8.6.05
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Basin Environmental Service Technologies, LLC

P. O. Box 301
Lovington, New Mexico 88260
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Effective Solutions

PRELIMINARY SITE INVESTIGATION REPORT
and
REMEDIATION/CLOSURE PLAN

PLAINS MARKETING, L.P.
Aztec 4 Inch Gathering
Lea County, New Mexico
Plains EMS # 2005-00003
UNIT H (SE/NE), Section 20, Township 17S, Range 36E
Latitude, Longitude 32°, 49', 25.4" North, 103°, 22', 16.6" West

Prepared For:

Plains Marketing, L.P.
333 Clay Street
Suite 1600
Houston, Texas 77002

Prepared By:
Basin Environmental Service Technologies, LLC
P. O. Box 301
Lovington, New Mexico 88260

07 July 2005

Ken Dutton
Basin Environmental Service Technologies, LLC

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INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the Aztec 4-Inch Gathering Pipeline on 30 December 2004. The Aztec 4-Inch Gathering Pipeline was repaired and the saturated impacted soils were excavated and temporarily stockpiled on a poly liner.

This site is located in Unit H (SE/NE), Section 20, Township 17 South, Range 36 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The latitude is 32°, 49', 25.4" North and the longitude is 103°, 22', 16.6" West. The site is characterized by a right-of-way for the pipeline in a pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 57 feet long by 48 feet wide. Approximately 10 barrels of crude oil were released from the Plains Pipeline and 6 barrels were recovered.

An Emergency One-Call was initiated 30 December 2004 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Mr. Darr Angell, landowner, was verbally notified 30 December 2004. Mr. Gary Wink, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1, was verbally notified of the release on 30 December 2004.

SUMMARY OF FIELD ACTIVITIES

On 30 December 2004, Basin arrived at the Aztec 4-Inch Gathering Pipeline release to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. After the release had been contained by replacing a 4-inch bull plug, excavation of the impacted soil was accomplished (see Figure 2, Site Map). The release point was excavated to approximately 57 feet long by 48 feet wide and 12 feet below ground surface (bgs). All excavated soil was placed on a poly liner for future remedial action.

Under the direction of Plains operations personnel, the Aztec 4-Inch Gathering Pipeline scrapper trap and pump were re-routed to facilitate excavation of the impacted area. Excavation of the release point and flow path continued and the excavated area is approximately 98 feet long by 75 feet wide and 19 feet bgs. On 23 March 2005, confirmation soil samples were collected and screened with a Photoionization Detector (PID), calibrated 23 March 2005 (see Figure 2, Site Map). The selected soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Laboratory results of the confirmation soil samples indicate that the excavated area is below NMOCD regulatory standards (see Table 1, Soil Chemistry Table).

NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed an average depth to water of 57 feet bgs for that section. Based on the initial emergency response excavation results, the impacted soils extended beyond 12 feet bgs; therefore, less than 50 feet of impacted soil remained between the last known impacted depth and groundwater. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of >19, which sets the remediation levels at:

Benzene:	10 ppm
BTEX:	50 ppm
TPH:	100 ppm

DISTRIBUTION OF HYDROCARBONS IN THE UNSATURATED ZONE

The release point and flow path areas were initially excavated to a depth of approximately 12 feet bgs and evidence of crude oil impact persisted on the floor and sidewalls of the excavation. PID readings indicated elevated concentrations of Volatile Organic Compounds (VOC) remain. The Aztec 4-Inch Gathering Pipeline scrapper trap and pump were re-routed to facilitate excavation of the impacted area. Excavation of the release point and flow path areas continued to approximately 19 feet bgs. Confirmation soil samples were collected and field screened with a PID and were analyzed for concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix C).

Analytical results indicated BTEX concentrations were below NMOCD regulatory standards on the 1st Bench North Wall soil sample at a depth of 8 feet bgs. Analytical results indicated BTEX concentrations were not detected above the laboratory detection limits on the remaining confirmation soil samples. Analytical results indicated TPH concentrations were below NMOCD regulatory standards on the North Wall Excavation soil sample at a depth of 15 feet bgs at 30 mg/kg. Analytical results indicated TPH concentrations were not detected above the laboratory detections limits on the remaining confirmation soil samples.

RECOMMENDATIONS FOR REMEDIATION/CLOSURE

Approximately 1600 cubic yards of impacted soil has been excavated and stockpiled on-site resulting from the emergency response and excavation of the release point and flow path. Based on the analytical results, which indicate the excavation is below NMOCD regulatory standards, Plains proposes to transport the excavated soil to the Plains Lea Station Land Farm once authorization is received from NMOCD, Santa

Fe. The excavation will be backfilled with indigenous soil obtained from the landowner and contoured to the original rangeland grade surrounding the site and reseeded with approved grass seed. A request for closure will be submitted to the Hobbs District 1 office, upon completion of backfilling activities.

QA/QC PROCEDURES

Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Odessa, Texas for BTEX, TPH analyses using the methods described below. Soil samples were analyzed for BTEX, TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

Decontamination Of Equipment

Cleaning of the sampling equipment will be the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment will be cleaned with Liqui-Nox® detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures will be either transmitted with the laboratory reports or are on file at the laboratory.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Preliminary Investigation Report and Work Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental

consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and Plains Marketing, L.P.

DISTRIBUTION

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New Mexico Oil Conservation Division
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LWJohnson@state.nm.us

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Lovington, New Mexico 88260
kdutton@basinenv.com

Copy 3

TABLES

TABLE 1

SOIL CHEMISTRY TABLE

TABLE 1

SOIL CHEMISTRY

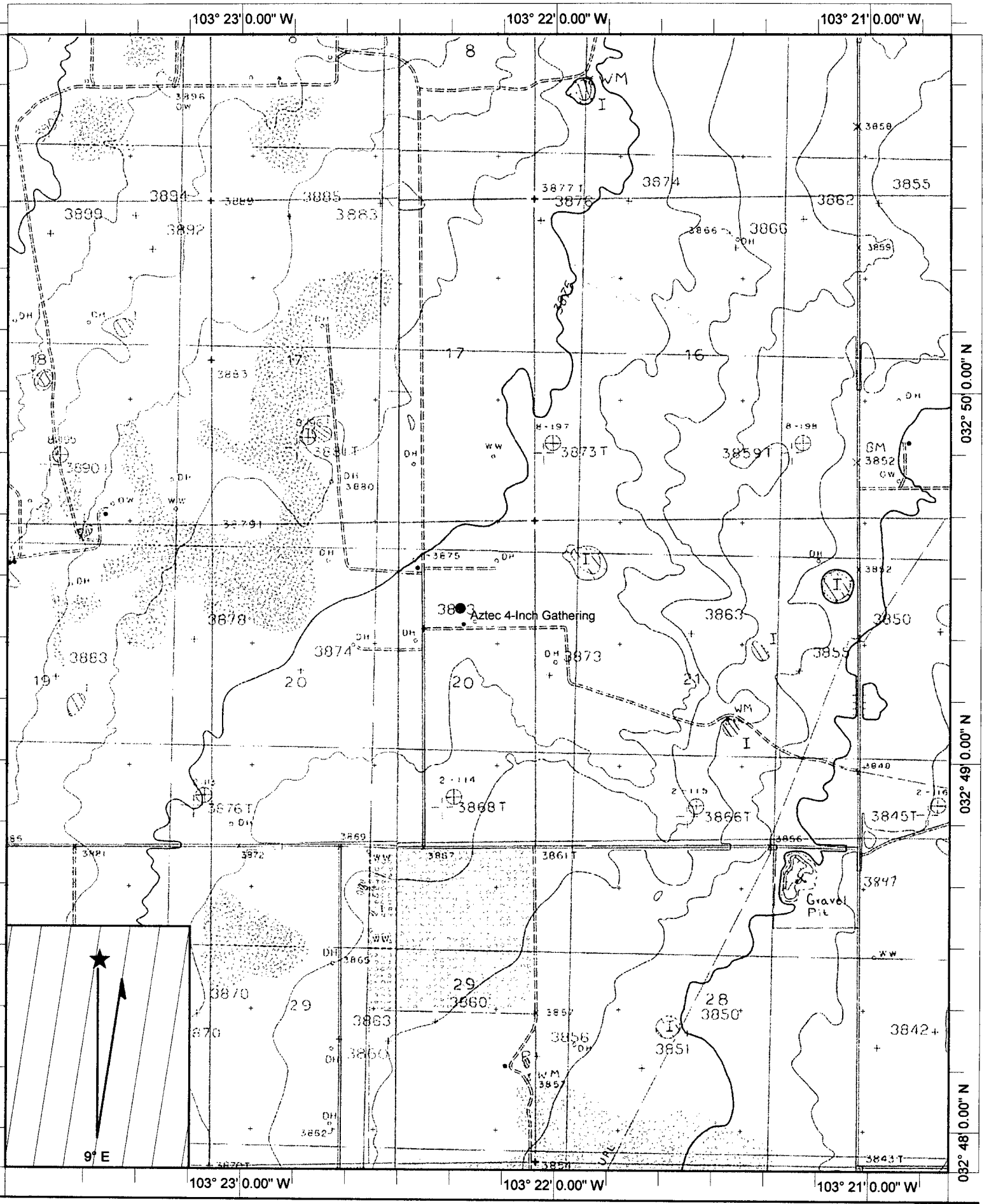
PLAINS MARKETING, L.P.
AZTEC 4" GATHERING
LEA COUNTY, NEW MEXICO
EMS: 2005-00003

SAMPLE LOCATION	SAMPLE DEPTH	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL	CHLORIDES
			BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P-XYLENES (mg/kg)	O-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	(mg/kg)
East Wall Excv	15' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
West Wall Excv	15' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench East Floor	12' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
South Wall 1st Bench	8' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench North Wall	8' bgs	03/23/05	<0.025	0.035	0.042	0.106	0.033	<10	<10	<10	
South Wall Excv	15' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench North Floor	12' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Stockpile Composite	2'	03/23/05	0.041	2.47	4.75	5.83	3.98	1050	5710	6770	
North Wall Excv	15' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	30.1	30.1	
1st Bench West Wall	8' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench South Floor	8' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench East Wall	8' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
1st Bench West Floor	12' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Distressed Area N/W	6" bgs	03/23/05						<10	<10	<10	
Bottom Floor Excv	19' bgs	03/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	821

FIGURES

FIGURE 2

SITE MAP



Name: LOVINGTON SE
Date: 7/20/2005
Scale: 1 inch equals 2000 feet

Location: 032° 49' 25.81" N 103° 22' 14.68" W
Caption: Figure 1
Plains Marketing, L. P.

FIGURE 2

SITE MAP

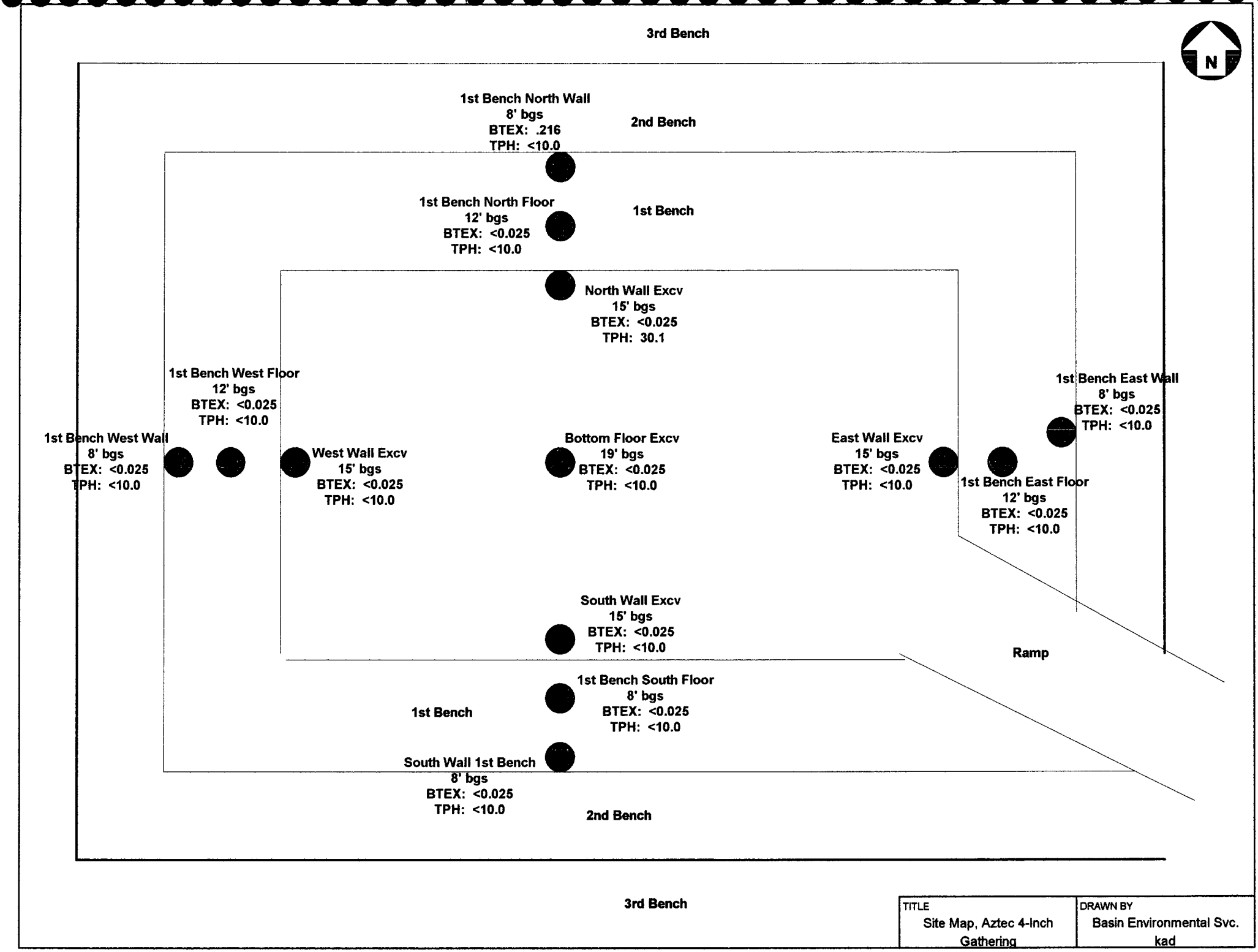
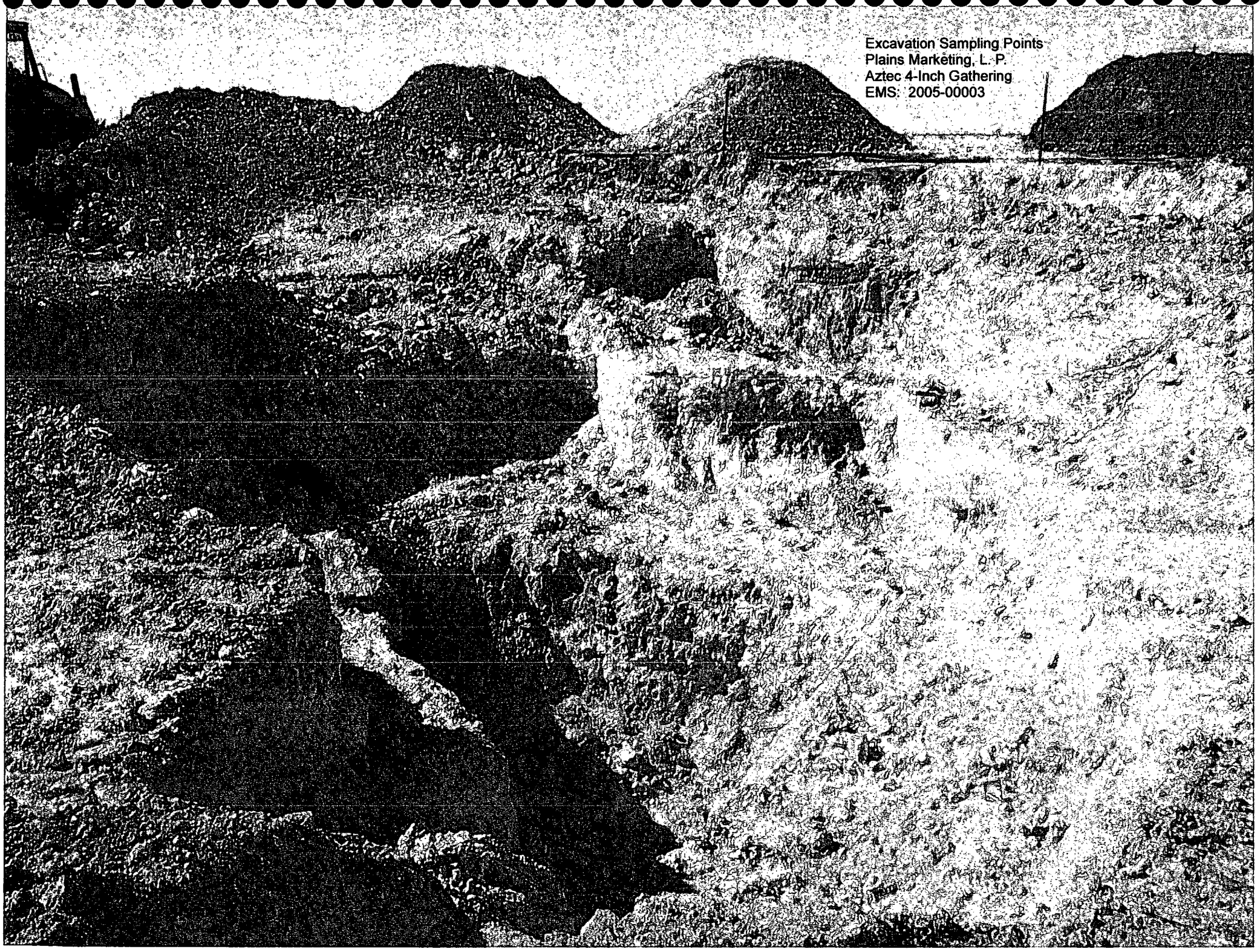

3rd Bench
N
1st Bench North Wall
8' bgs
BTEX: .216
TPH: <10.0
2nd Bench
1st Bench North Floor
12' bgs
BTEX: <0.025
TPH: <10.0
1st Bench
North Wall Excv
15' bgs
BTEX: <0.025
TPH: 30.1
1st Bench West Floor
12' bgs
BTEX: <0.025
TPH: <10.0
1st Bench East Wall
8' bgs
BTEX: <0.025
TPH: <10.0
1st Bench West Wall
8' bgs
BTEX: <0.025
TPH: <10.0
West Wall Excv
15' bgs
BTEX: <0.025
TPH: <10.0
Bottom Floor Excv
19' bgs
BTEX: <0.025
TPH: <10.0
East Wall Excv
15' bgs
BTEX: <0.025
TPH: <10.0
1st Bench East Floor
12' bgs
BTEX: <0.025
TPH: <10.0
South Wall Excv
15' bgs
BTEX: <0.025
TPH: <10.0
Ramp
1st Bench South Floor
8' bgs
BTEX: <0.025
TPH: <10.0
1st Bench
South Wall 1st Bench
8' bgs
BTEX: <0.025
TPH: <10.0
2nd Bench
3rd Bench
TITLE
Site Map, Aztec 4-Inch Gathering
DRAWN BY
Basin Environmental Svc.
kad

FIGURE 3

DIGITAL PHOTOS

Plains Marketing, L. P.
Aztec 4-Inch Gathering
Unit H, S20, T17S, R36E
EMS: 2005-00003

Plains Marketing, L. P.
Aztec 4-Inch Gathering
Unit H, S20, T17S, R36E
EMS: 2005-00003


Excavation Sampling Points
Plains Marketing, L. P.
Aztec 4-Inch Gathering
EMS: 2005-00003

APPENDICES

APPENDIX A

NEW MEXICO OFFICE OF THE STATE ENGINEER WATER WELL DATABASE REPORT

AZTEC

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 17S Range: 36E Sections: 20

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report | Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 12/31/2004

								(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	17S	36E	20				8	38	90	57

Record Count: 8

APPENDIX B

ENVIRONMENTAL LABORATORY OF TEXAS ANALYTICAL RESULTS

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: Aztec 4 in. Gathering

Project Number: 2005-00003

Location: Lea County

Lab Order Number: 5C24009

Report Date: 03/30/05

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East Wall Excv.	5C24009-01	Soil	03/23/05 09:40	03/24/05 16:24
West Wall Excv.	5C24009-02	Soil	03/23/05 09:50	03/24/05 16:24
1st Bench East Floor	5C24009-03	Soil	03/23/05 10:00	03/24/05 16:24
South Wall 1st Bench	5C24009-04	Soil	03/23/05 10:10	03/24/05 16:24
1st Bench North Wall	5C24009-05	Soil	03/23/05 10:20	03/24/05 16:24
South Wall Excv.	5C24009-06	Soil	03/23/05 10:40	03/24/05 16:24

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

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Wall Excv. (5C24009-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*121 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*107 %*	*70-130*		"	"	"	"	
West Wall Excv. (5C24009-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	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		*98.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.4 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*85.0 %*	*70-130*		"	"	"	"	
1st Bench East Floor (5C24009-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	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		*96.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1st Bench East Floor (5C24009-03) Soil									
Surrogate: 1-Chlorooctane		*100 %*	*67.6-140*		*EC52503*	*03/25/05*	*03/29/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*81.0 %*	*70-130*		"	"	"	"	
South Wall 1st Bench (5C24009-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	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		*94.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.2 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*81.6 %*	*70-130*		"	"	"	"	
1st Bench North Wall (5C24009-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	**0.0356**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0421**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.106**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0334**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*90.0 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*74.8 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
South Wall Excv. (5C24009-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*82.0 %*	*70-130*		"	"	"	"	

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

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1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Wall Excv. (5C24009-01) Soil									
% Moisture	**5.0**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
West Wall Excv. (5C24009-02) Soil									
% Moisture	**7.4**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench East Floor (5C24009-03) Soil									
% Moisture	**8.7**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
South Wall 1st Bench (5C24009-04) Soil									
% Moisture	**11.3**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench North Wall (5C24009-05) Soil									
% Moisture	**3.8**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
South Wall Excv. (5C24009-06) Soil									
% Moisture	**23.4**	0.1	%	1	EC52701	03/25/05	03/28/05	% 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 EC52503 - Solvent Extraction (GC)										
Blank (EC52503-BLK1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.2*		*mg/kg*	*50.0*		*74.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*35.1*		"	*50.0*		*70.2*	*70-130*			
LCS (EC52503-BS1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	476	10.0	mg/kg wet	500		95.2	76.3-104			
Diesel Range Organics >C12-C35	518	10.0	"	500		104	76.1-118			
Total Hydrocarbon C6-C35	994	10.0	"	1000		99.4	81.8-105			
Surrogate: 1-Chlorooctane	*47.2*		*mg/kg*	*50.0*		*94.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.6*		"	*50.0*		*79.2*	*70-130*			
Calibration Check (EC52503-CCV1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	459		mg/kg	500		91.8	80-120			
Diesel Range Organics >C12-C35	533		"	500		107	80-120			
Total Hydrocarbon C6-C35	992		"	1000		99.2	80-120			
Surrogate: 1-Chlorooctane	*53.6*		"	*50.0*		*107*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*49.6*		"	*50.0*		*99.2*	*70-130*			
Matrix Spike (EC52503-MS1)	**Source: 5C24008-01**			Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	484	10.0	mg/kg dry	524	ND	92.4	75.9-114			
Diesel Range Organics >C12-C35	521	10.0	"	524	ND	99.4	85.3-122			
Total Hydrocarbon C6-C35	1010	10.0	"	1050	ND	96.2	84.4-115			
Surrogate: 1-Chlorooctane	*49.7*		*mg/kg*	*50.0*		*99.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*42.5*		"	*50.0*		*85.0*	*70-130*			
Matrix Spike Dup (EC52503-MSD1)	**Source: 5C24008-01**			Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	512	10.0	mg/kg dry	524	ND	97.7	75.9-114	5.62	10.4	
Diesel Range Organics >C12-C35	563	10.0	"	524	ND	107	85.3-122	7.75	10.4	
Total Hydrocarbon C6-C35	1070	10.0	"	1050	ND	102	84.4-115	5.77	7.6	
Surrogate: 1-Chlorooctane	*57.5*		*mg/kg*	*50.0*		*115*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*52.0*		"	*50.0*		*104*	*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 EC52803 - EPA 5030C (GC)										
Blank (EC52803-BLK1)			Prepared & Analyzed: 03/25/05							
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	*88.4*		*ug/kg*	*100*		*88.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.5*		*"*	*100*		*87.5*	*80-120*			
LCS (EC52803-BS1)			Prepared & Analyzed: 03/25/05							
Benzene	86.2		ug/kg	100		86.2	80-120			
Toluene	84.9		"	100		84.9	80-120			
Ethylbenzene	105		"	100		105	80-120			
Xylene (p/m)	239		"	200		120	80-120			
Xylene (o)	118		"	100		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*111*		*"*	*100*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*118*		*"*	*100*		*118*	*80-120*			
Calibration Check (EC52803-CCV1)			Prepared & Analyzed: 03/25/05							
Benzene	85.3		ug/kg	100		85.3	80-120			
Toluene	86.8		"	100		86.8	80-120			
Ethylbenzene	94.5		"	100		94.5	80-120			
Xylene (p/m)	215		"	200		108	80-120			
Xylene (o)	114		"	100		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		*"*	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*89.2*		*"*	*100*		*89.2*	*80-120*			
Matrix Spike (EC52803-MS1)	**Source: 5C24008-01**		Prepared & Analyzed: 03/25/05							
Benzene	88.3		ug/kg	100	ND	88.3	80-120			
Toluene	87.2		"	100	ND	87.2	80-120			
Ethylbenzene	106		"	100	ND	106	80-120			
Xylene (p/m)	239		"	200	ND	120	80-120			
Xylene (o)	117		"	100	ND	117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		*"*	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*110*		*"*	*100*		*110*	*80-120*			

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 EC52803 - EPA 5030C (GC)										
Matrix Spike Dup (EC52803-MSD1)	**Source: 5C24008-01**		Prepared & Analyzed: 03/25/05							
Benzene	88.1		ug/kg	100	ND	88.1	80-120	0.227	20	
Toluene	87.2		"	100	ND	87.2	80-120	0.00	20	
Ethylbenzene	102		"	100	ND	102	80-120	3.85	20	
Xylene (p/m)	238		"	200	ND	119	80-120	0.837	20	
Xylene (o)	116		"	100	ND	116	80-120	0.858	20	
Surrogate: a,a,a-Trifluorotoluene	*118*		*"*	*100*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		*"*	*100*		*115*	*80-120*			

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/05 16:52

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 EC52701 - General Preparation (Prep)										
Blank (EC52701-BLK1)				Prepared: 03/25/05 Analyzed: 03/28/05						
% Moisture	ND	0.1	%							
Duplicate (EC52701-DUP1)		**Source: 5C24008-01**		Prepared: 03/25/05 Analyzed: 03/28/05						
% Moisture	4.6	0.1	%		4.6			0.00	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: 3/30/2005

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

Environmental Lab of Texas I, Ltd.

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Ken Dutton
Company Name: Basin Environmental Service Technologies
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (505) 396-2378
Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: Aztec 4" Gathering
Project #: 2005-00003
Project Loc: Lea County
PO #: PAA

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TCLP: TPH: 418.1 / 1005 / 1006	Analyze For: TOTAL: TPH: 418.1 / 1005 / 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B / 5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT
5C24009		2005																											
-01	East Wall Excv.	3/23/05	9:40	1	X									X		X								X					X
-02	West Wall Excv.		9:50																										
-03	1st Bench East Floor.		10:00																										
-04	South Wall 1st Bench.		10:10																										
-05	1st Bench North Wall.		10:20																										
-06	South Wall Excv.		10:40																										

Special Instructions:
Please email results to: KAP@zianet.com / Bill

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	24 MAR 05	0910	Jake Ulmer	24 Mar 05	09:14
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Jake Ulmer	24 Mar 05	16:24	Jana Mcmurry	03-24-05	1624

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 2.0°C
Laboratory Comments: 4oz glass on ice w/seals on containers + coolers

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

Client: Plains P/L

Date/Time: 03-24-05

Order #: 5C24009

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	2.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	(Yes)	No	Not present
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Variance Documentation:

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

Regarding:

Corrective Action Taken:

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: Aztec 4 in. Gathering

Project Number: 2005-00003

Location: Lea County

Lab Order Number: 5C24008

Report Date: 03/31/05

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/31/05 15:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1st Bench North Floor	5C24008-01	Soil	03/23/05 08:30	03/24/05 16:24
Stockpile Composite	5C24008-02	Soil	03/23/05 08:40	03/24/05 16:24
North Wall Excv.	5C24008-03	Soil	03/23/05 08:50	03/24/05 16:24
1st Bench West Wall	5C24008-04	Soil	03/23/05 09:00	03/24/05 16:24
1st Bench South Floor	5C24008-05	Soil	03/23/05 09:10	03/24/05 16:24
1st Bench East Wall	5C24008-06	Soil	03/23/05 09:20	03/24/05 16:24
1st Bench West Floor	5C24008-07	Soil	03/23/05 09:30	03/24/05 16:24
Distressed Area N/W	5C24008-08	Soil	03/23/05 08:10	03/24/05 16:24
Bottom Floor Excv.	5C24008-09	Soil	03/23/05 08:00	03/24/05 16:24

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1st Bench North Floor (5C24008-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.4 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.4 %*	*70-130*		"	"	"	"	
Stockpile Composite (5C24008-02) Soil									
Benzene	**0.0414**	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	**2.47**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**4.75**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**5.83**	0.0250	"	"	"	"	"	"	
Xylene (o)	**3.98**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*155 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**1050**	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	**5710**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**6760**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*123 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*108 %*	*70-130*		"	"	"	"	
North Wall Excv. (5C24008-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	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		*96.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	**30.1**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**30.1**	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
North Wall Excv. (5C24008-03) Soil									
Surrogate: 1-Chlorooctane		*101 %*	*67.6-140*		*EC52503*	*03/25/05*	*03/28/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*106 %*	*70-130*		"	"	"	"	
1st Bench West Wall (5C24008-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*88.4 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*91.0 %*	*70-130*		"	"	"	"	
1st Bench South Floor (5C24008-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	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		*95.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*98.6 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.8 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1st Bench East Wall (5C24008-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.0 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*85.4 %*	*70-130*		"	"	"	"	
1st Bench West Floor (5C24008-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.8 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*84.2 %*	*70-130*		"	"	"	"	
Distressed Area N/W (5C24008-08) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.4 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*81.2 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Aztec 4 in. Gathering	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00003	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/31/05 15:49

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom Floor Excv. (5C24008-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC52803	03/25/05	03/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*83.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52503	03/25/05	03/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*105 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	

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

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1st Bench North Floor (5C24008-01) Soil									
% Moisture	**4.6**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
Stockpile Composite (5C24008-02) Soil									
% Moisture	**6.4**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
North Wall Excv. (5C24008-03) Soil									
% Moisture	**2.8**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench West Wall (5C24008-04) Soil									
% Moisture	**6.3**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench South Floor (5C24008-05) Soil									
% Moisture	**10.3**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench East Wall (5C24008-06) Soil									
% Moisture	**6.0**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
1st Bench West Floor (5C24008-07) Soil									
% Moisture	**8.1**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
Distressed Area N/W (5C24008-08) Soil									
% Moisture	**5.8**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	
Bottom Floor Excv. (5C24008-09) Soil									
Chloride	**821**	10.0	mg/kg	20	EC53104	03/30/05	03/30/05	EPA 300.0	
% Moisture	**8.2**	0.1	%	1	EC52701	03/25/05	03/28/05	% calculation	

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 EC52503 - Solvent Extraction (GC)										
Blank (EC52503-BLK1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.2*		*mg/kg*	*50.0*		*74.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*35.1*		"	*50.0*		*70.2*	*70-130*			
LCS (EC52503-BS1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	476	10.0	mg/kg wet	500		95.2	76.3-104			
Diesel Range Organics >C12-C35	518	10.0	"	500		104	76.1-118			
Total Hydrocarbon C6-C35	994	10.0	"	1000		99.4	81.8-105			
Surrogate: 1-Chlorooctane	*47.2*		*mg/kg*	*50.0*		*94.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.6*		"	*50.0*		*79.2*	*70-130*			
Calibration Check (EC52503-CCV1)				Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	459		mg/kg	500		91.8	80-120			
Diesel Range Organics >C12-C35	533		"	500		107	80-120			
Total Hydrocarbon C6-C35	992		"	1000		99.2	80-120			
Surrogate: 1-Chlorooctane	*53.6*		"	*50.0*		*107*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*49.6*		"	*50.0*		*99.2*	*70-130*			
Matrix Spike (EC52503-MS1)	**Source: 5C24008-01**			Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	484	10.0	mg/kg dry	524	ND	92.4	75.9-114			
Diesel Range Organics >C12-C35	521	10.0	"	524	ND	99.4	85.3-122			
Total Hydrocarbon C6-C35	1010	10.0	"	1050	ND	96.2	84.4-115			
Surrogate: 1-Chlorooctane	*49.7*		*mg/kg*	*50.0*		*99.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*42.5*		"	*50.0*		*85.0*	*70-130*			
Matrix Spike Dup (EC52503-MSD1)	**Source: 5C24008-01**			Prepared: 03/25/05 Analyzed: 03/28/05						
Gasoline Range Organics C6-C12	512	10.0	mg/kg dry	524	ND	97.7	75.9-114	5.62	10.4	
Diesel Range Organics >C12-C35	563	10.0	"	524	ND	107	85.3-122	7.75	10.4	
Total Hydrocarbon C6-C35	1070	10.0	"	1050	ND	102	84.4-115	5.77	7.6	
Surrogate: 1-Chlorooctane	*57.5*		*mg/kg*	*50.0*		*115*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*52.0*		"	*50.0*		*104*	*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 EC52803 - EPA 5030C (GC)										
Blank (EC52803-BLK1)				Prepared & Analyzed: 03/25/05						
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	*88.4*		*ug/kg*	*100*		*88.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.5*		*"*	*100*		*87.5*	*80-120*			
LCS (EC52803-BS1)				Prepared & Analyzed: 03/25/05						
Benzene	86.2		ug/kg	100		86.2	80-120			
Toluene	84.9		"	100		84.9	80-120			
Ethylbenzene	105		"	100		105	80-120			
Xylene (p/m)	239		"	200		120	80-120			
Xylene (o)	118		"	100		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*111*		*"*	*100*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*118*		*"*	*100*		*118*	*80-120*			
Calibration Check (EC52803-CCV1)				Prepared & Analyzed: 03/25/05						
Benzene	85.3		ug/kg	100		85.3	80-120			
Toluene	86.8		"	100		86.8	80-120			
Ethylbenzene	94.5		"	100		94.5	80-120			
Xylene (p/m)	215		"	200		108	80-120			
Xylene (o)	114		"	100		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		*"*	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*89.2*		*"*	*100*		*89.2*	*80-120*			
Matrix Spike (EC52803-MS1)	**Source: 5C24008-01**			Prepared & Analyzed: 03/25/05						
Benzene	88.3		ug/kg	100	ND	88.3	80-120			
Toluene	87.2		"	100	ND	87.2	80-120			
Ethylbenzene	106		"	100	ND	106	80-120			
Xylene (p/m)	239		"	200	ND	120	80-120			
Xylene (o)	117		"	100	ND	117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		*"*	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*110*		*"*	*100*		*110*	*80-120*			

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 EC52803 - EPA 5030C (GC)										
Matrix Spike Dup (EC52803-MSD1)	**Source: 5C24008-01**			Prepared & Analyzed: 03/25/05						
Benzene	88.1		ug/kg	100	ND	88.1	80-120	0.227	20	
Toluene	87.2		"	100	ND	87.2	80-120	0.00	20	
Ethylbenzene	102		"	100	ND	102	80-120	3.85	20	
Xylene (p/m)	238		"	200	ND	119	80-120	0.837	20	
Xylene (o)	116		"	100	ND	116	80-120	0.858	20	
Surrogate: a,a,a-Trifluorotoluene	*118*		"	*100*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		"	*100*		*115*	*80-120*			

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 EC52701 - General Preparation (Prep)										
Blank (EC52701-BLK1)				Prepared: 03/25/05 Analyzed: 03/28/05						
% Moisture	ND	0.1	%							
Duplicate (EC52701-DUP1)	**Source: 5C24008-01**			Prepared: 03/25/05 Analyzed: 03/28/05						
% Moisture	4.6	0.1	%		4.6			0.00	20	
Batch EC53104 - Water Extraction										
Blank (EC53104-BLK1)				Prepared & Analyzed: 03/30/05						
Chloride	ND	0.500	mg/kg							
LCS (EC53104-BS1)				Prepared & Analyzed: 03/30/05						
Chloride	10.4		mg/L	10.0		104	80-120			
Calibration Check (EC53104-CCV1)				Prepared & Analyzed: 03/30/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Duplicate (EC53104-DUP1)	**Source: 5C30002-01**			Prepared & Analyzed: 03/30/05						
Chloride	13600	1000	mg/kg		13700			0.733	20	

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: 3/31/2005

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

Environmental Lab of Texas I, Ltd.

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Ken Dutton
Company Name: Basin Environmental Service Technologies
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (505) 396-2378
Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: Aztec 4" Gathering
Project #: 2005-00003
Project Loc: Lea County
PO #: PAA

5024008

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TCLP: TPH: 418.1 (8015M) 1005 1006	Analyze For: TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	Chlorides EPA 300.1	RUSH TAT (Pre-Schedule)	Standard TAT
-01	1st Bench North Floor	3/23/05	8:30	1	X									X		X							X						X
-02	Stockpile (Composite)		8:40																										
-03	Northwall Excv.		8:50																										
-04	1st Bench West Wall		9:00																										
-05	1st Bench South Floor		9:10																										
-06	1st Bench East Wall		9:20																										
-07	1st Bench West Floor	↓	9:30	↓																									
-08	Distressed Area N/W	3/23/05	8:10	1	X									X		X													X
-09	Bottom Floor Excv.	↓	8:00	1	X									X		X							X				X		X

Special Instructions:
Please email Results to: KAD@zia.net.com / Bill Direct to Plains

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 2.0°C
Laboratory Comments: 4oz glass on ice w/seals on containers + coolers

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	24 MAR 05	0910	Jake Ware	24 Mar 05	09:14
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Jake Ware	24 Mar 05	16:24	Jana Manning	03-29-05	1624

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

Client: Plains P/L

Date/Time: 03-24-05 @ 1624

Order #: 5C24008

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	2.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	(Yes)	No	Not present
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

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

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX C

NMOCD C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

INCIDENT # NLWJ 0521867996

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Marketing, LP	Contact Camille Reynolds
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965
Facility Name Aztec 4 Inch Gathering	Facility Type 4"Steel Pipeline

Surface Owner Darr Angell	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	20	17S	36E					Lea

Latitude 32° 49'25.4" Longitude 103° 22' 16.6"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 10 barrels	Volume Recovered 6 barrels
Source of Release 4" Steel Pipeline	Date and Hour of Occurrence 12-30-04 @16:45	Date and Hour of Discovery 12-30-04@ 16:50
Was Immediate Notice Given? x Yes ☐ No ☐ Not Required	If YES, To Whom? Gary Wink	
By Whom? Virgil Gibbs	Date and Hour 12-30-04@17:45	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

JAN 2005
RECEIVED
Hobbs
OCD

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Pinhole in a 4 inch bull plug caused release of sour crude. The bull plug was replaced to mitigate the release. The line is a 4 inch steel transmission pipeline that produces approximately 15 barrels of crude oil per day. The pressure on the line is approximately 70 psi and the gravity of the sour crude oil is 35.2. The H_2S content of the sour crude is less than 10 parts per million.

Describe Area Affected and Cleanup Action Taken.* The crude oil was vacuumed up and the impacted soil was excavated and stockpiled on plastic. The aerial extent of surface impact was approximately 57' x 48'.

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

Signature: Camille Reynolds

Printed Name: Camille Reynolds

Title: Remediation Coordinator

E-mail Address: cjreynolds@paalp.com

Date: 1-5-05 Phone:505-441-0965

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary