AP - 41

ANNUAL MONITORING REPORT

YEAR(S):

2004

PLAINS
ALL AMERICAN

March 31, 2005

Mr. Ed Martin
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Sante Fe, New Mexico 87505

Re: Plains All American – Annual Monitoring Report
1 Site in Lea County, New Mexico

Dear Mr. Martin:

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

Hugh Gathering Section 11, Township 21S, Range 37E, of Lea County

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

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

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

PLAINS
ALL AMERICAN
PIPELINE, L.P.

2004 ANNUAL MONITORING REPORT

Hugh Gathering 090402
Ref. # 2002-10235

SE¼ of the SE¼ of Section 11, R37E, T21S
Latitude 32°29'11.007"N and Longitude 103°07'33.864"W
Elevation ~3,425'amsl

3 miles northeast of Eunice, Lea County, New Mexico

March 2005

Prepared by

Environmental Plus, Inc.
2100 West Avenue O
P.O. Box 1558
Eunice, New Mexico 88231
Tele 505•394•3481 FAX 505•394•2601
(enviplus1@aol.com)

STANDARD OF CARE

Environmental Assessment and Remediation Report

Hugh Gathering
Ref. # 2002-10235

The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993), the NMOCD Unlined Surface Impoundment Closure Guidelines (February 1993), and the Environmental Plus, Inc. (EPI) Standard Operating Procedures and Quality Assurance/Quality Control Plan. The conclusions are based on field observations and laboratory analytical reports as presented in the report. Recommendations follow NMOCD guidance and represent the professional opinions of EPI staff. These opinions were arrived at with currently accepted geologic, hydrogeologic and engineering practices at this time and location. The report was prepared or reviewed by a certified or registered EPI professional with a background in engineering, environmental, and/or the natural sciences.

This report was prepared by:

Patrick W. McCasland — 31 March 2005
Date

This report was reviewed by:

Iain Olness, PG — 31 March 2005
Date

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Ed Martin	Environmental Engineer	NMOCD	1220 South St. Francis Drive Santa Fe, NM 87505	emartin@state.nm.us
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Camille Reynolds	Environmental Supervisor	Plains	P.O. Box 3119, Midland, TX 79702	cjreynolds@paalp.com
Jeff Dann	Environmental Director	Plains	333 Clay Street Suite #1600, Houston, TX 77002	jpdann@paalp.com
file	archive	EPI	P.O. Box 1558, Eunice, NM 88231	enviplus1@aol.com

NMOCD - New Mexico Oil Conservation Division
Plains - Plains Pipeline L.P.
EPI - Environmental Plus, Inc.

Table of Contents

1.0 BACKGROUND

This site is located in the SE¼ of the SE¼ of Section 11, Range 37 East, Township 21 South at a latitude of 32°29'11.007"N and a longitude of 103°07'33.864"W approximately 3 miles northeast of Eunice, Lea County, New Mexico on property owned by Jimmy Bryant. Area and site maps are included as Figures 1-3. The estimated 50 barrel crude oil leak was attributed to internal/external corrosion and occurred on September 4, 2002 in the 6" steel pipeline with no oil recovered. The line was subsequently replaced and tested. Near surface impacted soil was disposed of in an NMOCD approved landfarm and the site soil and groundwater impacts delineated. Approximately 100 square feet (10' X 10') of surface area was affected during the initial release. There are no surface water bodies or domestic or agricultural water wells within 1,000 horizontal feet of the site. During site soil delineation in September 2002, crude oil (i.e., phase separated hydrocarbons (PSH)) was found to have impacted the groundwater measured at approximately 60 feet below ground surface ('bgs). Plains Pipeline purchased the assets from Link Energy (previously EOTT Energy) in April 2004 and is now managing the environmental monitoring and remediation activities.

2.0 FIELD ACTIVITIES PRIOR TO 2004

A single 2" PVC cased monitor well (MW1) was installed during soil delineation activities in September 2002 to evaluate PSH thickness and to initiate PSH recovery. In June 2003, monitor wells MW2, MW3 and MW4 were installed and in July 2003, MW5 was installed. In June 2003, weekly manual recovery of PSH began at monitor wells MW1, MW2 and MW4. In August 2003, Link Energy began deploying a gasoline powered PSH recovery system on a daily basis. Site surveillance was conducted daily to monitor water and PSH levels, deploy the trailer mounted product recovery system, and manage produced fluids.

3.0 2004 FIELD ACTIVITIES

Site surveillance continued in 2004 with daily deployment of the trailer mounted product recovery system, monthly monitoring of water and PSH levels and quarterly sampling of monitor wells not impacted with PSH. Also in 2004, with approval from the NMOCD, monitor wells MW6, MW7, MW8, MW9, MW10, MW11 and MW12 were installed to further delineate the horizontal extents of PSH and dissolved phase impacts.

4.0 GROUNDWATER GRADIENT AND PSH THICKNESS

The area groundwater gradient, as illustrated in Figures 3 and 4, continues to trend to the southeast and was determined using measurements from the site monitoring wells. Stabilized PSH thickness in monitor well MW1, near the leak origin, declined from 7.77-feet in January 2002, to 4.47-feet in October 2003 and 3.16-feet in December 2004. Water and PSH levels are illustrated in Figures 9 and 10.

5.0 PSH RECOVERY

Product recovery activities began in September of 2002, initially by manual bailing followed in August of 2003 with the daily deployment of a gasoline powered PSH recovery system. The recovery system is shutdown for at least 48 hours prior to collecting water and PSH levels to ensure stabilized measurements. As of December 2004, approximately 600 gallons of crude oil have been recovered and reintroduced into the Plains pipeline system. Monitoring wells MW1, MW2, MW3, MW4, MW8, MW9, and MW10 are impacted with PSH and are being used as PSH recovery wells. An automated eductor type recovery system, being used successfully at other Plains sites, will be installed within a lined and bermed area central to the site and secured with a chain link fence with a lockable gate. Electrical power will be provided by a propane fueled 8,000 kilowatt generator designed for continuous operation. The system will be checked daily until the system and recovery rates have stabilized and twice weekly thereafter.

6.0 2004 GROUNDWATER SAMPLING

Monitoring wells MW1, MW2, MW3, MW4, MW8, MW9, and MW10 were not sampled during 2004 due to the presence of PSH. Monitoring well MW5 was sampled on May 20, July 26, October 11, and December 28, 2004. Monitoring wells MW6, MW7, and MW11 were sampled on July 26, October 11, and December 28, 2004. Monitoring well MW12 was sampled on December 3, 2004. Monitoring well MW6 was installed in April of 2004, monitoring wells MW7 and MW11 in June 2004, and monitoring well MW12 in December 2004. Prior to sampling, each monitoring well was purged at least 3 well volumes or dry.

7.0 ANALYTICAL RESULTS

The New Mexico Water Quality Control Commission (WQCC) groundwater standards are as follows: benzene-10.0 microgram per Liter (µg/L), ethylbenzene-750 µg/L, total xylene-620 µg/L, and toluene-750 µg/L. Groundwater samples collected from monitoring well MW5 exceeded the WQCC benzene standard during each 2004 sampling event and, although detected, toluene, ethylbenzene, and total xylene did not exceed the WQCC standards. Analytical results for perimeter monitoring wells MW6 (176-feet west northwest of the leak origin), MW7 (151-feet south of the leak origin), MW 11 (103-feet north of the leak origin), and MW12 (225-feet southeast of the leak origin) reported BTEX concentrations less than the laboratory method detection limits for each parameter.

During the July 26, 2004 sampling event, samples were collected from monitoring wells MW5, MW6, MW7, and MW11 and submitted to the laboratory for polynuclear aromatic hydrocarbons (PAH) analyses. The analytical results from monitoring well MW5 were 31.96 µg/L PAH and exceeded the WQCC PAH groundwater standard of 30.0 µg/L. The PAH results for monitoring wells MW6, MW7, and MW11 were reported as not detected. The analytical results are summarized in Table 2 and illustrated in Figures 16-27. The laboratory analytical reports are included in Appendix A.

8.0 STATUS AND RECOMMENDATIONS

In accordance with NMAC 19.15.1.19 (Rule 19), a combined Stage I and Stage II Abatement Plan (Abatement Plan) has been submitted to the NMOCD for approval. The Abatement Plan proposes to remove impacted soil to 10-feet bgs, permanently isolate the remaining impacted soil below 10-feet bgs with an impermeable oversized barrier, and backfill with clean soil. The dissolved phase hydrocarbon plume is bounded by the 4-perimeter monitoring wells and the current array of interior monitoring wells are being used to recovery PSH. It is recommended that:

- Continue current groundwater sampling at quarterly intervals;
- Analyze PAH at least annually;
- Measure groundwater and PSH levels semi-monthly during PSH recovery activities; and
- Install the proposed automated PSH recovery system.

