1R - 385

Annual GW Mon. REPORTS

DATE:

2007

PLAINS
ALL AMERICAN

RECEIVED
2008 APR 3 PM 2 05

March 31, 2008

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

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

Dear Mr. Hansen,

Pursuant to our phone conversation regarding the Annual Groundwater Monitoring Reports for the Plains Vacuum 10-Inch to Jal release site, NMOCD # 1R-0385 and the Lovington Gathering WTI release site, NMOCD #1R-838, the consultant for these sites has serious health issues and was unable to complete the reports. Enclosed are the Groundwater Concentration Maps, Groundwater Chemistry Tables and Groundwater Elevations Tables for each site. A complete report will be sent to your office as soon as possible. Plains greatly appreciates your understanding in this matter and will make every effort to submit the completed reports in a timely manner.

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

Sincerely,

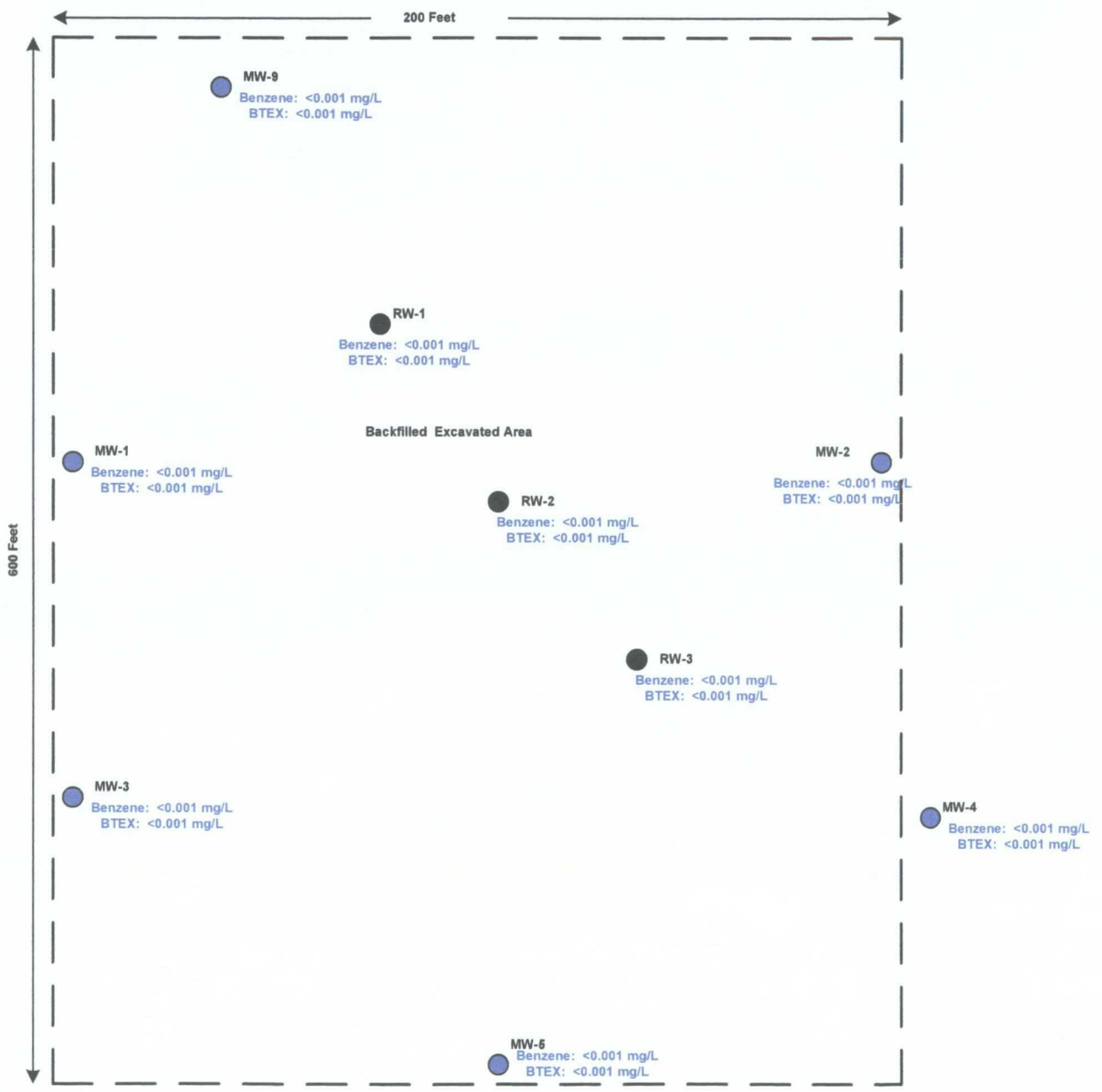
Camille Bryant

Camille Bryant
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



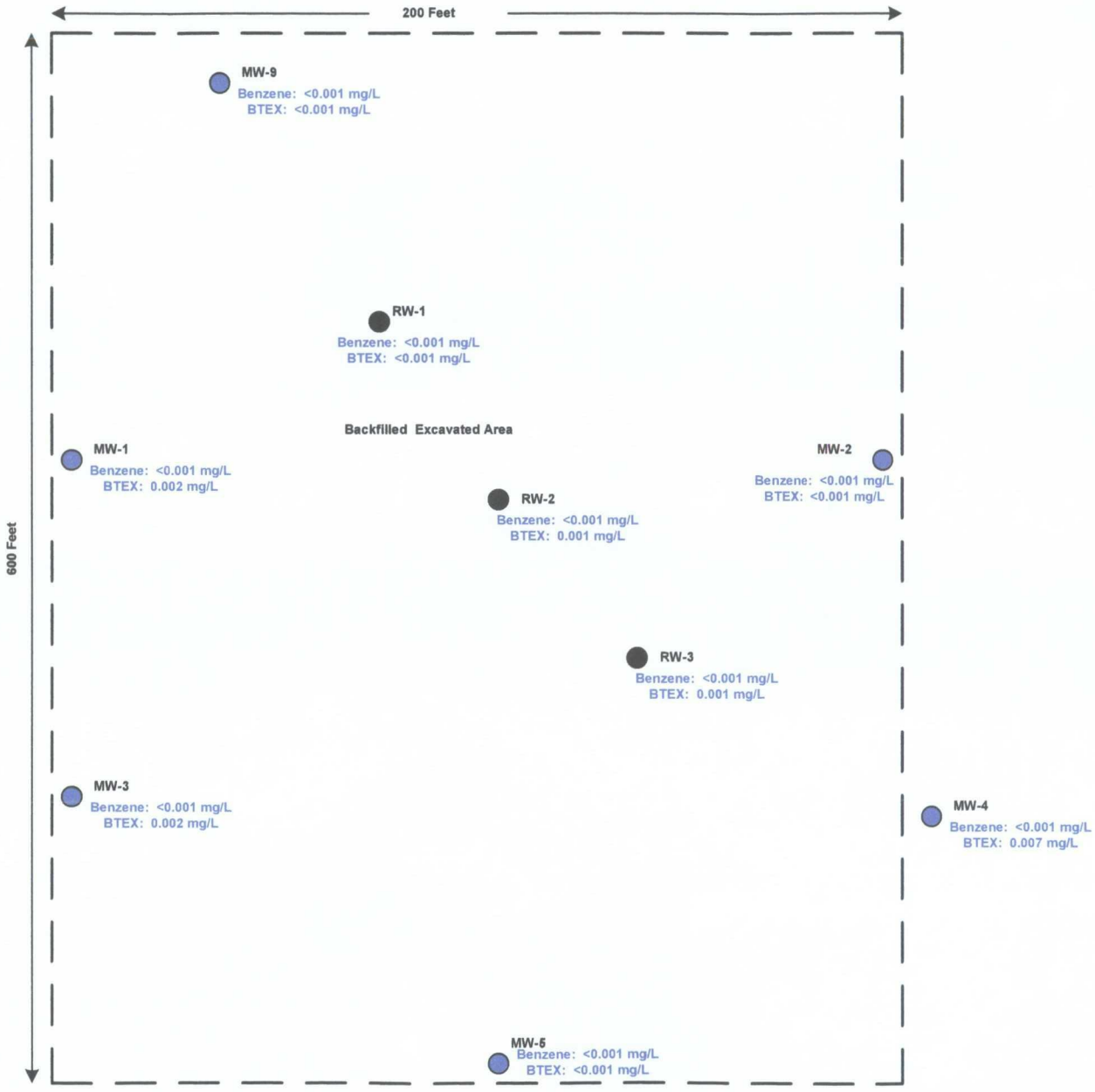
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3A
Groundwater Concentration (BTEX) Map
21 & 22 March 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



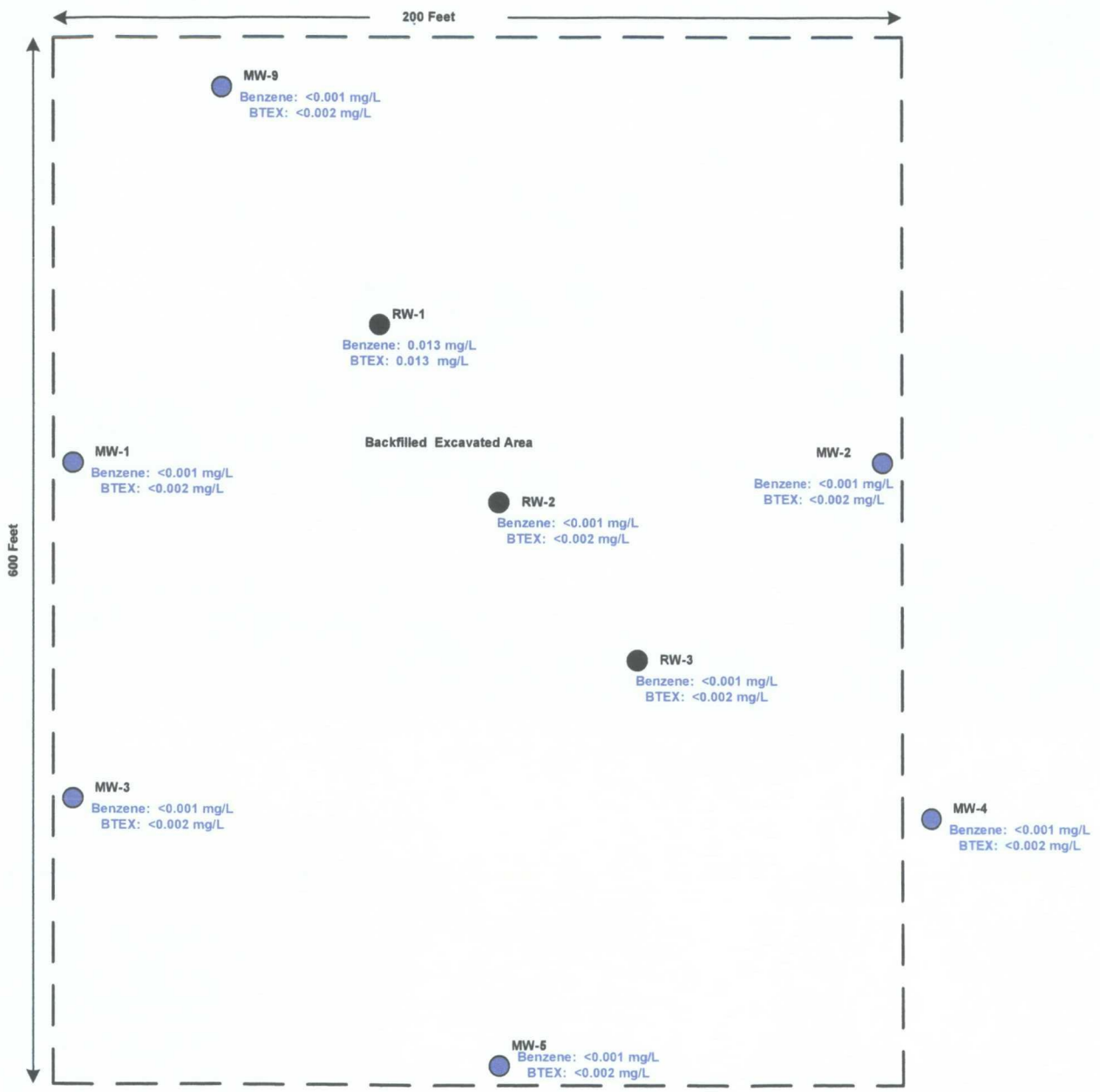
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3B
Groundwater Concentration (BTEX) Map
31 May & 01 June 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



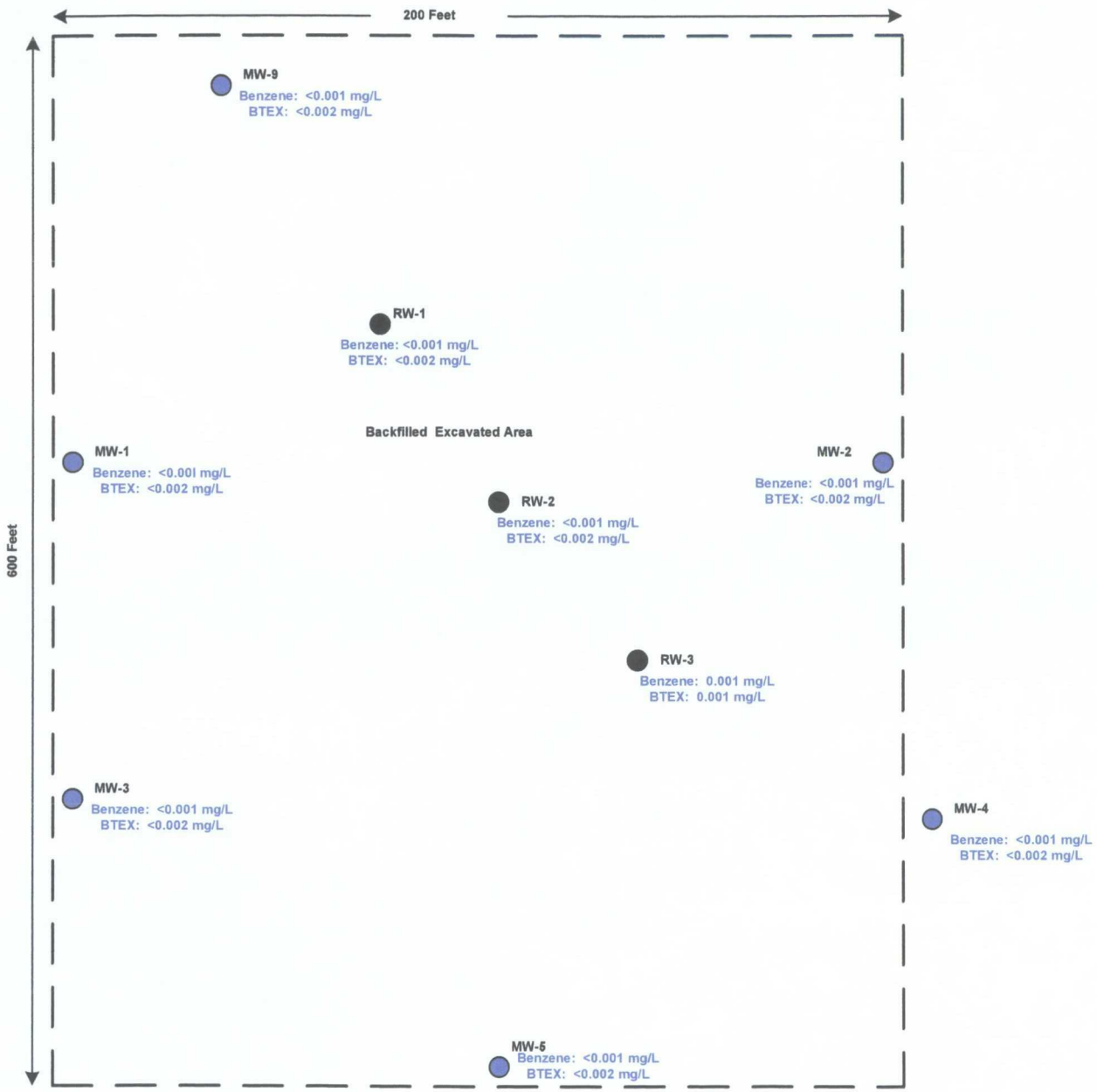
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3C
Groundwater Concentration (BTEX) Map
26 September 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3D
Groundwater Concentration (BTEX) Map
06 December 2007

