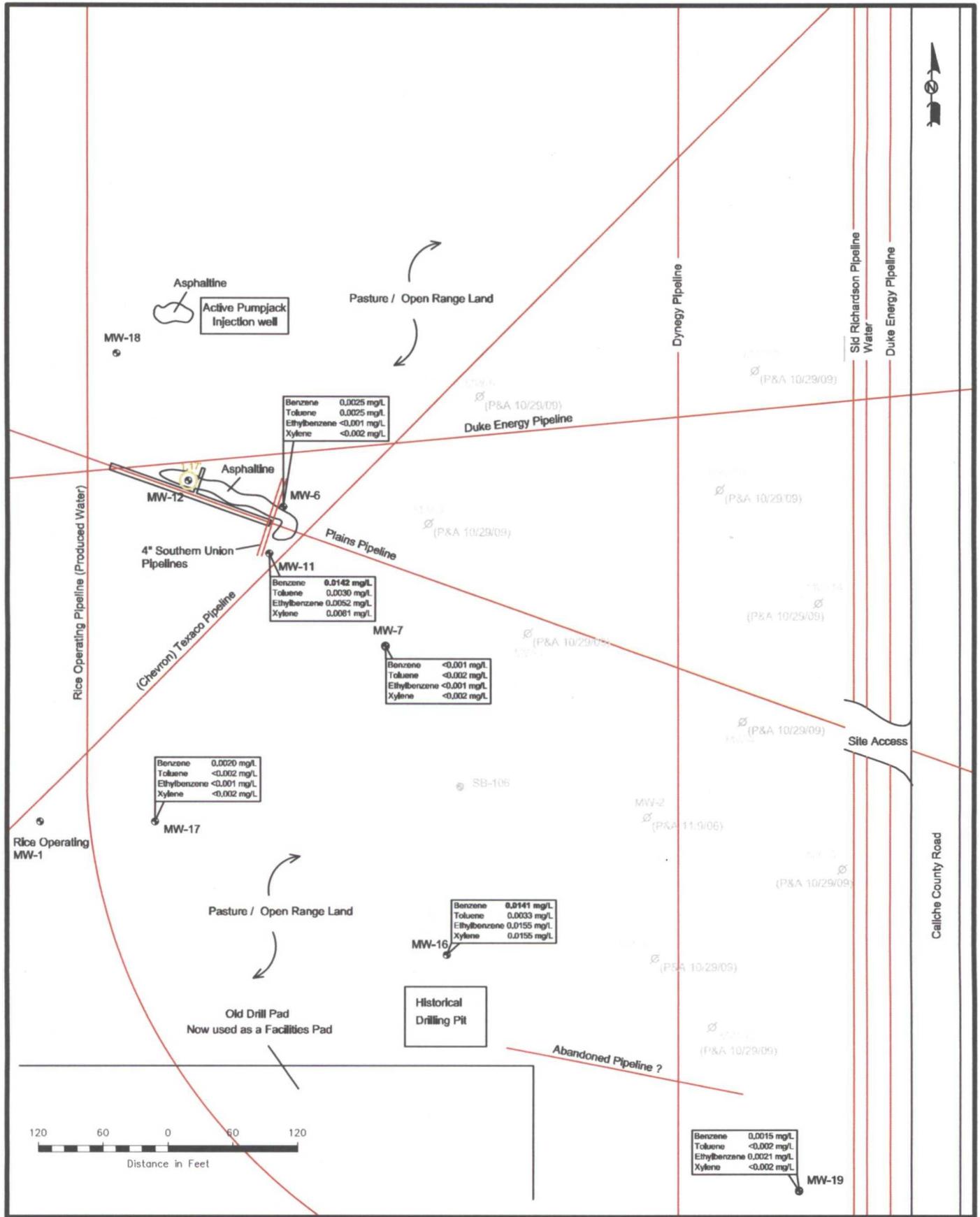
Legend:	Excavation	Deep Excavation
Monitor Well Location (3473.00)	Groundwater Elevation in Feet	Not Gauged
Pipeline	Groundwater Gradient and Magnitude	

