2R - 53

Annual GW Mon. Report

Year: 2011

Basin Environmental Service Technologies, LLC

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Effective Solutions

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APR 2 2012

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

2011
ANNUAL MONITORING REPORT

BALLARD GRAYBURG 5-INCH
Unit Letter "M" (SWSW), Section 10, Township 18 South, Range 29 East
Latitude 32° 45' 27.1" North, Longitude 104° 04' 12.0" West
Eddy County, New Mexico
Plains SRS Number: 2004-00192
NMOCD Reference Number: 2R-0053

Prepared For:

PLAINS

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 2012

Ben J. Arguijo
Project Manager

PLAINS
ALL AMERICAN

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APR 2 2012

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

March 29, 2012

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

Re: Plains All American – 2011 Annual Monitoring Reports
5 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	AP-96 (1R-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
14" Vac to Jal Legacy	1R-2162	Section 25, T22S, 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

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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 2011 only. For reference, a "Site Location Map" is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2011 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.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the Ballard Grayburg 5-Inch release site is Unit Letter "M" (SWSW), Section 10, Township 18 South, Range 29 East. The geographic coordinates of the release site are 32° 45' 27.1" North latitude and 104° 04' 12.0" West longitude.

On September 2, 2004, Allstate Environmental Services (Allstate) responded to a pipeline release to place a temporary clamp on the pipeline and excavate the impacted soil. At the request of Plains, Basin performed subsequent remediation at the site. The Ballard Grayburg 5" pipeline was de-oiled, cold cut, and capped. Approximately eighty (80) barrels of crude oil were released from the pipeline, with no recovery. The site is located in a pipeline right-of-way in a pasture utilized for cattle grazing. The initial surface stain covered an area approximately twenty-two (22) feet in length and twenty-three (23) feet in width. Excavation activities conducted during the initial response and subsequent remediation activities covered an area approximately two hundred and twenty-five (225) feet in length and sixty (60) feet in width, and ranged from approximately ten (10) to twenty (20) feet below ground surface (bgs). Excavated soil was placed adjacent to the excavation on a six (6)-mil poly liner for future remedial activities.

A *Preliminary Site Investigation Report and Remediation Plan* (PSIR), dated November 14, 2004, was submitted and approved by the NMOCD District II Artesia Office and the U. S. Department of the Interior, Bureau of Land Management (BLM), Carlsbad District Office. The approved plan required the excavation of the impacted area to approximately twelve (12) to fifteen (15) feet bgs, the collection of confirmation soil samples, the installation of a forty (40)-mil poly liner, the on-site blending of non-impacted segregated overburden and impacted soil, and backfilling of the excavation with the blended soil. In March 2006, an electronic revision was submitted and subsequently approved by NMOCD (Santa Fe) and BLM. The approved revision required the excavation of the impacted area to a depth of approximately eighteen (18) to twenty (20) feet bgs, the installation of a forty (40)-mil poly liner on the floor of the excavation, the blending of the non-impacted segregated overburden and impacted soil, and the collection of soil samples at five hundred (500) cubic yard (cy) intervals to ensure that total

petroleum hydrocarbon (TPH) constituent concentrations were less than 1,000 mg/Kg. Following the remediation activities, the plan required reseeding the site with BLM-approved grass seed.

Based on initial delineation of the release site, two (2) groundwater monitor wells were installed to evaluate the quality of groundwater, and one (1) recovery well was installed due to the presence of PSH detected in soil samples collected during drilling activities. There was no visual evidence of PSH impact in the soil samples collected during the installation of monitor wells MW-2 and MW-3.

Absorbent medium was placed in recovery well RW-1 to absorb the limited quantities of crude oil on the groundwater. The absorbent medium was inspected and replaced on a monthly schedule. During excavation of the release area, recovery well RW-1 collapsed. The approved PSIR revision stipulated installation of an additional recovery well located north-northwest of recovery well RW-1 would be attempted once backfilling of the excavation was completed. In July 2006, an attempt to install the additional recovery well was initiated; however, subsurface limestone caverns were encountered during drilling activities, and the installation of the recovery well was not possible.

Currently, there are two (2) groundwater monitor wells (MW-2 and MW-3) on site. In a letter dated October 2, 2009, the NMOCD granted Plains approval to modify the groundwater monitoring frequency at the site. Monitor well MW-2 will be sampled on an annual basis, and monitor well MW-3 will be sampled on a quarterly basis.

FIELD ACTIVITIES

The on-site monitor wells were gauged and sampled on March 16 (1Q2011), June 1 (2Q2011), September 7 (3Q2011), and October 26, 2011 (4Q2011). During these quarterly 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 were constructed from the measurements collected during the quarterly monitoring events and are depicted on Figures 2A through 2D. The groundwater elevation data is provided as Table 1. An inferred groundwater gradient map cannot be constructed from the observed groundwater elevation data derived from the two (2) on-site monitor wells. An inferred groundwater gradient map requires a minimum of three (3) monitor wells to calculate an accurate groundwater gradient direction and magnitude. Review of New Mexico State Engineers Office (NMOSE) records indicate a general south to southwest groundwater gradient in this area of Eddy County, New Mexico. The corrected groundwater elevations ranged from 3,355.01 to 3,355.76 feet above mean sea level, in monitor well MW-3 on October 26, 2011, and March 16, 2011, respectively.

The groundwater elevation data presented above indicates observed groundwater elevations are approximately forty-four (44) feet more shallow than observed groundwater elevations presented in the 2007 and prior Groundwater Monitoring Reports. This inconsistency in observed groundwater elevation may be related to the karstic nature of the subsurface beneath the release site, as depicted in the monitor well and recovery well logs previously submitted to the NMOCD.

LABORATORY RESULTS

Groundwater samples collected from the monitor wells during the quarterly sampling events (1Q2011, 2Q2011, 3Q2011, and 4Q2011) 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, "2011 Concentrations of Benzene & BTEX in Groundwater". Laboratory analytical reports are provided as Appendix A. "Groundwater Concentration" maps are provided as 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 (NMAC).

Monitor well MW-2

Monitor well MW-2 is sampled on an annual schedule. Laboratory analytical results from the sample collected on June 1, 2011, indicated benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory method detection limit (MDL) and less than NMOCD regulatory standards.

Monitor well MW-3

Monitor well MW-3 is sampled on a quarterly schedule. Laboratory analytical results indicated benzene concentrations ranged from 0.00321 mg/L in 4Q2011 to 0.0341 mg/L 1Q2011. Toluene concentrations ranged from less than the laboratory MDL in 2Q2011 and 4Q2011 to 0.0049 mg/L in 1Q2011. Ethylbenzene and total xylene concentrations were less than the appropriate laboratory MDL during all four quarters of the reporting period. Benzene concentrations exceeded NMOCD regulatory standards during 1Q2011 and 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate NMOCD regulatory standard during all four quarters of the reporting period.

SUMMARY

Based on the depth of the soil impact at this site, the NMOCD requested four (4) quarterly groundwater sampling events to be conducted at this site. This report presents the results of monitoring activities for the 2011 monitoring period. Currently, there are two (2) groundwater monitoring wells (MW-2 and MW-3) on-site. Monitor well MW-2 is sampled on an annual basis, and monitor well MW-3 is sampled on a quarterly basis.

Review of NMOSE records indicate a general groundwater gradient to the south-southwest.

Groundwater elevation data indicates observed groundwater elevations are approximately forty-four (44) feet more shallow than observed groundwater elevations presented in the 2007 (and prior) *Annual Monitoring Report*. This inconsistency in observed groundwater elevation may be related to the karstic nature of the subsurface beneath the release site, as depicted in the monitor well and recovery well logs previously submitted to the NMOCD.

Laboratory analytical results indicated benzene concentrations exceeded NMOCD regulatory standards during 1Q2011 and 3Q2011 in groundwater samples collected from monitor well MW-3. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards during all four quarters of the reporting period.

ANTICIPATED ACTIONS

On October 2, 2009, the NMOCD approved a modified sampling plan at the Ballard Grayburg 5-Inch release site. Monitor well MW-2 will be sampled on an annual basis, and monitor well MW-3 will be sampled on a quarterly basis.

A 2012 *Annual Monitoring Report* will be submitted to the NMOCD by April 1, 2013.