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	03/21/07	3,627.07	-	19.84	0.00	3,607.23
	04/26/07	3,627.07	-	19.53	0.00	3,607.54
	05/31/07	3,627.07	-	19.51	0.00	3,607.56
	06/20/07	3,627.07	-	19.52	0.00	3,607.55
	07/31/07	3,627.07	-	19.53	0.00	3,607.54
	08/13/07	3,627.07	-	19.53	0.00	3,607.54
	09/26/07	3,627.07	-	19.53	0.00	3,607.54
	10/16/07	3,627.07	-	19.52	0.00	3,607.55
	11/07/07	3,627.07	-	19.52	0.00	3,607.55
	12/06/07	3,627.07	-	19.50	0.00	3,607.57
MW - 2	03/22/07	3,625.94	-	24.85	0.00	3,601.09
	04/26/07	3,625.94	-	24.87	0.00	3,601.07
	06/01/07	3,625.94	-	24.85	0.00	3,601.09
	06/20/07	3,625.94	-	24.86	0.00	3,601.08
	07/31/07	3,625.94	-	24.89	0.00	3,601.05
	08/13/07	3,625.94	-	24.87	0.00	3,601.07
	09/26/07	3,625.94	-	24.87	0.00	3,601.07
	10/16/07	3,625.94	-	24.89	0.00	3,601.05
	11/07/07	3,625.94	-	24.91	0.00	3,601.03
	12/06/07	3,625.94	-	24.93	0.00	3,601.01
MW - 3	03/21/07	3,624.81	-	18.58	0.00	3,606.23
	04/26/07	3,624.81	-	18.55	0.00	3,606.26
	05/31/07	3,624.81	-	17.84	0.00	3,606.97
	06/20/07	3,624.81	-	18.06	0.00	3,606.75
	07/31/07	3,624.81	-	18.53	0.00	3,606.28

TABLE 1 (cont)

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	08/13/07	3,624.81	-	18.49	0.00	3,606.32
	09/26/07	3,624.81	-	18.41	0.00	3,606.40
	10/16/07	3,624.81	-	18.48	0.00	3,606.33
	11/07/07	3,624.81	-	18.56	0.00	3,606.25
	12/06/07	3,624.81	-	18.58	0.00	3,606.23
MW-4	03/21/07	3,624.95	-	22.35	0.00	3,602.60
	04/26/07	3,624.95	-	22.34	0.00	3,602.61
	05/31/07	3,624.95	-	22.29	0.00	3,602.66
	06/20/07	3,624.95	-	22.30	0.00	3,602.65
	07/31/07	3,624.95	-	22.33	0.00	3,602.62
	08/13/07	3,624.95	-	22.32	0.00	3,602.63
	09/26/07	3,624.95	-	22.31	0.00	3,602.64
	10/16/07	3,624.95	-	22.33	0.00	3,602.62
	11/07/07	3,624.95	-	22.38	0.00	3,602.57
	12/06/07	3,624.95	-	22.34	0.00	3,602.61
MW-5	03/22/07	3,624.15	-	20.75	0.00	3,603.40
	04/26/07	3,624.15	-	20.54	0.00	3,603.61
	06/01/07	3,624.15	-	20.45	0.00	3,603.70
	06/20/07	3,624.15	-	20.47	0.00	3,603.68
	07/31/07	3,624.15	-	20.55	0.00	3,603.60
	08/13/07	3,624.15	-	20.49	0.00	3,603.66
	09/26/07	3,624.15	-	20.43	0.00	3,603.72
	10/16/07	3,624.15	-	20.45	0.00	3,603.70
	11/07/07	3,624.15	-	20.55	0.00	3,603.60
	12/06/07	3,624.15	-	20.59	0.00	3,603.56

TABLE 1 (cont)

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-9	03/21/07	3,627.84	-	21.64	0.00	3,606.20
	04/26/07	3,627.84	-	21.63	0.00	3,606.21
	06/01/07	3,627.84	-	21.64	0.00	3,606.20
	06/20/07	3,627.84	-	21.64	0.00	3,606.20
	07/31/07	3,627.84	-	21.65	0.00	3,606.19
	08/13/07	3,627.84	-	21.64	0.00	3,606.20
	09/26/07	3,627.84	-	21.64	0.00	3,606.20
	10/16/07	3,627.84	-	21.65	0.00	3,606.19
	11/07/07	3,627.84	-	21.67	0.00	3,606.17
	12/06/07	3,627.84	-	21.69	0.00	3,606.15
RW-1	03/22/07	3,626.68	-	19.06	0.00	3,607.62
	04/26/07	3,626.68	-	19.04	0.00	3,607.64
	06/01/07	3,626.68	-	19.06	0.00	3,607.62
	06/20/07	3,626.68	-	19.05	0.00	3,607.63
	07/31/07	3,626.68	-	19.05	0.00	3,607.63
	08/13/07	3,626.68	-	19.05	0.00	3,607.63
	09/26/07	3,626.68	-	19.04	0.00	3,607.64
	10/16/07	3,626.68	-	19.05	0.00	3,607.63
	11/07/07	3,626.68	-	19.06	0.00	3,607.62
	12/06/07	3,626.68	-	19.08	0.00	3,607.60
RW-2	03/22/07	3,626.71	-	20.55	0.00	3,606.16
	04/26/07	3,626.71	-	20.40	0.00	3,606.31
	06/01/07	3,626.71	-	20.42	0.00	3,606.29
	06/20/07	3,626.71	-	20.43	0.00	3,606.28
	07/31/07	3,626.71	-	20.45	0.00	3,606.26
	08/13/07	3,626.71	-	20.45	0.00	3,606.26

TABLE 1 (cont)

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
	09/26/07	3,626.71	-	20.46	0.00	3,606.25
	10/16/07	3,626.71	-	20.46	0.00	3,606.25
	11/07/07	3,626.71	-	20.46	0.00	3,606.25
	12/06/07	3,626.71	-	20.48	0.00	3,606.23
RW-3	03/22/07	3,623.35	-	21.04	0.00	3,602.31
	04/26/07	3,623.35	-	20.93	0.00	3,602.42
	06/01/07	3,623.35	-	20.77	0.00	3,602.58
	06/20/07	3,623.35	-	20.78	0.00	3,602.57
	07/31/07	3,623.35	-	20.83	0.00	3,602.52
	08/13/07	3,623.35	-	20.86	0.00	3,602.49
	09/26/07	3,623.35	-	20.90	0.00	3,602.45
	10/16/07	3,623.35	-	20.89	0.00	3,602.46
	11/07/07	3,623.35	-	20.90	0.00	3,602.45
	12/06/07	3,623.35	-	21.04	0.00	3,602.31

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

SAMPLE LOCATION	SAMPLE DATE	DATE ANALYZED	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)
MW-1	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.002	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-2	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-3	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.002	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-4	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.007	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-5	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
VACUUM 10' TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

SAMPLE LOCATION	SAMPLE DATE	DATE ANALYZED	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)
MW-9	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
RW-1	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	0.013	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
RW-2	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
RW-3	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	0.001	<0.002	<0.001	<0.002	<0.001
NMOCD CRITERIA			**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**	

Basin Environmental Service Technologies, LLC

2800 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
kdutton@basinenv.com
Office: (505) 396-2378 Fax: (505) 396-1429

Effective Solutions

2007
ANNUAL MONITORING REPORT

VACUUM 10" TO JAL
SW ¼ SW ¼ SECTION 20, TOWNSHIP 19 SOUTH, RANGE 37 EAST
LATITUDE 32°, 38', 21.3" NORTH, LONGITUDE 103°, 16', 46.2" WEST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: 2002-10248
NMOCD REF NO: 1RP-0385

PREPARED FOR:

PLAINS

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

PREPARED BY:

BASIN ENVIRONMENTAL SERVICE TECHNOLOGIES, LLC
P. O. Box 301
Lovington, New Mexico 88260

June 2008

Curt D. Stanley For
Ken Dutton
Project Manager

PLAINS
ALL AMERICAN

RECEIVED
2008 JUL 10 PM 1 49

July 1, 2008

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

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

Dear Mr. Hansen,

Plains All American hereby submits the complete Annual Monitoring Reports for the following site:

Vacuum 10-Inch to Jal 1R385 Section 20, Township 19 South, Range 37 East, Lea County
Lovington Gathering WTI 1R838 Section 6, Township 17 South, Range 37 East, Lea County

The NMOCD granted Plains an extension for the submittal of these reports due to consultant health issues. Plains greatly appreciates your understanding in this matter. If you have any questions or require further information, please contact me at (505) 441-0965.

Sincerely,

Camille Bryant

Camille Bryant
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

TABLE OF CONTENTS

INTRODUCTION

Basin Environmental Service Technologies, LLC, (Basin), on behalf of Plains Marketing, L.P., (Plains), prepared this annual report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2007 only. Soil related site activities are summarized in several letters and reports previously submitted to the NMOCD. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during four consecutive quarters of 2007 to monitor the groundwater for dissolved phase benzene, toluene, ethylbenzene and xylene (BTEX) constituents. Each groundwater monitoring event consisted of measuring static water levels in the monitoring wells, checking for the presence of phase-separated hydrocarbons (PSH) on the water column, and purging and sampling of each well exhibiting sufficient recharge.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SW¼ SW¼ Section 20, Township 19 South, Range 37 East. The site latitude is 32°, 38', 21.3" North and the site longitude is 103°, 16', 46.2" West. In February 2007, at the request of Plains, Basin assumed groundwater sampling responsibility for the Vacuum 10" to Jal site.

On September 18, 2002, Environmental Plus, Inc. (EPI) responded to the pipeline release on behalf of Link Energy, LLC (Link) now Plains, to repair the pipeline and excavate the impacted soil. The Vacuum 10" to Jal pipeline was subsequently cold cut and capped under the direction of Link personnel. Approximately 250 barrels of crude oil was released from the pipeline and 80 barrels was recovered. The release site is located in the pipeline right-of-way, in a pasture containing numerous oil production facilities and utilized for cattle grazing. A visibly stained surface area was observed, measuring approximately 450 feet long by 150 feet wide. Excavation activities during the initial response and subsequent remediation of the site covered an area measuring approximately 600 feet long by 200 feet wide and ranged in depth from approximately 12 to 18 feet below ground surface (bgs).

EPI submitted a *Site Characterization and Soil Closure Report*, dated July 2006; this report was subsequently approved by NMOCD, Santa Fe. The approved work plan proposed mechanically separating the caliche rock and soil, utilizing the caliche rock as partial backfill material, transporting the separated soil to an NMOCD approved land farm, and obtaining non-impacted backfill from the landowner. Backfilling of the excavation was completed in the 3rd quarter of 2006.

Based on the laboratory results from the excavation soil sampling and delineation soil borings, five groundwater monitoring wells and three recovery wells were initially installed to evaluate the quality of the groundwater. In September 2005, groundwater monitoring well MW-9 was installed as agreed upon between Plains, NMOCD Santa Fe and the landowner.

Currently, there are six groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-9) and three recovery wells (RW-1, RW-2, and RW-3) on site. During the four quarterly sampling events of 2007, there was no PSH observed in the monitoring wells or recovery wells.

RECENT FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on March 21-22, May 31 - June 1, 2007, September 26, and December 6, 2007. During the quarterly sampling events, the monitoring wells and recovery wells, designated to be sampled, were purged of a minimum of 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Groundwater 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 in Monument, New Mexico.

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

The Inferred Groundwater Gradient Map, Figure 2D, indicates a localized mounding affect of the on-site groundwater, this mounding is likely an artifact of the past excavation activities. Therefore, a groundwater gradient cannot be determined from the data presented. The corrected groundwater elevations ranged from 3,601.01 feet above mean sea level in monitor well MW-2 on December 6, 2007 to 3,607.64 feet above mean sea level in recovery well RW-1 on April 26, and September 26, 2007.

LABORATORY RESULTS

Groundwater samples were collected from the groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-9) and recovery wells (RW-1, RW-2 and RW-3) during the quarterly monitoring events and were delivered to Environmental Laboratory of Texas, a XENCO Laboratories Company, Odessa, Texas for determination BTEX constituent concentrations by EPA Method SW846-8021b. A summary of BTEX constituent concentrations for 2007 is presented in Table 2 and the laboratory reports are provided as Appendix A.

Monitor Well MW-1 is sampled on a quarterly schedule and the analytical results indicates benzene concentrations were less than the MDL of 0.001 mg/L and the NMOCD regulatory standard of 0.01 mg/L during all four quarters of the 2007 reporting period. Toluene concentrations ranged from less than the MDL during the 1st, 3rd and 4th quarters to 0.002 mg/L during the 2nd quarter. Toluene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four quarters of the 2007 reporting period. Ethylbenzene concentrations were less than the MDL and NMOCD regulatory standard of 0.75 mg/L during all four quarters of the 2007 reporting period. Xylene concentrations were less than the MDL and NMOCD regulatory standard of 0.62 mg/L during all four quarters of the 2007 reporting period.

Monitor Well MW-2 is sampled on a quarterly schedule and the analytical results indicate benzene and BTEX concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Monitor Well MW-3 is sampled on a quarterly schedule and the analytical results indicate benzene, ethylbenzene and xylene concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period. Toluene concentrations ranged from less than the MDL during the 1st, 3rd and 4th quarters to 0.002 mg/L during the 2nd quarter. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Monitor Well MW-4 is sampled on a quarterly schedule and the analytical results indicate benzene, ethylbenzene and xylene concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period. Toluene concentrations ranged from less than the MDL during the 1st, 3rd and 4th quarters to 0.007 mg/L during the 2nd quarter. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Monitor Well MW-5 is sampled on a quarterly schedule and the analytical results indicate benzene and BTEX concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Monitor Well MW-9 is sampled on a quarterly schedule and the analytical results indicate benzene and BTEX concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Recovery Well RW-1 is sampled on a quarterly schedule and the analytical results indicate toluene, ethylbenzene and xylene concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period. Benzene concentrations ranged from less than the MDL during the 1st, 2nd, and 4th quarters to 0.013 mg/L during the 3rd quarter. Benzene concentrations were below the NMOCD regulatory standard during the 1st, 2nd and 4th quarters of the 2007 reporting period.

