Basin Environmental Service Technologies, LLC

P. O. Box 301
Lovington, New Mexico 88260
rjohnson@basinenv.com
Office: (505) 396-2378 Fax: (505) 396-1429

Effective Solutions

SOIL REMEDIATION and CLOSURE REQUEST

PLAINS MARKETING, L. P.
Lea to Dublin 8" Line
Lea County, New Mexico
Plains EMS #2004-00223
Unit G (SW ¼, NE ¼), Section 28, Township 20 South, Range 37 East
Latitude 32°, 32', 46.8" North, Longitude 103°, 15', 19.5" West

Prepared For:

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

Prepared By:
Basin Environmental Service Technologies, LLC

August 15, 2005

Rozanne Johnson
Basin Environmental Service Technologies, LLC

TABLE OF CONTENTS

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the Lea to Dublin 8" Pipeline on December 4, 2004. A 2-inch scraper valve at this pig trap location ruptured causing the release. The impacted soils were excavated and temporarily stockpiled on a poly liner.

This site is located in Unit G (SW ¼, NE ¼), Section 28, Township 20 South, Range 37 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site is located at latitude 32°, 32', 46.8" North and longitude 103°, 15', 19.5" West. The site is characterized by a right-of-way for the pipeline in an undulating sand dune pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 125 feet long by 130 feet wide. Approximately 910 barrels of crude oil were released from the Plains Pipeline and 860 barrels were recovered.

An Emergency One-Call was initiated December 4, 2004 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

The Millard Deck Estate owns the affected land. Mr. Tim Walters, Executor, Bank of America in Midland, Texas was notified of the release and subsequent remedial actions. The ranch foreman, Mr. Larry Strain, was notified and has made numerous visits to the release site. Mr. Strain was briefed on the continuing actions and is satisfied with the information he has been provided. Mr. Leo "Flap" Sims, Environmental Coordinator for the Millard Deck Estate, was also notified on the release and concurred with the remedial actions that have been proposed and completed.

Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1, was verbally notified of the release on December 4, 2004. A C-141 form, dated December 7, 2004 was completed by Plains and submitted to the NMOCD, Hobbs, New Mexico Office (see Appendix D, NMOCD C-141).

SUMMARY OF FIELD ACTIVITIES

On December 4, 2004, Basin responded to a pipeline release located on the Lea to Dublin 8" Pipeline to help contain the crude oil pipeline release under the direction of Plains operations personnel.

The release point and flow path were excavated removing impacted soils to dimensions approximately 125 feet long by 130 feet wide and 4 to 14 feet below ground surface (bgs) (see Figure 2, Site Map). All excavated soils were placed

on a poly liner for future remedial action. The visually stained flow path was excavated and confirmation samples were collected and delivered to the laboratory for analysis on January 3, 2005 and January 14, 2005. The confirmation soil samples collected were screened in the field with a Photoionization Detector (PID), (see Figure 2, Site Map) and soil screening results indicated no detectable Volatile Organic Compounds (VOC) present. All 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 walls and floor of the excavated area are below NMOCD regulatory standards (see Table 1, Soil Chemistry Table).

A request for backfilling the excavation was proposed to Mr. Larry Johnson, NMOCD Hobbs Office on May 16, 2005 and verbally approved (Appendix C Request Approval for Backfill of Excavation). Mr. Leo "Flap" Sims, Environmental Coordinator for the Millard Deck Estate concurred with the request for backfilling the excavation. Backfill material was obtained from the Millard Deck Estate.

NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed the average depth to groundwater is 40 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 >20, 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 excavated to depths of approximately 4 feet bgs to 14 feet bgs (see figure 2 site map) and no visual evidence of crude oil impact was evident on the floor or sidewalls following the completion of the excavation. PID readings indicated no detectable concentrations of Volatile Organic Compounds (VOC) remained on the floor or sidewalls of the excavation. Confirmation soil samples were collected from the excavation on January 3, 2005 and January 14, 2005; and were analyzed for concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix B).

Analytical results indicated detectable BTEX concentrations were below NMOCD regulatory standards for the South Excavation Floor, Middle Floor East, North Pipeline Floor, and North Floor soil samples at a depth of 6, 4, 8, and 4 feet bgs, respectively. Analytical results indicated BTEX concentrations were not detected above the laboratory detection limits for the remaining confirmation soil samples. Analytical results indicated detectable TPH concentrations were below NMOCD regulatory standards for South Excavation Side Wall, South Excavation Floor, Middle Floor East, and Middle Floor South soil samples at a depth of 3, 6, 4, and 4 feet bgs, respectively. Analytical results from the North Pipeline Floor reported a TPH concentration of 112 mg/kg, which is slightly above the NMOCD criteria of 100 mg/kg for TPH, but is within the margin for error of the laboratory equipment and was considered acceptable by the NMOCD. The remaining analytical results indicated TPH concentrations were not detected above the laboratory detection limits on the remaining confirmation soil samples.

RECOMMENDATIONS FOR REMEDIATION/CLOSURE

Approximately 3492 cubic yards of impacted soil was excavated and stockpiled on-site resulting from the emergency response and subsequent remedial activities. The impacted soil was transported to the Plains Lea Station Landfarm (LSLF). A permit (NMOCD Form C-138) was obtained from the NMOCD for the trucking of the contaminated soils to LSLF. A request for backfilling the exaction was proposed to Mr. Larry Johnson, NMOCD Hobbs Office on May 16, 2005, and verbally approved by Mr. Johnson (Appendix C Request Approval for Backfill of Excavation). The backfill material was obtained from the landowner (Millard Deck Estate). The excavation was backfilled and contoured to match the original rangeland grade surrounding the site and will be reseeded this fall with the landowners approved grass seed.

Based on the results of the remediation activities conducted, Basin, on behalf of Plains, requests that the NMOCD consider this site as eligible for closure under the *New Mexico Oil Conservation Division Guidelines for Remediation of Leaks, Spills and Releases (1993).* If the NMOCD concurs with this recommendation, please provide Plains with a letter stating no further action is required.

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 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 Soil Remediation and Closure Request 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

Copy 1:
Jeff Dann
Plains All American
333 Clay Street
Suite 1600
Houston, Texas 77002
jpdann@paalp.com

Copy 2:
Camille Reynolds
Plains All American
3112 West US 82
Lovington, New Mexico 88260
cjreynolds@paalp.com

Copy 3:
Larry Johnson
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240
Larry.Johnson@state.nm.us

Copy 4:
Basin Environmental Service Technologies LLC
P. O. Box 301
Lovington, New Mexico 88260
rjohnson@basinenv.com

Copy 5 and 6:
Millard Deck Estate
Delivered to:
Leo "Flap" Sims, Environmental Coordinator

Copy 3

Tables

Table 1

Soil Chemistry

TABLE 1

SOIL CHEMISTRY

PLAINS MARKETING, L.P.
LEA TO DUBLIN 8" LINE
LEA COUNTY, NEW MEXICO
EMS: 2004-00223

SAMPLE LOCATION	SAMPLE DEPTH	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)
South Exc SW	3'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	30.8	30.8
South Exc Floor	6'	01/03/05	<0.025	<0.025	<0.025	0.101	0.061	<10.0	14.5	14.5
Middle Floor East	4'	01/03/05	0.109	1.49	2.66	3.76	1.68	37.2	34.6	71.8
Middle Floor South	4'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	29.6	29.6
Middle Floor North	4'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North Exc Floor	14'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North Exc S/SW	6'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North Exc N/SW	6'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North P/L Floor	8'	01/03/05	<0.025	0.37	0.552	1.09	0.618	44.9	131	176
North P/L N/SW	4'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North P/L S/SW	4'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North Floor	3'	01/03/05	<0.025	0.315	0.169	0.096	0.06	<10.0	<10.0	<10.0
Stockpile North	6'	01/03/05	0.160	7.24	7.71	11.7	4.51	188	184	372
Stockpile South	6'	01/03/05	0.041	1.3	2.1	2.89	1.21	81.2	98.5	180
Stockpile East	6'	01/03/05	21.3	340	257	230	92.9	10400	9420	19800
Stockpile West	6'	01/03/05	<0.025	0.133	0.132	0.711	0.426	110	232	342
North P/L Floor 15'	15'	01/14/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	112	112
NMOCD Criteria			**10**	**TOTAL BTEX 50**						**100**

Figures

Figure 1

Site Location Map

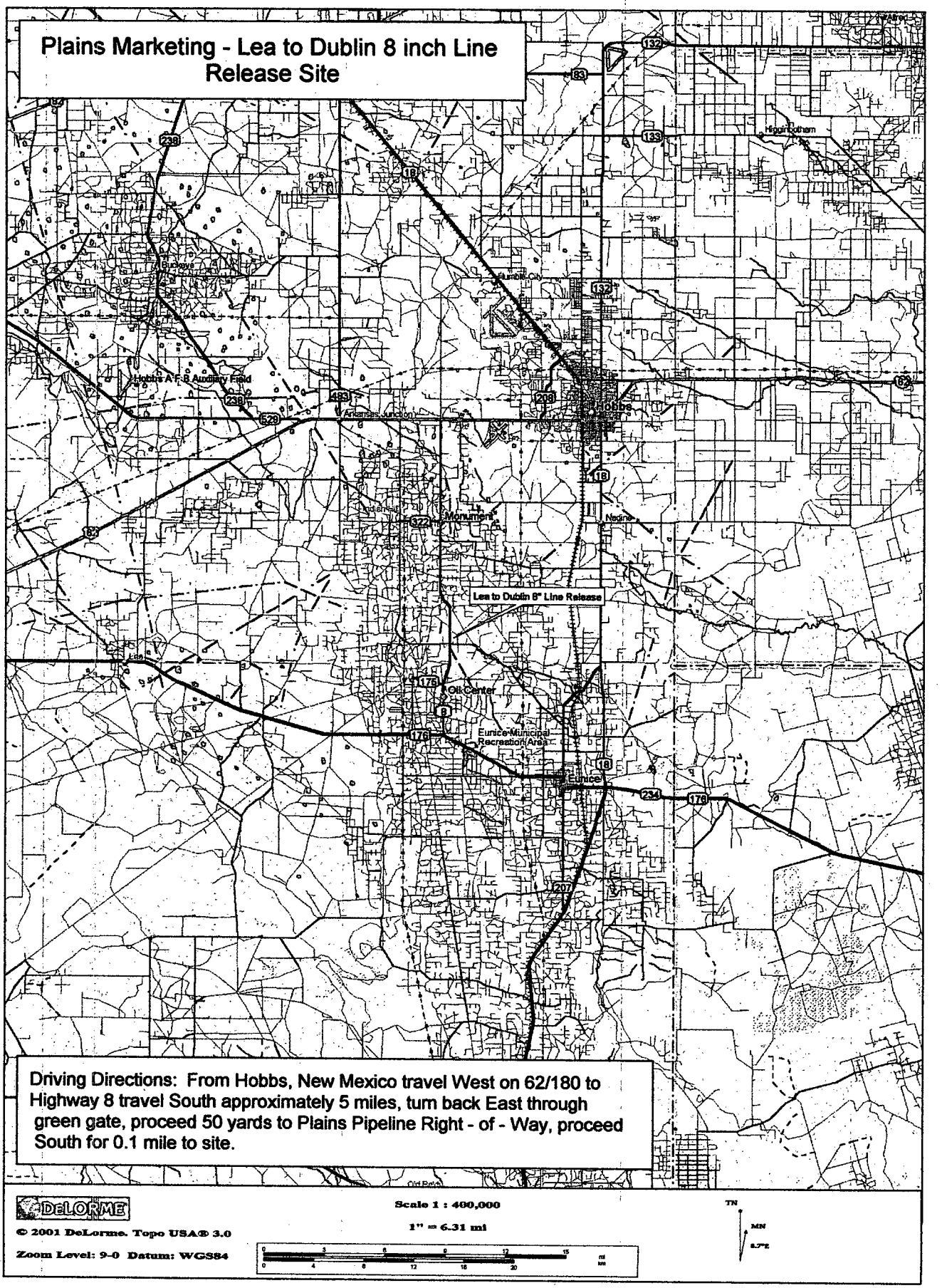

Plains Marketing - Lea to Dublin 8 inch Line Release Site
Hobbs A.F.B Auxiliary Field
Arkansas Junction
Hobbs
Monument
Lea to Dublin 8" Line Release
Oil Center
Eunice Municipal Recreation Area
Eunice
Higginbotham
Driving Directions: From Hobbs, New Mexico travel West on 62/180 to Highway 8 travel South approximately 5 miles, turn back East through green gate, proceed 50 yards to Plains Pipeline Right - of - Way, proceed South for 0.1 mile to site.
DeLorme
© 2001 DeLorme. Topo USA® 3.0
Zoom Level: 9-0 Datum: WGS84
Scale 1 : 400,000
1" = 6.31 mi
TN
MN

Figure 2

Site Map

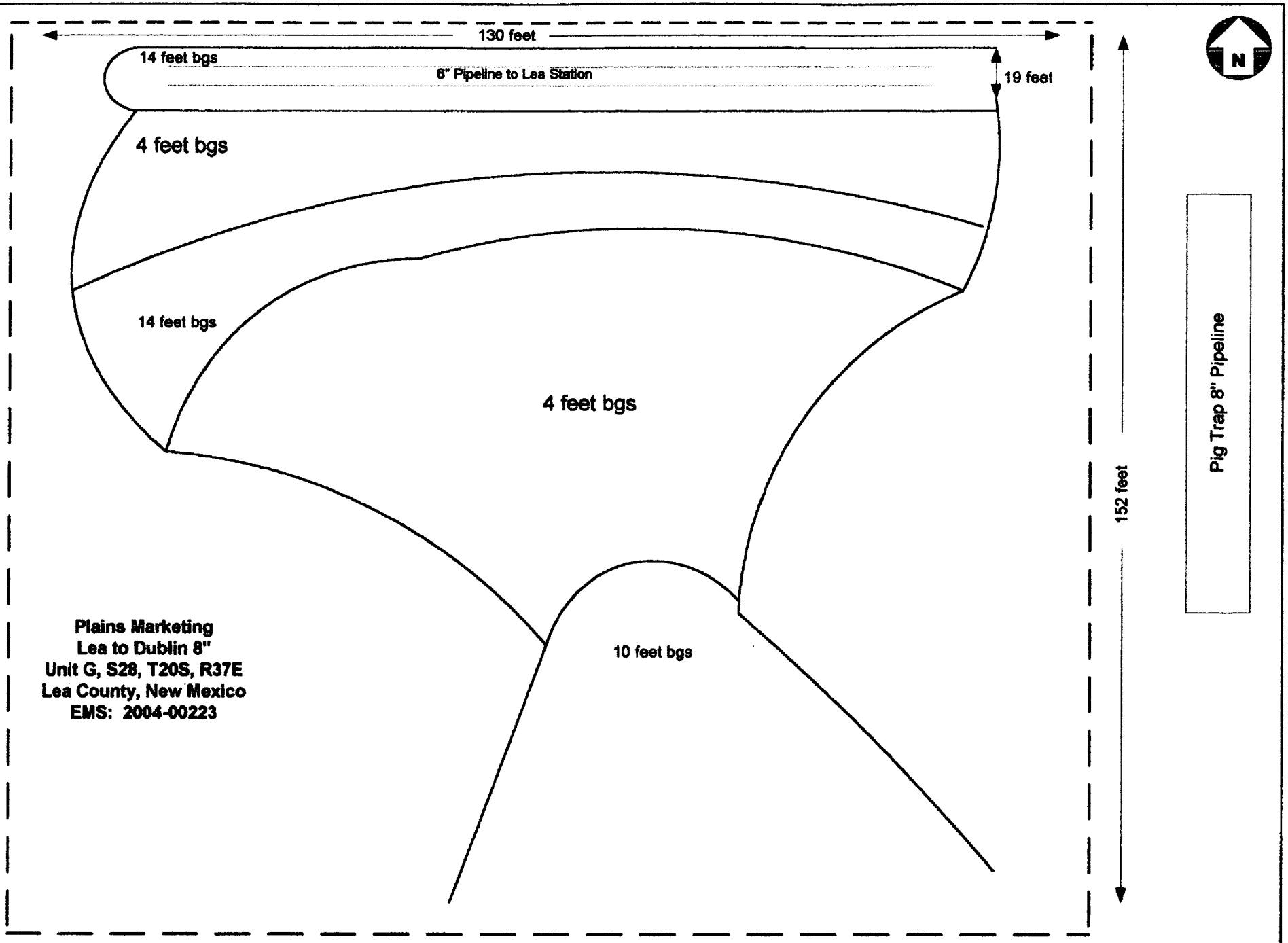
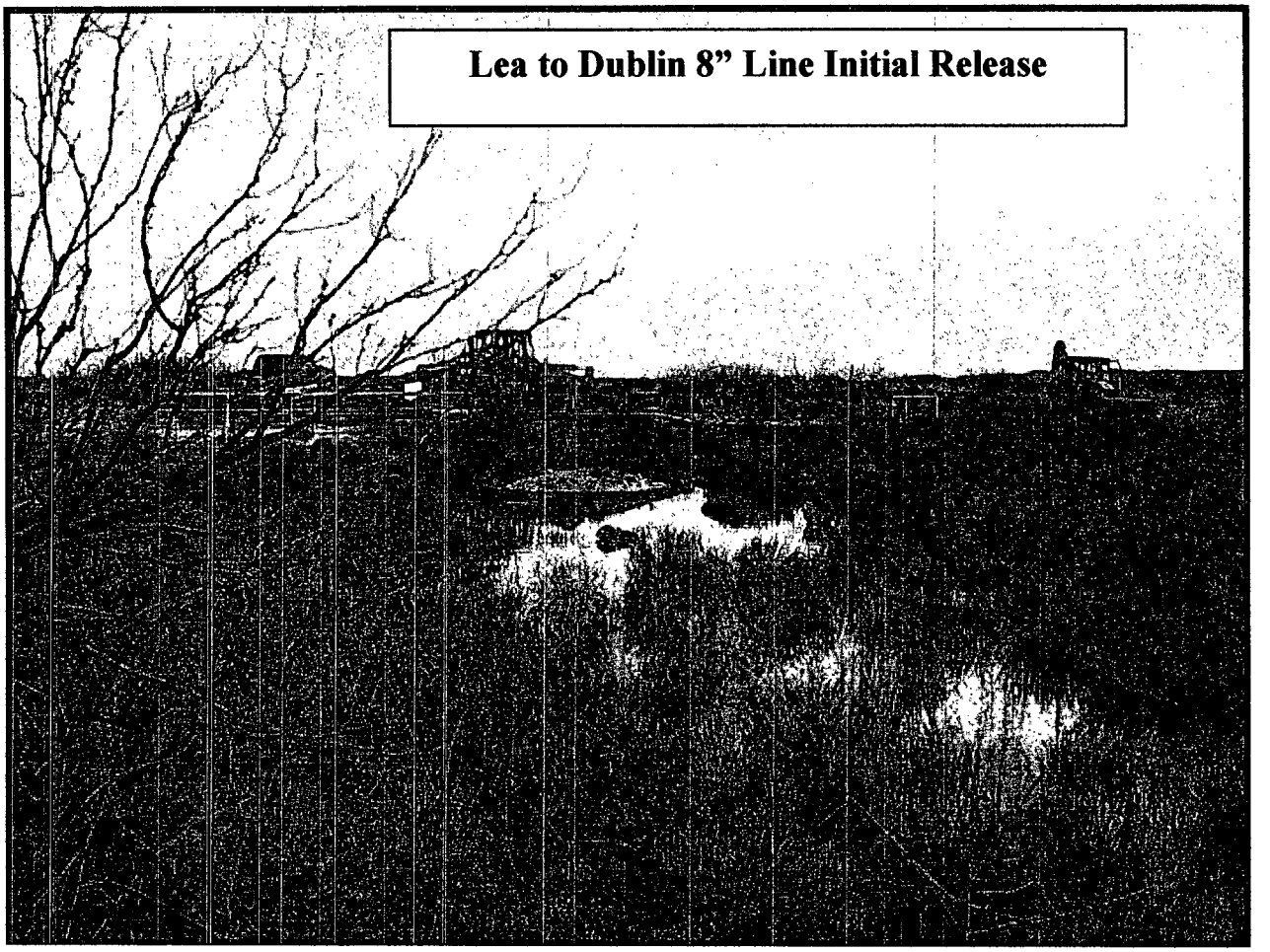
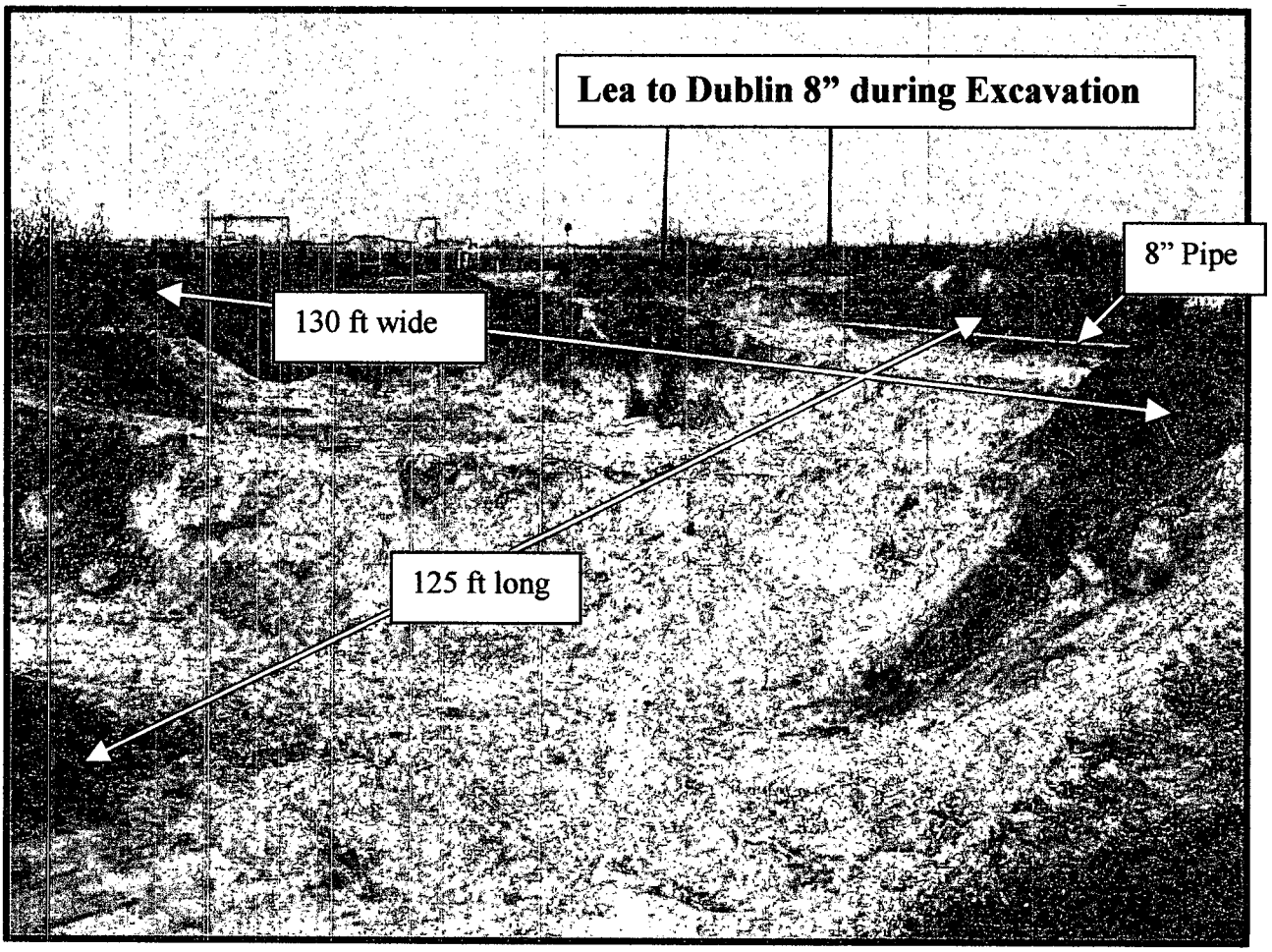
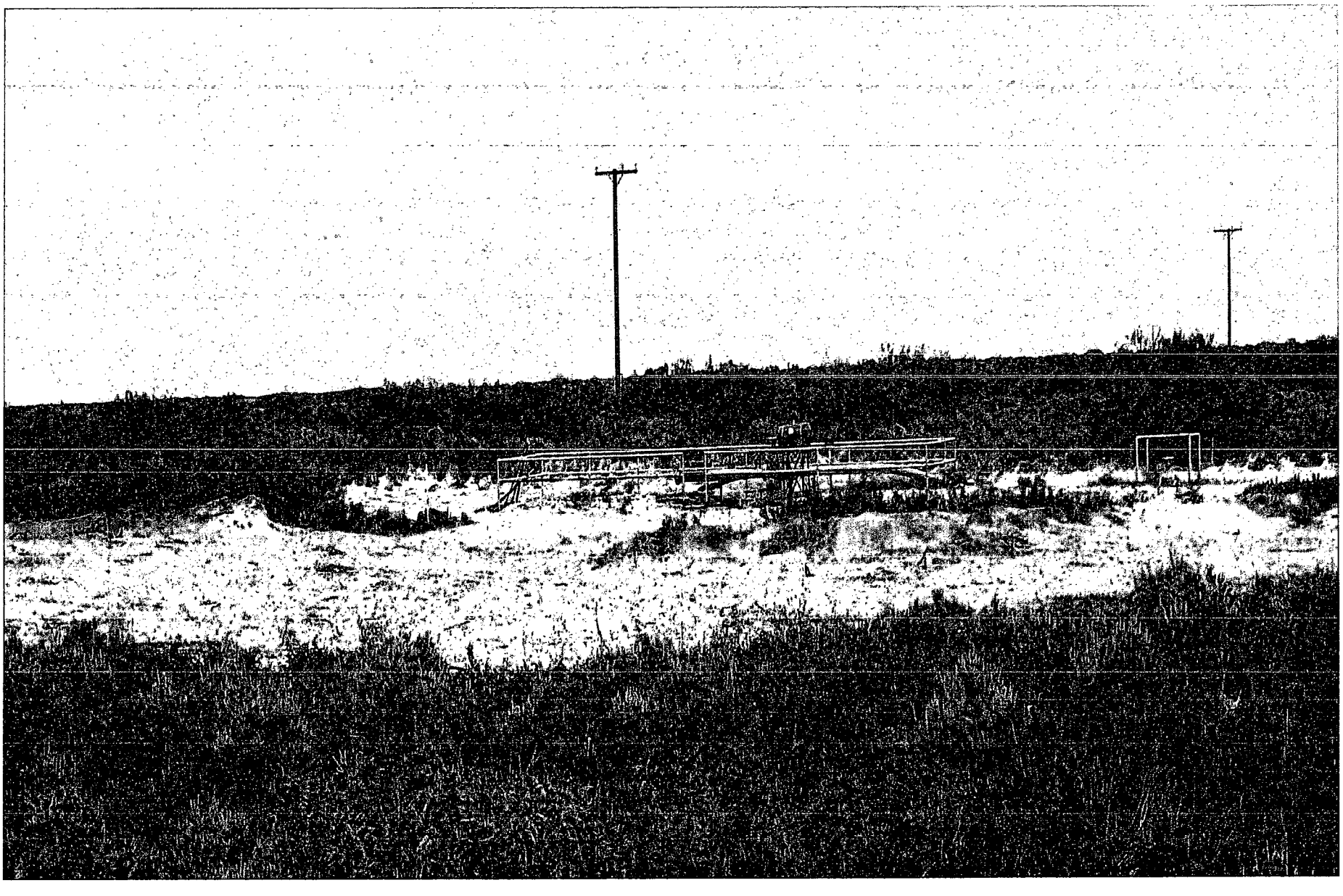

130 feet
14 feet bgs
6" Pipeline to Lea Station
19 feet
4 feet bgs
14 feet bgs
4 feet bgs
10 feet bgs
152 feet
N
Pig Trap 8" Pipeline
Plains Marketing
Lea to Dublin 8"
Unit G, S28, T20S, R37E
Lea County, New Mexico
EMS: 2004-00223
Stockpiled Material
TITLE
Site Map, Lea to Dublin 8"
DRAWN BY
Basin Environmental Services
kad

Figure 3

Digital Photos


Lea to Dublin 8" Line Initial Release


Lea to Dublin 8" during Excavation
8" Pipe
130 ft wide
125 ft long



Lea to Dublin 8" Line Release Site Backfilled and Contoured to the Original Grade

Appendices

Appendix A

New Mexico Office of the State Engineer
Water Well Database Report

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 20S Range: 37E Sections: 28

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 08/29/2005

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	20S	37E	28				2	40	40	40

Record Count: 2

Appendix B

Environmental Laboratory of Texas Analytical Results

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ken Dutton

Basin Environmental Services

P.O. Box 301

Lovington, NM 88260

Project: Lea to Dublin 8 inch

Project Number: EMS #2004-00223

Location: Lea County, NM

Lab Order Number: 5A05014

Report Date: 01/11/05

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
South Exc SW	5A05014-01	Soil	01/03/05 08:15	01/05/05 13:25
South Exc Floor	5A05014-02	Soil	01/03/05 09:00	01/05/05 13:25
Middle Floor East	5A05014-03	Soil	01/03/05 09:15	01/05/05 13:25
Middle Floor South	5A05014-04	Soil	01/03/05 09:25	01/05/05 13:25
Middle Floor North	5A05014-05	Soil	01/03/05 09:18	01/05/05 13:25
North Exc Floor	5A05014-06	Soil	01/03/05 09:10	01/05/05 13:25
North Exc S/SW	5A05014-07	Soil	01/03/05 09:45	01/05/05 13:25
North Exc N/SW	5A05014-08	Soil	01/03/05 09:55	01/05/05 13:25
North P/L Floor	5A05014-09	Soil	01/03/05 10:08	01/05/05 13:25
North P/L N/SW	5A05014-10	Soil	01/03/05 10:20	01/05/05 13:25
North P/L S/SW	5A05014-11	Soil	01/03/05 10:35	01/05/05 13:25
North Floor	5A05014-12	Soil	01/03/05 10:05	01/05/05 13:25
Stockpile North	5A05014-13	Soil	01/03/05 08:30	01/05/05 13:25
Stockpile South	5A05014-14	Soil	01/03/05 08:40	01/05/05 13:25
Stockpile East	5A05014-15	Soil	01/03/05 08:20	01/05/05 13:25
Stockpile West	5A05014-16	Soil	01/03/05 08:50	01/05/05 13:25

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
South Exc SW (5A05014-01) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51002	01/06/05	01/06/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*97.3 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*117 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	**J [7.83]**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	J
Diesel Range Organics >C12-C35	**30.8**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**30.8**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*99.4 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*77.0 %*	*70-130*		"	"	"	"		
South Exc Floor (5A05014-02) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51002	01/06/05	01/10/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**J [0.0124]**	0.0250	"	"	"	"	"	"	cdk	J
Xylene (p/m)	**0.101**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**0.0610**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*109 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**14.5**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**14.5**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*94.4 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*72.6 %*	*70-130*		"	"	"	"		
Middle Floor East (5A05014-03) Soil										
Benzene	**0.109**	0.0250	mg/kg dry	25	EA51002	01/06/05	01/06/05	EPA 8021B	cdk	
Toluene	**1.49**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**2.66**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**3.76**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**1.68**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*121 %*	*80-120*		"	"	"	"		*S-04*
Surrogate: 4-Bromofluorobenzene		*162 %*	*80-120*		"	"	"	"		*S-04*
Gasoline Range Organics C6-C12	**37.2**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**34.6**	10.0	"	"	"	"	"	"	JLH	

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Middle Floor East (5A05014-03) Soil										
Total Hydrocarbon C6-C35	**71.8**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Surrogate: 1-Chlorooctane		*96.4 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*72.0 %*	*70-130*		"	"	"	"		
Middle Floor South (5A05014-04) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51002	01/06/05	01/06/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*118 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**29.6**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**29.6**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*110 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*86.0 %*	*70-130*		"	"	"	"		
Middle Floor North (5A05014-05) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51002	01/06/05	01/06/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*99.8 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*117 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*80.8 %*	*70-130*		"	"	"	"		

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
North Exc Floor (5A05014-06) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51002	01/06/05	01/06/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*95.7 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*115 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*96.8 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*73.0 %*	*70-130*		"	"	"	"		
North Exc S/SW (5A05014-07) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*94.8 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*110 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*95.0 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*73.4 %*	*70-130*		"	"	"	"		
North Exc N/SW (5A05014-08) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*85.6 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*108 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
North Exc N/SW (5A05014-08) Soil										
Surrogate: 1-Chlorooctane		*99.4 %*	*70-130*		*EA50504*	*01/05/05*	*01/06/05*	*EPA 8015M*		
Surrogate: 1-Chlorooctadecane		*73.8 %*	*70-130*		"	"	"	"		
North P/L Floor (5A05014-09) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	**0.370**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**0.552**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**1.09**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**0.618**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*99.8 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*121 %*	*80-120*		"	"	"	"		*S-04*
Gasoline Range Organics C6-C12	**44.9**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**131**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**176**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*82.0 %*	*70-130*		"	"	"	"		
North P/L N/SW (5A05014-10) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/10/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*108 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*95.0 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*73.2 %*	*70-130*		"	"	"	"		

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
North P/L S/SW (5A05014-11) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/10/05	EPA 8021B	cdk	
Toluene	ND	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*95.0 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*75.8 %*	*70-130*		"	"	"	"		
North Floor (5A05014-12) Soil										
Benzene	**J [0.0174]**	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	J
Toluene	**0.315**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**0.169**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**0.0960**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**0.0608**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*117 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*94.8 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*74.2 %*	*70-130*		"	"	"	"		
Stockpile North (5A05014-13) Soil										
Benzene	**0.160**	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	**7.24**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**7.71**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**11.7**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**4.51**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*177 %*	*80-120*		"	"	"	"		*S-04*
Surrogate: 4-Bromofluorobenzene		*182 %*	*80-120*		"	"	"	"		*S-04*
Gasoline Range Organics C6-C12	**188**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**184**	10.0	"	"	"	"	"	"	JLH	

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Stockpile North (5A05014-13) Soil										
Total Hydrocarbon C6-C35	**372**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*80.4 %*	*70-130*		"	"	"	"		
Stockpile South (5A05014-14) Soil										
Benzene	**0.0418**	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	**1.30**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**2.10**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**2.89**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**1.21**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*132 %*	*80-120*		"	"	"	"		*S-04*
Gasoline Range Organics C6-C12	**81.2**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**98.5**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**180**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*80.4 %*	*70-130*		"	"	"	"		
Stockpile East (5A05014-15) Soil										
Benzene	**21.3**	0.200	mg/kg dry	200	EA51003	01/06/05	01/07/05	EPA 8021B	cdk	
Toluene	**340**	0.200	"	"	"	"	"	"	cdk	
Ethylbenzene	**257**	0.200	"	"	"	"	"	"	cdk	
Xylene (p/m)	**230**	0.200	"	"	"	"	"	"	cdk	
Xylene (o)	**92.9**	0.200	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*1060 %*	*80-120*		"	"	"	"		*S-04*
Surrogate: 4-Bromofluorobenzene		*151 %*	*80-120*		"	"	"	"		*S-04*
Gasoline Range Organics C6-C12	**10400**	50.0	mg/kg dry	5	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**9420**	50.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**19800**	50.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*49.6 %*	*70-130*		"	"	"	"		*S-06*
Surrogate: 1-Chlorooctadecane		*27.8 %*	*70-130*		"	"	"	"		*S-06*

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Stockpile West (5A05014-16) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/10/05	EPA 8021B	cdk	
Toluene	**0.133**	0.0250	"	"	"	"	"	"	cdk	
Ethylbenzene	**0.132**	0.0250	"	"	"	"	"	"	cdk	
Xylene (p/m)	**0.711**	0.0250	"	"	"	"	"	"	cdk	
Xylene (o)	**0.426**	0.0250	"	"	"	"	"	"	cdk	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		"	"	"	"		
Gasoline Range Organics C6-C12	**110**	10.0	mg/kg dry	1	EA50504	01/05/05	01/06/05	EPA 8015M	JLH	
Diesel Range Organics >C12-C35	**232**	10.0	"	"	"	"	"	"	JLH	
Total Hydrocarbon C6-C35	**342**	10.0	"	"	"	"	"	"	JLH	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		"	"	"	"		
Surrogate: 1-Chlorooctadecane		*80.6 %*	*70-130*		"	"	"	"		

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
South Exc SW (5A05014-01) Soil										
% Moisture	**13.4**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
South Exc Floor (5A05014-02) Soil										
% Moisture	**7.7**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Middle Floor East (5A05014-03) Soil										
% Moisture	**17.0**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Middle Floor South (5A05014-04) Soil										
% Moisture	**14.4**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Middle Floor North (5A05014-05) Soil										
% Moisture	**12.9**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North Exc Floor (5A05014-06) Soil										
% Moisture	**7.6**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North Exc S/SW (5A05014-07) Soil										
% Moisture	**21.0**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North Exc N/SW (5A05014-08) Soil										
% Moisture	**10.5**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North P/L Floor (5A05014-09) Soil										
% Moisture	**13.6**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North P/L N/SW (5A05014-10) Soil										
% Moisture	**5.3**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	

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

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
North P/L S/SW (5A05014-11) Soil										
% Moisture	**4.0**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
North Floor (5A05014-12) Soil										
% Moisture	**30.7**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Stockpile North (5A05014-13) Soil										
% Moisture	**11.1**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Stockpile South (5A05014-14) Soil										
% Moisture	**10.3**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Stockpile East (5A05014-15) Soil										
% Moisture	**8.6**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	
Stockpile West (5A05014-16) Soil										
% Moisture	**0.9**		%	1	EA50511	01/05/05	01/06/05	% calculation	LC	

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 EA50504 - Solvent Extraction (GC)				Analyst: JLH						
Blank (EA50504-BLK1)				Prepared & Analyzed: 01/05/05						
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	*38.5*		*mg/kg*	*50.0*		*77.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.6*		*"*	*50.0*		*73.2*	*70-130*			
Blank (EA50504-BLK2)				Prepared: 01/05/05 Analyzed: 01/06/05						
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	*39.3*		*mg/kg*	*50.0*		*78.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.6*		*"*	*50.0*		*75.2*	*70-130*			
LCS (EA50504-BS1)				Prepared & Analyzed: 01/05/05						
Gasoline Range Organics C6-C12	483	10.0	mg/kg wet	500		96.6	75-125			
Diesel Range Organics >C12-C35	481	10.0	"	500		96.2	75-125			
Total Hydrocarbon C6-C35	964	10.0	"	1000		96.4	75-125			
Surrogate: 1-Chlorooctane	*47.5*		*mg/kg*	*50.0*		*95.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.5*		*"*	*50.0*		*75.0*	*70-130*			
LCS (EA50504-BS2)				Prepared: 01/05/05 Analyzed: 01/06/05						
Gasoline Range Organics C6-C12	492	10.0	mg/kg wet	500		98.4	75-125			
Diesel Range Organics >C12-C35	488	10.0	"	500		97.6	75-125			
Total Hydrocarbon C6-C35	980	10.0	"	1000		98.0	75-125			
Surrogate: 1-Chlorooctane	*48.8*		*mg/kg*	*50.0*		*97.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.7*		*"*	*50.0*		*79.4*	*70-130*			
Calibration Check (EA50504-CCV1)				Prepared & Analyzed: 01/05/05						
Gasoline Range Organics C6-C12	540		mg/kg	500		108	80-120			
Diesel Range Organics >C12-C35	560		"	500		112	80-120			
Total Hydrocarbon C6-C35	1100		"	1000		110	80-120			
Surrogate: 1-Chlorooctane	*55.5*		*"*	*50.0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.6*		*"*	*50.0*		*75.2*	*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 EA50504 - Solvent Extraction (GC)				Analyst: JLH						
Calibration Check (EA50504-CCV2)				Prepared: 01/05/05 Analyzed: 01/06/05						
Gasoline Range Organics C6-C12	568		mg/kg	500		114	80-120			
Diesel Range Organics >C12-C35	575		"	500		115	80-120			
Total Hydrocarbon C6-C35	1140		"	1000		114	80-120			
Surrogate: 1-Chlorooctane	*59.5*		*"*	*50.0*		*119*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.9*		*"*	*50.0*		*77.8*	*70-130*			
Matrix Spike (EA50504-MS1)	**Source: 5A04009-01**			Prepared & Analyzed: 01/05/05						
Gasoline Range Organics C6-C12	496	10.0	mg/kg dry	546	11.5	88.7	75-125			
Diesel Range Organics >C12-C35	606	10.0	"	546	66.5	98.8	75-125			
Total Hydrocarbon C6-C35	1100	10.0	"	1090	78.0	93.8	75-125			
Surrogate: 1-Chlorooctane	*56.6*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.5*		*"*	*50.0*		*79.0*	*70-130*			
Matrix Spike (EA50504-MS2)	**Source: 5A05014-08**			Prepared: 01/05/05 Analyzed: 01/06/05						
Gasoline Range Organics C6-C12	618	10.0	mg/kg dry	559	ND	111	75-125			
Diesel Range Organics >C12-C35	644	10.0	"	559	ND	115	75-125			
Total Hydrocarbon C6-C35	1260	10.0	"	1120	ND	112	75-125			
Surrogate: 1-Chlorooctane	*56.0*		*mg/kg*	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.7*		*"*	*50.0*		*81.4*	*70-130*			
Matrix Spike Dup (EA50504-MSD1)	**Source: 5A04009-01**			Prepared: 01/05/05 Analyzed: 01/06/05						
Gasoline Range Organics C6-C12	497	10.0	mg/kg dry	546	11.5	88.9	75-125	0.201	20	
Diesel Range Organics >C12-C35	650	10.0	"	546	66.5	107	75-125	7.01	20	
Total Hydrocarbon C6-C35	1150	10.0	"	1090	78.0	98.3	75-125	4.44	20	
Surrogate: 1-Chlorooctane	*56.8*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.5*		*"*	*50.0*		*93.0*	*70-130*			
Matrix Spike Dup (EA50504-MSD2)	**Source: 5A05014-08**			Prepared: 01/05/05 Analyzed: 01/06/05						
Gasoline Range Organics C6-C12	643	10.0	mg/kg dry	559	ND	115	75-125	3.97	20	
Diesel Range Organics >C12-C35	644	10.0	"	559	ND	115	75-125	0.00	20	
Total Hydrocarbon C6-C35	1290	10.0	"	1120	ND	115	75-125	2.35	20	
Surrogate: 1-Chlorooctane	*56.5*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.1*		*"*	*50.0*		*82.2*	*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 EA51002 - EPA 5030C (GC)				Analyst: cdk						
Blank (EA51002-BLK1)				Prepared & Analyzed: 01/06/05						
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	*90.1*		*ug/kg*	*100*		*90.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*119*		"	*100*		*119*	*80-120*			
LCS (EA51002-BS1)				Prepared & Analyzed: 01/06/05						
Benzene	87.5		ug/kg	100		87.5	80-120			
Toluene	87.4		"	100		87.4	80-120			
Ethylbenzene	107		"	100		107	80-120			
Xylene (p/m)	239		"	200		120	80-120			
Xylene (o)	119		"	100		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	*101*		"	*100*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		"	*100*		*117*	*80-120*			
Calibration Check (EA51002-CCV1)				Prepared: 01/06/05 Analyzed: 01/09/05						
Benzene	99.9		ug/kg	100		99.9	80-120			
Toluene	104		"	100		104	80-120			
Ethylbenzene	99.4		"	100		99.4	80-120			
Xylene (p/m)	215		"	200		108	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*117*		"	*100*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		"	*100*		*115*	*80-120*			
Matrix Spike (EA51002-MS1)	**Source: 5A05014-06**			Prepared & Analyzed: 01/06/05						
Benzene	90.4		ug/kg	100	ND	90.4	80-120			
Toluene	96.2		"	100	ND	96.2	80-120			
Ethylbenzene	109		"	100	ND	109	80-120			
Xylene (p/m)	239		"	200	ND	120	80-120			
Xylene (o)	118		"	100	ND	118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		"	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		"	*100*		*115*	*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 EA51002 - EPA 5030C (GC)				Analyst: cdk						
Matrix Spike Dup (EA51002-MSD1)	**Source: 5A05014-06**			Prepared & Analyzed: 01/06/05						
Benzene	93.2		ug/kg	100	ND	93.2	80-120	3.05	20	
Toluene	101		"	100	ND	101	80-120	4.87	20	
Ethylbenzene	113		"	100	ND	113	80-120	3.60	20	
Xylene (p/m)	239		"	200	ND	120	80-120	0.00	20	
Xylene (o)	113		"	100	ND	113	80-120	4.33	20	
Surrogate: a,a,a-Trifluorotoluene	*118*		"	*100*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		"	*100*		*114*	*80-120*			
Batch EA51003 - EPA 5030C (GC)				Analyst: cdk						
Blank (EA51003-BLK1)				Prepared & Analyzed: 01/06/05						
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	*84.8*		*ug/kg*	*100*		*84.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*97.7*		"	*100*		*97.7*	*80-120*			
LCS (EA51003-BS1)				Prepared & Analyzed: 01/06/05						
Benzene	91.3		ug/kg	100		91.3	80-120			
Toluene	95.5		"	100		95.5	80-120			
Ethylbenzene	104		"	100		104	80-120			
Xylene (p/m)	231		"	200		116	80-120			
Xylene (o)	112		"	100		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		"	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*119*		"	*100*		*119*	*80-120*			

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

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 EA51003 - EPA 5030C (GC)				Analyst: cdk						
Calibration Check (EA51003-CCV1)				Prepared: 01/06/05 Analyzed: 01/09/05						
Benzene	99.9		ug/kg	100		99.9	80-120			
Toluene	104		"	100		104	80-120			
Ethylbenzene	99.4		"	100		99.4	80-120			
Xylene (p/m)	215		"	200		108	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*117*		"	*100*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		"	*100*		*115*	*80-120*			
Matrix Spike (EA51003-MS1)		**Source: 5A05015-08**		Prepared: 01/06/05 Analyzed: 01/09/05						
Benzene	101		ug/kg	100	ND	101	80-120			
Toluene	106		"	100	ND	106	80-120			
Ethylbenzene	106		"	100	ND	106	80-120			
Xylene (p/m)	232		"	200	ND	116	80-120			
Xylene (o)	105		"	100	ND	105	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		"	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*110*		"	*100*		*110*	*80-120*			
Matrix Spike Dup (EA51003-MSD1)		**Source: 5A05015-08**		Prepared: 01/06/05 Analyzed: 01/09/05						
Benzene	99.0		ug/kg	100	ND	99.0	80-120	2.00	20	
Toluene	104		"	100	ND	104	80-120	1.90	20	
Ethylbenzene	107		"	100	ND	107	80-120	0.939	20	
Xylene (p/m)	236		"	200	ND	118	80-120	1.71	20	
Xylene (o)	110		"	100	ND	110	80-120	4.65	20	
Surrogate: a,a,a-Trifluorotoluene	*115*		"	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*119*		"	*100*		*119*	*80-120*			

Basin Environmental Services	Project: Lea to Dublin 8 inch	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS #2004-00223	**Reported:**
Lovington NM, 88260	Project Manager: Ken Dutton	01/11/05 10:08

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 EA50511 - General Preparation (Prep)				Analyst: LC						
Blank (EA50511-BLK1)				Prepared: 01/05/05 Analyzed: 01/06/05						
% Moisture	0.001		%							
Duplicate (EA50511-DUP1)	**Source: 5A04009-01**			Prepared: 01/05/05 Analyzed: 01/06/05						
% Moisture	8.9		%		8.4			5.78	20	

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

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 1/11/05

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
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: BASIN ENV SVC.
Company Address: P.O. BOX 301
City/State/Zip: LOVINGTON, NM 88260
Telephone No: (505) 441-2124
Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: LEA TO DUBLIN 8"
Project #: EMS: 2004-00223
Project Loc: LEA COUNTY, NM
PO #: PAA

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 / 1005 / 1006	TOTAL: TPH: 418.1 / 8015M / 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 or BTEX 8260	RCI	N.O.R.M.			RUSH TAT (Pre-Schedule)	Standard TAT
5405014		2005		4																										
-01	SOUTH EXC SW	03 JAN	0815	1	X									X		X								X					X	
-02	SOUTH EXC FLOOR		0900																											
-03	MIDDLE FLOOR EAST		0915																											
-04	MIDDLE FLOOR SOUTH		0925																											
-05	MIDDLE FLOOR NORTH		0918																											
-06	NORTH EXC FLOOR		0910																											
-07	NORTH EXC S/SW		0945																											
-08	NORTH EXC N/SW		0955																											
-09	NORTH P/L FLOOR		1008																											
-10	NORTH P/L N/SW		1020																											

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	05 JAN 05	0820		1/5/05	8:20
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
	1/5/05	13:25		1-5-05	1325

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: BASIN ENV SVC

Company Address: P.O. BOX 301

City/State/Zip: LOVINGTON, NM 88260

Telephone No: (505) 441-2124

Fax No: (505) 396-1429

Sampler Signature: Ken Dutton

Project Name: LEA TO DUBLIN 8"

Project #: EMS: 2004-00223

Project Loc: LEA COUNTY, NM

PO #: PAA

5A05014

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Date Sampled (2005)	Time Sampled	No. of Containers (4oz glass)	Ice	HNO$_3$	HCl	NaOH	H$_2$SO$_4$	None	Other (Specify)	Water	Sludge	Soil	Other (specify)	TPH: 418.1 8015M 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 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule)	Standard TAT
-11	NORTH P/L S/SW	03JAN	1035	1	X									X		X							X				X
-12	NORTH FLOOR		1005																								
-13	STOCKPILE NORTH		0830																								
-14	STOCKPILE SOUTH		0840																								
-15	STOCKPILE EAST		0820																								
-16	STOCKPILE WEST	↓	0850	↓	↓									↓		↓							↓				↓

Special Instructions:

Sample Containers Intact? (Y) N

Temperature Upon Receipt: -1.5°C

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	05JAN05	0820	[signature]	1/5/05	8:20

Relinquished by:	Date	Time	Received by ELOT:	Date	Time
[signature]	1/5/05	13125	Jeanne McMurry	1-5-05	1325

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

Client: Basin Env. Svc.

Date/Time: 01-05-05 @ 1325

Order #: 5A05014

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:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Lea to Dublin 8 inch

Project Number: 2004-00223

Location: Lea County, NM

Lab Order Number: 5A18004

Report Date: 01/19/05

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
North P/L Floor, 15'	5A18004-01	Soil	01/14/05 13:05	01/18/05 10:00

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

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
North P/L Floor, 15' (5A18004-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EA51806	01/18/05	01/19/05	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		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA51808	01/18/05	01/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	**112**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**112**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*98.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
North P/L Floor, 15' (5A18004-01) Soil									
% Moisture	**3.7**		%	1	EA51807	01/18/05	01/19/05	% calculation	

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

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

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 EA51806 - EPA 5030C (GC)										
Blank (EA51806-BLK1)				Prepared & Analyzed: 01/17/05						
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	*112*		*ug/kg*	*100*		*112*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*113*		*"*	*100*		*113*	*80-120*			
LCS (EA51806-BS1)				Prepared & Analyzed: 01/17/05						
Benzene	108		ug/kg	100		108	80-120			
Toluene	106		"	100		106	80-120			
Ethylbenzene	101		"	100		101	80-120			
Xylene (p/m)	220		"	200		110	80-120			
Xylene (o)	103		"	100		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	*119*		*"*	*100*		*119*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*118*		*"*	*100*		*118*	*80-120*			
Calibration Check (EA51806-CCV1)				Prepared & Analyzed: 01/17/05						
Benzene	106		ug/kg	100		106	80-120			
Toluene	105		"	100		105	80-120			
Ethylbenzene	102		"	100		102	80-120			
Xylene (p/m)	217		"	200		108	80-120			
Xylene (o)	103		"	100		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	*116*		*"*	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*80-120*			
Matrix Spike (EA51806-MS1)	**Source: 5A14015-06**			Prepared & Analyzed: 01/17/05						
Benzene	111		ug/kg	100	ND	111	80-120			
Toluene	112		"	100	ND	112	80-120			
Ethylbenzene	108		"	100	ND	108	80-120			
Xylene (p/m)	233		"	200	ND	116	80-120			
Xylene (o)	106		"	100	ND	106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*113*		*"*	*100*		*113*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*116*		*"*	*100*		*116*	*80-120*			

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 EA51806 - EPA 5030C (GC)										
Matrix Spike Dup (EA51806-MSD1)	**Source: 5A14015-06**			Prepared & Analyzed: 01/17/05						
Benzene	109		ug/kg	100	ND	109	80-120	1.82	20	
Toluene	110		"	100	ND	110	80-120	1.80	20	
Ethylbenzene	112		"	100	ND	112	80-120	3.64	20	
Xylene (p/m)	233		"	200	ND	116	80-120	0.00	20	
Xylene (o)	112		"	100	ND	112	80-120	5.50	20	
Surrogate: a,a,a-Trifluorotoluene	*116*		"	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		"	*100*		*114*	*80-120*			
Batch EA51808 - Solvent Extraction (GC)										
Blank (EA51808-BLK1)				Prepared & Analyzed: 01/18/05						
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	*37.4*		*mg/kg*	*50.0*		*74.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.0*		"	*50.0*		*74.0*	*70-130*			
Blank (EA51808-BLK2)				Prepared: 01/18/05 Analyzed: 01/19/05						
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	*41.6*		*mg/kg*	*50.0*		*83.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.1*		"	*50.0*		*74.2*	*70-130*			
LCS (EA51808-BS1)				Prepared & Analyzed: 01/18/05						
Gasoline Range Organics C6-C12	441	10.0	mg/kg wet	500		88.2	75-125			
Diesel Range Organics >C12-C35	470	10.0	"	500		94.0	75-125			
Total Hydrocarbon C6-C35	911	10.0	"	1000		91.1	75-125			
Surrogate: 1-Chlorooctane	*41.2*		*mg/kg*	*50.0*		*82.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.9*		"	*50.0*		*71.8*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA51808 - Solvent Extraction (GC)										
LCS (EA51808-BS2)				Prepared: 01/18/05 Analyzed: 01/19/05						
Gasoline Range Organics C6-C12	491	10.0	mg/kg wet	500		98.2	75-125			
Diesel Range Organics >C12-C35	504	10.0	"	500		101	75-125			
Total Hydrocarbon C6-C35	995	10.0	"	1000		99.5	75-125			
Surrogate: 1-Chlorooctane	*50.6*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.7*		"	*50.0*		*87.4*	*70-130*			
Calibration Check (EA51808-CCV1)				Prepared & Analyzed: 01/18/05						
Gasoline Range Organics C6-C12	468		mg/kg	500		93.6	80-120			
Diesel Range Organics >C12-C35	525		"	500		105	80-120			
Total Hydrocarbon C6-C35	993		"	1000		99.3	80-120			
Surrogate: 1-Chlorooctane	*52.8*		"	*50.0*		*106*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.1*		"	*50.0*		*96.2*	*70-130*			
Calibration Check (EA51808-CCV2)				Prepared: 01/18/05 Analyzed: 01/19/05						
Gasoline Range Organics C6-C12	457		mg/kg	500		91.4	80-120			
Diesel Range Organics >C12-C35	514		"	500		103	80-120			
Total Hydrocarbon C6-C35	971		"	1000		97.1	80-120			
Surrogate: 1-Chlorooctane	*49.4*		"	*50.0*		*98.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.2*		"	*50.0*		*98.4*	*70-130*			
Matrix Spike (EA51808-MS1)	**Source: 5A17016-01**			Prepared & Analyzed: 01/18/05						
Gasoline Range Organics C6-C12	467	10.0	mg/kg dry	506	ND	92.3	75-125			
Diesel Range Organics >C12-C35	524	10.0	"	506	ND	104	75-125			
Total Hydrocarbon C6-C35	991	10.0	"	1010	ND	98.1	75-125			
Surrogate: 1-Chlorooctane	*60.0*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*62.3*		"	*50.0*		*125*	*70-130*			
Matrix Spike (EA51808-MS2)	**Source: 5A18006-02**			Prepared: 01/18/05 Analyzed: 01/19/05						
Gasoline Range Organics C6-C12	484	10.0	mg/kg dry	525	ND	92.2	75-125			
Diesel Range Organics >C12-C35	498	10.0	"	525	ND	94.9	75-125			
Total Hydrocarbon C6-C35	982	10.0	"	1050	ND	93.5	75-125			
Surrogate: 1-Chlorooctane	*53.9*		*mg/kg*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.3*		"	*50.0*		*101*	*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 EA51808 - Solvent Extraction (GC)										
Matrix Spike Dup (EA51808-MSD1)	**Source: 5A17016-01**			Prepared & Analyzed: 01/18/05						
Gasoline Range Organics C6-C12	494	10.0	mg/kg dry	506	ND	97.6	75-125	5.62	20	
Diesel Range Organics >C12-C35	549	10.0	"	506	ND	108	75-125	4.66	20	
Total Hydrocarbon C6-C35	1040	10.0	"	1010	ND	103	75-125	4.83	20	
Surrogate: 1-Chlorooctane	*58.9*		*mg/kg*	*50.0*		*118*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.0*		*"*	*50.0*		*128*	*70-130*			
Matrix Spike Dup (EA51808-MSD2)	**Source: 5A18006-02**			Prepared: 01/18/05 Analyzed: 01/19/05						
Gasoline Range Organics C6-C12	499	10.0	mg/kg dry	525	ND	95.0	75-125	3.05	20	
Diesel Range Organics >C12-C35	522	10.0	"	525	ND	99.4	75-125	4.71	20	
Total Hydrocarbon C6-C35	1020	10.0	"	1050	ND	97.1	75-125	3.80	20	
Surrogate: 1-Chlorooctane	*57.6*		*mg/kg*	*50.0*		*115*	*70-130*			
Surrogate: 1-Chlorooctadecane	*53.9*		*"*	*50.0*		*108*	*70-130*			

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

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 EA51807 - General Preparation (Prep)										
Blank (EA51807-BLK1)				Prepared: 01/18/05 Analyzed: 01/19/05						
% Moisture	0.001		%							
Duplicate (EA51807-DUP1)		**Source: 5A17017-01**		Prepared: 01/18/05 Analyzed: 01/19/05						
% Moisture	4.0		%		3.9			2.53	20	

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

Plains All American EH & S	Project: Lea to Dublin 8 inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2004-00223	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	01/19/05 17:00

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 1/19/2005

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

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: BASIN ENV SVC
Company Address: PO BOX 301
City/State/Zip: LOVINGTON NM 88260
Telephone No: (505) 441-2124 Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: LEA TO DUBLIN 8"
Project #: EMS: 2004-00223
Project Loc: LEA COUNTY, NM
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:	Analyze For: TOTAL: TPH: 418.1 / 8015M	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
5A18004		2005																										
-01	NORTH P/L FLOOR, 15'	14JAN	1305	1	X									X			X							X				X

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt: -0.5°C
Laboratory Comments: 4oz glass on ice

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	18JAN05	1000			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne McMurrey	01-18-05	1000

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

Client: Basin Environmental

Date/Time: 01-18-05 @ 1000

Order #: 5A18004

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-0.5 C
Shipping container/cooler in good condition?	Yes	No	N/A
Custody Seals intact on shipping container/cooler?	Yes	No	Not present N/A
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 Request Approval for Backfill of Excavation

Basin Environmental Service Technologies, LLC

P. O. Box 301
Lovington, New Mexico 88260
[illegible]
Office: (505) 396-2378 Fax: (505) 396-1429

Effective Solutions

16 May 2005

Mr. Larry Johnson
New Mexico Oil Conservation Division
Hobbs District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Request Approval for Backfill of Excavation
Plains Marketing, L. P. (C-141, dated 07 Dec 04)
Lea to Dublin 8"
Unit G (SW ¼, NE ¼) Section 28, Township 20 South, Range 37 East
Lea County, New Mexico

Dear Mr. Johnson:

Basin Environmental Services (Basin), on behalf of Plains Marketing, L. P. (Plains), is submitting this request for approval to backfill the Lea to Dublin 8" remediation site at the above referenced location. As indicated on the attached Soil Chemistry Table and Sampling Location Site Map, confirmation soil samples are below New Mexico Oil Conservation Division (NMOCD) standards (<100 ppm) for the site, with the exception of the North P/L Floor, 15 feet sample which is 112 mg/kg TPH concentration. Based on a previous discussion of this remediation site with yourself, you stated that a TPH concentration of 112 mg/kg would be acceptable for closure based on the reduction from a TPH concentration of 176 mg/kg to 112 mg/kg. Plains and Millard Deck Estates have reached an agreement to purchase backfill from the Estate. The impacted soil will be transported to the Plains Marketing Lea Station Land Farm. A C-138 will be submitted once your approval is received.

Basin responded and clamped the pipeline release on 04 Dec 04, located on the Lea to Dublin 8" Pipeline. The impacted soils were excavated and stockpiled on a poly liner. As reported on the C-141, dated 07 Dec 04, approximately 910 barrels of crude oil were released and 860 barrels recovered. Excavation of the visually stained area was accomplished and confirmation soil samples were collected for laboratory analysis. Initial soil sampling results reported concentrations of total petroleum hydrocarbons (THP) and benzene, toluene, ethyl-benzene, and xylenes (BTEX) below NMOCD

with the exception of the North P/L Floor, 15 feet sample, which is 112 mg/kg. Backfilling of the site will begin once your approval is received.

Upon completion of the backfilling activities a Site Investigation Plan/Closure Request will be submitted to the Hobbs District 1, NMOCD office.

Should you have any questions or comments, please contact me at (505) 441-2124.

Sincerely,

Ken Dutton
Basin Environmental Services

Enclosures: Site Map, Sampling Locations
Soil Chemistry Table
NMOCD C-141

Appendix D

NMOCD C-141

District I
625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 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 Lea to Dublin	Facility Type 8"Steel Pipeline

Surface Owner Millard Deck Estate	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
G	28	20S	37E					Lea

Latitude 32° 32'46.8" Longitude 103° 15' 19.5"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 910 barrels	Volume Recovered 860 barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence 12-04-04 @6:57	Date and Hour of Discovery 12-4-04@ 7:00
Was Immediate Notice Given? x Yes ☐ No ☐ Not Required	If YES, To Whom? Gary Wink	
By Whom? Camille Reynolds	Date and Hour 12-4-04@18:00	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
Hobbs
OCD

Describe Cause of Problem and Remedial Action Taken.* Failure of a 2" valve caused release of sour crude. The valve was replaced to mitigate the release. The line is a 8 inch steel transmission pipeline that produces approximately 872 barrels per hour. The pressure on the line is approximately 369 psi and the gravity of the sour crude oil is 36. 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 150' x 128'.

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: 12-7-04 Phone:505-441-0965

Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