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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jhenry@paalp.com

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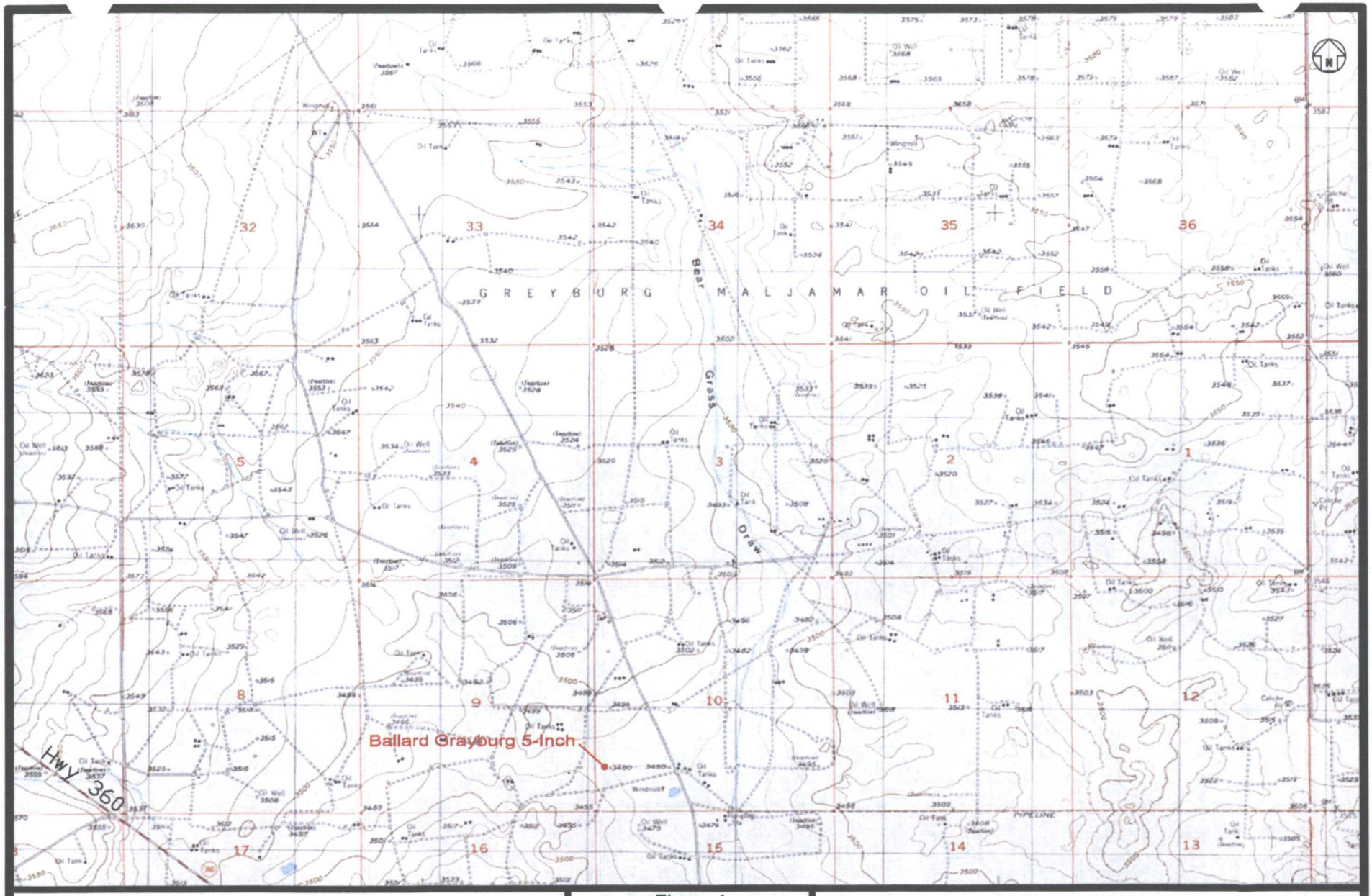
Lovington, New Mexico 88260

Figures



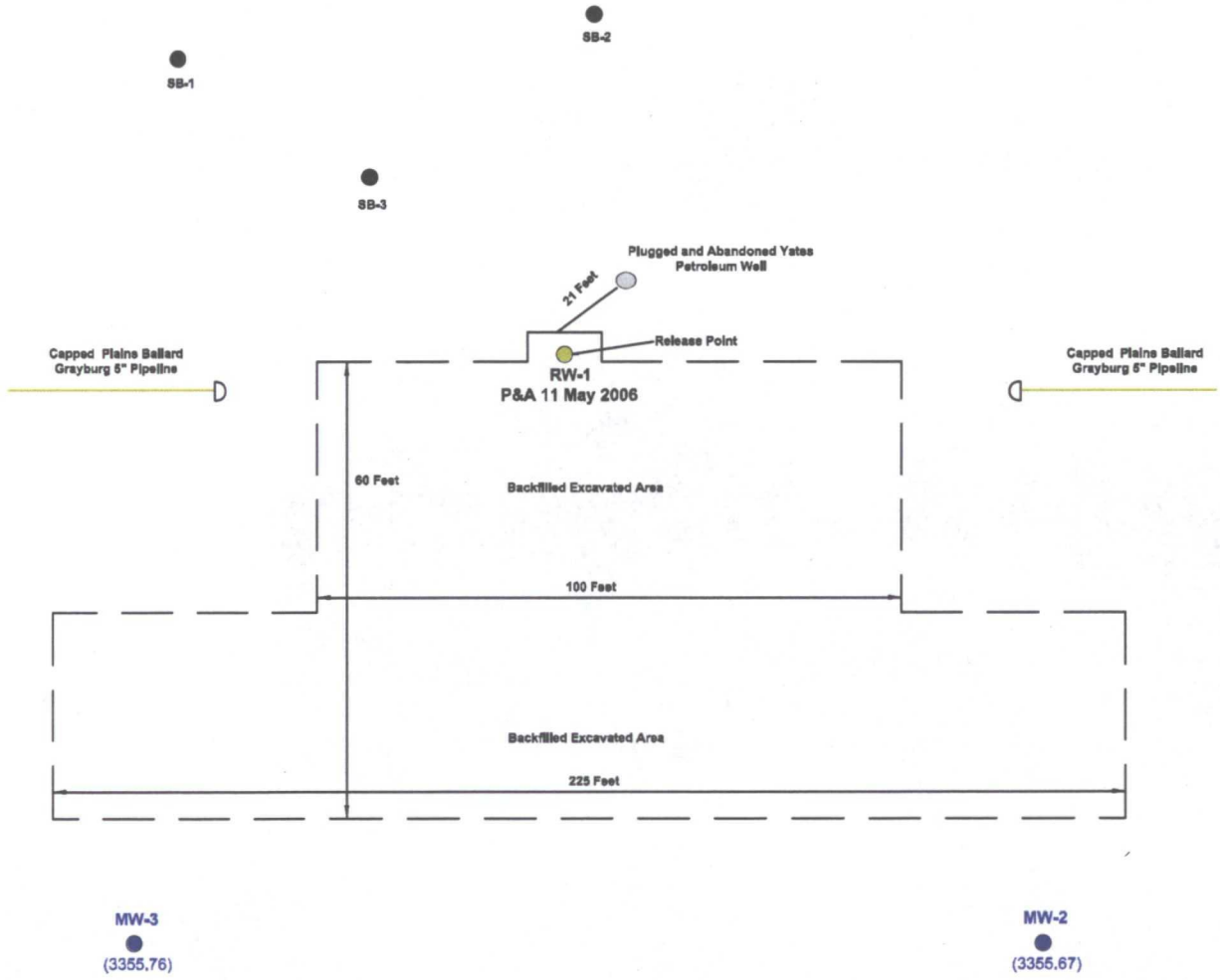
3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Ballard Grayburg 5-Inch
Plains Markering, L.P.
Lea County, New Mexico
2RP-0053

Basin Environmental Services

Prep By: CDS	Checked By: CDS
March 17, 2009	Scale 1"=3000'



LEGEND:

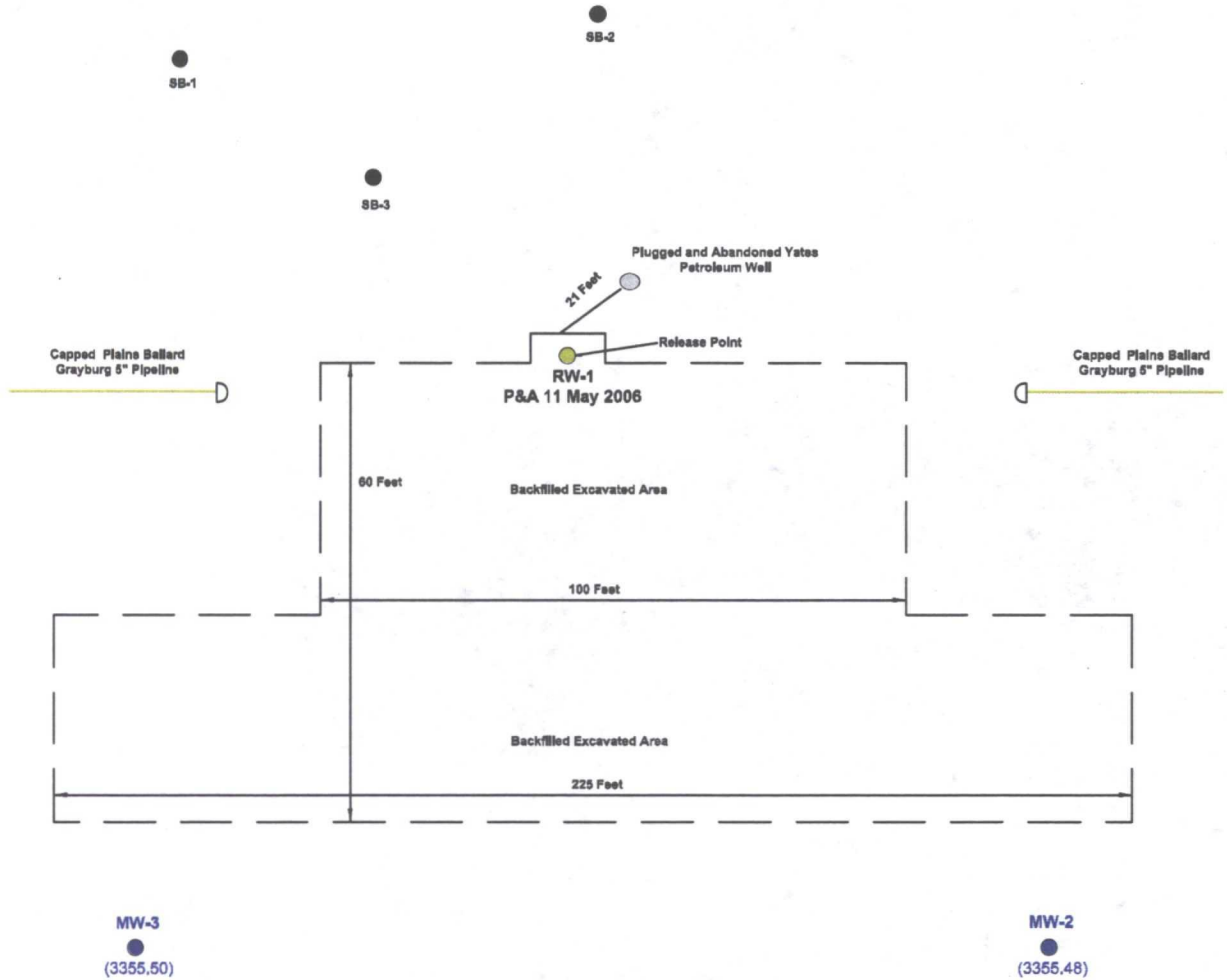
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.48) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2A
Groundwater Elevation
(03/16/2011)

Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Lea County, NM
2RP-0063

Basin Environmental Service Technologies

Scale: 1" = 80'	Drawn By: JWL	Prepared By: BJA
July 18, 2011	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



LEGEND:

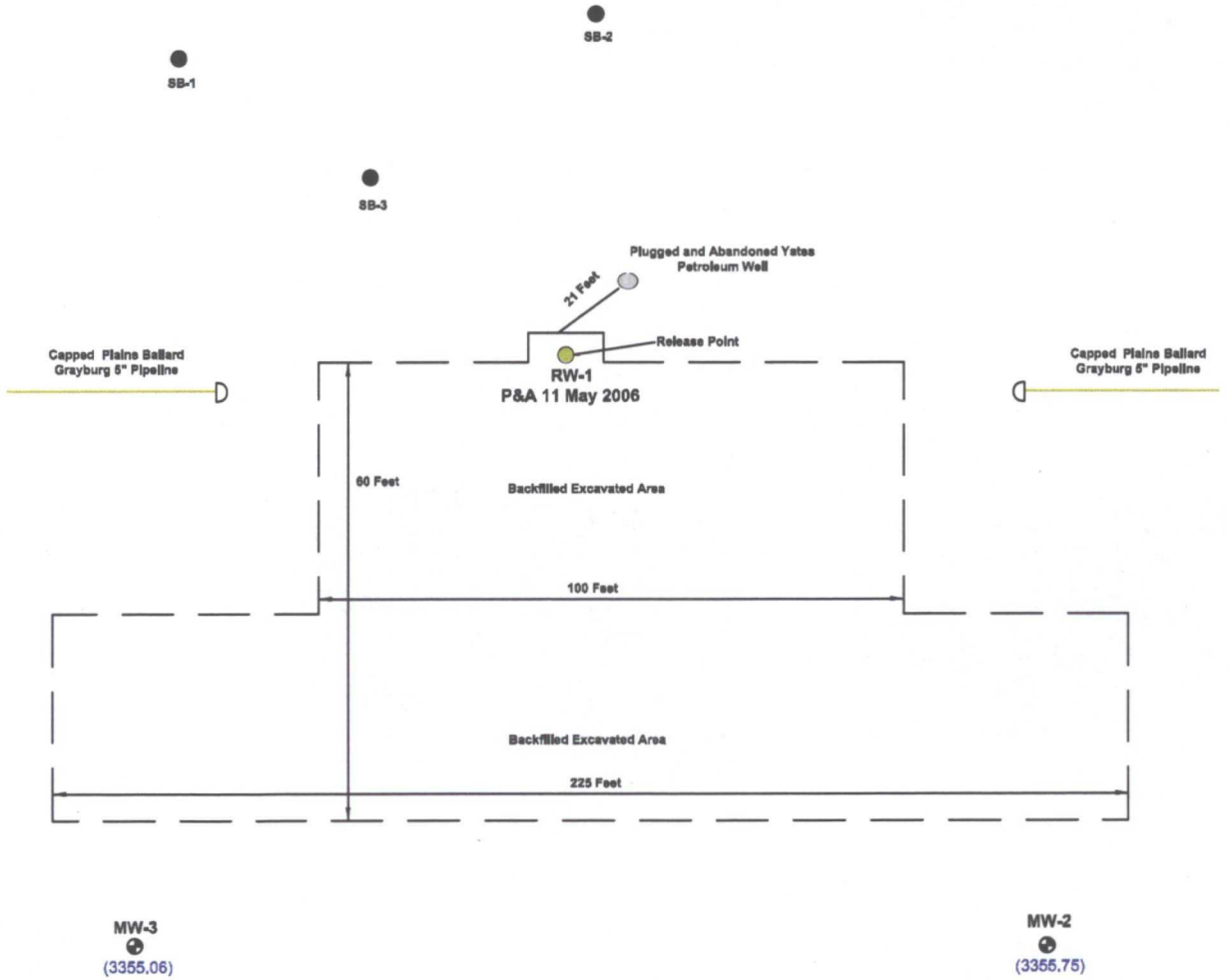
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.46) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2B
Groundwater Elevation
(06/01/2011)

Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Lea County, NM
2RP-0063

Basin Environmental Service Technologies

Scale: 1" = 80'	Drawn By: JWL	Prepared By: BJA
July 18, 2011	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



LEGEND:

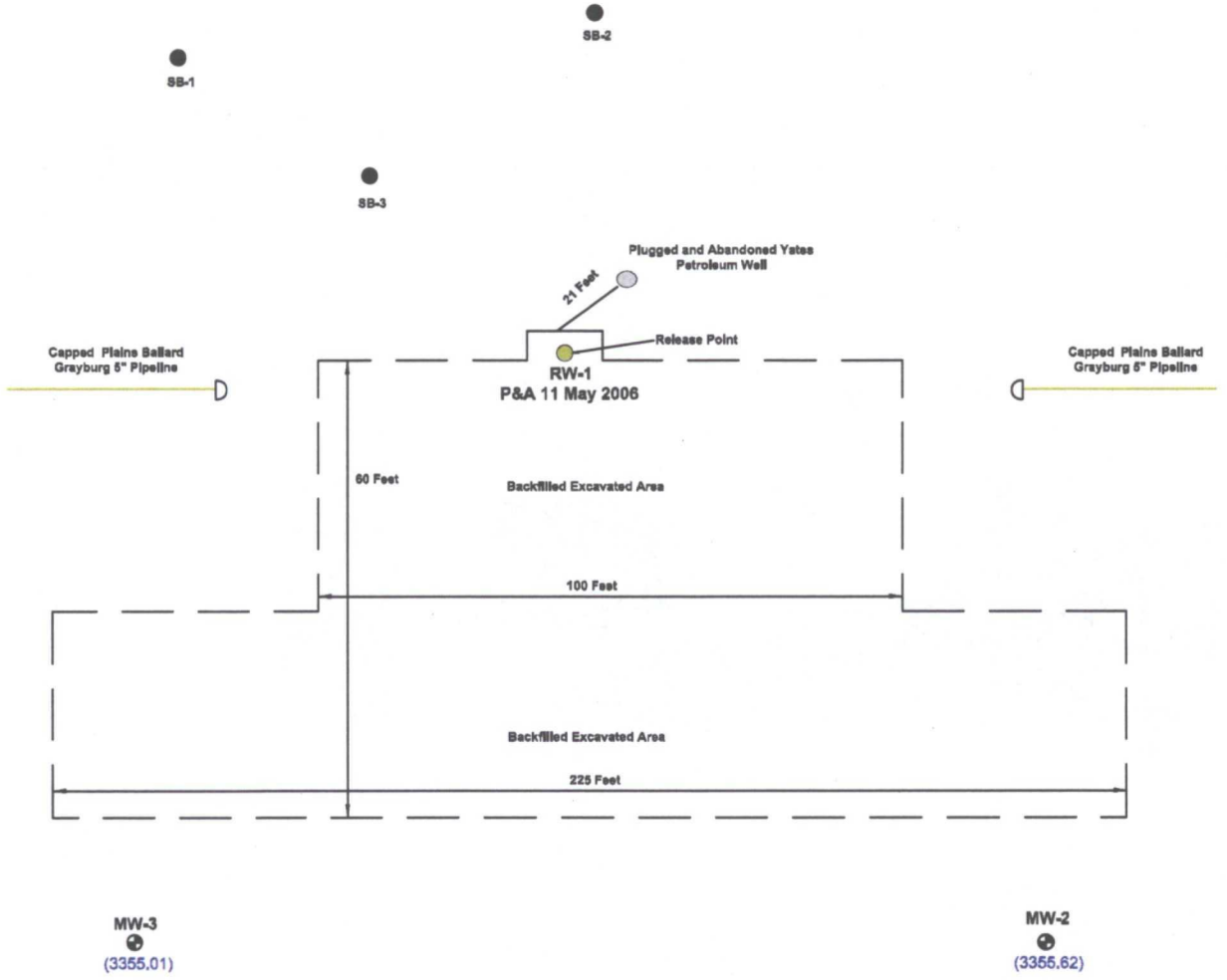
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.48) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2C
Groundwater Elevation
(09/07/2011)

Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Lea County, NM
2RP-0063

Basin Environmental Service Technologies

Scale: 1" = 80'	Drawn By: JWL	Prepared By: BJA
October 17, 2011	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



LEGEND:

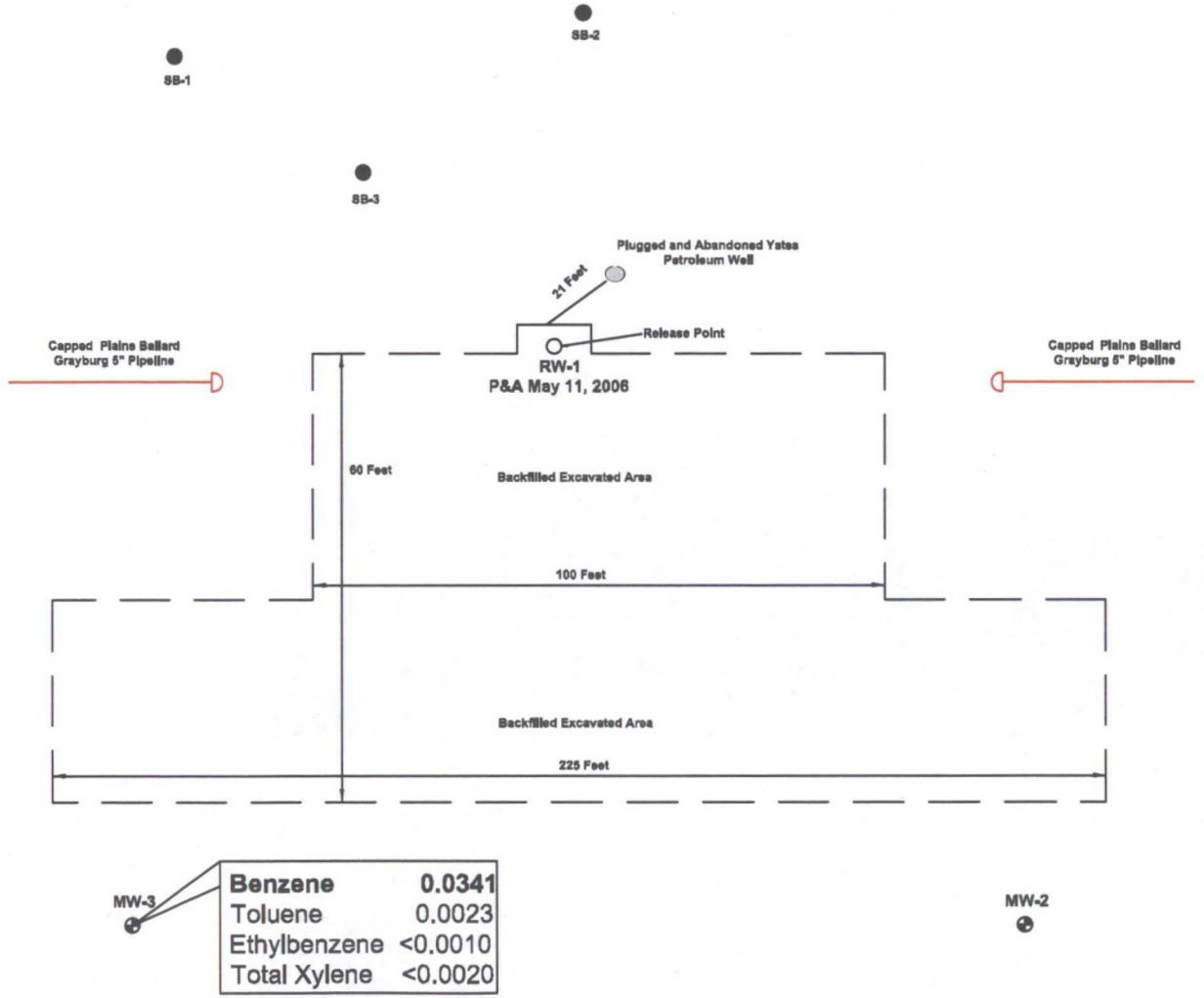
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.48) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2D
Groundwater Elevation
(10/26/2011)

Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Lea County, NM
2RP-0063

Basin Environmental Service Technologies

Scale: 1" = 80'	Drawn By: JWL	Prepared By: BJA
January 17, 2012	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