Recovery Well RW-2 is sampled on a quarterly schedule and the analytical results indicate benzene, ethylbenzene and xylene concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period. Toluene concentrations ranged from less than the MDL during the 1st, 3rd and 4th quarters to 0.001 mg/L during the 2nd quarter. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

Recovery Well RW-3 is sampled on a quarterly schedule and the analytical results indicate benzene, ethylbenzene and xylene concentrations were less than the MDL and the NMOCD regulatory standard during all four quarters of the 2007 reporting period. Toluene concentrations ranged from less than the MDL during the 1st, 3rd and 4th quarters to 0.001 mg/L during the 2nd quarter. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the 2007 reporting period.

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

SUMMARY

This report presents the results of groundwater monitoring activities for the 2007 monitoring period. Currently, there are six groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-9) and three recovery wells (RW-1, RW-2 and RW-3) on-site. The four quarterly Inferred Groundwater Gradient Maps indicate a localized mounding affect of the on-site groundwater, this mounding is likely an artifact of the past excavation activities

Laboratory results for the nine site groundwater samples, obtained during the four reporting periods, indicated benzene and BTEX constituent concentrations were below the NMOCD regulatory standard for groundwater monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-9 and recovery wells RW-2, RW-3. The analytical results indicated benzene concentrations slightly exceeded the NMOCD regulatory standard for recovery well RW-1 only during the 3rd quarter of the 2007 reporting period. Recovery well RW-1 has reported benzene (and BTEX) concentrations below the NMOCD regulatory standard for seven (7) out of the last nine (9) quarters.

ANTICIPATED ACTIONS

Continued monthly gauging and quarterly groundwater sampling will continue in the 2008 reporting period. Additionally, Basin, on behalf of Plains, recommends a semi-annual groundwater sampling schedule for monitoring wells MW-3, MW-4 and MW-5. The analytical data indicates monitor wells MW-3, MW-4 and MW-5 have exhibited BTEX concentrations below the NMOCD regulatory standards for the past eight consecutive quarters.

LIMITATIONS

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

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

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

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Figures

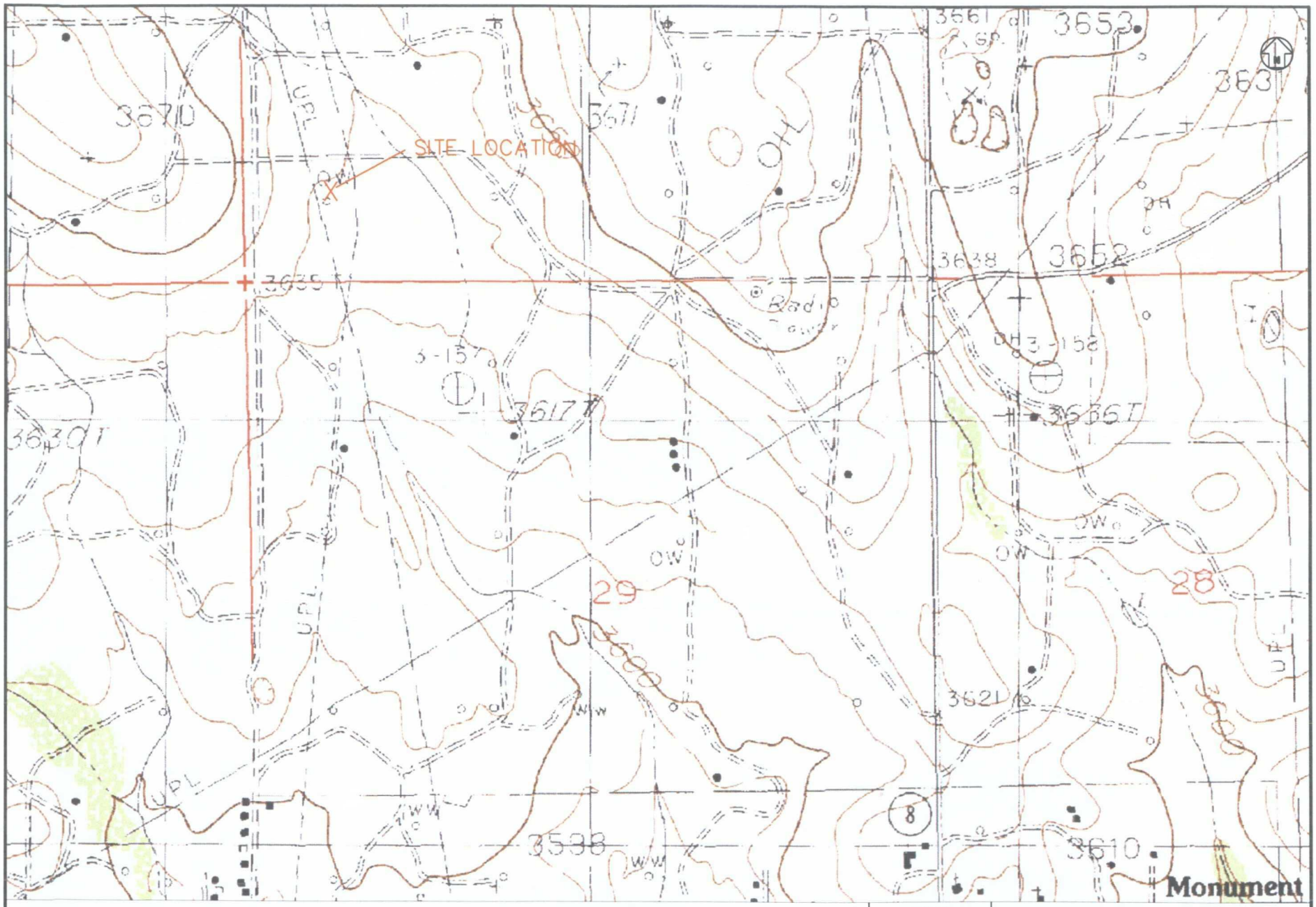
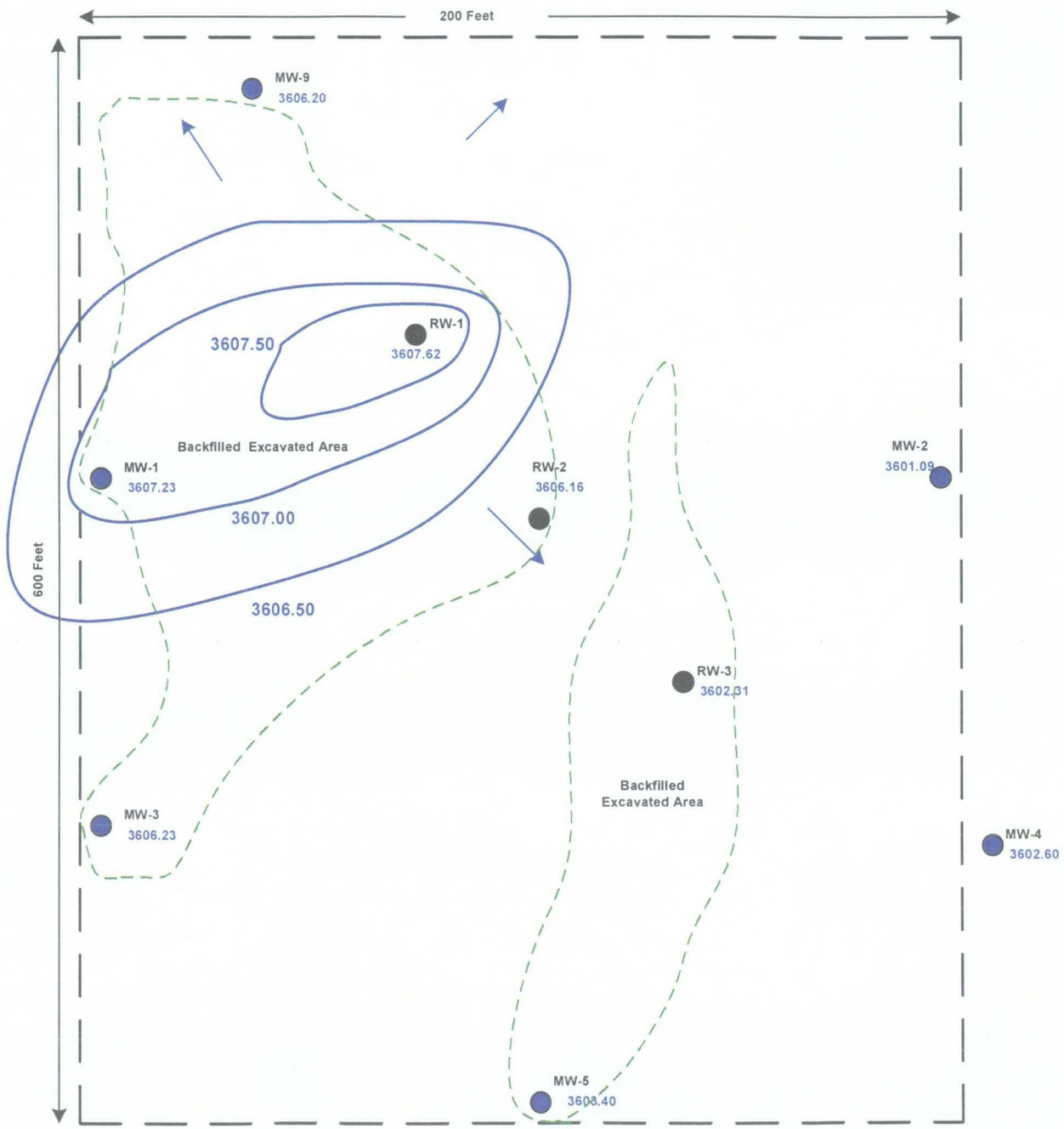


Figure 1
Site Location Map
Plains Marketing, L.P.
Vacuum 10" to Jal
Lea County, NM
Plains SRS: 2002-10248
NMOCD Ref: 1RP-0385

Basin Environmental Service Technologies

Scale: NTS	CAD By: CDS	Checked By: CDS
April 28, 2008	SW/SW Section 20, T19S, R37E	

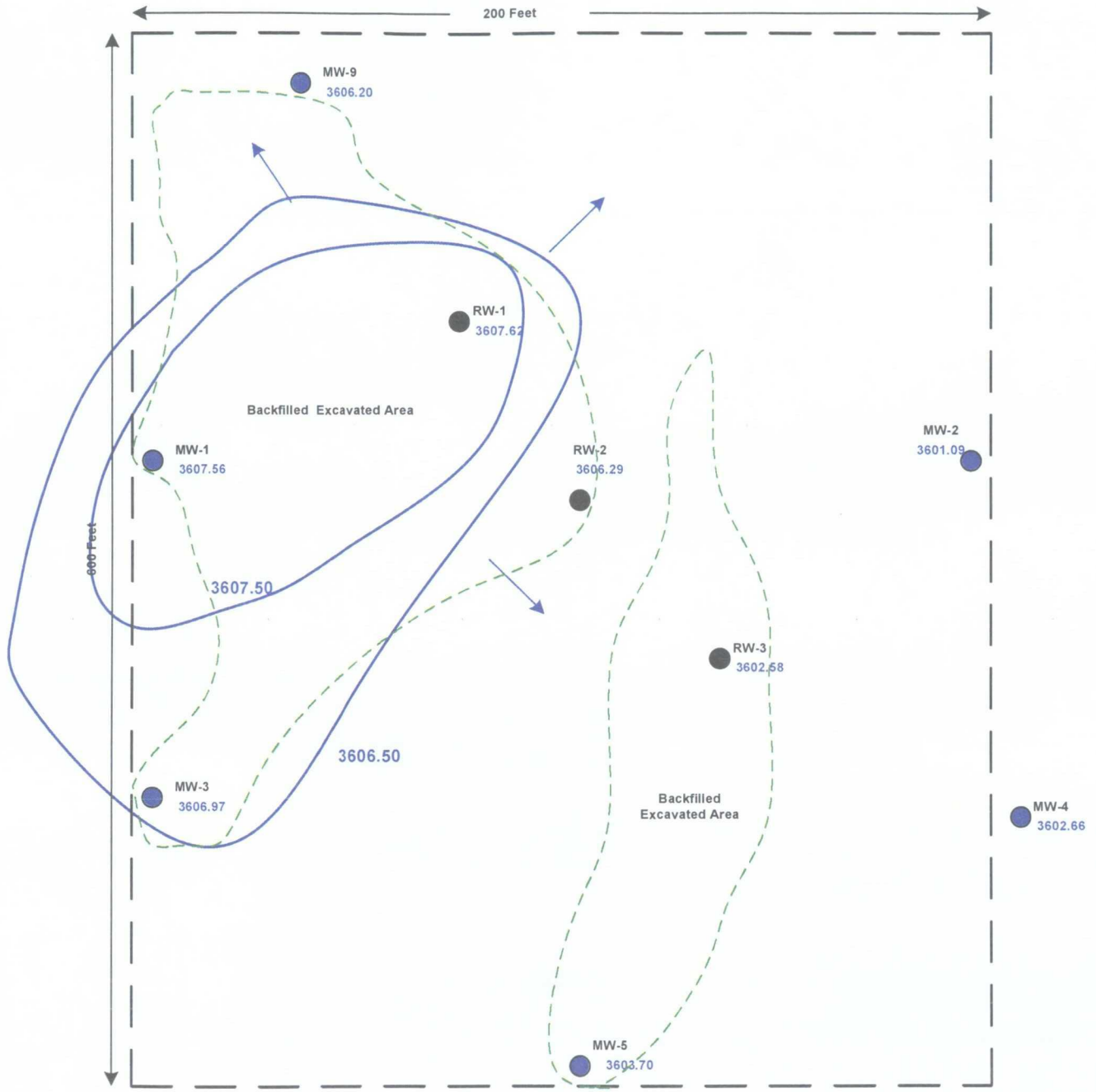
Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND
- Monitor Well
- Recovery Well
- (3607.23) Groundwater Elevation In Feet

DESCRIPTION
Figure 2A
Inferred Groundwater Gradient Map
21 & 22 March 2007

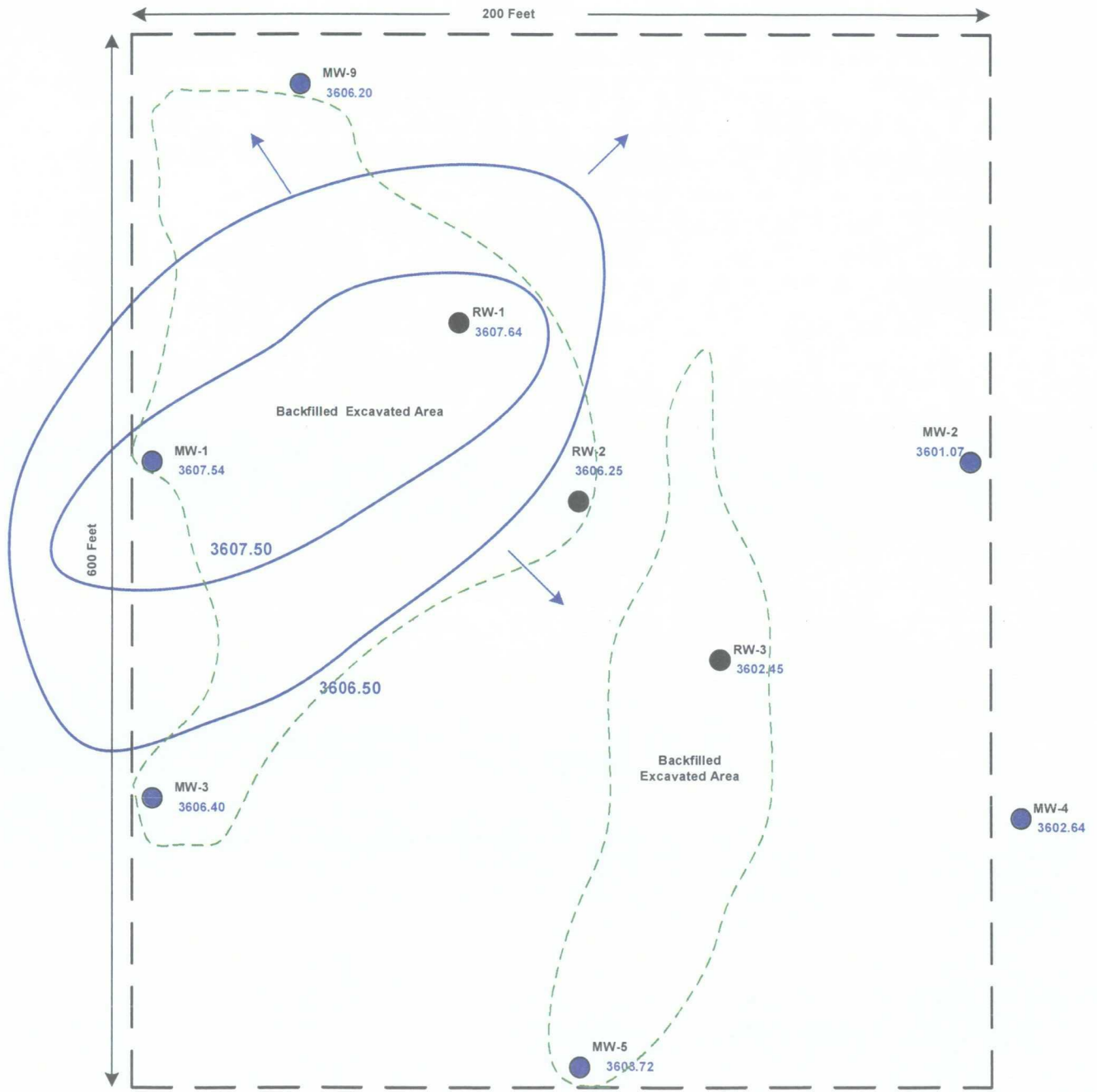
Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND
Monitor Well
Recovery Well
(3607.23) Groundwater Elevation In Feet

DESCRIPTION
Figure 2B
Inferred Groundwater Gradient Map
31 May & 01 June 2007

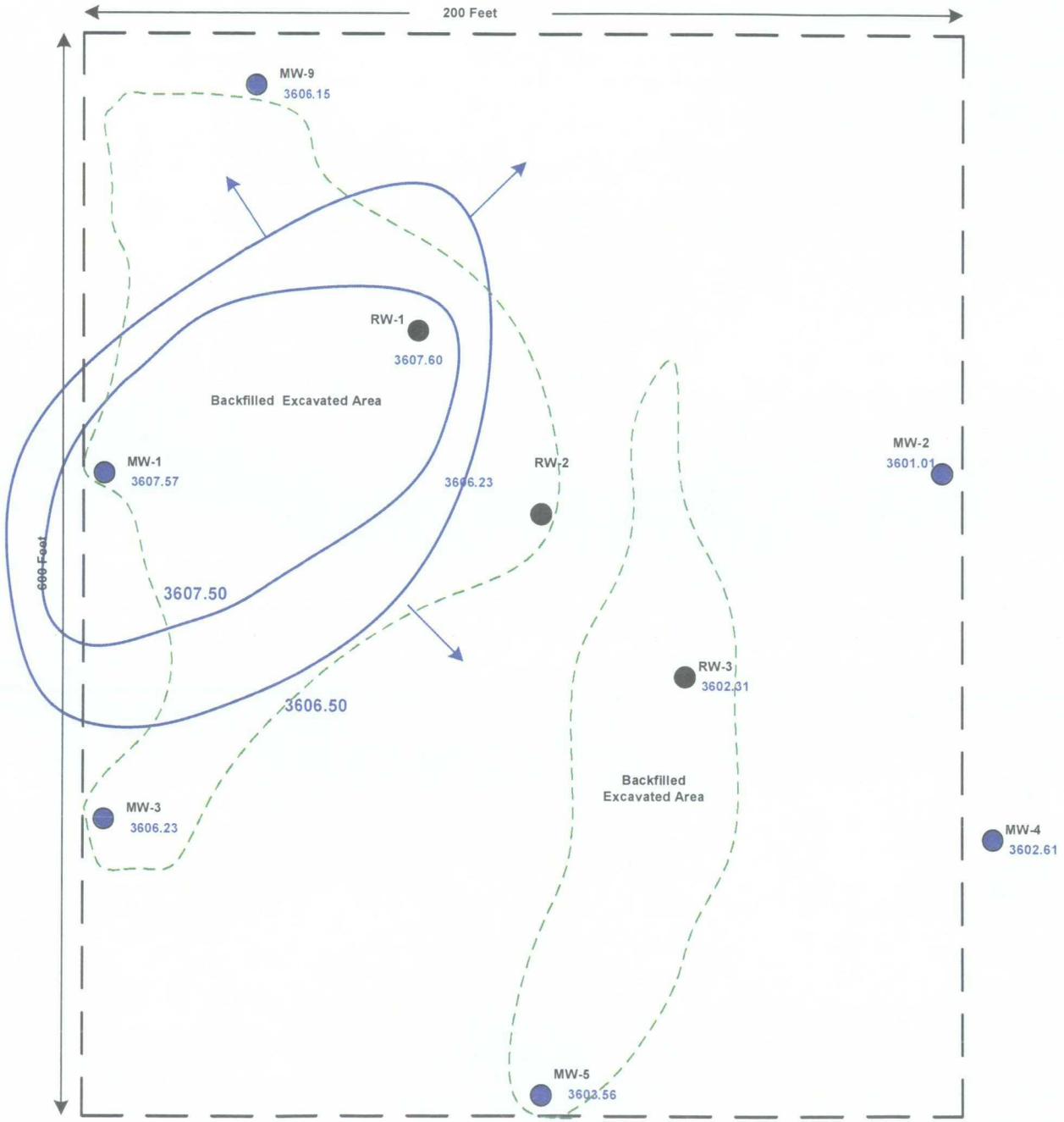
Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND
Monitor Well
Recovery Well
(3607.23) Groundwater Elevation In Feet

DESCRIPTION
Figure 2C
Inferred Groundwater Gradient Map
26 September 2007

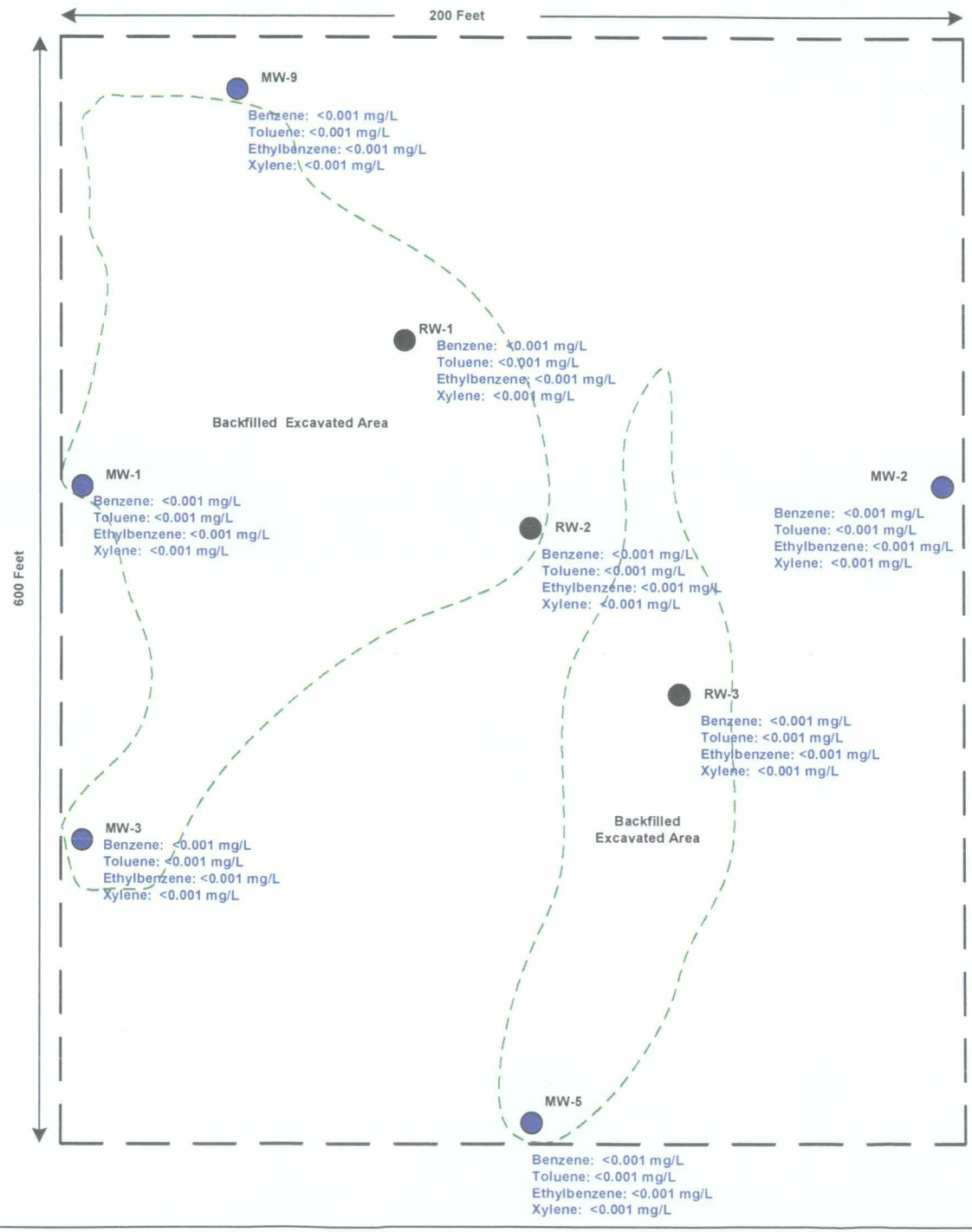
Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND
Monitor Well
Recovery Well
(3607.23) Groundwater Elevation In Feet

DESCRIPTION
Figure 2D
Inferred Groundwater Gradient Map
06 December 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



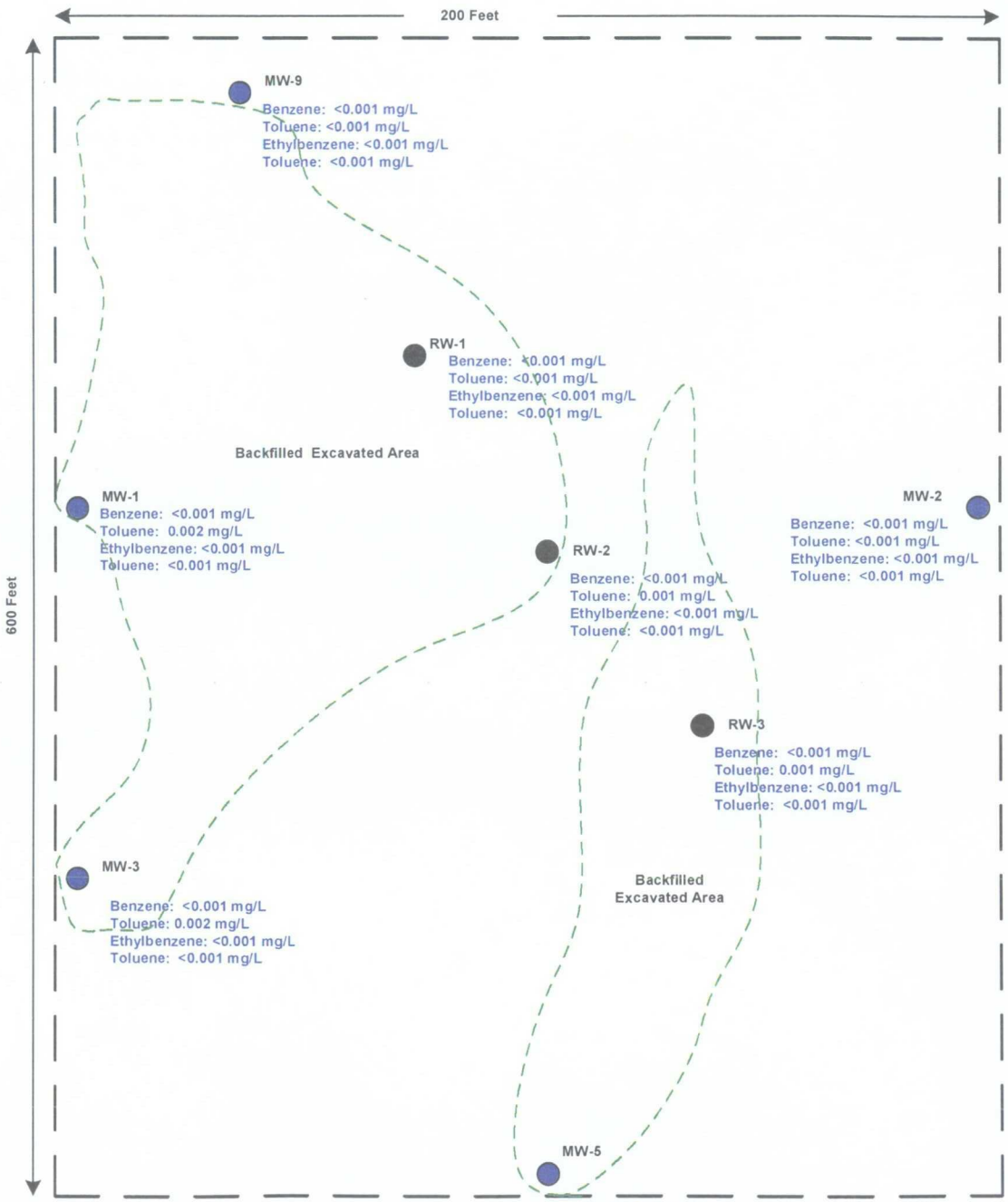
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3A
Groundwater Concentration (BTEX) Map
March 21-22, 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



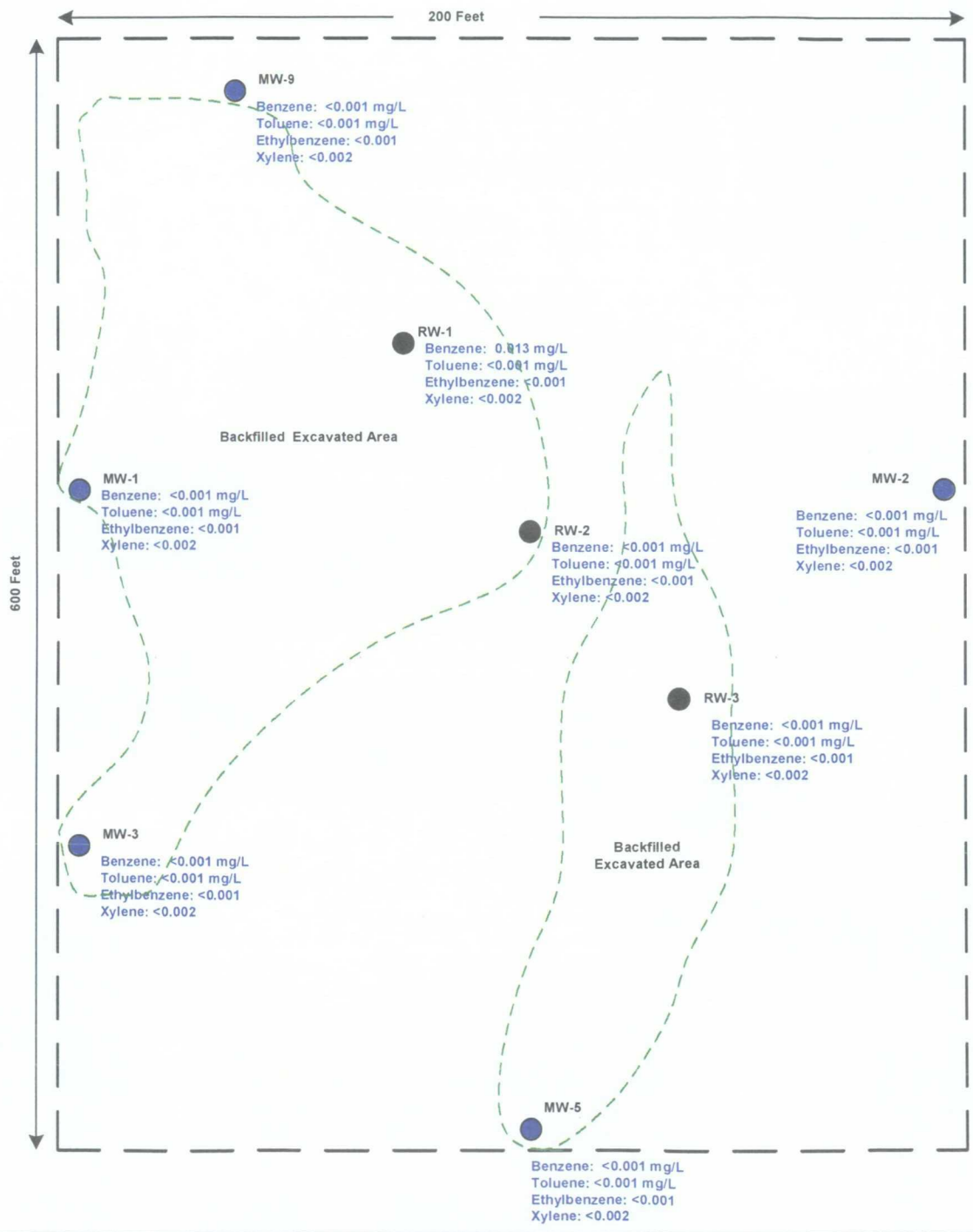
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3B
Groundwater Concentration (BTEX) Map
31 May & 01 June 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



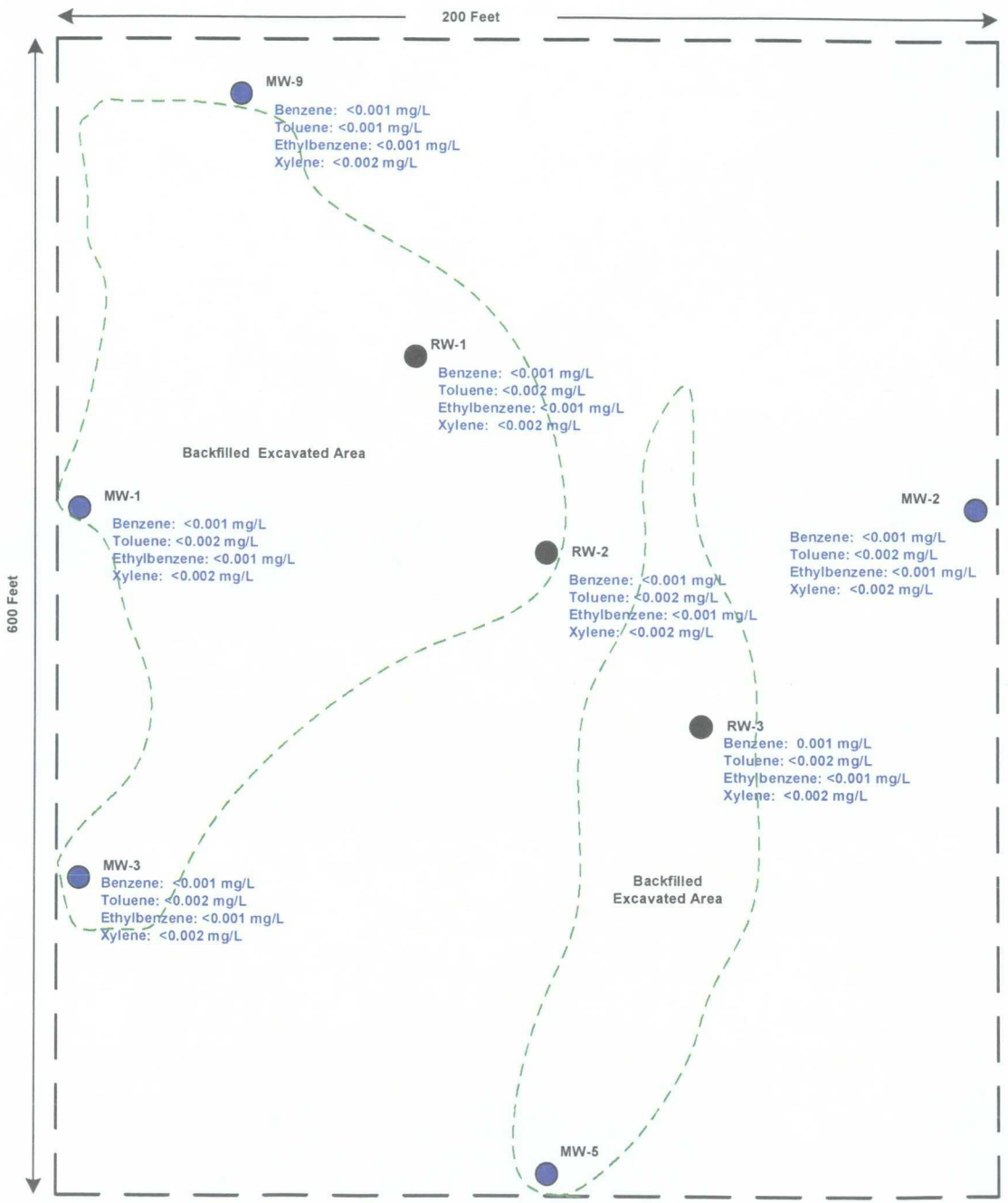
LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3C
Groundwater Concentration (BTEX) Map
26 September 2007

Plains Marketing, L. P.
Vacuum 10" to Jal
SW/SW S20,T19S,R37E
Lea County, New Mexico
Plains SRS: 2002-10248
NMOCD Ref No: 1RP-0385



LEGEND

- Monitor Well
- Recovery Well

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

DESCRIPTION
Figure 3D
Groundwater Concentration (BTEX)
Map
06 December 2007

Tables

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	*03/21/07*	3,627.07	-	19.84	0.00	3,607.23
	04/26/07	3,627.07	-	19.53	0.00	3,607.54
	05/31/07	3,627.07	-	19.51	0.00	3,607.56
	06/20/07	3,627.07	-	19.52	0.00	3,607.55
	07/31/07	3,627.07	-	19.53	0.00	3,607.54
	08/13/07	3,627.07	-	19.53	0.00	3,607.54
	09/26/07	3,627.07	-	19.53	0.00	3,607.54
	10/16/07	3,627.07	-	19.52	0.00	3,607.55
	11/07/07	3,627.07	-	19.52	0.00	3,607.55
	12/06/07	3,627.07	-	19.50	0.00	3,607.57
MW - 2	*03/22/07*	3,625.94	-	24.85	0.00	3,601.09
	04/26/07	3,625.94	-	24.87	0.00	3,601.07
	06/01/07	3,625.94	-	24.85	0.00	3,601.09
	06/20/07	3,625.94	-	24.86	0.00	3,601.08
	07/31/07	3,625.94	-	24.89	0.00	3,601.05
	08/13/07	3,625.94	-	24.87	0.00	3,601.07
	09/26/07	3,625.94	-	24.87	0.00	3,601.07
	10/16/07	3,625.94	-	24.89	0.00	3,601.05
	11/07/07	3,625.94	-	24.91	0.00	3,601.03
	12/06/07	3,625.94	-	24.93	0.00	3,601.01
MW - 3	*03/21/07*	3,624.81	-	18.58	0.00	3,606.23
	04/26/07	3,624.81	-	18.55	0.00	3,606.26
	05/31/07	3,624.81	-	17.84	0.00	3,606.97
	06/20/07	3,624.81	-	18.06	0.00	3,606.75
	07/31/07	3,624.81	-	18.53	0.00	3,606.28
	08/13/07	3,624.81	-	18.49	0.00	3,606.32
	09/26/07	3,624.81	-	18.41	0.00	3,606.40
	10/16/07	3,624.81	-	18.48	0.00	3,606.33
	11/07/07	3,624.81	-	18.56	0.00	3,606.25
	12/06/07	3,624.81	-	18.58	0.00	3,606.23
MW-4	*03/21/07*	3,624.95	-	22.35	0.00	3,602.60
	04/26/07	3,624.95	-	22.34	0.00	3,602.61
	05/31/07	3,624.95	-	22.29	0.00	3,602.66
	06/20/07	3,624.95	-	22.30	0.00	3,602.65
	07/31/07	3,624.95	-	22.33	0.00	3,602.62
	08/13/07	3,624.95	-	22.32	0.00	3,602.63
	09/26/07	3,624.95	-	22.31	0.00	3,602.64
	10/16/07	3,624.95	-	22.33	0.00	3,602.62

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

MW-4	11/07/07	3,624.95	-	22.38	0.00	3,602.57
	12/06/07	3,624.95	-	22.34	0.00	3,602.61
MW-5	*03/22/07*	3,624.15	-	20.75	0.00	3,603.40
	04/26/07	3,624.15	-	20.54	0.00	3,603.61
	06/01/07	3,624.15	-	20.45	0.00	3,603.70
	06/20/07	3,624.15	-	20.47	0.00	3,603.68
	07/31/07	3,624.15	-	20.55	0.00	3,603.60
	08/13/07	3,624.15	-	20.49	0.00	3,603.66
	09/26/07	3,624.15	-	20.43	0.00	3,603.72
	10/16/07	3,624.15	-	20.45	0.00	3,603.70
	11/07/07	3,624.15	-	20.55	0.00	3,603.60
	12/06/07	3,624.15	-	20.59	0.00	3,603.56
MW-9	*03/21/07*	3,627.84	-	21.64	0.00	3,606.20
	04/26/07	3,627.84	-	21.63	0.00	3,606.21
	06/01/07	3,627.84	-	21.64	0.00	3,606.20
	06/20/07	3,627.84	-	21.64	0.00	3,606.20
	07/31/07	3,627.84	-	21.65	0.00	3,606.19
	08/13/07	3,627.84	-	21.64	0.00	3,606.20
	09/26/07	3,627.84	-	21.64	0.00	3,606.20
	10/16/07	3,627.84	-	21.65	0.00	3,606.19
	11/07/07	3,627.84	-	21.67	0.00	3,606.17
	12/06/07	3,627.84	-	21.69	0.00	3,606.15
RW-1	*03/22/07*	3,626.68	-	19.06	0.00	3,607.62
	04/26/07	3,626.68	-	19.04	0.00	3,607.64
	06/01/07	3,626.68	-	19.06	0.00	3,607.62
	06/20/07	3,626.68	-	19.05	0.00	3,607.63
	07/31/07	3,626.68	-	19.05	0.00	3,607.63
	08/13/07	3,626.68	-	19.05	0.00	3,607.63
	09/26/07	3,626.68	-	19.04	0.00	3,607.64
	10/16/07	3,626.68	-	19.05	0.00	3,607.63
	11/07/07	3,626.68	-	19.06	0.00	3,607.62
	12/06/07	3,626.68	-	19.08	0.00	3,607.60
RW-2	*03/22/07*	3,626.71	-	20.55	0.00	3,606.16
	04/26/07	3,626.71	-	20.40	0.00	3,606.31
	06/01/07	3,626.71	-	20.42	0.00	3,606.29
	06/20/07	3,626.71	-	20.43	0.00	3,606.28
	07/31/07	3,626.71	-	20.45	0.00	3,606.26
	08/13/07	3,626.71	-	20.45	0.00	3,606.26
	09/26/07	3,626.71	-	20.46	0.00	3,606.25
	10/16/07	3,626.71	-	20.46	0.00	3,606.25

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

RW-2	11/07/07	3,626.71	-	20.46	0.00	3,606.25
	12/06/07	3,626.71	-	20.48	0.00	3,606.23
RW-3	*03/22/07*	3,623.35	-	21.04	0.00	3,602.31
	04/26/07	3,623.35	-	20.93	0.00	3,602.42
	06/01/07	3,623.35	-	20.77	0.00	3,602.58
	06/20/07	3,623.35	-	20.78	0.00	3,602.57
	07/31/07	3,623.35	-	20.83	0.00	3,602.52
	08/13/07	3,623.35	-	20.86	0.00	3,602.49
	09/26/07	3,623.35	-	20.90	0.00	3,602.45
	10/16/07	3,623.35	-	20.89	0.00	3,602.46
	11/07/07	3,623.35	-	20.90	0.00	3,602.45
	12/06/07	3,623.35	-	21.04	0.00	3,602.31

