

# ***Basin Environmental Service Technologies, LLC***

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

**PLAINS MARKETING, L.P. (231735)**

**North Hobbs 8-Inch Site**

**Lea County, New Mexico**

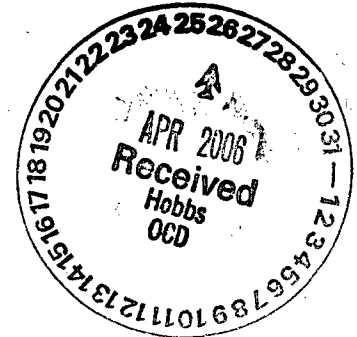
**Plains SRS # 2006-059**

**UNIT M (SW/SW), Section 29, Township 18S, Range 38E**

**Latitude 32°, 42', 40.2" North, Longitude 103°, 10', 41.7" 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

*RP#713*

**25 April 2006**

Ken Dutton

Basin Environmental Service Technologies, LLC

*incident - n PAC0605428056  
application - p PAC0605428301*

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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 North Hobbs 8-Inch Pipeline on 10 February 2006. Plains operations personnel contained and clamped the North Hobbs 8-Inch Pipeline on 09 February 2006 and the impacted soil was excavated and stockpiled on a 6-mil poly-liner adjacent to the excavation. The North Hobbs 8-Inch Pipeline right-of-way is located on land owned by R, M and S Enterprises.

This site is located in Unit M (SW/SW), Section 29, Township 18 South, Range 38 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site latitude is 32°, 42', 40.2" North and the site longitude is 103°, 10', 41.7" West. The site is characterized by a right-of-way for the pipeline in a pasture adjacent to commercial businesses to the east and oil production facilities to the north and west. The initial visible surface stained area includes the release point covering an area approximately 20 feet long by 20 feet wide. An estimated 10 barrels of crude oil were released from the North Hobbs 8-Inch Pipeline and 0 barrels were recovered.

An emergency one-call was initiated 09 February 2006 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Ms Pat Caperton, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District I was verbally notified of the release on 09 February 2006. A NMOCD C-141 was prepared and delivered to Ms Pat Caperton on 14 February 2006 (see Appendix D, NMOCD C-141).

## **SUMMARY OF FIELD ACTIVITIES**

Basin mobilized to the pipeline release site to initiate soil remediation activities on 10 February 2006, located on the North Hobbs 8-Inch Pipeline after Plains operations personnel clamped and secured the pipeline release on 09 February 2006. After the crude oil release had been contained utilizing a pipeline repair clamp, excavation of the impacted soil was accomplished (see Figure 2, Excavation Site Map). The North Hobbs 8-Inch Pipeline was de-oiled and removed from the excavated area under the direction of Plains operations personnel following the crude oil release. The release point and visually stained area was excavated to approximately 110 feet long by 75 feet wide and 18 feet below ground surface (bgs). An estimated 3500 cubic yards of excavated soils were placed on a 6-mil poly liner adjacent to the excavation for future remedial action. Approximately 2500 cubic yards of segregated clean overburden have been excavated and stockpiled on-site.

On 28 February 2006, soil samples were collected from the walls and delineation trench on the floor of the excavation. The four (4) soil samples were analyzed for

total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Laboratory results of the soil samples collected indicated that TPH-GRO/DRO constituent concentrations exceeded NMOCD regulatory standards for three (3) soil samples and were not detected above laboratory method detection limits for the remaining soil sample. Based on the laboratory results, excavation of the crude oil release site continued.

On 08 March 2006, a soil boring was installed at the release point on the excavation floor (18 feet bgs) to a depth of 58 feet bgs to evaluate the vertical impact of the crude oil release. Soil samples were collected at 5 feet intervals, field screened with a Photoionization Detector (PID) and the selected soils samples were analyzed for constituent concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) and TPH-GRO/DRO. Laboratory results indicated that the eight (8) soil samples were below NMOCD regulatory standards for concentrations of BTEX and exceeded NMOCD regulatory standards for TPH-GRO/DRO on seven (7) of the eight (8) soil samples. Groundwater was encountered at approximately 56 feet bgs and a groundwater sample was collected and analyzed for BTEX. Laboratory results indicated the groundwater sample was below NMOCD regulatory standards for constituent concentrations of BTEX.

On 13 and 14 March 2006, at the request of Hobbs NMOCD District 1, three (3) groundwater monitor wells were installed, one (1) up gradient and two (2) down gradient of the release point to evaluate the groundwater (see Figure 4, Excavation Site Map – Soil Boring & Monitoring Well Locations). Soil samples were collected at 5 feet intervals; field screened with a PID and selected soils samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Six (6) soil samples were selected for analysis from each of the three (3) groundwater monitoring well installations ranging in depth from 5 to 55 feet bgs, resulting in a total of eighteen (18) soil samples. Laboratory results of the eighteen (18) soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

On 16 and 17 March 2006, the three (3) groundwater monitoring wells were developed, purged and sampled. Additionally, the TFH domestic water well adjacent to the release site was sampled. The groundwater samples were analyzed for constituent concentrations of BTEX and Chlorides. Laboratory results of the three (3) groundwater monitoring wells and TFH domestic well groundwater samples indicated constituent concentrations of BTEX were not detected above laboratory method detection limits and below NMOCD regulatory standards for Chlorides.

On 27 March 2006, confirmation soil samples were collected from the floor and walls of the excavated area (see Figure 3, Excavation Site Map- Soil Sampling Locations). The soil samples were field screened with a PID and analyzed for BTEX and TPH-GRO/DRO. Laboratory results of the eight (8) soil samples collected from the floor and walls of the excavation indicated that TPH-GRO/DRO and BTEX constituent

concentrations were either below NMOCD regulatory standards or were not detected above laboratory method detection limits.

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

A search of the New Mexico State Engineers database revealed the average depth to groundwater to be 59 feet bgs for that section, township and range. Based on the installation of the soil boring and three (3) groundwater monitoring wells, the depth to groundwater (59 feet bgs) is accurate. There are no surface water bodies within 1000 feet, however; there is a domestic water well (TFH commercial business) within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of >19, which sets the remediation levels at:

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

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

The original release point and visually stained area was excavated to approximately 110 feet long by 75 feet wide and to a depth of approximately 18 feet bgs. Evidence of crude oil impact still existed on the excavation floor beneath the release point area. Photoionization Detector (PID) readings and laboratory results indicated elevated concentrations of Volatile Organic Compounds (VOC) remain. Approximately 3500 cubic yards of impacted soil was excavated and stockpiled adjacent to the excavation on a 6-mil poly-liner and approximately 2500 cubic yards of segregated clean overburden was excavated and stockpiled on-site.

On 28 February 2006, delineation soil samples were collected from the walls and delineation trench on the floor of the excavation. The four (4) soil samples were field screened with a PID and analyzed for constituent concentrations of TPH-GRO/DRO. The four (4) soil samples were collected at depths ranging from 13 to 30 feet bgs. Laboratory results of the soil samples collected indicated that TPH-GRO/DRO constituent concentrations exceeded NMOCD regulatory standards on the floor delineation trench at 30 feet bgs, south wall and west wall soil samples at 970 mg/kg, 909 mg/kg and 1530 mg/kg, respectively. The east wall soil sample was not detected above laboratory method detection limits for constituent concentrations of TPH-GRO/DRO.

Soil Boring 1, as depicted on the Excavation Site Map - Soil Boring & Monitoring Well Locations (Figure 4), was installed on the floor of the excavation at approximately 18 feet bgs at the release point utilizing an air rotary drill rig operated by Straub Corporation, Stanton, Texas. Soil samples collected at 5, 10, 15, 20, 25, 30, 35 and 40 feet bgs subsurface sample depths were submitted for analysis. Soil boring logs

are included in Appendix C. No visual observations of free phase hydrocarbons were encountered during the installation of the soil boring. Laboratory data sheets and chain-of-custody forms are attached in Appendix B. Laboratory results indicated that the 5, 10, 15, 20, 25, 30 and 35 feet bgs soil samples were below NMOCD regulatory standards for constituent concentrations of BTEX and were not detected above laboratory method detection limits for the 40 feet bgs soil sample. Laboratory results indicated that the 5, 10, 15, 20, 25, 30 and 35 feet bgs soils samples exceeded NMOCD regulatory standards for constituent concentrations of TPH-GRO/DRO at 4210 mg/kg, 5220 mg/kg, 1820 mg/kg, 258 mg/kg, 465 mg/kg, 218 mg/kg and 144 mg/kg, respectively. The 40 feet subsurface soil sample was not detected above laboratory method detection limits for constituent concentrations of TPH-GRO/DRO.

Groundwater Monitoring Well 1 (MW-1) was installed at an up gradient position to the release point. Subsurface soil samples were collected at 5, 15, 25, 35, 45 and 55 feet bgs sample depths and field screened with a PID and submitted for analysis. Laboratory results of the six (6) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

Groundwater Monitoring Well 2 (MW-2) was installed at a down gradient position to the release point. Subsurface soil samples were collected at 5, 15, 25, 35, 45 and 55 feet bgs sample depths and field screened with a PID and submitted for analysis. Laboratory results of the six (6) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

Groundwater Monitoring Well 3 (MW-3) was installed at a down gradient position to the release point. Subsurface soil samples were collected at 5, 15, 25, 35, 45 and 55 feet bgs sample depths and field screened with a PID and submitted for analysis. Laboratory results of the six (6) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

On 27 March 2006, eight (8) confirmation soil samples were collected from the walls and floor of the excavation following additional excavation at depths ranging from 12 to 18 feet, respectively, and submitted for analysis. Soil sample locations are included in Figure 3. Analytical results of the eight (8) confirmation soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits, with the exception of the south wall soil sample, which indicated detectable TPH-GRO/DRO concentrations, but were below NMOCD regulatory standards.

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

Groundwater was encountered at depths varying from 55 to 56 feet bgs in the soil boring and groundwater monitoring wells during drilling activities. No evidence of phase-separated hydrocarbons (PSH) was detected during drilling or groundwater sampling activities. Top-of-casing elevations for the on-site groundwater monitoring wells were not available at the time of this preliminary report; therefore, site-specific groundwater gradient information is not included.

On 16 and 17 March 2006, the three (3) groundwater monitoring wells were developed, purged and sampled. Additionally, the TFH domestic water well adjacent to the release site was sampled. The groundwater samples were analyzed for constituent concentrations of BTEX and Chlorides. Laboratory results of the three (3) groundwater monitoring wells and TFH domestic well groundwater samples indicated constituent concentrations of BTEX were not detected above laboratory method detection limits and below NMOCD regulatory standards for Chlorides (see Groundwater Chemistry, Table 2).

## **RECOMMENDATIONS FOR REMEDIATION/CLOSURE**

Approximately 3500 cubic yards of impacted soil and caliche rock and approximately 2500 cubic yards of segregated clean overburden and caliche rock have been excavated and stockpiled on-site resulting from the emergency response and excavation of the release point and flow path. Approximately 75% of the excavated material consists of caliche rock. Due to the extremely high content of caliche rock and limited vertical subsurface crude oil impact, Plains proposes to mechanically screen the impacted stockpile to separate the caliche rock and soil. Upon completion of the screening activities, the caliche rock will be utilized as partial backfill in accordance with standard NMOCD approved practices. The impacted mechanically screened soil will be transported to the Plains Lea Station Landfill for remediation.

Due to the limited vertical crude oil impact derived from analytical results commensurate with excavation and drilling activities, Plains recommends that an impermeable barrier consisting of a 40-mil poly liner be permanently installed at the base of the excavation to inhibit vertical migration of contaminants in soil left in place below the cap (see Figure 5, Installation Diagram of 40-mil Poly Liner). The barrier will extend to a minimum of three (3) feet beyond the edges of soil impacted above NMOCD remedial thresholds. A 6-inch layer of fine sand will be installed beneath and above the 40-mil poly liner to prevent degrading the integrity of the poly liner. Installation of the 40-mil poly liner at a depth of 18 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegrading of contaminants in the soil.

Once the installation of the 40-mil poly liner is completed, backfilling of the excavation will be initiated with the segregated clean overburden and mechanically screened caliche rock. Soil samples will be collected from the overburden materials at a rate of

one sample per 500 cubic yards to verify constituent concentrations of BTEX and TPH-GRO/DRO are below NMOCD regulatory standards of 100 mg/kg. If necessary, Plains will purchase clean backfill to complete the excavation. The backfilled excavation will be contoured to the original grade surrounding the site and reseeded with approved grass seed.

A request for closure will be submitted to the Hobbs District I office, upon completion of backfilling activities. Based on the results of the remediation activities conducted, Plains requests approval from NMOCD to implement these proposed final remediation and site closure activities.

Based on the results of the groundwater sampling event, Plains request permission from the NMOCD to plug and abandon the three (3) groundwater monitoring wells located at the site. The wells will be plugged in accordance with NMOCD prescribed procedures of cutting the casing off below ground surface level and filling the casing annulus from bottom to top with a cement grout containing 3-5% bentonite.

## **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

### **Groundwater Sampling**

The groundwater monitoring wells were developed utilizing the Environmental Protection Agency (EPA) protocol of approximately nine well volumes of groundwater or until the monitoring wells are dry using an electrical Grundfos Pump. Within forty-eight hours of development, the monitoring wells were measured and purged of approximately three well volumes utilizing an electrical Grundfos Pump. Groundwater samples were collected using a disposable Teflon sampler and the groundwater samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purged water was collected in a polystyrene tank and disposed of at a licensed New Mexico disposal facility. Groundwater samples were delivered to Environmental Lab of Texas, Odessa, Texas for analysis of BTEX and Chloride concentrations using the methods described below. All samples were analyzed within approved holding times following the collection date.



- BTEX concentrations in accordance with EPA Method 8821B/5030
- Chloride concentrations in accordance with EPA Method 300.0

### **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.

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**TABLE 1**  
**SOIL CHEMISTRY**

**PLAINS MARKETING L.P.**  
**NORTH HOBBS 8-INCH**  
**LEA COUNTY, NEW MEXICO**  
**PLAINS SRS: 2006-059**

SAMPLE LOCATION	SAMPLE DEPTH (Below Normal Surface Grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL TPH	METHOD 300 CHLORIDES (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)		
Floor @ 30'	30' bgs	02/28/06							96.5	873	970
East Wall	13' bgs	02/28/06							<10	<10	<10
South Wall	16' bgs	02/28/06							22	887	909
West Wall	16' bgs	02/28/06							107	1425	1530
SB-1 5'	23' bgs	03/08/06	0.061	0.832	1.79	5.09	0.327	815	3398	4210	
SB-1 10'	28' bgs	03/08/06	0.045	0.606	1.03	2.07	0.684	921	4302	5220	
SB-1 15'	33' bgs	03/08/06	0.033	0.178	0.342	0.611	0.144	199	1622	1820	
SB-1 20'	38' bgs	03/08/06	<0.025	<0.025	0.081	0.149	<0.025	11.8	246.3	258	
SB-1 25'	43' bgs	03/08/06	<0.025	<0.025	0.083	0.152	<0.025	22.6	442	465	
SB-1 30'	48' bgs	03/08/06	<0.025	0.056	0.081	0.150	<0.025	16.6	201	218	
SB-1 35'	53' bgs	03/08/06	<0.025	0.058	0.082	0.151	<0.025	<10.0	144	144	
SB-1 40'	58' bgs	03/08/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-1 5'	5' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-1 15'	15' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	10.9
MW-1 25'	25' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-1 35'	35' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-1 45'	45' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-1 55'	55' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-2 5'	5' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	

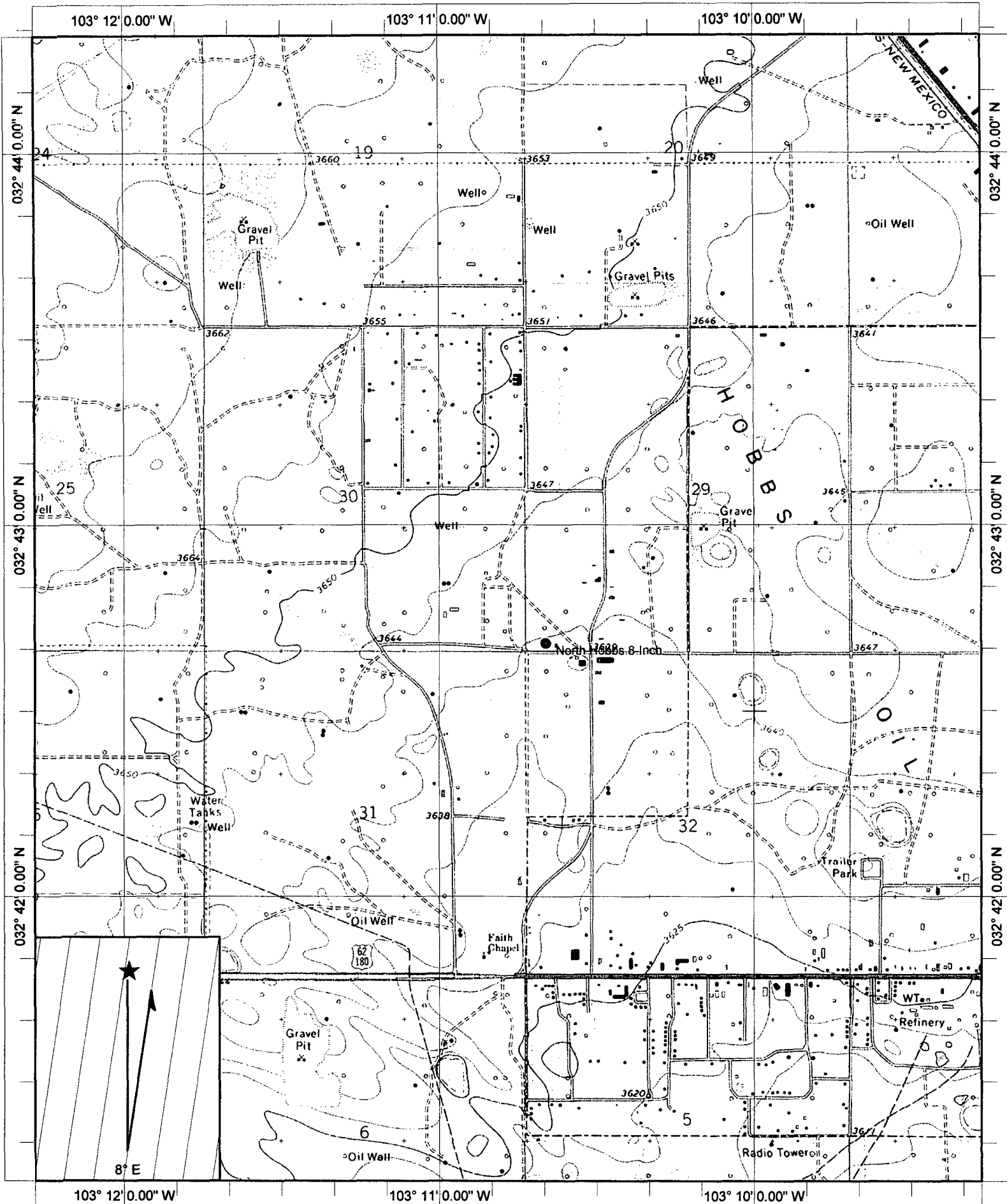
TABLE 1 (cont)  
SOIL CHEMISTRY

PLAINS MARKETING L.P.  
NORTH HOBBS 8-INCH  
LEA COUNTY, NEW MEXICO  
SRS: 2006-059

SAMPLE LOCATION	SAMPLE DEPTH (Below Normal Surface Grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL TPH	METHOD 300 CHLORIDES
			BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENE	GRO	DRO		
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
MW-2 15'	15' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-2 25'	25' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-2 35'	35' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-2 45'	45' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-2 55'	55' bgs	03/13/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 5'	5' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 15'	15' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 25'	25' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 35'	35' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 45'	45' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-3 55'	55' bgs	03/14/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
S/E Wall	12' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
S. Wall	13' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	12.9	12.9	
SW Wall	13' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
W. Wall	15' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
N. Wall	13' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
N/E Wall	14' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
E. Wall	12' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
N. Exc. Fir	18' bgs	03/27/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
NMOCD CRITERIA			10	TOTAL BTEX 50						100	

## GROUND WATER CHEMISTRY

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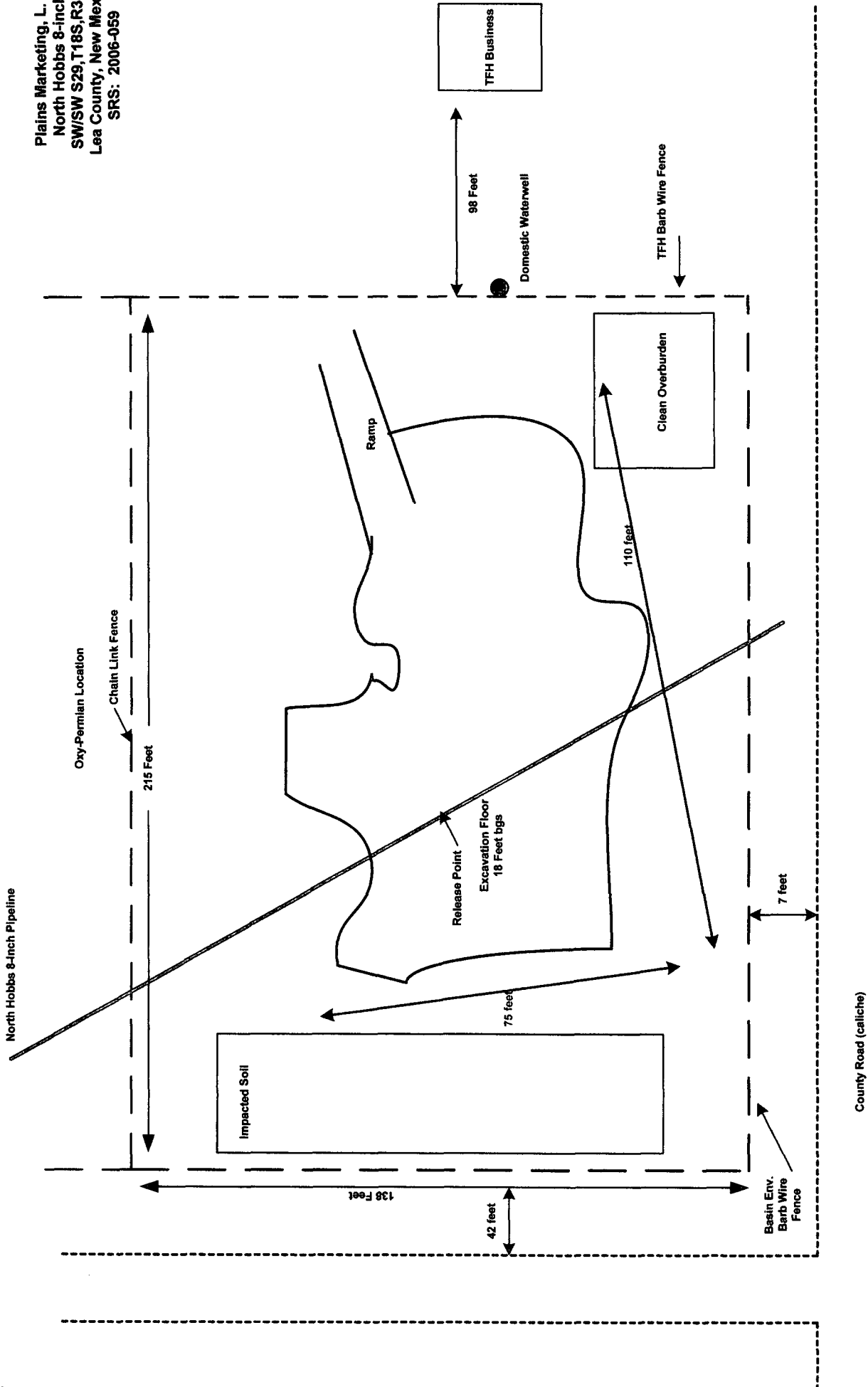


Name: HOBBS WEST  
 Date: 4/22/2006  
 Scale: 1 inch equals 2000 feet

Location: 032° 42' 46.32" N 103° 10' 46.81" W  
 Caption: Figure 1, Site Location Map  
 Plains Marketing, L.P.  
 North Hobbs 8-Inch Pipeline  
 Plains SPS: 2006 050



Plains Marketing, L. P.  
North Hobbs 8-inch  
SW/SW S29,T18S,R38E  
Lea County, New Mexico  
SRS: 2006-059



DESCRIPTION  
Figure 2  
Excavation Site Map  
North Hobbs 8-Inch

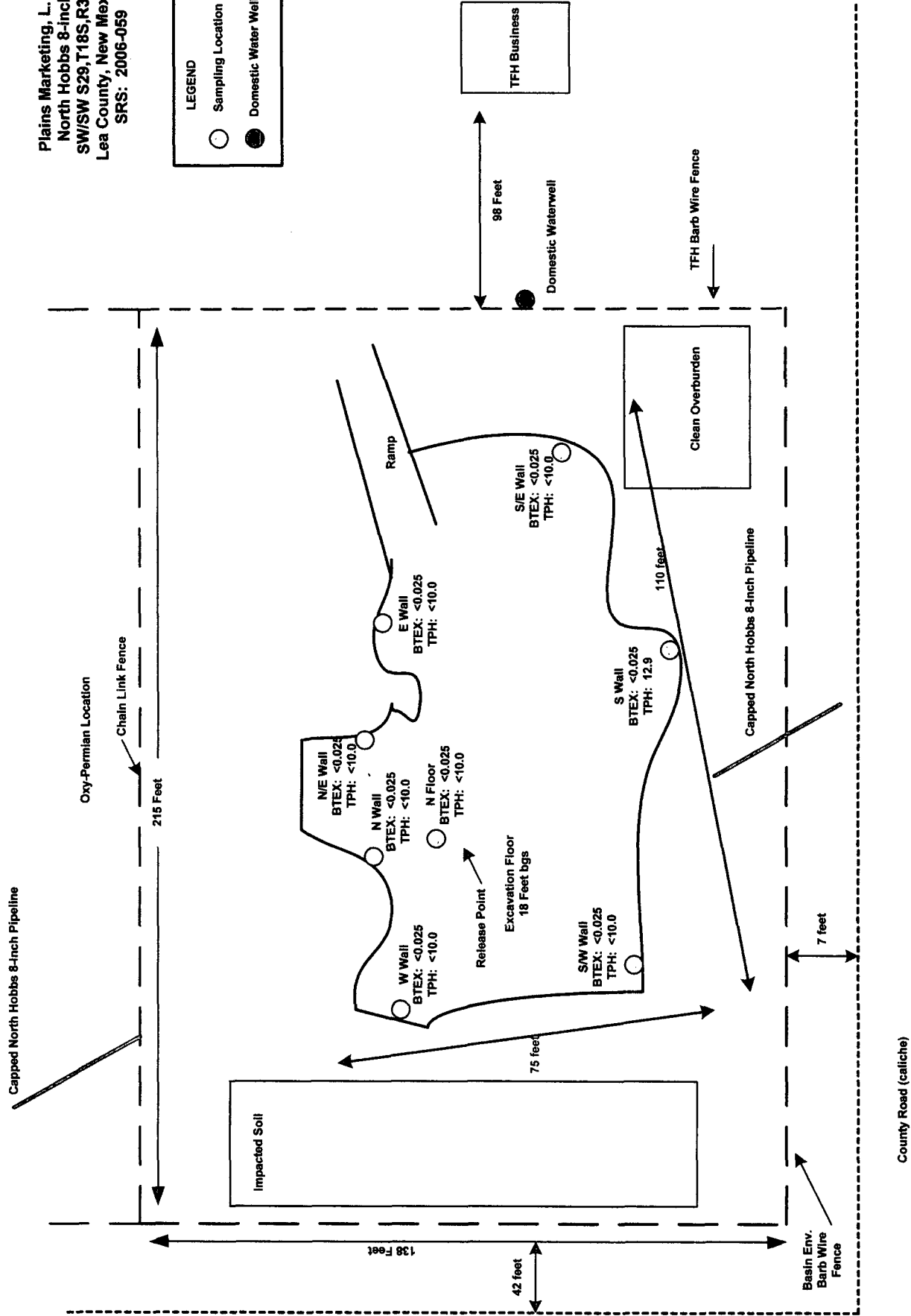


Plains Marketing, L. P.  
North Hobbs 8-inch  
SW/SW S29,T18S,R38E  
Lea County, New Mexico  
SRS: 2006-059

LEGEND

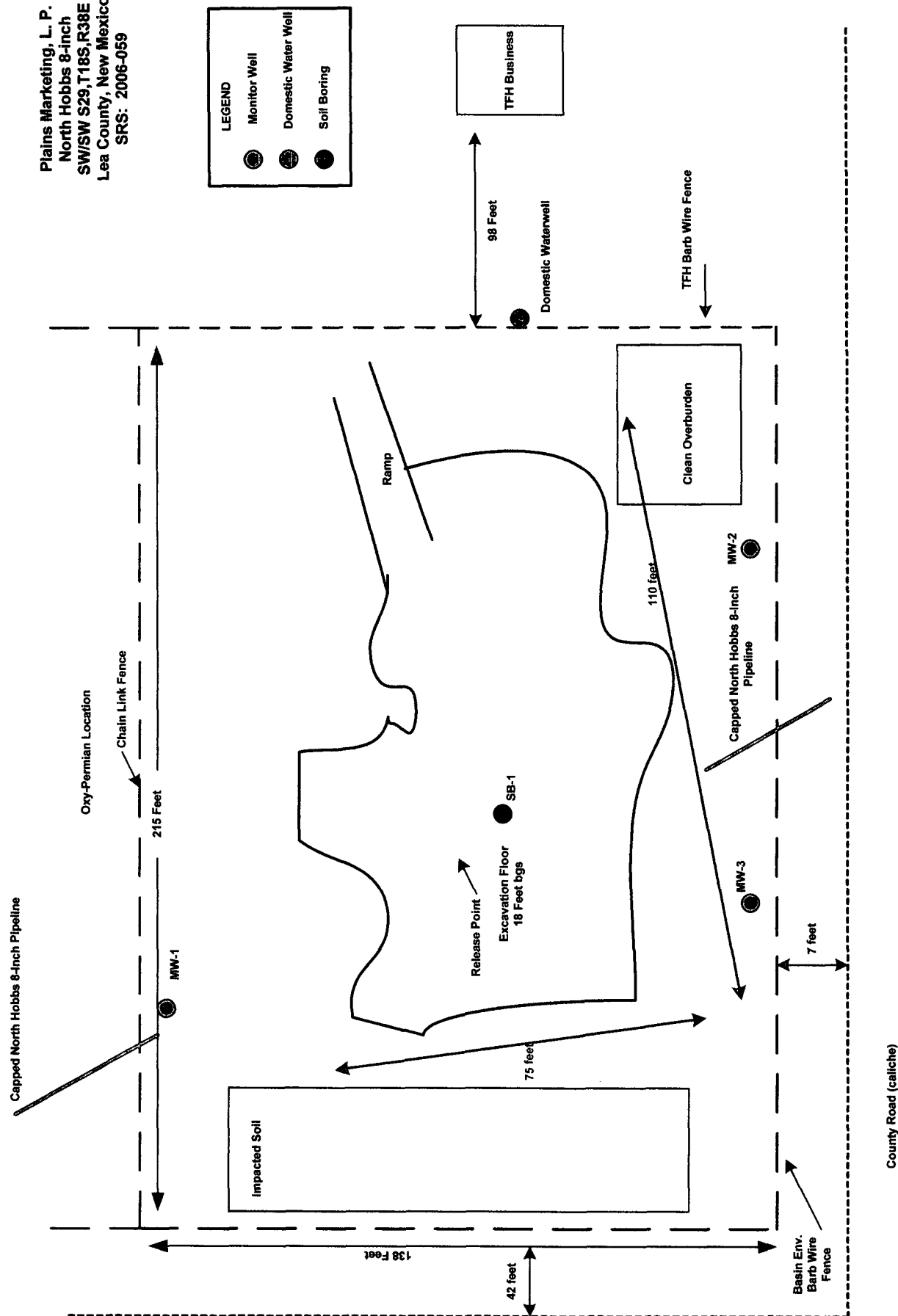
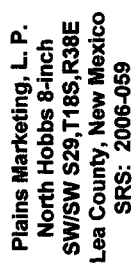
○ Sampling Location

● Domestic Water Well



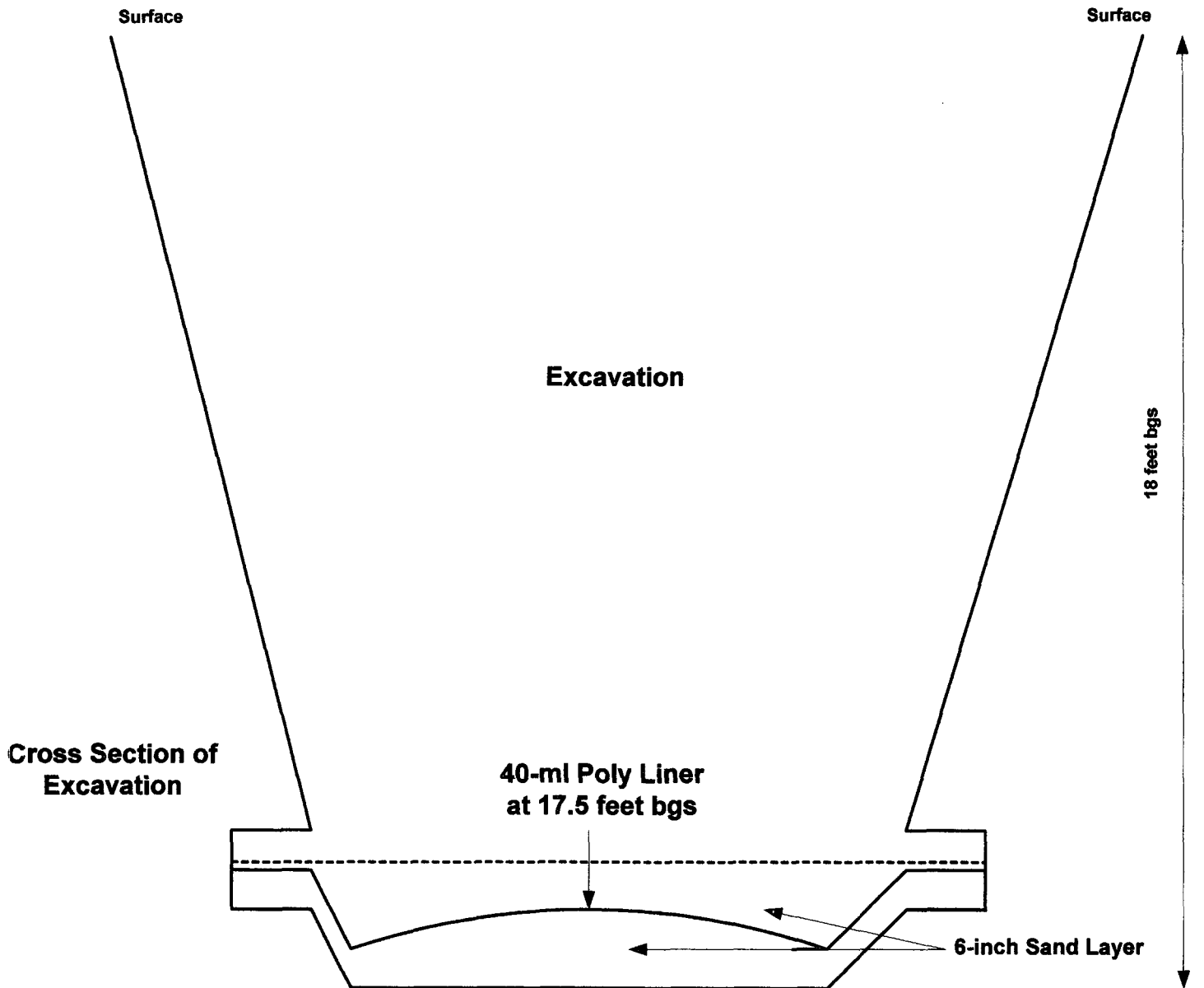
DESCRIPTION Figure 3  
Excavation Final Soil Sampling  
Locations  
North Hobbs 8-Inch





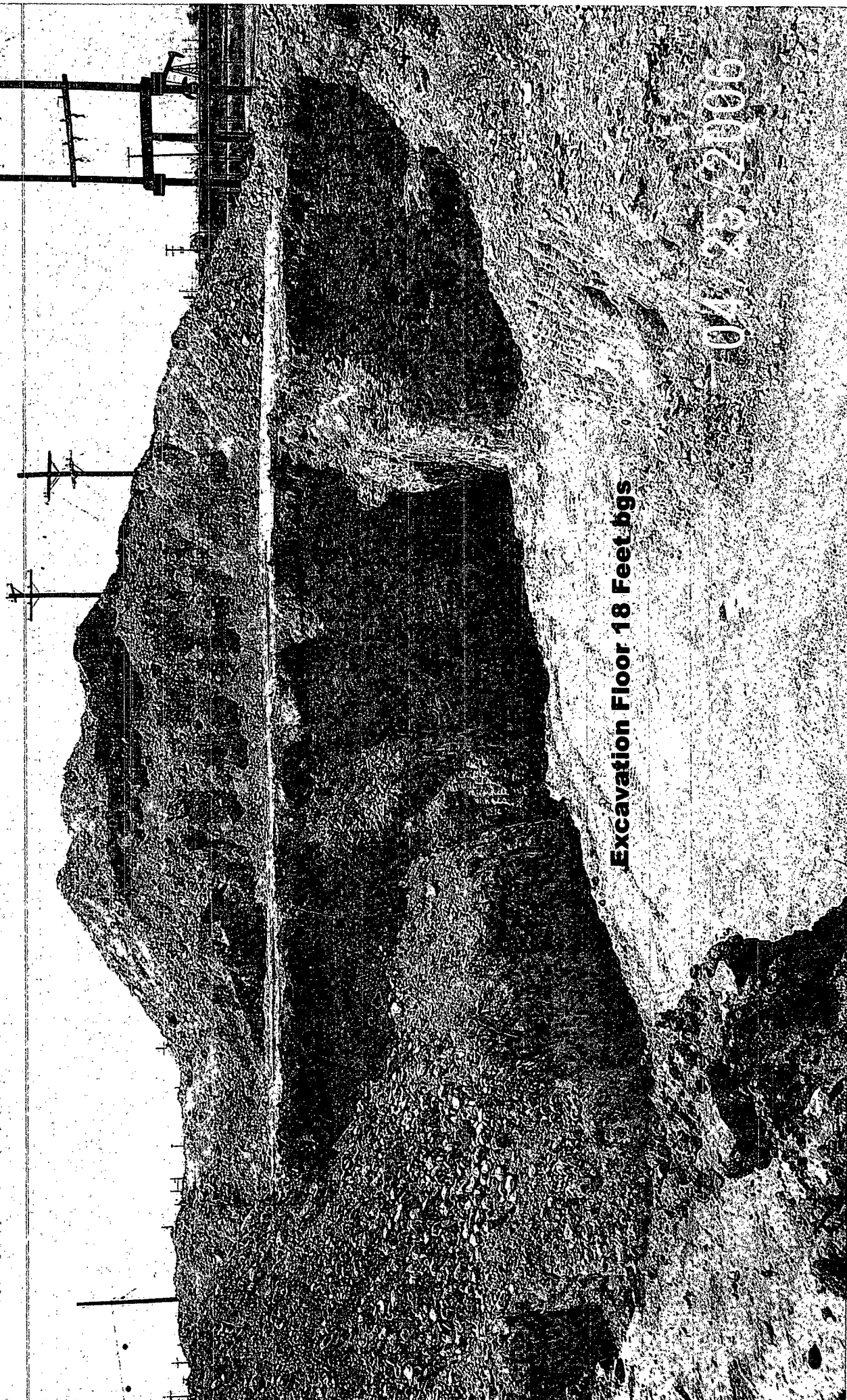
**DESCRIPTION** **Figure 4**  
**Soil Boring & Monitoring Well**  
**Locations**  
**North Hobbs 8-Inch**

North Hobbs 8-Inch Site  
Plains Marketing, L. P.  
Lea County, New Mexico  
SRS: 2006-059  
40-mil Poly-Liner Installation Schematic



TITLE	Figure 5 North Hobbs 8-Inch Site	DATE	21 April 2006
DRAWN BY	Basin Environmental Services KAD	LABEL	Installation of 40-mil Poly Liner

Plains Marketing, L.P.  
North Hobbs 8-Inch Site  
Lea County, NM  
CWSM 999, T-88A, R86E  
Plains Site 70000000



**Excavation Floor 18 Feet bgs**

04/20/2006

Plains Marketing, L. P.  
North Hobbs 8-Inch Site  
Lea County, NM  
SW/SW S29, T18S, R38E  
Plains SRS: 2006-059



04/25/2006

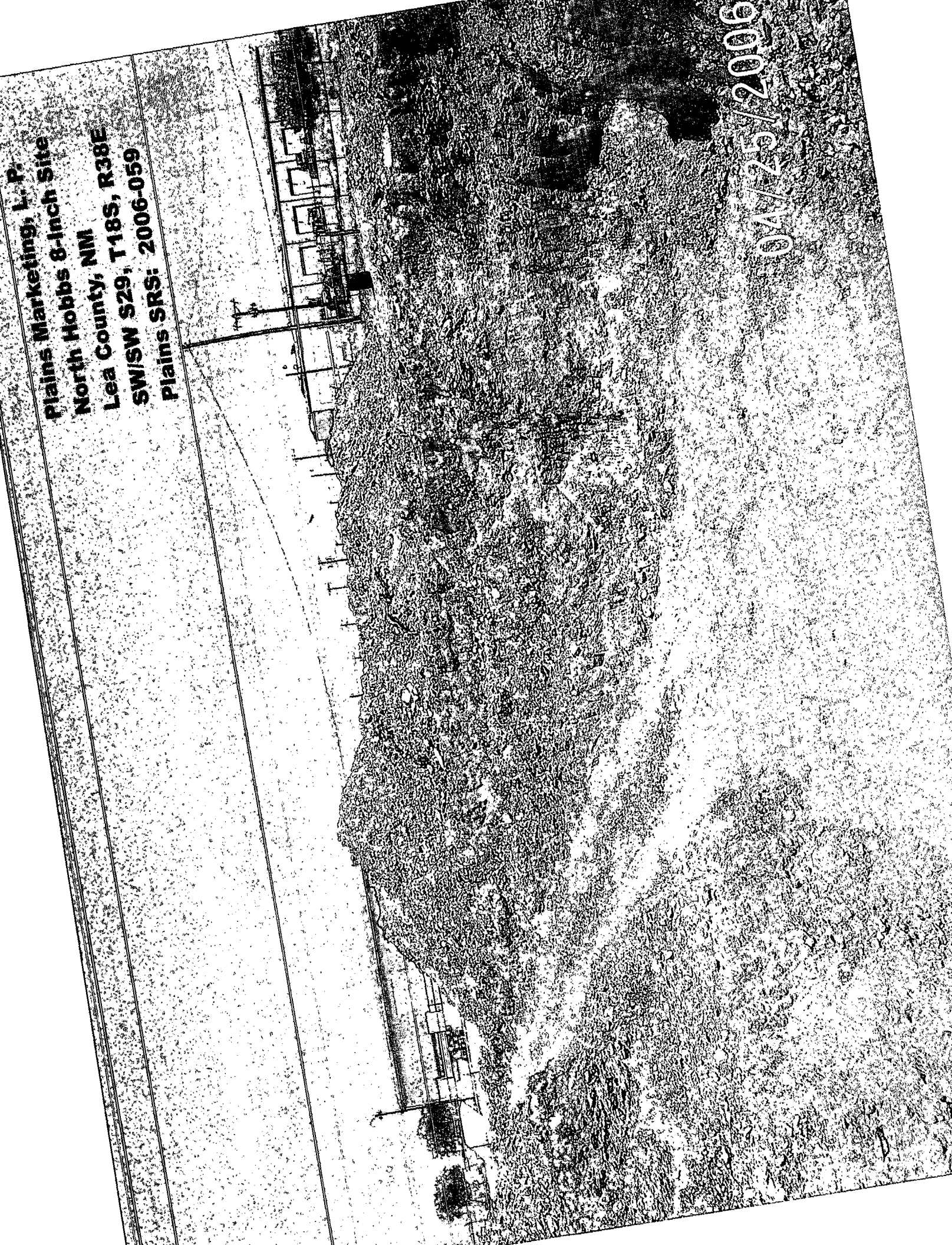


**Plains Marketing, L. P.**  
**North Hobbs 8-Inch Site**  
**Lea County, NM**  
**SW/SW S29, T18S, R38E**  
**Plains SRS: 2006-059**



**Stockpiled Material**

01006  
2006/07/20

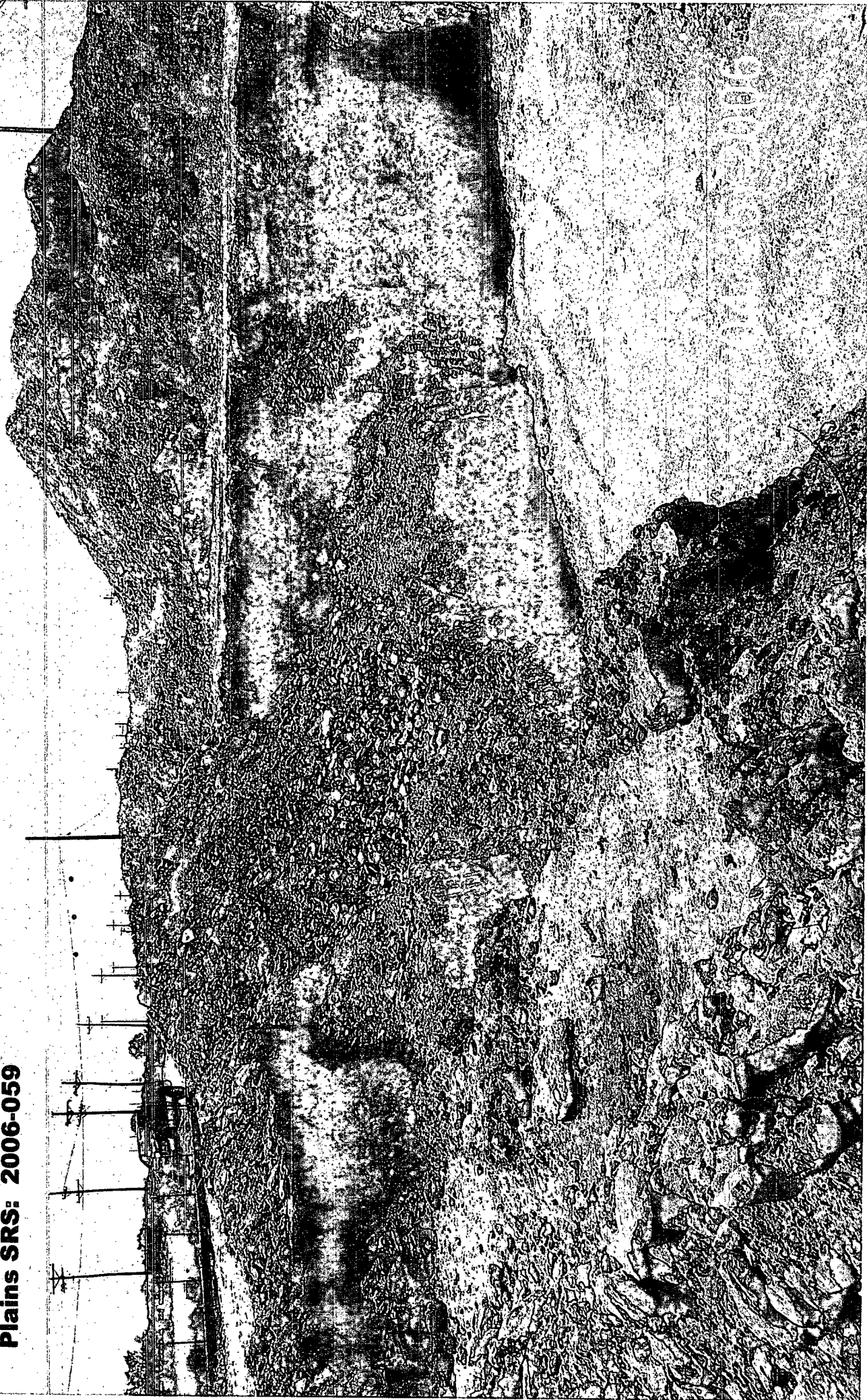


Plains Marketing, L. P.  
Plains Hobbs 8-Inch Site  
North Hobbs, NM  
Lea County, NM  
SW/SW S29, T18S, R38E  
Plains SRS: 2006-059

04/25/2006



**Plains Marketing, L. P.  
North Hobbs 8-Inch Site  
Lea County, NM  
SW/SW S29, T18S, R38E  
Plains SRS: 2006-059**



*New Mexico Office of the State Engineer*  
**POD Reports and Downloads**

---

Township: 18S Range: 38E Sections: 29

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

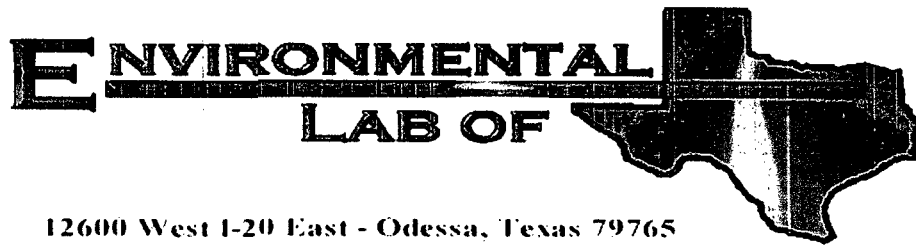
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**AVERAGE DEPTH OF WATER REPORT 04/21/2006**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
L	18S	38E	29				34	38	120	59

Record Count: 34





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: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea Co., NM

Lab Order Number: 6C28009

Report Date: 04/03/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
04/03/06 14:16

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S/E Wall	6C28009-01	Soil	03/27/06 11:40	03/28/06 11:45
S. Wall	6C28009-02	Soil	03/27/06 11:44	03/28/06 11:45
S/W Wall	6C28009-03	Soil	03/27/06 11:52	03/28/06 11:45
W. Wall	6C28009-04	Soil	03/27/06 11:56	03/28/06 11:45
N. Wall	6C28009-05	Soil	03/27/06 12:01	03/28/06 11:45
N/E Wall	6C28009-06	Soil	03/27/06 12:05	03/28/06 11:45
E. Wall	6C28009-07	Soil	03/27/06 12:09	03/28/06 11:45
N. Exc. Flr.	6C28009-08	Soil	03/27/06 12:15	03/28/06 11:45

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>S/E Wall (6C28009-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/03/06	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>		109 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		112 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		116 %	70-130		"	"	"	"	
<b>S. Wall (6C28009-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		107 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>12.9</b>	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>12.9</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	70-130		"	"	"	"	
<b>S/W Wall (6C28009-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		107 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	

Environmental Lab of Texas

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Page 2 of 11

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>S/W Wall (6C28009-03) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		105 %	70-130		"	"	"	"	
<b>W. Wall (6C28009-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/03/06	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>		99.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		106 %	70-130		"	"	"	"	
<b>N. Wall (6C28009-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		107 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		97.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		99.4 %	70-130		"	"	"	"	

Environmental Lab of Texas

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Page 3 of 11

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>N/E Wall (6C28009-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		109 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		106 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		108 %	70-130		"	"	"	"	
<b>E. Wall (6C28009-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		108 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		107 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		109 %	70-130		"	"	"	"	
<b>N. Exc. Flr. (6C28009-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC63115	03/31/06	04/02/06	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>		111 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	

Environmental Lab of Texas

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Page 4 of 11

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>N. Exc. Flr. (6C28009-08) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC62819	03/28/06	03/29/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		104 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		107 %	70-130		"	"	"	"	

Plains All American EH & S  
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Fax: (432) 687-4914

**Reported:**  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>S/E Wall (6C28009-01) Soil</b>									
% Moisture	2.7	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>S. Wall (6C28009-02) Soil</b>									
% Moisture	1.8	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>S/W Wall (6C28009-03) Soil</b>									
% Moisture	10.1	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>W. Wall (6C28009-04) Soil</b>									
% Moisture	3.8	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>N. Wall (6C28009-05) Soil</b>									
% Moisture	6.4	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>N/E Wall (6C28009-06) Soil</b>									
% Moisture	9.7	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>E. Wall (6C28009-07) Soil</b>									
% Moisture	5.5	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	
<b>N. Exc. Flr. (6C28009-08) Soil</b>									
% Moisture	9.4	0.1	%	1	EC62905	03/28/06	03/29/06	% calculation	

Plains All American EH & S  
1301 S. County Road 1150  
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Project: North Hobbs 8"  
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Fax: (432) 687-4914

**Reported:**  
04/03/06 14:16

**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 EC62819 - Solvent Extraction (GC)**

**Blank (EC62819-BLK1)**

Prepared & Analyzed: 03/28/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	45.1		mg/kg	50.0		90.2	70-130			
Surrogate: 1-Chlorooctadecane	46.7		"	50.0		93.4	70-130			

**LCS (EC62819-BS1)**

Prepared & Analyzed: 03/28/06

Carbon Ranges C6-C12	594	10.0	mg/kg wet	500		119	75-125			
Carbon Ranges C12-C28	596	10.0	"	500		119	75-125			
Total Hydrocarbon C6-C35	1190	10.0	"	1000		119	75-125			
Surrogate: 1-Chlorooctane	64.6		mg/kg	50.0		129	70-130			
Surrogate: 1-Chlorooctadecane	64.5		"	50.0		129	70-130			

**Calibration Check (EC62819-CCV1)**

Prepared: 03/28/06 Analyzed: 03/29/06

Carbon Ranges C6-C12	216		mg/kg	250		86.4	80-120			
Carbon Ranges C12-C28	282		"	250		113	80-120			
Total Hydrocarbon C6-C35	498		"	500		99.6	80-120			
Surrogate: 1-Chlorooctane	50.0		"	50.0		100	70-130			
Surrogate: 1-Chlorooctadecane	49.2		"	50.0		98.4	70-130			

**Matrix Spike (EC62819-MS1)**

Source: 6C27008-03

Prepared & Analyzed: 03/28/06

Carbon Ranges C6-C12	526	10.0	mg/kg dry	526	ND	100	75-125			
Carbon Ranges C12-C28	521	10.0	"	526	20.1	95.2	75-125			
Total Hydrocarbon C6-C35	1050	10.0	"	1050	20.1	98.1	75-125			
Surrogate: 1-Chlorooctane	57.6		mg/kg	50.0		115	70-130			
Surrogate: 1-Chlorooctadecane	52.9		"	50.0		106	70-130			



Plains All American EH & S  
1301 S. County Road 1150  
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Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
04/03/06 14:16

**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 EC62819 - Solvent Extraction (GC)**

Matrix Spike Dup (EC62819-MSD1)		Source: 6C27008-03		Prepared & Analyzed: 03/28/06						
Carbon Ranges C6-C12	541	10.0	mg/kg dry	526	ND	103	75-125	2.81	20	
Carbon Ranges C12-C28	538	10.0	"	526	20.1	98.5	75-125	3.21	20	
Total Hydrocarbon C6-C35	1080	10.0	"	1050	20.1	101	75-125	2.82	20	
Surrogate: 1-Chlorooctane	58.9		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	54.3		"	50.0		109	70-130			

**Batch EC63115 - EPA 5030C (GC)**

Blank (EC63115-BLK1)		Prepared & Analyzed: 03/31/06								
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	39.6		ug/kg	40.0		99.0	80-120			
Surrogate: 4-Bromofluorobenzene	36.6		"	40.0		91.5	80-120			

LCS (EC63115-BS1)		Prepared & Analyzed: 03/31/06								
Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.07	0.0250	"	1.25		85.6	80-120			
Ethylbenzene	1.20	0.0250	"	1.25		96.0	80-120			
Xylene (p/m)	2.44	0.0250	"	2.50		97.6	80-120			
Xylene (o)	1.17	0.0250	"	1.25		93.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.5		ug/kg	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	35.7		"	40.0		89.2	80-120			

Calibration Check (EC63115-CCV1)		Prepared: 03/31/06 Analyzed: 04/03/06								
Benzene	45.7		ug/kg	50.0		91.4	80-120			
Toluene	43.5		"	50.0		87.0	80-120			
Ethylbenzene	47.8		"	50.0		95.6	80-120			
Xylene (p/m)	98.1		"	100		98.1	80-120			
Xylene (o)	47.6		"	50.0		95.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.4		"	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	37.1		"	40.0		92.8	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
04/03/06 14:16

**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 EC63115 - EPA 5030C (GC)**

<b>Matrix Spike (EC63115-MS1)</b>		<b>Source: 6C28009-02</b>		<b>Prepared: 03/31/06 Analyzed: 04/02/06</b>						
Benzene	1.10	0.0250	mg/kg dry	1.27	ND	86.6	80-120			
Toluene	1.05	0.0250	"	1.27	ND	82.7	80-120			
Ethylbenzene	1.14	0.0250	"	1.27	ND	89.8	80-120			
Xylene (p/m)	2.35	0.0250	"	2.55	ND	92.2	80-120			
Xylene (o)	1.13	0.0250	"	1.27	ND	89.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	44.3		ug/kg	40.0		111	80-120			
Surrogate: 4-Bromofluorobenzene	33.7		"	40.0		84.2	80-120			

<b>Matrix Spike Dup (EC63115-MSD1)</b>		<b>Source: 6C28009-02</b>		<b>Prepared: 03/31/06 Analyzed: 04/02/06</b>						
Benzene	1.15	0.0250	mg/kg dry	1.27	ND	90.6	80-120	4.51	20	
Toluene	1.07	0.0250	"	1.27	ND	84.3	80-120	1.92	20	
Ethylbenzene	1.19	0.0250	"	1.27	ND	93.7	80-120	4.25	20	
Xylene (p/m)	2.38	0.0250	"	2.55	ND	93.3	80-120	1.19	20	
Xylene (o)	1.17	0.0250	"	1.27	ND	92.1	80-120	3.42	20	
Surrogate: a,a,a-Trifluorotoluene	45.4		ug/kg	40.0		114	80-120			
Surrogate: 4-Bromofluorobenzene	37.8		"	40.0		94.5	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
04/03/06 14:16

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EC62905 - General Preparation (Prep)</b>									
<b>Blank (EC62905-BLK1)</b>		Prepared: 03/28/06 Analyzed: 03/29/06							
% Solids	100		%						
<b>Duplicate (EC62905-DUP1)</b>		<b>Source: 6C27008-01</b>		Prepared: 03/28/06 Analyzed: 03/29/06					
% Solids	93.2		%		93.4		0.214	20	
<b>Duplicate (EC62905-DUP2)</b>		<b>Source: 6C28002-03</b>		Prepared: 03/28/06 Analyzed: 03/29/06					
% Solids	97.5		%		97.5		0.00	20	
<b>Duplicate (EC62905-DUP3)</b>		<b>Source: 6C28010-03</b>		Prepared: 03/28/06 Analyzed: 03/29/06					
% Solids	88.3		%		88.2		0.113	20	

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Midland TX, 79706-4476

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

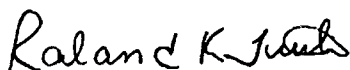
Fax: (432) 687-4914

**Reported:**  
04/03/06 14:16

### 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:

4/3/2006

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.

**12800 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713**


Project Manager: Ken Patton

Company Name Basin Environmental

Company Address: P.O. Box 301

City/State/Zip: Livingston NM 87260

Telephone No: 505-441-2124  
Fax No: 505-396-1429

Sampler Signature:  Amancio Ruiz @adl.com

→ Add 03-29-06 as per attach  
e-mail Standard TAT

Project Name: North Hobbs 8-inch



Project #: SR5# 2006-059

Project Loc: Lea Co., NM

PO #: 04A/C. Reynolds

[illegible]

Special Instructions: HOLD SOIL SAMPLES FOR POSSIBLE BTEX ANALYSES. ELECTRONIC NOTIFICATION WILL FOLLOW UPON TPH RESULTS. (214) 237-4444	Sample Containers Intact? <input checked="" type="radio"/> Y <input type="radio"/> N
Temperature Upon Receipt:	Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/26/06	11:45			
Relinquished by:	Date	Time	Received by ELDT:	Date	Time
			Carrie Keel	3/28/00	11:45

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

Client Plains  
 Date/Time 3/28/06 11:45  
 Order # 6028008 6028009  
 Initials CR

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	210 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No	
Custody Seals intact on shipping container/cooler?	Yes	No	<del>Not present</del>
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/>	No	<del>Not present</del>
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:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Jeanne McMurrey**

---

**From:** "Ken Dutton" <kdutton@basinenv.com>  
**To:** "Jeanne" <jeanne@elabtexas.com>  
**Cc:** "Camille Reynolds" <cjreynolds@paalp.com>  
**Sent:** Wednesday, March 29, 2006 9:02 AM  
**Subject:** North Hobbs 8-Inch COC (BTEX Analysis)

Jeanne,

Reference the COC for the nine (9) soil samples collected from the North Hobbs 8-Inch release site, which had instructions to "hold the nine (9) soils samples for possible BTEX analysis."

Please proceed and run the nine (9) soil samples for BTEX analysis, Standard TAT, utilizing EPA 8021/5030 protocol.

If you have questions, please contact me.

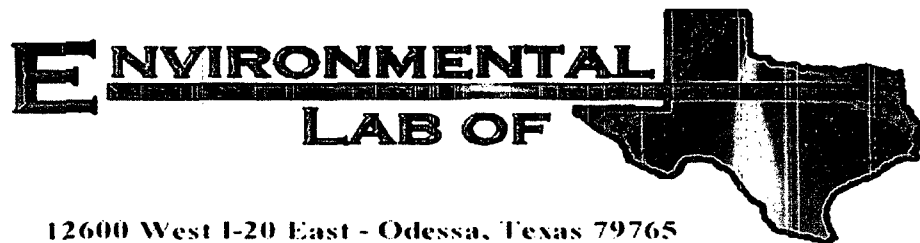
thxs

Ken  
(505) 441-2124

--

This message has been scanned for viruses and dangerous content by Basin Broadband, and is believed to be clean.

3/29/2006



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: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6C20007

Report Date: 03/23/06



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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/23/06 20:49

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TFH W/W	6C20007-01	Water	03/17/06 14:40	03/20/06 11:00

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TFH W/W (6C20007-01) Water</b>									
<b>Chloride</b>	<b>86.0</b>	5.00	mg/L	10	EC62112	03/20/06	03/21/06	EPA 300.0	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:49

**Volatile Organic Compounds by EPA Method 8260B**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TFH W/W (6C20007-01) Water</b>									
Benzene	ND	1.00	ug/l	1	EC62305	03/23/06	03/23/06	EPA 8260B	
<b>Toluene</b>	<b>ND</b>	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		117 %		68-129	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.6 %		72-132	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		109 %		74-118	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		101 %		65-140	"	"	"	"	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/23/06 20:49

**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 EC62112 - General Preparation (WetChem)</b>										
<b>Blank (EC62112-BLK1)</b>										
				Prepared: 03/20/06 Analyzed: 03/21/06						
Chloride	ND	0.500	mg/L							
<b>LCS (EC62112-BS1)</b>										
				Prepared: 03/20/06 Analyzed: 03/21/06						
Chloride	9.09		mg/L	10.0		90.9	80-120			
<b>Calibration Check (EC62112-CCV1)</b>										
				Prepared: 03/20/06 Analyzed: 03/21/06						
Chloride	9.30		mg/L	10.0		93.0	80-120			
<b>Duplicate (EC62112-DUP1)</b>										
				Source: 6C20006-01 Prepared: 03/20/06 Analyzed: 03/21/06						
Chloride	46.9	5.00	mg/L		45.7			2.59	20	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:49

**Volatile Organic Compounds by EPA Method 8260B - 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 EC62305 - EPA 5030C (GCMS)**

**Blank (EC62305-BLK1)**

Prepared & Analyzed: 03/23/06

Benzene	ND	1.00	ug/l							
Toluene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Xylene (p/m)	ND	1.00	"							
Xylene (o)	ND	1.00	"							
Surrogate: Dibromofluoromethane	44.1		"	50.0		88.2	68-129			
Surrogate: 1,2-Dichloroethane-d4	40.8		"	50.0		81.6	72-132			
Surrogate: Toluene-d8	51.6		"	50.0		103	74-118			
Surrogate: 4-Bromofluorobenzene	46.9		"	50.0		93.8	65-140			

**LCS (EC62305-BS1)**

Prepared & Analyzed: 03/22/06

Benzene	47.3	1.00	ug/l	50.0		94.6	70-130			
Toluene	57.6	1.00	"	50.0		115	70-130			
Ethylbenzene	46.7	1.00	"	50.0		93.4	70-130			
Xylene (p/m)	92.6	1.00	"	100		92.6	70-130			
Xylene (o)	47.0	1.00	"	50.0		94.0	70-130			
Surrogate: Dibromofluoromethane	50.4		"	50.0		101	68-129			
Surrogate: 1,2-Dichloroethane-d4	50.4		"	50.0		101	72-132			
Surrogate: Toluene-d8	52.2		"	50.0		104	74-118			
Surrogate: 4-Bromofluorobenzene	41.4		"	50.0		82.8	65-140			

**Calibration Check (EC62305-CCV1)**

Prepared & Analyzed: 03/22/06

Toluene	54.2		ug/l	50.0		108	70-130			
Ethylbenzene	43.3		"	50.0		86.6	70-130			
Surrogate: Dibromofluoromethane	53.4		"	50.0		107	68-129			
Surrogate: 1,2-Dichloroethane-d4	46.9		"	50.0		93.8	72-132			
Surrogate: Toluene-d8	52.7		"	50.0		105	74-118			
Surrogate: 4-Bromofluorobenzene	46.4		"	50.0		92.8	65-140			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:49

**Volatile Organic Compounds by EPA Method 8260B - 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 EC62305 - EPA 5030C (GCMS)**

**Matrix Spike (EC62305-MS1)**

Source: 6C16022-29

Prepared & Analyzed: 03/23/06

Benzene	43.2	1.00	ug/l	50.0	ND	86.4	70-130			
Toluene	52.2	1.00	"	50.0	ND	104	70-130			
Ethylbenzene	39.2	1.00	"	50.0	ND	78.4	70-130			
Xylene (p/m)	75.7	1.00	"	100	ND	75.7	70-130			
Xylene (o)	39.2	1.00	"	50.0	ND	78.4	70-130			
Surrogate: Dibromofluoromethane	50.2		"	50.0		100	68-129			
Surrogate: 1,2-Dichloroethane-d4	49.1		"	50.0		98.2	72-132			
Surrogate: Toluene-d8	52.8		"	50.0		106	74-118			
Surrogate: 4-Bromofluorobenzene	42.2		"	50.0		84.4	65-140			

**Matrix Spike Dup (EC62305-MSD1)**

Source: 6C16022-29

Prepared & Analyzed: 03/23/06

Benzene	45.9	1.00	ug/l	50.0	ND	91.8	70-130	6.06	20	
Toluene	55.9	1.00	"	50.0	ND	112	70-130	6.85	20	
Ethylbenzene	45.7	1.00	"	50.0	ND	91.4	70-130	15.3	20	
Xylene (p/m)	89.2	1.00	"	100	ND	89.2	70-130	16.4	20	
Xylene (o)	45.1	1.00	"	50.0	ND	90.2	70-130	14.0	20	
Surrogate: Dibromofluoromethane	48.9		"	50.0		97.8	68-129			
Surrogate: 1,2-Dichloroethane-d4	47.3		"	50.0		94.6	72-132			
Surrogate: Toluene-d8	50.1		"	50.0		100	74-118			
Surrogate: 4-Bromofluorobenzene	42.0		"	50.0		84.0	65-140			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

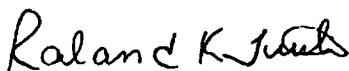
Fax: (432) 687-4914

**Reported:**  
03/23/06 20:49

### 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: 3/23/2006

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.

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

**12600 West I-20 East  
Odessa, Texas 79763**

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: NORTH HOBBS 8-INCH  
Project #: SPS: 2006-059  
Project Loc: LEA COUNTY, NM  
PO #: PAH/C. REYNOLDS

Project Manager: KEN DUTTON  
Company Name: BARTIN ENV. SVCS.  
Company Address: P.O. BOX 301  
City/State/Zip: LOVINGTON, NM 88260  
Telephone No: (505) 441-2124  
Fax No: (505) 396-1429  
Sampler Signature: *Ken Dutton*

[illegible]



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

Client: Plains  
 Date/Time: 3/20/06 11:00  
 Order #: 6C20007  
 Initials: UK

## Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	<u>-1.0</u> 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:

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## Variance Documentation:

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

Corrective Action Taken:

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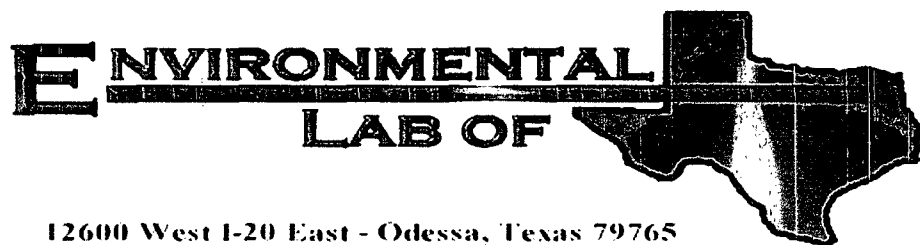
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6C20006

Report Date: 03/23/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/23/06 15:16

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6C20006-01	Water	03/17/06 13:40	03/20/06 11:00
MW-2	6C20006-02	Water	03/17/06 12:06	03/20/06 11:00
MW-3	6C20006-03	Water	03/17/06 10:35	03/20/06 11:00

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/23/06 15:16

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (6C20006-01) Water</b>									
<b>Chloride</b>	<b>45.7</b>	5.00	mg/L	10	EC62112	03/20/06	03/21/06	EPA 300.0	
<b>MW-2 (6C20006-02) Water</b>									
<b>Chloride</b>	<b>64.0</b>	5.00	mg/L	10	EC62112	03/20/06	03/21/06	EPA 300.0	
<b>MW-3 (6C20006-03) Water</b>									
<b>Chloride</b>	<b>69.0</b>	5.00	mg/L	10	EC62112	03/20/06	03/21/06	EPA 300.0	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/23/06 15:16

**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 EC62112 - General Preparation (WetChem)										
Blank (EC62112-BLK1)										
Chloride	ND	0.500	mg/L	Prepared: 03/20/06 Analyzed: 03/21/06						
LCS (EC62112-BS1)										
Chloride	9.09		mg/L	10.0		90.9	80-120			
Calibration Check (EC62112-CCV1)										
Chloride	9.30		mg/L	10.0		93.0	80-120			
Duplicate (EC62112-DUP1)										
Chloride	46.9	5.00	mg/L		45.7			2.59	20	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

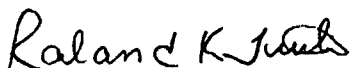
Fax: (432) 687-4914

**Reported:**  
03/23/06 15:16

### 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:

3/23/2006

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.