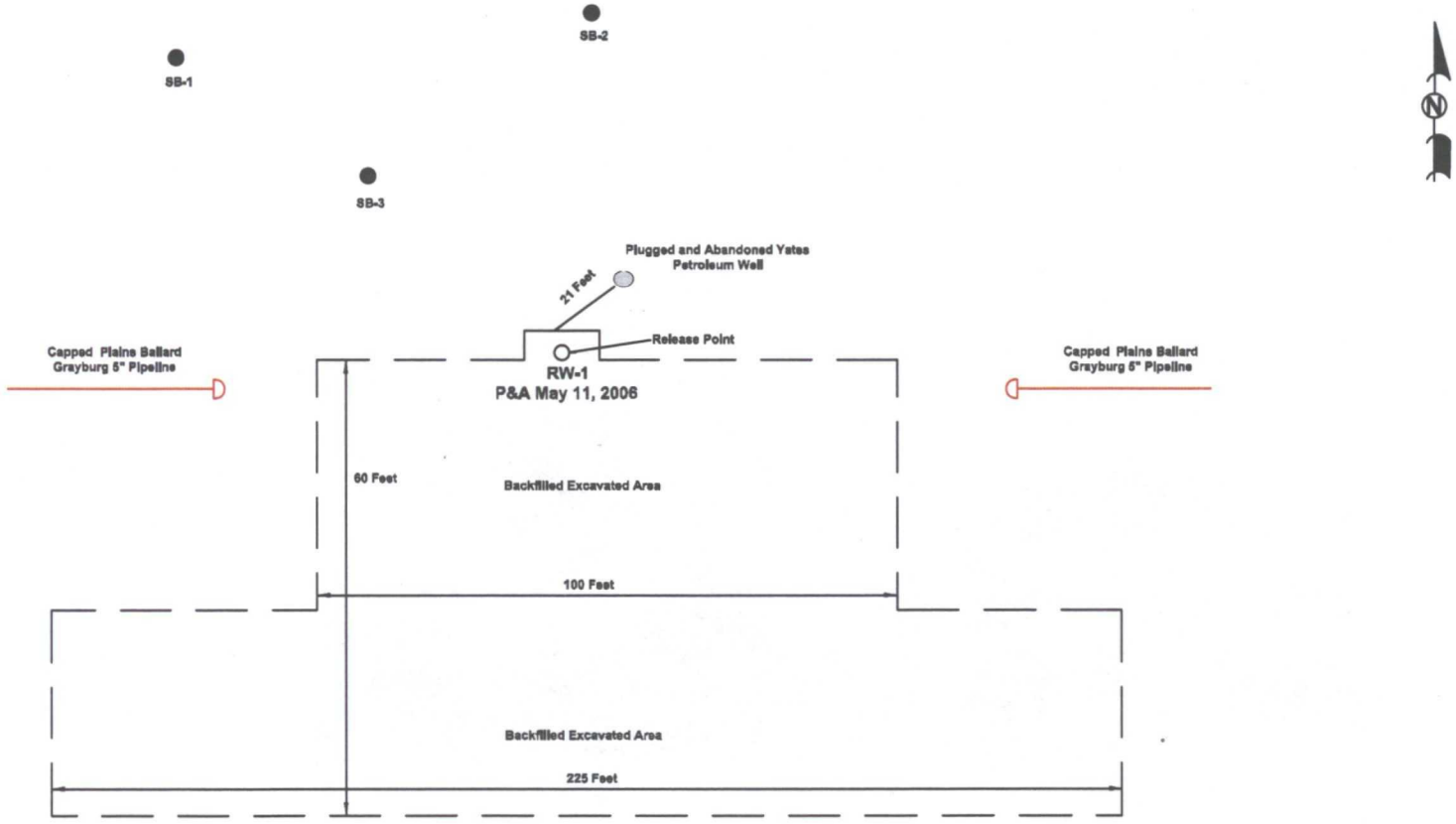
LEGEND:

- MW-1 Monitor Well Location
- Excavation Extents
- Pipeline
- SB-1 Soil Boring Location
- <0.001 Constituent Concentartion (mg/L)

Figure 3A
Groundwater Concentration Map
(3/16/2011)
Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Eddy County, NM
2RP-0053

Basin Environmental Service Technologies

Scale: Not to Scale	Drawn By: BJA	Prepared By:B A
April 18, 2011	SW1/4 SW1/4 Sec 10 T18S R29E	
	Lat. N32° 45' 27.1" Long. W104° 04' 12.0"	



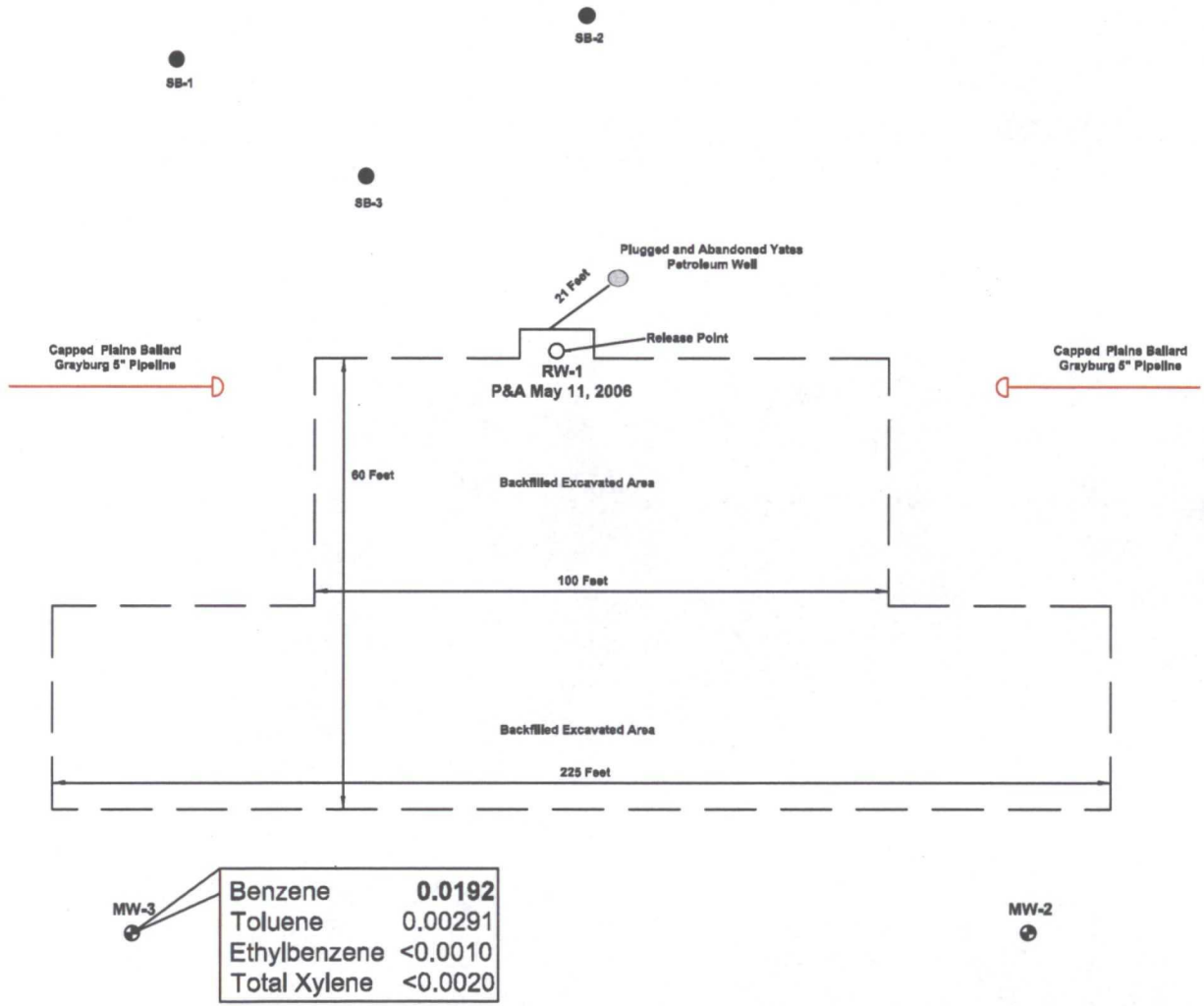
LEGEND:

- MW-1 Monitor Well Location
- Excavation Extents
- Pipeline
- SB-1 Soil Boring Location
- <0.001 Constituent Concentartion (mg/L)

Figure 3B
Groundwater Concentration Map
(6/1/2011)
Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Eddy County, NM
2RP-0053

Basin Environmental Service Technologies

Scale: Not to Scale	Drawn By: BJA	Prepared By:B A
July 18, 2011	SW1/4 SW1/4 Sec 10 T16S R29E	
	Lat. N32° 45' 27.1" Long. W104° 04' 12.0"	



LEGEND:

- MW-1 Monitor Well Location
- Excavation Extents
- Pipeline
- SB-1 Soil Boring Location
- <0.001 Constituent Concentartion (mg/L)

Figure 3C
Groundwater Concentration Map
(9/7/2011)
Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Eddy County, NM
2RP-0053

Basin Environmental Service Technologies

Scale: Not to Scale	Drawn By: BJA	Prepared By:B A
October 17, 2011	SW1/4 SW1/4 Sec 10 T18S R29E	
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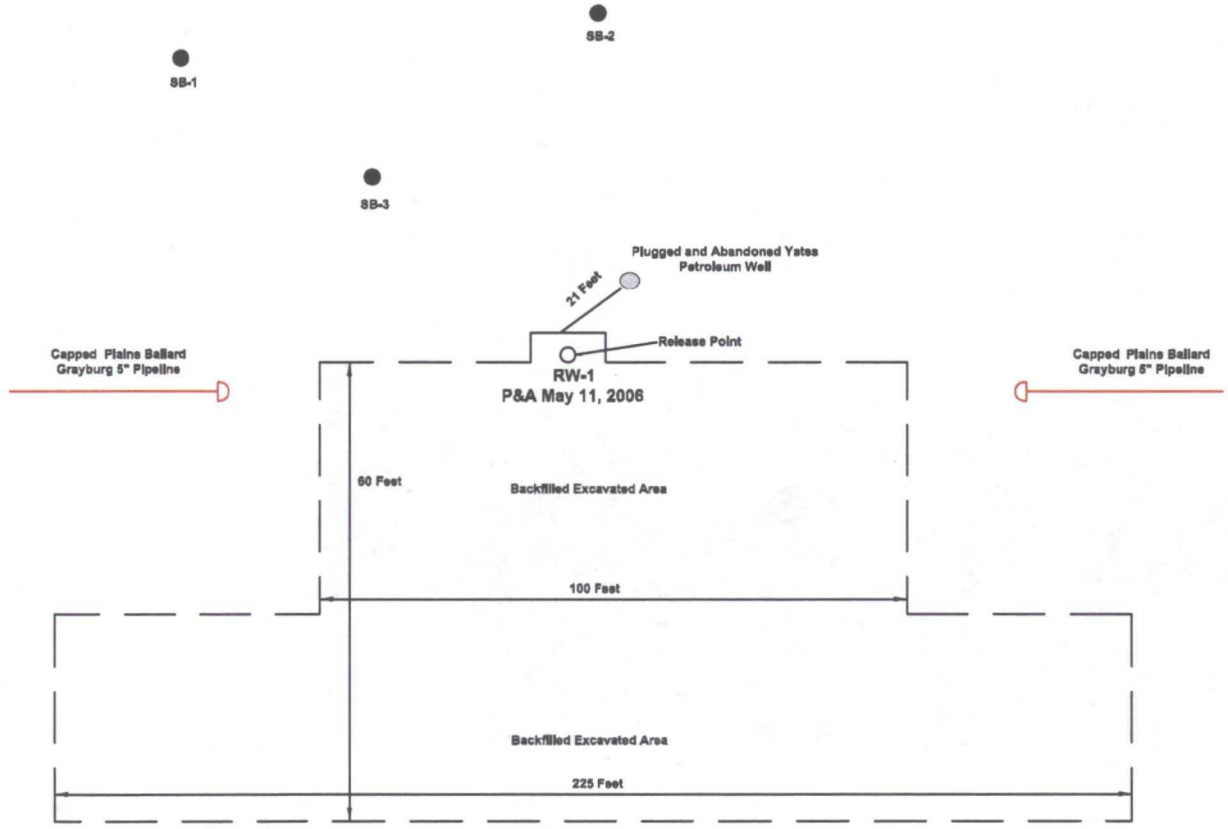

LEGEND:

- MW-1 Monitor Well Location
- Excavation Extents
- Pipeline
- SB-1 Soil Boring Location
- <0.001 Constituent Concentartion (mg/L)

Figure 3D
Groundwater Concentration Map
(10/26/2011)
Plains Marketing, L.P.
Ballard Grayburg 5-Inch
Eddy County, NM
2RP-0053

Basin Environmental Service Technologies

Scale: Not to Scale	Drawn By: BJA	Prepared By:B A
January 17, 2012	SW1/4 SW1/4 Sec 10 T18S R29E	
	Lat. N32° 45' 27.1" Long. W104° 04' 12.0"	

Tables

TABLE 1

2011 GROUNDWATER ELEVATION DATA

PLAINS PIPELINE, L.P.
BALLARD GRAYBURG 5-INCH
EDDY COUNTY, NEW MEXICO
PLAINS SRS NO: 2004-192
NMOCD REFERENCE NO: 2RP-0053

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	3/16/2011	3,497.90	-	142.23	-	3,355.67
	6/1/2011	3,497.90	-	142.42	-	3,355.48
	9/7/2011	3,497.90	-	142.15	-	3,355.75
	10/26/2011	3,497.90	-	142.29	-	3,355.62
MW-3	3/16/2011	3,497.91	-	142.15	-	3,355.76
	6/1/2011	3,497.91	-	142.41	-	3,355.50
	9/7/2011	3,497.91	-	142.85	-	3,355.06
	10/26/2011	3,497.91	-	142.90	-	3,355.01
NOTE: RW-1 Plugged & Abandoned May 11, 2006						

TABLE 2

2011 CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
BALLARD GRAYBURG 5"
EDDY COUNTY, NEW MEXICO
PLAINS EMS NO. 2004-00206

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b						
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENE (mg/L)	TOTAL BTEX (mg/L)
MW-2	6/1/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
MW-3	3/16/2011	**0.0341**	0.0049	<0.0010	<0.0020	<0.0010	<0.0020	0.0390
	6/1/2011	0.00713	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00713
	9/7/2011	**0.0192**	0.00291	<0.0010	<0.0020	<0.0010	<0.0020	0.0221
	10/26/2011	0.00321	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00321
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**			

Appendices

Appendix A
Laboratory Analytical Reports

Analytical Report 410356

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Ballard Grayburg 5"

2004-00192

25-MAR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-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: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

25-MAR-11

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

Reference: XENCO Report No: **410356**
Ballard Grayburg 5"
Project Address: Eddy 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 410356. 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. 410356 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

XENCO Laboratories

Sample Cross Reference 410356

PLAINS ALL AMERICAN EH&S, Midland, TX

Ballard Grayburg 5"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	Mar-16-11 15:30		410356-001
Storage Blank	W	Mar-18-11 07:00		410356-002

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Ballard Grayburg 5"

Project ID:	*2004-00192*	*Report Date:*	*25-MAR-11*
Work Order Number:	*410356*	*Date Received:*	*03/18/2011*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Certificate of Analys ummary 410356

PLAINS ALL AMERICA ..H&S, Midland, TX

Project Name: Ballard Grayburg 5"

Project Id: 2004-00192
Contact: Jason Henry
Project Location: Eddy County, NM

Date Received in Lab: Fri Mar-18-11 02:33 pm
Report Date: 25-MAR-11
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	410356-001		410356-002					
	Field Id:	MW-3		Storage Blank					
	Depth:								
	Matrix:	WATER		WATER					
	Sampled:	Mar-16-11 15:30		Mar-18-11 07:00					
BTEX by EPA 8021B	***Extracted:***	Mar-21-11 13:45		Mar-21-11 13:45					
	Analyzed:	Mar-21-11 20:53		Mar-21-11 20:30					
	Units/RL:	mg/L	RL	mg/L	RL				
Benzene		0.0341	0.0010	ND	0.0010				
Toluene		0.00493	0.0020	ND	0.0020				
Ethylbenzene		ND	0.0010	ND	0.0010				
m_p-Xylenes		ND	0.0020	ND	0.0020				
o-Xylene		ND	0.0010	ND	0.0010				
Total Xylenes		ND	0.0010	ND	0.0010				
Total BTEX		0.0390	0.0010	ND	0.0010				

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5"

ork Orders : 410356,

Project ID: 2004-00192

Lab Batch #: 848690 **Sample:** 598593-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/21/11 18:37

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 848690 **Sample:** 598593-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/21/11 19:00

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0309	0.0300	103	80-120	

Lab Batch #: 848690 **Sample:** 598593-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/21/11 20:08

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 848690 **Sample:** 410356-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/21/11 20:30

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 848690 **Sample:** 410356-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/21/11 20:53

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0308	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

'1' results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5"

Work Orders : 410356,

Project ID: 2004-00192

Lab Batch #: 848690 **Sample:** 410286-003 D / MD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/22/11 00:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	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 / BS[illegible] Recoveries

Project Name: Ballard Grayburg 5"

Work Order #: 410356 **Project ID:** 2004-00192

Analyst: ASA **Date Prepared:** 03/21/2011 **Date Analyzed:** 03/21/2011

Lab Batch ID: 848690 **Sample:** 598593-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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
Benzene	<0.00100	0.100	0.112	112	0.100	0.112	112	0	70-125	25	
Toluene	<0.00200	0.100	0.113	113	0.100	0.113	113	0	70-125	25	
Ethylbenzene	<0.00100	0.100	0.111	111	0.100	0.112	112	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.222	111	0.200	0.223	112	0	70-131	25	
o-Xylene	<0.00100	0.100	0.114	114	0.100	0.115	115	1	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

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Ballard Grayburg 5"

Work Order #: 410356

Lab Batch #: 848690 **Project ID:** 2004-00192

Date Analyzed: 03/22/2011 00:17 **Date Prepared:** 03/21/2011 **Analyst:** ASA

QC- Sample ID: 410286-003 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by EPA 8021B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	<0.00100	<0.00100	0	25	
Toluene	<0.00200	<0.00200	0	25	
Ethylbenzene	<0.00100	<0.00100	0	25	
m_p-Xylenes	<0.00200	<0.00200	0	25	
o-Xylene	<0.00100	<0.00100	0	25	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Ben Arguijo PAGE 01 OF 01 Project Name: BALLARD GRAYBURG 5"

Company Name: Basin Environmental Service Technologies, LLC Project #: 2004-00192

Company Address: P.O. Box 301 Project Loc: Eddy County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA J. Henry

Telephone No: (575)396-2378 Fax No: (575) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: DAT e-mail: pm@basinenv.com

(lab use only)
ORDER #: 410356

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	MW-3			3/16/2011	1530		3	X		X						GW								X				X
	Trip Blank			3/18/2011	0700		2	X		X						DI H_2O								X				X

Special Instructions:
Run BTEX on MW-3 sample first. Call with results before analyzing Trip Blank.

Relinquished by:	Date	Time	Received by:	Date	Time
DAT	3-18	2:33			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Lisa Murdock	3-18-11	2:33

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star
VOZ75
Temperature Upon Receipt: 6 °C

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No.: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 3-18-11 2:33

Lab ID #: 410356

Initials: LM

Sample Receipt Checklist

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

18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs (6) °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

Analytical Report 418529

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Ballard Grayburg 5"

2004-00192

06-JUN-11

Collected By: Client

XENCO Laboratories

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-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: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

06-JUN-11

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

Reference: XENCO Report No: **418529**
Ballard Grayburg 5"
Project Address: Eddy 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 418529. 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

XENCO Laboratories

Sample Cross Reference 418529

PLAINS ALL AMERICAN EH&S, Midland, TX

Ballard Grayburg 5"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Jun-01-11 15:50		418529-001
MW-3	W	Jun-01-11 16:45		418529-002
Trip Blank	W	Jun-01-11 07:40		418529-003

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Ballard Grayburg 5"

Project ID:	*2004-00192*	*Report Date:*	*06-JUN-11*
Work Order Number:	*418529*	*Date Received:*	*06/02/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 418529

PLAINS ALL AMERICA, EH&S, Midland, TX

Project Name: Ballard Grayburg 5"

Project Id: 2004-00192
Contact: Jason Henry
Project Location: Eddy County, NM

Date Received in Lab: Thu Jun-02-11 02:00 pm
Report Date: 06-JUN-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	418529-001		418529-002		418529-003				
	Field Id:	MW-2		MW-3		Trip Blank				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Jun-01-11 15:50		Jun-01-11 16:45		Jun-01-11 07:40				
BTEX by EPA 8021	*Extracted:*	Jun-03-11 16:00		Jun-03-11 16:00		Jun-03-11 16:00				
	Analyzed:	Jun-04-11 22:12		Jun-04-11 22:35		Jun-04-11 22:57				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		ND	0.0010	0.00713	0.0010	ND	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	0.0010	ND	0.0010	ND	0.0010			
Total BTEX		ND	0.0010	0.00713	0.0010	ND	0.0010			

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 affect the recovery of the spike concentration. This condition could also affect 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

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5"

rk Orders : 418529,

Project ID: 2004-00192

Lab Batch #: 858722 **Sample:** 604371-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 09:08

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 858722 **Sample:** 604371-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 09:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 858722 **Sample:** 604371-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 10:38

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 858722 **Sample:** 418641-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 19:55

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 858722 **Sample:** 418641-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 20:18

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	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.

Final 1.000

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5"

Work Orders : 418529,

Project ID: 2004-00192

Lab Batch #: 858722 **Sample:** 418529-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 22:12

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0294	0.0300	98	80-120	

Lab Batch #: 858722 **Sample:** 418529-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 22:35

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0307	0.0300	102	80-120	

Lab Batch #: 858722 **Sample:** 418529-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 22:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0314	0.0300	105	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.

Xenco Laboratories

BS / BS. .ecoveries

Project Name: Ballard Grayburg 5"

Work Order #: 418529
Analyst: ASA
Lab Batch ID: 858722
Sample: 604371-1-BKS
Batch #: 1
Units: mg/L

Date Prepared: 06/03/2011

Project ID: 2004-00192
Date Analyzed: 06/04/2011
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 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
Benzene	<0.00100	0.100	0.104	104	0.100	0.0972	97	7	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.0974	97	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.104	104	0.100	0.0966	97	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.222	111	0.200	0.205	103	8	70-131	25	
o-Xylene	<0.00100	0.100	0.121	121	0.100	0.113	113	7	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

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Ballard Grayburg 5"

Work Order # : 418529 **Project ID:** 2004-00192

Lab Batch ID: 858722 **QC- Sample ID:** 418641-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 06/04/2011 **Date Prepared:** 06/03/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 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	<0.00100	0.100	0.0957	96	0.100	0.0973	97	2	70-125	25	
Toluene	<0.00200	0.100	0.0980	98	0.100	0.0997	100	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0935	94	0.100	0.0960	96	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.199	100	0.200	0.200	100	1	70-131	25	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.108	108	1	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Ben Arguijo PAGE 01 OF 01 Project Name: BALLARD GRAYBURG 5"

Company Name: Basin Environmental Service Technologies, LLC Project #: 2004-00192

Company Address: P.O. Box 301 Project Loc: Eddy County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA J. Henry

Telephone No: (575)396-2378 Fax No: (575) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Dakotan Ward e-mail: pm@basinenv.com

(lab use only)
ORDER #: 419529

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O2	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-2			6/1/2011	15:50		3	X		X						GW								X				X
02	MW-3			6/1/2011	16:45		3	X		X						GW								X				X
03	Trip Blank			6/1/2011	0740		3	X		X						DI H_2O								X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotan Ward	6/1/11	1800		6/1/11	1800
Relinquished by:	Date	Time	Received by:	Date	Time
	6/2/11	1400			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	6-2-11	14:00

Laboratory Comments:

Sample Containers Intact?	Y N
VOCs Free of Headspace?	Y N
Labels on container(s)	Y N
Custody seals on container(s)	Y N
Custody seals on cooler(s)	Y N
Sample Hand Delivered by Sampler/Client Rep.?	Y N
by Courier? UPS DHL FedEx Lone Star	

Temperature Upon Receipt: 3.6 °C

XENCO Laboratories

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: Basin Env. / Plains
Date/Time: 6.7.11 14:00
Lab ID # : 419529
Initials: AZ

Sample Receipt Checklist

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

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 427282

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

BALLARD GRAYBURG 5"

2004-00192

15-SEP-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), 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 Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

15-SEP-11

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

Reference: XENCO Report No: **427282**
BALLARD GRAYBURG 5"
Project Address: Eddy 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 427282. 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. 427282 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

XENCO Laboratories

Sample Cross Reference 427282

PLAINS ALL AMERICAN EH&S, Midland, TX

BALLARD GRAYBURG 5"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	09-07-11 11:00		427282-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: BALLARD GRAYBURG 5"

Project ID:	*2004-00192*	*Report Date:*	*15-SEP-11*
Work Order Number:	*427282*	*Date Received:*	*09/08/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy[illegible]ummary 427282

PLAINS ALL AMERICA[illegible]EH&S, Midland, TX

Project Name: BALLARD GRAYBURG 5"

Project Id: 2004-00192
Contact: Jason Henry
Project Location: Eddy County, NM

Date Received in Lab: Thu Sep-08-11 01:30 pm
Report Date: 15-SEP-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	427282-001					
	Field Id:	MW-3					
	Depth:						
	Matrix:	WATER					
	Sampled:	Sep-07-11 11:00					
BTEX by EPA 8021	*Extracted:*	Sep-09-11 17:15					
	Analyzed:	Sep-10-11 14:43					
	Units/RL:	mg/L	RL				
Benzene		0.0192	0.00100				
Toluene		0.00291	0.00200				
Ethylbenzene		ND	0.00100				
m_p-Xylenes		ND	0.00200				
o-Xylene		ND	0.00100				
Xylenes, Total		ND	0.00100				
Total BTEX		0.0221	0.00100				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 affect the recovery of the spike concentration. This condition could also affect 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 quantiation limit and above the detection limit.