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

SAMPLE LOCATION	SAMPLE DATE	DATE ANALYZED	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)
MW-1	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.002	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-2	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-3	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.002	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-4	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	05/31/07	06/07/07	<0.001	0.007	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-5	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
MW-9	03/21/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
RW-1	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	<0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	**0.013**	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001
RW-2	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	<0.001	<0.002	<0.001	<0.002	<0.001

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
VACUUM 10" TO JAL
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2002-10248
NMOCD REF NO: 1RP-0385

RW-3	03/22/07	03/29/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/01/07	06/07/07	<0.001	0.001	<0.001	<0.001	<0.001
	09/26/07	10/03/07	<0.001	<0.001	<0.001	<0.002	<0.001
	12/06/07	12/11/07	0.001	<0.002	<0.001	<0.002	<0.001
NMOCD CRITERIA (mg/L)			**0.01**	**0.75**	**0.75**	**0.62**	

Appendices

Appendix A
Laboratory Reports

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Vacuum 10" to Jal

Project Number: 2002-10248

Location: Lea County, NM

Lab Order Number: 7C23006

Report Date: 03/30/07

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4	7C23006-01	Water	03/21/07 14:40	03-23-2007 13:30
MW-1	7C23006-02	Water	03/21/07 14:56	03-23-2007 13:30
MW-3	7C23006-03	Water	03/21/07 15:09	03-23-2007 13:30
MW-9	7C23006-04	Water	03/21/07 15:30	03-23-2007 13:30
MW-5	7C23006-05	Water	03/22/07 10:24	03-23-2007 13:30
RW-2	7C23006-06	Water	03/22/07 11:27	03-23-2007 13:30
RW-3	7C23006-07	Water	03/22/07 12:09	03-23-2007 13:30
MW-2	7C23006-08	Water	03/22/07 13:30	03-23-2007 13:30
RW-1	7C23006-09	Water	03/22/07 14:30	03-23-2007 13:30

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (7C23006-01) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.4 %*	*80-120*		"	"	"	"	
MW-1 (7C23006-02) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.2 %*	*80-120*		"	"	"	"	
MW-3 (7C23006-03) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.8 %*	*80-120*		"	"	"	"	
MW-9 (7C23006-04) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.6 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S	Project: Vacuum 10" to Jal	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10248	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (7C23006-05) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.8 %*	*80-120*		"	"	"	"	
RW-2 (7C23006-06) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.0 %*	*80-120*		"	"	"	"	
RW-3 (7C23006-07) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.6 %*	*80-120*		"	"	"	"	
MW-2 (7C23006-08) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.8 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S	Project: Vacuum 10" to Jal	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10248	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RW-1 (7C23006-09) Water									
Benzene	ND	0.00100	mg/L	1	EC72815	03/28/07	03/29/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.6 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC72815 - EPA 5030C (GC)										
Blank (EC72815-BLK1)				Prepared: 03/28/07 Analyzed: 03/29/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*51.5*		*ug/l*	*50.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.6*		*"*	*50.0*		*83.2*	*80-120*			
LCS (EC72815-BS1)				Prepared: 03/28/07 Analyzed: 03/29/07						
Benzene	0.0536	0.00100	mg/L	0.0500		107	80-120			
Toluene	0.0518	0.00100	"	0.0500		104	80-120			
Ethylbenzene	0.0534	0.00100	"	0.0500		107	80-120			
Xylene (p/m)	0.0981	0.00100	"	0.100		98.1	80-120			
Xylene (o)	0.0548	0.00100	"	0.0500		110	80-120			
Surrogate: a,a,a-Trifluorotoluene	*53.7*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48.7*		*"*	*50.0*		*97.4*	*80-120*			
Calibration Check (EC72815-CCV1)				Prepared: 03/28/07 Analyzed: 03/29/07						
Benzene	0.0523		mg/L	0.0500		105	80-120			
Toluene	0.0497		"	0.0500		99.4	80-120			
Ethylbenzene	0.0497		"	0.0500		99.4	80-120			
Xylene (p/m)	0.0912		"	0.100		91.2	80-120			
Xylene (o)	0.0518		"	0.0500		104	80-120			
Surrogate: a,a,a-Trifluorotoluene	*54.3*		*ug/l*	*50.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.9*		*"*	*50.0*		*87.8*	*80-120*			
Matrix Spike (EC72815-MS1)	**Source: 7C22003-14**			Prepared: 03/28/07 Analyzed: 03/29/07						
Benzene	0.0518	0.00100	mg/L	0.0500	ND	104	80-120			
Toluene	0.0500	0.00100	"	0.0500	ND	100	80-120			
Ethylbenzene	0.0506	0.00100	"	0.0500	ND	101	80-120			
Xylene (p/m)	0.0946	0.00100	"	0.100	ND	94.6	80-120			
Xylene (o)	0.0533	0.00100	"	0.0500	ND	107	80-120			
Surrogate: a,a,a-Trifluorotoluene	*53.3*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.8*		*"*	*50.0*		*91.6*	*80-120*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC72815 - EPA 5030C (GC)										
Matrix Spike Dup (EC72815-MSD1)	**Source: 7C22003-14**			Prepared: 03/28/07 Analyzed: 03/29/07						
Benzene	0.0544	0.00100	mg/L	0.0500	ND	109	80-120	4.69	20	
Toluene	0.0521	0.00100	"	0.0500	ND	104	80-120	3.92	20	
Ethylbenzene	0.0533	0.00100	"	0.0500	ND	107	80-120	5.77	20	
Xylene (p/m)	0.0974	0.00100	"	0.100	ND	97.4	80-120	2.92	20	
Xylene (o)	0.0548	0.00100	"	0.0500	ND	110	80-120	2.76	20	
Surrogate: a,a,a-Trifluorotoluene	*51.9*		*ug/l*	*50.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.9*		*"*	*50.0*		*91.8*	*80-120*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Celey D. Keene Date: 03/30/07

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

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

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Environmental Lab of Texas

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: Ken Dutton PAGE 01 OF 01

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-2124

Sampler Signature: Ken Dutton

Fax No: (505) 396-1429

e-mail: kad@basinenv.com

Project Name: VACUUM 10-INCH TO JAL

Project #: 2002-10248

Project Loc: Lea County, NM

PO #: PAA - C. J. Reynolds

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7C23006

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. 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)	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	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-4			21-Mar-07	1440		2	X		X						GW									X								X
02	MW-1			21-Mar-07	1456		2	X		X						GW									X								X
03	MW-3			21-Mar-07	1509		2	X		X						GW									X								X
04	MW-9			21-Mar-07	1530		2	X		X						GW									X								X
05	MW-5			22-Mar-07	1024		2	X		X						GW									X								X
06	RW-2			22-Mar-07	1127		2	X		X						GW									X								X
07	RW-3			22-Mar-07	1209		2	X		X						GW									X								X
08	MW-2			22-Mar-07	1330		2	X		X						GW									X								X
09	RW-1			22-Mar-07	1430		2	X		X						GW									X								X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	23 MAR 07	1000	Linda Blackwood	3-23-07	10:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Linda Blackwood	3/23/07	1:50	Received by ELOT: [illegible signature]	3/23/07	1:30

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
4oz glass
Temperature Upon Receipt: 4.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

nt. Plains

e/ Time: 3/23/07 1:30

ID # : 1C23006

als: CK

Sample Receipt Checklist

				Client Initials
Temperature of container/ cooler?	Yes	No	4.0 °C	
Shipping container in good condition?	Yes	No		
Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
Chain of Custody present?	Yes	No		
Sample instructions complete of Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Yes	No	Not Applicable	
Sample matrix/ properties agree with Chain of Custody?	Yes	No		
Containers supplied by ELOT?	Yes	No		
Samples in proper container/ bottle?	Yes	No	See Below	
Samples properly preserved?	Yes	No	See Below	
Sample bottles intact?	Yes	No		
Preservations documented on Chain of Custody?	Yes	No		
Containers documented on Chain of Custody?	Yes	No		
Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
All samples received within sufficient hold time?	Yes	No	See Below	
Subcontract of sample(s)?	Yes	No	Not Applicable	
VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

ct: _____ Contacted by: _____ Date/ Time: _____

ding: _____

tive Action Taken:

_____

_____

_____

all that Apply:

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Vacuum 10" to Jal

Project Number: 2002-10248

Location: Lea County, NM

Lab Order Number: 7F06010

Report Date: 06/11/07

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	7F06010-01	Water	05/31/07 14:45	06-06-2007 12:21
MW-3	7F06010-02	Water	05/31/07 15:40	06-06-2007 12:21
MW-4	7F06010-03	Water	05/31/07 16:50	06-06-2007 12:21
MW-5	7F06010-04	Water	06/01/07 09:55	06-06-2007 12:21
MW-9	7F06010-05	Water	06/01/07 10:45	06-06-2007 12:21
MW-2	7F06010-06	Water	06/01/07 11:30	06-06-2007 12:21
RW-3	7F06010-07	Water	06/01/07 13:00	06-06-2007 12:21
RW-2	7F06010-08	Water	06/01/07 14:20	06-06-2007 12:21
RW-1	7F06010-09	Water	06/01/07 15:40	06-06-2007 12:21

Plains All American EH & S	Project: Vacuum 10" to Jal	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10248	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (7F06010-01) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**0.00245**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
MW-3 (7F06010-02) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**0.00256**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*112 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
MW-4 (7F06010-03) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**0.00772**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*113 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
MW-5 (7F06010-04) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**J [0.000313]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*108 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*	*80-120*		"	"	"	"	

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Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (7F06010-05) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**J [0.000695]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
MW-2 (7F06010-06) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**J [0.000492]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*80-120*		"	"	"	"	
RW-3 (7F06010-07) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**0.00182**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
RW-2 (7F06010-08) Water									
Benzene	ND	0.00100	mg/L	1	EF70601	06/06/07	06/07/07	EPA 8021B	
Toluene	**0.00184**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.0 %*	*80-120*		"	"	"	"	

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Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RW-1 (7F06010-09) Water									
Benzene	ND	0.00100	mg/L	1	EF70802	06/08/07	06/09/07	EPA 8021B	
Toluene	**J [0.000697]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*80-120*		"	"	"	"	

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Midland TX, 79706-4476

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70601 - EPA 5030C (GC)										
Blank (EF70601-BLK1)				Prepared: 06/06/07 Analyzed: 06/07/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*48.7*		*ug/l*	*50.0*		*97.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.4*		"	*50.0*		*84.8*	*80-120*			
LCS (EF70601-BS1)				Prepared: 06/06/07 Analyzed: 06/07/07						
Benzene	0.0509	0.00100	mg/L	0.0500		102	80-120			
Toluene	0.0519	0.00100	"	0.0500		104	80-120			
Ethylbenzene	0.0498	0.00100	"	0.0500		99.6	80-120			
Xylene (p/m)	0.0973	0.00100	"	0.100		97.3	80-120			
Xylene (o)	0.0520	0.00100	"	0.0500		104	80-120			
Surrogate: a,a,a-Trifluorotoluene	*51.6*		*ug/l*	*50.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.6*		"	*50.0*		*95.2*	*80-120*			
Calibration Check (EF70601-CCV1)				Prepared: 06/06/07 Analyzed: 06/07/07						
Benzene	0.0546		mg/L	0.0500		109	80-120			
Toluene	0.0546		"	0.0500		109	80-120			
Ethylbenzene	0.0531		"	0.0500		106	80-120			
Xylene (p/m)	0.0986		"	0.100		98.6	80-120			
Xylene (o)	0.0549		"	0.0500		110	80-120			
Surrogate: a,a,a-Trifluorotoluene	*52.2*		*ug/l*	*50.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49.8*		"	*50.0*		*99.6*	*80-120*			
Matrix Spike (EF70601-MS1)	**Source: 7F06010-08**			Prepared: 06/06/07 Analyzed: 06/07/07						
Benzene	0.0545	0.00100	mg/L	0.0500	ND	109	80-120			
Toluene	0.0563	0.00100	"	0.0500	0.00184	109	80-120			
Ethylbenzene	0.0510	0.00100	"	0.0500	ND	102	80-120			
Xylene (p/m)	0.101	0.00100	"	0.100	ND	101	80-120			
Xylene (o)	0.0563	0.00100	"	0.0500	ND	113	80-120			
Surrogate: a,a,a-Trifluorotoluene	*55.2*		*ug/l*	*50.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.1*		"	*50.0*		*102*	*80-120*			

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Project Number: 2002-10248
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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70601 - EPA 5030C (GC)										
Matrix Spike Dup (EF70601-MSD1)	**Source: 7F06010-08**			Prepared: 06/06/07 Analyzed: 06/07/07						
Benzene	0.0546	0.00100	mg/L	0.0500	ND	109	80-120	0.00	20	
Toluene	0.0567	0.00100	"	0.0500	0.00184	110	80-120	0.913	20	
Ethylbenzene	0.0533	0.00100	"	0.0500	ND	107	80-120	4.78	20	
Xylene (p/m)	0.101	0.00100	"	0.100	ND	101	80-120	0.00	20	
Xylene (o)	0.0560	0.00100	"	0.0500	ND	112	80-120	0.889	20	
Surrogate: a,a,a-Trifluorotoluene	*54.3*		*ug/l*	*50.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49.7*		"	*50.0*		*99.4*	*80-120*			
Batch EF70802 - EPA 5030C (GC)										
Blank (EF70802-BLK1)				Prepared & Analyzed: 06/08/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*54.1*		*ug/l*	*50.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.4*		"	*50.0*		*90.8*	*80-120*			
LCS (EF70802-BS1)				Prepared & Analyzed: 06/08/07						
Benzene	0.0548	0.00100	mg/L	0.0500		110	80-120			
Toluene	0.0556	0.00100	"	0.0500		111	80-120			
Ethylbenzene	0.0543	0.00100	"	0.0500		109	80-120			
Xylene (p/m)	0.101	0.00100	"	0.100		101	80-120			
Xylene (o)	0.0569	0.00100	"	0.0500		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*54.6*		*ug/l*	*50.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.7*		"	*50.0*		*103*	*80-120*			

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70802 - EPA 5030C (GC)										
Calibration Check (EF70802-CCV1)				Prepared: 06/08/07 Analyzed: 06/09/07						
Benzene	0.0576		mg/L	0.0500		115	80-120			
Toluene	0.0567		"	0.0500		113	80-120			
Ethylbenzene	0.0537		"	0.0500		107	80-120			
Xylene (p/m)	0.0999		"	0.100		99.9	80-120			
Xylene (o)	0.0573		"	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*57.9*		*ug/l*	*50.0*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.0*		*"*	*50.0*		*106*	*80-120*			
Matrix Spike (EF70802-MS1)	**Source: 7F06019-03**			Prepared: 06/08/07 Analyzed: 06/09/07						
Benzene	0.0598	0.00100	mg/L	0.0500	ND	120	80-120			
Toluene	0.0593	0.00100	"	0.0500	ND	119	80-120			
Ethylbenzene	0.0584	0.00100	"	0.0500	ND	117	80-120			
Xylene (p/m)	0.107	0.00100	"	0.100	ND	107	80-120			
Xylene (o)	0.0614	0.00100	"	0.0500	ND	123	80-120			M1
Surrogate: a,a,a-Trifluorotoluene	*58.4*		*ug/l*	*50.0*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*56.2*		*"*	*50.0*		*112*	*80-120*			
Matrix Spike Dup (EF70802-MSD1)	**Source: 7F06019-03**			Prepared: 06/08/07 Analyzed: 06/09/07						
Benzene	0.0565	0.00100	mg/L	0.0500	ND	113	80-120	6.01	20	
Toluene	0.0566	0.00100	"	0.0500	ND	113	80-120	5.17	20	
Ethylbenzene	0.0556	0.00100	"	0.0500	ND	111	80-120	5.26	20	
Xylene (p/m)	0.102	0.00100	"	0.100	ND	102	80-120	4.78	20	
Xylene (o)	0.0584	0.00100	"	0.0500	ND	117	80-120	5.00	20	
Surrogate: a,a,a-Trifluorotoluene	*58.3*		*ug/l*	*50.0*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*54.2*		*"*	*50.0*		*108*	*80-120*			

Plains All American EH & S	Project: Vacuum 10" to Jal	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10248	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Notes and Definitions

M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Celey D. Keene Date: 06/11/07

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

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

Analytical Report 283780

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Vacuum 10-Inch to Jal

2002-10248

11-JUN-07

12600 West I-20 East Odessa, Texas 79765

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

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

11-JUN-07

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

Reference: XENCO Report No: **283780**
Vacuum 10-Inch to Jal
Project Address: Lea County, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 283780. 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. 283780 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
Odessa Laboratory Director

Certificate of Analysis Summary 283780

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-Inch to Jal

Project Id: 2002-10248
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Jun-06-07 12:21 pm
Report Date: 11-JUN-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	283780-001		283780-002		283780-003		283780-004	
	Field Id:	MW-1		MW-3		MW-4		MW-5	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	May-31-07 14:45		May-31-07 15:40		May-31-07 16:50		Jun-01-07 09:55	
SVOA PAHs List by EPA 8270C	*Extracted:*	Jun-07-07 10:06		Jun-07-07 10:08		Jun-07-07 10:10		Jun-07-07 10:12	
	Analyzed:	Jun-07-07 17:54		Jun-07-07 18:38		Jun-07-07 19:21		Jun-07-07 20:04	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Acenaphthylene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Anthracene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Benzo(a)anthracene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Benzo(a)pyrene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Benzo(b)fluoranthene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Benzo(k)fluoranthene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Benzo(g,h,i)perylene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Chrysene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Dibenz(a,h)Anthracene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Fluoranthene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Fluorene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
1-Methylnaphthalene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
2-Methylnaphthalene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Naphthalene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Phenanthrene		ND	0.005	ND	0.006	ND	0.005	ND	0.006
Pyrene		ND	0.005	ND	0.006	ND	0.005	ND	0.006

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 283780

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-Inch to Jal

Project Id: 2002-10248
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Jun-06-07 12:21 pm
Report Date: 11-JUN-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	283780-005		283780-006		283780-007		283780-008	
	Field Id:	MW-9		MW-2		RW-3		RW-2	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Jun-01-07 10:45		Jun-01-07 11:30		Jun-01-07 13:00		Jun-01-07 14:20	
SVOA PAHs List by EPA 8270C	*Extracted:*	Jun-07-07 10:14		Jun-07-07 10:16		Jun-07-07 10:18		Jun-07-07 10:20	
	Analyzed:	Jun-07-07 20:47		Jun-07-07 21:30		Jun-07-07 22:13		Jun-07-07 22:56	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Acenaphthylene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Anthracene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Chrysene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Fluoranthene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Fluorene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
1-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
2-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Naphthalene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Phenanthrene		ND	0.005	ND	0.005	ND	0.006	ND	0.005
Pyrene		ND	0.005	ND	0.005	ND	0.006	ND	0.005

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 283780

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-Inch to Jal

Project Id: 2002-10248
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Jun-06-07 12:21 pm
Report Date: 11-JUN-07
Project Manager: Brent Barron, II

Analysis Requested						
	Lab Id:	283780-009				
	Field Id:	RW-1				
	Depth:					
	Matrix:	WATER				
	Sampled:	Jun-01-07 15:40				
SVOA PAHs List by EPA 8270C	*Extracted:*	Jun-07-07 10:22				
	Analyzed:	Jun-07-07 23:40				
	Units/RL:	mg/L	RL			
Acenaphthene		ND	0.005			
Acenaphthylene		ND	0.005			
Anthracene		ND	0.005			
Benzo(a)anthracene		ND	0.005			
Benzo(a)pyrene		ND	0.005			
Benzo(b)fluoranthene		ND	0.005			
Benzo(k)fluoranthene		ND	0.005			
Benzo(g,h,i)perylene		ND	0.005			
Chrysene		ND	0.005			
Dibenz(a,h)Anthracene		ND	0.005			
Fluoranthene		ND	0.005			
Fluorene		ND	0.005			
Indeno(1,2,3-c,d)Pyrene		ND	0.005			
1-Methylnaphthalene		ND	0.005			
2-Methylnaphthalene		ND	0.005			
Naphthalene		ND	0.005			
Phenanthrene		ND	0.005			
Pyrene		ND	0.005			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch to Jal

Work Order #: 283780 **Project ID:** 2002-10248

Lab Batch #: 698093 **Sample:** 283780-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.019	0.050	38	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.037	0.050	74	33-141	
2,4,6-Tribromophenol	0.048	0.050	96	10-123	

Lab Batch #: 698093 **Sample:** 283780-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.063	68	43-116	
2-Fluorophenol	0.025	0.063	40	21-100	
Nitrobenzene-d5	0.043	0.063	68	35-114	
Phenol-d6	0.015	0.063	24	10-94	
Terphenyl-D14	0.046	0.063	73	33-141	
2,4,6-Tribromophenol	0.048	0.063	76	10-123	

Lab Batch #: 698093 **Sample:** 283780-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.016	0.050	32	21-100	
Nitrobenzene-d5	0.034	0.050	68	35-114	
Phenol-d6	0.009	0.050	18	10-94	
Terphenyl-D14	0.033	0.050	66	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

** 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: Vacuum 10-Inch to Jal

Work Order #: 283780 **Project ID:** 2002-10248

Lab Batch #: 698093 **Sample:** 283780-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.056	68	43-116	
2-Fluorophenol	0.017	0.056	30	21-100	
Nitrobenzene-d5	0.037	0.056	66	35-114	
Phenol-d6	0.010	0.056	18	10-94	
Terphenyl-D14	0.039	0.056	70	33-141	
2,4,6-Tribromophenol	0.045	0.056	80	10-123	

Lab Batch #: 698093 **Sample:** 283780-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.034	0.050	68	43-116	
2-Fluorophenol	0.015	0.050	30	21-100	
Nitrobenzene-d5	0.033	0.050	66	35-114	
Phenol-d6	0.009	0.050	18	10-94	
Terphenyl-D14	0.033	0.050	66	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

Lab Batch #: 698093 **Sample:** 283780-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.019	0.050	38	21-100	
Nitrobenzene-d5	0.034	0.050	68	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.036	0.050	72	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

** 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: Vacuum 10-Inch to Jal

Work Order #: 283780 **Project ID:** 2002-10248

Lab Batch #: 698093 **Sample:** 283780-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.059	69	43-116	
2-Fluorophenol	0.022	0.059	37	21-100	
Nitrobenzene-d5	0.039	0.059	66	35-114	
Phenol-d6	0.013	0.059	22	10-94	
Terphenyl-D14	0.041	0.059	69	33-141	
2,4,6-Tribromophenol	0.046	0.059	78	10-123	

Lab Batch #: 698093 **Sample:** 283780-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.054	70	43-116	
2-Fluorophenol	0.019	0.054	35	21-100	
Nitrobenzene-d5	0.037	0.054	69	35-114	
Phenol-d6	0.011	0.054	20	10-94	
Terphenyl-D14	0.039	0.054	72	33-141	
2,4,6-Tribromophenol	0.042	0.054	78	10-123	

Lab Batch #: 698093 **Sample:** 283780-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.018	0.050	36	21-100	
Nitrobenzene-d5	0.035	0.050	70	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.039	0.050	78	33-141	
2,4,6-Tribromophenol	0.045	0.050	90	10-123	

** 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: Vacuum 10-Inch to Jal

Work Order #: 283780 **Project ID:** 2002-10248

Lab Batch #: 698093 **Sample:** 495887-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.029	0.050	58	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.021	0.050	42	10-94	
Terphenyl-D14	0.043	0.050	86	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

Lab Batch #: 698093 **Sample:** 495887-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.025	0.050	50	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.018	0.050	36	10-94	
Terphenyl-D14	0.040	0.050	80	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

Lab Batch #: 698093 **Sample:** 495887-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.029	0.050	58	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.021	0.050	42	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.042	0.050	84	10-123	

** 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: Vacuum 10-Inch to Jal

Work Order #: 283780 **Project ID:** 2002-10248

Analyst: TTD **Date Prepared:** 06/07/2007 **Date Analyzed:** 06/07/2007

Lab Batch ID: 698093 **Sample:** 495887-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C 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
Acenaphthene	ND	0.050	0.041	82	0.05	0.041	82	0	54-114	25	
Acenaphthylene	ND	0.050	0.040	80	0.05	0.041	82	2	53-113	25	
Anthracene	ND	0.050	0.040	80	0.05	0.041	82	2	56-116	25	
Benzo(a)anthracene	ND	0.050	0.042	84	0.05	0.042	84	0	59-116	25	
Benzo(a)pyrene	ND	0.050	0.041	82	0.05	0.042	84	2	58-118	25	
Benzo(b)fluoranthene	ND	0.050	0.042	84	0.05	0.041	82	2	54-123	25	
Benzo(k)fluoranthene	ND	0.050	0.041	82	0.05	0.041	82	0	52-122	25	
Benzo(g,h,i)perylene	ND	0.050	0.040	80	0.05	0.041	82	2	47-129	25	
Chrysene	ND	0.050	0.042	84	0.05	0.042	84	0	58-116	25	
Dibenz(a,h)Anthracene	ND	0.050	0.041	82	0.05	0.042	84	2	46-131	25	
Fluoranthene	ND	0.050	0.041	82	0.05	0.041	82	0	55-120	25	
Fluorene	ND	0.050	0.040	80	0.05	0.040	80	0	56-114	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.041	82	0.05	0.041	82	0	44-132	25	
1-Methylnaphthalene	ND	0.050	0.040	80	0.05	0.042	84	5	47-113	25	
2-Methylnaphthalene	ND	0.050	0.040	80	0.05	0.041	82	2	57-106	25	
Naphthalene	ND	0.050	0.039	78	0.05	0.040	80	3	53-110	25	
Phenanthrene	ND	0.050	0.040	80	0.05	0.041	82	2	56-116	25	
Pyrene	ND	0.050	0.042	84	0.05	0.042	84	0	57-119	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+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

Environmental Lab of Texas

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: Ken Dutton PAGE 01 OF 01

Project Name: VACUUM 10-INCH TO JAL

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2002-10248

Company Address: P. O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: PAA - C. J. Reynolds

Telephone No: (505) 441-2124 Fax No: (505) 396-1429

Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Tom Sedgwick e-mail: kdutton@basinenv.com

(lab use only)
ORDER #: 7F06010
283180

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 VOA (x2)	H2SO4	NaOH	Na2S2O3	None 1 Gallon	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 X; RCI; N.O.R.M.; PAH	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-1			31-May-07	1445	N	3	X		X				X		GW		X	X	X
02	MW-3			31-May-07	1540	N	3	X		X						GW		X	X	X
03	MW-4			31-May-07	1650	N	3	X		X						GW		X	X	X
04	MW-5			1-Jun-07	0955	N	3	X		X						GW		X	X	X
05	MW-9			1-Jun-07	1045	N	3	X		X						GW		X	X	X
06	MW-2			1-Jun-07	1130	N	3	X		X						GW		X	X	X
07	RW-3			1-Jun-07	1300	N	3	X		X						GW		X	X	X
08	RW-2			1-Jun-07	1420	N	3	X		X						GW		X	X	X
09	RW-1			1-Jun-07	1540	N	3	X		X				X		GW		X	X	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Tom Sedgwick	06 Jun 07	1221			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	Date 6.6.07	Time 12:21

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: 4.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 6·6·07 12:21

Lab ID #: 7F06010

Initials: AL

Sample Receipt Checklist

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

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

_____

_____

_____

Check all that Apply:

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

Analytical Report 290459

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Vacuum 10-Inch To Jal

2002-10248

03-OCT-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

03-OCT-07

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

Reference: XENCO Report No: **290459**
Vacuum 10-Inch To Jal
Project Address: Lea County, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 290459. 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. 290459 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
Odessa Laboratory Director

Sample Cross Reference 290459

PLAINS ALL AMERICAN EH&S, Midland, TX

Vacuum 10-Inch To Jal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Sep-26-07 10:25		290459-001
MW-3	W	Sep-26-07 11:15		290459-002
MW-4	W	Sep-26-07 12:05		290459-003
MW-5	W	Sep-26-07 13:17		290459-004
MW-9	W	Sep-26-07 13:44		290459-005
MW-2	W	Sep-26-07 14:22		290459-006
RW-3	W	Sep-26-07 15:03		290459-007
RW-2	W	Sep-26-07 15:33		290459-008
RW-1	W	Sep-26-07 16:10		290459-009

Certificate of Analysis Summary 290459

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-Inch To Jal

Project Id: 2002-10248
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Fri Sep-28-07 01:45 pm
Report Date: *03-OCT-07*
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	290459-001		290459-002		290459-003		290459-004		290459-005		290459-006	
	Field Id:	MW-1		MW-3		MW-4		MW-5		MW-9		MW-2	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-26-07 10:25		Sep-26-07 11:15		Sep-26-07 12:05		Sep-26-07 13:17		Sep-26-07 13:44		Sep-26-07 14:22	
BTEX by EPA 8021B	*Extracted:*	Oct-03-07 10:16		Oct-03-07 10:16		Oct-02-07 16:30		Oct-02-07 16:30		Oct-02-07 16:30		Oct-02-07 16:30	
	Analyzed:	Oct-03-07 12:27		Oct-03-07 13:38		Oct-02-07 23:23		Oct-02-07 23:40		Oct-02-07 23:56		Oct-03-07 02:08	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND		ND		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND		ND		ND	

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 290459

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-Inch To Jal

Project Id: 2002-10248
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Fri Sep-28-07 01:45 pm
Report Date: 03-OCT-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	290459-007		290459-008		290459-009				
	Field Id:	RW-3		RW-2		RW-1				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Sep-26-07 15:03		Sep-26-07 15:33		Sep-26-07 16:10				
BTEX by EPA 8021B	*Extracted:*	Oct-02-07 16:30		Oct-02-07 16:30		Oct-03-07 10:16				
	Analyzed:	Oct-03-07 02:25		Oct-03-07 02:41		Oct-03-07 14:30				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		ND	0.0010	ND	0.0010	0.0138	0.0010			
Toluene		ND	0.0010	ND	0.0010	ND	0.0010			
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010			
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020			
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010			
Total Xylenes		ND		ND		ND				
Total BTEX		ND		ND		0.0138				

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705584 **Sample:** 290458-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 705584 **Sample:** 290458-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 705584 **Sample:** 290459-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 705584 **Sample:** 290459-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 705584 **Sample:** 290459-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705584 **Sample:** 500015-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 705584 **Sample:** 500015-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 705584 **Sample:** 500015-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 705593 **Sample:** 290459-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 705593 **Sample:** 290459-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705593 **Sample:** 290459-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 705593 **Sample:** 290566-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 705593 **Sample:** 290566-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 705593 **Sample:** 500023-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 705593 **Sample:** 500023-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705607 **Sample:** 290459-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 705607 **Sample:** 290459-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 705607 **Sample:** 290459-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 705607 **Sample:** 500032-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 705607 **Sample:** 500032-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705607 **Sample:** 500032-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Blank Spike Recovery

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Lab Batch #: 705593 **Sample:** 500023-1-BKS **Matrix:** Water

Date Analyzed: 10/03/2007 **Date Prepared:** 10/02/2007 **Analyst:** SHE

Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.1000	0.0958	96	70-125	
Toluene	ND	0.1000	0.0937	94	70-125	
Ethylbenzene	ND	0.1000	0.0915	92	71-129	
m,p-Xylene	ND	0.2000	0.1830	92	70-131	
o-Xylene	ND	0.1000	0.0913	91	71-133	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Vacuum 10-Inch To Jal

Work Order #: 290459 **Project ID:** 2002-10248

Analyst: SHE **Date Prepared:** 10/02/2007 **Date Analyzed:** 10/02/2007

Lab Batch ID: 705584 **Sample:** 500015-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	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
Benzene	ND	0.1000	0.1061	106	0.1	0.1072	107	1	70-125	25	
Toluene	ND	0.1000	0.1047	105	0.1	0.1058	106	1	70-125	25	
Ethylbenzene	ND	0.1000	0.1047	105	0.1	0.1061	106	1	71-129	25	
m,p-Xylene	ND	0.2000	0.2099	105	0.2	0.2123	106	1	70-131	25	
o-Xylene	ND	0.1000	0.1022	102	0.1	0.1033	103	1	71-133	25	

Analyst: SHE **Date Prepared:** 10/03/2007 **Date Analyzed:** 10/03/2007

Lab Batch ID: 705607 **Sample:** 500032-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	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
Benzene	ND	0.1000	0.0940	94	0.1	0.0948	95	1	70-125	25	
Toluene	ND	0.1000	0.0924	92	0.1	0.0928	93	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0918	92	0.1	0.0929	93	1	71-129	25	
m,p-Xylene	ND	0.2000	0.1832	92	0.2	0.1860	93	2	70-131	25	
o-Xylene	ND	0.1000	0.0896	90	0.1	0.0911	91	2	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+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: Vacuum 10-Inch To Jal

Work Order # : 290459 **Project ID:** 2002-10248

Lab Batch ID: 705584 **QC- Sample ID:** 290458-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/03/2007 **Date Prepared:** 10/02/2007 **Analyst:** SHE

Reporting Units: mg/L

BTEX by EPA 8021B 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	ND	0.1000	0.0935	94	0.1000	0.0969	97	3	70-125	25	
Toluene	ND	0.1000	0.0915	92	0.1000	0.0941	94	2	70-125	25	
Ethylbenzene	ND	0.1000	0.2076	208	0.1000	0.2098	210	1	71-129	25	X
m,p-Xylene	ND	0.2000	0.1795	90	0.2000	0.1814	91	1	70-131	25	
o-Xylene	ND	0.1000	0.0897	90	0.1000	0.0905	91	1	71-133	25	

Lab Batch ID: 705593 **QC- Sample ID:** 290566-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/03/2007 **Date Prepared:** 10/02/2007 **Analyst:** SHE

Reporting Units: mg/L

BTEX by EPA 8021B 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	ND	0.1000	0.0940	94	0.1000	0.0935	94	0	70-125	25	
Toluene	ND	0.1000	0.0894	89	0.1000	0.0883	88	1	70-125	25	
Ethylbenzene	ND	0.1000	0.0897	90	0.1000	0.0849	85	6	71-129	25	
m,p-Xylene	ND	0.2000	0.1761	88	0.2000	0.1650	83	6	70-131	25	
o-Xylene	ND	0.1000	0.0854	85	0.1000	0.0836	84	1	71-133	25	

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

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

Environmental Lab of Texas

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: Ken Dutton PAGE 01 OF 01 Project Name: VACUUM 10-INCH TO JAL

Company Name: Basin Environmental Service Technologies, LLC Project #: 2002-10248

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

City/State/Zip: Lovington, NM 88260 PO #: PAA - C. J. Reynolds

Telephone No: (505) 441-2124 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Ken Dutton e-mail: kdutton@basinenv.com

(lab use only)
ORDER #: 290459

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 (VOA X 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: 8015B TPH: 418.1 8015M 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 RCI N.O.R.M PAH	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-1			26-Sep-07	1025		2	X		X						GW		X	X
02	MW-3			26-Sep-07	1115		2	X		X						GW		X	X
03	MW-4			26-Sep-07	1205		2	X		X						GW		X	X
04	MW-5			26-Sep-07	1317		2	X		X						GW		X	X
05	MW-9			26-Sep-07	1344		2	X		X						GW		X	X
06	MW-2			26-Sep-07	1422		2	X		X						GW		X	X
07	RW-3			26-Sep-07	1503		2	X		X						GW		X	X
08	RW-2			26-Sep-07	1533		2	X		X						GW		X	X
09	RW-1			26-Sep-07	1610		2	X		X						GW		X	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	28 SEP 07	0930	Linda Blackwood	Sep 28 07	9:30
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Linda Blackwood Sep 28 07		1:45	Andrea Lam	9.28.07	1.45

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. ?
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.5 °C

[redacted]

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin | Plains

Date/ Time: 9.28.07 1:45

Lab ID # : 290459

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample Instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

Analytical Report 294149

for

PLAINS ALL AMERICAN EH&S

Project Manager: JIMMY BRYANT

Vacuum 10-inch to Jal

2002-10248

12-DEC-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

ENVIRONMENTAL LAB OF

12-DEC-07

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

Reference: XENCO Report No: **294149**
Vacuum 10-inch to Jal
Project Address: Lea County, NM

JIMMY BRYANT:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 294149. 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. 294149 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

Sample Cross Reference 294149

PLAINS ALL AMERICAN EH&S, Midland, TX

Vacuum 10-inch to Jal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Dec-06-07 11:10		294149-001
MW-3	W	Dec-06-07 11:35		294149-002
MW-4	W	Dec-06-07 12:05		294149-003
MW-5	W	Dec-06-07 12:35		294149-004
MW-9	W	Dec-06-07 13:05		294149-005
MW-2	W	Dec-06-07 13:35		294149-006
RW-3	W	Dec-06-07 14:00		294149-007
RW-2	W	Dec-06-07 14:30		294149-008
RW-1	W	Dec-06-07 14:40		294149-009

Certificate of Analysis Summary 294149

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-inch to Jal

Project Id: 2002-10248
Contact: JIMMY BRYANT
Project Location: Lea County, NM

Date Received in Lab: Fri Dec-07-07 08:41 am
Report Date: 12-DEC-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	294149-001		294149-002		294149-003		294149-004		294149-005		294149-006	
	Field Id:	MW-1		MW-3		MW-4		MW-5		MW-9		MW-2	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Dec-06-07 11:10		Dec-06-07 11:35		Dec-06-07 12:05		Dec-06-07 12:35		Dec-06-07 13:05		Dec-06-07 13:35	
BTEX by EPA 8021B	*Extracted:*	Dec-11-07 11:19		Dec-11-07 11:19		Dec-11-07 11:19		Dec-11-07 11:19		Dec-11-07 11:19		Dec-11-07 11:19	
	Analyzed:	Dec-11-07 21:42		Dec-11-07 21:59		Dec-11-07 22:49		Dec-11-07 23:06		Dec-11-07 23:23		Dec-11-07 23:40	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	0.0013	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Xylenes, Total		ND		ND		ND		ND		ND		ND	
Total BTEX		ND		0.0013		ND		ND		ND		ND	

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 294149

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Vacuum 10-inch to Jal

Project Id: 2002-10248
Contact: JIMMY BRYANT
Project Location: Lea County, NM

Date Received in Lab: Fri Dec-07-07 08:41 am
Report Date: 12-DEC-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	294149-007		294149-008		294149-009				
	Field Id:	RW-3		RW-2		RW-1				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Dec-06-07 14:00		Dec-06-07 14:30		Dec-06-07 14:40				
BTEX by EPA 8021B	*Extracted:*	Dec-11-07 11:19		Dec-11-07 11:19		Dec-11-07 11:19				
	Analyzed:	Dec-12-07 00:14		Dec-12-07 00:31		Dec-12-07 00:48				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		0.0012	0.0010	ND	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		ND		ND				
Total BTEX		0.0012		ND		ND				

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-inch to Jal

Work Order #: 294149 **Project ID:** 2002-10248

Lab Batch #: 710229 **Sample:** 294149-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710229 **Sample:** 294149-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 710229 **Sample:** 294149-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 710229 **Sample:** 294149-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 710229 **Sample:** 294149-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

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

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-inch to Jal

Work Order #: 294149 **Project ID:** 2002-10248

Lab Batch #: 710229 **Sample:** 294149-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710229 **Sample:** 294149-006 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 710229 **Sample:** 294149-006 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 710229 **Sample:** 294149-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 710229 **Sample:** 294149-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vacuum 10-inch to Jal

Work Order #: 294149 **Project ID:** 2002-10248

Lab Batch #: 710229 **Sample:** 294149-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 710229 **Sample:** 502384-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 710229 **Sample:** 502384-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

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

Lab Batch #: 710229 **Sample:** 502384-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

ENVIRONMENTAL LAB OF

BS / BSD Recoveries

Project Name: Vacuum 10-inch to Jal

Work Order #: 294149 **Project ID:** 2002-10248

Analyst: SHE **Date Prepared:** 12/11/2007 **Date Analyzed:** 12/11/2007

Lab Batch ID: 710229 **Sample:** 502384-1-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	ND	0.1000	0.1029	103	0.1	0.1053	105	2	70-125	25	
Toluene	ND	0.1000	0.1008	101	0.1	0.1020	102	1	70-125	25	
Ethylbenzene	ND	0.1000	0.1003	100	0.1	0.1007	101	0	71-129	25	
m,p-Xylenes	ND	0.2000	0.1965	98	0.2	0.1970	99	0	70-131	25	
o-Xylene	ND	0.1000	0.0996	100	0.1	0.0985	99	1	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+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

ENVIRONMENTAL LAB OF

Form 3 - MS / MSD Recoveries

Project Name: Vacuum 10-inch to Jal

Work Order # : 294149 **Project ID:** 2002-10248

Lab Batch ID: 710229 **QC- Sample ID:** 294149-006 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/12/2007 **Date Prepared:** 12/11/2007 **Analyst:** SHE

Reporting Units: mg/L

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
Benzene	ND	0.1000	0.1049	105	0.1000	0.1016	102	3	70-125	25	
Toluene	ND	0.1000	0.1042	104	0.1000	0.0987	99	5	70-125	25	
Ethylbenzene	ND	0.1000	0.1116	112	0.1000	0.0997	100	11	71-129	25	
m,p-Xylenes	ND	0.2000	0.2337	117	0.2000	0.1965	98	18	70-131	25	
o-Xylene	ND	0.1000	0.1112	111	0.1000	0.0993	99	11	71-133	25	

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

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

Environmental Lab of Texas

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: Ken Dutton PAGE 01 OF 01 Project Name: VACUUM 10-INCH TO JAL

Company Name: Basin Environmental Service Technologies, LLC Project #: 2002-10248

Company Address: 2800 Plains Hwy Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA - C. J. Reynolds

Telephone No: (505) 441-2124 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Ken Dutton e-mail: kdutton@basinenv.com

(lab use only) ORDER #: 294149

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 (VOA X 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix: DW = Drinking Water SL = Sludge GW = Groundwater S = Soil/Sol NP = Non-Potable Specify Oth	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	TOTAL: Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
001	MW-1			06-Dec-07	1110		2	X		X						GW									X					X
002	MW-3			06-Dec-07	1135		2	X		X						GW									X					X
003	MW-4			06-Dec-07	1205		2	X		X						GW									X					X
004	MW-5			06-Dec-07	1235		2	X		X						GW									X					X
005	MW-9			06-Dec-07	1305		2	X		X						GW									X					X
006	MW-2			06-Dec-07	1335		2	X		X						GW									X					X
007	RW-3			06-Dec-07	1400		2	X		X						GW									X					X
008	RW-2			06-Dec-07	1430		2	X		X						GW									X					X
009	RW-1			06-Dec-07	1440		2	X		X						GW									X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	12/07/07	8:41			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				12/07/07	8:41

Laboratory Comments: gc-VOA

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: 2-0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Envirn. | Plains

Date/ Time: 12/07/07 8:41

Lab ID # : 294149

Initials: gmk

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

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

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR "INFORMATION ONLY NON-REPORTABLE" ☒ Initial Report ☐ Final Report

Name of Company	Contact
EOTT Energy Pipeline	Frank Hernandez
Address	Telephone No.
5805 East Highway 80 / P.O. Box 1660, Midland, TX 79703	915.638.3799
Facility Name	Facility Type
Vacuum 10" to Jal 9-18-02 #2002-10248	10" Crude Oil Pipeline

Surface Owner	Mineral Owner	Lease No.
Jim T. Cooper		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat.: 32°38'21.3"N Lon:103°16'46.2"W
M	20	19S	37E					

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil	250 bbls	80 bbls
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
10" Steel Pipeline	9-18-02 10:00 AM	9-18-02 1:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley, Hobbs NMOCD (9-18-02)	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: NMOCD notified on 9-18-02 2:45 PM	
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.*
The cause of the release was internal/external corrosion. The line has been repaired. Contaminated soil is stockpiled on a plastic barrier on site awaiting remediation.

Describe Area Affected and Cleanup Action Taken.*
Spill Area = ~35,197 ft^2 150'X 490'. Near surface soil will be characterized in accordance with 40 CFR 261 and with NMOCD approval, disposed of in a NMOCD approved facility. The site will be delineated and remediated.

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: Frank Hernandez	OIL CONSERVATION DIVISION	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: September 20, 2002 Phone: 915.638.3799	Conditions of Approval:	Attached ☐

* Attach Additional Sheets If Necessary