FIGURES

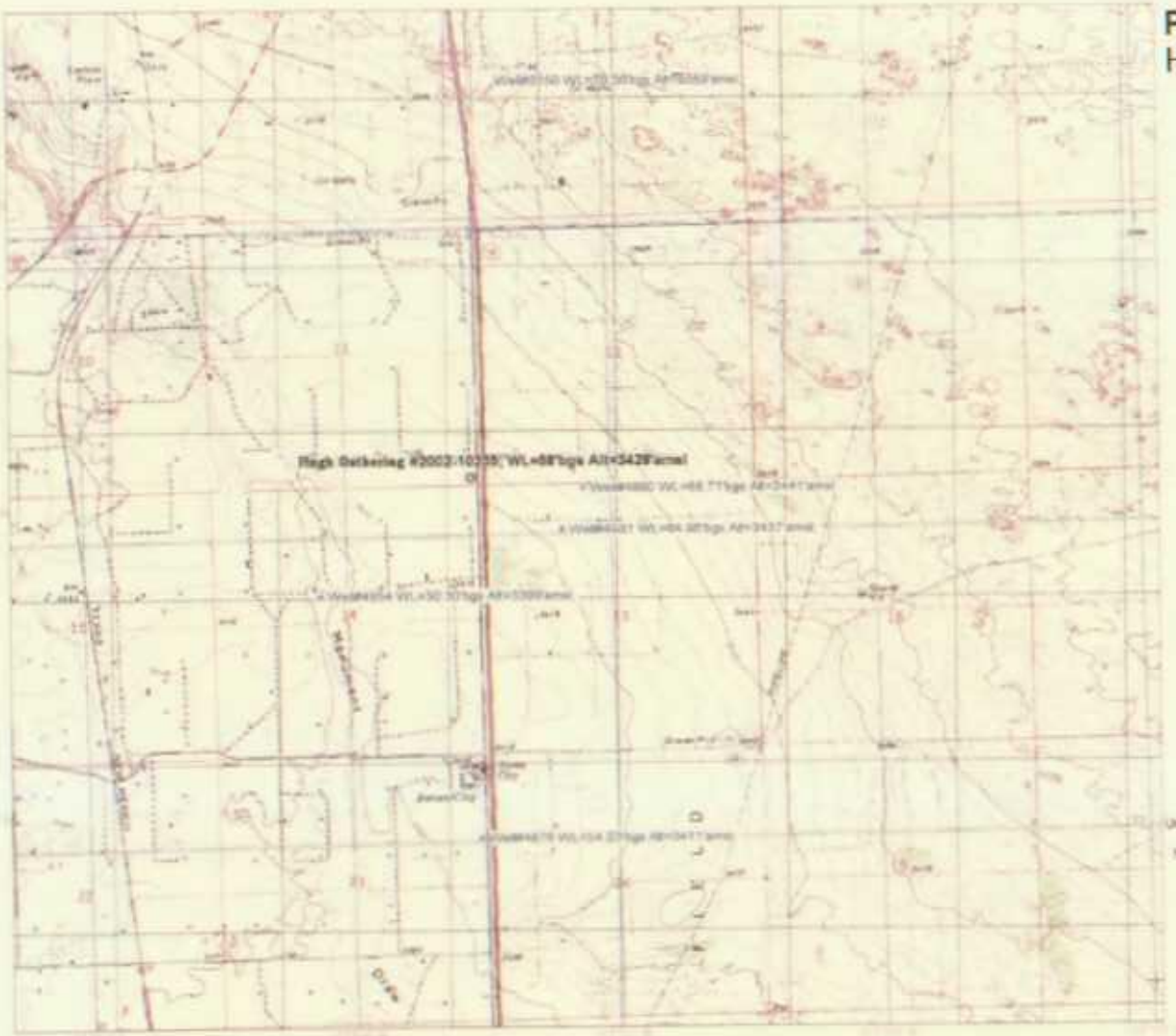


Figure 1 - Hugh Gathering Area Map

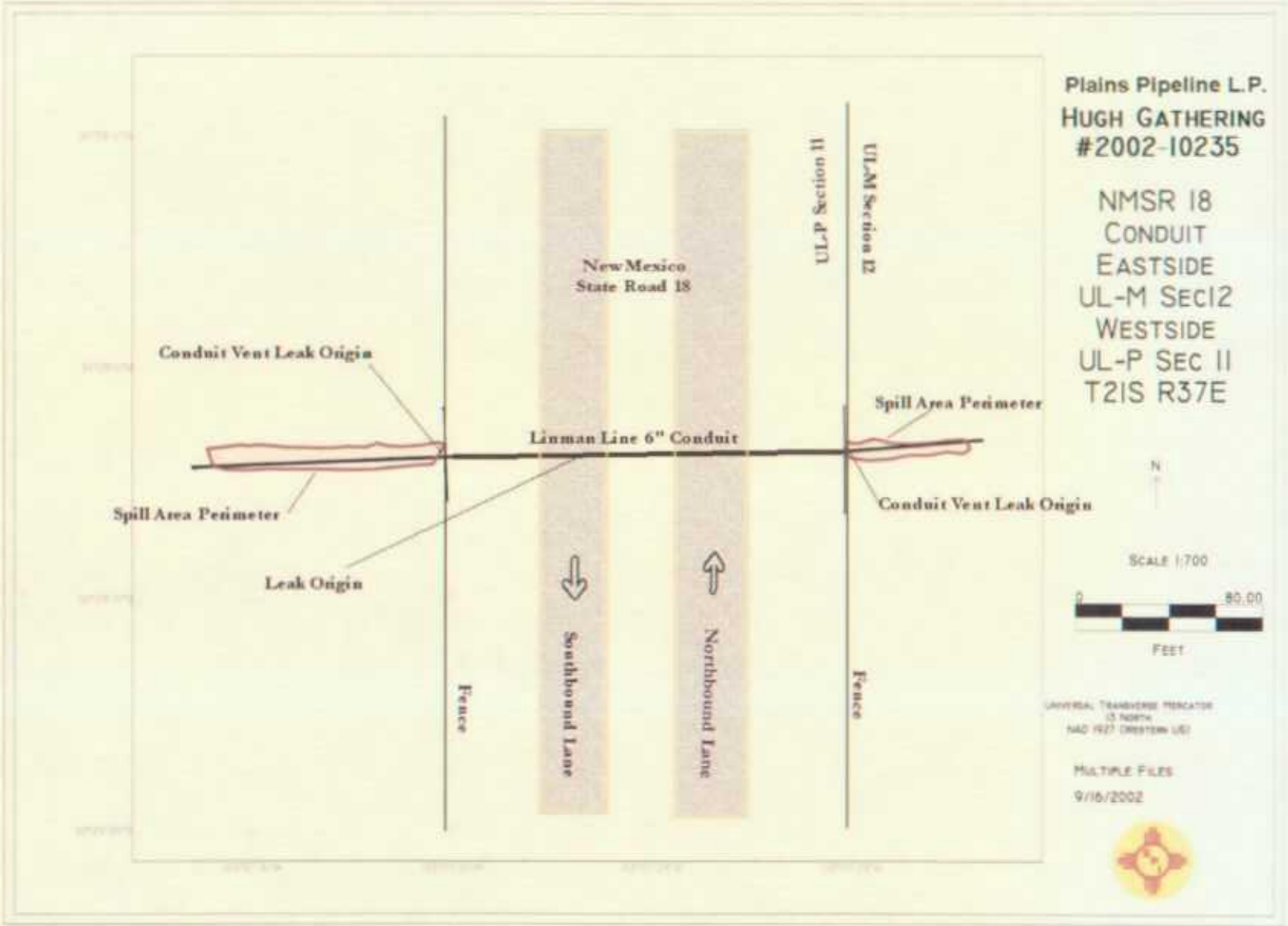


Figure 2 - Hugh Gathering Site Map

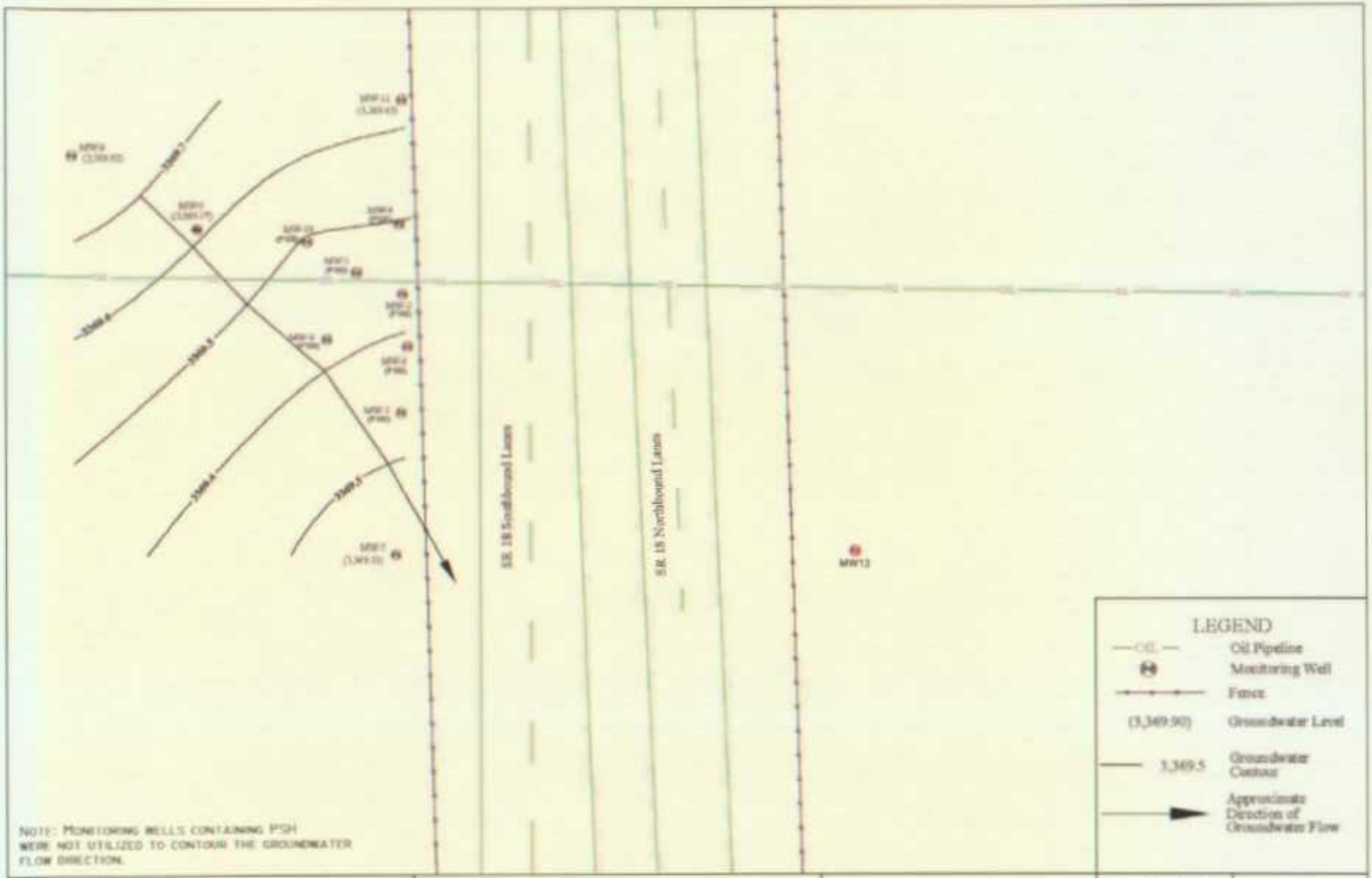


Figure 3 - Hugh Gathering Groundwater Contour Map – 7/26/04

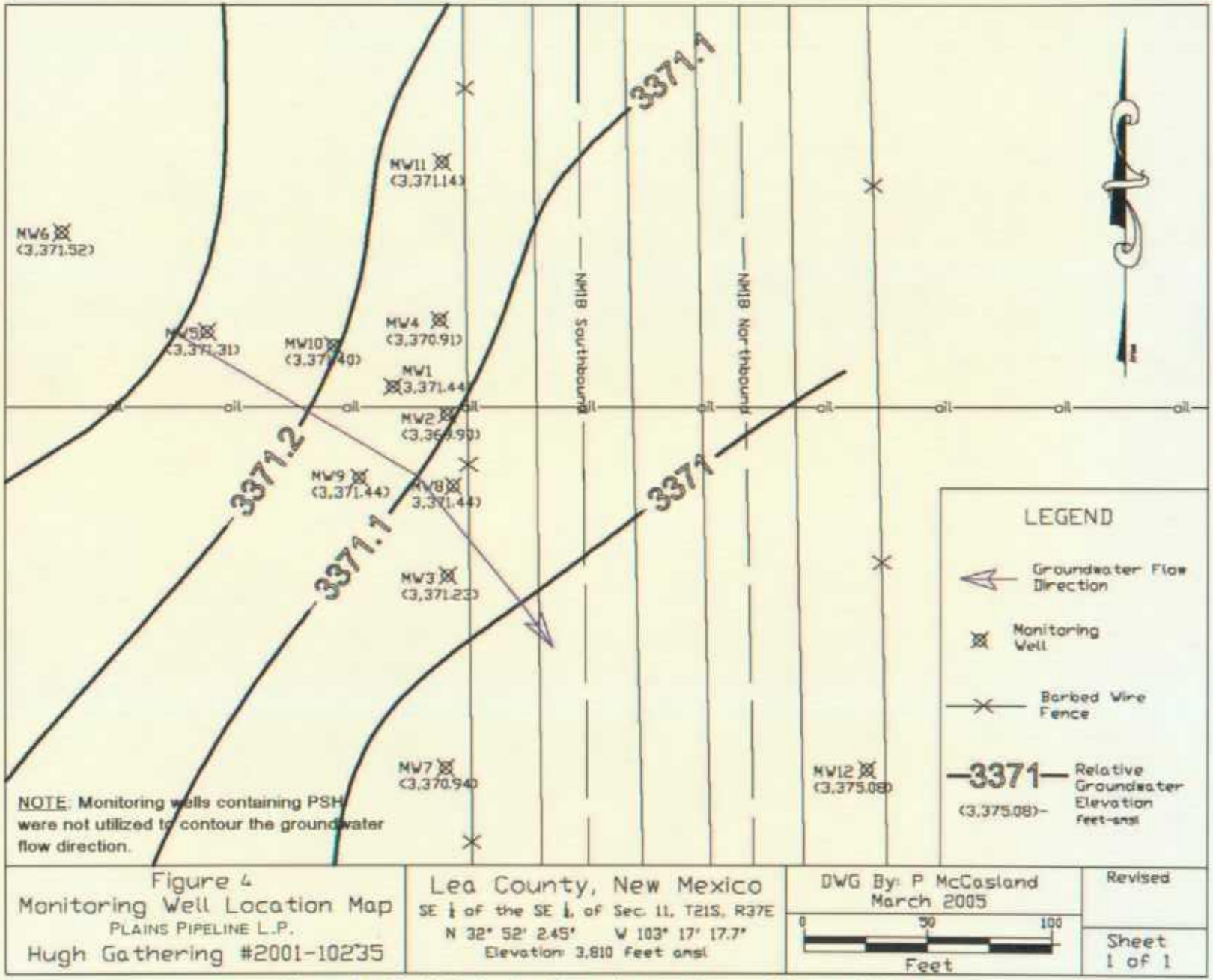


Figure 4 - Hugh Gathering Groundwater Contour Map – 12/28/04

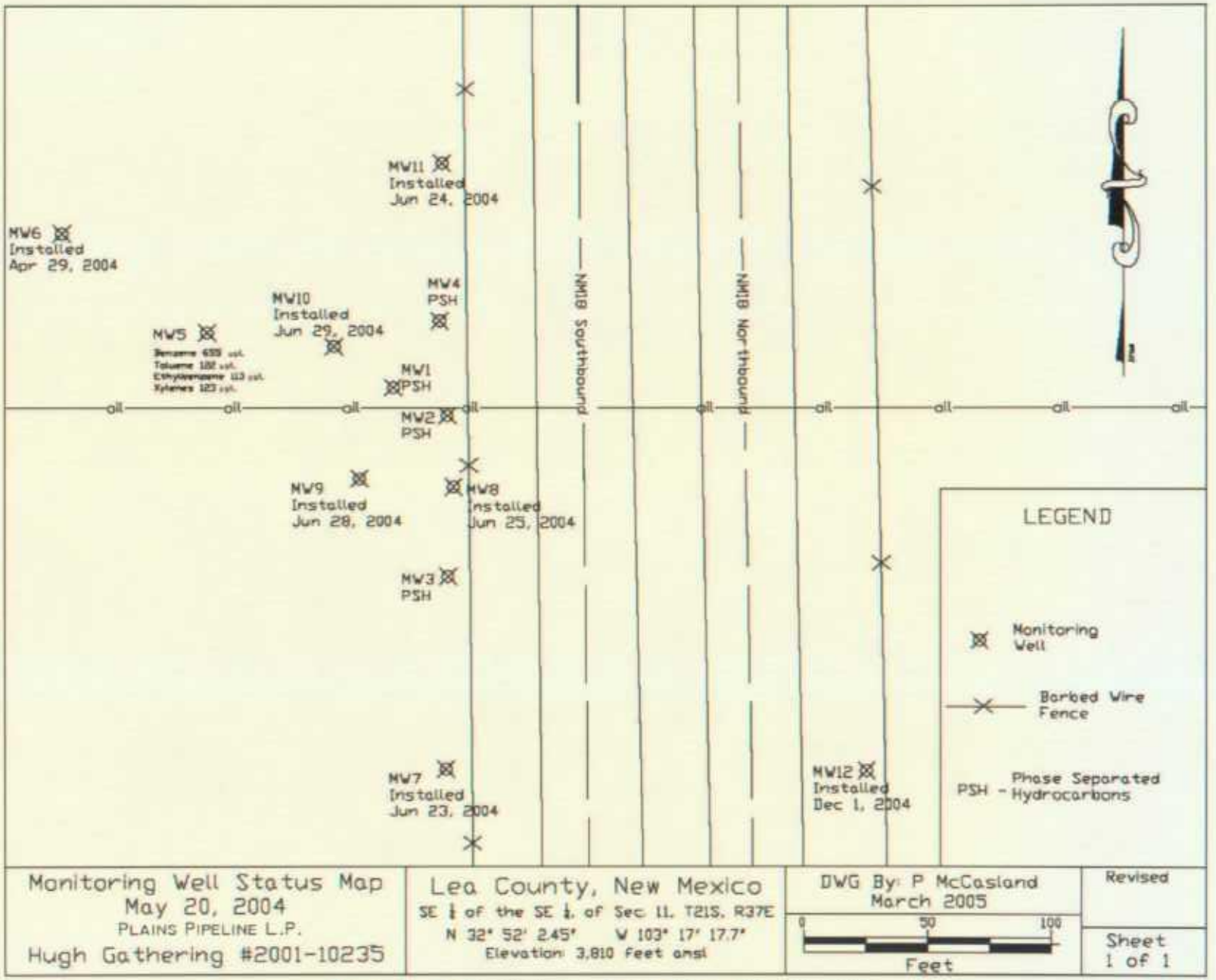


Figure 5 - Hugh Gathering Status Map – May 20, 2004