Figure 2D  
Inferred Groundwater  
Gradient Map (11/12/10)  
  
Plains Marketing, L.P.  
Red Byrd No. 1  
Lea County, NM

**Basin Environmental Service Technologies, LLC**

SE1/4 NE1/4 Sec 1 T20S R38E	32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: BJA Checked By: BRB
March 28, 2011	





**Legend:**

- Excavation
- Deep Excavation
- Monitor Well Location
- Pipeline
- Inferred PSH Extent
- 1.04' Thickness of PSH (In feet)

**Figure 3B**  
 Groundwater Concentration &  
 Inferred PSH Extent  
 Map (11/12/2010)  
 Plains Marketing, L.P.  
 Red Byrd No. 1  
 Lea County, NM

**Basin Environmental Service Technologies, LLC**

SE1/4 NE1/4 Sec 1 T20S R96E	32° 36' 09.2"N 103° 17' 56.9"W
Scale: 1" = 100'	Prep By: BJA
March 23, 2011	Checked By: BJA



# Tables

**TABLE 1  
2010 GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.  
RED BYRD #1  
LEA COUNTY, NEW MEXICO  
NMOCD REFERENCE NUMBER 1R-0085**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	10/29/09	Plugged and Abandoned				
MW-2	11/09/06	Plugged and Abandoned				
MW-3	10/29/09	Plugged and Abandoned				
MW-4	10/29/09	Plugged and Abandoned				
MW-5	10/29/09	Plugged and Abandoned				
MW-6	03/16/10	3,570.91	-	37.82	0.00	3,529.71
MW-6	05/24/10	3,570.91	-	37.90	0.00	3,529.63
MW-6	10/01/10	3,570.91	-	37.22	0.00	3,530.31
MW-6	11/12/10	3,570.91	-	37.05	0.00	3,530.48
MW-7	03/16/10	3,567.53	-	34.68	0.00	3,532.85
MW-7	05/24/10	3,567.53	-	34.75	0.00	3,532.78
MW-7	10/01/10	3,567.53	-	34.10	0.00	3,533.43
MW-7	11/12/10	3,567.53	-	33.95	0.00	3,533.58
MW-8	10/29/09	Plugged and Abandoned				
MW-9	10/29/09	Plugged and Abandoned				
MW-10	10/29/09	Plugged and Abandoned				
MW-11	03/16/10	3,567.96	-	34.83	0.00	3,533.13
MW-11	05/24/10	3,567.96	-	34.91	0.00	3,533.05
MW-11	10/01/10	3,567.96	-	-	-	-
MW-11	11/12/10	3,567.96	-	34.10	0.00	3,533.86
MW-12	03/16/10	3,570.95	37.52	39.22	1.70	3,530.19
MW-12	05/24/10	3,570.95	37.59	39.24	1.65	3,530.12
MW-12	10/01/10	3,570.95	36.93	38.15	1.22	3,530.85
MW-12	11/12/10	3,570.95	36.72	37.89	1.17	3,531.06
MW-13	10/29/09	Plugged and Abandoned				
MW-14	10/29/09	Plugged and Abandoned				
MW-15	10/29/09	Plugged and Abandoned				

**TABLE 1  
2010 GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.  
RED BYRD #1  
LEA COUNTY, NEW MEXICO  
NMOCDF REFERENCE NUMBER 1R-0085**

<b>WELL NUMBER</b>	<b>DATE MEASURED</b>	<b>TOP OF CASING ELEVATION</b>	<b>DEPTH TO PRODUCT</b>	<b>DEPTH TO WATER</b>	<b>PSH THICKNESS</b>	<b>CORRECTED GROUND WATER ELEVATION</b>
MW-16	03/16/10	3,568.89	-	37.18	0.00	3,531.71
MW-16	05/24/10	3,568.89	-	37.25	0.00	3,531.64
MW-16	10/01/10	3,568.89	-	36.76	0.00	3,532.13
MW-16	11/12/10	3,568.89	-	37.64	0.00	3,531.25
<b>Separator</b>						
MW-17	03/16/10	3,569.66	-	37.01	0.00	3,532.65
MW-17	05/24/10	3,569.66	-	37.09	0.00	3,532.57
MW-17	10/01/10	3,569.66	-	36.53	0.00	3,533.13
MW-17	11/12/10	3,569.66	-	36.28	0.00	3,533.38
<b>Separator</b>						
MW-18	03/16/10	3,571.17	-	37.18	0.00	3,533.99
MW-18	05/24/10	3,571.17	-	37.41	0.00	3,533.76
MW-18	10/01/10	3,571.17	-	36.72	0.00	3,534.45
MW-18	11/12/10	3,571.17	-	36.49	0.00	3,534.68
<b>Separator</b>						
MW-19	03/16/10	3,569.78	-	38.81	0.00	3,530.97
MW-19	05/24/10	3,569.78	-	38.88	0.00	3,530.90
MW-19	10/01/10	3,569.78	-	38.45	0.00	3,531.33
MW-19	11/12/10	3,569.78	-	38.40	0.00	3,531.38

*Elevations based on the North American Vertical Datum of 1929.*

TABLE 2

2010 CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER  
 PLAINS MARKETING, L.P.  
 RED BYRD #1  
 LEA COUNTY, NEW MEXICO  
 PLAINS SRS NO: TNM-RED BYRD #1  
 NMOCD REF NO: 1RP-0085

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030					
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)
MW-1	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-2	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-3	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-4	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-5	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-6	05/24/10	0.0113	0.0295	0.0035	0.0052	0.0019	0.0514
	11/12/10	0.0025	0.0025	<0.0010	<0.0020	<0.0010	0.005
MW-7	05/24/10	0.0015	<0.0020	<0.0010	<0.0020	<0.0010	0.0015
	11/12/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020
MW-8	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-9	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-10	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-11	05/24/10	0.0465	<0.0020	0.0084	0.0047	0.0074	0.067
	11/12/10	0.0142	0.0030	0.0052	0.0063	0.0018	0.0305
MW-12	05/24/10	Not Sampled Due to Presence of PSH					
	11/12/10						
MW-13	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-14	05/24/10	Plugged and Abandoned					
	11/12/10						

TABLE 2

2010 CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER  
 PLAINS MARKETING, L.P.  
 RED BYRD #1  
 LEA COUNTY, NEW MEXICO  
 PLAINS SRS NO: TNM-RED BYRD #1  
 NMOCD REF NO: 1RP-0085

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030					
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)
MW-15	05/24/10	Plugged and Abandoned					
	11/12/10						
MW-16	05/24/10	0.0271	<0.0100	0.0176	0.0112	0.0055	0.0614
	11/12/10	0.0141	0.0033	0.0155	0.0135	0.0020	0.0484
MW-17	05/24/10	0.0424	<0.0020	0.0194	0.0139	0.0028	0.0785
	11/12/10	0.0020	<0.0020	<0.0010	<0.0020	<0.0010	0.002
MW-18	05/24/10	Not Sampled Due to Presence of PSH					
	11/12/10						
MW-19	05/24/10	0.0013	<0.0020	0.0032	<0.0020	<0.0010	0.0045
	11/12/10	0.0015	<0.0020	0.0021	<0.0020	<0.0010	0.0036
<b>NMOCD CRITERIA</b>		<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>TOTAL XYLENES 0.62</b>		



# Appendices



**Appendix A**  
**Laboratory Analytical Reports**

# Analytical Report 374688

for

## PLAINS ALL AMERICAN EH&S

**Project Manager: Jason Henry**

**Red Byrd # 1 TNM-Red Byrd # 1**

**Red Byrd # 1 TNM-Red Byrd # 1**

**03-JUN-10**



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295)



03-JUN-10

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

Reference: XENCO Report No: **374688**  
**Red Byrd # 1 TNM-Red Byrd # 1**  
Project Address: Lea County, NM

**Jason Henry:**

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 374688. 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. 374688 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,

**Brent Barron, II**

Odessa Laboratory Manager

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**Sample Cross Reference 374688**



**PLAINS ALL AMERICAN EH&S, Midland, TX**

Red Byrd # 1 TNM-Red Byrd # 1

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
MW-17	W	May-24-10 09:00		374688-001
MW-19	W	May-24-10 11:00		374688-002
MW-16	W	May-24-10 11:45		374688-003
MW-7	W	May-24-10 12:30		374688-004
MW-11	W	May-24-10 13:15		374688-005
MW-6	W	May-24-10 14:00		374688-006



## CASE NARRATIVE

*Client Name: PLAINS ALL AMERICAN EH&S*

*Project Name: Red Byrd # 1 TNM-Red Byrd # 1*



*Project ID: Red Byrd # 1 TNM-Red By*  
*Work Order Number: 374688*

*Report Date: 03-JUN-10*  
*Date Received: 05/27/2010*

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**Sample receipt non conformances and Comments:**

None

---

**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

Batch: LBA-809029 BTEX by EPA 8021  
SW8021BM

Batch 809029, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 374688-001,374688-002,374688-003,374688-005,374688-006,374688-004.



**Certificate of Analysis Summary 374688**  
**PLAINS ALL AMERICAN EH&S, Midland, TX**



Project Id: Red Byrd # 1 TNM-Red Byrd # 1

Contact: Jason Henry

Project Location: Lea County, NM

Date Received in Lab: Thu May-27-10 01:40 pm

Report Date: 03-JUN-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	374688-001	374688-002	374688-003	374688-004	374688-005	374688-006
	Field Id:	MW-17	MW-19	MW-16	MW-7	MW-11	MW-6
Depth:							
Matrix:		WATER	WATER	WATER	WATER	WATER	WATER
Sampled:		May-24-10 09:00	May-24-10 11:00	May-24-10 11:45	May-24-10 12:30	May-24-10 13:15	May-24-10 14:00
Extracted:		Jun-02-10 15:45					
Analyzed:		Jun-03-10 00:25	Jun-03-10 00:47	Jun-03-10 02:16	Jun-03-10 01:09	Jun-03-10 01:32	Jun-03-10 01:54
Units/RL:		mg/L RL					
Benzene		0.0424	0.0013	0.0271	0.0015	0.0465	0.0113
Toluene		ND	ND	ND	ND	ND	0.0295
Ethylbenzene		0.0194	0.0032	0.0176	ND	0.0084	0.0035
m,p-Xylenes		0.0139	ND	0.0112	ND	0.0047	0.0052
o-Xylene		0.0028	ND	0.0055	ND	0.0074	0.0019
Xylenes, Total		0.0167	ND	0.0167	ND	0.0121	0.0071
Total BTEX		0.0785	0.0045	0.0614	0.0015	0.0670	0.0514

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, II  
 Odessa Laboratory Manager



# 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.
  - JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- \* Outside XENCO's scope of NELAC Accreditation.

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



# Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1 TNM-Red Byrd # 1

Work Orders : 374688,

Project ID: Red Byrd # 1 TNM-Red Byrd # 1

Lab Batch #: 809029

Sample: 564756-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/02/10 16:31

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 809029

Sample: 564756-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/02/10 16:54

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 809029

Sample: 564756-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/02/10 18:01

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 809029

Sample: 374688-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 00:25

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0230	0.0300	77	80-120	*
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 809029

Sample: 374688-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 00:47

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0217	0.0300	72	80-120	*
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

\* Surrogate outside of Laboratory QC limits

\*\* 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: Red Byrd # 1 TNM-Red Byrd # 1

