1R - 380

REPORTS

DATE:

2006

PLAINS PIPELINE

May 24, 2006

2006 MAY 26 AM 11 08

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

IR-380

Re: Plains Pipeline Soil Over Excavation and Backfill Work Plan
8-Inch Moore to Jal #1 Release Site
SE ¼, NW ¼ of Section 16, Township 17 South, Range 37 East
Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your approval the Soil Over Excavation and Backfill Work Plan, dated May 2006, for the 8-Inch Moore to Jal #1 release site located in Section 16 of Township 17 South and Range 37 East of Lea County, New Mexico. The Soil Over Excavation and Backfill Work Plan details site activities conducted to date and future activities for soil closure of the site.

Should you have any questions or comments, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American Pipeline

Cc: Larry Johnson, NMOCD, Hobbs Office

Enclosure

6-12-06

WAITING ON CAMILLE TO COME UP WITH A PLAN TO BRING TPH LEVELS DOWN IN THE TREATMENT CELLS.

May 23, 2006

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

Re: Soil Over Excavation Report
Plains Pipeline, L.P.
8" Moore to Jal #1 (Rcf #2002-10270)
SE/4 NW/4 of Section 16, Township 17 South, Range 37 East
Lea County, New Mexico
NMOCD Ref. 1R-0380

Mr. Martin:

The 8" Moore to Jal #1 release site is located approximately 9.1 miles southeast of Lovington in Lea County, New Mexico. The release occurred on property owned by the State of New Mexico and is utilized as pasture land. The site is located in a rural area within the West Lovington Oil Field, with no residences or surface water within a 1,000-foot radius of the facility.

In October 2002, a release of approximately two hundred (200) barrels of crude oil occurred at the site due to corrosion (internal and/or external) of the pipeline. Approximately eight thousand (8,000) square feet (ft^2) of surface area was impacted by the release. Surficial soil saturated by the release was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm for treatment.

The details of the soil remediation, sampling activities, analytical results, and backfill work plan are described in the attached Soil Over Excavation Report and Backfill Work Plan. If you have any questions feel free to contact me at (432) 288-3490 or by E-mail at jgraham@talonlpe.com. Thank you very much.

TALON/LPE

Jason Graham
Project Manager

Cc: Camille Reynolds, Plains All American Pipeline, L.P.
Jeff Dann, Plains All American Pipeline, L.P.

8" Moore to Jal #1
Soil Over Excavation Report and Backfill Work Plan

Plains Ref: 2002-10270
SE¼ of the NW¼ of Section 16, Township 17 South, Range 37 East
Lea County, New Mexico

~9.1 Miles Southeast of
Lovington, Lea County, New Mexico
Latitude: N32° 50' 13.8" **Longitude: W103° 15' 25.3"**

May 2006

Prepared For:

PLAINS
ALL AMERICAN
PIPELINE, L.P.

333 Clay Street, Suite 600
Houston, TX 77002

Prepared By:
Llano-Permian Environmental
318 East Taylor Street
Hobbs, New Mexico 88240

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Ed Martin	Environmental Engineer	NMOCD	1220 South St. Francis Drive Santa Fe, NM 87505	emartin@state.nm.us
Larry Johnson	Environmental Engineer	NMOCD	1625 French Dr. Hobbs, NM 88231	lwjohnson@state.nm.us
Camille Reynolds	Remediation Coordinator	Plains All American Pipeline	3112 West U.S. Hwy 82 Lovington, NM 88260	cjreynolds@paalp.com
Jeff Dann	Senior Environmental Specialist	Plains All American Pipeline	P. O. Box 4648 Houston, TX 77210-4648	jpdann@paalp.com
File		Talon/LPE	318 East Taylor Street Hobbs, New Mexico 88240	lsanchez@TalonTalon/LPE.com

NMOCD - New Mexico Oil Conservation Division

SOILS REMEDIATION OVER EXCAVATION REPORT

Introduction

The 8" Moore to Jal #1 release site is located approximately 9.1 miles southeast of Lovington in Lea County, New Mexico, at an elevation of approximately 3,770 feet above mean sea level. The release occurred on property owned by the State of New Mexico and is utilized as pasture land. The site is located in a rural area within the West Lovington Oil Field, with no residences or surface water within a 1,000-foot radius of the facility (Figure 1).

In October 2002, a release of approximately two hundred (200) barrels of crude oil occurred at the site due to corrosion (internal and/or external) of the pipeline. Approximately eight thousand (8,000) square feet (ft^2) of surface area was impacted by the release. Surficial soil saturated by the release was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm for treatment.

In an effort to delineate the extent of impacted soil at the site, six (6) soil borings were advanced, by Environmental Plus, Inc. (EPI), at the site to depths ranging from fifteen (15) to sixty (60) feet below ground surface (bgs) in October 2002 (Figure 2). Field analysis of soil samples collected at discrete intervals indicated organic vapor concentrations exceeded 100 parts per million (ppm) at least to a depth of fifty-five (55) feet bgs in soil boring BH-1 (Table 1).

Excavation activities commenced at the site by EPI in June 2003 in order to remove soil impacted above the New Mexico Oil Conservation Division (NMOCD) remedial thresholds. Approximately two thousand eight hundred (2,800) cubic yards of soil were excavated and processed through a screener to separate the rock from the soil. After the soil and rock had been separated, the soil (approximately 950 cubic yards) was spread out into two land treatment areas and the rock was stockpiled on site. Upon the completion of excavation activities, composite samples were collected from the north sidewall, south sidewall, east sidewall, west sidewall and bottom of the excavation to document the successful removal of soil impacted above NMOCD remedial thresholds (Figure 2). Laboratory analysis of the samples indicated soil impacted above the NMOCD remedial thresholds remained in all sampling locations, with the exception of the west sidewall (Table 2).

EPI installed one (1) monitor well in July of 2004, one (1) monitor well in September of 2004, and three (3) monitoring wells in October of 2004 (Figure 2). Soil samples were collected from MW-1, 2, 3 and 4 at various horizons during the boring process of the well installation. No soil samples were collected during the boring of MW-1A due to its close proximity to MW-1. The majority of the samples collected exceeded the NMOCD thresholds for the various analytes (Table 1).

As a result of the presence of phase separated hydrocarbons (PSH) in each monitoring well, EPI performed PSH recovery activities from September of 2004 to April of 2005. In an effort to accelerate the PSH recovery at the 8" Moore to Jal #1 site, Talon/LPE began bi-weekly PSH recovery upon commencement of PSH recovery activities in May 2005. Approximately twenty

five (25) to thirty (30) gallons of PSH has been recovered every week as a result of the bi-weekly recovery events since May 2005.

The land treatment areas were sampled by EPI on December 15, 2004, in conjunction with the weekly site visit. Sampling results indicated hydrocarbon levels in the land treatment area soil were above the NMOCD remedial thresholds for this site (Table 3). Since May 2005, the land treatment areas have been turned every quarter to aerate the soils and accelerate the TPH degradation. These activities will continue quarterly until the implementation of the attached Backfill Work Plan.

Implementation of Excavation Activities Work Plan

The Soil Remediation Work Plan submitted to Ed Martin on June 24, 2005 and was implemented in January 2006. The excavation activities are summarized below.

Excavation Activities

On January 16, 2006, due to the evidence of the excavation confirmation composite sampling (Table 2), the east sidewall of the excavation was cut back an additional two feet (2'), and the north and south sidewalls were cut back an additional one foot (1') (Figure 4) . The east wall is located adjacent to the railroad right-of-way. In addition five (5) to six (6) feet of soil remains between the excavation and the right of way. At that point a photo ionization detector (PID) was used to determine if any portion of the three (3) sidewalls had remaining impacted soil that required excavation. Upon completion of the excavation, the PID readings on the three over excavated walls were below the NMOCD limit of 100 ppm. The materials removed during the excavation activities were placed in a separate area on six millimeter (6-mil) poly until the time that the excavation is backfilled.

Once no elevated readings were detected with the PID on the excavated sidewalls, grab confirmation samples were collected for laboratory confirmation. No excavation activities were performed on the excavation floor or west side wall. Prior sampling activities have shown the west sidewall to be below the NMOCD Remedial Threshold of 100 mg/kg. In addition to the side wall confirmation samples, grab confirmation samples were collected on the excavation floor in a grid pattern to re-analyze the floor concentrations (Sample EFW-007 to EFW-018). All samples collected during the over excavation activities were delivered to Environmental Labs of Texas, in Odessa, Texas, under Chain-of-Custody protocol to be analyzed by EPA SW-846 method 8021B for BTEX and 8015M for TPH. The results for all the excavation samples can be found in Table 2 and are discussed in the following section, "Analytical Results".

Analytical Results

East Wall

The sample collected from the south end of the east wall (SEW-001) was below the method detection limit (MDL) of 0.025 mg/kg for benzene, toluene, ethylbenzene, and total xylenes (BTEX). SEW-001 was slightly above the NMOCD regulatory limit of 100 mg/kg (119 mg/kg) for total petroleum hydrocarbons (TPH). Sample EW-002, collected south of the center of the

east wall, was below the MDL of 0.025 mg/kg for all BTEX constituents and 10 mg/kg for TPH. Sample EW-003, collected north of the center of the east wall, was below the MDL for benzene, and toluene, but was above the MDL for both ethylbenzene and total xylenes; however, the total result for BTEX constituents (0.089) mg/kg was below the NMOCD regulatory limit of 50 mg/kg. The TPH results for sample EW-003 were above the NMOCD regulatory limit of 100 mg/kg (155 mg/kg). The final sample collected from the north end of the east wall (NEW-004) was below MDL for all BTEX constituents as well as TPH. The areas of impact (SEW-001 and EW-003) that are above NMOCD regulatory limits will be excavated to the maximum extent of six (6) feet during the installation of the liner and prior to backfilling.

North Wall

Sample NEW-004 was collected in the corner of the north and east wall and is representative of both walls. Only one (1) additional sample was collected on the north wall, sample NWW-005. Analytical results for sample NWW-005 listed all BTEX constituents and TPH below the MDL for their respective analytical methods.

South Wall

Sample SEW-001 was collected in the corner of the south and east wall and is representative of both walls. Only one (1) additional sample was collected on the south wall, sample SWW-006. Analytical results for sample SWW-006 listed all BTEX constituents below the MDL. SWW-006 returned a reportable TPH concentration of (64.9 mg/kg), but the result was below the NMOCD remedial threshold of 100 mg/kg.

Excavation Floor

No over excavation activities were performed on the excavation floor; however, twelve (12) samples consisting of six (6) on each side of the pipeline were collected from the excavation floor to obtain a more complete evaluation of the concentration distribution on the base of the excavation. The highest concentration from the excavation floor analytical results as well as the highest concentration from the land treatment area are evaluated later in this report for their migration potential ("Modeling Activities").

All six (6) of the west excavation floor samples (EFW-007 to EFW-012) as well as all six (6) of the east excavation floor samples (EFE-013 to EFE-018) were below the NMOCD regulatory limits for benzene (10 mg/kg) and BTEX (50 mg/kg). The analytical results for all twelve floor samples returned TPH concentration above the NMOCD regulatory limit of 100 mg/kg. The lowest TPH analytical results was from sample EFW-010 (2,120 mg/kg) and the highest TPH analytical result was from sample EFW-017 (8,100 mg/kg). The TPH results from the other ten (10) samples fell within this range.

Soil Disposal Activities

No disposal activities are proposed at this time. All soils onsite will be placed back in the excavation, on top of a twenty millimeter (20 mil) black-on-black rock grade poly ethylene liner,

as backfill. These activities are outlined in the "Restoration Activities Work Plan" section of this report.

Land Treatment Cells

The highest concentration of TPH in the soils at the land treatment cells is 2,410 mg/kg in the northwest quadrant (Table 2). These soils are turned quarterly, with no further action taken.

Modeling Activities

RISC 4 Modeling Software was utilized to calculate the mass loading and volatilization losses at the groundwater interface. For modeling purposes the highest laboratory analyzed TPH concentration of 14,200 mg/kg was utilized to represent the worse case scenario. This TPH concentration was present in boring MW-1 at forty (40) to forty two (42) feet bgs advanced on July 26, 2004. Benzene and BTEX concentrations in both media are below the NMOCD remedial threshold; however, the benzene concentration from the same boring was utilized as the basis for the migration calculations.

For comparison purposes fate and transport models were completed for a lined and unlined excavation.

FATE AND TRANSPORT MODEL INPUT SUMMARY – Without Liner

Unsaturated zone model linked with saturated zone model

Simulation time (years).	50

Vadose Zone Source Parameters

Thickness of contamination (m)	25.
Depth to top of contamination (m).	1.5
Length of source (m)	44.
Width of source (m).	18.

Unsaturated Zone Properties

Total Porosity in vadose zone (cm3/cm3)	0.60
Residual water content (cm3/cm3)	0.17
Fraction organic carbon (g oc/g soil).	5.00E-02
Soil bulk density (g/cm3).	1.7
Infiltration Rate (cm/yr).	1.0
Saturated conductivity (m/d)	1.00E-04
Van Genuchten's N.	1.1
Thickness of vadose zone (m)	10.

Aquifer Properties

Effective porosity (cm3/cm3)	0.25
Fraction organic carbon (g oc/g soil).	2.00E-03
Hydraulic conductivity (m/d)	10.
Soil bulk density (g/cm3).	1.7
Hydraulic gradient (m/m)	1.00E-03
***Longitudinal dispersivity (m). code calculated	
***Transverse dispersivity (m). code calculated	
***Vertical dispersivity (m). code calculated	

TPH Data for Unsaturated Zone Source

Concentration of TPH in soil (mg/kg)	1.42E+04
Molecular weight of TPH (g/mol).	1.00E+02

CHEMICAL DATA FOR: Benzene

Diffusion coefficient in air (cm2/s)	8.80E-02
Diffusion coefficient in water (cm2/s)	9.80E-06
Solubility (mg/l)	1.75E+03
Vapor pressure (mmHg)	95.
KOC (L/kg).	59.
Henry's Law coefficient (-).	0.23
Molecular weight (g/mol).	78.
Degradation rate, saturated zone (1/d).	9.60E-04
Degradation rate, vadose zone (1/d).	9.60E-04

Source Concentrations:

Source conc. for unsaturated zone model (mg/kg). 92.

The modeling software produced the following results with regards to mass loading to groundwater and volatilization losses over a fifty (50) year period with no liner based upon a silty, sandy, gravel soil:

CUMULATIVE LOSSES FROM THE VADOSE ZONE
Benzene

Time (yr)	Mass Loading to Groundwater (kg)	Volatilization Losses (kg)
1.0	1.45E+01	2.90E+00
2.0	2.97E+01	5.79E+00
3.0	4.48E+01	8.68E+00
4.0	6.00E+01	1.16E+01
5.0	7.51E+01	1.44E+01
6.0	9.02E+01	1.73E+01
7.0	1.05E+02	2.02E+01
8.0	1.20E+02	2.30E+01
9.0	1.35E+02	2.59E+01
10.0	1.50E+02	2.88E+01
11.0	1.65E+02	3.16E+01
12.0	1.80E+02	3.44E+01
13.0	1.95E+02	3.73E+01
14.0	2.10E+02	4.01E+01
15.0	2.25E+02	4.30E+01
16.0	2.40E+02	4.58E+01
17.0	2.55E+02	4.86E+01
18.0	2.69E+02	5.14E+01
19.0	2.84E+02	5.42E+01
20.0	2.99E+02	5.70E+01
21.0	3.14E+02	5.98E+01
22.0	3.28E+02	6.26E+01
23.0	3.43E+02	6.54E+01
24.0	3.58E+02	6.82E+01
25.0	3.72E+02	7.10E+01
26.0	3.87E+02	7.38E+01
27.0	4.01E+02	7.65E+01
28.0	4.16E+02	7.93E+01
29.0	4.30E+02	8.21E+01
30.0	4.45E+02	8.48E+01
31.0	4.59E+02	8.76E+01
32.0	4.74E+02	9.03E+01
33.0	4.88E+02	9.31E+01
34.0	5.03E+02	9.58E+01
35.0	5.17E+02	9.86E+01
36.0	5.31E+02	1.01E+02
37.0	5.46E+02	1.04E+02
38.0	5.60E+02	1.07E+02
39.0	5.74E+02	1.09E+02

40.0	5.89E+02	1.12E+02
41.0	6.03E+02	1.15E+02
42.0	6.17E+02	1.18E+02
43.0	6.31E+02	1.20E+02
44.0	6.45E+02	1.23E+02
45.0	6.59E+02	1.26E+02
46.0	6.74E+02	1.28E+02
47.0	6.88E+02	1.31E+02
48.0	7.02E+02	1.34E+02
49.0	7.16E+02	1.36E+02
50.0	7.30E+02	1.39E+02

The same model was used with the same above parameters but using an impermeable liner. For modeling purposes, default parameters for clay were utilized as the impermeable layer in place of the silty, sandy, gravel soil. The results are as follows:

CUMULATIVE LOSSES FROM THE VADOSE ZONE
Benzene

Time (yr)	Mass Loading to Groundwater (kg)	Volatilization Losses (kg)
1.0	0.00E+00	1.17E-02
2.0	0.00E+00	2.35E-02
3.0	0.00E+00	3.52E-02
4.0	0.00E+00	4.70E-02
5.0	0.00E+00	5.87E-02
6.0	0.00E+00	7.05E-02
7.0	0.00E+00	8.22E-02
8.0	0.00E+00	9.40E-02
9.0	0.00E+00	1.06E-01
10.0	0.00E+00	1.17E-01
11.0	0.00E+00	1.29E-01
12.0	0.00E+00	1.41E-01
13.0	0.00E+00	1.53E-01
14.0	0.00E+00	1.64E-01
15.0	0.00E+00	1.76E-01
16.0	0.00E+00	1.88E-01
17.0	0.00E+00	2.00E-01
18.0	0.00E+00	2.11E-01
19.0	0.00E+00	2.23E-01
20.0	0.00E+00	2.35E-01
21.0	0.00E+00	2.47E-01

22.0	0.00E+00	2.58E-01
23.0	0.00E+00	2.70E-01
24.0	0.00E+00	2.82E-01
25.0	0.00E+00	2.94E-01
26.0	0.00E+00	3.05E-01
27.0	0.00E+00	3.17E-01
28.0	0.00E+00	3.29E-01
29.0	0.00E+00	3.41E-01
30.0	0.00E+00	3.52E-01
31.0	0.00E+00	3.64E-01
32.0	0.00E+00	3.76E-01
33.0	0.00E+00	3.87E-01
34.0	0.00E+00	3.99E-01
35.0	0.00E+00	4.11E-01
36.0	0.00E+00	4.23E-01
37.0	0.00E+00	4.34E-01
38.0	0.00E+00	4.46E-01
39.0	0.00E+00	4.58E-01
40.0	0.00E+00	4.70E-01
41.0	0.00E+00	4.81E-01
42.0	0.00E+00	4.93E-01
43.0	0.00E+00	5.05E-01
44.0	0.00E+00	5.16E-01
45.0	0.00E+00	5.28E-01
46.0	0.00E+00	5.40E-01
47.0	0.00E+00	5.52E-01
48.0	0.00E+00	5.63E-01
49.0	0.00E+00	5.75E-01
50.0	0.00E+00	5.87E-01

The fate and transport models estimate the mass loading of benzene from the soil to groundwater pathway with and without a confining layer (i.e 20 mil liner). The benzene loading to groundwater is reduced to zero (0) mg/kg per year after the liner is installed and backfilled. The model without the liner shows continued benzene loading to the groundwater. The benzene concentrations are below the NMOCD remedial threshold of 10 mg/kg in soils. The findings in this model suggests that installing a liner and placing the soils from the land treatment cells as suggested in the "Restoration Activities Work Plan", would eliminate the soil to groundwater pathway preventing additional groundwater impacts from occurring.

Restoration Activities Work Plan

Prior to the initiation of the restoration activities, MW-1 will be plugged and abandoned according to the guidelines described by Mr. Edwin Martin in his April 14, 2005 letter concerning the recommendation in the 2004 Annual Monitoring Report. MW-1A will be vertically extended to a level above the top of the excavation, and the top of casing will be re-surveyed. With the monitoring well extended to a level accessible after the backfill activities,

the bottom of the excavation will be filled with an even six inch (6") layer of sand. A twenty millimeter (20 mil) black-on-black rock grade polyethylene liner will then be placed on the sand covering the base of the excavation. A small hole will be cut through the liner to encompass MW-1A which will be left in the excavation. Clay packing material will be utilized to seal the opening in the liner around the monitor well casing. An additional six inch (6") layer of sand will be placed on top of the liner.

With the poly liner and protective sand cover in place, backfill of the excavated materials will begin. A layer of the rock material will first be carefully placed back in the excavation. Then a layer of the soils from the land treatment area will be placed on top of the first rock layer. The two layers will then be properly compacted. This alternating of layers and compacting activities will continue to the top of the excavation taking great care to insure the integrity of MW-1A, the pipeline, and the poly liner. Only soils, no rock, will be place in the proximity of either the pipeline or MW-1A. Clean backfill will be used during the backfill activities as needed to bring the excavation to surface grade..

Conclusion and Recommendations

It is the opinion of Talon/LPE that the over excavation activities were successful in removing the remaining areas of hydrocarbon impact in the north and south walls of the 8" Moore to Jal #1 excavation. The areas above the NMOCD regulatory limits at EW-003 and SEW-001 along the east sidewall are located adjacent to the railroad right-of-way. These areas will be excavated approximately six (6) feet during the installation of the liner. All analytical results from the confirmation samples collected following the over excavation activities were at or below the NMOCD remedial threshold for the respective constituents. From the results of the modeling activities, as well as the fact that neither the excavation floor or the soils from the land treatment cells exhibit benzene or BTEX concentration above the NMOCD remedial thresholds, it is the opinion of Talon/LPE that with the placement of the poly liner prior to backfill will isolate the source area and reduce the threat of further groundwater impact from the soils in the land treatment cells being placed into the excavation.

Signatures

Written By:

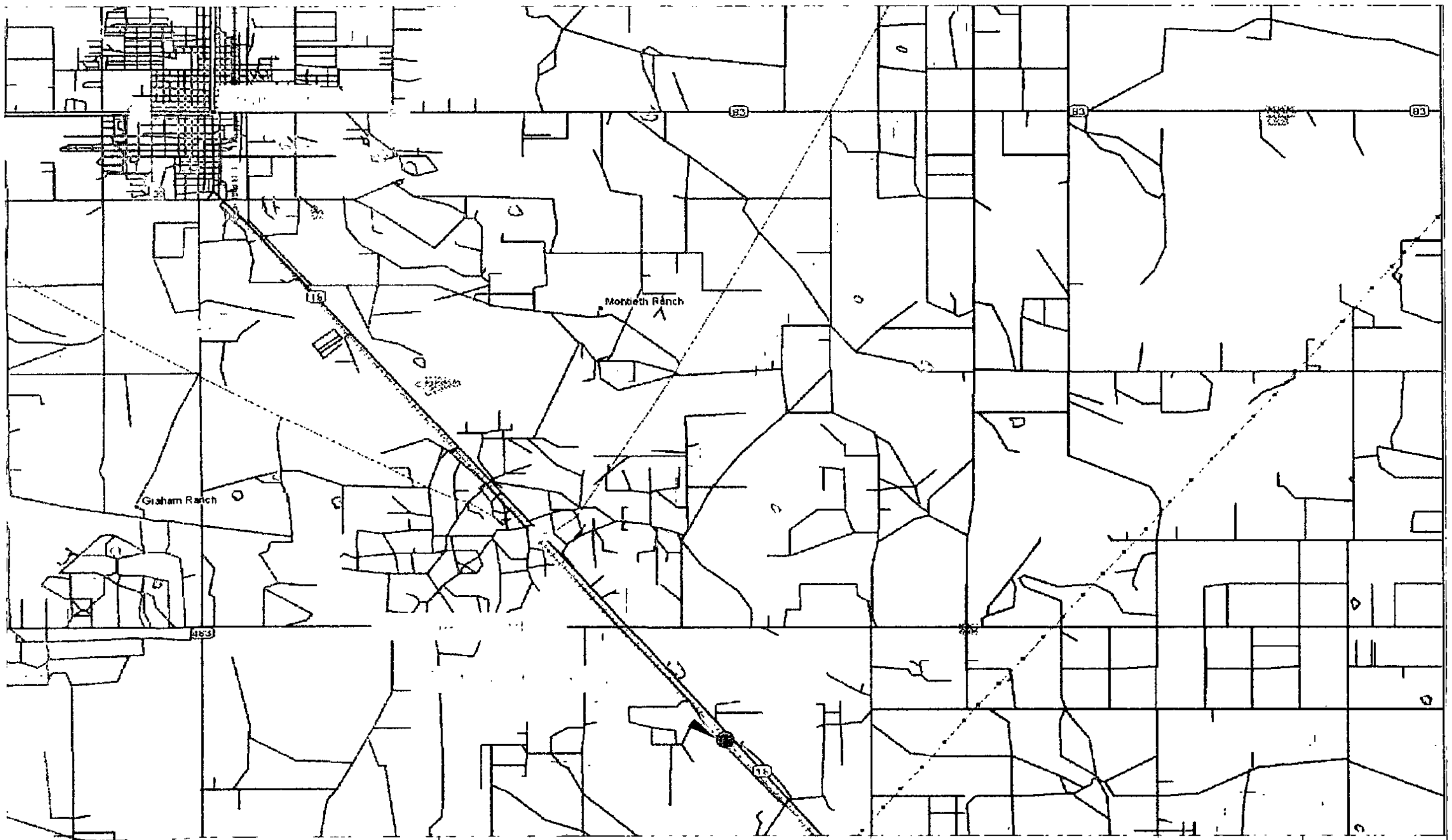
Jason M. Graham
Project Manager
Talon/LPE

Reviewed By:

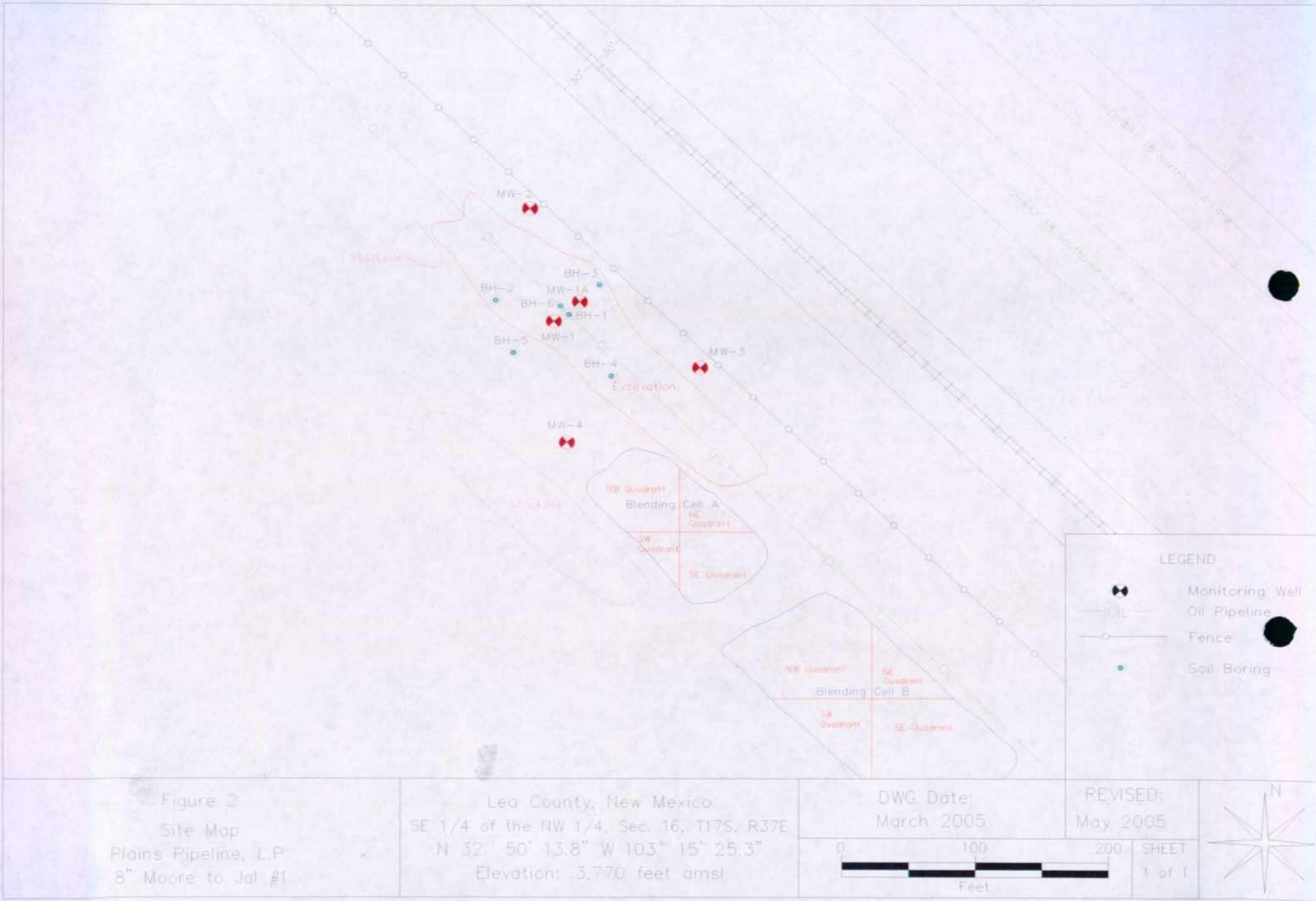
for Kyle Wagonner

Kyle Wagonner, P.G
Senior Project Manager
Talon/LPE

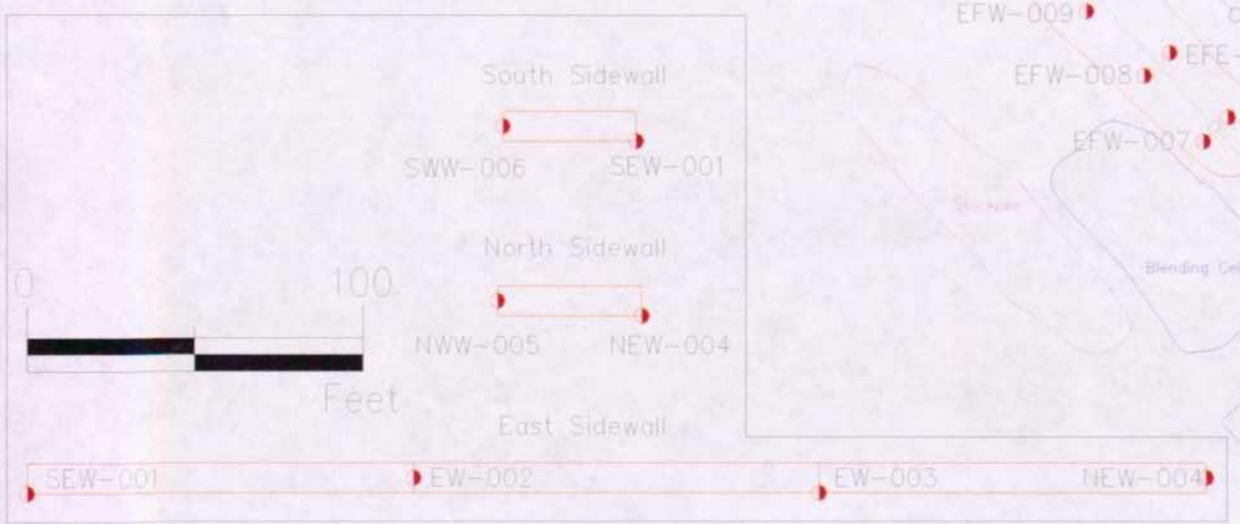
Figures

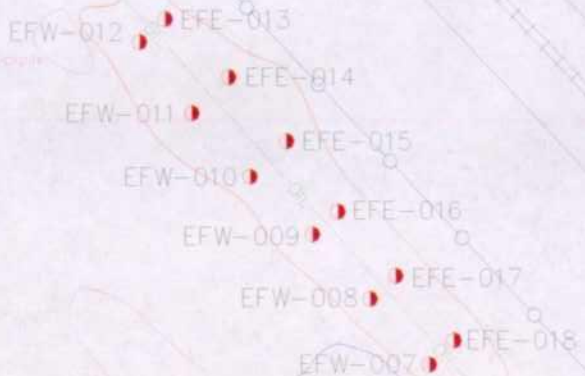


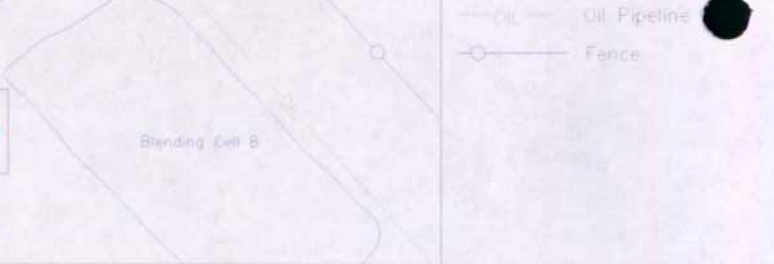
DWG Date:
March 2005


MW-2
BH-3
BH-2
MW-1A
BH-6
BH-1
MW-1
BH-5
MW-3
BH-4
Excavation
MW-4
NW Quadrant
Blending Cell A
NE Quadrant
SW Quadrant
SE Quadrant
NW Quadrant
NE Quadrant
Blending Cell B
SW Quadrant
SE Quadrant
LEGEND
Monitoring Well
Oil Pipeline
Fence
Soil Boring
Figure 2
Site Map
Plains Pipeline, L.P.
8" Moore to Jal #1
Lea County, New Mexico
SE 1/4 of the NW 1/4, Sec. 16, T17S, R37E
N 32° 50' 13.8" W 103° 15' 25.3"
Elevation: 3,770 feet amsl
DWG Date:
March 2005
REVISED:
May 2005
0
100
200
Feet
SHEET
1 of 1
N

Sidewall Sampling Locations







Blending Cell B

Figure 3
Sampling Locations
Plains Pipeline, L.P.
8" Maore to Jal #1

Lea County, New Mexico
SE 1/4 of the NW 1/4, Sec. 16, T17S, R37E
N 32° 50' 13.8" W 103° 15' 25.3"
Elevation: 3,770 feet amsl

DWG Date:
March 2005

REVISED:
Feb 2006

0 100 200
Feet

SHEET
1 of 1

N

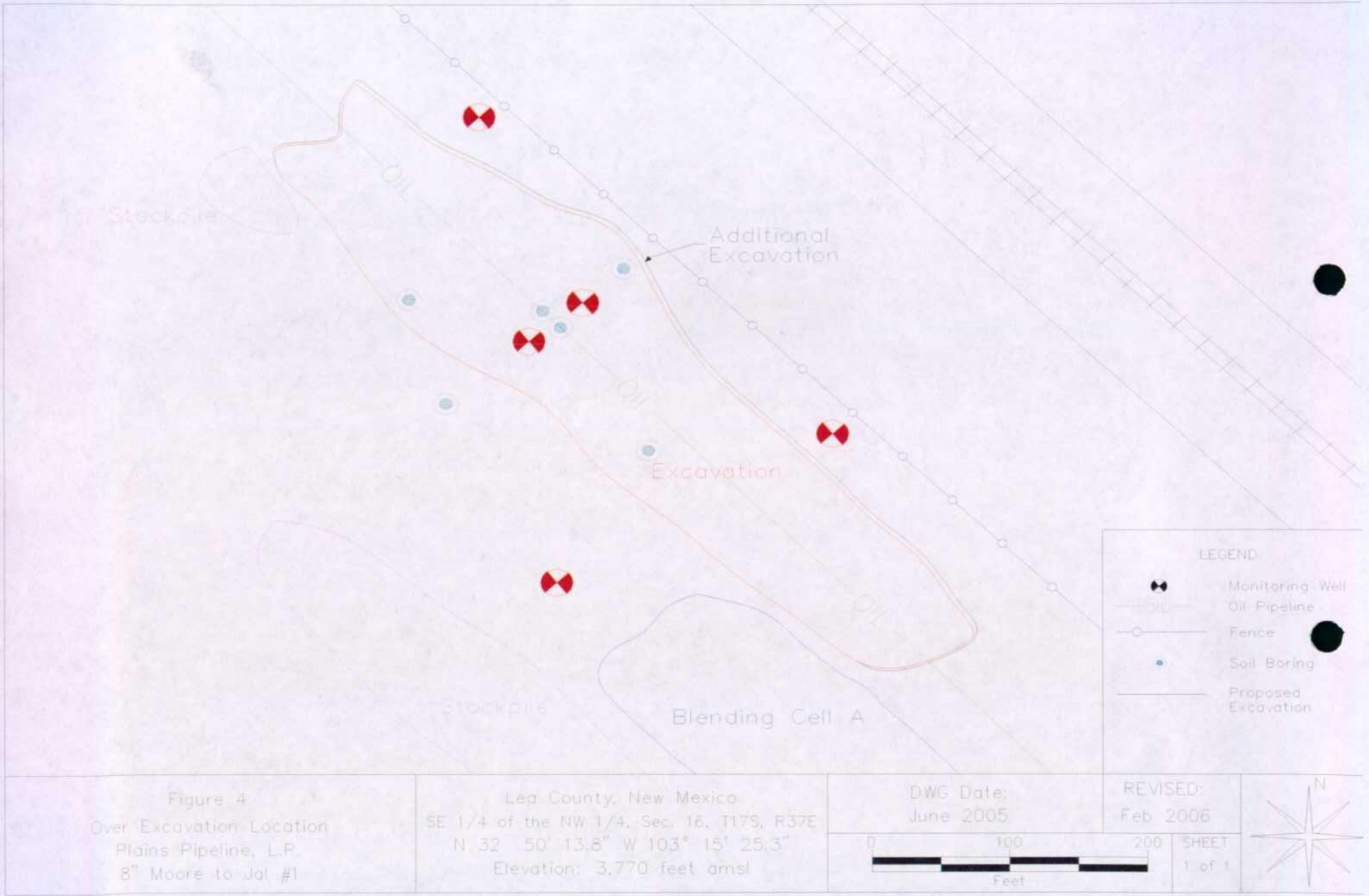


Figure 4 Over Excavation Location Plains Pipeline, L.P. 8" Moore to Jal #1	Lea County, New Mexico SE 1/4 of the NW 1/4, Sec. 16, T17S, R37E N 32° 50' 13.8" W 103° 15' 25.3" Elevation: 3,770 feet amsl	DWG Date: June 2005	REVISED: Feb 2006	SHEET 1 of 1

Tables

TALONLPE *Talon/LPE*

318 East Taylor Street, Hobbs, New Mexico 88240
Phone: 505/393-4261, FAX: 505/393-4658

Table 1

SUMMARY OF ENVIRONMENTAL BORING RESULTS (SOIL)

Plains All American Pipeline, LP. - 8" Moore to Jal #1 - Ref #2002-10270

Sample ID	Sample Date	Soil Boring	PID Readings (ppm)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-benzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gas) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)
SE8M102302BH1 (5-7)	23-Oct-02	BH-1	695	29.7	168	88.6	151	59.2	497	6810	5950	12760
SE8M102302BH1 (10-12)			505	35.9	256	142	227	89.1	750	11400	9960	21360
SE8M102302BH1 (15-17)			306	19.8	241	165	225	92.1	743	9000	9220	18220
SE8M102302BH1 (20-22)			1,350	38.7	290	150	217	85.2	781	9450	8140	17590
SE8M102302BH1 (25-27)			1,223	94.6	500	251	359	142	1,347	14400	13400	27800
SE8M102302BH1 (30-32)			682	114	342	174	285	109	1024	16600	10400	27000
SE8M102302BH1 (35-37)			510	65.9	302	157	292	113	929.9	16800	17400	34200
SE8M102302BH1 (40-42)			1,583	32	153	86.5	164	68.7	504.2	8440	11500	19940
SE8M102302BH1 (45-47)			384	30.2	210	118	207	82.2	647.4	8900	8180	17080
SE8M102302BH1 (50-52)			589	159	572	255	429	169	1584	20800	12700	33500
SE8M102302BH1 (55-57)			485	285	809	341	563	223	2221	40400	25200	65600
SE8M102302BH1 (60-62)			NA	449	1300	689	1180	496	4114	103000	79500	182500
SE8M102402BH2 (5-7)	24-Oct-02	BH-2	1.6	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH2 (10-12)			2.9	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH2 (15-17)			3.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH3 (5-7)	24-Oct-02	BH-3	1.6	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH3 (10-12)			2.9	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH3 (15-17)			1.3	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102402BH4 (5-7)	24-Oct-02	BH-4	46.4	191	628	300	374	151	1644	17100	10900	28000
SE8M102402BH4 (10-12)			225	175	494	270	395	160	1494	22800	11900	34700
SE8M102402BH4 (15-17)			3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
SE8M102402BH4 (20-22)			NA	76.2	296	135	262	100	869.2	14700	10400	25100
SE8M102402BH4 (25-27)			3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS

SE8M102402BH4 (30-32)			NA	140	442	228	420	163	1393	20600	15800	36400
SE8M102402BH4 (35-37)			1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
SE8M102402BH4 (50-52)			NA	118	291	93.6	157	55.5	715.1	9040	6700	15740
SE8M102502BH5 (5-7)			3.0	224	749	344	486	196	1999	29500	18000	47500
SE8M102502BH5 (10-12)			1.3	70.6	347	176	347	136	1076.6	15100	14900	30000
SE8M102502BH5 (15-17)	25-Oct-02	BH-5	0.0	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102502BH5 (25-27)			NA	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102502BH5 (35-37)			NA	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102502BH6 (5-7)			NA	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102502BH6 (10-12)	25-Oct-02	BH-6	NA	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
SE8M102502BH6 (15-17)			NA	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<5	<5	<10
2002-10270 (10-12)			2,982	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (15-17)			2,565	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (20-22)			1,574	**14.6**	43.6	23.3	34.3	15.4	**131**	4,210	3,950	**8,160**
2002-10270 (25-27)			1,558	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (30-32)			1,160	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (35-37)			1,049	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (40-42)	26-Jul-04	MW-1	927	**80.0**	144	74.1	94.5	45.5	**438**	7,710	6,450	**14,200**
2002-10270 (45-47)			1,125	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (50-52)			1,227	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (55-57)			2,124	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (60-62)			710	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (65-67)			906	NA	NA	NA	NA	NA	NA	NA	NA	NA
2002-10270 (70-72)			1,543	**11.6**	25.1	13.9	20.0	9.56	**80.2**	2,280	2,870	**5,150**
MW-2 (20-25)			62.2	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	<10.0	<10.0
MW-2 (25-30)			59.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2 (30-35)			68.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2 (35-40)			53.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2 (40-45)	23-Oct-04	MW-2	73.3	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	6.59[4]	<10.0
MW-2 (45-50)			224	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2 (50-55)			1,838	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-2 (55-60)			875	**139**	434	158	308	105	**1,140**	8,550	9,390	**17,900**
MW-2 (60-65)			800	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (15-20)	24-Oct-04	MW-3	12.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (20-25)			100	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	6.86[4]	17.4	17.4
MW-3 (25-30)			40.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (30-35)			75.4	NA	NA	NA	NA	NA	NA	NA	NA	NA

MW-3 (35-40)			144	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (40-45)	24-Oct-04	MW-3 con't	216	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (45-50)			350	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (50-55)			1,653	0.226	2.97	2.97	6.64	2.59	15.4	481	1,100	**1,580**
MW-3 (55-60)			534	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3 (60-65)			740	**139**	252	107	159	58	**715**	4,930	5,790	**10,720**
MW-4 (15-20)	22-Oct-04	MW-4	153	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.125	<10.0	7.84[4]	<10.0
MW-4 (20-25)			18.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (25-30)			155	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (30-35)			120	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (35-40)			67.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (40-45)			254	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (45-50)			186	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (50-55)			249	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (55-60)			820	**205**	460	187	328	127	**1,310**	9,970	11,100	**21,100**
MW-4 (60-65)			596	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4 (65-70)			447	0.295	0.253	0.0567	0.115	0.0419	0.762	81.9	165	**247**
NMOCD Remedial Thresholds				**10**					**50**			**100**

[1] *Bolded values are in excess of the NMOCD Remediation Thresholds*

[2] *NA : Not Analyzed*

[3] *NS : No Sample Recovery*

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

TALON LPE

Talon/LPE

318 East Taylor Street, Hobbs, New Mexico 88240
Phone: 505/393-4261, FAX: 505/393-4658

Table 2

SUMMARY OF EXCAVATION ANALYTICAL RESULTS (SOIL)

Plains All American Pipeline, LP. - 8" Moore to Jal #1 - Ref #2002-10270

Sample ID	Sample Date	Sample Location	Field PID Analysis (ppm)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TP (as di (mg/l
SEMR31302NSW	13-Mar-02	North Sidewall	NA	<25	937	3,590	4,410	2,140	11,077	224	54
SEMR31302RAMP	13-Mar-02	Ramp	NA	<25	<25	<25	<25	<25	<125	<10	<1
SEMR51302SP	13-May-02	Stockpile	NA	<1	<1	<1	<1	<1	NA	NA	N/
SEMR51702BCC3'	17-May-02	Bottom -3'	NA	<25	<25	<25	<25	<25	<125	<10	<1
SE8M1112503WSW	25-Nov-03	West Sidewall Composite	NA	<0.025	<0.025	<0.025	0.040	<0.025	0.040	<10.0	74.
SE8M1112503ESW	25-Nov-03	East Sidewall Composite	NA	0.082	0.679	0.558	1.14	0.423	2.88	144	2,4
SE8M1112503SSW	25-Nov-03	South Sidewall Composite	NA	<0.025	<0.025	<0.025	0.078	<0.025	0.078	<10.0	[redacted]14
SE8M1112503NSW	25-Nov-03	North Sidewall Composite	NA	<0.025	0.179	0.197	0.577	0.230	1.18	49.1	31
SE8M1112503BH	25-Nov-03	Bottomhole Composite	NA	0.2350	0.9920	0.5000	1.1500	0.5430	3.4200	175	9,2
SEW-001	16-Jan-06	South Side of East Wall	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<10	11
EW-002	16-Jan-06	South Sentral Side of East Wall	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<10	<1
EW-003	16-Jan-06	North Central Side of East	NA	<0.025	<0.025	0.0291	0.0599	<0.025	0.0890	<10	15

		Wall									
NEW-004	16-Jan-06	North Side of East Wall	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<10	<1
NWW-005	16-Jan-06	West Side of North Wall	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<10	<1
SWW-006	16-Jan-06	West Side of South Wall	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	<10	64.
EFW-007	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.125	20.1	2,1
EFW-008	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	0.0535	0.1870	0.0671	0.3076	250	5,4
EFW-009	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	0.0420	0.0742	<0.025	0.1162	81.4	[redacted]
EFW-010	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	0.0263	0.0869	<0.025	0.1132	61.9	2,1
EFW-011	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	0.0310	0.0689	0.036	0.1362	97.8	3,3
EFW-012	16-Jan-06	West Side of Excavation Base	NA	<0.025	<0.025	0.1410	0.3240	0.128	0.5930	150	2,8
EFW-013	16-Jan-06	East Side of Excavation Base	NA	<0.025	<0.025	0.0400	0.0567	<0.025	0.0967	155	6,7
EFW-014	16-Jan-06	East Side of Excavation Base	NA	<0.025	<0.025	0.0311	0.0724	<0.025	0.1035	77.6	5,2
EFW-015	16-Jan-06	East Side of Excavation Base	NA	0.0274	0.0926	0.1510	0.5610	0.198	1.0300	242	3,9
EFW-016	16-Jan-06	East Side of Excavation Base	NA	1.2300	2.8500	0.7420	2.5200	0.9240	8.2660	1240	6,1
EFW-017	16-Jan-06	East Side of Excavation Base	NA	<0.025	<0.025	<0.025	0.0487	<0.025	0.0487	41.8	8,1
EFW-018	16-Jan-06	East Side of Excavation Base	NA	<0.025	<0.025	0.0675	0.3000	0.1110	0.4785	<10	4,6
NMOCD Remedial Thresholds				**10**					**50**		

[1] ***Bolded*** *values are in excess of the NMOCD Remediation Thresholds*

[2] *NA : Not Analyzed*

[3] *NS : Not Sampled*

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

TALON LPE *Talon/LPE*

318 East Taylor Street, Hobbs, New Mexico 88240
Phone: 505/393-4261, FAX: 505/393-4658

SUMMARY OF LAND TREATMENT ANALYTICAL RESULTS (SOIL)

Plains All American Pipeline, LP. - 8" Moore to Jal #1 - Ref #2002-10270

Sample ID	Sample Location	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)
NW-A	Northwest Quadrant of Cell A	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	987.0	**987.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	21.5	1500.0	**1520.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	14.8	237.0	**251.8**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	1160.0	**1160.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1270.0	**1270.0**
NE-A	Northeast Quadrant of Cell A	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	1310.0	**1310.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	34.9	1580.0	**1610.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	<10	208.0	**208.0**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	1840.0	**1840.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1960.0	**1960.0**
SE-A	Southeast Quadrant of Cell A	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	664.0	**664.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	26.1	1280.0	**1310.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	<10	404.0	**404.0**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	1990.0	**1990.0**

		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	933.0	**933.0**
SW-A	Southwest Quadrant of Cell A	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	542.0	**542.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	16.1	1000.0	**1020.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	<10	320.0	**320.0**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	1010.0	**1010.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1040.0	**1040.0**
SE-B	Southeast Quadrant of Cell B	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	1140.0	**1140.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	26.7	1610.0	**1640.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	<10	177.0	**177.0**
		30-Dec-05	NA	NA	NA	NA	NA	NA	10.3	2240.0	**2250.3**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1040.0	**1040.0**
SW-B	Southwest Quadrant of Cell B	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	1470.0	**1470.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	24.8	1240.0	**1260.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	11.5	388.0	**399.5**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	2170.0	**2170.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	2050.0	**2050.0**
NE-B	Northeast Quadrant of Cell B	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	1240.0	**1240.0**
		1-Jul-05	NA	NA	NA	NA	NA	NA	25.7	1640.0	**1660.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	10.3	446.0	**456.3**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	2410.0	**2410.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1700.0	**1700.0**
NW-B	Northwest Quadrant of Cell	15-Dec-04	NA	NA	NA	NA	NA	NA	<5	1170.0	**1170.0**

	B	1-Jul-05	NA	NA	NA	NA	NA	NA	32.7	1530.0	**1560.0**
		29-Sep-05	NA	NA	NA	NA	NA	NA	11.2	384.0	**395.2**
		30-Dec-05	NA	NA	NA	NA	NA	NA	<10	1610.0	**1610.0**
		30-Mar-06	NA	NA	NA	NA	NA	NA	<10	1110.0	**1110.0**
NMOCD Remedial Thresholds			**10**					**50**			**100**

[1]*Bolded values are in excess of the NMOCD Remediation Thresholds*

[2]*NA : Not Analyzed*

[3]*NS : Not Sampled*

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

Laboratory Analytical Data

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: 8 inch Moore to Jal #1

Project Number: 2002-10270

Location: 15 miles North of Hobbs, NM

Lab Order Number: 6A18005

Report Date: 01/25/06

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EFW-009	6A18005-01	Soil	01/17/06 13:20	01/18/06 08:16
EFW-010	6A18005-02	Soil	01/17/06 13:30	01/18/06 08:16
EFW-011	6A18005-03	Soil	01/17/06 13:45	01/18/06 08:16
EFW-012	6A18005-04	Soil	01/17/06 13:50	01/18/06 08:16
EFW-013	6A18005-05	Soil	01/17/06 14:05	01/18/06 08:16
EFW-014	6A18005-06	Soil	01/17/06 14:15	01/18/06 08:16
EFW-015	6A18005-07	Soil	01/17/06 14:25	01/18/06 08:16
EFW-016	6A18005-08	Soil	01/17/06 14:35	01/18/06 08:16
EFW-017	6A18005-09	Soil	01/17/06 14:45	01/18/06 08:16
EFW-018	6A18005-10	Soil	01/17/06 14:55	01/18/06 08:16
SPN-019	6A18005-11	Soil	01/17/06 10:35	01/18/06 08:16
SEW-001	6A18005-12	Soil	01/17/06 11:30	01/18/06 08:16
EW-002	6A18005-13	Soil	01/17/06 11:40	01/18/06 08:16
EW-003	6A18005-14	Soil	01/17/06 11:50	01/18/06 08:16
NEW-004	6A18005-15	Soil	01/17/06 12:00	01/18/06 08:16
NWW-005	6A18005-16	Soil	01/17/06 12:10	01/18/06 08:16
SWW-006	6A18005-17	Soil	01/17/06 12:25	01/18/06 08:16
EFW-007	6A18005-18	Soil	01/17/06 13:00	01/18/06 08:16
EFW-008	6A18005-19	Soil	01/17/06 13:15	01/18/06 08:16

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-009 (6A18005-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**J [0.0196]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0420**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0742**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0237]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*94.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**81.4**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**3390**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**3470**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*121 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*120 %*	*70-130*		"	"	"	"	
EFW-010 (6A18005-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0263**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0689**	0.0250	"	"	"	"	"	"	
Xylene (o)	**ND**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**61.9**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**2120**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2180**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*120 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*123 %*	*70-130*		"	"	"	"	
EFW-011 (6A18005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**J [0.0136]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0310**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0689**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0363**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**97.8**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**3320**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**3420**	10.0	"	"	"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-011 (6A18005-03) Soil									
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		*EA61807*	*01/18/06*	*01/19/06*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	
EFW-012 (6A18005-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**J [0.0196]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.141**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.324**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.128**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*115 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**150**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**2820**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2970**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*122 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*129 %*	*70-130*		"	"	"	"	
EFW-013 (6A18005-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**J [0.0187]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0400**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0567**	0.0250	"	"	"	"	"	"	
Xylene (o)	**ND**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**155**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**6730**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**6880**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*123 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*113 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-014 (6A18005-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0311**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0724**	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**77.6**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**5270**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**5350**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	
EFW-015 (6A18005-07) Soil									
Benzene	**0.0274**	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**0.0926**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.151**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.561**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.198**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*119 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**242**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**3990**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**4230**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*124 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*116 %*	*70-130*		"	"	"	"	
EFW-016 (6A18005-08) Soil									
Benzene	**1.23**	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	**2.85**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.742**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**2.52**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.924**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*815 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*154 %*	*80-120*		"	"	"	"	*S-04*
Gasoline Range Organics C6-C12	**1240**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**6170**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**7400**	10.0	"	"	"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-016 (6A18005-08) Soil									
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*EA61807*	*01/18/06*	*01/19/06*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*93.0 %*	*70-130*		"	"	"	"	
EFW-017 (6A18005-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**ND**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0487**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0177]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*84.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**41.8**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**8100**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**8140**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*126 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*116 %*	*70-130*		"	"	"	"	
EFW-018 (6A18005-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0657**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.300**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.111**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**J [8.58]**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	J
Diesel Range Organics >C12-C35	**4610**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**4610**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SPN-019 (6A18005-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	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		*86.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**ND**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**211**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**211**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*150 %*	*70-130*		"	"	"	"	*S-04*
Surrogate: 1-Chlorooctadecane		*128 %*	*70-130*		"	"	"	"	
SEW-001 (6A18005-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/20/06	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		*83.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**119**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**119**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*123 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	
EW-002 (6A18005-13) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/23/06	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		*91.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	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	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EW-002 (6A18005-13) Soil									
Surrogate: 1-Chlorooctane		*121 %*	*70-130*		*EA61807*	*01/18/06*	*01/19/06*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*107 %*	*70-130*		"	"	"	"	
EW-003 (6A18005-14) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA61902	01/19/06	01/21/06	EPA 8021B	
Toluene	**J [0.0223]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0291**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0599**	0.0250	"	"	"	"	"	"	
Xylene (o)	**ND**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**155**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**155**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*125 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*113 %*	*70-130*		"	"	"	"	
NEW-004 (6A18005-15) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/21/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*105 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NWW-005 (6A18005-16) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/23/06	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		*92.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*81.2 %*	*70-130*		"	"	"	"	
SWW-006 (6A18005-17) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/23/06	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		*95.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**64.9**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**64.9**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*127 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*112 %*	*70-130*		"	"	"	"	
EFW-007 (6A18005-18) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/23/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**ND**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**J [0.0228]**	0.0250	"	"	"	"	"	"	J
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**20.1**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**2190**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2210**	10.0	"	"	"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-007 (6A18005-18) Soil									
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*EA61807*	*01/18/06*	*01/19/06*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	
EFW-008 (6A18005-19) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA62021	01/20/06	01/24/06	EPA 8021B	
Toluene	**J [0.0204]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0535**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.187**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0671**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*126 %*	*80-120*		"	"	"	"	*S-04*
Gasoline Range Organics C6-C12	**250**	10.0	mg/kg dry	1	EA61807	01/18/06	01/19/06	EPA 8015M	
Diesel Range Organics >C12-C35	**5490**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**5740**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*116 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.0 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EFW-009 (6A18005-01) Soil									
% Moisture	**8.2**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-010 (6A18005-02) Soil									
% Moisture	**9.3**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-011 (6A18005-03) Soil									
% Moisture	**7.4**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-012 (6A18005-04) Soil									
% Moisture	**12.6**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-013 (6A18005-05) Soil									
% Moisture	**3.8**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-014 (6A18005-06) Soil									
% Moisture	**7.1**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-015 (6A18005-07) Soil									
% Moisture	**10.5**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-016 (6A18005-08) Soil									
% Moisture	**13.3**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-017 (6A18005-09) Soil									
% Moisture	**7.3**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-018 (6A18005-10) Soil									
% Moisture	**3.3**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
SPN-019 (6A18005-11) Soil									
% Moisture	**4.9**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SEW-001 (6A18005-12) Soil									
% Moisture	**7.1**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EW-002 (6A18005-13) Soil									
% Moisture	**8.2**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EW-003 (6A18005-14) Soil									
% Moisture	**5.1**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
NEW-004 (6A18005-15) Soil									
% Moisture	**7.7**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
NWW-005 (6A18005-16) Soil									
% Moisture	**6.3**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
SWW-006 (6A18005-17) Soil									
% Moisture	**5.4**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-007 (6A18005-18) Soil									
% Moisture	**8.9**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	
EFW-008 (6A18005-19) Soil									
% Moisture	**7.2**	0.1	%	1	EA61901	01/18/06	01/19/06	% calculation	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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 EA61807 - Solvent Extraction (GC)										
Blank (EA61807-BLK1)				Prepared: 01/18/06 Analyzed: 01/19/06						
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	*55.2*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.5*		*"*	*50.0*		*97.0*	*70-130*			
LCS (EA61807-BS1)				Prepared: 01/18/06 Analyzed: 01/19/06						
Gasoline Range Organics C6-C12	488	10.0	mg/kg wet	500		97.6	75-125			
Diesel Range Organics >C12-C35	585	10.0	"	500		117	75-125			
Total Hydrocarbon C6-C35	1070	10.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	*63.3*		*mg/kg*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.2*		*"*	*50.0*		*108*	*70-130*			
Calibration Check (EA61807-CCV1)				Prepared: 01/18/06 Analyzed: 01/19/06						
Gasoline Range Organics C6-C12	485		mg/kg	500		97.0	80-120			
Diesel Range Organics >C12-C35	585		"	500		117	80-120			
Total Hydrocarbon C6-C35	1070		"	1000		107	80-120			
Surrogate: 1-Chlorooctane	*63.0*		*"*	*50.0*		*126*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.5*		*"*	*50.0*		*109*	*70-130*			
Matrix Spike (EA61807-MS1)	**Source: 6A18005-13**			Prepared: 01/18/06 Analyzed: 01/20/06						
Gasoline Range Organics C6-C12	565	10.0	mg/kg dry	545	ND	104	75-125			
Diesel Range Organics >C12-C35	616	10.0	"	545	ND	113	75-125			
Total Hydrocarbon C6-C35	1180	10.0	"	1090	ND	108	75-125			
Surrogate: 1-Chlorooctane	*63.5*		*mg/kg*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.6*		*"*	*50.0*		*111*	*70-130*			
Matrix Spike Dup (EA61807-MSD1)	**Source: 6A18005-13**			Prepared: 01/18/06 Analyzed: 01/20/06						
Gasoline Range Organics C6-C12	556	10.0	mg/kg dry	545	ND	102	75-125	1.61	20	
Diesel Range Organics >C12-C35	614	10.0	"	545	ND	113	75-125	0.325	20	
Total Hydrocarbon C6-C35	1170	10.0	"	1090	ND	107	75-125	0.851	20	
Surrogate: 1-Chlorooctane	*62.5*		*mg/kg*	*50.0*		*125*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.9*		*"*	*50.0*		*110*	*70-130*			

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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 EA61902 - EPA 5030C (GC)										
Blank (EA61902-BLK1)				Prepared & Analyzed: 01/19/06						
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	*36.7*		*ug/kg*	*40.0*		*91.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.7*		*"*	*40.0*		*89.2*	*80-120*			
LCS (EA61902-BS1)				Prepared: 01/19/06 Analyzed: 01/20/06						
Benzene	1.28	0.0250	mg/kg wet	1.25		102	80-120			
Toluene	1.29	0.0250	"	1.25		103	80-120			
Ethylbenzene	1.23	0.0250	"	1.25		98.4	80-120			
Xylene (p/m)	2.38	0.0250	"	2.50		95.2	80-120			
Xylene (o)	1.33	0.0250	"	1.25		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*38.4*		*ug/kg*	*40.0*		*96.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*38.3*		*"*	*40.0*		*95.8*	*80-120*			
Calibration Check (EA61902-CCV1)				Prepared: 01/19/06 Analyzed: 01/21/06						
Benzene	46.4		ug/kg	50.0		92.8	80-120			
Toluene	46.1		"	50.0		92.2	80-120			
Ethylbenzene	43.4		"	50.0		86.8	80-120			
Xylene (p/m)	84.5		"	100		84.5	80-120			
Xylene (o)	47.6		"	50.0		95.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.7*		*"*	*40.0*		*86.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.2*		*"*	*40.0*		*90.5*	*80-120*			
Matrix Spike (EA61902-MS1)	**Source: 6A17011-04**			Prepared: 01/19/06 Analyzed: 01/21/06						
Benzene	1.41	0.0250	mg/kg dry	1.46	ND	96.6	80-120			
Toluene	1.38	0.0250	"	1.46	ND	94.5	80-120			
Ethylbenzene	1.29	0.0250	"	1.46	ND	88.4	80-120			
Xylene (p/m)	2.48	0.0250	"	2.91	0.0282	84.3	80-120			
Xylene (o)	1.40	0.0250	"	1.46	ND	95.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.5*		*ug/kg*	*40.0*		*86.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.1*		*"*	*40.0*		*87.8*	*80-120*			

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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 EA61902 - EPA 5030C (GC)										
Matrix Spike Dup (EA61902-MSD1)	**Source: 6A17011-04**			Prepared: 01/19/06 Analyzed: 01/21/06						
Benzene	1.37	0.0250	mg/kg dry	1.46	ND	93.8	80-120	2.94	20	
Toluene	1.38	0.0250	"	1.46	ND	94.5	80-120	0.00	20	
Ethylbenzene	1.30	0.0250	"	1.46	ND	89.0	80-120	0.676	20	
Xylene (p/m)	2.51	0.0250	"	2.91	0.0282	85.3	80-120	1.18	20	
Xylene (o)	1.41	0.0250	"	1.46	ND	96.6	80-120	0.727	20	
Surrogate: a,a,a-Trifluorotoluene	*33.5*		*ug/kg*	*40.0*		*83.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.2*		*"*	*40.0*		*88.0*	*80-120*			
Batch EA62021 - EPA 5030C (GC)										
Blank (EA62021-BLK1)				Prepared: 01/20/06 Analyzed: 01/23/06						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*37.9*		*ug/kg*	*40.0*		*94.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.8*		*"*	*40.0*		*92.0*	*80-120*			
LCS (EA62021-BS1)				Prepared: 01/20/06 Analyzed: 01/21/06						
Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.15	0.0250	"	1.25		92.0	80-120			
Ethylbenzene	1.07	0.0250	"	1.25		85.6	80-120			
Xylene (p/m)	2.04	0.0250	"	2.50		81.6	80-120			
Xylene (o)	1.16	0.0250	"	1.25		92.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*32.2*		*ug/kg*	*40.0*		*80.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.1*		*"*	*40.0*		*82.8*	*80-120*			

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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 EA62021 - EPA 5030C (GC)										
Calibration Check (EA62021-CCV1)				Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	44.3		ug/kg	50.0		88.6	80-120			
Toluene	44.5		"	50.0		89.0	80-120			
Ethylbenzene	40.2		"	50.0		80.4	80-120			
Xylene (p/m)	81.2		"	100		81.2	80-120			
Xylene (o)	41.9		"	50.0		83.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*36.6*		*"*	*40.0*		*91.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.0*		*"*	*40.0*		*82.5*	*80-120*			
Matrix Spike (EA62021-MS1)		**Source: 6A18005-15**		Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	1.15	0.0250	mg/kg dry	1.35	ND	85.2	80-120			
Toluene	1.17	0.0250	"	1.35	ND	86.7	80-120			
Ethylbenzene	1.10	0.0250	"	1.35	ND	81.5	80-120			
Xylene (p/m)	2.21	0.0250	"	2.71	ND	81.5	80-120			
Xylene (o)	1.17	0.0250	"	1.35	ND	86.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.9*		*ug/kg*	*40.0*		*89.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.1*		*"*	*40.0*		*92.8*	*80-120*			
Matrix Spike Dup (EA62021-MSD1)		**Source: 6A18005-15**		Prepared: 01/20/06 Analyzed: 01/24/06						
Benzene	1.24	0.0250	mg/kg dry	1.35	ND	91.9	80-120	7.57	20	
Toluene	1.24	0.0250	"	1.35	ND	91.9	80-120	5.82	20	
Ethylbenzene	1.16	0.0250	"	1.35	ND	85.9	80-120	5.26	20	
Xylene (p/m)	2.31	0.0250	"	2.71	ND	85.2	80-120	4.44	20	
Xylene (o)	1.23	0.0250	"	1.35	ND	91.1	80-120	4.95	20	
Surrogate: a,a,a-Trifluorotoluene	*36.9*		*ug/kg*	*40.0*		*92.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.5*		*"*	*40.0*		*98.8*	*80-120*			

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

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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 EA61901 - General Preparation (Prep)										
Blank (EA61901-BLK1)				Prepared: 01/18/06 Analyzed: 01/19/06						
% Solids	100		%							
Duplicate (EA61901-DUP1)	**Source: 6A18001-01**			Prepared: 01/18/06 Analyzed: 01/19/06						
% Solids	87.2		%		87.1			0.115	20	
Duplicate (EA61901-DUP2)	**Source: 6A18005-13**			Prepared: 01/18/06 Analyzed: 01/19/06						
% Solids	92.2		%		91.8			0.435	20	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/25/06 16:50

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: 1/25/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: TALON/LPE
Phone #: 432-522-2133
Address: (Street, City, Zip) EAST 9th INDUSTRIAL LOOP
Fax #:
e-mail:
Contact Person: LOUIS SANCHEZ Camille Reynolds
Invoice to: (If different from above) (Same) Plains P/L 2002-10270
Project #: LBSPLAINS007SPL
Project Name: 8"-Moore To JAL #4
Project Location: 15 Miles North of Hobbs, N. Mex
Sampler Signature: Sam Silvas

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE 6A18005	# CONTAINERS	Volume/Amount	WATER	SOIL	AIR	SLUDGE	HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 (Ext)	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
-01	SUS EFW-009	1	4oz		✓							✓		1-17-06	1320		✓	✓																
-02	EFW-010	1	"		✓							✓		"	1330		✓	✓																
-03	EFW-011	1	"		✓							✓		"	1345		✓	✓																
-04	EFW-012	1	"		✓							✓		"	1350		✓	✓																
-05	EFE-013	1	"		✓							✓		"	1405		✓	✓																
-06	EFE-014	1	"		✓							✓		"	1415		✓	✓																
-07	EFE-015	1	"		✓							✓		"	1425		✓	✓																
-08	EFE-016	1	"		✓							✓		"	1435		✓	✓																
-09	EFE-017	1	"		✓							✓		"	1445		✓	✓																
-10	EFE-018	1	"		✓							✓		"	1455		✓	✓																
-11	SPN-019	1	"		✓							✓		"	10:35		✓	✓																

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Sam Silvas	1-18-06	8:16 Am			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			Jeanie McMurray	01-18-06	0816

LAB USE ONLY
Intact (Y) / N
Headspace Y / (N)
Temp -2.5 °
Log-in Review

REMARKS:
labels/seal

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Carrier #

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: TALON / LPG
Phone #: 432-522-2133
Address: (Street, City, Zip) #9 GAST INDUSTRIAL Rd.
Fax #:
e-mail:
Contact Person: LOUIS SANCHEZ Camille Reynolds
Invoice to: (If different from above) JMA (Same) Plains P/L 2002-10270
Project #: LBSPLAINS007SPL
Project Name: 8" MOORE TO JAL #1
Project Location: 15 Miles NORTH OF Hobbs, N. Mex.
Sampler Signature: Sam Silvas

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 (8015)	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content				Turn Around Time if different from standard	Hold
	6A18005																																			
	NE-1 SITE2	1	402		✓							✓		1-17-06	9:55		✓	✓																		
	NW-2 SITE2	1	402		✓							✓		"	10:05		✓	✓																		
	SP-3 SITE2	1	"		✓							✓		"	10:10		✓	✓																		
-12	SEW-001	1	"		✓							✓		"	11:30		✓	✓																		
-13	SEW-002	1	"		✓							✓		"	11:40		✓	✓																		
-14	EW-003	1	"		✓							✓		"	11:50		✓	✓																		
-15	NEW-004	1	"		✓							✓		"	12:00		✓	✓																		
-16	NWW-005	1	"		✓							✓		"	12:10		✓	✓																		
-17	SWW-006	1	"		✓							✓		"	12:25		✓	✓																		
-18	EFW-007	1	"		✓							✓		"	1300		✓	✓																		
-19	EFW-008	1	"		✓							✓		"	1310		✓	✓																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Sam Silvas	1-18-06	8:16 AM			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Jeanne McMurray	Date: 01-18-06	Time: 0816 AM

LAB USE ONLY
Intact (Y) / N
Headspace Y / (N)
Temp °C
Log-in Review -2.5

REMARKS:
labels/seal

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier #

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Plains P/L

Date/Time: 01-18-06 @ 0816

Order #: 6A18005

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-2.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(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?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

* see attached e-mail

Variance Documentation:

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

Regarding:

Corrective Action Taken:

Jeanne McMurrey

From: "Louis Sanchez" <lsanchez@talonlpe.com>
To: "'Jeanne McMurrey'" <jeanne@elabtexas.com>
Sent: Wednesday, January 18, 2006 2:07 PM
Subject: RE: sample time discrepancy

Let's go with 1315. Sorry for all the problems.

Respectfully,

Louis B. Sanchez
TALON/LPE
Project Manager
Phone: 432-522-2133
Fax: 432-522-2180
Cell: 432-770-0838
Email: lsanchez@talonlpe.com
TALONLPE
www.talonlpe.com

-----Original Message-----
From: Jeanne McMurrey [mailto:jeanne@elabtexas.com]
Sent: Wednesday, January 18, 2006 1:50 PM
To: Louis Sanchez
Subject: Re: sample time discrepancy

Hi Louis,

We had a discrepancy on sample time on one of your samples for 8" Moore to Jal #1.

	COC	*Label*
EFW-008	1310	1315

Which time would you like to reference?

Thanks,
Jeanne

Jeanne McMurrey
Environmental Lab of Texas I, Ltd.
12600 West I-20 East
Odessa, Texas 79765
432-563-1800

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: 8 inch Moore to Jal #1

Project Number: 2002-10270

Location: None Given

Lab Order Number: 6C30008

Report Date: 04/07/06

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NW-A	6C30008-01	Soil	03/30/06 11:27	03/30/06 15:35
NE-A	6C30008-02	Soil	03/30/06 11:25	03/30/06 15:35
SW-A	6C30008-03	Soil	03/30/06 11:30	03/30/06 15:35
SE-A	6C30008-04	Soil	03/30/06 11:29	03/30/06 15:35
NW-B	6C30008-05	Soil	03/30/06 11:32	03/30/06 15:35
NE-B	6C30008-06	Soil	03/30/06 11:34	03/30/06 15:35
SW-B	6C30008-07	Soil	03/30/06 11:38	03/30/06 15:35
SE-B	6C30008-08	Soil	03/30/06 11:36	03/30/06 15:35

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

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NW-A (6C30008-01) Soil									
Carbon Ranges C6-C12	**J [7.08]**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	J
Carbon Ranges C12-C28	**1040**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**233**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1270**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*123 %*	*70-130*		"	"	"	"	
NE-A (6C30008-02) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	**1620**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**344**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1960**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
SW-A (6C30008-03) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	**839**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**199**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1040**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*135 %*	*70-130*		"	"	"	"	*S-04*
Surrogate: 1-Chlorooctadecane		*139 %*	*70-130*		"	"	"	"	*S-04*
SE-A (6C30008-04) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	**770**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**163**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**933**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*120 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NW-B (6C30008-05) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	**912**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**202**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1110**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*115 %*	*70-130*		"	"	"	"	
NE-B (6C30008-06) Soil									
Carbon Ranges C6-C12	**J [5.53]**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	J
Carbon Ranges C12-C28	**1390**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**305**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1700**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*113 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*120 %*	*70-130*		"	"	"	"	
SW-B (6C30008-07) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63102	03/31/06	04/01/06	EPA 8015M	
Carbon Ranges C12-C28	**1680**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**372**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2050**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
SE-B (6C30008-08) Soil									
Carbon Ranges C6-C12	**ND**	10.0	mg/kg dry	1	EC63117	03/31/06	04/04/06	EPA 8015M	
Carbon Ranges C12-C28	**814**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**231**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1040**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*116 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*120 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NW-A (6C30008-01) Soil									
% Moisture	**5.8**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
NE-A (6C30008-02) Soil									
% Moisture	**3.3**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
SW-A (6C30008-03) Soil									
% Moisture	**21.5**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
SE-A (6C30008-04) Soil									
% Moisture	**6.6**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
NW-B (6C30008-05) Soil									
% Moisture	**6.2**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
NE-B (6C30008-06) Soil									
% Moisture	**4.4**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
SW-B (6C30008-07) Soil									
% Moisture	**3.1**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	
SE-B (6C30008-08) Soil									
% Moisture	**6.3**	0.1	%	1	ED60401	03/31/06	04/03/06	% calculation	

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

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 EC63102 - Solvent Extraction (GC)										
Blank (EC63102-BLK1)				Prepared: 03/31/06 Analyzed: 04/01/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*55.2*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.7*		*"*	*50.0*		*115*	*70-130*			
LCS (EC63102-BS1)				Prepared & Analyzed: 03/31/06						
Carbon Ranges C6-C12	510	10.0	mg/kg wet	500		102	75-125			
Carbon Ranges C12-C28	491	10.0	"	500		98.2	75-125			
Total Hydrocarbon C6-C35	1000	10.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	*59.8*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.8*		*"*	*50.0*		*112*	*70-130*			
Calibration Check (EC63102-CCV1)				Prepared: 03/31/06 Analyzed: 04/01/06						
Carbon Ranges C6-C12	264		mg/kg	250		106	80-120			
Carbon Ranges C12-C28	294		"	250		118	80-120			
Total Hydrocarbon C6-C35	557		"	500		111	80-120			
Surrogate: 1-Chlorooctane	*56.8*		*"*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.9*		*"*	*50.0*		*114*	*70-130*			
Matrix Spike (EC63102-MS1)	**Source: 6C30004-01**			Prepared: 03/31/06 Analyzed: 04/01/06						
Carbon Ranges C6-C12	615	10.0	mg/kg dry	588	ND	105	75-125			
Carbon Ranges C12-C28	594	10.0	"	588	ND	101	75-125			
Total Hydrocarbon C6-C35	1210	10.0	"	1180	ND	103	75-125			
Surrogate: 1-Chlorooctane	*62.4*		*mg/kg*	*50.0*		*125*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.2*		*"*	*50.0*		*114*	*70-130*			

Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

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 EC63102 - Solvent Extraction (GC)										
Matrix Spike Dup (EC63102-MSD1)	**Source: 6C30004-01**			Prepared: 03/31/06 Analyzed: 04/01/06						
Carbon Ranges C6-C12	614	10.0	mg/kg dry	588	ND	104	75-125	0.163	20	
Carbon Ranges C12-C28	595	10.0	"	588	ND	101	75-125	0.168	20	
Total Hydrocarbon C6-C35	1210	10.0	"	1180	ND	103	75-125	0.00	20	
Surrogate: 1-Chlorooctane	*61.8*		*mg/kg*	*50.0*		*124*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.3*		*"*	*50.0*		*113*	*70-130*			
Batch EC63117 - Solvent Extraction (GC)										
Blank (EC63117-BLK1)				Prepared: 03/31/06 Analyzed: 04/04/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*58.6*		*mg/kg*	*50.0*		*117*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.5*		*"*	*50.0*		*123*	*70-130*			
LCS (EC63117-BS1)				Prepared: 03/31/06 Analyzed: 04/04/06						
Carbon Ranges C6-C12	491	10.0	mg/kg wet	500		98.2	75-125			
Carbon Ranges C12-C28	489	10.0	"	500		97.8	75-125			
Total Hydrocarbon C6-C35	980	10.0	"	1000		98.0	75-125			
Surrogate: 1-Chlorooctane	*56.0*		*mg/kg*	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.5*		*"*	*50.0*		*105*	*70-130*			
Calibration Check (EC63117-CCV1)				Prepared: 03/31/06 Analyzed: 04/06/06						
Carbon Ranges C6-C12	262		mg/kg	250		105	80-120			
Carbon Ranges C12-C28	295		"	250		118	80-120			
Total Hydrocarbon C6-C35	557		"	500		111	80-120			
Surrogate: 1-Chlorooctane	*57.4*		*"*	*50.0*		*115*	*70-130*			
Surrogate: 1-Chlorooctadecane	*59.2*		*"*	*50.0*		*118*	*70-130*			

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

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 EC63117 - Solvent Extraction (GC)										
Matrix Spike (EC63117-MS1)	**Source: 6C24004-19**			Prepared: 03/31/06 Analyzed: 04/05/06						
Carbon Ranges C6-C12	496	10.0	mg/kg dry	536	ND	92.5	75-125			
Carbon Ranges C12-C28	549	10.0	"	536	85.2	86.5	75-125			
Carbon Ranges C28-C35	14.0	10.0	"	0.00	15.9		75-125			
Total Hydrocarbon C6-C35	1060	10.0	"	1070	101	89.6	75-125			
Surrogate: 1-Chlorooctane	*50.4*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.0*		*"*	*50.0*		*84.0*	*70-130*			
Matrix Spike Dup (EC63117-MSD1)	**Source: 6C24004-19**			Prepared: 03/31/06 Analyzed: 04/05/06						
Carbon Ranges C6-C12	502	10.0	mg/kg dry	536	ND	93.7	75-125	1.20	20	
Carbon Ranges C12-C28	568	10.0	"	536	85.2	90.1	75-125	3.40	20	
Carbon Ranges C28-C35	16.3	10.0	"	0.00	15.9		75-125	15.2	20	
Total Hydrocarbon C6-C35	1090	10.0	"	1070	101	92.4	75-125	2.79	20	
Surrogate: 1-Chlorooctane	*51.4*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.7*		*"*	*50.0*		*85.4*	*70-130*			

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

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 ED60401 - General Preparation (Prep)										
Blank (ED60401-BLK1)				Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	100		%							
Duplicate (ED60401-DUP1)	**Source: 6C30011-01**			Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	92.8		%		92.3			0.540	20	
Duplicate (ED60401-DUP2)	**Source: 6C31006-06**			Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	96.1		%		96.2			0.104	20	
Duplicate (ED60401-DUP3)	**Source: 6C31016-09**			Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	90.5		%		90.4			0.111	20	
Duplicate (ED60401-DUP4)	**Source: 6C31018-04**			Prepared: 03/31/06 Analyzed: 04/03/06						
% Solids	87.5		%		87.5			0.00	20	

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Plains All American EH & S	Project: 8 inch Moore to Jal #1	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10270	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/07/06 08:24

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: 4/7/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

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Environmental Labs of Texas

12600 West I-20 East, Odessa, TX 79763
(432) 563-1800 FAX: (432) 563-1713

Chain of Custody Form

Page 1 of 1

Company Name	Llano-Permian Environmental
LPE Project Manager	Jason Graham
Mailing Address	318 E. Taylor Street
City, State, Zip	Hobbs, NM
LPE Phone#/Fax#	505-393-4261 / 505-393-4658
Client Company	PAAP / Camille Reynolds
Facility Name	8" Moore to Jal #1 / 2002-10270
Project Reference	LBSPLAINS007SPL
LPE Sampler Name	Jeremy Anderson

Bill To

PLAINS ALL AMERICAN PIPELINE, L.P.

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

ANALYSIS REQUEST

LAB I.D. (LC30008)		SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH	TPH 1005		NORM	
-01	1	NW-A	C	1			X					X		3/30/06	1127		X									
-02	2	NE-A	C	1			X					X		3/30/06	1125		X									
-03	3	SW-A	C	1			X					X		3/30/06	1130		X									
-04	4	SE-A	C	1			X					X		3/30/06	1129		X									
-05	5	NW-B	C	1			X					X		3/30/06	1132		X									
-06	6	NE-B	C	1			X					X		3/30/06	1134		X									
-07	7	SW-B	C	1			X					X		3/30/06	1138		X									
-08	8	SE-B	C	1			X					X		3/30/06	1136		X									
	9																									
	10																									

Sampler Relinquished:

Relinquished by:

Delivered by:

Date: 3/30/06 Time: 1535

Received By:

Date: 3/30/06 Time: 1535

Received By: (lab staff) Camille Reynolds

Sample Cool & Intact: (Yes) No

Checked By: CK

E-mail results to: jgraham@llano-permian.com

REMARKS: 4oz glass

4.0°c labels/seal

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Plains

Date/Time: 3/30/06

Order #: 6C30006

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	4.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	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?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Variance Documentation:

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

Regarding:

Corrective Action Taken:

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **EOTT**	Contact **Frank Hernandez**
Address PO Box 1660 5805 East Highway 80 Midland, Texas 79702	Telephone No. 915.638.3799
Facility Name 8" Moore to Jal #1	Facility Type 8" Steel Pipeline

Surface Owner	Mineral Owner	Lease No.
State of New Mexico		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
16	16	T17S	R37E					Lat. 32° 50' 12.36"N Lon. 103° 15' 26.234"W.

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 200 bbls barrels	Volume Recovered 0 bbls barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence EOTT	Date and Hour of Discovery 10-18-02 @ 8:00 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley	
By Whom? Pat McCasland, EPI	Date and Hour 10-18-02 @ 11:00 AM Pat McCasland EPI left message with Paul Sheeley and sent page to the "ON-CALL" representative	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
8" Steel Pipeline Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of.

Describe Area Affected and Cleanup Action Taken.*
8,000 sqft ~200' x 40' Site will be delineated to determine the vertical and horizontal extents of contamination. Contaminated soil will be blended on site or disposed of. Remedial Goals: TPH 8015m = 1000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

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

Signature:	**OIL CONSERVATION DIVISION**	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: October 23, 2003 Phone: 915.638.3799	Conditions of Approval:	Attached ☐

* Attach Additional Sheets If Necessary