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 **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BALLARD GRAYBURG 5"

rk Orders : 427282,

Project ID: 2004-00192

Lab Batch #: 869745 **Sample:** 427282-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 14:43

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 869745 **Sample:** 611243-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 13:57

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 869745 **Sample:** 611243-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 12:26

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 869745 **Sample:** 611243-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 12:49

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 869745 **Sample:** 427280-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 17:24

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
1,4-Difluorobenzene	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0280	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.

Final 1.000

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BALLARD GRAYBURG 5"

Work Orders : 427282,

Project ID: 2004-00192

Lab Batch #: 869745 **Sample:** 427280-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/10/11 17:47

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	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.

Xenco Laboratories

BS / BS. .ecoveries

Project Name: BALLARD GRAYBURG 5"

Work Order #: 427282 **Project ID:** 2004-00192

Analyst: ASA **Date Prepared:** 09/09/2011 **Date Analyzed:** 09/10/2011

Lab Batch ID: 869745 **Sample:** 611243-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 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
Benzene	<0.00100	0.100	0.104	104	0.100	0.109	109	5	70-125	25	
Toluene	<0.00200	0.100	0.0933	93	0.100	0.0990	99	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.103	103	0.100	0.110	110	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.202	101	0.200	0.219	110	8	70-131	25	
o-Xylene	<0.00100	0.100	0.0952	95	0.100	0.104	104	9	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

Final 1.000

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: BALLARD GRAYBURG 5"

Work Order # : 427282 **Project ID:** 2004-00192

Lab Batch ID: 869745 **QC- Sample ID:** 427280-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/10/2011 **Date Prepared:** 09/09/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 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	0.305	0.100	0.396	91	0.100	0.407	102	3	70-125	25	
Toluene	0.180	0.100	0.260	80	0.100	0.269	89	3	70-125	25	
Ethylbenzene	0.0152	0.100	0.109	94	0.100	0.116	101	6	71-129	25	
m_p-Xylenes	0.0202	0.200	0.204	92	0.200	0.220	100	8	70-131	25	
o-Xylene	0.00934	0.100	0.0950	86	0.100	0.103	94	8	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Ben Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dakotah Ward e-mail: pm@basinenv.com

Project Name: BALLARD GRAYBURG 5"
Project #: 2004-00192
Project Loc: Eddy County, NM
PO #: PAA J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 427282

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl 40ml/VOA	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW = Drinking Water SL = Sludge	CW = Groundwater S = Soil/Sol	NP = Non-Potable Specify Oth	Analyze For: TCLP: TOTAL: TPH: 418.1 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (X)	RCI	N.O.R.M.	Chlorides	TDS		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
CC1	MW-3			9/7/2011	1100		3	X		X						GW										X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotah Ward	9/8/11	1370			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	9-8-11	13:30

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 2.6 °C

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains C

Date/Time: 9/8/11 13:30

Lab ID #: 427252

Initials: QE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.6 °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

Analytical Report 430347

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Ballard Grayburg 5-Inch

2004-00192

28-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), 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 Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

28-OCT-11

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

Reference: XENCO Report No: **430347**
Ballard Grayburg 5-Inch
Project Address: Eddy 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 430347. 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. 430347 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

XENCO Laboratories

Sample Cross Reference 430347

PLAINS ALL AMERICAN EH&S, Midland, TX

Ballard Grayburg 5-Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	10-26-11 10:15		430347-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Ballard Grayburg 5-Inch

Project ID:	*2004-00192*	*Report Date:*	*28-OCT-11*
Work Order Number:	*430347*	*Date Received:*	*10/27/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy[illegible]ummary 430347

PLAINS ALL AMERIC[illegible]H&S, Midland, TX

Project Name: Ballard Grayburg 5-Inch

Project Id: 2004-00192
Contact: Jason Henry
Project Location: Eddy County, NM

Date Received in Lab: Thu Oct-27-11 12:05 pm
Report Date: 28-OCT-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	430347-001					
	Field Id:	MW-3					
	Depth:						
	Matrix:	WATER					
	Sampled:	Oct-26-11 10:15					
BTEX by EPA 8021	***Extracted:***	Oct-27-11 14:30					
	Analyzed:	Oct-27-11 23:29					
	Units/RL:	mg/L	RL				
Benzene		0.00321	0.00100				
Toluene		ND	0.00200				
Ethylbenzene		ND	0.00100				
m_p-Xylenes		ND	0.00200				
o-Xylene		ND	0.00100				
Xylenes, Total		ND	0.00100				
Total BTEX		0.00321	0.00100				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 affect the recovery of the spike concentration. This condition could also affect 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 quantiation limit and above the detection limit.

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.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5-Inch

rk Orders : 430347,

Project ID: 2004-00192

Lab Batch #: 873382 **Sample:** 430347-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/27/11 23:29

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 873382 **Sample:** 613305-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/27/11 17:25

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 873382 **Sample:** 613305-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/27/11 15:53

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 873382 **Sample:** 613305-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/27/11 16:16

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 873382 **Sample:** 430347-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/28/11 02:07

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0277	0.0300	92	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

[1] results are based on MDL and validated for QC purposes.

Final 1.000

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Ballard Grayburg 5-Inch

Work Orders : 430347,

Project ID: 2004-00192

Lab Batch #: 873382 **Sample:** 430347-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/28/11 02:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	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 / BS. Recoveries

Project Name: Ballard Grayburg 5-Inch

Work Order #: 430347
Analyst: ASA
Lab Batch ID: 873382
Sample: 613305-1-BKS
Units: mg/L

Date Prepared: 10/27/2011
Batch #: 1

Project ID: 2004-00192
Date Analyzed: 10/27/2011
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 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
Benzene	<0.00100	0.100	0.101	101	0.100	0.104	104	3	70-125	25	
Toluene	<0.00200	0.100	0.103	103	0.100	0.106	106	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.111	111	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.220	110	4	70-131	25	
o-Xylene	<0.00100	0.100	0.106	106	0.100	0.110	110	4	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: Ballard Grayburg 5-Inch

Work Order # : 430347 **Project ID:** 2004-00192

Lab Batch ID: 873382 **QC- Sample ID:** 430347-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/28/2011 **Date Prepared:** 10/27/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 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	0.00321	0.100	0.0904	87	0.100	0.0944	91	4	70-125	25	
Toluene	<0.00200	0.100	0.0863	86	0.100	0.0919	92	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0873	87	0.100	0.0932	93	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.153	77	0.200	0.161	81	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0815	82	0.100	0.0879	88	8	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Xe..o Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Cody Ward e-mail: pm@basinenv.com

Project Name: Ballard Grayburg 5-Inch
Project #: 2004-00192
Project Loc: Eddy County, NM
PO #: PAA J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 430347

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	TDS	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-3			10/26/2011	1015		3	X		X						GW								X						X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cody Ward	10/27/11	0745		10/27/11	7:50
Relinquished by:	Date	Time	Received by:	Date	Time
	10/27/11	12:05			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	10-27-11	12:05

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star
40 ml VOA
Temperature Upon Receipt: 2.5 °C

Final 1.000

XENCO Laboratories

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: Basin Env. / Plains
Date/Time: 10.27.11 12.05
Lab ID # : 430347
Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.5 °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 Marketing, LP	Contact Camille Reynolds
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965
Facility Name Ballard Greyburg 5" #2	Facility Type 5"Steel Pipeline

Surface Owner BLM	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
M	10	18S	29E					Eddy

Latitude 32°45'27.1" Longitude 104°04'12.0"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 80 barrels	Volume Recovered 0 barrels
Source of Release 5" Steel Pipeline	Date and Hour of Occurrence 9-2-04 @ 06:00	Date and Hour of Discovery 9-2-04 @ 08:45
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Van Barton	
By Whom? Ken Dutton	Date and Hour 9-2-04 @ 14:32	
Was a Watercourse Reached? ☐ Yes ☒ 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 5" steel pipeline. A line clamp was installed to mitigate the release. The line is a 5-inch steel gathering line that produces approximately 95 barrels of crude per day. The pressure on the line varies from 50 to 70 psi and the gravity of the sour crude oil is 39. The sour crude has an H_2S content of 20 ppm

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 10 x 6 feet, subsequent excavation of impacted soil resulted in an area of approximately 22 x 23 x 13 feet.

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: Camille Reynolds

Printed Name: Camille Reynolds

Title: Remediation Coordinator

E-mail Address: cjreynolds@paalp.com

Date: 9-7-04 Phone:505-441-0965

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

Attach Additional Sheets If Necessary