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

**12600 West I-20 East  
Odessa, Texas 79763**

**Phone: 915-563-1800**  
**Fax: 915-563-1713**

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: NORTH HOBBS 8-INCH  
Project #: SR5' 2006-059  
Project Loc: LEA COUNTY, NM  
PO #: PAF/C. REYNOLDS

Project Manager: KEN DUTTON  
Company Name BASIN ENV. SVCS.  
Company Address: P.O. BOX 301  
City/State/Zip: LOVINGTON, NM 88260  
Telephone No: (505) 441-2124  
Fax No: (505) 396-1429

Sampler Signature: Ken Dutton

[illegible]

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

Client: Plains

Date/Time: 3/20/06 11:00

Order #: 6620006

Initials: UK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	<u>1.0</u> C
Shipping container/cooler in good condition?	<u>Yes</u>	No	
Custody Seals intact on shipping container/cooler?	<u>Yes</u>	No	Not present
Custody Seals intact on sample bottles?	<u>Yes</u>	No	Not present
Chain of custody present?	<u>Yes</u>	No	
Sample Instructions complete on Chain of Custody?	<u>Yes</u>	No	
Chain of Custody signed when relinquished and received?	<u>Yes</u>	No	
Chain of custody agrees with sample label(s)	<u>Yes</u>	No	
Container labels legible and intact?	<u>Yes</u>	No	
Sample Matrix and properties same as on chain of custody?	<u>Yes</u>	No	
Samples in proper container/bottle?	<u>Yes</u>	No	
Samples properly preserved?	<u>Yes</u>	No	
Sample bottles intact?	<u>Yes</u>	No	
Preservations documented on Chain of Custody?	<u>Yes</u>	No	
Containers documented on Chain of Custody?	<u>Yes</u>	No	
Sufficient sample amount for indicated test?	<u>Yes</u>	No	
All samples received within sufficient hold time?	<u>Yes</u>	No	
VOC samples have zero headspace?	Yes	No	<u>Not Applicable</u>

Other observations:

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Variance Documentation:

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

Regarding: \_\_\_\_\_

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Corrective Action Taken:

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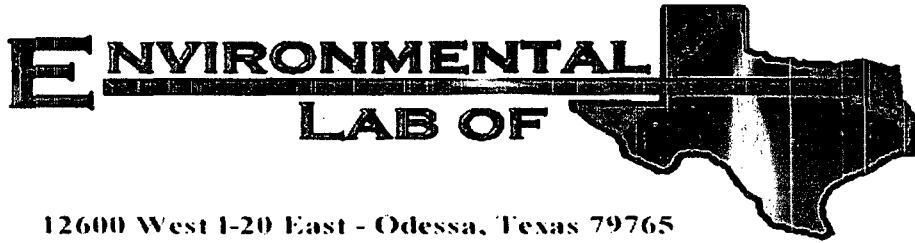


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12600 West 1-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6C20005

Report Date: 03/23/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/23/06 20:45

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6C20005-01	Water	03/17/06 13:40	03/20/06 11:00
MW-2	6C20005-02	Water	03/17/06 12:06	03/20/06 11:00
MW-3	6C20005-03	Water	03/17/06 10:35	03/20/06 11:00

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/23/06 20:45

**Volatile Organic Compounds by EPA Method 8260B**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (6C20005-01) Water</b>									
Benzene	ND	1.00	ug/l	1	EC62305	03/23/06	03/23/06	EPA 8260B	
<b>Toluene</b>	<b>ND</b>	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		94.6 %	68-129		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		76.6 %	72-132		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %	74-118		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.0 %	65-140		"	"	"	"	
<b>MW-2 (6C20005-02) Water</b>									
Benzene	ND	1.00	ug/l	1	EC62305	03/23/06	03/23/06	EPA 8260B	
<b>Toluene</b>	<b>ND</b>	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		112 %	68-129		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	72-132		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		108 %	74-118		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		101 %	65-140		"	"	"	"	
<b>MW-3 (6C20005-03) Water</b>									
Benzene	ND	1.00	ug/l	1	EC62305	03/23/06	03/23/06	EPA 8260B	
<b>Toluene</b>	<b>ND</b>	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		105 %	68-129		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90.2 %	72-132		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.8 %	74-118		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.6 %	65-140		"	"	"	"	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:45

**Volatile Organic Compounds by EPA Method 8260B - 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 EC62305 - EPA 5030C (GCMS)**

**Blank (EC62305-BLK1)**

Prepared & Analyzed: 03/23/06

Benzene	ND	1.00	ug/l							
Toluene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Xylene (p/m)	ND	1.00	"							
Xylene (o)	ND	1.00	"							
Surrogate: Dibromofluoromethane	44.1		"	50.0		88.2	68-129			
Surrogate: 1,2-Dichloroethane-d4	40.8		"	50.0		81.6	72-132			
Surrogate: Toluene-d8	51.6		"	50.0		103	74-118			
Surrogate: 4-Bromofluorobenzene	46.9		"	50.0		93.8	65-140			

**LCS (EC62305-BS1)**

Prepared & Analyzed: 03/22/06

Benzene	47.3	1.00	ug/l	50.0		94.6	70-130			
Toluene	57.6	1.00	"	50.0		115	70-130			
Ethylbenzene	46.7	1.00	"	50.0		93.4	70-130			
Xylene (p/m)	92.6	1.00	"	100		92.6	70-130			
Xylene (o)	47.0	1.00	"	50.0		94.0	70-130			
Surrogate: Dibromofluoromethane	50.4		"	50.0		101	68-129			
Surrogate: 1,2-Dichloroethane-d4	50.4		"	50.0		101	72-132			
Surrogate: Toluene-d8	52.2		"	50.0		104	74-118			
Surrogate: 4-Bromofluorobenzene	41.4		"	50.0		82.8	65-140			

**Calibration Check (EC62305-CCV1)**

Prepared & Analyzed: 03/22/06

Toluene	54.2		ug/l	50.0		108	70-130			
Ethylbenzene	43.3		"	50.0		86.6	70-130			
Surrogate: Dibromofluoromethane	53.4		"	50.0		107	68-129			
Surrogate: 1,2-Dichloroethane-d4	46.9		"	50.0		93.8	72-132			
Surrogate: Toluene-d8	52.7		"	50.0		105	74-118			
Surrogate: 4-Bromofluorobenzene	46.4		"	50.0		92.8	65-140			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 20:45

**Volatile Organic Compounds by EPA Method 8260B - 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 EC62305 - EPA 5030C (GCMS)**

**Matrix Spike (EC62305-MS1)**

Source: 6C16022-29

Prepared & Analyzed: 03/23/06

Benzene	43.2	1.00	ug/l	50.0	ND	86.4	70-130			
Toluene	52.2	1.00	"	50.0	ND	104	70-130			
Ethylbenzene	39.2	1.00	"	50.0	ND	78.4	70-130			
Xylene (p/m)	75.7	1.00	"	100	ND	75.7	70-130			
Xylene (o)	39.2	1.00	"	50.0	ND	78.4	70-130			
Surrogate: Dibromofluoromethane	50.2		"	50.0		100	68-129			
Surrogate: 1,2-Dichloroethane-d4	49.1		"	50.0		98.2	72-132			
Surrogate: Toluene-d8	52.8		"	50.0		106	74-118			
Surrogate: 4-Bromofluorobenzene	42.2		"	50.0		84.4	65-140			

**Matrix Spike Dup (EC62305-MSD1)**

Source: 6C16022-29

Prepared & Analyzed: 03/23/06

Benzene	45.9	1.00	ug/l	50.0	ND	91.8	70-130	6.06	20	
Toluene	55.9	1.00	"	50.0	ND	112	70-130	6.85	20	
Ethylbenzene	45.7	1.00	"	50.0	ND	91.4	70-130	15.3	20	
Xylene (p/m)	89.2	1.00	"	100	ND	89.2	70-130	16.4	20	
Xylene (o)	45.1	1.00	"	50.0	ND	90.2	70-130	14.0	20	
Surrogate: Dibromofluoromethane	48.9		"	50.0		97.8	68-129			
Surrogate: 1,2-Dichloroethane-d4	47.3		"	50.0		94.6	72-132			
Surrogate: Toluene-d8	50.1		"	50.0		100	74-118			
Surrogate: 4-Bromofluorobenzene	42.0		"	50.0		84.0	65-140			

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

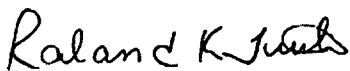
Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/23/06 20:45

### 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:

3/23/2006

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.

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**112600 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713**

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: NORTH HOBBS 8-INCH  
Project #: SR5: 2006-059  
Project Loc: LEA COUNTY, NM  
PO #: PAA/C REYNOLDS

Company Name BASTEN ENV. SVCS.

Company Address: 70, Box 301

City/State/Zip: LOVINGTON, NM 88260

Fax No: (505) 396-1429

**Sampler Signature:**




[illegible]

**Special Instructions:**

Sample Containers Intact?	X	N
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Temperature Upon Receipt:

**Laboratory Comments:**

Relinquished by: 	Date 24 MAR 06	Time 1600	Received by: 	Date 3/17/06	Time 1600
Relinquished by: 	Date 3/20/06	Time 1100	Received by ELO: Cecilia Lopez	Date 3/20/06	Time 11:00

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

Client: Plains  
 Date/Time: 3/20/02 11:00  
 Order #: 6020005  
 Initials: UK

## Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	-1.0 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:

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## Variance Documentation:

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

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Corrective Action Taken:

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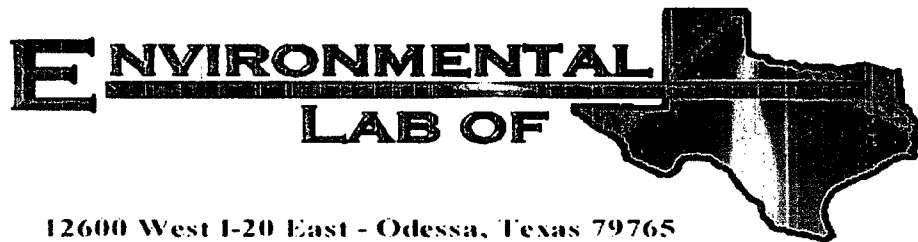


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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6C16004

Report Date: 03/23/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/23/06 16:49

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 5'	6C16004-01	Soil	03/13/06 09:59	03/16/06 10:00
MW-1 15'	6C16004-02	Soil	03/13/06 10:06	03/16/06 10:00
MW-1 25'	6C16004-03	Soil	03/13/06 10:12	03/16/06 10:00
MW-1 35'	6C16004-04	Soil	03/13/06 10:17	03/16/06 10:00
MW-1 45'	6C16004-05	Soil	03/13/06 10:21	03/16/06 10:00
MW-1 55'	6C16004-06	Soil	03/13/06 10:39	03/16/06 10:00
MW-2 5'	6C16004-07	Soil	03/13/06 12:41	03/16/06 10:00
MW-2 15'	6C16004-08	Soil	03/13/06 12:45	03/16/06 10:00
MW-2 25'	6C16004-09	Soil	03/13/06 12:52	03/16/06 10:00
MW-2 35'	6C16004-10	Soil	03/13/06 12:59	03/16/06 10:00
MW-2 45'	6C16004-11	Soil	03/13/06 13:05	03/16/06 10:00
MW-2 55'	6C16004-12	Soil	03/13/06 13:10	03/16/06 10:00
MW-3 5'	6C16004-13	Soil	03/14/06 08:51	03/16/06 10:00
MW-3 15'	6C16004-14	Soil	03/14/06 09:00	03/16/06 10:00
MW-3 25'	6C16004-15	Soil	03/14/06 09:07	03/16/06 10:00
MW-3 35'	6C16004-16	Soil	03/14/06 09:12	03/16/06 10:00
MW-3 45'	6C16004-17	Soil	03/14/06 09:19	03/16/06 10:00
MW-3 55'	6C16004-18	Soil	03/14/06 09:26	03/16/06 10:00

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 16:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 5' (6C16004-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		85.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		92.8 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		93.8 %	70-130		"	"	"	"	
<b>MW-1 15' (6C16004-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		87.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		101 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		97.2 %	70-130		"	"	"	"	
<b>MW-1 25' (6C16004-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		83.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 16:49

**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 25' (6C16004-03) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		113 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		108 %	70-130		"	"	"	"	
<b>MW-1 35' (6C16004-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		89.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		94.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.2 %	70-130		"	"	"	"	
<b>MW-1 45' (6C16004-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		88.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		106 %	70-130		"	"	"	"	

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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 55' (6C16004-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		85.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		110 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		113 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		107 %	70-130		"	"	"	"	
<b>MW-2 5' (6C16004-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		86.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		116 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		110 %	70-130		"	"	"	"	
<b>MW-2 15' (6C16004-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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>		90.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	

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Midland TX, 79706-4476

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/23/06 16:49

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 15' (6C16004-08) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		94.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.0 %	70-130		"	"	"	"	
<b>MW-2 25' (6C16004-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		96.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		96.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.6 %	70-130		"	"	"	"	
<b>MW-2 35' (6C16004-10) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		92.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		96.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		99.6 %	70-130		"	"	"	"	

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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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**Organics by GC**  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 45' (6C16004-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		85.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		99.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		103 %	70-130		"	"	"	"	
<b>MW-2 55' (6C16004-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		89.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.8 %	70-130		"	"	"	"	
<b>MW-3 5' (6C16004-13) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		85.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	

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Project: North Hobbs 8"  
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Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 5' (6C16004-13) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		96.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %	70-130		"	"	"	"	
<b>MW-3 15' (6C16004-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		84.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		98.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		98.4 %	70-130		"	"	"	"	
<b>MW-3 25' (6C16004-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/20/06	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		87.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		103 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-130		"	"	"	"	

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/23/06 16:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 35' (6C16004-16) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62005	03/20/06	03/21/06	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>		89.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		97.8 %	70-130		"	"	"	"	
<b>MW-3 45' (6C16004-17) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	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>		87.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		110 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		104 %	70-130		"	"	"	"	
<b>MW-3 55' (6C16004-18) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	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>		97.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	

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.*

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: North Hobbs 8"  
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Project Manager: Camille Reynolds

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 55' (6C16004-18) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61616	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		113 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		105 %	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>MW-1 5' (6C16004-01) Soil</b>									
% Moisture	3.2	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-1 15' (6C16004-02) Soil</b>									
Chloride	10.9	5.00	mg/kg	10	EC62001	03/20/06	03/20/06	EPA 300.0	
% Moisture	7.0	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-1 25' (6C16004-03) Soil</b>									
% Moisture	5.5	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-1 35' (6C16004-04) Soil</b>									
% Moisture	4.6	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-1 45' (6C16004-05) Soil</b>									
% Moisture	5.1	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-1 55' (6C16004-06) Soil</b>									
% Moisture	11.4	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-2 5' (6C16004-07) Soil</b>									
% Moisture	6.0	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-2 15' (6C16004-08) Soil</b>									
% Moisture	4.1	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-2 25' (6C16004-09) Soil</b>									
% Moisture	4.1	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-2 35' (6C16004-10) Soil</b>									
% Moisture	3.8	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	

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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>MW-2 45' (6C16004-11) Soil</b>									
% Moisture	7.2	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-2 55' (6C16004-12) Soil</b>									
% Moisture	6.9	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 5' (6C16004-13) Soil</b>									
% Moisture	2.0	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 15' (6C16004-14) Soil</b>									
% Moisture	8.4	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 25' (6C16004-15) Soil</b>									
% Moisture	5.2	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 35' (6C16004-16) Soil</b>									
% Moisture	4.4	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 45' (6C16004-17) Soil</b>									
% Moisture	5.5	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
<b>MW-3 55' (6C16004-18) Soil</b>									
% Moisture	10.4	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	

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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
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**Batch EC61616 - Solvent Extraction (GC)**

**Blank (EC61616-BLK1)**

Prepared: 03/16/06 Analyzed: 03/17/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	45.5		mg/kg	50.0		91.0	70-130			
Surrogate: 1-Chlorooctadecane	47.4		"	50.0		94.8	70-130			

**LCS (EC61616-BS1)**

Prepared & Analyzed: 03/16/06

Carbon Ranges C6-C12	607	10.0	mg/kg wet	500		121	75-125			
Carbon Ranges C12-C28	555	10.0	"	500		111	75-125			
Total Hydrocarbon C6-C35	1160	10.0	"	1000		116	75-125			
Surrogate: 1-Chlorooctane	64.5		mg/kg	50.0		129	70-130			
Surrogate: 1-Chlorooctadecane	61.3		"	50.0		123	70-130			

**Calibration Check (EC61616-CCV1)**

Prepared: 03/16/06 Analyzed: 03/17/06

Carbon Ranges C6-C12	293		mg/kg	250		117	80-120			
Carbon Ranges C12-C28	297		"	250		119	80-120			
Total Hydrocarbon C6-C35	590		"	500		118	80-120			
Surrogate: 1-Chlorooctane	61.0		"	50.0		122	70-130			
Surrogate: 1-Chlorooctadecane	52.5		"	50.0		105	70-130			

**Matrix Spike (EC61616-MS1)**

Source: 6C16004-01

Prepared: 03/16/06 Analyzed: 03/17/06

Carbon Ranges C6-C12	581	10.0	mg/kg dry	517	ND	112	75-125			
Carbon Ranges C12-C28	581	10.0	"	517	ND	112	75-125			
Total Hydrocarbon C6-C35	1160	10.0	"	1030	ND	113	75-125			
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	49.0		"	50.0		98.0	70-130			

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**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 EC61616 - Solvent Extraction (GC)**

<b>Matrix Spike Dup (EC61616-MSD1)</b>		<b>Source: 6C16004-01</b>		<b>Prepared: 03/16/06</b>		<b>Analyzed: 03/17/06</b>				
Carbon Ranges C6-C12	501	10.0	mg/kg dry	517	ND	96.9	75-125	14.8	20	
Carbon Ranges C12-C28	519	10.0	"	517	ND	100	75-125	11.3	20	
Total Hydrocarbon C6-C35	1020	10.0	"	1030	ND	99.0	75-125	12.8	20	
Surrogate: 1-Chlorooctane	58.1		mg/kg	50.0		116	70-130			
Surrogate: 1-Chlorooctadecane	54.8		"	50.0		110	70-130			

**Batch EC62005 - EPA 5030C (GC)**

<b>Blank (EC62005-BLK1)</b>		<b>Prepared &amp; Analyzed: 03/20/06</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	36.6		ug/kg	40.0		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	39.2		"	40.0		98.0	80-120			

**LCS (EC62005-BS1)**

		<b>Prepared &amp; Analyzed: 03/20/06</b>								
Benzene	1.00	0.0250	mg/kg wet	1.25		80.0	80-120			
Toluene	1.13	0.0250	"	1.25		90.4	80-120			
Ethylbenzene	1.29	0.0250	"	1.25		103	80-120			
Xylene (p/m)	2.66	0.0250	"	2.50		106	80-120			
Xylene (o)	1.30	0.0250	"	1.25		104	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.1		ug/kg	40.0		87.8	80-120			
Surrogate: 4-Bromofluorobenzene	42.6		"	40.0		106	80-120			

**Calibration Check (EC62005-CCV1)**

		<b>Prepared &amp; Analyzed: 03/20/06</b>								
Benzene	40.4		ug/kg	50.0		80.8	80-120			
Toluene	40.7		"	50.0		81.4	80-120			
Ethylbenzene	40.8		"	50.0		81.6	80-120			
Xylene (p/m)	82.5		"	100		82.5	80-120			
Xylene (o)	41.8		"	50.0		83.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	37.6		"	40.0		94.0	80-120			
Surrogate: 4-Bromofluorobenzene	34.8		"	40.0		87.0	80-120			

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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
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**Batch EC62005 - EPA 5030C (GC)**

**Matrix Spike (EC62005-MS1)**

Source: 6C16004-13

Prepared & Analyzed: 03/20/06

Benzene	1.10	0.0250	mg/kg dry	1.28	ND	85.9	80-120			
Toluene	1.28	0.0250	"	1.28	ND	100	80-120			
Ethylbenzene	1.47	0.0250	"	1.28	ND	115	80-120			
Xylene (p/m)	2.98	0.0250	"	2.55	ND	117	80-120			
Xylene (o)	1.48	0.0250	"	1.28	ND	116	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.2		ug/kg	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	44.2		"	40.0		110	80-120			

**Matrix Spike Dup (EC62005-MSD1)**

Source: 6C16004-13

Prepared: 03/20/06 Analyzed: 03/21/06

Benzene	1.05	0.0250	mg/kg dry	1.28	ND	82.0	80-120	4.65	20	
Toluene	1.20	0.0250	"	1.28	ND	93.8	80-120	6.40	20	
Ethylbenzene	1.37	0.0250	"	1.28	ND	107	80-120	7.21	20	
Xylene (p/m)	2.80	0.0250	"	2.55	ND	110	80-120	6.17	20	
Xylene (o)	1.38	0.0250	"	1.28	ND	108	80-120	7.14	20	
Surrogate: a,a,a-Trifluorotoluene	35.5		ug/kg	40.0		88.8	80-120			
Surrogate: 4-Bromofluorobenzene	42.1		"	40.0		105	80-120			

**Batch EC62103 - EPA 5030C (GC)**

**Blank (EC62103-BLK1)**

Prepared: 03/20/06 Analyzed: 03/21/06

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	37.5		ug/kg	40.0		93.8	80-120			
Surrogate: 4-Bromofluorobenzene	34.5		"	40.0		86.2	80-120			

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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 EC62103 - EPA 5030C (GC)</b>										
<b>LCS (EC62103-BS1)</b>										
				Prepared: 03/20/06 Analyzed: 03/21/06						
Benzene	1.03	0.0250	mg/kg wet	1.25		82.4	80-120			
Toluene	1.17	0.0250	"	1.25		93.6	80-120			
Ethylbenzene	1.31	0.0250	"	1.25		105	80-120			
Xylene (p/m)	2.66	0.0250	"	2.50		106	80-120			
Xylene (o)	1.31	0.0250	"	1.25		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.9		ug/kg	40.0		92.2	80-120			
Surrogate: 4-Bromofluorobenzene	35.6		"	40.0		89.0	80-120			
<b>Calibration Check (EC62103-CCV1)</b>										
				Prepared: 03/20/06 Analyzed: 03/22/06						
Benzene	41.2		ug/kg	50.0		82.4	80-120			
Toluene	44.3		"	50.0		88.6	80-120			
Ethylbenzene	48.6		"	50.0		97.2	80-120			
Xylene (p/m)	100		"	100		100	80-120			
Xylene (o)	50.4		"	50.0		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.2		"	40.0		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	37.4		"	40.0		93.5	80-120			
<b>Matrix Spike (EC62103-MS1)</b>										
				Source: 6C16015-01 Prepared: 03/20/06 Analyzed: 03/21/06						
Benzene	1.18	0.0250	mg/kg dry	1.42	ND	83.1	80-120			
Toluene	1.34	0.0250	"	1.42	ND	94.4	80-120			
Ethylbenzene	1.53	0.0250	"	1.42	ND	108	80-120			
Xylene (p/m)	3.10	0.0250	"	2.84	ND	109	80-120			
Xylene (o)	1.54	0.0250	"	1.42	ND	108	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.4		ug/kg	40.0		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	41.5		"	40.0		104	80-120			
<b>Matrix Spike Dup (EC62103-MSD1)</b>										
				Source: 6C16015-01 Prepared: 03/20/06 Analyzed: 03/21/06						
Benzene	1.17	0.0250	mg/kg dry	1.42	ND	82.4	80-120	0.846	20	
Toluene	1.33	0.0250	"	1.42	ND	93.7	80-120	0.744	20	
Ethylbenzene	1.51	0.0250	"	1.42	ND	106	80-120	1.87	20	
Xylene (p/m)	3.07	0.0250	"	2.84	ND	108	80-120	0.922	20	
Xylene (o)	1.52	0.0250	"	1.42	ND	107	80-120	0.930	20	
Surrogate: a,a,a-Trifluorotoluene	37.0		ug/kg	40.0		92.5	80-120			
Surrogate: 4-Bromofluorobenzene	38.0		"	40.0		95.0	80-120			



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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EC61702 - General Preparation (Prep)</b>										
<b>Blank (EC61702-BLK1)</b>				Prepared: 03/16/06 Analyzed: 03/17/06						
% Solids	99.9		%							
<b>Duplicate (EC61702-DUP1)</b>				Source: 6C15014-01 Prepared: 03/16/06 Analyzed: 03/17/06						
% Solids	97.9		%		97.5			0.409	20	
<b>Duplicate (EC61702-DUP2)</b>				Source: 6C16004-14 Prepared: 03/16/06 Analyzed: 03/17/06						
% Solids	91.7		%		91.6			0.109	20	
<b>Duplicate (EC61702-DUP3)</b>				Source: 6C16013-02 Prepared: 03/16/06 Analyzed: 03/17/06						
% Solids	98.3		%		97.9			0.408	20	
<b>Batch EC62001 - Water Extraction</b>										
<b>Blank (EC62001-BLK1)</b>				Prepared: 03/17/06 Analyzed: 03/20/06						
Chloride	ND	0.500	mg/kg							
<b>LCS (EC62001-BS1)</b>				Prepared: 03/17/06 Analyzed: 03/20/06						
Chloride	8.53		mg/L	10.0		85.3	80-120			
<b>Calibration Check (EC62001-CCV1)</b>				Prepared: 03/17/06 Analyzed: 03/20/06						
Chloride	8.81		mg/L	10.0		88.1	80-120			
<b>Duplicate (EC62001-DUP1)</b>				Source: 6C16019-06 Prepared: 03/17/06 Analyzed: 03/20/06						
Chloride	159	10.0	mg/kg		160			0.627	20	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

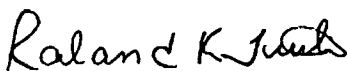
Fax: (432) 687-4914

**Reported:**  
03/23/06 16:49

### 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:

3/23/2006

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.



# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: NORTH HOBBS 8-INCH  
Project #: SPS: 2006-059  
Project Loc: LEA COUNTY, NM  
PO #: PAH/C. REYNOLDS

[illegible]

Special Instructions:				Sample Containers Intact?		Y	N
Temperature Upon Receipt:				Laboratory Comments:			
Relinquished by:	Date	Time	Received by:	Date	Time		
<i>[Signature]</i>	15 MAR 86	1600	<i>[Signature]</i>	3/18/86	1600		
Relinquished by:	Date	Time	Received by:	Date	Time		
<i>[Signature]</i>	3/16/86	1900	<i>[Signature]</i>	3/16/86	10:00		

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

Client: Basin Env. / Plains

Date/Time: 3/16/06 10:00

Order #: 60160

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	10 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:

**Jeanne McMurrey**

---

**From:** "Ken Dutton" <kdutton@basinenv.com>  
**To:** "Jeanne" <jeanne@elabtexas.com>  
**Sent:** Thursday, March 16, 2006 10:50 AM  
**Subject:** COC, North Hobbs 8-Inch

Jeanne,

Plz add a chloride analysis for the MW-1, 15 feet soil sample, EPA Method 300.1, for the North Hobbs 8-Inch site.

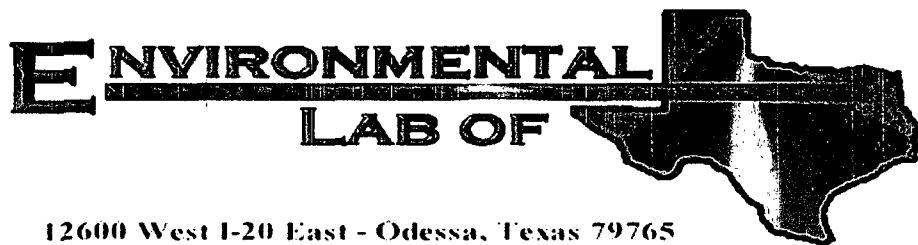
thxs

Ken

--

This message has been scanned for viruses and dangerous content by Basin Broadband, and is believed to be clean.

3/16/2006



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: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea. County, NM

Lab Order Number: 6C09010

Report Date: 03/14/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/14/06 09:49

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 5'	6C09010-01	Soil	03/08/06 12:45	03/09/06 11:40
SB-1 10'	6C09010-02	Soil	03/08/06 12:47	03/09/06 11:40
SB-1 15'	6C09010-03	Soil	03/08/06 12:50	03/09/06 11:40
SB-1 20'	6C09010-04	Soil	03/08/06 12:56	03/09/06 11:40
SB-1 25'	6C09010-05	Soil	03/08/06 13:20	03/09/06 11:40



Plains All American EH & S  
1301 S. County Road 1150  
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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/14/06 09:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 5' (6C09010-01) Soil</b>									
<b>Benzene</b>	<b>0.0617</b>	0.0250	mg/kg dry	25	EC61010	03/10/06	03/13/06	EPA 8021B	
<b>Toluene</b>	<b>0.832</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>1.79</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>5.09</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (o)</b>	<b>0.327</b>	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		161 %	80-120		"	"	"	"	S-04
<i>Surrogate: 4-Bromofluorobenzene</i>		196 %	80-120		"	"	"	"	S-04
<b>Carbon Ranges C6-C12</b>	<b>815</b>	20.0	mg/kg dry	2	EC60920	03/09/06	03/11/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>2720</b>	20.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>678</b>	20.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>4210</b>	20.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		42.8 %	70-130		"	"	"	"	S-06
<i>Surrogate: 1-Chlorooctadecane</i>		40.4 %	70-130		"	"	"	"	S-06
<b>SB-1 10' (6C09010-02) Soil</b>									
<b>Benzene</b>	<b>0.0457</b>	0.0250	mg/kg dry	25	EC61010	03/10/06	03/13/06	EPA 8021B	
<b>Toluene</b>	<b>0.606</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>1.03</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>2.07</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (o)</b>	<b>0.684</b>	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		137 %	80-120		"	"	"	"	S-04
<i>Surrogate: 4-Bromofluorobenzene</i>		207 %	80-120		"	"	"	"	S-04
<b>Carbon Ranges C6-C12</b>	<b>921</b>	20.0	mg/kg dry	2	EC60920	03/09/06	03/11/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>3460</b>	20.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>842</b>	20.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>5220</b>	20.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		45.0 %	70-130		"	"	"	"	S-06
<i>Surrogate: 1-Chlorooctadecane</i>		38.0 %	70-130		"	"	"	"	S-06
<b>SB-1 15' (6C09010-03) Soil</b>									
<b>Benzene</b>	<b>0.0335</b>	0.0250	mg/kg dry	25	EC61010	03/10/06	03/13/06	EPA 8021B	
<b>Toluene</b>	<b>0.178</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.342</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>0.611</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (o)</b>	<b>0.144</b>	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		103 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		118 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>199</b>	10.0	mg/kg dry	1	EC60920	03/09/06	03/11/06	EPA 8015M	

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 2 of 9

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/14/06 09:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 15' (6C09010-03) Soil</b>									
<b>Carbon Ranges C12-C28</b>	<b>1270</b>	10.0	mg/kg dry	1	EC60920	03/09/06	03/11/06	EPA 8015M	
<b>Carbon Ranges C28-C35</b>	<b>352</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>1820</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		71.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		77.2 %	70-130		"	"	"	"	
<b>SB-1 20' (6C09010-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC61010	03/10/06	03/13/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.0818</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>0.149</b>	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.5 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>11.8</b>	10.0	mg/kg dry	1	EC60920	03/09/06	03/11/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>152</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>94.3</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>258</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		71.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		72.0 %	70-130		"	"	"	"	
<b>SB-1 25' (6C09010-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC61010	03/10/06	03/13/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.0830</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>0.152</b>	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		93.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.8 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>22.6</b>	10.0	mg/kg dry	1	EC60920	03/09/06	03/11/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>308</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>134</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>465</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		70.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		73.0 %	70-130		"	"	"	"	

Environmental Lab of Texas

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Page 3 of 9

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/14/06 09:49

**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' (6C09010-01) Soil</b>									
% Moisture	3.3	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 10' (6C09010-02) Soil</b>									
% Moisture	2.2	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 15' (6C09010-03) Soil</b>									
% Moisture	1.0	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 20' (6C09010-04) Soil</b>									
% Moisture	0.9	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 25' (6C09010-05) Soil</b>									
% Moisture	0.6	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	

Plains All American EH & S  
1301 S. County Road 1150  
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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/14/06 09:49

**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 EC60920 - Solvent Extraction (GC)**

**Blank (EC60920-BLK1)**

Prepared: 03/09/06 Analyzed: 03/10/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	62.3		mg/kg	50.0		125	70-130			
Surrogate: 1-Chlorooctadecane	63.8		"	50.0		128	70-130			

**LCS (EC60920-BS1)**

Prepared: 03/09/06 Analyzed: 03/10/06

Carbon Ranges C6-C12	524	10.0	mg/kg wet	500		105	75-125			
Carbon Ranges C12-C28	511	10.0	"	500		102	75-125			
Total Hydrocarbon C6-C35	1040	10.0	"	1000		104	75-125			
Surrogate: 1-Chlorooctane	52.4		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	51.1		"	50.0		102	70-130			

**Calibration Check (EC60920-CCV1)**

Prepared: 03/09/06 Analyzed: 03/11/06

Carbon Ranges C6-C12	256		mg/kg	250		102	80-120			
Carbon Ranges C12-C28	286		"	250		114	80-120			
Total Hydrocarbon C6-C35	542		"	500		108	80-120			
Surrogate: 1-Chlorooctane	56.6		"	50.0		113	70-130			
Surrogate: 1-Chlorooctadecane	58.7		"	50.0		117	70-130			

**Matrix Spike (EC60920-MS1)**

Source: 6C09007-01

Prepared: 03/09/06 Analyzed: 03/10/06

Carbon Ranges C6-C12	543	10.0	mg/kg dry	548	ND	99.1	75-125			
Carbon Ranges C12-C28	484	10.0	"	548	ND	88.3	75-125			
Total Hydrocarbon C6-C35	1030	10.0	"	1100	ND	93.6	75-125			
Surrogate: 1-Chlorooctane	38.2		mg/kg	50.0		76.4	70-130			
Surrogate: 1-Chlorooctadecane	36.1		"	50.0		72.2	70-130			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
Reported:  
03/14/06 09:49

**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 EC60920 - Solvent Extraction (GC)**

**Matrix Spike Dup (EC60920-MSD1)**

Source: 6C09007-01

Prepared: 03/09/06 Analyzed: 03/10/06

Carbon Ranges C6-C12	529	10.0	mg/kg dry	548	ND	96.5	75-125	2.61	20	
Carbon Ranges C12-C28	474	10.0	"	548	ND	86.5	75-125	2.09	20	
Total Hydrocarbon C6-C35	1000	10.0	"	1100	ND	90.9	75-125	2.96	20	
Surrogate: 1-Chlorooctane	37.4		mg/kg	50.0		74.8	70-130			
Surrogate: 1-Chlorooctadecane	35.3		"	50.0		70.6	70-130			

**Batch EC61010 - EPA 5030C (GC)**

**Blank (EC61010-BLK1)**

Prepared & Analyzed: 03/10/06

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	37.5		ug/kg	40.0		93.8	80-120			
Surrogate: 4-Bromofluorobenzene	33.4		"	40.0		83.5	80-120			

**LCS (EC61010-BS1)**

Prepared & Analyzed: 03/10/06

Benzene	1.09	0.0250	mg/kg wet	1.25		87.2	80-120			
Toluene	1.22	0.0250	"	1.25		97.6	80-120			
Ethylbenzene	1.35	0.0250	"	1.25		108	80-120			
Xylene (p/m)	2.82	0.0250	"	2.50		113	80-120			
Xylene (o)	1.37	0.0250	"	1.25		110	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.2		ug/kg	40.0		98.0	80-120			
Surrogate: 4-Bromofluorobenzene	33.6		"	40.0		84.0	80-120			

**Calibration Check (EC61010-CCV1)**

Prepared: 03/10/06 Analyzed: 03/13/06

Benzene	44.0		ug/kg	50.0		88.0	80-120			
Toluene	50.4		"	50.0		101	80-120			
Ethylbenzene	58.0		"	50.0		116	80-120			
Xylene (p/m)	120		"	100		120	80-120			
Xylene (o)	58.7		"	50.0		117	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.1		"	40.0		97.8	80-120			
Surrogate: 4-Bromofluorobenzene	41.7		"	40.0		104	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/14/06 09:49

**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 EC61010 - EPA 5030C (GC)**

Matrix Spike (EC61010-MS1)	Source: 6C06009-09			Prepared: 03/10/06 Analyzed: 03/13/06						
Benzene	1.12	0.0250	mg/kg dry	1.28	ND	87.5	80-120			
Toluene	1.26	0.0250	"	1.28	ND	98.4	80-120			
Ethylbenzene	1.41	0.0250	"	1.28	ND	110	80-120			
Xylene (p/m)	2.94	0.0250	"	2.56	ND	115	80-120			
Xylene (o)	1.44	0.0250	"	1.28	ND	112	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.7		ug/kg	40.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	36.0		"	40.0		90.0	80-120			

Matrix Spike Dup (EC61010-MSD1)	Source: 6C06009-09			Prepared: 03/10/06 Analyzed: 03/13/06						
Benzene	1.19	0.0250	mg/kg dry	1.28	ND	93.0	80-120	6.09	20	
Toluene	1.36	0.0250	"	1.28	ND	106	80-120	7.44	20	
Ethylbenzene	1.52	0.0250	"	1.28	ND	119	80-120	7.86	20	
Xylene (p/m)	3.07	0.0250	"	2.56	ND	120	80-120	4.26	20	
Xylene (o)	1.52	0.0250	"	1.28	ND	119	80-120	6.06	20	
Surrogate: a,a,a-Trifluorotoluene	41.1		ug/kg	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	40.2		"	40.0		100	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
**Reported:**  
03/14/06 09:49

**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 EC61008 - General Preparation (Prep)</b>										
<b>Blank (EC61008-BLK1)</b>		Prepared: 03/09/06 Analyzed: 03/10/06								
% Solids	100		%							
<b>Duplicate (EC61008-DUP1)</b>		<b>Source: 6C03014-01</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	95.9		%		96.8			0.934	20	
<b>Duplicate (EC61008-DUP2)</b>		<b>Source: 6C03014-21</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	99.9		%		99.9			0.00	20	
<b>Duplicate (EC61008-DUP3)</b>		<b>Source: 6C08019-01</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	95.1		%		96.4			1.36	20	
<b>Duplicate (EC61008-DUP4)</b>		<b>Source: 6C09016-04</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	69.8		%		70.0			0.286	20	

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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/14/06 09:49

### 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.

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

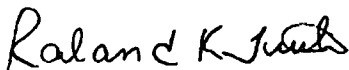
RPD      Relative Percent Difference

LCS      Laboratory Control Spike

MS      Matrix Spike

Dup      Duplicate

Report Approved By:



Date:

3/14/2006

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.



**12800 West I-20 East  
Odessa, Texas 79763**

**Phone: 915-563-1800**  
**Fax: 915-563-1713**

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Manager:**

KEN DUTTON

Project Name: NORTH HOBBS' 8-INCH

**Company Name**

Company Name BASIN ENV SVCS

Project #: SRS: 2006-059

**Company Address:**

Company Address: P.O. Box 301

Project Loc: LEA COUNTY, NM

City/State/Zip:

City/State/Zip: LOVINGTON NJ 08260

PO #: PAR/C. REYNOLDS

**Telephone No:**

Telephone No: (505) 441-2124

Fax No: (505) 369-1429

**Sampler Signature:**

Gen Sutton

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers 46 ± 2 / 955	Preservative							Matrix								Analyze For:							RUSH TAT (Pre-Schedule)
					HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	None	Other (Specify)	Water	Sediment	Soil	Other (specify):	TPH: 418.1 (0-15M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )	BAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021 B/5030	RCI	M.O.R.M.	Total Gamma		
-01	SB-1 5'	08 MAR	1245	✓	X															X						X	
-02	SB-1 10'		1247	✓																X							
-03	SB-1 15'		1250																								
-04	SB-1 20'		1256																								
-05	SB-1 25'	✓	1320	✓																							

**Special Instructions:**

**Sample Containers Intact?**

**Temperature Upon Receipt:**

**Laboratory Comments:**

Received by: 

**Received by:**

Time

Date \_\_\_\_\_

Relinquished By: \_\_\_\_\_

**Received by ELLOT:**

**Received by E**

Time

Date 10/1/2011

Relinquished by: \_\_\_\_\_

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# Environmental Lab of Texas

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

Client: Plains F/L

Date/Time: 03-09-06 @ 1140

Order #: UC09010

Initials: JMM

### Sample Receipt Checklist

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

Other observations:

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### Variance Documentation:

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

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Corrective Action Taken:

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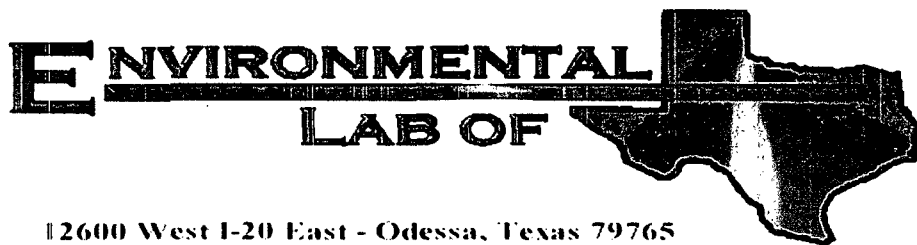
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6C09009

Report Date: 03/10/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 30'	6C09009-01	Soil	03/08/06 13:30	03/09/06 11:40
SB-1 35'	6C09009-02	Soil	03/08/06 14:10	03/09/06 11:40
SB-1 40'	6C09009-03	Soil	03/08/06 14:30	03/09/06 11:40
SB-1 (W)	6C09009-04	Water	03/08/06 15:05	03/09/06 11:40

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1301 S. County Road 1150  
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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/10/06 11:12

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 30' (6C09009-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC60917	03/09/06	03/09/06	EPA 8021B	
<b>Toluene</b>	<b>0.0567</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.0818</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>0.150</b>	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		84.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.2 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>16.6</b>	10.0	mg/kg dry	1	EC60918	03/09/06	03/09/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>201</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>218</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		98.8 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		107 %	70-130		"	"	"	"	
<b>SB-1 35' (6C09009-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC60917	03/09/06	03/09/06	EPA 8021B	
<b>Toluene</b>	<b>0.0585</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.0829</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>0.151</b>	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		88.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>J [9.29]</b>	10.0	mg/kg dry	1	EC60918	03/09/06	03/09/06	EPA 8015M	J
<b>Carbon Ranges C12-C28</b>	<b>144</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>144</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		101 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		106 %	70-130		"	"	"	"	
<b>SB-1 40' (6C09009-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EC60917	03/09/06	03/09/06	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>		84.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.0 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>ND</b>	10.0	mg/kg dry	1	EC60918	03/09/06	03/09/06	EPA 8015M	

Environmental Lab of Texas

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Page 2 of 10

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SB-1 40' (6C09009-03) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC60918	03/09/06	03/09/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		106 %	70-130		"	"	"	"	
<b>SB-1 (W) (6C09009-04) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC60704	03/09/06	03/09/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00335	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00636	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		80.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	80-120		"	"	"	"	

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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

**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 30' (6C09009-01) Soil</b>									
% Moisture	1.8	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 35' (6C09009-02) Soil</b>									
% Moisture	3.6	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	
<b>SB-1 40' (6C09009-03) Soil</b>									
% Moisture	16.4	0.1	%	1	EC61008	03/09/06	03/10/06	% calculation	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

**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 EC60704 - EPA 5030C (GC)**

**Blank (EC60704-BLK1)**

Prepared: 03/07/06 Analyzed: 03/08/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	37.1		ug/l	40.0		92.8	80-120			
Surrogate: 4-Bromofluorobenzene	39.5		"	40.0		98.8	80-120			

**LCS (EC60704-BS1)**

Prepared: 03/07/06 Analyzed: 03/08/06

Benzene	0.0440	0.00100	mg/L	0.0500		88.0	80-120			
Toluene	0.0489	0.00100	"	0.0500		97.8	80-120			
Ethylbenzene	0.0569	0.00100	"	0.0500		114	80-120			
Xylene (p/m)	0.117	0.00100	"	0.100		117	80-120			
Xylene (o)	0.0590	0.00100	"	0.0500		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.7		ug/l	40.0		96.8	80-120			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	80-120			

**Calibration Check (EC60704-CCV1)**

Prepared: 03/07/06 Analyzed: 03/09/06

Benzene	40.1		ug/l	50.0		80.2	80-120			
Toluene	40.8		"	50.0		81.6	80-120			
Ethylbenzene	42.9		"	50.0		85.8	80-120			
Xylene (p/m)	88.4		"	100		88.4	80-120			
Xylene (o)	44.3		"	50.0		88.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.1		"	40.0		85.2	80-120			
Surrogate: 4-Bromofluorobenzene	32.7		"	40.0		81.8	80-120			

**Matrix Spike (EC60704-MS1)**

Source: 6C03007-06

Prepared: 03/07/06 Analyzed: 03/09/06

Benzene	0.0403	0.00100	mg/L	0.0500	ND	80.6	80-120			
Toluene	0.0432	0.00100	"	0.0500	ND	86.4	80-120			
Ethylbenzene	0.0464	0.00100	"	0.0500	ND	92.8	80-120			
Xylene (p/m)	0.0971	0.00100	"	0.100	ND	97.1	80-120			
Xylene (o)	0.0476	0.00100	"	0.0500	ND	95.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.4		ug/l	40.0		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	43.8		"	40.0		110	80-120			

Environmental Lab of Texas

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Page 5 of 10



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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/10/06 11:12

**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 EC60704 - EPA 5030C (GC)**

**Matrix Spike Dup (EC60704-MSD1)**

Source: 6C03007-06

Prepared: 03/07/06 Analyzed: 03/09/06

Benzene	0.0433	0.00100	mg/L	0.0500	ND	86.6	80-120	7.18	20	
Toluene	0.0472	0.00100	"	0.0500	ND	94.4	80-120	8.85	20	
Ethylbenzene	0.0539	0.00100	"	0.0500	ND	108	80-120	15.1	20	
Xylene (p/m)	0.112	0.00100	"	0.100	ND	112	80-120	14.3	20	
Xylene (o)	0.0541	0.00100	"	0.0500	ND	108	80-120	12.6	20	
Surrogate: a,a,a-Trifluorotoluene	36.5		ug/l	40.0		91.2	80-120			
Surrogate: 4-Bromofluorobenzene	38.0		"	40.0		95.0	80-120			

**Batch EC60917 - EPA 5030C (GC)**

**Blank (EC60917-BLK1)**

Prepared & Analyzed: 03/09/06

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	33.4		ug/kg	40.0		83.5	80-120			
Surrogate: 4-Bromofluorobenzene	33.9		"	40.0		84.8	80-120			

**LCS (EC60917-BS1)**

Prepared & Analyzed: 03/09/06

Benzene	1.05	0.0250	mg/kg wet	1.25		84.0	80-120			
Toluene	1.16	0.0250	"	1.25		92.8	80-120			
Ethylbenzene	1.33	0.0250	"	1.25		106	80-120			
Xylene (p/m)	2.77	0.0250	"	2.50		111	80-120			
Xylene (o)	1.35	0.0250	"	1.25		108	80-120			
Surrogate: a,a,a-Trifluorotoluene	33.0		ug/kg	40.0		82.5	80-120			
Surrogate: 4-Bromofluorobenzene	37.2		"	40.0		93.0	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/10/06 11:12

**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 EC60917 - EPA 5030C (GC)**

**Calibration Check (EC60917-CCV1)**

Prepared: 03/09/06 Analyzed: 03/10/06

Benzene	43.5		ug/kg	50.0		87.0	80-120			
Toluene	49.6		"	50.0		99.2	80-120			
Ethylbenzene	56.6		"	50.0		113	80-120			
Xylene (p/m)	117		"	100		117	80-120			
Xylene (o)	57.6		"	50.0		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.3		"	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	38.4		"	40.0		96.0	80-120			

**Matrix Spike (EC60917-MS1)**

Source: 6C06006-04

Prepared: 03/09/06 Analyzed: 03/10/06

Benzene	1.32	0.0250	mg/kg dry	1.46	ND	90.4	80-120			
Toluene	1.46	0.0250	"	1.46	ND	100	80-120			
Ethylbenzene	1.64	0.0250	"	1.46	ND	112	80-120			
Xylene (p/m)	3.40	0.0250	"	2.92	ND	116	80-120			
Xylene (o)	1.67	0.0250	"	1.46	ND	114	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.9		ug/kg	40.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	37.8		"	40.0		94.5	80-120			

**Matrix Spike Dup (EC60917-MSD1)**

Source: 6C06006-04

Prepared: 03/09/06 Analyzed: 03/10/06

Benzene	1.32	0.0250	mg/kg dry	1.46	ND	90.4	80-120	0.00	20	
Toluene	1.48	0.0250	"	1.46	ND	101	80-120	0.995	20	
Ethylbenzene	1.67	0.0250	"	1.46	ND	114	80-120	1.77	20	
Xylene (p/m)	3.48	0.0250	"	2.92	ND	119	80-120	2.55	20	
Xylene (o)	1.71	0.0250	"	1.46	ND	117	80-120	2.60	20	
Surrogate: a,a,a-Trifluorotoluene	40.2		ug/kg	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	41.1		"	40.0		103	80-120			

**Batch EC60918 - Solvent Extraction (GC)**

**Blank (EC60918-BLK1)**

Prepared & Analyzed: 03/09/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	44.2		mg/kg	50.0		88.4	70-130			
Surrogate: 1-Chlorooctadecane	48.1		"	50.0		96.2	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.

Page 7 of 10

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/10/06 11:12

**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 EC60918 - Solvent Extraction (GC)</b>										
<b>LCS (EC60918-BS1)</b>				Prepared & Analyzed: 03/09/06						
Carbon Ranges C6-C12	478	10.0	mg/kg wet	500		95.6	75-125			
Carbon Ranges C12-C28	511	10.0	"	500		102	75-125			
Total Hydrocarbon C6-C35	989	10.0	"	1000		98.9	75-125			
Surrogate: 1-Chlorooctane	53.8		mg/kg	50.0		108	70-130			
Surrogate: 1-Chlorooctadecane	53.4		"	50.0		107	70-130			
<b>Calibration Check (EC60918-CCV1)</b>				Prepared: 03/09/06 Analyzed: 03/10/06						
Carbon Ranges C6-C12	221		mg/kg	250		88.4	80-120			
Carbon Ranges C12-C28	270		"	250		108	80-120			
Total Hydrocarbon C6-C35	491		"	500		98.2	80-120			
Surrogate: 1-Chlorooctane	57.3		"	50.0		115	70-130			
Surrogate: 1-Chlorooctadecane	58.6		"	50.0		117	70-130			
<b>Matrix Spike (EC60918-MS1)</b>				Source: 6C06009-11		Prepared & Analyzed: 03/09/06				
Carbon Ranges C6-C12	580	10.0	mg/kg dry	504	ND	115	75-125			
Carbon Ranges C12-C28	592	10.0	"	504	ND	117	75-125			
Total Hydrocarbon C6-C35	1170	10.0	"	1010	ND	116	75-125			
Surrogate: 1-Chlorooctane	64.0		mg/kg	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	63.1		"	50.0		126	70-130			
<b>Matrix Spike Dup (EC60918-MSD1)</b>				Source: 6C06009-11		Prepared & Analyzed: 03/09/06				
Carbon Ranges C6-C12	588	10.0	mg/kg dry	504	ND	117	75-125	1.37	20	
Carbon Ranges C12-C28	524	10.0	"	504	ND	104	75-125	12.2	20	
Total Hydrocarbon C6-C35	1110	10.0	"	1010	ND	110	75-125	5.26	20	
Surrogate: 1-Chlorooctane	64.1		mg/kg	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	65.0		"	50.0		130	70-130			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

**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 EC61008 - General Preparation (Prep)</b>										
<b>Blank (EC61008-BLK1)</b>		Prepared: 03/09/06 Analyzed: 03/10/06								
% Solids	100		%							
<b>Duplicate (EC61008-DUP1)</b>		<b>Source: 6C03014-01</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	95.9		%		96.8			0.934	20	
<b>Duplicate (EC61008-DUP2)</b>		<b>Source: 6C03014-21</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	99.9		%		99.9			0.00	20	
<b>Duplicate (EC61008-DUP3)</b>		<b>Source: 6C08019-01</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	95.1		%		96.4			1.36	20	
<b>Duplicate (EC61008-DUP4)</b>		<b>Source: 6C09016-04</b>		Prepared: 03/09/06 Analyzed: 03/10/06						
% Solids	69.8		%		70.0			0.286	20	

Plains All American EH & S  
1301 S. County Road 1150  
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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

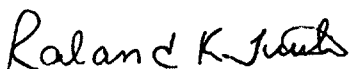
Fax: (432) 687-4914

**Reported:**  
03/10/06 11:12

### Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

3/10/2006

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.

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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 P/L

Date/Time: 03-09-04 @ 1140

Order #: 6C09009

Initials: JMM

### Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	2.0	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
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:

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### Variance Documentation:

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

Corrective Action Taken:

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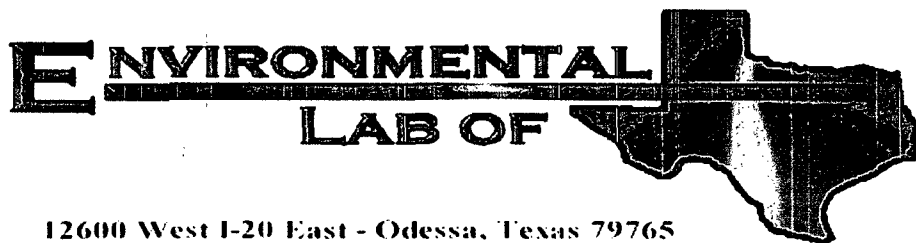
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6B28010

Report Date: 03/02/06



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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/02/06 14:53

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Floor@ 30'	6B28010-01	Soil	02/28/06 09:30	02/28/06 14:20
East Wall	6B28010-02	Soil	02/28/06 10:10	02/28/06 14:20
South Wall	6B28010-03	Soil	02/28/06 09:45	02/28/06 14:20
West Wall	6B28010-04	Soil	02/28/06 09:55	02/28/06 14:20

Plains All American EH & S  
1301 S. County Road 1150  
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Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/02/06 14:53

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Floor@ 30' (6B28010-01) Soil</b>									
Carbon Ranges C6-C12	96.5	10.0	mg/kg dry	1	EB62414	03/02/06	03/02/06	EPA 8015M	
Carbon Ranges C12-C28	703	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	170	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	970	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		113 %	70-130		"	"	"	"	
<b>East Wall (6B28010-02) Soil</b>									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB62414	03/02/06	03/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		98.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-130		"	"	"	"	
<b>South Wall (6B28010-03) Soil</b>									
Carbon Ranges C6-C12	22.0	10.0	mg/kg dry	1	EB62414	03/02/06	03/02/06	EPA 8015M	
Carbon Ranges C12-C28	644	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	243	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	909	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		101 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-130		"	"	"	"	
<b>West Wall (6B28010-04) Soil</b>									
Carbon Ranges C6-C12	107	10.0	mg/kg dry	1	EB62414	03/02/06	03/02/06	EPA 8015M	
Carbon Ranges C12-C28	1150	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	275	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1530	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-130		"	"	"	"	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/02/06 14:53

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Floor@ 30' (6B28010-01) Soil</b>									
% Moisture	5.4	0.1	%	1	EC60101	02/28/06	03/01/06	% calculation	
<b>East Wall (6B28010-02) Soil</b>									
% Moisture	9.6	0.1	%	1	EC60101	02/28/06	03/01/06	% calculation	
<b>South Wall (6B28010-03) Soil</b>									
% Moisture	5.7	0.1	%	1	EC60101	02/28/06	03/01/06	% calculation	
<b>West Wall (6B28010-04) Soil</b>									
% Moisture	7.5	0.1	%	1	EC60101	02/28/06	03/01/06	% calculation	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/02/06 14:53

**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 EB62414 - Solvent Extraction (GC)**

**Blank (EB62414-BLK1)**

Prepared: 02/24/06 Analyzed: 03/01/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	47.6		mg/kg	50.0		95.2	70-130			
Surrogate: 1-Chlorooctadecane	45.9		"	50.0		91.8	70-130			

**LCS (EB62414-BS1)**

Prepared: 02/24/06 Analyzed: 03/01/06

Carbon Ranges C6-C12	514	10.0	mg/kg wet	500		103	75-125			
Carbon Ranges C12-C28	496	10.0	"	500		99.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Surrogate: 1-Chlorooctane	59.7		mg/kg	50.0		119	70-130			
Surrogate: 1-Chlorooctadecane	56.5		"	50.0		113	70-130			

**Calibration Check (EB62414-CCV1)**

Prepared: 02/24/06 Analyzed: 03/02/06

Carbon Ranges C6-C12	233		mg/kg	250		93.2	80-120			
Carbon Ranges C12-C28	265		"	250		106	80-120			
Total Hydrocarbon C6-C35	498		"	500		99.6	80-120			
Surrogate: 1-Chlorooctane	53.6		"	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	54.2		"	50.0		108	70-130			

**Matrix Spike (EB62414-MS1)**

Source: 6B23027-01

Prepared: 02/24/06 Analyzed: 03/02/06

Carbon Ranges C6-C12	594	10.0	mg/kg dry	530	ND	112	75-125			
Carbon Ranges C12-C28	636	10.0	"	530	102	101	75-125			
Carbon Ranges C28-C35	38.6	10.0	"	0.00	82.9		75-125			
Total Hydrocarbon C6-C35	1270	10.0	"	1060	185	102	75-125			
Surrogate: 1-Chlorooctane	60.7		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	59.0		"	50.0		118	70-130			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/02/06 14:53

**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 EB62414 - Solvent Extraction (GC)**

Matrix Spike Dup (EB62414-MSD1)		Source: 6B23027-01		Prepared: 02/24/06		Analyzed: 03/02/06				
Carbon Ranges C6-C12	591	10.0	mg/kg dry	530	ND	112	75-125	0.506	20	
Carbon Ranges C12-C28	628	10.0	"	530	102	99.2	75-125	1.27	20	
Carbon Ranges C28-C35	44.8	10.0	"	0.00	82.9		75-125	14.9	20	
Total Hydrocarbon C6-C35	1260	10.0	"	1060	185	101	75-125	0.791	20	
Surrogate: 1-Chlorooctane	60.6		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	58.0		"	50.0		116	70-130			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/02/06 14:53

**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 EC60101 - General Preparation (Prep)</b>										
<b>Blank (EC60101-BLK1)</b>		Prepared: 02/28/06 Analyzed: 03/01/06								
% Solids	100		%							
<b>Duplicate (EC60101-DUP1)</b>		<b>Source: 6B28005-01</b>		Prepared: 02/28/06 Analyzed: 03/01/06						
% Solids	79.6		%		81.9			2.85	20	
<b>Duplicate (EC60101-DUP2)</b>		<b>Source: 6B28014-06</b>		Prepared: 02/28/06 Analyzed: 03/01/06						
% Solids	86.5		%		86.0			0.580	20	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/02/06 14:53

### Notes and Definitions

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

Report Approved By:

*Raland K. Tuttle*

Date:

3/2/2006

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.

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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: 2/28/06 14:20

Order #: WB28010

Initials: CK

### Sample Receipt Checklist

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

Other observations:

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### Variance Documentation:

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

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Corrective Action Taken:

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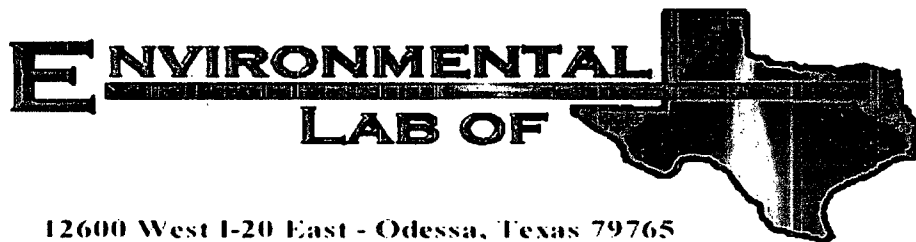
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: North Hobbs 8"

Project Number: SRS: 2006-059

Location: Lea County, NM

Lab Order Number: 6B27013

Report Date: 03/06/06

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/06/06 11:35

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP 1	6B27013-01	Soil	02/24/06 10:00	02/24/06 17:30

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/06/06 11:35

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SP 1 (6B27013-01) Soil</b>									
<b>Benzene</b>	<b>0.0494</b>	0.0250	mg/kg dry	25	EC60202	03/02/06	03/02/06	EPA 8021B	
<b>Toluene</b>	<b>0.954</b>	0.0250	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>2.31</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (p/m)</b>	<b>5.19</b>	0.0250	"	"	"	"	"	"	
<b>Xylene (o)</b>	<b>1.12</b>	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		126 %	80-120		"	"	"	"	S-04
<b>Carbon Ranges C6-C12</b>	<b>217</b>	10.0	mg/kg dry	1	EC60206	03/02/06	03/02/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>790</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>107</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon C6-C35</b>	<b>1110</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		122 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		123 %	70-130		"	"	"	"	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/06/06 11:35

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SP 1 (6B27013-01) Soil</b>									
<b>% Moisture</b>	<b>10.9</b>	0.1	%	1	EB62809	02/27/06	02/28/06	% calculation	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/06/06 11:35

**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 EC60202 - EPA 5030C (GC)</b>										
<b>Blank (EC60202-BLK1)</b>										
Prepared & Analyzed: 03/02/06										
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	33.0		ug/kg	40.0		82.5	80-120			
Surrogate: 4-Bromofluorobenzene	34.8		"	40.0		87.0	80-120			
<b>LCS (EC60202-BS1)</b>										
Prepared & Analyzed: 03/02/06										
Benzene	1.04	0.0250	mg/kg wet	1.25		83.2	80-120			
Toluene	1.13	0.0250	"	1.25		90.4	80-120			
Ethylbenzene	1.29	0.0250	"	1.25		103	80-120			
Xylene (p/m)	2.73	0.0250	"	2.50		109	80-120			
Xylene (o)	1.35	0.0250	"	1.25		108	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.8		ug/kg	40.0		87.0	80-120			
Surrogate: 4-Bromofluorobenzene	40.7		"	40.0		102	80-120			
<b>Calibration Check (EC60202-CCV1)</b>										
Prepared & Analyzed: 03/02/06										
Benzene	41.5		ug/kg	50.0		83.0	80-120			
Toluene	46.3		"	50.0		92.6	80-120			
Ethylbenzene	52.9		"	50.0		106	80-120			
Xylene (p/m)	111		"	100		111	80-120			
Xylene (o)	55.5		"	50.0		111	80-120			
Surrogate: a,a,a-Trifluorotoluene	33.1		"	40.0		82.8	80-120			
Surrogate: 4-Bromofluorobenzene	37.9		"	40.0		94.8	80-120			
<b>Matrix Spike (EC60202-MS1)</b>										
Source: 6B27012-01 Prepared & Analyzed: 03/02/06										
Benzene	1.04	0.0250	mg/kg dry	1.30	ND	80.0	80-120			
Toluene	1.15	0.0250	"	1.30	ND	88.5	80-120			
Ethylbenzene	1.32	0.0250	"	1.30	ND	102	80-120			
Xylene (p/m)	2.83	0.0250	"	2.60	ND	109	80-120			
Xylene (o)	1.37	0.0250	"	1.30	ND	105	80-120			
Surrogate: a,a,a-Trifluorotoluene	33.7		ug/kg	40.0		84.2	80-120			
Surrogate: 4-Bromofluorobenzene	36.2		"	40.0		90.5	80-120			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/06/06 11:35

**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 EC60202 - EPA 5030C (GC)**

**Matrix Spike Dup (EC60202-MSD1)**

**Source: 6B27012-01**

Prepared: 03/02/06 Analyzed: 03/03/06

Benzene	1.05	0.0250	mg/kg dry	1.30	ND	80.8	80-120	0.995	20	
Toluene	1.12	0.0250	"	1.30	ND	86.2	80-120	2.63	20	
Ethylbenzene	1.28	0.0250	"	1.30	ND	98.5	80-120	3.49	20	
Xylene (p/m)	2.72	0.0250	"	2.60	ND	105	80-120	3.74	20	
Xylene (o)	1.35	0.0250	"	1.30	ND	104	80-120	0.957	20	
Surrogate: a,a,a-Trifluorotoluene	33.7		ug/kg	40.0		84.2	80-120			
Surrogate: 4-Bromofluorobenzene	36.1		"	40.0		90.2	80-120			

**Batch EC60206 - Solvent Extraction (GC)**

**Blank (EC60206-BLK1)**

Prepared & Analyzed: 03/02/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	48.4		mg/kg	50.0		96.8	70-130			
Surrogate: 1-Chlorooctadecane	46.3		"	50.0		92.6	70-130			

**LCS (EC60206-BS1)**

Prepared & Analyzed: 03/02/06

Carbon Ranges C6-C12	538	10.0	mg/kg wet	500		108	75-125			
Carbon Ranges C12-C28	501	10.0	"	500		100	75-125			
Total Hydrocarbon C6-C35	1040	10.0	"	1000		104	75-125			
Surrogate: 1-Chlorooctane	58.6		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	58.3		"	50.0		117	70-130			

**Calibration Check (EC60206-CCV1)**

Prepared: 03/02/06 Analyzed: 03/03/06

Carbon Ranges C6-C12	233		mg/kg	250		93.2	80-120			
Carbon Ranges C12-C28	270		"	250		108	80-120			
Total Hydrocarbon C6-C35	503		"	500		101	80-120			
Surrogate: 1-Chlorooctane	54.6		"	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	54.4		"	50.0		109	70-130			

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
03/06/06 11:35

**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 EC60206 - Solvent Extraction (GC)**

<b>Matrix Spike (EC60206-MS1)</b>		<b>Source: 6B27012-06</b>		<b>Prepared &amp; Analyzed: 03/02/06</b>						
Carbon Ranges C6-C12	571	10.0	mg/kg dry	527	ND	108	75-125			
Carbon Ranges C12-C28	507	10.0	"	527	ND	96.2	75-125			
Total Hydrocarbon C6-C35	1080	10.0	"	1050	ND	103	75-125			
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	55.5		"	50.0		111	70-130			
<b>Matrix Spike Dup (EC60206-MSD1)</b>		<b>Source: 6B27012-06</b>		<b>Prepared &amp; Analyzed: 03/02/06</b>						
Carbon Ranges C6-C12	561	10.0	mg/kg dry	527	ND	106	75-125	1.77	20	
Carbon Ranges C12-C28	504	10.0	"	527	ND	95.6	75-125	0.593	20	
Total Hydrocarbon C6-C35	1070	10.0	"	1050	ND	102	75-125	0.930	20	
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	54.1		"	50.0		108	70-130			



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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

**Reported:**  
03/06/06 11:35

**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 EB62809 - General Preparation (Prep)</b>										
<b>Blank (EB62809-BLK1)</b>				Prepared: 02/27/06 Analyzed: 02/28/06						
% Solids	100		%							
<b>Duplicate (EB62809-DUP1)</b>				Source: 6B27001-01 Prepared: 02/27/06 Analyzed: 02/28/06						
% Solids	92.9		%		92.7			0.216	20	
<b>Duplicate (EB62809-DUP2)</b>				Source: 6B27012-03 Prepared: 02/27/06 Analyzed: 02/28/06						
% Solids	96.2		%		95.5			0.730	20	

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

Project: North Hobbs 8"  
Project Number: SRS: 2006-059  
Project Manager: Camille Reynolds

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**Reported:**  
03/06/06 11:35

### Notes and Definitions

S-04      The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

DET      Analyte DETECTED

ND      Analyte NOT DETECTED at or above the reporting limit

NR      Not Reported

dry      Sample results reported on a dry weight basis

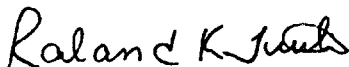
RPD      Relative Percent Difference

LCS      Laboratory Control Spike

MS      Matrix Spike

Dup      Duplicate

Report Approved By:



Date:

3/6/2006

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.

**12600 West I-20 East  
Odessa, Texas 79763**

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Sampler Signature:**  396

26

PO#: C. REYNOLDS / PAA

[illegible]



**Jeanne McMurrey**

---

**From:** "Ken Dutton" <kdutton@basinenv.com>  
**To:** "Jeanne" <jeanne@elabtxas.com>  
**Cc:** "Camille Reynolds" <cjreynolds@paalp.com>  
**Sent:** Monday, February 27, 2006 10:02 AM  
**Subject:** Hobbs North 8-Inch COC

Jeanne,

Reference the Hobbs North 8-Inch COC which had instructions to "hold for analytical instructions."

Please run the following analyticals on the soil sample:

SB1, TPH (8015M) & BTEX (8021B/5030)

SB2 is not needed, please discard.

Questions, let me know.




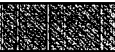

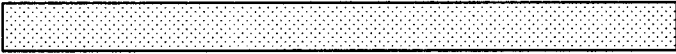



thxs

Ken

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This message has been scanned for viruses and dangerous content by Basin Broadband, and is believed to be clean.

2/27/2006




Plains Marketing, L. P. North Hobbs 8-Inch Site Lea County, New Mexico SW/SW S29, T18S, R38E SRS No. 2006-059				Soil Boring Completion Data			
Depth	Soil Column	PID	Petroleum	Petroleum	Soil	Soil Boring Completion Data	
Excavation Floor 18 feet bgs						TD: 45 Feet bgs	
5		674 ppm	Heavy	Heavy	Caliche Layer, Dry	Installed 08 March 2006 Basin Environmental Service Technologies	
10		621 ppm	Heavy	Heavy	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry, Imbeeded w/caliche nodules	<input type="checkbox"/> Samples selected for analysis	
15		250 ppm	Moderate	None	Sand Stone Layer (12' - 14' bgs), Dry	<input checked="" type="checkbox"/> Groundwater Level	
20		115 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry	Soil Boring Completion Data	
25		183 ppm	Slight	None			
30		54.8 ppm	Slight	None			
35		71.8 ppm	Slight	None			
40		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Wet		
45	TD						

TITLE	DESCRIPTION
Appendix C North Hobbs 8-Inch	Soil Boring 1
DRAWN BY KAD	DATE 21 April 2006

Plains Marketing, L. P. North Hobbs 8-Inch Site Lea County, New Mexico SW/SW S29, T18S, R38E SRS No. 2006-059											
Depth	Soil Column	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Monitoring Well Completion Data					
5		0.1 ppm	None	None	Caliche Layer to 19' bgs, Dry	<p>Installed 13 March 2006 Basin Environmental Service Technologies</p> <p><input type="checkbox"/> Samples selected for analysis</p>	<p>Groundwater Depth</p> <p>TD: 65 Feet bgs</p> <p>25 Feet, 2" .010 PVC Screen</p> <p>45 Feet, 2" PVC Riser</p> <p>35 Feet, Depth to Sand Pack</p> <p>35 Feet to Surface, Hydrated Bentonite Seal</p> <p>2 X 2 Feet Concrete Surface Pad installed w/4 X 60 inch metal locking square protector</p>				
10		0.1 ppm	None	None							
15		0.1 ppm	None	None							
20		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry, Imbedded w/caliche nodules						
25		0.1 ppm	None	None	Sand Stone Layer (26' - 29' bgs) Dry						
30		0.1 ppm	None	None							
35		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry						
40		0.1 ppm	None	None							
45		0.1 ppm	None	None							
50		0.1 ppm	None	None							
55	0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Moist							
60											
65 TD											
<table><tr><th>TITLE</th><th>DESCRIPTION</th></tr><tr><td>Appendix C North Hobbs 8-Inch</td><td>Monitoring Well 1</td></tr><tr><td>DRAWN BY KAD</td><td>DATE 21 April 2006</td></tr></table>						TITLE	DESCRIPTION	Appendix C North Hobbs 8-Inch	Monitoring Well 1	DRAWN BY KAD	DATE 21 April 2006
TITLE	DESCRIPTION										
Appendix C North Hobbs 8-Inch	Monitoring Well 1										
DRAWN BY KAD	DATE 21 April 2006										

Plains Marketing, L. P. North Hobbs 8-Inch Site Lea County, New Mexico SW/SW S29, T18S, R38E SRS No. 2006-059											
Depth	Soil Column	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Monitoring Well Completion Data					
5		0.1 ppm	None	None	Caliche Layer to 19' bgs, Dry	<div>Installed 13 March 2006 Basin Environmental Service Technologies</div> <div><input type="checkbox"/> Samples selected for analysis</div>	<div>▼ Groundwater Depth</div> <div>TD: 65 Feet bgs</div> <div>25 Feet, 2" .010 PVC Screen</div> <div>45 Feet, 2" PVC Riser</div> <div>35 Feet, Depth to Sand Pack 35 Feet to Surface, Hydrated Bentonite Seal</div> <div>2 X 2 Feet Concrete Surface Pad installed w/4 X 60 inch metal locking square protector</div>				
10		0.1 ppm	None	None							
15		0.1 ppm	None	None							
20		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry, Imbedded w/caliche nodules						
25		0.1 ppm	None	None	Sand Stone Layer (27' - 29' bgs) Dry						
30		0.1 ppm	None	None							
35		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry						
40		0.1 ppm	None	None							
45		0.1 ppm	None	None							
50		0.1 ppm	None	None							
55	0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Moist							
▼ 60											
65 TD											
						TITLE		DESCRIPTION			
						Appendix C North Hobbs 8-Inch		Monitoring Well 2			
						DRAWN BY KAD		DATE 21 April 2006			



Plains Marketing, L. P. North Hobbs 8-Inch Site Lea County, New Mexico SW/SW S29, T18S, R38E SRS No. 2006-059											
Depth	Soil Column	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Monitoring Well Completion Data					
5		0.1 ppm	None	None	Caliche Layer to 22' bgs, Dry	 Groundwater Depth	Installed 14 March 2006 Basin Environmental Service Technologies <input type="checkbox"/> Samples selected for analysis				
10		0.1 ppm	None	None			TD: 65 Feet bgs				
15		0.1 ppm	None	None			25 Feet , 2" .010 PVC Screen				
20		0.1 ppm	None	None			45 Feet, 2" PVC Riser				
25		0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry,		35 Feet, Depth to Sand Pack				
30		0.1 ppm	None	None			35 Feet to Surface, Hydrated Bentonite Seal				
35		0.1 ppm	None	None			2 X 2 Feet Concrete Surface Pad installed w/4 X 60 inch metal locking square protector				
40		0.1 ppm	None	None							
45		0.1 ppm	None	None							
50		0.1 ppm	None	None							
55	0.1 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Moist							
 60											
65 TD											
<table><tr><th>TITLE</th><th>DESCRIPTION</th></tr><tr><td>Appendix C North Hobbs 8-Inch</td><td>Monitoring Well 3</td></tr><tr><td>DRAWN BY KAD</td><td>DATE 21 April 2006</td></tr></table>						TITLE	DESCRIPTION	Appendix C North Hobbs 8-Inch	Monitoring Well 3	DRAWN BY KAD	DATE 21 April 2006
TITLE	DESCRIPTION										
Appendix C North Hobbs 8-Inch	Monitoring Well 3										
DRAWN BY KAD	DATE 21 April 2006										

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

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds	
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965	
Facility Name North Hobbs 8 Inch	Facility Type 8" Steel Pipeline	
Surface Owner R,M and S Enterprises	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter M	Section 29	Township 18S	Range 38E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32° 42' 40.2" Longitude 103° 10' 41.7"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 10 barrels	Volume Recovered 3 barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence 2-09-06 @ 9:00	Date and Hour of Discovery 2-09-06 @ 10:00
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 2-09-06 @ 11:00	
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.\*

Describe Cause of Problem and Remedial Action Taken.\* Internal corrosion of a 8 inch steel pipeline resulted in a release of sour crude oil. A clamp was installed on the line to mitigate the release. The line is a 8 inch steel gathering pipeline that produces approximately 280 barrels of crude oil per day. The pressure on the line is approximately 20 psi and the gravity of the sour crude oil is 37. The sour crude has an H<sub>2</sub>S content of 310 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 400 ft<sup>2</sup>.

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>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached <input type="checkbox"/>

Date: 2-14-06

Phone: 505-441-0965