1R - 386

REPORTS

DATE:

2005

PLAINS
ALL AMERICAN
PIPELINE, L.P.

ANNUAL MONITORING REPORT

JUNCTION 34 TO LEA
PLAINS REF: 2002-10286

NW¼ OF THE SW¼ OF SECTION 21, TOWNSHIP 20 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO

~9.8 MILES NORTHWEST (314°) OF
EUNICE, LEA COUNTY, NEW MEXICO
LATITUDE: N32° 33' 18.8" LONGITUDE: W103° 15' 39.7"

FEBRUARY 1, 2005

PREPARED BY:

Environmental Plus, Inc.

2100 Avenue O
P.O. Box 1558
Eunice, NM 88231

Phone: (505)394-3481
FAX: (505)394-2601
iolness@hotmail.com

STANDARD OF CARE

Annual Monitoring Report

Junction 34 to Lea
Ref. # 2002-10286

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:

Iain A. Olness — 15 February 2005

Iain A. Olness, P.G.
Hydrogeologist

Date

This report was reviewed by:

Pat McCasland — 2.15.05

Pat McCasland

Date

TABLE OF CONTENTS

FIGURES

TABLES

APPENDIX

I. Background

The "Junction 34 to Lea" (2002-10286) release site is located approximately 9.79 miles northwest of Eunice in Lea County, New Mexico, at an elevation of approximately 3,505 feet above mean sea level (reference Figures 1 and 2). The site is located in the northwest quarter of the southwest quarter of section 21, range 37 east, township 20 south. There are no residences or surface water bodies within a 1,000-foot radius of the leak site.

The initial New Mexico Oil Conservation Division (NMOCD) notification form C-141 submitted by EOTT reported approximately 300 barrels of crude oil released with 190 barrels recovered. The release is believed to have been due to internal corrosion of the pipeline. The release covered approximately 10,769 square feet of pipeline right-of-way, caliche road and land owned by the Deck Estate.

Upon discovery of the release on November 6, 2002, Environmental Plus, Inc. (EPI) and EOTT personnel mobilized to the site and excavated down to the pipeline and installed a pipe repair clamp. In addition, the surficial saturated soil was excavated and hauled to an approved land farm. Following the removal of the surficial saturated soil, approximately 50 cubic yards of impacted soil in the vicinity of the release source were excavated and hauled to an approved land farm.

During initial investigative activities conducted from February 6-11, 2003, which included the advancement of nine soil borings, it was determined that groundwater was situated approximately 20 feet below ground surface (bgs) and that groundwater had been impacted. Three of the soil borings were completed as groundwater monitoring wells to monitor contaminant levels and/or recover phase separated hydrocarbons (PSH) (reference Figure 3). Upon completion of the soil borings and installation of the three groundwater monitoring wells, mitigation activities commenced, specifically, the excavation of impacted soil to a depth of approximately 25 feet bgs. This soil was stockpiled within a fenced area.

Due to fact that soil and groundwater had been impacted above NMOCD remedial thresholds, a *Groundwater and Soil Remediation Proposal* was submitted in June 2003. This plan recommended to a) treat hydrocarbons in groundwater with *in-situ* activated carbon; b) backfill the excavation with blended soil; c) cap the excavation with a compacted clay barrier; d) backfill with three feet of native topsoil; and e) re-vegetate to landowner specifications.

In April 2004, an *Annual Monitoring Report* was submitted to the NMOCD documenting the results of the 2003 sampling and field activities. In addition, the report recommended continued quarterly sampling of the groundwater monitoring well network and semi-monthly gauging/recovery of PSH and semi-monthly gauging of water levels.

II. Field Activities

Site visits were made to the site on January 2, January 30, June 3, June 15, July 8, September 10, September 21, October 15, November 9, November 16 and December 7, 2004 to record PSH/groundwater levels and recover PSH from groundwater monitoring well MW-1. In addition,

the rest of the groundwater monitoring well network was gauged to determine depth to groundwater.

Site visits were made on May 5, May 25, July 26, October 4 and December 17, 2004 to complete the aforementioned activities and collect groundwater samples for laboratory analyses.

Four additional groundwater monitoring wells were installed around the release area from May 13 through May 21, 2004. These additional wells (MW-4 through MW-7) were installed to delineate the lateral extent of hydrocarbon impacts to the aquifer. Groundwater monitoring well MW-4 was installed near the northwest corner of the excavation and the screen set from 24 to 34 feet below ground surface (bgs). Groundwater monitoring well MW-5 was installed near the northeast corner of the excavation and the screen set from 19 to 29 feet bgs. Groundwater monitoring well MW-6 was installed approximately 40 feet south of the southwest corner of the excavation and the screen set from 27 to 37 feet bgs. Groundwater monitoring well MW-7 was installed approximately 90 feet southeast from the southeast corner of the excavation and the screen set from 20 to 30 feet bgs. Reference *Figure 3* for the locations of the groundwater monitoring wells and *Appendix B* for the soil boring logs and well construction diagrams.

In July 2004, a water sparging system was installed at the site. The sparging system consisted of perforated poly-vinyl chloride (PVC) piping attached to an air compressor. The perforated PVC piping was laid in the water pools located in the base of the excavation and air was blown through the piping in order to aerate the water.

III. Groundwater Gradient and PSH Thickness

Monitoring wells were gauged prior to bailing to determine the depth to groundwater and the thickness of PSH, if present. Measurements of groundwater levels during the past year indicate, except for minor fluctuations, water levels rose approximately 0.4 feet during the past year. PSH levels in the impacted monitoring well (MW-3) ranged from non-detectable to 0.03 feet. PSH was only detected on the water column during 4 of the sixteen site visits conducted during the past year, with the last detection occurring in October. A summary of groundwater elevations and PSH thickness is included as *Table 1.*

IV. PSH Recovery

Recovery of PSH has been accomplished via absorbent socks during the past year. Due to the fact that PSH recovery is accomplished via absorbent socks and aeration of groundwater in the excavation, the volume of PSH recovered during the past year is not known. However, the absorbent socks are changed on approximately a monthly basis. In addition, absorbent booms were placed around the perimeter of the exposed groundwater in the excavation basin to recover PSH on the water surface and are changed quarterly. There has been no evidence of PSH (i.e., sheen) in the pools located in the excavation since October 2004. The site is fenced and the exposed groundwater covered with netting to prevent wildlife and livestock from utilizing the water.

V. Groundwater Sampling

Groundwater monitoring wells MW-1, MW-2 and MW-3 were sampled on May 5, 2004 and the samples submitted for quantification of BTEX using EPA Method 8260b and TPH using EPA Method 8015 modified.

Groundwater monitoring wells MW-4, MW-5, MW-6 and MW-7 were sampled on May 25, 2004 and the samples submitted for quantification of BTEX using EPA Method 8260b and TPH using EPA Method 8015 modified.

The groundwater monitoring well network was sampled on July 26, 2004 and the samples submitted for quantification of BTEX via EPA Method 8260B, poly-aromatic hydrocarbons (PAHs) via EPA Method3 610 and 8270c and chlorides via EPA Method 325.2 and 9251. Groundwater monitoring well MW-3 was not sampled during this sampling event.

The groundwater monitoring well network was sampled on October 4 and December 17, 2004 and the samples submitted for quantification of BTEX using EPA Method 8260b.

The wells were purged a minimum of three well volumes or dry and samples collected utilizing dedicated or disposable sample bailers. Samples were then placed on ice and shipped to an independent laboratory under chain-of-custody for analyses.

VI. Groundwater Analytical Results

Analytical results for the samples from groundwater monitoring well MW-1 indicated benzene concentrations ranging from 1,070 micrograms per liter (µg/L) to 2,960 µg/L, toluene concentrations ranging from 2.36 µg/L to 7.77 µg/L, ethylbenzene concentrations ranging from 583 µg/L to 1,520 µg/L and total xylene concentrations ranging from 232 µg/L to 891 µg/L (reference *Table 2*). The reported benzene concentrations were above the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards of 10 µg/L for all four sampling events in 2004. The reported ethylbenzene concentrations were above the NMWQCC Groundwater Standards of 750 µg/L for the final three sampling events in 2004. The reported total xylene concentrations were above the NMWQCC Groundwater Standards of 620 µg/L for the final sampling event in 2004. Toluene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all four sampling events in 2004. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 1,740 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 45.5 µg/L. PAH concentrations for total naphthalene were above the NMWQCC Groundwater Standard for total naphthalene plus monomethylnaphthalene of 30 µg/L.

Analytical results for samples collected from groundwater monitoring well MW-2 indicated benzene concentrations ranging from 1,880 µg/L to 6,020 µg/L, toluene concentrations ranging from non-detectable (ND) at or above method detection limits (MDL) to 10.4 µg/L, ethylbenzene concentrations ranging from 574 µg/L to 1,740 µg/L and total xylene concentrations ranging from 161 µg/L to 926 µg/L (reference *Table 2*). The reported benzene concentrations were above the NMWQCC Groundwater Standards of 10 µg/L for all four sampling events in 2004. The reported ethylbenzene concentrations were above the NMWQCC Groundwater Standards of 750

µg/L for two of the four sampling events in 2004. The reported total xylene concentrations were above the NMWQCC Groundwater Standards of 620 µg/L for one sampling event in 2004. Toluene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all four sampling events in 2004. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 2,100 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 49.5 µg/L. PAH concentrations for total naphthalene were above the NMWQCC Groundwater Standard for total naphthalene plus monomethylnaphthalene of 30 µg/L.

Analytical results for samples collected from groundwater monitoring well MW-3 indicated benzene concentrations ranging from 1.65 µg/L to 2,510 µg/L, toluene concentrations ranging from ND at or above the MDL to 490 µg/L, ethylbenzene concentrations ranging from ND to 972 µg/L and total xylene concentrations ranging from ND to 965 µg/L (reference *Table 2*). The reported benzene concentrations were above the NMWQCC Groundwater Standards of 10 µg/L for the last two sampling events in 2004. The reported ethylbenzene concentrations were above the NMWQCC Groundwater Standards of 750 µg/L for the final sampling event in 2004. The reported total xylene concentrations were above the NMWQCC Groundwater Standards of 620 µg/L for the final two sampling events in 2004. Toluene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all three sampling events.

Analytical results for samples collected from groundwater monitoring well MW-4 indicated benzene concentrations ranging from ND at or above the MDL to 3.93 µg/L, toluene concentrations ranging from ND at or above the MDL to 1.01 µg/L, ethylbenzene concentrations ranging from 93.4 µg/L to 447 µg/L and total xylene concentrations ranging from ND at or above the MDL to 485 µg/L (reference *Table 2*). Reported concentrations for all organic analytes were below their respective NMWQCC Groundwater Standards for all four sampling events in 2004. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 2,230 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 39.2 µg/L. PAH concentrations for total naphthalene were above the NMWQCC Groundwater Standard for total naphthalene plus monomethylnaphthalene of 30 µg/L.

Analytical results for samples collected from groundwater monitoring well MW-5 indicated benzene concentrations ranging from 69.2 µg/L to 178 µg/L, toluene concentrations ranging from ND at or above the MDL to 20.9 µg/L, ethylbenzene concentrations ranging from 199 µg/L to 654 µg/L and total xylene concentrations ranging from 8.96 µg/L to 639 µg/L (reference *Table 2*). The reported benzene concentrations were above the NMWQCC Groundwater Standards of 10 µg/L for all four sampling events in 2004. The reported total xylene concentrations were above the NMWQCC Groundwater Standards of 620 µg/L for the initial sampling event in 2004. Toluene and ethylbenzene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all three sampling events. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 2,480 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 35.4 µg/L. PAH concentrations for total naphthalene were above the NMWQCC Groundwater Standard for total naphthalene plus monomethylnaphthalene of 30 µg/L.

Analytical results for samples collected from groundwater monitoring well MW-6 indicated benzene concentrations ranging from ND at or above the MDL to 641 µg/L, toluene concentrations ranging from ND at or above the MDL to 5.33 µg/L, ethylbenzene concentrations ranging from 1.22 µg/L to 161 µg/L and total xylene concentrations ranging from ND at or above the MDL to 201 µg/L (reference *Table 2*). The reported benzene concentrations were above the NMWQCC Groundwater Standards of 10 µg/L for the first three sampling events in 2004. Toluene and ethylbenzene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all four sampling events. Total xylene concentrations were also below the NMWQCC Groundwater Standards of 620 µg/L for all four sampling events. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 2,090 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 8.01 µg/L.

Analytical results for samples collected from groundwater monitoring well MW-7 indicated benzene concentrations ranging from 1,840 µg/L to 3,260 µg/L, toluene concentrations ranging from ND at or above the MDL to 608 µg/L, ethylbenzene concentrations ranging from 604 µg/L to 1,180 µg/L and total xylene concentrations ranging from 484 µg/L to 2,075 µg/L (reference *Table 2*). The reported benzene concentrations were above the NMWQCC Groundwater Standards of 10 µg/L for all four sampling events in 2004. The reported ethylbenzene concentrations were above the NMWQCC Groundwater Standards of 740 µg/L for two of the four sampling events in 2004. The reported total xylene concentrations were above the NMWQCC Groundwater Standards of 620 µg/L for two of the four sampling events in 2004. Toluene concentrations were below the NMWQCC Groundwater Standards of 750 µg/L for all four sampling events. Analytical results for the sample collected on July 26, 2004, reported chloride concentrations at 2,320 milligrams per liter (mg/L), above the NMWQCC Groundwater Standards of 250 mg/L and PAH concentrations at 37.1 µg/L. PAH concentrations for total naphthalene were above the NMWQCC Groundwater Standard for total naphthalene plus monomethylnaphthalene of 30 µg/L.

A summary of groundwater analytical results is included as Tables 2 and 3 and copies of the analytical results and chain-of-custodies are included as Appendix A.

VII. Recommendations

Based on field monitoring and analytical results collected during the past year, the following recommendations are made:

1) Continue to monitor for the presence of PSH on a semi-monthly basis. In addition, collect groundwater level data from the monitoring well network and check the operation of the water sparging system on a semi-monthly basis.

2) Conduct quarterly sampling activities of the groundwater monitoring well network and submit the samples for quantification of BTEX. Samples should be analyzed for the presence of poly-aromatic hydrocarbons (PAH) during the initial sampling event of 2005. Groundwater monitoring wells from which samples indicate concentrations above the NMWQCC standards for PAH should incorporate PAH quantification into the quarterly sampling plan.

3) Install three additional groundwater monitoring wells south of the excavation (reference *Figure 19*). These wells shall be utilized to delineate the lateral extent of impacted groundwater and to monitor the migration of the contaminant plume.

FIGURES

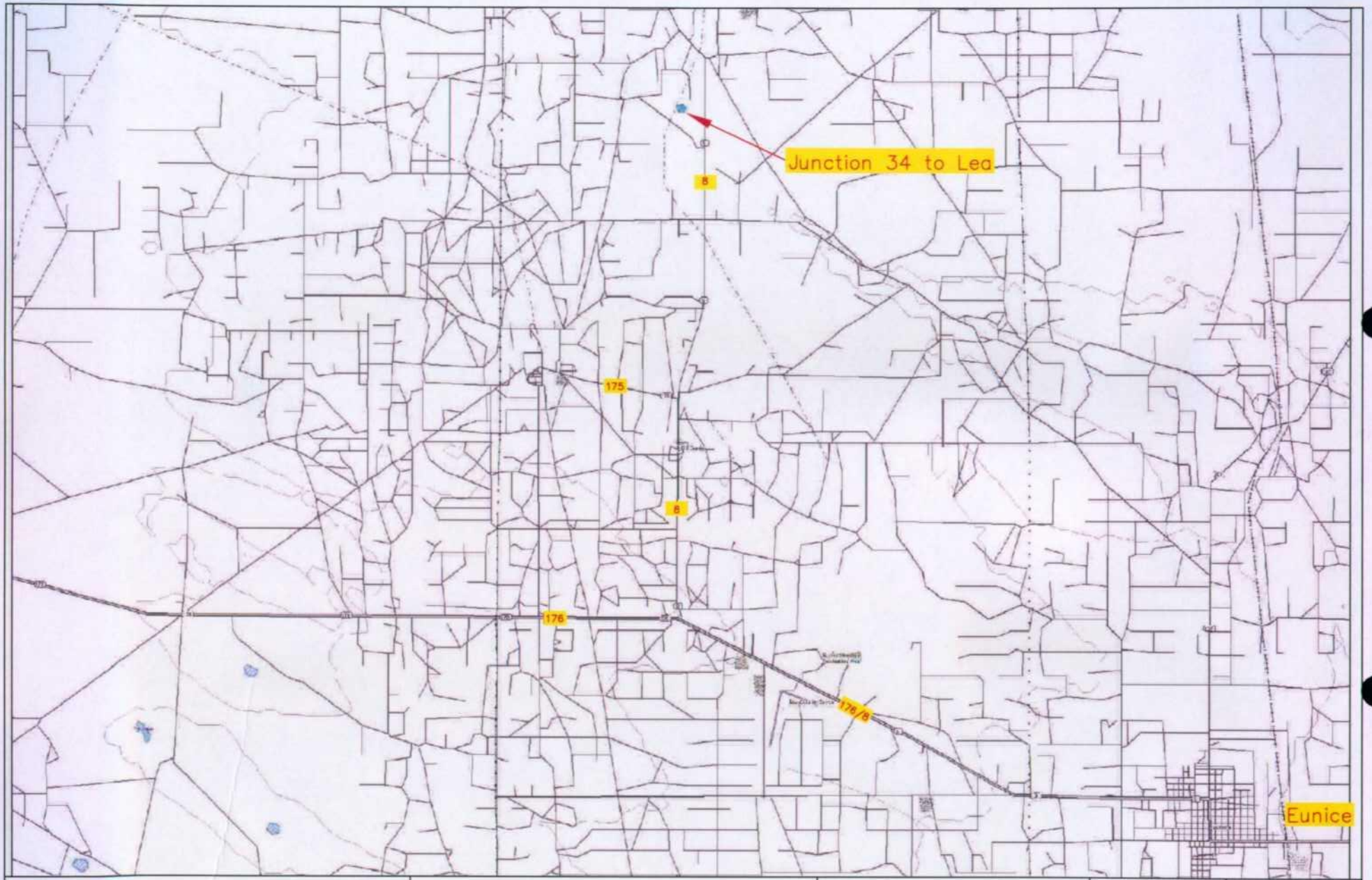


Figure 1
Area Map
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
April 2004

REVISED:
JAN 2005

0 8,000 16,000
Feet

SHEET
1 of 1

N

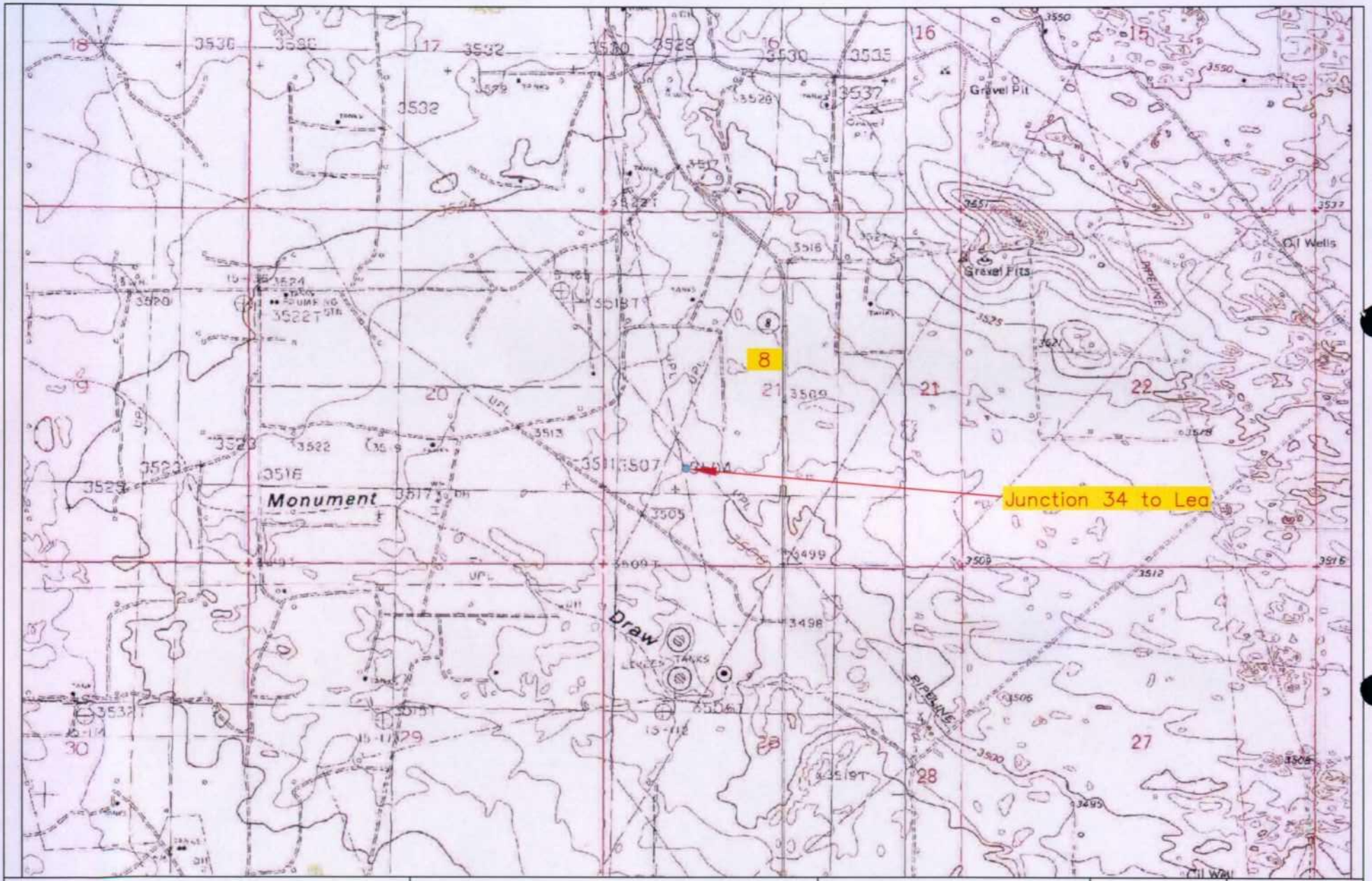


Figure 2
Site Location Map
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
April 2004

REVISED:

0 2,000 4,000
Feet

SHEET
1 of 1

N

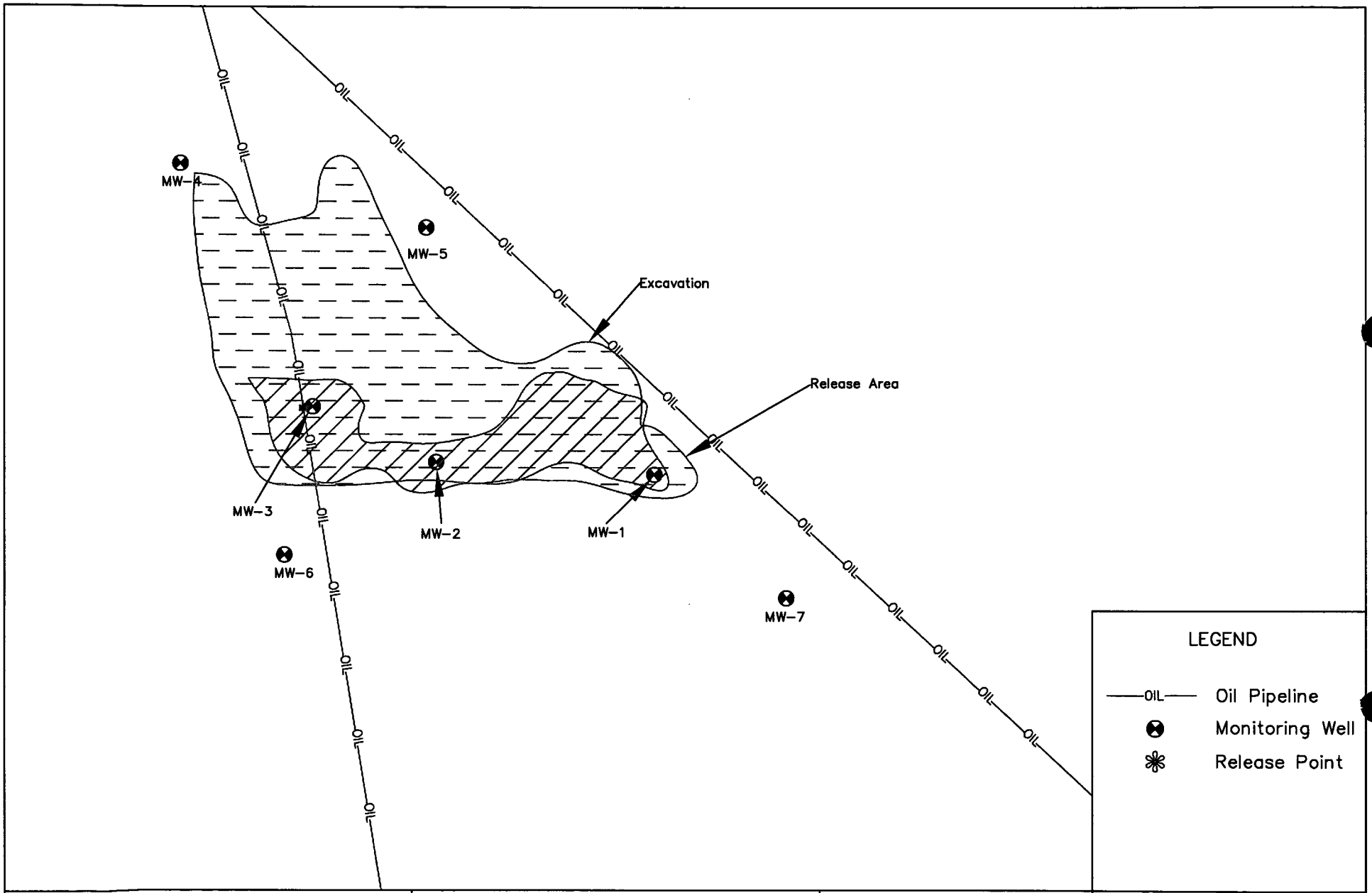


Figure 3
Site Map
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

0 75 150
Feet

SHEET
1 of 1

N

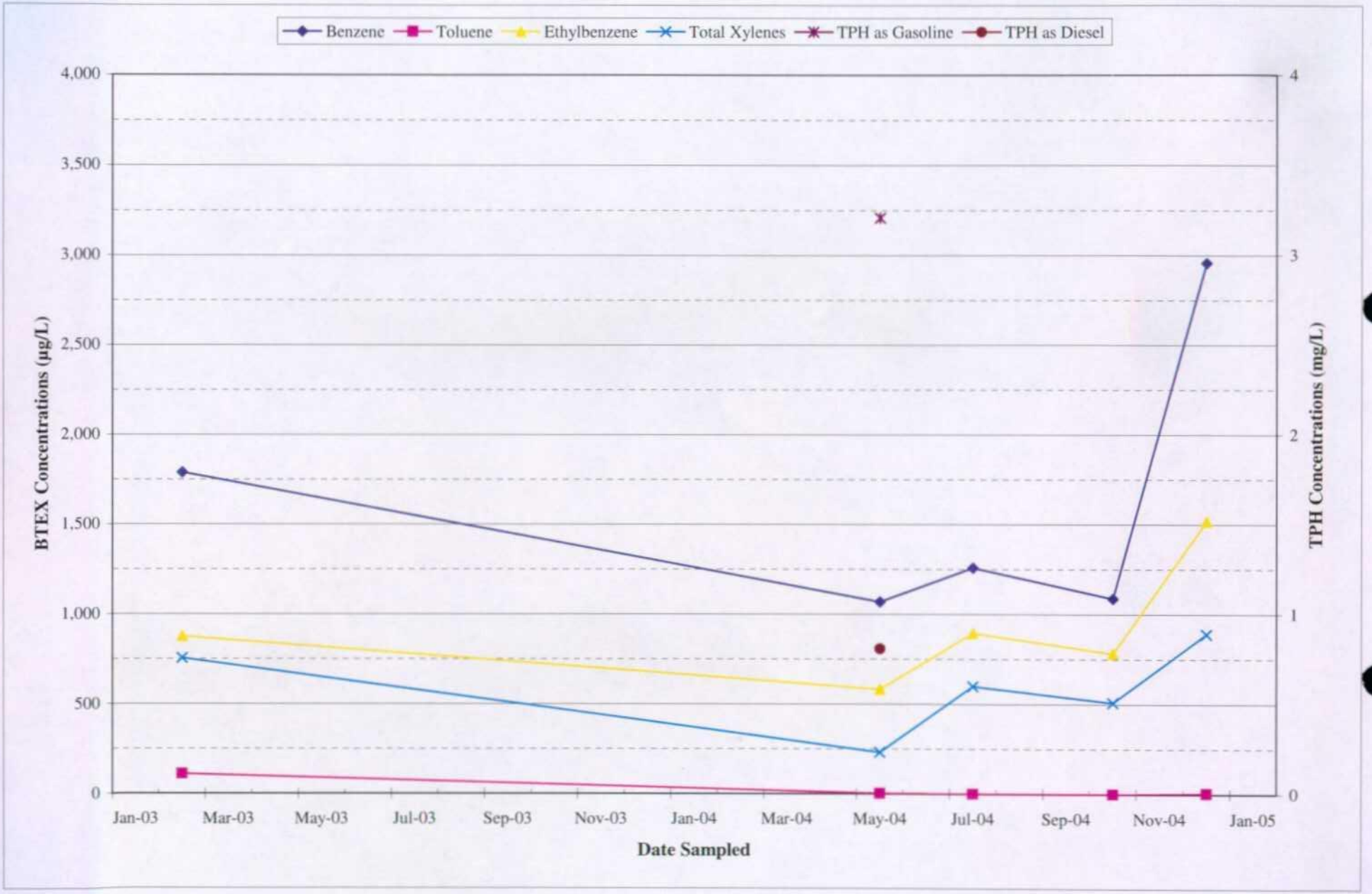


Figure 4: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-1 from 02/27/03 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

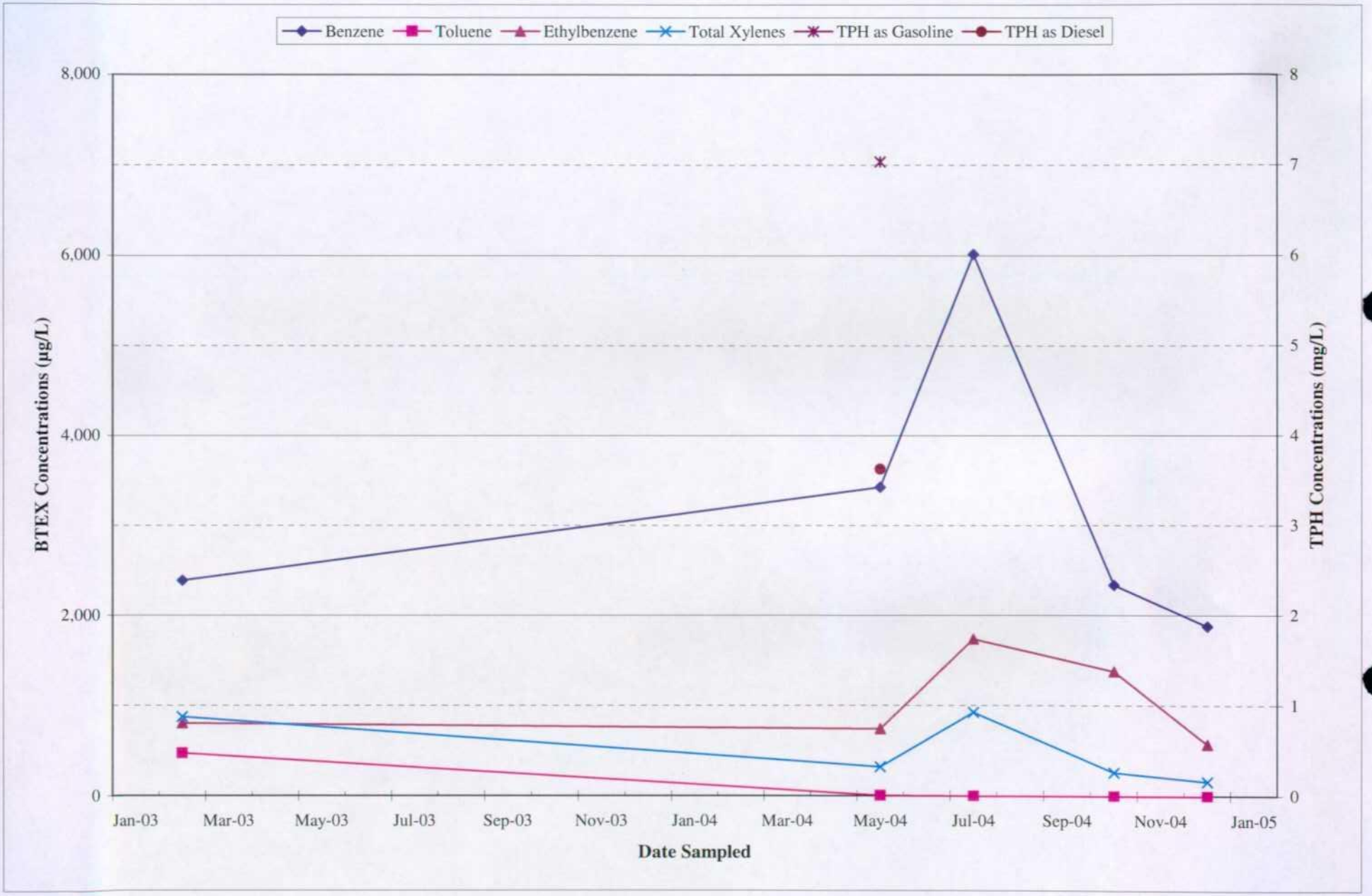


Figure 5: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-2 from 02/27/03 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

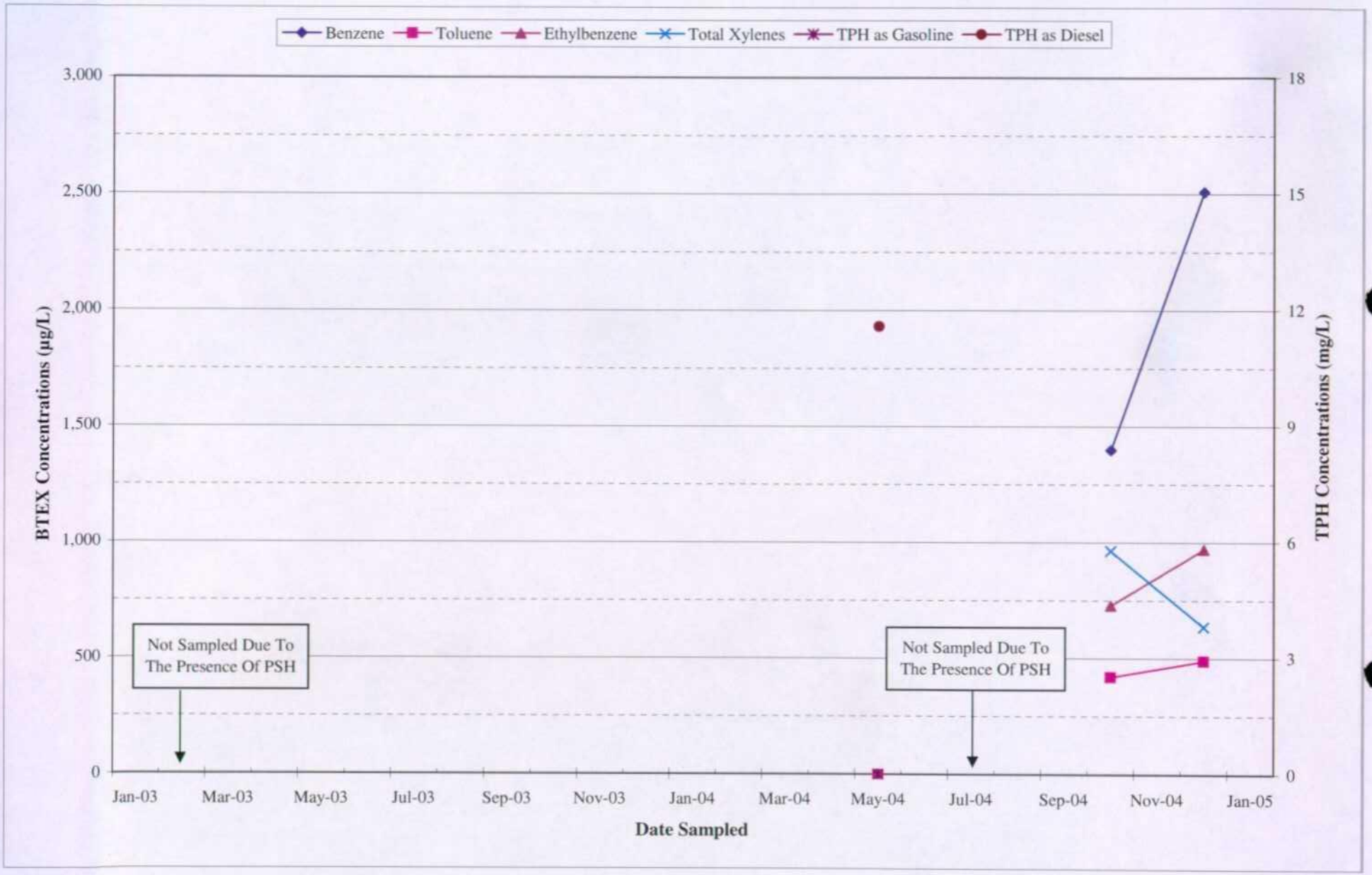


Figure 6: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-3 from 02/27/03 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

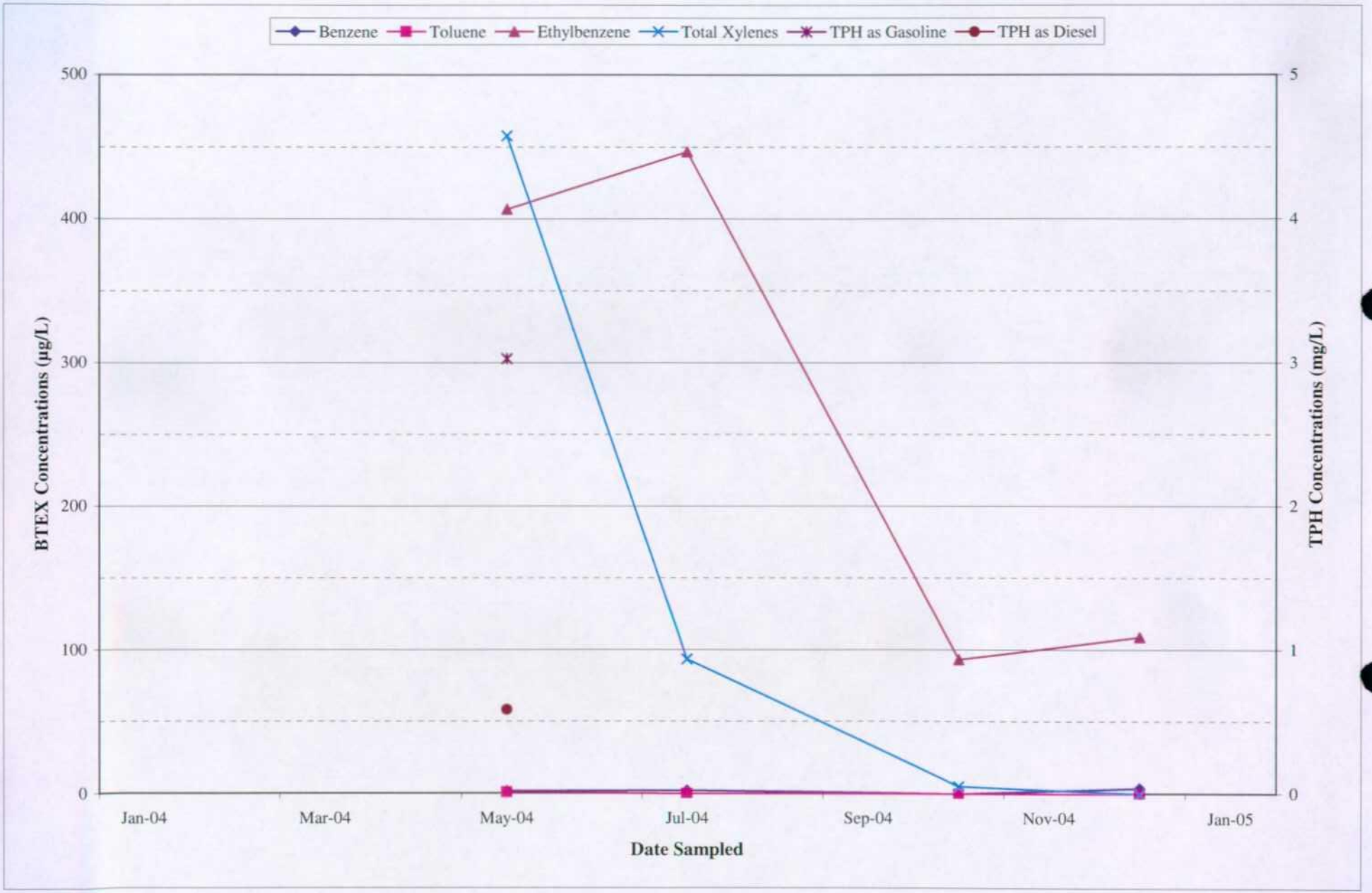


Figure 7: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-4 from 05/25/04 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

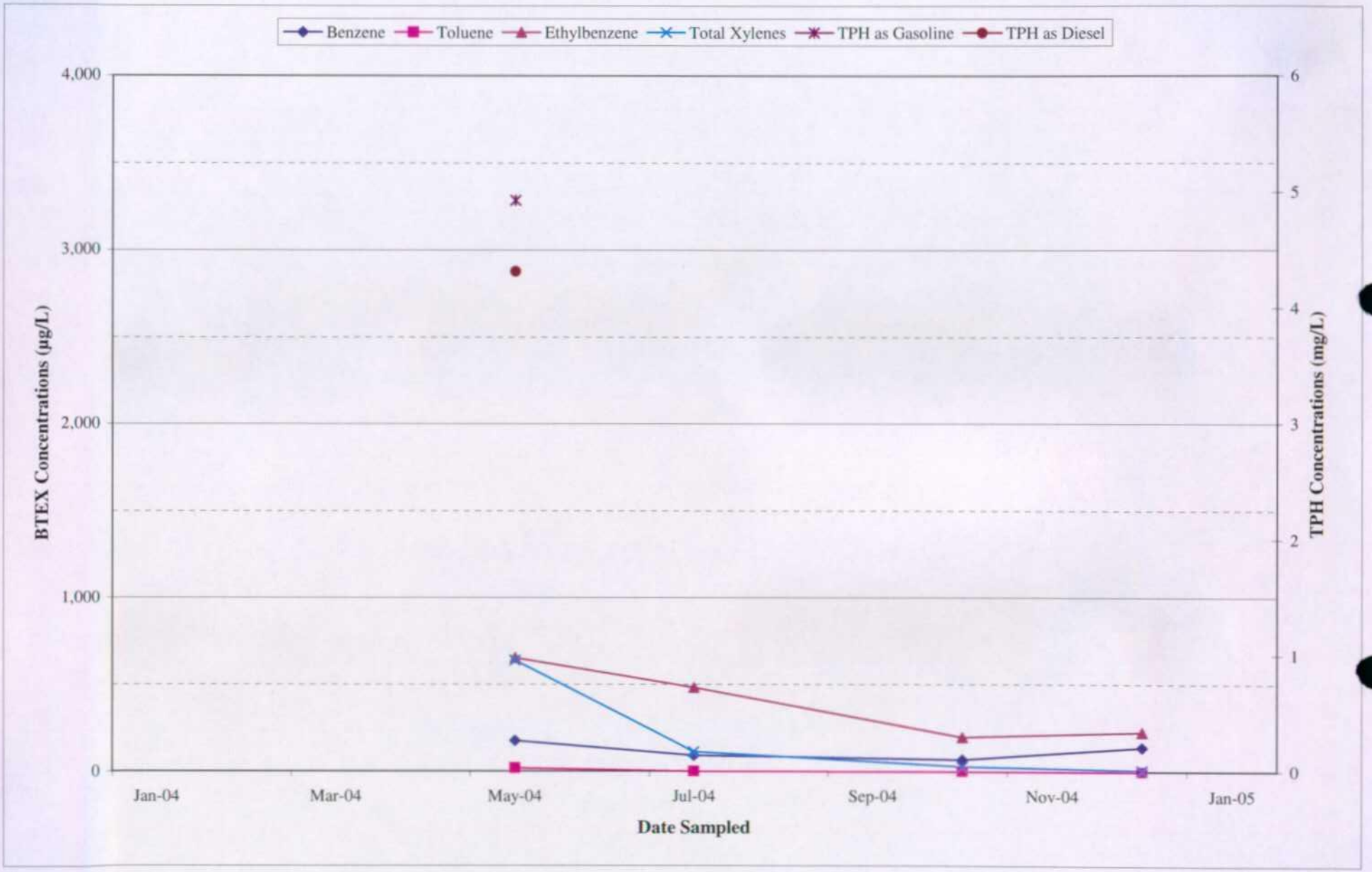


Figure 8: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-5 from 05/25/04 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

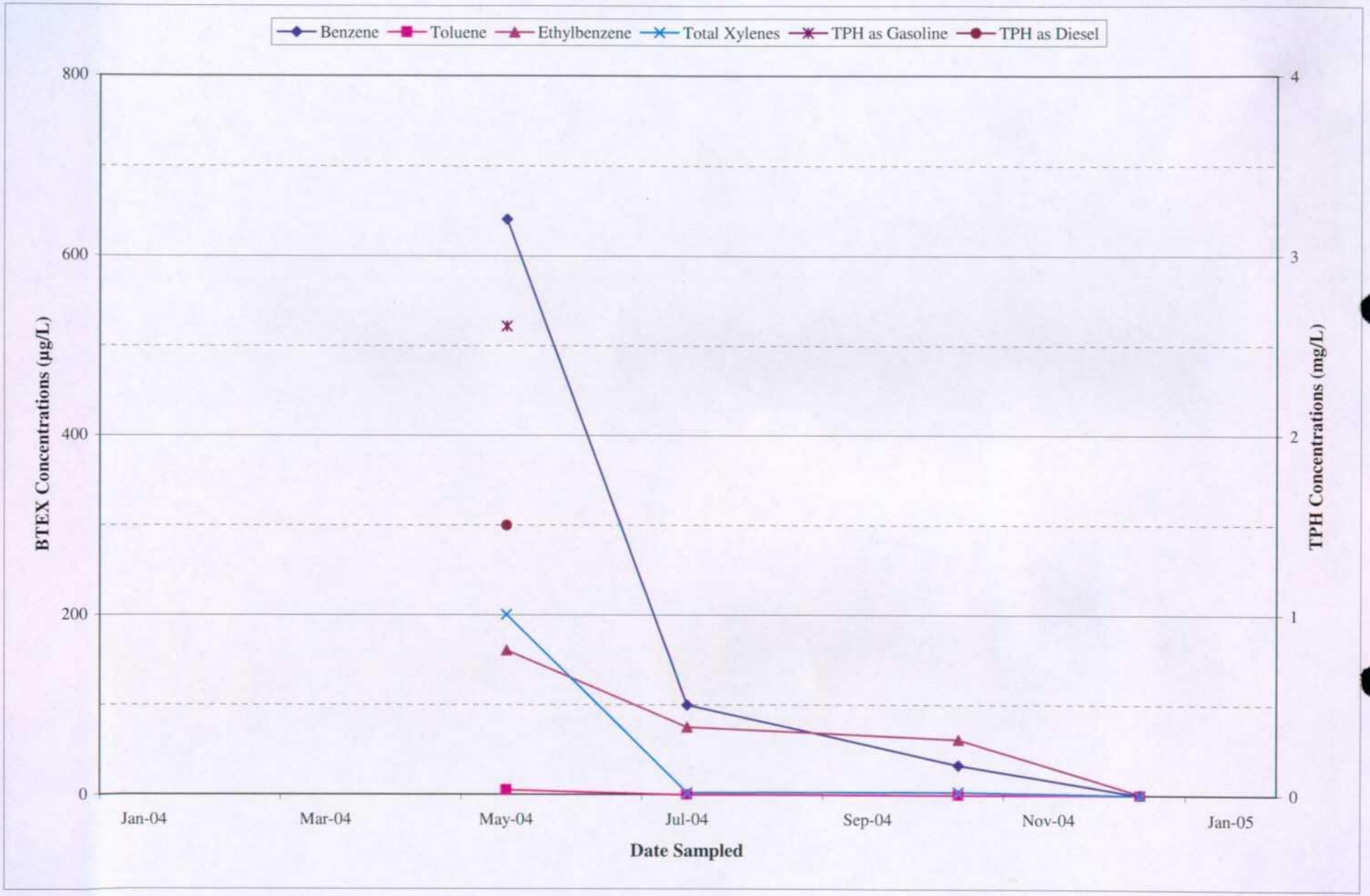


Figure 9: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-6 from 05/25/04 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

Figure 10: TPH and BTEX Concentrations in Groundwater Monitoring Well MW-7 from 05/25/04 through 12/31/04, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexico.

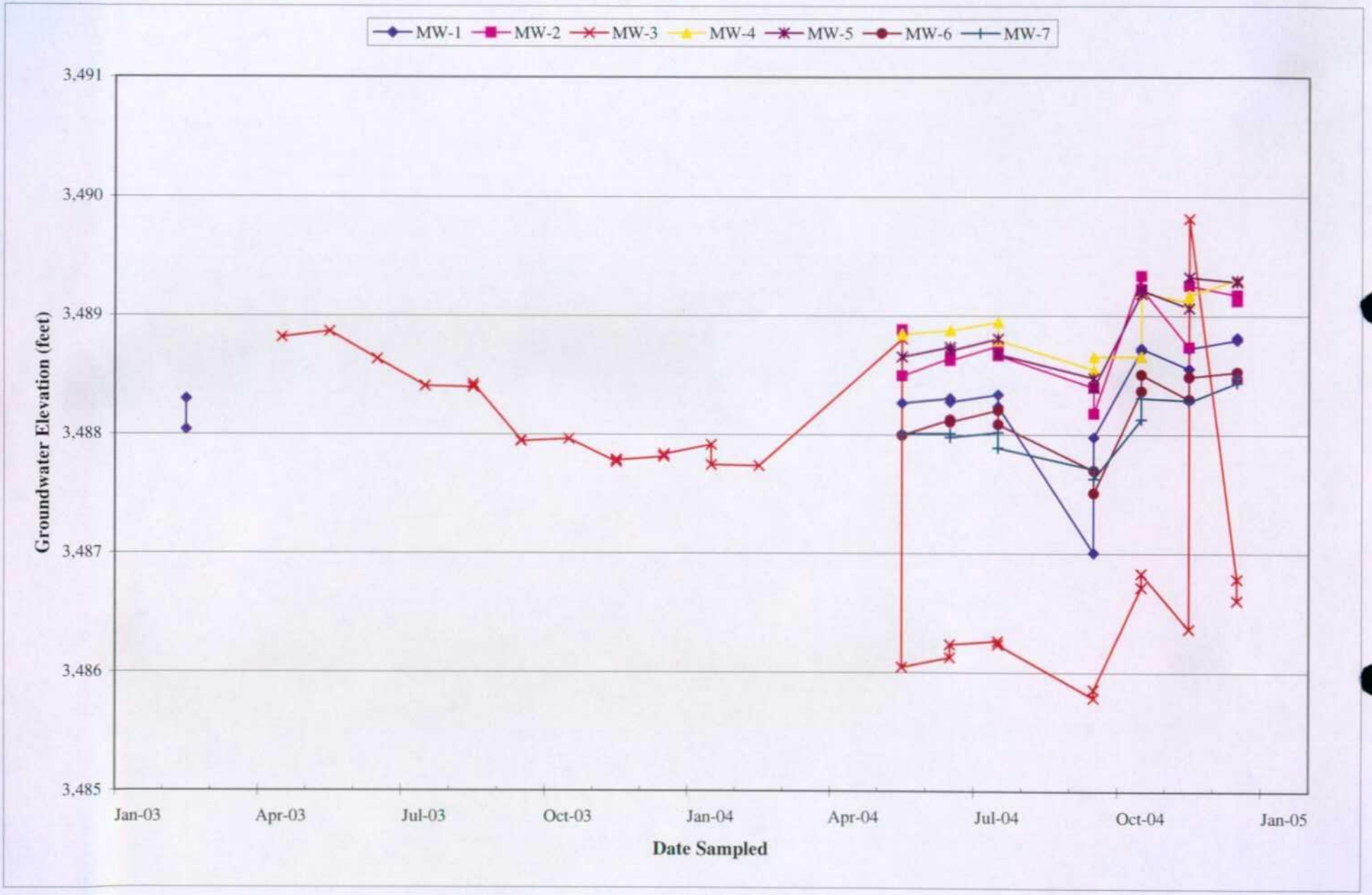


Figure 11: Hydrograph for the Groundwater Monitoring Well Network, Plains All American Pipeline Junction 34 to Lea, Lea County, New Mexcio from 02/11/03 through 12/31/04.

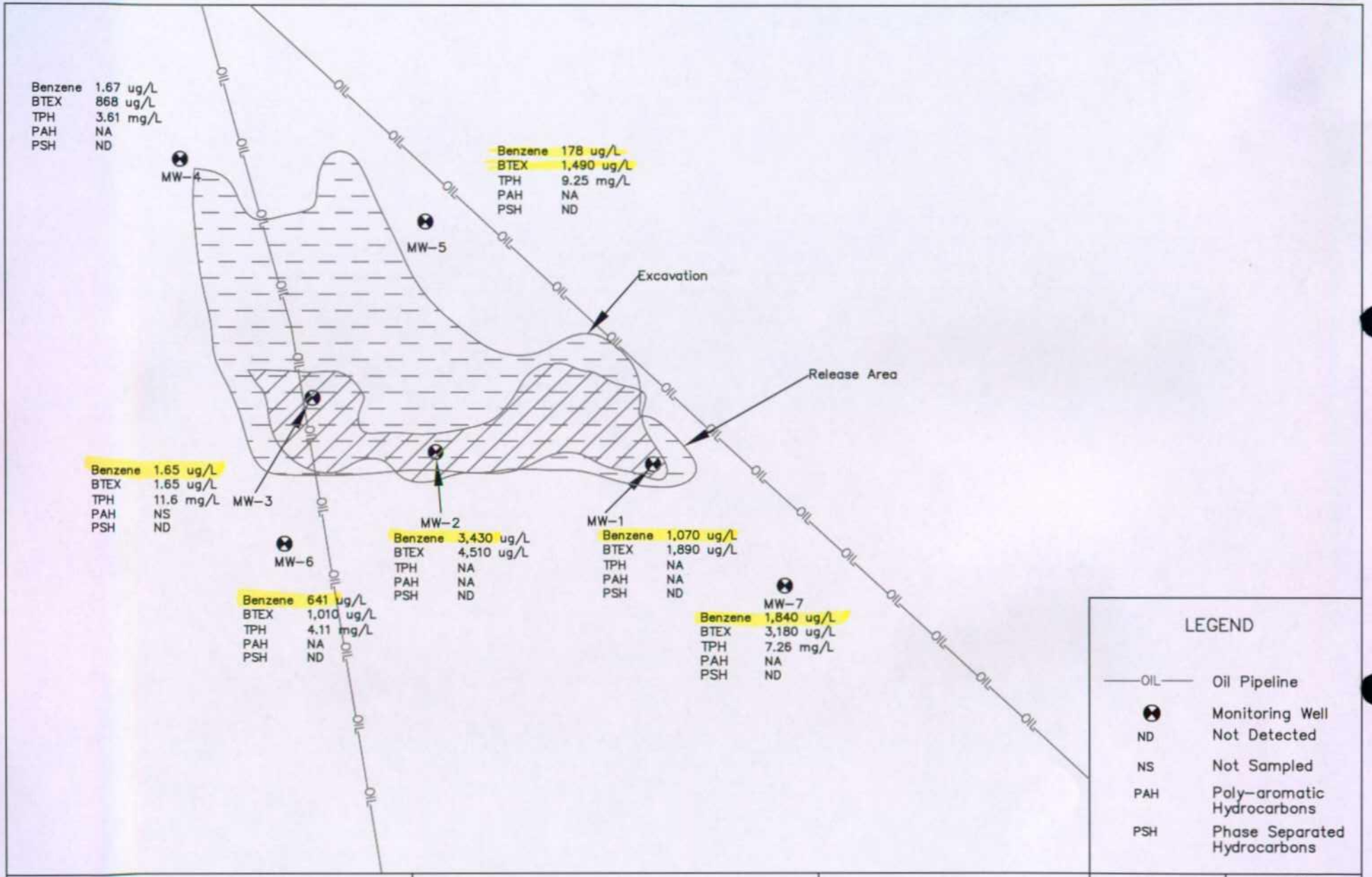


Figure 12
Contaminant Concentration Map – 05/05/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

0 75 150
Feet

SHEET 1 of 1

N

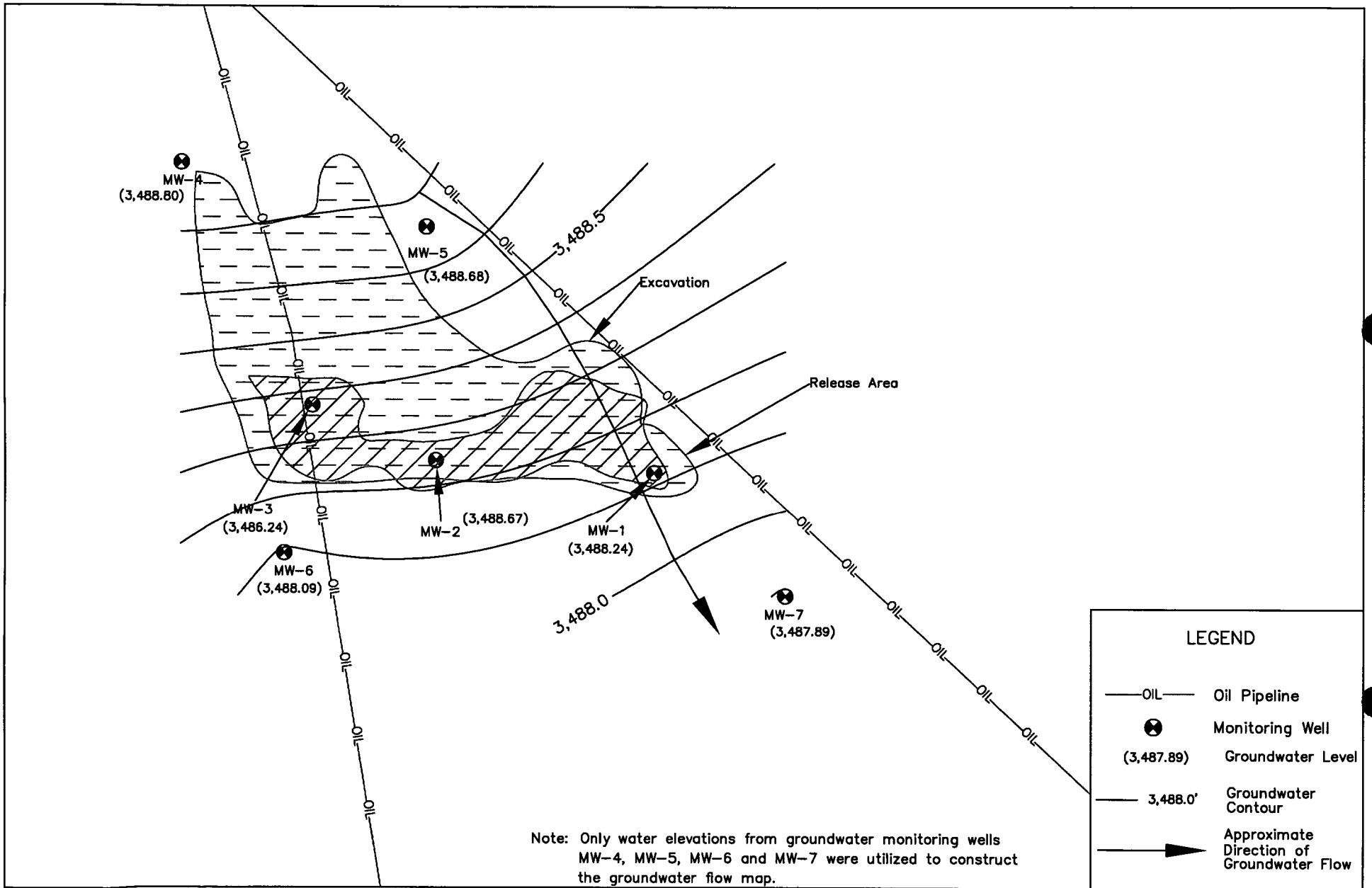


Figure 13
Groundwater Contour Map – 07/26/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

SHEET
1 of 1

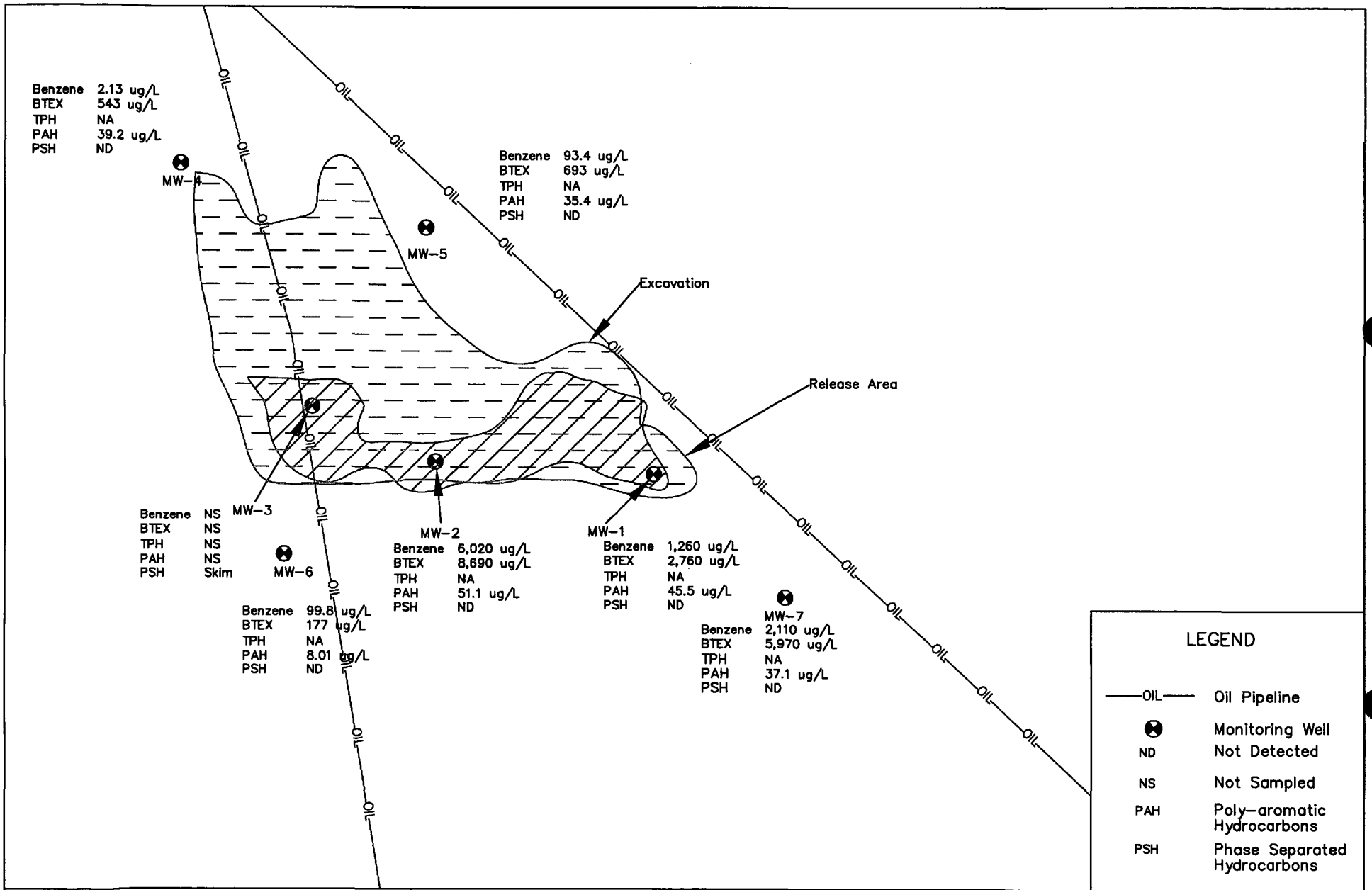


Figure 14
Contaminant Concentration Map – 07/26/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

SHEET 1 of 1

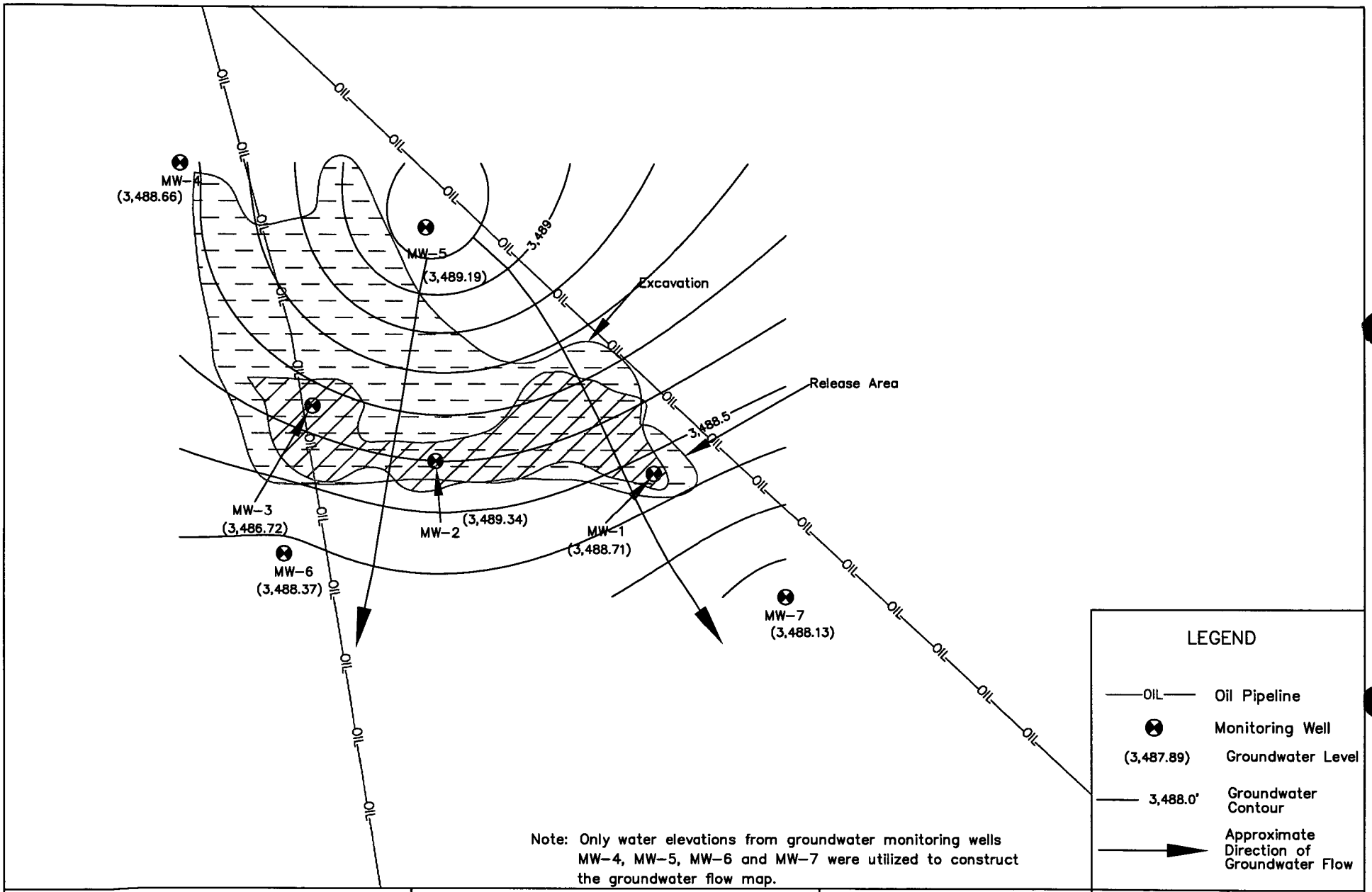


Figure 15
Groundwater Contour Map – 10/04/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

SHEET
1 of 1

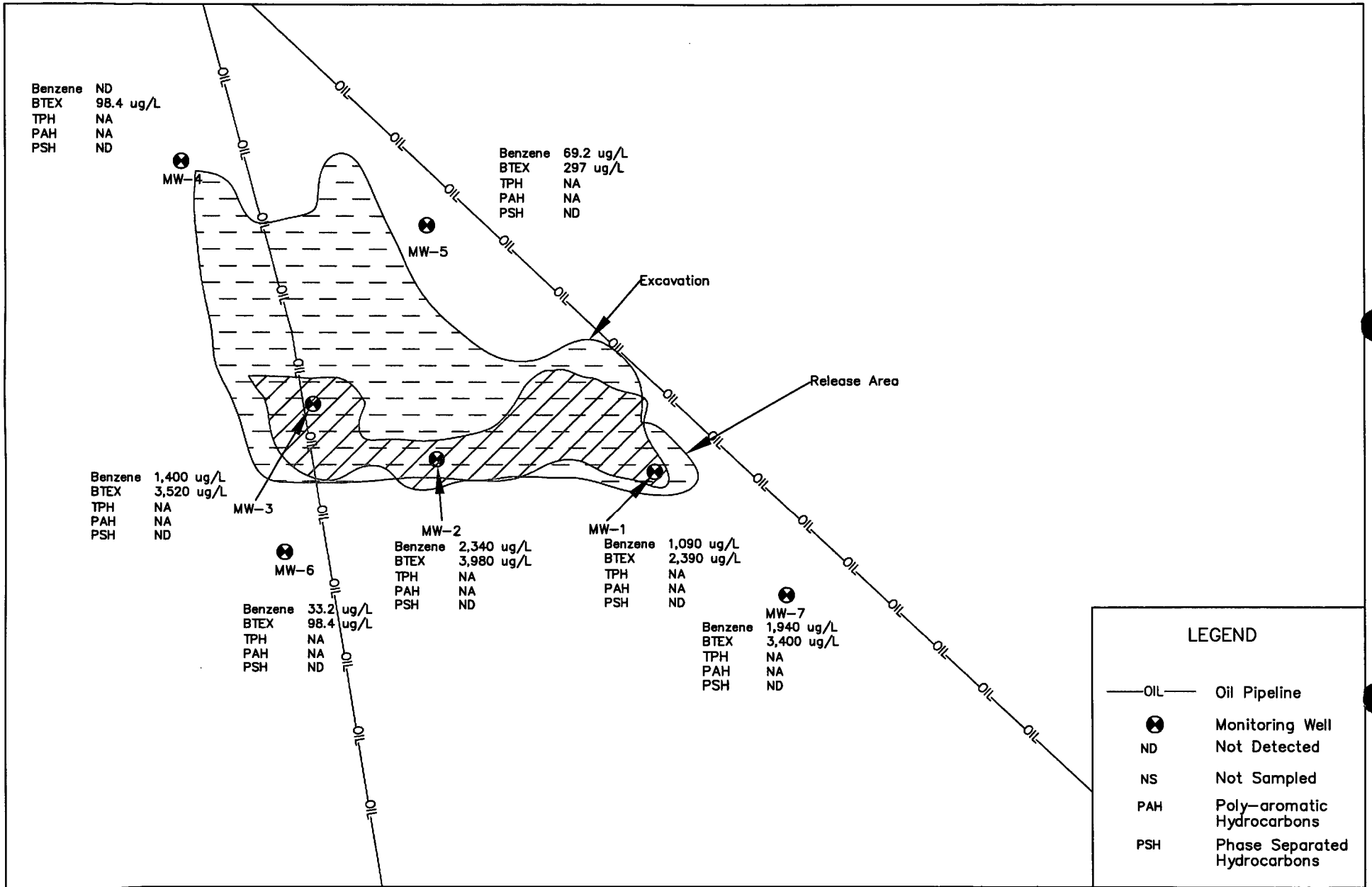


Figure 16
Contaminant Concentration Map – 10/04/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

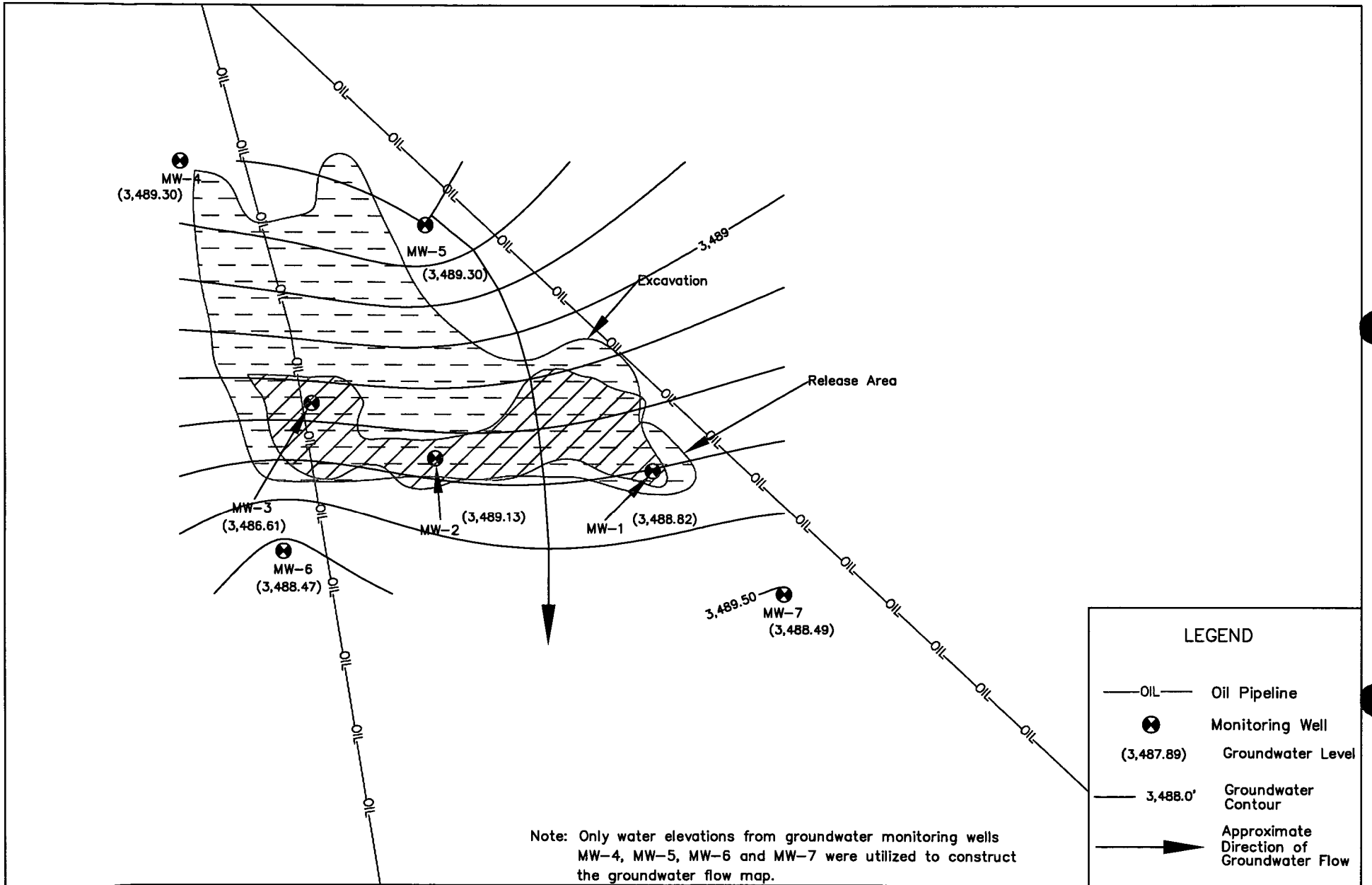
DWG By: Iain Olness
January 2005

REVISED:

0 75 150
Feet

SHEET 1 of 1

N



Note: Only water elevations from groundwater monitoring wells MW-4, MW-5, MW-6 and MW-7 were utilized to construct the groundwater flow map.

Figure 17 Groundwater Contour Map – 12/17/04 Plains All American Pipeline, LP Junction 34 to Lea	Lea County, New Mexico NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E N 32° 33' 18.8" W 103° 15' 39.7" Elevation: 3,505 feet amsl	DWG By: Iain Olness January 2005 0 75 150 Feet	REVISED: SHEET 1 of 1	N

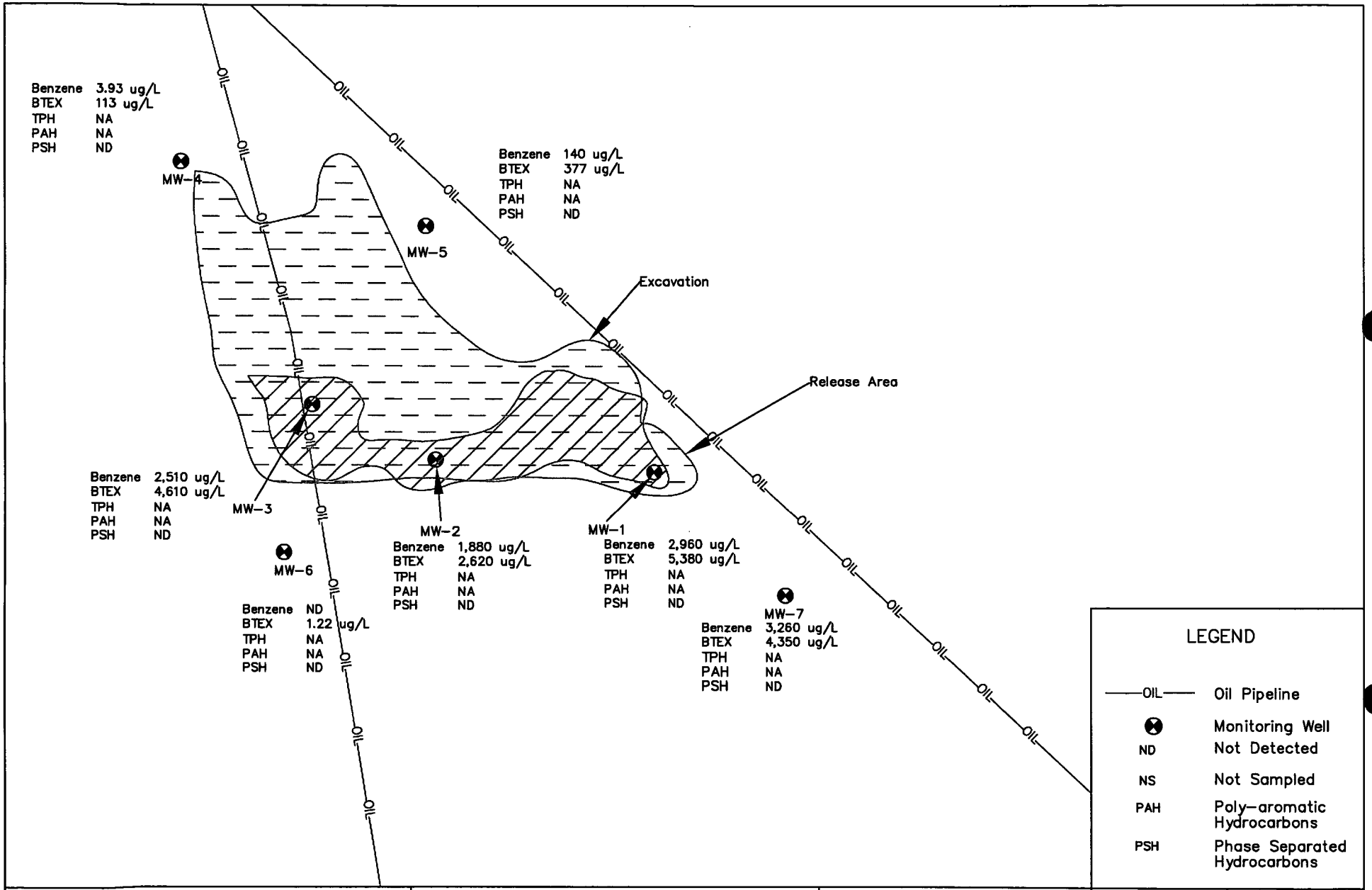


Figure 18
Contaminant Concentration Map – 12/17/04
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

0 75 150
Feet

SHEET 1 of 1

N

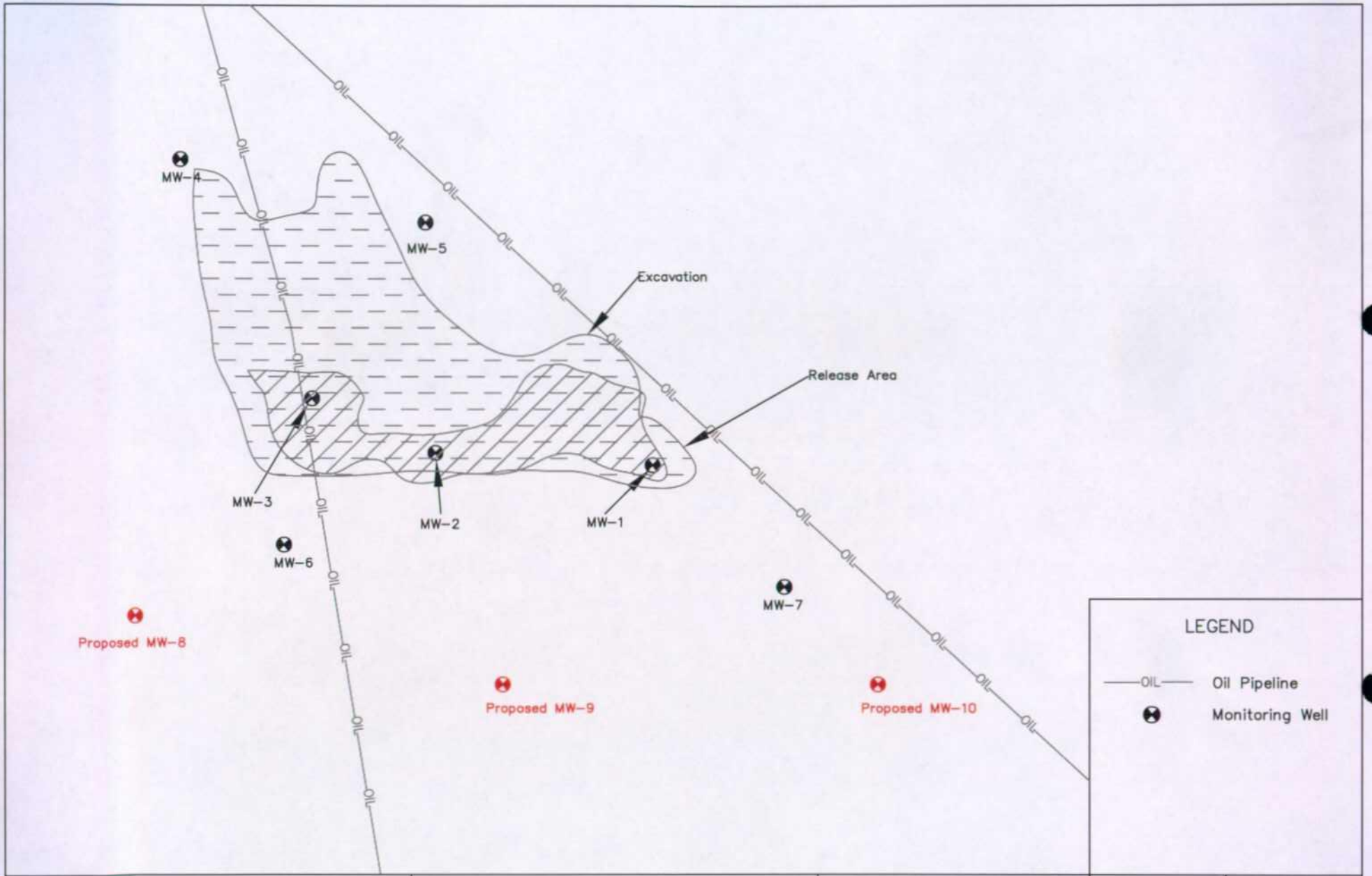


Figure 19
Proposed Monitoring Well Location Map
Plains All American Pipeline, LP
Junction 34 to Lea

Lea County, New Mexico
NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E
N 32° 33' 18.8" W 103° 15' 39.7"
Elevation: 3,505 feet amsl

DWG By: Iain Olness
January 2005

REVISED:

0 75 150
Feet

SHEET
1 of 1

N

TABLES

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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	11-Feb-03	3,508.17	- -	20.13	3,488.04	- -
	27-Feb-03		- -	19.87	3,488.30	- -
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03					
	05-May-03					
	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					
	30-Jan-04					
	06-Feb-04					
	05-May-04		- -	19.66	3,488.51	- -
	25-May-04		- -	19.90	3,488.27	- -
	03-Jun-04		- -	19.86	3,488.31	- -
	15-Jun-04		- -	19.89	3,488.28	- -
	08-Jul-04		- -	19.83	3,488.34	- -
	26-Jul-04		- -	19.93	3,488.24	- -
	10-Sep-04		- -	21.16	3,487.01	- -
	21-Sep-04		- -	20.19	3,487.98	- -
	04-Oct-04		- -	19.46	3,488.71	- -
	15-Oct-04		- -	19.44	3,488.73	- -
	09-Nov-04		- -	19.61	3,488.56	- -
	16-Nov-04		- -	19.44	3,488.73	- -
	07-Dec-04		- -	19.37	3,488.80	- -
	17-Dec-04		- -	19.35	3,488.82	- -
MW-2	11-Feb-03		- -	17.25		- -
	27-Feb-03		- -	19.75		- -
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03	3,501.45				
	05-May-03					

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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-2 (cont.)	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					
	30-Jan-04					
	06-Feb-04					
	05-May-04		- -	12.56	3,488.89	- -
	25-May-04		- -	12.95	3,488.50	- -
	03-Jun-04		- -	12.80	3,488.65	- -
	15-Jun-04		- -	12.82	3,488.63	- -
	08-Jul-04		- -	12.70	3,488.75	- -
	26-Jul-04		- -	12.78	3,488.67	- -
	10-Sep-04		- -	13.05	3,488.40	- -
	21-Sep-04		- -	13.27	3,488.18	- -
	04-Oct-04		- -	12.11	3,489.34	- -
	15-Oct-04		- -	12.22	3,489.23	- -
	09-Nov-04		- -	12.71	3,488.74	- -
	16-Nov-04		- -	12.19	3,489.26	- -
	07-Dec-04		- -	12.27	3,489.18	- -
	17-Dec-04		- -	12.32	3,489.13	- -
MW-3	11-Feb-03		17.10	17.77		0.67
	27-Feb-03		16.64	19.15		2.51
	19-Mar-03		16.63	19.50		2.87
	03-Apr-03		16.65	19.47		2.82
	11-Apr-03		16.65	19.48		2.83
	21-Apr-03		16.62	18.98		2.36
	30-Apr-03	3,495.97	6.98	8.67	3,488.82	1.69
	05-May-03		6.93	8.63	3,488.87	1.70
	18-Jun-03		7.24	8.15	3,488.64	0.91
	09-Jul-03		7.49	8.18	3,488.41	0.69
	21-Jul-03		7.49	8.19	3,488.41	0.70
	12-Aug-03		7.50	8.20	3,488.40	0.70
	18-Aug-03		7.47	8.19	3,488.43	0.72
	03-Sep-03		7.96	8.52	3,487.95	0.56
	19-Sep-03		7.97	8.51	3,487.95	0.54

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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-3 (cont.)	02-Oct-03		7.95	8.50	3,487.97	0.55
	03-Nov-03		8.15	8.65	3,487.77	0.50
	13-Nov-03		8.14	8.51	3,487.79	0.37
	25-Nov-03		8.15	8.50	3,487.79	0.35
	02-Dec-03		8.15	8.20	3,487.82	0.05
	10-Dec-03		8.13	8.16	3,487.84	0.03
	02-Jan-04		8.05	8.08	3,487.92	0.03
	30-Jan-04		8.22	8.24	3,487.75	0.02
	06-Feb-04		8.23	8.24	3,487.74	0.01
	05-May-04		- -	7.16	3,488.81	skim
	25-May-04		9.92	9.94	3,486.05	0.02
	03-Jun-04		- -	9.84	3,486.13	skim
	15-Jun-04		- -	9.73	3,486.24	- -
	08-Jul-04		- -	9.70	3,486.27	- -
	26-Jul-04		- -	9.73	3,486.24	- -
	10-Sep-04		- -	10.18	3,485.79	- -
	21-Sep-04		- -	10.11	3,485.86	- -
	04-Oct-04		- -	9.25	3,486.72	- -
	15-Oct-04		9.13	9.16	3,486.84	0.03
	09-Nov-04		- -	9.60	3,486.37	- -
	16-Nov-04		- -	6.15	3,489.82	- -
	07-Dec-04		- -	9.18	3,486.79	- -
	17-Dec-04		- -	9.36	3,486.61	- -
MW-4	11-Feb-03					
	27-Feb-03					
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03					
	05-May-03					
	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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-4 (cont.)	30-Jan-04					
	06-Feb-04					
	05-May-04					
	25-May-04	3,508.01	- -	19.16	3,488.85	- -
	03-Jun-04		- -	19.13	3,488.88	- -
	15-Jun-04		- -	19.13	3,488.88	- -
	08-Jul-04		- -	19.06	3,488.95	- -
	26-Jul-04		- -	19.21	3,488.80	- -
	10-Sep-04		- -	19.46	3,488.55	- -
	21-Sep-04		- -	19.35	3,488.66	- -
	04-Oct-04		- -	19.35	3,488.66	- -
	15-Oct-04		- -	18.81	3,489.20	- -
	09-Nov-04		- -	18.89	3,489.12	- -
	16-Nov-04		- -	18.83	3,489.18	- -
	07-Dec-04		- -	18.70	3,489.31	- -
	17-Dec-04		- -	18.71	3,489.30	- -
MW-5	11-Feb-03					
	27-Feb-03					
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03					
	05-May-03					
	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					
	30-Jan-04					
	06-Feb-04					
	05-May-04					
	25-May-04	3,508.74	- -	20.08	3,488.66	- -
	03-Jun-04		- -	20.00	3,488.74	- -
	15-Jun-04		- -	20.03	3,488.71	- -
	08-Jul-04		- -	19.93	3,488.81	- -

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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-5 (cont.)	26-Jul-04		- -	20.06	3,488.68	- -
	10-Sep-04		- -	20.26	3,488.48	- -
	21-Sep-04		- -	20.34	3,488.40	- -
	04-Oct-04		- -	19.55	3,489.19	- -
	15-Oct-04		- -	19.52	3,489.22	- -
	09-Nov-04		- -	19.67	3,489.07	- -
	16-Nov-04		- -	19.41	3,489.33	- -
	07-Dec-04		- -	19.45	3,489.29	- -
	17-Dec-04		- -	19.44	3,489.30	- -
MW-6	11-Feb-03					
	27-Feb-03					
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03					
	05-May-03					
	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					
	30-Jan-04					
	06-Feb-04					
	05-May-04					
	25-May-04	3,509.76	- -	21.76	3,488.00	- -
	03-Jun-04		- -	21.63	3,488.13	- -
	15-Jun-04		- -	21.65	3,488.11	- -
	08-Jul-04		- -	21.55	3,488.21	- -
	26-Jul-04		- -	21.67	3,488.09	- -
	10-Sep-04		- -	22.06	3,487.70	- -
	21-Sep-04		- -	22.25	3,487.51	- -
	04-Oct-04		- -	21.39	3,488.37	- -
	15-Oct-04		- -	21.25	3,488.51	- -
	09-Nov-04		- -	21.46	3,488.30	- -
	16-Nov-04		- -	21.27	3,488.49	- -

TABLE 1

RELATIVE GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESSES

Junction 34 to Lea - Ref #2002-10286

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-6 (cont.)	07-Dec-04		- -	21.23	3,488.53	- -
	17-Dec-04		- -	21.29	3,488.47	- -
MW-7	11-Feb-03					
	27-Feb-03					
	19-Mar-03					
	03-Apr-03					
	11-Apr-03					
	21-Apr-03					
	30-Apr-03					
	05-May-03					
	18-Jun-03					
	09-Jul-03					
	21-Jul-03					
	12-Aug-03					
	18-Aug-03					
	03-Sep-03					
	19-Sep-03					
	02-Oct-03					
	03-Nov-03					
	13-Nov-03					
	25-Nov-03					
	02-Dec-03					
	10-Dec-03					
	02-Jan-04					
	30-Jan-04					
	06-Feb-04					
	05-May-04					
	25-May-04	3,507.38	- -	19.37	3,488.01	- -
	03-Jun-04		- -	19.37	3,488.01	- -
	15-Jun-04		- -	19.40	3,487.98	- -
	08-Jul-04		- -	19.36	3,488.02	- -
	26-Jul-04		- -	19.49	3,487.89	- -
	10-Sep-06		- -	19.67	3,487.71	- -
	21-Sep-04		- -	19.75	3,487.63	- -
	04-Oct-04		- -	19.25	3,488.13	- -
	15-Oct-04		- -	19.07	3,488.31	- -
	09-Nov-04		- -	19.09	3,488.29	- -
	16-Nov-04		- -	19.10	3,488.28	- -
	07-Dec-04		- -	18.94	3,488.44	- -
	17-Dec-04		- -	18.89	3,488.49	- -

* Corrected Groundwater Elevation = Top of Casing Elevation - (Depth to Water Below Top of Casing - (SG)(PSH Thickness).

- - = Not Detected

If the cell is blank, the well was not gauged.

TABLE 2

Summary of Groundwater Analytical Results

Junction 34 to Lea - Ref #2002-10286

Monitor Well Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	m,p-Xylenes (µg/L)	o-Xylene (µg/L)	Total Xylenes (µg/L)	Chloride (mg/L)	Total Dissolved Solids (mg/L)	TPH as Gasoline (mg/L)	TPH as Diesel (mg/L)	Total TPH (mg/L)
MW-1	27-Feb-03	**1,790**	110	**876**	639	117	**756**					
	5-May-04	**1,070**	4.92	583	228	4.38	232			3.21	0.81	4.02
	26-Jul-04	**1,260**	2.36	**898**	590	9.54	600	**1,740**				
	4-Oct-04	**1,090**	2.43	**785**	506	3.1	509					
	17-Dec-04	**2,960**	7.77	**1,520**	891	<5.0	**891**					
MW-2	27-Feb-03	**2,390**	474	**807**	655	221	**876**					
	5-May-04	**3,430**	10.4	746	317	6.18	323			7.04	3.63	10.67
	26-Jul-04	**6,020**	3.42	**1,740**	910	15.7	**926**	**2,100**				
	4-Oct-04	**2,340**	<5	**1,380**	261	<5	261					
	17-Dec-04	**1,880**	<2.0	574	159	2.09	161					
MW-3	27-Feb-03	**Not Sampled Due to the Presence of PSH**										
	5-May-04	1.65	<1.0	<1.0	<2.0	<1.0	<3.0			<0.5	11.6	11.6
	26-Jul-04	Not Sampled										
	4-Oct-04	**1,400**	421	730	723	242	**965**					
	17-Dec-04	**2,510**	490	**972**	550	87.6	**638**					
MW-4	25-May-04	1.67	1.01	407	345	113	458			3.03	0.583	3.61
	26-Jul-04	2.13	<1.0	447	91.7	1.85	93.6	**2,230**				
	4-Oct-04	<1	<1	93.4	5.03	<1	5.03					
	17-Dec-04	3.93	<1.0	109	<2.0	<1.0	<3.0					
MW-5	25-May-04	**178**	20.9	654	523	116	**639**			4.93	4.32	9.25
	26-Jul-04	**93.4**	2.04	484	113	1.29	114	**2,480**				
	4-Oct-04	**69.2**	<1	199	28.6	<1	28.6					
	17-Dec-04	**140**	<1.0	228	8.96	<1.0	8.96					
MW-6	25-May-04	**641**	5.33	161	188	12.7	201			2.61	1.5	4.11
	26-Jul-04	**99.8**	<1.0	75.4	2.28	<1.0	2.28	**2,090**				
	4-Oct-04	**33.2**	<1	61.8	3.36	<1	3.36					
	17-Dec-04	<1.0	<1.0	1.22	<2.0	<1.0	<3.0					
MW-7	25-May-04	**1,840**	26.7	813	457	41	498			5.74	1.52	7.26
	26-Jul-04	**2,110**	608	**1,180**	1,490	585	**2,075**	**2,320**				
	4-Oct-04	**1,940**	<2	**830**	622	9.43	**631**					
	17-Dec-04	**3,260**	<5.0	604	475	9.09	484					
NMOCD Remedial Thresholds		10	750	750			620	250	1,000			

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

If cell is blank, that parameter was not analyzed

TABLE 3

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

Junction 34 to Lea - Ref #2002-10286.

Monitor Well Location	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-1	27-Feb-03	NOT ANALYZED															
	5-May-04	NOT ANALYZED															
	26-Jul-04	**42.6**	0.136	0.115	1.45	1.13	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-2	27-Feb-03	NOT ANALYZED															
	5-May-04	NOT ANALYZED															
	26-Jul-04	**49.5**	0.092	0.075	0.934	0.495	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-3	27-Feb-03	NOT ANALYZED															
	5-May-04	NOT ANALYZED															
	26-Jul-04	**NOT ANALYZED DUE TO THE PRESENCE OF PHASE SEPARATED HYDROCARBONS**															
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-4	27-Feb-03	WELL INSTALLED 21 MAY 2004															
	5-May-04	WELL INSTALLED 21 MAY 2004															
	26-Jul-04	**37**	0.104	0.066	1.15	0.85	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-5	27-Feb-03	WELL INSTALLED 13 MAY 2004															
	5-May-04	WELL INSTALLED 13 MAY 2004															
	26-Jul-04	**32.8**	0.125	0.092	1.37	0.976	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-6	27-Feb-03	WELL INSTALLED 17 MAY 2004															
	5-May-04	WELL INSTALLED 17 MAY 2004															
	26-Jul-04	6.71	0.057	0.069	0.675	0.437	0.062	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-Dec-04	NOT ANALYZED															
MW-7	27-Feb-03	WELL INSTALLED 13 MAY 2004															
	5-May-04	WELL INSTALLED 13 MAY 2004															
	26-Jul-04	**36.5**	<0.05	<0.05	0.635	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4-Oct-04	NOT ANALYZED															
	17-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

LABORATORY ANALYTICAL RESULTS

AND

CHAIN-OF-CUSTODY FORMS

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#: 155386 **Report Date:** 05/20/04
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-1
Sample Matrix: water
Date Received: 05/07/2004 **Time:** 10:30
Date Sampled: 05/05/2004 **Time:** 07:30

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)	**0.81**	mg/L	0.5	<0.5	05/19/04	8015 mod.	---	11.3	115.1	122.2	109.4
TPH by GC (as diesel-ext)	---	---	---	---	05/19/04	3510	---	---	---	---	---
TPH by GC (as gasoline)	**3.21**	mg/L	0.5	<0.5	05/19/04	8015 mod.	J	5.5	90.4	84.4	88.6
Volatile organics-8260b/BTEX	---		---		05/11/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**1070**	µg/L	10	<10	05/12/04	8260b	---	3.4	117.1	112.1	112.3
Ethylbenzene	**583**	µg/L	10	<10	05/12/04	8260b	---	2	110.5	107	104.5
m,p-Xylenes	**228**	µg/L	2	<2	05/11/04	8260b	---	1.9	111.7	105.5	106.3
o-Xylene	**4.38**	µg/L	1	<1	05/11/04	8260b	---	1.6	112.7	107.5	107.6
Toluene	**4.92**	µg/L	1	<1	05/11/04	8260b	---	3.8	125.7	118.9	118.9

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.

ANALYSIS 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:** 2002-10286	**Report#/Lab ID#:** 155386
Attn: Iain Olness	**Sample Name:** LEJ34L05504MW-1	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	67.7	42-122	---
p-Terphenyl	8015 mod.	70.6	39-125	---
1,2-Dichloroethane-d4	8260b	112	74-124	---
Toluene-d8	8260b	107	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 155386 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-1

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
TPH by GC (as gasoline)	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#: 155387 **Report Date:** 05/20/04
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-2
Sample Matrix: water
Date Received: 05/07/2004 **Time:** 10:30
Date Sampled: 05/05/2004 **Time:** 08:00

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)	**3.63**	mg/L	0.5	<0.5	05/19/04	8015 mod.	J	11.3	115.1	122.2	109.4
TPH by GC (as diesel-ext)	---	---	---	---	05/19/04	3510	---	---	---	---	---
TPH by GC (as gasoline)	**7.04**	mg/L	0.5	<0.5	05/19/04	8015 mod.	---	5.5	90.4	84.4	88.6
Volatile organics-8260b/BTEX	---		---		05/17/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**3430**	µg/L	100	<100	05/12/04	8260b	---	3.4	117.1	112.1	112.3
Ethylbenzene	**746**	µg/L	10	<10	05/11/04	8260b	---	2	110.5	107	104.5
m,p-Xylenes	**317**	µg/L	20	<20	05/11/04	8260b	---	1.9	111.7	105.5	106.3
o-Xylene	**6.18**	µg/L	5	<5	05/17/04	8260b	---	1.6	112.7	107.5	107.6
Toluene	**10.4**	µg/L	5	<5	05/17/04	8260b	---	3.8	125.7	118.9	118.9

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.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 155387
Attn: Iain Olness	**Sample Name:** LEJ34L05504MW-2	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	64.9	42-122	---
p-Terphenyl	8015 mod.	82.4	39-125	---
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	103	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 155387 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-2

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
TPH by GC (as diesel)	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#: 155388 **Report Date:** 05/20/04
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-3
Sample Matrix: water
Date Received: 05/07/2004 **Time:** 10:30
Date Sampled: 05/05/2004 **Time:** 09:30

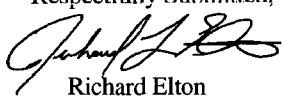
REPORT OF ANALYSIS

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)	**11.6**	mg/L	0.5	<0.5	05/19/04	8015 mod.	---	11.3	115.1	122.2	109.4
TPH by GC (as diesel-ext)	---	---	---	---	05/19/04	3510	---	---	---	---	---
TPH by GC (as gasoline)	<0.5	mg/L	0.5	<0.5	05/19/04	8015 mod.	---	5.5	90.4	84.4	88.6
Volatile organics-8260b/BTEX	---		---		05/12/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**1.65**	µg/L	1	<1	05/12/04	8260b	---	3.4	117.1	112.1	112.3
Ethylbenzene	<1	µg/L	1	<1	05/12/04	8260b	J	2	110.5	107	104.5
m,p-Xylenes	<2	µg/L	2	<2	05/12/04	8260b	---	1.9	111.7	105.5	106.3
o-Xylene	<1	µg/L	1	<1	05/12/04	8260b	---	1.6	112.7	107.5	107.6
Toluene	<1	µg/L	1	<1	05/12/04	8260b	J	3.8	125.7	118.9	118.9

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.

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:** 2002-10286 **Sample Name:** LEJ34L05504MW-3	**Report#/Lab ID#:** 155388 **Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	78.1	42-122	---
p-Terphenyl	8015 mod.	103	39-125	---
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	105	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 155388 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34L05504MW-3

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
Ethylbenzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

9425

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	Junction 34 to Lea
Project Reference	2002-10286
EPI Sampler Name	Sergio Prieto

Bill To

LinkEnergy

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

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
155386 1	LEJ34L05504MW-1	G	2	X							X		5-May	7:30	X	X	X					X
155387 2	LEJ34L05504MW-2	G	2	X							X		5-May	8:00	X	X	X					X
155388 3	LEJ34L05504MW-3	G	2	X							X		5-May	9:30	X	X	X					X
4																	Jar					Jar
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: Sergio Prieto	Date 5/4/04 Time 4	Received By:	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date 5/7/04 Time 1030	Received By: (lab staff) D Flynn / ASI	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	T: 2.4°C

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

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

Project: Jct. 34 to Lea
Project Number: 2002-10286
Location: UL-L Section 21 T20S R37E

Lab Order Number: 4E21006

Report Date: 05/27/04

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	**Reported:**
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 14:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LEJ34051304MW5 (5')	4E21006-01	Soil	05/13/04 08:20	05/21/04 09:25
LEJ34051304MW5 (10')	4E21006-02	Soil	05/13/04 09:35	05/21/04 09:25
LEJ34051304MW5 (15')	4E21006-03	Soil	05/13/04 10:18	05/21/04 09:25
LEJ34051404MW7 (15')	4E21006-04	Soil	05/13/04 10:40	05/21/04 09:25
LEJ34051704MW6 (10')	4E21006-05	Soil	05/17/04 00:00	05/21/04 09:25
LEJ34051704MW6 (15')	4E21006-06	Soil	05/17/04 00:00	05/21/04 09:25

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 14:44

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LEJ34051304MW5 (5') (4E21006-01) Soil									
Benzene	**ND**	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	**0.0696**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.112**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.411**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.174**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**300**	10.0	mg/kg dry	1	EE42103	05/24/04	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	**1660**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1960**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*110 %*	*70-130*		"	"	"	"	
LEJ34051304MW5 (10') (4E21006-02) Soil									
Benzene	**0.0316**	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	**0.302**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**2.15**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**3.12**	0.0250	"	"	"	"	"	"	
Xylene (o)	**1.79**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*150 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*88.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**851**	10.0	mg/kg dry	1	EE42103	05/24/04	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	**3990**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**4840**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*123 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*128 %*	*70-130*		"	"	"	"	

Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 14:44

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LEJ34051304MW5 (15') (4E21006-03) Soil									
Benzene	**ND**	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	**0.141**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.630**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.966**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.548**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**467**	10.0	mg/kg dry	1	EE42103	05/24/04	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	**2980**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**3440**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*127 %*	*70-130*		"	"	"	"	
LEJ34051404MW7 (15') (4E21006-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*81.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42103	05/24/04	05/26/04	EPA 8015M	
Diesel Range Organics >C12-C35	**35.4**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**35.4**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.6 %*	*70-130*		"	"	"	"	

Raland K Tuttle
Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	**Reported:**
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 14:44

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LEJ34051704MW6 (10') (4E21006-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42103	05/24/04	05/26/04	EPA 8015M	
Diesel Range Organics >C12-C35	**11.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**11.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*85.6 %*	*70-130*		"	"	"	"	
LEJ34051704MW6 (15') (4E21006-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42103	05/24/04	05/26/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*88.0 %*	*70-130*		"	"	"	"	

Raland K Tuttle
Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 14:44

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LEJ34051304MW5 (5') (4E21006-01) Soil									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
LEJ34051304MW5 (10') (4E21006-02) Soil									
% Solids	98.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
LEJ34051304MW5 (15') (4E21006-03) Soil									
% Solids	98.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
LEJ34051404MW7 (15') (4E21006-04) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
LEJ34051704MW6 (10') (4E21006-05) Soil									
% Solids	97.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
LEJ34051704MW6 (15') (4E21006-06) Soil									
% Solids	95.0		%	1	EE42402	05/21/04	05/21/04	% calculation	

Roland de Juan
Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 09:49

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42103 - Solvent Extraction (GC)										
Blank (EE42103-BLK1)			Prepared & Analyzed: 05/24/04							
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.0*		*mg/kg*	*50.0*		*74.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.4*		*"*	*50.0*		*70.8*	*70-130*			
Blank (EE42103-BLK2)			Prepared & Analyzed: 05/24/04							
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*36.8*		*mg/kg*	*50.0*		*73.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.8*		*"*	*50.0*		*71.6*	*70-130*			
LCS (EE42103-BS1)			Prepared & Analyzed: 05/24/04							
Gasoline Range Organics C6-C12	426	10.0	mg/kg wet	500		85.2	75-125			
Diesel Range Organics >C12-C35	493	10.0	"	500		98.6	75-125			
Total Hydrocarbon C6-C35	919	10.0	"	1000		91.9	75-125			
Surrogate: 1-Chlorooctane	*45.3*		*mg/kg*	*50.0*		*90.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.5*		*"*	*50.0*		*81.0*	*70-130*			
LCS (EE42103-BS2)			Prepared & Analyzed: 05/24/04							
Gasoline Range Organics C6-C12	408	10.0	mg/kg wet	500		81.6	75-125			
Diesel Range Organics >C12-C35	515	10.0	"	500		103	75-125			
Total Hydrocarbon C6-C35	923	10.0	"	1000		92.3	75-125			
Surrogate: 1-Chlorooctane	*49.0*		*mg/kg*	*50.0*		*98.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.8*		*"*	*50.0*		*73.6*	*70-130*			
LCS Dup (EE42103-BSD2)			Prepared & Analyzed: 05/24/04							
Gasoline Range Organics C6-C12	414	10.0	mg/kg wet	500		82.8	75-125	1.46	20	
Diesel Range Organics >C12-C35	483	10.0	"	500		96.6	75-125	6.41	20	
Total Hydrocarbon C6-C35	897	10.0	"	1000		89.7	75-125	2.86	20	
Surrogate: 1-Chlorooctane	*48.6*		*mg/kg*	*50.0*		*97.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.8*		*"*	*50.0*		*71.6*	*70-130*			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K

Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 09:49

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42103 - Solvent Extraction (GC)										
Calibration Check (EE42103-CCV1)				Prepared & Analyzed: 05/23/04						
Gasoline Range Organics C6-C12	421		mg/kg	500		84.2	80-120			
Diesel Range Organics >C12-C35	498		"	500		99.6	80-120			
Total Hydrocarbon C6-C35	919		"	1000		91.9	80-120			
Surrogate: 1-Chlorooctane	*53.8*		"	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.9*		"	*50.0*		*85.8*	*70-130*			
Calibration Check (EE42103-CCV2)				Prepared & Analyzed: 05/24/04						
Gasoline Range Organics C6-C12	421		mg/kg	500		84.2	80-120			
Diesel Range Organics >C12-C35	513		"	500		103	80-120			
Total Hydrocarbon C6-C35	934		"	1000		93.4	80-120			
Surrogate: 1-Chlorooctane	*53.5*		"	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.3*		"	*50.0*		*92.6*	*70-130*			
Matrix Spike (EE42103-MS1)	**Source: 4E21005-24**			Prepared & Analyzed: 05/24/04						
Gasoline Range Organics C6-C12	586	10.0	mg/kg dry	568	ND	103	75-125			
Diesel Range Organics >C12-C35	660	10.0	"	568	ND	116	75-125			
Total Hydrocarbon C6-C35	1250	10.0	"	1140	ND	110	75-125			
Surrogate: 1-Chlorooctane	*51.5*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.9*		"	*50.0*		*91.8*	*70-130*			
Matrix Spike Dup (EE42103-MSD1)	**Source: 4E21005-24**			Prepared & Analyzed: 05/24/04						
Gasoline Range Organics C6-C12	508	10.0	mg/kg dry	568	ND	89.4	75-125	14.3	20	
Diesel Range Organics >C12-C35	686	10.0	"	568	ND	121	75-125	3.86	20	
Total Hydrocarbon C6-C35	1190	10.0	"	1140	ND	104	75-125	4.92	20	
Surrogate: 1-Chlorooctane	*50.4*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.9*		"	*50.0*		*104*	*70-130*			

Quality Assurance Review

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

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project: Jct. 34 to Lea Project Number: 2002-10286 Project Manager: Jimmy Bryant	Fax: (432) 687-4914 **Reported:** 05/27/04 09:49

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42504 - EPA 5030C (GC)										
Blank (EE42504-BLK1)				Prepared & Analyzed: 05/24/04						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*84.5*		*ug/kg*	*100*		*84.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*83.3*		*"*	*100*		*83.3*	*80-120*			
LCS (EE42504-BS1)				Prepared & Analyzed: 05/24/04						
Benzene	89.1		ug/kg	100		89.1	80-120			
Toluene	86.1		"	100		86.1	80-120			
Ethylbenzene	86.3		"	100		86.3	80-120			
Xylene (p/m)	169		"	200		84.5	80-120			
Xylene (o)	86.2		"	100		86.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*82.1*		*"*	*100*		*82.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*89.3*		*"*	*100*		*89.3*	*80-120*			
Calibration Check (EE42504-CCV1)				Prepared: 05/24/04 Analyzed: 05/25/04						
Benzene	92.3		ug/kg	100		92.3	80-120			
Toluene	91.5		"	100		91.5	80-120			
Ethylbenzene	90.5		"	100		90.5	80-120			
Xylene (p/m)	179		"	200		89.5	80-120			
Xylene (o)	90.2		"	100		90.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*109*		*"*	*100*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*104*		*"*	*100*		*104*	*80-120*			
Matrix Spike (EE42504-MS1)	**Source: 4E21005-24**			Prepared: 05/24/04 Analyzed: 05/25/04						
Benzene	90.7		ug/kg	100	ND	90.7	80-120			
Toluene	88.4		"	100	ND	88.4	80-120			
Ethylbenzene	87.4		"	100	ND	87.4	80-120			
Xylene (p/m)	172		"	200	ND	86.0	80-120			
Xylene (o)	85.9		"	100	ND	85.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*102*		*"*	*100*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*108*		*"*	*100*		*108*	*80-120*			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Tuttle
Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	**Reported:**
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 09:49

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42504 - EPA 5030C (GC)										
Matrix Spike Dup (EE42504-MSD1)	**Source: 4E21005-24**			Prepared: 05/24/04	Analyzed: 05/25/04					
Benzene	85.6		ug/kg	100	ND	85.6	80-120	5.79	20	
Toluene	85.0		"	100	ND	85.0	80-120	3.92	20	
Ethylbenzene	84.6		"	100	ND	84.6	80-120	3.26	20	
Xylene (p/m)	167		"	200	ND	83.5	80-120	2.95	20	
Xylene (o)	82.2		"	100	ND	82.2	80-120	4.40	20	
Surrogate: a,a,a-Trifluorotoluene	*107*		"	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*102*		"	*100*		*102*	*80-120*			

Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 09:49

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42402 - General Preparation (Prep)										
Blank (EE42402-BLK1)				Prepared & Analyzed: 05/21/04						
% Solids	100		%							
Duplicate (EE42402-DUP1)		**Source: 4E21001-01**		Prepared & Analyzed: 05/21/04						
% Solids	86.0		%		86.0			0.00	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Rolanda K. Perkins
Quality Assurance Review

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

Plains All American EH & S	Project: Jct. 34 to Lea	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10286	Reported:
Midland TX, 79706-4476	Project Manager: Jimmy Bryant	05/27/04 09:49

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Quality Assurance Review

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

Environmental Lab of Texas, Inc.
12600 West I-20 East Phone: 915-563-1800
Odessa Texas 79763 Fax: 915-563-1713

Project Manager: Jimmy Bryant
Company Name: Plains All American (Formerly Link Energy)
Company Address: 5805 E. HIGHWAY 80
City/State/Zip: MIDLAND, TX 79701
Telephone No: (505) 631-3095
Sampler Signature: Iain Olness EPI - Environmental Consultant

Project Name: Jct. 34 to Lea
Project #: 2002-10286
Project Loc: UL-L Section 21 T20S R37E
PO#:

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative: ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Type: Water	Sludge	Soil	Other (Specify)	Analyze For: TCLP/TOTAL: TDS/Cl/SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals *	Volatiles *	Semivolatiles *	BTEX 8021B/5030	Reactivity	Corrosivity	Ignitiability	Chlorides	Sulfates		RUSH TAT	Standard TAT
01	LEJ34051304MW5(5')	13-May	8:20	1	X									X					X				X								X
02	LEJ34051304MW5(10')	13-May	9:35	1	X									X					X				X								X
03	LEJ34051304MW5(15')	13-May	10:18	1	X									X					X				X								X
04	LEJ34051404MW7(15')	13-May	10:40	1	X									X					X				X								X
05	LEJ34051704MW6(10')	17-May		1	X									X					X				X								X
06	LEJ34051704MW6(15')	17-May		1	X									X					X				X								X

Special Instructions

FAX RESULTS TO Iain Olness [505-394-2601]

Sample Containers Intact? Y N
Temperature Upon Request
Laboratory Comments: Rec -2.0 °C

Relinquished:	Date	Time	Received by:	Date	Time
Iain Olness	5/21/04	0656		5-21-04	0656
Relinquished:	Date	Time	Received by:	Date	Time
	5/21/04	9:25		5-21-04	0925

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

lient: Environmental Plus, Inc.
ttn: Iain Olness
ddress: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156252 **Report Date:** 06/04/04
Project ID: 2002-10286
Sample Name: LEJ34052104MW4 (5')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/21/2004 **Time:** 08:15

EPORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
PH by GC (as diesel)	202	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
PH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
PH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
olatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
enzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
thylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
oluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

his analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ave been carefully reviewed and, to the best of my knowledge, the analytical results :e 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.

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

Client: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156252
Attn: Iain Olness	**Sample Name:** LEJ34052104MW4 (5')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
o-Chlorooctane	8015 mod.	64.7	36-140	---
o-Terphenyl	8015 mod.	227	40-121	X
1,2-Dichloroethane-d4	8260b	88.1	56-120	---
Toluene-d8	8260b	101	71-116	---

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

port #/Lab ID#: 156252 **Matrix:** soil
lent: Environmental Plus, Inc. **Attn:** Iain Olness
oject ID: 2002-10286
mple Name: LEJ34052104MW4 (5')

nple 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).

nple 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.

ag Discussion:

flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background ls/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. ause 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 sence 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.)

mments pertaining to Data Qualifiers and QC data:

ameter	Qualif	Comment
rphenyl	X	Surrogate recovery outside advisory/acceptance limits. Typically, for samples with TPH by GC hits, high recoveries are due to co-elution of
rphenyl	X	hydrocarbons from the sample at the same retention time as the surrogate

es:

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

lient: Environmental Plus, Inc.
ttn: Iain Olness
ddress: 2100 Ave. O
Eunice, NM 88231
ione: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156253 **Report Date:** 06/04/04
Project ID: 2002-10286
Sample Name: LEJ34052104MW4 (15')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/21/2004 **Time:** 08:42

EPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
PH by GC (as diesel)	1870	mg/Kg	12.5	<12.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
PH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
PH by GC (as gasoline)	388	mg/Kg	25	<25	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
olatile organics-8260b/BTEX	---		---		06/04/04	8260b(5030/5035)	---	---	---	---	---
enzene	<20	µg/Kg	20	<20	06/04/04	8260b	---	13.5	94.4	93.2	86.8
hylbenzene	2570	µg/Kg	20	<20	06/04/04	8260b	---	0.9	101.7	105.1	103.6
,p-Xylenes	4330	µg/Kg	40	<40	06/04/04	8260b	---	6.3	109.4	100.6	101.8
Xylene	44.8	µg/Kg	20	<20	06/04/04	8260b	---	3.6	115.1	109.5	109.9
oluene	<20	µg/Kg	20	<20	06/04/04	8260b	---	6	101.7	102.5	91.7

his analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ave been carefully reviewed and, to the best of my knowledge, the analytical results e 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.

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

Client: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156253
Attn: Iain Olness	**Sample Name:** LEJ34052104MW4 (15')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
o-Chlorooctane	8015 mod.	none/diluted	diluted @ 2.5X	D
o-Terphenyl	8015 mod.	none/diluted	diluted @ 2.5X	D
1,2-Dichloroethane-d4	8260b	89.9	56-120	---
Toluene-d8	8260b	98.4	71-116	---

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

port #/Lab ID#: 156253 **Matrix:** soil
lent: Environmental Plus, Inc. **Attn:** Iain Olness
ject ID: 2002-10286
mple Name: LEJ34052104MW4 (15')

nple 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).

nple 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.

ag Discussion:

flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background ls/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. ause 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 sence 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.)

mments pertaining to Data Qualifiers and QC data:

ameter	Qualif	Comment
hlorooctane hlorooctane	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
erphenyl erphenyl	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.

es:

AnalySys Inc.

Chain of Custody For..

4221 Freidrich Lane, Suite 190, Austin, TX 78744
512-444-5896 FAX: 512-447-4766

2209 N. Padre Island Dr., Corpus Christi, TX 78408

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	Jct. 34 to Lea
Project Reference	2002-10286
EPI Sampler Name	Manuel Gonzales

PLAINS ALL AMERICAN PIPELINE, LP

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^{-2})	pH	TCLP	OTHER >>>	PAH
156252 1	LEJ34052104MW4(5')	G	1			X					X		21-May	8:15	X	X						
156253 2	LEJ34052104MW4(15')	G	1			X					X		21-May	8:42	X	X						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: Manuel Gonzales	Date: 5/29/04 Time: 7:30	Received By:	E-mail results to: loiness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date: 5/28/04 Time: 1015	Received By: (lab staff) L. Hlupm / ASI	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	T: 4.2 C

EPI Form "Analysis Analysis Inc Chain of Custody.xls"

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

lient: Environmental Plus, Inc.
ttn: Iain Olness
ddress: 2100 Ave. O
Eunice, NM 88231
ione: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156151 **Report Date:** 06/03/04
Project ID: 2002-10286
Sample Name: LEJ34052504MW4
Sample Matrix: water
Date Received: 05/26/2004 **Time:** 10:25
Date Sampled: 05/25/2004 **Time:** 12:10

EPORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
PH by GC (as diesel)	0.583	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	15.3	99.3	94.8	84.5
PH by GC (as diesel-ext)	---	---	---	---	06/01/04	3510	---	---	---	---	---
PH by GC (as gasoline)	3.03	mg/L	0.5	<0.5	06/02/04	8015 mod.	J	21.8	74.2	96.2	93.3
olatile organics-8260b/BTEX	---		---		06/01/04	8260b(5030/5035)	---	---	---	---	---
enzene	1.67	µg/L	1	<1	05/28/04	8260b	---	4.5	97.9	103.7	112.8
hylbenzene	407	µg/L	10	<10	06/01/04	8260b	---	1.2	111.1	109.6	116.5
,p-Xylenes	345	µg/L	20	<20	06/01/04	8260b	---	0.3	108.3	110.1	119
Xylene	113	µg/L	10	<10	06/01/04	8260b	---	2	114.2	111.3	121
oluene	1.01	µg/L	1	<1	05/28/04	8260b	---	2.6	113.9	110.3	120.5

his analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ave been carefully reviewed and, to the best of my knowledge, the analytical results e 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.

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

lient: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156151
.ttn: Iain Olness	**Sample Name:** LEJ34052504MW4	**Sample Matrix:** water

EPORT OF SURROGATE RECOVERY

urrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
-Chlorooctane	8015 mod.	75.2	42-122	---
-Terphenyl	8015 mod.	100	39-125	---
,2-Dichloroethane-d4	8260b	101	74-124	---
oluene-d8	8260b	111	89-115	---

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

port #/Lab ID#: 156151 **Matrix:** water
ent: Environmental Plus, Inc. **Attn:** Iain Olness
)ject ID: 2002-10286
nple Name: LEJ34052504MW4

ıple 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).

ıple 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.

ag Discussion:

flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background ·ls/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. ause 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 ·ence 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.)

mments pertaining to Data Qualifiers and QC data:

·ameter	Qualif	Comment
l by GC (as gasoline)	J	See J-flag discussion above.

es:

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

lent: Environmental Plus, Inc.
tn: Iain Olness
ldress: 2100 Ave. O
Eunice, NM 88231
one: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156152 **Report Date:** 06/03/04
Project ID: 2002-10286
Sample Name: LEJ34052504MW5
Sample Matrix: water
Date Received: 05/26/2004 **Time:** 10:25
Date Sampled: 05/25/2004 **Time:** 13:30

PORT OF ANALYSIS — **QUALITY ASSURANCE DATA** [1]

rameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual. [7]	Prec. [2]	Recov. [3]	CCV [4]	LCS [4]
H by GC (as diesel)	4.32	mg/L	0.5	<0.5	06/02/04	8015 mod.	J	15.3	99.3	94.8	84.5
H by GC (as diesel-ext)	---	---	---	---	06/01/04	3510	---	---	---	---	---
H by GC (as gasoline)	4.93	mg/L	0.5	<0.5	06/02/04	8015 mod.	J	21.8	74.2	96.2	93.3
latile organics-8260b/BTEX	---		---		06/01/04	8260b(5030/5035)	---	---	---	---	---
nzene	178	µg/L	10	<10	06/01/04	8260b	---	4.5	97.9	103.7	112.8
ylbenzene	654	µg/L	10	<10	06/01/04	8260b	---	1.2	111.1	109.6	116.5
p-Xylenes	523	µg/L	20	<20	06/01/04	8260b	---	0.3	108.3	110.1	119
Xylene	116	µg/L	10	<10	06/01/04	8260b	---	2	114.2	111.3	121
luene	20.9	µg/L	10	<10	06/01/04	8260b	---	2.6	113.9	110.3	120.5

is analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ve been carefully reviewed and, to the best of my knowledge, the analytical results e 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.

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

lient: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156152
ttn: Iain Olness	**Sample Name:** LEJ34052504MW5	**Sample Matrix:** water

EPORT OF SURROGATE RECOVERY

urrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
-Chlorooctane	8015 mod.	74.9	42-122	---
-Terphenyl	8015 mod.	112	39-125	---
,2-Dichloroethane-d4	8260b	105	74-124	---
oluene-d8	8260b	100	89-115	---

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

port #/Lab ID#: 156152 **Matrix:** water
ient: Environmental Plus, Inc. **Attn:** Iain Olness
)ject ID: 2002-10286
mple Name: LEJ34052504MW5

nple 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).

nple 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.

ag Discussion:

flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background ls/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. ause 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 ence 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.)

mments pertaining to Data Qualifiers and QC data:

ameter	Qualif	Comment
l by GC (as diesel)	J	See J-flag discussion above.
l by GC (as gasoline)	J	See J-flag discussion above.

es:

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

ient: Environmental Plus, Inc.
:tn: Iain Olness
ldress: 2100 Ave. O
Eunice, NM 88231
ıone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156153 **Report Date:** 06/03/04
Project ID: 2002-10286
Sample Name: LEJ34052504MW6
Sample Matrix: water
Date Received: 05/26/2004 **Time:** 10:25
Date Sampled: 05/25/2004 **Time:** 14:50

EPORT OF ANALYSIS — **QUALITY ASSURANCE DATA** [1]

ırameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
³H by GC (as diesel)	1.5	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	15.3	99.3	94.8	84.5
³H by GC (as diesel-ext)	---	---	---	---	06/01/04	3510	---	---	---	---	---
³H by GC (as gasoline)	2.61	mg/L	0.5	<0.5	06/02/04	8015 mod.	J	21.8	74.2	96.2	93.3
ɔlatile organics-8260b/BTEX	---		---		05/28/04	8260b(5030/5035)	---	---	---	---	---
ɜnzene	341	µg/L	10	<10	06/01/04	8260b	---	4.5	97.9	103.7	112.8
hylbenzene	161	µg/L	1	<1	05/28/04	8260b	---	1.2	111.1	109.6	116.5
,p-Xylenes	188	µg/L	2	<2	05/28/04	8260b	---	0.3	108.3	110.1	119
Xylene	12.7	µg/L	1	<1	05/28/04	8260b	---	2	114.2	111.3	121
ɔluene	5.33	µg/L	1	<1	05/28/04	8260b	---	2.6	113.9	110.3	120.5

ıis analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ıve been carefully reviewed and, to the best of my knowledge, the analytical results e 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.

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

Client:	Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156153
Attn:	Iain Olness	**Sample Name:** LEJ34052504MW6	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
o-Chlorooctane	8015 mod.	76.4	42-122	---
o-Terphenyl	8015 mod.	104	39-125	---
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	108	89-115	---

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

port #/Lab ID#: 156153 **Matrix:** water
ient: Environmental Plus, Inc. **Attn:** Iain Olness
)ject ID: 2002-10286
mple Name: LEJ34052504MW6

nple 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).

nple 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.

ag Discussion:

flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background ›ls/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. :ause 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 ›ence 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.)

mments pertaining to Data Qualifiers and QC data:

·ameter	Qualif	Comment
I by GC (as gasoline)	J	See J-flag discussion above.

es:

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

ient: Environmental Plus, Inc.
:tn: Iain Olness
ldress: 2100 Ave. O
Eunice, NM 88231
ıone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 156154 **Report Date:** 06/03/04
Project ID: 2002-10286
Sample Name: LEJ34052504MW7
Sample Matrix: water
Date Received: 05/26/2004 **Time:** 10:25
Date Sampled: 05/25/2004 **Time:** 11:08

:PORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

ırameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
²H by GC (as diesel)	1.52	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	15.3	99.3	94.8	84.5
²H by GC (as diesel-ext)	---	---	---	---	06/01/04	3510	---	---	---	---	---
²H by GC (as gasoline)	5.74	mg/L	0.5	<0.5	06/02/04	8015 mod.	---	21.8	74.2	96.2	93.3
ɔlatile organics-8260b/BTEX	---		---		05/28/04	8260b(5030/5035)	---	---	---	---	---
ɜnzene	1840	µg/L	10	<10	05/28/04	8260b	---	4.5	97.9	103.7	112.8
hylbenzene	813	µg/L	10	<10	05/28/04	8260b	---	1.2	111.1	109.6	116.5
,p-Xylenes	457	µg/L	20	<20	05/28/04	8260b	---	0.3	108.3	110.1	119
Xylene	41	µg/L	10	<10	05/28/04	8260b	---	2	114.2	111.3	121
ɔluene	26.7	µg/L	10	<10	05/28/04	8260b	---	2.6	113.9	110.3	120.5

ıis analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ıve been carefully reviewed and, to the best of my knowledge, the analytical results e 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.

220 [illegible] Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 156154
Attn: Iain Olness	**Sample Name:** LEJ34052504MW7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
o-Chlorooctane	8015 mod.	68.4	42-122	---
o-Terphenyl	8015 mod.	108	39-125	---
1,2-Dichloroethane-d4	8260b	122	74-124	---
Toluene-d8	8260b	106	89-115	---

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

760

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	Junction 34 to Lea
Project Reference	2002-10286
EPI Sampler Name	Manuel Gonzales / Sergio Prieto

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	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO_4^{-2})	pH	TCLP	OTHER >>>	PAH				
156151 1	LEJ34052504MW4	G	2	X						X	X		25-May	12:10	X	X										
156152 2	LEJ34052504MW5	G	2	X						X	X		25-May	13:30	X	X										
156153 3	LEJ34052504MW6	G	2	X						X	X		25-May	14:50	X	X										
156154 4	LEJ34052504MW7	G	2	X						X	X		25-May	11:08	X	X										
5																										
6																										
7																										
8																										
9																										
10																										

Sampler Relinquished: Manuel Gonzales	Date: 5/25/04 Time: 9:03 pm	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) 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#: 157903 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW1
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 09:20

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	---	---	---	---	---
Chloride	1740	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	1260	µg/L	10	<10	07/31/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	898	µg/L	10	<10	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	590	µg/L	20	<20	07/31/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	9.54	µg/L	1	<1	07/30/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	2.36	µg/L	1	<1	07/30/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	0.115	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	0.136	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	0.07	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	J	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	1.45	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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,

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: 2002-10286
Sample Name: LEJ34072604MW1

Report#/Lab ID#: 157903
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]
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
Naphthalene	42.6	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	1.13	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	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

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:** 2002-10286	**Report#/Lab ID#:** 157903
Attn: Iain Olness	**Sample Name:** LEJ34072604MW1	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	49	39-110	---
Nitrobenzene-d5	610 & 8270c	89.5	12-110	---
Terphenyl-d14	610 & 8270c	34.5	25-110	---
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	102	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157903 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34072604MW1

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
Chrysene	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#: 157904 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW2
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 10:15

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	---	---	---	---	---
Chloride	2100	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	6020	µg/L	100	<100	07/31/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	1740	µg/L	100	<100	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	910	µg/L	200	<200	07/31/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	15.7	µg/L	1	<1	07/30/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	3.42	µg/L	1	<1	07/30/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	0.075	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	0.092	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	J	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	0.934	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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,

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: 2002-10286
Sample Name: LEJ34072604MW2

Report#/Lab ID#: 157904
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]
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
Naphthalene	49.5	µg/L	5	<5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	0.495	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	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

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:** 2002-10286	**Report#/Lab ID#:** 157904
Attn: Iain Olness	**Sample Name:** LEJ34072604MW2	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	68	39-110	---
Nitrobenzene-d5	610 & 8270c	54.1	12-110	---
Terphenyl-d14	610 & 8270c	49	25-110	---
1,2-Dichloroethane-d4	8260b	99.5	74-124	---
Toluene-d8	8260b	101	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157904 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34072604MW2

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:

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#: 157905 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW4
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 11:20

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	---	---	---	---	---
Chloride	2230	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	2.13	µg/L	1	<1	07/30/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	447	µg/L	10	<10	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	91.7	µg/L	2	<2	07/30/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	1.85	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	---	6.2	108.1	114.9	107.6
Acenaphthene	0.066	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	0.104	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	J	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	1.15	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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,

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: 2002-10286
Sample Name: LEJ34072604MW4

Report#/Lab ID#: 157905
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]
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
Naphthalene	37	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	0.85	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	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

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:** 2002-10286	**Report#/Lab ID#:** 157905
Attn: Iain Olness	**Sample Name:** LEJ34072604MW4	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	50.7	39-110	---
Nitrobenzene-d5	610 & 8270c	98.9	12-110	---
Terphenyl-d14	610 & 8270c	42.3	25-110	---
1,2-Dichloroethane-d4	8260b	106	74-124	---
Toluene-d8	8260b	102	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157905 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34072604MW4

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:

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#: 157906 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW5
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 12:05

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	---	---	---	---	---
Chloride	2480	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	93.4	µg/L	1	<1	07/30/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	484	µg/L	10	<10	07/31/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	113	µg/L	2	<2	07/30/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	1.29	µg/L	1	<1	07/30/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	2.04	µg/L	1	<1	07/30/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	0.092	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	0.125	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	0.06	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	1.37	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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,

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: 2002-10286
Sample Name: LEJ34072604MW5

Report#/Lab ID#: 157906
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]
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
Naphthalene	32.8	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	0.976	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	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

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: 2002-10286
Sample Name: LEJ34072604MW5

Report#/Lab ID#: 157906
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	67.4	39-110	---
Nitrobenzene-d5	610 & 8270c	110	12-110	---
Terphenyl-d14	610 & 8270c	50.6	25-110	---
1,2-Dichloroethane-d4	8260b	107	74-124	---
Toluene-d8	8260b	101	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#: 157907 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW6
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 10:55

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	---	---	---	---	---
Chloride	2090	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/29/04	8260b(5030/5035)	---	---	---	---	---
Benzene	99.8	µg/L	1	<1	07/29/04	8260b	---	3.4	85.3	102.5	97.8
Ethylbenzene	75.4	µg/L	1	<1	07/29/04	8260b	---	4.3	90	109.3	104
m,p-Xylenes	2.28	µg/L	2	<2	07/29/04	8260b	---	1.9	112	108.9	106.1
o-Xylene	<1	µg/L	1	<1	07/29/04	8260b	---	4.7	110.9	111.3	109.2
Toluene	<1	µg/L	1	<1	07/29/04	8260b	---	6.2	108.1	114.9	107.6
Acenaphthene	0.069	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	0.057	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	0.062	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	0.675	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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: 2002-10286
Sample Name: LEJ34072604MW6

Report#/Lab ID#: 157907
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]
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
Naphthalene	6.71	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	0.437	µg/L	0.05	<0.05	08/13/04	610 & 8270c	---	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

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:** 2002-10286 **Sample Name:** LEJ34072604MW6	**Report#/Lab ID#:** 157907 **Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	60.5	39-110	---
Nitrobenzene-d5	610 & 8270c	102	12-110	---
Terphenyl-d14	610 & 8270c	34	25-110	---
1,2-Dichloroethane-d4	8260b	93.6	74-124	---
Toluene-d8	8260b	100	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#: 157908 **Report Date:** 08/16/04
Project ID: 2002-10286
Sample Name: LEJ34072604MW7
Sample Matrix: water
Date Received: 07/28/2004 **Time:** 10:15
Date Sampled: 07/26/2004 **Time:** 07:30

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	---	---	---	---	---
Chloride	2320	mg/L	50	<50	08/05/04	325.2&9251	---	1.97	109.17	103	96.22
Extractable organics-PAH	---	---	---	---	08/13/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/30/04	8260b(5030/5035)	---	---	---	---	---
Benzene	2110	µg/L	10	<10	07/30/04	8260b	---	1	107.5	96.8	116.2
Ethylbenzene	1180	µg/L	10	<10	07/30/04	8260b	---	1.9	109.6	103.9	111
m,p-Xylenes	1490	µg/L	20	<20	07/30/04	8260b	---	1.7	111.2	102.9	106.8
o-Xylene	585	µg/L	10	<10	07/30/04	8260b	---	3.2	113.3	108.2	111.9
Toluene	608	µg/L	10	<10	07/30/04	8260b	---	5.6	116	103	107.7
Acenaphthene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	5.5	37.4	88.1	43.9
Acenaphthylene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	0.8	39.3	104.5	47.6
Anthracene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	8.2	50.6	101.9	57.1
Benzo[a]anthracene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	6.5	41.7	91.6	56.2
Benzo[a]pyrene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	17.8	28.9	98.6	59.4
Benzo[b]fluoranthene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	7.7	27.9	82.1	45.9
Benzo[g,h,i]perylene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	1.8	37.4	110.2	62.1
Benzo[j,k]fluoranthene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	3.6	38.4	108.4	63.4
Chrysene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	6.8	47.1	110.6	63
Dibenz[a,h]anthracene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	1.8	36.2	108.7	61.2
Fluoranthene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	0.4	55.7	107.7	60.3
Fluorene	0.635	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	14.1	43.8	83.6	46.3

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,

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: 2002-10286
Sample Name: LEJ34072604MW7

Report#/Lab ID#: 157908
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]
Indeno[1,2,3-cd]pyrene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	5.3	35.4	109.6	61.1
Naphthalene	36.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	2.9	32.5	95	41.4
Phenanthrene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	J	4.7	45.1	83.7	46.6
Pyrene	<0.5	µg/L	0.5	<0.5	08/13/04	610 & 8270c	---	1.1	55.2	100	58.3

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:** 2002-10286	**Report#/Lab ID#:** 157908
Attn: Iain Olness	**Sample Name:** LEJ34072604MW7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	**none/diluted**	diluted @ 10X	D
Nitrobenzene-d5	610 & 8270c	**none/diluted**	diluted @ 10X	D
Terphenyl-d14	610 & 8270c	**none/diluted**	diluted @ 10X	D
1,2-Dichloroethane-d4	8260b	105	74-124	---
Toluene-d8	8260b	102	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157908 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34072604MW7

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
Phenanthrene	J	See J-flag discussion above.
2-Fluorobiphenyl 2-Fluorobiphenyl	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5 Nitrobenzene-d5	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Terphenyl-d14 Terphenyl-d14	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.

Notes:

10/12

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	Junction 34 to Lea
Project Reference	2002-10286
EPI Sampler Name	Manuel Gonzales

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
157903	1	LEJ34072604MW1	G	7	X						X	X		26-Jul	9:20	X		X					X
157904	2	LEJ34072604MW2	G	7	X						X	X		26-Jul	10:15	X		X					X
157905	3	LEJ34072604MW4	G	7	X						X	X		26-Jul	11:20	X		X					X
157906	4	LEJ34072604MW5	G	7	X						X	X		26-Jul	12:05	X		X					X
157907	5	LEJ34072604MW6	G	7	X						X	X		26-Jul	10:55	X		X					X
157908	6	LEJ34072604MW7	G	7	X						X	X		26-Jul	7:30	X		X					X
	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. Thyssen / ASI

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

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

REMARKS:

T: 5.5°C

AnalySys INC.
[redacted] Montopolis Drive, Austin, [redacted] 787[redacted]
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#: 160289 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW1
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 09:29

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	---		---		10/08/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**1090**	µg/L	10	<10	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	**785**	µg/L	10	<10	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	**506**	µg/L	4	<4	10/08/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	**3.1**	µg/L	2	<2	10/08/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	**2.43**	µg/L	2	<2	10/08/04	8260b	---	3	106.9	106.9	111.2

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.

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:** 2002-10286	**Report#/Lab ID#:** 160289
Attn: Iain Olness	**Sample Name:** LEJ34100404MW1	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	101	89-115	---

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

AnalySys, Inc.
[redacted] Montopolis Drive, Austin, [redacted] 78[redacted]
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#: 160290 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW2
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 13:05

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	---		---		10/08/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**2340**	µg/L	10	<10	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	**1380**	µg/L	10	<10	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	**261**	µg/L	10	<10	10/08/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	<5	µg/L	5	<5	10/08/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	<5	µg/L	5	<5	10/08/04	8260b	---	3	106.9	106.9	111.2

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.

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:** 2002-10286	**Report#/Lab ID#:** 160290
Attn: Iain Olness	**Sample Name:** LEJ34100404MW2	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	110	74-124	---
Toluene-d8	8260b	99.5	89-115	---

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

AnalySys, Inc.
[redacted] Montopolis Drive, Austin, TX 78[redacted]
[redacted] 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#: 160291 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW3
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 14:21

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	---		---		10/07/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**1400**	µg/L	100	<100	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	**730**	µg/L	100	<100	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	**723**	µg/L	200	<200	10/07/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	**242**	µg/L	100	<100	10/07/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	**421**	µg/L	100	<100	10/07/04	8260b	---	3	106.9	106.9	111.2

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.

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:** 2002-10286	**Report#/Lab ID#:** 160291
Attn: Iain Olness	**Sample Name:** LEJ34100404MW3	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	100	74-124	---
Toluene-d8	8260b	103	89-115	---

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

AnalySys, INC.
[redacted] 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#: 160292 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW4
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 11:40

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	---		---		10/07/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	**93.4**	µg/L	1	<1	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	**5.03**	µg/L	2	<2	10/07/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	<1	µg/L	1	<1	10/07/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	<1	µg/L	1	<1	10/07/04	8260b	---	3	106.9	106.9	111.2

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.

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:** 2002-10286	**Report#/Lab ID#:** 160292
Attn: Iain Olness	**Sample Name:** LEJ34100404MW4	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	99.6	74-124	---
Toluene-d8	8260b	101	89-115	---

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

AnalySys INC.
[redacted] Montopolis Drive, Austin, TX 787[redacted]
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#: 160293 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW5
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 10:12

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	---		---		10/08/04	8260b(5030/5035)	---	---	---	---	---
Benzene	69.2	µg/L	1	<1	10/08/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	199	µg/L	1	<1	10/08/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	28.6	µg/L	2	<2	10/08/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	<1	µg/L	1	<1	10/08/04	8260b	J	0.6	107.7	105.4	106.7
Toluene	<1	µg/L	1	<1	10/08/04	8260b	---	3	106.9	106.9	111.2

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.

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:** 2002-10286	**Report#/Lab ID#:** 160293
Attn: Iain Olness	**Sample Name:** LEJ34100404MW5	**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	99.5	89-115	---

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

Report #/Lab ID#: 160293 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34100404MW5

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
o-Xylene	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#: 160294 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW6
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 08:15

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]
Volatile organics-8260b/BTEX	---		---		10/07/04	8260b(5030/5035)	---	---	---	---	---
Benzene	33.2	µg/L	1	<1	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	61.8	µg/L	1	<1	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	3.36	µg/L	2	<2	10/07/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	<1	µg/L	1	<1	10/07/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	<1	µg/L	1	<1	10/07/04	8260b	---	3	106.9	106.9	111.2

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.

Analysys Inc.
[redacted]
(512) 385-5886 • FAX (512) 385-7411

Client:	Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 160294
Attn:	Iain Olness	**Sample Name:** LEJ34100404MW6	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	100	74-124	---
Toluene-d8	8260b	99.1	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#: 160295 **Report Date:** 10/11/04
Project ID: 2002-10286
Sample Name: LEJ34100404MW7
Sample Matrix: water
Date Received: 10/06/2004 **Time:** 13:30
Date Sampled: 10/04/2004 **Time:** 15:30

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	---		---		10/08/04	8260b(5030/5035)	---	---	---	---	---
Benzene	1940	µg/L	10	<10	10/07/04	8260b	---	4.5	91.2	92.1	92.6
Ethylbenzene	830	µg/L	10	<10	10/07/04	8260b	---	0.1	84.9	104.5	102
m,p-Xylenes	622	µg/L	4	<4	10/08/04	8260b	---	0.4	105.8	103.7	101.2
o-Xylene	9.43	µg/L	2	<2	10/08/04	8260b	---	0.6	107.7	105.4	106.7
Toluene	<2	µg/L	2	<2	10/08/04	8260b	J	3	106.9	106.9	111.2

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,

D Wagner

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] Montopolis Drive [redacted] Austin [redacted] TX [redacted] &
[redacted] N. Padre Island Dr., Corpus Christi, TX [redacted]
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2002-10286	**Report#/Lab ID#:** 160295
Attn: Iain Olness	**Sample Name:** LEJ34100404MW7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	100	89-115	---

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

Report #/Lab ID#: 160295 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2002-10286
Sample Name: LEJ34100404MW7

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
Toluene	J	See J-flag discussion above.

Notes:

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	Junction 34 to Lea
Project Reference	2002-10286
EPI Sampler Name	Manuel Gonzales

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.

Attn: Camille Reynolds
PO Box 1660,
Midland, TX 79701

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				
160289	1	LEJ34100404MW1	G	3	X						X	X		4-Oct	9:29	X										
160290	2	LEJ34100404MW2	G	3	X						X	X		4-Oct	13:05	X										
160291	3	LEJ34100404MW3	G	3	X						X	X		4-Oct	14:21	X										
160292	4	LEJ34100404MW4	G	3	X						X	X		4-Oct	11:40	X										
160293	5	LEJ34100404MW5	G	3	X						X	X		4-Oct	10:12	X										
160294	6	LEJ34100404MW6	G	3	X						X	X		4-Oct	8:15	X										
160295	7	LEJ34100404MW7	G	3	X						X	X		4-Oct	15:30	X										
	8																									
	9																									
	10																									

Sampler Relinquished: Iain Olness — Date: 10/5/04 Time: 1630 — Received By:

Relinquished by: — Date: 10/6/04 Time: 1330 — Received By: (lab staff) D. Flynn 1451

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

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

REMARKS:

T:4.4 c

APPENDIX B

SOIL BORING LOGS

AND

WELL CONSTRUCTION DIAGRAMS

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286
Project Name: Junction 34 to Lea
Location: UL L, Sec. 21, T20S, R37E, Lea County, NM
Boring Number: MW-4 | Surface Elevation: 3,506'

Start Date: 05/21/04 Time: 0800 hrs
Finish Date: 05/21/04 Time: 1015 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Dark Brown, Soft, Fine to Medium-Grained SAND WITH SOME GRAVEL AND TRACE CLAY.
0808	CS	– –	Dry	0	SP		
						5	
0815	CS	– –	Dry	0	SP		
						10	
0828	CS	– –	Dry	50.6	SP		
						15	
0842	CS	– –	Dry	133	SP		
						▼ 20	
0910	CS	– –	Da	126	SP		Increase in clay content
						25	
0930	CS	– –	Wet	19.1	SP		
						30	
0942	CS	– –	Wet	0	SP		
						35	

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-4 | Surface Elevation: 3,506'

Start Date: 05/21/04 Time: 0800 hrs

Finish Date: 05/21/04 Time: 1015 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Yellow Brown, Fine to Coarse-Grained SAND WITH SOME GRAVEL.
						35	
0952	CS	– –	Wet	0	SP		Caliche present
							End of Boring at 37 feet bgs
						40	
						45	
						50	
						55	
						60	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
05/25/04	1210	–	35	–	19.2
06/03/04	–	–	35	–	19.1

Drilling Method: HSA 3.5" ID

Backfill Method: Bentonite Grout

Field Representative: MG

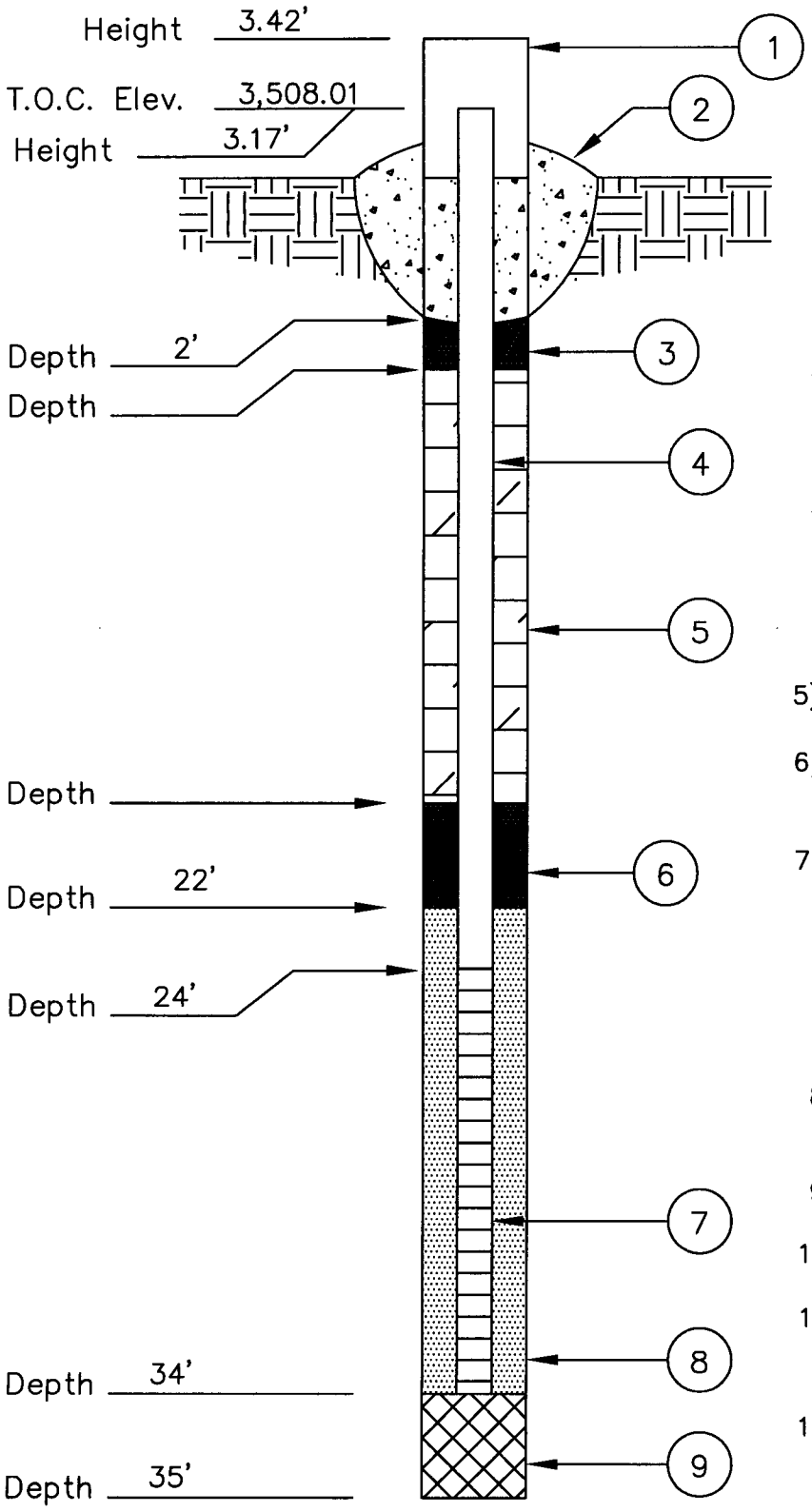
ENVIRONMENTAL PLUS, INC.
P.O. BOX 1558 -- 2100 AVENUE O
EUNICE, NM 88231
(505) 394-3481

Monitoring Well Construction Information

Standard Well

Job No.: 2002-10286 Job Name: Junction 34 to Lea Boring / Well No. MW-4

Date: 05/21/04 Field Representative: MG State Unique Well No. NA



1) Protective Casing [Yes] No
Locking [Yes] No
Protective Posts Yes [No]
Concrete Pyramid Yes [No]

2) Concrete Seal [Yes] No

3) Type of Surface Seal if Installed Bentonite

4) Solid Pipe Type PVC

Solid Pipe Length 25 ft.

Joint Type Slip/Glued or Threaded Threaded

5) Type of Backfill Bentonite

6) Type of Lower Seal if Installed None

7) Screen Type PVC
Screen Length 10 ft.

Slot Size .010"
Length 10 ft.

Screen Diameter 2 in.

8) Type of Backfill around Screen #30 Flint Sand

9) Type of Backfill Native Soils/Bentonite

10) Drilling Method 3 1/4" H.S.A.

11) Additives Used if any None

12) Borehole Diameter 6.5" O.D. in.

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-5 | Surface Elevation: 3,507'

Start Date: 05/13/04 Time: 0800 hrs

Finish Date: 05/13/04 Time: 1530 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Dark Brown, Soft, Fine to Medium-Grained SAND WITH SOME GRAVEL AND TRACE CLAY.
						5	
0812	CS	– –	Dry	46.8	SP		
						10	
0905	CS	– –	Dry	145	SP		
						15	
1000	CS	– –	Dry	271	SP		
						▼20	
1230	CS	– –	Da	338	SP		
						25	
1410	CS	– –	Wet	125	SP		
						30	
1515	CS	– –	Wet	85	SP		
						35	End of Boring at 32 feet bgs

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-5 | Surface Elevation: 3,507'

Start Date: 05/13/04 Time: 0800 hrs

Finish Date: 05/13/04 Time: 1530 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
						35	
						40	
						45	
						50	
						55	
						60	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
05/20/04	–	–	30	–	20.2
05/25/04	–	–	30	–	20.1

Drilling Method: HSA 3.5" ID

Backfill Method: Bentonite Grout

Field Representative: MG

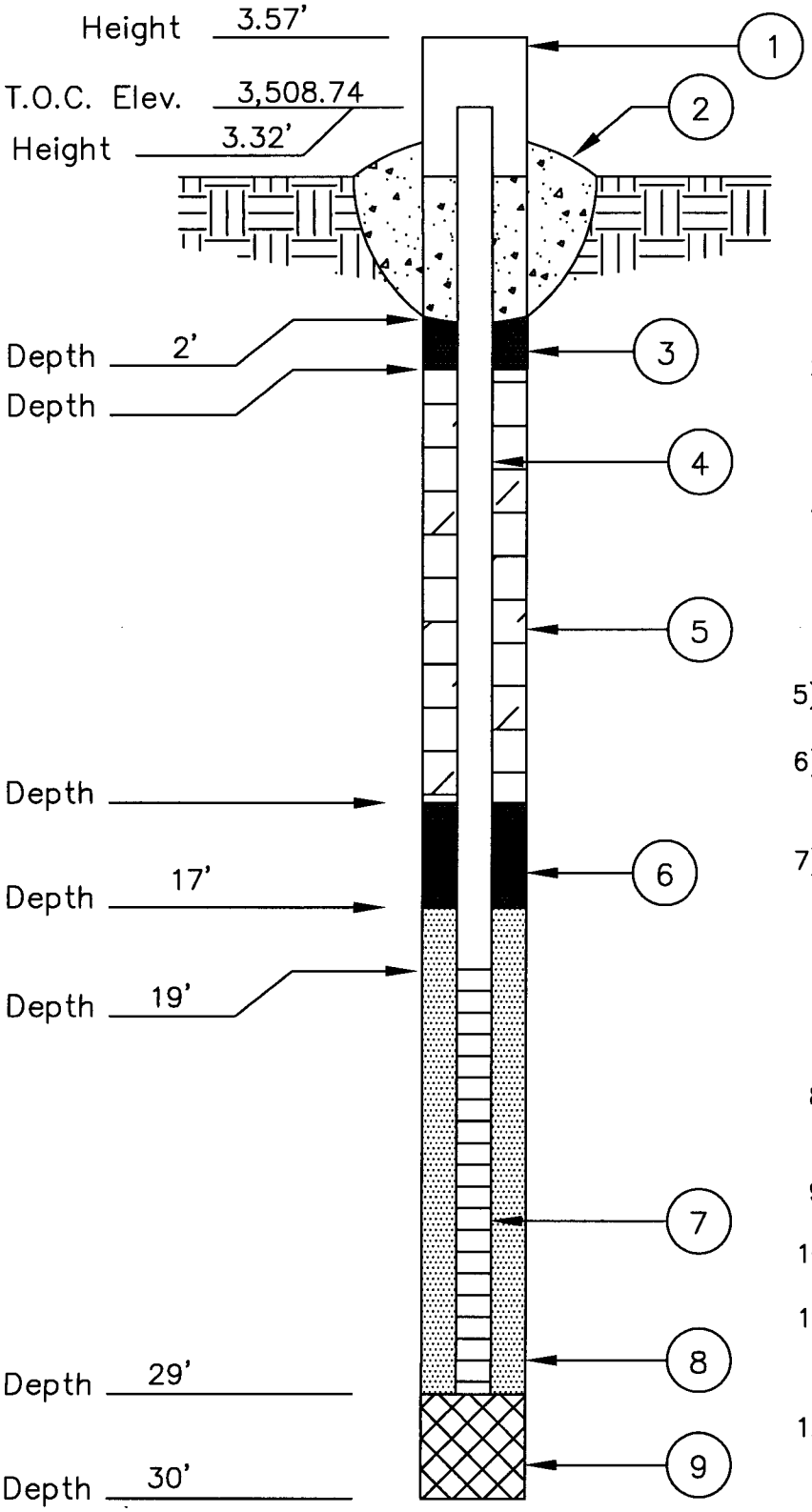
ENVIRONMENTAL PLUS, INC.
P.O. BOX 1558 -- 2100 AVENUE O
EUNICE, NM 88231
(505) 394-3481

Monitoring Well Construction Information

Standard Well

Job No.: 2002-10286 Job Name: Junction 34 to Lea Boring / Well No. MW-5

Date: 05/13/04 Field Representative: MG State Unique Well No. NA



1) Protective Casing [Yes] No
Locking [Yes] No
Protective Posts Yes [No]
Concrete Pyramid Yes [No]

2) Concrete Seal [Yes] No

3) Type of Surface Seal if Installed Bentonite

4) Solid Pipe Type PVC

Solid Pipe Length 20 ft.

Joint Type Slip/Glued or Threaded Threaded

5) Type of Backfill Bentonite

6) Type of Lower Seal if Installed None

7) Screen Type PVC
Screen Length 10 ft.

Slot Size .010"
Length 10 ft.

Screen Diameter 2 in.

8) Type of Backfill around Screen #30 Flint Sand

9) Type of Backfill Native Soils/Bentonite

10) Drilling Method 3 1/4" H.S.A.

11) Additives Used if any None

12) Borehole Diameter 6.5" O.D. in.

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-6 | Surface Elevation: 3,506'

Start Date: 05/17/04 Time: 0715 hrs

Finish Date: 05/17/04 Time: 1430 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Dark Brown, Soft, Fine to Medium-Grained SAND WITH SOME GRAVEL AND TRACE CLAY.
0730	CS	– –	Dry	0	SP		
						5	
0800	CS	– –	Dry	0	SP		
						10	
0915	CS	– –	Dry	0	SP		
						15	
1000	CS	– –	Dry	0	SP		
						20	
1125	CS	– –	Da	– –	SP	▼	
						25	
1240	CS	– –	Wet	– –	SP		Increase in clay content
						30	
1330	CS	– –	Wet	– –	SP		
						35	

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-6 | Surface Elevation: 3,506'

Start Date: 05/17/04 Time: 0715 hrs

Finish Date: 05/17/04 Time: 1430 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Dark Brown, Soft, Fine to Medium-Grained SAND WITH SOME GRAVEL AND TRACE CLAY.
1415	CS	– –	Wet	– –	SP	35	
						40	End of Boring at 37 feet bgs
						45	
						50	
						55	
						60	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
05/20/04	–	–	35	–	22.0
05/25/04	1450	–	35	–	21.9

Drilling Method: HSA 3.5" ID

Backfill Method: Installed Groundwater Monitoring Well MW-6

Field Representative: MG

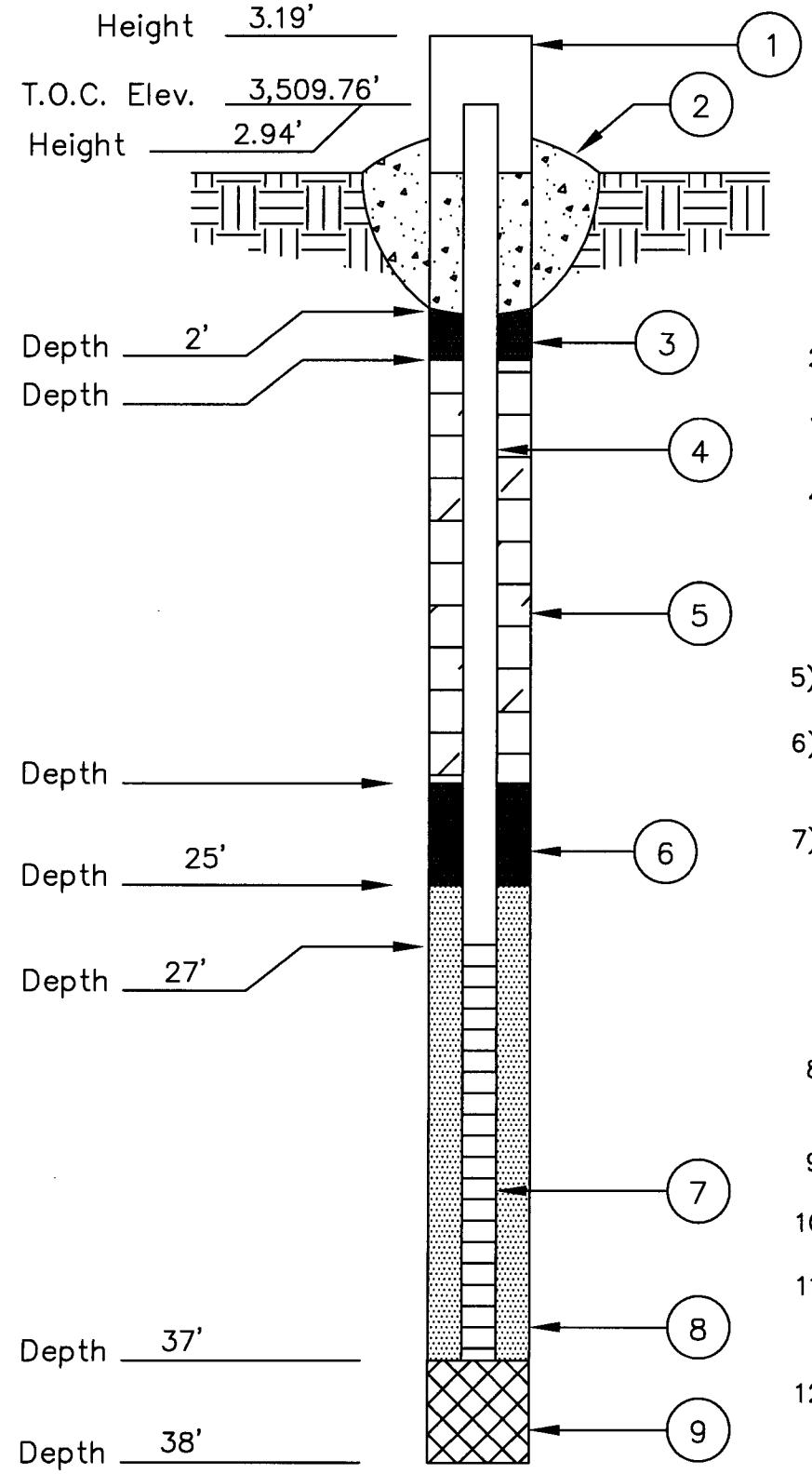
ENVIRONMENTAL PLUS, INC.
P.O. BOX 1558 -- 2100 AVENUE O
EUNICE, NM 88231
(505) 394-3481

Monitoring Well Construction Information

Standard Well

Job No.: 2002-10286 Job Name: Junction 34 to Lea Boring / Well No. MW-6

Date: 05/17/04 Field Representative: MG State Unique Well No. NA



1) Protective Casing [Yes] No
Locking [Yes] No
Protective Posts Yes [No]
Concrete Pyramid Yes [No]

2) Concrete Seal [Yes] No

3) Type of Surface Seal if Installed: Bentonite

4) Solid Pipe Type: PVC

Solid Pipe Length: 25 ft.

Joint Type Slip/Glued or Threaded: Threaded

5) Type of Backfill: Bentonite

6) Type of Lower Seal if Installed: None

7) Screen Type: PVC
Screen Length: 10 ft.

Slot Size: .010"
Length: 10 ft.

Screen Diameter: 2 in.

8) Type of Backfill around Screen: #30 Flint Sand

9) Type of Backfill: Native Soils/Bentonite

10) Drilling Method: 3 1/4" H.S.A.

11) Additives Used if any: None

12) Borehole Diameter: 6.5" O.D. in.

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-7 | Surface Elevation: 3,504'

Start Date: 05/14/04 Time: 0730 hrs

Finish Date: 05/14/04 Time: 1500 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
							COARSE ALLUVIUM, Dark Brown, Soft, Fine to Medium-Grained SAND WITH SOME GRAVEL AND TRACE CLAY.
0745	CS	– –	Dry	1.3	SP		
						5	
0830	CS	– –	Dry	3.0	SP		
						10	
0915	CS	– –	Dry	1.4	SP		
						15	
1030	CS	– –	Dry	2.7	SP		
						▼ 20	
1125	CS	– –	Da	18.4	SP		Increase in clay content
						25	
1320	CS	– –	Wet	24.4	SP		
						30	
1445	CS	– –	Wet	28.7	SP		
						35	End of Boring at 32 feet bgs

Log Of Test Borings

ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES
EUNICE
505-394-3481

Project Number: 2002-10286

Project Name: Junction 34 to Lea

Location: UL L, Sec. 21, T20S, R37E, Lea County, NM

Boring Number: MW-7 | Surface Elevation: 3,504'

Start Date: 05/13/04 Time: 0730 hrs

Finish Date: 05/13/04 Time: 1500 hrs

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Description
						35	
						40	
						45	
						50	
						55	
						60	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
05/20/04	–	–	30	–	19.4
05/25/04	–	–	30	–	19.4

Drilling Method: HSA 3.5" ID

Backfill Method: Bentonite Grout

Field Representative: MG

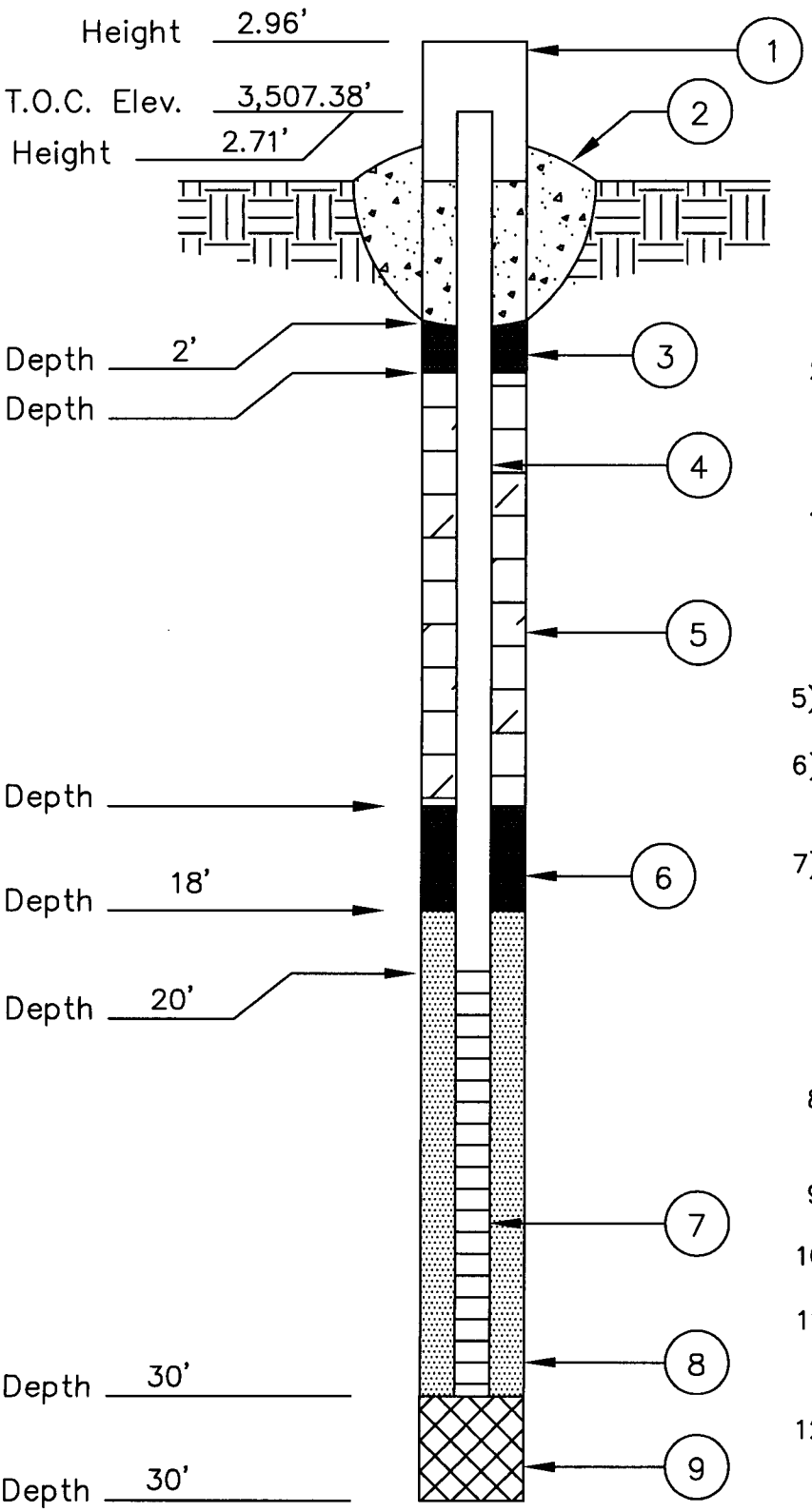
ENVIRONMENTAL PLUS, INC.
P.O. BOX 1558 -- 2100 AVENUE O
EUNICE, NM 88231
(505) 394-3481

Monitoring Well Construction Information

Standard Well

Job No.: 2002-10286 Job Name: Junction 34 to Lea Boring / Well No. MW-7

Date: 05/14/04 Field Representative: MG State Unique Well No. NA



1) Protective Casing [Yes] No
Locking [Yes] No
Protective Posts Yes [No]
Concrete Pyramid Yes [No]

2) Concrete Seal [Yes] No

3) Type of Surface Seal if Installed Bentonite

4) Solid Pipe Type PVC

Solid Pipe Length 20 ft.

Joint Type Slip/Glued or Threaded Threaded

5) Type of Backfill Bentonite

6) Type of Lower Seal if Installed None

7) Screen Type PVC
Screen Length 10 ft.

Slot Size .010"
Length 10 ft.

Screen Diameter 2 in.

8) Type of Backfill around Screen #30 Flint Sand

9) Type of Backfill Native Soils/Bentonite

10) Drilling Method 3 1/4" H.S.A.

11) Additives Used if any None

12) Borehole Diameter 6.5" O.D. in.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

October 14, 2004

Mr. Jeffrey P. Dann
Plains All American L.P.
P.O. Box 4648
Houston, TX 77210-4648

1R-386

Dear Mr. Dann:

The New Mexico Oil Conservation Division (NMOCD) has received your letter, dated September 20, 2004, identifying the need for additional groundwater monitor and/or recovery wells at various sites. This request is hereby approved.

This approval does not relieve Plains Marketing, L.P. of any future liability at these sites should it prove that Plains' operations have caused harm to public health or the environment. Nor does it relieve Plains of its obligation to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact me at (505) 476-3492 or emartin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Ed Martin

Edwin E. Martin
Environmental Bureau

Cc: Larry Johnson, NMOCD, Hobbs
Camille Reynolds, Plains, Midland

Should you have any questions or comments concerning this information, please contact me at (713) 646-4657.

Sincerely,

Jeffrey P. Dann, P.G.
Sr. Environmental Specialist
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Camille Reynolds, Plains
Todd Choban, Nova
Pat McCasland, EPI

File: c/jeff-files/OCD-DrillingSchOct2004

PLAINS
MARKETING, L.P.

September 20, 2004

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

Re: Plains Marketing, L.P. (formerly Link Energy) Remediation Sites
Various Locations in Lea County

Dear Mr. Martin:

Based on the results of our ongoing groundwater monitoring and sampling program at several of our remediation and groundwater monitoring sites in Lea County, we have identified the need for additional groundwater monitor and/or recovery wells at the flowing sites.

Site Name	Plains EMS No.	Site Location	Number of Wells
Jct 34 to Lea	2002-10286	Section 21, T20S, R37E	3
Livingston Line-Bob McCasland	2001-11043	Section 3, T21S, R37E	2
Hugh Gathering	2002-10235	Section 11, T21S, R37E	1
C. S. Cayler	2002-10250	Section 6, T17S, R37E	5
Lovington Deep 6-Inch	2002-1-312	Section 6, T21S, R36E	6
Kimbrough Sweet	2000-10757	Section 3, T18S, R37E	2
8" Moore to Jal #1	2002-10270	Section 16, T17S, R37E	3
8" Moore to Jal #2	2002-10273	Section 16, T17S, R37E	3
Darr Angell #1	Darr Angell #1	Section 11, T15S, R37E	1
Darr Angell #4	2001-10876	Section 2/11, T15S, R37E	2
Red Byrd #1	Red Byrd #1	Section 1, T19S, R36E	5
HDO 90-23	HDO 90-23	Section 6, T20S, R37E	2
Monument 6" Pipeline	2001-11056	Section 5, T20S, R37E	3
Texaco Skelly F	2002-11229	Section 21, T20S, R37E	1
SPS-11	SPS-11	Section 18, T18S, R36E	2
Monument #11	TNM Mon #11	Section 30, T19S, R37E	2
Monument #2	TNM Mon #2	Section 6, T20S, R37E	1
Monument #17	TNM Mon #17	Section 29, T19S, R37E	1
Monument #18	TNM Mon #18	Section 7, T20S, R37E	2
98-05A	TNM 98-05A	Section 26, T21S, R37E	1
LF-59	LF-59	Section 32, T19S, R37E	2

The proposed well locations are illustrated on the attached site maps. Plains requests your approval of the proposed monitor well locations at the above-referenced sites. We anticipate commencement of drilling activities the week of October 4, 2004.

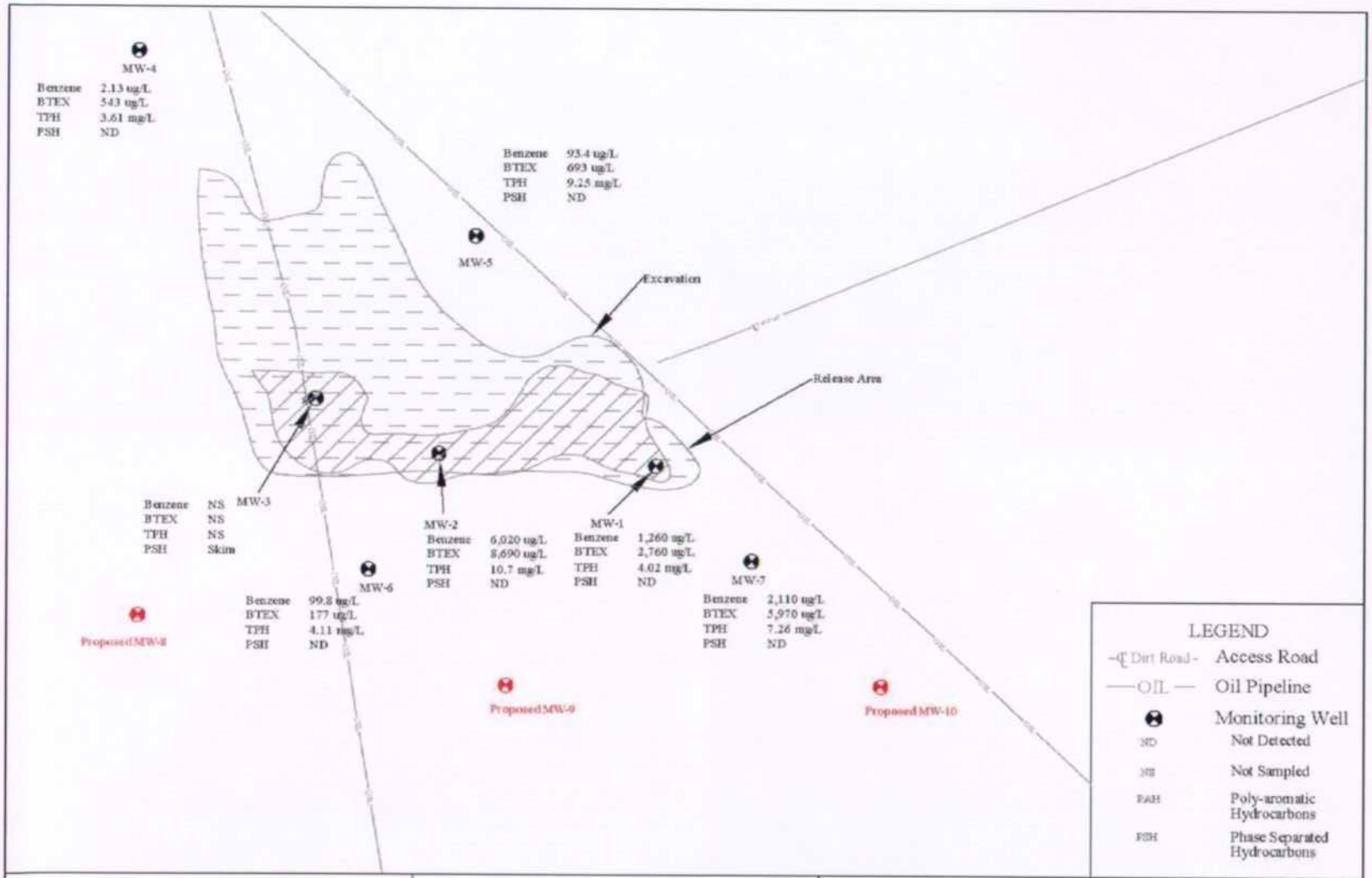


Figure 1 Proposed Monitoring Well Location Map Link Energy, LLC Junction 34 to Lea	Lea County, New Mexico NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E N 32° 33' 18.8" W 103° 15' 39.7" Elevation: 3,505 feet amsl	DWG By: Iain Olness April 2004	REVISED: Sept. 2004	SHEET 1 of 1

ENVIRONMENTAL PLUS, INC. Micro-Blaze Micro-Blaze Out™
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

April 5, 2004

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

Subject: Preliminary 2003 Ground water monitoring summary

Re: Link Energy Junction JCT 34 Line to Lea #2002-10286
UL-L Section 21 T20S R37E
Lea County New Mexico
Landowner: Millard Deck Estate

1R-0386

Dear Mr. Martin,

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, Link Energy, submits for your consideration this *Preliminary 2003 Ground Water Monitoring Report* for the Link Energy Junction JCT 34 Line to Lea #2002-10286 remediation site. The information included in this submittal provides water and product levels, an analytical results summary, and an annotated map of the site. The soil has been delineated and is being remediated and phase separated hydrocarbon (PSH) is being recovered.

If there are any questions or comments please call Mr. Ben Miller or myself at office, or at 505-390-2088 or 505-390-7864, respectively. Mr. Hernandez may be contacted through Link's Midland office at 915-638-3799 or 505-631-3095.

All official correspondence should be addressed to:

Mr. Frank Hernandez
Link Energy
P.O. Box 1660
5805 East Highway 80
Midland, Texas 79703

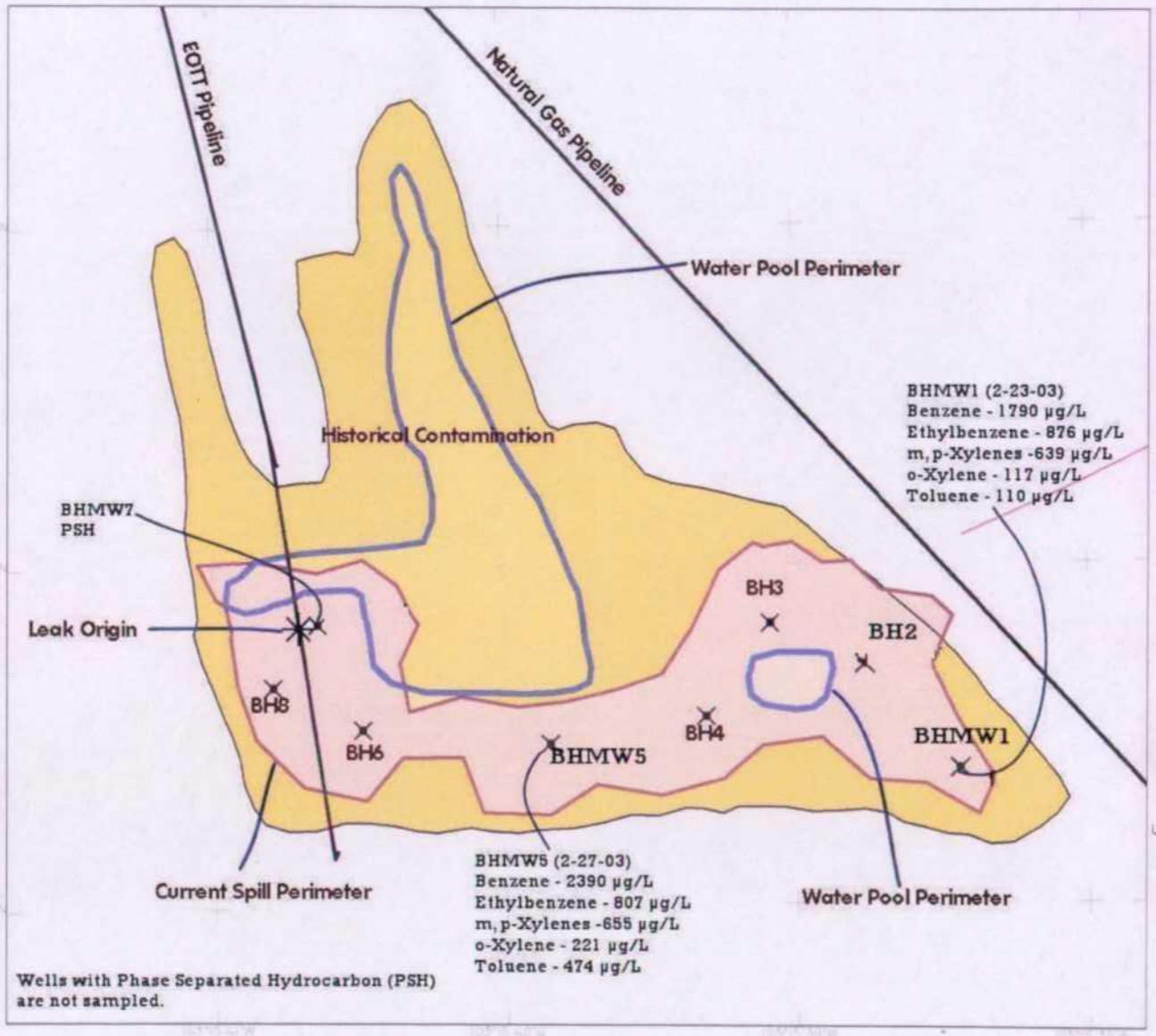
Sincerely,

Pat McCasland
EPI Technical Manager

cc: Larry W. Johnson, NMOCD – Hobbs District Office
Frank Hernandez, Link Energy
Jeff Dann, Link Energy (Houston)
Sherry Miller, EPI President
Ben Miller, EPI Vice President and General Manager

ENVIRONMENTAL PLUS, INC.

P.O. BOX 1558 ••• 2100 AVENUE O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 ••• FAX 505•394•2601



EOTT Energy Junction 34 to Lea #2002-10286

UL-L Sec 21
T20S R37E
Excavation
~28,297 sqft
Spill Area
~10118 sqft
Water Pool
~5,497 sqft

N

Scale 1:600

0 60.00

Feet

Universal Transverse Mercator
13 North
NAD 1983 HPGN (New Mexico)

JCT34COMBINED MAP.SSF

6/13/2003

Link Energy
Junction JCT 34 Line to Lea #2002-10286
Water and PSH Levels and Analytical Information

Well #	Date	PSH Level	Water Level	PSH Thickness	Benzene	Ethylbenzene	m,p-Xylenes	o-Xylene	Toluene	TPH		Production Volume
										GRO	DRO	
		'btoc	'btoc	feet	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	Gallons
BHMW1	2/11/2003	ND	20.13									
	2/27/2003	ND	19.87		1790	876	639	117	110			
BHMW5	2/11/2003	ND	17.25									
	2/27/2003	ND	19.75		2390	807	655	221	474			
BHMW7	2/11/2003	17.10	17.77	0.67								
	2/27/2003	16.64	19.15	2.51								
	3/14/2003	18.11	18.88	0.77								
	4/3/2003	16.64	19.41	2.77								20
	4/11/2003	16.65	19.48	2.83								20
	4/21/2003	16.62	18.98	2.36								5
	Approximately 10 feet of casing removed during excavation.											Absorbent Booms and netting installed at water pool
	4/30/2003	6.98	8.67	1.69								7
	5/5/2003	6.93	8.63	1.70								5
	6/18/2003	7.24	8.15	0.91								5
	7/7/2003	7.50	8.17	0.67								5
	7/8/2003	7.48	8.17	0.69								5
	7/21/2003	7.49	8.19	0.70								4
	8/12/2003	7.50	8.20	0.70								4
	8/18/2003	7.47	8.19	0.72								4
	9/3/2003	7.96	8.52	0.56								3
	9/19/2003	7.97	8.51	0.54								3
	10/2/2003	7.95	8.50	0.55								3
	11/3/2003	8.15	8.65	0.50								3
	11/13/2003	8.14	8.51	0.37								2
	11/25/2003	8.15	8.50	0.35								2
	12/2/2003	8.15	8.20	0.05								2
	12/10/2003	8.13	8.16	0.03								2
Water Pool	9/30/2003			Sheen	18.2	22.6	6.24	<1	1.03			
				WQCC Standard	10	750	Total Xylene 620.0		750			
											Total PSH Volume	104

'btoc - feet below top of casing
µg/L - micrograms per Liter
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
PSH - Phase Separated Hydrocarbon
WQCC - New Mexico Water Quality Control Commission

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

June 11, 2004

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Mr. Frank Hernandez
Link Energy
P.O. Box 1660
Midland, TX 79703

Dear Mr. Hernandez:

Re: NMOCD 1R-0386

The annual monitoring report on the Link Energy **Junction 34 to Lea** (#2002-10286), submitted on your behalf by Environmental Plus, Inc. has been received by the NMOCD.

The following recommendations noted in the report are hereby approved:

1. Continue to collect PSH on a semi-monthly basis.
2. Collect groundwater level data from the monitoring well network on a semi-monthly basis.
3. Conduct quarterly sampling activities of the groundwater monitoring well network and submit the samples for quantification of BTEX.
4. Analyze the next quarterly samples for the presence of poly-aromatic hydrocarbons (PAH), total petroleum hydrocarbons as gasoline (TPH-gasoline), total petroleum hydrocarbons as diesel (TPH-diesel) and chlorides. This data will be used to establish baseline concentrations at the site.

Implementation of the Groundwater and Soil Remediation Proposal (dated June 2003) for this site is also approved with the conditions imposed on that proposal in NMOCD's approval letter dated June 13, 2003.

This OCD approval does not relieve Link of responsibility if the proposed workplan fails to adequately remediate contamination related to Link's activities. This approval also does not relieve Link of its responsibility for compliance with any other federal, state, or local laws and regulations.

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin
Environmental Bureau

Cc: Larry W. Johnson, NMOCD, Hobbs, NM
Iain Olness, EPI, Eunice, NM
Jeff Dann, Link Energy, Houston, TX

ENVIRONMENTAL PLUS, INC. Micro-Blaze Micro-Blaze Out™
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

May 10, 2004

RECEIVED
MAY 13 2004
OIL CONSERVATION DIVISION

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

Subject: Proposed Link Energy monitor well installations in Lea County, New Mexico

Re: C.S. Cayler #2002-10250, UL-B Section 6 T17S R37E
Hugh Gathering #2002-10235, UL-P Section 11 T21S R37E
Hobbs Junction Mainline #2003-00017, UL-M Sections 26 and 35 T18S R37E
Junction 34 to Lea #2002-10286, UL-L Section 21 T20S R37E
Kimbrough Sweet #2002-10757, UL-E Section 3 T18S R37E
Livingston Line Bob McCasland #2001-11043, UL-K Section 3 T21S R37E

Dear Mr. Martin,

Environmental Plus, Inc. (EPI), on behalf of Mr. Jimmy Bryant, Link Energy, submits for your consensus, the attached maps illustrating the proposed monitor well installation locations at the above referenced sites. Installation of these wells will provide further delineation information regarding the extents of phase separated and dissolved phase hydrocarbon, as well as, additional soil delineation information. It is anticipated that the work will begin the week of May 17, 2004.

If there are any questions or comments please call Mr. Ben Miller or myself at office, or at 505-390-2088 or 505-390-7864, respectively. Mr. Bryant may be contacted at 432-684-3479.

All official correspondence should be addressed to:

Mr. Jimmy Bryant
Link Energy
P.O. Box 1660
5805 East Highway 80
Midland, Texas 79703

Sincerely,

Pat McCasland
EPI Technical Manager

cc: Larry W. Johnson, NMOCD – Hobbs District Office
Jimmy Bryant, Link Energy (Midland)
Jeff Dann, Link Energy (Houston)
Sherry Miller, EPI President
Ben Miller, EPI Vice President and General Manager

ENVIRONMENTAL PLUS, INC.

P.O. BOX 1558 ••• 2100 AVENUE O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 ••• FAX 505•394•2601

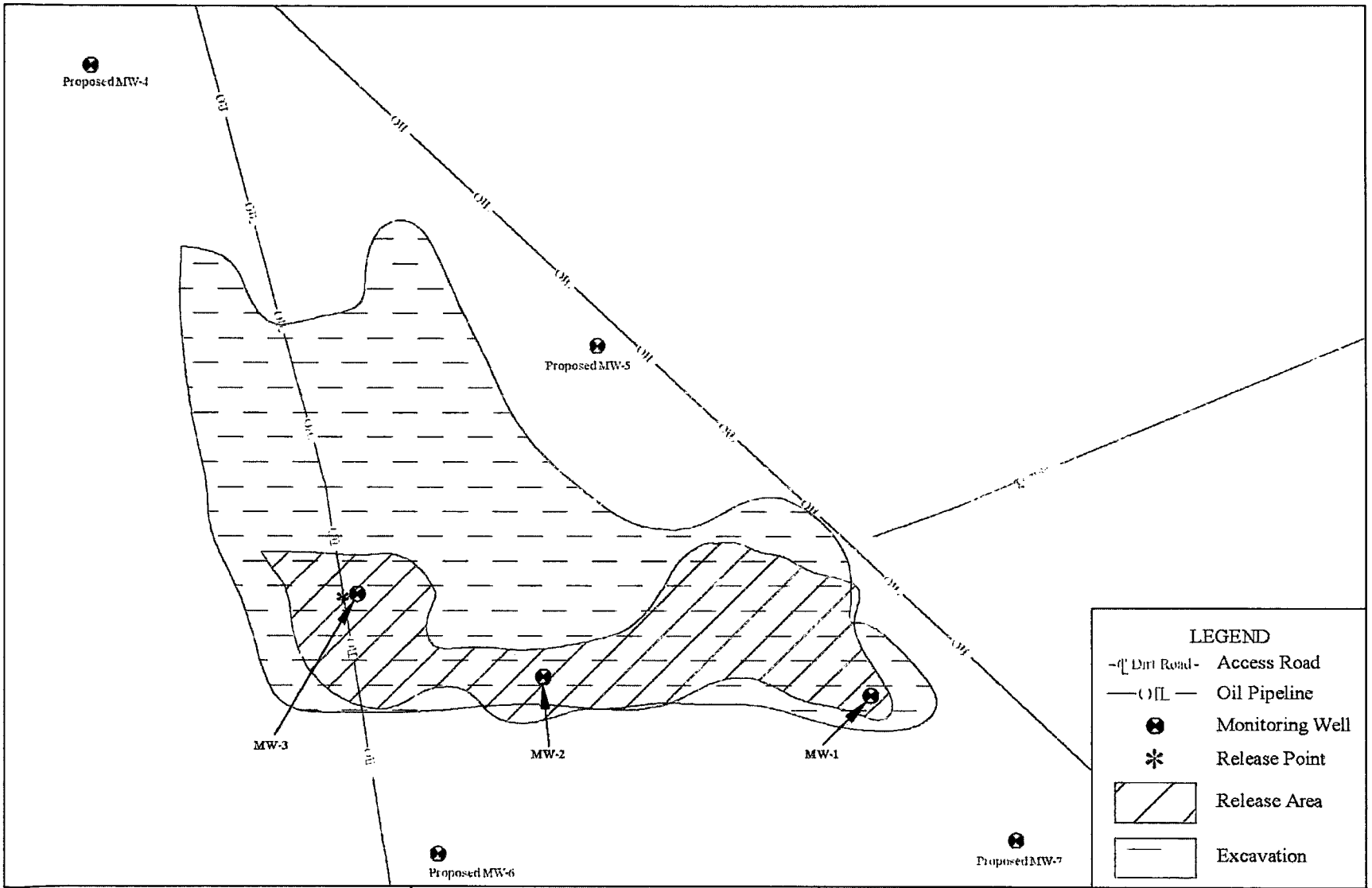


Figure 1 Proposed Monitoring Well Locations Map Link Energy, LLC Junction 34 to Lea	Lea County, New Mexico NW 1/4 of the SW 1/4, Sec. 21, T20S, R37E N 32° 33' 18.8" W 103 °15' 39.7" Elevation: 3,505 feet amsl	DWG By: Iain Olness April 2004	REVISED:	SHEET 1 of 1

ENVIRONMENTAL PLUS, INC. Micro-Blaze Micro-Blaze Out™
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

30 April 2004

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

Re: Annual Monitoring Report Link Energy Junction 34 to Lea #2002-10286
UL-L Section 21 T20S R37E, Lea County, New Mexico
Land Owner: Deck Estate

Dear Mr. Martin,

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, Link Energy, submits for your consideration this *Annual Monitoring Report* for the above-referenced site. Based on data collected during the past year, Link Energy recommends that the groundwater monitoring well network continue to be monitored on a semi-monthly basis for the collection of phase separated hydrocarbons (PSH) and it be sampled on a quarterly basis. In addition, Link Energy is recommending that the approved *Groundwater and Soil Remediation Proposal* (dated June 2003) be implemented.

Should you have any questions or comments please call Mr. Ben Miller or myself at EPI's offices, or at 505-390-2088 or 505-390-7306 respectively. Mr. Hernandez may be contacted through Link's Midland office at 915-638-3799 or 505-631-3095.

All official correspondence should be addressed to:

Mr. Frank Hernandez
Link Energy
P.O. Box 1660
5805 East Highway 80
Midland, Texas 79703

Sincerely,

ENVIRONMENTAL PLUS, INC.

Iain Olness, P.G.
Hydrogeologist

cc: Larry W. Johnson, NMOCD – Hobbs District Office
Frank Hernandez, Link Energy – Midland
Jeff Dann, Link Energy – Houston
Sherry Miller, EPI President
Ben Miller, EPI Vice President and General Manager

ENVIRONMENTAL PLUS, INC.

P.O. BOX 1558 ••• 2100 AVENUE O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 ••• FAX 505•394•2601