

*Basin Environmental Service Technologies, LLC*

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



**REVISED**  
**PRELIMINARY SITE INVESTIGATION REPORT**  
**and**  
**REMEDIATION/CLOSURE PLAN**

**PLAINS MARKETING, L.P.**  
**Maljamar to Lynch Abandoned 10"**  
**231735**

**Lea County, New Mexico**  
**Plains EMS # 2004-00227**

**UNIT A (NE/NE), Section 19, Township 20S, Range 34E**  
**Latitude, Longitude 32°, 33', 55.3" North, 103°, 35', 35.9" 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

**19 December 2005**

  
Ken Dutton

Basin Environmental Service Technologies, LLC

Application # PAC 0604029716

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## **INTRODUCTION**

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the Maljamar to Lynch Abandoned 10" Pipeline on 09 December 2004. The Maljamar to Lynch Abandoned 10" Pipeline was clamped and the saturated impacted soils were excavated and stockpiled adjacent to the excavation on a 6-mil poly liner.

This site is located in Unit A (NE/NE), Section 19, Township 20 South, Range 34 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The latitude is 32° 33' 55.3" North and the longitude is 103° 35' 35.9" West. The site is characterized by a right-of-way for the pipeline in a pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 181 feet long by 50 feet wide. An estimated 120 barrels of crude oil were released from the Plains Pipeline and 100 barrels were recovered.

An Emergency One-Call was initiated 09 December 2004 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Mr. James Amos, Bureau of Land Management (BLM), Carlsbad, New Mexico Office, was verbally notified 09 December 2004. Mr. Paul Sheeley, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1 was verbally notified of the release on 09 December 2004.

## **SUMMARY OF FIELD ACTIVITIES**

On 09 December 2004, Basin arrived at the Maljamar to Lynch Abandoned 10" Pipeline release to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. After the release had been contained utilizing a pipeline repair clamp, excavation of the impacted soil was accomplished (see Figure 2, Excavation Site Map). The release point and visually stained area was excavated to approximately 181 feet long by 50 feet wide and 6 feet below ground surface (bgs). All excavated soil was placed on a 6-mil poly liner for future remedial action.

On 03 January 2005, confirmation soil samples were collected from the floor and sidewalls of the excavated areas (see Figure 3, Sampling Locations & Soil Boring Location). Soil samples were collected and screened with a Photoionization Detector (PID), calibrated 03 January 2005. The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) (see Table 1, Soil Chemistry). Laboratory results indicate that the area immediately surrounding the release point is above NMOCD regulatory standards and the remaining excavated area (flow path) is below NMOCD regulatory standards. Further excavation of the

site (release point) was suspended and an archeological survey was requested pursuant to BLM directives.

On 02 May 2005, Basin installed a soil boring at the release point utilizing Straub Corporation, Stanton, Texas. Soil samples were collected every 5 feet in order to determine the vertical extent of crude oil impacted soil (See Soil Sampling Locations & Soil Boring Location, Figure 3). The soil boring was installed to a depth of 51 feet bgs (Soil Boring Logs are attached as Appendix E). Each sample was field screened with a PID, which was calibrated 02 May 2005. The selected soil samples were analyzed for BTEX and TPH-GRO/DRO.

On 21 November 2005, Basin excavated the release point area to a depth of 23 feet bgs. A confirmation soil sample was collected and field screened with a PID. The soil sample was analyzed for BTEX and TPH-GRO/DRO.

### **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 USATURATED ZONE**

The original release point and visually stained area was excavated to approximately 181 feet long and 50 feet wide and to a depth of approximately 6 feet bgs and evidence of crude oil impact still existed on the floor at the release point. PID readings and laboratory results indicated elevated concentrations of Volatile Organic Compounds (VOC) remain. Vertical delineation of the release point site was attempted by installing a soil boring adjacent to the release point to determine the depth of crude oil impact. Installation of the soil boring at the exact release point was negated due to the limited distance between the Abandoned 10" pipeline and the active 8" pipeline. Analytical results from the release point soil boring indicated a disparity from the previously collected confirmation soil samples; therefore, vertical delineation of crude oil impact was not accomplished. Ramping and extended excavation of the release point was accomplished in November 2005 and a confirmation soil sample was collected. Soil samples were analyzed for

concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix C).

Confirmation soil samples were collected, as depicted on the Sampling Locations & Soil Boring Location (Figure 3), from the sidewalls and floor of the excavated areas at a depth of 6 feet bgs for the floor and 3 feet bgs for the sidewalls. Analytical results indicate BTEX and TPH constituent concentrations were below NMOCD regulatory standards on all soil samples with the exception of the release point. The release point analytical results indicate BTEX and TPH constituent concentrations exceeded NMOCD regulatory standards at a depth of 6 feet bgs at 395 mg/kg and 19,200 mg/kg, respectively. Further excavation of the site (release point) was suspended and an archeological survey was requested pursuant to BLM directives. The archeological survey was accomplished and cleared the site for further remedial activities.

Soil Boring 1, as depicted on the Soil Sampling Locations & Soil Boring Location (Figure 3) was installed adjacent to the release point. Installation of the soil boring at the exact release point was negated due to the limited distance between the Abandoned 10' pipeline and the active 8" pipeline. The soil boring was terminated at a depth of 51 feet bgs. Analytical results indicated that detectable BTEX constituent concentrations were below NMOCD regulatory standards at 5, 10 and 15 feet bgs soil samples. Analytical results indicated that BTEX constituent concentrations were not detected above laboratory detection limits on the remaining six (6) soil samples. Analytical results indicated that TPH constituent concentrations were below NMOCD regulatory standards on the 5 feet bgs soil sample and were not detected above laboratory detection limits on the remaining eight (8) soil samples.

On 21 November 2005, Basin ramped and excavated the release point area to a depth of 23 feet bgs. A confirmation soil sample was collected on 23 November 2005, and field screened with a PID. Analytical results indicated that BTEX constituent concentrations were not detected above laboratory detection limits on the release point 23 feet bgs soil sample. Analytical results indicated that TPH constituent concentrations were below NMOCD regulatory standards on the 23 feet bgs soil sample.

In summary, confirmation soil sampling of the initial excavation indicated that BTEX and TPH constituent concentrations were below NMOCD standards or not detected above laboratory detection limits, with the exception of the release point. Installation of Soil Boring 1 to delineate the vertical crude oil impact, adjacent to the release point proved to be inconclusive and further excavation of the release point ensued. The extended excavation of the release point was to a depth of 23 feet bgs and analytical results indicated that BTEX constituent concentrations were below laboratory detection limits on the 23 feet release point soil sample and TPH concentrations were below NMOCD regulatory standards.

## **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 850 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 300 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

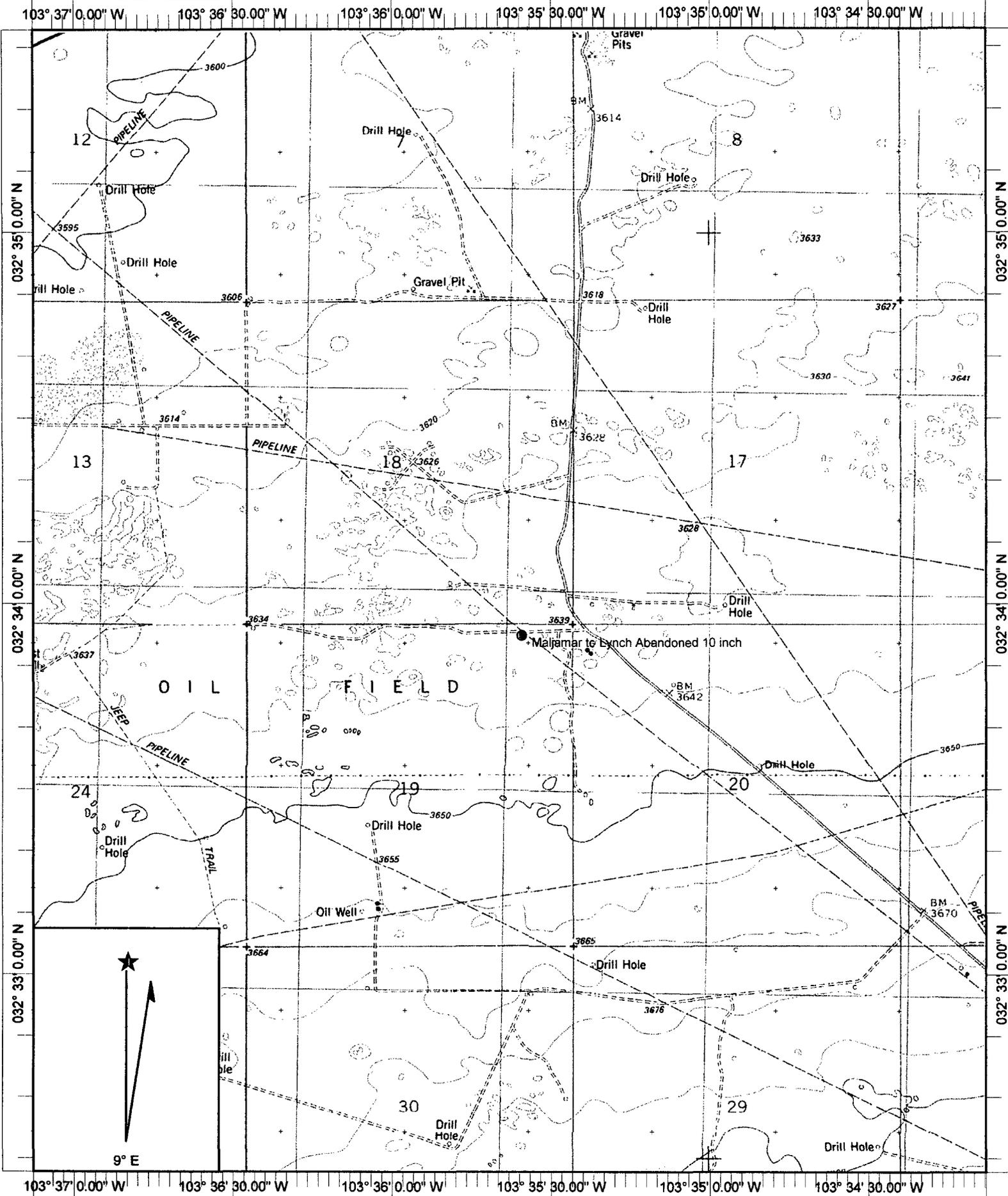
- Copy 1: Jeff Dann  
Plains All American  
333 Clay Street  
Suite 1600  
Houston, Texas 77002  
[jpdann@paalp.com](mailto:jpdann@paalp.com)
- Copy 2: Camille Reynolds  
Plains All American  
3112 West Highway 82  
Lovington, New Mexico 88260  
[cjreynolds@paalp.com](mailto:cjreynolds@paalp.com)
- Copy 3: Mr. James Amos  
U.S. Department of the Interior  
Bureau of Land Management  
620 E. Greene St.  
P. O. Box 1778  
Carlsbad, New Mexico, 88220  
[James\\_Amos@nm.blm.gov](mailto:James_Amos@nm.blm.gov)
- Copy 4: Mr. Larry Johnson  
New Mexico Oil Conservation Division  
Francis Drive  
Hobbs, New Mexico 88240  
[larry.johnson@state.nm.us](mailto:larry.johnson@state.nm.us)
- Copy 5: Basin Environmental Service Technologies LLC  
P. O. Box 301  
Lovington, New Mexico 88260  
[kdutton@basinenv.com](mailto:kdutton@basinenv.com)
- Copy 4

TABLE 1

SOIL CHEMISTRY

PLAINS MARKETING, L.P.  
MALJAMAR TO LYNCH ABANDONED 10"  
LEA COUNTY, NEW MEXICO  
EMS: 2004-00227

SAMPLE LOCATION	SAMPLE DEPTH	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M			TOTAL TPH (mg/kg)
			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)			
Stockpile East	6'	01/03/05	0.233	6.98	24.4	38.7	18.8	6100	16600	22700		
Stockpile West	6'	01/03/05	0.091	4.25	13.7	16.9	7.7	4400	16500	20900		
West Exc N/SW	3'	01/03/05	<0.025	<0.025	0.115	0.308	0.156	416	1720	2130		
West Exc W/SW	3'	01/03/05	<0.025	0.203	1.41	2.31	1.27	327	701	1030		
West Exc Floor	6'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	12.6	98.3	111		
RP East Sidewall	3'	01/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0		
RP Floor North	6'	01/03/05	<0.025	0.025	0.203	0.48	0.319	185	527	712		
RP Floor South	6'	01/03/05	26.2	118	105	102	44.6	8320	10900	19200		
Valve SW	3'	01/03/05	<0.025	<0.0125	0.042	0.073	0.04	<10.0	39.6	39.6		
SB-1 5'	11'	05/02/05	<0.025	0.036	0.197	0.402	0.174	95.3	289	384		
SB-1 10'	16'	05/02/05	<0.025	<0.025	<0.025	0.044	<0.025	<10	<10	<10		
SB-1 15'	21'	05/02/05	<0.025	<0.025	<0.025	0.036	<0.025	<10	<10	<10		
SB-1 20'	26'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
SB-1 25'	31'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
SB-1 30'	36'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
SB-1 35'	41'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
SB-1 40'	46'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
SB-1 45'	51'	05/02/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10		
R/P 17'	23' bgs	11/23/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	140	140		
<b>NMOC CRITERIA</b>			<b>10</b>	<b>TOTAL BTEX 50</b>					<b>5000</b>			



Name: LEA  
 Date: 12/22/2005  
 Scale: 1 inch equals 2000 feet

Location: 032° 34' 00.30" N 103° 35' 37.78" W  
 Caption: Figure 1, Site Location Map  
 Plains Marketing, L. P.  
 Maljamar to Lynch Abandoned 10 inch



Caliche Lease Road

50 feet wide

Stockpiled  
Excavated Soil on  
6-mil Poly-liner

Plains Abandoned  
Pipeline

Release Point

6 feet  
bgs

23 feet  
bgs

6 feet  
bgs

181 feet long

Plains 10 inch Abandoned  
Line

Plains Active 8 inch  
Line

6 feet  
bgs



Pipeline Valve

Excavated Area

Excavation  
Limits

DESCRIPTION	TITLE	DRAWN BY
Plains Marketing, L.P. Majamar to Lynch Abandoned 10" NE/NE S19, T20S, R34E Lea County, New Mexico	Figure 2 Excavation Site Map	Basin Environmental Services kad



Caliche Lease Road

50 feet wide

Stockpiled Excavated Soil on 6-mil Poly-liner

Plains Abandoned Pipeline

Release Point

181 feet long

Plains 10 inch Abandoned Line

Plains Active 8 inch Line



Pipeline Valve



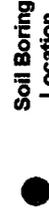
Excavated Area



Excavation Limits



Soil Sampling Locations



Soil Boring Location

R/R North  
6' bgs  
BTEX: 1.027  
TPH: 712

West Exc N/SW  
3' bgs  
BTEX: 0.579  
TPH: 2130

R/P EAST  
Sidewall  
3' bgs  
BTEX: <0.025  
TPH: <10.0

R/P EAST  
Sidewall  
3' bgs  
BTEX: <0.025  
TRH: <10.0

R/P South  
6' bgs  
BTEX: 395.80  
TPH: 19,200

23 feet R/P  
bgs  
BTEX: <0.025  
TPH: 140

Valve SW  
3 bgs  
BTEX: 0.155  
TPH: 39.6

West Exc W/SW  
3' bgs  
BTEX: 5.193  
TPH: 1030

West Exc Floor  
6' bgs  
BTEX: <0.025  
TPH: 111

6 feet bgs

DESCRIPTION	TITLE	DRAWN BY
Plains Marketing, L.P. Maljamar to Lynch Abandoned 10" NE/NE S19, T20S, R34E Lea County, New Mexico	Figure 3 Soil Sampling Locations & Soil Boring Location	Basin Environmental Services kad

Maljamar to Lynch Abandoned 10

Plains active 00

Excavated area south of release point

Maljamar to Lynch Abandoned 10

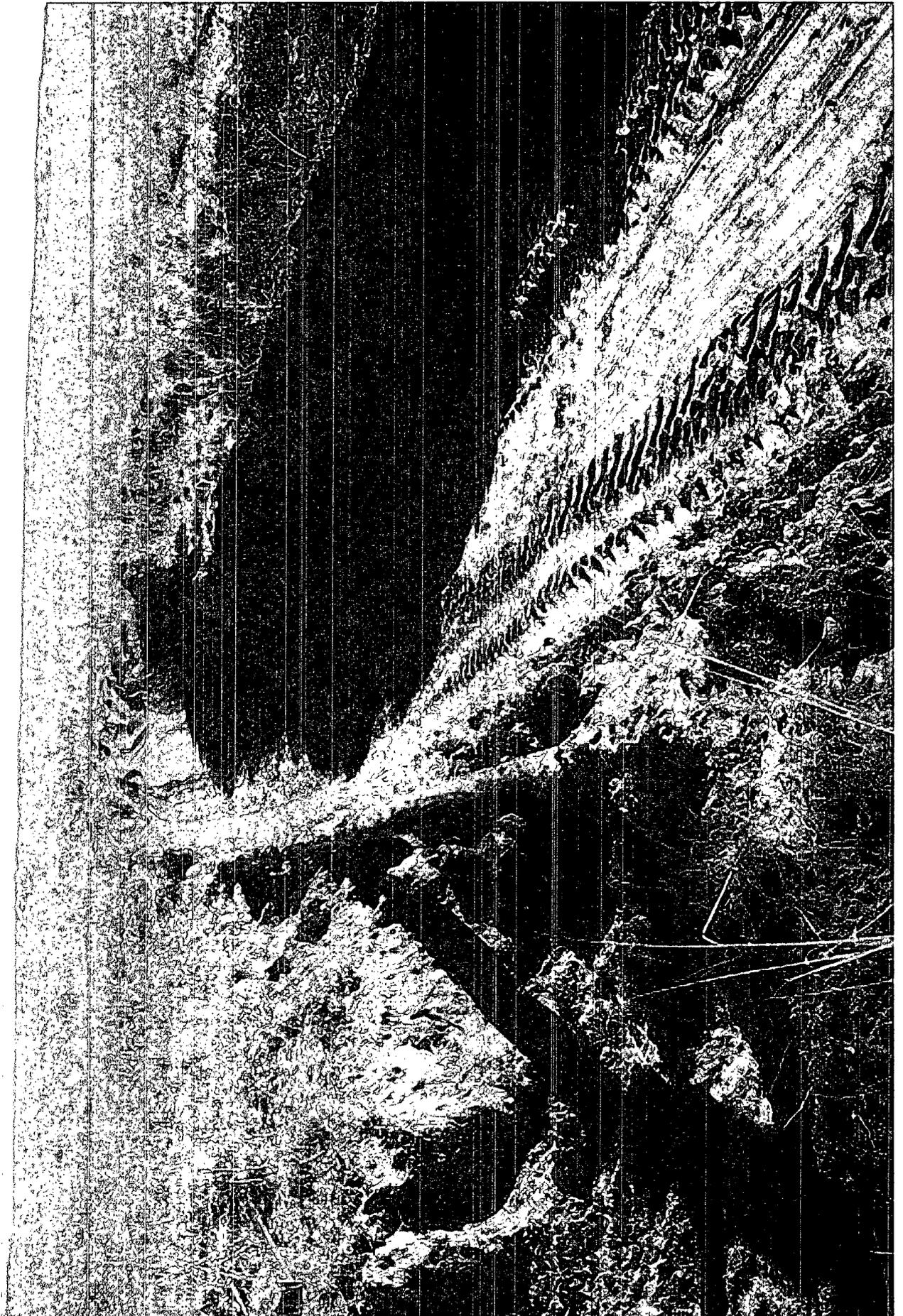
Plains Marketing, L.P.

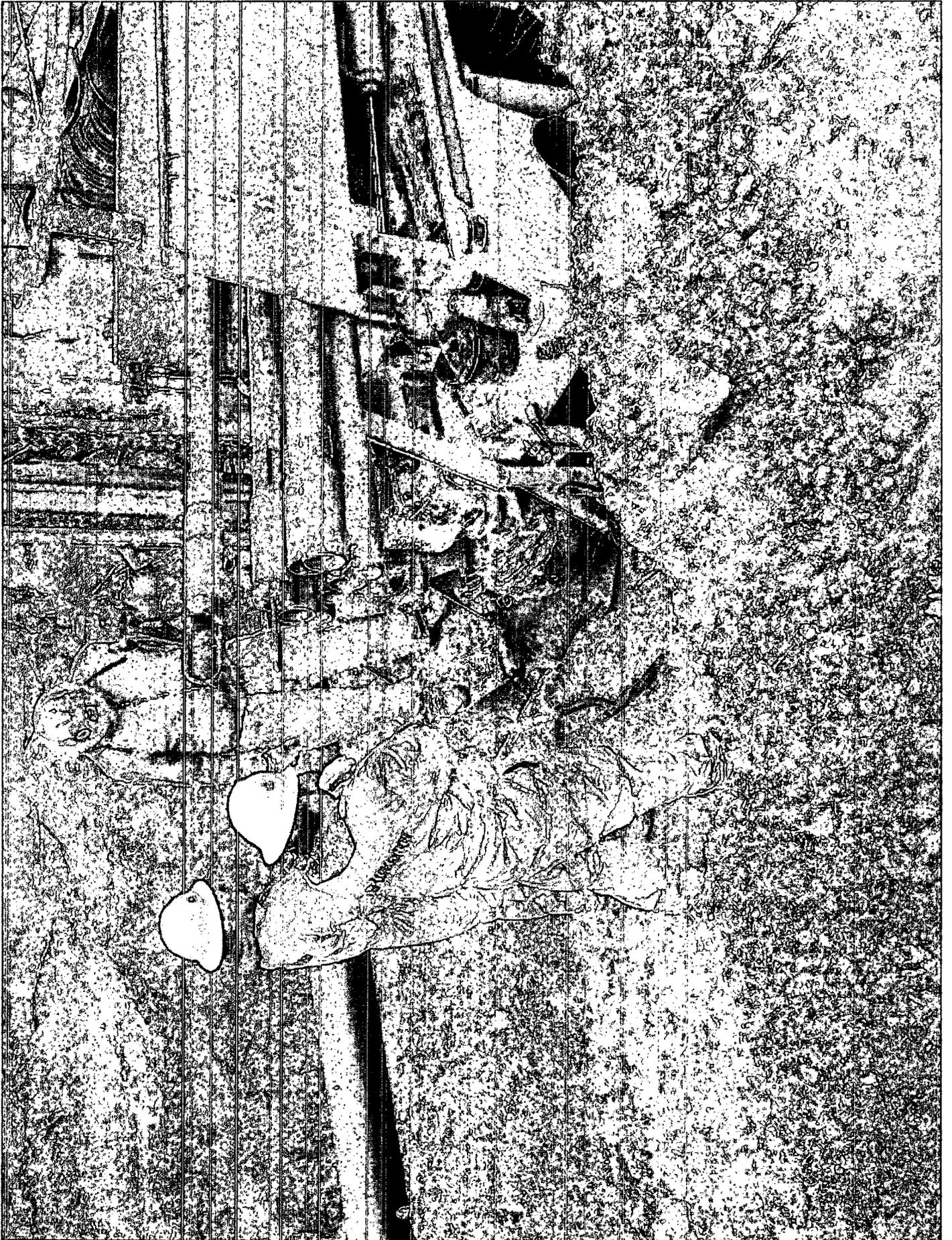
Dea County, New Mexico

NE/NE 1/4 T20S R34E









**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

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

**AVERAGE DEPTH OF WATER REPORT 12/10/2004**

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

No Records found, try again

**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

**AVERAGE DEPTH OF WATER REPORT 12/10/2004**

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

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

REPORT OF UNDESIRABLE EVENT

DATE OF OCCURRENCE/DISCOVERY: 12/9/04 TIME OF OCCURRENCE: 8:30

DATE REPORTED TO BLM: 12/9/04 TIME REPORTED: 15:00

BLM OFFICE REPORTED TO: (FIELD/DISTRICT/OTHER) Carlsbad (Jim Amos)

LOCATION: (1/4 1/4) NE, NE SECTION 19 T. 20S R. 34E MERIDIAN New Mexico Prime

COUNTY: Lea STATE: NM WELL NAME Maljamar <sup>Meridian</sup> to Lynch 10" Line

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

CONTACT PERSON'S NAME Camille Reynolds

SURFACE OWNER: BLM MINERAL OWNER: BLM  
(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 10 inch pipeline resulted in crude oil release

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: Crude oil impacted soil

ACTION TAKEN TO CONTROL EVENT: A clamp was placed on the line to mitigate the release, the crude oil was excavated and stock piled on plastic.

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

VOLUMES DISCHARGED: OIL 120 barrels WATER \_\_\_\_\_ GAS \_\_\_\_\_

OTHER AGENCIES NOTIFIED: AMOC (Paul Shreeley-Hobbs Office) notified on 12-9-04

ACTION TAKEN OR TO BE TAKEN TO PREVENT RECURRENCE: Clamp installed  
on the 10 inch line

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:

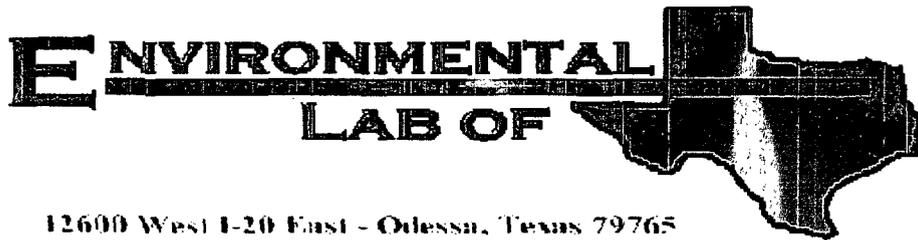
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

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



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: Maljamar to Lynch 10 inch

Project Number: EMS #2004-00227

Location: Lea County, NM

Lab Order Number: 5A05015

Report Date: 01/11/05

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Maljamar to Lynch 10 inch  
Project Number: EMS #2004-00227  
Project Manager: Ken Dutton

Fax: (505) 396-1429

**Reported:**  
01/11/05 10:14

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stock Pile East	5A05015-01	Soil	01/03/05 16:10	01/05/05 13:25
Stock Pile West	5A05015-02	Soil	01/03/05 16:00	01/05/05 13:25
West Exc N/ SW	5A05015-03	Soil	01/03/05 14:40	01/05/05 13:25
West Exc W/ SW	5A05015-04	Soil	01/03/05 14:50	01/05/05 13:25
RP East Sidewall	5A05015-05	Soil	01/03/05 15:30	01/05/05 13:25
RP Floor North	5A05015-06	Soil	01/03/05 15:50	01/05/05 13:25
RP Floor South	5A05015-07	Soil	01/03/05 15:40	01/05/05 13:25
West Exc Floor	5A05015-08	Soil	01/03/05 15:05	01/05/05 13:25
Valve SW	5A05015-09	Soil	01/03/05 15:15	01/05/05 13:25

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Maljamar to Lynch 10 inch  
Project Number: EMS #2004-00227  
Project Manager: Ken Dutton

Fax: (505) 396-1429

Reported:  
01/11/05 10:14

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Stock Pile East (5A05015-01) Soil</b>									
Benzene	0.233	0.200	mg/kg dry	200	EA51003	01/06/05	01/07/05	EPA 8021B	
Toluene	6.98	0.200	"	"	"	"	"	"	
Ethylbenzene	24.4	0.200	"	"	"	"	"	"	
Xylene (p/m)	38.7	0.200	"	"	"	"	"	"	
Xylene (o)	18.8	0.200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		128 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		149 %	80-120		"	"	"	"	S-04
Gasoline Range Organics C6-C12	6100	50.0	mg/kg dry	5	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	16600	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	22700	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		40.0 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		72.8 %	70-130		"	"	"	"	S-06
<b>Stock Pile West (5A05015-02) Soil</b>									
Benzene	0.0918	0.0250	mg/kg dry	25	EA51003	01/06/05	01/07/05	EPA 8021B	
Toluene	4.25	0.0250	"	"	"	"	"	"	
Ethylbenzene	13.7	0.0250	"	"	"	"	"	"	
Xylene (p/m)	16.9	0.0250	"	"	"	"	"	"	
Xylene (o)	7.70	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		189 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		156 %	80-120		"	"	"	"	S-04
Gasoline Range Organics C6-C12	4400	50.0	mg/kg dry	5	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	16500	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	20900	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		33.0 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		64.8 %	70-130		"	"	"	"	S-06
<b>West Exc N/ SW (5A05015-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/10/05	EPA 8021B	
Toluene	J [0.0230]	0.0250	"	"	"	"	"	"	J
Ethylbenzene	0.115	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.308	0.0250	"	"	"	"	"	"	
Xylene (o)	0.156	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		109 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		132 %	80-120		"	"	"	"	S-04
Gasoline Range Organics C6-C12	416	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	1720	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	2130	10.0	"	"	"	"	"	"	

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Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Maljamar to Lynch 10 inch  
Project Number: EMS #2004-00227  
Project Manager: Ken Dutton

Fax: (505) 396-1429  
**Reported:**  
01/11/05 10:14

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>West Exc N/ SW (5A05015-03) Soil</b>									
<i>Surrogate: 1-Chlorooctane</i>		103 %	70-130		EA50504	01/05/05	01/07/05	EPA 8015M	
<i>Surrogate: 1-Chlorooctadecane</i>		96.8 %	70-130		"	"	"	"	
<b>West Exc W/ SW (5A05015-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/09/05	EPA 8021B	
Toluene	0.203	0.0250	"	"	"	"	"	"	
Ethylbenzene	1.41	0.0250	"	"	"	"	"	"	
Xylene (p/m)	2.31	0.0250	"	"	"	"	"	"	
Xylene (o)	1.27	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		114 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		136 %	80-120		"	"	"	"	S-04
Gasoline Range Organics C6-C12	327	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	701	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1030	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		117 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		103 %	70-130		"	"	"	"	
<b>RP East Sidewall (5A05015-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/09/05	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>		86.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		102 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		79.0 %	70-130		"	"	"	"	

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**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>RP Floor North (5A05015-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/09/05	EPA 8021B	
Toluene	0.0253	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.203	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.480	0.0250	"	"	"	"	"	"	
Xylene (o)	0.319	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		109 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		116 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	185	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	527	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	712	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		121 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.6 %	70-130		"	"	"	"	
<b>RP Floor South (5A05015-07) Soil</b>									
Benzene	26.2	0.100	mg/kg dry	100	EA51003	01/06/05	01/09/05	EPA 8021B	
Toluene	118	0.100	"	"	"	"	"	"	
Ethylbenzene	105	0.100	"	"	"	"	"	"	
Xylene (p/m)	102	0.100	"	"	"	"	"	"	
Xylene (o)	44.6	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		895 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		166 %	80-120		"	"	"	"	S-04
Gasoline Range Organics C6-C12	8320	50.0	mg/kg dry	5	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	10900	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	19200	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		40.6 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		33.0 %	70-130		"	"	"	"	S-06
<b>West Exc Floor (5A05015-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/10/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		94.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	12.6	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	98.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	111	10.0	"	"	"	"	"	"	

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Project Manager: Ken Dutton

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>West Exc Floor (5A05015-08) Soil</b>									
Surrogate: 1-Chlorooctane		103 %	70-130		EA50504	01/05/05	01/07/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		81.4 %	70-130		"	"	"	"	
<b>Valve SW (5A05015-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EA51003	01/06/05	01/09/05	EPA 8021B	
Toluene	J [0.0203]	0.0250	"	"	"	"	"	"	J
Ethylbenzene	0.0423	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0738	0.0250	"	"	"	"	"	"	
Xylene (o)	0.0406	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		108 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		120 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EA50504	01/05/05	01/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	39.6	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	39.6	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		82.2 %	70-130		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Stock Pile East (5A05015-01) Soil</b>									
% Moisture	3.2		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>Stock Pile West (5A05015-02) Soil</b>									
% Moisture	4.2		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>West Exc N/ SW (5A05015-03) Soil</b>									
% Moisture	4.1		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>West Exc W/ SW (5A05015-04) Soil</b>									
% Moisture	0.9		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>RP East Sidewall (5A05015-05) Soil</b>									
% Moisture	4.2		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>RP Floor North (5A05015-06) Soil</b>									
% Moisture	2.9		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>RP Floor South (5A05015-07) Soil</b>									
% Moisture	3.9		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>West Exc Floor (5A05015-08) Soil</b>									
% Moisture	1.3		%	1	EA50511	01/05/05	01/06/05	% calculation	
<b>Valve SW (5A05015-09) Soil</b>									
% Moisture	2.1		%	1	EA50511	01/05/05	01/06/05	% calculation	

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EA50504 - Solvent Extraction (GC)**

**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			

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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EA50504 - Solvent Extraction (GC)</b>										
<b>Calibration Check (EA50504-CCV2)</b>										
				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			
<b>Matrix Spike (EA50504-MS1)</b>										
				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			
<b>Matrix Spike (EA50504-MS2)</b>										
				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			
<b>Matrix Spike Dup (EA50504-MSD1)</b>										
				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			
<b>Matrix Spike Dup (EA50504-MSD2)</b>										
				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			

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**Organics by GC - Quality Control**  
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EA51003 - EPA 5030C (GC)</b>										
<b>Blank (EA51003-BLK1)</b> 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			
<b>LCS (EA51003-BS1)</b> 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			
<b>Calibration Check (EA51003-CCV1)</b> 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			
<b>Matrix Spike (EA51003-MS1)</b> 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			

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Maljamar to Lynch 10 inch  
Project Number: EMS #2004-00227  
Project Manager: Ken Dutton

Fax: (505) 396-1429

**Reported:**  
01/11/05 10:14

**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
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**Batch EA51003 - EPA 5030C (GC)**

**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: <i>a,a,a-Trifluorotoluene</i>	115		"	100		115	80-120			
Surrogate: <i>4-Bromofluorobenzene</i>	119		"	100		119	80-120			

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Fax: (505) 396-1429

**Reported:**  
01/11/05 10:14

**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
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**Batch EA50511 - General Preparation (Prep)**

**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

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Reported:  
01/11/05 10:14

### 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

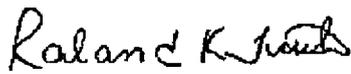
RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



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.

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

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Page 12 of 12



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

Client: Basin Env. Svc.

Date/Time: 01-05-05 @ 1325

Order #: 5A 05015

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	-115	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Custody Seals intact on shipping container/cooler?	<input type="radio"/> Yes	<input type="radio"/> No	<u>Not present</u>	
Custody Seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<u>Not present</u>	
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	

**Other observations:**

extra sample not listed Valve SW  
RP floor<sup>N</sup> listed twice on COC

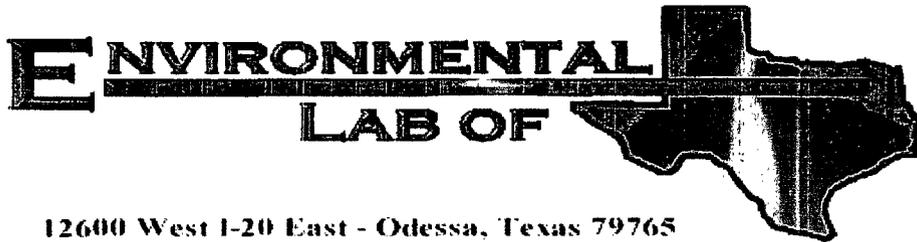
**Variance Documentation:**

Contact Person: - Ken Dutton Date/Time: 01-05-05 @ 1509 Contacted by: Jeanne McMurray

Regarding: sample / COC discrepancy

**Corrective Action Taken:**

Mark off 2<sup>nd</sup> RP floor North listed last on COC  
add Valve SW run BTEX + E015



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: Maljamar to Lynch 10"

Project Number: EMS: 2004-00227

Location: Lea County, NM

Lab Order Number: 5E06008

Report Date: 05/10/05

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

Project: Maljamar to Lynch 10'  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
05/10/05 11:03

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 5'	5E06008-01	Soil	05/02/05 10:30	05/06/05 16:10
SB-1 10'	5E06008-02	Soil	05/02/05 11:03	05/06/05 16:10
SB-1 15'	5E06008-03	Soil	05/02/05 11:08	05/06/05 16:10
SB-1 20'	5E06008-04	Soil	05/02/05 11:12	05/06/05 16:10
SB-1 25'	5E06008-05	Soil	05/02/05 11:18	05/06/05 16:10
SB-1 30'	5E06008-06	Soil	05/02/05 11:20	05/06/05 16:10
SB-1 35'	5E06008-07	Soil	05/02/05 11:30	05/06/05 16:10
SB-1 40'	5E06008-08	Soil	05/02/05 11:32	05/06/05 16:10
SB-1 45'	5E06008-09	Soil	05/01/05 11:38	05/06/05 16:10

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 05/10/05 11:03

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 5' (5E06008-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50903	05/06/05	05/09/05	EPA 8021B	
Toluene	0.0369	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.197	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.402	0.0250	"	"	"	"	"	"	
Xylene (o)	0.174	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		97.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	95.3	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	289	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	384	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		78.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		79.2 %	70-130		"	"	"	"	
<b>SB-1 10' (5E06008-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50903	05/06/05	05/06/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0445	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		91.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		88.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.8 %	70-130		"	"	"	"	
<b>SB-1 15' (5E06008-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0363	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.7 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
 05/10/05 11:03

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 15' (5E06008-03) Soil</b>									
<i>Surrogate: 1-Chlorooctane</i>		84.2 %	70-130		EE50619	05/06/05	05/07/05	EPA 8015M	
<i>Surrogate: 1-Chlorooctadecane</i>		72.4 %	70-130		"	"	"	"	
<b>SB-1 20' (5E06008-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		87.9 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.4 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		82.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		73.8 %	70-130		"	"	"	"	
<b>SB-1 25' (5E06008-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		91.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		74.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		71.2 %	70-130		"	"	"	"	

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Reported:  
 05/10/05 11:03

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 30' (SE06008-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		89.8 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		83.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		75.0 %	70-130		"	"	"	"	
<b>SB-1 35' (SE06008-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		86.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		92.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		80.4 %	70-130		"	"	"	"	
<b>SB-1 40' (SE06008-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		88.3 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 05/10/05 11:03

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 40' (5E06008-08) Soil</b>									
<i>Surrogate: 1-Chlorooctane</i>		85.4 %	70-130		EE50619	05/06/05	05/07/05	EPA 8015M	
<i>Surrogate: 1-Chlorooctadecane</i>		72.0 %	70-130		"	"	"	"	
<b>SB-1 45' (5E06008-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE50907	05/09/05	05/09/05	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>		98.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		81.1 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE50619	05/06/05	05/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		87.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		71.4 %	70-130		"	"	"	"	

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

Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
05/10/05 11:03

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 5' (5E06008-01) Soil</b>									
% Moisture	9.4	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 10' (5E06008-02) Soil</b>									
% Moisture	10.1	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 15' (5E06008-03) Soil</b>									
% Moisture	4.8	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 20' (5E06008-04) Soil</b>									
% Moisture	5.3	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 25' (5E06008-05) Soil</b>									
% Moisture	7.2	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 30' (5E06008-06) Soil</b>									
% Moisture	5.9	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 35' (5E06008-07) Soil</b>									
% Moisture	3.8	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 40' (5E06008-08) Soil</b>									
% Moisture	4.4	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	
<b>SB-1 45' (5E06008-09) Soil</b>									
% Moisture	17.0	0.1	%	1	EE50901	05/06/05	05/09/05	% calculation	

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 05/10/05 11:03

**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
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**Batch EE50619 - Solvent Extraction (GC)**

**Blank (EE50619-BLK1)**

Prepared: 05/06/05 Analyzed: 05/07/05

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	35.1		"	50.0		70.2	70-130			

**LCS (EE50619-BS1)**

Prepared: 05/06/05 Analyzed: 05/07/05

Gasoline Range Organics C6-C12	445	10.0	mg/kg wet	500		89.0	75-125			
Diesel Range Organics >C12-C35	485	10.0	"	500		97.0	75-125			
Total Hydrocarbon C6-C35	930	10.0	"	1000		93.0	75-125			
Surrogate: 1-Chlorooctane	37.8		mg/kg	50.0		75.6	70-130			
Surrogate: 1-Chlorooctadecane	36.4		"	50.0		72.8	70-130			

**Calibration Check (EE50619-CCV1)**

Prepared: 05/06/05 Analyzed: 05/07/05

Gasoline Range Organics C6-C12	447		mg/kg	500		89.4	80-120			
Diesel Range Organics >C12-C35	481		"	500		96.2	80-120			
Total Hydrocarbon C6-C35	928		"	1000		92.8	80-120			
Surrogate: 1-Chlorooctane	42.4		"	50.0		84.8	70-130			
Surrogate: 1-Chlorooctadecane	35.6		"	50.0		71.2	70-130			

**Matrix Spike (EE50619-MS1)**

Source: 5E06008-02

Prepared: 05/06/05 Analyzed: 05/07/05

Gasoline Range Organics C6-C12	504	10.0	mg/kg dry	556	ND	90.6	75-125			
Diesel Range Organics >C12-C35	560	10.0	"	556	ND	101	75-125			
Total Hydrocarbon C6-C35	1060	10.0	"	1110	ND	95.5	75-125			
Surrogate: 1-Chlorooctane	48.0		mg/kg	50.0		96.0	70-130			
Surrogate: 1-Chlorooctadecane	38.0		"	50.0		76.0	70-130			

**Matrix Spike Dup (EE50619-MSD1)**

Source: 5E06008-02

Prepared: 05/06/05 Analyzed: 05/07/05

Gasoline Range Organics C6-C12	516	10.0	mg/kg dry	556	ND	92.8	75-125	2.35	20	
Diesel Range Organics >C12-C35	550	10.0	"	556	ND	98.9	75-125	1.80	20	
Total Hydrocarbon C6-C35	1070	10.0	"	1110	ND	96.4	75-125	0.939	20	
Surrogate: 1-Chlorooctane	46.9		mg/kg	50.0		93.8	70-130			
Surrogate: 1-Chlorooctadecane	38.1		"	50.0		76.2	70-130			

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Fax: (432) 687-4914

Reported:  
 05/10/05 11:03

**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
<b>Batch EE50903 - EPA 5030C (GC)</b>										
<b>Blank (EE50903-BLK1)</b>										
Prepared & Analyzed: 05/06/05										
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	103		ug/kg	100		103	80-120			
Surrogate: 4-Bromofluorobenzene	102		"	100		102	80-120			
<b>LCS (EE50903-BS1)</b>										
Prepared & Analyzed: 05/06/05										
Benzene	84.4		ug/kg	100		84.4	80-120			
Toluene	87.6		"	100		87.6	80-120			
Ethylbenzene	90.3		"	100		90.3	80-120			
Xylene (p/m)	214		"	200		107	80-120			
Xylene (o)	95.6		"	100		95.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.2		"	100		91.2	80-120			
Surrogate: 4-Bromofluorobenzene	111		"	100		111	80-120			
<b>Calibration Check (EE50903-CCV1)</b>										
Prepared: 05/06/05 Analyzed: 05/07/05										
Benzene	81.6		ug/kg	100		81.6	80-120			
Toluene	82.4		"	100		82.4	80-120			
Ethylbenzene	80.8		"	100		80.8	80-120			
Xylene (p/m)	183		"	200		91.5	80-120			
Xylene (o)	90.5		"	100		90.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	120		"	100		120	80-120			
Surrogate: 4-Bromofluorobenzene	102		"	100		102	80-120			
<b>Matrix Spike (EE50903-MS1)</b>										
Source: 5E06008-02 Prepared: 05/06/05 Analyzed: 05/09/05										
Benzene	2060		ug/kg	2500	ND	82.4	80-120			
Toluene	2150		"	2500	ND	86.0	80-120			
Ethylbenzene	2260		"	2500	ND	90.4	80-120			
Xylene (p/m)	5000		"	5000	40.0	99.2	80-120			
Xylene (o)	2340		"	2500	ND	93.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	117		"	100		117	80-120			
Surrogate: 4-Bromofluorobenzene	117		"	100		117	80-120			

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 05/10/05 11:03

**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
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**Batch EE50903 - EPA 5030C (GC)**

Matrix Spike Dup (EE50903-MSD1)	Source: 5E06008-02		Prepared & Analyzed: 05/06/05							
Benzene	2110		ug/kg	2500	ND	84.4	80-120	2.40	20	
Toluene	2180		"	2500	ND	87.2	80-120	1.39	20	
Ethylbenzene	2300		"	2500	ND	92.0	80-120	1.75	20	
Xylene (p/m)	5310		"	5000	40.0	105	80-120	5.68	20	
Xylene (o)	2490		"	2500	ND	99.6	80-120	6.21	20	
Surrogate: a,a,a-Trifluorotoluene	116		"	100		116	80-120			
Surrogate: 4-Bromofluorobenzene	117		"	100		117	80-120			

**Batch EE50907 - EPA 5030C (GC)**

Blank (EE50907-BLK1)	Prepared & Analyzed: 05/09/05									
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	98.7		ug/kg	100		98.7	80-120			
Surrogate: 4-Bromofluorobenzene	93.9		"	100		93.9	80-120			

**LCS (EE50907-BS1)**

LCS (EE50907-BS1)			Prepared & Analyzed: 05/09/05							
Benzene	80.5		ug/kg	100		80.5	80-120			
Toluene	83.2		"	100		83.2	80-120			
Ethylbenzene	84.6		"	100		84.6	80-120			
Xylene (p/m)	200		"	200		100	80-120			
Xylene (o)	93.4		"	100		93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	117		"	100		117	80-120			
Surrogate: 4-Bromofluorobenzene	110		"	100		110	80-120			

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Fax: (432) 687-4914

Reported:  
 05/10/05 11:03

**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
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**Batch EE50907 - EPA 5030C (GC)**

**Calibration Check (EE50907-CCV1)**

Prepared & Analyzed: 05/09/05

Benzene	80.2		ug/kg	100		80.2	80-120			
Toluene	80.9		"	100		80.9	80-120			
Ethylbenzene	81.1		"	100		81.1	80-120			
Xylene (p/m)	183		"	200		91.5	80-120			
Xylene (o)	84.1		"	100		84.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	115		"	100		115	80-120			
Surrogate: 4-Bromofluorobenzene	97.3		"	100		97.3	80-120			

**Matrix Spike (EE50907-MS1)**

Source: 5E06008-04

Prepared: 05/09/05 Analyzed: 05/10/05

Benzene	2020		ug/kg	2500	ND	80.8	80-120			
Toluene	2010		"	2500	ND	80.4	80-120			
Ethylbenzene	2010		"	2500	ND	80.4	80-120			
Xylene (p/m)	4740		"	5000	ND	94.8	80-120			
Xylene (o)	2320		"	2500	ND	92.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	80.0		"	100		80.0	80-120			
Surrogate: 4-Bromofluorobenzene	80.4		"	100		80.4	80-120			

**Matrix Spike Dup (EE50907-MSD1)**

Source: 5E06008-04

Prepared: 05/09/05 Analyzed: 05/10/05

Benzene	2020		ug/kg	2500	ND	80.8	80-120	0.00	20	
Toluene	2070		"	2500	ND	82.8	80-120	2.94	20	
Ethylbenzene	2050		"	2500	ND	82.0	80-120	1.97	20	
Xylene (p/m)	4780		"	5000	ND	95.6	80-120	0.840	20	
Xylene (o)	2280		"	2500	ND	91.2	80-120	1.74	20	
Surrogate: a,a,a-Trifluorotoluene	115		"	100		115	80-120			
Surrogate: 4-Bromofluorobenzene	105		"	100		105	80-120			

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Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
05/10/05 11:03

**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
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**Batch EE50901 - General Preparation (Prep)**

**Blank (EE50901-BLK1)**

Prepared: 05/06/05 Analyzed: 05/09/05

% Moisture ND 0.1 %

**Duplicate (EE50901-DUP1)**

Source: 5E06001-01

Prepared: 05/06/05 Analyzed: 05/09/05

% Moisture 1.3 0.1 % 1.2 8.00 20

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Midland TX, 79706-4476

Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

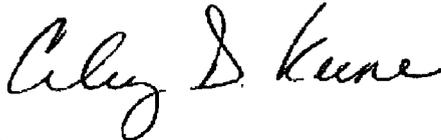
Fax: (432) 687-4914

**Reported:**  
05/10/05 11:03

### 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: \_\_\_\_\_



Date: 5/10/2005

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.

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**  
**Variance / Corrective Action Report – Sample Log-In**

Client: Basin Env.

Date/Time: 5/6/05 4:30

Order #: 5E06008

Initials: CK

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	40 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:

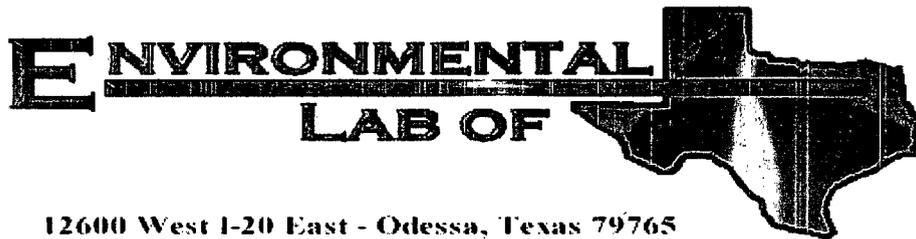
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Maljamar to Lynch 10"

Project Number: EMS: 2004-00227

Location: Lea County, NM

Lab Order Number: 5K28001

Report Date: 12/01/05

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

Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
12/01/05 16:05

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
R/P 17	5K28001-01	Soil	11/23/05 09:00	11/23/05 16:00

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
 12/01/05 16:05

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>R/P 17' (5K28001-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EK52901	11/29/05	11/29/05	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>		98.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.8 %	80-120		"	"	"	"	
<b>Gasoline Range Organics C6-C12</b>	<b>ND</b>	10.0	mg/kg dry	1	EK52804	11/28/05	12/01/05	EPA 8015M	
<b>Diesel Range Organics &gt;C12-C35</b>	<b>140</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>140</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		98.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		98.2 %	70-130		"	"	"	"	

Plains All American EH & S  
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**Reported:**  
12/01/05 16:05

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>R/P 17' (5K28001-01) Soil</b>									
% Moisture	3.3	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	

Plains All American EH & S  
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Fax: (432) 687-4914  
**Reported:**  
 12/01/05 16:05

**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
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**Batch EK52804 - Solvent Extraction (GC)**

**Blank (EK52804-BLK1)**

Prepared: 11/28/05 Analyzed: 12/01/05

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	38.6		mg/kg	50.0		77.2	70-130			
Surrogate: 1-Chlorooctadecane	35.0		"	50.0		70.0	70-130			

**LCS (EK52804-BS1)**

Prepared: 11/28/05 Analyzed: 12/01/05

Gasoline Range Organics C6-C12	516	10.0	mg/kg wet	500		103	75-125			
Diesel Range Organics >C12-C35	591	10.0	"	500		118	75-125			
Total Hydrocarbon C6-C35	1110	10.0	"	1000		111	75-125			
Surrogate: 1-Chlorooctane	62.5		mg/kg	50.0		125	70-130			
Surrogate: 1-Chlorooctadecane	51.2		"	50.0		102	70-130			

**Calibration Check (EK52804-CCV1)**

Prepared: 11/28/05 Analyzed: 12/01/05

Gasoline Range Organics C6-C12	410		mg/kg	500		82.0	80-120			
Diesel Range Organics >C12-C35	556		"	500		111	80-120			
Total Hydrocarbon C6-C35	966		"	1000		96.6	80-120			
Surrogate: 1-Chlorooctane	56.8		"	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	55.8		"	50.0		112	70-130			

**Matrix Spike (EK52804-MS1)**

Source: 5K28003-11

Prepared: 11/28/05 Analyzed: 12/01/05

Gasoline Range Organics C6-C12	504	10.0	mg/kg dry	510	ND	98.8	75-125			
Diesel Range Organics >C12-C35	608	10.0	"	510	ND	119	75-125			
Total Hydrocarbon C6-C35	1110	10.0	"	1020	ND	109	75-125			
Surrogate: 1-Chlorooctane	62.8		mg/kg	50.0		126	70-130			
Surrogate: 1-Chlorooctadecane	58.3		"	50.0		117	70-130			

**Matrix Spike Dup (EK52804-MSD1)**

Source: 5K28003-11

Prepared: 11/28/05 Analyzed: 12/01/05

Gasoline Range Organics C6-C12	535	10.0	mg/kg dry	510	ND	105	75-125	5.97	20	
Diesel Range Organics >C12-C35	619	10.0	"	510	ND	121	75-125	1.79	20	
Total Hydrocarbon C6-C35	1150	10.0	"	1020	ND	113	75-125	3.54	20	
Surrogate: 1-Chlorooctane	59.9		mg/kg	50.0		120	70-130			
Surrogate: 1-Chlorooctadecane	59.8		"	50.0		120	70-130			

Plains All American EH & S  
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Project: Maljamar to Lynch 10"  
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Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/01/05 16:05

**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
<b>Batch EK52901 - EPA 5030C (GC)</b>										
<b>Blank (EK52901-BLK1)</b> Prepared & Analyzed: 11/29/05										
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	41.8		ug/kg	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	35.6		"	40.0		89.0	80-120			
<b>LCS (EK52901-BS1)</b> Prepared & Analyzed: 11/29/05										
Benzene	0.0435	0.00100	mg/kg wet	0.0500		87.0	80-120			
Toluene	0.0526	0.00100	"	0.0500		105	80-120			
Ethylbenzene	0.0550	0.00100	"	0.0500		110	80-120			
Xylene (p/m)	0.103	0.00100	"	0.100		103	80-120			
Xylene (o)	0.0545	0.00100	"	0.0500		109	80-120			
Surrogate: a,a,a-Trifluorotoluene	45.5		ug/kg	40.0		114	80-120			
Surrogate: 4-Bromofluorobenzene	42.4		"	40.0		106	80-120			
<b>Calibration Check (EK52901-CCV1)</b> Prepared & Analyzed: 11/29/05										
Benzene	42.7		ug/kg	50.0		85.4	80-120			
Toluene	50.3		"	50.0		101	80-120			
Ethylbenzene	49.7		"	50.0		99.4	80-120			
Xylene (p/m)	93.8		"	100		93.8	80-120			
Xylene (o)	49.4		"	50.0		98.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	44.2		"	40.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	32.9		"	40.0		82.2	80-120			
<b>Matrix Spike (EK52901-MS1)</b> Source: 5K28011-01 Prepared & Analyzed: 11/29/05										
Benzene	0.0458	0.00100	mg/kg dry	0.0526	ND	87.1	80-120			
Toluene	0.0559	0.00100	"	0.0526	ND	106	80-120			
Ethylbenzene	0.0593	0.00100	"	0.0526	ND	113	80-120			
Xylene (p/m)	0.111	0.00100	"	0.105	ND	106	80-120			
Xylene (o)	0.0589	0.00100	"	0.0526	ND	112	80-120			
Surrogate: a,a,a-Trifluorotoluene	47.7		ug/kg	40.0		119	80-120			
Surrogate: 4-Bromofluorobenzene	46.7		"	40.0		117	80-120			

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

Project: Maljamar to Lynch 10"  
 Project Number: EMS: 2004-00227  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/01/05 16:05

**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
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**Batch EK52901 - EPA 5030C (GC)**

**Matrix Spike Dup (EK52901-MSD1)**

Source: 5K28011-01

Prepared & Analyzed: 11/29/05

Benzene	0.0463	0.00100	mg/kg dry	0.0526	ND	88.0	80-120	1.03	20	
Toluene	0.0559	0.00100	"	0.0526	ND	106	80-120	0.00	20	
Ethylbenzene	0.0587	0.00100	"	0.0526	ND	112	80-120	0.889	20	
Xylene (p/m)	0.110	0.00100	"	0.105	ND	105	80-120	0.948	20	
Xylene (o)	0.0583	0.00100	"	0.0526	ND	111	80-120	0.897	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	46.3		ug/kg	40.0		116	80-120			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	80-120			

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

Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
12/01/05 16:05

**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
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**Batch EK52902 - General Preparation (Prep)**

**Blank (EK52902-BLK1)**

Prepared: 11/28/05 Analyzed: 11/29/05

% Solids 100 %

**Duplicate (EK52902-DUP1)**

Source: 5K28001-01

Prepared: 11/28/05 Analyzed: 11/29/05

% Solids 97.2 % 96.7 0.516 20

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

Project: Maljamar to Lynch 10"  
Project Number: EMS: 2004-00227  
Project Manager: Camille Reynolds

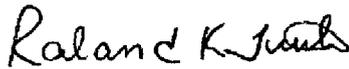
Fax: (432) 687-4914

**Reported:**  
12/01/05 16:05

### 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:



Date:

12/1/2005

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**  
**Variance / Corrective Action Report – Sample Log-In**

Client: Plains  
 Date/Time: 11/23/05 16:00  
 Order #: 5K28001  
 Initials: OK

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	O.S	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:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



16. Project Data:

a. Records Search: Date(s) of BLM File Review: 14 Feb. 2005 Name of Reviewer (s): Ann Boone

Date(s) of ARMS Data Review: 14 Feb. 2005 Name of Reviewer (s): Ann Boone

Findings (see Field Office requirements to determine area to be reviewed during records search):

LA 108870 is within .25 mile

b. Description of Undertaking:

The project is an area where an abandoned pipeline leaked and will be cleaned up. The survey area is roughly block shaped, see attached map. This project was not staked but Mr. Ken Dutton met at the location with Danny Boone and an estimated 100 feet buffer around the effected area was surveyed. Location, footage, survey acres and impact acres are estimations based on a hand held GPS Unit.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

Topography: Slightly rolling dunal plain.

Vegetation: Overall ground cover is approximately 30% and consists primarily of shinoak, yucca cactus, prickly pear cactus, various grasses and other flora.

NRCS: Peyote-Maljamar-Kermit association: Gently undulating and rolling, deep, sandy soils.

d. Field Methods: (transect intervals; crew size; time in field, etc.):

Transects: A parallel grid spaced 15 meters or less apart.

Crew Size: One

Time in Field: 1.0 hours.

e. Artifacts Collected (?): None

17. Cultural Resource Findings:

a. Identification and description: None

b. Evaluation of significance of Each Resource:

18. Management Summary (Recommendations):

No cultural resources were encountered during the survey, therefore clearance is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.

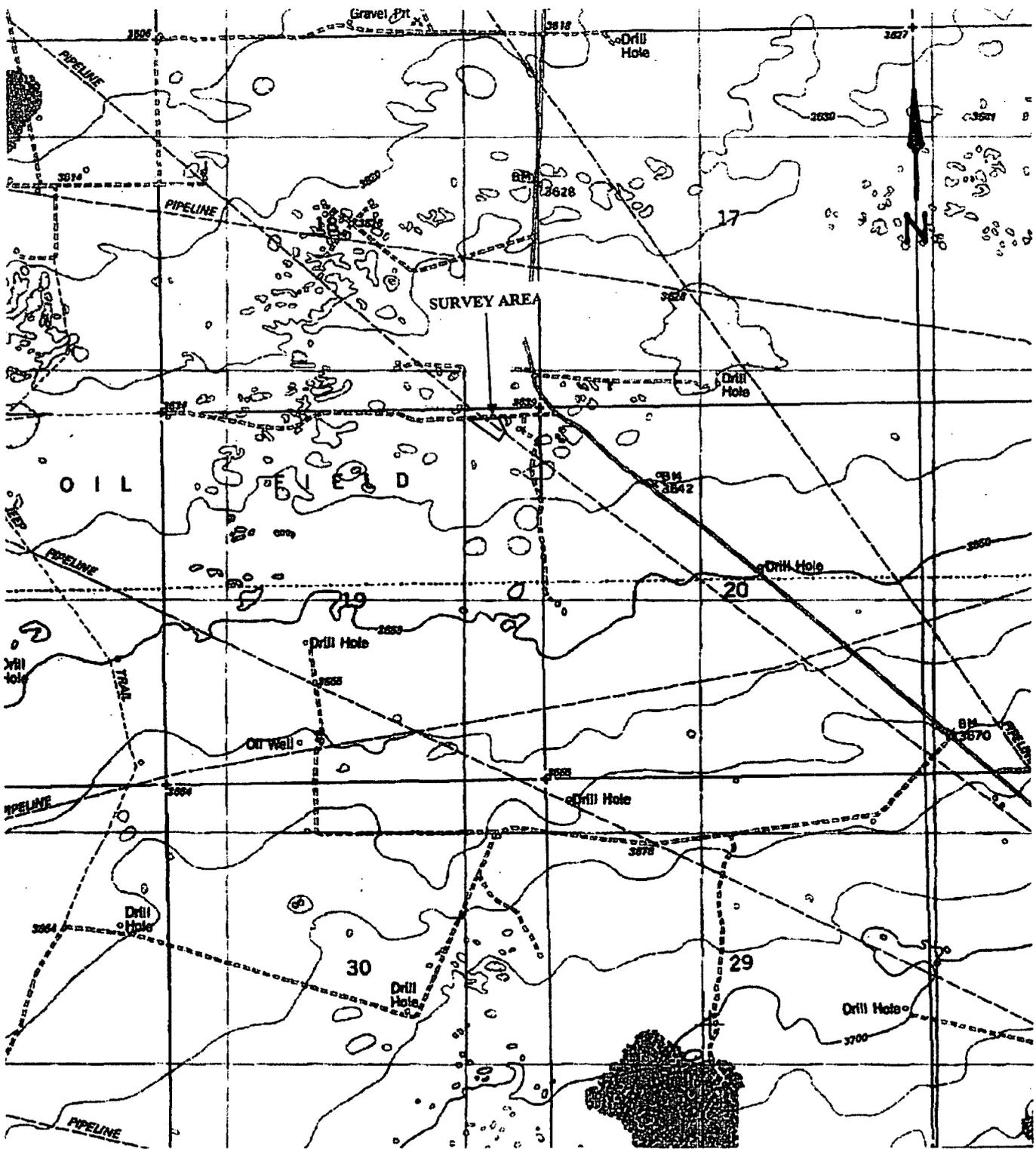
19.

I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist

Danny Boone  
Signature

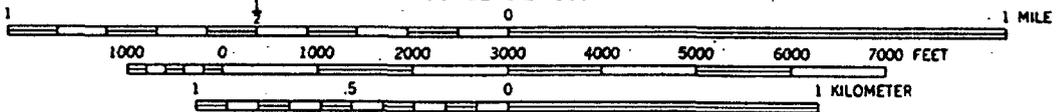
25 Feb. 2005  
Date



Location Map of a survey area for an oil spill from the Maljamar to Lynch 10" line for Plains All American in Section 19, T 20S, R 34E, NMPM, Lea County, New Mexico.

Map Reference: USGS 7.5' Series; LEA, NM (1984) 32103-E5

SCALE 1:24 000



Depth	Soil Column	PID Readings	Petroleum Odor	Petroleum Stain	Soil Description	Soil Boring Completion Data
5		128 ppm	Slight	None	Sand (SP) Red, Very Fine Grained, Well Sorted, Moist	<b>Soil Boring Completion Data</b> TD: 45 Feet bgs Installed 02 May 05 Basin Environmental Svc. 9 Bags Bentonite hydrated with water Soil Boring Plugging Data
10		8.6 ppm	Slight	None		
15		3.3 ppm	None	None	Sand (SP) White-Brown, Very Fine Grained, Well Sorted, dry	
20		0.9 ppm	None	None		
25		1.9 ppm	None	None		
30		0.2 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, dry, Caliche layer 31' - 34'	Bentonite Plug, 0-45' bgs 
35		0.1 ppm			Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, imbedded w/ gravel, dry	
40		0.7 ppm				
45		0.1 ppm				

TITLE	DESCRIPTION
Majamar to Lynch Abandoned 10"	SB-1
DRAWN BY KAD	DATE 02 May 05

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

State of New Mexico  
Energy Minerals and Natural Resources

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 Maljamar to Lynch 10 inch	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
A	19	20S	34E					Lea

Latitude 32°33'55.3" Longitude 103°35'35.9"

**NATURE OF RELEASE**

Type of Release Crude Oil	Volume of Release 120 barrels	Volume Recovered 100 barrels
Source of Release 10" Steel Pipeline	Date and Hour of Occurrence 12/9/04 @ 08:00	Date and Hour of Discovery 12/9/04 @ 08:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley	
By Whom? Camille Reynolds	Date and Hour 12/9/04 @ 14:50	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.\* Internal corrosion of the idle 10" steel gathering pipeline. A clamp was installed on the line to mitigate the release. The line is inactive so information concerning volume produced and pressure on line is unavailable.

Describe Area Affected and Cleanup Action Taken.\* A clamp was installed on the line to mitigate the release. The sour crude oil was vacuumed up and the impacted soil was excavated and stockpiled on plastic. The aerial extent of surface impact was approximately 181' x 50'.

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: 12/10/04 Phone: 505-441-0965		

Attach Additional Sheets If Necessary