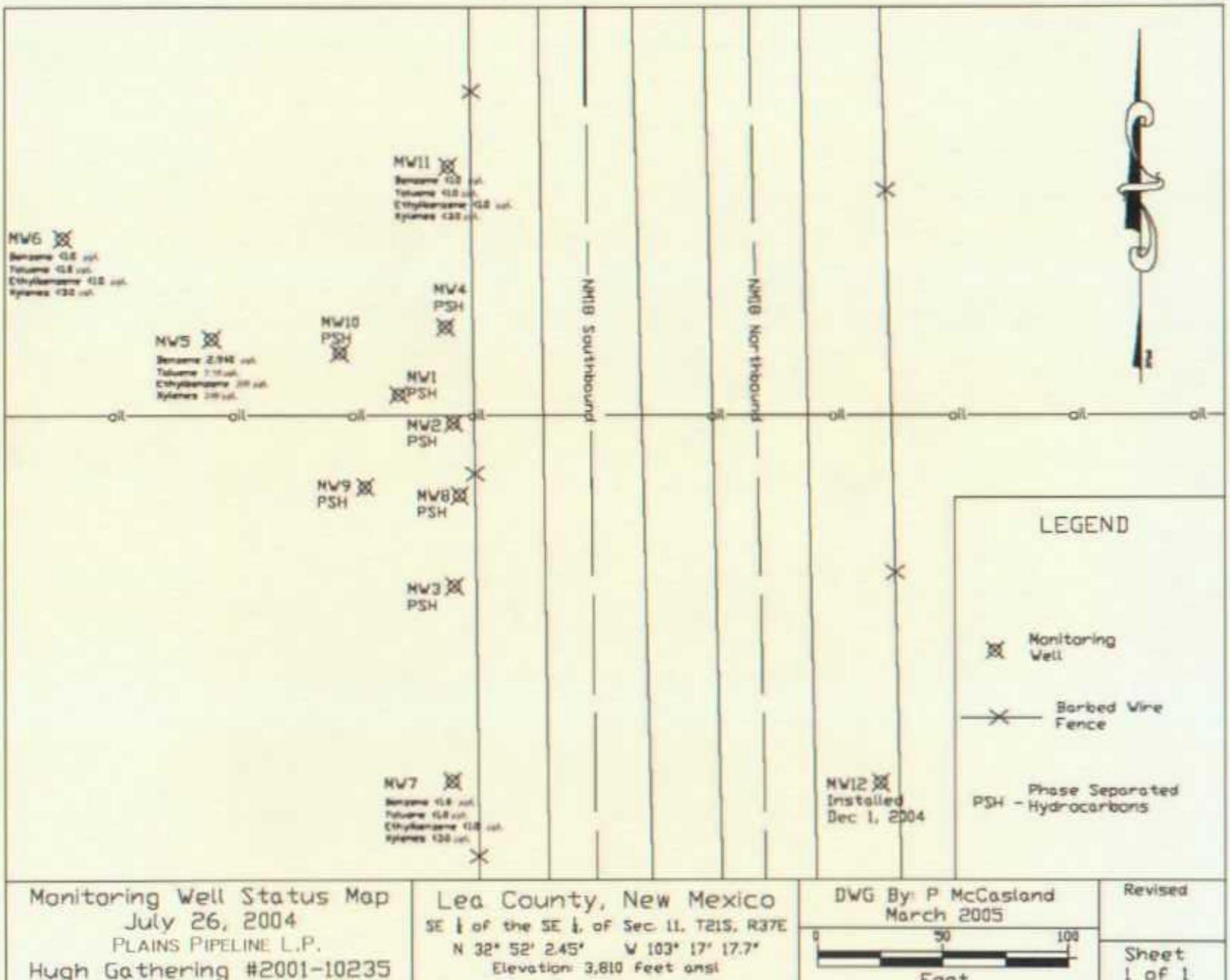


Figure 6 - Hugh Gathering Status Map – July 26, 2004

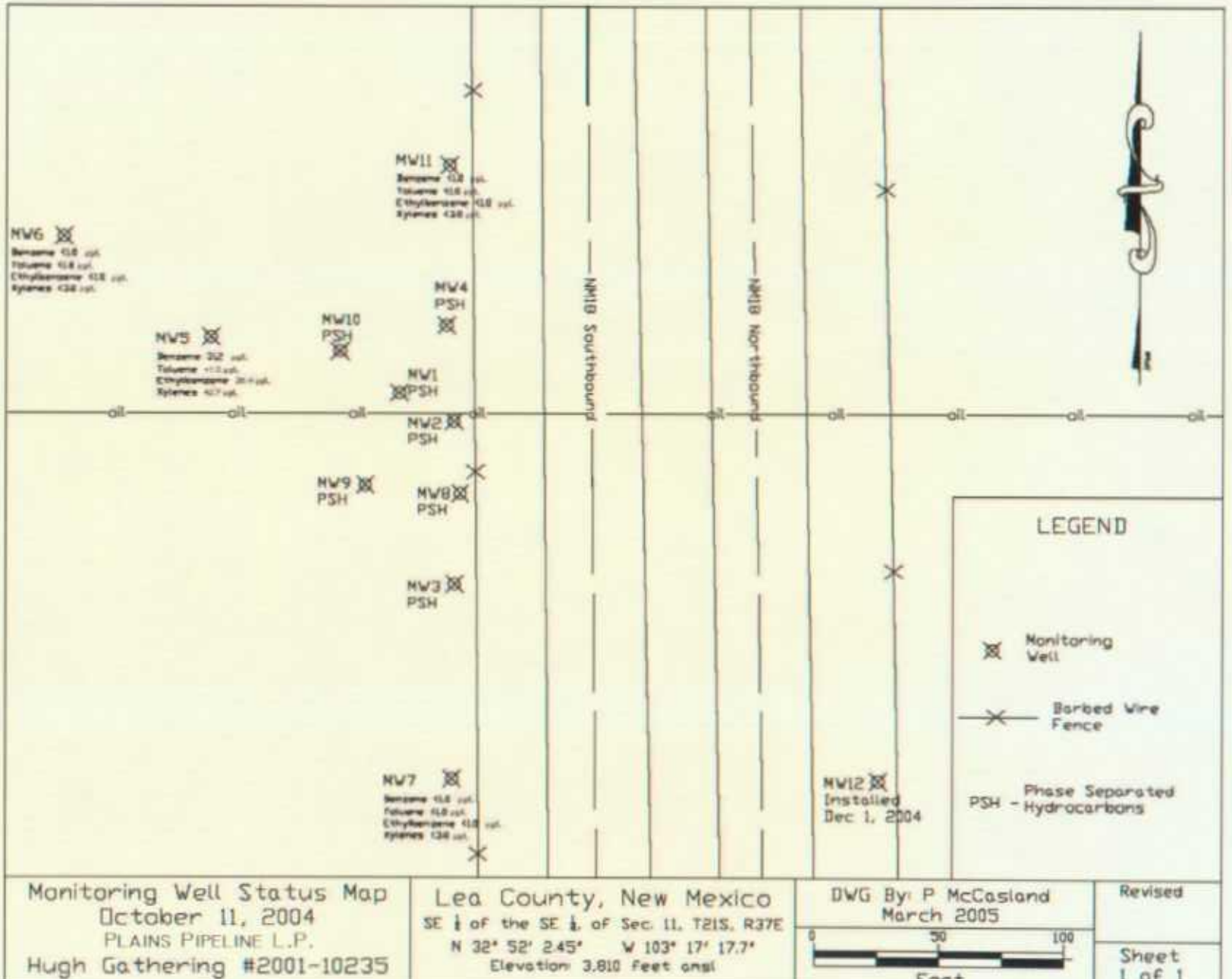


Figure 7 - Hugh Gathering Status Map – October 11, 2004

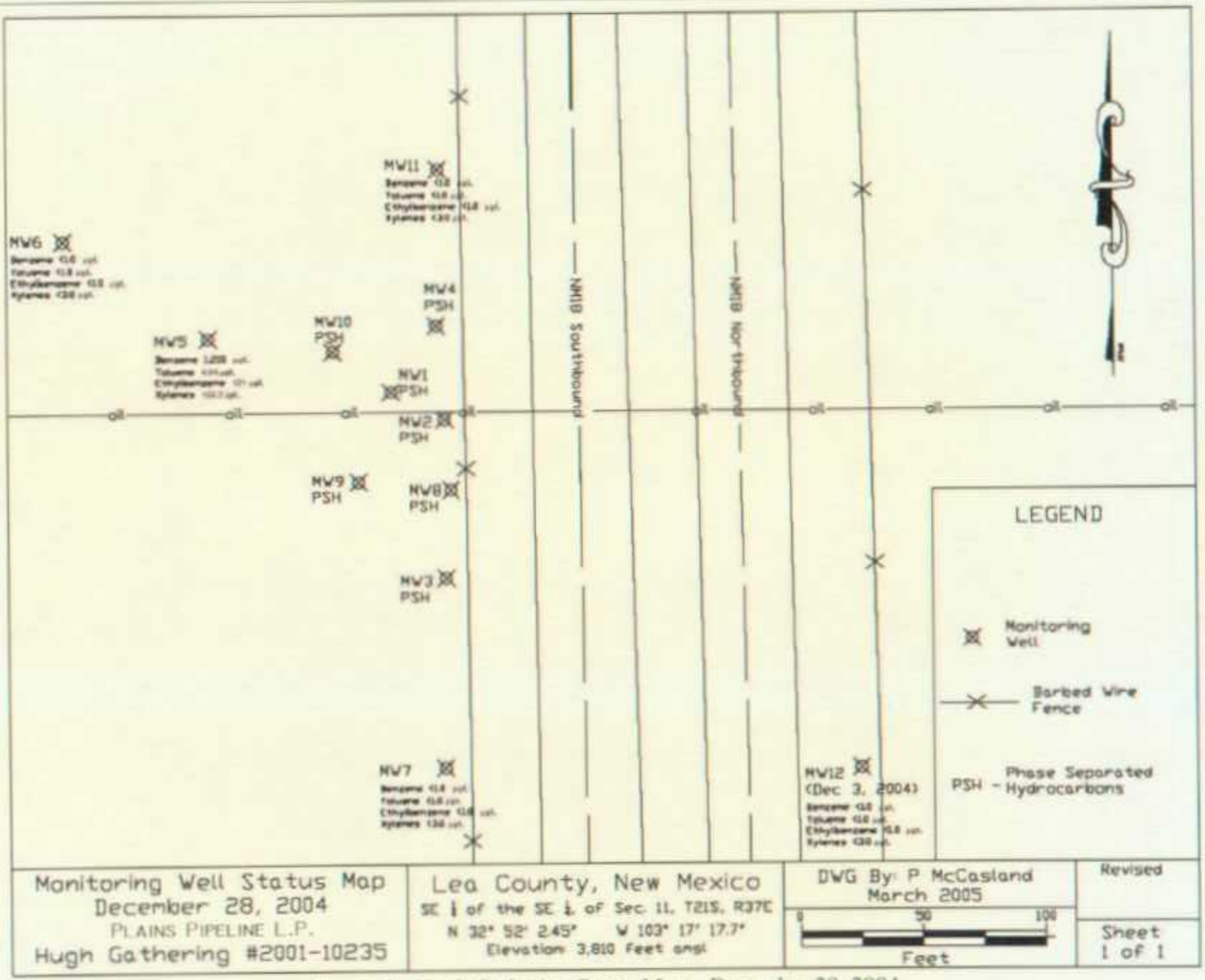


Figure 8 - Hugh Gathering Status Map – December 28, 2004

Plains Pipeline , L.P.
Hugh Gathering #2001-10235
Phase Separated Hydrocarbon Thickness
Monitoring Wells MW1, MW2, MW3, and MW4

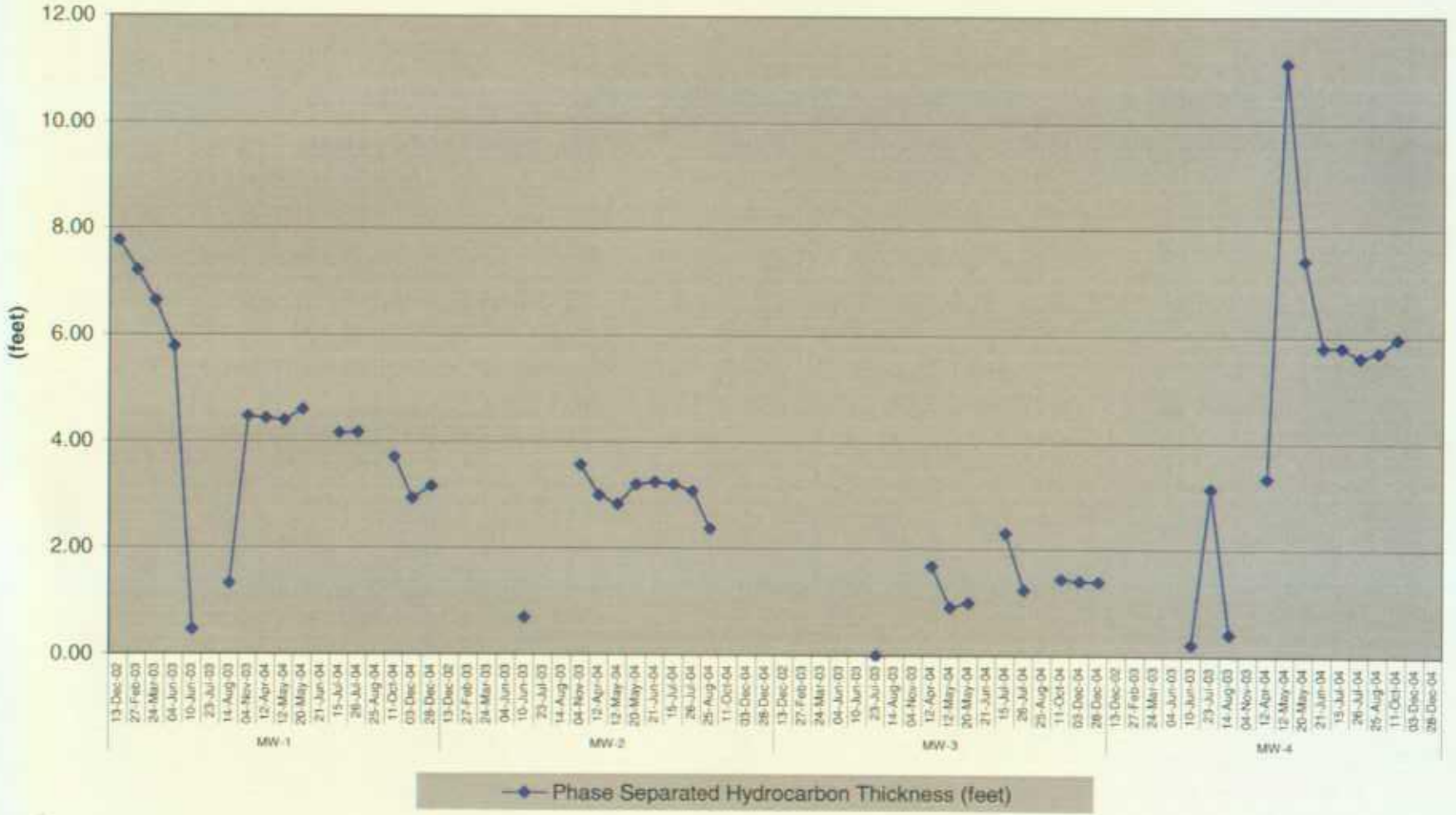


Figure 9 - Hugh Gathering PSH Thickness – MW1, MW2, MW3, and MW4

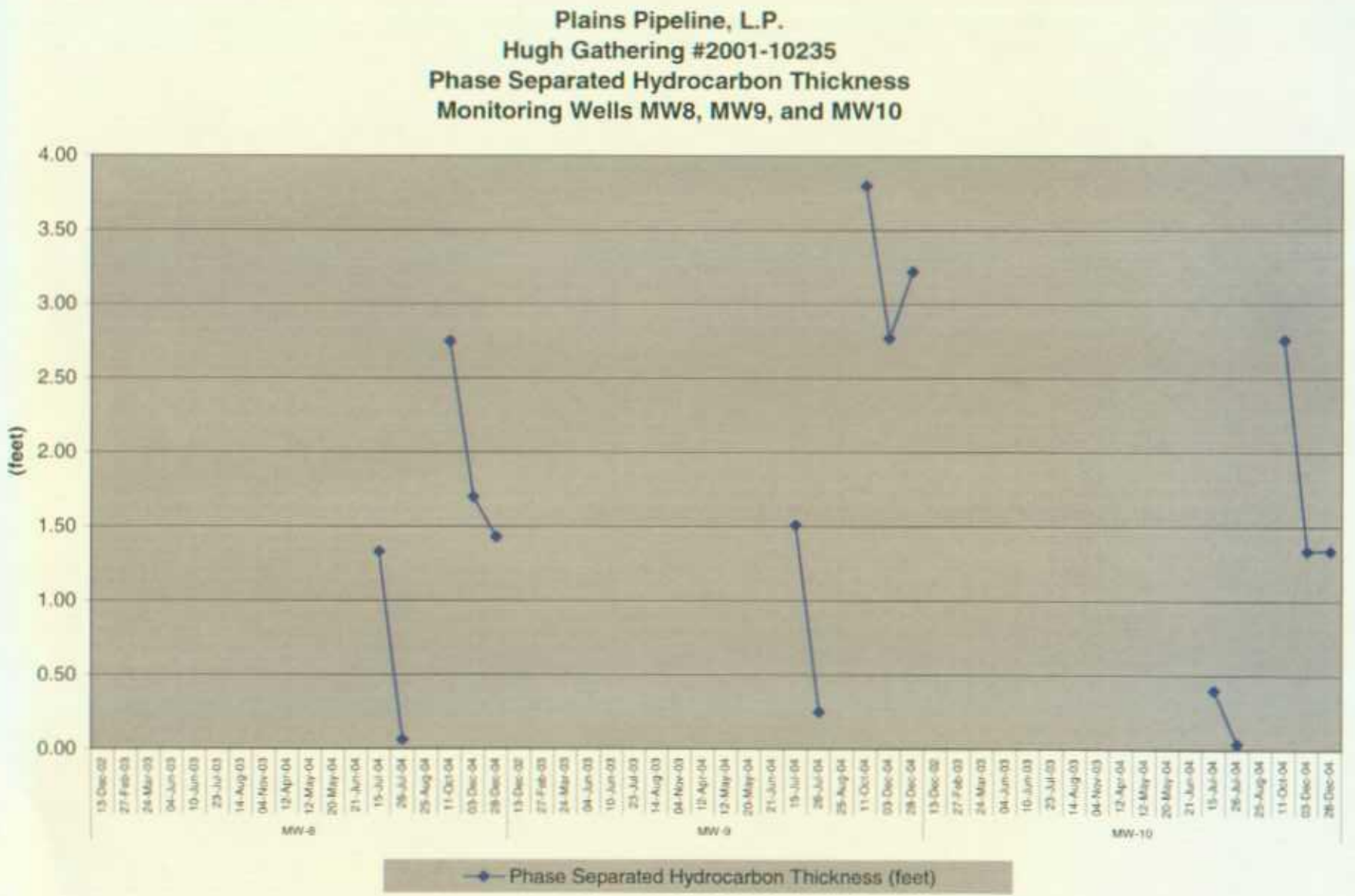


Figure 10 - Hugh Gathering PSH Thickness – MW8, MW9, and MW10

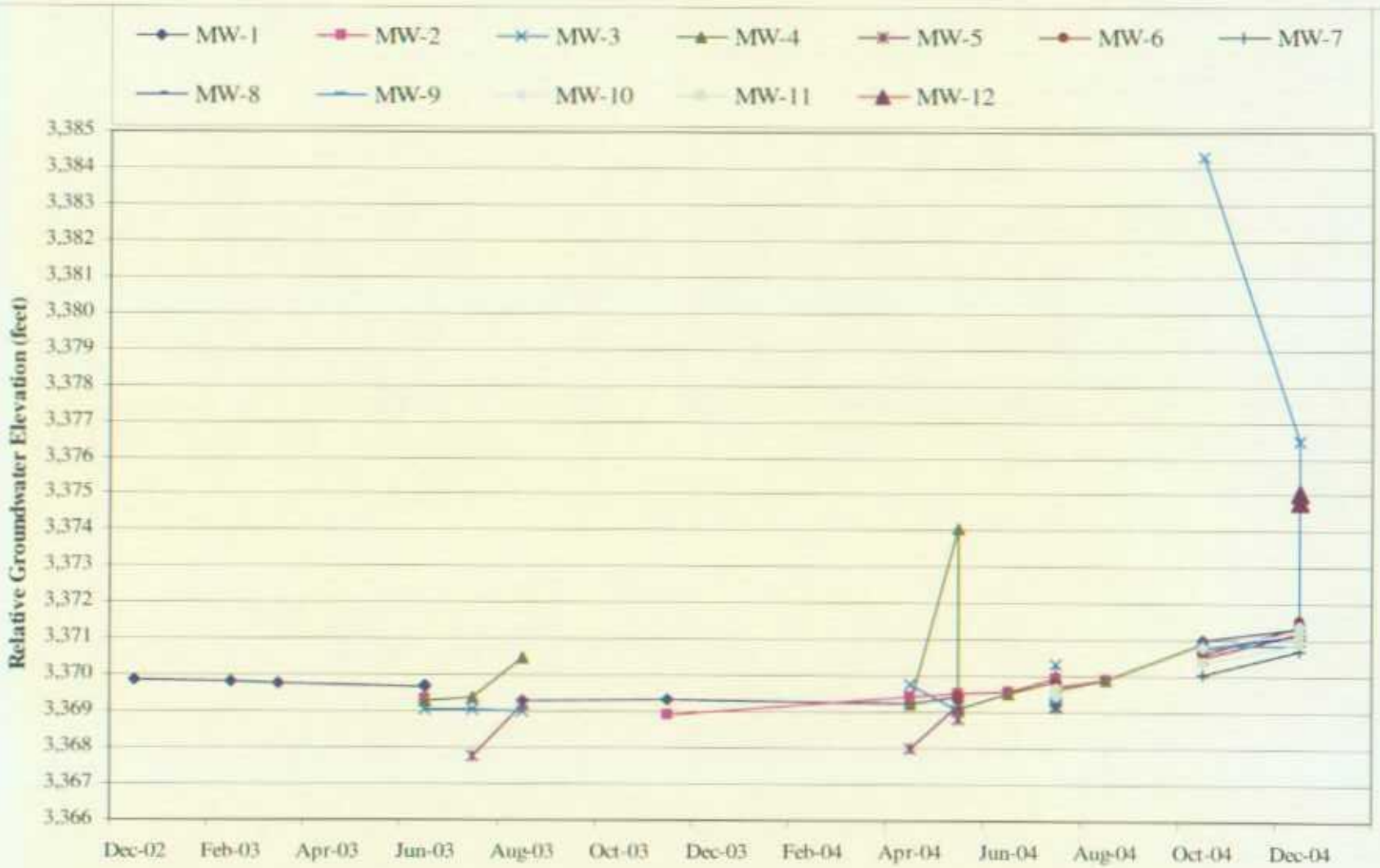
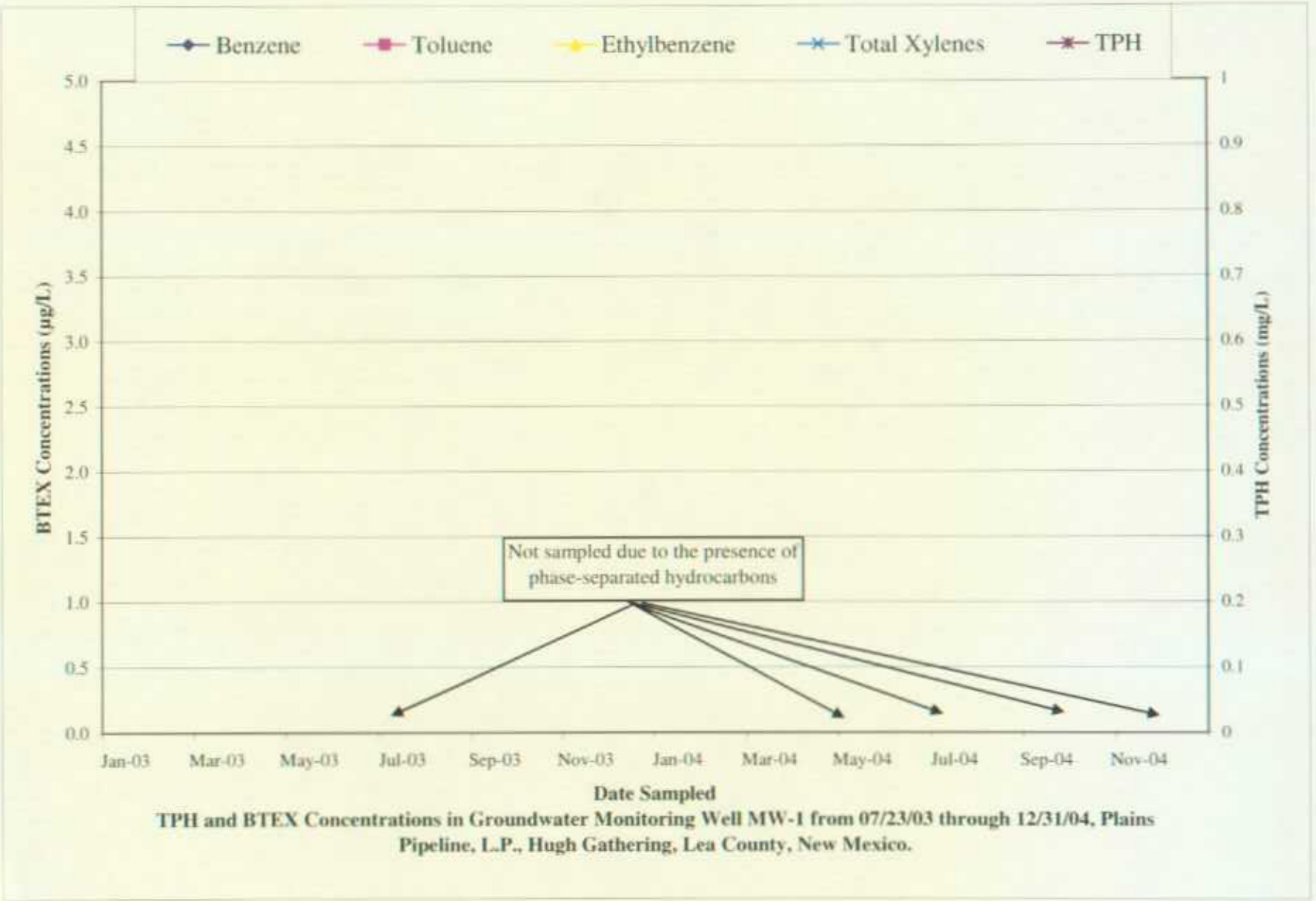
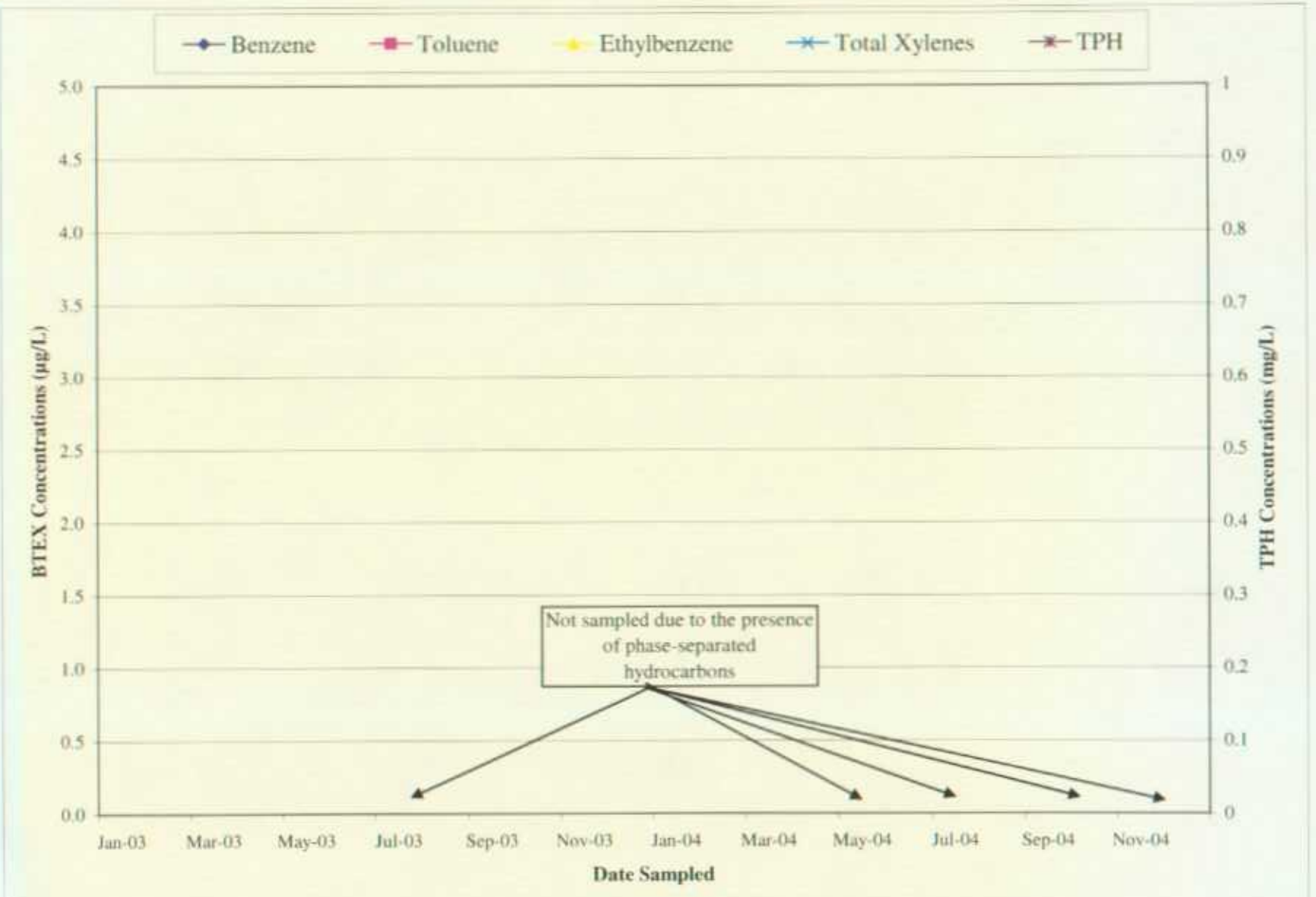


Figure 11 - Hugh Gathering Monitoring Well Hydrograph



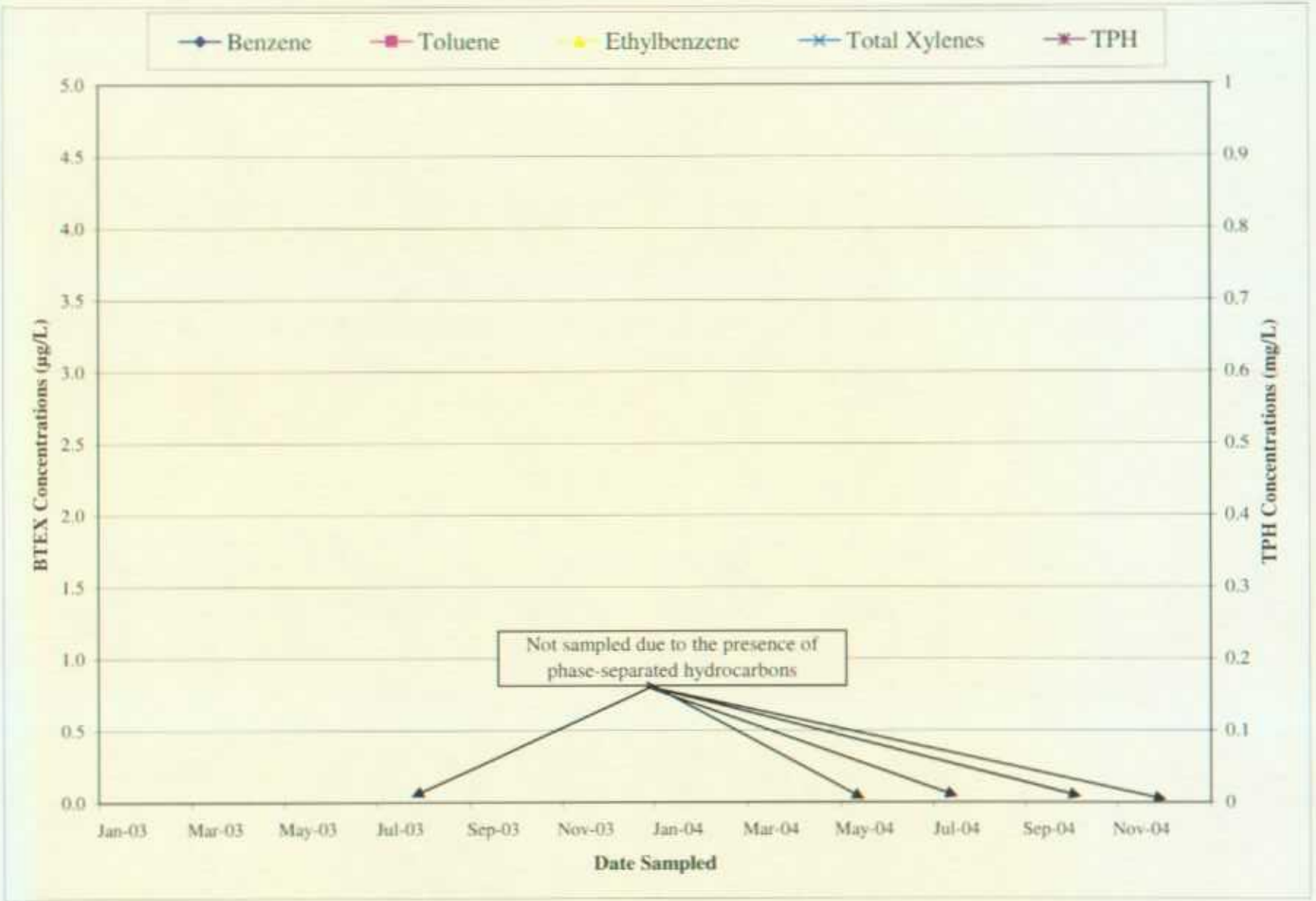
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-1 from 07/23/03 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 12 - Hugh Gathering MW1 Analytical Results



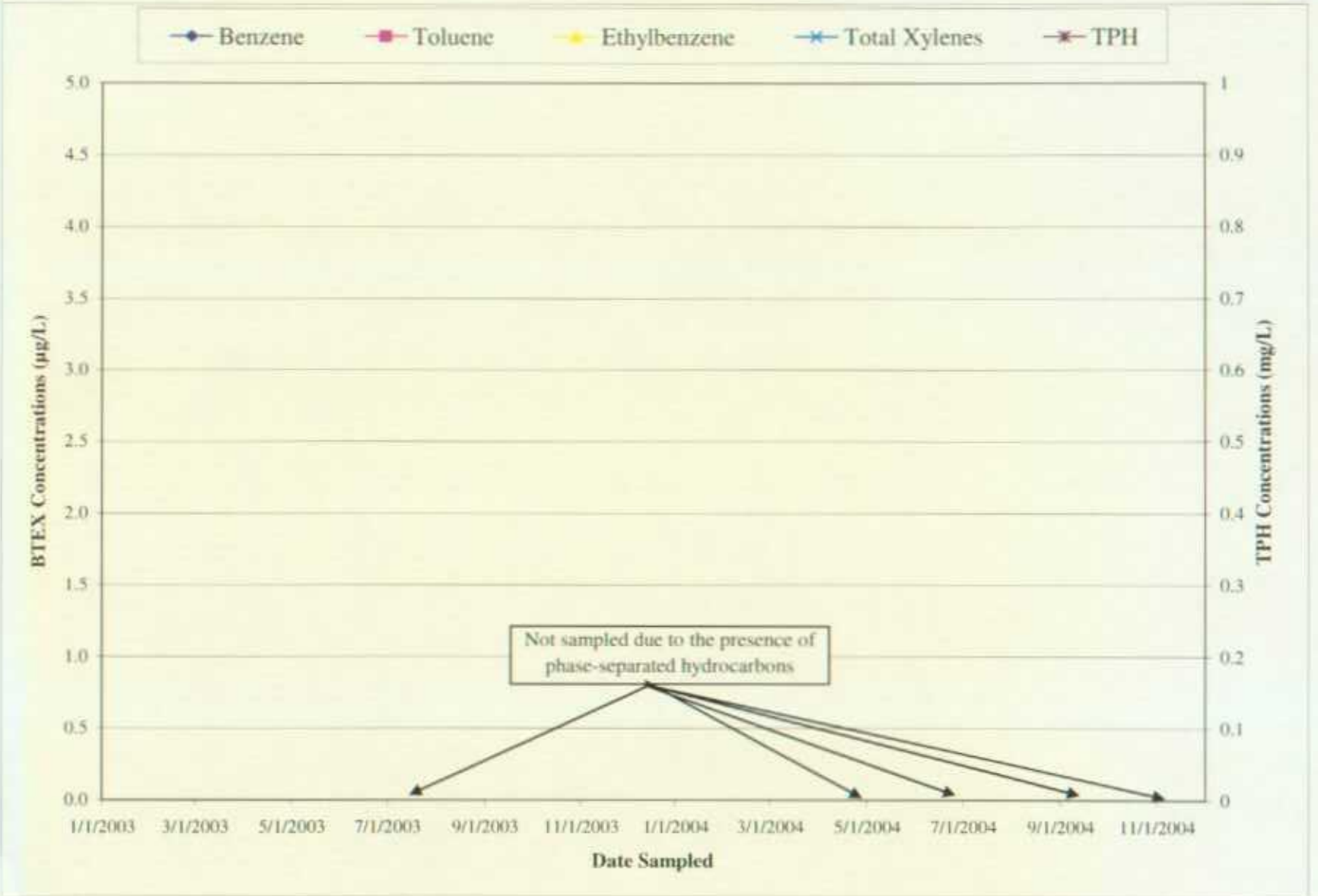
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-2 from 07/23/03 through 12/31/04, Plains Pipeline, L.P. Hugh Gathering, Lea County, New Mexico.

Figure 13 - Hugh Gathering MW2 Analytical Results



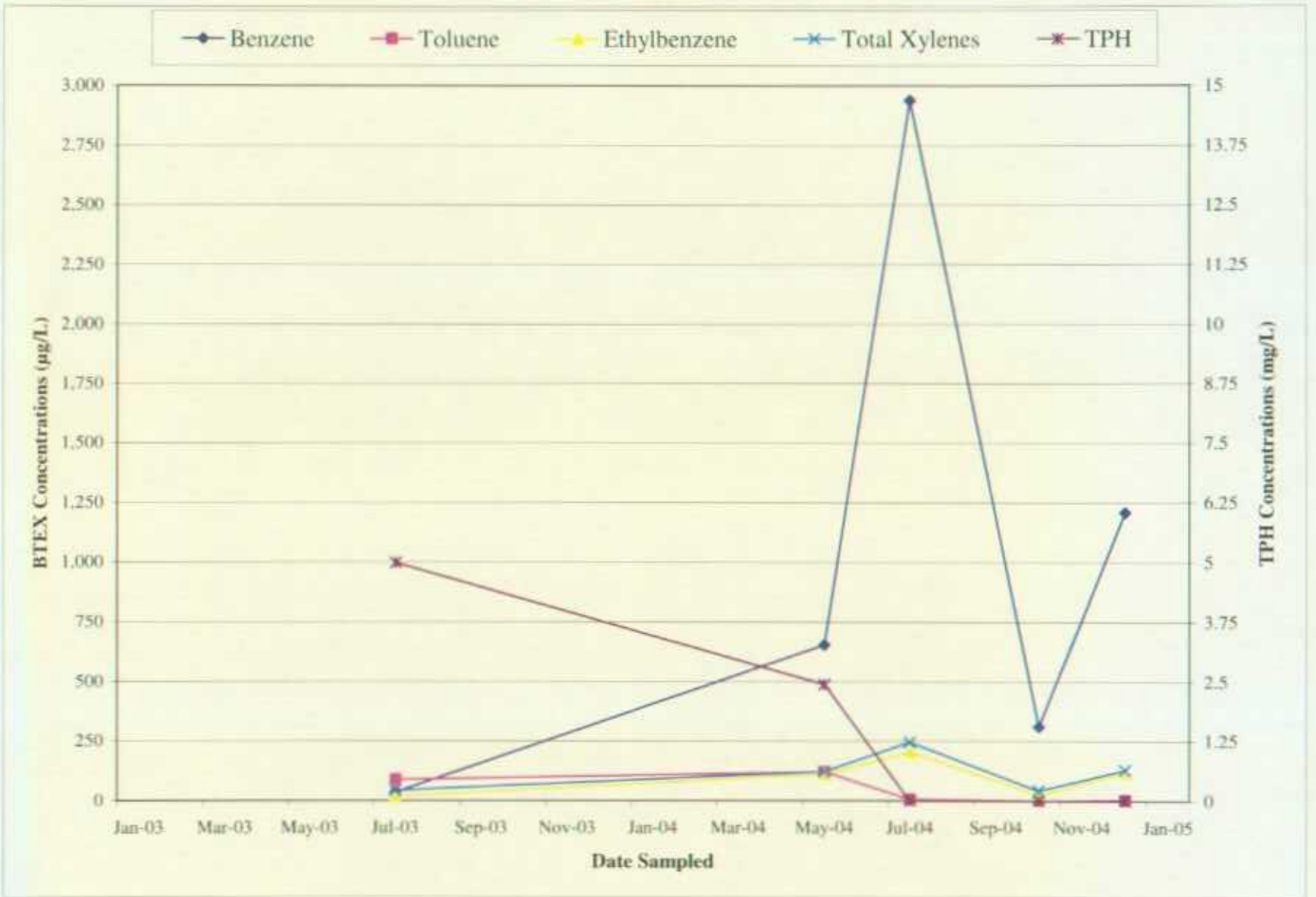
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-3 from 07/23/03 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 14 - Hugh Gathering MW3 Analytical Results



TPH and BTEX Concentrations in Groundwater Monitoring Well MW-4 from 07/23/03 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 15 - Hugh Gathering MW4 Analytical Results



TPH and BTEX Concentrations in Groundwater Monitoring Well MW-5 from 07/23/03 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

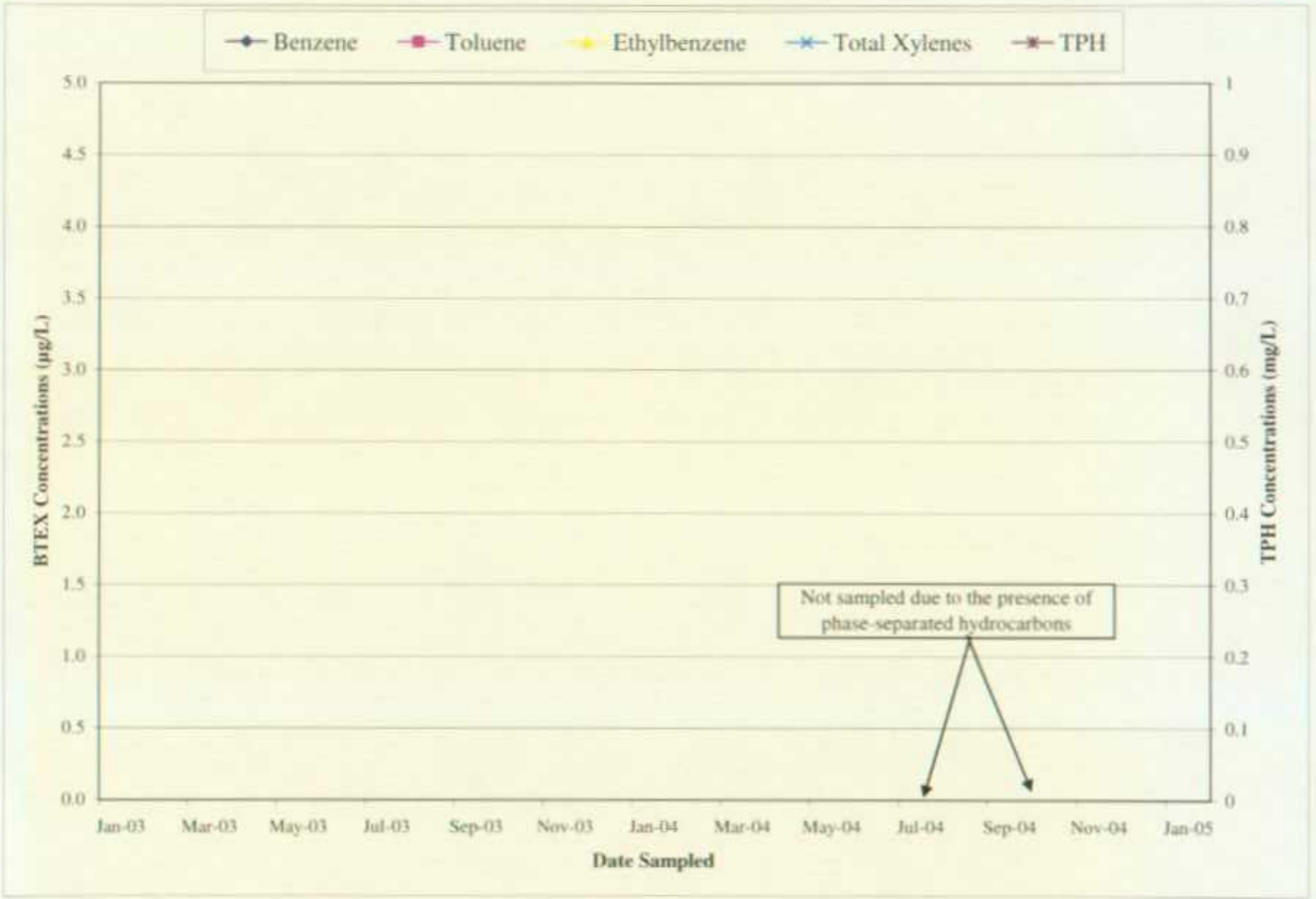
Figure 16 - Hugh Gathering MW5 Analytical Results

TPH and BTEX Concentrations in Groundwater Monitoring Well MW-6 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 17 - Hugh Gathering MW6 Analytical Results

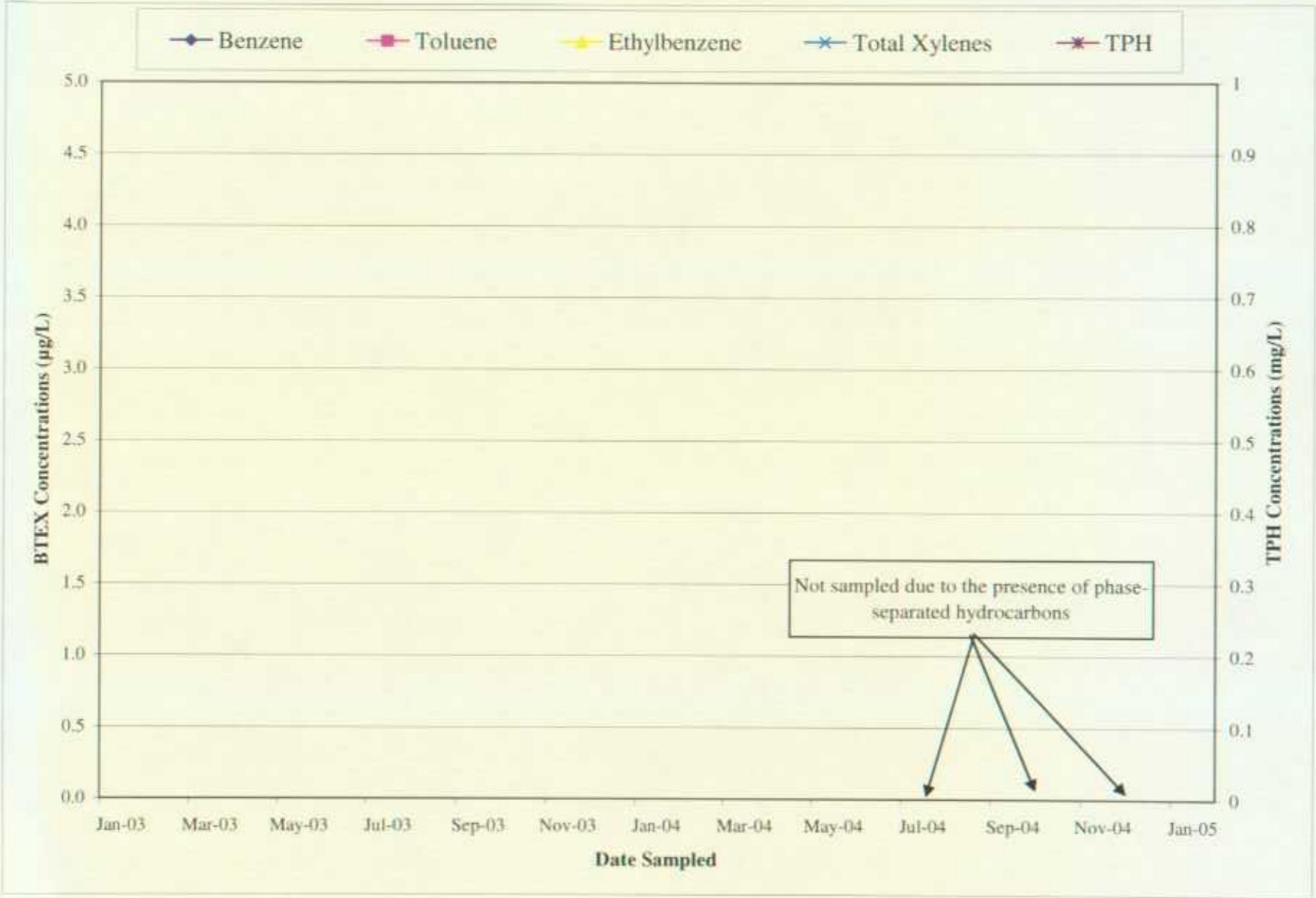
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-7 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 18 - Hugh Gathering MW7 Analytical Results



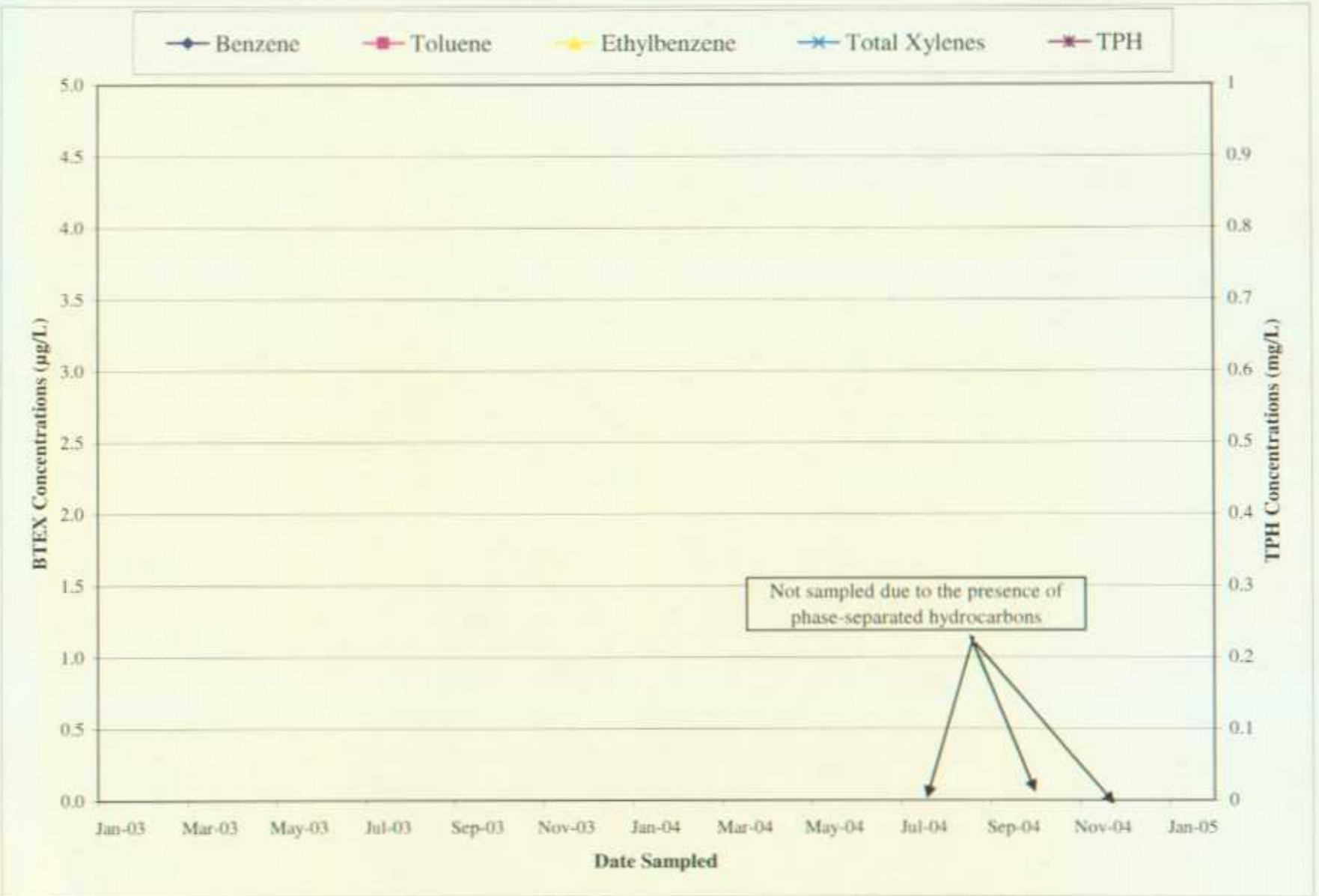
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-8 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 19 - Hugh Gathering MW8 Analytical Results



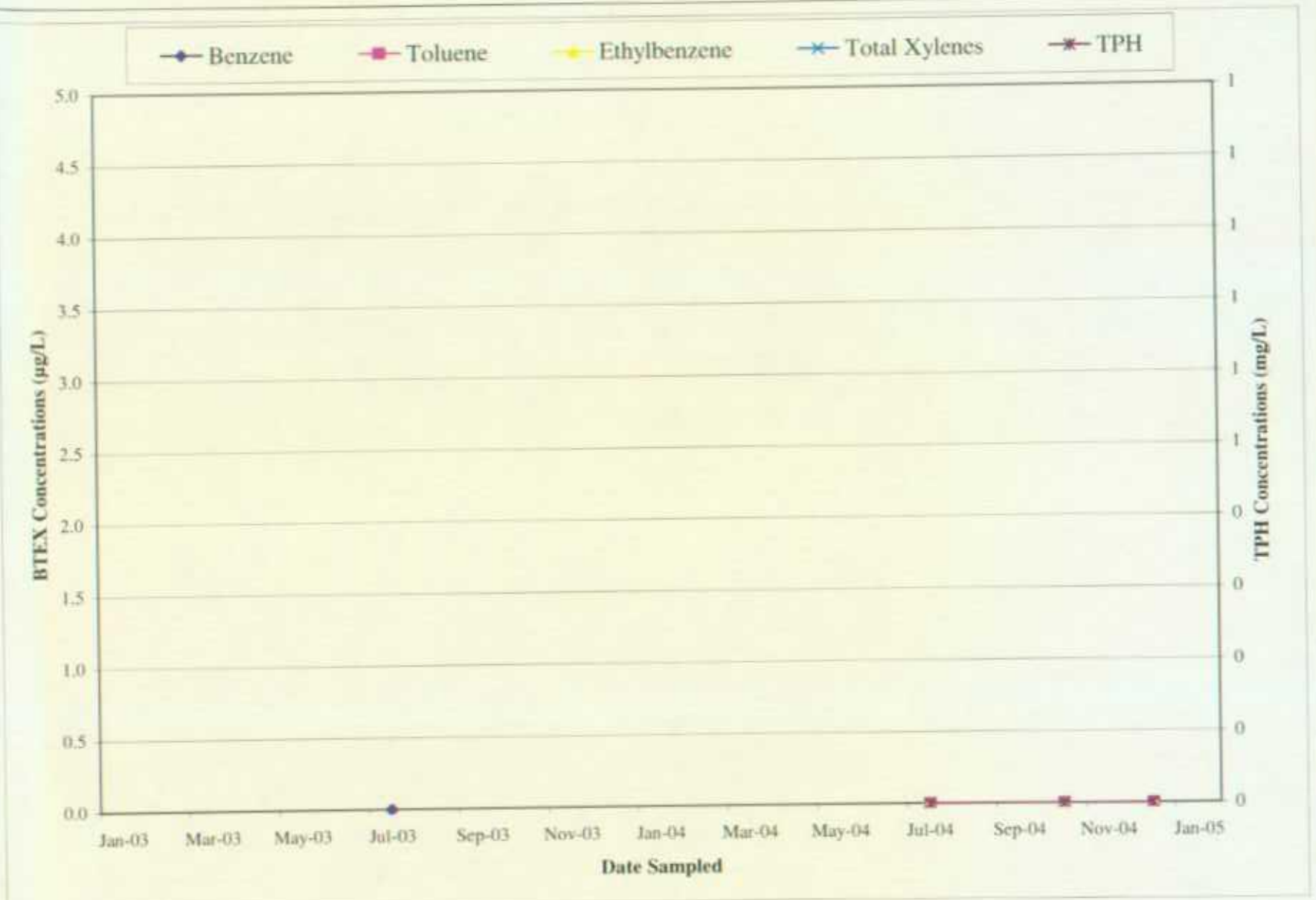
TPH and BTEX Concentrations in Groundwater Monitoring Well MW-9 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 20 - Hugh Gathering MW9 Analytical Results



TPH and BTEX Concentrations in Groundwater Monitoring Well MW-10 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 21 - Hugh Gathering MW10 Analytical Results



TPH and BTEX Concentrations in Groundwater Monitoring Well MW-11 from 07/27/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 22 - Hugh Gathering MW11 Analytical Results

TPH and BTEX Concentrations in Groundwater Monitoring Well MW-12 from 12/03/04 through 12/31/04, Plains Pipeline, L.P., Hugh Gathering, Lea County, New Mexico.

Figure 23 - Hugh Gathering MW12 Analytical Results

TABLES

Table 1 - Hugh Gathering Groundwater and PSH Levels and PSH Recovery Log

TABLE 1
RELATIVE GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON THICKNESSES
Plains Pipeline, L.P.
Hugh Gathering - Ref. #2002-10235

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW-1	13-Dec-02	3,429.95	59.33	67.10	3,369.84	7.77
	27-Feb-03		59.42	66.63	3,369.81	7.21
	24-Mar-03		59.51	66.15	3,369.78	6.64
	04-Jun-03		59.70	65.48	3,369.67	5.78
	10-Jun-03		60.16	60.62	3,369.74	0.46
	23-Jul-03					
	14-Aug-03		60.53	61.86	3,369.29	1.33
	04-Nov-03		60.17	64.64	3,369.33	4.47
	12-Apr-04		60.25	64.68	3,369.26	4.43
	12-May-04		60.07	64.46	3,369.44	4.39
	20-May-04		60.03	64.63	3,369.46	4.60
	21-Jun-04					
	15-Jul-04		59.67	63.83	3,369.86	4.16
	26-Jul-04		59.91	64.08	3,369.62	4.17
	25-Aug-04					
	11-Oct-04		58.59	62.30	3,370.99	3.71
	03-Dec-04		58.29	61.22	3,371.37	2.93
	28-Dec-04		58.19	61.35	3,371.44	3.16
MW2	10-Jun-03	3,429.97	60.57	61.27	3,369.33	0.70
	23-Jul-03					
	14-Aug-03					
	04-Nov-03		60.71	64.28	3,368.90	3.57
	12-Apr-04		60.22	63.22	3,369.45	3.00
	12-May-04		60.15	62.98	3,369.54	2.83
	20-May-04		60.11	63.32	3,369.54	3.21
	21-Jun-04		60.06	63.31	3,369.59	3.25
	15-Jul-04		59.68	62.89	3,369.97	3.21
	26-Jul-04		59.96	63.04	3,369.70	3.08
	25-Aug-04		59.83	62.21	3,369.90	2.38
	11-Oct-04			Not Gauged		
	03-Dec-04			Not Gauged		
	28-Dec-04			Not Gauged		
MW3	10-Jun-03	3,429.89		60.85	3,369.04	
	23-Jul-03			60.85	3,369.04	Oil Sheen
	14-Aug-03			60.86	3,369.03	
	04-Nov-03					
	12-Apr-04		59.96	61.64	3,369.76	1.68
	12-May-04		60.75	61.66	3,369.05	0.91
	20-May-04		60.72	61.72	3,369.07	1.00
	21-Jun-04				3,429.89	
	15-Jul-04		59.31	61.62	3,370.35	2.31
	26-Jul-04		60.58	61.82	3,369.19	1.24
	25-Aug-04				3,429.89	
	11-Oct-04		45.41	46.86	3,384.34	1.45
	03-Dec-04		53.24	54.65	3,376.51	1.41
	28-Dec-04		58.52	59.92	3,371.23	1.40

TABLE 1
RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES
Plains Pipeline, L.P.
Hugh Gathering - Ref. #2002-10235

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW4	10-Jun-03	3,430.36	61.03	61.26	3,369.31	0.23
	23-Jul-03		60.65	63.80	3,369.40	3.15
	14-Aug-03		59.82	60.24	3,370.50	0.42
	04-Nov-03					
	12-Apr-04		60.76	64.11	3,369.27	3.35
	12-May-04		55.18	66.31	3,374.07	11.13
	20-May-04		60.51	67.95	3,369.11	7.44
	21-Jun-04		60.24	66.05	3,369.54	5.81
	15-Jul-04		59.91	65.72	3,369.87	5.81
	26-Jul-04		60.16	65.78	3,369.64	5.62
	25-Aug-04		59.89	65.61	3,369.90	5.72
	11-Oct-04		58.85	64.82	3,370.91	5.97
	03-Dec-04			Not Gauged		
	28-Dec-04			Not Gauged		
MW-5	23-Jul-03	3,428.93	--	61.17	3,367.76	--
	14-Aug-03		--	59.75	3,369.18	--
	04-Nov-03					
	12-Apr-04		--	60.93	3,368.00	--
	12-May-04		--	59.72	3,369.21	--
	20-May-04		--	60.12	3,368.81	--
	21-Jun-04				3,428.93	
	15-Jul-04		--	59.34	3,369.59	--
	26-Jul-04		--	59.76	3,369.17	--
	25-Aug-04				3,428.93	
	11-Oct-04		--	58.40	3,370.53	--
	03-Dec-04		--	57.71	3,371.22	--
	28-Dec-04		--	57.62	3,371.31	--
MW6	12-May-04	3,429.24	--	59.83	3,369.41	--
	20-May-04		--	59.79	3,369.45	--
	21-Jun-04				3,429.24	
	15-Jul-04		--	59.49	3,369.75	--
	26-Jul-04		--	59.44	3,369.80	--
	25-Aug-04					
	11-Oct-04		--	58.60	3,370.64	--
	03-Dec-04		--	57.85	3,371.39	--
	28-Dec-04		--	57.72	3,371.52	--
MW-7	15-Jul-04	3,429.80	--	60.56	3,369.24	--
	26-Jul-04		--	60.58	3,369.22	--
	25-Aug-04					
	11-Oct-04		--	59.75	3,370.05	--
	03-Dec-04		--	59.08	3,370.72	--
	28-Dec-04		--	58.86	3,370.94	--
MW-8	15-Jul-04	3,430.27	60.41	61.74	3,369.73	1.33
	26-Jul-04		60.54	60.60	3,369.72	0.06
	25-Aug-04					
	11-Oct-04		59.16	61.91	3,370.84	2.75
	03-Dec-04		58.90	60.60	3,371.20	1.70
	28-Dec-04		58.83	60.26	3,371.30	1.43

TABLE 1
RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES
Plains Pipeline, L.P.
Hugh Gathering - Ref. #2002-10235

Monitor Well	Date Gauged	Relative Top of Casing Elevation (feet)*	Depth to PSH Below Top of Casing (feet)	Depth to Water Below Top of Casing (feet)	Corrected Relative Groundwater Elevation (feet)*	Phase Separated Hydrocarbon Thickness (feet)
MW9	15-Jul-04	3,429.88	60.05	61.56	3,369.68	1.51
	26-Jul-04		60.50	60.75	3,369.36	0.25
	25-Aug-04					
	11-Oct-04		58.65	62.45	3,370.85	3.80
	03-Dec-04		58.72	61.49	3,370.88	2.77
	28-Dec-04		58.12	61.34	3,371.44	3.22
MW10	15-Jul-04	3,430.65	60.92	61.32	3,369.69	0.40
	26-Jul-04		61.16	61.20	3,369.49	0.04
	25-Aug-04					
	11-Oct-04		59.55	62.31	3,370.82	2.76
	03-Dec-04		59.25	60.59	3,371.27	1.34
	28-Dec-04		59.12	60.46	3,371.40	1.34
MW11	15-Jul-04	3,430.94	--	61.31	3,369.63	--
	26-Jul-04		--	61.31	3,369.63	--
	25-Aug-04					
	11-Oct-04		--	60.55	3,370.39	--
	03-Dec-04		--	60.00	3,370.94	--
	28-Dec-04		--	59.80	3,371.14	--
MW12	03-Dec-04	3,430.94	--	56.11	3,374.83	--
	28-Dec-04		--	55.86	3,375.08	--
Total Cumulative PSH Recovered						~600

* = Wells are referenced to the TOC of groundwater monitoring well MW-2, which was set to an elevation of 100.00 feet

-- = Not Detected

If cell is blank, the well was not gauged

NS = Not Surveyed

Table 2 - Hugh Gathering Groundwater Analytical Results

TABLE 2

Summary of Groundwater Analytical Results

Plains Pipeline, L.P. Hugh Gathering - Ref. #2002-10235

Monitoring Well Location	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	m,p-Xylenes (ug/L)	o-Xylene (ug/L)	Total Xylenes (ug/L)	Chloride (mg/L)	Total Dissolved Solids (mg/L)	TPH as Diesel (mg/L)	TPH as Gasoline (mg/L)	Total TPH (mg/L)
MW-1	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-2	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-3	23-Jul-03	112	361	138	158	92	250			3.95	2.29	6.24
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-4	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-5	23-Jul-03	36	88	21	24	20	44			1.97	3.02	4.99
	20-May-04	655	122	113	57.8	65	123	--	--	1.41	1.03	2.44
	26-Jul-04	2,940	7.15	206	20.1	226	246	--	--	--	--	--
	11-Oct-04	812	<1.0	26.4	<2.0	42.7	42.7	--	--	--	--	--
	28-Dec-04	1,210	4.84	121	10.3	119.0	129.3	--	--	--	--	--
MW-6	23-Jul-03				WELL INSTALLED 29 APRIL 2004							
	20-May-04	WAITING TO INSTALL MONITORING WELLS MW-7 THROUGH MW-11 TO SAMPLE										
	26-Jul-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	11-Oct-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	28-Dec-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
MW-7	23-Jul-03											
	20-May-04				WELL INSTALLED 23 JUNE 2004							
	26-Jul-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	11-Oct-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	28-Dec-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
MW-8	23-Jul-03											
	20-May-04	WELL INSTALLED 25 JUNE 2004										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-9	23-Jul-03											
	20-May-04	WELL INSTALLED 28 JUNE 2004										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										

TABLE 2

Summary of Groundwater Analytical Results

Plains Pipeline, L.P. Hugh Gathering - Ref. #2002-10235

Monitoring Well Location	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	m,p-Xylenes (ug/L)	o-Xylene (ug/L)	Total Xylenes (ug/L)	Chloride (mg/L)	Total Dissolved Solids (mg/L)	TPH as Diesel (mg/L)	TPH as Gasoline (mg/L)	Total TPH (mg/L)
MW-10	23-Jul-03											
	20-May-04	WELL INSTALLED 29 JUNE 2004										
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS										
MW-11	23-Jul-03											
	20-May-04	WELL INSTALLED 24 JUNE 2004										
	26-Jul-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	11-Oct-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
	28-Dec-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
MW-12	23-Jul-03											
	20-May-04											
	26-Jul-04											
	11-Oct-04	WELL INSTALLED 01 DECEMBER 2004										
	3-Dec-04	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--
NMOCD Remedial Thresholds		10	750	750			620	250	1,000			

Bolded values are in excess of the NMOCD Remediation Thresholds or Other Standards for Domestic Water Supply.

-- = Parameter was not analyzed

Table 3 - Hugh Gathering Groundwater Analytical Results PAHs

TABLE 3

Summary of Groundwater Polynuclear-Aromatic Hydrocarbons (PAH) Analytical Results

Plains Pipeline, L.P. Hugh Gathering - Ref. #2002-10235

Monitoring Well	Sample Date	Naphthalene	Acenaphthylene	Acenaphthene	Flourene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo[a]-anthracene	Chrysene	Benzo[b]-fluoranthene	Benzo[j,k]-fluoranthene	Benzo[a]-pyrene	Indeno[1,2,3-cd]-pyrene	Dibenz[a,h]-anthracene	Benzo[g,h,i]-perylene
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDRICARBONS															
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDRICARBONS															
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDRICARBONS															
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDRICARBONS															
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDRICARBONS															
MW-2	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
MW-3	23-Jul-03	NOT ANALYZED															
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
MW-4	23-Jul-03	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	20-May-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	26-Jul-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
MW-5	23-Jul-03	NOT ANALYZED															
	20-May-04	NOT ANALYZED															
	26-Jul-04	31.0	0.056	0.096	0.45	0.353	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11-Oct-04	NOT ANALYZED															
	28-Dec-04	NOT ANALYZED															

TABLE 3
Summary of Groundwater Polynuclear-Aromatic Hydrocarbons (PAH) Analytical Results

Plains Pipeline, L.P. Hugh Gathering - Ref. #2002-10235

Monitoring Well	Sample Date	Napthalene (µg/L)	Acenapthylene (µg/L)	Acenapthene (µg/L)	Flourene (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Benzo[a]-anthracene (µg/L)	Chrysene (µg/L)	Benzo[b]-fluoranthene (µg/L)	Benzo[j,k]-fluoranthene (µg/L)	Benzo[a]-pyrene (µg/L)	Indeno[1,2,3-cd]-pyrene (µg/L)	Dibenz[a,h]-anthracene (µg/L)	Benzo[g,h,i]-perylene (µg/L)
MW-6	23-Jul-03	WELL INSTALLED 29 APRIL 2004															
	20-May-04	WAITING TO INSTALL MONITORING WELLS MW-7 THROUGH MW-11 TO SAMPLE															
	26-Jul-04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11-Oct-04	NOT ANALYZED															
	28-Dec-04	NOT ANALYZED															
MW-7	23-Jul-03																
	20-May-04	WELL INSTALLED 23 JUNE 2004															
	26-Jul-04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11-Oct-04	NOT ANALYZED															
	28-Dec-04	NOT ANALYZED															
MW-8	23-Jul-03																
	20-May-04	WELL INSTALLED 25 JUNE 2004															
	26-Jul-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
MW-9	23-Jul-03																
	20-May-04	WELL INSTALLED 28 JUNE 2004															
	26-Jul-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
MW-10	23-Jul-03																
	20-May-04	WELL INSTALLED 29 JUNE 2004															
	26-Jul-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	11-Oct-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															
	28-Dec-04	WELL NOT SAMPLED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS															

TABLE 3
Summary of Groundwater Polynuclear-Aromatic Hydrocarbons (PAH) Analytical Results
Plains Pipeline, L.P. Hugh Gathering - Ref. #2002-10235

Monitoring Well	Sample Date	Napthalene (µg/L)	Acenapthylene (µg/L)	Acenapthene (µg/L)	Flourene (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Benzo[a]-anthracene (µg/L)	Chrysene (µg/L)	Benzo[b]-fluoranthene (µg/L)	Benzo[j,k]-fluoranthene (µg/L)	Benzo[a]-pyrene (µg/L)	Indeno[1,2,3-cd]-pyrene (µg/L)	Dibenz[a,h]-anthracene (µg/L)	Benzo[g,h,i]-perylene (µg/L)
MW-11	23-Jul-03																
	20-May-04	WELL INSTALLED 24 JUNE 2004															
	26-Jul-04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	11-Oct-04	NOT ANALYZED															
	28-Dec-04	NOT ANALYZED															
MW-12	23-Jul-03																
	20-May-04																
	26-Jul-04																
	11-Oct-04	WELL INSTALLED 1 December 2004															
	28-Dec-04	NOT ANALYZED															
NMOCD Remedial Thresholds		30												0.70			

Red, bolded values are in excess of the NMOCD Remediation Thresholds or Other Standards for Domestic Water Supply.

-- = Parameter was not analyzed

APPENDICES

APPENDIX A - HUGH GATHERING LABORATORY REPORTS

AnalySys INC.
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156150 **Report Date:** 06/03/04
Project ID: 2002-10235
Sample Name: MW-5
Sample Matrix: water
Date Received: 05/26/2004 **Time:** 10:25
Date Sampled: 05/20/2004 **Time:** 14:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
TPH by GC (as diesel)	1.41	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	15.3	99.3	94.8	84.5
TPH by GC (as diesel-ext)	---	---	---	---	06/01/04	3510	---	---	---	---	---
TPH by GC (as gasoline)	1.03	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	21.8	74.2	96.2	93.3
Volatile organics-8260b/BTEX	---		---		06/01/04	8260b(5030/5035)	---	---	---	---	---
Benzene	655	µg/L	10	<10	06/01/04	8260b	---	4.5	97.9	103.7	112.8
Ethylbenzene	113	µg/L	10	<10	06/01/04	8260b	---	1.2	111.1	109.6	116.5
m,p-Xylenes	57.8	µg/L	20	<20	06/01/04	8260b	---	0.3	108.3	110.1	119
o-Xylene	65	µg/L	10	<10	06/01/04	8260b	---	2	114.2	111.3	121
Toluene	122	µg/L	10	<10	06/01/04	8260b	---	2.6	113.9	110.3	120.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.
3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: MW-5

Report#/Lab ID#: 156150
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	70.5	42-122	---
p-Terphenyl	8015 mod.	121	39-125	---
1,2-Dichloroethane-d4	8260b	96.8	74-124	---
Toluene-d8	8260b	103	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hugh Gathering
Project Reference	2002-10235
EPI Sampler Name	Brett Clay

BILL TO

PLAINS ALL AMERICAN PIPELINE, L.P.

Attn: Jimmy Bryant
PO Box 1660,
Midland, TX 79701

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^=$)	pH	TCLP	OTHER >>>	PAH
156150 1	MW-5	G	3	X						X	X		20-May	14:00	X	X						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: Brett Clay	Date 5/26/04 Time	Received By:	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date 5/26/04 Time 1025	Received By: (lab staff) L. Flynn / ASI	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	T:4.2:c

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 157899 **Report Date:** 08/16/04
Project ID: 2002-10235
Sample Name: LEHG072604MW-5
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 14:41

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
A/BN Extraction-PAH	---	---	---	---	07/29/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/12/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/29/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**2940**	µg/L	100	<100	07/31/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	**206**	µg/L	1	<1	07/29/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	**20.1**	µg/L	2	<2	07/29/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	**226**	µg/L	1	<1	07/29/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	**7.15**	µg/L	1	<1	07/29/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	**0.096**	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	**0.056**	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	J	8.2	50.6	101.9	57.1
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	6.5	41.7	91.6	56.2
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	17.8	28.9	98.6	59.4
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	7.7	27.9	82.1	45.9
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.8	37.4	110.2	62.1
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	3.6	38.4	108.4	63.4
Chrysene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	6.8	47.1	110.6	63
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.8	36.2	108.7	61.2
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	0.4	55.7	107.7	60.3
Fluorene	**0.45**	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	14.1	43.8	83.6	46.3
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	5.3	35.4	109.6	61.1

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.
3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: LEHG072604MW-5

Report#/Lab ID#: 157899
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	31	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	0.353	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	4.7	45.1	83.7	46.6
Pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.1	55.2	100	58.3

ANALYSYS INC.

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Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: LEHG072604MW-5

Report#/Lab ID#: 157899
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	60.4	39-110	---
Nitrobenzene-d5	610 & 8270c	43.3	12-110	---
Terphenyl-d14	610 & 8270c	81.8	25-110	---
Toluene-d8	8260b	103	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 157899 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10235
Sample Name: LEHG072604MW-5

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation:

☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Anthracene	J	See J-flag discussion above.

Notes:

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 157900 **Report Date:** 08/16/04
Project ID: 2002-10235
Sample Name: LEHG072604MW-6
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 15:18

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL[5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
A/BN Extraction-PAH	---	---	---	---	07/29/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/12/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/31/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/31/04	8260b	J	3.4	85.3	102.5	97.8
Ethylbenzene	<1	µg/L	1	<1	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	<2	µg/L	2	<2	07/31/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	<1	µg/L	1	<1	07/31/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	<1	µg/L	1	<1	07/31/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	8.2	50.6	101.9	57.1
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	6.5	41.7	91.6	56.2
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	17.8	28.9	98.6	59.4
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	7.7	27.9	82.1	45.9
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.8	37.4	110.2	62.1
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	3.6	38.4	108.4	63.4
Chrysene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	6.8	47.1	110.6	63
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.8	36.2	108.7	61.2
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	0.4	55.7	107.7	60.3
Fluorene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	14.1	43.8	83.6	46.3
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	5.3	35.4	109.6	61.1

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

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ANALYSYS INC.

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 157900
Attn: Iain Olness	**Sample Name:** LEHG072604MW-6	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	41.8	39-110	---
Nitrobenzene-d5	610 & 8270c	79.5	12-110	---
Terphenyl-d14	610 & 8270c	63.1	25-110	---
1,2-Dichloroethane-d4	8260b	79.8	74-124	---
Toluene-d8	8260b	111	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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Project ID: 2002-10235
Sample Name: LEHG072604MW-6

Report#/Lab ID#: 157900
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	J	2.9	32.5	95	41.4
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	4.7	45.1	83.7	46.6
Pyrene	<0.05	µg/L	0.05	<0.05	08/12/04	610 & 8270c	---	1.1	55.2	100	58.3

Exceptions Report:

Report #/Lab ID#: 157900 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10235
Sample Name: LEHG072604MW-6

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation:

☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
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J flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Naphthalene	J	See J-flag discussion above.

Notes:

ANALYSYS INC.

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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 157901 **Report Date:** 08/16/04
Project ID: 2002-10235
Sample Name: LEHG072604MW-7
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 15:45

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual. [7]	Prec. [2]	Recov. [3]	CCV [4]	LCS [4]
A/BN Extraction-PAH	---	---	---	---	07/29/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/31/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/31/04	8260b	J	3.4	85.3	102.5	97.8
Ethylbenzene	<1	µg/L	1	<1	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	<2	µg/L	2	<2	07/31/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	<1	µg/L	1	<1	07/31/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	<1	µg/L	1	<1	07/31/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	8.2	50.6	101.9	57.1
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	6.5	41.7	91.6	56.2
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	17.8	28.9	98.6	59.4
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	7.7	27.9	82.1	45.9
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.8	37.4	110.2	62.1
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	3.6	38.4	108.4	63.4
Chrysene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	6.8	47.1	110.6	63
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.8	36.2	108.7	61.2
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.4	55.7	107.7	60.3
Fluorene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.3	35.4	109.6	61.1

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: LEHG072604MW-7

Report#/Lab ID#: 157901
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	J	2.9	32.5	95	41.4
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	J	4.7	45.1	83.7	46.6
Pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.1	55.2	100	58.3

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Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: LEHG072604MW-7

Report#/Lab ID#: 157901
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	66.8	39-110	---
Nitrobenzene-d5	610 & 8270c	99	12-110	---
Terphenyl-d14	610 & 8270c	128	25-110	X
1,2-Dichloroethane-d4	8260b	88.9	74-124	---
Toluene-d8	8260b	106	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 157901 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10235
Sample Name: LEHG072604MW-7

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Naphthalene	J	See J-flag discussion above.
Phenanthrene	J	See J-flag discussion above.
Terphenyl-d14 Terphenyl-d14	X X	Surrogate recovery outside advisory/acceptance limits. Typically verified by reanalysis or reextraction & reanalysis. In some well known matrices (sample sources with known interferences) and for some conditions, reextraction and/or reanalysis may be at analysts discretion.

Notes: _____

AnalySys Inc.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 157902 **Report Date:** 08/16/04
Project ID: 2002-10235
Sample Name: LEHG072604MW-11
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 14:15

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual. [7]	Prec. [2]	Recov. [3]	CCV [4]	LCS [4]
A/BN Extraction-PAH	---	---	---	---	07/29/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/30/04	8260b	J	3.4	85.3	102.5	97.8
Ethylbenzene	<1	µg/L	1	<1	07/30/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	<2	µg/L	2	<2	07/30/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	<1	µg/L	1	<1	07/30/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	<1	µg/L	1	<1	07/30/04	8260b	J	6.2	108.1	114.9	107.6
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	8.2	50.6	101.9	57.1
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	6.5	41.7	91.6	56.2
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	17.8	28.9	98.6	59.4
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	7.7	27.9	82.1	45.9
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.8	37.4	110.2	62.1
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	3.6	38.4	108.4	63.4
Chrysene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	6.8	47.1	110.6	63
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.8	36.2	108.7	61.2
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.4	55.7	107.7	60.3
Fluorene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.3	35.4	109.6	61.1

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.

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Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 157902
Attn: Iain Olness	**Sample Name:** LEHG072604MW-11	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	101	39-110	---
Nitrobenzene-d5	610 & 8270c	144	12-110	X
Terphenyl-d14	610 & 8270c	145	25-110	X
1,2-Dichloroethane-d4	8260b	92.8	74-124	---
Toluene-d8	8260b	106	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: LEHG072604MW-11

Report#/Lab ID#: 157902
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/03/04	610 & 8270c	J	14.1	29.4	80.7	22.8
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	J	4.7	45.1	83.7	46.6
Pyrene	<0.05	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	1.1	55.2	100	58.3

Exceptions Report:

Report #/Lab ID#: 157902 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10235
Sample Name: LEHG072604MW-11

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation:

☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.
Naphthalene	J	See J-flag discussion above.
Phenanthrene	J	See J-flag discussion above.
Nitrobenzene-d5 Nitrobenzene-d5	X X	Surrogate recovery outside advisory/acceptance limits. Typically verified by reanalysis or reextraction & reanalysis. In some well known matrices (sample sources with known interferences) and for some conditions, reextraction and/or reanalysis may be at analysts discretion.
Terphenyl-d14 Terphenyl-d14	X X	Surrogate recovery outside advisory/acceptance limits. Typically verified by reanalysis or reextraction & reanalysis. In some well known matrices (sample sources with known interferences) and for some conditions, reextraction and/or reanalysis may be at analysts discretion.

Notes:

1D123

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hugh Gathering
Project Reference	2002-10235
EPI Sampler Name	Manuel Gonzales

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.

Attn: Jimmy Bryant
PO Box 1660,
Midland, TX 79701

ANALYSIS REQUEST

LAB I.D.		SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^=$)	pH	TCLP	OTHER >>>	PAH
157899	1	LEHG072604MW-5	G	4	X						X	X		26-Jul	14:41	X							X
157900	2	LEHG072604MW-6	G	4	X						X	X		26-Jul	15:18	X							X
157901	3	LEHG072604MW-7	G	4	X						X	X		26-Jul	15:45	X							X
157902	4	LEHG072604MW-11	G	4	X						X	X		26-Jul	14:15	X							X
	5																						
	6																						
	7																						
	8																						
	9																						
	10																						

Sampler Relinquished: Iain Olness Date 7/27/04 Time 1630 Received By:

Relinquished by: Date 7/28/04 Time 1015 Received By: (lab staff) D. Hepp / ASI

Delivered by: Sample Cool & Intact Yes No Checked By:

E-mail results to: iolness@hotmail.com and enviplus1@aol.com

REMARKS:

T:58C

Sample Analysis Case Narrative

Client: Environmental Plus, Inc. **Project ID:** 2002-10235

Attn: Iain Olness

for Sample #'s: 157899 **thru** 157902

Analyzed by AnalySys, Inc.

Final Review Date: 8/16/2004 **By:** for (R. Elton)

Case Narrative:

The recoveries of the Semi-volatile organic surrogate Terphenyl-d14 for sample #'s 157901 and 157902, and the Semi-volatile organic surrogate Nitrobenzene-d5 for sample # 157902 were above normal laboratory acceptance criteria. However, no Semi-volatile organic compounds were detected in either of the above referenced samples, indicating that this potential "high" bias had no impact on data usability.

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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 160508 **Report Date:** 10/21/04
Project ID: 2002-10235
Sample Name: PAAHG101104MW-5
Sample Matrix: water
Date Received: 10/14/2004 **Time:** 14:00
Date Sampled: 10/11/2004 **Time:** 08:18

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Volatile organics-8260b/BTEX	---		---		10/19/04	8260b(5030/5035)	---	---	---	---	---
Benzene	312	µg/L	10	<10	10/21/04	8260b	---	4.8	117.8	99.7	104.9
Ethylbenzene	26.4	µg/L	1	<1	10/19/04	8260b	---	0.4	115.5	110	103.1
m,p-Xylenes	<2	µg/L	2	<2	10/19/04	8260b	---	2.2	113.4	109.7	104
o-Xylene	42.7	µg/L	1	<1	10/19/04	8260b	---	0.7	127.7	114.6	106.7
Toluene	<1	µg/L	1	<1	10/19/04	8260b	J	1.4	108.5	107.5	107.2

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

[redacted] INC.
[redacted] 12 M[redacted]olis [redacted] Aus[redacted] TX [redacted] &
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Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 160508
Attn: Iain Olness	**Sample Name:** PAAHG101104MW-5	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	104	74-124	---
Toluene-d8	8260b	108	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Report #/Lab ID#: 160508 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10235
Sample Name: PAAHG101104MW-5

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation:

☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
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J flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:

AnalySys INC.
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Attn: Iain Olness
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Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 160509 **Report Date:** 10/21/04
Project ID: 2002-10235
Sample Name: PAAHG101104MW-6
Sample Matrix: water
Date Received: 10/14/2004 **Time:** 14:00
Date Sampled: 10/11/2004 **Time:** 09:01

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Volatile organics-8260b/BTEX	---		---		10/18/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.4	98.4	106.7	99.8
Ethylbenzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.2	111.5	117.5	113.9
m,p-Xylenes	<2	µg/L	2	<2	10/18/04	8260b	---	1.3	113.4	117.3	116.5
o-Xylene	<1	µg/L	1	<1	10/18/04	8260b	---	2	120.8	109.6	122.2
Toluene	<1	µg/L	1	<1	10/18/04	8260b	---	1.4	110.9	118.4	113.8

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.
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Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10235
Sample Name: PAAHG101104MW-6

Report#/Lab ID#: 160509
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	99	74-124	---
Toluene-d8	8260b	112	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

AnalySys, Inc.
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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 160510 **Report Date:** 10/21/04
Project ID: 2002-10235
Sample Name: PAAHG101104MW-7
Sample Matrix: water
Date Received: 10/14/2004 **Time:** 14:00
Date Sampled: 10/11/2004 **Time:** 09:41

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Volatile organics-8260b/BTEX	---		---		10/18/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.4	98.4	106.7	99.8
Ethylbenzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.2	111.5	117.5	113.9
m,p-Xylenes	<2	µg/L	2	<2	10/18/04	8260b	---	1.3	113.4	117.3	116.5
o-Xylene	<1	µg/L	1	<1	10/18/04	8260b	---	2	120.8	109.6	122.2
Toluene	<1	µg/L	1	<1	10/18/04	8260b	---	1.4	110.9	118.4	113.8

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

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Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 160510
Attn: Iain Olness	**Sample Name:** PAAHG101104MW-7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	92.9	74-124	---
Toluene-d8	8260b	108	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

ANALYSYS INC.
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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
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Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 160511 **Report Date:** 10/21/04
Project ID: 2002-10235
Sample Name: PAAHG101104MW-11
Sample Matrix: water
Date Received: 10/14/2004 **Time:** 14:00
Date Sampled: 10/11/2004 **Time:** 10:10

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Volatile organics-8260b/BTEX	---		---		10/18/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.4	98.4	106.7	99.8
Ethylbenzene	<1	µg/L	1	<1	10/18/04	8260b	---	2.2	111.5	117.5	113.9
m,p-Xylenes	<2	µg/L	2	<2	10/18/04	8260b	---	1.3	113.4	117.3	116.5
o-Xylene	<1	µg/L	1	<1	10/18/04	8260b	---	2	120.8	109.6	122.2
Toluene	<1	µg/L	1	<1	10/18/04	8260b	---	1.4	110.9	118.4	113.8

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 160511
Attn: Iain Olness	**Sample Name:** PAAHG101104MW-11	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	95.9	74-124	---
Toluene-d8	8260b	112	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hugh Gathering
Project Reference	2002-10235
EPI Sampler Name	Manuel Gonzales

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.
c/o ENV Accounts Payable
PO Box 4648
Houston, TX 77210-4648

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH				
160508 1	PAAHG101104MW-5	G		X						X	X		11-Oct	8:18	X											
160509 2	PAAHG101104MW-6	G		X						X	X		11-Oct	9:01	X											
160510 3	PAAHG101104MW-7	G		X						X	X		11-Oct	9:41	X											
160511 4	PAAHG101104MW-11	G		X						X	X		11-Oct	10:10	X											
5																										
6																										
7																										
8																										
9																										
10																										

Sampler Relinquished: Iain Olness	Date 10/13/04 Time 1630	Received By:	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date / Time	Received By: (lab staff) T. Long KSD 10/14/04	REMARKS: 14.00
Delivered by:	Sample Cool & Intact Yes No	Checked By:	T: 5.5°C

ANALYSYS INC.
3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 162513 **Report Date:** 12/09/04
Project ID: 2002-10235
Sample Name: PAAHG120304MW-12
Sample Matrix: water
Date Received: 12/07/2004 **Time:** 10:45
Date Sampled: 12/03/2004 **Time:** 11:28

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Volatile organics-8260b/BTEX	---		---		12/08/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	12/08/04	8260b	---	2	95	89.3	93.2
Ethylbenzene	<1	µg/L	1	<1	12/08/04	8260b	---	1.1	106.2	105.4	106.5
m,p-Xylenes	<2	µg/L	2	<2	12/08/04	8260b	---	2.7	103.4	106.9	105.1
o-Xylene	<1	µg/L	1	<1	12/08/04	8260b	---	1.8	111.1	114.2	111.5
Toluene	<1	µg/L	1	<1	12/08/04	8260b	---	4.2	99.9	116.5	96.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

INC.
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2002-10235	**Report#/Lab ID#:** 162513
Attn: Iain Olness	**Sample Name:** PAAHG120304MW-12	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	104	74-124	---
Toluene-d8	8260b	95.5	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hugh Gathering
Project Reference	2002-10235
EPI Sampler Name	Manuel Gonzales

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.

c/o ENV Accounts Payable
PO Box 4648
Houston, TX 77210-4648

	LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl⁻)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
1	162513	PAAHG120304MW-12	G	3	X						X	X		3-Dec	11:28	X							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

Sampler Relinquished: Iain Olness	Date: 12/6/04 Time: 1630	Received By:	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date: 12/7/04 Time: 1045	Received By: (lab staff) L. Flynn / ASI	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	

T: 2.3°C

AnalySys Inc.

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 163147 **Report Date:** 01/12/05
Project ID: 2003-10235
Sample Name: PAAHG122804MW-5
Sample Matrix: water
Date Received: 01/05/2005 **Time:** 08:35
Date Sampled: 12/28/2004 **Time:** 08:07

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Volatile organics-8260b/BTEX	---		---		01/07/05	8260b(5030/5035)	---	---	---	---	---
Benzene	**1210**	µg/L	10	<10	01/10/05	8260b	---	6.5	87.8	93.7	92.3
Ethylbenzene	**121**	µg/L	1	<1	01/07/05	8260b	---	7	96	103.2	101.8
m,p-Xylenes	**10.3**	µg/L	2	<2	01/07/05	8260b	---	6.4	92.5	97.5	96
o-Xylene	**119**	µg/L	1	<1	01/07/05	8260b	---	6	103.8	109	106.6
Toluene	**4.84**	µg/L	1	<1	01/07/05	8260b	---	6.6	97.1	102.7	99.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2003-10235
Sample Name: PAAHG122804MW-5

Report#/Lab ID#: 163147
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	116	74-124	---
Toluene-d8	8260b	99	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 163148 **Report Date:** 01/12/05
Project ID: 2003-10235
Sample Name: PAAHG122804MW-6
Sample Matrix: water
Date Received: 01/05/2005 **Time:** 08:35
Date Sampled: 12/28/2004 **Time:** 08:42

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Volatile organics-8260b/BTEX	---		---		01/10/05	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	01/10/05	8260b	---	6.5	87.8	93.7	92.3
Ethylbenzene	<1	µg/L	1	<1	01/10/05	8260b	---	7	96	103.2	101.8
m,p-Xylenes	<2	µg/L	2	<2	01/10/05	8260b	---	6.4	92.5	97.5	96
o-Xylene	<1	µg/L	1	<1	01/10/05	8260b	---	6	103.8	109	106.6
Toluene	<1	µg/L	1	<1	01/10/05	8260b	---	6.6	97.1	102.7	99.3

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2003-10235
Sample Name: PAAHG122804MW-6

Report#/Lab ID#: 163148
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	109	74-124	---
Toluene-d8	8260b	95.4	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

AnalySys inc.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 163149 **Report Date:** 01/12/05
Project ID: 2003-10235
Sample Name: PAAHG122804MW-7
Sample Matrix: water
Date Received: 01/05/2005 **Time:** 08:35
Date Sampled: 12/28/2004 **Time:** 07:39

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Volatile organics-8260b/BTEX	---		---		01/07/05	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	01/07/05	8260b	J	6.5	87.8	93.7	92.3
Ethylbenzene	<1	µg/L	1	<1	01/07/05	8260b	---	7	96	103.2	101.8
m,p-Xylenes	<2	µg/L	2	<2	01/07/05	8260b	---	6.4	92.5	97.5	96
o-Xylene	<1	µg/L	1	<1	01/07/05	8260b	---	6	103.8	109	106.6
Toluene	<1	µg/L	1	<1	01/07/05	8260b	J	6.6	97.1	102.7	99.3

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ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2003-10235	**Report#/Lab ID#:** 163149
Attn: Iain Olness	**Sample Name:** PAAHG122804MW-7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	109	74-124	---
Toluene-d8	8260b	98.4	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 163149 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-10235
Sample Name: PAAHG122804MW-7

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation:

☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 163150 **Report Date:** 01/12/05
Project ID: 2003-10235
Sample Name: PAAHG122804MW-11
Sample Matrix: water
Date Received: 01/05/2005 **Time:** 08:35
Date Sampled: 12/28/2004 **Time:** 09:28

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Volatile organics-8260b/BTEX	---		---		01/07/05	8260b(5030/5035)	---	---	---	---	---
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Ethylbenzene	<1	µg/L	1	<1	01/07/05	8260b	---	7	96	103.2	101.8
m,p-Xylenes	<2	µg/L	2	<2	01/07/05	8260b	---	6.4	92.5	97.5	96
o-Xylene	<1	µg/L	1	<1	01/07/05	8260b	---	6	103.8	109	106.6
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Dale Wagner

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ANALYSYS INC.

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2003-10235
Sample Name: PAAHG122804MW-11

Report#/Lab ID#: 163150
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	109	74-124	---
Toluene-d8	8260b	98.6	89-115	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

11451

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
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Client Company	Plains All American
Facility Name	Hugh Gathering
Project Reference	2002-10235
EPI Sampler Name	Manuel Gonzales

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.

ATTN: ENV Accounts Payable
PO Box 4648
Houston, TX 77210-4648

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES (SO_4^-)	pH	TCLP	OTHER >>>	PAH
163147 1	PAAHG122804MW-5	G	3	X						X	X		28-Dec	8:02 Am	X							
163148 2	PAAHG122804MW-6	G	3	X						X	X		28-Dec	8:42 Am	X							
163149 3	PAAHG122804MW-7	G	3	X						X	X		28-Dec	7:39 Am	X							
163150 4	PAAHG122804MW-11	G	3	X						X	X		28-Dec	9:28 Am	X							
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: Manuel Gonzales	Date: 1-26-05 Time: 5:53 pm	Received By: Iain Olness	E-mail results to: iolness@hotmail.com and cjreynolds@paalp.com
Relinquished by: Iain Olness	Date: 1-4-05 Time: 1600	Received By: (lab staff) L. Thymn/ASI - 1/5/05 @ 0835	REMARKS:
Delivered by:	Sample Cool & Intact: Yes / No	Checked By:	

T: 4.5° C

APPENDIX B - HUGH GATHERING SITE INFORMATION AND METRICS FORM

PLAINS ALL AMERICAN
Site Information and Metrics

Incident Date: 9-4-02 @ 1:20 PM	NMOCD Notified: 9-4-02 @ 3:30 PM Larry Johnson by Frank Hernandez

SITE: **Hugh Gathering 090402**	Assigned Site Reference #: **2002-10235**
Company: Plains Pipeline, L.P.	**NATIONAL RESPONSE CENTER**
Street Address: 3705 East Highway 158 (79706)	Notified Date/Time: NA
Mailing Address: PO Box 1339	Notified by:
City, State, Zip: Midland, Texas 79702	Person Notified:
Representative: Camille Reynolds	NRC Report# :
Representative Telephone: 505.393.5611	
Telephone:	
Fluid volume released (bbls): 50 bbls	Recovered (bbls): 0 bbls

>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.
(Also applies to unauthorized releases >500 mcf Natural Gas)

5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)

Leak, Spill, or Pit (LSP) Name: Hugh Gathering 090402
Source of contamination: 6" Steel Pipeline
Land Owner, i.e., BLM, ST, Fee, Other: Bryant
LSP Dimensions 10' X 10'
LSP Area: 100 sqft
Location of Reference Point (RP)
Location distance and direction from RP
Latitude: 32°29'11.007"N
Longitude: 103°07'33.864"W
Elevation above mean sea level: 3,425'amsl
Feet from South Section Line
Feet from West Section Line
Location- Unit or ¼¼: SE¼ of the SE¼ Unit Letter: P
Location- Section: 11
Location- Township: T21S
Location- Range: R37E
Surface water body within 1000 ' radius of site: none
Domestic water wells within 1000' radius of site: none
Agricultural water wells within 1000' radius of site: none
Public water supply wells within 1000' radius of site: none
Depth from land surface to ground water (DG) 60'bgs
Depth of contamination (DC) – 60'bgs
Depth to ground water (DG – DC = DtGW) - zero feet

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or;<200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 10	*Wellhead Protection Area Score=0*	*Surface Water Score= 0*

Site Rank (1+2+3) = 10

Total Site Ranking Score and Acceptable Concentrations

Parameter	>19	10-19	0-9
Benzene[1]	10 ppm	10 ppm	10 ppm
BTEX[1]	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis

APPENDIX C - HUGH GATHERING NMOCD FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2004

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☐ Final Report

Name of Company: **Plains All American Pipeline**	Contact: **Camille Reynolds**
Address: **PO Box 3119 (3705 Highway 158) Midland, Texas 79702 (79706)**	Telephone No. **505.396.3341**
Facility Name **Hugh Gathering #2002-10235**	Facility Type **6" Steel Pipeline**
Surface Owner: **Jimmy Bryant**	Mineral Owner / Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County:
P	**11**	**T21S**	**R37E**					Lea

Latitude: **32°29'11.007"N** **Longitude:** **103°07'33.864"W**

NATURE OF RELEASE

Type of Release **Crude Oil**	Volume of Release **50 barrels**	Volume Recovered **0 bbls barrels**
Source of Release **6" Steel Pipeline**	Date and Hour of Occurrence **9-4-02 @ 1:20 PM**	Date and Hour of Discovery **9-4-02 @ 1:30 PM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Larry Johnson**	
By Whom? **Camille Reynolds**	Date and Hour **9-4-02 @ 3:30 PM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
6" Steel Pipeline **The leak was due to internal/external corrosion. Near surface impacted soil was disposed of in an NMOCD approved landfarm.**

Describe Area Affected and Cleanup Action Taken.*100 sqft 10' X 10': Site has been delineated and Rule 19 Abatement Plan submitted. Remedial Goals: TPH 8015m = 1000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	**OIL CONSERVATION DIVISION**	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
E-mail Address: CJReynolds@PAALP.com	Approval Date:	Expiration Date:
Title: District Environmental Supervisor	Conditions of Approval:	Attached ☐
Date: 9/6/2002 Phone: 505.393.5611		

Attach Additional Sheets If Necessary