PRELIMINARY SITE INVESTIGATION REPORT
and
REMEDIATION PLAN

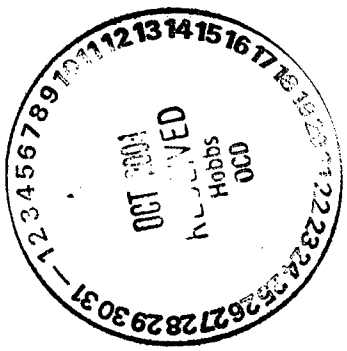
10.4.04
VERBAL APPROVAL @ 1:30 PM
(START BORING DEC UP)

PLAINS MARKETING L.P.
SAUNDERS 8" # 2
PLAINS EMS # 2004-00175
Lea County, New Mexico
UNIT L, Section 24, Township 14S, Range 33E
33°, 05', 14.9" North, 103°, 34', 31.2" West

Prepared For:

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

HOBBS
1RP-001



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

19 September 2004

Ken Dutton
Basin Environmental Service Technologies, LLC

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INTRODUCTION

Allstate Environmental Services, LLC (AES) responded to a pipeline release for Plains Marketing L.P. (Plains), located on the Saunders 8" Pipeline on 30 July 2004. The Saunders 8" Pipeline was clamped and the impacted soils was excavated and stockpiled on a poly liner. Basin Environmental Service Technologies, LLC (BES), will perform subsequent remediation of the site at the request of Plains.

This site is located in Unit L, Section 24, Township 14 South, Range 33 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The latitude is 33°, 05', 14.9" North, and the longitude is 103°, 34', 31.2" West. The site is characterized by a right-of-way for the pipeline in a pasture utilized for cattle grazing. The stained area includes the release point covering an area approximately 150 feet long by 30 feet wide. Approximately 8 barrels of crude oil were released from the Plains Pipeline and approximately 0 barrels were recovered.

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

Mr. Leon Anderson and Ms. Myra Meyers, New Mexico State Land Office (NMSLO), Hobbs Office, were notified 2 August 2004. A Right of Entry (ROE) permit was verbally approved (2 August 2004) by Mr. Cody Morrow, New Mexico State Land Office, Santa Fe, with appropriate protocols adhered to in obtaining a written ROE, which was obtained, ROE Number 984. Mr. Paul Sheeley, New Mexico Oil Conservation Division (NMOCD), Hobbs District 1 was verbally notified of the release on 30 July 2004.

The lessee, Mr. Norman Hahn, has been out of state for an extended period of time, however; the ranch foreman, Mr. Kenneth Augustine is aware of the release and subsequent remedial actions taken. Contact with Mr. Hahn was accomplished 13 September 2004. Mr. Hahn was informed of all activities that have been accomplished to date and remedial actions that are being considered.

On 16 August 2004, Plains initiated the replacement of approximately 1300 feet of the existing 8" steel pipeline with a 6" poly line completing the replacement on 17 August 2004. The 8" steel pipeline was purged of fluid and removed from the existing Plains right-of-way. After removal from the Plains right-of-way, the steel pipeline was cut into 30-foot joints and transported to the Plains Lovington, New Mexico yard. The 6" poly line will be placed in the existing Plains right-of-way upon completion of remediation of the impacted soil.

SUMMARY OF FIELD ACTIVITIES

On 30 July 2004, AES employee Bobby Blackwood arrived at the Saunders 8" Pipeline release to repair and contain the crude oil pipeline release. After the release had been contained utilizing a pipeline repair clamp excavation of the impacted soil was initiated. The impacted soil was placed on a poly liner adjacent to the release.

On 2 August 2004, AES employee Ken Dutton began extended excavation of the impacted area. The release point was excavated to approximately 69 feet long by 39 feet wide and 5 feet below ground surface (bgs). Further excavation of the release point was temporarily halted in order to protect the remaining pipeline and prevent exaggerated sagging of the pipeline. Upon removal of the existing pipeline on 16 and 17 August 2004, excavation resumed. All excavated soil was placed on a poly liner for future remedial action. Mr. Kenneth Augustine, ranch foreman, was contacted concerning placing cattle into that section. Mr. Augustine indicated that he had no plans on moving cattle into that section until remediation activities have concluded. In the event cattle are moved into that section, Plains will erect appropriate barriers to prevent ingress on the site.

New Mexico Oil Conservation Division (NMOCD) Soil Classification

A search of the New Mexico State Engineers database revealed no water depth information for that section; however the adjoining sections had water depth information, which were 100 to 125 feet bgs. 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 10 – 19, which sets the remediation levels at:

Benzene:	10 ppm
BTEX:	50 ppm
TPH:	1000 ppm

Distribution of Hydrocarbons in the Unsaturated Zone

The release point was excavated to approximately 69 feet long by 39 feet wide and 5 feet below ground surface (bgs). Further excavation of the release point was temporarily halted in order to protect the remaining pipeline and prevent exaggerated sagging of the pipeline. The impacted soil was placed on a poly liner adjacent to the release.

On 13 August 2004, soil samples were collected to ascertain the contaminate levels of the impacted soil. Due to the 8" pipeline being in the existing right-of-way the soil samples were collected on the east and west side of the pipeline. The analytical results were from the bottom east pipeline, bottom west pipeline, east sidewall

sample, west sidewall sample, and backfill sample. Each sample was screened with a Photoionization detector (PID) calibrated before use. The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Analytical results indicated that BTEX and TPH exceeded NMOCD regulatory standards (see Figure 3) on the east bottom soil sample and TPH exceeded the NMOCD standard on the west bottom sample and the west sidewall sample. Analytical results indicated that BTEX and TPH concentrations were not detected above laboratory method detection limits on the east sidewall and backfill soil samples.

On 16 August 2004, Plains initiated the replacement of approximately 1300 feet of the existing 8" steel pipeline with a 6" poly line completing the replacement on 17 August 2004. Vertical and horizontal delineation of the site was accomplished on 19 August 2004 utilizing a backhoe excavating a cross-pattern trench running from the east to west and north to south in the existing excavation. Excavation of the cross-pattern trench was to a depth of approximately 9 feet bgs. A PID was utilized to determine the extent of concentrations of Volatile Organic Compounds (VOC).

On 20 August 2004 further excavation of the release point was initiated. The excavation expanded to approximately 150 feet long by 30 feet wide by 14 feet bgs. Approximately 3500 cubic yards of caliche rock and soil have been excavated and stockpiled adjacent to the release point which resulted from the initial response excavation and excavation after site delineation. Composite confirmation soil samples were collected from the east sidewall, west sidewall and the bottom of the excavation on 27 August 2004. Analytical results indicated that BTEX and TPH were below NMOCD regulatory standards for the site ranking criteria for all three samples.

RECOMMENDATIONS FOR REMEDIATION

Approximately 3500 cubic yards of impacted soil and caliche rock have been excavated and stockpiled on-site. Approximately 75% of the excavated soil consists of caliche rock. Due to the high content of caliche rock, screening of the stockpile is warranted to separate the rock and soil. Upon completion of the screening process utilize the caliche rock as partial backfill. The screened soil, estimated to be 900 cubic yards, will then be stockpiled in bio-mounds of approximately 200 cubic yards as the soil is screened through the screener. These bio-mounds will be placed on a poly liner and earthen berms will be placed around each individual bio-mound to prevent run-off of impacted soil due to inclement weather. Nutrients will be added during the screening process to enhance the remediation process. Aeration tubing will be installed before the soil is screened to supply the required oxygen for enhanced remediation. Approximately 4 ½ bio-mounds will be required to facilitate the 900 cubic yards. These bio-mounds will be strategically placed around the excavation to limit land damage and the travel distance for backfilling. A header system will be connected to each bio-mound allowing individual aeration of the bio-mound. Initial soil sampling of the bio-mounds will be accomplished to ascertain the level of contaminants and the bio-mounds will be aerated on a monthly basis. Soil

sampling will be accomplished on a monthly basis and once NMOCD regulatory standards, based on the ranking criteria, have been met, the remediated soil will be backfilled in the excavation. Approximately 10 inches to 1 foot of topsoil will be purchased and contoured to the original rangeland surrounding the site and reseeded with approved NMSLO grass seed. A closure report will be submitted to NMOCD upon completion of all tasks with appropriate documentation.

QA/QC PROCEDURES

Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Midland, 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

Groundwater Sampling

As groundwater was not encountered during the investigation process, no water samples were obtained.

Decontamination Of Equipment

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

Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures were 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 General Remediation 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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Copy _____

TABLE

TABLE 1

TABLE 1

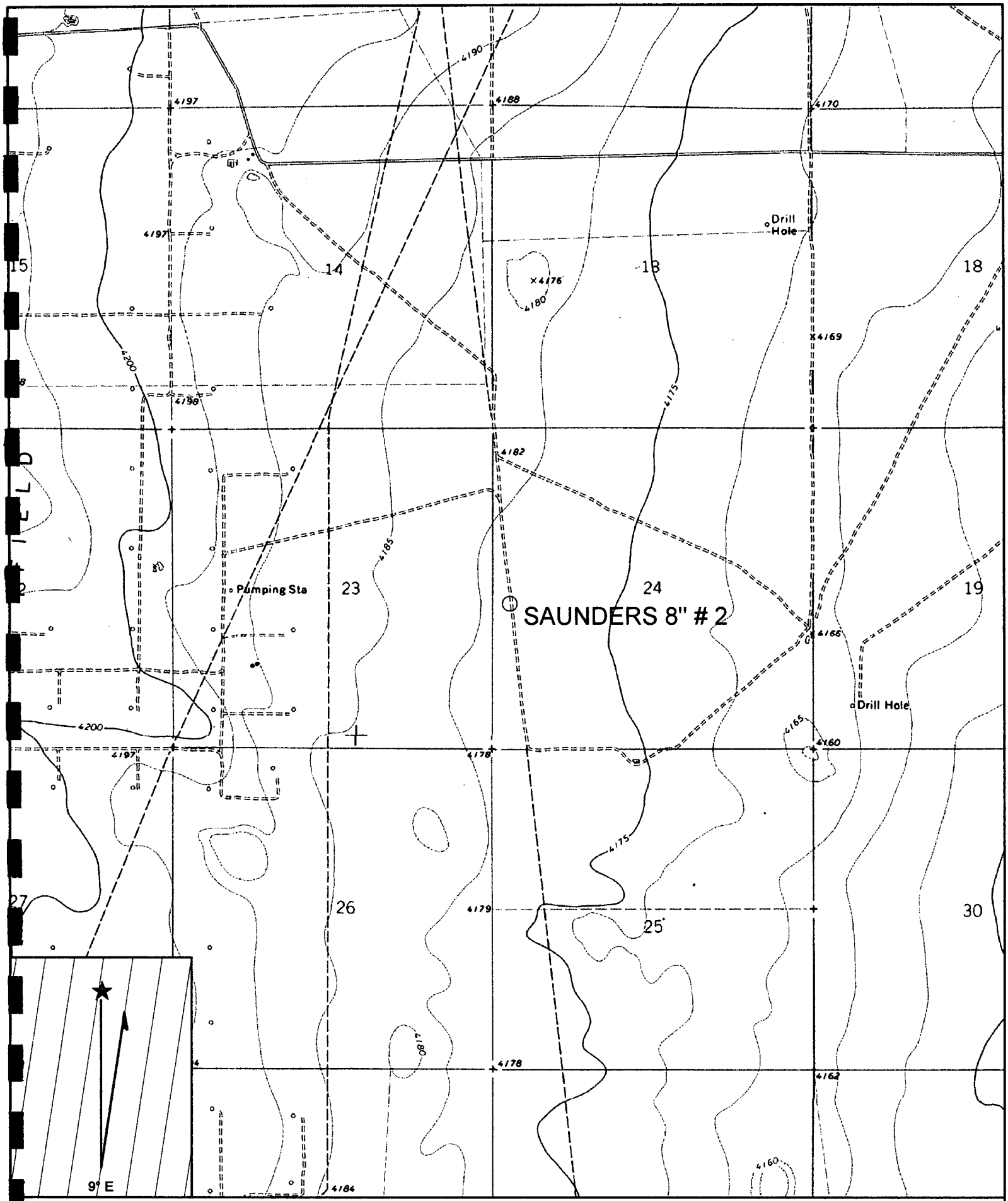
SOIL CHEMISTRY

PLAINS ALL AMERICAN
SAUNDERS 8" # 2
LEA COUNTY, NEW MEXICO
EMS NO: 2004-00175

SAMPLE LOCATION	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL
		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)
S82BCEPL (bottom east 5 ft)	08/13/04	2.14	13.8	13.4	21.5	12.1	3170	8870	12000
S82BCWPL (bottom west 5 ft)	08/13/04	0.318	7.41	10.7	16.5	9.66	2050	7250	9300
S82SWCEPL (east sidewall 3 ft)	08/13/04	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
S82SWCWPL (west sidewall 3 ft)	08/13/04	<0.025	0.067	0.068	0.169	0.069	222	2319	2530
S82SBFPL (backfill sample)	08/13/04	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
S82BCS (bottom 14 ft)	08/27/04	<0.025	0.029	0.063	0.188	0.071	42.2	322	364
S82ESWC (east sidewall 6 ft)	08/27/04	<0.025	<0.025	<0.025	0.094	0.265	71.1	816	887
S82WSWC (west sidewall 6 ft)	08/27/04	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	18.1	18.1

FIGURES

FIGURE 1

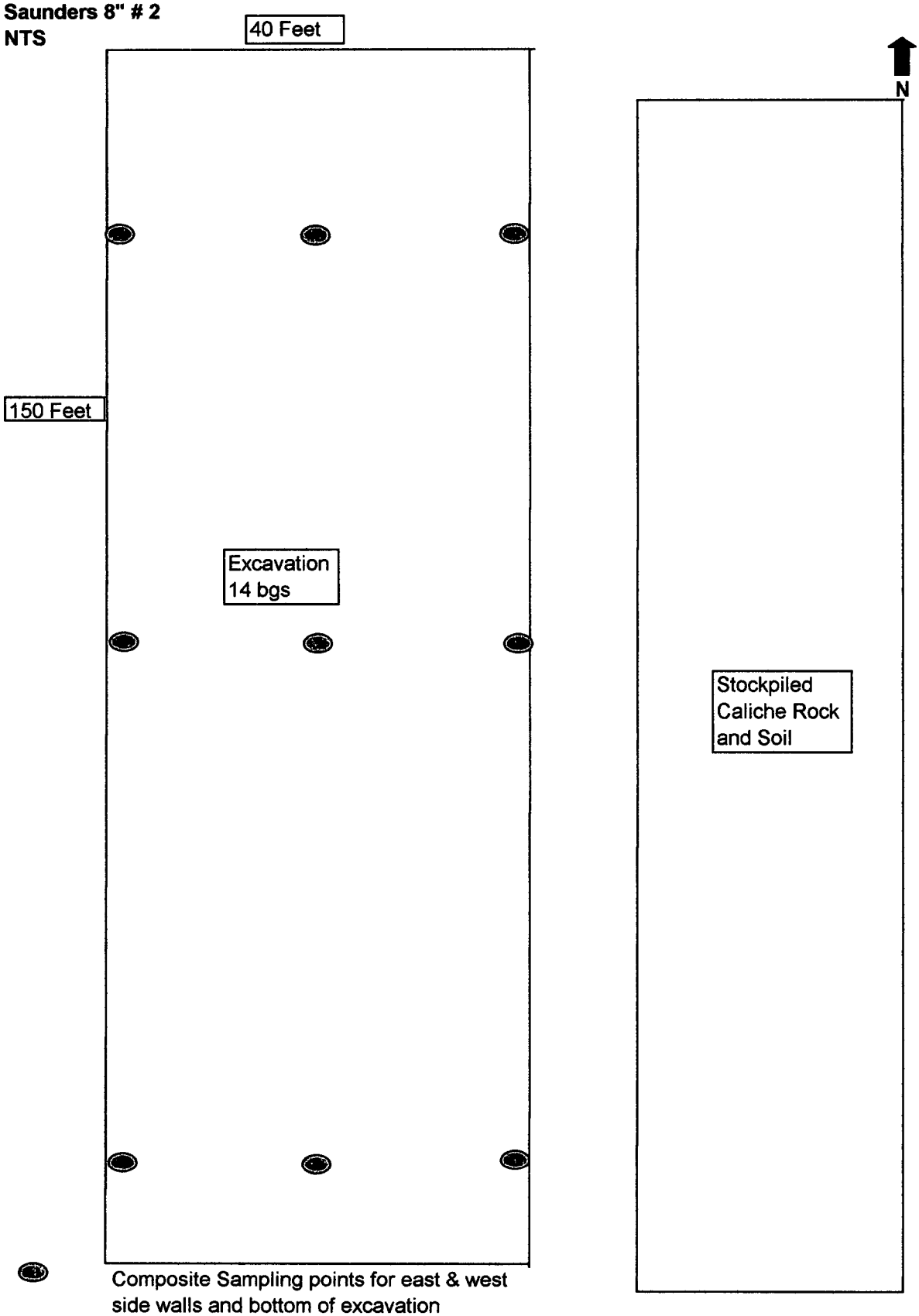


Name: FORT RANCH
Date: 9/30/2004
Scale: 1 inch equals 2000 feet

Location: 033° 05' 21.42" N 103° 34' 30.63" W

FIGURE 2

Saunders 8" # 2
NTS



APPENDICES

APPENDIX A

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 26

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 08/12/2004

							(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	14S	33E	26				2	125	125	125

Record Count: 2

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 13

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 08/12/2004

							(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	14S	33E	13				1	80	80	80

Record Count: 1

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 14

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 08/12/2004

							(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	14S	33E	14				2	100	100	100

Record Count: 2

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 24,13,23

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 08/12/2004

							(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
L	14S	33E	13				1	80	80	80
L	14S	33E	23				2	58	100	79

Record Count: 3

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03787	14S	33E	23	3	3	3			

Driller Licence: 99 O.R. MUSSELWHITE WATER WELL SE
Driller Name: MUSSELWHITE, O.R. **Source:** Shallow
Drill Start Date: 02/15/1958 **Drill Finish Date:** 02/18/1958
Log File Date: 02/25/1958 **PCW Received Date:**
Pump Type: **Pipe Discharge Size:**
Casing Size: 6.63 **Estimated Yield:**
Depth Well: 163 **Depth Water:** 100

Water Bearing Stratifications:	Top	Bottom	Description
	110	163	Shallow Alluvium/Basin Fil
Casing Perforations:	**Top**	**Bottom**	
	103	163	

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 24

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 08/12/2004

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 14S Range: 33E Sections: 25

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 08/12/2004

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

APPENDIX B

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

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 Saunders 8" #2	Facility Type 8"Steel Pipeline

Surface Owner State Of New Mexico	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
L	24	14S	33E					Lea

Latitude 33°05'14.9" **Longitude** 103°34'31.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 8 barrels	Volume Recovered 0 barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence 7-30-04 @ 06:30	Date and Hour of Discovery 7-30-04 @ 09:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley	
By Whom? Camille Reynolds	Date and Hour 7-30-04 @ 3:30	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* External corrosion of the 8" steel pipeline. A line clamp was installed to mitigate the release. The line is an 8 inch steel transmission pipeline that produces approximately 1,400 barrels of crude per day. The pressure on the line varies from 25 to 30 psi and the gravity of the sweet crude oil is 38-42. The sweet crude has an H_2S content of less than 10 ppm

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 5,382 ft^2.

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 "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	OIL CONSERVATION DIVISION
Printed Name: Camille Reynolds	Approved by District Supervisor:
Title: Remediation Coordinator	Approval Date: Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval: Attached ☐
Date: 8-9-04 Phone:505-441-0965	

RECEIVED Hobbs OCD

* Attach Additional Sheets If Necessary

APPENDIX C

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ken Dutton

Allstate Environmental Services, LLC

P.O. Box 11322

Midland, TX 79702

Project: Saunders 8 in. #2

Project Number: PAA 2004-00175

Location: Lea County, NM

Lab Order Number: 4H27005

Report Date: 09/08/04

Allstate Environmental Services, LLC	Project: Saunders 8 in. #2	Fax: (432) 682-4182
P.O. Box 11322	Project Number: PAA 2004-00175	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	09/08/04 14:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S82BCS	4H27005-01	Soil	08/27/04 09:05	08/27/04 15:10
S82ESWC	4H27005-02	Soil	08/27/04 09:15	08/27/04 15:10
S82WSWC	4H27005-03	Soil	08/27/04 09:30	08/27/04 15:10

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

Allstate Environmental Services, LLC	Project: Saunders 8 in. #2	Fax: (432) 682-4182
P.O. Box 11322	Project Number: PAA 2004-00175	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	09/08/04 14:04

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82BCS (4H27005-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI40102	08/30/04	08/30/04	EPA 8021B	
Toluene	**0.0296**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0632**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.188**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0712**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**42.2**	10.0	mg/kg dry	1	EH43004	08/30/04	09/04/04	EPA 8015M	
Diesel Range Organics >C12-C35	**322**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**364**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*72.6 %*	*70-130*		"	"	"	"	
S82ESWC (4H27005-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI40102	08/30/04	08/31/04	EPA 8021B	
Toluene	**J [0.0205]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0947**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.265**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.124**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**71.1**	10.0	mg/kg dry	1	EH43004	08/30/04	09/04/04	EPA 8015M	
Diesel Range Organics >C12-C35	**816**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**887**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*70.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.6 %*	*70-130*		"	"	"	"	
S82WSWC (4H27005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI40102	08/30/04	08/31/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH43004	08/30/04	09/04/04	EPA 8015M	
Diesel Range Organics >C12-C35	**18.1**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**18.1**	10.0	"	"	"	"	"	"	

Allstate Environmental Services, LLC	Project: Saunders 8 in. #2	Fax: (432) 682-4182
P.O. Box 11322	Project Number: PAA 2004-00175	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	09/08/04 14:04

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82WSWC (4H27005-03) Soil									
Surrogate: 1-Chlorooctane		*71.8 %*	*70-130*		*EH43004*	*08/30/04*	*09/04/04*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*71.0 %*	*70-130*		"	"	"	"	

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Allstate Environmental Services, LLC	Project: Saunders 8 in. #2	Fax: (432) 682-4182
P.O. Box 11322	Project Number: PAA 2004-00175	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	09/08/04 14:04

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82BCS (4H27005-01) Soil									
% Solids	**96.0**		%	1	EI40101	08/30/04	08/30/04	% calculation	
S82ESWC (4H27005-02) Soil									
% Solids	**97.0**		%	1	EI40101	08/30/04	08/30/04	% calculation	
S82WSWC (4H27005-03) Soil									
% Solids	**98.0**		%	1	EI40101	08/30/04	08/30/04	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH43004 - Solvent Extraction (GC)										
Blank (EH43004-BLK1)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.3*		*mg/kg*	*50.0*		*74.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.9*		*"*	*50.0*		*83.8*	*70-130*			
Blank (EH43004-BLK2)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.7*		*mg/kg*	*50.0*		*75.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.0*		*"*	*50.0*		*74.0*	*70-130*			
LCS (EH43004-BS1)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	500	10.0	mg/kg wet	500		100	75-125			
Diesel Range Organics >C12-C35	564	10.0	"	500		113	75-125			
Total Hydrocarbon C6-C35	1060	10.0	"	1000		106	75-125			
Surrogate: 1-Chlorooctane	*36.2*		*mg/kg*	*50.0*		*72.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.4*		*"*	*50.0*		*74.8*	*70-130*			
LCS (EH43004-BS2)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	517	10.0	mg/kg wet	500		103	75-125			
Diesel Range Organics >C12-C35	554	10.0	"	500		111	75-125			
Total Hydrocarbon C6-C35	1070	10.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	*36.5*		*mg/kg*	*50.0*		*73.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.6*		*"*	*50.0*		*75.2*	*70-130*			
LCS Dup (EH43004-BSD1)				Prepared: 08/30/04 Analyzed: 09/05/04						
Gasoline Range Organics C6-C12	509	10.0	mg/kg wet	500		102	75-125	1.78	20	
Diesel Range Organics >C12-C35	565	10.0	"	500		113	75-125	0.177	20	
Total Hydrocarbon C6-C35	1070	10.0	"	1000		107	75-125	0.939	20	
Surrogate: 1-Chlorooctane	*36.6*		*mg/kg*	*50.0*		*73.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.3*		*"*	*50.0*		*74.6*	*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 EH43004 - Solvent Extraction (GC)										
LCS Dup (EH43004-BSD2)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	483	10.0	mg/kg wet	500		96.6	75-125	6.80	20	
Diesel Range Organics >C12-C35	565	10.0	"	500		113	75-125	1.97	20	
Total Hydrocarbon C6-C35	1050	10.0	"	1000		105	75-125	1.89	20	
Surrogate: 1-Chlorooctane	*38.5*		*mg/kg*	*50.0*		*77.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.5*		*"*	*50.0*		*75.0*	*70-130*			
Calibration Check (EH43004-CCV1)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	440		mg/kg	500		88.0	80-120			
Diesel Range Organics >C12-C35	533		"	500		107	80-120			
Total Hydrocarbon C6-C35	973		"	1000		97.3	80-120			
Surrogate: 1-Chlorooctane	*58.7*		*"*	*50.0*		*117*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.6*		*"*	*50.0*		*101*	*70-130*			
Calibration Check (EH43004-CCV2)				Prepared: 08/30/04 Analyzed: 09/04/04						
Gasoline Range Organics C6-C12	448		mg/kg	500		89.6	80-120			
Diesel Range Organics >C12-C35	538		"	500		108	80-120			
Total Hydrocarbon C6-C35	986		"	1000		98.6	80-120			
Surrogate: 1-Chlorooctane	*56.7*		*"*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.7*		*"*	*50.0*		*101*	*70-130*			
Batch EI40102 - EPA 5030C (GC)										
Blank (EI40102-BLK1)				Prepared & Analyzed: 08/30/04						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*92.2*		*ug/kg*	*100*		*92.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.5*		*"*	*100*		*92.5*	*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 EI40102 - EPA 5030C (GC)										
LCS (EI40102-BS1)				Prepared & Analyzed: 08/30/04						
Benzene	114		ug/kg	100		114	80-120			
Toluene	111		"	100		111	80-120			
Ethylbenzene	110		"	100		110	80-120			
Xylene (p/m)	239		"	200		120	80-120			
Xylene (o)	120		"	100		120	80-120			
Surrogate: a,a,a-Trifluorotoluene	*96.5*		"	*100*		*96.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*105*		"	*100*		*105*	*80-120*			
Calibration Check (EI40102-CCV1)				Prepared: 08/30/04 Analyzed: 08/31/04						
Benzene	114		ug/kg	100		114	80-120			
Toluene	109		"	100		109	80-120			
Ethylbenzene	103		"	100		103	80-120			
Xylene (p/m)	222		"	200		111	80-120			
Xylene (o)	114		"	100		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*111*		"	*100*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*102*		"	*100*		*102*	*80-120*			
Matrix Spike (EI40102-MS1)	**Source: 4H26009-08**			Prepared: 08/30/04 Analyzed: 08/31/04						
Benzene	110		ug/kg	100	ND	110	80-120			
Toluene	107		"	100	ND	107	80-120			
Ethylbenzene	105		"	100	ND	105	80-120			
Xylene (p/m)	229		"	200	ND	114	80-120			
Xylene (o)	114		"	100	ND	114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*103*		"	*100*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*96.2*		"	*100*		*96.2*	*80-120*			
Matrix Spike Dup (EI40102-MSD1)	**Source: 4H26009-08**			Prepared: 08/30/04 Analyzed: 08/31/04						
Benzene	111		ug/kg	100	ND	111	80-120	0.905	20	
Toluene	107		"	100	ND	107	80-120	0.00	20	
Ethylbenzene	106		"	100	ND	106	80-120	0.948	20	
Xylene (p/m)	231		"	200	ND	116	80-120	1.74	20	
Xylene (o)	116		"	100	ND	116	80-120	1.74	20	
Surrogate: a,a,a-Trifluorotoluene	*96.6*		"	*100*		*96.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*98.1*		"	*100*		*98.1*	*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 EI40101 - General Preparation (Prep)										
Blank (EI40101-BLK1)				Prepared & Analyzed: 08/30/04						
% Solids	100		%							
Duplicate (EI40101-DUP1)		**Source: 4H27004-01**		Prepared & Analyzed: 08/30/04						
% Solids	95.0		%		96.0			1.05	20	

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: Raland K Tuttle Date: 9/8/04

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 Biezugbe, Lab Tech.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: AES
Company Address: P.O. BOX 11322
City/State/Zip: MIDLAND, TX 79702
Telephone No: (432) 682-3547
Fax No: (432) 682-4182
Sampler Signature: Ken Dutton

Project Name: SAUNDERS 8" #2
Project #: PAA, 2004-05175
Project Loc: LEA COUNTY, NM
PO #:

4H27005

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 (8015M)	TCLP: 1005 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, CO3, HCO3)	TCLP: BAR / ESP / CEC	TCLP: Metals: As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule)	Standard TAT
-01	S82 BCS	27 Aug 04	0905	1	X									X		X								X				X
-02	S82 ESWC		0915		X									X		X								X				X
-03	S82 WSWC		0930		X									X		X								X				X

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments:
1.5 °C

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	27 Aug 04	0950	Dennis Rogers	08-27-04	0950
Dennis Rogers	08-27-04	1500	Carlos Lyon	8-27-04	1500
Carlos Lyon	08-27-04	1510	Jeanne Mancuso	8-27-04	1510

Received by ELOT:

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

Client: AES

Date/Time: 08-27-04 @ 1525

Order #: 4H27005

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	1.5 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

_____

_____

_____

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:

Ken Dutton

Allstate Environmental Services, LLC

P.O. Box 11322

Midland, TX 79702

Project: PAA

Project Number: Saunders 8 inch #2

Location: Lea County, NM

Lab Order Number: 4H16002

Report Date: 08/17/04

Allstate Environmental Services, LLC	Project: PAA	Fax: (432) 397-5125
P.O. Box 11322	Project Number: Saunders 8 inch #2	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	08/17/04 15:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S82BCEPL	4H16002-01	Soil	08/13/04 10:30	08/16/04 08:35
S82BCWPL	4H16002-02	Soil	08/13/04 10:40	08/16/04 08:35
S82SWCEPL	4H16002-03	Soil	08/13/04 10:50	08/16/04 08:35
S82SWCWPL	4H16002-04	Soil	08/13/04 11:05	08/16/04 08:35
S82SBFPL	4H16002-05	Soil	08/13/04 11:15	08/16/04 08:35

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Allstate Environmental Services, LLC	Project: PAA	Fax: (432) 397-5125
P.O. Box 11322	Project Number: Saunders 8 inch #2	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	08/17/04 15:47

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82BCEPL (4H16002-01) Soil									
Benzene	**2.14**	0.0250	mg/kg dry	25	EH41608	08/16/04	08/16/04	EPA 8021B	
Toluene	**13.8**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**13.4**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**21.5**	0.0250	"	"	"	"	"	"	
Xylene (o)	**12.1**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*527 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*98.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**3170**	10.0	mg/kg dry	1	EH41602	08/16/04	08/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	**8870**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**12000**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*117 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*248 %*	*70-130*		"	"	"	"	*S-04*
S82BCWPL (4H16002-02) Soil									
Benzene	**0.318**	0.0250	mg/kg dry	25	EH41608	08/16/04	08/16/04	EPA 8021B	
Toluene	**7.41**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**10.7**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**16.5**	0.0250	"	"	"	"	"	"	
Xylene (o)	**9.66**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*145 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*121 %*	*80-120*		"	"	"	"	*S-04*
Gasoline Range Organics C6-C12	**2050**	10.0	mg/kg dry	1	EH41602	08/16/04	08/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	**7250**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**9300**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*242 %*	*70-130*		"	"	"	"	*S-04*
S82SWCEPL (4H16002-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH41608	08/16/04	08/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH41602	08/16/04	08/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Allstate Environmental Services, LLC	Project: PAA	Fax: (432) 397-5125
P.O. Box 11322	Project Number: Saunders 8 inch #2	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	08/17/04 15:47

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82SWCEPL (4H16002-03) Soil									
Surrogate: 1-Chlorooctane		*98.6 %*	*70-130*		*EH41602*	*08/16/04*	*08/16/04*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*84.4 %*	*70-130*		"	"	"	"	
S82SWCWPL (4H16002-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH41608	08/16/04	08/16/04	EPA 8021B	
Toluene	**0.0677**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0682**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.169**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0690**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**222**	10.0	mg/kg dry	1	EH41602	08/16/04	08/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	**2310**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2530**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*128 %*	*70-130*		"	"	"	"	
S82SBFPL (4H16002-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EH41608	08/16/04	08/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EH41602	08/16/04	08/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	**J [7.82]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*82.4 %*	*70-130*		"	"	"	"	

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Allstate Environmental Services, LLC	Project: PAA	Fax: (432) 397-5125
P.O. Box 11322	Project Number: Saunders 8 inch #2	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	08/17/04 15:47

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S82BCEPL (4H16002-01) Soil									
% Solids	**95.0**		%	1	EH41705	08/16/04	08/16/04	% calculation	
S82BCWPL (4H16002-02) Soil									
% Solids	**97.0**		%	1	EH41705	08/16/04	08/16/04	% calculation	
S82SWCEPL (4H16002-03) Soil									
% Solids	**97.0**		%	1	EH41705	08/16/04	08/16/04	% calculation	
S82SWCWPL (4H16002-04) Soil									
% Solids	**98.0**		%	1	EH41705	08/16/04	08/16/04	% calculation	
S82SBFPL (4H16002-05) Soil									
% Solids	**91.0**		%	1	EH41705	08/16/04	08/16/04	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH41602 - Solvent Extraction (GC)										
Blank (EH41602-BLK1)				Prepared & Analyzed: 08/16/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*40.9*		*mg/kg*	*50.0*		*81.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.6*		*"*	*50.0*		*85.2*	*70-130*			
LCS (EH41602-BS1)				Prepared & Analyzed: 08/16/04						
Gasoline Range Organics C6-C12	422	10.0	mg/kg wet	500		84.4	75-125			
Diesel Range Organics >C12-C35	556	10.0	"	500		111	75-125			
Total Hydrocarbon C6-C35	978	10.0	"	1000		97.8	75-125			
Surrogate: 1-Chlorooctane	*51.5*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.8*		*"*	*50.0*		*102*	*70-130*			
LCS Dup (EH41602-BSD1)				Prepared & Analyzed: 08/16/04						
Gasoline Range Organics C6-C12	456	10.0	mg/kg wet	500		91.2	75-125	7.74	20	
Diesel Range Organics >C12-C35	511	10.0	"	500		102	75-125	8.43	20	
Total Hydrocarbon C6-C35	967	10.0	"	1000		96.7	75-125	1.13	20	
Surrogate: 1-Chlorooctane	*54.8*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.5*		*"*	*50.0*		*101*	*70-130*			
Calibration Check (EH41602-CCV1)				Prepared & Analyzed: 08/16/04						
Gasoline Range Organics C6-C12	462		mg/kg	500		92.4	80-120			
Diesel Range Organics >C12-C35	543		"	500		109	80-120			
Total Hydrocarbon C6-C35	1000		"	1000		100	80-120			
Surrogate: 1-Chlorooctane	*54.8*		*"*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.8*		*"*	*50.0*		*99.6*	*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 EH41608 - EPA 5030C (GC)										
Blank (EH41608-BLK1)			Prepared & Analyzed: 08/15/04							
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*83.8*		*ug/kg*	*100*		*83.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*80.1*		"	*100*		*80.1*	*80-120*			
LCS (EH41608-BS1)			Prepared & Analyzed: 08/15/04							
Benzene	103		ug/kg	100		103	80-120			
Toluene	101		"	100		101	80-120			
Ethylbenzene	98.3		"	100		98.3	80-120			
Xylene (p/m)	211		"	200		106	80-120			
Xylene (o)	106		"	100		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*89.1*		"	*100*		*89.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*94.4*		"	*100*		*94.4*	*80-120*			
Calibration Check (EH41608-CCV1)			Prepared: 08/15/04 Analyzed: 08/16/04							
Benzene	106		ug/kg	100		106	80-120			
Toluene	100		"	100		100	80-120			
Ethylbenzene	97.5		"	100		97.5	80-120			
Xylene (p/m)	206		"	200		103	80-120			
Xylene (o)	103		"	100		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	*93.5*		"	*100*		*93.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*97.3*		"	*100*		*97.3*	*80-120*			
Matrix Spike (EH41608-MS1)	**Source: 4H13014-02**		Prepared: 08/15/04 Analyzed: 08/16/04							
Benzene	99.8		ug/kg	100	ND	99.8	80-120			
Toluene	98.2		"	100	ND	98.2	80-120			
Ethylbenzene	96.2		"	100	ND	96.2	80-120			
Xylene (p/m)	209		"	200	ND	104	80-120			
Xylene (o)	104		"	100	ND	104	80-120			
Surrogate: a,a,a-Trifluorotoluene	*92.4*		"	*100*		*92.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.0*		"	*100*		*92.0*	*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 EH41608 - EPA 5030C (GC)										
Matrix Spike Dup (EH41608-MSD1)	**Source: 4H13014-02**			Prepared: 08/15/04 Analyzed: 08/16/04						
Benzene	99.3		ug/kg	100	ND	99.3	80-120	0.502	20	
Toluene	97.0		"	100	ND	97.0	80-120	1.23	20	
Ethylbenzene	95.3		"	100	ND	95.3	80-120	0.940	20	
Xylene (p/m)	206		"	200	ND	103	80-120	0.966	20	
Xylene (o)	104		"	100	ND	104	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	*89.5*		*"*	*100*		*89.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*90.1*		*"*	*100*		*90.1*	*80-120*			

Allstate Environmental Services, LLC	Project: PAA	Fax: (432) 397-5125
P.O. Box 11322	Project Number: Saunders 8 inch #2	**Reported:**
Midland TX, 79702	Project Manager: Ken Dutton	08/17/04 15:47

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 EH41705 - General Preparation (Prep)										
Blank (EH41705-BLK1)				Prepared & Analyzed: 08/16/04						
% Solids	100		%							
Duplicate (EH41705-DUP1)		**Source: 4H16001-01**		Prepared & Analyzed: 08/16/04						
% Solids	92.0		%		92.0			0.00	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.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 8/17/04

Raland K. Tuttle, QA Officer
Celey D. Keene, Lab Director, Org. Tech Director
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sara Molina, Chemist
Sandra Biezugbe, Lab Tech.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: AES
Company Address: P.O. BOX 11322
City/State/Zip: MIDLAND TX, 79702
Telephone No: 432-682-3547
Fax No: 432-682-4182
Sampler Signature: Ken Dutton

Project Name: PAA
Project #: SAUNDERS 8" #2
Project Loc: LEA COUNTY, NM
PO #:

4416002

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TPH: 418.1 (8015M) 1005 1006	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 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule)	Standard TAT
-01	S82 BCEPL	13AUG	1030	1	X									X		X							X				X
-02	S82 BCWPL		1040																								
-03	S82 SWCEPL		1050																								
-04	S82 SWCWPL		1105																								
-05	S82 BFPL		1115																								

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt: 4.0 °C
Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	13 AUG 04	1205	Earl P. Owens	13 Aug 04	1205
Earl P. Owens	16 Aug 04	0800	Received by ELOT: Tara Lucas	16 Aug 04	8:25
Tara Lucas	16 Aug 04	08:35	Jeanne McMurrey	08-16-04	0825

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

Client: AES

Date/Time: 8-16-04 / 9:46am

Order #: 4H160002

Initials: PA

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	4.0 C
Shipping container/cooler in good condition?	Yes	No	NA
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:

_____

_____

_____

_____

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_____

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