1R – 467

REPORT

DATE:
JULY 2007

1R-467
Report
July 2007

PLAINS
PIPELINE, L.P.

August 13, 2007

Mr. Wayne Price
State of New Mexico
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains Pipeline, L.P.
Document Submittal – Nine Soil Closure Reports
Clay Osborn - Rocky Top Ranch
Jal, Lea County, New Mexico

Dear Mr. Price:

Plains Pipeline, L.P. (Plains) is pleased to submit the attached Soil Closure Reports for the nine soil remediation project sites located on the Osborn's Rocky Top Ranch in Jal, Lea County, New Mexico. The soil remediation activities were conducted in accordance with the General Remediation Work Plan (dated April 2006) and the Site-Specific Remediation Work Plan (dated July 2006) prepared for each site and approved by the New Mexico Oil Conservation Division (NMOCD).

Based on the analytical laboratory results of confirmation soil samples and completion of the site-specific soil remediation and restoration activities as described in each Work Plan, remediation activities are complete and Plains requests that the NMOCD issue Plains a "no further action letter" and close these nine sites listed below.

Clay Osborn Jalmat #1	1R-0412
Clay Osborn Jalmat #2	1R-0466
Clay Osborn Jalmat #3	1R-0467
Clay Osborn Jalmat #22A	1R-0411
Clay Osborn Jalmat #22B	1R-0468
Clay Osborn East Shell North	1R-0083
Clay Osborn SH-0193-2	1R-0471
Clay Osborn SH-0184-1	1R-0472
Clay Osborn DT-27	1R-0470

Please note that site "Clay Osborn TM-245-2 (1R-0469)" was combined into site "Jalmat #22B" since the sites were immediately adjacent to each other. A separate report was not prepared for TM-245-2.

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

Sincerely,

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

Attachment: Nine Soil Closure Reports

File: n/jeff-files/Osborn-RockyTopRanch/DocumentClosureReptCovrLtr.doc

Report Entered

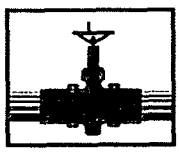
Site Closure Report

Clay Osborn Rocky Top Ranch
Jalmat #3 Release Site

SE¼ SE¼, Section 12
T25S, R36E
Lea County, New Mexico

SRS No. 2000-10610
NMOCD No. 1R-0467

Prepared For



PLAINS
PIPELINE, L.P.

333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By

ENVIRONMENTAL
SERVICES

July 2007

Table of Contents

1.0 Introduction

SDG Environmental Services was retained by Plains Pipeline, L.P. (Plains) to provide oversight of remediation activities and prepare a closure report for the Clay Osborn Jalmat #3 release site located on the Clay Osborn Rocky Top Ranch. Plains Pipeline is the owner/operator of several pipelines present on the Clay Osborn Rocky Top Ranch in Lea County, New Mexico. Plains retained Basin Environmental Services to conduct the soil excavation/remediation activities.

The site is located in the SE ¼ of the SE ¼ of Section 12, Township 25 South, Range 36 East, approximately 1 mile northwest of Jal at Latitude 32°08′16″ North, and Longitude 103°12′38″ West. The site is characterized by a right-of-way for the pipeline in a pasture. The pipeline is currently not in operation. A site location map is provided as Figure 1.

The hydrocarbon impacted area was the result of a historical release. The date of the release as well as the volume of crude released and recovered is not known. There was no visible surface staining.

Plains prepared and submitted a General Remediation Work Plan dated April 2006 to address the release sites located at the Rocky Top Ranch. The objective of the General Remediation Work Plan was to provide a framework for remediation of crude oil impacted sites consistent with the remediation/abatement goals and objectives provided in the New Mexico Oil Conservation Division (NMOCD) "NMOCD Guidelines for Remediation of Leaks, Spills, and Releases." The general Remediation Work Plan was conditionally approved by the NMOCD in a letter to Plains dated May 30, 2006.

Soil analytical data and information obtained from the EPI December 2001 Jalmat #3 Investigation Report was used to develop a Site Investigation Report and Site-Specific Remediation Work Plan. The Site Investigation Report and Site-Specific Remediation Work Plan dated July 2006 provided for closure of the site under three closure scenarios. The closure scenario selected to be dependent on the conditions observed in the field. These selected closure scenarios are as follows.

Work Plan Scenario 2 (Total Excavation)

Areas where impacts greater than 100 mg/kg TPH were limited in vertical extent (i.e. 5 to 10 feet in depth) were recommended to be remediated under the Work Plan Scenario 2 involving the following procedures as outlined in the approved Work Plan including NMOCD conditions presented in the May 2006 NMOCD approval letter.

- Excavation of impacted soil to between 5 to 10 feet bgs or until site remediation standards are met;
- Collect and analyze soil sample from the walls and floor of the excavation to confirm that the remediation has met site guidelines;
- Relocation of excavated soil to the centralized soil treatment area for blending and aeration;

• Collect and analyze treated soil to confirm that the soil treatment activities have met site guidelines;
• Backfill the excavation with treated soil to 100 mg/kg and restore the area to as close as possible to pre-spill conditions.

The north and south ends of the release site were remediated under Work Plan Scenario 2. The northern area excavated to 2.5 feet bgs and the southern area up to 15 feet bgs. Confirmation soil samples were collected from the floor of the excavation and at sidewalls identified by the highest PID reading and observed staining.

Work Plan Scenario 3 (Limited Excavation and Risk-based Closure)

At areas of the site where data indicated that soil impacts extended to below 15 feet bgs and excavation of all the impacted soil to below NMOCD guidelines is not practical, Work Plan Scenario 3 was implemented.

Scenario 3 included the permanent installation of an oversized 40-mil polyethylene liner at a minimum depth of 10 feet to inhibit vertical migration of contaminants in soil left in place below the cap. A 3-foot wide clean area buffer was established around the impacted soil in the floor of the excavation.

A 20-foot by 20-foot area in the central area of the release site was remediated under Scenario 3.

Clean overburden and impacted soils were blended and utilized as backfill. Soil samples were collected to verify constituent concentrations were below NMOCD site-specific guidelines. Once the excavation was confirmed to meet NMOCD standards and the installation of the liner was completed, backfilling of the excavation was initiated. The backfilled excavation was contoured to the original grade surrounding the site and restored by seeding with approved grass seed.

2.0 Regulatory Framework

In New Mexico, the MNOCD oversees and regulates oil, gas and geothermal activities, including compliance with environmental regulations. The Jalmat #3 Site was evaluated and remediated consistent with the characterization and remediation/abatement goals and objectives of the NMOCD approved Remediation Work Plan and the NMOCD guidelines defined in the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases* (August 13, 1993). Primary contaminants, or constituents of concern (COCs), associated with crude oil releases include total petroleum hydrocarbons (TPH), benzene, toluene, ethyl benzene, and total xylenes (BTEX). Acceptable levels for these COCs are determined based on a site ranking system. The ranking system estimates the likelihood of exposures to the COCs. The more likely that human exposure will occur, the more stringent the cleanup levels. The site ranking system is set up on the three following parameters:

- Depth to groundwater
- Wellhead protection area
- Distance to surface water body

3.0 Regional and Site Characteristics

3.1 Geological Description

The site is located east of the caprock escarpment which defines the western margin of the high plains or Llano Estacado of southeastern New Mexico. The surface is comprised of rolling hills with sand dunes of Quaternary age deposits, eroded Ogallala Formation and windblown deposits.

3.2 Land Use

Land usage in the area is primarily livestock range land and oil field activities. Several gas driven electric power stations are located in the vicinity of the site and several major oil and gas transmission lines bisect the region. The area in the immediate vicinity of the site is sparsely populated.

3.3 Ground Water

The depth to groundwater at the site is approximately 50 feet below ground surface (bgs) based on measured depth to groundwater in a monitor well located nearby. The depth to groundwater is consistent with the information provided in the USGS Groundwater Report 6. The New Mexico Office of the State Engineer database does not list any water wells in Range 36 East of Township 25.

4.0 NMOCD Site Ranking

The depth to water at the site is approximately 50 feet bgs. Based on the analytical results of soil samples, the hydrocarbon impacted soil extends from the surface to 10 feet bgs, therefore, less than 50 feet of non-impacted soil remains between the last known impacted soil depth and groundwater. The resulting Depth to Groundwater Ranking Score is 20.

The site is greater than 1000 feet from any public water supply source and greater than 200 feet from any private domestic water supply well. The resulting Wellhead Protection Ranking Score is 0.

There are no water bodies located within 1000 feet of the site. The resulting Distance to Surface Water Body Ranking Score is 0.

Based on the individual ranking scores identified above, the site has an NMOCD Total Ranking Score of >19, which establish the remediation levels as shown in the following table demonstrating the site ranking matrix:

Table 1 – Site Ranking Matrix

Depth to Groundwater	**Wellhead Protection Area**	**Distance to Surface Water**
<50 feet = 20	<1000 feet from a water source, or <200 feet from a domestic water source	<200 feet = 20
50 to 99 feet = 10	Yes = 20	200 to 1000 feet = 10
>100 feet = 0	No = 0	>1000 feet = 0
Groundwater Score = 20	Well Protection Score = 0	Surface Water Score = 0
Total Site Ranking Score = 20		
Parameter	**Score of >19 Maximum Concentrations**	
Benzene	10 ppm	
BTX	50 ppm	
TPH	100 ppm	

Based on this ranking system the site has a total score of 20 resulting in remediation goals of 10 ppm benzene, 50 ppm BTEX and 100 ppm TPH.

5.0 Site Assessment

On 17 through 19 July 2000, initial subsurface horizontal and vertical delineation was conducted by EPI with the installation of 15 soil borings installed at the site. The 15 soil borings were installed to a depth of 15 feet bgs and soil samples were collected at depths of 2, 5, 10, and 15 feet bgs, field screened with a PID, and analyzed for BTEX and TPH-GRO/DRO. Laboratory results indicated that constituent concentrations of BTEX were either below NMOCD regulatory standards or not detected above laboratory method

detection limits on the 60 soil samples. Laboratory results indicated that TPH-GRO/DRO concentrations exceeded 100 mg/kg TPH in six (6) of the soil samples and the remaining 54 soil samples were either below NMOCD regulatory standards or were not detected above the laboratory method detection limits.

5.1 Distribution of Hydrocarbons in the Unsaturated Zone

The area of soils remediated was approximately 4,400 square feet. Based on the previous data, impacted soils above the NMOCD guidelines were expected to be shallower than 10 feet bgs. However, during site remediation, the vertical extent of soils impacted above the site-specific NMOCD cleanup guidelines was determined to extend to below 10 feet bgs in two areas. No free phase hydrocarbons were observed during the excavation.

5.2 Distribution of Hydrocarbons in the Saturated Zone

No saturated conditions were reported in any of the borings or observed during later site remediation activities. A monitor well installed at a nearby site has recorded water levels of approximately 50 feet bgs. Therefore, there is no indication that hydrocarbons from the historical release have impacted the saturated zone.

6.0 Site Remediation

The final surface area remediated was approximately 4,400 square feet. The volume of excavated and blended soils totaled 820 cubic yards. The remediated area is shown in Figure 2.

The north and south ends of the release site were remediated under Work Plan Scenario 2. The northern area excavated to 2.5 feet bgs and the southern area up to 15 feet bgs. Confirmation soil samples were collected from the bottom of the excavation at side of impacted area defined by the highest PID reading and observed staining.

A 20 by 20 square foot area in the central area of the release site was remediated under Scenario 3. In this area, excavation continued to 10 feet bgs at which point the excavation was terminated. One soil sample from the excavation floor and a followup sample from 15 feet bgs indicated the soils to be above the site-specific guidelines for Closure Scenario 2. Therefore, the site was managed under Closure Scenario 3 of the approved Site-Specific Work Plan and a 40-mil liner was installed at 10 feet bgs.

Prior to liner installation, a 3-foot wide clean area buffer was established around the impacted soil in the floor of the excavation. The buffer extent was determined using a calibrated PID and confirmed by laboratory analysis of grab samples collected around the perimeter of the excavation. The liner was cushioned with sandy soils to protect it from puncture and tearing during the backfilling process. Installation of the 40-mil polyethylene liner at a depth of 10 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegrading of contaminates in the soil.

Soil samples of blended soils were collected to verify constituent concentrations of BTEX are below NMOCD guidelines and TPHGRO/DRO are below 100 mg/kg for direct backfill and below 1000 mg/kg as approved for backfill over liners. Once the

excavation was confirmed to meet NMOCD standards and the installation of the 40-mil poly liner was completed, backfilling of the excavation was initiated with the blended soil.

After determining that the confirmation samples did not exceed the site-specific remediation standards, the excavated area was backfilled with blended soils meeting the cleanup guidelines for the closure scenario, contoured to the original grade surrounding the site, and reseeded with approved grass seed.

7.0 Confirmation Sampling and Comparison to Remediation Guideline Standards

Confirmation samples were collected from the walls and the bottom of the excavation and submitted to Environmental Lab of Texas for laboratory analyses of total petroleum hydrocarbons (TPH) by EPA Method 8015M (DRO, GRO), and for benzene, toluene, ethyl benzene, and total xylenes (BTEX) by EPA Method 8021B, a copy of the laboratory report is presented in Appendix C. A site detail map identifying soil sample locations is presented as Figure 2. Table 2 provides a summary of the analytical results.

Soil samples were collected from soils from the excavation floor and walls. At one location, results indicated soils at 15 feet bgs were above the NMOCD cleanup guidelines. Therefore, this area of the site was closed under Closure Scenario 3 and a 20-foot by 20-foot 40-mil polyethylene liner was installed at 10 feet bgs. Final confirmation samples indicated concentrations of TPH in soils remaining in place at the liner edge ranged from 35.3 mg/kg in one wall sample to <10 mg/kg in all other samples. The soil samples from the perimeter of the liner installation did not exhibit BTEX concentrations above the NMOCD cleanup guidelines.

Sample results were compared to the site-specific soil remediation guidelines. As indicated in Table 2 and the laboratory reports, all constituents for soils remaining in place are below the site-specific cleanup guidelines for the closure scenarios implemented at the site. Therefore, remediation at this site is considered complete.

8.0 Conclusion

SDG Environmental Services was retained by Plains Pipeline, L.P. (Plains) to provide oversight of remediation activities and prepare a closure report for the Clay Osborn Jalmat #3 release site located on the Clay Osborn Rocky Top Ranch. The site is located in the SE ¼ of the SE ¼ of Section 12, Township 25 South, Range 36 East, approximately 1 mile northwest of Jal at Latitude 32°08′16″ North, and Longitude 103°12′38″ West.

The hydrocarbon impacted area was the result of a historical release. The date of the release as well as the volume of crude released and recovered is not known. A Site-Specific Remediation Work Plan dated April 2006 provided for closure of the site under

three closure scenarios which were implemented at the release site in October 2006 through March 2007.

Impacted soils were excavated, a 40-mil polyethylene liner installed in one area, and confirmation samples were collected and compared to the site-specific cleanup guidelines. Soil samples from the excavated areas confirm that the Jalmat #3 release site was remediated per the NMOCD approved Site-Specific Work Plan. Therefore, remediation at this site has been completed and no further investigation is warranted. SDG recommends that Plains submit a copy of this report to the NMOCD and request that the NMOCD close this case and issue a "no further action letter" to Plains.

TABLE 1

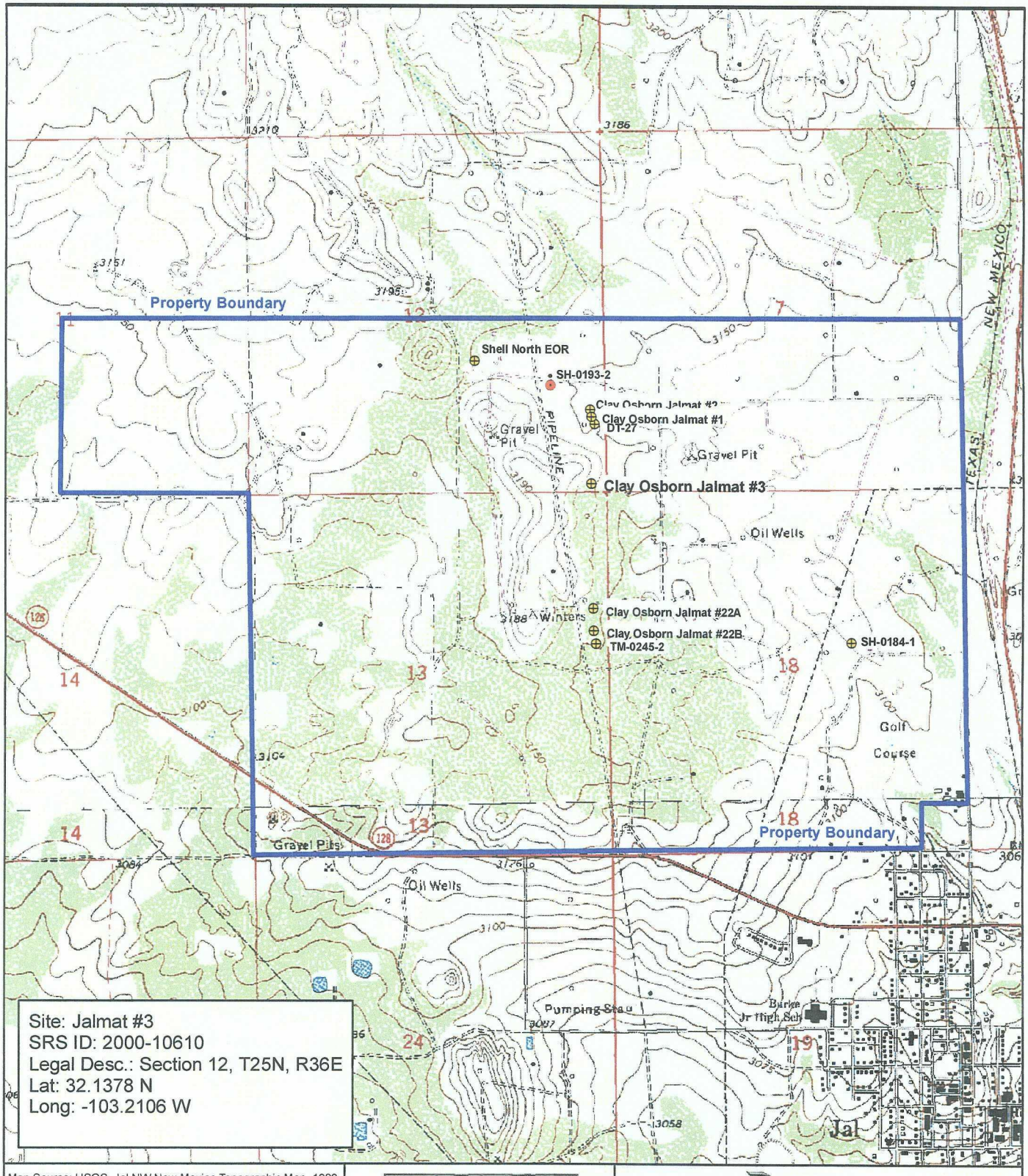
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY

PLAINS PIPELINE, L.P.
Jalmat #3
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2000-10610

SAMPLE LOCATION	DEPTH ft bgs	SAMPLE DATE	LABORATORY I.D.	METHOD: EPA 8021B					METHOD: EPA 8015M			TOTAL TPH
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P-XYLENES (mg/kg)	O-XYLENE (mg/kg)	C6-C12 (mg/kg)	C12-C28 (mg/kg)	C28-C35 (mg/kg)	C6-C35 (mg/kg)
JM3-F1	3*	12/19/2006	6L19013-01	na	na	na	na	na	<10.0	212	113	325
JM3-F2	10**	12/20/2006	6L21006-01	0.0126 J	0.224	0.0934	0.55	0.305	<10.0	1370	229	1600
JM3-F3	10	12/20/2006	6L21006-02	<0.0250	0.0296	0.0160 J	0.104	0.0566	<10.0	<10.0	<10.0	<10.0
JM3-F4	10	12/20/2006	6L21006-03	<0.0250	0.0272	0.0167 J	0.0891	0.0456	<10.0	<10.0	<10.0	<10.0
JM3-DF1	15**	12/20/2006	7A02001-01	<0.0250	<0.0250	0.0322	<0.0250	0.0184 J	64.4	1450	149	1660
JM3-F5	2	12/21/2006	6L22004-01	<0.0250	0.0165 J	<0.0250	0.0714	0.0347	<10.0	27.6	<10.0	27.6
JM3-F6	10	12/21/2006	6L22004-02	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-EW2	2	12/21/2006	6L22004-03	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-EW5	5	12/21/2006	6L22004-04	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-SW2	2	12/21/2006	6L22004-05	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-SW5	5	12/21/2006	6L22004-06	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-WW2	2	12/21/2006	6L22004-07	<0.0250	<0.0250	0.0244 J	<0.0250	0.0171 J	<10.0	<10.0	<10.0	<10.0
JM3-WW5	5*	12/21/2006	6L22004-08	<0.0250	0.0541	0.0225 J	0.133	0.0682	<10.0	152	56.2	208
JM3-F7	10	12/21/2006	6L22004-09	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-F8	10	12/21/2006	6L22004-10	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-ZWW2	2	12/21/2006	6L22004-11	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	35.3	<10.0	35.3
JM3-F9	15'	12/21/2006	6L22004-12	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-F10	15'	12/21/2006	6L22004-13	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-NW2	2	12/21/2006	6L22004-14	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-3WW2	2	12/21/2006	6L22004-15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-2EW2	2*	12/21/2006	6L22004-16	0.00948 J	0.449	0.259	1.13	0.392	<10.0	68.9	38.8	108
EXCV FLR	12*	1/4/2007	7A05011-01	na	na	na	na	na	63.2	4610	642	5320
N S/W	12	1/4/2007	7A05011-02	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	68	13.2	81.2
E S/W	12	1/4/2007	7A05011-03	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
W S/W	12	1/4/2007	7A05011-04	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
S S/W	12	1/4/2007	7A05011-05	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	69.9	2.64 J	69.9
JM3-2WW5	5	1/9/2007	7A10007-01	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-3EW2	2	1/9/2007	7A10007-02	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-SF15	15	1/10/2007	7A11001-01	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10.0	<10.0	<10.0	<10.0
JM3-SP	stockpile	1/17/2007	7A17007-01	na	na	na	na	na	32.4	155	4.63 J	**187**

* Soils subsequently excavated after sample collection.
** Soils subsequently covered by impermeable liner.
< indicates the constituent was not detected
J indicates estimated value (detected below method reporting limit
na not analyzed

Appendix A
Figures



Map Source: USGS, Jal NW New Mexico Topographic Map, 1980.

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Feet

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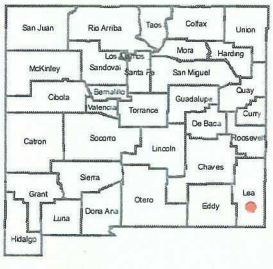
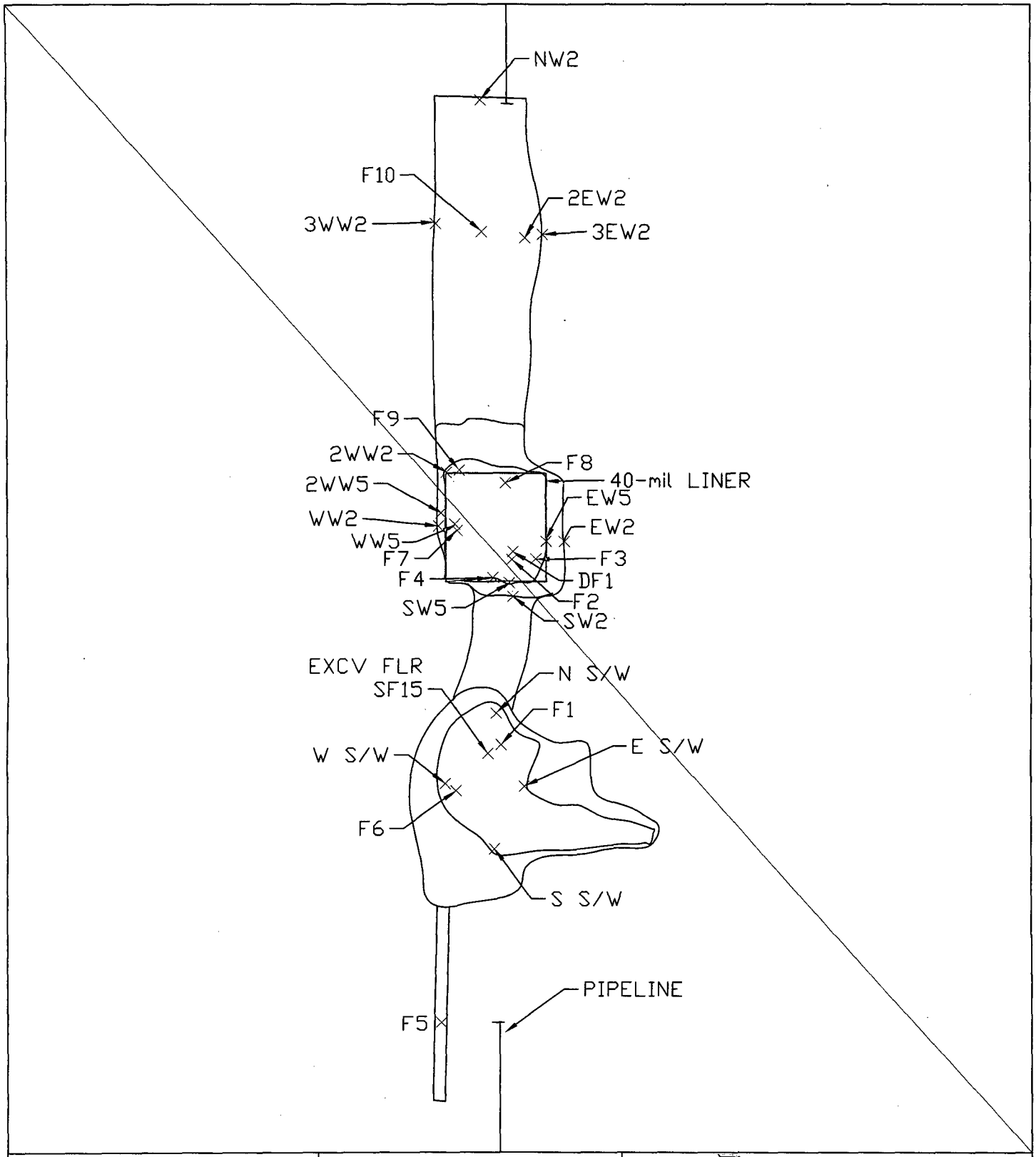


GLACIER FOX GIS INC

SDG ENVIRONMENTAL SERVICES

Jalmat #3
SRS ID: 2000-10610
Plains Pipeline, L.P.
Lea County, New Mexico

Figure 1: Site Location Map



N

0 30 60

Feet

LEGEND:

× Soil Sample Locations

— Final Excavation Boundary

F1 Interim Sample (removed)

SDG ENVIRONMENTAL SERVICES

Rocky Top Ranch
Clay Osborn Jalmat #3
SRS ID: 2000-10610
Lea County, New Mexico

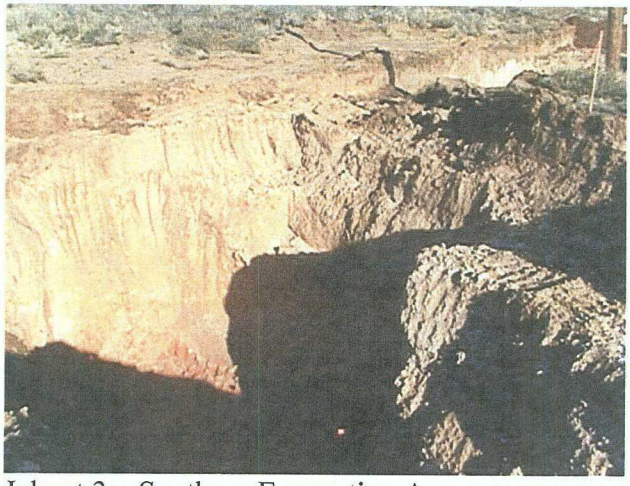
Figure 2: Estimated Excavation Areas

Appendix B
Site Photographs

Jalmat 3 – Excavated Area Facing South

Jalmat 3 – North-Central Excavation Prepared for Liner

Jalmat 3 – Liner Installation



Jalmat 3 – Southern Excavation Area

Jalmat 3 – Backfilled Area Facing South

Appendix C
Analytical Reports

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: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 6L19013

Report Date: 12/20/06

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- F1	6L19013-01	Soil	12/19/06 13:30	12-19-2006 17:00

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

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F1 (6L19013-01) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL61918	12/19/06	12/20/06	EPA 8015M	
Carbon Ranges C12-C28	**212**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**113**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**325**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*126 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*157 %*	*70-130*		"	"	"	"	*S-04*

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

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F1 (6L19013-01) Soil									
% Moisture	**12.5**	0.1	%	1	EL62003	12/19/06	12/20/06	% calculation	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL61918 - Solvent Extraction (GC)										
Blank (EL61918-BLK1)				Prepared: 12/19/06 Analyzed: 12/20/06						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*42.5*		*mg/kg*	*50.0*		*85.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.6*		"	*50.0*		*99.2*	*70-130*			
LCS (EL61918-BS1)				Prepared: 12/19/06 Analyzed: 12/20/06						
Carbon Ranges C6-C12	609	10.0	mg/kg wet	500		122	75-125			
Carbon Ranges C12-C28	521	10.0	"	500		104	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1130	10.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	*58.8*		*mg/kg*	*50.0*		*118*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.7*		"	*50.0*		*101*	*70-130*			
Calibration Check (EL61918-CCV1)				Prepared: 12/19/06 Analyzed: 12/20/06						
Carbon Ranges C6-C12	231		mg/kg	250		92.4	80-120			
Carbon Ranges C12-C28	298		"	250		119	80-120			
Total Hydrocarbons	529		"	500		106	80-120			
Surrogate: 1-Chlorooctane	*50.7*		"	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.5*		"	*50.0*		*103*	*70-130*			
Duplicate (EL61918-DUP1)	**Source: 6L18001-13**			Prepared: 12/19/06 Analyzed: 12/20/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg dry		ND				20	
Carbon Ranges C12-C28	ND	10.0	"		ND				20	
Carbon Ranges C28-C35	ND	10.0	"		ND				20	
Total Hydrocarbons	ND	10.0	"		ND				20	
Surrogate: 1-Chlorooctane	*51.7*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.0*		"	*50.0*		*122*	*70-130*			

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Project: Jalmat #3
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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL61918 - Solvent Extraction (GC)										
Matrix Spike (EL61918-MS1)	**Source: 6L18001-13**			Prepared: 12/19/06 Analyzed: 12/20/06						
Carbon Ranges C6-C12	487	10.0	mg/kg dry	550	ND	88.5	75-125			
Carbon Ranges C12-C28	529	10.0	"	550	ND	96.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1020	10.0	"	1100	ND	92.7	75-125			
Surrogate: 1-Chlorooctane	*53.6*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.1*		*"*	*50.0*		*104*	*70-130*			

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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 EL62003 - General Preparation (Prep)										
Blank (EL62003-BLK1)				Prepared: 12/19/06 Analyzed: 12/20/06						
% Moisture	ND	0.1	%							
Duplicate (EL62003-DUP1)	**Source: 6L18012-01**			Prepared: 12/19/06 Analyzed: 12/20/06						
% Moisture	4.3	0.1	%		4.6			6.74	20	

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Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 12/20/2006

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.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No:
Fax No:
Sampler Signature:
e-mail: kcody@sdjenv.com

Project Name: Jalmat #3
Project #: 2000-10610
Project Loc: Clay Osborne Ranch
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 0L19013

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: 8015M	TPH: 418.1	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Scheduled 24, 48, 72 hrs)	Standard TAT
01	JM3-F1			12/19/06	1330		1	✓								S		X													X	

Special Instructions:

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) (Y) N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 0°C °C

Relinquished by:	Date	Time	Received by:	Date	Time
	12/19/06	1700			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				12/19/06	17:00

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 12/19/06 5:05

Lab ID #: 6L-19013

Initials: CK

Sample Receipt Checklist

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

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

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: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 6L21006

Report Date: 12/31/06

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- F2	6L21006-01	Soil	12/20/06 11:00	12-21-2006 10:05
JM3- F3	6L21006-02	Soil	12/20/06 10:55	12-21-2006 10:05
JM3- F4	6L21006-03	Soil	12/20/06 11:05	12-21-2006 10:05

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F2 (6L21006-01) Soil									
Benzene	**J [0.0126]**	0.0250	mg/kg dry	25	EL62220	12/22/06	12/27/06	EPA 8021B	J
Toluene	**0.224**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0934**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.550**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.305**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62117	12/21/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	**1370**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**229**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1600**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*74.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*83.1 %*	*70-130*		"	"	"	"	
JM3- F3 (6L21006-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/27/06	EPA 8021B	
Toluene	**0.0296**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0160]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.104**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0566**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62117	12/21/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*70.3 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*75.0 %*	*70-130*		"	"	"	"	
JM3- F4 (6L21006-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/27/06	EPA 8021B	
Toluene	**0.0272**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0167]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0891**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0456**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62117	12/21/06	12/22/06	EPA 8015M	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F4 (6L21006-03) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EL62117	12/21/06	12/22/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*88.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*102 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F2 (6L21006-01) Soil									
% Moisture	**20.1**	0.1	%	1	EL62206	12/21/06	12/22/06	% calculation	
JM3- F3 (6L21006-02) Soil									
% Moisture	**20.9**	0.1	%	1	EL62206	12/21/06	12/22/06	% calculation	
JM3- F4 (6L21006-03) Soil									
% Moisture	**13.6**	0.1	%	1	EL62206	12/21/06	12/22/06	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62117 - Solvent Extraction (GC)										
Blank (EL62117-BLK1)				Prepared: 12/21/06 Analyzed: 12/22/06						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*60.0*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.2*		*"*	*50.0*		*128*	*70-130*			
LCS (EL62117-BS1)				Prepared: 12/21/06 Analyzed: 12/22/06						
Carbon Ranges C6-C12	1120	10.0	mg/kg wet	1000		112	75-125			
Carbon Ranges C12-C28	903	10.0	"	1000		90.3	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	2020	10.0	"	2000		101	75-125			
Surrogate: 1-Chlorooctane	*79.0*		*mg/kg*	*100*		*79.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*76.4*		*"*	*100*		*76.4*	*70-130*			
Calibration Check (EL62117-CCV1)				Prepared: 12/21/06 Analyzed: 12/22/06						
Carbon Ranges C6-C12	210		mg/kg	250		84.0	80-120			
Carbon Ranges C12-C28	273		"	250		109	80-120			
Total Hydrocarbons	483		"	500		96.6	80-120			
Surrogate: 1-Chlorooctane	*50.0*		*"*	*50.0*		*100*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.6*		*"*	*50.0*		*103*	*70-130*			
Matrix Spike (EL62117-MS1)	**Source: 6L21003-25**			Prepared: 12/21/06 Analyzed: 12/22/06						
Carbon Ranges C6-C12	821	10.0	mg/kg dry	731	ND	112	75-125			
Carbon Ranges C12-C28	642	10.0	"	731	ND	87.8	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1460	10.0	"	1460	ND	100	75-125			
Surrogate: 1-Chlorooctane	*75.3*		*mg/kg*	*100*		*75.3*	*70-130*			
Surrogate: 1-Chlorooctadecane	*72.5*		*"*	*100*		*72.5*	*70-130*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62117 - Solvent Extraction (GC)										
Matrix Spike Dup (EL62117-MSD1)	**Source: 6L21003-25**			Prepared: 12/21/06 Analyzed: 12/22/06						
Carbon Ranges C6-C12	810	10.0	mg/kg dry	731	ND	111	75-125	0.897	20	
Carbon Ranges C12-C28	658	10.0	"	731	ND	90.0	75-125	2.47	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1470	10.0	"	1460	ND	101	75-125	0.995	20	
Surrogate: 1-Chlorooctane	*78.7*		*mg/kg*	*100*		*78.7*	*70-130*			
Surrogate: 1-Chlorooctadecane	*71.0*		*"*	*100*		*71.0*	*70-130*			
Batch EL62220 - EPA 5030C (GC)										
Blank (EL62220-BLK1)				Prepared: 12/22/06 Analyzed: 12/28/06						
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	*44.2*		*ug/kg*	*40.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.6*		*"*	*40.0*		*109*	*80-120*			
LCS (EL62220-BS1)				Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.13	0.0250	mg/kg wet	1.25		90.4	80-120			
Toluene	1.28	0.0250	"	1.25		102	80-120			
Ethylbenzene	1.33	0.0250	"	1.25		106	80-120			
Xylene (p/m)	2.73	0.0250	"	2.50		109	80-120			
Xylene (o)	1.27	0.0250	"	1.25		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.0*		*ug/kg*	*40.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.9*		*"*	*40.0*		*115*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62220 - EPA 5030C (GC)										
Calibration Check (EL62220-CCV1)				Prepared: 12/22/06 Analyzed: 12/29/06						
Benzene	58.8		ug/kg	50.0		118	80-120			
Toluene	55.7		"	50.0		111	80-120			
Ethylbenzene	58.1		"	50.0		116	80-120			
Xylene (p/m)	101		"	100		101	80-120			
Xylene (o)	46.3		"	50.0		92.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*48.0*		"	*40.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.9*		"	*40.0*		*112*	*80-120*			
Matrix Spike (EL62220-MS1)	**Source: 6L22004-04**			Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.47	0.0250	mg/kg dry	1.56	ND	94.2	80-120			
Toluene	1.45	0.0250	"	1.56	ND	92.9	80-120			
Ethylbenzene	1.29	0.0250	"	1.56	ND	82.7	80-120			
Xylene (p/m)	2.75	0.0250	"	3.13	ND	87.9	80-120			
Xylene (o)	1.35	0.0250	"	1.56	ND	86.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.7*		*ug/kg*	*40.0*		*94.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.2*		"	*40.0*		*106*	*80-120*			
Matrix Spike Dup (EL62220-MSD1)	**Source: 6L22004-04**			Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.77	0.0250	mg/kg dry	1.56	ND	113	80-120	18.1	20	
Toluene	1.77	0.0250	"	1.56	ND	113	80-120	19.5	20	
Ethylbenzene	1.75	0.0250	"	1.56	ND	112	80-120	30.1	20	R
Xylene (p/m)	3.48	0.0250	"	3.13	ND	111	80-120	23.2	20	R
Xylene (o)	1.63	0.0250	"	1.56	ND	104	80-120	18.4	20	
Surrogate: a,a,a-Trifluorotoluene	*46.0*		*ug/kg*	*40.0*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.8*		"	*40.0*		*107*	*80-120*			

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EL62206 - General Preparation (Prep)										
Blank (EL62206-BLK1)				Prepared: 12/21/06 Analyzed: 12/22/06						
% Solids	100		%							
Duplicate (EL62206-DUP1)		**Source: 6L21001-01**		Prepared: 12/21/06 Analyzed: 12/22/06						
% Solids	86.4		%		86.0			0.464	20	
Duplicate (EL62206-DUP2)		**Source: 6L21003-15**		Prepared: 12/21/06 Analyzed: 12/22/06						
% Solids	87.4		%		86.6			0.920	20	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
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: 12/31/2006

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.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No: Fax No:
Sampler Signature: e-mail: kcody@sdgenv.com

Project Name: Jalmat 3
Project #: 2000-10610
Project Loc: Clay Osborn Ranch
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 0612006

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TOTAL: TPH: 8015M	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	JM3 - F2			12/20/06	1100		1	✓								G	X									X				
02	JM3 - F3			12/20/06	1055		1	✓									X									X				
03	JM3 - F4			12/20/06	1105		1	✓									X									X				
04	JM3 - DF1			12/20/06	1405		1	✓								↓	H	O	L	D										

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	12/20/06	10:05			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				12/21/06	10:05

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Labels on container(s)	(Y)	N
Custody seals on container(s)	Y	(N)
Custody seals on cooler(s)	Y	(N)
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	(Y)	N

by Courier? UPS DHL FedEx Lone Star
402 glass
Temperature Upon Receipt: 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 12/21/06 10:05

Lab ID #: 61210006

Initials: ck

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

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: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 7A02001

Report Date: 01/05/07

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- DF1	7A02001-01	Soil	12/20/06 14:05	12-21-2006 10:05

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

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- DF1 (7A02001-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA70219	01/02/07	01/02/07	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0322**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0184]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*96.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.8 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	**64.4**	10.0	mg/kg dry	1	EA70212	01/02/07	01/02/07	EPA 8015M	
Carbon Ranges C12-C28	**1450**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**149**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1660**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*124 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*152 %*	*70-130*		"	"	"	"	*S-04*

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

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- DF1 (7A02001-01) Soil									
% Moisture	**15.9**	0.1	%	1	EA70301	01/02/07	01/03/07	% 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 EA70212 - Solvent Extraction (GC)										
Blank (EA70212-BLK1)				Prepared & Analyzed: 01/02/07						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*57.7*		*mg/kg*	*50.0*		*115*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.2*		"	*50.0*		*128*	*70-130*			
LCS (EA70212-BS1)				Prepared & Analyzed: 01/02/07						
Carbon Ranges C6-C12	596	10.0	mg/kg wet	500		119	75-125			
Carbon Ranges C12-C28	487	10.0	"	500		97.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1080	10.0	"	1000		108	75-125			
Surrogate: 1-Chlorooctane	*55.1*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*59.6*		"	*50.0*		*119*	*70-130*			
Calibration Check (EA70212-CCV1)				Prepared & Analyzed: 01/02/07						
Carbon Ranges C6-C12	218		mg/kg	250		87.2	80-120			
Carbon Ranges C12-C28	281		"	250		112	80-120			
Total Hydrocarbons	499		"	500		99.8	80-120			
Surrogate: 1-Chlorooctane	*43.6*		"	*50.0*		*87.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.8*		"	*50.0*		*87.6*	*70-130*			
Matrix Spike (EA70212-MS1)	**Source: 6L29015-04**			Prepared & Analyzed: 01/02/07						
Carbon Ranges C6-C12	692	10.0	mg/kg dry	555	ND	125	75-125			
Carbon Ranges C12-C28	638	10.0	"	555	82.7	100	75-125			
Carbon Ranges C28-C35	58.1	10.0	"	0.00	52.8		75-125			
Total Hydrocarbons	1390	10.0	"	1110	136	113	75-125			
Surrogate: 1-Chlorooctane	*60.2*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.2*		"	*50.0*		*128*	*70-130*			

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 EA70212 - Solvent Extraction (GC)										
Matrix Spike Dup (EA70212-MSD1)	**Source: 6L29015-04**			Prepared & Analyzed: 01/02/07						
Carbon Ranges C6-C12	687	10.0	mg/kg dry	555	ND	124	75-125	0.803	20	
Carbon Ranges C12-C28	633	10.0	"	555	82.7	99.2	75-125	0.803	20	
Carbon Ranges C28-C35	55.3	10.0	"	0.00	52.8		75-125		20	
Total Hydrocarbons	1380	10.0	"	1110	136	112	75-125	0.889	20	
Surrogate: 1-Chlorooctane	*57.2*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*62.9*		"	*50.0*		*126*	*70-130*			
Batch EA70219 - EPA 5030C (GC)										
Blank (EA70219-BLK1)				Prepared & Analyzed: 01/02/07						
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	*41.3*		*ug/kg*	*40.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*34.5*		"	*40.0*		*86.2*	*80-120*			
LCS (EA70219-BS1)				Prepared: 01/02/07 Analyzed: 01/03/07						
Benzene	1.18	0.0250	mg/kg wet	1.25		94.4	80-120			
Toluene	1.25	0.0250	"	1.25		100	80-120			
Ethylbenzene	1.28	0.0250	"	1.25		102	80-120			
Xylene (p/m)	2.71	0.0250	"	2.50		108	80-120			
Xylene (o)	1.25	0.0250	"	1.25		100	80-120			
Surrogate: a,a,a-Trifluorotoluene	*36.2*		*ug/kg*	*40.0*		*90.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.6*		"	*40.0*		*89.0*	*80-120*			

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA70219 - EPA 5030C (GC)										
Calibration Check (EA70219-CCV1)				Prepared & Analyzed: 01/02/07						
Benzene	52.0		ug/kg	50.0		104	80-120			
Toluene	52.3		"	50.0		105	80-120			
Ethylbenzene	52.5		"	50.0		105	80-120			
Xylene (p/m)	99.8		"	100		99.8	80-120			
Xylene (o)	49.0		"	50.0		98.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*38.3*		"	*40.0*		*95.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*32.7*		"	*40.0*		*81.8*	*80-120*			
Matrix Spike (EA70219-MS1)	**Source: 7A02001-01**			Prepared & Analyzed: 01/02/07						
Benzene	1.40	0.0250	mg/kg dry	1.49	ND	94.0	80-120			
Toluene	1.51	0.0250	"	1.49	ND	101	80-120			
Ethylbenzene	1.45	0.0250	"	1.49	0.0322	95.2	80-120			
Xylene (p/m)	3.22	0.0250	"	2.97	ND	108	80-120			
Xylene (o)	1.48	0.0250	"	1.49	0.0184	98.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.2*		*ug/kg*	*40.0*		*93.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.2*		"	*40.0*		*108*	*80-120*			
Matrix Spike Dup (EA70219-MSD1)	**Source: 7A02001-01**			Prepared & Analyzed: 01/02/07						
Benzene	1.30	0.0250	mg/kg dry	1.49	ND	87.2	80-120	7.51	20	
Toluene	1.38	0.0250	"	1.49	ND	92.6	80-120	8.68	20	
Ethylbenzene	1.43	0.0250	"	1.49	0.0322	93.8	80-120	1.48	20	
Xylene (p/m)	2.95	0.0250	"	2.97	ND	99.3	80-120	8.39	20	
Xylene (o)	1.43	0.0250	"	1.49	0.0184	94.7	80-120	3.53	20	
Surrogate: a,a,a-Trifluorotoluene	*32.4*		*ug/kg*	*40.0*		*81.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*34.5*		"	*40.0*		*86.2*	*80-120*			

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EA70301 - General Preparation (Prep)										
Blank (EA70301-BLK1)				Prepared: 01/02/07 Analyzed: 01/03/07						
% Solids	99.8		%							
Duplicate (EA70301-DUP1)		**Source: 6L29015-01**		Prepared: 01/02/07 Analyzed: 01/03/07						
% Solids	84.0		%		86.0			2.35	20	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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: 1/5/2007

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.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No: Fax No:
Sampler Signature: e-mail: kcody@sdgenv.com

Project Name: Jalmat 3
Project #: 2000-10610
Project Loc: Clay Osborn Ranch
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 0121000/7A002 001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TOTAL: TPH: 8015M	TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	JM3 - F2			12/20/06	1100		1	✓								S	X									X				
02	JM3 - F3			12/20/06	1055		1	✓									X									X				
03	JM3 - F4			12/20/06	1105		1	✓									X									X				
04	JM3 - DF1			12/20/06	1405		1	✓								↓	(X)	O	L	D						(X)				

Special Instructions: (X) Add TPH + BTEX 1/2/7 as per attached e-mail

COPY

Relinquished by	Date	Time	Received by	Date	Time
	12/21/06	10:05			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT:	12/21/06	10:05

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
402 9418
Temperature Upon Receipt: 0.5 °C

COPY

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 12/21/06 10:05

Lab ID #: 612006 / A02001

Initials: DK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

Jeanne McMurrey

From: "KCody" <kcody@sdgenv.com>
To: "'Jeanne McMurrey'" <jeanne@elabtexas.com>
Sent: Tuesday, January 02, 2007 8:27 AM
Subject: RE: Report #6L21006 Jalmat #3

Jeanne,

Please run TPH 8015M and BTEX 8021 on the sample JM3-DF1. This sample was collected on 12/20/06 and delivered on 12/21/06 and was placed on hold.

Thanks,

Kenneth

-----Original Message-----
From: Jeanne McMurrey [mailto:jeanne@elabtexas.com]
Sent: Sunday, December 31, 2006 2:52 PM
To: Kellie Carter; Daniel M. Bryant; Camille Reynolds; Kenneth Cody
Subject: Re: Report #6L21006 Jalmat #3

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: Jalmat #3

Project Number: 2000-10610

Location: None Given

Lab Order Number: 6L22004

Report Date: 01/03/07

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- F5	6L22004-01	Soil	12/21/06 11:15	12-22-2006 08:30
JM3- F6	6L22004-02	Soil	12/21/06 11:30	12-22-2006 08:30
JM3- EW2	6L22004-03	Soil	12/21/06 11:40	12-22-2006 08:30
JM3- EW5	6L22004-04	Soil	12/21/06 11:50	12-22-2006 08:30
JM3- SW2	6L22004-05	Soil	12/21/06 12:00	12-22-2006 08:30
JM3- SW5	6L22004-06	Soil	12/21/06 12:05	12-22-2006 08:30
JM3- WW2	6L22004-07	Soil	12/21/06 12:10	12-22-2006 08:30
JM3- WW5	6L22004-08	Soil	12/21/06 12:15	12-22-2006 08:30
JM3- F7	6L22004-09	Soil	12/21/06 12:30	12-22-2006 08:30
JM3- F8	6L22004-10	Soil	12/21/06 12:40	12-22-2006 08:30
JM3- ZWW2	6L22004-11	Soil	12/21/06 12:45	12-22-2006 08:30
JM3- F9	6L22004-12	Soil	12/21/06 12:50	12-22-2006 08:30
JM3- F10	6L22004-13	Soil	12/21/06 13:15	12-22-2006 08:30
JM3- NW2	6L22004-14	Soil	12/21/06 13:20	12-22-2006 08:30
JM3- 3WW2	6L22004-15	Soil	12/21/06 13:30	12-22-2006 08:30
JM3- 2EW2	6L22004-16	Soil	12/21/06 13:25	12-22-2006 08:30

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F5 (6L22004-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	EPA 8021B	
Toluene	**J [0.0165]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**ND**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0714**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0347**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*113 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	**27.6**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**27.6**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*127 %*	*70-130*		"	"	"	"	
JM3- F6 (6L22004-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/27/06	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		*81.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.8 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*122 %*	*70-130*		"	"	"	"	
JM3- EW2 (6L22004-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*98.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.5 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- EW2 (6L22004-03) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*122 %*	*70-130*		"	"	"	"	
JM3- EW5 (6L22004-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*98.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*125 %*	*70-130*		"	"	"	"	
JM3- SW2 (6L22004-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- SW5 (6L22004-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*88.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*98.8 %*	*70-130*		"	"	"	"	
JM3- WW2 (6L22004-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/29/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0244]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0171]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*81.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.0 %*	*70-130*		"	"	"	"	
JM3- WW5 (6L22004-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	EPA 8021B	
Toluene	**0.0541**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0225]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.133**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0682**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*122 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*117 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- WW5 (6L22004-08) Soil									
Carbon Ranges C12-C28	**152**	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C28-C35	**56.2**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**208**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*93.8 %*	*70-130*		"	"	"	"	
JM3- F7 (6L22004-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*119 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*99.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*116 %*	*70-130*		"	"	"	"	
JM3- F8 (6L22004-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*113 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*120 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- ZWW2 (6L22004-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/29/06	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		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	**35.3**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**35.3**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*106 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*126 %*	*70-130*		"	"	"	"	
JM3- F9 (6L22004-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*78.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*86.0 %*	*70-130*		"	"	"	"	
JM3- F10 (6L22004-13) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/28/06	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		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.8 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F10 (6L22004-13) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
JM3- NW2 (6L22004-14) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62220	12/22/06	12/29/06	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		*95.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.8 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*107 %*	*70-130*		"	"	"	"	
JM3- 3WW2 (6L22004-15) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL62807	12/27/06	12/28/06	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		*96.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.5 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*106 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*124 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- 2EW2 (6L22004-16) Soil									
Benzene	**J [0.00948]**	0.0250	mg/kg dry	25	EL62807	12/27/06	12/27/06	EPA 8021B	J
Toluene	**0.449**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.259**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**1.13**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.392**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*178 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*120 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EL62217	12/22/06	12/23/06	EPA 8015M	
Carbon Ranges C12-C28	**68.9**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**38.8**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**108**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*99.2 %*	*70-130*		"	"	"	"	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F5 (6L22004-01) Soil									
% Moisture	**10.6**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- F6 (6L22004-02) Soil									
% Moisture	**15.4**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- EW2 (6L22004-03) Soil									
% Moisture	**21.7**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- EW5 (6L22004-04) Soil									
% Moisture	**20.1**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- SW2 (6L22004-05) Soil									
% Moisture	**15.5**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- SW5 (6L22004-06) Soil									
% Moisture	**21.9**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- WW2 (6L22004-07) Soil									
% Moisture	**17.4**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- WW5 (6L22004-08) Soil									
% Moisture	**13.0**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- F7 (6L22004-09) Soil									
% Moisture	**12.9**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- F8 (6L22004-10) Soil									
% Moisture	**21.9**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- ZWW2 (6L22004-11) Soil									
% Moisture	**10.4**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- F9 (6L22004-12) Soil									
% Moisture	**13.6**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- F10 (6L22004-13) Soil									
% Moisture	**8.6**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- NW2 (6L22004-14) Soil									
% Moisture	**6.0**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- 3WW2 (6L22004-15) Soil									
% Moisture	**13.1**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	
JM3- 2EW2 (6L22004-16) Soil									
% Moisture	**4.6**	0.1	%	1	EL62219	12/22/06	12/22/06	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62217 - Solvent Extraction (GC)										
Blank (EL62217-BLK1)				Prepared & Analyzed: 12/22/06						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*36.1*		*mg/kg*	*50.0*		*72.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.3*		"	*50.0*		*78.6*	*70-130*			
LCS (EL62217-BS1)				Prepared & Analyzed: 12/22/06						
Carbon Ranges C6-C12	604	10.0	mg/kg wet	500		121	75-125			
Carbon Ranges C12-C28	523	10.0	"	500		105	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1130	10.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	*59.3*		*mg/kg*	*50.0*		*119*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.4*		"	*50.0*		*103*	*70-130*			
Calibration Check (EL62217-CCV1)				Prepared: 12/22/06 Analyzed: 12/23/06						
Carbon Ranges C6-C12	205		mg/kg	250		82.0	80-120			
Carbon Ranges C12-C28	241		"	250		96.4	80-120			
Total Hydrocarbons	446		"	500		89.2	80-120			
Surrogate: 1-Chlorooctane	*51.4*		"	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.9*		"	*50.0*		*114*	*70-130*			
Matrix Spike (EL62217-MS1)	**Source: 6L22004-01**			Prepared: 12/22/06 Analyzed: 12/23/06						
Carbon Ranges C6-C12	595	10.0	mg/kg dry	559	ND	106	75-125			
Carbon Ranges C12-C28	483	10.0	"	559	27.6	81.5	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1080	10.0	"	1120	27.6	94.0	75-125			
Surrogate: 1-Chlorooctane	*53.4*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.9*		"	*50.0*		*97.8*	*70-130*			

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 EL62217 - Solvent Extraction (GC)										
Matrix Spike Dup (EL62217-MSD1)	**Source: 6L22004-01**			Prepared: 12/22/06 Analyzed: 12/23/06						
Carbon Ranges C6-C12	595	10.0	mg/kg dry	559	ND	106	75-125	0.00	20	
Carbon Ranges C12-C28	502	10.0	"	559	27.6	84.9	75-125	4.09	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1100	10.0	"	1120	27.6	95.8	75-125	1.90	20	
Surrogate: 1-Chlorooctane	*57.4*		*mg/kg*	*50.0*		*115*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.1*		"	*50.0*		*104*	*70-130*			
Batch EL62220 - EPA 5030C (GC)										
Blank (EL62220-BLK1)				Prepared: 12/22/06 Analyzed: 12/28/06						
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	*44.2*		*ug/kg*	*40.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.6*		"	*40.0*		*109*	*80-120*			
LCS (EL62220-BS1)				Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.13	0.0250	mg/kg wet	1.25		90.4	80-120			
Toluene	1.28	0.0250	"	1.25		102	80-120			
Ethylbenzene	1.33	0.0250	"	1.25		106	80-120			
Xylene (p/m)	2.73	0.0250	"	2.50		109	80-120			
Xylene (o)	1.27	0.0250	"	1.25		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.0*		*ug/kg*	*40.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.9*		"	*40.0*		*115*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62220 - EPA 5030C (GC)										
Calibration Check (EL62220-CCV1)				Prepared: 12/22/06 Analyzed: 12/29/06						
Benzene	58.8		ug/kg	50.0		118	80-120			
Toluene	55.7		"	50.0		111	80-120			
Ethylbenzene	58.1		"	50.0		116	80-120			
Xylene (p/m)	101		"	100		101	80-120			
Xylene (o)	46.3		"	50.0		92.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*48.0*		"	*40.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.9*		"	*40.0*		*112*	*80-120*			
Matrix Spike (EL62220-MS1)	**Source: 6L22004-04**			Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.47	0.0250	mg/kg dry	1.56	ND	94.2	80-120			
Toluene	1.45	0.0250	"	1.56	ND	92.9	80-120			
Ethylbenzene	1.29	0.0250	"	1.56	ND	82.7	80-120			
Xylene (p/m)	2.75	0.0250	"	3.13	ND	87.9	80-120			
Xylene (o)	1.35	0.0250	"	1.56	ND	86.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.7*		*ug/kg*	*40.0*		*94.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.2*		"	*40.0*		*106*	*80-120*			
Matrix Spike Dup (EL62220-MSD1)	**Source: 6L22004-04**			Prepared: 12/22/06 Analyzed: 12/28/06						
Benzene	1.77	0.0250	mg/kg dry	1.56	ND	113	80-120	18.1	20	
Toluene	1.77	0.0250	"	1.56	ND	113	80-120	19.5	20	
Ethylbenzene	1.75	0.0250	"	1.56	ND	112	80-120	30.1	20	R
Xylene (p/m)	3.48	0.0250	"	3.13	ND	111	80-120	23.2	20	R
Xylene (o)	1.63	0.0250	"	1.56	ND	104	80-120	18.4	20	
Surrogate: a,a,a-Trifluorotoluene	*46.0*		*ug/kg*	*40.0*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.8*		"	*40.0*		*107*	*80-120*			
Batch EL62807 - EPA 5030C (GC)										
Blank (EL62807-BLK1)				Prepared: 12/28/06 Analyzed: 12/29/06						
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	*39.4*		*ug/kg*	*40.0*		*98.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.9*		"	*40.0*		*102*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL62807 - EPA 5030C (GC)										
LCS (EL62807-BS1)				Prepared: 12/28/06 Analyzed: 12/29/06						
Benzene	1.23	0.0250	mg/kg wet	1.25		98.4	80-120			
Toluene	1.25	0.0250	"	1.25		100	80-120			
Ethylbenzene	1.34	0.0250	"	1.25		107	80-120			
Xylene (p/m)	2.65	0.0250	"	2.50		106	80-120			
Xylene (o)	1.19	0.0250	"	1.25		95.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.8*		*ug/kg*	*40.0*		*94.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.2*		*"*	*40.0*		*108*	*80-120*			
Calibration Check (EL62807-CCV1)				Prepared: 12/28/06 Analyzed: 12/29/06						
Benzene	53.7		ug/kg	50.0		107	80-120			
Toluene	51.7		"	50.0		103	80-120			
Ethylbenzene	52.1		"	50.0		104	80-120			
Xylene (p/m)	90.7		"	100		90.7	80-120			
Xylene (o)	43.5		"	50.0		87.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.7*		*"*	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*38.0*		*"*	*40.0*		*95.0*	*80-120*			
Matrix Spike (EL62807-MS1)	**Source: 6L22004-15**			Prepared: 12/28/06 Analyzed: 12/29/06						
Benzene	1.60	0.0250	mg/kg dry	1.44	ND	111	80-120			
Toluene	1.63	0.0250	"	1.44	ND	113	80-120			
Ethylbenzene	1.63	0.0250	"	1.44	ND	113	80-120			
Xylene (p/m)	3.15	0.0250	"	2.88	ND	109	80-120			
Xylene (o)	1.46	0.0250	"	1.44	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*47.4*		*ug/kg*	*40.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.0*		*"*	*40.0*		*115*	*80-120*			
Matrix Spike Dup (EL62807-MSD1)	**Source: 6L22004-15**			Prepared: 12/28/06 Analyzed: 12/29/06						
Benzene	1.58	0.0250	mg/kg dry	1.44	ND	110	80-120	0.905	20	
Toluene	1.59	0.0250	"	1.44	ND	110	80-120	2.69	20	
Ethylbenzene	1.52	0.0250	"	1.44	ND	106	80-120	6.39	20	
Xylene (p/m)	3.08	0.0250	"	2.88	ND	107	80-120	1.85	20	
Xylene (o)	1.46	0.0250	"	1.44	ND	101	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	*44.3*		*ug/kg*	*40.0*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.2*		*"*	*40.0*		*110*	*80-120*			

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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 EL62219 - General Preparation (Prep)										
Blank (EL62219-BLK1)				Prepared & Analyzed: 12/22/06						
% Solids	99.8		%							
Duplicate (EL62219-DUP1)		**Source: 6L22003-01**		Prepared & Analyzed: 12/22/06						
% Solids	87.2		%		88.1			1.03	20	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
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: 1/3/2007

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.

1 of -

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No: Fax No:
Sampler Signature: e-mail: kcoody@sdgenv.com

Project Name: Jalmat 3
Project #: 2000-10610
Project Loc:
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 6L22004

4oz Glass

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 (8015B)	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/8260 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	JM3-F5			12/21/06	1115		1	✓								S	X							X				X
02	JM3-F6			12/21/06	1130		1	✓								S	X							X				X
03	JM3-EW2			12/21/06	1140		1	✓								S	X							X				X
04	JM3-EW5			12/21/06	1150		1	✓								S	X							X				X
05	JM3-SW2			12/21/06	1200		1	✓								S	X							X				X
06	JM3-SW5			12/21/06	1205		1	✓								S	X							X				X
07	JM3-WW2			12/21/06	1210		1	✓								S	X							X				X
08	JM3-WW5			12/21/06	1215		1	✓								S	X							X				X
09	JM3-F7			12/21/06	1230		1	✓								S	X							X				X
10	JM3-F8			12/21/06	1240		1	✓								S	X							X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	12/21/06	0830			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				12/22/06	8:30

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No:
Fax No:
Sampler Signature: [signature]
e-mail: kcody@edge-v.com

Project Name: Jalmat 3
Project #: 2000-10610
Project Loc:
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 6L22004

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other) 4oz glass	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX-1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	JM3 - 2WW2			12/21/06	1245		1	✓								S	X								X							X
12	JM3 - F9			12/21/06	1250		1	✓								S	X								X							X
13	JM3 - F10			12/21/06	1315		1	✓								S	X								X							X
14	JM3 - NW2			12/21/06	1320		1	✓								S	X								X							X
15	JM3 - 3WW2			12/21/06	1330		1	✓								S	X								X							X
16	JM3 - 2EW2			12/21/06	1325		1	✓								S	X								X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/22/06	0830			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: [signature]	12/22/06	8:20

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by (Sampler)/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: -3.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 12/22/09 8:30

Lab ID #: 9L22004

Initials: CL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	-3.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

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

Regarding: _____

_____

Corrective Action Taken:

_____

_____

_____

Check all that Apply:

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

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: Jalmat #3

Project Number: 2000-10610

Location: Lea County, NM

Lab Order Number: 7A05011

Report Date: 01/10/07

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EXCV FLR	7A05011-01	Soil	01/04/07 12:30	01-05-2007 16:30
N S/W	7A05011-02	Soil	01/04/07 12:45	01-05-2007 16:30
E S/W	7A05011-03	Soil	01/04/07 13:00	01-05-2007 16:30
W S/W	7A05011-04	Soil	01/04/07 13:15	01-05-2007 16:30
S S/W	7A05011-05	Soil	01/04/07 13:30	01-05-2007 16:30

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EXCV FLR (7A05011-01) Soil									
Carbon Ranges C6-C12	**63.2**	50.0	mg/kg dry	5	EA70805	01/08/07	01/08/07	EPA 8015M	
Carbon Ranges C12-C28	**4610**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**642**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**5320**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*19.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*29.8 %*	*70-130*		"	"	"	"	*S-06*
N S/W (7A05011-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA70806	01/08/07	01/08/07	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		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*115 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA70805	01/08/07	01/08/07	EPA 8015M	
Carbon Ranges C12-C28	**68.0**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**13.2**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**81.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*127 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*146 %*	*70-130*		"	"	"	"	*S-04*
E S/W (7A05011-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA70806	01/08/07	01/08/07	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		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA70805	01/08/07	01/08/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*123 %*	*70-130*		"	"	"	"	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W S/W (7A05011-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA70806	01/08/07	01/08/07	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		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA70805	01/08/07	01/08/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
S S/W (7A05011-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA70806	01/08/07	01/08/07	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		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA70805	01/08/07	01/09/07	EPA 8015M	
Carbon Ranges C12-C28	**69.9**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [2.64]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**69.9**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.8 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EXCV FLR (7A05011-01) Soil									
% Moisture	**2.5**	0.1	%	1	EA70903	01/08/07	01/09/07	% calculation	
N S/W (7A05011-02) Soil									
% Moisture	**3.6**	0.1	%	1	EA70903	01/08/07	01/09/07	% calculation	
E S/W (7A05011-03) Soil									
% Moisture	**2.1**	0.1	%	1	EA70903	01/08/07	01/09/07	% calculation	
W S/W (7A05011-04) Soil									
% Moisture	**2.0**	0.1	%	1	EA70903	01/08/07	01/09/07	% calculation	
S S/W (7A05011-05) Soil									
% Moisture	**2.1**	0.1	%	1	EA70903	01/08/07	01/09/07	% calculation	

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Project: Jalmat #3
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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA70805 - Solvent Extraction (GC)										
Blank (EA70805-BLK1)				Prepared & Analyzed: 01/08/07						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*38.5*		*mg/kg*	*50.0*		*77.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.0*		"	*50.0*		*82.0*	*70-130*			
LCS (EA70805-BS1)				Prepared & Analyzed: 01/08/07						
Carbon Ranges C6-C12	556	10.0	mg/kg wet				75-125			
Carbon Ranges C12-C28	454	10.0	"				75-125			
Carbon Ranges C28-C35	ND	10.0	"				75-125			
Total Hydrocarbons	1010	10.0	"				75-125			
Surrogate: 1-Chlorooctane	*53.3*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.5*		"	*50.0*		*85.0*	*70-130*			
Calibration Check (EA70805-CCV1)				Prepared & Analyzed: 01/08/07						
Carbon Ranges C6-C12	255		mg/kg	250		102	80-120			
Carbon Ranges C12-C28	295		"	250		118	80-120			
Total Hydrocarbons	549		"	500		110	80-120			
Surrogate: 1-Chlorooctane	*59.0*		"	*50.0*		*118*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.3*		"	*50.0*		*109*	*70-130*			
Matrix Spike (EA70805-MS1)	**Source: 7A05011-05**			Prepared & Analyzed: 01/08/07						
Carbon Ranges C6-C12	629	10.0	mg/kg dry	511	ND	123	75-125			
Carbon Ranges C12-C28	598	10.0	"	511	69.9	103	75-125			
Carbon Ranges C28-C35	5.08	10.0	"	0.00	2.64		75-125			J
Total Hydrocarbons	1230	10.0	"	1020	69.9	114	75-125			
Surrogate: 1-Chlorooctane	*65.0*		*mg/kg*	*50.0*		*130*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.4*		"	*50.0*		*115*	*70-130*			

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1301 S. County Road 1150
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Project: Jalmat #3
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Project Manager: Camille Reynolds

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA70805 - Solvent Extraction (GC)										
Matrix Spike Dup (EA70805-MSD1)	**Source: 7A05011-05**			Prepared: 01/08/07 Analyzed: 01/09/07						
Carbon Ranges C6-C12	623	10.0	mg/kg dry	511	ND	122	75-125	0.816	20	
Carbon Ranges C12-C28	596	10.0	"	511	69.9	103	75-125	0.00	20	
Carbon Ranges C28-C35	3.35	10.0	"	0.00	2.64		75-125		20	J
Total Hydrocarbons	1220	10.0	"	1020	69.9	113	75-125	0.881	20	
Surrogate: 1-Chlorooctane	*63.7*		*mg/kg*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.3*		*"*	*50.0*		*111*	*70-130*			
Batch EA70806 - EPA 5030C (GC)										
Blank (EA70806-BLK1)				Prepared & Analyzed: 01/08/07						
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	*43.8*		*ug/kg*	*40.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.9*		*"*	*40.0*		*92.2*	*80-120*			
LCS (EA70806-BS1)				Prepared & Analyzed: 01/08/07						
Benzene	1.47	0.0250	mg/kg wet	1.25		118	80-120			
Toluene	1.43	0.0250	"	1.25		114	80-120			
Ethylbenzene	1.34	0.0250	"	1.25		107	80-120			
Xylene (p/m)	2.65	0.0250	"	2.50		106	80-120			
Xylene (o)	1.26	0.0250	"	1.25		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*45.6*		*ug/kg*	*40.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.6*		*"*	*40.0*		*91.5*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA70806 - EPA 5030C (GC)										
Calibration Check (EA70806-CCV1)				Prepared: 01/08/07 Analyzed: 01/09/07						
Benzene	59.2		ug/kg	50.0		118	80-120			
Toluene	59.4		"	50.0		119	80-120			
Ethylbenzene	56.4		"	50.0		113	80-120			
Xylene (p/m)	109		"	100		109	80-120			
Xylene (o)	56.6		"	50.0		113	80-120			
Surrogate: a,a,a-Trifluorotoluene	*46.7*		"	*40.0*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.2*		"	*40.0*		*113*	*80-120*			
Matrix Spike (EA70806-MS1)		**Source: 7A05010-01**		Prepared: 01/08/07 Analyzed: 01/09/07						
Benzene	1.38	0.0250	mg/kg dry	1.36	ND	101	80-120			
Toluene	1.49	0.0250	"	1.36	ND	110	80-120			
Ethylbenzene	1.63	0.0250	"	1.36	ND	120	80-120			
Xylene (p/m)	3.00	0.0250	"	2.73	ND	110	80-120			
Xylene (o)	1.45	0.0250	"	1.36	ND	107	80-120			
Surrogate: a,a,a-Trifluorotoluene	*40.7*		*ug/kg*	*40.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.2*		"	*40.0*		*98.0*	*80-120*			
Matrix Spike Dup (EA70806-MSD1)		**Source: 7A05010-01**		Prepared: 01/08/07 Analyzed: 01/09/07						
Benzene	1.40	0.0250	mg/kg dry	1.36	ND	103	80-120	1.96	20	
Toluene	1.49	0.0250	"	1.36	ND	110	80-120	0.00	20	
Ethylbenzene	1.58	0.0250	"	1.36	ND	116	80-120	3.39	20	
Xylene (p/m)	2.97	0.0250	"	2.73	ND	109	80-120	0.913	20	
Xylene (o)	1.49	0.0250	"	1.36	ND	110	80-120	2.76	20	
Surrogate: a,a,a-Trifluorotoluene	*41.5*		*ug/kg*	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.6*		"	*40.0*		*114*	*80-120*			

Plains All American EH & S
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Midland TX, 79706-4476

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EA70903 - General Preparation (Prep)										
Blank (EA70903-BLK1)				Prepared: 01/08/07 Analyzed: 01/09/07						
% Solids	100		%							
Duplicate (EA70903-DUP1)		**Source: 7A05010-01**		Prepared: 01/08/07 Analyzed: 01/09/07						
% Solids	91.9		%		91.7			0.218	20	
Duplicate (EA70903-DUP2)		**Source: 7A08004-06**		Prepared: 01/08/07 Analyzed: 01/09/07						
% Solids	88.3		%		94.6			6.89	20	

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 1/10/2007

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 Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kenneth Cody PAGE 01 OF 01

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-3307

Fax No: (505) 396-1429

Sampler Signature: [signature]

e-mail: jwalters@basinenv.com

Project Name: JALMAT # 3

Project #: 2000-10610

Project Loc: Lea County, NM

PO #: PAA - C. J. Reynolds

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

(lab use only)
ORDER #: 7A05011

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (TOTAL: X)	RCI	N.O.R.M.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	EXCV FLR			4-Jan-07	1230		1	X								SOIL	X								X							X
-02	N S/W			4-Jan-07	1245		1	X								SOIL	X								X							X
-03	E S/W			4-Jan-07	1300		1	X								SOIL	X								X							X
-04	W S/W			4-Jan-07	1315		1	X								SOIL	X								X							X
-05	S S/W			4-Jan-07	1330		1	X								SOIL	X								X							X

Special Instructions:
NOTE: RUN BTEX ANALYSIS IF TPH IS <100 PPM

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	05-JAN-07	8:12	Linda Blackwood	1-5-07	8:12
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Linda Blackwood	1/5/07	16:30	Received by ELOT: [signature]	1/5/07	18:30

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep? Y N
by Courier? UPS DHL FedEx Lone Star
4oz glass
Temperature Upon Receipt: 3.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 11507 16:30

Lab ID # : 7A0501

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	3.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	~~Yes~~	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	~~Yes~~	No	Not Present	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

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: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 7A10007

Report Date: 01/13/07

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- 2WW5	7A10007-01	Soil	01/09/07 12:30	01-10-2007 08:10
JM3- 3EW2	7A10007-02	Soil	01/09/07 12:40	01-10-2007 08:10

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

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- 2WW5 (7A10007-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA71002	01/10/07	01/10/07	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		*97.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA71003	01/10/07	01/11/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*126 %*	*70-130*		"	"	"	"	
JM3- 3EW2 (7A10007-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA71014	01/10/07	01/11/07	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		*112 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA71003	01/10/07	01/11/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*100 %*	*70-130*		"	"	"	"	

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- 2WW5 (7A10007-01) Soil									
% Moisture	**10.0**	0.1	%	1	EA71109	01/10/07	01/11/07	% calculation	
JM3- 3EW2 (7A10007-02) Soil									
% Moisture	**21.5**	0.1	%	1	EA71109	01/10/07	01/11/07	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71002 - EPA 5030C (GC)										
Blank (EA71002-BLK1)				Prepared & Analyzed: 01/09/07						
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	*47.1*		*ug/kg*	*40.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.8*		"	*40.0*		*99.5*	*80-120*			
LCS (EA71002-BS1)				Prepared: 01/09/07 Analyzed: 01/10/07						
Benzene	1.42	0.0250	mg/kg wet	1.25		114	80-120			
Toluene	1.38	0.0250	"	1.25		110	80-120			
Ethylbenzene	1.29	0.0250	"	1.25		103	80-120			
Xylene (p/m)	2.53	0.0250	"	2.50		101	80-120			
Xylene (o)	1.17	0.0250	"	1.25		93.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.3*		*ug/kg*	*40.0*		*85.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.4*		"	*40.0*		*104*	*80-120*			
Calibration Check (EA71002-CCV1)				Prepared: 01/09/07 Analyzed: 01/10/07						
Benzene	49.1		ug/kg	50.0		98.2	80-120			
Toluene	44.8		"	50.0		89.6	80-120			
Ethylbenzene	41.5		"	50.0		83.0	80-120			
Xylene (p/m)	80.4		"	100		80.4	80-120			
Xylene (o)	40.6		"	50.0		81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.9*		"	*40.0*		*89.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*32.2*		"	*40.0*		*80.5*	*80-120*			
Matrix Spike (EA71002-MS1)	**Source: 7A09007-01**			Prepared: 01/09/07 Analyzed: 01/10/07						
Benzene	1.58	0.0250	mg/kg dry	1.43	ND	110	80-120			
Toluene	1.52	0.0250	"	1.43	ND	106	80-120			
Ethylbenzene	1.43	0.0250	"	1.43	ND	100	80-120			
Xylene (p/m)	2.79	0.0250	"	2.85	ND	97.9	80-120			
Xylene (o)	1.30	0.0250	"	1.43	ND	90.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.4*		*ug/kg*	*40.0*		*86.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.4*		"	*40.0*		*91.0*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71002 - EPA 5030C (GC)										
Matrix Spike Dup (EA71002-MSD1)	**Source: 7A09007-01**			Prepared: 01/09/07 Analyzed: 01/10/07						
Benzene	1.61	0.0250	mg/kg dry	1.43	ND	113	80-120	2.69	20	
Toluene	1.52	0.0250	"	1.43	ND	106	80-120	0.00	20	
Ethylbenzene	1.42	0.0250	"	1.43	ND	99.3	80-120	0.702	20	
Xylene (p/m)	2.75	0.0250	"	2.85	ND	96.5	80-120	1.44	20	
Xylene (o)	1.28	0.0250	"	1.43	ND	89.5	80-120	1.55	20	
Surrogate: a,a,a-Trifluorotoluene	*38.3*		*ug/kg*	*40.0*		*95.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.2*		*"*	*40.0*		*93.0*	*80-120*			
Batch EA71003 - Solvent Extraction (GC)										
Blank (EA71003-BLK1)				Prepared: 01/10/07 Analyzed: 01/11/07						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*60.5*		*mg/kg*	*50.0*		*121*	*70-130*			
Surrogate: 1-Chlorooctadecane	*65.1*		*"*	*50.0*		*130*	*70-130*			
LCS (EA71003-BS1)				Prepared: 01/10/07 Analyzed: 01/11/07						
Carbon Ranges C6-C12	613	10.0	mg/kg wet	500		123	75-125			
Carbon Ranges C12-C28	555	10.0	"	500		111	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1170	10.0	"	1000		117	75-125			
Surrogate: 1-Chlorooctane	*62.9*		*mg/kg*	*50.0*		*126*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.8*		*"*	*50.0*		*104*	*70-130*			
Calibration Check (EA71003-CCV1)				Prepared: 01/10/07 Analyzed: 01/11/07						
Carbon Ranges C6-C12	236		mg/kg	250		94.4	80-120			
Carbon Ranges C12-C28	299		"	250		120	80-120			
Total Hydrocarbons	535		"	500		107	80-120			
Surrogate: 1-Chlorooctane	*54.4*		*"*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.3*		*"*	*50.0*		*109*	*70-130*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71003 - Solvent Extraction (GC)										
Matrix Spike (EA71003-MS1)	**Source: 7A10005-08**			Prepared: 01/10/07 Analyzed: 01/11/07						
Carbon Ranges C6-C12	601	10.0	mg/kg dry	513	ND	117	75-125			
Carbon Ranges C12-C28	523	10.0	"	513	22.6	97.5	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1120	10.0	"	1030	22.6	107	75-125			
Surrogate: 1-Chlorooctane	*50.4*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.4*		*"*	*50.0*		*109*	*70-130*			
Matrix Spike Dup (EA71003-MSD1)	**Source: 7A10005-08**			Prepared: 01/10/07 Analyzed: 01/11/07						
Carbon Ranges C6-C12	608	10.0	mg/kg dry	513	ND	119	75-125	1.69	20	
Carbon Ranges C12-C28	528	10.0	"	513	22.6	98.5	75-125	1.02	20	
Total Hydrocarbons	1140	10.0	"	1030	22.6	108	75-125	0.930	20	
Surrogate: 1-Chlorooctane	*54.1*		*mg/kg*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*58.4*		*"*	*50.0*		*117*	*70-130*			
Batch EA71014 - EPA 5030C (GC)										
Blank (EA71014-BLK1)				Prepared & Analyzed: 01/10/07						
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	*39.5*		*ug/kg*	*40.0*		*98.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.4*		*"*	*40.0*		*91.0*	*80-120*			
LCS (EA71014-BS1)				Prepared & Analyzed: 01/10/07						
Benzene	1.45	0.0250	mg/kg wet	1.25		116	80-120			
Toluene	1.41	0.0250	"	1.25		113	80-120			
Ethylbenzene	1.31	0.0250	"	1.25		105	80-120			
Xylene (p/m)	2.57	0.0250	"	2.50		103	80-120			
Xylene (o)	1.21	0.0250	"	1.25		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.0*		*ug/kg*	*40.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.5*		*"*	*40.0*		*114*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71014 - EPA 5030C (GC)										
Calibration Check (EA71014-CCV1)				Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	54.4		ug/kg	50.0		109	80-120			
Toluene	52.7		"	50.0		105	80-120			
Ethylbenzene	54.8		"	50.0		110	80-120			
Xylene (p/m)	99.0		"	100		99.0	80-120			
Xylene (o)	48.4		"	50.0		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.2*		"	*40.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.9*		"	*40.0*		*105*	*80-120*			
Matrix Spike (EA71014-MS1)	**Source: 7A10007-02**			Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	1.72	0.0250	mg/kg dry	1.59	ND	108	80-120			
Toluene	1.59	0.0250	"	1.59	ND	100	80-120			
Ethylbenzene	1.48	0.0250	"	1.59	ND	93.1	80-120			
Xylene (p/m)	3.03	0.0250	"	3.18	ND	95.3	80-120			
Xylene (o)	1.31	0.0250	"	1.59	ND	82.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.0*		*ug/kg*	*40.0*		*92.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.0*		"	*40.0*		*100*	*80-120*			
Matrix Spike Dup (EA71014-MSD1)	**Source: 7A10007-02**			Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	1.76	0.0250	mg/kg dry	1.59	ND	111	80-120	2.74	20	
Toluene	1.70	0.0250	"	1.59	ND	107	80-120	6.76	20	
Ethylbenzene	1.60	0.0250	"	1.59	ND	101	80-120	8.14	20	
Xylene (p/m)	3.26	0.0250	"	3.18	ND	103	80-120	7.77	20	
Xylene (o)	1.50	0.0250	"	1.59	ND	94.3	80-120	13.5	20	
Surrogate: a,a,a-Trifluorotoluene	*39.7*		*ug/kg*	*40.0*		*99.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.9*		"	*40.0*		*112*	*80-120*			

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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 EA71109 - General Preparation (Prep)										
Blank (EA71109-BLK1)				Prepared: 01/10/07 Analyzed: 01/11/07						
% Moisture	ND	0.1	%							
Duplicate (EA71109-DUP1)		**Source: 7A09015-01**		Prepared: 01/10/07 Analyzed: 01/11/07						
% Solids	91.3		%		92.0			0.764	20	
Duplicate (EA71109-DUP2)		**Source: 7A10007-02**		Prepared: 01/10/07 Analyzed: 01/11/07						
% Solids	77.8		%		78.5			0.896	20	
Duplicate (EA71109-DUP3)		**Source: 7A10011-02**		Prepared: 01/10/07 Analyzed: 01/11/07						
% Solids	90.4		%		90.9			0.552	20	

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Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 1/13/2007

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.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline, LP
Company Address:
City/State/Zip:
Telephone No: Fax No:
Sampler Signature: e-mail: keadly@sdgenv.com

Project Name: Talmat 3
Project #: 2000-10610
Project Loc: Clay Osborn Ranch
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 7A10007

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice 4 oz Glass	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water GW=Groundwater NP=Non-Potable SL=Sludge S=Soil/Solid Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	JM3-2EW5			1/9/07	1230			✓								S	X								X					
02	JM3-3EW2			1/9/07	1240			✓								S	X								X					

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	1/10/07	08:10			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Denise Moore	1-10-07	08:10

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s)? Y N
Custody seals on container(s)? Y N
Custody seals on cooler(s)? Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

ate/ Time: 1/10/07

Lab ID #: 7A10007

itials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	~~Yes~~	No	Not Present	
#5	Chain of Custody present?	~~Yes~~	No		
6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

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

egarding: _____

orrective Action Taken: _____

heck all that Apply:

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 7A11001

Report Date: 01/12/07

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3-SF-15	7A11001-01	Soil	01/10/07 13:00	01-11-2007 07:58

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

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3-SF-15 (7A11001-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA71014	01/11/07	01/11/07	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EA71112	01/11/07	01/11/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.4 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3-SF-15 (7A11001-01) Soil									
% Moisture	**4.8**	0.1	%	1	EA71211	01/11/07	01/12/07	% calculation	

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

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71014 - EPA 5030C (GC)										
Blank (EA71014-BLK1)				Prepared & Analyzed: 01/10/07						
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	*39.5*		*ug/kg*	*40.0*		*98.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.4*		"	*40.0*		*91.0*	*80-120*			
LCS (EA71014-BS1)				Prepared & Analyzed: 01/10/07						
Benzene	1.45	0.0250	mg/kg wet	1.25		116	80-120			
Toluene	1.41	0.0250	"	1.25		113	80-120			
Ethylbenzene	1.31	0.0250	"	1.25		105	80-120			
Xylene (p/m)	2.57	0.0250	"	2.50		103	80-120			
Xylene (o)	1.21	0.0250	"	1.25		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.0*		*ug/kg*	*40.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.5*		"	*40.0*		*114*	*80-120*			
Calibration Check (EA71014-CCV1)				Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	54.4		ug/kg	50.0		109	80-120			
Toluene	52.7		"	50.0		105	80-120			
Ethylbenzene	54.8		"	50.0		110	80-120			
Xylene (p/m)	99.0		"	100		99.0	80-120			
Xylene (o)	48.4		"	50.0		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.2*		"	*40.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.9*		"	*40.0*		*105*	*80-120*			
Matrix Spike (EA71014-MS1)	**Source: 7A10007-02**			Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	1.72	0.0250	mg/kg dry	1.59	ND	108	80-120			
Toluene	1.59	0.0250	"	1.59	ND	100	80-120			
Ethylbenzene	1.48	0.0250	"	1.59	ND	93.1	80-120			
Xylene (p/m)	3.03	0.0250	"	3.18	ND	95.3	80-120			
Xylene (o)	1.31	0.0250	"	1.59	ND	82.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*37.0*		*ug/kg*	*40.0*		*92.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.0*		"	*40.0*		*100*	*80-120*			

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71014 - EPA 5030C (GC)										
Matrix Spike Dup (EA71014-MSD1)	**Source: 7A10007-02**			Prepared: 01/10/07 Analyzed: 01/11/07						
Benzene	1.76	0.0250	mg/kg dry	1.59	ND	111	80-120	2.74	20	
Toluene	1.70	0.0250	"	1.59	ND	107	80-120	6.76	20	
Ethylbenzene	1.60	0.0250	"	1.59	ND	101	80-120	8.14	20	
Xylene (p/m)	3.26	0.0250	"	3.18	ND	103	80-120	7.77	20	
Xylene (o)	1.50	0.0250	"	1.59	ND	94.3	80-120	13.5	20	
Surrogate: a,a,a-Trifluorotoluene	*39.7*		*ug/kg*	*40.0*		*99.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.9*		*"*	*40.0*		*112*	*80-120*			
Batch EA71112 - Solvent Extraction (GC)										
Blank (EA71112-BLK1)				Prepared & Analyzed: 01/11/07						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*39.7*		*mg/kg*	*50.0*		*79.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*44.0*		*"*	*50.0*		*88.0*	*70-130*			
LCS (EA71112-BS1)				Prepared & Analyzed: 01/11/07						
Carbon Ranges C6-C12	580	10.0	mg/kg wet	500		116	75-125			
Carbon Ranges C12-C28	486	10.0	"	500		97.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1070	10.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	*54.6*		*mg/kg*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.7*		*"*	*50.0*		*87.4*	*70-130*			
Calibration Check (EA71112-CCV1)				Prepared: 01/11/07 Analyzed: 01/12/07						
Carbon Ranges C6-C12	235		mg/kg	250		94.0	80-120			
Carbon Ranges C12-C28	267		"	250		107	80-120			
Total Hydrocarbons	502		"	500		100	80-120			
Surrogate: 1-Chlorooctane	*56.9*		*"*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.6*		*"*	*50.0*		*109*	*70-130*			

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71112 - Solvent Extraction (GC)										
Matrix Spike (EA71112-MS1)	**Source: 7A11001-01**			Prepared: 01/11/07 Analyzed: 01/12/07						
Carbon Ranges C6-C12	642	10.0	mg/kg dry	525	ND	122	75-125			
Carbon Ranges C12-C28	597	10.0	"	525	ND	114	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1240	10.0	"	1050	ND	118	75-125			
Surrogate: 1-Chlorooctane	*58.0*		*mg/kg*	*50.0*		*116*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.6*		*"*	*50.0*		*99.2*	*70-130*			
Matrix Spike Dup (EA71112-MSD1)	**Source: 7A11001-01**			Prepared: 01/11/07 Analyzed: 01/12/07						
Carbon Ranges C6-C12	629	10.0	mg/kg dry	525	ND	120	75-125	1.65	20	
Carbon Ranges C12-C28	546	10.0	"	525	ND	104	75-125	9.17	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1180	10.0	"	1050	ND	112	75-125	5.22	20	
Surrogate: 1-Chlorooctane	*52.3*		*mg/kg*	*50.0*		*105*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.6*		*"*	*50.0*		*113*	*70-130*			

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 EA71211 - General Preparation (Prep)										
Blank (EA71211-BLK1)				Prepared: 01/11/07 Analyzed: 01/12/07						
% Solids	100		%							
Duplicate (EA71211-DUP1)		**Source: 7A10021-01**		Prepared: 01/11/07 Analyzed: 01/12/07						
% Solids	95.2		%		95.4			0.210	20	
Duplicate (EA71211-DUP2)		**Source: 7A11003-06**		Prepared: 01/11/07 Analyzed: 01/12/07						
% Solids	85.3		%		98.6			14.5	20	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 1/12/2007

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.

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds
Company Name: Plains Pipeline LP
Company Address:
City/State/Zip:
Telephone No: Fax No:
Sampler Signature: e-mail:

Project Name: Jalmat 3
Project #: 2000-10610
Project Loc: Clay Osborn Ranch
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 711100

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24 48 72 hrs	Standard TAT
-01	JM3-BF-15			1/10/07	1300		1	X								S	X										X				X	

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	1/11/07	0758			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample containers intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon R

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains Pipeline

Date/ Time: 10/11/07 0758

Lab ID #: 7A11001

Initials: BM

Sample Receipt Checklist

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

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories, Inc. Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jalmat #3

Project Number: 2000-10610

Location: Clay Osborn Ranch

Lab Order Number: 7A17007

Report Date: 01/25/07

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM3- SP	7A17007-01	Soil	01/17/07 11:00	01-17-2007 16:35

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

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- SP (7A17007-01) Soil									
Carbon Ranges C6-C12	**32.4**	10.0	mg/kg dry	1	EA71806	01/18/07	01/19/07	EPA 8015M	
Carbon Ranges C12-C28	**155**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [4.63]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**187**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.8 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Jalmat #3	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2000-10610	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- SP (7A17007-01) Soil									
% Moisture	**22.1**	0.1	%	1	EA71901	01/18/07	01/19/07	% calculation	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Volatile Organic Compounds by EPA Method 8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JM3- SP (7A17007-01) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EA72209	01/22/07	01/23/07	EPA 8260B	
Toluene	ND	0.00200	"	"	"	"	"	"	
Ethylbenzene	ND	0.00200	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00200	"	"	"	"	"	"	
Xylene (o)	**0.00809**	0.00200	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*111 %*	*70-139*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.8 %*	*52-149*		"	"	"	"	
Surrogate: Toluene-d8		*93.6 %*	*76-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*121 %*	*66-145*		"	"	"	"	

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

Project: Jalmat #3
Project Number: 2000-10610
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71806 - Solvent Extraction (GC)										
Blank (EA71806-BLK1)				Prepared: 01/18/07 Analyzed: 01/22/07						
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 Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*44.3*		*mg/kg*	*50.0*		*88.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.5*		*"*	*50.0*		*71.0*	*70-130*			
LCS (EA71806-BS1)				Prepared: 01/18/07 Analyzed: 01/19/07						
Carbon Ranges C6-C12	563	10.0	mg/kg wet	500		113	75-125			
Carbon Ranges C12-C28	468	10.0	"	500		93.6	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1030	10.0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	*55.0*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.6*		*"*	*50.0*		*103*	*70-130*			
Calibration Check (EA71806-CCV1)				Prepared: 01/18/07 Analyzed: 01/20/07						
Carbon Ranges C6-C12	244		mg/kg	250		97.6	80-120			
Carbon Ranges C12-C28	282		"	250		113	80-120			
Total Hydrocarbons	526		"	500		105	80-120			
Surrogate: 1-Chlorooctane	*61.8*		*"*	*50.0*		*124*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.6*		*"*	*50.0*		*105*	*70-130*			
Matrix Spike (EA71806-MS1)	**Source: 7A17002-10**			Prepared: 01/18/07 Analyzed: 01/20/07						
Carbon Ranges C6-C12	709	10.0	mg/kg dry	597	ND	119	75-125			
Carbon Ranges C12-C28	573	10.0	"	597	ND	96.0	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1280	10.0	"	1190	ND	108	75-125			
Surrogate: 1-Chlorooctane	*59.5*		*mg/kg*	*50.0*		*119*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.6*		*"*	*50.0*		*97.2*	*70-130*			

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Plains All American EH & S
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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71806 - Solvent Extraction (GC)										
Matrix Spike Dup (EA71806-MSD1)	**Source: 7A17002-10**			Prepared: 01/18/07 Analyzed: 01/20/07						
Carbon Ranges C6-C12	698	10.0	mg/kg dry	597	ND	117	75-125	1.69	20	
Carbon Ranges C12-C28	568	10.0	"	597	ND	95.1	75-125	0.942	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1270	10.0	"	1190	ND	107	75-125	0.930	20	
Surrogate: 1-Chlorooctane	*59.8*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.8*		*"*	*50.0*		*97.6*	*70-130*			

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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 EA71901 - General Preparation (Prep)										
Blank (EA71901-BLK1)				Prepared: 01/18/07 Analyzed: 01/19/07						
% Solids	100		%							
Duplicate (EA71901-DUP1)		**Source: 7A17007-01**		Prepared: 01/18/07 Analyzed: 01/19/07						
% Solids	76.7		%		77.9			1.55	20	
Duplicate (EA71901-DUP2)		**Source: 7A17005-01**		Prepared: 01/18/07 Analyzed: 01/19/07						
% Solids	61.0		%		62.7			2.75	20	

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA72209 - EPA 5030C (GCMS)										
Blank (EA72209-BLK1)				Prepared & Analyzed: 01/22/07						
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: Dibromofluoromethane	*49.5*		*ug/kg*	*50.0*		*99.0*	*70-139*			
Surrogate: 1,2-Dichloroethane-d4	*45.5*		*"*	*50.0*		*91.0*	*52-149*			
Surrogate: Toluene-d8	*46.8*		*"*	*50.0*		*93.6*	*76-125*			
Surrogate: 4-Bromofluorobenzene	*50.3*		*"*	*50.0*		*101*	*66-145*			
LCS (EA72209-BS1)				Prepared & Analyzed: 01/22/07						
Benzene	0.0491	0.00100	mg/kg wet	0.0500		98.2	70-130			
Toluene	0.0458	0.00100	"	0.0500		91.6	70-130			
Ethylbenzene	0.0540	0.00100	"	0.0500		108	70-130			
Xylene (p/m)	0.104	0.00100	"	0.100		104	70-130			
Xylene (o)	0.0552	0.00100	"	0.0500		110	70-130			
Surrogate: Dibromofluoromethane	*56.8*		*ug/kg*	*50.0*		*114*	*70-139*			
Surrogate: 1,2-Dichloroethane-d4	*50.8*		*"*	*50.0*		*102*	*52-149*			
Surrogate: Toluene-d8	*47.8*		*"*	*50.0*		*95.6*	*76-125*			
Surrogate: 4-Bromofluorobenzene	*53.7*		*"*	*50.0*		*107*	*66-145*			
Calibration Check (EA72209-CCV1)				Prepared & Analyzed: 01/22/07						
Toluene	45.2		ug/kg	50.0		90.4	70-130			
Ethylbenzene	49.5		"	50.0		99.0	70-130			
Surrogate: Dibromofluoromethane	*54.1*		*"*	*50.0*		*108*	*70-139*			
Surrogate: 1,2-Dichloroethane-d4	*50.2*		*"*	*50.0*		*100*	*52-149*			
Surrogate: Toluene-d8	*49.3*		*"*	*50.0*		*98.6*	*76-125*			
Surrogate: 4-Bromofluorobenzene	*56.7*		*"*	*50.0*		*113*	*66-145*			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA72209 - EPA 5030C (GCMS)										
Matrix Spike (EA72209-MS1)	**Source: 7A17002-05**			Prepared: 01/22/07 Analyzed: 01/23/07						
Benzene	0.112	0.00200	mg/kg dry	0.116	ND	96.6	70-130			
Toluene	0.111	0.00200	"	0.116	ND	95.7	70-130			
Ethylbenzene	0.110	0.00200	"	0.116	ND	94.8	70-130			
Xylene (p/m)	0.223	0.00200	"	0.232	ND	96.1	70-130			
Xylene (o)	0.117	0.00200	"	0.116	ND	101	70-130			
Surrogate: Dibromofluoromethane	*63.2*		*ug/kg*	*50.0*		*126*	*70-139*			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		"	*50.0*		*97.4*	*52-149*			
Surrogate: Toluene-d8	*47.3*		"	*50.0*		*94.6*	*76-125*			
Surrogate: 4-Bromofluorobenzene	*55.1*		"	*50.0*		*110*	*66-145*			
Matrix Spike Dup (EA72209-MSD1)	**Source: 7A17002-05**			Prepared: 01/22/07 Analyzed: 01/23/07						
Benzene	0.117	0.00200	mg/kg dry	0.116	ND	101	70-130	4.45	20	
Toluene	0.106	0.00200	"	0.116	ND	91.4	70-130	4.60	20	
Ethylbenzene	0.116	0.00200	"	0.116	ND	100	70-130	5.34	20	
Xylene (p/m)	0.230	0.00200	"	0.232	ND	99.1	70-130	3.07	20	
Xylene (o)	0.124	0.00200	"	0.116	ND	107	70-130	5.77	20	
Surrogate: Dibromofluoromethane	*68.1*		*ug/kg*	*50.0*		*136*	*70-139*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		"	*50.0*		*106*	*52-149*			
Surrogate: Toluene-d8	*47.3*		"	*50.0*		*94.6*	*76-125*			
Surrogate: 4-Bromofluorobenzene	*55.7*		"	*50.0*		*111*	*66-145*			

Notes and Definitions

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: _____ Date: 1/25/2007

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

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Reynolds

Company Name: Plains Pipeline, LP

Company Address:

City/State/Zip:

Telephone No:

Fax No:

Sampler Signature: [signature]

e-mail: kcody@sdyenv.com

Project Name: Jalmat 3

Project #: 2000-10610

Project Loc: Clay Osborn Ranch

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: MA17007

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For (TCLP: / TOTAL:): TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	JM3-SP			1/17/07	1100		1	✓								S	X								X								X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	1/17/07	1635			
			ELOT: [signature]	[illegible]	[illegible]

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 11/17/07 16:35

Lab ID # : 7A17007

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken:

Check all that Apply:

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