

# Basin Environmental Service Technologies, LLC

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



JEFFREY OK  
8.4.05  
To Client & BLM

## PRELIMINARY SITE INVESTIGATION REPORT and REMEDIATION/CLOSURE PLAN

IRP 2B

**PLAINS MARKETING, L.P.**  
**Young Deep to Lynch Idle 10" BLM**  
**Lea County, New Mexico**  
**Plains EMS # 2005-00162**  
**UNIT K (NE/SW), Section 18, Township 20S, Range 34E**  
**Latitude, Longitude 32°, 34', 15.8" North, 103°, 36', 02.7" West**

Prepared For:

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



Prepared By:

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

25 July 2005

  
Ken Dutton

Basin Environmental Service Technologies, LLC

## TABLE OF CONTENTS

Introduction	1
Summary of Field Activities	1
New Mexico Oil Conservation Division (NMOCD) Soil Classification	2
Distribution of Hydrocarbons in the Unsaturated Zone	2
Archeological Survey Results	3
Recommendations for Remediation	3
QA/QC Procedures	3
Soil Sampling	3
Decontamination of Equipment	3
Laboratory Protocol	4
Limitations	4
Distribution	5

### Tables

Table 1: Soil Chemistry

### Figures

Figure 1: Site Location Map  
Figure 2: Site Map  
Figure 3: Digital Photos

### Appendices

Appendix A: New Mexico Office of the State Engineer Water Well Database Report  
Appendix B: Environmental Laboratory of Texas Analytical Results  
Appendix C: BLM Report of Undesirable Event  
Appendix D: Boone Archeology Survey Report  
Appendix E: NMOCD C-141

## **INTRODUCTION**

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the Young Deep to Lynch Idle 10-inch BLM Pipeline on 07 July 2005. The actual release point was not visually apparent on the Young Deep to Lynch Idle 10-inch Pipeline; however, the suspected weld failure was closely monitored and crude oil seepage ceased shortly after Basin responded to the pipeline release. The saturated impacted soils were excavated and temporarily stockpiled on a poly liner.

This site is located in Unit K (NE/SW), Section 18, Township 20 South, Range 34 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1) on land owned by the Bureau of Land Management (BLM). The latitude is 32°, 34', 15.8" North and the longitude is 103°, 36', 02.7" West. The site is characterized by a right-of-way for the pipeline in an undulating sanddune pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 28 feet long by 14 feet wide. Approximately 8 barrels of crude oil were released from the Plains Pipeline and 0 barrels were recovered.

An Emergency One-Call was initiated 07 July 2005 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1, and Ms Trish Badbear, BLM, Hobbs, New Mexico Office, were verbally notified of the release on 07 July 2005. A BLM Report of Undesirable Event form was completed by Plains and submitted to the BLM, Hobbs, New Mexico Office (see Appendix C, Report of Undesirable Event).

## **SUMMARY OF FIELD ACTIVITIES**

On 07 July 2005, Basin arrived at the Young Deep to Lynch Idle 10-inch BLM Pipeline release to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. The actual release point was not visually apparent on the Young Deep to Lynch Idle 10-inch Pipeline; however, the suspected weld failure was closely monitored and crude oil seepage ceased shortly after Basin responded to the pipeline release. Under the direction of Plains operations personnel, the Young Deep to Lynch Idle 10-inch Pipeline was de-oiled following the crude oil release.

The release point and flow path were excavated to approximately 60 feet long by 40 feet wide and 12 feet below ground surface (bgs) (see Figure 2, Site Map). All excavated soil was placed on a poly liner for future remedial action. On 14 July 2005, confirmation soil samples were collected and screened with a Photoionization Detector (PID), calibrated 14 July 2005 (see Figure 2, Site Map). The selected soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX),

and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Laboratory results of the confirmation soil samples indicate that the excavated area is below NMOCD regulatory standards (see Table 1, Soil Chemistry Table).

### **NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION**

A search of the New Mexico State Engineers database revealed no groundwater depth information for that section. However, Section 24 in the same Township and Range contains groundwater information revealing an average depth to groundwater of 270 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 0 –9, which sets the remediation levels at:

Benzene:	10 ppm
BTEX:	50 ppm
TPH:	5000 ppm

### **DISTRIBUTION OF HYDROCARBONS IN THE UNSATURATED ZONE**

The release point and flow path areas were excavated to a depth of approximately 12 feet bgs and no visual evidence of crude oil impact was evident on the floor or sidewalls 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 14 July 2005; field screened with a PID and were analyzed for concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix C).

Analytical results indicated detectable BTEX concentrations were below NMOCD regulatory standards for the South Sidewall and Ramp East soil samples at a depth of 6 and 3 feet bgs, respectively. Analytical results indicated BTEX concentrations were not detected above the laboratory detection limits on the remaining confirmation soil samples. Analytical results indicated detectable TPH concentrations were below NMOCD regulatory standards for the North Sidewall, Excavation Floor, West Sidewall, Pipeline Wall, Excavation Floor East P/L, and Excavation Floor West P/L soil samples at a depth of 6, 12, 6, 6, 8, and 8 feet bgs, respectively. Analytical results indicated TPH concentrations were not detected above the laboratory detections limits on the remaining confirmation soil samples.

## **ARCHEOLOGICAL SURVEY RESULTS**

Boone Archeological Services, LLC, Carlsbad, New Mexico, conducted an archeological survey of the site, in accordance with BLM directives. Results of the archeological survey did not find evidence of cultural resources present, and therefore, recommended archeological clearance. A copy of the archeological survey is included in Appendix D.

## **RECOMMENDATIONS FOR REMEDIATION/CLOSURE**

Approximately 1100 cubic yards of impacted soil has been excavated and stockpiled on-site resulting from the emergency response and excavation of the release point and flow path. Approximately 800 cubic yards of segregated clean overburden required bulldozing aside to allow an area for stockpiling the impacted soils and access to the release point and flow path. Based on the analytical results, which indicate the excavation is below NMOCD regulatory standards, Basin and Plains propose to blend the excavated impacted soils with the clean segregated overburden, collect confirmation soil samples from the blended material to ensure TPH concentrations of less than 5,000 mg/kg and backfill the excavation with the blended soils. The backfilled excavation will be contoured to the original rangeland grade surrounding the site and reseeded with BLM approved grass seed. A request for closure will be submitted to the Hobbs District 1 office, upon completion of backfilling activities. Based on the results of the remediation activities conducted, Plains requests approval from the OCD and BLM to implement these proposed final remediation and site closure activities.

## **QA/QC PROCEDURES**

### **Soil Sampling**

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

The soil samples were analyzed as follows:

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

### **Decontamination Of Equipment**

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

## **Laboratory Protocol**

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

## **LIMITATIONS**

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

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

**DISTRIBUTION**

- Copy 1:            Jeff Dann  
                     Plains All American  
                     333 Clay Street  
                     Suite 1600  
                     Houston, Texas 77002  
                     [jpdann@paalp.com](mailto:jpdann@paalp.com)
- Copy 2:            Camille Reynolds  
                     Plains All American  
                     214 W. C-61  
                     Hobbs, New Mexico 88240  
                     [cjreynolds@paalp.com](mailto:cjreynolds@paalp.com)
- Copy 3:            Mr. Larry Johnson  
                     New Mexico Oil Conservation Division  
                     1625 N. French Drive  
                     Hobbs, New Mexico 88240  
                     [Larry.Johnson@state.nm.us](mailto:Larry.Johnson@state.nm.us)
- Copy 4:            Ms Trish Badbear  
                     Bureau of Land Management  
                     Hobbs Field Office  
                     414 W. Taylor  
                     Hobbs, New Mexico 88240
- Copy 5:            Basin Environmental Service Technologies LLC  
                     P. O. Box 301  
                     Lovington, New Mexico 88260  
                     [kdutton@basinenv.com](mailto:kdutton@basinenv.com)
- Copy   3

# TABLES

**TABLE 1**

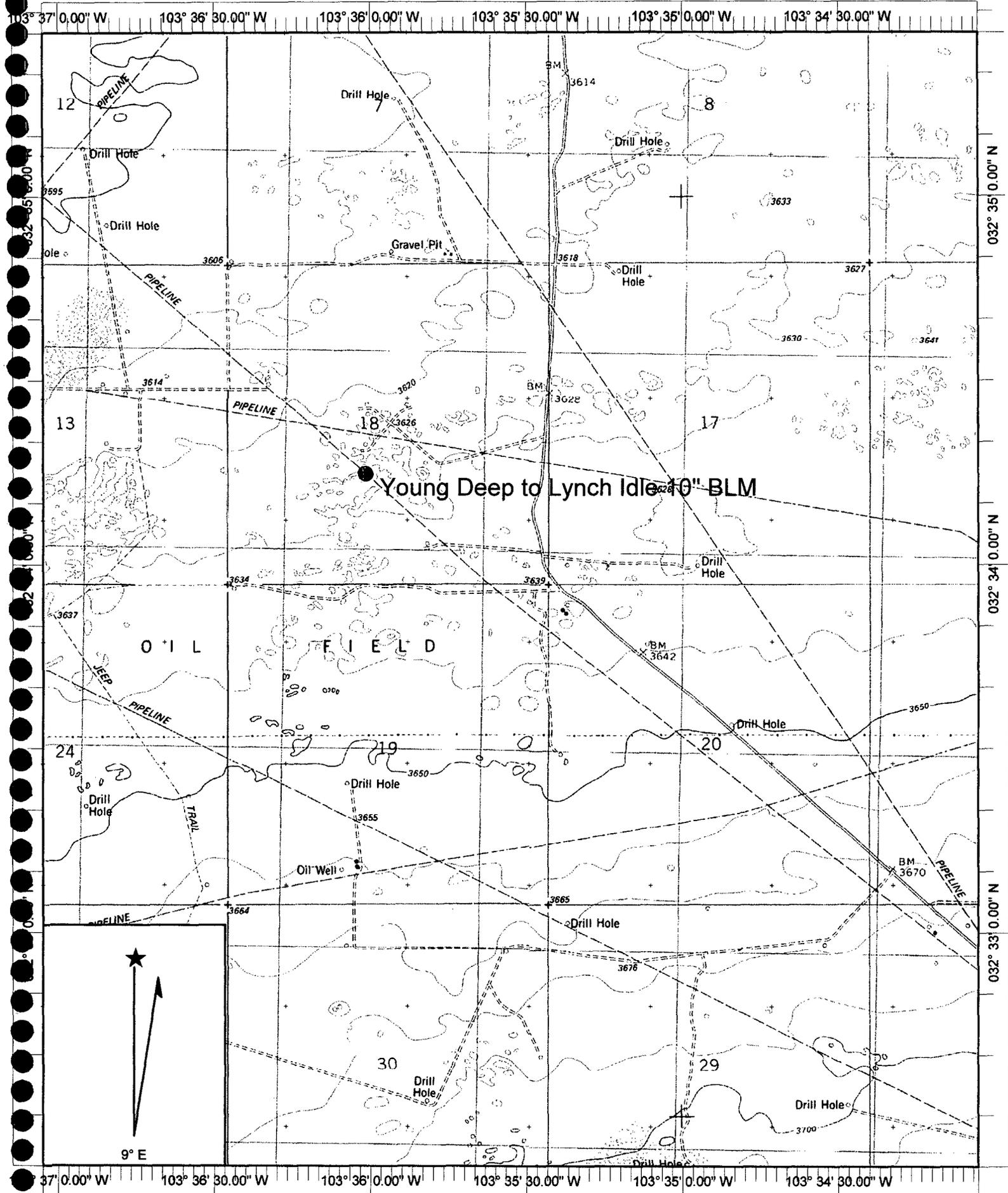
**SOIL CHEMISTRY TABLE**



# FIGURES

**FIGURE 1**

**SITE LOCATION MAP**



Young Deep to Lynch Idle 10" BLM

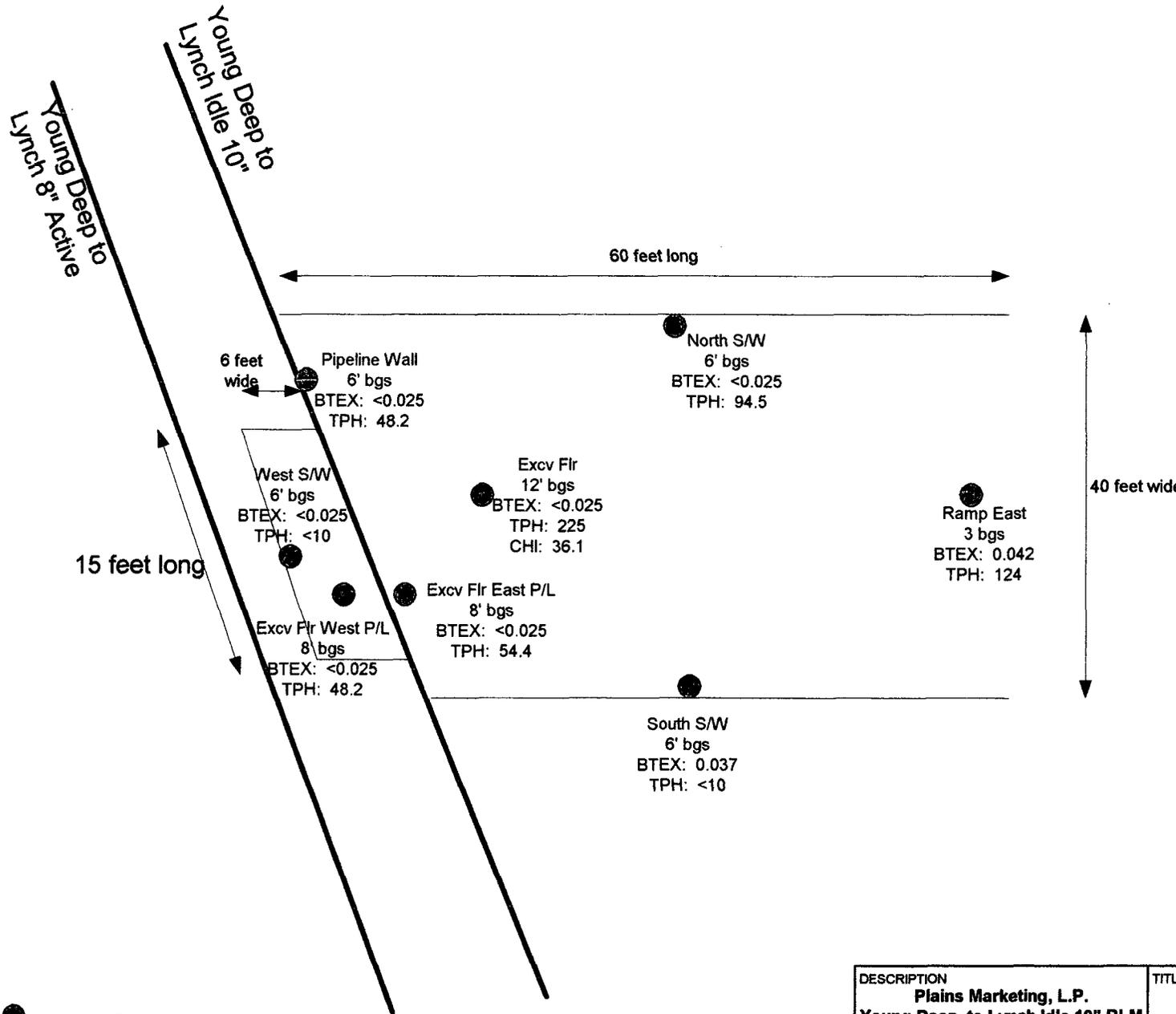
O I L F I E L D

Name: LEA  
 Date: 7/28/2005  
 Scale: 1 inch equals 2000 feet

Location: 032° 33' 54.3" N 103° 35' 33.5" W  
 Caption: Figure 1, Site Location Map  
 Plains Marketing, L. P.  
 Young Deep to Lynch Idle 10" BLM

**FIGURE 2**

**SITE MAP**

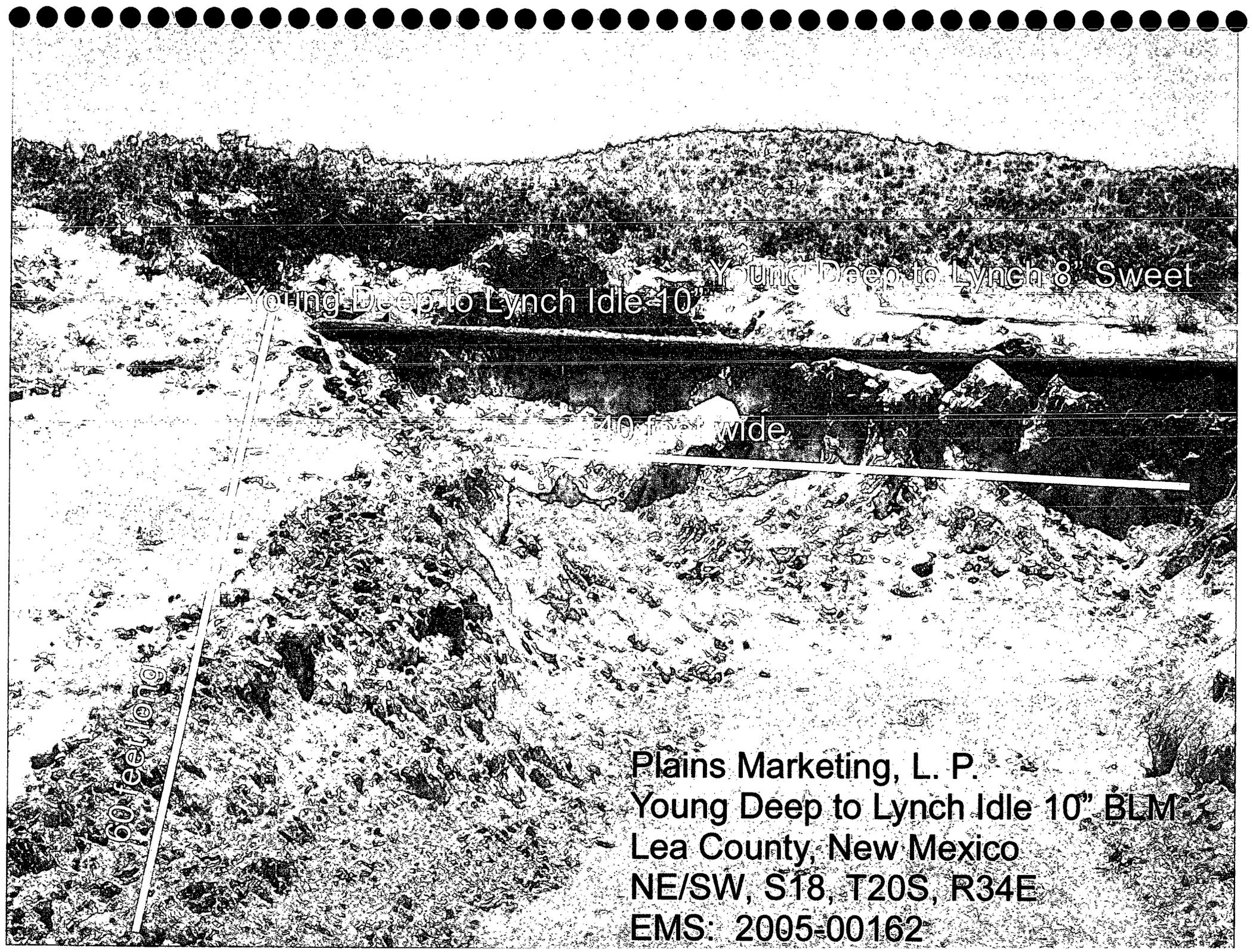


● Sampling Points

DESCRIPTION	TITLE	DRAWN BY
Plains Marketing, L.P. Young Deep to Lynch Idle 10" BLM NE/SW S18, T20S, R34E Lea County, New Mexico	Figure 2, Site Map	Basin Environmental Services kad

**FIGURE 3**

**DIGITAL PHOTOS**

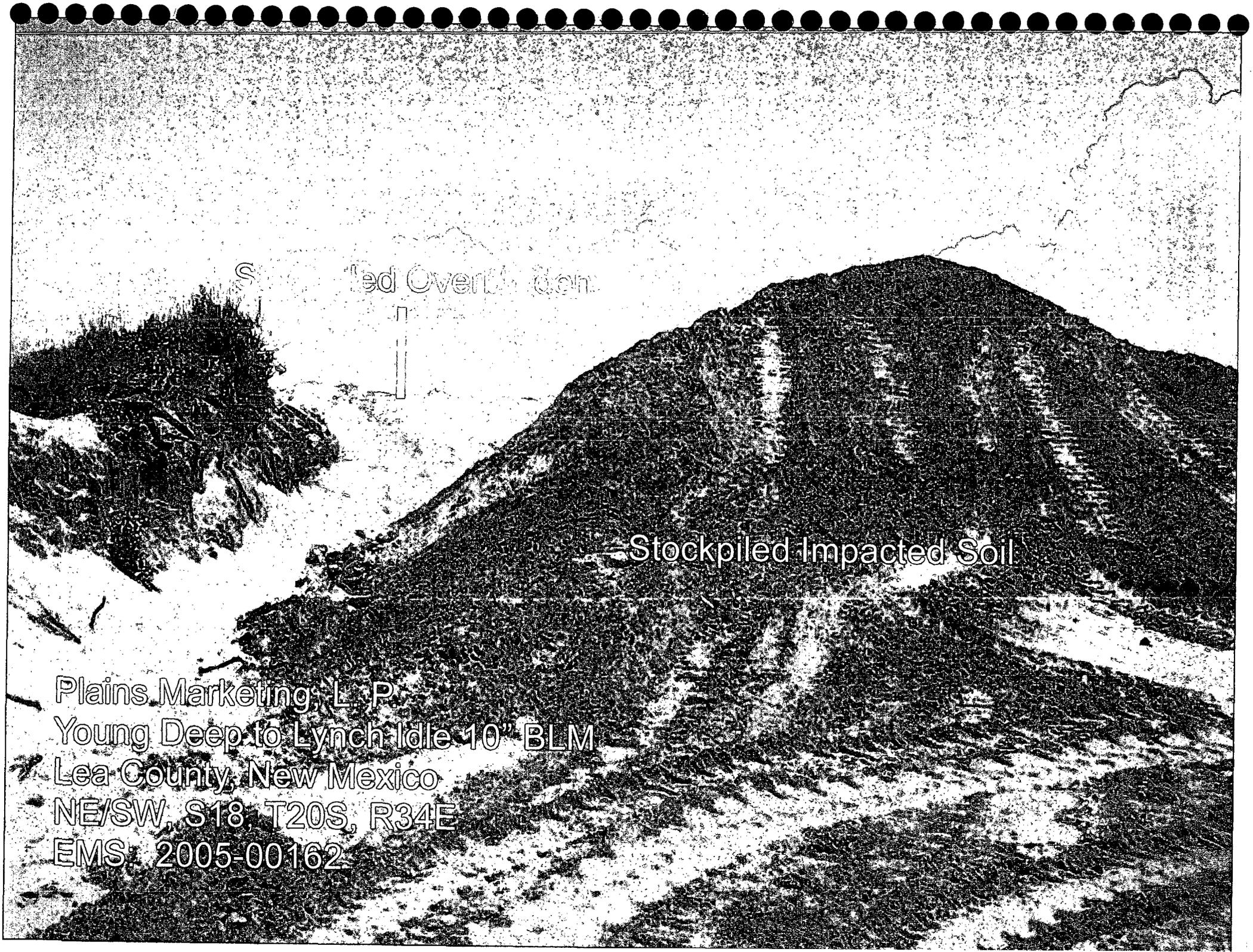


Young Deep to Lynch Idle 10"      Young Deep to Lynch 8" Sweet

40 feet wide

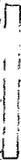
60 feet long

Plains Marketing, L. P.  
Young Deep to Lynch Idle 10" BLM  
Lea County, New Mexico  
NE/SW, S18, T20S, R34E  
EMS: 2005-00162



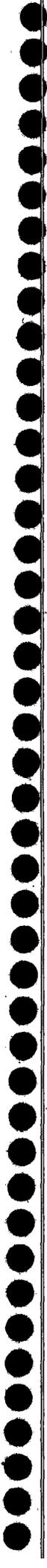
S

ed Overb...



Stockpiled Impacted Soil

Plains Marketing, L.P.  
Young Deep to Lynch Idle 10" BLM  
Lea County, New Mexico  
NE/SW, S18, T20S, R34E  
EMS: 2005-00162



## **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:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

<input type="button" value="Well / Surface Data Report"/>	<input type="button" value="Avg Depth to Water Report"/>
<input type="button" value="Water Column Report"/>	
<input type="button" value="Clear Form"/>	<input type="button" value="WATERS Menu"/>
<input type="button" value="Help"/>	

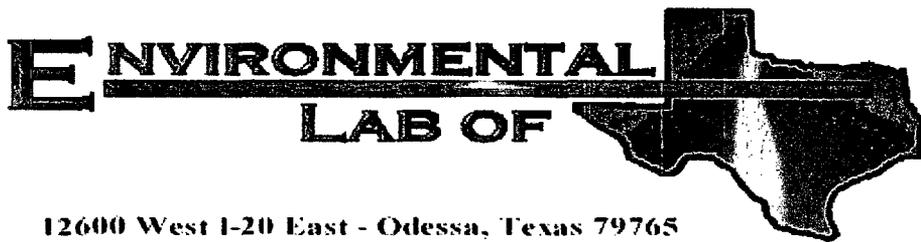
**AVERAGE DEPTH OF WATER REPORT 07/26/2005**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
CP	20S	34E	24				1	270	270	270

Record Count: 1

**APPENDIX B**

**ENVIRONMENTAL LABORATORY OF  
TEXAS ANALYTICAL RESULTS**



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: Young Deep to Lynch Idle 10" BLM

Project Number: EMS: 2005-00162

Location: Lea County, NM

Lab Order Number: 5G15009

Report Date: 07/19/05

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

Project: Young Deep to Lynch Idle 10" BLM  
Project Number: EMS: 2005-00162  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
07/19/05 16:18

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
South S/W	5G15009-01	Soil	07/14/05 15:00	07/15/05 12:00
North S/W	5G15009-02	Soil	07/14/05 15:15	07/15/05 12:00
Ramp East	5G15009-03	Soil	07/14/05 15:30	07/15/05 12:00
EXCV FLR	5G15009-04	Soil	07/14/05 15:45	07/15/05 12:00
West S/W	5G15009-05	Soil	07/14/05 16:00	07/15/05 12:00
Pipeline Wall	5G15009-06	Soil	07/14/05 16:15	07/15/05 12:00
EXCV FLR East P/L	5G15009-07	Soil	07/14/05 16:30	07/15/05 12:00
EXCV FLR West P/L	5G15009-08	Soil	07/14/05 16:45	07/15/05 12:00
Stockpile	5G15009-09	Soil	07/14/05 17:00	07/15/05 12:00

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

Project: Young Deep to Lynch Idle 10<sup>th</sup> BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
 07/19/05 16:18

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>South S/W (5G15009-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51512	07/15/05	07/15/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		82.9 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.3 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		83.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		89.2 %	70-130		"	"	"	"	
<b>North S/W (5G15009-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51512	07/15/05	07/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		80.1 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	94.5	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	94.5	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		78.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		91.2 %	70-130		"	"	"	"	
<b>Ramp East (5G15009-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51512	07/15/05	07/15/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0421	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		92.1 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	124	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	124	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Ramp East (5G15009-03) Soil</b>									
Surrogate: 1-Chlorooctane		84.0 %	70-130		EG51515	07/15/05	07/18/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		91.2 %	70-130		"	"	"	"	
<b>EXCV FLR (5G15009-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51512	07/15/05	07/15/05	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		84.1 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	J [9.74]	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	J
Diesel Range Organics >C12-C35	225	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	225	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		81.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.8 %	70-130		"	"	"	"	
<b>West S/W (5G15009-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51902	07/18/05	07/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		93.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		86.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		91.0 %	70-130		"	"	"	"	

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
 07/19/05 16:18

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Pipeline Wall (5G15009-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51902	07/18/05	07/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
<b>Diesel Range Organics &gt;C12-C35</b>	<b>48.2</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>48.2</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		75.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		71.2 %	70-130		"	"	"	"	
<b>EXCV FLR East P/L (5G15009-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51902	07/18/05	07/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		83.7 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
<b>Diesel Range Organics &gt;C12-C35</b>	<b>56.4</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>56.4</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		84.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		88.0 %	70-130		"	"	"	"	
<b>EXCV FLR West P/L (5G15009-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51902	07/18/05	07/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		87.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		108 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51515	07/15/05	07/18/05	EPA 8015M	
<b>Diesel Range Organics &gt;C12-C35</b>	<b>48.2</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>48.2</b>	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>EXCV FLR West P/L (5G15009-08) Soil</b>									
Surrogate: 1-Chlorooctane		83.2 %	70-130		EG51515	07/15/05	07/18/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		91.2 %	70-130		"	"	"	"	
<b>Stockpile (5G15009-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EG51902	07/18/05	07/18/05	EPA 8021B	
Toluene	0.0791	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.388	0.0250	"	"	"	"	"	"	
Xylene (p/m)	1.09	0.0250	"	"	"	"	"	"	
Xylene (o)	0.390	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		102 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	825	50.0	mg/kg dry	5	EG51515	07/15/05	07/18/05	EPA 8015M	
Diesel Range Organics >C12-C35	5050	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	5880	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		16.5 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		17.8 %	70-130		"	"	"	"	S-06

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
 07/19/05 16:18

**General Chemistry Parameters by EPA / Standard Methods  
 Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>South S/W (5G15009-01) Soil</b>									
% Moisture	1.5	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>North S/W (5G15009-02) Soil</b>									
% Moisture	0.7	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>Ramp East (5G15009-03) Soil</b>									
% Moisture	2.2	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>EXCV FLR (5G15009-04) Soil</b>									
Chloride	36.1	5.00	mg/kg	10	EG51904	07/18/05	07/18/05	EPA 300.0	
% Moisture	6.4	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>West S/W (5G15009-05) Soil</b>									
% Moisture	3.2	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>Pipeline Wall (5G15009-06) Soil</b>									
% Moisture	0.5	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>EXCV FLR East P/L (5G15009-07) Soil</b>									
% Moisture	10.5	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>EXCV FLR West P/L (5G15009-08) Soil</b>									
% Moisture	0.6	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	
<b>Stockpile (5G15009-09) Soil</b>									
% Moisture	1.2	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation	

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**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 EG51512 - EPA 5030C (GC)**

**Blank (EG51512-BLK1)**

Prepared & Analyzed: 07/15/05

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	89.9		ug/kg	100		89.9	80-120			
Surrogate: 4-Bromofluorobenzene	90.0		"	100		90.0	80-120			

**LCS (EG51512-BS1)**

Prepared & Analyzed: 07/15/05

Benzene	91.3		ug/kg	100		91.3	80-120			
Toluene	97.6		"	100		97.6	80-120			
Ethylbenzene	114		"	100		114	80-120			
Xylene (p/m)	212		"	200		106	80-120			
Xylene (o)	115		"	100		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	102		"	100		102	80-120			
Surrogate: 4-Bromofluorobenzene	112		"	100		112	80-120			

**Calibration Check (EG51512-CCV1)**

Prepared: 07/15/05 Analyzed: 07/19/05

Benzene	81.3		ug/kg	100		81.3	80-120			
Toluene	86.8		"	100		86.8	80-120			
Ethylbenzene	96.3		"	100		96.3	80-120			
Xylene (p/m)	190		"	200		95.0	80-120			
Xylene (o)	99.8		"	100		99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	81.3		"	100		81.3	80-120			
Surrogate: 4-Bromofluorobenzene	98.2		"	100		98.2	80-120			

**Matrix Spike (EG51512-MS1)**

Source: 5G15009-04

Prepared & Analyzed: 07/15/05

Benzene	83.0		ug/kg	100	ND	83.0	80-120			
Toluene	90.0		"	100	ND	90.0	80-120			
Ethylbenzene	98.5		"	100	ND	98.5	80-120			
Xylene (p/m)	194		"	200	ND	97.0	80-120			
Xylene (o)	99.9		"	100	ND	99.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	80.1		"	100		80.1	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**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 EG51512 - EPA 5030C (GC)**

**Matrix Spike Dup (EG51512-MSD1)**

Source: 5G15009-04

Prepared & Analyzed: 07/15/05

Benzene	83.7		ug/kg	100	ND	83.7	80-120	0.840	20	
Toluene	91.4		"	100	ND	91.4	80-120	1.54	20	
Ethylbenzene	104		"	100	ND	104	80-120	5.43	20	
Xylene (p/m)	205		"	200	ND	102	80-120	5.03	20	
Xylene (o)	107		"	100	ND	107	80-120	6.86	20	
Surrogate: a,a,a-Trifluorotoluene	82.1		"	100		82.1	80-120			
Surrogate: 4-Bromofluorobenzene	112		"	100		112	80-120			

**Batch EG51515 - Solvent Extraction (GC)**

**Blank (EG51515-BLK1)**

Prepared: 07/15/05 Analyzed: 07/18/05

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	44.9		mg/kg	50.0		89.8	70-130			
Surrogate: 1-Chlorooctadecane	44.2		"	50.0		88.4	70-130			

**LCS (EG51515-BS1)**

Prepared: 07/15/05 Analyzed: 07/18/05

Gasoline Range Organics C6-C12	394	10.0	mg/kg wet	500		78.8	75-125			
Diesel Range Organics >C12-C35	395	10.0	"	500		79.0	75-125			
Total Hydrocarbon C6-C35	789	10.0	"	1000		78.9	75-125			
Surrogate: 1-Chlorooctane	50.9		mg/kg	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	46.7		"	50.0		93.4	70-130			

**Calibration Check (EG51515-CCV1)**

Prepared: 07/15/05 Analyzed: 07/18/05

Gasoline Range Organics C6-C12	498		mg/kg	500		99.6	80-120			
Diesel Range Organics >C12-C35	498		"	500		99.6	80-120			
Total Hydrocarbon C6-C35	996		"	1000		99.6	80-120			
Surrogate: 1-Chlorooctane	229		"	250		91.6	70-130			
Surrogate: 1-Chlorooctadecane	235		"	250		94.0	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**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 EG51515 - Solvent Extraction (GC)**

<b>Matrix Spike (EG51515-MS1)</b>		<b>Source: 5G15008-08</b>		<b>Prepared: 07/15/05</b>		<b>Analyzed: 07/18/05</b>	
Gasoline Range Organics C6-C12	443	10.0	mg/kg dry	507	ND	87.4	75-125
Diesel Range Organics >C12-C35	455	10.0	"	507	35.1	82.8	75-125
Total Hydrocarbon C6-C35	898	10.0	"	1010	35.1	85.4	75-125
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	70-130
Surrogate: 1-Chlorooctadecane	52.2		"	50.0		104	70-130

<b>Matrix Spike Dup (EG51515-MSD1)</b>		<b>Source: 5G15008-08</b>		<b>Prepared: 07/15/05</b>		<b>Analyzed: 07/18/05</b>			
Gasoline Range Organics C6-C12	476	10.0	mg/kg dry	507	ND	93.9	75-125	7.18	20
Diesel Range Organics >C12-C35	471	10.0	"	507	35.1	86.0	75-125	3.46	20
Total Hydrocarbon C6-C35	947	10.0	"	1010	35.1	90.3	75-125	5.31	20
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	70-130		
Surrogate: 1-Chlorooctadecane	52.0		"	50.0		104	70-130		

**Batch EG51902 - EPA 5030C (GC)**

<b>Blank (EG51902-BLK1)</b>				<b>Prepared &amp; Analyzed: 07/18/05</b>		
Benzene	ND	0.0250	mg/kg wet			
Toluene	ND	0.0250	"			
Ethylbenzene	ND	0.0250	"			
Xylene (p/m)	ND	0.0250	"			
Xylene (o)	ND	0.0250	"			
Surrogate: a,a,a-Trifluorotoluene	88.5		ug/kg	100	88.5	80-120
Surrogate: 4-Bromofluorobenzene	84.0		"	100	84.0	80-120

<b>LCS (EG51902-BS1)</b>				<b>Prepared &amp; Analyzed: 07/18/05</b>		
Benzene	99.3		ug/kg	100	99.3	80-120
Toluene	105		"	100	105	80-120
Ethylbenzene	113		"	100	113	80-120
Xylene (p/m)	222		"	200	111	80-120
Xylene (o)	111		"	100	111	80-120
Surrogate: a,a,a-Trifluorotoluene	90.7		"	100	90.7	80-120
Surrogate: 4-Bromofluorobenzene	103		"	100	103	80-120

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
 07/19/05 16:18

**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 EG51902 - EPA 5030C (GC)**

**Calibration Check (EG51902-CCV1)**

Prepared: 07/18/05 Analyzed: 07/19/05

Benzene	81.3		ug/kg	100		81.3	80-120			
Toluene	86.8		"	100		86.8	80-120			
Ethylbenzene	96.3		"	100		96.3	80-120			
Xylene (p/m)	190		"	200		95.0	80-120			
Xylene (o)	99.8		"	100		99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	81.3		"	100		81.3	80-120			
Surrogate: 4-Bromofluorobenzene	98.2		"	100		98.2	80-120			

**Matrix Spike (EG51902-MS1)**

Source: 5G15012-01

Prepared & Analyzed: 07/18/05

Benzene	89.0		ug/kg	100	ND	89.0	80-120			
Toluene	95.8		"	100	ND	95.8	80-120			
Ethylbenzene	107		"	100	ND	107	80-120			
Xylene (p/m)	209		"	200	ND	104	80-120			
Xylene (o)	103		"	100	ND	103	80-120			
Surrogate: a,a,a-Trifluorotoluene	88.7		"	100		88.7	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

**Matrix Spike Dup (EG51902-MSD1)**

Source: 5G15012-01

Prepared & Analyzed: 07/18/05

Benzene	81.4		ug/kg	100	ND	81.4	80-120	8.92	20	
Toluene	88.8		"	100	ND	88.8	80-120	7.58	20	
Ethylbenzene	99.2		"	100	ND	99.2	80-120	7.57	20	
Xylene (p/m)	196		"	200	ND	98.0	80-120	5.94	20	
Xylene (o)	98.1		"	100	ND	98.1	80-120	4.87	20	
Surrogate: a,a,a-Trifluorotoluene	83.1		"	100		83.1	80-120			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 10 of 13

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

Project: Young Deep to Lynch Idle 10" BLM  
 Project Number: EMS: 2005-00162  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 07/19/05 16:18

**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
<b>Batch EG51807 - General Preparation (Prep)</b>										
<b>Blank (EG51807-BLK1)</b> Prepared: 07/15/05 Analyzed: 07/18/05										
% Moisture	ND	0.1	%							
<b>Duplicate (EG51807-DUP1)</b> Source: 5G15002-01 Prepared: 07/15/05 Analyzed: 07/18/05										
% Moisture	18.9	0.1	%		17.2			9.42	20	
<b>Batch EG51904 - Water Extraction</b>										
<b>Blank (EG51904-BLK1)</b> Prepared & Analyzed: 07/19/05										
Chloride	ND	0.500	mg/kg							
<b>Blank (EG51904-BLK2)</b> Prepared & Analyzed: 07/19/05										
Chloride	ND	0.500	mg/kg							
<b>LCS (EG51904-BS1)</b> Prepared & Analyzed: 07/18/05										
Chloride	11.1		mg/L	10.0		111	80-120			
<b>LCS (EG51904-BS2)</b> Prepared & Analyzed: 07/19/05										
Chloride	10.5		mg/L	10.0		105	80-120			
<b>Calibration Check (EG51904-CCV1)</b> Prepared & Analyzed: 07/18/05										
Chloride	10.9		mg/L	10.0		109	80-120			
<b>Calibration Check (EG51904-CCV2)</b> Prepared & Analyzed: 07/18/05										
Chloride	10.9		mg/L	10.0		109	80-120			
<b>Duplicate (EG51904-DUP1)</b> Source: 5G14002-01 Prepared & Analyzed: 07/18/05										
Chloride	139	5.00	mg/kg		138			0.722	20	

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

Project: Young Deep to Lynch Idle 10" BLM  
Project Number: EMS: 2005-00162  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
07/19/05 16:18

**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 EG51904 - Water Extraction**

Duplicate (EG51904-DUP2)

Source: 5G15012-08

Prepared & Analyzed: 07/18/05

Chloride	81.3	5.00	mg/kg		97.5			18.1	20	
----------	------	------	-------	--	------	--	--	------	----	--

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

Project: Young Deep to Lynch Idle 10" BLM  
Project Number: EMS: 2005-00162  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
07/19/05 16:18

### 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.

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: \_\_\_\_\_

7/19/2005

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 13 of 13



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

Client: Basin ENV. / PLAINS A.A.

Date/Time: 7/15/05 12:00

Order #: 5G/5009

Initials: CK

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	-2.5 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/>	No	Not present
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/>	No	Not present
Chain of custody present?	<input checked="" type="checkbox"/>	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/>	No	
Container labels legible and intact?	<input checked="" type="checkbox"/>	No	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No	
Samples properly preserved?	<input checked="" type="checkbox"/>	No	
Sample bottles intact?	<input checked="" type="checkbox"/>	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No	
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	No	Not Applicable

Other observations:

---



---



---

**Variance Documentation:**

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

---



---

Corrective Action Taken:

---



---



---



---



---



---



---

**APPENDIX C**

**BLM REPORT OF UNDESIRABLE EVENT**

UNITED STATES DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
New Mexico State Office

REPORT OF UNDESIRABLE EVENT

DATE OF OCCURRENCE/DISCOVERY: 7-7-05 TIME OF OCCURRENCE: 11:30

DATE REPORTED TO BLM: 7-7-05 TIME REPORTED: 15:50

BLM OFFICE REPORTED TO: (FIELD/DISTRICT/OTHER) Hobbs Office - Trish Badbear

LOCATION: (1/4 1/2 NE, SW) SECTION 18 T. 20 R. 34 MERIDIAN Nm Prime

COUNTY: Lea STATE: NM WELL NAME \_\_\_\_\_

OPERATOR: COMPANY NAME Plains Pipeline PHONE NO. (505) 441-0965

CONTACT PERSON'S NAME Camille Reynolds

SURFACE OWNER: BLM MINERAL OWNER: \_\_\_\_\_  
(FEDERAL/INDIAN/FEE/STATE)

LEASE NO.: \_\_\_\_\_ RIGHT-OF-WAY NO.: NM 168992

UNIT NAME / COMMUNITIZATION AGREEMENT NO.: \_\_\_\_\_

TYPE OF EVENT, CIRCLE APPROPRIATE ITEM (S):

BLOWOUT, FIRE, FATALITY, INJURY, PROPERTY DAMAGE, (OIL SPILL) SALTWATER SPILL, OIL AND  
SALTWATER SPILL, TOXIC FLUID SPILL, HAZARDOUS MATERIAL SPILL, UNCONTROLLED FLOW  
OF WELLBORE FLUIDS, OTHER (SPECIFY):

CAUSE OF EVENT: Internal Corrosion of pipeline

HazMat Notified: (for spills) -

Law Enforcement Notified: (for thefts) -

CAUSE AND EXTENT OF PERSONAL INJURIES/CAUSE OF DEATH(S):  
None

Safety Officer Notified: \_\_\_\_\_

EFFECTS OF EVENT: Soil around pipeline impacted w/  
crude oil

ACTION TAKEN TO CONTROL EVENT: Line de-oiled

LENGTH OF TIME TO CONTROL BLOWOUT OR FIRE: \_\_\_\_\_

VOLUMES DISCHARGED: OIL 8 barrels WATER 0 GAS 0

OTHER AGENCIES NOTIFIED: NMOC - Larry Johnson, Hobbs  
Office

ACTION TAKEN OR TO BE TAKEN TO PREVENT RECURRENCE: Line de-oiled

FINAL INVESTIGATION:

TEAM NAME(S) \_\_\_\_\_

FIELD INSPECTION DATE \_\_\_\_\_

SUMMARY OF RESULTS OF INSPECTION \_\_\_\_\_

RESOURCE LOSS WAS (CIRCLE ITEM):      AVOIDABLE      UNAVOIDABLE

DATE OF MEMO NOTIFYING MINEALS MANAGEMENT SERVICE THAT LOSS WAS AVOIDABLE:

DATE/TIME/PERSON NOTIFIED:

DISTRICT OFFICE \_\_\_\_\_

STATE OFFICE \_\_\_\_\_

WASHINGTON OFFICE \_\_\_\_\_

SUMMARY OF RESULTS OF RECLAMATION/CORRECTIVE ACTION:

REMARKS:

SIGNATURE OF AUTHORIZED OFFICER \_\_\_\_\_

DATE: \_\_\_\_\_ TITLE: \_\_\_\_\_

**APPENDIX D**

**BOONE ARCHEOLOGY SURVEY REPORT**

Boone Archaeological Services LLC  
2030 North Canal  
Carlsbad, NM 88220  
Email: BAS@warpdriveonline.com  
Office: 505-885-1352



FAX NUMBER 505-887-7667

FACSIMILE TRANSMITTAL SHEET

TO: Ken Dutton	FROM: Danny / Ann Boone
COMPANY: Basin Environmental	DATE: 7/28/2005
FAX NUMBER: 505-396-1429	TOTAL NO. OF PAGES: 4
PHONE NUMBER: 505-396 2378	SENDER'S REFERENCE NUMBER: BAS 07-05-37
RE: Arch report	YOUR REFERENCE NUMBER: EMS 2006-00162

URGENT  FOR REVIEW  PLEASE COMMENT  PLEASE REPLY

Notes/Comments:

The above report has been delivered to the Carlsbad BLM

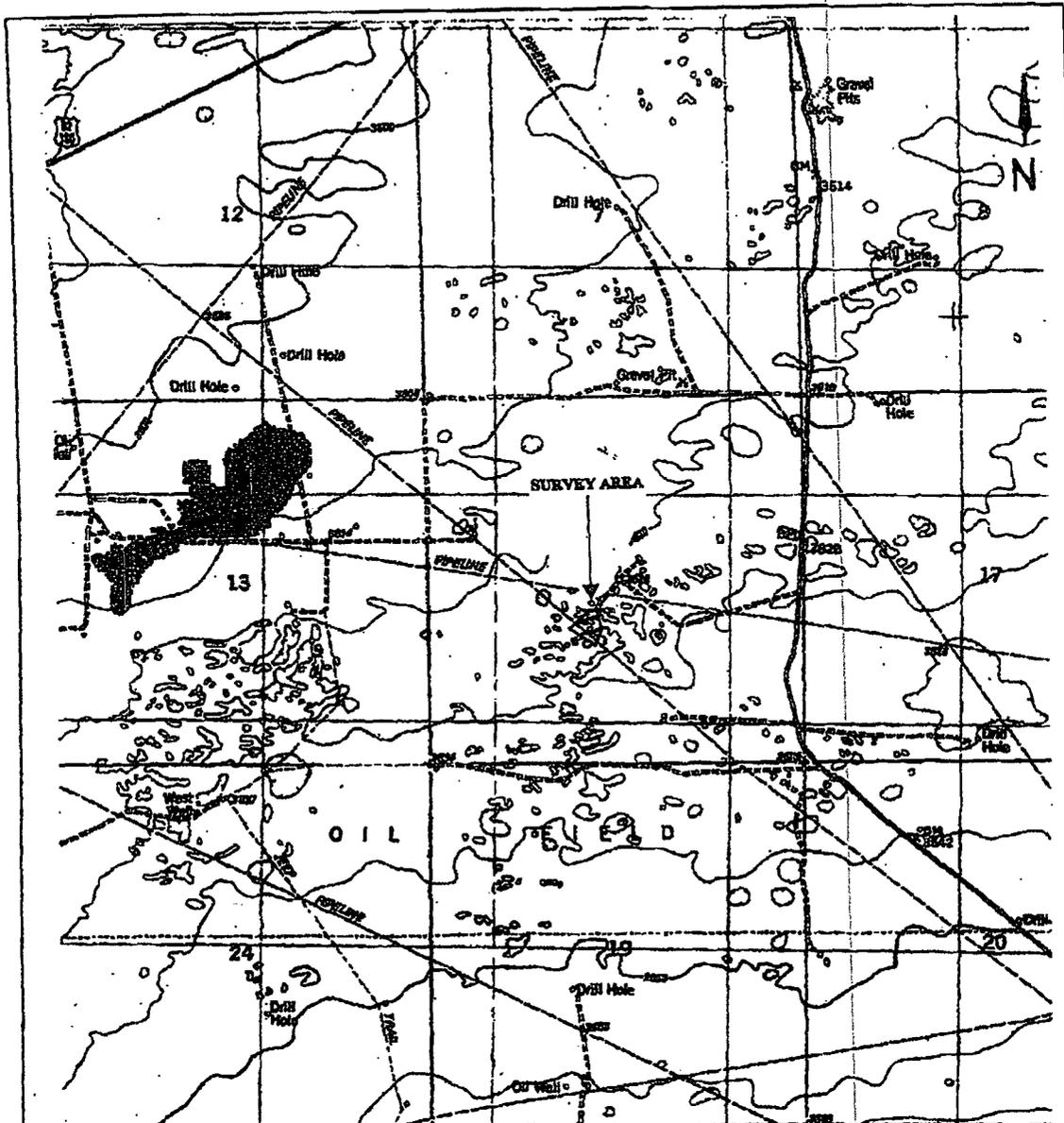
Thank you for your business

**TITLE PAGE/ABSTRACT/  
NEGATIVE SITE REPORT  
CFO/RFO**

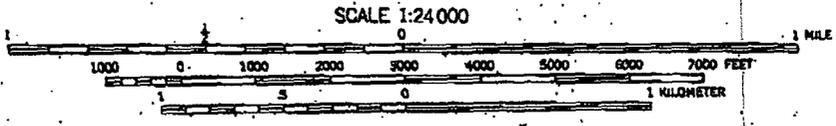
1/03

1. BLM Report No.		2. Reviewer's Initials/Date _____ ACCEPTED ( ) REJECTED ( )		3. NMCRIS No.: 93850	
4. Type of Report:		Negative (X)		Positive ( )	
5. Title of Report: Class III archaeological survey of an irregular shaped area where petroleum produce leaked from the Maljamar to Lynch 10" line. Author(s): Ann Boone				6. Fieldwork Date(s): from 15 July 2005 to	
				7. Report Date: 25 July 2005	
8. Consultant Name & Address: Boone Archaeological Services 2030 North Canal Carlsbad, NM 88220 Direct Charge: Danny Boone Field Personnel Names: Danny Boone Phone: (505) 885-1352				9. Cultural Resource Permit No. BLM: 190-292-05-G STATE: NM-05-157	
				10. Consultant Report No.: BAS 07-05-37	
11. Customer Name: Plains All American Pipeline, L.P. Responsible Individual: Ken Dutton (Agent) Address: 1301 S Country Road 1150 Midland, Texas 79706-4476 Phone: (432) 682-5392				12. Customer Project No.: EMS No.2005-00162	
13. Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	3.2 (+/-)	0	0	0	3.2 (+/-)
b. Area of Effect (acres)	1.8 (-/+)	0	0	0	1.8 (-/+)
14. a. Linear: Length; NA                      Width; NA b. Block: Irregular shaped, See I 6 b. and attached project map.					
15. Location: (Maps Attached if Negative Survey) a. State: New Mexico b. County: Lea c. BLM Office: Carlsbad d. Nearest City or Town: Hobbs, NM e. Legal Location: T 20S, R 34E, Sec. 18, NE¼ SW¼. f. Well Pad Footage: NA g. USGS 7.5 Map Name(s) and Code Number(s): LEA, NM (1984) 32103-E5					





Location Map of an irregular shaped area where petroleum produce leaked from the Maljamar to Lynch 10" line for Plains All American Pipeline in Section 18, T 20S, R 34E, NMPM, Lea County, New Mexico.  
 Map Reference: USGS 7.5' Series; LEA, NM (1984) 32103-E5



**APPENDIX E**

**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 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Plains Marketing, LP Contact Camille Reynolds  
Address 5805 East Hwy. 80, Midland, TX 79706 Telephone No. 505-441-0965  
Facility Name Young Deep to Lynch Idle 10" BLM Facility Type 10" Steel Pipeline

Surface Owner BLM Mineral Owner Lease No.

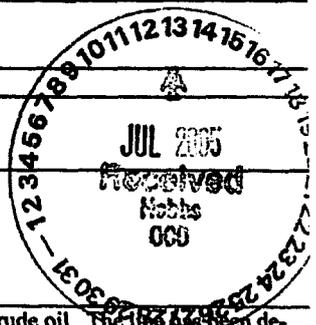
**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	18	20S	34E					Lea

Latitude 32° 34' 15.8" Longitude 103° 36' 02.7"

**NATURE OF RELEASE**

Type of Release Crude Oil Volume of Release 8 barrels Volume Recovered 0 barrels  
Source of Release 10" Steel Pipeline Date and Hour of Occurrence 07/07/2005 @ 11:15 Date and Hour of Discovery 07/07/2005 @ 11:30  
Was Immediate Notice Given?  Yes  No  Not Required If YES, To Whom? Larry Johnson  
By Whom? Camille Reynolds Date and Hour 07/07/2005 @ 15:50  
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.\* Internal corrosion of the 10 inch pipeline resulted in release of crude oil. The line has been de-oiled. The line is idle so information concerning volume and pressure on line is unavailable.

Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 432 square feet.

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: <i>Camille Reynolds</i>	<b>OIL CONSERVATION DIVISION</b>	
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 <input type="checkbox"/>
Date: 07/13/05	Phone: 505-441-0965	

Attach Additional Sheets If Necessary

Microsoft Access - [Administrative Applications/Orders]

File Edit RDBMS Reports View Records Admin Window Help

Administrative Applications/Orders

Application No:  Application Type:  Date Recd:  Amt:  Processing Dates:  County:  Approvals:  ELM:

Applicant:  Rec:  Exp:

Contact:

Permit Level:

LOG BOOK | EVENTS | WELLS (Non-ONGARD data to the right) | POOLS | MULTI-WELL | PROPERTY | FACILITY/BONDS | AMEND/ORD LINK | NXT ORD #

Facility:  Bond No.:  Cert Mail No.:  Dt Eff:

UL-S-T-R:  County:  Operator:  Dt Exp:

Directions:  Guarantor:  Dt Rel:

Amount:  TypInst:  Status:  GuarBndNo:

Well Specifications and Technical Data

Record:  of 191 (Filtered)

Form View

Inspect Facility Surface Facilities

Facility ID: **FLWJ0521732708** Facility Name: **PlainsMarketingLP YoungDeep to Lynch Idle 1** UIC: **K 18 20 S 34 E**  
Fac. Type: **Pipeline - Crude Gathering** Status: **1** County: **Lea** State: **30**  
Company: **PLAINS MARKETING, LP** Longitude: **32.341580** Longitude: **103.360270**  
Directions:   
Status: **Open** (A: Closed, E: Pending, S: Shut Down) **Federal**  
Location:  GW Depth: **270** Impact:   
Dist: **01** W:  E:  I:  M:

**Pits** | Tanks | Sumps | Contacts

Pit No:  Pit Type:  Status:  Dt Apprv:  Dt Open:   
Denied?  Close Apprv'd?  Close Denied?  Not Built?  Dt Regist:  6 Mt Ext:   
Guide Lines?  Const Mat:  Fluid Type:  Site Rank:  Dt Close:   
Leak Detect?  041504 Prior?  Salt Sect?  Mud >9.5?  To Remain?  Flts Remvd?  Dewater?  Lined?   
Length  ft Width  ft Depth  ft Capacity  bbls Chlor  ppm TDS  ppm  
OCD Remediation Action Levels: Benzene  ppm BTEX  ppm TPH  ppm  
Comments:   
Record: **14** of **1**

IncidentNo: mLWJ0521734321 Type: Oil Release Source of Referral: Industry Rep API Well No: Date: 07/07/2005

Material	Spilled	GAL/BBL	Recover	Lost	Source	Cause
Crude Oil	8	BBL	0	8	Pipeline	Corrosion
*		BBL				

Record: 1 of 1

NOTES - Please include in the notes all information on Volume Reaching the Environment, Wildlife Affected, Contacts, Method of Cleanup, Evidence, and Volume Recovered.

Aging Infrastructure:  **Area Affected**

Dimensions		Areal Extents		Waterway
Wide	Est.	240	Sq Ft	<input type="checkbox"/>
Long	Calc.		Cu Ft	<input type="checkbox"/>

Weld failure in 18" line - 48' x 60" areal 12" deep - line closed and prep to de-oil. Removed 1100 yards impacted soil to plastic for remediation - Plan request approval granted 8-3-05. LWJ

To: Camille J Reynolds  
Cc:  
Bcc:  
Subject: RE: Plains Pipeline Young Deep to Lynch Idle 10"  
Attachments:

Normal Arial 10 B I U

This is your confirmation of receipt by NMOCD. LWJ

**From:** Camille J Reynolds [mailto:cjreynolds@paalp.com]  
**Sent:** Fri 8/5/2005 10:20 AM  
**To:** Johnson, Larry, EMNRD  
**Cc:** 'steve\_caffey@nm.blm.gov'  
**Subject:** Plains Pipeline Young Deep to Lynch Idle 10"

Larry,

This e-mail message confirms your verbal approval on Thursday, August 4, 2005 of the Plains Pipeline, "Young Deep to Lynch Idle 10" Remediation/Closure Plan" dated July 25, 2005. Steve Caffey with the BLM has also verbally approved the remediation plan. Plains will notify you and the BLM at least 48 hours prior to plan implementation.

Sincerely,

Camille Reynolds