Work Orders : 374688,

Project ID: Red Byrd # 1 TNM-Red Byrd # 1

Lab Batch #: 809029

Sample: 374688-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 01:09

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0227	0.0300	76	80-120	*
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 809029

Sample: 374688-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 01:32

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0200	0.0300	67	80-120	*
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 809029

Sample: 374688-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 01:54

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0216	0.0300	72	80-120	*
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 809029

Sample: 374688-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 02:16

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0228	0.0300	76	80-120	*
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 809029

Sample: 374687-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 02:39

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

\* Surrogate outside of Laboratory QC limits

\*\* 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: Red Byrd # 1 TNM-Red Byrd # 1

Work Orders : 374688,

Project ID: Red Byrd # 1 TNM-Red Byrd # 1

Lab Batch #: 809029

Sample: 374687-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/03/10 03:02

## SURROGATE RECOVERY STUDY

<b>BTEX by EPA 8021</b>	<b>Amount Found [A]</b>	<b>True Amount [B]</b>	<b>Recovery %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>					
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

\* Surrogate outside of Laboratory QC limits

\*\* 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: Red Byrd # 1 TNM-Red Byrd # 1

Work Order #: 374688

Analyst: ASA

Lab Batch ID: 809029

Sample: 564756-1-BKS

Date Prepared: 06/02/2010

Batch #: 1

Project ID: Red Byrd # 1 TNM-Red Byrd # 1

Date Analyzed: 06/02/2010

Matrix: Water

Units: mg/L

## BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	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
BTEX by EPA 8021	ND	0.1000	0.1056	106	0.1	0.1103	110	4	70-125	25	
Benzene	ND	0.1000	0.1039	104	0.1	0.1086	109	4	70-125	25	
Toluene	ND	0.1000	0.1065	107	0.1	0.1119	112	5	71-129	25	
Ethylbenzene	ND	0.2000	0.2129	106	0.2	0.2237	112	5	70-131	25	
m,p-Xylenes	ND	0.1000	0.1045	105	0.1	0.1096	110	5	71-133	25	
o-Xylene	ND	0.1000	0.1045	105	0.1	0.1096	110	5	71-133	25	

Relative Percent Difference RPD =  $200 * [(C-F)/(C+F)]$

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

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

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries



Project Name: Red Byrd # 1 TNM-Red Byrd # 1

Work Order #: 374688

Project ID: Red Byrd # 1 TNM-Red Byrd # 1

Lab Batch ID: 809029

QC- Sample ID: 374687-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 06/03/2010

Date Prepared: 06/02/2010

Analyst: ASA

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

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	0.0014	0.1000	0.0988	97	0.1000	0.0956	94	3	70-125	25	
Toluene	ND	0.1000	0.0945	95	0.1000	0.0917	92	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0963	96	0.1000	0.0928	93	4	71-129	25	
m,p-Xylenes	ND	0.2000	0.1836	92	0.2000	0.1722	86	6	70-131	25	
o-Xylene	ND	0.1000	0.0923	92	0.1000	0.0874	87	5	71-133	25	

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

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

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





**XENCO Laboratories**  
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 San Antonio, Tampa

Document Title: Sample Receipt Checklist  
 Document No.: SYS - SRC  
 Revision/Date : No.00 , 05/18/10  
 Effective Date: 05/20/10  
 Page No.: 1 of 1

**Prelogin / Nonconformance Report - Sample Log-In**

Client: Basin Env. / Plains  
 Date/Time: 5-27-10 13:40  
 Lab ID #: 374688  
 Initials: AL

**Sample Receipt Checklist**

1. Sample on ice?	Blue	<input checked="" type="radio"/> Water	No	
2. Shipping container in good condition?	<input checked="" type="radio"/> Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<input checked="" type="radio"/> Yes	No	N/A	
4. Chain of Custody present?	<input checked="" type="radio"/> Yes	No		
5. Sample instructions complete on chain of custody?	<input checked="" type="radio"/> Yes	No		
6. Any missing / extra samples?	Yes	<input checked="" type="radio"/> No		
7. Chain of custody signed when relinquished / received?	<input checked="" type="radio"/> Yes	No		
8. Chain of custody agrees with sample lable(s)?	<input checked="" type="radio"/> Yes	No		
9. Container labels legible legible and intact?	<input checked="" type="radio"/> Yes	No		
10. Sample matrix / properties agree with chain of custody?	<input checked="" type="radio"/> Yes	No		
11. Samples in proper container / bottle?	<input checked="" type="radio"/> Yes	No		
12. Samples properly preserved?	<input checked="" type="radio"/> Yes	No	N/A	
13. Sample container intact?	<input checked="" type="radio"/> Yes	No		
14. Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/> Yes	No		
15. All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	No		
16. Subcontract of sample(s)?	Yes	No	<input checked="" type="radio"/> N/A	
17. Voc sample have zero head space?	<input checked="" type="radio"/> * Yes	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 3.6 °C	lbs °C	lbs °C	lbs °C	lbs °C

**Nonconformance Documentation**

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

Regarding: \* see note on coc per client.

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

- Check all that apply:
- Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
  - Initial and Backup Temperature confirm out of temperature conditions
  - Client understands and would like to proceed with analysis

**Analytical Report 397220**  
**for**  
**PLAINS ALL AMERICAN EH&S**

**Project Manager: Jason Henry**

**Red Byrd Ranch Historical**

**Red Byrd Ranch TNM Historical**

**17-NOV-10**



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**Xenco-Tampa Mobile (EPA Lab code: FL01212):** Florida (E84900)

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**Xenco-Dallas (EPA Lab code: TX01468):** Texas (T104704295-TX)

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**Xenco-Phoenix Mobile (EPA Lab code: AZ00901):** Arizona (AZM757)

**Xenco Tucson (EPA Lab code:AZ000989):** Arizona (AZ0758)



17-NOV-10

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

Reference: XENCO Report No: **397220**  
**Red Byrd Ranch Historical**  
Project Address: Lea County, NM

**Jason Henry:**

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 397220. 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. 397220 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,

**Brent Barron, II**

Odessa Laboratory Manager

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**Sample Cross Reference 397220**



**PLAINS ALL AMERICAN EH&S, Midland, TX**  
Red Byrd Ranch Historical

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
MW-19	W	Nov-12-10 09:00		397220-001
MW-7	W	Nov-12-10 10:00		397220-002
MW-11	W	Nov-12-10 11:00		397220-003
MW-6	W	Nov-12-10 12:00		397220-004
MW-16	W	Nov-12-10 13:00		397220-005
MW-17	W	Nov-12-10 14:00		397220-006



## CASE NARRATIVE

*Client Name: PLAINS ALL AMERICAN EH&S*

*Project Name: Red Byrd Ranch Historical*



*Project ID: Red Byrd Ranch TNM Hisi*  
*Work Order Number: 397220*

*Report Date: 17-NOV-10*  
*Date Received: 11/12/2010*

---

**Sample receipt non conformances and Comments:**

None

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**Sample receipt Non Conformances and Comments per Sample:**

None



# Certificate of Analysis Summary 397220

## PLAINS ALL AMERICAN EH&S, Midland, TX



**Project Id:** Red Byrd Ranch TNM Historical  
**Contact:** Jason Henry  
**Project Location:** Lea County, NM

**Date Received in Lab:** Fri Nov-12-10 04:20 pm  
**Report Date:** 17-NOV-10  
**Project Manager:** Brent Barron, II

**Project Name:** Red Byrd Ranch Historical

Analysis Requested	Lab Id:	397220-001	397220-002	397220-003	397220-004	397220-005	397220-006
	Field Id:	MW-19	MW-7	MW-11	MW-6	MW-16	MW-17
Depth:							
Matrix:		WATER	WATER	WATER	WATER	WATER	WATER
Sampled:		Nov-12-10 09:00	Nov-12-10 10:00	Nov-12-10 11:00	Nov-12-10 12:00	Nov-12-10 13:00	Nov-12-10 14:00
Extracted:		Nov-15-10 16:45					
Analyzed:		Nov-16-10 16:57	Nov-16-10 17:19	Nov-16-10 17:40	Nov-16-10 18:02	Nov-16-10 18:45	Nov-16-10 18:24
Units/RL:		mg/L RL					
Benzene		0.0015 0.0010	ND 0.0010	0.0142 0.0010	0.0025 0.0010	0.0141 0.0010	0.0020 0.0010
Toluene		ND 0.0020	ND 0.0020	0.0030 0.0020	0.0025 0.0020	0.0033 0.0020	ND 0.0020
Ethylbenzene		0.0021 0.0010	ND 0.0010	0.0052 0.0010	ND 0.0010	0.0155 0.0010	ND 0.0010
m,p-Xylenes		ND 0.0020	ND 0.0020	0.0063 0.0020	ND 0.0020	0.0135 0.0020	ND 0.0020
o-Xylene		ND 0.0010	ND 0.0010	0.0018 0.0010	ND 0.0010	0.0020 0.0010	ND 0.0010
Total Xylenes		ND 0.0010	ND 0.0010	0.0081 0.0010	ND 0.0010	0.0155 0.0010	ND 0.0010
Total BTEX		0.0036 0.0010	ND 0.0010	0.0305 0.0010	0.0050 0.0010	0.0484 0.0010	0.0020 0.0010

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, II**  
 Odessa Laboratory Manager

## 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.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- MDL** Method Detection Limit
- PQL** Practical Quantitation Limit
- \* Outside XENCO's scope of NELAC Accreditation.

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# Form 2 - Surrogate Recoveries

Project Name: Red Byrd Ranch Historical

Work Orders : 397220,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 832334

Sample: 578959-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 09:43

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 832334

Sample: 578959-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 10:05

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 832334

Sample: 578959-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 10:48

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 832334

Sample: 397215-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 14:46

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 832334

Sample: 397215-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 15:08

### 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	0.0279	0.0300	93	80-120	

\* Surrogate outside of Laboratory QC limits  
 \*\* 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: Red Byrd Ranch Historical

Work Orders : 397220,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 832334

Sample: 397220-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L		Date Analyzed: 11/16/10 16:57		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0266	0.0300	89	80-120	
4-Bromofluorobenzene		0.0351	0.0300	117	80-120	

Lab Batch #: 832334

Sample: 397220-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L		Date Analyzed: 11/16/10 17:19		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0301	0.0300	100	80-120	
4-Bromofluorobenzene		0.0343	0.0300	114	80-120	

Lab Batch #: 832334

Sample: 397220-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L		Date Analyzed: 11/16/10 17:40		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	
4-Bromofluorobenzene		0.0319	0.0300	106	80-120	

Lab Batch #: 832334

Sample: 397220-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L		Date Analyzed: 11/16/10 18:02		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0.0303	0.0300	101	80-120	

Lab Batch #: 832334

Sample: 397220-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L		Date Analyzed: 11/16/10 18:24		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0281	0.0300	94	80-120	
4-Bromofluorobenzene		0.0337	0.0300	112	80-120	

\* Surrogate outside of Laboratory QC limits  
 \*\* 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: Red Byrd Ranch Historical

Work Orders : 397220,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 832334

Sample: 397220-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/16/10 18:45

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

\* Surrogate outside of Laboratory QC limits

\*\* 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: Red Byrd Ranch Historical

Work Order #: 397220

Analyst: ASA

Lab Batch ID: 832334

Sample: 578959-1-BKS

Date Prepared: 11/15/2010

Batch #: 1

Project ID: Red Byrd Ranch TNM Historical

Date Analyzed: 11/16/2010

Matrix: Water

Units: mg/L

### BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	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
BTEX by EPA 8021B											
Benzene	ND	0.1000	0.0961	96	0.1	0.1026	103	7	70-125	25	
Toluene	ND	0.1000	0.0930	93	0.1	0.0996	100	7	70-125	25	
Ethylbenzene	ND	0.1000	0.0935	94	0.1	0.1008	101	8	71-129	25	
m,p-Xylenes	ND	0.2000	0.1896	95	0.2	0.2038	102	7	70-131	25	
o-Xylene	ND	0.1000	0.0924	92	0.1	0.0972	97	5	71-133	25	

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



# Form 3 - MS / MSD Recoveries



Project Name: Red Byrd Ranch Historical

Work Order #: 397220

Lab Batch ID: 832334

Date Analyzed: 11/16/2010

Reporting Units: mg/L

Project ID: Red Byrd Ranch TNM Historical

QC- Sample ID: 397215-001 S

Date Prepared: 11/15/2010

Batch #: 1

Matrix: Water

Analyst: ASA

Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.2795	0.1000	0.3749	95	0.1000	0.3882	109	3	70-125	25	
Toluene	0.1807	0.1000	0.2835	103	0.1000	0.2916	111	3	70-125	25	
Ethylbenzene	0.0126	0.1000	0.1002	88	0.1000	0.1015	89	1	71-129	25	
m,p-Xylenes	0.0114	0.2000	0.1834	86	0.2000	0.1834	86	0	70-131	25	
o-Xylene	0.0049	0.1000	0.0928	88	0.1000	0.0934	89	1	71-133	25	

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

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

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





**XENCO Laboratories**  
 Atlanta, Boca Raton, Corpus Christi, Dallas  
 Houston, Miami, Odessa, Philadelphia  
 Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist  
 Document No.: SYS-SRC  
 Revision/Date: No. 01, 5/27/2010  
 Effective Date: 6/1/2010 Page 1 of 1

**Prelogin / Nonconformance Report - Sample Log-In**

Client: Plains Basin Environmental  
 Date/Time: 11-18-10 16:20  
 Lab ID #: 397220  
 Initials: AM

**Sample Receipt Checklist**

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	<u>N/A</u>	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
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		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	<u>No</u>	N/A	
17. VOC sample have zero head space?	Yes	<u>No</u>	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>3.1</u> °C	lbs °C	lbs °C	lbs °C	lbs °C

**Nonconformance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Regarding: \_\_\_\_\_  
 Corrective Action Taken: \_\_\_\_\_

- Check all that apply:
- Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
  - Initial and Backup Temperature confirm out of temperature conditions
  - Client understands and would like to proceed with analysis



**Appendix B**  
**Release Notification &**  
**Corrective Action (Form C-141)**

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

**Release Notification and Corrective Action**

**OPERATOR** x Initial Report  Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name:	Red Byrd # 1	Facility Type:	Steel Pipeline
Surface Owner:	Red Byrd	Mineral Owner	Lease No.

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	1	20S	36E					Lea

Latitude 32° 36' 09.8" N Longitude 103° 17' 58.5" W

**NATURE OF RELEASE**

Type of Release:	Crude Oil	Volume of Release:	Unknown	Volume Recovered
Source of Release:	Steel Pipeline	Date and Hour of Occurrence		Date and Hour of Discovery
Was Immediate Notice Given?	Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required <input type="checkbox"/>	If YES, To Whom?		
By Whom?		Date and Hour		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.		
If a Watercourse was Impacted, Describe Fully.*				
Describe Cause of Problem and Remedial Action Taken.*				
Describe Area Affected and Cleanup Action Taken.* <b>NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable.</b>				
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.				

**OIL CONSERVATION DIVISION**

Signature:			
Printed Name:	Camille Reynolds	Approved by District Supervisor:	
Title:	Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address:	cjreynolds@paalp.com	Conditions of Approval:	
Date: 3/21/2005	Phone: (505)441-0965	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary