

# CLOSURE REPORT

VACUUM TO JAL 14" MAINLINE #6  
PLAINS REF: 2003-00135  
COMPANY #231735

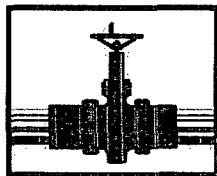
SW¼ OF THE SE¼ OF SECTION 25,  
TOWNSHIP 23 SOUTH, RANGE 37 EAST  
~12 MILES NORTHEAST (15.4°) OF  
JAL, LEA COUNTY, NEW MEXICO  
LATITUDE: N32° 16' 06.76"      LONGITUDE: W103° 06' 49.57"

JUNE 2006

*PREPARED BY:*

ENVIRONMENTAL PLUS, INC.  
2100 AVENUE O  
EUNICE, NEW MEXICO 88231

*PREPARED FOR:*

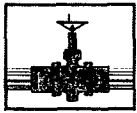


**PLAINS**  
ALL AMERICAN

RP# 372

Application p FAC 0603052632





**PLAINS  
ALL AMERICAN**

July 10, 2006

Mr. Larry Johnson  
New Mexico Oil Conservation Division (NMOCD)  
1625 French Drive  
Hobbs, New Mexico 88240

Re: Plains All American – Closure Report  
Vacuum to Jal 14" Mainline #6 release site  
SW¼ of the SE¼ of Section 25, T23S, R37E  
Lea County, New Mexico

Dear Mr. Johnson:

Please find included herewith the closure report for the Plains Vacuum to Jal 14" Mainline #6 release site located in the SW¼ of the SE¼ of Section 25, T23S, R37E, Lea County, New Mexico, dated June 2006. The report details closure activities approved by the NMOCD.

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

Sincerely,

Camille Reynolds  
Remediation Coordinator  
Plains All American

Enclosure



## Distribution List

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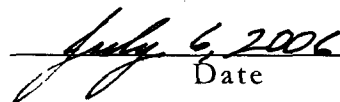
## STANDARD OF CARE

Closure Report  
Plains Pipeline, L.P.  
Vacuum to Jal 14" Mainline #6  
Ref. # 2003-00135  
(Company #231735)

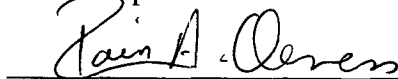
The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993), the NMOCD Unlined Surface Impoundment Closure Guidelines (February 1993), and the Environmental Plus, Inc. (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:

  
Pat W. McCasland  
Senior Environmental Consultant

  
Date

This report was reviewed by:

  
Iain A. Olness, P.G.  
Technical Manager

  
Date



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## 1.0 SUMMARY

The Vacuum to Jal 14" Mainline #6 release site is located in UL-O (SW¼ of the SE¼) of Section 25, Range 37 East (R37E), Township 23 South (T23S) at a latitude of 32° 16' 06.76"N and a longitude of 103° 06' 49.57"W. This site is located approximately 12 miles northeast of Jal, New Mexico on property owned by the State of New Mexico (reference *Figures 1 and 2*). The estimated 450 barrel (bbls) crude oil release occurred on May 23, 2004 from the 14-inch steel pipeline and was attributed to internal corrosion. Approximately 270 bbls of crude oil were recovered and reintroduced to the system. Approximately 39,800 square feet (ft²) of pasture land were impacted due to the release (reference *Figure 3*). Because the site is located on the eastern slope of the Monument Draw, a major drainage (non-throughgoing) feature within southern Lea County, the National Response Center was notified on May 24, 2003 and recorded by Nowak on report #645926. There are no surface water bodies observed to be located within a 1,000-foot radius of the site. During the preliminary investigation, groundwater was estimated to occur at approximately 33-feet below ground surface (bgs) and was based on United States Geological Survey (USGS), New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer groundwater level information (reference *Table 1*). The New Mexico Office of the State Engineer groundwater well database does not have record of any wells in Section 25 or the adjacent Sections in R37E/T23S (reference *Appendix II*). The NMOCD groundwater well database lists the nearest groundwater well as a livestock watering windmill well #3151 located approximately 0.8 miles west of the site at an elevation of approximately 3,239-feet amsl with a 1976 groundwater level of 65.5-feet bgs. There are no water wells listed or observed to be within a 1,000-foot radius of the site. This results in a site ranking of 40 points within the NMOCD ranking system, which applies the following remedial guidelines:

CONSTITUENTS/CONTAMINANTS OF CONCERN	REMEDIAL GOAL
Benzene	10 mg/Kg
BTEX (mass sum of benzene, toluene, ethylbenzene, and xylenes)	50 mg/Kg
Total Petroleum Hydrocarbon 8015m (TPH)	100 mg/Kg

In May 2003, eleven soil borings were advanced and samples collected to determine the vertical extent of contamination due to the release (reference *Figure 4*). During delineation activities, site lithology was defined as fine sand to a depth of approximately 7 to 14 feet bgs. The sand is underlain by a one-foot thick layer of medium to coarse gravel, which in turn is underlain by red clay to a depth of at least 25-feet bgs in the vicinity of soil boring BH-5. Soil samples collected during the advancement of the soil borings were observed to be dry. Crude oil impact graded from the surface, near the leak origin, down to 20-feet bgs in the lower pooling areas with the longest residence times.

Remediation of the site began in May 2004. The remediation strategy consisted of excavating crude oil impacted soils and transferring to the soil landfarm established at the Plains Vacuum to Jal 14" Mainline #1 site, located approximately 0.5-mile north of the Vacuum to Jal 14" Mainline #6 site. During remediation of the visibly impacted surface area, additional impacted soil

associated with a network of rodent burrows was discovered and designated as the Rodent Burrow Flowpath (reference *Appendix III* and *Figures 6* and *7*). A total of approximately 15,850 cubic yards (yd<sup>3</sup>) of soil were excavated and spread in the land treatment area associated with the Plains Vacuum to Jal 14" Mainline #1 remediation site.

Compliance with NMOCD soil remediation standards for the site were verified by laboratory analysis of soil samples collected from the floor and sides of the excavated areas. To ensure samples were representative, sample points were selected at approximately 50-foot lateral intervals along the flowpaths. Sampling events occurred on May 14, 18, and 20; June 8, 10, and 16; July 12, 13 and 14; and August 3 and 10, 2004 and were followed by removal (where necessary) of soil identified as being in excess of the remedial goals. The final sampling event occurred on August 20, 2004 and focused on vertical delineation of the #17 sample location in the south bottom of the northwest flowpath. Impacted soil to a depth of 19-feet bgs was removed. Benzene and BTEX concentrations in the sample collected at the 20-feet bgs were below NMOCD remedial goals and deemed acceptable; however, the TPH concentration was 256 mg/Kg, in excess of the 100 mg/Kg remedial goal. The NMOCD agreed the residual TPH would not be capable of impacting area groundwater and does not present an environmental risk or affect revegetation of the surface. The NMOCD subsequently permitted Plains to leave the limited area of impacted soil in place. With NMOCD and landowner consensus, the excavated area was backfilled with local clean soil obtained from the unvegetated hummocks located east and west of the site. Additional soil was hauled in from the unvegetated above grade hummocks adjacent and west of the Plains Vacuum to Jal 14" Mainline #1 site approximately 0.5 miles to the north. The surface was contoured to the natural grade and reseeded.

The information contained in this report documents remediation of the Vacuum to Jal 14" Mainline #6 release site consistent with the NMOCD guidelines. Plains requests the NMOCD require no further action at this site and issue a "no further action required" letter to Plains.

## 2.0 ENVIRONMENTAL MEDIA CHARACTERIZATION

Chemical parameters of the soil and groundwater were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the NMOCD approved General Work Plan for Remediation of E.O.T.T. Pipeline Spills, Leaks and Releases in New Mexico, (July 2000) and the NMOCD guidelines published in the following documents:

- Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for contaminants were determined based on the NMOCD Ranking Criteria as follows:

- Depth to groundwater, (i.e., distance from the lower most acceptable concentration to the groundwater);

- Wellhead Protection Area, (i.e., distance from fresh water supply wells); and
- Distance to Surface Water Bodies, (i.e., horizontal distance to all down gradient surface water bodies).

## 2.1 GEOLOGICAL DESCRIPTION

The USGS Ground-Water Report 6 (Nicholson and Clebsch)<sup>1</sup> describes the near surface geology of southern Lea County as an intergrade of the Quaternary Alluvium (QA) sediments (i.e., fine to medium sand) with the mostly eroded Cenozoic Ogallala (CO) formation. Nicholson and Clebsch describe the Monument Draw as a major drainage feature within southern Lea County and is not a through-going drainage course. They also state, "The draw is partly filled, primarily by dune sand and alluvium; and it is densely overgrown in many places with vegetation.", which is the case at the Vacuum to Jal 14" Mainline #6 release site.

## 2.2 ECOLOGICAL DESCRIPTION

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses and weeds. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit and Mule Deer. Reptiles, amphibians and birds are numerous and typical of area. A survey of listed, threatened and/or endangered species was not conducted.

## 2.3 AREA GROUNDWATER

During the preliminary investigation, groundwater was estimated to occur at approximately 33-feet below ground surface (bgs) and was based on United States Geological Survey (USGS), New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer groundwater level information (reference *Table 1*). However, during site delineation and excavation activities, site lithology was defined as fine sand to a depth of approximately 7 to 14 feet bgs. The sand is underlain by a one-foot thick layer of medium to coarse gravel, which in turn is underlain by red clay to a depth of at least 25-feet bgs in the vicinity of soil boring BH-5. Soil samples collected during the advancement of the soil borings were observed to be dry. The nearest water well to the site is the groundwater monitoring well at the Plains Vacuum to Jal 14" Mainline #1 release site, in the middle of the drainage feature. This well was installed in February 2003 and is approximately 0.5-mile north of the Vacuum to Jal 14" Mainline #6 release site. The lithology at the Vacuum to Jal 14" Mainline #1 release was defined as a fine sand from the surface down to a depth of 15-feet bgs with red clay from 15 to a depth of 37-feet bgs. No measurable amounts of groundwater have been detected in the groundwater monitoring well since installation. Given the presence of the confining clay interbed and the lack of overlying saturation, it

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<sup>1</sup> Alexander Nicholson, Jr. and Alfred Clebsch, Jr., "Ground-Water Report 6, Geology and Ground-Water Conditions in Southern Lea County, New Mexico," United States Geological Survey, 1961, pp. 13 and 50.

is reasonable to conclude that a shallow unconfined groundwater aquifer is not present beneath the site.

## 2.4 AREA WATER WELLS

The New Mexico Office of the State Engineer groundwater well database does not have record of any wells in Section 25 or the adjacent Sections in R37E/T23S (reference *Appendix II*). The USGS groundwater well database lists the nearest groundwater well as a livestock watering windmill well #3151, located approximately 0.8 miles west of the site at an elevation of approximately 3,239-feet amsl. It is listed as having a groundwater level of 65.5-feet bgs in 1976. There are no water wells, listed or observed, within a 1,000-foot radius of the site.

## 2.5 AREA SURFACE WATER BODIES

The release site is located in the Monument Draw described by Nicholson and Clebsch as a major drainage feature within southern Lea County and is not a through-going drainage course. Even though there are no permanent or intermittent bodies of surface water present in the draw within a radius of 1,000-feet of the release site, the rules state such drainage features are to be considered as bodies of surface water.

## 3.0 NMOCD SITE RANKING

Based on the proximity of the site to protectable area water wells, surface water bodies, and the estimated depth to groundwater, the site has an NMOCD ranking score of 40 points with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Groundwater	2. Wellhead Protection Area	3. Distance to Surface Water Body	
If Depth to GW <50 feet: 20 points	If <1000' from water source, or; <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points	
If Depth to GW 50 to 99 feet: 10 points		200-100 horizontal feet: 10 points	
If Depth to GW >100 feet: 0 points	If >1000' from water source, or; >200' from private domestic water source: 0 points	>1000 horizontal feet: 0 points	
Site Rank (1+2+3) = 20 + 0 +20 = 40 points			
Total Site Ranking Score and Acceptable Remedial Goal Concentrations			
Parameter	>19	10-19	0-9
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

## 4.0 INITIAL SITE DELINEATION

In May 2003, eleven soil borings were advanced and samples collected to delineate the vertical extents of contamination due to the release (reference *Figure 4*). For sample control purposes, the site was initially divided into the Leak Origin, East Flowpath, Northwest Flowpath, South Flowpath North of Fence, South Flowpath South of Fence, and the Southeast Flowpath (reference *Figure 3*). The soil borings were advanced with a trailer mounted hollow-stem auger drill rig and discrete soil samples collected with a vinyl sleeved stainless steel soil probe through the

hollow-stem auger at 5-foot vertical intervals beginning at the surface. Each sample was logged, removed from the vinyl sleeve, immediately jarred, placed on ice and submitted to an independent laboratory for TPH and BTEX analysis. The remainder of the sample was placed in a Ziplock<sup>®</sup> bag, allowed to equilibrate to 70 to 75°F and the headspace surveyed for organic vapors using a calibrated photoionization detector (PID) equipped with a 9.8 electron volt (eV) lamp. Sampling ceased in each soil boring after obtaining two consecutive PID readings of less than 50 parts per million (ppm).

#### 4.1 SITE LITHOLOGY

However, during site delineation and excavation activities, site lithology was defined as fine sand to a depth of approximately 7 to 14 feet bgs. The sand is underlain by a one-foot thick layer of medium to coarse gravel, which in turn is underlain by red clay to a depth of at least 25-feet bgs in the vicinity of soil boring BH-5. Soil samples collected during the advancement of the soil borings were observed to be dry (reference *Table 2*).

#### 4.2 RODENT BURROW DELINEATION

Soil boring BH9 was advanced inside the perimeter of a small isolated crude oil stain observed approximately 50-feet east of the main pooling area. The stain was not contiguous with the surface spill area nor did it appear to be associated with the disturbed surface from initial mitigation and recovery activities. Crude oil impact was delineated to at least 5-feet bgs but less than 10-feet bgs. During excavation of the visibly impacted soil, additional impacted soil associated with a network of rodent burrows was discovered and designated as the Rodent Burrow Flowpath (reference *Figure 6*, *Figure 7* and *Appendix III*). Analytical results from soil samples collected on June 8 and 10, 2004 from four trenches at sample points located above and below the exposed burrow openings verified the impact as coming from the burrows, in that, contaminant concentrations decreased radially from the burrow (reference *Table 3*).

#### 4.3 ANALYTICAL RESULTS

The analytical results from each soil boring indicate crude oil impacts graded from the surface, near the leak origin, to 20-feet bgs in the low-lying pooling areas with the longest residence times (reference *Table 2*).

### 5.0 SOIL REMEDIATION

Remediation of the site began in May 2004 and was based on the information collected during the May 2003 delineation. The strategy was to excavate the crude oil impacted soils above NMOCD guidelines and remediate at the landfarm established at the Plains Vacuum to Jal 14" Mainline #1 site located approximately 0.5-mile north of the Vacuum to Jal 14" Mainline #6 site. The process of excavating and testing continued through August 20, 2004, during which time approximately 15,850 yd<sup>3</sup> of crude oil impacted soil were excavated from the Vacuum to Jal 14" Mainline #6 site and spread in the aforementioned land treatment area.

## 6.0 CLOSURE ACTIVITIES

Compliance with NMOCD soil remediation standards for the site were verified by laboratory analyses of soil samples collected from the floor and sidewalls of the excavated areas. All samples submitted to the laboratory for analyses were grab samples with the exception of the 5-point composite samples collected from the west sidewall, bottom and east sidewall of the "south flowpath south of the fence" on June 1, 2004. Each sample was immediately jarred, placed on ice and submitted to the laboratory for TPH and BTEX analysis. The remainder of the sample was placed in a Ziplock<sup>®</sup> bag, allowed to equilibrate to 70 to 75°F and the headspace surveyed for organic vapors using a calibrated PID equipped with a 9.8 eV lamp. To ensure representative samples, sample points were located at approximately 50-foot lateral intervals along the flowpaths (reference *Figures 5, 6 and 7*). The NMOCD was notified prior to each sampling event. After each iteration of excavating and testing, soils associated with the sample points identified as being in excess of the remedial goals were excavated and transported to the treatment area. To verify removal of soil impacted above NMOCD thresholds, samples were collected and submitted to the laboratory for analysis. To maintain sample location control, pin flags, labeled with the sample number (unique to the sample point) were placed at the initial sample points for reference and at all successive sample points. The sample number from successive soil samples collected from the same sample point remained the same except for the addition of a sequential letter (i.e., 2, 2A, 2B, 2C, etc.). The sample #5 number was inadvertently left out of the initial series of samples and is not associated with a sample. Sampling events occurred on May 14, 18, and 20; June 1 and 16; July 12, 13 and 14; and August 3 and 10, 2004 and were followed by removal of soil identified as being in excess of the remedial goals. The final sampling event occurred on August 20, 2004 and focused on vertical delineation of the #17 sample location in the bottom of the northwest flowpath (reference *Figure 7 and Table 4*).

### 6.1 MAY 14, 18 AND 20, 2004 SAMPLING EVENTS

TPH and BTEX results from analysis of soil samples collected during the May 14, 18 and 20, 2004 sampling events from sample points #1 through #27 indicated adequate soil removal at all sample points with the exception of #1, #6, #7, #8, #10, #11, #14, #17 and #20 (reference *Figure 5*). TPH and BTEX results from these sampling points were above TPH and BTEX remedial goals for the site. Additional soil was excavated from these locations.

### 6.2 JUNE 1, 2004 SAMPLING EVENT

During the June 1, 2004 sampling event, composite samples were collected from the west sidewall, bottom and east sidewall of the "south flowpath south of the fence" and submitted to the laboratory for TPH and BTEX analyses. TPH and BTEX concentrations were below the remedial goals and deemed acceptable. The "south flowpath south of the fence" was subsequently backfilled with local clean soil and contoured to the natural grade.

### 6.3 JUNE 16, 2004 SAMPLING EVENT

During the June 16, 2004 sampling event, soil samples were collected from sample points #1A, #6A, #7A, #8A, #10A, #11A, #14A, #17A and #20A. TPH and



BTEX concentrations in all samples were below remedial goals and deemed acceptable with the exception of samples collected from #1A, #6A, #11A and #17A. BTEX concentrations in sample #1A were not detectable at or above the 0.025 mg/Kg method detection limit and deemed acceptable. The TPH concentration in sample #1A was reported above the 100 mg/Kg remedial goal at 150 mg/Kg, but does not represent an environmental hazard and was deemed acceptable. TPH and BTEX concentrations in the #6A, #11A, and #17A samples exceeded the NMOCD remedial goals. Additional soil was excavated from these locations.

#### **6.4 JULY 12 AND 13, 2004 SAMPLING EVENTS**

Analytical results for soil samples collected on July 12 and 13 from sample points #28 through #60 were below NMOCD remedial goals with the exception of samples #28, #40, #41, #46, #55, #57, #58 and #59. Additional soil was excavated from these locations.

#### **6.5 JULY 14, 2004 SAMPLING EVENT**

During the July 14, 2004 sampling event, soil samples #6B, #11B and #17B were collected and submitted to an independent laboratory for TPH and BTEX analyses. BTEX concentrations were below NMOCD remedial goals; TPH concentrations remained above the 100 mg/Kg remedial goal. Additional soil was excavated from these locations.

#### **6.6 AUGUST 3 AND 4, 2004 SAMPLING EVENTS**

During the August 3 and 4, 2004 sampling events, soil samples #17C, #28B, 41B, #46B, #55B, #57B, #58B and #59B were collected and submitted to an independent laboratory for TPH and BTEX analyses. TPH and BTEX concentrations in samples #41B, #46B, #57B, #58B and #59B were below NMOCD remedial goals and deemed acceptable. BTEX concentrations were below the NMOCD remedial goals in samples #17C, #28B and #55B; however, TPH concentrations exceeded NMOCD remedial goals. Additional soil was excavated from these locations.

#### **6.7 AUGUST 10, 2004 SAMPLING EVENT**

During the August 10, 2004 sampling event, soil samples #6C, #11C, #17D, #28C and #55C were collected and submitted to an independent laboratory for TPH and BTEX analyses. BTEX concentrations were below the NMOCD remedial goals in all the samples; however, TPH concentrations in the #6C, #11C, and the #17D samples exceeded NMOCD remedial goals. Additional soil was excavated from these locations.

#### **6.8 AUGUST 20, 2004 SAMPLING EVENT**

During the August 20, 2004 sampling event, soil samples #6D and #11D were collected and submitted to the laboratory for TPH and BTEX analyses. TPH and BTEX concentrations in the #6D and #11D samples were reported to be below NMOCD remedial goals and deemed acceptable.

To determine the vertical extent of crude oil impact at the #17 sample point, located in the floor of the northwest flowpath, a series of 1-foot interval soil

samples were collected to 20-foot bgs, beginning at the excavation floor, approximately 12-foot bgs. Reported BTEX concentrations ranged from an excessive 167 mg/Kg in the 12-foot bgs sample to an acceptable concentration of 0.575 mg/Kg in the 20-foot bgs sample. The TPH concentrations ranged from 5,310 mg/Kg in the 12-foot bgs sample to 216 in the 18-foot bgs sample. The TPH concentration in the 20-foot bgs sample was 256 mg/Kg, in excess of the 100 mg/Kg remedial goal. The NMOCD agreed that TPH and BTEX concentrations at 20-foot bgs would not be capable of impacting area groundwater, does not present an environmental risk or affect revegetation of the surface and subsequently permitted Plains to leave the impacted soil below the 20-foot bgs interval in place providing Plains excavated the limited area of small diameter impacted soil column to 19-foot bgs. The impacted soil column associated with the #17 sample location to a depth of 19-foot bgs was removed.

## **7.0 BACKFILLING AND CONTOURING**

With NMOCD and landowner consensus, the excavated area was first backfilled with local clean soil obtained from the unvegetated hummocks located east and west of the site. Additional soil was hauled in from the unvegetated hummocks adjacent and west of the Plains Vacuum to Jal 14" Mainline #1 site. The surface was contoured to the natural grade and reseeded.

## **8.0 FOLLOW-UP ACTIVITIES**

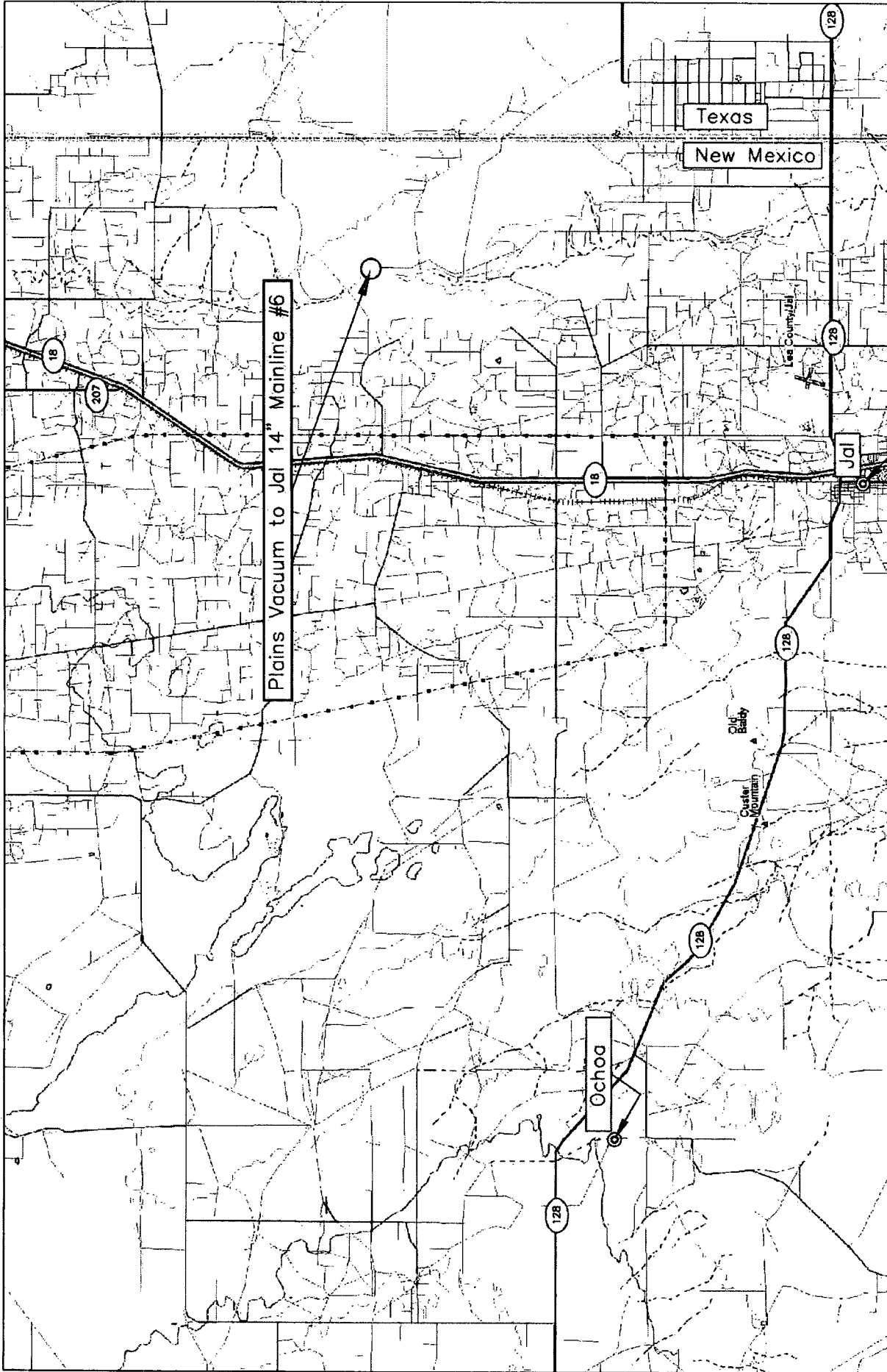
Plains will ensure the surface disturbed during remediation activities is restored to pre-leak conditions as practicable and minimize further disturbance of vegetated areas and continue to monitor attenuation of the TPH and BTEX concentrations in the soils placed in the soil remediation area at the Plains Vacuum to Jal 14" Mainline #1 site located approximately 0.5-mile to the north.

## **9.0 CONCLUSION**

The information provide in this report documents remediation of the release consistent with the NMOCD guidelines, Plains therefore requests the NMOCD require no further action at the site and issue a "no further action required" letter to Plains.

## FIGURES





<p>Figure 1 Area Map Plains Pipeline, L.P. Vacuum to Jal 14" Mainline #6</p>	<p>Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 25, T23S, R37E N 32°16' 06.76" W 103°06' 49.57" Elevation: 3,200 feet amsl</p>	<p>DWG By: P McCasland March 2006</p> <p>REVISED: April 2006</p> <p>6.0 SHEET 1 of 1</p>
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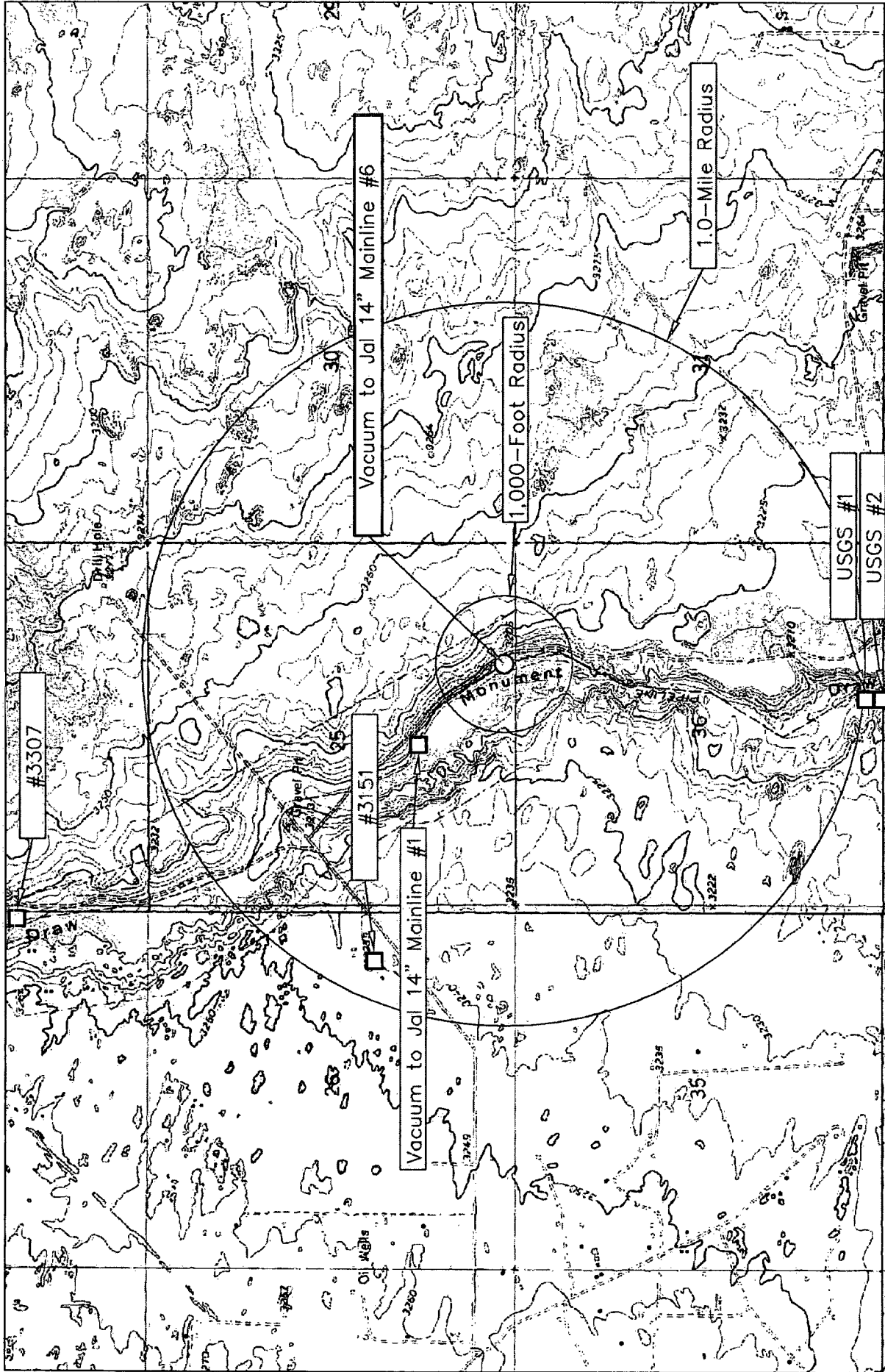


Figure 2	Site Location Map	Plains Pipeline, L.P.	Vacuum to Jal 14" Mainline #6
		Lea County, New Mexico	
		SW 1/4 of the SE 1/4, Sec. 25, T23S, R37E	
		N 32°16' 06.76" W 103°06' 49.57"	
		Elevation: 3,200 feet amsl	
		DWG By: P McCasland	REVISED:
		March 2006	April 2006
		0	4,000
		2,000	SHEET
		Feet	1 of 1

PLAINS ALL  
AMERICAN  
PIPELINE  
VACUUM TO JAL  
14" MAINLINE #6  
#2003-00135  
UL-0 SEC 25  
UL-B SEC 36  
T23S R37E  
LEA CO NM



SCALE 1:1,000



FEET

UNIVERSAL TRANSVERSE MERCATOR  
13 NORTH  
NAD 1983 HPGN (TEXAS)

VACJML#6 EXC SPOTS.SSF  
6/10/2004

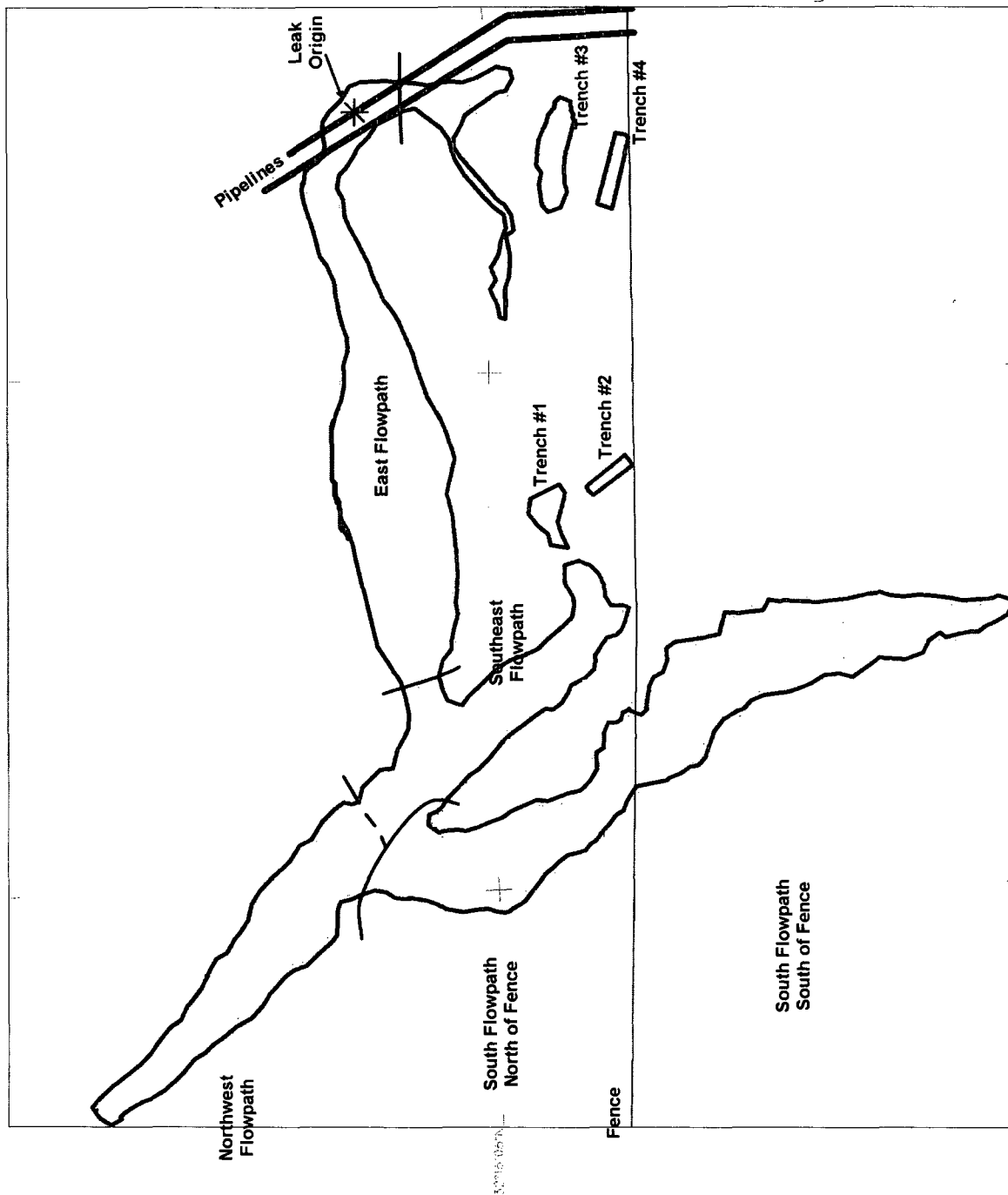
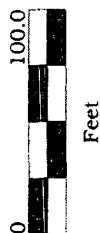


Figure 3: Site Map

Plains  
Pipeline, L.P.  
Vacuum to  
Jal 14"  
Mainline #6  
#2003-00135  
UL-O Sec 25  
UL-B Sec 36  
T23S R37E  
Soil Boring  
Location Map

N ↑

Scale 1:1,000



Lat/Long  
WGS 1984

Figure 4 Soil Boring Map.ssf  
4/17/2006

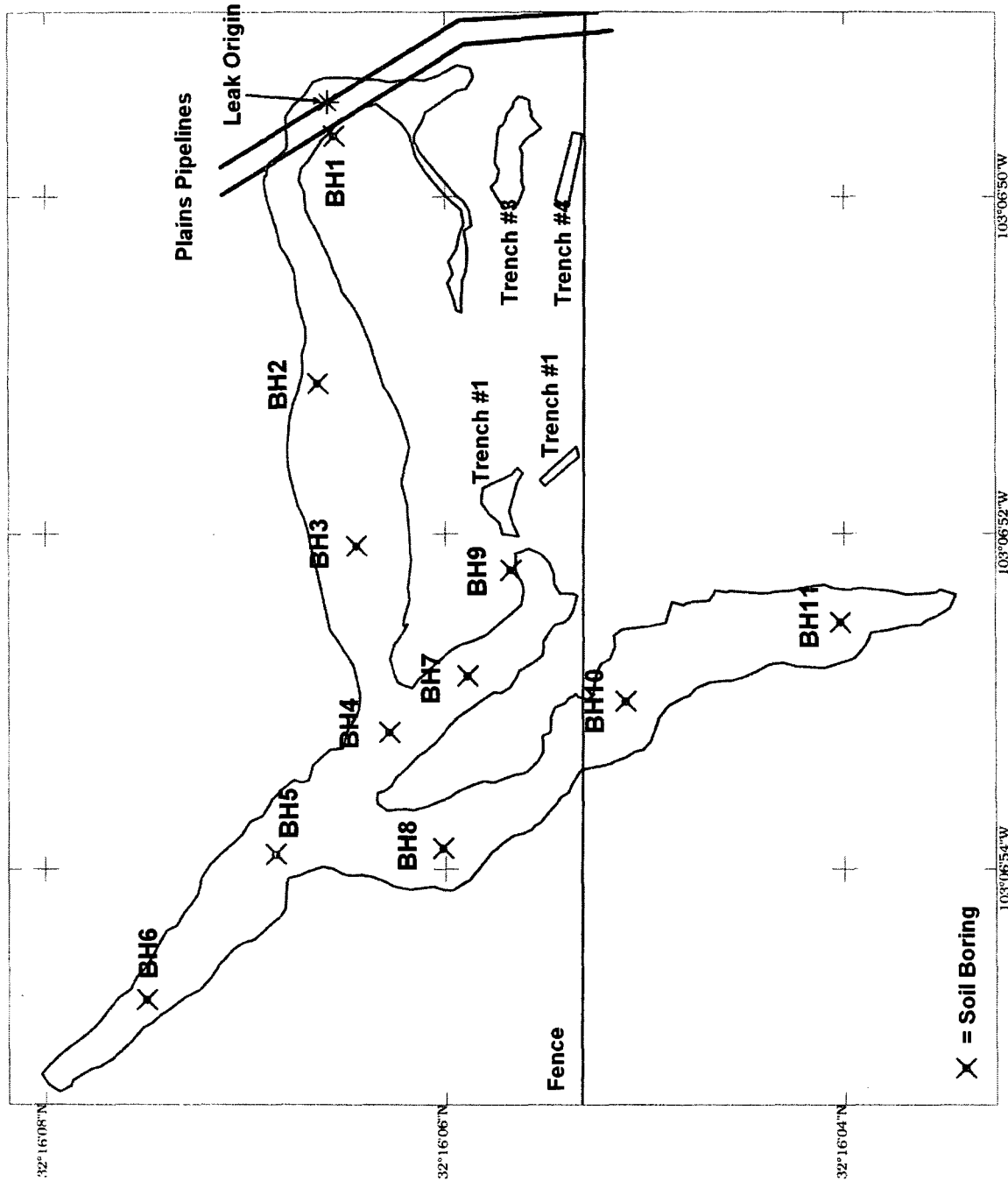


Figure 4: Soil Boring Location Map



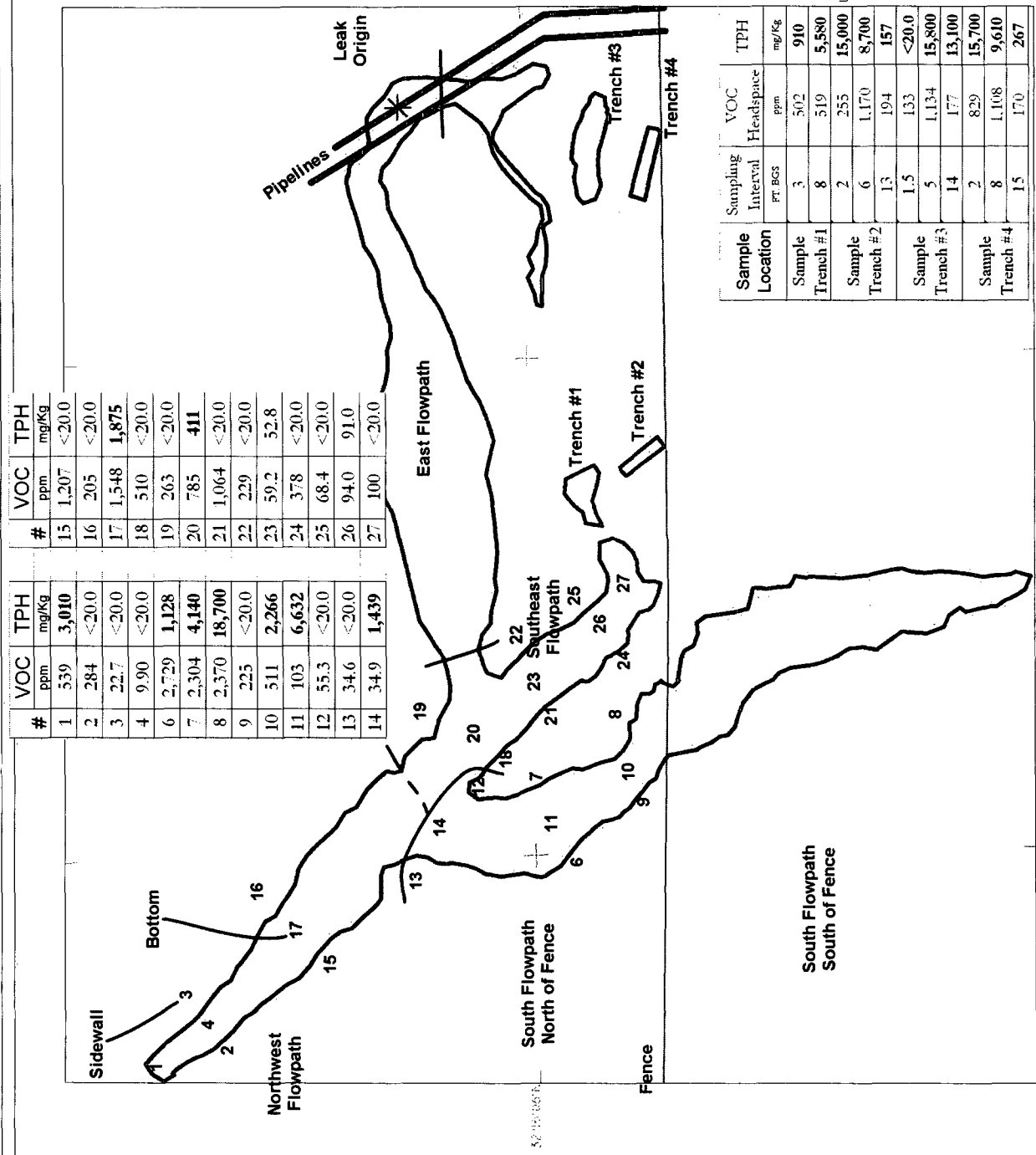
PLAINS ALL  
AMERICAN  
PIPELINE  
VACUUM TO JAL  
14" MAINLINE #6  
#2003-00135  
UL-O SEC 25  
UL-B SEC 36  
T23S R37E  
LEA CO NM

SCALE 1:1,000



UNIVERSAL TRANSVERSE MERCATOR  
13 NORTH  
NAD 1983 HPGN (TEXAS)

VAC JML #6 EXC SPOTS.SSF  
6/10/2004



Sample Location	Sampling Interval FT BGS	VOC Headspace ppm	TPH mg/Kg
Sample Trench #1	3	502	910
Sample Trench #2	8	519	5,580
Sample Trench #3	2	255	15,000
Sample Trench #4	6	1,170	8,700
	13	194	157
	15	133	<20.0
	5	1,134	15,800
	14	177	13,100
	2	829	15,700
	8	1,108	9,610
	15	170	267

#	VOC ppm	TPH mg/Kg
1	539	3,010
2	284	<20.0
3	22.7	<20.0
4	9.90	<20.0
6	2,729	1,128
7	2,304	4,140
8	2,370	18,700
9	225	<20.0
10	511	2,266
11	103	6,632
12	55.3	<20.0
13	34.6	<20.0
14	34.9	1,439

#	VOC ppm	TPH mg/Kg
15	1,207	<20.0
16	205	<20.0
17	1,548	1,875
18	510	<20.0
19	263	<20.0
20	785	411
21	1,064	<20.0
22	229	<20.0
23	59.2	52.8
24	378	<20.0
25	68.4	<20.0
26	94.0	91.0
27	100	<20.0

Figure 5: Sample Location Map - May 14 to June 10, 2004

PLAINS ALL  
AMERICAN  
PIPELINE  
VACUUM TO JAL  
14" MAINLINE #6  
#2003-00135  
UL-O SEC 25  
UL-B SEC 36  
T23S R37E  
LEA CO NM



SCALE 1:1,000



FEET

LAT/LONG  
WGS 1984

VAC6 MAP 7-8-04, SSF  
7/8/2004

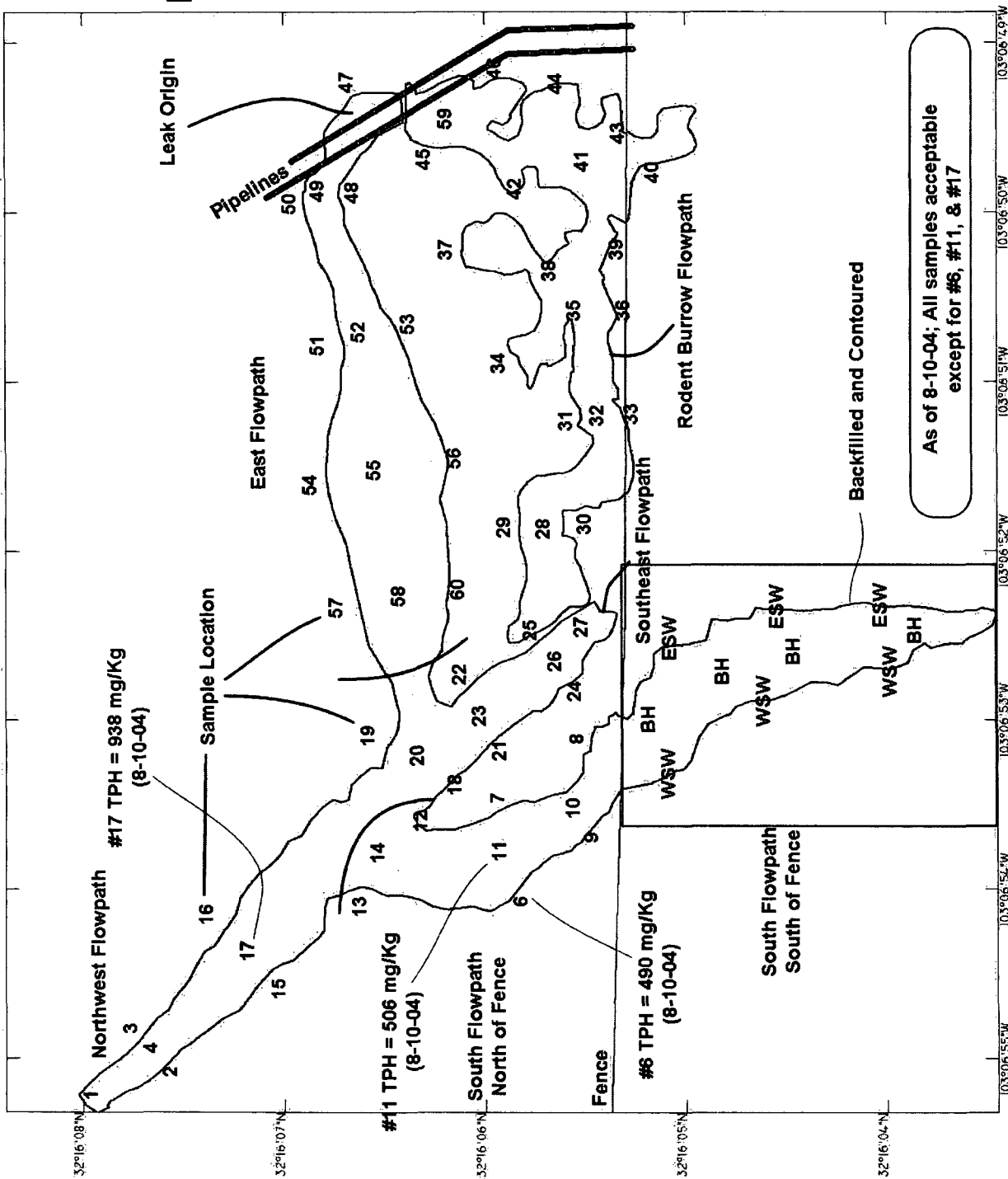


Figure 6: Sample Location Map - August 10, 2004

PLAINS ALL  
AMERICAN  
PIPELINE  
VACUUM TO JAL  
14" MAINLINE #6  
#2003-00135  
UL-O SEC 25  
UL-B SEC 36  
T23S R37E  
LEA CO NM



SCALE 1:1,000.



FEET

LAT/LONG  
WGS 1984

VAC6 MAP 7-8-04.SSF  
7/8/2004

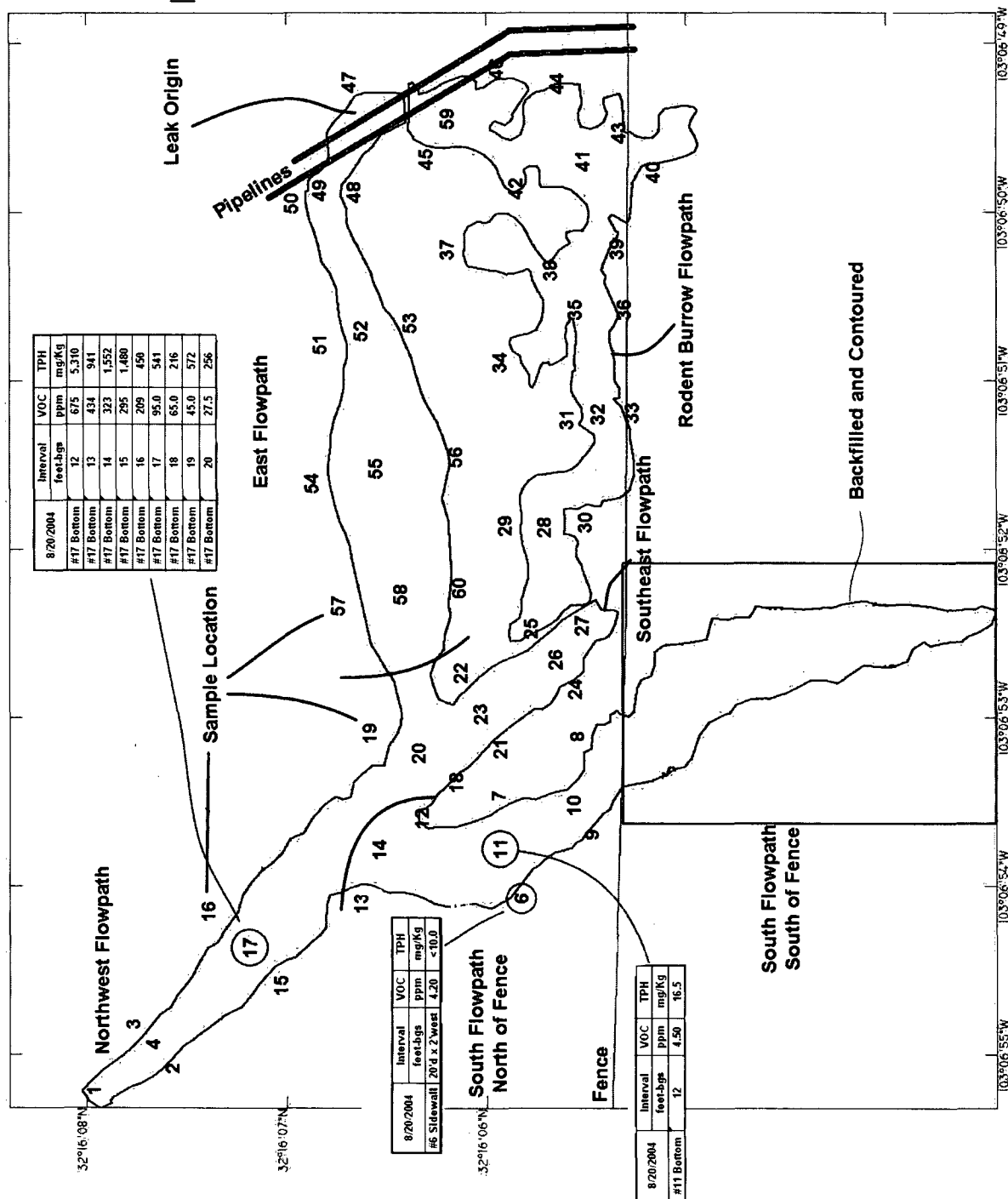


Figure 7: Sample Location Map - August 20, 2004

## TABLES

**TABLE 1**  
**Summary of Area Groundwater Levels and Site Groundwater Level Estimate**

Plains Pipeline, L.P.

Vacuum to Jal 14" Mainline #6 ref. #2003-00135

ID#	Latitude	Longitude	Township Range Section	Measurement Date	Groundwater Level feet-bgs <sup>1</sup>	Surface Elevation feet-amsl <sup>2</sup>	Calculated Groundwater Elevation feet-amsl	Distance and Direction from Site
Windmill Well	32° 14' 37.4"N	103° 06' 59.2"W	T24S, R37E, Sec 1	2004	16.66 <sup>3</sup>	3,170	3,153.34	1.7 miles south
USGS #1	32° 15' 14.5"N	103° 06' 54.4"W	T23S, R37E, Sec 31	1966	20.99	3,185	3,164.01	1.1 miles south
USGS #2	32° 15' 13.3"N	103° 06' 54.3"W	T23S, R37E, Sec 31	1976	20.45	3,185	3,164.55	1.1 miles south
#3151	32° 16' 25.1"N	103° 07' 36.0"W	T23S, R37E, Sec 26	1976	65.5	3,239	3,173.50	0.8 miles west
Plains Vacuum to Jal 14" Mainline #1 Monitoring Well #1 <sup>4</sup>	32° 16' 18.4"N	103° 07' 05.2"W	T23S, R37E, Sec 23	2006	dry	3,195		0.25 miles northwest
#3307	32° 17' 16.7"N	103° 07' 29.2"W	T23S, R37E, Sec 23	1991	29.55	3,214	3,184.45	1.3 miles north

<sup>1</sup>bgs - below ground surface

<sup>2</sup>amsl - above mean sea level

<sup>3</sup>The groundwater level was measured and recorded by Environmental Plus, Inc..

<sup>4</sup>The groundwater monitoring well was installed in 2003. Total Depth = 27'bgs; 10-feet of 2" PVC casing and 20-feet of 0.020-inch screen was installed with a 3-foot stickup; fine sand was encountered from the surface down to a depth of 15-feet bgs with red clay from 15 to a depth of 37-feet bgs.

Surface elevations were interpolated from the USGS Topographical map.

The estimated groundwater elevation at the site is calculated to be approximately 33-feet bgs and is based on a calculated groundwater gradient of 0.002 feet per foot.

**Table 2**  
**Plains Pipeline, L.P.**  
**Vacuum to Jal 14" Mainline #6 ref.#2003-00135**  
**Initial Delineation Data May 2003**

Sample Location	Description	Sampling Interval (FT. BGS) <sup>1</sup>	SAMPLE ID#	Date	Lithology	PID <sup>2</sup> ppm	GRO <sup>3</sup> mg/Kg	DRO <sup>4</sup> mg/Kg	TPH <sup>5</sup> mg/Kg	BTEX <sup>6</sup> mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Total Xylenes mg/Kg
Borehole 1	Probe	2	SE14M652703BH1-2	5/27/03	Tan Sand	300	<10.0	11.9	11.9	0.039	<0.020	<0.020	<0.020	0.039
	Probe	5	SE14M652703BH1-5	5/27/03	Tan Sand	38.4	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652703BH1-10	5/27/03	Tan Sand	1.40	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652703BH1-15	5/27/03	Tan Sand	0.30	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652703BH2-2	5/27/03	Tan Sand	338	<10.0	27.8	27.8	0.035	<0.020	<0.020	<0.020	0.035
Borehole 2	Probe	5	SE14M652703BH2-5	5/27/03	Tan Sand	19.7	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652703BH2-10	5/27/03	Tan Sand	40.3	12.2	156	168	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652703BH2-15	5/27/03	Red Clay	0.20	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652703BH3-2	5/27/03	Tan Sand	1,500	1,210	2,240	3,450	53.0	0.106	6.89	13.4	32.6
	Probe	5	SE14M652703BH3-5	5/27/03	Tan Sand	7.80	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 3	Probe	10	SE14M652703BH3-10	5/27/03	Tan Sand	3.40	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652703BH3-15	5/27/03	Red Clay	0.20	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652803BH4-2	5/28/03	Tan Sand	657	22,600	34,300	56,900	802	24.7	166	168	443
	Probe	5	SE14M652803BH4-5	5/28/03	Tan Sand	53.6	<10.0	6.51	6.51	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652803BH4-10	5/28/03	Red Clay	15.4	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 4	Probe	15	SE14M652803BH4-15	5/28/03	Red Clay	10.4	<10.0	<10.0	5.52	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652803BH5-2	5/28/03	Tan Sand	650	15,300	19,800	35,100	835	35.1	215	180	405
	Probe	5	SE14M652803BH5-5	5/28/03	Tan Sand	750	16,800	19,600	36,400	1,200	72.5	346	236	465
	Probe	10	SE14M652803BH5-10	5/28/03	Red Clay	700	7,100	6,740	13,800	375	17.8	100	80.0	177
	Probe	15	SE14M652803BH5-15	5/28/03	Red Clay	849	297	583	880	14.9	0.253	2.76	3.49	8.40
Borehole 5	Probe	20	SE14M652803BH5-20	5/28/03	Red Clay	24.1	<10.0	5.89	5.89	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	25	SE14M652803BH5-25	5/28/03	Red Clay	15.3	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652803BH6-2	5/28/03	Tan Sand	853	12,700	22,300	35,000	637	16.8	149	143	328
	Probe	5	SE14M652803BH6-5	5/28/03	Tan Sand	18.0	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652803BH6-10	5/28/03	Tan Sand	10.2	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 6	Probe	15	SE14M652803BH6-15	5/28/03	Red Clay	7.90	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652803BH7-2	5/28/03	Tan Sand	675	9,250	12,700	21,950	366	10.7	81.2	75.4	199
	Probe	5	SE14M652803BH7-5	5/28/03	Tan Sand	600	13,800	11,300	25,100	868	53.9	240	179	395
	Probe	10	SE14M652803BH7-10	5/28/03	Red Clay	750	12,800	12,600	25,400	721	31.1	188	155	347
	Probe	15	SE14M652803BH7-15	5/28/03	Red Clay	20.2	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 7	Probe	20	SE14M652803BH7-20	5/28/03	Red Clay	18.4	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652903BH8-2	5/29/03	Tan Sand	1,060	19,800	32,300	52,100	796	28.2	193	176	399
	Probe	5	SE14M652903BH8-5	5/29/03	Tan Sand	865	16,600	14,800	31,400	534	19.8	136	116	262
	Probe	10	SE14M652903BH8-10	5/29/03	Red Clay	40.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652903BH8-15	5/29/03	Red Clay	20.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 8	Probe	2	SE14M652903BH9-2	5/29/03	Tan Sand	740	17,200	11,100	28,300	1,167	64.6	391	226	485
	Probe	5	SE14M652903BH9-5	5/29/03	Tan Sand	420	12,900	10,800	23,700	784	43.0	217	163	361
	Probe	10	SE14M652903BH9-10	5/29/03	Tan Sand	10.9	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652903BH9-15	5/29/03	Red Clay	5.70	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652903BH10-2	5/29/03	Tan Sand	720	6,260	8,300	14,500	283	9.48	81.4	56.0	136
Borehole 9	Probe	5	SE14M652903BH10-5	5/29/03	Tan Sand	20.7	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652903BH10-10	5/29/03	Red Clay	7.0	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652903BH10-15	5/29/03	Tan Sand	1,188	10,000	15,600	25,600	285	8.70	82.9	60.8	133
	Probe	2	SE14M652903BH11-2	5/29/03	Tan Sand	10.4	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	5	SE14M652903BH11-5	5/29/03	Tan Sand	8.00	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 10	Probe	10	SE14M652903BH11-10	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652903BH11-15	5/29/03	Red Clay	100	<10.0	<10.0	100	50.0	10.0	<0.020	<0.020	<0.020
	Probe	2	SE14M652903BH12-2	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	5	SE14M652903BH12-5	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652903BH12-10	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
Borehole 11	Probe	15	SE14M652903BH12-15	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	2	SE14M652903BH13-2	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	5	SE14M652903BH13-5	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	10	SE14M652903BH13-10	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020
	Probe	15	SE14M652903BH13-15	5/29/03	Red Clay	6.1	<10.0	<10.0	<10.0	<0.020	<0.020	<0.020	<0.020	<0.020

<sup>1</sup> bgs - below ground surface

<sup>2</sup> PID - Photoionization Detector for Volatile Organic Contaminants /Constituents

<sup>3</sup> GRO - Gasoline Range Organics C<sub>6</sub>-C<sub>12</sub>

<sup>4</sup> DRO - Diesel Range Organics C<sub>13</sub>-C<sub>28</sub>

<sup>5</sup> TPH - Total Petroleum Hydrocarbon = GRO + DRO.

<sup>6</sup> BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes  
 7 < - (i.e., less than); indicates the method detection limit

Red Bold font indicates concentration is in excess of the remedial goal.

Table 3

**Plains Pipeline, L.P.  
Vacuum to Jal 14" Mainline #6 #2003-00135**

**Rodent Burrow Sample Trench Delineation Data**

Sample Location	Description	Sampling Interval (FT. BGS <sup>1</sup> )	SAMPLE ID#	Date	Lithology	PID <sup>2</sup> ppm	GRO <sup>3</sup> mg/kg	DRO <sup>4</sup> mg/kg	TPH <sup>5</sup> mg/kg	BTEX <sup>6</sup> mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg
Sample Trench #1	Above burrow opening	3	SL14M0601004H#1-3'	6/8/04	Sand	502	273	637	910	8.40	0.041	0.778	1.92	5.66
	Below burrow opening	8	SL14M0601004H#1-8'	6/8/04	Sand	519	1,050	4,530	5,580	19.4	0.146	2.61	4.26	12.4
Sample Trench #2	Above burrow opening	2	SL14M0601004H#2-2'	6/10/04	Sand	255	3,620	11,400	15,000	18.0	0.082	1.79	5.33	10.8
	Below burrow opening	6	SL14M0601004H#2-6'	6/10/04	Sand	1,170	3,050	5,640	8,690	53.9	0.222	8.44	12.0	33.2
Sample Trench #3	Below burrow opening	13	SL14M0601004H#2-13'	6/10/04	Sand	194	13.3	144	157	0.033	<0.025 <sup>8</sup>	<0.025	<0.025	0.033
	Above burrow opening	1.5	SL14M0601004H#3-1'6"	6/10/04	Sand	133	<10.0	<10.0	<10.0	0.143	<0.025	0.029	J[0.021g] <sup>7</sup>	0.114
	Below burrow opening	5	SL14M0601004H#3-5'	6/10/04	Sand	1,134	5,570	10,200	15,800	150.34	3.34	32.2	34.8	80.0
Sample Trench #4	Below burrow opening	14	SL14M0601004H#3-14'	6/10/04	Sand	177	2,410	10,700	13,100	67.2	1.45	13.3	15.2	37.3
	Above burrow opening	2	SL14M0601004H#4-2'	6/10/04	Sand	829	4,130	11,600	15,700	55.9	0.687	9.41	11.5	34.3
	Below burrow opening	8	SL14M0601004H#4-8'	6/10/04	Sand	1,108	3,070	6,540	9,610	91.6	1.49	17.5	20.4	52.2
	Below burrow opening	15	SL14M0601004H#4-15'	6/10/04	Sand	170	18.7	248	267	0.175	<0.025	J[0.022g]	0.037	0.139
New Mexico Oil Conservation Division Remedial Goals						100			100	50.0	10.0			

<sup>1</sup> bgs - below ground surface<sup>2</sup> PID - Photoionization Detector for Volatile Organic Contaminants/Constituents<sup>3</sup> GRO-Gasoline Range Organics C<sub>6</sub>-C<sub>12</sub><sup>4</sup> DRO-Diesel Range Organics C<sub>13</sub>-C<sub>28</sub><sup>5</sup> TPH-Total Petroleum Hydrocarbon = GRO+DRO.<sup>6</sup> BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes<sup>7</sup> J - parameter detected but not above the method detection limit.<sup>8</sup> < - (i.e., less than): indicates the method detection limit<sup>9</sup> - - = not analyzed**Red Bold font indicates concentration is in excess of the remedial goal.**

Table 4

Plains Pipeline, L.P.

Vacuum to Jal 14" Mainline #6 #2003-00135

## Excavation Delineation Data

Sample Location	Sample Point	Sampling Interval	SAMPLE ID#	Date	Soil Status	Lithology	PID <sup>2</sup> ppm	GRO <sup>3</sup> mg/kg	DRO <sup>4</sup> mg/kg	TPH <sup>5</sup> mg/kg	BTEX <sup>6</sup> mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg
Northwest Flowpath	Northwest end	1	SLVJ6514041	5/14/04	excavated	Sand	539	440	2,570	3,010	1.07	<0.025 <sup>8</sup>	<0.025	0.158	0.912
		2	Jal14Main#6616041A	6/16/04	in-situ	Sand	284	<100	150	150	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6514042	5/14/04	in-situ	Sand	227	<100	<100	<100	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6514043	5/14/04	in-situ	Sand	227	<100	619	<100	<0.025	<0.025	<0.025	<0.025	<0.025
	Northsouth wall	5 to 8	SLVJ6514044	5/14/04	in-situ	Red Clay	990	<100	<100	<100	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6514045	5/14/04	in-situ	Red Clay	2,729	338	790	1,100	16.6	0.177	1.72	4.16	10.6
	North bottom	5 to 8	SLVJ6518046	5/14/04	excavated	Sand	--	1,560	5,530	7,090	43.2	1.12	8.67	9.59	23.8
		5 to 8	Jal14Main#6616046A	6/16/04	excavated	Sand	--	50.7	467	518	0.094	<0.025	<0.025	<0.025	0.094
	Midwest west wall	5 to 8	SPAAVJ671404#6B	7/14/04	excavated	Sand	--	61.7	428	490	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6518047	8/10/04	excavated	Sand	--	61.7	428	490	<0.025	<0.025	<0.025	<0.025	<0.025
South Flowpath north of fence	Midwest east wall	5 to 8	PV682004#17E-2	8/20/04	in-situ	Sand	2,370	360	15,100	18,700	86.1	1.36	13.6	20.8	50.3
		5 to 8	SLVJ6518047	5/18/04	excavated	Sand	2,304	1,350	2,790	4,140	115	2.13	19.2	26.8	67.1
		5 to 8	Jal14Main#6616047A	6/16/04	in-situ	Sand	225	<100	<100	<100	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6518048	5/18/04	excavated	Sand	511	136	2,130	2,300	0.495	<0.025	0.044	0.117	0.335
	Southeast wall	5 to 8	Jal14Main#6616048A	6/16/04	in-situ	Red Clay	511	<100	39.2	59.2	<0.025	<0.025	<0.025	<0.025	<0.025
		5 to 8	SLVJ6518049	5/18/04	excavated	Red Clay	103	812	5,820	6,400	9.86	0.192	1.06	2.24	6.37
	Southwest wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Southwest bottom	5 to 8	Jal14Main#6616041A	6/16/04	excavated	Red Clay	--	50.0	695	745	0.328	<0.025	0.035	0.073	0.221
		5 to 8	SPAAVJ671404#11B	7/14/04	excavated	Red Clay	--	50.0	695	745	0.328	<0.025	0.035	0.073	0.221
Northwest Flowpath	Midbottom	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Northeast wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Northwest wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	North bottom	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
Northwest Flowpath	Southsouth wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Southwest wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	North bottom	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Southsouth wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
Northwest Flowpath	Southwest wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	South bottom	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Southsouth wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
	Southwest wall	5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813
		5 to 8	SLVJ6518041	5/18/04	excavated	Red Clay	--	63.8	442	506	1.23	<0.025	0.179	0.238	0.813



Table 4

**Plains Pipeline, L.P.**  
**Vacuum to Jal 14" Mainline #6 #2003-00135**  
**Excavation Delineation Data**

Sample Location	Sample Point		Sampling Interval	SAMPLE ID#	Date	Soil Status	Lithology	PID <sup>2</sup> ppm	GRO <sup>3</sup> mg/kg	DRO <sup>4</sup> mg/kg	TPH <sup>5</sup> mg/kg	BTEX <sup>6</sup> mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg
	Description	#														
Southeast Flowpath	Northsouth wall	18	5 to 8	SLVJ65200418	5/20/04	in-situ	Sand	510	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Northnorth wall	19	5 to 8	SLVJ65200419	5/20/04	in-situ	Sand	263	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	North bottom	20	8	SLVJ65200420	5/20/04	excavated	Red Clay	785	18.6	392	411	0.361	0.034	0.066	0.061	0.200
	Mid south wall	20A	8	Jal 14" Main #66160417A	6/16/04	in-situ	Red Clay	---	<10.0	738	73.8	0.059	<0.025	<0.025	<0.025	0.059
	Mid south wall	21	5 to 8	SLVJ65200421	5/20/04	in-situ	Sand	1,064	<10.0	15.9	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Mid south wall	22	5 to 8	SLVJ65200422	5/20/04	in-situ	Sand	229	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Mid bottom	23	8	SLVJ65200423	5/20/04	in-situ	Red Clay	59.2	<10.0	42.8	42.8	<0.025	<0.025	<0.025	<0.025	<0.025
	Southsouth wall	24	5 to 8	SLVJ65200424	5/20/04	in-situ	Sand	378	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Southnorth wall	25	5 to 8	SLVJ65200425	5/20/04	in-situ	Sand	68.4	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Southbottom	26	8	SLVJ65200426	5/20/04	in-situ	Red Clay	94.0	<10.0	91.0	91.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Southsouth wall	27	5 to 8	SLVJ65200427	5/20/04	in-situ	Sand	100	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West bottom	28	8	SPAAVJ671204#28	7/12/04	excavated	Red Clay	68.0	273	1,420	1,700	2.46	0.0209	0.171	0.301	1.99
	West north wall	28B	12	08030428B	8/4/04	excavated	Red Clay	---	95.9	252	348	1.95	<0.025	0.074	0.386	1.49
	West south wall	28C	14	SLVJ65200428C	8/10/04	in-situ	Red Clay	---	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West north wall	29	5 to 8	SPAAVJ671204#29	7/12/04	in-situ	Sand	730	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West south wall	30	5 to 8	SPAAVJ671204#30	7/12/04	in-situ	Sand	518	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West north wall	31	5 to 8	SPAAVJ671204#31	7/12/04	in-situ	Sand	670	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West bottom	32	8	SPAAVJ671204#32	7/12/04	in-situ	Red Clay	28.5	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West south wall	33	5 to 8	SPAAVJ671204#33	7/12/04	in-situ	Sand	40.9	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West north wall	34	5 to 8	SPAAVJ671204#34	7/12/04	in-situ	Sand	79.0	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West bottom	35	8	SPAAVJ671204#35	7/12/04	in-situ	Red Clay	80.1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West south wall	36	5 to 8	SPAAVJ671204#36	7/12/04	in-situ	Sand	75.9	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East north wall	37	5 to 8	SPAAVJ671204#37	7/12/04	in-situ	Sand	80.1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East bottom	38	8	SPAAVJ671204#38	7/12/04	in-situ	Red Clay	92.3	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East south wall	39	5 to 8	SPAAVJ671204#39	7/12/04	in-situ	Sand	11.9	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
Rodent Burrow Flowpath	East bottom	40	5 to 8	SPAAVJ671204#40	7/12/04	excavated	Sand	409	<10.0	91.3	91.3	<0.025	<0.025	<0.025	<0.025	<0.025
	East bottom	41	8	SPAAVJ671204#41	7/12/04	excavated	Red Clay	11.0	42.2	1,550	1,600	0.069	<0.025	<0.025	<0.025	0.069
	East bottom	41B	12	08030441B	8/3/04	in-situ	Red Clay	---	<10.0	15.6	15.6	<0.025	<0.025	<0.025	<0.025	<0.025
	East northwest wall	42	5 to 8	SPAAVJ671204#42	7/12/04	in-situ	Sand	9.80	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East south wall	43	5 to 8	SPAAVJ671204#43	7/12/04	in-situ	Sand	9.50	<10.0	<10.0	<10.0	0.045	<0.025	<0.025	<0.025	0.045
	East wall	44	5 to 8	SPAAVJ671204#44	7/12/04	in-situ	Sand	10.8	<10.0	<10.0	<10.0	0.487	0.0201	0.060	0.038	0.389
	West bottom	45B	12	08030459B	8/3/04	excavated	Red Clay	9.80	86.6	1,190	1,300	1.26	<0.025	0.147	0.262	0.849
	East north wall	45	5 to 8	SPAAVJ671204#45	7/13/04	in-situ	Red Clay	68.0	<10.0	<10.0	<10.0	0.187	<0.025	0.0213	0.0182	0.187
	East wall	46	5 to 8	SPAAVJ671204#46	7/13/04	excavated	Sand	7.30	1,650	6,680	8,300	173	1.89	32.9	42.7	95.8
	East wall	46B	5 to 8	08030446B	8/3/04	in-situ	Sand	---	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025

Table 4

## Plains Pipeline, L.P.

Vacuum to Jal 14" Mainline #6 #2003-00135

## Excavation Delineation Data

Sample Location	Sample Point	Sampling Interval	Sample ID#	Date	Soil Status	Lithology	PID <sup>2</sup> ppm	GRO <sup>3</sup> mg/kg	DRO <sup>4</sup> mg/kg	TPH <sup>5</sup> mg/kg	BTEX <sup>6</sup> mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg
East Flowpath	East east wall	47 5 to 8	SPAAV1671204#47	7/13/04	in-situ	Red Clay	51.8	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East east south wall	48 5 to 8	SPAAV1671204#48	7/13/04	in-situ	Red Clay	6.70	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East east bottom	49 5 to 8	SPAAV1671204#49	7/13/04	in-situ	Red Clay	28.5	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East east north wall	50 5 to 8	SPAAV1671204#50	7/13/04	in-situ	Sand	40.9	<10.0	74.0	74.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East north wall	51 5 to 8	SPAAV1671204#51	7/13/04	in-situ	Red Clay	79.0	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East bottom	52 5 to 8	SPAAV1671204#52	7/13/04	in-situ	Red Clay	80.1	<10.0	35.7	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	East south wall	53 5 to 8	SPAAV1671204#53	7/13/04	in-situ	Sand	75.9	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Mid north wall	54 5 to 8	SPAAV1671204#54	7/13/04	in-situ	Sand	80.1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Mid bottom	55 8	SPAAV1671204#55	7/13/04	excavated	Red Clay	92.3	14.6	295	310	<0.025	<0.025	<0.025	<0.025	<0.025
	Mid bottom	55B 12	08030455B	8/3/04	excavated	Red Clay	--	359	1,330	1,700	12.1	0.070	1.48	2.61	7.96
	Mid south wall	56 5 to 8	SL14M061004#56	8/10/04	in-situ	Red Clay	--	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West north wall	57 5 to 8	SPAAV1671204#57	7/13/04	in-situ	Sand	11.9	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West bottom	57B 5 to 8	SPAAV1671204#57	7/13/04	excavated	Sand	409	711	5,820	6,500	0.708	<0.025	0.0189	0.061	0.647
	West bottom	58 8	08030457B	8/3/04	in-situ	Sand	--	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	West south bottom	58B 12	08030458B	8/3/04	in-situ	Red Clay	--	21.3	58.8	80.1	0.053	<0.025	<0.025	0.0172	0.053
South Flowpath South of fence	West south bottom	60 8	SPAAV1671204#60	7/13/04	in-situ	Red Clay	9.50	<10.0	46.9	46.9	<0.025	<0.025	<0.025	<0.025	<0.025
	West sidewall	WSW 5 to 8	SL14M061004#WSW	6/1/04	in-situ	Sand	--	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
	Bottom	BH 8	SL14M061004#BH	6/1/04	in-situ	Red Clay	--	<10.0	13.6	13.6	<0.025	<0.025	<0.025	<0.025	<0.025
	East sidewall	ESW 5 to 8	SL14M061004#ESW	6/1/04	in-situ	Sand	--	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025
New Mexico Oil Conservation Division (NMOCD) Remedial Goals							100			100	50.0	10.0			

<sup>1</sup>bgs -- below ground surface<sup>2</sup>PID - Photoionization Detector for Volatile Organic Vapors<sup>3</sup>GRO-Gasoline Range Organics C<sub>6</sub>-C<sub>10</sub><sup>4</sup>DRO-Diesel Range Organics C<sub>10</sub>-C<sub>25</sub><sup>5</sup>TPH-Total Petroleum Hydrocarbon = GRO+DRO.<sup>6</sup>BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes<sup>7</sup>[0.0189] parameter detected but not above the method detection limit.<sup>8</sup>< - (i.e., less than): indicates the method detection limit<sup>9</sup>-- = not analyzed

Red Bold font indicates concentration is in excess of the remedial goal.

"Gray Shading" indicates final sample location.

## APPENDICES

## Appendix I: Laboratory Analytical Reports



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: Pat McCasland

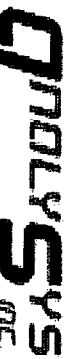
Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH8-5'

Report#/Lab ID#: 143462  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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



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:** Pat McCasland  
**Address:** 2100 Ave. O  
Bunice NM 88231  
**Phone:** (505) 394-3481 **FAX:** (505) 394-2601

**Report# / Lab ID#:** 143462 **Report Date:** 06/13/03  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH8-5'  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/29/2003 **Time:** 07:45

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	14800	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	16600	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/07/03	8260b	---	---	---	---	---
Benzene	19800	µg/Kg	5000	<5000	06/07/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	116000	µg/Kg	5000	<5000	06/07/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	199000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	62800	µg/Kg	5000	<5000	06/07/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	136000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.6	82.2	88.5	84.8

**QUALITY ASSURANCE DATA<sup>1</sup>**

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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). 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.

## Exceptions Report:

**Report #/Lab ID#:** 143461 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH8-2'

### 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.

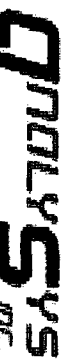
### J flag Discussion

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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH8-2'

Report#/Lab ID#: 143461  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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



**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Eunice

NM 88231

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

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

**Report#/Lab ID#:** 143461 **Report Date:** 06/13/03

**Project ID:** 2003-00136 14" Main #6

**Sample Name:** SE14M652903BH8-2'

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/29/2003 **Time:** 07:30

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	32300	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	19800	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	28200	µg/Kg	5000	<5000	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	176000	µg/Kg	5000	<5000	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	299000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	99700	µg/Kg	5000	<5000	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	193000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.6	82.2	88.5	84.8

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Respectfully Submitted,

*Richard Lastier*

Richard Lastier

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 1 = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(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.



Send Report 0:

Bill to (if differ):

4221 Freidrich Lane, Suite 190, Austin, TX 78741  
(512) 444-5896

Analyses Requested  
Please attach explanatory information a

Company Name California Natural Gas  
Address 2100 Ave O  
City Encine State CA Zip 92621  
ATTN: Pat Mc Card

Phone 505.394.3488 Fax 505.394.2601

Company Name ERT Energy  
Address 5805 Hwy 50  
City Midland State TX Zip 79701  
ATTN: Frank Hernandez  
Phone 915.638.5799 Fax

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 2003-0934 Sampler 14 main #46

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Comments			
SE14M652803BH4-2	5-28-03	8:00	1	X			143442	X	X		
SE14M652803BH4-5	5-28-03	8:10	1	X			143443	X	X		
SE14M652803BH4-10	5-28-03	8:25	1	X			143444	X	X		
SE14M652803BH4-15	5-28-03	8:40	1	X			143445	X	X		
SE14M652803BH4-2	5-28-03	9:10	1	X			143446	X	X		
SE14M652803BH4-5	5-28-03	9:20	1	X			143447	X	X		
SE14M652803BH4-10	5-28-03	9:30	1	X			143448	X	X		
SE14M652803BH4-15	5-28-03	9:40	1	X			143449	X	X		
SE14M652803BH4-20	5-28-03	10:20	1	X			143450	X	X		
SE14M652803BH4-25	5-28-03	11:00	1	X			143451	X	X		

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal limits (MDL/POL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Per ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

T=5.30C

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
<u>Pat Mc Card</u>	<u>California Natural Gas</u>	<u>5-28-03</u>		<u>Melanie Humphrey</u>	<u>ASI</u>	<u>6/3/03</u>	

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

## Exceptions Report:

<b>Report #/Lab ID#:</b> 143460	<b>Matrix:</b> soil	<b>Attn:</b> Pat McCasland
<b>Client:</b> Environmental Plus, Inc.		
<b>Project ID:</b> 2003-00136 14 Main #6		
<b>Sample Name:</b> SE14M652803BH7-20		

### 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 (ROL) 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	Qualifier	Comment
TPH by GC (as diesel)	J	See J-flag discussion above.

Notes:




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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH7-20

Report#/Lab ID#: 143460  
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitise	Data Qualifiers
1-Chlorooctane	8015 mod.	75.5	50-150	---
p-Terphenyl	8015 mod.	75.5	50-150	---
1,2-Dichloroethane-d4	8260b	83	65-115	---
Toluene-d8	8260b	106	50-120	---

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

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

**Report#/Lab ID#:** 143460 **Report Date:** 06/11/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-20  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/28/2003 **Time:** 15:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	J	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatle organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH7-15

Report#/Lab ID#: 143459  
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	77.2 75.7	50-150 50-150	--- ---
p-Terphenyl				
1,2-Dichloroethane-d4	8260b	81.6	65-115	---
Toluene-d8	8260b	104	50-120	---

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

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

**Report#/Lab ID#:** 143459 **Report Date:** 06/11/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-15  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/28/2003 **Time:** 14:20

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Last*  
Richard Last

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 (POL) 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 POL and the MDL. B = Analyte detected in associated method blank(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.



## Exceptions Report:

**Report #/Lab ID#:** 143458 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-10

### Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GF-AA 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.

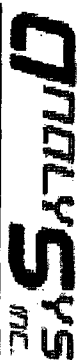
### J Flag Discussion:

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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland

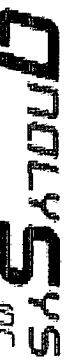
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M6S2803BH7-10

Report#/Lab ID#: 143458  
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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



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:** Pat McCasland

**Address:** 2100 Ave. O

Eunice

NM 88231

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

**Report#/Lab ID#:** 143458 **Report Date:** 06/11/03

**Project ID:** 2003-00136 14 Main #6

**Sample Name:** SE14M652803BH7-10

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/28/2003 **Time:** 13:45

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	12600	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	12800	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	31100	µg/Kg	5000	<5000	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	155000	µg/Kg	5000	<5000	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	262000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	84800	µg/Kg	5000	<5000	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	188000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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). 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.

## Exceptions Report:

**Report #/Lab ID#:** 143457 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-5

### Sample Temperature/Condition: <=6°C

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

### Sample Bottles & Preservation:

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

### J Flag Discussion:

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH7-5

Report#/Lab ID#: 143457  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	none/diluted none/diluted	diluted @ 50X diluted @ 50X	D D
p-Terphenyl	8260b	none/diluted	diluted @ 250X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

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

**Report#/Lab ID#:** 143457 **Report Date:** 06/11/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-5  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/28/2003 **Time:** 13:30

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	11300	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	13800	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	53900	µg/Kg	5000	<5000	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	179000	µg/Kg	5000	<5000	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	301000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	94300	µg/Kg	5000	<5000	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	240000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,  
*Richard Last*  
Richard Last

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). 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.

## Exceptions Report:

**Report #/Lab ID#:** 143456 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH7-2

### Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GF-AA 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.

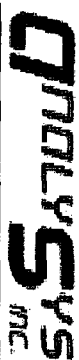
### J Flag Discussion:

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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH7-2

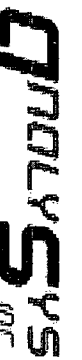
Report#/Lab ID#: 143456  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 10X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 10X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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





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: Pat McCasland  
Address: 2100 Ave. O

Bunice

NM 88231

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

Report#/Lab ID#: 143456 Report Date: 06/11/03  
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH7-2

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30  
Date Sampled: 05/28/2003 Time: 13:20

# REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	12700	mg/Kg	100	<100	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	9230	mg/Kg	100	<100	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatle organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	10700	µg/Kg	5000	<5000	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	75400	µg/Kg	5000	<5000	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	148000	µg/Kg	5000	<5000	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	50600	µg/Kg	5000	<5000	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	81200	µg/Kg	5000	<5000	06/06/03	8260b	---	0.6	82.2	88.5	84.8

# QUALITY ASSURANCE DATA 1

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*

Richard Laster

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 RQL and the MDL. B = Analyte detected in associated method blank(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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH6-15

Report#/Lab ID#: 143455  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitise	Data Qualifiers
1-Chlorooctane	8015 mod.	77.2	50-150	---
p-Terphenyl	8015 mod.	78.6	50-150	---
1,2-Dichloroethane-d4	8260b	78.7	65-115	---
Toluene-d8	8260b	109	50-120	---

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

11

4221 Freidrich Lane, Suite 190, Austin, TX  
(512) 444-5896

(c) + (d)

1

Analyses Requested (1)

Please attach explanatory information as

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[illegible]

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pot ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
Barbara Blum	Environmental Affairs	5-29-03		Melanie Humphrey	ASI	6/3/03	10:05

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

Seha Report To:

Bill to (if different):

4221 Freidrich Lane, Suite 190, Austin, TX  
(512) 444-5896

Company Name Salvadori & Pils

Company Name EOT Energy

Address 2100 Ave O

Address 5805 Hwy 80

City San Antonio State TX Zip 78231

City Midland State TX Zip 79701

ATTN: Ray McCloud

ATTN: Frank Henderson

Phone 505-394-3481 Fax 505-394-2601

Phone 915-638-3799 Fax

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 2003-00134

Sampler Frankly

14" MHW #6

Analyses Requested (1)  
Please attach explanatory information as r

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Toll 505-5896 BTEX 502116										Comments	
SE14M652903BH8-2	5-29-03	7:30	1	X			143461	X	X										
SE14M652903BH8-5	5-29-03	7:45	1	X			143462	X	X										
SE14M652903BH8-10	5-29-03	8:00	1	X			143463	X	X										
SE14M652903BH8-15	5-29-03	8:20	1	X			143464	X	X										
SE14M652903BH9-2	5-29-03	8:45	1	X			143465	X	X										
SE14M652903BH9-5	5-29-03	9:00	1	X			143466	X	X										
SE14M652903BH9-10	5-29-03	9:20	1	X			143467	X	X										
SE14M652903BH9-15	5-29-03	9:45	1	X			143468	X	X										
SE14M652903BH10-2	5-29-03	10:20	1	X			143469	X	X										
SE14M652903BH10-5	5-29-03	10:35	1	X			143470	X	X										

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal r limits (MDL/POL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Poll. ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

T = 5.3°C

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
<u>Frankly</u>	<u>Environmental H&amp;S</u>	<u>5-29-03</u>		<u>Michelle Humphrey</u>	<u>ASI</u>	<u>6/3/03</u>	<u>10:3</u>

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]



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: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH11-15'

Report#/Lab ID#: 143476  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	85.2	50-150	---
p-Terphenyl	8015 mod.	82.4	50-150	---
1,2-Dichloroethane-d4	8260b	89.7	65-115	---
Toluene-d8	8260b	117	50-120	---

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

**Client:** Environmental Plus, Inc.  
**Attn:** Pat McCasland  
**Address:** 2100 Ave. O  
Eunice NM 88231

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

**Report#/Lab ID#:** 143476 **Report Date:** 06/13/03

**Project ID:** 2003-00136 14" Main #6

**Sample Name:** SE14M652903BH11-15'

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/29/2003 **Time:** 02:30

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/12/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/12/03	8015 mod.	---	17.2	72	105.3	76.6
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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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: Pat McCasland

Project ID: 2003-0013614" Main #6  
Sample Name: SE14M652903BH11-10'

Report#/Lab ID#: 143475  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	78.2 69.7	50-150 50-150	--- ---
p-Terphenyl				
1,2-Dichloroethane-d4	8260b	86.7	65-115	---
Toluene-d8	8260b	103	50-120	---

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

**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Eunice

NM 88231

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

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

**Report#/Lab ID#:** 143475

**Report Date:** 06/13/03

**Project ID:** 2003-00136 14" Main #6

**Sample Name:** SE14M652903BH11-10'

**Sample Matrix:** soil

**Date Received:** 06/03/2003

**Time:** 10:30

**Date Sampled:** 05/29/2003

**Time:** 01:40

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	17.2	72	105.3	76.6
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

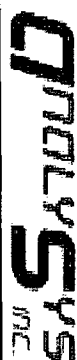
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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH11-5'

Report#/Lab ID#: 143474  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	84.5 80.7	50-150 50-150	--- ---
p-Terphenyl				
1,2-Dichloroethane-d4	8260b	76.9	65-115	---
Toluene-d8	8260b	87.5	50-120	---

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

**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Burice

NM 88231

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

**Report#/Lab ID#:** 143474 **Report Date:** 06/13/03

**Project ID:** 2003-00136 14" Main #6

**Sample Name:** SE14M652903BH11-5'

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/29/2003 **Time:** 01:20

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	17.2	72	105.3	76.6
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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## Exceptions Report:

**Report #/Lab ID#:** 143473 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH11-2'

### 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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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:



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH11-2'

Report#/Lab ID#: 143473  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 10X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 10X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

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

Report#/Lab ID#: 143473 Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH11-2'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 01:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	15600	mg/Kg	100	<100	06/12/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	10000	mg/Kg	100	<100	06/12/03	8015 mod.	---	17.2	72	105.3	76.6
Volatiles organics-8260b/BTEX	---	---	---	---	06/09/03	8260b	---	---	---	---	---
Benzene	8700	µg/Kg	1000	<1000	06/09/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	60800	µg/Kg	1000	<1000	06/09/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	100000	µg/Kg	1000	<1000	06/09/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	32800	µg/Kg	1000	<1000	06/09/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	82900	µg/Kg	1000	<1000	06/09/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M6S2903BH10-15'

Report#/Lab ID#: 143472  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	74.5	50-150	---
p-Terphenyl	8015 mod.	58.1	50-150	---
1,2-Dichloroethane-d4	8260b	85.6	65-115	---
Toluene-d8	8260b	103	50-120	---

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

**Client:** Environmental Plus, Inc.  
**Attn:** Pat McCasland  
**Address:** 2100 Ave. O  
Eunice NM 88231

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

**Report#/Lab ID#:** 143440 **Report Date:** 06/10/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH3-10  
**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/27/2003 **Time:** 13:30

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA<sup>1</sup>

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics 8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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*Richard Laster*  
Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH3-5

Report#/Lab ID#: 143439  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	71.6	50-150	---
p-Terphenyl	8015 mod.	57.9	50-150	---
1,2-Dichloroethane-d4	8260b	87.7	65-115	---
Toluene-d8	8260b	105	50-120	---

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



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

**Report#/Lab ID#:** 143439 **Report Date:** 06/10/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH3-5  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/27/2003 **Time:** 13:15

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatiles organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Richard Laster

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## Exceptions Report:

**Report #/Lab ID#:** 143438 **Matrix:** soil  
**Client:** Environmental Plus, Inc.  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH3-2

**Attn:** Pat McCasland

### 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.

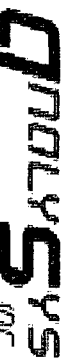
### J Flag Discussion

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	Qualifier	Comment
1-Chlorooctane	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 recovers not accurately quantifiable.
1-Chlorooctane	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.

### Notes:



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

<b>Client:</b> Environmental Plus, Inc. <b>Attn:</b> Pat McCasland	<b>Project ID:</b> 2003-00136 14 Main #6 <b>Sample Name:</b> SE14M652703BH3-2	<b>Report#/Lab ID#:</b> 143438 <b>Sample Matrix:</b> soil
---	--	--

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	none/diluted none/diluted	diluted @ 2.5X diluted @ 2.5X	D
p-Terphenyl				D
1,2-Dichloroethane-d4	8260b	85.1	65-115	---
Toluene-d8	8260b	90.4	50-120	---

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

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

**Report#/Lab ID#:** 143438 **Report Date:** 06/10/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH3-2  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/27/2003 **Time:** 12:45

## REPORT OF ANALYSIS

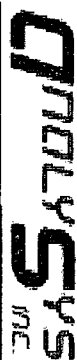
## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	2240	mg/Kg	25	<25	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	1210	mg/Kg	25	<25	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/09/03	8260b	---	---	---	---	---
Benzene	106	µg/Kg	20	<20	06/09/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	13400	µg/Kg	1000	<1000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	24300	µg/Kg	1000	<1000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	8260	µg/Kg	1000	<1000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	6890	µg/Kg	1000	<1000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.



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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH2-15

Report#/Lab ID#: 143437  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	76.2	50-150	---
p-Terphenyl	8015 mod.	53.7	50-150	---
1,2-Dichloroethane-d4	8260b	91.2	65-115	---
Toluene-d8	8260b	114	50-120	---

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

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

**Report#/Lab ID#:** 143437 **Report Date:** 06/10/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH2-15  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/27/2003 **Time:** 11:40

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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**Exceptions Report:**

<b>Report #/Lab ID#:</b> 143436 <b>Matrix:</b> soil	<b>Attn:</b> Pat McCasland
<b>Client:</b> Environmental Plus, Inc.	
<b>Project ID:</b> 2003-00136 14 Main #6	
<b>Sample Name:</b> SE14M652703BH2-10	

**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.

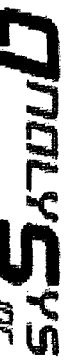
**J flag Discussion**

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 (ROL) 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
m,p-Xylenes	J	See J-flag discussion above.

Notes:



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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH2-10

Report#/Lab ID#: 143436  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	70.2	50-150	---
p-Terphenyl	8015 mod.	50.8	50-150	---
1,2-Dichloroethane-d4	8260b	94.7	65-115	---
Toluene-d8	8260b	114	50-120	---

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



**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Eunice

NM 88231

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

**Report#/Lab ID#:** 143436 **Report Date:** 06/10/03

**Project ID:** 2003-00136 14 Main #6

**Sample Name:** SE14M652703BH2-10

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/27/2003 **Time:** 11:20

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

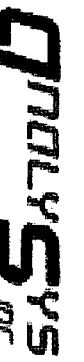
Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	156	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	12.2	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	J	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH2-5

Report#/Lab ID#: 143435  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	70.2	50-150	---
p-Terphenyl	8015 mod.	51.7	50-150	---
1,2-Dichloroethane-d4	8260b	87.4	65-115	---
Toluene-d8	8260b	101	50-120	---

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

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

**Report#/Lab ID#:** 143435 **Report Date:** 06/10/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH2-5  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/27/2003 **Time:** 11:10

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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## Exceptions Report:

**Report #/Lab ID#:** 143434 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652703BH2-2

### 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 (ROL) 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.
Ethylbenzene	J	See J-flag discussion above.
o-Xylene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

### Notes:



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH2-2

Report#/Lab ID#: 143434  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	83.1	50-150	---
p-Terphenyl	8015 mod.	63.8	50-150	---
1,2-Dichloroethane-d4	8260b	88.8	65-115	---
Toluene-d8	8260b	106	50-120	---

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

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Bunice NM 88231

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

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	27.8	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	J	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	J	5.7	101.7	98.4	102.1
m,p-Xylenes	35.4	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	J	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	J	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

Report#/Lab ID#: 143434 Report Date: 06/10/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652703BH2-2

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/27/2003 Time: 11:00

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M6S2703BH1-15

Report#/Lab ID#: 143433  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	77.8	50-150	---
p-Terphenyl	8015 mod.	55.9	50-150	---
1,2-Dichloroethane-d4	8260b	90.3	65-115	---
Toluene-d8	8260b	102	50-120	---

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143433

Report Date: 06/10/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652703BH1-15

Sample Matrix: soil

Date Received: 06/03/2003

Time: 10:30

Date Sampled: 05/27/2003

Time: 10:45

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M6S2703BH1-10

Report#/Lab ID#: 143432  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	82.9	50-150	---
p-Terphenyl	8015 mod.	63.4	50-150	---
1,2-Dichloroethane-d4	8260b	77.2	65-115	---
Toluene-d8	8260b	96.1	50-120	---

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

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

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NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143432 Report Date: 06/10/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652703BH1-10

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/27/2003 Time: 10:30

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<10	mg/Kg	10	<10	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ex)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<10	mg/Kg	10	<10	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Richard Laster

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**Exceptions Report:**

<b>Report #/Lab ID#:</b> 143431	<b>Matrix:</b> soil	<b>Attn:</b> Pat McCasland
<b>Client:</b> Environmental Plus, Inc.		
<b>Project ID:</b> 2003-00136 14 Main #6		
<b>Sample Name:</b> SE14M652703BH1-5		

**Sample Temperature/Condition** <=6°C

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

**Sample Bottles & Preservation**

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

**J flag Discussion**

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

**Comments pertaining to Data Qualifiers and QC data:**

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

Notes:



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

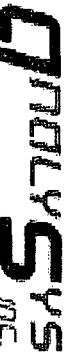
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH1-5

Report#/Lab ID#: 143431  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	78.6	50-150	---
p-Terphenyl	8015 mod.	50.7	50-150	---
1,2-Dichloroethane-d4	8260b	88.3	65-115	---
Toluene-d8	8260b	114	50-120	---

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



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**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Bunice

NM 88231

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

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

**Report#/Lab ID#:** 143431 **Report Date:** 06/10/03

**Project ID:** 2003-00136 14 Main #6

**Sample Name:** SE14M652703BH1-5

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/27/2003 **Time:** 10:15

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/05/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/05/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	J	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

## QUALITY ASSURANCE DATA<sup>1</sup>

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# Exceptions Report:

Report #/Lab ID#: 143430	Matrix: soil
Client: Environmental Plus, Inc.	Attn: Pat McCasland
Project ID: 2003-00136 14 Main #6	
Sample Name: SE14M652703BH1-2	

## Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GF/A 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

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- ☐ 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 (ROL) 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.
o-Xylene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

## Notes:


Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652703BH1-2

Report#/Lab ID#: 143430  
Sample Matrix: soil

## REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Chlorooctane	8015 mod.	75.9	50-150	---
Terphenyl	8015 mod.	54	50-150	---
2-Dichloroethane-d4	8260b	89.6	65-115	---
fluene-d8	8260b	103	50-120	---

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

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143430 Report Date: 06/10/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652703BH1-2

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/27/2003 Time: 10:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	11.9	mg/Kg	5	<5	06/05/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/05/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	J	5.7	101.7	98.4	102.1
m,p-Xylenes	39.3	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	J	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	J	4.7	90.1	110.3	91.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH10-10'

Report#/Lab ID#: 143471  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod. 8015 mod.	75 57.3	50-150 50-150	--- ---
p-Terphenyl				
1,2-Dichloroethane-d4	8260b 8260b	86.4 104	65-115 50-120	--- ---
Toluene-d8				

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

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

**Report#/Lab ID#:** 143472 **Report Date:** 06/13/03  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH10-15'  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/29/2003 **Time:** 11:45

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	17.2	72	105.3	76.6
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Richard Laster

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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143471 Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH10-10'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 11:05

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/11/03	8015 mod.	---	17.2	72	105.3	76.6
Volatiles organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*  
Richard Laster

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). 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.

## Exceptions Report:

**Report #/Lab ID#:** 143470 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH10-5'

### Sample Temperature/Condition $\leq 6^{\circ}\text{C}$

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

### Sample Bottles & Preservation

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

### J flag Discussion

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

### Comments pertaining to Data Qualifiers and QC data:

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

Notes:



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

<b>Client:</b> Environmental Plus, Inc.	<b>Project ID:</b> 2003-00136 14" Main #6	<b>Report#/Lab ID#:</b> 143470
<b>Attn:</b> Pat McCasland	<b>Sample Name:</b> SE14M652903BH10-5'	<b>Sample Matrix:</b> soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	64.2	50-150	---
p-Terphenyl	8015 mod.	61	50-150	---
1,2-Dichloroethane-d4	8260b	82.1	65-115	---
Toluene-d8	8260b	92.9	50-120	---

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

**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Bunice

NM 88231

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

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

**Report#/Lab ID#:** 143470 **Report Date:** 06/13/03

**Project ID:** 2003-00136 14" Main #6

**Sample Name:** SE14M652903BH10-5'

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/29/2003 **Time:** 10:35

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	94.3	mg/Kg	5	<5	06/11/03	8015 mod.	---	14.5	72	105.6	78.5
TPH by GC (as diesel-ext)	---	---	---	---	06/11/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	34.4	mg/Kg	5	<5	06/11/03	8015 mod.	---	17.2	72	105.3	76.6
Volatle organics-8260b/BTEX	---	---	---	---	06/09/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/09/03	8260b	1	3.6	81.7	88.2	83.2
Ethylbenzene	484	µg/Kg	20	<20	06/09/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	903	µg/Kg	20	<20	06/09/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	346	µg/Kg	20	<20	06/09/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	227	µg/Kg	20	<20	06/09/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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## Exceptions Report:

**Report #/Lab ID#:** 143469 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH10-2'

### 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

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☐ 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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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:



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: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH10-2'

Report#/Lab ID#: 143469  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 10X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 10X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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





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

**Report#/Lab ID#:** 143469 **Report Date:** 06/13/03  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH10-2'  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/29/2003 **Time:** 10:20

# REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	8300	mg/Kg	100	<100	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	6260	mg/Kg	100	<100	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/09/03	8260b	---	---	---	---	---
Benzene	9480	µg/Kg	1000	<1000	06/09/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	56000	µg/Kg	1000	<1000	06/09/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	101000	µg/Kg	1000	<1000	06/09/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	35400	µg/Kg	1000	<1000	06/09/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	81400	µg/Kg	1000	<1000	06/09/03	8260b	---	0.6	82.2	88.5	84.8

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Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

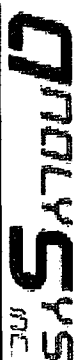
Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH9-15'

Report#/Lab ID#: 143468  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
I-Chlorooctane	8015 mod.	76.3	50-150	---
p-Terphenyl	8015 mod.	74.2	50-150	---
1,2-Dichloroethane-d4	8260b	91.3	65-115	---
Toluene-d8	8260b	109	50-120	---

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143468 Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH9-15'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 09:45

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA<sup>1</sup>

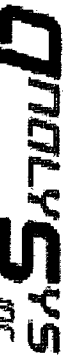
Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH9-10'

Report#/Lab ID#: 143467  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	73.5	50-150	---
p-Terphenyl	8015 mod.	71.6	50-150	---
1,2-Dichloroethane-d4	8260b	83.7	65-115	---
Toluene-d8	8260b	109	50-120	---

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

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

**Report#/Lab ID#:** 143467 **Report Date:** 06/13/03  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH9-10'  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/29/2003 **Time:** 09:20

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA<sup>1</sup>

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Richard Laster

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# Exceptions Report:

<b>Report #/Lab ID#:</b> 143466	<b>Matrix:</b> soil
<b>Client:</b> Environmental Plus, Inc.	<b>Attn:</b> Pat McCasland
<b>Project ID:</b> 2003-00136 14" Main #6	
<b>Sample Name:</b> SE14M652903BH9-5'	

## Sample Temperature/Condition <=6°C

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

## Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
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## J flag Discussion

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## Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualifier	Comment
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:

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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: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH9-5'

Report#/Lab ID#: 143466  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

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

**Report#/Lab ID#:** 143466 **Report Date:** 06/13/03  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH9-5'  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/29/2003 **Time:** 09:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	10800	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	12900	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatle organics-8260b/BTEX	---	---	---	---	06/07/03	8260b	---	---	---	---	---
Benzene	43000	µg/Kg	5000	<5000	06/07/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	163000	µg/Kg	5000	<5000	06/07/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	275000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	86300	µg/Kg	5000	<5000	06/07/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	217000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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). 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.



## Exceptions Report:

**Report #/Lab ID#:** 143465    **Matrix:** soil  
**Client:** Environmental Plus, Inc.  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH9-2'

**Attn:** Pat McCasland

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GF/AA 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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland

Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH9-2'

Report#/Lab ID#: 143465  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143465 Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH9-2'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 08:45

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	11100	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	17200	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/07/03	8260b	---	---	---	---	---
Benzene	64600	µg/Kg	5000	<5000	06/07/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	226000	µg/Kg	5000	<5000	06/07/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	367000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	118000	µg/Kg	5000	<5000	06/07/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	291000	µg/Kg	5000	<5000	06/07/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA<sup>1</sup>

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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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: Pat McCasland

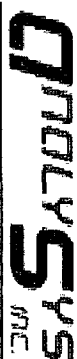
Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH8-15'

Report#/Lab ID#: 143464  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
I-Chlorooctane	8015 mod.	80.3	50-150	---
p-Terphenyl	8015 mod.	81.7	50-150	---
1,2-Dichloroethane-d4	8260b	84	65-115	---
Toluene-d8	8260b	101	50-120	---

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



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143464 Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH8-15'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 08:20

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA<sup>1</sup>

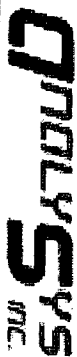
Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*  
Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

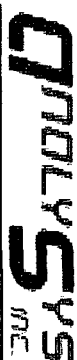
Project ID: 2003-00136 14" Main #6  
Sample Name: SE14M652903BH8-10'

Report#/Lab ID#: 143463  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	72.1	50-150	---
p-Terphenyl	8015 mod.	50.6	50-150	---
1,2-Dichloroethane-d4	8260b	83.9	65-115	---
Toluene-d8	8260b	98.6	50-120	---

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



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

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eumice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143463

Report Date: 06/13/03

Project ID: 2003-00136 14" Main #6

Sample Name: SE14M652903BH8-10'

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/29/2003 Time: 08:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

## QUALITY ASSURANCE DATA<sup>1</sup>

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## Exceptions Report:

**Report #/Lab ID#:** 143462 **Matrix:** soil  
**Client:** Environmental Plus, Inc. **Attn:** Pat McCasland  
**Project ID:** 2003-00136 14" Main #6  
**Sample Name:** SE14M652903BH8-5'

### Sample Temperature/Condition <=6°C

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

### Sample Bottles & Preservation

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

### J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (ROL) 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	Qualifier	Comment
1,2-Dichloroethane-d4	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 recovers not accurately quantifiable.
1,2-Dichloroethane-d4	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 recovers not accurately quantifiable.
1-Chlorooctane	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 recovers not accurately quantifiable.
1-Chlorooctane	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.
Toluene-d8	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 recovers not accurately quantifiable.
Toluene-d8	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 recovers not accurately quantifiable.

### Notes:



Send Report to:

Bill to (if differ):

Company Name Environmental Plus

Company Name Scott Energy

Address 8100 Ave C

Address 5805 Hwy 80

City San Jose State NM Zip 88231

City Midland State TX Zip 79701

ATTN: Pat McAsland

ATTN: Frank Hernandez

Phone 505-394-3481 Fax 505-394-2601

Phone 955-638-3199 Fax

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 2013-00134 Sampler: Shelly

14 M411112

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Analyses Requested (1) Please attach explanatory information as re				Comments
								TPH 505B	BTEX 505B	505B	505B	
SE14M650703BH1-2	5-27-03	10:00	1	X			143430	X	X			
SE14M650703BH1-5	5-27-03	10:15	1	X			143431	X	X			
SE14M650703BH1-10	5-27-03	10:30	1	X			143432	X	X			
SE14M650703BH1-15	5-27-03	10:45	1	X			143433	X	X			
SE14M650703BH2-2	5-27-03	11:00	1	X			143434	X	X			
SE14M650703BH2-5	5-27-03	11:10	1	X			143435	X	X			
SE14M650703BH2-10	5-27-03	11:20	1	X			143436	X	X			
SE14M650703BH2-15	5-27-03	11:40	1	X			143437	X	X			
SE14M650703BH3-2	5-27-03	12:45	1	X			143438	X	X			
SE14M650703BH3-5	5-27-03	1:15	1	X			143439	X	X			

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal ref limits (MDL/POL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollut ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

T=5.20C

Sample Relinquished By

Sample Received By

Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
Shelly	Environmental Plus	5-27-03		Malorie Thompson	ASI	6/3/03	10:30

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

4221 Friedrich Lane, Suite 190, Austin, TX 78745  
(512) 444-5896

1

### Analyses Requested (1)

Please attach explanatory information as re

11

11

\_\_\_\_\_

## Comments

 $T = 5.2^\circ\text{C}$ 

**Sample Received By**

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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: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143442 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH4-2

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 08:00

# REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	34300	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	22600	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	24700	µg/Kg	5000	<5000	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	168000	µg/Kg	5000	<5000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	329000	µg/Kg	5000	<5000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	114000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	166000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

# QUALITY ASSURANCE DATA 1

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH4-2

Report#/Lab ID#: 143442  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
I-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

## Exceptions Report:

<b>Report #/Lab ID#:</b> 143442	<b>Matrix:</b> soil
<b>Client:</b> Environmental Plus, Inc.	<b>Attn:</b> Pat McCasland
<b>Project ID:</b> 2003-00136 14 Main #6	
<b>Sample Name:</b> SE14M652803BH4-2	

### 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 inappropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

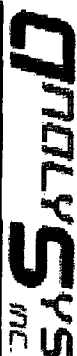
### J flag Discussion:

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 (ROL) 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
1,2-Dichloroethane-d4	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 recovers not accurately quantifiable.
1,2-Dichloroethane-d4	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 recovers not accurately quantifiable.
1-Chlorooctane	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 recovers not accurately quantifiable.
1-Chlorooctane	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.
p-Terphenyl	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 recovers not accurately quantifiable.
Toluene-d8	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 recovers not accurately quantifiable.
Toluene-d8	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 recovers not accurately quantifiable.

### Notes:



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland  
Address: 2100 Ave. O

Elmice NM 88231

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

Report#/Lab ID#: 143443 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH4-5

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 08:10

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	6.51	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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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: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH4-5

Report#/Lab ID#: 143443  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	71.8	50-150	---
p-Terphenyl	8015 mod.	55.4	50-150	---
1,2-Dichloroethane-d4	8260b	87.1	65-115	---
Toluene-d8	8260b	101	50-120	---

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

**Client:** Environmental Plus, Inc.  
**Attn:** Pat McCasland  
**Address:** 2100 Ave. O

Eunice

NM 88231

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

**Report#/Lab ID#:** 143444 **Report Date:** 06/11/03

**Project ID:** 2003-00136 14 Main #6

**Sample Name:** SE14M652803BH4-10

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/28/2003 **Time:** 08:25

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

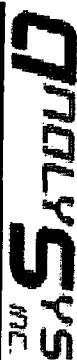
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH4-10

Report#/Lab ID#: 143444  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	71	50-150	---
p-Terphenyl	8015 mod.	53.5	50-150	---
1,2-Dichloroethane-d4	8260b	67.8	65-115	---
Toluene-d8	8260b	65.1	50-120	---

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143445 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH4-15

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 08:40

### REPORT OF ANALYSIS

### QUALITY ASSURANCE DATA 1

Parameter	Result	Units	ROL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	5.52	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatiles organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	<20	µg/Kg	20	<20	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	<20	µg/Kg	20	<20	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	<20	µg/Kg	20	<20	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

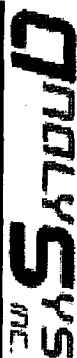
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH4-15

Report#/Lab ID#: 143445  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	79.9	50-150	---
p-Terphenyl	8015 mod.	66	50-150	---
1,2-Dichloroethane-d4	8260b	82.2	65-115	---
Toluene-d8	8260b	113	50-120	---

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



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eumice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143446 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH5-2

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 09:10

## REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	19800	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	15300	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	34800	µg/Kg	5000	<5000	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	180000	µg/Kg	5000	<5000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	305000	µg/Kg	5000	<5000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	99900	µg/Kg	5000	<5000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	215000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Richard Laster

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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-2

Report#/Lab ID#: 143446  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

## Exceptions Report:

Report #/Lab ID#: 143446 Matrix: soil  
Client: Environmental Plus, Inc.  
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-2

Attn: Pat McCasland

### Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is  $\leq 6^{\circ}\text{C}$ . 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 inappropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

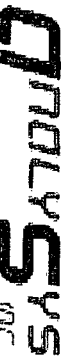
### J flag Discussion:

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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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: Pat McCasland  
Address: 2100 Ave. O  
Eunice NM 88231  
Phone: (505) 394-3481 FAX: (505) 394-2601

Report#/Lab ID#: 143447 Report Date: 06/11/03  
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-5  
Sample Matrix: soil  
Date Received: 06/03/2003 Time: 10:30  
Date Sampled: 05/28/2003 Time: 09:20

# REPORT OF ANALYSIS

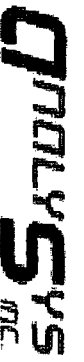
## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	19600	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	16800	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatile organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	72500	µg/Kg	5000	<5000	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	236000	µg/Kg	5000	<5000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	353000	µg/Kg	5000	<5000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	112000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	346000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-5

Report#/Lab ID#: 143447  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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



## Exceptions Report:

Report #/Lab ID#: 143447 Matrix: soil  
Client: Environmental Plus, Inc.  
Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-5

Attn: Pat McCasland

### 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 (ROL) 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143448 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH5-10

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 09:30

# REPORT OF ANALYSIS

## QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	6740	mg/Kg	50	<50	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	7100	mg/Kg	50	<50	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatiles organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	17800	µg/Kg	5000	<5000	06/05/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	80000	µg/Kg	5000	<5000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	135000	µg/Kg	5000	<5000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	42000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	100000	µg/Kg	5000	<5000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

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. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-10

Report#/Lab ID#: 143448  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

## Exceptions Report:

**Report #/Lab ID#:** 143448 **Matrix:** soil  
**Client:** Environmental Plus, Inc.  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH5-10

**Attn:** Pat McCasland

### Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

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

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### J flag Discussion:

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### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
1-Chlorooctane	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.
p-Terphenyl	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.
p-Terphenyl	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.
Toluene-d8	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.
Toluene-d8	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:



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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143449 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH5-15

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 09:40

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	583	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.5	74.4	88.9	78.2
TPH by GC (as diesel-ext)	---	---	---	---	06/05/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	297	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	80	94.9	80.2
Volatle organics-8260b/BTEX	---	---	---	---	06/05/03	8260b	---	---	---	---	---
Benzene	253	µg/Kg	20	<20	06/09/03	8260b	---	2.4	83.2	86.9	84.8
Ethylbenzene	3490	µg/Kg	1000	<1000	06/05/03	8260b	---	5.7	101.7	98.4	102.1
m,p-Xylenes	6300	µg/Kg	1000	<1000	06/05/03	8260b	---	3.3	109.7	100.7	114.3
o-Xylene	2100	µg/Kg	1000	<1000	06/05/03	8260b	---	4.1	107.1	98.4	111.1
Toluene	2760	µg/Kg	1000	<1000	06/05/03	8260b	---	4.7	90.1	110.3	91.2

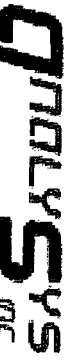
This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*

Richard Laster

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

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-15

Report#/Lab ID#: 143449  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	62.5	50-150	---
p-Terphenyl	8015 mod.	57.9	50-150	---
1,2-Dichloroethane-d4	8260b	77.8	65-115	---
Toluene-d8	8260b	78.2	50-120	---

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

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

**Report#/Lab ID#:** 143450 **Report Date:** 06/11/03  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH5-20  
**Sample Matrix:** soil  
**Date Received:** 06/03/2003 **Time:** 10:30  
**Date Sampled:** 05/28/2003 **Time:** 10:20

## REPORT OF ANALYSIS

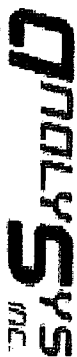
Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	5.89	mg/Kg	5	<5	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,  
*Richard Laster*  
Richard Laster

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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-20

Report#/Lab ID#: 143450  
Sample Matrix: soil

# REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
I-Chlorooctane	8015 mod.	73.1	50-150	---
P-Terphenyl	8015 mod.	72.9	50-150	---
1,2-Dichloroethane-d4	8260b	79.9	65-115	---
Toluene-d8	8260b	95	50-120	---

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





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: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143451 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH5-25

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 11:00

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	J	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

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Respectfully Submitted,

*Richard Laster*

Richard Laster

## QUALITY ASSURANCE DATA 1

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). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.



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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH5-25

Report#/Lab ID#: 143451  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
I-Chlorooctane	8015 mod.	69.5	50-150	---
p-Terphenyl	8015 mod.	59.1	50-150	---
1,2-Dichloroethane-d4	8260b	84.5	65-115	---
Toluene-d8	8260b	101	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 143451	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2003-00136 14 Main #6		
Sample Name: SE14M652803BH5-25		

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GF/AA 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 inappropriate 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 (ROL) 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	Qualifier	Comment
TPH by GC (as diesel)	J	See J-flag discussion above.

Notes:

**Client:** Environmental Plus, Inc.

**Attn:** Pat McCasland

**Address:** 2100 Ave. O

Eunice

NM 88231

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

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

**Report#/Lab ID#:** 143452 **Report Date:** 06/11/03

**Project ID:** 2003-00136 14 Main #6

**Sample Name:** SE14M652803BH6-2

**Sample Matrix:** soil

**Date Received:** 06/03/2003 **Time:** 10:30

**Date Sampled:** 05/28/2003 **Time:** 11:20

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	22300	mg/Kg	500	<500	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	12700	mg/Kg	500	<500	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/09/03	8260b	---	---	---	---	---
Benzene	16800	µg/Kg	5000	<5000	06/09/03	8260b	---	3.6	81.7	88.2	83.2
Ethylbenzene	143000	µg/Kg	5000	<5000	06/09/03	8260b	---	4.1	95.1	97.3	97.9
m,p-Xylenes	245000	µg/Kg	5000	<5000	06/09/03	8260b	---	0.7	104.9	107.2	106
o-Xylene	82700	µg/Kg	5000	<5000	06/09/03	8260b	---	1.6	102.2	104.5	105.2
Toluene	149000	µg/Kg	5000	<5000	06/09/03	8260b	---	0.6	82.2	88.5	84.8

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH6-2

Report#/Lab ID#: 143452  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
I-Chlorooctane	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

## Exceptions Report:

**Report #/Lab ID#:** 143452 **Matrix:** soil  
**Client:** Environmental Plus, Inc.  
**Project ID:** 2003-00136 14 Main #6  
**Sample Name:** SE14M652803BH6-2

**Attn:** Pat McCasland

### Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is  $\leq 6^{\circ}\text{C}$ . 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
1,2-Dichloroethane-d4	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.
1,2-Dichloroethane-d4	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.
1-Chlorooctane	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.
p-Terphenyl	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.
Toluene-d8	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.

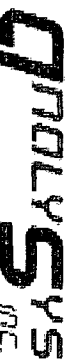
### Notes:

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Client: Environmental Plus, Inc.

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NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143453 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH6-5

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 11:30

## REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatile organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH6-5

Report#/Lab ID#: 143453  
Sample Matrix: soil

### REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	66.8	50-150	---
p-Terphenyl	8015 mod.	53.3	50-150	---
1,2-Dichloroethane-d4	8260b	85.2	65-115	---
Toluene-d8	8260b	102	50-120	---

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





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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143454 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH6-10

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 11:45

# REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual. <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/06/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

## QUALITY ASSURANCE DATA 1

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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Client: Environmental Plus, Inc.  
Attn: Pat McCasland

Project ID: 2003-00136 14 Main #6  
Sample Name: SE14M652803BH6-10

Report#/Lab ID#: 143454  
Sample Matrix: soil

## REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitise	Data Qualifiers
1-Chlorooctane	8015 mod.	67.6	50-150	---
p-Terphenyl	8015 mod.	51.7	50-150	---
1,2-Dichloroethane-d4	8260b	84.8	65-115	---
Toluene-d8	8260b	101	50-120	---

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

**Sample Analysis Case Narrative & Exceptions Report**Client: ENVIRONMENTAL PLUS Project ID: 2003-00136 14 MAIN #6Attn: PAT MCCASLANDfor Sample #'s 143455 thru —Final Review Date: 6/12/03 By: [Signature] JIM DONNEL for  
(R.J. Laster)

FOR TPH by GC; SAMPLE REQUIRED DILUTION  
DUE TO MATRIX INTERFERENCE, ORIGINAL  
SAMPLE VOLUME ABSORBED ORIGINAL SOLVENT  
ALLOUT, ADDITIONAL SOLVENT NECESSARY.



3512 Montopolis Drive, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78408  
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Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

Report#/Lab ID#: 143455 Report Date: 06/11/03

Project ID: 2003-00136 14 Main #6

Sample Name: SE14M652803BH6-15

Sample Matrix: soil

Date Received: 06/03/2003 Time: 10:30

Date Sampled: 05/28/2003 Time: 12:00

## 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)	<10	mg/Kg	10	<10	06/09/03	8015 mod.	---	3.4	77.6	88.9	72
TPH by GC (as diesel-ext)	---	---	---	---	06/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<10	mg/Kg	10	<10	06/09/03	8015 mod.	---	0.5	79.4	97	81.1
Volatiles organics-8260b/BTEX	---	---	---	---	06/06/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	2.2	82	82.3	84.4
Ethylbenzene	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.6	103.1	105.9	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	06/06/03	8260b	---	0.4	107.7	110.8	113.8
o-Xylene	<20	µg/Kg	20	<20	06/06/03	8260b	---	9.5	97	109.7	111.9
Toluene	<20	µg/Kg	20	<20	06/06/03	8260b	---	3.4	85.9	86.6	92.2

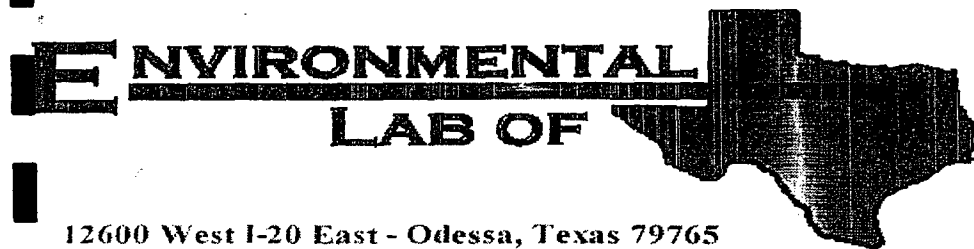
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Respectfully Submitted,

*Richard Laster*

Richard Laster

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# Analytical Report

**Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6

Project Number: 2003-00135

Location: None Given

Lab Order Number: 4E21005

Report Date: 05/27/04

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
05/27/04 09:49

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SLVJ6514041	4E21005-01	Soil	05/14/04 11:35	05/21/04 09:25
SLVJ6514042	4E21005-02	Soil	05/14/04 11:36	05/21/04 09:25
SLVJ6514043	4E21005-03	Soil	05/14/04 11:37	05/21/04 09:25
SLVJ6514044	4E21005-04	Soil	05/14/04 11:38	05/21/04 09:25
SLVJ6518046	4E21005-05	Soil	05/18/04 10:55	05/21/04 09:25
SLVJ6518047	4E21005-06	Soil	05/18/04 10:59	05/21/04 09:25
SLVJ6518048	4E21005-07	Soil	05/18/04 11:02	05/21/04 09:25
SLVJ6518049	4E21005-08	Soil	05/18/04 11:05	05/21/04 09:25
SLVJ65180410	4E21005-09	Soil	05/18/04 11:07	05/21/04 09:25
SLVJ65180411	4E21005-10	Soil	05/18/04 01:14	05/21/04 09:25
SLVJ65180412	4E21005-11	Soil	05/18/04 01:16	05/21/04 09:25
SLVJ65180413	4E21005-12	Soil	05/18/04 01:19	05/21/04 09:25
SLVJ65180414	4E21005-13	Soil	05/18/04 01:22	05/21/04 09:25
SLVJ65200415	4E21005-14	Soil	05/20/04 11:26	05/21/04 09:25
SLVJ65200416	4E21005-15	Soil	05/20/04 01:45	05/21/04 09:25
SLVJ65200417	4E21005-16	Soil	05/20/04 02:10	05/21/04 09:25
SLVJ65200418	4E21005-17	Soil	05/20/04 02:14	05/21/04 09:25
SLVJ65200419	4E21005-18	Soil	05/20/04 02:17	05/21/04 09:25
SLVJ65200420	4E21005-19	Soil	05/20/04 02:20	05/21/04 09:25
SLVJ65200421	4E21005-20	Soil	05/20/04 02:40	05/21/04 09:25
SLVJ65200422	4E21005-21	Soil	05/20/04 02:50	05/21/04 09:25
SLVJ65200423	4E21005-22	Soil	05/20/04 03:00	05/21/04 09:25
SLVJ65200424	4E21005-23	Soil	05/20/04 03:10	05/21/04 09:25
SLVJ65200425	4E21005-24	Soil	05/20/04 03:20	05/21/04 09:25
SLVJ65200426	4E21005-25	Soil	05/20/04 03:30	05/21/04 09:25
SLVJ65200427	4E21005-26	Soil	05/20/04 03:40	05/21/04 09:25

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ6514041 (4E21005-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.158	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.608	0.0250	"	"	"	"	"	"	
Xylene (o)	0.304	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	440	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	2570	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	3010	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		121 %	70-130		"	"	"	"	

<b>SLVJ6514042 (4E21005-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/21/04	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		84.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.1 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		93.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		98.2 %	70-130		"	"	"	"	

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Quality Assurance Review

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ6514043 (4E21005-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/21/04	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		85.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [6.19]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		90.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.6 %	70-130		"	"	"	"	

**SLVJ6514044 (4E21005-04) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/21/04	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		84.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		86.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		91.4 %	70-130		"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ6518046 (4E21005-05) Soil</b>									
Benzene	0.177	0.0250	mg/kg dry	25	EE42501	05/21/04	05/21/04	EPA 8021B	
Toluene	1.72	0.0250	"	"	"	"	"	"	
Ethylbenzene	4.16	0.0250	"	"	"	"	"	"	
Xylene (p/m)	7.90	0.0250	"	"	"	"	"	"	
Xylene (o)	2.68	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		208 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		85.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	338	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	790	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1130	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		109 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-130		"	"	"	"	

<b>SLVJ6518047 (4E21005-06) Soil</b>									
Benzene	2.13	0.100	mg/kg dry	100	EE42501	05/21/04	05/21/04	EPA 8021B	
Toluene	19.2	0.100	"	"	"	"	"	"	
Ethylbenzene	26.8	0.100	"	"	"	"	"	"	
Xylene (p/m)	48.1	0.100	"	"	"	"	"	"	
Xylene (o)	19.0	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		364 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		92.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	1350	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	2790	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	4140	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		126 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-130		"	"	"	"	

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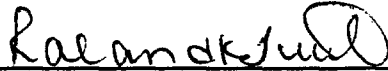
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**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ6518048 (4E21005-07) Soil</b>									
Benzene	1.36	0.100	mg/kg dry	100	EE42501	05/21/04	05/21/04	EPA 8021B	
Toluene	13.6	0.100	"	"	"	"	"	"	
Ethylbenzene	20.8	0.100	"	"	"	"	"	"	
Xylene (p/m)	36.9	0.100	"	"	"	"	"	"	
Xylene (o)	13.4	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		292 %	80-120	"	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		88.7 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	3600	50.0	mg/kg dry	5	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	15100	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	18700	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		30.6 %	70-130	"	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		58.8 %	70-130	"	"	"	"	"	S-06
<b>SLVJ6518049 (4E21005-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	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		85.4 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.0 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		91.2 %	70-130	"	"	"	"	"	

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Quality Assurance Review

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>LVJ65180410 (4E21005-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	EPA 8021B	
Toluene	0.0435	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.117	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.242	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0925	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		85.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.6 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	136	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	2130	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	2270	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	
<b>LVJ65180411 (4E21005-10) Soil</b>									
Benzene	0.192	0.100	mg/kg dry	100	EE42501	05/21/04	05/21/04	EPA 8021B	
Toluene	1.06	0.100	"	"	"	"	"	"	
Ethylbenzene	2.24	0.100	"	"	"	"	"	"	
Xylene (p/m)	4.68	0.100	"	"	"	"	"	"	
Xylene (o)	1.69	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		119 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	812	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	5820	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	6630	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		114 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		154 %	70-130		"	"	"	"	S-04

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Quality Assurance Review

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Plains All American EH & S  
1301 S. County Road 1150  
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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
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05/27/04 09:49

**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65180412 (4E21005-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	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		84.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [6.81]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		90.8 %	70-130		"	"	"	"	
<b>SLVJ65180413 (4E21005-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	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		84.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [7.93]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		82.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		83.4 %	70-130		"	"	"	"	

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Quality Assurance Review

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
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Fax: (432) 687-4914


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05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>LVJ65180414 (4E21005-13) Soil</b>									
Benzene	J [0.0184]	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	EPA 8021B	J
Toluene	0.143	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.358	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.733	0.0250	"	"	"	"	"	"	
Xylene (o)	0.234	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	129	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	1310	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1440	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		100 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		117 %	70-130		"	"	"	"	
<b>LVJ65200415 (4E21005-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	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		84.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		82.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		84.6 %	70-130		"	"	"	"	

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Quality Assurance Review

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200416 (4E21005-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	05/23/04	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		82.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		91.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		93.6 %	70-130		"	"	"	"	
<b>SLVJ65200417 (4E21005-16) Soil</b>									
Benzene	0.204	0.100	mg/kg dry	100	EE42501	05/21/04	05/23/04	EPA 8021B	
Toluene	0.816	0.100	"	"	"	"	"	"	
Ethylbenzene	1.61	0.100	"	"	"	"	"	"	
Xylene (p/m)	3.23	0.100	"	"	"	"	"	"	
Xylene (o)	1.22	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		115 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.6 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	255	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	1620	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1880	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		118 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	

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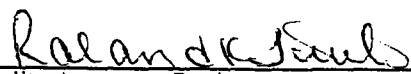
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**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200418 (4E21005-17) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	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		81.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-130		"	"	"	"	
<b>LVJ65200419 (4E21005-18) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42501	05/21/04	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		81.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		81.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		86.6 %	70-130		"	"	"	"	

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**Organics by GC**  
**Environmental Lab of Texas**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200420 (4E21005-19) Soil</b>									
Benzene	0.0341	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	0.0658	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.0609	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.167	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0331	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		88.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	18.6	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	392	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	411	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		90.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		98.0 %	70-130		"	"	"	"	

**SLVJ65200421 (4E21005-20) 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		81.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	J [5.59]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		102 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.8 %	70-130		"	"	"	"	

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Project Manager: Jeff Dann

Fax: (432) 687-4914

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200422 (4E21005-21) Soil</b>									
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		82.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		88.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.2 %	70-130		"	"	"	"	
<b>SLVJ65200423 (4E21005-22) Soil</b>									
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		82.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	42.8	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	42.8	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		104 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		105 %	70-130		"	"	"	"	

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Quality Assurance Review

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
05/27/04 09:49

**Organics by GC**  
**Environmental Lab of Texas**

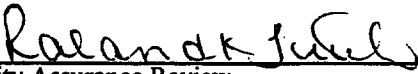
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200424 (4E21005-23) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42102	05/21/04	05/23/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %	70-130		"	"	"	"	

**SLVJ65200425 (4E21005-24) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/25/04	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		107 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42103	05/24/04	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		83.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		93.4 %	70-130		"	"	"	"	

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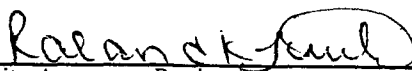
**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>LVJ65200426 (4E21005-25) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE42504	05/24/04	05/24/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.3 %	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	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	91.0	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	91.0	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.8 %	70-130		"	"	"	"	

<b>LVJ65200427 (4E21005-26) Soil</b>									
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		81.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42103	05/24/04	05/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		101 %	70-130		"	"	"	"	

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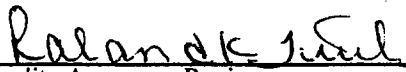
  
Quality Assurance Review

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ6514041 (4E21005-01) Soil</b>									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6514042 (4E21005-02) Soil</b>									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6514043 (4E21005-03) Soil</b>									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6514044 (4E21005-04) Soil</b>									
% Solids	91.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6518046 (4E21005-05) Soil</b>									
% Solids	89.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6518047 (4E21005-06) Soil</b>									
% Solids	89.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6518048 (4E21005-07) Soil</b>									
% Solids	95.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ6518049 (4E21005-08) Soil</b>									
% Solids	98.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65180410 (4E21005-09) Soil</b>									
% Solids	97.0		%	1	EE42402	05/21/04	05/21/04	% calculation	

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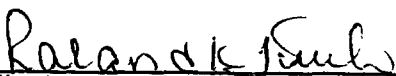
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**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLVJ65180411 (4E21005-10) Soil									
% Solids	96.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65180412 (4E21005-11) Soil									
% Solids	88.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65180413 (4E21005-12) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65180414 (4E21005-13) Soil									
% Solids	91.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65200415 (4E21005-14) Soil									
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65200416 (4E21005-15) Soil									
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65200417 (4E21005-16) Soil									
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65200418 (4E21005-17) Soil									
% Solids	93.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
SLVJ65200419 (4E21005-18) Soil									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	

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Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
05/27/04 09:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SLVJ65200420 (4E21005-19) Soil</b>									
% Solids	89.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200421 (4E21005-20) Soil</b>									
% Solids	97.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200422 (4E21005-21) Soil</b>									
% Solids	98.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200423 (4E21005-22) Soil</b>									
% Solids	91.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200424 (4E21005-23) Soil</b>									
% Solids	94.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200425 (4E21005-24) Soil</b>									
% Solids	88.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200426 (4E21005-25) Soil</b>									
% Solids	92.0		%	1	EE42402	05/21/04	05/21/04	% calculation	
<b>SLVJ65200427 (4E21005-26) Soil</b>									
% Solids	98.0		%	1	EE42402	05/21/04	05/21/04	% calculation	

Environmental Lab of Texas

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Quality Assurance Review

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

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
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**Batch EE42102 - Solvent Extraction (GC)**

**Blank (EE42102-BLK1)**

Prepared: 05/21/04 Analyzed: 05/22/04

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	38.6		mg/kg	50.0		77.2	70-130			
Surrogate: 1-Chlorooctadecane	36.8		"	50.0		73.6	70-130			

**Blank (EE42102-BLK2)**

Prepared: 05/21/04 Analyzed: 05/23/04

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	36.1		mg/kg	50.0		72.2	70-130			
Surrogate: 1-Chlorooctadecane	36.7		"	50.0		73.4	70-130			

**LCS (EE42102-BS1)**

Prepared: 05/21/04 Analyzed: 05/22/04

Gasoline Range Organics C6-C12	424	10.0	mg/kg wet	500		84.8	75-125			
Diesel Range Organics >C12-C35	452	10.0	"	500		90.4	75-125			
Total Hydrocarbon C6-C35	876	10.0	"	1000		87.6	75-125			
Surrogate: 1-Chlorooctane	49.0		mg/kg	50.0		98.0	70-130			
Surrogate: 1-Chlorooctadecane	35.9		"	50.0		71.8	70-130			

**LCS (EE42102-BS2)**

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	419	10.0	mg/kg wet	500		83.8	75-125			
Diesel Range Organics >C12-C35	476	10.0	"	500		95.2	75-125			
Total Hydrocarbon C6-C35	895	10.0	"	1000		89.5	75-125			
Surrogate: 1-Chlorooctane	48.7		mg/kg	50.0		97.4	70-130			
Surrogate: 1-Chlorooctadecane	37.5		"	50.0		75.0	70-130			

**Calibration Check (EE42102-CCV1)**

Prepared: 05/21/04 Analyzed: 05/22/04

Gasoline Range Organics C6-C12	404		mg/kg	500		80.8	80-120			
Diesel Range Organics >C12-C35	504		"	500		101	80-120			
Total Hydrocarbon C6-C35	908		"	1000		90.8	80-120			
Surrogate: 1-Chlorooctane	53.8		"	50.0		108	70-130			
Surrogate: 1-Chlorooctadecane	43.2		"	50.0		86.4	70-130			

Environmental Lab of Texas

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Quality Assurance Review

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1301 S. County Road 1150  
Midland TX, 79706-4476

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Project Number: 2003-00135  
Project Manager: Jeff Dann

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
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**Batch EE42102 - Solvent Extraction (GC)**

**Calibration Check (EE42102-CCV2)**

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	427		mg/kg	500		85.4	80-120			
Diesel Range Organics >C12-C35	474		"	500		94.8	80-120			
Total Hydrocarbon C6-C35	901		"	1000		90.1	80-120			
Surrogate: 1-Chlorooctane	52.7		"	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	41.4		"	50.0		82.8	70-130			

**Matrix Spike (EE42102-MS1)**

Source: 4E21004-01

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	473	10.0	mg/kg dry	562	ND	84.2	75-125			
Diesel Range Organics >C12-C35	537	10.0	"	562	7.32	94.2	75-125			
Total Hydrocarbon C6-C35	1010	10.0	"	1120	ND	90.2	75-125			
Surrogate: 1-Chlorooctane	58.7		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	45.8		"	50.0		91.6	70-130			

**Matrix Spike (EE42102-MS2)**

Source: 4E21005-04

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	479	10.0	mg/kg dry	549	ND	87.2	75-125			
Diesel Range Organics >C12-C35	584	10.0	"	549	ND	106	75-125			
Total Hydrocarbon C6-C35	1060	10.0	"	1100	ND	96.4	75-125			
Surrogate: 1-Chlorooctane	49.1		mg/kg	50.0		98.2	70-130			
Surrogate: 1-Chlorooctadecane	46.2		"	50.0		92.4	70-130			

**Matrix Spike Dup (EE42102-MSD1)**

Source: 4E21004-01

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	474	10.0	mg/kg dry	562	ND	84.3	75-125	0.211	20	
Diesel Range Organics >C12-C35	544	10.0	"	562	7.32	95.5	75-125	1.30	20	
Total Hydrocarbon C6-C35	1020	10.0	"	1120	ND	91.1	75-125	0.985	20	
Surrogate: 1-Chlorooctane	60.7		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	46.0		"	50.0		92.0	70-130			

**Matrix Spike Dup (EE42102-MSD2)**

Source: 4E21005-04

Prepared: 05/21/04 Analyzed: 05/23/04

Gasoline Range Organics C6-C12	495	10.0	mg/kg dry	549	ND	90.2	75-125	3.29	20	
Diesel Range Organics >C12-C35	564	10.0	"	549	ND	103	75-125	3.48	20	
Total Hydrocarbon C6-C35	1060	10.0	"	1100	ND	96.4	75-125	0.00	20	
Surrogate: 1-Chlorooctane	61.8		mg/kg	50.0		124	70-130			
Surrogate: 1-Chlorooctadecane	46.4		"	50.0		92.8	70-130			

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Quality Assurance Review



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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

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
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**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			

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Quality Assurance Review

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1301 S. County Road 1150  
Midland TX, 79706-4476

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Project Number: 2003-00135  
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Fax: (432) 687-4914

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**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			

Environmental Lab of Texas

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Ralanda K. Sidel  
Quality Assurance Review

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

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
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**Batch EE42501 - EPA 5030C (GC)**

**Blank (EE42501-BLK1)**

Prepared & Analyzed: 05/21/04

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	83.4		ug/kg	100		83.4	80-120			
Surrogate: 4-Bromofluorobenzene	83.8		"	100		83.8	80-120			

**LCS (EE42501-BS1)**

Prepared & Analyzed: 05/21/04

Benzene	93.4		ug/kg	100		93.4	80-120			
Toluene	91.1		"	100		91.1	80-120			
Ethylbenzene	89.1		"	100		89.1	80-120			
Xylene (p/m)	174		"	200		87.0	80-120			
Xylene (o)	84.1		"	100		84.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.1		"	100		93.1	80-120			
Surrogate: 4-Bromofluorobenzene	80.8		"	100		80.8	80-120			

**Calibration Check (EE42501-CCV1)**

Prepared: 05/21/04 Analyzed: 05/24/04

Benzene	84.2		ug/kg	100		84.2	80-120			
Toluene	84.1		"	100		84.1	80-120			
Ethylbenzene	83.4		"	100		83.4	80-120			
Xylene (p/m)	163		"	200		81.5	80-120			
Xylene (o)	82.9		"	100		82.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	83.2		"	100		83.2	80-120			
Surrogate: 4-Bromofluorobenzene	81.0		"	100		81.0	80-120			

**Matrix Spike (EE42501-MS1)**


Source: 4E21005-15

Prepared: 05/21/04 Analyzed: 05/23/04

Benzene	88.0		ug/kg	100	ND	88.0	80-120			
Toluene	85.2		"	100	ND	85.2	80-120			
Ethylbenzene	87.1		"	100	ND	87.1	80-120			
Xylene (p/m)	172		"	200	ND	86.0	80-120			
Xylene (o)	88.0		"	100	ND	88.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	82.2		"	100		82.2	80-120			
Surrogate: 4-Bromofluorobenzene	96.1		"	100		96.1	80-120			

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Project Manager: Jeff Dann

Fax: (432) 687-4914

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE42501 - EPA 5030C (GC)**

**Matrix Spike Dup (EE42501-MSD1)**

Source: 4E21005-15

Prepared: 05/21/04

Analyzed: 05/23/04

Benzene	91.8		ug/kg	100	ND	91.8	80-120	4.23	20	
Toluene	89.0		"	100	ND	89.0	80-120	4.36	20	
Ethylbenzene	89.9		"	100	ND	89.9	80-120	3.16	20	
Xylene (p/m)	177		"	200	ND	88.5	80-120	2.87	20	
Xylene (o)	88.5		"	100	ND	88.5	80-120	0.567	20	
Surrogate: a,a,a-Trifluorotoluene	85.8		"	100		85.8	80-120			
Surrogate: 4-Bromofluorobenzene	91.1		"	100		91.1	80-120			

**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			

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Quality Assurance Review

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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

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 Limits	RPD	RPD Limit	Notes
<b>Batch EE42504 - EPA 5030C (GC)</b>									
<b>Calibration Check (EE42504-CCV1)</b>				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		
<b>Matrix Spike (EE42504-MS1)</b>				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		
<b>Matrix Spike Dup (EE42504-MSD1)</b>				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		

Environmental Lab of Texas

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*Roland K. J. Sulo*

Quality Assurance Review

Page 24 of 26

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
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

%

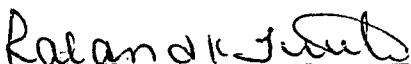
86.0

0.00

20

Environmental Lab of Texas

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Quality Assurance Review

Page 25 of 26

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
05/27/04 09:49

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

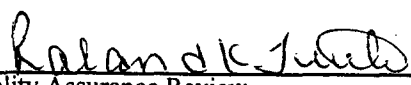
NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Environmental Lab of Texas

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Quality Assurance Review

Page 26 of 26

# Environmental Lab of Texas, Inc.

12600 West I-20 East Phone: 915-563-1800  
Odessa Texas 79763 Fax: 915-563-1713

Project Manager: Jeff Dann

Company Name: Link Energy / Plains Marketing

Company Address:

City/State/Zip:

Telephone No:

Sampler Signature: *Susan P. T.*

Project Name: Vacuum To Jal 14" Mainline #6

Project #: 2003-00135

Project Loc:

PO#:

Sample ID	Date Sampled	Time Sampled	No. of Containers	Analyze For										TCLP		Metals	Volatiles	Semi-volatiles	BTEX 8021B/5030	Reactivity	Corrosivity	Ignitability	Chlorides	RUSH TAT	Standard TAT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
				ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Water	Sludge	Soil	Other (Specify)	TDS/Cl-/SAR/EC											TPH 418.1	TPH TX 1005/1006	TPH8015MGMGRDRO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Special Instructions

FAX RESULTS TO PAT MCCASLAND ASAP

Sample Containers: Y N

Temperature Upon Request

Laboratory Comments:

*Rec 20.0C*

Received By:

Date 5-20-04 Time 3:00

Requisitioned: *Susan P. T.*

Requisitioned By:

Date 5-21-04 Time 9:25

Received By: *P. C. Clark*

Date 5-21-04 Time 6:10

Date 5-21-04 Time 09:25



[illegible]

Plains  
Client: All American

Order #: \_\_\_\_\_

## Sample Receipt Checklist

**Other observations:**

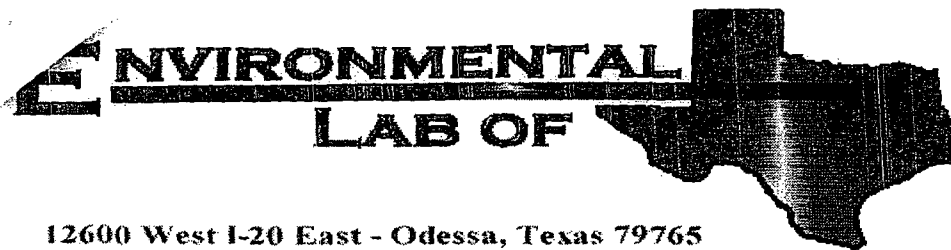
## Variance Documentation:

Contacted by:

CDC errors

**Corrective Action Taken:**

omitted sample SLVJ85520042D @ 5/20/2009 2:30 was a duplicate



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jal 14 in. Mainline #6

Project Number: 2003-00135

Location: None Given

Lab Order Number: 4F11009

Report Date: 06/16/04

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
06/16/04 17:03

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SL14M060804H#1-3'	4F11009-01	Soil	06/08/04 07:39	06/11/04 10:50
SL14M060804H#1-8'	4F11009-02	Soil	06/08/04 07:42	06/11/04 10:50
SL14M061004H#2-2'	4F11009-03	Soil	06/08/04 07:48	06/11/04 10:50
SL14M061004H#2-6'	4F11009-04	Soil	06/08/04 07:50	06/11/04 10:50
SL14M061004H#2-13'	4F11009-05	Soil	06/08/04 07:54	06/11/04 10:50
SL14M061004H#3-1'6 in	4F11009-06	Soil	06/08/04 08:00	06/11/04 10:50
SL14M061004H#3-5'	4F11009-07	Soil	06/08/04 08:02	06/11/04 10:50
SL14M061004H#3-14'	4F11009-08	Soil	06/08/04 08:06	06/11/04 10:50
SL14M061004H#4-2'	4F11009-09	Soil	06/08/04 08:10	06/11/04 10:50
SL14M061004H#4-8'	4F11009-10	Soil	06/08/04 08:16	06/11/04 10:50
SL14M061004H#4-15'	4F11009-11	Soil	06/08/04 08:23	06/11/04 10:50

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M060804H#1-3' (4F11009-01) Soil</b>									
Benzene	0.0414	0.00100	mg/kg dry	1	EF41303	06/12/04	06/12/04	EPA 8021B	
Toluene	0.778	0.0250	"	25	"	"	"	"	
Ethylbenzene	1.92	0.0250	"	"	"	"	"	"	
Xylene (p/m)	4.03	0.0250	"	"	"	"	"	"	
Xylene (o)	1.63	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		138 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		96.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	273	10.0	mg/kg dry	1	EF41120	06/11/04	06/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	637	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	910	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		103 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		78.8 %	70-130		"	"	"	"	
<b>SL14M060804H#1-8' (4F11009-02) Soil</b>									
Benzene	0.146	0.100	mg/kg dry	100	EF41303	06/12/04	06/12/04	EPA 8021B	
Toluene	2.61	0.100	"	"	"	"	"	"	
Ethylbenzene	4.26	0.100	"	"	"	"	"	"	
Xylene (p/m)	9.04	0.100	"	"	"	"	"	"	
Xylene (o)	3.35	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		122 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		88.6 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	1050	10.0	mg/kg dry	1	EF41120	06/11/04	06/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	4530	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	5590	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		116 %	70-130		"	"	"	"	
<b>SL14M061004H#2-2' (4F11009-03) Soil</b>									
Benzene	0.0819	0.0250	mg/kg dry	25	EF41303	06/12/04	06/12/04	EPA 8021B	
Toluene	1.79	0.0250	"	"	"	"	"	"	
Ethylbenzene	5.33	0.0250	"	"	"	"	"	"	
Xylene (p/m)	6.02	0.0250	"	"	"	"	"	"	
Xylene (o)	4.76	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		222 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		82.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	3620	50.0	mg/kg dry	5	EF41120	06/11/04	06/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	11400	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	15000	50.0	"	"	"	"	"	"	

Environmental Lab of Texas

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Page 2 of 16

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004H#2-2' (4F11009-03) Soil</b>									
Surrogate: 1-Chlorooctane		11.4 %		70-130	EF41120	06/11/04	06/11/04	EPA 8015M	S-06
Surrogate: 1-Chlorooctadecane		30.2 %		70-130	"	"	"	"	S-06
<b>SL14M061004H#2-6' (4F11009-04) Soil</b>									
Benzene	0.222	0.0250	mg/kg dry	25	EF41501	06/14/04	06/14/04	EPA 8021B	
Toluene	8.44	0.0250	"	"	"	"	"	"	
Ethylbenzene	12.0	0.0250	"	"	"	"	"	"	
Xylene (p/m)	24.7	0.0250	"	"	"	"	"	"	
Xylene (o)	8.49	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		357 %		80-120	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		82.8 %		80-120	"	"	"	"	
Gasoline Range Organics C6-C12	3050	10.0	mg/kg dry	1	EF41120	06/11/04	06/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	5640	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	8690	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		90.6 %		70-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		116 %		70-130	"	"	"	"	
<b>SL14M061004H#2-13' (4F11009-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41601	06/14/04	06/14/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0333	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		88.4 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.8 %		80-120	"	"	"	"	
Gasoline Range Organics C6-C12	13.3	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	144	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	157	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		80.6 %		70-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		83.2 %		70-130	"	"	"	"	

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:03

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004H#3-1'6 in (4F11009-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41601	06/14/04	06/14/04	EPA 8021B	
Toluene	0.0290	0.0250	"	"	"	"	"	"	
Ethylbenzene	J [0.0216]	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	0.0718	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0426	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		77.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		75.0 %	70-130		"	"	"	"	
<b>SL14M061004H#3-5' (4F11009-07) Soil</b>									
Benzene	3.34	0.100	mg/kg dry	100	EF41601	06/14/04	06/14/04	EPA 8021B	
Toluene	32.2	0.100	"	"	"	"	"	"	
Ethylbenzene	34.8	0.100	"	"	"	"	"	"	
Xylene (p/m)	56.9	0.100	"	"	"	"	"	"	
Xylene (o)	23.1	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		514 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		84.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	5570	50.0	mg/kg dry	5	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	10200	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	15800	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		10.9 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		37.4 %	70-130		"	"	"	"	S-06
<b>SL14M061004H#3-14' (4F11009-08) Soil</b>									
Benzene	1.45	0.100	mg/kg dry	100	EF41602	06/15/04	06/16/04	EPA 8021B	
Toluene	13.3	0.100	"	"	"	"	"	"	
Ethylbenzene	15.2	0.100	"	"	"	"	"	"	
Xylene (p/m)	28.1	0.100	"	"	"	"	"	"	
Xylene (o)	9.16	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		245 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		94.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	2410	50.0	mg/kg dry	5	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	10700	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	13100	50.0	"	"	"	"	"	"	

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Page 4 of 16

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:03

# Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004H#3-14' (4F11009-08) Soil</b>									
Surrogate: 1-Chlorooctane		23.2 %	70-130		EF41120	06/11/04	06/12/04	EPA 8015M	S-06
Surrogate: 1-Chlorooctadecane		42.8 %	70-130		"	"	"	"	S-06
<b>SL14M061004H#4-2' (4F11009-09) Soil</b>									
Benzene	0.687	0.0250	mg/kg dry	25	EF41602	06/15/04	06/16/04	EPA 8021B	
Toluene	9.41	0.0250	"	"	"	"	"	"	
Ethylbenzene	11.5	0.0250	"	"	"	"	"	"	
Xylene (p/m)	25.4	0.0250	"	"	"	"	"	"	
Xylene (o)	8.94	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		400 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		80.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	4130	50.0	mg/kg dry	5	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	11600	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	15700	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		11.2 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		34.2 %	70-130		"	"	"	"	S-06
<b>SL14M061004H#4-8' (4F11009-10) Soil</b>									
Benzene	1.49	0.100	mg/kg dry	100	EF41602	06/15/04	06/16/04	EPA 8021B	
Toluene	17.5	0.100	"	"	"	"	"	"	
Ethylbenzene	20.4	0.100	"	"	"	"	"	"	
Xylene (p/m)	39.1	0.100	"	"	"	"	"	"	
Xylene (o)	13.1	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		256 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		84.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	3070	50.0	mg/kg dry	5	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	6540	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	9610	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		31.8 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		26.6 %	70-130		"	"	"	"	S-06



Plains All American EH & S  
1301 S. County Road 1150  
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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:03

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004H#4-15' (4F11009-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41602	06/15/04	06/16/04	EPA 8021B	
Toluene	J [0.0229]	0.0250	"	"	"	"	"	"	J
Ethylbenzene	0.0368	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.105	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0336	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		91.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	18.7	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	248	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	267	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		81.4 %	70-130		"	"	"	"	

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Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M060804H#1-3' (4F11009-01) Soil</b>									
% Solids	80.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M060804H#1-8' (4F11009-02) Soil</b>									
% Solids	94.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#2-2' (4F11009-03) Soil</b>									
% Solids	92.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#2-6' (4F11009-04) Soil</b>									
% Solids	91.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#2-13' (4F11009-05) Soil</b>									
% Solids	96.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#3-1'6 in (4F11009-06) Soil</b>									
% Solids	94.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#3-5' (4F11009-07) Soil</b>									
% Solids	94.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#3-14' (4F11009-08) Soil</b>									
% Solids	95.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#4-2' (4F11009-09) Soil</b>									
% Solids	96.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#4-8' (4F11009-10) Soil</b>									
% Solids	81.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004H#4-15' (4F11009-11) Soil</b>									
% Solids	91.0		%	1	EF41301	06/11/04	06/11/04	% calculation	

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41120 - Solvent Extraction (GC)**

**Blank (EF41120-BLK2)**

Prepared & Analyzed: 06/11/04

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	40.4		mg/kg	50.0		80.8	70-130			
Surrogate: 1-Chlorooctadecane	37.7		"	50.0		75.4	70-130			

**LCS (EF41120-BS1)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	440	10.0	mg/kg wet	500		88.0	75-125			
Diesel Range Organics >C12-C35	524	10.0	"	500		105	75-125			
Total Hydrocarbon C6-C35	964	10.0	"	1000		96.4	75-125			
Surrogate: 1-Chlorooctane	51.4		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	41.9		"	50.0		83.8	70-130			

**LCS (EF41120-BS2)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	411	10.0	mg/kg wet	500		82.2	75-125			
Diesel Range Organics >C12-C35	457	10.0	"	500		91.4	75-125			
Total Hydrocarbon C6-C35	868	10.0	"	1000		86.8	75-125			
Surrogate: 1-Chlorooctane	51.6		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	40.1		"	50.0		80.2	70-130			

**LCS Dup (EF41120-BSD1)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	453	10.0	mg/kg wet	500		90.6	75-125	2.91	20	
Diesel Range Organics >C12-C35	495	10.0	"	500		99.0	75-125	5.69	20	
Total Hydrocarbon C6-C35	948	10.0	"	1000		94.8	75-125	1.67	20	
Surrogate: 1-Chlorooctane	51.8		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorooctadecane	41.7		"	50.0		83.4	70-130			

**Calibration Check (EF41120-CCV2)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	425		mg/kg	500		85.0	80-120			
Diesel Range Organics >C12-C35	493		"	500		98.6	80-120			
Total Hydrocarbon C6-C35	918		"	1000		91.8	80-120			
Surrogate: 1-Chlorooctane	51.0		"	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	44.6		"	50.0		89.2	70-130			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41120 - Solvent Extraction (GC)**

**Matrix Spike (EF41120-MS2)** Source: 4F11010-01 Prepared: 06/11/04 Analyzed: 06/12/04

Gasoline Range Organics C6-C12	481	10.0	mg/kg dry	538	ND	89.4	75-125			
Diesel Range Organics >C12-C35	555	10.0	"	538	ND	103	75-125			
Total Hydrocarbon C6-C35	1040	10.0	"	1080	ND	96.3	75-125			
Surrogate: 1-Chlorooctane	58.1		mg/kg	50.0		116	70-130			
Surrogate: 1-Chlorooctadecane	38.9		"	50.0		77.8	70-130			

**Matrix Spike Dup (EF41120-MSD2)** Source: 4F11010-01 Prepared: 06/11/04 Analyzed: 06/12/04

Gasoline Range Organics C6-C12	470	10.0	mg/kg dry	538	ND	87.4	75-125	2.31	20	
Diesel Range Organics >C12-C35	558	10.0	"	538	ND	104	75-125	0.539	20	
Total Hydrocarbon C6-C35	1030	10.0	"	1080	ND	95.4	75-125	0.966	20	
Surrogate: 1-Chlorooctane	58.0		mg/kg	50.0		116	70-130			
Surrogate: 1-Chlorooctadecane	40.4		"	50.0		80.8	70-130			

**Batch EF41303 - EPA 5030C (GC)**

**Blank (EF41303-BLK1)**

Prepared & Analyzed: 06/11/04

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	92.9		ug/kg	100		92.9	80-120			
Surrogate: 4-Bromofluorobenzene	89.5		"	100		89.5	80-120			

**LCS (EF41303-BS1)**

Prepared & Analyzed: 06/11/04

Benzene	0.0881	0.00100	mg/kg wet	0.100		88.1	80-120			
Toluene	0.0910	0.00100	"	0.100		91.0	80-120			
Ethylbenzene	0.0877	0.00100	"	0.100		87.7	80-120			
Xylene (p/m)	0.177	0.00100	"	0.200		88.5	80-120			
Xylene (o)	0.0897	0.00100	"	0.100		89.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.5		ug/kg	100		96.5	80-120			
Surrogate: 4-Bromofluorobenzene	97.0		"	100		97.0	80-120			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41303 - EPA 5030C (GC)**

**Calibration Check (EF41303-CCV1)**

Prepared & Analyzed: 06/11/04

Benzene	87.8		ug/kg	100		87.8	80-120			
Toluene	90.5		"	100		90.5	80-120			
Ethylbenzene	86.8		"	100		86.8	80-120			
Xylene (p/m)	173		"	200		86.5	80-120			
Xylene (o)	88.6		"	100		88.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	97.0		"	100		97.0	80-120			
Surrogate: 4-Bromofluorobenzene	92.7		"	100		92.7	80-120			

**Matrix Spike (EF41303-MS1)**

Source: 4F12001-17

Prepared: 06/11/04 Analyzed: 06/13/04

Benzene	2.40	0.0250	mg/kg dry	2.87	ND	83.6	80-120			
Toluene	2.42	0.0250	"	2.87	ND	84.3	80-120			
Ethylbenzene	2.34	0.0250	"	2.87	ND	81.5	80-120			
Xylene (p/m)	4.68	0.0250	"	5.75	ND	81.4	80-120			
Xylene (o)	2.33	0.0250	"	2.87	ND	81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	92.2		ug/kg	100		92.2	80-120			
Surrogate: 4-Bromofluorobenzene	87.4		"	100		87.4	80-120			

**Matrix Spike Dup (EF41303-MSD1)**

Source: 4F12001-17

Prepared: 06/11/04 Analyzed: 06/13/04

Benzene	2.36	0.0250	mg/kg dry	2.87	ND	82.2	80-120	1.69	20	
Toluene	2.51	0.0250	"	2.87	ND	87.5	80-120	3.73	20	
Ethylbenzene	2.42	0.0250	"	2.87	ND	84.3	80-120	3.38	20	
Xylene (p/m)	4.85	0.0250	"	5.75	ND	84.3	80-120	3.50	20	
Xylene (o)	2.40	0.0250	"	2.87	ND	83.6	80-120	2.91	20	
Surrogate: a,a,a-Trifluorotoluene	95.6		ug/kg	100		95.6	80-120			
Surrogate: 4-Bromofluorobenzene	89.8		"	100		89.8	80-120			

**Batch EF41501 - EPA 5030C (GC)**

**Blank (EF41501-BLK1)**

Prepared & Analyzed: 06/14/04

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	93.7		ug/kg	100		93.7	80-120			
Surrogate: 4-Bromofluorobenzene	80.5		"	100		80.5	80-120			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41501 - EPA 5030C (GC)**

**LCS (EF41501-BS1)**

Prepared & Analyzed: 06/14/04

Benzene	80.1		ug/kg	100		80.1	80-120			
Toluene	85.1		"	100		85.1	80-120			
Ethylbenzene	82.5		"	100		82.5	80-120			
Xylene (p/m)	165		"	200		82.5	80-120			
Xylene (o)	83.2		"	100		83.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	92.1		"	100		92.1	80-120			
Surrogate: 4-Bromofluorobenzene	88.1		"	100		88.1	80-120			

**Calibration Check (EF41501-CCV1)**

Prepared & Analyzed: 06/14/04

Benzene	87.7		ug/kg	100		87.7	80-120			
Toluene	95.0		"	100		95.0	80-120			
Ethylbenzene	91.3		"	100		91.3	80-120			
Xylene (p/m)	182		"	200		91.0	80-120			
Xylene (o)	88.0		"	100		88.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	104		"	100		104	80-120			
Surrogate: 4-Bromofluorobenzene	83.9		"	100		83.9	80-120			

**Matrix Spike (EF41501-MS1)**

Source: 4F14001-16

Prepared & Analyzed: 06/14/04

Benzene	2050		ug/kg	2500	ND	82.0	80-120			
Toluene	2100		"	2500	ND	84.0	80-120			
Ethylbenzene	2080		"	2500	ND	83.2	80-120			
Xylene (p/m)	4170		"	5000	40.3	82.6	80-120			
Xylene (o)	2120		"	2500	ND	84.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.9		"	100		91.9	80-120			
Surrogate: 4-Bromofluorobenzene	91.5		"	100		91.5	80-120			

**Matrix Spike Dup (EF41501-MSD1)**

Source: 4F14001-16

Prepared & Analyzed: 06/14/04

Benzene	2070		ug/kg	2500	ND	82.8	80-120	0.971	20	
Toluene	2100		"	2500	ND	84.0	80-120	0.00	20	
Ethylbenzene	2060		"	2500	ND	82.4	80-120	0.966	20	
Xylene (p/m)	4120		"	5000	40.3	81.6	80-120	1.22	20	
Xylene (o)	2090		"	2500	ND	83.6	80-120	1.43	20	
Surrogate: a,a,a-Trifluorotoluene	88.9		"	100		88.9	80-120			
Surrogate: 4-Bromofluorobenzene	89.2		"	100		89.2	80-120			

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**Organics by GC - Quality Control**  
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41601 - EPA 5030C (GC)**

**Blank (EF41601-BLK1)**

Prepared & Analyzed: 06/14/04

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	86.5		ug/kg	100		86.5	80-120			
Surrogate: 4-Bromofluorobenzene	81.6		"	100		81.6	80-120			

**LCS (EF41601-BS1)**

Prepared & Analyzed: 06/14/04

Benzene	80.1		ug/kg	100		80.1	80-120			
Toluene	85.1		"	100		85.1	80-120			
Ethylbenzene	82.5		"	100		82.5	80-120			
Xylene (p/m)	165		"	200		82.5	80-120			
Xylene (o)	83.2		"	100		83.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	92.1		"	100		92.1	80-120			
Surrogate: 4-Bromofluorobenzene	88.1		"	100		88.1	80-120			

**Calibration Check (EF41601-CCV1)**

Prepared: 06/14/04 Analyzed: 06/15/04

Benzene	87.5		ug/kg	100		87.5	80-120			
Toluene	90.5		"	100		90.5	80-120			
Ethylbenzene	88.3		"	100		88.3	80-120			
Xylene (p/m)	178		"	200		89.0	80-120			
Xylene (o)	92.8		"	100		92.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.4		"	100		93.4	80-120			
Surrogate: 4-Bromofluorobenzene	91.4		"	100		91.4	80-120			

**Matrix Spike (EF41601-MS1)**

Source: 4F15003-07

Prepared & Analyzed: 06/15/04

Benzene	90.6		ug/kg	100	ND	90.6	80-120			
Toluene	93.9		"	100	ND	93.9	80-120			
Ethylbenzene	94.8		"	100	ND	94.8	80-120			
Xylene (p/m)	192		"	200	ND	96.0	80-120			
Xylene (o)	101		"	100	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.7		"	100		93.7	80-120			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	80-120			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41601 - EPA 5030C (GC)**

Matrix Spike Dup (EF41601-MSD1)		Source: 4F15003-07		Prepared & Analyzed: 06/15/04						
Benzene	92.5		ug/kg	100	ND	92.5	80-120	2.08	20	
Toluene	95.6		"	100	ND	95.6	80-120	1.79	20	
Ethylbenzene	94.8		"	100	ND	94.8	80-120	0.00	20	
Xylene (p/m)	191		"	200	ND	95.5	80-120	0.522	20	
Xylene (o)	99.2		"	100	ND	99.2	80-120	1.80	20	
Surrogate: a,a,a-Trifluorotoluene	100		"	100		100	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

**Batch EF41602 - EPA 5030C (GC)**

Blank (EF41602-BLK1)		Prepared & Analyzed: 06/15/04								
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	97.9		ug/kg	100		97.9	80-120			
Surrogate: 4-Bromofluorobenzene	92.0		"	100		92.0	80-120			

**LCS (EF41602-BS1)**

		Prepared & Analyzed: 06/15/04								
Benzene	90.7		ug/kg	100		90.7	80-120			
Toluene	93.2		"	100		93.2	80-120			
Ethylbenzene	90.2		"	100		90.2	80-120			
Xylene (p/m)	182		"	200		91.0	80-120			
Xylene (o)	96.0		"	100		96.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.8		"	100		96.8	80-120			
Surrogate: 4-Bromofluorobenzene	98.9		"	100		98.9	80-120			



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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF41602 - EPA 5030C (GC)**

**Calibration Check (EF41602-CCV1)**

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	96.4		ug/kg	100		96.4	80-120			
Toluene	93.5		"	100		93.5	80-120			
Ethylbenzene	88.0		"	100		88.0	80-120			
Xylene (p/m)	176		"	200		88.0	80-120			
Xylene (o)	91.4		"	100		91.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	94.0		"	100		94.0	80-120			
Surrogate: 4-Bromofluorobenzene	89.5		"	100		89.5	80-120			

**Matrix Spike (EF41602-MS1)**

Source: 4F11010-01

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	101		ug/kg	100	ND	101	80-120			
Toluene	98.6		"	100	ND	98.6	80-120			
Ethylbenzene	96.3		"	100	ND	96.3	80-120			
Xylene (p/m)	194		"	200	ND	97.0	80-120			
Xylene (o)	101		"	100	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	95.5		"	100		95.5	80-120			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	80-120			

**Matrix Spike Dup (EF41602-MSD1)**

Source: 4F11010-01

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	103		ug/kg	100	ND	103	80-120	1.96	20	
Toluene	99.4		"	100	ND	99.4	80-120	0.808	20	
Ethylbenzene	96.6		"	100	ND	96.6	80-120	0.311	20	
Xylene (p/m)	196		"	200	ND	98.0	80-120	1.03	20	
Xylene (o)	102		"	100	ND	102	80-120	0.985	20	
Surrogate: a,a,a-Trifluorotoluene	85.4		"	100		85.4	80-120			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	80-120			

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
06/16/04 17:03

**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
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**Batch EF41301 - General Preparation (Prep)**

**Blank (EF41301-BLK1)**

Prepared & Analyzed: 06/11/04

% Solids	100		%							
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**Duplicate (EF41301-DUP1)**

Source: 4F11001-01

Prepared & Analyzed: 06/11/04

% Solids	86.0		%		86.0			0.00	20	
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**Duplicate (EF41301-DUP2)**

Source: 4F12001-17

Prepared & Analyzed: 06/11/04

% Solids	86.0		%		87.0			1.16	20	
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Fax: (432) 687-4914

**Reported:**  
06/16/04 17:03

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: Raland K. Tuttle Date: 6-16-04

Raland K. Tuttle, QA Officer  
Celey D. Keene, Lab Director, Org. Tech Director  
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist  
Sara Molina, Chemist  
Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

**12600 West I-20 East**  
**Odessa Texas 79763**  
**Phone: 915-563-1800**  
**Fax: 915-563-1713**

**Project Name: Jal 14" Mainline #6**

**Project #:** 2003-00135

**Project Loc:**

**PO#:**

Michael Crowley

[illegible]

Temperature Upon Request  
Laboratory Comments:

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains

Date/Time: 06-11-04 @ 1200

Order #: 4F11009

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>O.S</u>	<u>C</u>
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>N/A</u>	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>Not present</u>	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>Not present</u>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

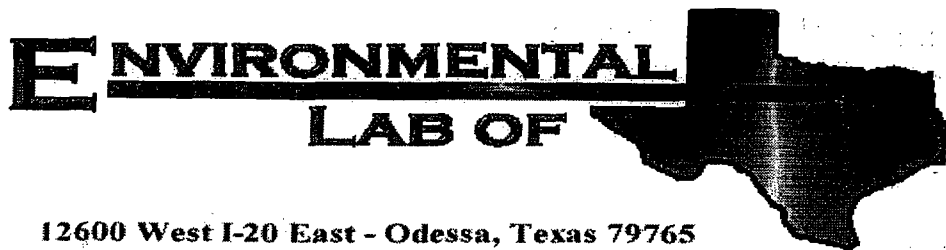
Other observations:

### Variance Documentation:

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

Regarding: \_\_\_\_\_

Corrective Action Taken:



## Analytical Report

**Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jal 14 in. Mainline #6

Project Number: 2003-00135

Location: None Given

Lab Order Number: 4F11011

Report Date: 06/16/04

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SL14M061004WSW	4F11011-01	Soil	06/10/04 10:12	06/11/04 10:50
SL14M061004BH	4F11011-02	Soil	06/10/04 10:16	06/11/04 10:50
SL14M061004ESW	4F11011-03	Soil	06/10/04 10:20	06/11/04 10:50

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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004WSW (4F11011-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41602	06/15/04	06/16/04	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		95.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		86.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		77.2 %	70-130		"	"	"	"	
<b>SL14M061004BH (4F11011-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41602	06/15/04	06/16/04	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		90.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	13.6	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	13.6	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		70.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130		"	"	"	"	
<b>SL14M061004ESW (4F11011-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF41602	06/15/04	06/16/04	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		87.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41120	06/11/04	06/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004ESW (4F11011-03) Soil</b>									
Surrogate: 1-Chlorooctane		92.4 %	70-130		EF41120	06/11/04	06/12/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		82.0 %	70-130		"	"	"	"	

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Fax: (432) 687-4914

Reported:  
06/16/04 17:04

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M061004WSW (4F11011-01) Soil</b>									
% Solids	35.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004BH (4F11011-02) Soil</b>									
% Solids	92.0		%	1	EF41301	06/11/04	06/11/04	% calculation	
<b>SL14M061004ESW (4F11011-03) Soil</b>									
% Solids	81.0		%	1	EF41301	06/11/04	06/11/04	% calculation	

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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

**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
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**Batch EF41120 - Solvent Extraction (GC)**

**Blank (EF41120-BLK2)**

Prepared & Analyzed: 06/11/04

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	40.4		mg/kg	50.0		80.8	70-130			
Surrogate: 1-Chlorooctadecane	37.7		"	50.0		75.4	70-130			

**LCS (EF41120-BS1)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	440	10.0	mg/kg wet	500		88.0	75-125			
Diesel Range Organics >C12-C35	524	10.0	"	500		105	75-125			
Total Hydrocarbon C6-C35	964	10.0	"	1000		96.4	75-125			
Surrogate: 1-Chlorooctane	51.4		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	41.9		"	50.0		83.8	70-130			

**LCS (EF41120-BS2)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	411	10.0	mg/kg wet	500		82.2	75-125			
Diesel Range Organics >C12-C35	457	10.0	"	500		91.4	75-125			
Total Hydrocarbon C6-C35	868	10.0	"	1000		86.8	75-125			
Surrogate: 1-Chlorooctane	51.6		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	40.1		"	50.0		80.2	70-130			

**LCS Dup (EF41120-BSD1)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	453	10.0	mg/kg wet	500		90.6	75-125	2.91	20	
Diesel Range Organics >C12-C35	495	10.0	"	500		99.0	75-125	5.69	20	
Total Hydrocarbon C6-C35	948	10.0	"	1000		94.8	75-125	1.67	20	
Surrogate: 1-Chlorooctane	51.8		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorooctadecane	41.7		"	50.0		83.4	70-130			

**Calibration Check (EF41120-CCV2)**

Prepared & Analyzed: 06/11/04

Gasoline Range Organics C6-C12	425		mg/kg	500		85.0	80-120			
Diesel Range Organics >C12-C35	493		"	500		98.6	80-120			
Total Hydrocarbon C6-C35	918		"	1000		91.8	80-120			
Surrogate: 1-Chlorooctane	51.0		"	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	44.6		"	50.0		89.2	70-130			

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Fax: (432) 687-4914

Reported:  
06/16/04 17:04

**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
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**Batch EF41120 - Solvent Extraction (GC)**

**Matrix Spike (EF41120-MS2)** Source: 4F11010-01 Prepared: 06/11/04 Analyzed: 06/12/04

Gasoline Range Organics C6-C12	481	10.0	mg/kg dry	538	ND	89.4	75-125			
Diesel Range Organics >C12-C35	555	10.0	"	538	ND	103	75-125			
Total Hydrocarbon C6-C35	1040	10.0	"	1080	ND	96.3	75-125			

Surrogate: 1-Chlorooctane 58.1 mg/kg 50.0 116 70-130

Surrogate: 1-Chlorooctadecane 38.9 " 50.0 77.8 70-130

**Matrix Spike Dup (EF41120-MSD2)** Source: 4F11010-01 Prepared: 06/11/04 Analyzed: 06/12/04

Gasoline Range Organics C6-C12	470	10.0	mg/kg dry	538	ND	87.4	75-125	2.31	20	
Diesel Range Organics >C12-C35	558	10.0	"	538	ND	104	75-125	0.539	20	
Total Hydrocarbon C6-C35	1030	10.0	"	1080	ND	95.4	75-125	0.966	20	

Surrogate: 1-Chlorooctane 58.0 mg/kg 50.0 116 70-130

Surrogate: 1-Chlorooctadecane 40.4 " 50.0 80.8 70-130

**Batch EF41602 - EPA 5030C (GC)**

**Blank (EF41602-BLK1)**

Prepared & Analyzed: 06/15/04

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	97.9		ug/kg	100		97.9	80-120			
Surrogate: 4-Bromofluorobenzene	92.0		"	100		92.0	80-120			

**LCS (EF41602-BS1)**

Prepared & Analyzed: 06/15/04

Benzene	90.7		ug/kg	100		90.7	80-120			
Toluene	93.2		"	100		93.2	80-120			
Ethylbenzene	90.2		"	100		90.2	80-120			
Xylene (p/m)	182		"	200		91.0	80-120			
Xylene (o)	96.0		"	100		96.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.8		"	100		96.8	80-120			
Surrogate: 4-Bromofluorobenzene	98.9		"	100		98.9	80-120			

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Project: Jal 14 in. Mainline #6  
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Project Manager: Jeff Dann

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Reported:  
06/16/04 17:04

**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 EF41602 - EPA 5030C (GC)**

**Calibration Check (EF41602-CCV1)**

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	96.4		ug/kg	100		96.4	80-120			
Toluene	93.5		"	100		93.5	80-120			
Ethylbenzene	88.0		"	100		88.0	80-120			
Xylene (p/m)	176		"	200		88.0	80-120			
Xylene (o)	91.4		"	100		91.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	94.0		"	100		94.0	80-120			
Surrogate: 4-Bromofluorobenzene	89.5		"	100		89.5	80-120			

**Matrix Spike (EF41602-MS1)**

Source: 4F11010-01

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	101		ug/kg	100	ND	101	80-120			
Toluene	98.6		"	100	ND	98.6	80-120			
Ethylbenzene	96.3		"	100	ND	96.3	80-120			
Xylene (p/m)	194		"	200	ND	97.0	80-120			
Xylene (o)	101		"	100	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	95.5		"	100		95.5	80-120			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	80-120			

**Matrix Spike Dup (EF41602-MSD1)**

Source: 4F11010-01

Prepared: 06/15/04 Analyzed: 06/16/04

Benzene	103		ug/kg	100	ND	103	80-120	1.96	20	
Toluene	99.4		"	100	ND	99.4	80-120	0.808	20	
Ethylbenzene	96.6		"	100	ND	96.6	80-120	0.311	20	
Xylene (p/m)	196		"	200	ND	98.0	80-120	1.03	20	
Xylene (o)	102		"	100	ND	102	80-120	0.985	20	
Surrogate: a,a,a-Trifluorotoluene	85.4		"	100		85.4	80-120			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	80-120			

Environmental Lab of Texas

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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

**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 EF41301 - General Preparation (Prep)**

**Blank (EF41301-BLK1)**

Prepared & Analyzed: 06/11/04

% Solids 100 %

**Duplicate (EF41301-DUP1)**

Source: 4F11001-01

Prepared & Analyzed: 06/11/04

% Solids 86.0 % 86.0 0.00 20

**Duplicate (EF41301-DUP2)**

Source: 4F12001-17

Prepared & Analyzed: 06/11/04

% Solids 86.0 % 87.0 1.16 20

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/16/04 17:04

### Notes and Definitions

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

Report Approved By:

Raland K. Tuttle

Date:

6-16-04

Raland K. Tuttle, QA Officer

James L. Hawkins, Chemist/Geologist

Celey D. Keene, Lab Director, Org. Tech Director

Sara Molina, Chemist

Jeanne Mc Murrey, Inorg. Tech Director

Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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Page 9 of 9

**12600 West I-20 East**  
**Odessa Texas 79763**  
**Phone: 915-563-1800**  
**Fax: 915-563-1713**

Project Name:     Jal 14" Mainline #6    

Project #: 2003-00135

**Project Loc:**

PO#:

Michael B. Browley

44025/1955

[illegible]

### Special Instructions

**FAX RESULTS TO PAT McCASLAND ASAP**

**Relinquished:**

Received by

Time

Date \_\_\_\_\_

work

**Relinquished:**

**Received by:**

Time

**Date**



Sample Containers If Y	N

### Temperature Upon Request

**Laboratory Comments:**

0.50



# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains

Date/Time: 06-11-04 @ 1215

Order #: 4F11011

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	0.5	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	N/A	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

Other observations:

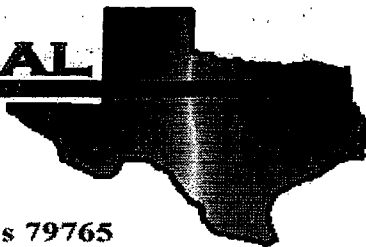
### Variance Documentation:

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

Regarding: \_\_\_\_\_

Corrective Action Taken:

# **E** NVIRONMENTAL LAB OF



12600 West I-20 East - Odessa, Texas 79765

## **Analytical Report**

### **Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jal 14 in. Mainline #6

Project Number: 2003-00135

Location: None Given

Lab Order Number: 4F17006

Report Date: 06/21/04

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
**Reported:**  
06/21/04 11:32

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Jal14Main#6616041A	4F17006-01	Soil	06/16/04 07:07	06/17/04 12:40
Jal14Main#66160417A	4F17006-02	Soil	06/16/04 07:12	06/17/04 12:40
Jal14Main#6616046A	4F17006-03	Soil	06/16/04 07:15	06/17/04 12:40
Jal14Main#66160414A	4F17006-04	Soil	06/16/04 07:18	06/17/04 12:40
Jal14Main#6616047A	4F17006-05	Soil	06/16/04 07:20	06/17/04 12:40
Jal14Main#6616048A	4F17006-06	Soil	06/16/04 07:24	06/17/04 12:40
Jal14Main#66160410A	4F17006-07	Soil	06/16/04 07:27	06/17/04 12:40
Jal14Main#66160411A	4F17006-08	Soil	06/16/04 07:30	06/17/04 12:40
Jal14Main#66160420A	4F17006-09	Soil	06/16/04 07:34	06/17/04 12:40

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1301 S. County Road 1150  
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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Jal14Main#6616041A (4F17006-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/18/04	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		93.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/17/04	EPA 8015M	
Diesel Range Organics >C12-C35	150	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	150	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		109 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-130		"	"	"	"	
<b>Jal14Main#66160417A (4F17006-02) Soil</b>									
Benzene	10.4	0.100	mg/kg dry	100	EF42102	06/17/04	06/18/04	EPA 8021B	
Toluene	48.3	0.100	"	"	"	"	"	"	
Ethylbenzene	36.4	0.100	"	"	"	"	"	"	
Xylene (p/m)	61.6	0.100	"	"	"	"	"	"	
Xylene (o)	23.0	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		664 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		109 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	3250	10.0	mg/kg dry	1	EF41705	06/17/04	06/17/04	EPA 8015M	
Diesel Range Organics >C12-C35	5810	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	9060	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		128 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		145 %	70-130		"	"	"	"	S-04
<b>Jal14Main#6616046A (4F17006-03) Soil</b>									
Benzene	1.12	0.0500	mg/kg dry	50	EF42102	06/17/04	06/18/04	EPA 8021B	
Toluene	8.67	0.0500	"	"	"	"	"	"	
Ethylbenzene	9.59	0.0500	"	"	"	"	"	"	
Xylene (p/m)	17.8	0.0500	"	"	"	"	"	"	
Xylene (o)	6.02	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		260 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		80.1 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	1560	10.0	mg/kg dry	1	EF41705	06/17/04	06/17/04	EPA 8015M	
Diesel Range Organics >C12-C35	5530	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	7090	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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Page 2 of 12

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Jal14Main#6616046A (4F17006-03) Soil</b>									
Surrogate: 1-Chlorooctane		122 %	70-130		EF41705	06/17/04	06/17/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		161 %	70-130		"	"	"	"	S-04
<b>Jal14Main#66160414A (4F17006-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/18/04	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		90.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		115 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		107 %	70-130		"	"	"	"	
<b>Jal14Main#6616047A (4F17006-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/18/04	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		93.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		111 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		105 %	70-130		"	"	"	"	

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Jal14Main#6616048A (4F17006-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/18/04	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		91.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		102 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		98.6 %	70-130		"	"	"	"	
<b>Jal14Main#66160410A (4F17006-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/19/04	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		89.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	59.2	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	59.2	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		108 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-130		"	"	"	"	
<b>Jal14Main#66160411A (4F17006-08) Soil</b>									
Benzene	0.396	0.100	mg/kg dry	100	EF42102	06/17/04	06/18/04	EPA 8021B	
Toluene	4.26	0.100	"	"	"	"	"	"	
Ethylbenzene	5.82	0.100	"	"	"	"	"	"	
Xylene (p/m)	11.7	0.100	"	"	"	"	"	"	
Xylene (o)	4.68	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		126 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		83.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	2080	50.0	mg/kg dry	5	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	16300	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	18400	50.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
06/21/04 11:32

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Jal14Main#66160411A (4F17006-08) Soil</b>									
Surrogate: 1-Chlorooctane		29.8 %	70-130		EF41705	06/17/04	06/18/04	EPA 8015M	S-06
Surrogate: 1-Chlorooctadecane		65.8 %	70-130		"	"	"	"	S-06
<b>Jal14Main#66160420A (4F17006-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EF42102	06/17/04	06/18/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0590	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		92.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF41705	06/17/04	06/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	73.8	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	73.8	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		110 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-130		"	"	"	"	

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Jal14Main#6616041A (4F17006-01) Soil</b>									
% Solids	100		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#66160417A (4F17006-02) Soil</b>									
% Solids	87.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#6616046A (4F17006-03) Soil</b>									
% Solids	96.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#66160414A (4F17006-04) Soil</b>									
% Solids	98.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#6616047A (4F17006-05) Soil</b>									
% Solids	99.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#6616048A (4F17006-06) Soil</b>									
% Solids	99.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#66160410A (4F17006-07) Soil</b>									
% Solids	98.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#66160411A (4F17006-08) Soil</b>									
% Solids	98.0		%	1	EF41806	06/17/04	06/17/04	% calculation	
<b>Jal14Main#66160420A (4F17006-09) Soil</b>									
% Solids	93.0		%	1	EF41806	06/17/04	06/17/04	% calculation	

Environmental Lab of Texas

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**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 EF41705 - Solvent Extraction (GC)**

**Blank (EF41705-BLK1)**

Prepared & Analyzed: 06/17/04

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	41.2		mg/kg	50.0		82.4	70-130			
Surrogate: 1-Chlorooctadecane	35.7		"	50.0		71.4	70-130			

**Blank (EF41705-BLK2)**

Prepared: 06/17/04 Analyzed: 06/18/04

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	40.4		mg/kg	50.0		80.8	70-130			
Surrogate: 1-Chlorooctadecane	35.1		"	50.0		70.2	70-130			

**LCS (EF41705-BS1)**

Prepared & Analyzed: 06/17/04

Gasoline Range Organics C6-C12	480	10.0	mg/kg wet	500		96.0	75-125			
Diesel Range Organics >C12-C35	536	10.0	"	500		107	75-125			
Total Hydrocarbon C6-C35	1020	10.0	"	1000		102	75-125			
Surrogate: 1-Chlorooctane	57.0		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	38.2		"	50.0		76.4	70-130			

**LCS (EF41705-BS2)**

Prepared: 06/17/04 Analyzed: 06/18/04

Gasoline Range Organics C6-C12	461	10.0	mg/kg wet	500		92.2	75-125			
Diesel Range Organics >C12-C35	536	10.0	"	500		107	75-125			
Total Hydrocarbon C6-C35	997	10.0	"	1000		99.7	75-125			
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	36.8		"	50.0		73.6	70-130			

**Calibration Check (EF41705-CCV1)**

Prepared & Analyzed: 06/17/04

Gasoline Range Organics C6-C12	523		mg/kg	500		105	80-120			
Diesel Range Organics >C12-C35	562		"	500		112	80-120			
Total Hydrocarbon C6-C35	1090		"	1000		109	80-120			
Surrogate: 1-Chlorooctane	53.3		"	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	42.9		"	50.0		85.8	70-130			

Environmental Lab of Texas

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Page 7 of 12

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**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
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**Batch EF41705 - Solvent Extraction (GC)**

**Calibration Check (EF41705-CCV2)**

Prepared: 06/17/04 Analyzed: 06/18/04

Gasoline Range Organics C6-C12	518		mg/kg	500		104	80-120			
Diesel Range Organics >C12-C35	570		"	500		114	80-120			
Total Hydrocarbon C6-C35	1090		"	1000		109	80-120			
Surrogate: 1-Chlorooctane	54.5		"	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	46.7		"	50.0		93.4	70-130			

**Matrix Spike (EF41705-MS1)**

Source: 4F17003-01

Prepared & Analyzed: 06/17/04

Gasoline Range Organics C6-C12	595	10.0	mg/kg dry	538	ND	111	75-125			
Diesel Range Organics >C12-C35	657	10.0	"	538	ND	122	75-125			
Total Hydrocarbon C6-C35	1250	10.0	"	1080	ND	116	75-125			
Surrogate: 1-Chlorooctane	62.9		mg/kg	50.0		126	70-130			
Surrogate: 1-Chlorooctadecane	53.2		"	50.0		106	70-130			

**Matrix Spike (EF41705-MS2)**

Source: 4F17007-02

Prepared: 06/17/04 Analyzed: 06/18/04

Gasoline Range Organics C6-C12	681	10.0	mg/kg dry	633	ND	108	75-125			
Diesel Range Organics >C12-C35	759	10.0	"	633	ND	120	75-125			
Total Hydrocarbon C6-C35	1440	10.0	"	1270	ND	113	75-125			
Surrogate: 1-Chlorooctane	58.3		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	49.3		"	50.0		98.6	70-130			

**Matrix Spike Dup (EF41705-MSD1)**

Source: 4F17003-01

Prepared & Analyzed: 06/17/04

Gasoline Range Organics C6-C12	599	10.0	mg/kg dry	538	ND	111	75-125	0.670	20	
Diesel Range Organics >C12-C35	645	10.0	"	538	ND	120	75-125	1.84	20	
Total Hydrocarbon C6-C35	1240	10.0	"	1080	ND	115	75-125	0.803	20	
Surrogate: 1-Chlorooctane	63.0		mg/kg	50.0		126	70-130			
Surrogate: 1-Chlorooctadecane	52.7		"	50.0		105	70-130			

**Matrix Spike Dup (EF41705-MSD2)**

Source: 4F17007-02

Prepared: 06/17/04 Analyzed: 06/18/04

Gasoline Range Organics C6-C12	677	10.0	mg/kg dry	633	ND	107	75-125	0.589	20	
Diesel Range Organics >C12-C35	777	10.0	"	633	ND	123	75-125	2.34	20	
Total Hydrocarbon C6-C35	1450	10.0	"	1270	ND	114	75-125	0.692	20	
Surrogate: 1-Chlorooctane	60.5		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	50.7		"	50.0		101	70-130			

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Page 8 of 12

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**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
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**Batch EF42102 - EPA 5030C (GC)**

**Blank (EF42102-BLK1)**

Prepared & Analyzed: 06/17/04

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	83.4		ug/kg	100		83.4	80-120			
Surrogate: 4-Bromofluorobenzene	97.5		"	100		97.5	80-120			

**LCS (EF42102-BS1)**

Prepared & Analyzed: 06/17/04

Benzene	100		ug/kg	100		100	80-120			
Toluene	95.8		"	100		95.8	80-120			
Ethylbenzene	91.4		"	100		91.4	80-120			
Xylene (p/m)	185		"	200		92.5	80-120			
Xylene (o)	96.8		"	100		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	88.0		"	100		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	103		"	100		103	80-120			

**Calibration Check (EF42102-CCV1)**

Prepared: 06/17/04 Analyzed: 06/19/04

Benzene	95.3		ug/kg	100		95.3	80-120			
Toluene	91.9		"	100		91.9	80-120			
Ethylbenzene	86.0		"	100		86.0	80-120			
Xylene (p/m)	173		"	200		86.5	80-120			
Xylene (o)	90.8		"	100		90.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.6		"	100		93.6	80-120			
Surrogate: 4-Bromofluorobenzene	95.9		"	100		95.9	80-120			

**Matrix Spike (EF42102-MS1)**

Source: 4F17007-01

Prepared: 06/17/04 Analyzed: 06/19/04

Benzene	98.5		ug/kg	100	ND	98.5	80-120			
Toluene	95.3		"	100	ND	95.3	80-120			
Ethylbenzene	90.2		"	100	ND	90.2	80-120			
Xylene (p/m)	182		"	200	ND	91.0	80-120			
Xylene (o)	93.7		"	100	ND	93.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.2		"	100		96.2	80-120			
Surrogate: 4-Bromofluorobenzene	99.2		"	100		99.2	80-120			

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
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**Batch EF42102 - EPA 5030C (GC)**

**Matrix Spike Dup (EF42102-MSD1)**

Source: 4F17007-01

Prepared: 06/17/04

Analyzed: 06/19/04

Benzene	100		ug/kg	100	ND	100	80-120	1.51	20	
Toluene	96.6		"	100	ND	96.6	80-120	1.35	20	
Ethylbenzene	91.6		"	100	ND	91.6	80-120	1.54	20	
Xylene (p/m)	185		"	200	ND	92.5	80-120	1.63	20	
Xylene (o)	96.7		"	100	ND	96.7	80-120	3.15	20	
Surrogate: a,a,a-Trifluorotoluene	94.6		"	100		94.6	80-120			
Surrogate: 4-Bromofluorobenzene	105		"	100		105	80-120			

Plains All American EH & S  
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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

## 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 EF41806 - General Preparation (Prep)

##### Blank (EF41806-BLK1)

Prepared & Analyzed: 06/17/04

% Solids	100	%
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##### Duplicate (EF41806-DUP1)

Source: 4F17003-01

Prepared & Analyzed: 06/17/04

% Solids	93.0	%	93.0	0.00	20
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Plains All American EH & S  
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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
06/21/04 11:32

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

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

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K Tuttle

Date:

6-21-04

Raland K. Tuttle, QA Officer  
Celey D. Keene, Lab Director, Org. Tech Director  
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist  
Sara Molina, Chemist  
Sandra Biezugbe, Lab Tech.

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12600 West I-20 East  
Odessa Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713

Rec 4°C.

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains P/L

Date/Time: 06-17-04 @ 1315

Order #: 4F-17006

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	4	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	N/A	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

Other observations:

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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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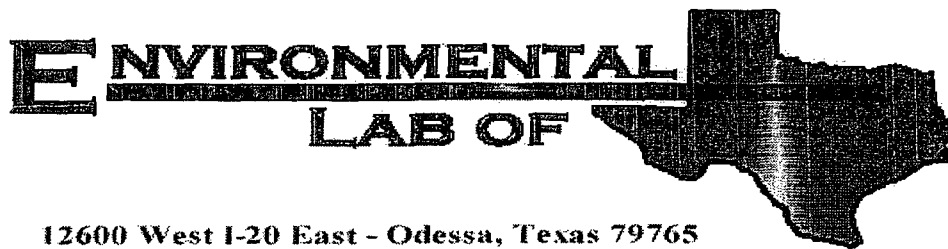


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## Analytical Report

**Prepared for:**

Jimmy Bryant

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6

Project Number: 2003-00135

Location: Secs 25/36 T23S R37E Lea Co. , NM

Lab Order Number: 4G14018

Report Date: 07/20/04

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SPAADVJ671204#28	4G14018-01	Soil	07/12/04 07:40	07/14/04 11:36
SPAADVJ671204#29	4G14018-02	Soil	07/12/04 07:45	07/14/04 11:36
SPAADVJ671204#30	4G14018-03	Soil	07/12/04 07:51	07/14/04 11:36
SPAADVJ671204#31	4G14018-04	Soil	07/12/04 07:54	07/14/04 11:36
SPAADVJ671204#32	4G14018-05	Soil	07/12/04 07:58	07/14/04 11:36
SPAADVJ671204#33	4G14018-06	Soil	07/12/04 08:12	07/14/04 11:36
SPAADVJ671204#34	4G14018-07	Soil	07/12/04 08:25	07/14/04 11:36
SPAADVJ671204#35	4G14018-08	Soil	07/12/04 08:52	07/14/04 11:36
SPAADVJ671204#36	4G14018-09	Soil	07/12/04 08:54	07/14/04 11:36
SPAADVJ671204#37	4G14018-10	Soil	07/12/04 09:10	07/14/04 11:36
SPAADVJ671204#38	4G14018-11	Soil	07/12/04 09:25	07/14/04 11:36
SPAADVJ671204#39	4G14018-12	Soil	07/12/04 09:30	07/14/04 11:36
SPAADVJ671204#40	4G14018-13	Soil	07/12/04 09:34	07/14/04 11:36
SPAADVJ671204#41	4G14018-14	Soil	07/12/04 09:40	07/14/04 11:36
SPAADVJ671204#42	4G14018-15	Soil	07/12/04 10:00	07/14/04 11:36
SPAADVJ671204#43	4G14018-16	Soil	07/12/04 10:05	07/14/04 11:36
SPAADVJ671204#44	4G14018-17	Soil	07/12/04 10:12	07/14/04 11:36
SPAADVJ671304#45	4G14018-18	Soil	07/13/04 07:15	07/14/04 11:36
SPAADVJ671304#46	4G14018-19	Soil	07/13/04 07:18	07/14/04 11:36
SPAADVJ671304#47	4G14018-20	Soil	07/13/04 07:21	07/14/04 11:36
SPAADVJ671304#48	4G14018-21	Soil	07/13/04 07:23	07/14/04 11:36
SPAADVJ671304#49	4G14018-22	Soil	07/13/04 07:25	07/14/04 11:36
SPAADVJ671304#50	4G14018-23	Soil	07/13/04 07:30	07/14/04 11:36
SPAADVJ671304#51	4G14018-24	Soil	07/13/04 07:36	07/14/04 11:36
SPAADVJ671304#52	4G14018-25	Soil	07/13/04 07:50	07/14/04 11:36
SPAADVJ671304#53	4G14018-26	Soil	07/13/04 07:59	07/14/04 11:36
SPAADVJ671304#54	4G14018-27	Soil	07/13/04 08:18	07/14/04 11:36
SPAADVJ671304#55	4G14018-28	Soil	07/13/04 08:20	07/14/04 11:36
SPAADVJ671304#56	4G14018-29	Soil	07/13/04 08:24	07/14/04 11:36
SPAADVJ671304#57	4G14018-30	Soil	07/13/04 09:02	07/14/04 11:36
SPAADVJ671304#58	4G14018-31	Soil	07/13/04 09:07	07/14/04 11:36
SPAADVJ671304#59	4G14018-32	Soil	07/13/04 09:11	07/14/04 11:36
SPAADVJ671304#60	4G14018-33	Soil	07/13/04 09:15	07/14/04 11:36

*Robert Burman  
Flintk*

*Car 3 Flintk*

*- R.B.*

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

**Reported:**  
07/20/04 12:37

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671204#28 (4G14018-01) Soil</b>									
Benzene	J [0.0209]	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	EPA 8021B	J
Toluene	0.171	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.301	0.0250	"	"	"	"	"	"	
Xylene (p/m)	1.39	0.0250	"	"	"	"	"	"	
Xylene (o)	0.601	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		96.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	273	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	1420	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1690	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		80.4 %	70-130		"	"	"	"	
<b>SPAAVJ671204#29 (4G14018-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		89.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.8 %	70-130		"	"	"	"	
<b>SPAAVJ671204#30 (4G14018-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		83.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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Page 3 of 29

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Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**SPAAVJ671204#30 (4G14018-03) Soil**

Surrogate: 1-Chlorooctane		79.8 %	70-130		EG41406	07/15/04	07/15/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		75.0 %	70-130		"	"	"	"	

**SPAAVJ671204#31 (4G14018-04) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		80.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		76.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.0 %	70-130		"	"	"	"	

**SPAAVJ671204#32 (4G14018-05) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		89.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		91.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		77.2 %	70-130		"	"	"	"	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671204#33 (4G14018-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		90.7 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		81.6 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.6 %	70-130	"	"	"	"	"	
<b>SPAAVJ671204#34 (4G14018-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		86.6 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		81.2 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130	"	"	"	"	"	
<b>SPAAVJ671204#35 (4G14018-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41605	07/14/04	07/15/04	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		85.6 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**SPAAVJ671204#35 (4G14018-08) Soil**

Surrogate: 1-Chlorooctane		86.6 %	70-130		EG41406	07/15/04	07/15/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130		"	"	"	"	

**SPAAVJ671204#36 (4G14018-09) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/15/04	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		87.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.1 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.8 %	70-130		"	"	"	"	

**SPAAVJ671204#37 (4G14018-10) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/15/04	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		88.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		117 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.8 %	70-130		"	"	"	"	

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Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671204#38 (4G14018-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		86.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		74.0 %	70-130		"	"	"	"	
<b>SPAAVJ671204#39 (4G14018-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		90.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		77.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130		"	"	"	"	
<b>SPAAVJ671204#40 (4G14018-13) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		83.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	91.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	91.3	10.0	"	"	"	"	"	"	

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAYJ671204#40 (4G14018-13) Soil</b>									
Surrogate: 1-Chlorooctane		82.2 %	70-130		EG41406	07/15/04	07/15/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		70.0 %	70-130		"	"	"	"	
<b>SPAAYJ671204#41 (4G14018-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0686	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0298	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		85.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	42.2	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	1550	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1590	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		109 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %	70-130		"	"	"	"	
<b>SPAAYJ671204#42 (4G14018-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		91.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		92.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		79.4 %	70-130		"	"	"	"	

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 12:37

# Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAADVJ671204#43 (4G14018-16) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0447	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		74.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.4 %	70-130		"	"	"	"	
<b>SPAADVJ671204#44 (4G14018-17) Soil</b>									
Benzene	J [0.0201]	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	EPA 8021B	J
Toluene	0.0603	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.0376	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.281	0.0250	"	"	"	"	"	"	
Xylene (o)	0.108	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		84.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		91.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		74.2 %	70-130		"	"	"	"	
<b>SPAADVJ671304#45 (4G14018-18) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	EPA 8021B	
Toluene	J [0.0213]	0.0250	"	"	"	"	"	"	J
Ethylbenzene	J [0.0182]	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	0.127	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0601	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**SPAAVJ671304#45 (4G14018-18) Soil**

Surrogate: 1-Chlorooctane	92.4 %	70-130	EG41406	07/15/04	07/15/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane	75.6 %	70-130	"	"	"	"	

**SPAAVJ671304#46 (4G14018-19) Soil**

Benzene	1.89	0.100	mg/kg dry	100	EG41905	07/15/04	07/19/04	EPA 8021B	
Toluene	32.9	0.100	"	"	"	"	"	"	
Ethylbenzene	42.7	0.100	"	"	"	"	"	"	
Xylene (p/m)	70.8	0.100	"	"	"	"	"	"	
Xylene (o)	25.0	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene	329 %	80-120	"	"	"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene	90.6 %	80-120	"	"	"	"	"	"	
Gasoline Range Organics C6-C12	1650	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	6680	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	8330	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane	81.0 %	70-130	"	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane	82.4 %	70-130	"	"	"	"	"	"	

**SPAAVJ671304#47 (4G14018-20) Soil**

Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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	84.6 %	80-120	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	84.3 %	80-120	"	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane	90.2 %	70-130	"	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane	71.0 %	70-130	"	"	"	"	"	"	

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**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#48 (4G14018-21) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		81.0 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.3 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		72.4 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.2 %	70-130	"	"	"	"	"	
<b>SPAAVJ671304#49 (4G14018-22) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		83.9 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.0 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		92.8 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.6 %	70-130	"	"	"	"	"	
<b>SPAAVJ671304#50 (4G14018-23) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		83.4 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.0 %	80-120	"	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	74.0	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	74.0	10.0	"	"	"	"	"	"	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAADVJ671304#50 (4G14018-23) Soil</b>									
Surrogate: 1-Chlorooctane		102 %	70-130		EG41406	07/15/04	07/16/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		73.2 %	70-130		"	"	"	"	
<b>SPAADVJ671304#51 (4G14018-24) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		82.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		80.4 %	70-130		"	"	"	"	
<b>SPAADVJ671304#52 (4G14018-25) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		87.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	35.7	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	35.7	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.2 %	70-130		"	"	"	"	

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Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

## Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#53 (4G14018-26) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		81.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		93.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.0 %	70-130		"	"	"	"	
<b>SPAAVJ671304#54 (4G14018-27) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		94.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.0 %	70-130		"	"	"	"	
<b>SPAAVJ671304#55 (4G14018-28) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG41905	07/15/04	07/16/04	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		81.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	14.6	10.0	mg/kg dry	1	EG41406	07/15/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	295	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	310	10.0	"	"	"	"	"	"	

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Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#55 (4G14018-28) Soil</b>									
Surrogate: 1-Chlorooctane		83.0 %	70-130		EG41406	07/15/04	07/16/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		71.0 %	70-130		"	"	"	"	
<b>SPAAVJ671304#56 (4G14018-29) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	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		87.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.8 %	70-130		"	"	"	"	
<b>SPAAVJ671304#57 (4G14018-30) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	J [0.0189]	0.0250	"	"	"	"	"	"	J
Ethylbenzene	0.0609	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.418	0.0250	"	"	"	"	"	"	
Xylene (o)	0.229	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		83.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	711	50.0	mg/kg dry	5	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	5820	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	6530	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		9.20 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		18.8 %	70-130		"	"	"	"	S-06

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**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#58 (4G14018-31) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	J [0.0161]	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	0.0639	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0263	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		80.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	16.4	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	243	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	259	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		72.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.8 %	70-130		"	"	"	"	
<b>SPAAVJ671304#59 (4G14018-32) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	0.147	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.262	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.604	0.0250	"	"	"	"	"	"	
Xylene (o)	0.245	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		83.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	86.6	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	1190	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1280	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		85.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		75.2 %	70-130		"	"	"	"	
<b>SPAAVJ671304#60 (4G14018-33) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	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		80.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	46.9	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	46.9	10.0	"	"	"	"	"	"	

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Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SPAAVJ671304#60 (4G14018-33) Soil									
Surrogate: 1-Chlorooctane		85.2 %	70-130		EG41603	07/16/04	07/16/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		70.6 %	70-130		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAADV671204#28 (4G14018-01) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#29 (4G14018-02) Soil</b>									
% Solids	99.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#30 (4G14018-03) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#31 (4G14018-04) Soil</b>									
% Solids	99.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#32 (4G14018-05) Soil</b>									
% Solids	95.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#33 (4G14018-06) Soil</b>									
% Solids	97.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#34 (4G14018-07) Soil</b>									
% Solids	96.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#35 (4G14018-08) Soil</b>									
% Solids	90.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#36 (4G14018-09) Soil</b>									
% Solids	94.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADV671204#37 (4G14018-10) Soil</b>									
% Solids	77.0		%	1	EG41618	07/16/04	07/16/04	% calculation	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 12:37

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAADVJ671204#38 (4G14018-11) Soil</b>									
% Solids	93.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#39 (4G14018-12) Soil</b>									
% Solids	97.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#40 (4G14018-13) Soil</b>									
% Solids	97.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#41 (4G14018-14) Soil</b>									
% Solids	94.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#42 (4G14018-15) Soil</b>									
% Solids	96.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#43 (4G14018-16) Soil</b>									
% Solids	93.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671204#44 (4G14018-17) Soil</b>									
% Solids	91.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671304#45 (4G14018-18) Soil</b>									
% Solids	91.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671304#46 (4G14018-19) Soil</b>									
% Solids	86.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAADVJ671304#47 (4G14018-20) Soil</b>									
% Solids	99.0		%	1	EG41618	07/16/04	07/16/04	% calculation	

Environmental Lab of Texas

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**General Chemistry Parameters by EPA / Standard Methods**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#48 (4G14018-21) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#49 (4G14018-22) Soil</b>									
% Solids	95.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#50 (4G14018-23) Soil</b>									
% Solids	95.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#51 (4G14018-24) Soil</b>									
% Solids	93.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#52 (4G14018-25) Soil</b>									
% Solids	96.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#53 (4G14018-26) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#54 (4G14018-27) Soil</b>									
% Solids	93.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#55 (4G14018-28) Soil</b>									
% Solids	94.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#56 (4G14018-29) Soil</b>									
% Solids	97.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#57 (4G14018-30) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671304#58 (4G14018-31) Soil</b>									
% Solids	99.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#59 (4G14018-32) Soil</b>									
% Solids	98.0		%	1	EG41618	07/16/04	07/16/04	% calculation	
<b>SPAAVJ671304#60 (4G14018-33) Soil</b>									
% Solids	94.0		%	1	EG41618	07/16/04	07/16/04	% calculation	

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Reported:  
07/20/04 12:37

**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
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**Batch EG41406 - Solvent Extraction (GC)**

**Blank (EG41406-BLK1)**

Prepared: 07/14/04 Analyzed: 07/15/04

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	43.4		mg/kg	50.0		86.8	70-130			
Surrogate: 1-Chlorooctadecane	35.8		"	50.0		71.6	70-130			

**Blank (EG41406-BLK2)**

Prepared: 07/14/04 Analyzed: 07/15/04

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	45.1		mg/kg	50.0		90.2	70-130			
Surrogate: 1-Chlorooctadecane	37.4		"	50.0		74.8	70-130			

**LCS (EG41406-BS1)**

Prepared: 07/14/04 Analyzed: 07/15/04

Gasoline Range Organics C6-C12	420	10.0	mg/kg wet	500		84.0	75-125			
Diesel Range Organics >C12-C35	501	10.0	"	500		100	75-125			
Total Hydrocarbon C6-C35	921	10.0	"	1000		92.1	75-125			
Surrogate: 1-Chlorooctane	54.6		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	36.1		"	50.0		72.2	70-130			

**LCS (EG41406-BS2)**

Prepared: 07/14/04 Analyzed: 07/15/04

Gasoline Range Organics C6-C12	428	10.0	mg/kg wet	500		85.6	75-125			
Diesel Range Organics >C12-C35	477	10.0	"	500		95.4	75-125			
Total Hydrocarbon C6-C35	905	10.0	"	1000		90.5	75-125			
Surrogate: 1-Chlorooctane	53.3		mg/kg	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	38.3		"	50.0		76.6	70-130			

**Calibration Check (EG41406-CCV1)**

Prepared: 07/14/04 Analyzed: 07/15/04

Gasoline Range Organics C6-C12	420		mg/kg	500		84.0	80-120			
Diesel Range Organics >C12-C35	469		"	500		93.8	80-120			
Total Hydrocarbon C6-C35	889		"	1000		88.9	80-120			
Surrogate: 1-Chlorooctane	52.8		"	50.0		106	70-130			
Surrogate: 1-Chlorooctadecane	36.4		"	50.0		72.8	70-130			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41406 - Solvent Extraction (GC)**

**Calibration Check (EG41406-CCV2)**

Prepared: 07/14/04 Analyzed: 07/15/04

Gasoline Range Organics C6-C12	413		mg/kg	500		82.6	80-120		
Diesel Range Organics >C12-C35	480		"	500		96.0	80-120		
Total Hydrocarbon C6-C35	893		"	1000		89.3	80-120		
Surrogate: 1-Chlorooctane	52.0		"	50.0		104	70-130		
Surrogate: 1-Chlorooctadecane	40.2		"	50.0		80.4	70-130		

**Matrix Spike (EG41406-MS1)**

Source: 4G14018-07

Prepared: 07/14/04 Analyzed: 07/16/04

Gasoline Range Organics C6-C12	482	10.0	mg/kg dry	521	ND	92.5	75-125		
Diesel Range Organics >C12-C35	553	10.0	"	521	ND	106	75-125		
Total Hydrocarbon C6-C35	1040	10.0	"	1040	ND	100	75-125		
Surrogate: 1-Chlorooctane	58.1		mg/kg	50.0		116	70-130		
Surrogate: 1-Chlorooctadecane	37.1		"	50.0		74.2	70-130		

**Matrix Spike (EG41406-MS2)**

Source: 4G14018-09

Prepared: 07/14/04 Analyzed: 07/16/04

Gasoline Range Organics C6-C12	497	10.0	mg/kg dry	532	ND	93.4	75-125		
Diesel Range Organics >C12-C35	554	10.0	"	532	ND	104	75-125		
Total Hydrocarbon C6-C35	1050	10.0	"	1060	ND	99.1	75-125		
Surrogate: 1-Chlorooctane	62.0		mg/kg	50.0		124	70-130		
Surrogate: 1-Chlorooctadecane	38.4		"	50.0		76.8	70-130		

**Matrix Spike Dup (EG41406-MSD1)**

Source: 4G14018-07

Prepared: 07/14/04 Analyzed: 07/16/04

Gasoline Range Organics C6-C12	466	10.0	mg/kg dry	521	ND	89.4	75-125	3.38	20
Diesel Range Organics >C12-C35	546	10.0	"	521	ND	105	75-125	1.27	20
Total Hydrocarbon C6-C35	1010	10.0	"	1040	ND	97.1	75-125	2.93	20
Surrogate: 1-Chlorooctane	56.6		mg/kg	50.0		113	70-130		
Surrogate: 1-Chlorooctadecane	37.0		"	50.0		74.0	70-130		

**Matrix Spike Dup (EG41406-MSD2)**

Source: 4G14018-09

Prepared: 07/14/04 Analyzed: 07/16/04

Gasoline Range Organics C6-C12	489	10.0	mg/kg dry	532	ND	91.9	75-125	1.62	20
Diesel Range Organics >C12-C35	549	10.0	"	532	ND	103	75-125	0.907	20
Total Hydrocarbon C6-C35	1040	10.0	"	1060	ND	98.1	75-125	0.957	20
Surrogate: 1-Chlorooctane	63.9		mg/kg	50.0		128	70-130		
Surrogate: 1-Chlorooctadecane	40.1		"	50.0		80.2	70-130		

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41603 - Solvent Extraction (GC)**

**Blank (EG41603-BLK1)**

Prepared & Analyzed: 07/16/04

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	43.3		mg/kg	50.0		87.0	70-130			
Surrogate: 1-Chlorooctadecane	36.3		"	50.0		72.6	70-130			

**LCS (EG41603-BS1)**

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	424	10.0	mg/kg wet	500		84.8	75-125			
Diesel Range Organics >C12-C35	436	10.0	"	500		87.2	75-125			
Total Hydrocarbon C6-C35	860	10.0	"	1000		86.0	75-125			
Surrogate: 1-Chlorooctane	44.9		mg/kg	50.0		89.8	70-130			
Surrogate: 1-Chlorooctadecane	36.3		"	50.0		72.6	70-130			

**Calibration Check (EG41603-CCV1)**

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	423		mg/kg	500		84.6	80-120			
Diesel Range Organics >C12-C35	453		"	500		90.6	80-120			
Total Hydrocarbon C6-C35	876		"	1000		87.6	80-120			
Surrogate: 1-Chlorooctane	53.6		"	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	36.8		"	50.0		73.6	70-130			

**Matrix Spike (EG41603-MS1)**

Source: 4G14018-29

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	454	10.0	mg/kg dry	515	ND	88.2	75-125			
Diesel Range Organics >C12-C35	443	10.0	"	515	ND	86.0	75-125			
Total Hydrocarbon C6-C35	897	10.0	"	1030	ND	87.1	75-125			
Surrogate: 1-Chlorooctane	50.6		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	38.5		"	50.0		77.0	70-130			

**Matrix Spike Dup (EG41603-MSD1)**

Source: 4G14018-29

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	437	10.0	mg/kg dry	515	ND	84.9	75-125	3.82	20	
Diesel Range Organics >C12-C35	458	10.0	"	515	ND	88.9	75-125	3.33	20	
Total Hydrocarbon C6-C35	895	10.0	"	1030	ND	86.9	75-125	0.223	20	
Surrogate: 1-Chlorooctane	51.5		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	35.4		"	50.0		70.8	70-130			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41605 - EPA 5030C (GC)**

**Blank (EG41605-BLK1)**

Prepared & Analyzed: 07/14/04

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	89.1		ug/kg	100		89.1	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			

**LCS (EG41605-BS1)**

Prepared & Analyzed: 07/14/04

Benzene	97.3		ug/kg	100		97.3	80-120			
Toluene	95.8		"	100		95.8	80-120			
Ethylbenzene	96.7		"	100		96.7	80-120			
Xylene (p/m)	194		"	200		97.0	80-120			
Xylene (o)	103		"	100		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	84.3		"	100		84.3	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			

**Calibration Check (EG41605-CCV1)**

Prepared: 07/14/04 Analyzed: 07/15/04

Benzene	96.0		ug/kg	100		96.0	80-120			
Toluene	93.6		"	100		93.6	80-120			
Ethylbenzene	92.5		"	100		92.5	80-120			
Xylene (p/m)	185		"	200		92.5	80-120			
Xylene (o)	99.0		"	100		99.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	87.4		"	100		87.4	80-120			
Surrogate: 4-Bromofluorobenzene	93.6		"	100		93.6	80-120			

**Matrix Spike (EG41605-MS1)**

Source: 4G14018-08

Prepared: 07/14/04 Analyzed: 07/15/04

Benzene	96.6		ug/kg	100	ND	96.6	80-120			
Toluene	94.5		"	100	ND	94.5	80-120			
Ethylbenzene	96.3		"	100	ND	96.3	80-120			
Xylene (p/m)	188		"	200	ND	94.0	80-120			
Xylene (o)	99.8		"	100	ND	99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	90.8		"	100		90.8	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41605 - EPA 5030C (GC)**

**Matrix Spike Dup (EG41605-MSD1)**

Source: 4G14018-08

Prepared: 07/14/04

Analyzed: 07/15/04

Benzene	90.6		ug/kg	100	ND	90.6	80-120	6.41	20	
Toluene	88.1		"	100	ND	88.1	80-120	7.01	20	
Ethylbenzene	90.2		"	100	ND	90.2	80-120	6.54	20	
Xylene (p/m)	182		"	200	ND	91.0	80-120	3.24	20	
Xylene (o)	97.1		"	100	ND	97.1	80-120	2.74	20	
Surrogate: a,a,a-Trifluorotoluene	84.7		"	100		84.7	80-120			
Surrogate: 4-Bromofluorobenzene	98.6		"	100		98.6	80-120			

**Batch EG41905 - EPA 5030C (GC)**

**Blank (EG41905-BLK1)**

Prepared & Analyzed: 07/15/04

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	82.7		ug/kg	100		82.7	80-120			
Surrogate: 4-Bromofluorobenzene	92.7		"	100		92.7	80-120			

**LCS (EG41905-BS1)**

Prepared & Analyzed: 07/15/04

Benzene	96.1		ug/kg	100		96.1	80-120			
Toluene	94.1		"	100		94.1	80-120			
Ethylbenzene	95.2		"	100		95.2	80-120			
Xylene (p/m)	192		"	200		96.0	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	88.8		"	100		88.8	80-120			
Surrogate: 4-Bromofluorobenzene	102		"	100		102	80-120			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41905 - EPA 5030C (GC)**

**Calibration Check (EG41905-CCV1)**

Prepared: 07/15/04 Analyzed: 07/16/04

Benzene	91.4		ug/kg	100		91.4	80-120			
Toluene	89.1		"	100		89.1	80-120			
Ethylbenzene	87.8		"	100		87.8	80-120			
Xylene (p/m)	175		"	200		87.5	80-120			
Xylene (o)	93.4		"	100		93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	88.2		"	100		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	89.4		"	100		89.4	80-120			

**Matrix Spike (EG41905-MS1)**

Source: 4G14018-28

Prepared: 07/15/04 Analyzed: 07/16/04

Benzene	92.6		ug/kg	100	ND	92.6	80-120			
Toluene	93.2		"	100	ND	93.2	80-120			
Ethylbenzene	99.3		"	100	ND	99.3	80-120			
Xylene (p/m)	198		"	200	ND	99.0	80-120			
Xylene (o)	102		"	100	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	86.2		"	100		86.2	80-120			
Surrogate: 4-Bromofluorobenzene	87.7		"	100		87.7	80-120			

**Matrix Spike Dup (EG41905-MSD1)**

Source: 4G14018-28

Prepared: 07/15/04 Analyzed: 07/16/04

Benzene	90.0		ug/kg	100	ND	90.0	80-120	2.85	20	
Toluene	88.0		"	100	ND	88.0	80-120	5.74	20	
Ethylbenzene	88.7		"	100	ND	88.7	80-120	11.3	20	
Xylene (p/m)	177		"	200	ND	88.5	80-120	11.2	20	
Xylene (o)	93.0		"	100	ND	93.0	80-120	9.23	20	
Surrogate: a,a,a-Trifluorotoluene	83.9		"	100		83.9	80-120			
Surrogate: 4-Bromofluorobenzene	89.8		"	100		89.8	80-120			

**Batch EG42002 - EPA 5030C (GC)**

**Blank (EG42002-BLK1)**

Prepared & Analyzed: 07/19/04

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	81.0		ug/kg	100		81.0	80-120			
Surrogate: 4-Bromofluorobenzene	90.9		"	100		90.9	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.

Page 26 of 29

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 12:37

**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
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**Batch EG42002 - EPA 5030C (GC)**

**LCS (EG42002-BS1)**

Prepared & Analyzed: 07/19/04

Benzene	94.6		ug/kg	100		94.6	80-120			
Toluene	93.3		"	100		93.3	80-120			
Ethylbenzene	93.7		"	100		93.7	80-120			
Xylene (p/m)	188		"	200		94.0	80-120			
Xylene (o)	99.0		"	100		99.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.5		"	100		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	99.8		"	100		99.8	80-120			

**Calibration Check (EG42002-CCV1)**

Prepared: 07/19/04 Analyzed: 07/20/04

Benzene	84.3		ug/kg	100		84.3	80-120			
Toluene	82.9		"	100		82.9	80-120			
Ethylbenzene	80.1		"	100		80.1	80-120			
Xylene (p/m)	161		"	200		80.5	80-120			
Xylene (o)	85.4		"	100		85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	81.3		"	100		81.3	80-120			
Surrogate: 4-Bromofluorobenzene	81.0		"	100		81.0	80-120			

**Matrix Spike (EG42002-MS1)**

Source: 4G19001-04

Prepared: 07/19/04 Analyzed: 07/20/04

Benzene	87.7		ug/kg	100	ND	87.7	80-120			
Toluene	87.3		"	100	ND	87.3	80-120			
Ethylbenzene	89.5		"	100	ND	89.5	80-120			
Xylene (p/m)	181		"	200	ND	90.5	80-120			
Xylene (o)	93.4		"	100	ND	93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	84.0		"	100		84.0	80-120			
Surrogate: 4-Bromofluorobenzene	88.4		"	100		88.4	80-120			

**Matrix Spike Dup (EG42002-MSD1)**

Source: 4G19001-04

Prepared: 07/19/04 Analyzed: 07/20/04

Benzene	94.2		ug/kg	100	ND	94.2	80-120	7.15	20	
Toluene	92.4		"	100	ND	92.4	80-120	5.68	20	
Ethylbenzene	93.3		"	100	ND	93.3	80-120	4.16	20	
Xylene (p/m)	187		"	200	ND	93.5	80-120	3.26	20	
Xylene (o)	98.9		"	100	ND	98.9	80-120	5.72	20	
Surrogate: a,a,a-Trifluorotoluene	87.6		"	100		87.6	80-120			
Surrogate: 4-Bromofluorobenzene	96.7		"	100		96.7	80-120			

Environmental Lab of Texas

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Page 27 of 29

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

**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 EG41618 - General Preparation (Prep)**

**Blank (EG41618-BLK1)**

Prepared: 07/16/04 Analyzed: 07/19/04

% Solids	100	%
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**Duplicate (EG41618-DUP1)**

Source: 4G14018-01

Prepared: 07/16/04 Analyzed: 07/19/04

% Solids	98.0	%	98.0	0.00	20
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Environmental Lab of Texas

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Page 28 of 29

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 12:37

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP-J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

7-20-04

Raland K. Tuttle, QA Officer  
Celey D. Keene, Lab Director, Org. Tech Director  
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist  
Sara Molina, Chemist  
Sandra Biezugbe, Lab Tech.

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If you have received this material in error, please notify us immediately at 432-563-1800.

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.*

Page 29 of 29

# 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 / Pat McCasland

Company Name: Plains All American Pipeline / Environmental Plus, Inc.

Company Address: 2100 Ave O

City/State/Zip: Eunice NM 88231

Telephone No: 505-394-3481

Sampler Signature: 

Project Name: Vacuum to Jal 14" Mainline #6

Project #: 2003-00135

Project Loc: Secs 25/36 T23S R37E Lea Co NM

PO#: 2003-00135

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative								Type				Analyze For																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Special Instructions

FAX RESULTS TO Pat McCasland 505.394.3481

Sample Containers Intact? Y N

Temperature Upon Request  
Laboratory Comments:

20C  
4 oz Glass

Relinquished:

Date

Time

Received by:

Signature

Relinquished:

Date

Time

Received by:

Signature





2 of 3

**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 / Pat McCasland

Company Name: Plains All American Pipeline / Environmental Plus, Inc.

Company Address: 2100 Ave O

City/State/Zip: Eunice NM 88231

Telephone No: 505-394-3481

Sampler Signature: 

Project Name: Vacuum to Jal 14" Mainline #6

Project #: 2003-00135

Project Loc: Secs 25/36 T23S R37E Lea Co NM

PO#: 2003-00135

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative										Type		TCLP										Analyze For																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Special Instructions


FAX RESULTS TO Pat McCasland 505.394.3481

Relinquished:



Date

Time

Received by: 

Relinquished:



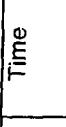
Date

Time

Received by: 

Date

Time

Received by: 

Sample Containers Intact? Y N

Temperature Upon Request

Laboratory Comments:

2C

406655

# Environmental Lab of Texas, Inc.

12600 West I-20 East Phone: 915-563-1800  
Odessa Texas 79763 Fax: 915-563-1713

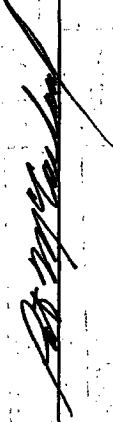
Project Manager: Jimmy Bryant / Pat McCasland

Company Name: Plains All American Pipeline / Environmental Plus, Inc.

Company Address: 2100 Ave O

City/State/Zip: Eunice NM 88231

Telephone No: 505-394-3481

Sampler Signature: 

Project Name: Vacuum to Jal 14" Mainline #6

Project #: 2003-00135


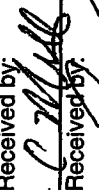

Project Loc: Secs 25/36 T23S R37E Lea Co NM

PO#: 2003-00135

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative								Type				Analyze For																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Special Instructions

FAX RESULTS TO Pat McCasland 505.394.3481

Relinquished:		Date	Time	Received by:		Date	Time
Relinquished:		Date	Time	Received by:		Date	Time

Sample Containers Intact? Y N

Temperature Upon Request Laboratory Comments:

20C

402 C/LCS

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains Pipeline

Date/Time: 07-14-04 @ 1215

Order #: 4G14018

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	No	2	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	No		
Custody Seals intact on shipping container/cooler?	Yes	No	<del>Not present</del>	
Custody Seals intact on sample bottles?	Yes	No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	No		
Chain of custody agrees with sample label(s)	Yes	No		
Container labels legible and intact?	Yes	No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable	

Other observations:

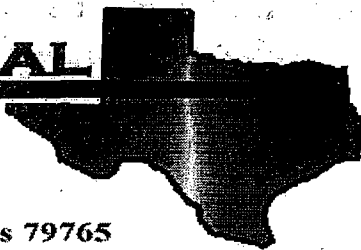
### Variance Documentation:

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

Regarding: \_\_\_\_\_

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

# **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: Vacuum To Jal 14 inch Mainline #6**

**Project Number: 2003-00135**

**Location: Secs 25/36 T23S R37E Lea Co., NM**

**Lab Order Number: 4G16006**

**Report Date: 07/20/04**

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

**Reported:**  
07/20/04 16:30

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SPAAVJ671404#6B	4G16006-01	Soil	07/14/04 08:30	07/16/04 10:30
SPAAVJ671404#11B	4G16006-02	Soil	07/14/04 08:45	07/16/04 10:30
SPAAVJ671404#17B	4G16006-03	Soil	07/14/04 08:55	07/16/04 10:30

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

# Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671404#6B (4G16006-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0671	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0271	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	50.7	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	467	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	518	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.8 %	70-130		"	"	"	"	
<b>SPAAVJ671404#11B (4G16006-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	0.0346	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.0730	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.162	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0585	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		81.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	50.0	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	695	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	745	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.4 %	70-130		"	"	"	"	
<b>SPAAVJ671404#17B (4G16006-03) Soil</b>									
Benzene	0.277	0.0250	mg/kg dry	25	EG42002	07/19/04	07/19/04	EPA 8021B	
Toluene	3.16	0.0250	"	"	"	"	"	"	
Ethylbenzene	4.89	0.0250	"	"	"	"	"	"	
Xylene (p/m)	9.79	0.0250	"	"	"	"	"	"	
Xylene (o)	4.01	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		204 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		85.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	843	10.0	mg/kg dry	1	EG41603	07/16/04	07/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	2510	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	3350	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671404#17B (4G16006-03) Soil</b>									
Surrogate: 1-Chlorooctane		108 %	70-130		EG41603	07/16/04	07/16/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		89.6 %	70-130		"	"	"	"	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SPAAVJ671404#6B (4G16006-01) Soil</b>									
% Solids	95.0		%	1	EG41618	07/16/04	07/19/04	% calculation	
<b>SPAAVJ671404#11B (4G16006-02) Soil</b>									
% Solids	96.0		%	1	EG41618	07/16/04	07/19/04	% calculation	
<b>SPAAVJ671404#17B (4G16006-03) Soil</b>									
% Solids	93.0		%	1	EG41618	07/16/04	07/19/04	% calculation	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

**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
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**Batch EG41603 - Solvent Extraction (GC)**

**Blank (EG41603-BLK1)**

Prepared & Analyzed: 07/16/04

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	43.5		mg/kg	50.0		87.0	70-130			
Surrogate: 1-Chlorooctadecane	36.3		"	50.0		72.6	70-130			

**LCS (EG41603-BS1)**

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	424	10.0	mg/kg wet	500		84.8	75-125			
Diesel Range Organics >C12-C35	436	10.0	"	500		87.2	75-125			
Total Hydrocarbon C6-C35	860	10.0	"	1000		86.0	75-125			
Surrogate: 1-Chlorooctane	44.9		mg/kg	50.0		89.8	70-130			
Surrogate: 1-Chlorooctadecane	36.3		"	50.0		72.6	70-130			

**Calibration Check (EG41603-CCV1)**

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	423		mg/kg	500		84.6	80-120			
Diesel Range Organics >C12-C35	453		"	500		90.6	80-120			
Total Hydrocarbon C6-C35	876		"	1000		87.6	80-120			
Surrogate: 1-Chlorooctane	53.6		"	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	36.8		"	50.0		73.6	70-130			

**Matrix Spike (EG41603-MS1)**

Source: 4G14018-29

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	454	10.0	mg/kg dry	515	ND	88.2	75-125			
Diesel Range Organics >C12-C35	443	10.0	"	515	ND	86.0	75-125			
Total Hydrocarbon C6-C35	897	10.0	"	1030	ND	87.1	75-125			
Surrogate: 1-Chlorooctane	50.6		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	38.5		"	50.0		77.0	70-130			

**Matrix Spike Dup (EG41603-MSD1)**

Source: 4G14018-29

Prepared & Analyzed: 07/16/04

Gasoline Range Organics C6-C12	437	10.0	mg/kg dry	515	ND	84.9	75-125	3.82	20	
Diesel Range Organics >C12-C35	458	10.0	"	515	ND	88.9	75-125	3.33	20	
Total Hydrocarbon C6-C35	895	10.0	"	1030	ND	86.9	75-125	0.223	20	
Surrogate: 1-Chlorooctane	51.5		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	35.4		"	50.0		70.8	70-130			

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 16:30

**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
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**Batch EG42002 - EPA 5030C (GC)**

**Blank (EG42002-BLK1)**

Prepared & Analyzed: 07/19/04

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	81.0		ug/kg	100		81.0	80-120			
Surrogate: 4-Bromofluorobenzene	90.9		"	100		90.9	80-120			

**LCS (EG42002-BS1)**

Prepared & Analyzed: 07/19/04

Benzene	94.6		ug/kg	100		94.6	80-120			
Toluene	93.3		"	100		93.3	80-120			
Ethylbenzene	93.7		"	100		93.7	80-120			
Xylene (p/m)	188		"	200		94.0	80-120			
Xylene (o)	99.0		"	100		99.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.5		"	100		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	99.8		"	100		99.8	80-120			

**Calibration Check (EG42002-CCV1)**

Prepared: 07/19/04 Analyzed: 07/20/04

Benzene	84.3		ug/kg	100		84.3	80-120			
Toluene	82.9		"	100		82.9	80-120			
Ethylbenzene	80.1		"	100		80.1	80-120			
Xylene (p/m)	161		"	200		80.5	80-120			
Xylene (o)	85.4		"	100		85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	81.3		"	100		81.3	80-120			
Surrogate: 4-Bromofluorobenzene	81.0		"	100		81.0	80-120			

**Matrix Spike (EG42002-MS1)**

Source: 4G19001-04

Prepared: 07/19/04 Analyzed: 07/20/04

Benzene	87.7		ug/kg	100	ND	87.7	80-120			
Toluene	87.3		"	100	ND	87.3	80-120			
Ethylbenzene	89.5		"	100	ND	89.5	80-120			
Xylene (p/m)	181		"	200	ND	90.5	80-120			
Xylene (o)	93.4		"	100	ND	93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	84.0		"	100		84.0	80-120			
Surrogate: 4-Bromofluorobenzene	88.4		"	100		88.4	80-120			

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

**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
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**Batch EG42002 - EPA 5030C (GC)**

**Matrix Spike Dup (EG42002-MSD1)**

Source: 4G19001-04

Prepared: 07/19/04

Analyzed: 07/20/04

Benzene	94.2		ug/kg	100	ND	94.2	80-120	7.15	20	
Toluene	92.4		"	100	ND	92.4	80-120	5.68	20	
Ethylbenzene	93.3		"	100	ND	93.3	80-120	4.16	20	
Xylene (p/m)	187		"	200	ND	93.5	80-120	3.26	20	
Xylene (o)	98.9		"	100	ND	98.9	80-120	5.72	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	87.6		"	100		87.6	80-120			
Surrogate: 4-Bromofluorobenzene	96.7		"	100		96.7	80-120			

Environmental Lab of Texas

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914  
Reported:  
07/20/04 16:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EG41618 - General Preparation (Prep)**

**Blank (EG41618-BLK1)**

Prepared: 07/16/04 Analyzed: 07/19/04

% Solids	100	%
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**Duplicate (EG41618-DUP1)**

Source: 4G14018-01

Prepared: 07/16/04 Analyzed: 07/19/04

% Solids	98.0	%	98.0	0.00	20
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Plains All American EH & S  
1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jimmy Bryant

Fax: (432) 687-4914

Reported:  
07/20/04 16:30

### 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

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K Tuttle

Date:

7-20-04

Raland K. Tuttle, QA Officer  
Celey D. Keene, Lab Director, Org. Tech Director  
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist  
Sara Molina, Chemist  
Sandra Biezugbe, Lab Tech.

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If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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**12600 West I-20 East**  
**Odessa Texas 79763**

**Sampler Signature:**

PO#: 2003-00135

6505204

## Special Instructions

**FAX RESULTS TO Pat McCasland 505.394.3481**

**Relinquished:**

Received by:

Date	Time
------	------

Retained:

Received by:

Date	Time
------	------

7 of 1

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains Pipeline

Date/Time: 07-16-04 @ 1100

Order #: 4G16006

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	I, S	C
Shipping container/cooler in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	N/A	
Custody Seals intact on shipping container/cooler?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Custody Seals intact on sample bottles?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

Other observations:

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### Variance Documentation:

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

Regarding: \_\_\_\_\_

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Corrective Action Taken:

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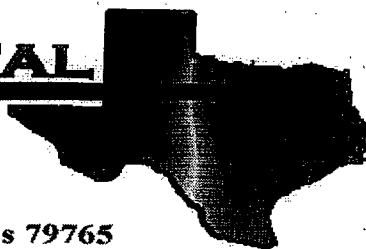


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# **E** **NVIRONMENTAL** **LAB OF**



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

## **Analytical Report**

**Prepared for:**

**Jeff Dann**

**Plains All American EH & S**

**1301 S. County Road 1150**

**Midland, TX 79706-4476**

**Project: Jal 14 in. Mainline #6**

**Project Number: 2003-00135**

**Location: None Given**

**Lab Order Number: 4H04013**

**Report Date: 08/10/04**



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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/10/04 10:54

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
08030459B	4H04013-01	Soil	08/03/04 07:20	08/04/04 15:05
08030446B	4H04013-02	Soil	08/03/04 07:25	08/04/04 15:05
08030441B	4H04013-03	Soil	08/03/04 07:30	08/04/04 15:05
08030455B	4H04013-04	Soil	08/03/04 07:58	08/04/04 15:05
08030457B	4H04013-05	Soil	08/03/04 08:01	08/04/04 15:05
08030458B	4H04013-06	Soil	08/03/04 08:04	08/04/04 15:05
08030428B	4H04013-07	Soil	08/03/04 08:25	08/04/04 15:05
08030417B	4H04013-08	Soil	08/03/04 08:29	08/04/04 15:05

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>08030459B (4H04013-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	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		86.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.7 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		76.6 %	70-130		"	"	"	"	
<b>08030446B (4H04013-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	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		84.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		82.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.2 %	70-130		"	"	"	"	
<b>08030441B (4H04013-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	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		86.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	15.6	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	15.6	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>08030441B (4H04013-03) Soil</b>									
Surrogate: 1-Chlorooctane		86.6 %	70-130		EH40520	08/05/04	08/06/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		75.4 %	70-130		"	"	"	"	
<b>08030455B (4H04013-04) Soil</b>									
Benzene	0.0704	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	EPA 8021B	
Toluene	1.48	0.0250	"	"	"	"	"	"	
Ethylbenzene	2.61	0.0250	"	"	"	"	"	"	
Xylene (p/m)	5.69	0.0250	"	"	"	"	"	"	
Xylene (o)	2.27	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		127 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	359	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1330	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1690	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		120 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-130		"	"	"	"	
<b>08030457B (4H04013-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	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		86.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130		"	"	"	"	

Environmental Lab of Texas

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>08030458B (4H04013-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/09/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	J [0.0172]	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	0.0530	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		84.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	21.3	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	58.8	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	80.1	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		92.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		79.0 %	70-130		"	"	"	"	
<b>08030428B (4H04013-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	EPA 8021B	
Toluene	0.0739	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.386	0.0250	"	"	"	"	"	"	
Xylene (p/m)	1.04	0.0250	"	"	"	"	"	"	
Xylene (o)	0.454	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		80.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	95.9	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	252	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	348	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		92.0 %	70-130		"	"	"	"	
<b>08030417B (4H04013-08) Soil</b>									
Benzene	0.122	0.0250	mg/kg dry	25	EH41007	08/06/04	08/06/04	EPA 8021B	
Toluene	1.16	0.0250	"	"	"	"	"	"	
Ethylbenzene	1.22	0.0250	"	"	"	"	"	"	
Xylene (p/m)	3.50	0.0250	"	"	"	"	"	"	
Xylene (o)	1.40	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		120 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	423	10.0	mg/kg dry	1	EH40520	08/05/04	08/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1190	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1610	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>08030417B (4H04013-08) Soil</b>									
Surrogate: 1-Chlorooctane		108 %	70-130		EH40520	08/05/04	08/06/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		97.2 %	70-130		"	"	"	"	

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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>08030459B (4H04013-01) Soil</b>									
% Solids	85.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030446B (4H04013-02) Soil</b>									
% Solids	96.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030441B (4H04013-03) Soil</b>									
% Solids	87.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030455B (4H04013-04) Soil</b>									
% Solids	94.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030457B (4H04013-05) Soil</b>									
% Solids	96.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030458B (4H04013-06) Soil</b>									
% Solids	94.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030428B (4H04013-07) Soil</b>									
% Solids	96.0		%	1	EH40901	08/05/04	08/05/04	% calculation	
<b>08030417B (4H04013-08) Soil</b>									
% Solids	91.0		%	1	EH40901	08/05/04	08/05/04	% calculation	

Environmental Lab of Texas

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Plains All American EH & S  
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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**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 EH40520 - Solvent Extraction (GC)**

**Blank (EH40520-BLK1)**

Prepared: 08/05/04 Analyzed: 08/06/04

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	53.6		mg/kg	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	37.2		"	50.0		74.4	70-130			

**LCS (EH40520-BS1)**

Prepared: 08/05/04 Analyzed: 08/06/04

Gasoline Range Organics C6-C12	461	10.0	mg/kg wet	500		92.2	75-125			
Diesel Range Organics >C12-C35	441	10.0	"	500		88.2	75-125			
Total Hydrocarbon C6-C35	902	10.0	"	1000		90.2	75-125			
Surrogate: 1-Chlorooctane	60.4		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	56.6		"	50.0		113	70-130			

**Calibration Check (EH40520-CCV1)**

Prepared: 08/05/04 Analyzed: 08/06/04

Gasoline Range Organics C6-C12	435		mg/kg	500		87.0	80-120			
Diesel Range Organics >C12-C35	438		"	500		87.6	80-120			
Total Hydrocarbon C6-C35	873		"	1000		87.3	80-120			
Surrogate: 1-Chlorooctane	50.6		"	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	36.9		"	50.0		73.8	70-130			

**Matrix Spike (EH40520-MS1)**

Source: 4H04012-03

Prepared: 08/05/04 Analyzed: 08/06/04

Gasoline Range Organics C6-C12	514	10.0	mg/kg dry	549	ND	93.6	75-125			
Diesel Range Organics >C12-C35	565	10.0	"	549	ND	103	75-125			
Total Hydrocarbon C6-C35	1080	10.0	"	1100	ND	98.2	75-125			
Surrogate: 1-Chlorooctane	63.8		mg/kg	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	63.9		"	50.0		128	70-130			

**Matrix Spike Dup (EH40520-MSD1)**

Source: 4H04012-03

Prepared: 08/05/04 Analyzed: 08/06/04

Gasoline Range Organics C6-C12	508	10.0	mg/kg dry	549	ND	92.5	75-125	1.17	20	
Diesel Range Organics >C12-C35	482	10.0	"	549	ND	87.8	75-125	15.9	20	
Total Hydrocarbon C6-C35	990	10.0	"	1100	ND	90.0	75-125	8.70	20	
Surrogate: 1-Chlorooctane	64.4		mg/kg	50.0		129	70-130			
Surrogate: 1-Chlorooctadecane	60.6		"	50.0		121	70-130			

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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**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
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**Batch EH41007 - EPA 5030C (GC)**

**Blank (EH41007-BLK1)**

Prepared & Analyzed: 08/06/04

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	81.2		ug/kg	100		81.2	80-120			
Surrogate: 4-Bromofluorobenzene	86.5		"	100		86.5	80-120			

**LCS (EH41007-BS1)**

Prepared & Analyzed: 08/06/04

Benzene	95.0		ug/kg	100		95.0	80-120			
Toluene	94.1		"	100		94.1	80-120			
Ethylbenzene	91.7		"	100		91.7	80-120			
Xylene (p/m)	199		"	200		99.5	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	94.4		"	100		94.4	80-120			
Surrogate: 4-Bromofluorobenzene	90.6		"	100		90.6	80-120			

**Calibration Check (EH41007-CCV1)**

Prepared: 08/06/04 Analyzed: 08/09/04

Benzene	98.7		ug/kg	100		98.7	80-120			
Toluene	96.9		"	100		96.9	80-120			
Ethylbenzene	97.9		"	100		97.9	80-120			
Xylene (p/m)	206		"	200		103	80-120			
Xylene (o)	108		"	100		108	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	98.9		"	100		98.9	80-120			

**Matrix Spike (EH41007-MS1)**

Source: 4H04013-06

Prepared: 08/06/04 Analyzed: 08/09/04

Benzene	2330		ug/kg	2500	ND	93.2	80-120			
Toluene	2360		"	2500	ND	94.4	80-120			
Ethylbenzene	2480		"	2500	16.2	98.6	80-120			
Xylene (p/m)	5300		"	5000	49.8	105	80-120			
Xylene (o)	2700		"	2500	ND	108	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.4		"	100		91.4	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			



Plains All American EH & S  
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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**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
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**Batch EH41007 - EPA 5030C (GC)**

**Matrix Spike Dup (EH41007-MSD1)**

**Source: 4H04013-06**

**Prepared: 08/06/04**

**Analyzed: 08/09/04**

Benzene	2370		ug/kg	2500	ND	94.8	80-120	1.70	20	
Toluene	2400		"	2500	ND	96.0	80-120	1.68	20	
Ethylbenzene	2510		"	2500	16.2	99.8	80-120	1.21	20	
Xylene (p/m)	5360		"	5000	49.8	106	80-120	0.948	20	
Xylene (o)	2740		"	2500	ND	110	80-120	1.83	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	92.1		"	100		92.1	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	105		"	100		105	80-120			

Environmental Lab of Texas

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Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

**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 EH40901 - General Preparation (Prep)**

**Blank (EH40901-BLK1)**

Prepared & Analyzed: 08/05/04

% Solids	100	%
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**Duplicate (EH40901-DUP1)**

Source: 4H04012-01

Prepared & Analyzed: 08/05/04

% Solids	95.0	%	95.0	0.00	20
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Environmental Lab of Texas

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1301 S. County Road 1150  
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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/10/04 10:54

### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

2-10-04

Raland K. Tuttle, QA Officer

Celey D. Keene, Lab Director, Org. Tech Director

Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist

Sara Molina, Chemist

Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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Page 11 of 11

**112600 West I-20 East**  
**Odessa Texas 79763**  
**Phone: 915-563-1800**  
**Fax: 915-563-1713**

**Project Name:** Jal 14" Mainline #6

Project #: 2003-00135

**Project Loc:**

**PO#:**

**Telephone No:** \_\_\_\_\_

W. H. B. B. B. B.

as per Pat. McCasland.

[illegible]

### Special Instructions

**FAX RESULTS TO PAT McCASLAND ASAP**

**Relinquished:**

Relinquished: *Mike S. Browley*

Date	Time
------	------

Received by:

Received by: *[Signature]*

**Relinquished:**

Relinquished: *Geoff Hall*

Date	Time
------	------

Received by:

Received by:  
Kala VK Jund

Sample Containers In Y	N
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
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94	1
95	1
96	1
97	1
98	1
99	1
100	1

### Temperature Upon Request

**Laboratory Comments:**

Rec 1.5°C

Date \_\_\_\_\_ Time \_\_\_\_\_

505

23

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains P/L

Date/Time: 08-04-04 @ 1615

Order #: 4404013

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	115	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Custody Seals intact on shipping container/cooler?	<input type="radio"/> Yes	<input type="radio"/> No	<del>Not present</del>	
Custody Seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Instructions complete on Chain of Custody?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	client called and told us to analyze BTEX 8021B + TPH 8015	
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	

Other observations:

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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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12600 West I-20 East  
Odessa Texas 79763

Project Name: Jal 14" Mainline #6

Project #: 2003-00135

**Project Loc:**

PO#:

Telephone No: \_\_\_\_\_  
Sampler Signature: Mark D. Venturi

**Sampler Signature:**

[illegible]

### Special Instructions

**FAX RESULTS TO PAT McCASLAND ASAP**

**Relinquished:**

Relinquished: *Marlo O. Mooreley*  
Relinquished: *11/20/20*

Date	Time
3-4	7:00

Received by:

Received by: *[Signature]*

**Relinquished:**

Relinquished: Deaf Hall

Date	Time
8-4	205

Received by:

Received by: Carl A. K. Jundt

	Y	N
Sample Containers In Y		

## Temperature Upon Request

**Laboratory Comments:**

Rec'd 1.5°C

①

**12600 West I-20 East**  
**Odessa Texas 79763**

**Phone: 915-563-1800**  
**Fax: 915-563-1713**

Project Name: **Jan 14" Mainline #6**

Project #: 2003-00135

Project Loc:

PO#:

**Telephone No:**

**Sampler Signature:**

[illegible]

### Special Instructions

**FAX RESULTS TO PAT McCASLAND ASAP**

**Relinquished:**

Received by:

Date	Time
------	------

**Relinquished:**

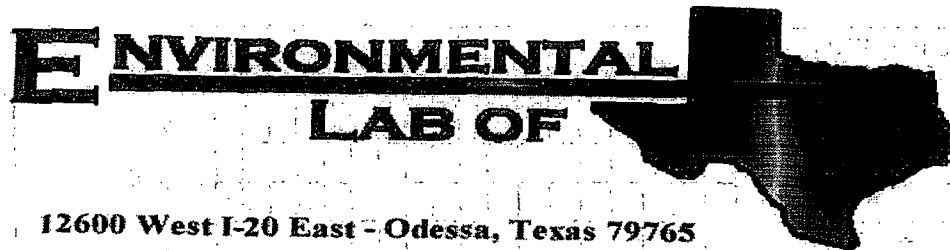
**Received by:**

Date	Time
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Sample Containers In Y	N
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
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93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

**Temperature Upon Request.**

**Laboratory Comments:**



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jal 14 in. Mainline #6

Project Number: 2003-00135

Location: None Given

Lab Order Number: 4H12005

Report Date: 08/18/04



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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/18/04 08:37

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SL14M8100428C	4H12005-01	Soil	08/10/04 07:19	08/12/04 10:30
SL14M8100455C	4H12005-02	Soil	08/10/04 07:26	08/12/04 10:30
SL14M810046D	4H12005-03	Soil	08/10/04 08:16	08/12/04 10:30
SL14M8100411D	4H12005-04	Soil	08/10/04 08:20	08/12/04 10:30
SL14M8100417D	4H12005-05	Soil	08/10/04 08:25	08/12/04 10:30

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/18/04 08:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M8100428C (4H12005-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41605	08/12/04	08/13/04	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		88.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH41207	08/12/04	08/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		123 %	70-130		"	"	08/12/04	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	
<b>SL14M8100455C (4H12005-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41605	08/12/04	08/15/04	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		80.6 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH41207	08/12/04	08/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		117 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-130		"	"	"	"	
<b>SL14M810046D (4H12005-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41605	08/12/04	08/13/04	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		84.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	61.7	10.0	mg/kg dry	1	EH41207	08/12/04	08/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	428	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	490	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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Page 2 of 10

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M810046D (4H12005-03) Soil</b>									
Surrogate: 1-Chlorooctane		115 %	70-130		EH41207	08/12/04	08/12/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		128 %	70-130		"	"	"	"	
<b>SL14M8100411D (4H12005-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41605	08/12/04	08/13/04	EPA 8021B	
Toluene	0.179	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.238	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.640	0.0250	"	"	"	"	"	"	
Xylene (o)	0.173	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		103 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	63.8	10.0	mg/kg dry	1	EH41207	08/12/04	08/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	442	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	506	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		115 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-130		"	"	"	"	
<b>SL14M8100417D (4H12005-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH41605	08/12/04	08/15/04	EPA 8021B	
Toluene	0.110	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.191	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.431	0.0250	"	"	"	"	"	"	
Xylene (o)	0.157	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	78.9	10.0	mg/kg dry	1	EH41207	08/12/04	08/12/04	EPA 8015M	
Diesel Range Organics >C12-C35	859	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	938	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		120 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SL14M8100428C (4H12005-01) Soil</b>									
% Solids	95.0		%	1	EH41301	08/12/04	08/12/04	% calculation	
<b>SL14M8100455C (4H12005-02) Soil</b>									
% Solids	93.0		%	1	EH41301	08/12/04	08/12/04	% calculation	
<b>SL14M810046D (4H12005-03) Soil</b>									
% Solids	92.0		%	1	EH41301	08/12/04	08/12/04	% calculation	
<b>SL14M8100411D (4H12005-04) Soil</b>									
% Solids	89.0		%	1	EH41301	08/12/04	08/12/04	% calculation	
<b>SL14M8100417D (4H12005-05) Soil</b>									
% Solids	96.0		%	1	EH41301	08/12/04	08/12/04	% calculation	

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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

**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 EH41207 - Solvent Extraction (GC)**

**Blank (EH41207-BLK1)**

Prepared & Analyzed: 08/12/04

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	43.9		mg/kg	50.0		87.8	70-130			
Surrogate: 1-Chlorooctadecane	44.5		"	50.0		89.0	70-130			

**Blank (EH41207-BLK2)**

Prepared & Analyzed: 08/12/04

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	43.3		mg/kg	50.0		86.6	70-130			
Surrogate: 1-Chlorooctadecane	44.7		"	50.0		89.4	70-130			

**LCS (EH41207-BS1)**

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	440	10.0	mg/kg wet	500		88.0	75-125			
Diesel Range Organics >C12-C35	484	10.0	"	500		96.8	75-125			
Total Hydrocarbon C6-C35	924	10.0	"	1000		92.4	75-125			
Surrogate: 1-Chlorooctane	50.4		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	43.4		"	50.0		86.8	70-130			

**LCS (EH41207-BS2)**

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	414	10.0	mg/kg wet	500		82.8	75-125			
Diesel Range Organics >C12-C35	410	10.0	"	500		82.0	75-125			
Total Hydrocarbon C6-C35	824	10.0	"	1000		82.4	75-125			
Surrogate: 1-Chlorooctane	36.3		mg/kg	50.0		72.6	70-130			
Surrogate: 1-Chlorooctadecane	39.4		"	50.0		78.8	70-130			

**Calibration Check (EH41207-CCV1)**

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	442		mg/kg	500		88.4	80-120			
Diesel Range Organics >C12-C35	496		"	500		99.2	80-120			
Total Hydrocarbon C6-C35	938		"	1000		93.8	80-120			
Surrogate: 1-Chlorooctane	49.5		"	50.0		99.0	70-130			
Surrogate: 1-Chlorooctadecane	40.4		"	50.0		80.8	70-130			

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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

## Organics by GC - Quality Control Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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### Batch EH41207 - Solvent Extraction (GC)

#### Calibration Check (EH41207-CCV2)

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	465		mg/kg	500		93.0	80-120		
Diesel Range Organics >C12-C35	513		"	500		103	80-120		
Total Hydrocarbon C6-C35	978		"	1000		97.8	80-120		
Surrogate: 1-Chlorooctane	51.9		"	50.0		104	70-130		
Surrogate: 1-Chlorooctadecane	44.5		"	50.0		89.0	70-130		

#### Matrix Spike (EH41207-MS1)

Source: 4H12002-04

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	518	10.0	mg/kg dry	526	ND	98.5	75-125		
Diesel Range Organics >C12-C35	684	10.0	"	526	65.9	118	75-125		
Total Hydrocarbon C6-C35	1200	10.0	"	1050	65.9	108	75-125		
Surrogate: 1-Chlorooctane	56.9		mg/kg	50.0		114	70-130		
Surrogate: 1-Chlorooctadecane	59.2		"	50.0		118	70-130		

#### Matrix Spike (EH41207-MS2)

Source: 4H12008-07

Prepared: 08/12/04 Analyzed: 08/13/04

Gasoline Range Organics C6-C12	587	10.0	mg/kg dry	575	ND	102	75-125		
Diesel Range Organics >C12-C35	643	10.0	"	575	ND	112	75-125		
Total Hydrocarbon C6-C35	1230	10.0	"	1150	ND	107	75-125		
Surrogate: 1-Chlorooctane	56.8		mg/kg	50.0		114	70-130		
Surrogate: 1-Chlorooctadecane	51.7		"	50.0		103	70-130		

#### Matrix Spike Dup (EH41207-MSD1)

Source: 4H12002-04

Prepared & Analyzed: 08/12/04

Gasoline Range Organics C6-C12	541	10.0	mg/kg dry	526	ND	103	75-125	4.34	20
Diesel Range Organics >C12-C35	667	10.0	"	526	65.9	114	75-125	2.52	20
Total Hydrocarbon C6-C35	1210	10.0	"	1050	65.9	109	75-125	0.830	20
Surrogate: 1-Chlorooctane	61.2		mg/kg	50.0		122	70-130		
Surrogate: 1-Chlorooctadecane	57.9		"	50.0		116	70-130		

#### Matrix Spike Dup (EH41207-MSD2)

Source: 4H12008-07

Prepared: 08/12/04 Analyzed: 08/13/04

Gasoline Range Organics C6-C12	583	10.0	mg/kg dry	575	ND	101	75-125	0.684	20
Diesel Range Organics >C12-C35	630	10.0	"	575	ND	110	75-125	2.04	20
Total Hydrocarbon C6-C35	1210	10.0	"	1150	ND	105	75-125	1.64	20
Surrogate: 1-Chlorooctane	56.3		mg/kg	50.0		113	70-130		
Surrogate: 1-Chlorooctadecane	53.7		"	50.0		107	70-130		

Environmental Lab of Texas

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

**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
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**Batch EH41605 - EPA 5030C (GC)**

**Blank (EH41605-BLK1)**

Prepared & Analyzed: 08/12/04

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	86.4		ug/kg	100		86.4	80-120			
Surrogate: 4-Bromofluorobenzene	81.3		"	100		81.3	80-120			

**LCS (EH41605-BS1)**

Prepared: 08/12/04 Analyzed: 08/13/04

Benzene	93.2		ug/kg	100		93.2	80-120			
Toluene	98.9		"	100		98.9	80-120			
Ethylbenzene	103		"	100		103	80-120			
Xylene (p/m)	217		"	200		108	80-120			
Xylene (o)	111		"	100		111	80-120			
Surrogate: a,a,a-Trifluorotoluene	97.0		"	100		97.0	80-120			
Surrogate: 4-Bromofluorobenzene	98.5		"	100		98.5	80-120			

**Calibration Check (EH41605-CCV1)**

Prepared: 08/12/04 Analyzed: 08/14/04

Benzene	93.5		ug/kg	100		93.5	80-120			
Toluene	97.9		"	100		97.9	80-120			
Ethylbenzene	98.3		"	100		98.3	80-120			
Xylene (p/m)	212		"	200		106	80-120			
Xylene (o)	109		"	100		109	80-120			
Surrogate: a,a,a-Trifluorotoluene	96.7		"	100		96.7	80-120			
Surrogate: 4-Bromofluorobenzene	94.8		"	100		94.8	80-120			

**Matrix Spike (EH41605-MS1)**

Source: 4H12002-03

Prepared: 08/12/04 Analyzed: 08/15/04

Benzene	97.9		ug/kg	100	ND	97.9	80-120			
Toluene	95.0		"	100	ND	95.0	80-120			
Ethylbenzene	96.7		"	100	ND	96.7	80-120			
Xylene (p/m)	206		"	200	ND	103	80-120			
Xylene (o)	103		"	100	ND	103	80-120			
Surrogate: a,a,a-Trifluorotoluene	88.2		"	100		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	87.0		"	100		87.0	80-120			

Environmental Lab of Texas

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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

**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 EH41605 - EPA 5030C (GC)**

**Matrix Spike Dup (EH41605-MSD1)**

Source: 4H12002-03

Prepared: 08/12/04 Analyzed: 08/15/04

Benzene	98.4		ug/kg	100	ND	98.4	80-120	0.509	20	
Toluene	96.0		"	100	ND	96.0	80-120	1.05	20	
Ethylbenzene	97.6		"	100	ND	97.6	80-120	0.926	20	
Xylene (p/m)	209		"	200	ND	104	80-120	0.966	20	
Xylene (o)	105		"	100	ND	105	80-120	1.92	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	91.0		"	100		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	91.0		"	100		91.0	80-120			



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

Project: Jal 14 in. Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH41301 - General Preparation (Prep)**

**Blank (EH41301-BLK1)**

Prepared & Analyzed: 08/12/04

% Solids	100	%
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**Duplicate (EH41301-DUP1)**

Source: 4H12001-01

Prepared & Analyzed: 08/12/04

% Solids	87.0	%	86.0	1.16	20
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Midland TX, 79706-4476

Project: Jal 14 in. Mainline #6  
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Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/18/04 08:37

### Notes and Definitions

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

Report Approved By:

Raland K. Tuttle

Date:

8-18-04

Raland K. Tuttle, QA Officer

Celey D. Keene, Lab Director, Org. Tech Director

Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist

Sara Molina, Chemist

Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

**12600 West I-20 East**  
**Odessa Texas 79763**  
**Phone: 915-563-1800**  
**Fax: 915-563-1713**

**Project Name:** Jal 14" Mainline # 6

Project #: 2003-00135

Project Loc:

PO#:

**Telephone No:**

Player Signature: Michael Broder

125/

163

[illegible]

## Special Instructions

**FAX RESULTS TO PAT McCASLAND ASAP**

**Relinquished:**

Relinquished: *Wade O. Bunker*

Date	Time
------	------

Received by:

Received by: *David L. Allen*

\_\_\_\_\_

Date	Time
------	------

## Temperature Upon Rec-

**Temperature Upon Request**  
**Laboratory Comments:**

\_\_\_\_\_

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains P/L

Date/Time: 08-12-04 @ 1100

Order #: 4H12005

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	IS	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

Other observations:

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### Variance Documentation:

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

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Corrective Action Taken:

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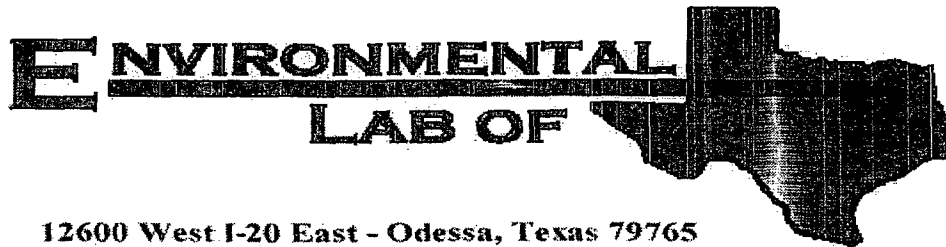
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## Analytical Report

**Prepared for:**

Jeff Dann

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6

Project Number: 2003-00135

Location: Section 25 & 36 T23S R37E

Lab Order Number: 4H24004

Report Date: 08/26/04

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PV682004#17E-12'	4H24004-01	Soil	08/20/04 08:00	08/24/04 12:55
PV682004#17E-13'	4H24004-02	Soil	08/20/04 08:10	08/24/04 12:55
PV682004#17E-14'	4H24004-03	Soil	08/20/04 08:15	08/24/04 12:55
PV682004#17E-15'	4H24004-04	Soil	08/20/04 08:20	08/24/04 12:55
PV682004#17E-16'	4H24004-05	Soil	08/20/04 08:25	08/24/04 12:55
PV682004#17E-17'	4H24004-06	Soil	08/20/04 08:30	08/24/04 12:55
PV682004#17E-18'	4H24004-07	Soil	08/20/04 08:50	08/24/04 12:55
PV682004#17E-19'	4H24004-08	Soil	08/20/04 08:57	08/24/04 12:55
PV682004#17E-20'	4H24004-09	Soil	08/20/04 09:05	08/24/04 12:55
PV682004#11E-12'	4H24004-10	Soil	08/20/04 09:30	08/24/04 12:55
PV682004#6E-2'	4H24004-23	Soil	08/20/04 13:40	08/24/04 12:55

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

## Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#17E-12' (4H24004-01) Soil</b>									
Benzene	16.7	0.0500	mg/kg dry	50	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	45.4	0.0500	"	"	"	"	"	"	
Ethylbenzene	36.4	0.0500	"	"	"	"	"	"	
Xylene (p/m)	47.3	0.0500	"	"	"	"	"	"	
Xylene (o)	21.0	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		1600 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		101 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	2510	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	2800	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	5310	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		108 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		127 %	70-130		"	"	"	"	
<b>PV682004#17E-13' (4H24004-02) Soil</b>									
Benzene	1.73	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	8.68	0.0250	"	"	"	"	"	"	
Ethylbenzene	6.38	0.0250	"	"	"	"	"	"	
Xylene (p/m)	12.7	0.0250	"	"	"	"	"	"	
Xylene (o)	5.11	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		678 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		100 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	420	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	521	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	941	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		111 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %	70-130		"	"	"	"	
<b>PV682004#17E-14' (4H24004-03) Soil</b>									
Benzene	1.31	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	7.94	0.0250	"	"	"	"	"	"	
Ethylbenzene	6.00	0.0250	"	"	"	"	"	"	
Xylene (p/m)	11.5	0.0250	"	"	"	"	"	"	
Xylene (o)	4.49	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		541 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		98.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	560	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	992	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1550	10.0	"	"	"	"	"	"	

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.

Page 2 of 13

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/26/04 17:21

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#17E-14' (4H24004-03) Soil</b>									
Surrogate: 1-Chlorooctane		116 %	70-130		EH42405	08/24/04	08/24/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		107 %	70-130		"	"	"	"	
<b>PV682004#17E-15' (4H24004-04) Soil</b>									
Benzene	0.310	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	3.48	0.0250	"	"	"	"	"	"	
Ethylbenzene	3.51	0.0250	"	"	"	"	"	"	
Xylene (p/m)	7.75	0.0250	"	"	"	"	"	"	
Xylene (o)	2.87	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		145 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		96.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	507	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	973	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1480	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		113 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		115 %	70-130		"	"	"	"	
<b>PV682004#17E-16' (4H24004-05) Soil</b>									
Benzene	0.106	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	0.851	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.774	0.0250	"	"	"	"	"	"	
Xylene (p/m)	2.17	0.0250	"	"	"	"	"	"	
Xylene (o)	0.747	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		131 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		101 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	153	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	297	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	450	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		105 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		90.8 %	70-130		"	"	"	"	

Environmental Lab of Texas

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/26/04 17:21

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#17E-17' (4H24004-06) Soil</b>									
Benzene	0.0145	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	J
Toluene	0.231	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.379	0.0250	"	"	"	"	"	"	
Xylene (p/m)	1.08	0.0250	"	"	"	"	"	"	
Xylene (o)	0.378	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	146	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	395	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	541	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		113 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		103 %	70-130		"	"	"	"	
<b>PV682004#17E-18' (4H24004-07) Soil</b>									
Benzene	0.0403	0.0250	mg/kg dry	25	EH42606	08/24/04	08/24/04	EPA 8021B	
Toluene	0.206	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.214	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.637	0.0250	"	"	"	"	"	"	
Xylene (o)	0.186	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		108 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	67.2	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	149	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	216	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		104 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		90.8 %	70-130		"	"	"	"	
<b>PV682004#17E-19' (4H24004-08) Soil</b>									
Benzene	0.0744	0.0250	mg/kg dry	25	EH42606	08/24/04	08/25/04	EPA 8021B	
Toluene	0.861	0.0250	"	"	"	"	"	"	
Ethylbenzene	1.15	0.0250	"	"	"	"	"	"	
Xylene (p/m)	2.76	0.0250	"	"	"	"	"	"	
Xylene (o)	0.959	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		136 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	193	10.0	mg/kg dry	1	EH42405	08/25/04	08/25/04	EPA 8015M	
Diesel Range Organics >C12-C35	379	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	572	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#17E-19' (4H24004-08) Soil</b>									
Surrogate: 1-Chlorooctane		117 %	70-130		EH42405	08/25/04	08/25/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		88.4 %	70-130		"	"	"	"	
<b>PV682004#17E-20' (4H24004-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH42606	08/24/04	08/25/04	EPA 8021B	
Toluene	0.0313	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.120	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.324	0.0250	"	"	"	"	"	"	
Xylene (o)	0.100	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		88.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	70.9	10.0	mg/kg dry	1	EH42405	08/25/04	08/25/04	EPA 8015M	
Diesel Range Organics >C12-C35	185	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	256	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		120 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.6 %	70-130		"	"	"	"	
<b>PV682004#11E-12' (4H24004-10) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH42606	08/24/04	08/25/04	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		95.9 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	16.5	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	16.5	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		77.2 %	70-130		"	"	"	"	

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

Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#6E-2' (4H24004-23) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EH42606	08/24/04	08/25/04	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		90.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH42405	08/24/04	08/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.8 %	70-130		"	"	"	"	

Plains All American EH & S  
1301 S. County Road 1150  
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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/26/04 17:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PV682004#17E-12' (4H24004-01) Soil</b>									
% Solids	89.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-13' (4H24004-02) Soil</b>									
% Solids	90.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-14' (4H24004-03) Soil</b>									
% Solids	91.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-15' (4H24004-04) Soil</b>									
% Solids	93.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-16' (4H24004-05) Soil</b>									
% Solids	93.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-17' (4H24004-06) Soil</b>									
% Solids	92.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-18' (4H24004-07) Soil</b>									
% Solids	93.0		%	1	EH42506	08/24/04	08/24/04	% calculation	
<b>PV682004#17E-19' (4H24004-08) Soil</b>									
% Solids	94.0		%	1	EH42624	08/25/04	08/25/04	% calculation	
<b>PV682004#17E-20' (4H24004-09) Soil</b>									
% Solids	94.0		%	1	EH42624	08/25/04	08/25/04	% calculation	
<b>PV682004#11E-12' (4H24004-10) Soil</b>									
% Solids	94.0		%	1	EH42506	08/24/04	08/24/04	% calculation	

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Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PV682004#6E-2' (4H24004-23) Soil									
% Solids	93.0		%	1	EH42506	08/24/04	08/24/04	% calculation	

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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/26/04 17:21

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch EH42405 - Solvent Extraction (GC)**

**Blank (EH42405-BLK1)**

Prepared: 08/24/04 Analyzed: 08/25/04

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	49.8		mg/kg	50.0		99.6	70-130		
Surrogate: 1-Chlorooctadecane	42.5		"	50.0		85.0	70-130		

**LCS (EH42405-BS1)**

Prepared: 08/24/04 Analyzed: 08/25/04

Gasoline Range Organics C6-C12	476	10.0	mg/kg wet	500		95.2	75-125		
Diesel Range Organics >C12-C35	526	10.0	"	500		105	75-125		
Total Hydrocarbon C6-C35	1000	10.0	"	1000		100	75-125		
Surrogate: 1-Chlorooctane	52.5		mg/kg	50.0		105	70-130		
Surrogate: 1-Chlorooctadecane	40.9		"	50.0		81.8	70-130		

**Calibration Check (EH42405-CCV1)**

Prepared: 08/24/04 Analyzed: 08/25/04

Gasoline Range Organics C6-C12	457		mg/kg	500		91.4	80-120		
Diesel Range Organics >C12-C35	513		"	500		103	80-120		
Total Hydrocarbon C6-C35	970		"	1000		97.0	80-120		
Surrogate: 1-Chlorooctane	52.2		"	50.0		104	70-130		
Surrogate: 1-Chlorooctadecane	37.7		"	50.0		75.4	70-130		

**Matrix Spike (EH42405-MS1)**

Source: 4H24001-01

Prepared: 08/24/04 Analyzed: 08/25/04

Gasoline Range Organics C6-C12	638	10.0	mg/kg dry	575	ND	111	75-125		
Diesel Range Organics >C12-C35	635	10.0	"	575	ND	110	75-125		
Total Hydrocarbon C6-C35	1270	10.0	"	1150	ND	110	75-125		
Surrogate: 1-Chlorooctane	58.0		mg/kg	50.0		116	70-130		
Surrogate: 1-Chlorooctadecane	40.1		"	50.0		80.2	70-130		

**Matrix Spike Dup (EH42405-MSD1)**

Source: 4H24001-01

Prepared: 08/24/04 Analyzed: 08/25/04

Gasoline Range Organics C6-C12	635	10.0	mg/kg dry	575	ND	110	75-125	0.471	20
Diesel Range Organics >C12-C35	642	10.0	"	575	ND	112	75-125	1.10	20
Total Hydrocarbon C6-C35	1280	10.0	"	1150	ND	111	75-125	0.784	20
Surrogate: 1-Chlorooctane	60.0		mg/kg	50.0		120	70-130		
Surrogate: 1-Chlorooctadecane	48.1		"	50.0		96.2	70-130		

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH42606 - EPA 5030C (GC)**

**Blank (EH42606-BLK1)**

Prepared & Analyzed: 08/24/04

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	92.7		ug/kg	100		92.7	80-120			
Surrogate: 4-Bromofluorobenzene	85.5		"	100		85.5	80-120			

**LCS (EH42606-BS1)**

Prepared & Analyzed: 08/24/04

Benzene	90.7		ug/kg	100		90.7	80-120			
Toluene	87.8		"	100		87.8	80-120			
Ethylbenzene	86.7		"	100		86.7	80-120			
Xylene (p/m)	190		"	200		95.0	80-120			
Xylene (o)	94.6		"	100		94.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	96.7		"	100		96.7	80-120			

**Calibration Check (EH42606-CCV1)**

Prepared: 08/24/04 Analyzed: 08/25/04

Benzene	87.5		ug/kg	100		87.5	80-120			
Toluene	83.6		"	100		83.6	80-120			
Ethylbenzene	80.1		"	100		80.1	80-120			
Xylene (p/m)	181		"	200		90.5	80-120			
Xylene (o)	84.7		"	100		84.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	88.1		"	100		88.1	80-120			

**Matrix Spike (EH42606-MS1)**

Source: 4H24004-23

Prepared: 08/24/04 Analyzed: 08/25/04

Benzene	88.1		ug/kg	100	ND	88.1	80-120			
Toluene	86.0		"	100	ND	86.0	80-120			
Ethylbenzene	83.5		"	100	ND	83.5	80-120			
Xylene (p/m)	184		"	200	ND	92.0	80-120			
Xylene (o)	91.8		"	100	ND	91.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	95.4		"	100		95.4	80-120			
Surrogate: 4-Bromofluorobenzene	87.7		"	100		87.7	80-120			

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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914  
Reported:  
08/26/04 17:21

**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
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**Batch EH42606 - EPA 5030C (GC)**

**Matrix Spike Dup (EH42606-MSD1)**

Source: 4H24004-23

Prepared: 08/24/04

Analyzed: 08/25/04

Benzene	89.3		ug/kg	100	ND	89.3	80-120	1.35	20	
Toluene	87.9		"	100	ND	87.9	80-120	2.19	20	
Ethylbenzene	85.7		"	100	ND	85.7	80-120	2.60	20	
Xylene (p/m)	189		"	200	ND	94.5	80-120	2.68	20	
Xylene (o)	93.8		"	100	ND	93.8	80-120	2.16	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	92.7		"	100		92.7	80-120			
Surrogate: 4-Bromofluorobenzene	89.4		"	100		89.4	80-120			



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Fax: (432) 687-4914

Reported:  
08/26/04 17:21

**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 EH42506 - General Preparation (Prep)**

**Blank (EH42506-BLK1)**

Prepared & Analyzed: 08/24/04

% Solids 100 %

**Duplicate (EH42506-DUP1)**

Source: 4H24001-01

Prepared & Analyzed: 08/24/04

% Solids 87.0 % 87.0 0.00 20

**Batch EH42624 - General Preparation (Prep)**

**Blank (EH42624-BLK1)**

Prepared & Analyzed: 08/25/04

% Solids 100 %

**Duplicate (EH42624-DUP1)**

Source: 4H20017-10

Prepared & Analyzed: 08/25/04

% Solids 94.0 % 94.0 0.00 20

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Project: Vacuum To Jal 14 inch Mainline #6  
Project Number: 2003-00135  
Project Manager: Jeff Dann

Fax: (432) 687-4914

Reported:  
08/26/04 17:21

### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K Tuttle

Date:

8-26-04

Raland K. Tuttle, QA Officer  
Celey D. Keene, Lab Director, Org. Tech Director  
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist  
Sara Molina, Chemist  
Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

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12600 West I-20 East  
Odessa Texas 79763  
Phone: 432-563-1800  
Fax: 432-563-1713

**EPI - Environmental Consultant**

PO#: 2003-00135

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative										Type				Analyze For									
					ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Water	Sludge	Soil	Other (Specify)	TDS/C/SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals *	Volatiles *	Semivolatiles *	BTEX 80218/5030	Reactivity	Corrosivity	Ignitability	Chlorides	Sulfates
TCLP	TOTAL																											
4424004																												
-01	PV682004#17E-12'	8/20/04	8:00	1	X																X							
-02	PV682004#17E-13'	8/20/04	8:10	1	X																X							
-03	PV682004#17E-14'	8/20/04	8:15	1	X																X							
-04	PV682004#17E-15'	8/20/04	8:20	1	X																X							
-05	PV682004#17E-16'	8/20/04	8:25	1	X																X							
-06	PV682004#17E-17'	8/20/04	8:30	1	X																X							
-07	PV682004#17E-18'	8/20/04	8:50	1	X																X							
-08	PV682004#17E-19'	8/20/04	8:57	1	X																X							
-09	PV682004#17E-20'	8/20/04	9:05	1	X																X							
-10	PV682004#11E-12'	8/20/04	9:30	1	X																X							
-11	PV682004#11E-13'	8/20/04	9:35	1	X																X							

Special Instructions: Analyze samples PV682004#17E-\*\*\* and PV682004#11E-\*\*\* in sequence; if TPH is <100 mg/Kg, do not analyze the remaining samples from the particular sample location.

FAX RESULTS TO Pat McCasland ASAP [505-394-2601] Call Pat McCasland 505-394-3447

Relinquished: *[Signature]* Date: 8/24/04 Time: 12:55

Relinquished: *[Signature]* Date: 8/24/04 Time: 12:55

Sample Containers Intact? Y N

Temperature Upon Request Laboratory Comments:  
*Rec 1.0°C*

19/3

12600 West I-20 East  
Odessa Texas 79763  
Phone: 432-563-1800  
Fax: 432-563-1713

**Telephone No: 713.646.4657/505.441.0965**

**EPI - Environmental Consultant**

**PO#: 2003-00135**

LAB ID	SAMPLE IDENTIFICATION	Date Sampled	Time Sampled	No. of Containers	Preservative										Type		Analyze For										Y	N		
					ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Water	Sludge	Soil	Other (Specify)	TDS/C/SAR/EC	TPH #18.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals *	Volatiles *	Semivolatiles *	BTEX 8021B/5030	Reactivity	Corrosivity	Ignitability			Chlorides	Sulfates
TOTAL		TCLP	Analyze For																											

44#24004																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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2 of 3

12600 West I-20 East  
Odessa Texas 79763  
Phone: 432-563-1800  
Fax: 432-563-1713

**EPI - Environmental Consultant**

PO#: 2003-00135

[illegible]

30/3

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains All American

Date/Time: 08-24-04 @ 1315

Order #: 4424004

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	1.0 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not present</del>
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable

Other observations:

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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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## Appendix II: Area Groundwater Information

*New Mexico Office of the State Engineer*  
**Well Reports and Downloads**

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic  
☒ All

Well / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

WATERS Menu

Help

**AVERAGE DEPTH OF WATER REPORT 02/20/2003**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again



*New Mexico Office of the State Engineer*  
**POD Reports and Downloads**

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic  
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

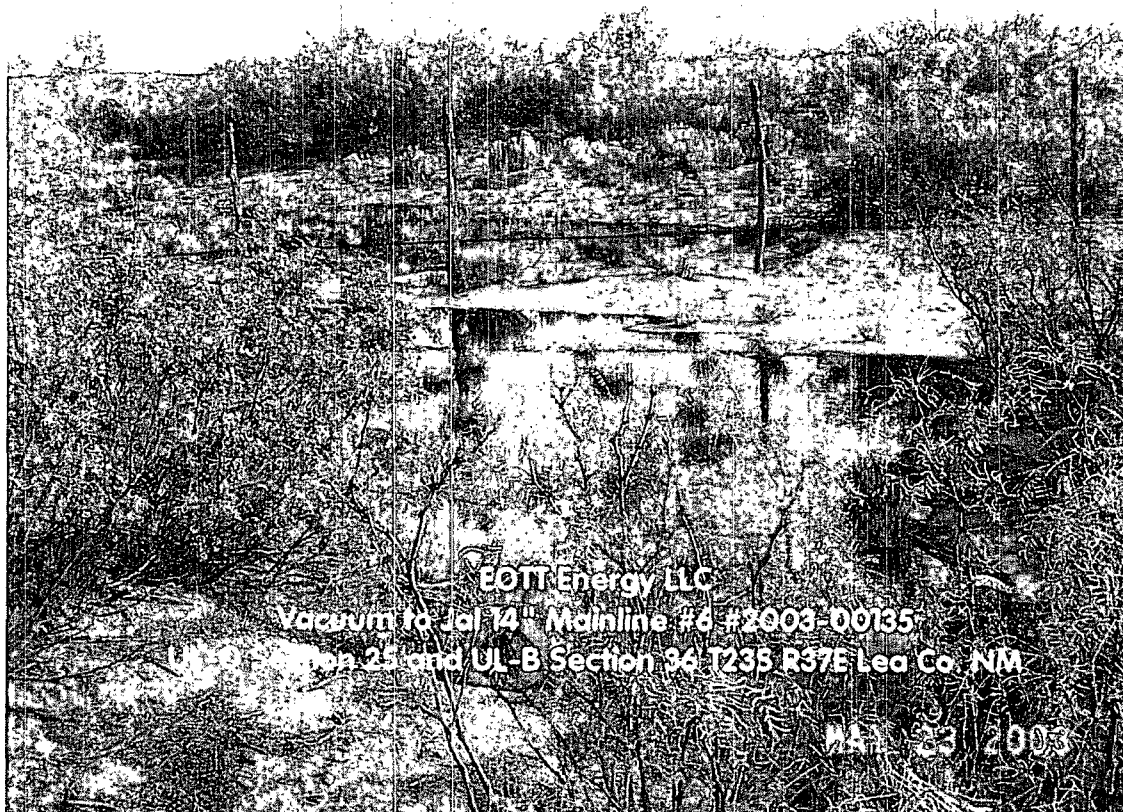
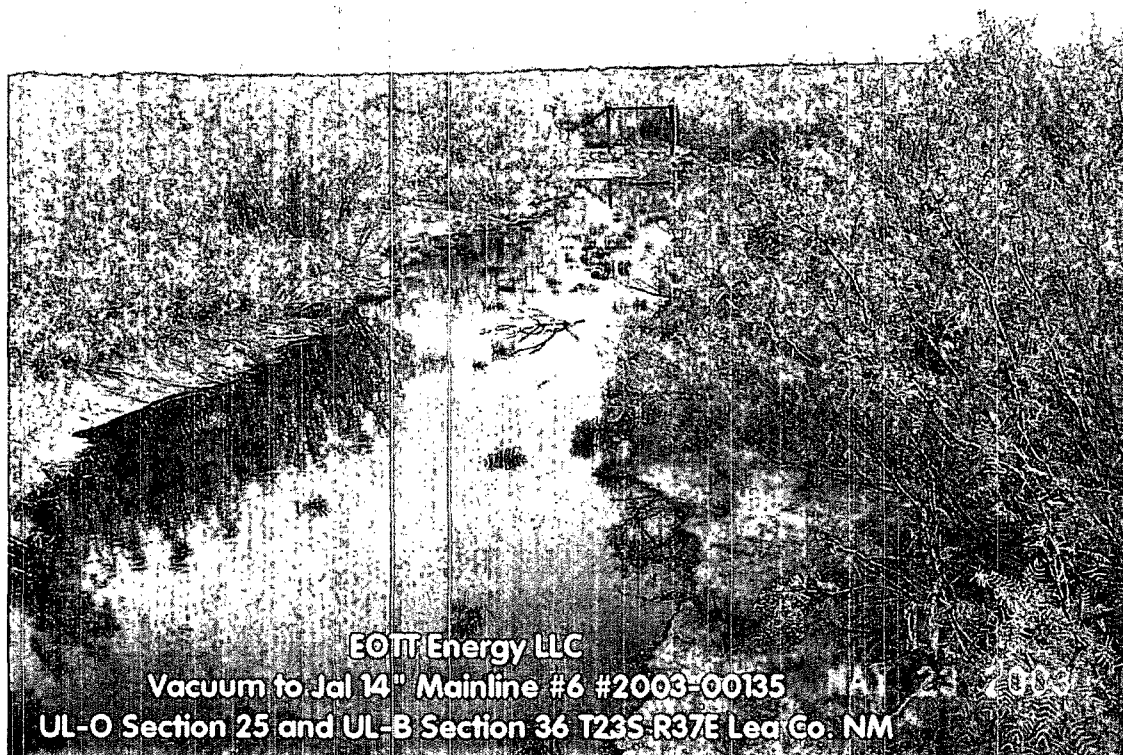
Help

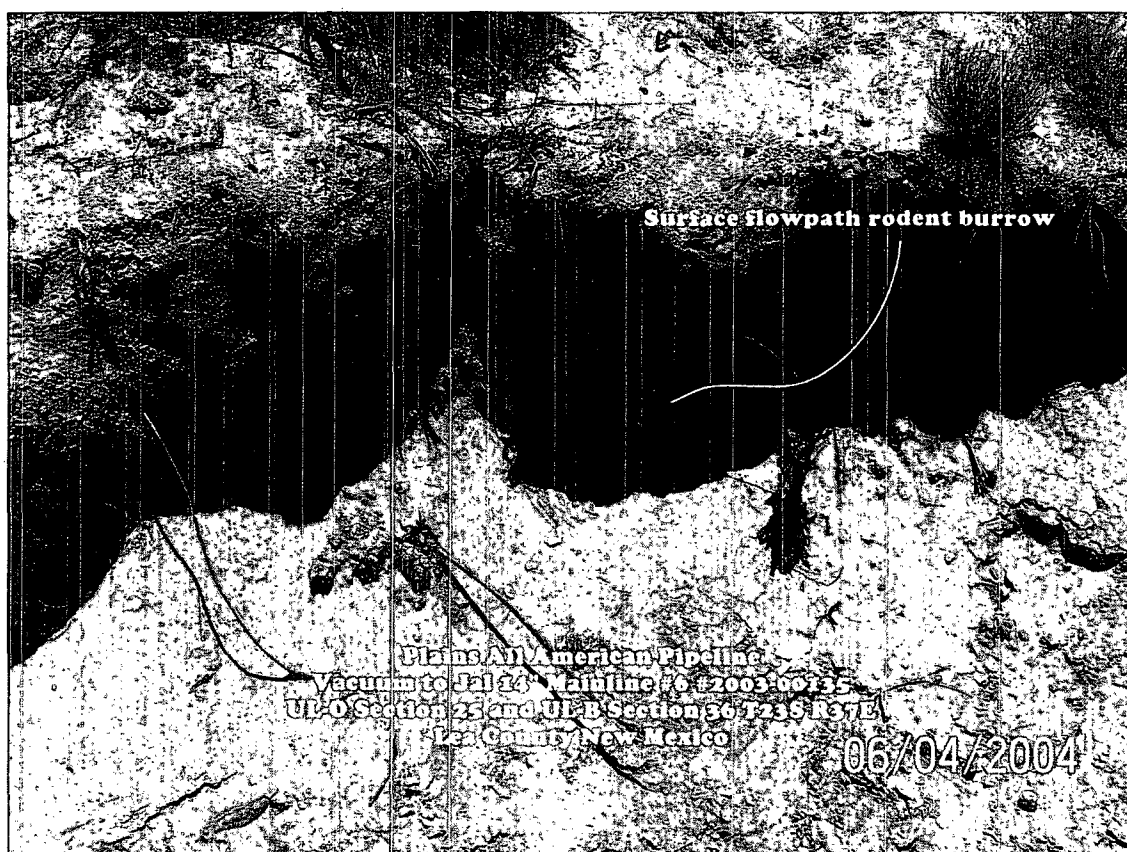
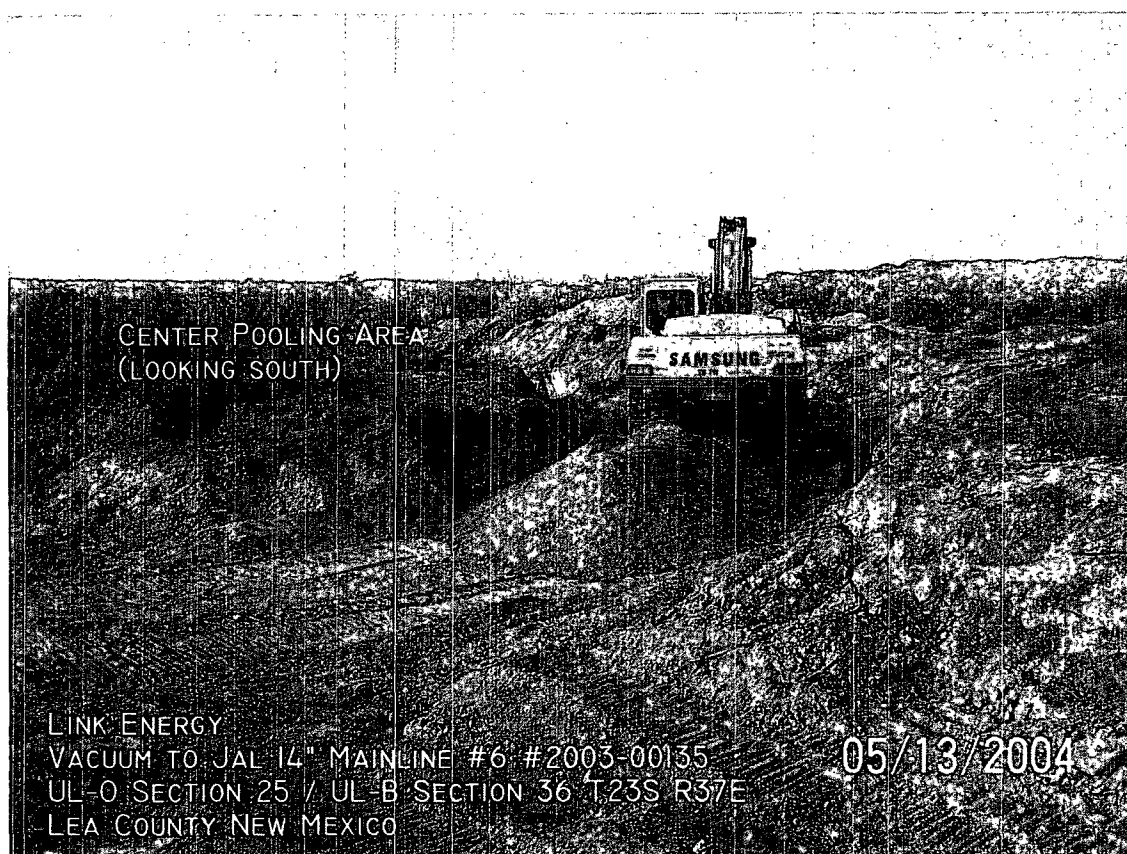
**AVERAGE DEPTH OF WATER REPORT 03/28/2006**

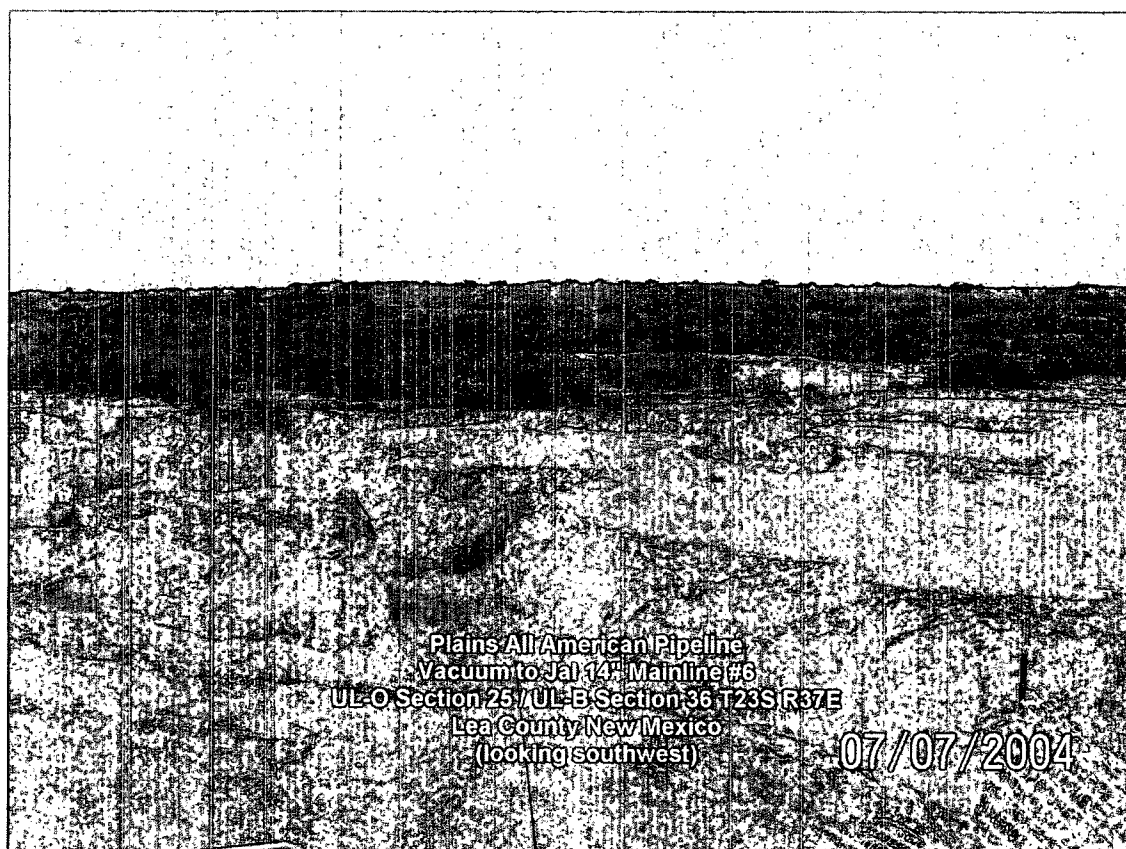
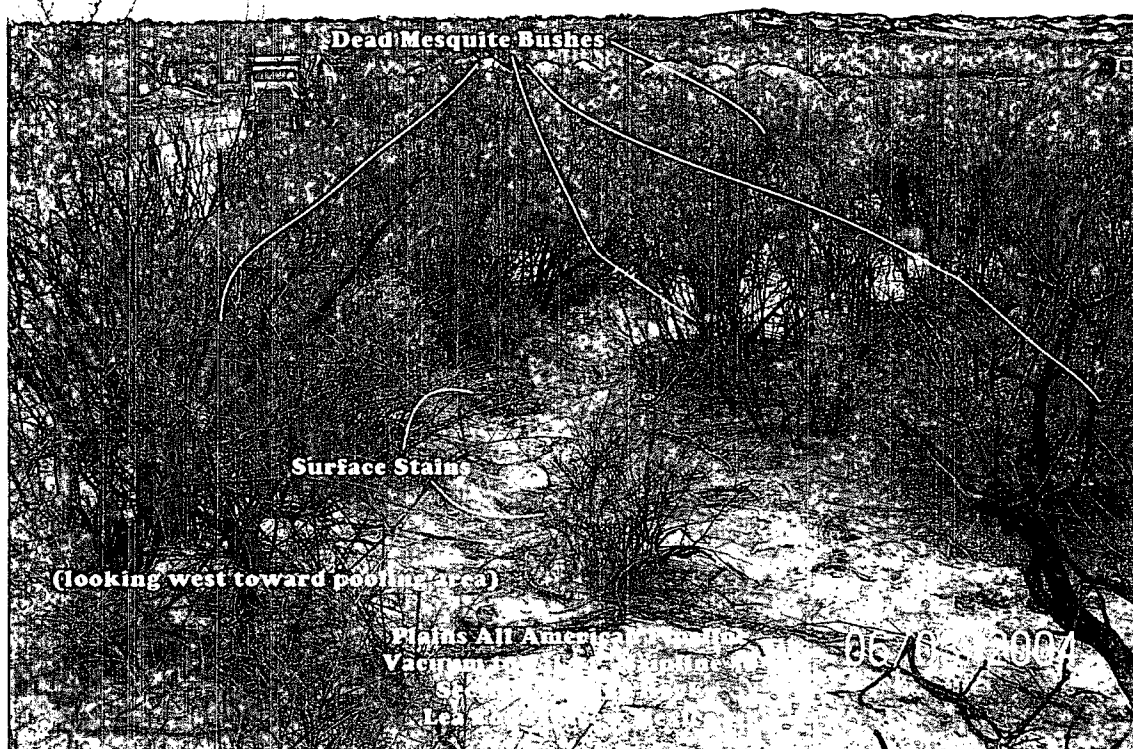
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

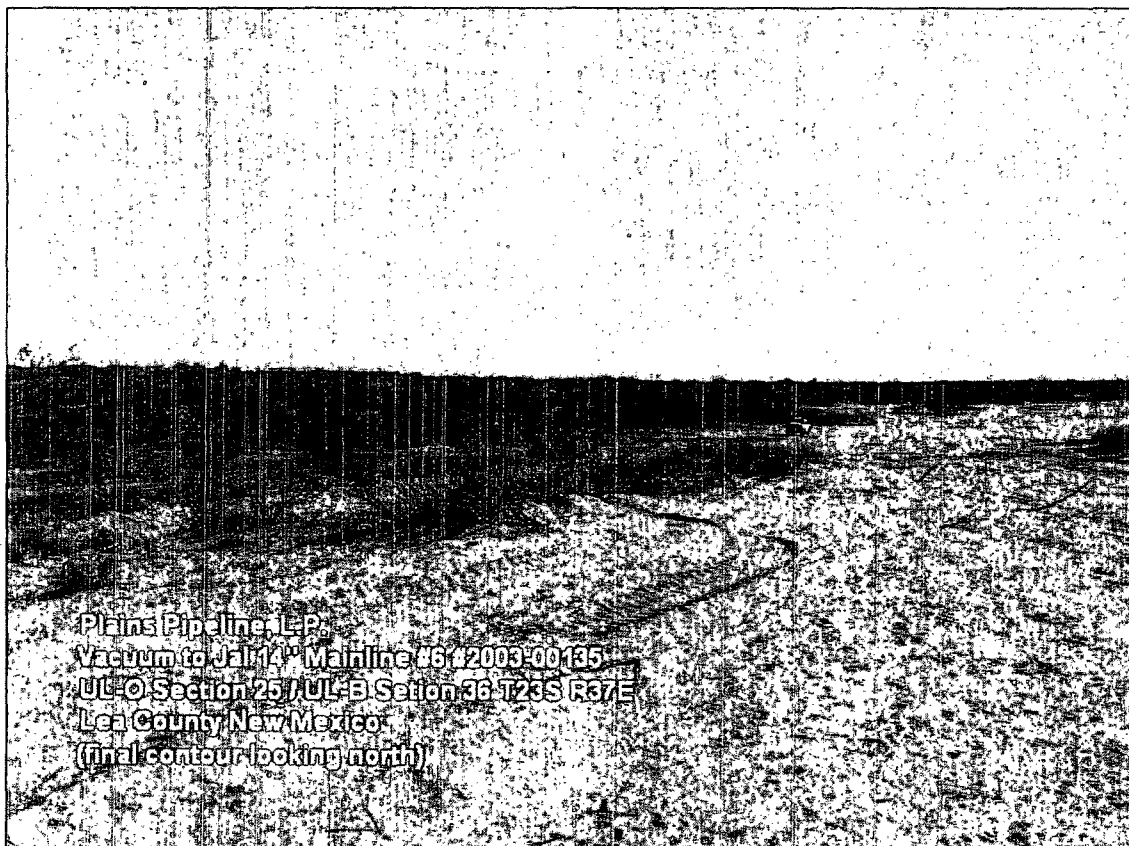
No Records found, try again

### Appendix III: Photographs

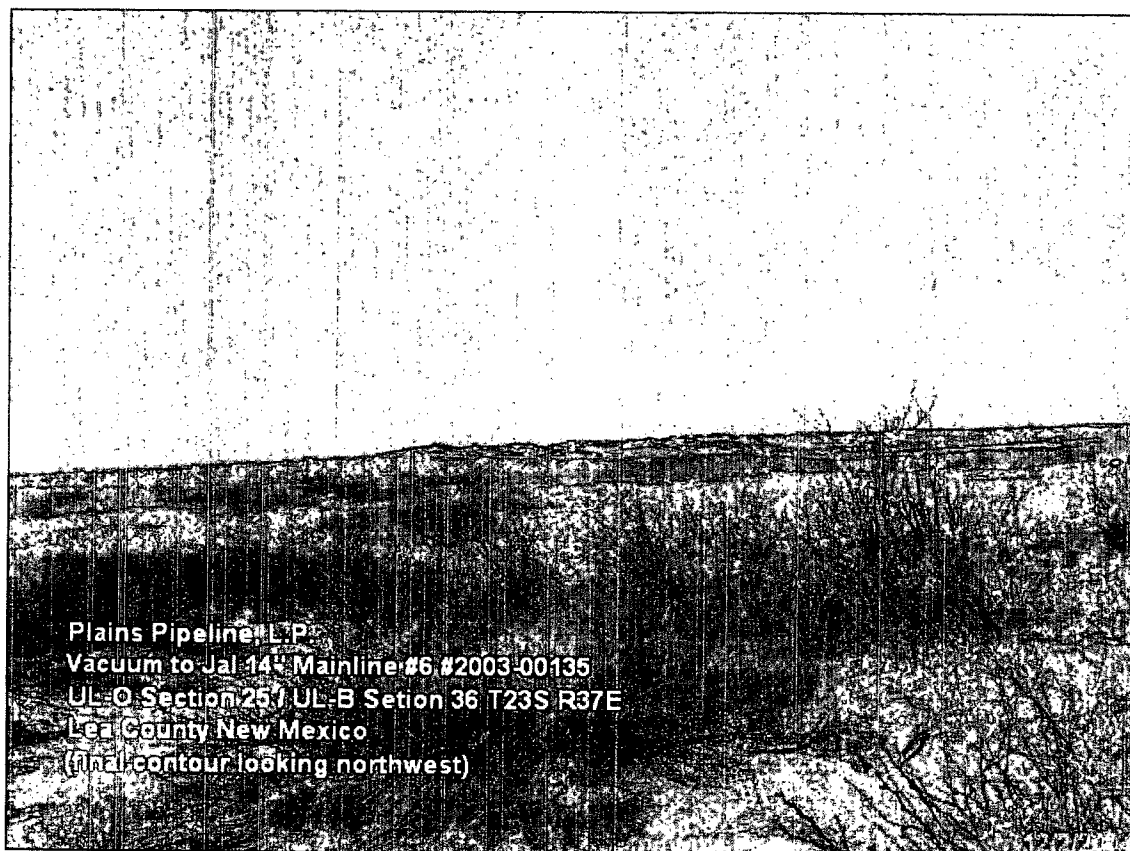
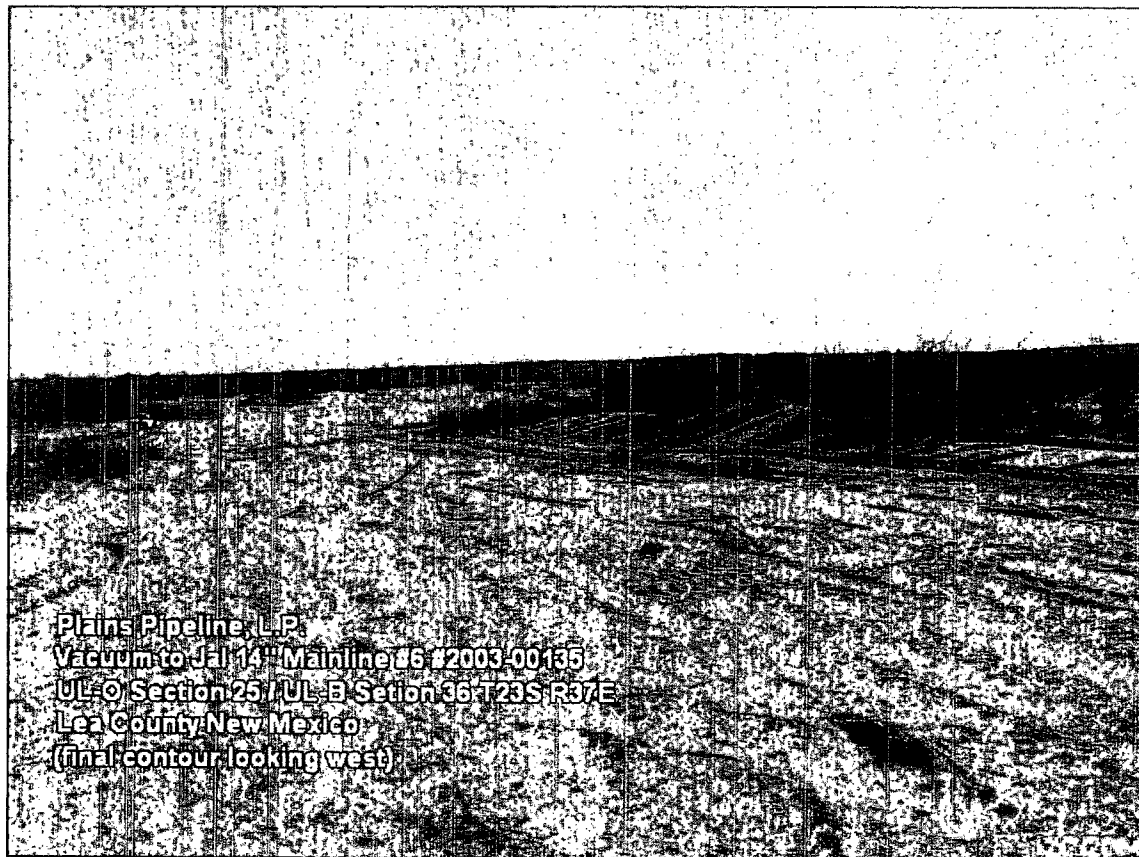












Appendix IV: Site Information & Metrics Form and Final NMOCD Form C-141



**Plains All American Pipeline**  
 Site Information and Metrics

 Incident Date:  
**5-23-03 @3:00 PM**

 NMOCD Notified:  
 5-23-03 @ 8:00 PM

SITE: <b>Vacuum to Jal 14" Mainline #6</b>		Assigned Site Reference #: <b>2003-00135</b>	
Company: <b>Plains All American Pipeline</b>		<b>NATIONAL RESPONSE CENTER - 800.424.8802</b>	
Street Address: <b>PO Box 1660</b>		Notified Date/Time: <b>National Response Center notified at 11:30 AM on 5-24-03 by Pat McCasland, EPI.</b>	
Mailing Address: <b>5805 East Highway 80</b>		Notified by: <b>Pat McCasland, EPI</b>	
City, State, Zip: <b>Midland, Texas 79702</b>		Person Notified: <b>Nowak</b>	
Representative: <b>Camille Reynolds</b>		NRC Report# : <b>#645926</b>	
Representative Telephone: <b>505.396.3341 (email CJReynolds@paalp.com)</b>			
Telephone:			
Fluid volume released (bbls): <b>450 bbls</b>		Recovered (bbls): <b>270 bbls</b>	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: <b>Vacuum to Jal 14" Mainline #6</b>			
Source of contamination: <b>14" Steel Pipeline</b>			
Land Owner, i.e., BLM, ST, Fee, Other: <b>State of New Mexico</b>			
LSP Dimensions <b>~400' x 100'</b>			
LSP Area: <b>39,821ft<sup>2</sup></b>			
Location of Reference Point (RP)			
Location distance and direction from RP			
Latitude: <b>32° 16' 06.76"N</b>			
Longitude: <b>103° 06' 49.57"W</b>			
Elevation above mean sea level: <b>3,200'amsl</b>			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼: <b>SW¼ of the SE¼</b>		Unit Letter: <b>O</b>	
Location- Section: <b>25</b>			
Location- Township: <b>T23S</b>			
Location- Range: <b>R37E</b>			
Surface water body within 1000' radius of site: <b>none</b>			
Domestic water wells within 1000' radius of site: <b>none</b>			
Agricultural water wells within 1000' radius of site: <b>none</b>			
Public water supply wells within 1000' radius of site: <b>none</b>			
Depth from land surface to groundwater (DG): <b>Estimated to be 33-feet bgs</b>			
Depth of contamination (DC) - <b>18'bgs</b>			
Depth to groundwater (DG - DC = DtGW) - <b>Unconfined aquifer not present</b>			
<b>1. Groundwater</b>		<b>2. Wellhead Protection Area</b>	
If Depth to GW <50 feet: <b>20 points</b>		If <1000' from water source, or; <200' from private domestic water source: <b>20 points</b>	
If Depth to GW 50 to 99 feet: <b>10 points</b>			
If Depth to GW >100 feet: <b>0 points</b>		If >1000' from water source, or; >200' from private domestic water source: <b>0 points</b>	
Groundwater Score = <b>20</b>		Wellhead Protection Area Score = <b>0</b>	
Site Rank (1+2+3) = <b>20</b>		Surface Water Score = <b>0</b>	
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	<b>&gt;19</b>	<b>10-19</b>	<b>0-9</b>
Benzene <sup>1</sup>	<b>10 ppm</b>	<b>10 ppm</b>	<b>10 ppm</b>
BTEX <sup>1</sup>	<b>50 ppm</b>	<b>50 ppm</b>	<b>50 ppm</b>
TPH	<b>100 ppm</b>	<b>1000 ppm</b>	<b>5000 ppm</b>

<sup>1</sup>100 ppm field VOC headspace measurement may be substituted for lab analysis

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

State of New Mexico  
Energy Minerals and Natural Resources  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: <b>Plains All American Pipeline</b>	Contact: <b>Camille Reynolds</b>	
Address: <b>PO Box 1660 5805 East Highway 80 Midland, Texas 79702</b>	Telephone No. <b>505.396.3341 (email CJReynolds@paalp.com)</b>	
Facility Name <b>Vacuum to Jal 14" Mainline #6 #2003-00135</b>	Facility Type <b>14" Steel Pipeline</b>	
Surface Owner: <b>State of New Mexico</b>	Mineral Owner	Lease No.

### LOCATION OF RELEASE

Unit Letter <b>O</b>	Section <b>25</b>	Township <b>T23S</b>	Range <b>R37E</b>	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
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Latitude: **32° 16' 06.76"N** Longitude: **103° 06' 49.57"W**

### NATURE OF RELEASE

Type of Release <b>Crude Oil</b>	Volume of Release <b>450 barrels</b>	Volume Recovered <b>270 barrels</b>
Source of Release <b>14" Steel Pipeline</b>	Date and Hour of Occurrence <b>5-23-03 @ 3:00 PM</b>	Date and Hour of Discovery <b>Richard Espinoza (EOTT) notified by Air Patrol at 4:00 PM 5-23-03</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Larry Johnson</b>	
By Whom? <b>Pat McCasland, EPI</b>	Date and Hour <b>5-23-03 @ 8:00 PM</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>NA</b>	

If a Watercourse was Impacted, Describe Fully.\*

**Unconfined groundwater was not detected laying on top of the red clay interbed encountered at 15-18 feet-bgs.**

Describe Cause of Problem and Remedial Action Taken.\* **14" Steel Pipeline The cause was internal corrosion. The line was being pressure tested at the time of the occurrence. The line was depressured and a line repair clamp installed. Contaminated soil placed on a plastic barrier.**

Describe Area Affected and Cleanup Action Taken.\* **39,821 sqft (~400' x 100'): Site was delineated to determine the vertical and horizontal extents of contamination. Contaminated soil was excavated and spread in the soil remediation cell located at the Plains Vacuum to Jal 14" Mainline #1 located approximately 0.5 mile north of the site. The excavated area was backfilled with clean soil and contoured. A site surface restoration plan has been submitted and approved by the landowner.**

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

Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Camille Reynolds</b>	Approved by District Supervisor:	
E-mail Address: <b>CJReynolds@PAALP.com</b>	Approval Date:	Expiration Date:
Title: <b>Remediation Coordinator</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	Phone: <b>505.396.3341</b>	

Attach Additional Sheets If Necessary