

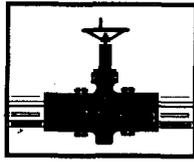
**1R - 468**

**WORK PLAN**

**DATE:**

**JULY, 2006**

IR-468  
Work Plan  
July, 2006



**PLAINS**  
PIPELINE, L.P.

July 24, 2006

Mr. Ben Stone  
State of New Mexico  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: Plains Pipeline, L.P.  
Document Submittal  
Clay Osborn Ranch – Rocky Top #1 Site Remediation Work Plan  
Clay Osborn Ranch – Jalmat #22B and TM 0245-2 Site Remediation Plan  
Jal, Lea County, New Mexico

IR  
GW-468

Dear Mr. Stone:

Plains Pipeline, L.P. (Plains) is pleased to submit the attached Site Investigation Report and Site-Specific Remediation Work Plans for two of the soil remediation project sites located on the Osborn's Rocky Top Ranch in Jal, Lea County, New Mexico. These documents include the results of an additional soil investigation conducted at the site and the remediation plan are based on the General Remediation Work Plan recently submitted to the New Mexico Oil Conservation Commission (NMOCD) by Plains.

Should you have any questions or comments, please contact me at (713) 646-4657.

Sincerely,

Jeffrey P. Dann, P.G.  
Sr. Environmental Specialist  
Plains All American

Attachment: Rocky Top #1 and Jalmat #22B Site Investigation Report and Site-Specific Remediation Work Plans

File: n:\jeff-files\Osborn-RockyTopRanch\RockyTop-1 CovrLtr.doc

JUL 24 2006

**SITE INVESTIGATION REPORT  
and  
SITE-SPECIFIC REMEDIATION WORK PLAN**

**Clay Osborn Rocky Top Ranch  
Jalmat #22B and TM-0245-2 Release Site**

**SW1/4 NW1/4 UL-E, Section 18, Township 25 North, Range 37 East  
Latitude 32° 07' 55" North, Longitude 103° 12' 38" West  
Lea County, New Mexico**

**PLAINS PIPELINE, L.P. SRS ID: 2000-10616**

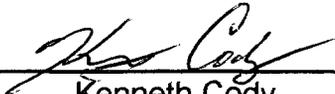
Prepared For:

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SDG Environmental Services  
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**July 2006**

  
\_\_\_\_\_  
Kenneth Cody  
SDG Environmental Services

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## 1.0 INTRODUCTION

SDG Environmental Services (SDG) was retained by Plains Pipeline, L.P. (Plains) to evaluate historical information, conduct additional investigation, and develop a site-specific remediation work plan for the Jalmat #22B and TM-0245-2 release site located on the Clay Osborne Rocky Top Ranch in Lea County, New Mexico. Plains is the owner/operator of several pipelines present on the Clay Osborne Rocky Top Ranch located near Jal, New Mexico.

This site is located in Unit Letter-E, in the SW $\frac{1}{4}$  NW  $\frac{1}{4}$  of Section 7, Township 25 North, Range 37 East, approximately 1-mile northwest of Jal, Lea County, New Mexico. A topographic Site Location Map is provided as Figure 1. The latitude is 32° 07' 55" North, and Longitude 103° 12' 38" West. The site is characterized by a right-of-way for the pipeline in a pasture. The pipeline is currently not in operation.

The hydrocarbon impacted area is the result of a historical release and the date of the release as well as the volume of crude oil released and recovered is not known. The visually stained area of the Jalmat #22B site is approximately 14,000 ft<sup>2</sup>. In June 2005, a surface soil sample was collected by others at the site identified as TM-0245-2 located at the southern edge of the Jalmat #22B site. Due to the two areas being contiguous, these two sites have been combined for the purpose of remediation.

The Jalmat #22B site was originally investigated in August 2000 by Environmental Plus, Inc. (EPI) but was not fully delineated at that time. In the EPI report dated December 2001, groundwater was estimated to be 70 feet below ground surface (bgs) and hydrocarbon soil impacts were indicated at depths to 15 feet bgs but were not vertically delineated. In the May 2006 investigation conducted by SDG, no groundwater was encountered in a boring installed to 75 feet bgs and the vertical extent of hydrocarbon impacted soils were determined to be less than 15 feet bgs. A summary of site activities is provided in Section 2.0.

Plains prepared and submitted a General Remediation Work Plan dated April 2006 to address the release sites located on the Rocky Top Ranch. The objective of the General Remediation Work Plan was to remediate crude oil impacted sites at the Rocky Top Ranch, consistent with the remediation/abatement goals and objectives set forth in the New Mexico Oil Conservation Division (NMOCD) "NMOCD Guidelines for Remediation of Leaks, Spills, and Releases, August 13, 1993." The General Remediation Work Plan proposed appropriate risk-based thresholds for contaminants of concern (CoCs) based on relative risk posed by the CoC residuals to local groundwater, area water wells, surface water bodies and impacts on surface reclamation.

The General Remediation Work Plan proposed remediation strategies for sites would be developed under the following three scenarios.

1. Surface Restoration Sites (Scenario 1)

This scenario was developed for sites where investigation data indicates that the surface area has restored itself naturally, the surface expression of the release is difficult to identify, the impacts are limited to the surface and/or shallow soils, and there is no threat to groundwater.

2. Total Excavation (Scenario 2)

For sites where data indicates that soil impacts are limited in vertical extent (i.e. 10 to 15 feet in depth) and total excavation of the impacted soil is practical.

3. Limited Excavation and Risk-based Closure (scenario 3)

For sites where data indicates that soil impacts in the source area extend to between 10 feet and 45 feet below ground surface (bgs) and excavation of all the impacted soil to below NMOCD guidelines is not practical.

The General Remediation Work Plan was conditionally approved by the NMOCD in a letter to Plains dated May 30, 2006.

The soil analytical data in the EPI December 2001 Jalmat #22B Site Investigation Report as well as the visual observations, field photoionization detector (PID) measurement, and soil analytical data from a site investigation conducted in May 2006 by SDG was used in development of this Site Specific Remediation Work Plan.

## 2.0 SUMMARY OF SITE ACTIVITIES

On 04 through 10 August 2000, initial subsurface horizontal and vertical delineation was conducted by EPI with the installation of twenty two (22) soil borings installed at the site. Each soil boring was installed to a depth of 15 feet bgs and are identified in Figure 2 as BH-1 through BH-22. Soil samples were collected at depths of 2, 5, 10, and 15 feet bgs, field screened with a PID and the soil samples were analyzed for BTEX and TPH-GRO/DRO. Laboratory results indicated that constituent concentrations of BTEX were either below NMOCD regulatory standards or not detected above laboratory method detection limits on the sixty-four (64) soil samples. Laboratory results indicated that TPH-GRO/DRO concentrations exceed 1000 mg/kg TPH for five (5) soil samples and the remaining fifty-nine (59) soil samples were either below NMOCD regulatory standards or were not detected above laboratory method detection limits. The highest concentrations were exhibited in samples collected from BH-1 and BH-16. A table of the analytical results from the August 2000 investigation report is provided in Appendix D.

On 29 June 2005, one surface soil sample was collected of observed surface staining by others at the site identified as TM-0245-2. The sample identified as OTS 19 was analyzed for BTEX and TPH-GRO/DRO. Laboratory results indicated that constituent concentrations of BTEX were either below NMOCD regulatory standards or not detected above laboratory method detection limits. Laboratory results indicated a TPH-GRO/DRO concentration sample OTS 19 of 863 mg/kg.

On 23 May 2006, SDG conducted an additional soil investigation in an effort to determine the vertical and horizontal extent of impacts at the Jalmat #22B and an adjacent suspected historical release site TM-0245-2. The TM-0245-2 site was located based on the latitude and longitude provided and a visible lack of vegetation, there was no obvious visible surface staining. The TM-0245-2 site is located adjacent to and just south of the Jalmat #22B site. The soil borings installed to delineate the historical TM-0245-2 site also serve to delineate the southern edge of the Jalmat #22B site; and therefore these sites are combined for the purposes of delineation and remediation.

Three soil borings were installed in the TM-0245-2 area and are identified in Figure 2 as TM2-SB1, TM2-SB2, and TM2-SB-3.

In order to further define the extent of impacted soils associated with Jalmat #22B site, three soil borings were installed. One boring JM22B-SB1 was installed adjacent to the southeastern edge of impacted soils in the vicinity of soil boring BH-22. Soil borings JM22B-SB2, and JM22B-SB3 were installed at the locations of previous soil borings BH-16 and BH-1 in an effort to provide vertical delineation of impacted soils.

Soil boring JM22B-SB1 was installed to 75 feet bgs and no groundwater was encountered.

Soil borings were installed by Straub Corporation, Stanton, Texas utilizing an air rotary drill rig. Soil samples were typically collected at 2 ft, 5 ft, 10 ft, 15 ft, and 20 ft depths using a core sampler. Soil samples were collected from some borings at deeper intervals and at intervals above and below a sandstone layer encountered at approximately 20 ft bgs. Soil samples were split for headspace analysis to screen for total volatile organic vapor concentrations in soils. A one quart zip-lock bag was filled one-half full of soil and sealed leaving the remainder of the bag filled with air. The sample was allowed to volatilize for five to ten minutes. One end of the bag was opened and the PID probe inserted carefully into the bag and the bag re-sealed around the probe as much as possible to prevent vapors from escaping. The peak measurement associated with the sample was recorded. The peak PID measurements are provided on the soil boring logs included in Appendix C.

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

The December 8, 2001 Site Investigation Report estimated the depth to water at the site of 70 ft bgs. Based on soil boring (LM22B-SB1) installed during the May 2006 investigation the depth to water at the site is greater than 75 ft. Based on the analytical results of soil samples from borings installed during the May 2006 investigation, impacted soil is limited to soils shallower than 20 feet bgs, therefore, at

least 55 feet of non-impacted soil remains between the last known impacted soil depth and groundwater. The resulting Depth to Groundwater Ranking Score is 10.

The site is greater than 1000 ft from any public water supply source and greater than 200 feet from any private domestic water supply well. The resulting Wellhead Protection Ranking Score is 0.

During remediation activities associated with the Texas-New Mexico Pipeline conducted in the 1990's, a retention basin was constructed to contain storm water runoff from the land farm located east of the site. The retention basin is located approximately 890 feet southeast of the site. At the time of the May 2006 investigation, there was no water in the basin. Although the retention basin may contain seasonal storm water, it was constructed to manage storm water from the land farm area which has a soil treatment standard of 1000 mg/kg TPH. The resulting Distance to Surface Water Body Ranking Score is 0.

Based on the individual ranking scores identified above, the site has an NMOCD Total Ranking Score of 10-19, which establish the following remediation levels:

Benzene:	10 mg/kg
BTEX:	50 mg/kg
TPH:	1000 mg/kg

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

The estimated area of soils impacted above NMOCD Standards is shown in Figure 3. The vertical extent of soils impacted above NMOCD standards based on the data obtained in the 25 May 2006 subsurface sampling is limited to 5 to 10 feet bgs. The impacted area is estimated to be approximately 24,000 square feet, 14,000 square feet of which are identifiable with some visible staining or lack of vegetation.

On 25 May 2006, an air rotary drill rig, operated by Straub Corporation, Stanton, Texas, was utilized to delineate the vertical extent of crude oil impacted soil at the site. Soil samples were collected in the subsurface from the soil boring at 5 foot intervals; field screened with a PID and selected soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Laboratory data sheets and chain-of-custody forms are attached (Appendix B). No visual observations of free phase hydrocarbons were encountered during the installation of the soil borings. Soil boring logs are provided in Appendix C.

Soil Boring TM2-SB1 was installed at the location of a historical release site. The soil boring was installed to 20 feet bgs and samples were collected at 2, 5, 10, 15, and 20 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH

GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in any of the samples. Analytical results indicated that TPH concentrations exceeded the NMOCD standard of 1000 mg/kg at 2 feet bgs and that TPH was not detected above the laboratory detection limits in soil samples collected at 5, 10, 15, and 20 feet bgs.

Soil Boring TM2-SB2 was installed at a location downgradient of TM2-SB1 and within the possible spill path of the reported historical release TM-0245-2. The soil boring was installed to 20 feet bgs and samples were collected at 2, 5, 10, 15, and 20 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in the samples except for the sample collected at 5 feet bgs which had an estimated M,P-xylenes concentration of 0.0223 mg/kg which is estimated because it is above the method detection limit but below the laboratory reporting limit. Analytical results indicated that TPH concentrations were not detected above the laboratory method detection limits in any of the samples.

Soil Boring TM2-SB3 was installed at a location downgradient of TM2-SB1. The soil boring was installed to 20 feet bgs and samples were collected at 2, 5, 10, 15, and 20 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in any of the samples. Analytical results indicated that TPH concentrations were below the NMOCD standard of 1000 mg/kg at 2, 5, and 20 feet bgs with TPH concentrations of 107, 666, and 65.6 mg/kg, respectively. Laboratory results of soil samples collected at 10 and 15 feet bgs indicated that TPH-GRO/DRO concentrations were not detected above the laboratory method detection limits.

Soil Boring JM22B-SB1 was installed at a location near the southeast corner of the impacted area associated with the Jalmat #22B release. The soil boring was installed to 75 feet bgs and samples were collected at 2, 5, 10, 15, 18, 28, and 40 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in any of the seven (7) samples. Analytical results indicated that TPH concentrations were below the NMOCD standard of 1000 mg/kg at 2, 5, 10, and 15 feet bgs with TPH concentrations of 244, 390, 49.1 and 194 mg/kg, respectively. Analytical results indicated that TPH concentrations were not detected above the laboratory method detection limits at 18, 28, and 40 feet bgs.

Soil Boring JM22B-SB2 was installed at the location of the previously installed soil boring BH-16. This location was selected because the results of August 2000 sampling indicated impacted soils above the NMOCD standard of 1000 mg/kg at 15 feet bgs. The purpose of soil boring JM22B-SB2 was to verify the previous results and to obtain a vertical delineation of impacted soils at this location. JM22B-SB2 was

installed to 30 feet bgs and samples were collected at 2, 5, 10, 15, 20, and 30 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in any of the six (6) samples. Analytical results indicated that TPH concentrations were below the NMOCD standard of 1000 mg/kg at 2 and 5 feet bgs with TPH concentrations of 20.2 and 616 mg/kg, respectively. Analytical results indicated that TPH concentrations were not detected above the laboratory method detection limits at 10, 15, 20, and 30 feet bgs.

Soil Boring JM22B-SB3 was installed at the location of the previously installed soil boring BH-1. This location was selected because the results of August 2000 sampling indicated impacted soils above the NMOCD standard of 1000 mg/kg at 15 feet bgs. The purpose of soil boring JM22B-SB3 was to verify the previous results and to obtain a vertical delineation of impacted soils at this location. JM22B-SB2 was installed to 40 feet bgs and samples were collected at 2, 5, 10, 15, 20, 33, and 40 feet bgs, field screened with a PID and submitted for laboratory analysis of TPH GRO/DRO and BTEX. Analytical results indicated that constituent concentrations of BTEX were not detected above the laboratory method detection limits in any of the seven (7) samples. Analytical results indicated that TPH concentrations were above the NMOCD standard of 1000 mg/kg at 5 feet bgs with TPH concentrations of 2130 mg/kg. Analytical results indicated that TPH concentrations were below the NMOCD standard of 1000 mg/kg at 2, 10, and 20 feet bgs with TPH concentrations of 61.2, 206, and 71.4 mg/kg, respectively. Analytical results indicated that TPH concentrations were not detected above the laboratory method detection limits at 15, 33, and 40 feet bgs.

The extent of hydrocarbon impacted soils has been delineated vertically. The horizontal extent of impacted soils has been defined to the north and east. Hydrocarbon impacted soils have not been fully delineated to the west of the surface stained area and JM22B-SB3 and TM2-SB1. However, based on the results of the soil samples collected and analyzed from surrounding soil borings, it is likely that the horizontal impact in these areas is limited in extent.

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

No saturated conditions were observed in any of the borings. Soil boring JM22B-SB1 was installed to 75 feet bgs and no groundwater was encountered. The depth of hydrocarbon impacted soils above 1000 mg/kg TPH is limited to less than 10 feet bgs based on the recent investigation. Therefore, there is no indication that hydrocarbons from the historical release have impacted the saturated zone.

## **6.0 RECOMMENDATIONS FOR REMEDIATION**

Based on the results of the horizontal and vertical soil boring investigation conducted at the site, it appears that hydrocarbon impacted soils are present to depths of less

than 15 feet bgs. Given the NMOCD guideline cleanup standard of 1000 mg/kg TPH, an estimated 4,000 cubic yards of impacted soil and segregated clean overburden will require excavation. Because the horizontal impacts have not been fully defined, delineation samples will be collected commensurate with excavation and/or cleanup confirmation sampling activities.

The area with observed staining and where laboratory analytical results indicate that surface impacts do not extend to below 2 feet bgs will be addressed under the General Work Plan Scenario 1 involving the following procedures as were outlined in the approved General Remediation Work Plan and approved by NMOCD in the May 2006 NMOCD approval letter:

- Scrape the surface asphaltines where apparent and remove.
- Blend the underlying 1 to 2 feet of soil with native soil and contour.
- Do not disturb areas that have already re-vegetated.

Because the impacts greater than 1000 mg/kg TPH are limited in vertical extent (i.e. 10 to 15 feet in depth) these soils will be remediated under the General Work Plan Scenario 2 (surface restoration) involving the following procedures as were outlined in the approved General Remediation Work Plan and includes NMOCD conditions presented in the May 2006 NMOCD approval letter.

- Excavation of impacted soils to between 5 to 10 feet bgs or until site remediation standards are met.
- Collect and analyze soil samples from the walls and floor of the excavation to confirm that the remediation has met the site remediation standards.
- Relocation of the excavated soil to the centralized soil treatment area for blending and aeration.
- Collect and analyze treated soil to confirm that the soil treatment activities have met the site guidelines.
- Backfill the excavation with soil treated to 1000 mg/kg TPH and restore the area to as close as possible to pre-spill conditions.

Should impacted soils be determined to be limited in extent based on additional delineation samples collected commensurate with excavation activities, the soils may be blended on site and stockpiled adjacent to the excavation pending approval of the NMOCD Project Manager.

Additionally, should areas where vertical hydrocarbon impacted soils extend below 15 feet bgs be determined based on analytical results commensurate with excavation activities, Plains recommends that the approved General Work Plan Closure Scenario 3 be applied. Under this scenario, an impermeable barrier consisting of an oversized 20-mil polyethylene liner will be permanently installed at a minimum depth of 10 feet to inhibit vertical migration of contaminants in soil left in place below the cap. A 3-foot wide clean area buffer will be established around the impacted soil in the floor of the excavation. The buffer extent will be determined using a calibrated

PID and confirmed by laboratory analysis of grab samples collected around the perimeter of the excavation. The liner shall be cushioned above and below with a 3 to 4-inch layer of sand or geotextile to protect it from puncture and tearing during the backfilling process. Installation of the 20-mil polyethylene liner at a minimum depth of 10 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegrading of contaminants in the soil.

The clean overburden and impacted soils be blended and utilized as backfill. Soil samples will be collected at a rate of one sample per 500 cubic yards to verify constituent concentrations of BTEX are below NMOCD guidelines and TPH-GRO/DRO are below 1000 mg/kg as approved for backfill over liners. Once the excavation has been confirmed to meet NMOCD standards or the installation of the 20-mil poly liner is completed, backfilling of the excavation will be initiated with the blended soil. 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 NMOCD, upon completion of backfilling activities. Plains is requesting approval from NMOCD to implement these proposed final remediation and site closure activities.

## **7.0 QA/QC PROCEDURES**

### **Soil Sampling**

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

The soil samples will be analyzed as follows:

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

### **Decontamination of Equipment**

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

## **Laboratory Protocol**

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

## **8.0 LIMITATIONS**

SDG Environmental Services has prepared this Preliminary Investigation Report and Remediation Work Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

SDG Environmental Services has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. SDG Environmental Services 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. SDG Environmental Services has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. SDG Environmental Services 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 Pipeline, 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 SDG Environmental Services and Plains Pipeline, L.P.

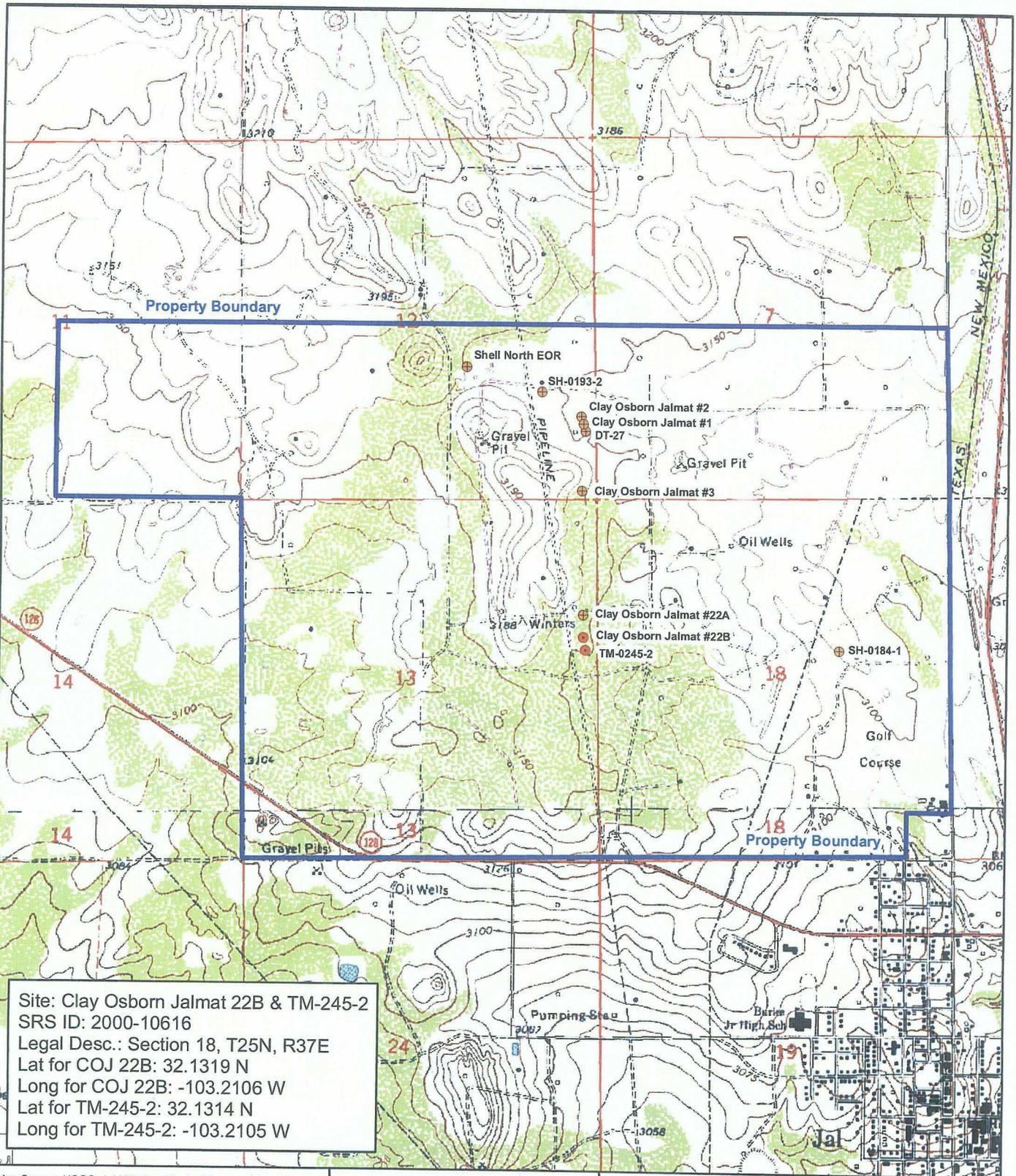
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TABLE 1  
 SOIL SAMPLE ANALYTICAL RESULTS SUMMARY  
 PLAINS PIPELINE, L. P.  
 Jalmat #22B and TM-0245-2  
 LEA COUNTY, NEW MEXICO  
 PLAINS SRS ID: 2000-10616

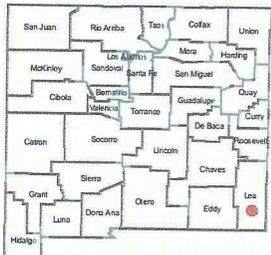
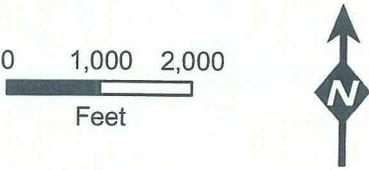
SAMPLE LOCATION	DEPTH ft bgs	SAMPLE DATE	LABORATORY I.D.	METHOD: EPA SW 846-8021B, 5030				METHOD: 8015M				TOTAL TPH (mg/kg)
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-XYLENES (mg/kg)	M.P. O-XYLENE (mg/kg)	C6-C12 (mg/kg)	C12-C28 (mg/kg)	C28-C35 (mg/kg)	C6-C35 (mg/kg)	
JM22B-SB1-2	2'	05/23/06	6E24001-01	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	188	56.3	244
JM22B-SB1-5	5'	05/23/06	6E24001-02	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	336	54.3	390
JM22B-SB1-10	10'	05/23/06	6E24001-03	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	49.1	<10	49.1
JM22B-SB1-15	15'	05/23/06	6E24001-04	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	17.1	22.6	194
JM22B-SB1-18	18'	05/23/06	6E24001-05	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB1-28	28'	05/23/06	6E24001-06	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB1-40	40'	05/23/06	6E24001-07	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	20.2	5.53 J	20.2
JM22B-SB2-2	2'	05/23/06	6E24001-08	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	60.1	115	616
JM22B-SB2-5	5'	05/23/06	6E24001-09	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB2-10	10'	05/23/06	6E24001-10	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB2-15	15'	05/23/06	6E24001-11	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB2-20	20'	05/23/06	6E24001-12	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB2-30	30'	05/23/06	6E24001-13	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB3-2	2'	05/23/06	6E24001-14	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	50.2	11	61.2
JM22B-SB3-5	5'	05/23/06	6E24001-15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	154.0	554	2130
JM22B-SB3-10	10'	05/23/06	6E24001-16	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	14	170	23.6	206
JM22B-SB3-15	15'	05/23/06	6E24001-17	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB3-20	20'	05/23/06	6E24001-18	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	71.4	8.77 J	71.4
JM22B-SB3-33	33'	05/23/06	6E24001-19	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
JM22B-SB2-40	40'	05/23/06	6E24001-20	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB1-2	2'	05/22/06	6E24002-01	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	56.4	3290	860	4210
TM2-SB1-5	5'	05/22/06	6E24002-02	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB1-10	10'	05/22/06	6E24002-03	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB1-15	15'	05/22/06	6E24002-04	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB1-20	20'	05/22/06	6E24002-05	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB2-2	2'	05/22/06	6E24002-06	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB2-5	5'	05/22/06	6E24002-07	<0.0250	<0.0250	<0.0250	0.0223 J	<0.0250	<10	<10	<10	<10
TM2-SB2-10	10'	05/22/06	6E24002-08	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB2-15	15'	05/22/06	6E24002-09	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB2-20	20'	05/22/06	6E24002-10	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB3-2	2'	05/22/06	6E26004-12	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	78	28.3	107
TM2-SB3-5	5'	05/22/06	6E26004-13	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	445	221	666
TM2-SB3-10	10'	05/22/06	6E26004-14	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB3-15	15'	05/22/06	6E26004-15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10	<10
TM2-SB3-20	20'	05/22/06	6E26004-16	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	65.6	<10	65.6

< indicates the constituent was not detected  
 J indicates estimated value (detected below method reporting limit)



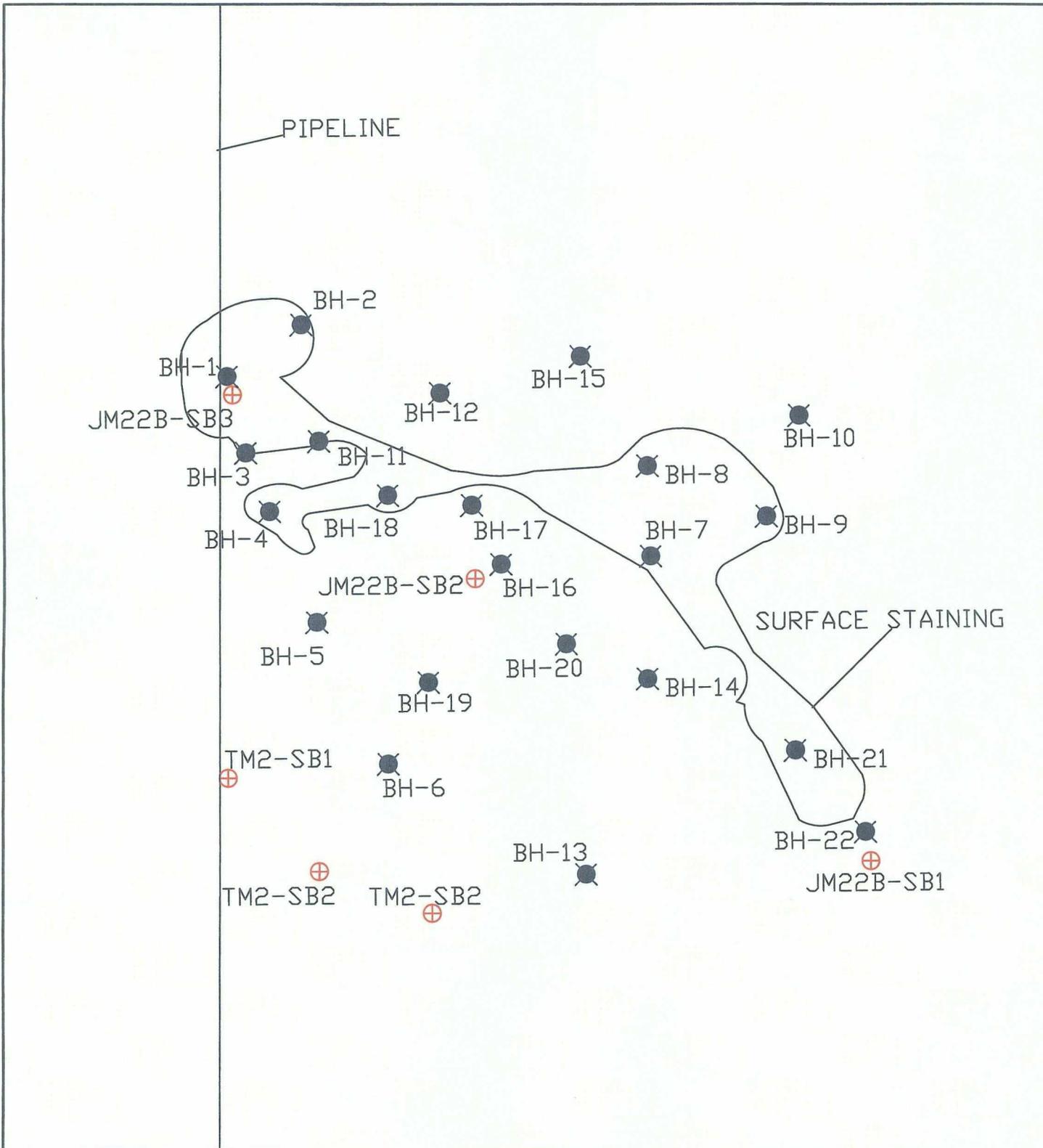
Site: Clay Osborn Jalmat 22B & TM-245-2  
 SRS ID: 2000-10616  
 Legal Desc.: Section 18, T25N, R37E  
 Lat for COJ 22B: 32.1319 N  
 Long for COJ 22B: -103.2106 W  
 Lat for TM-245-2: 32.1314 N  
 Long for TM-245-2: -103.2105 W

Map Source: USGS, Jal NW New Mexico Topographic Map, 1980.



Clay Osborn Jalmat 22B & TM-245-2  
 SRS ID: 2000-10616  
 Plains Marketing L.P.  
 Lea County, New Mexico

Figure 1: Site Location Map

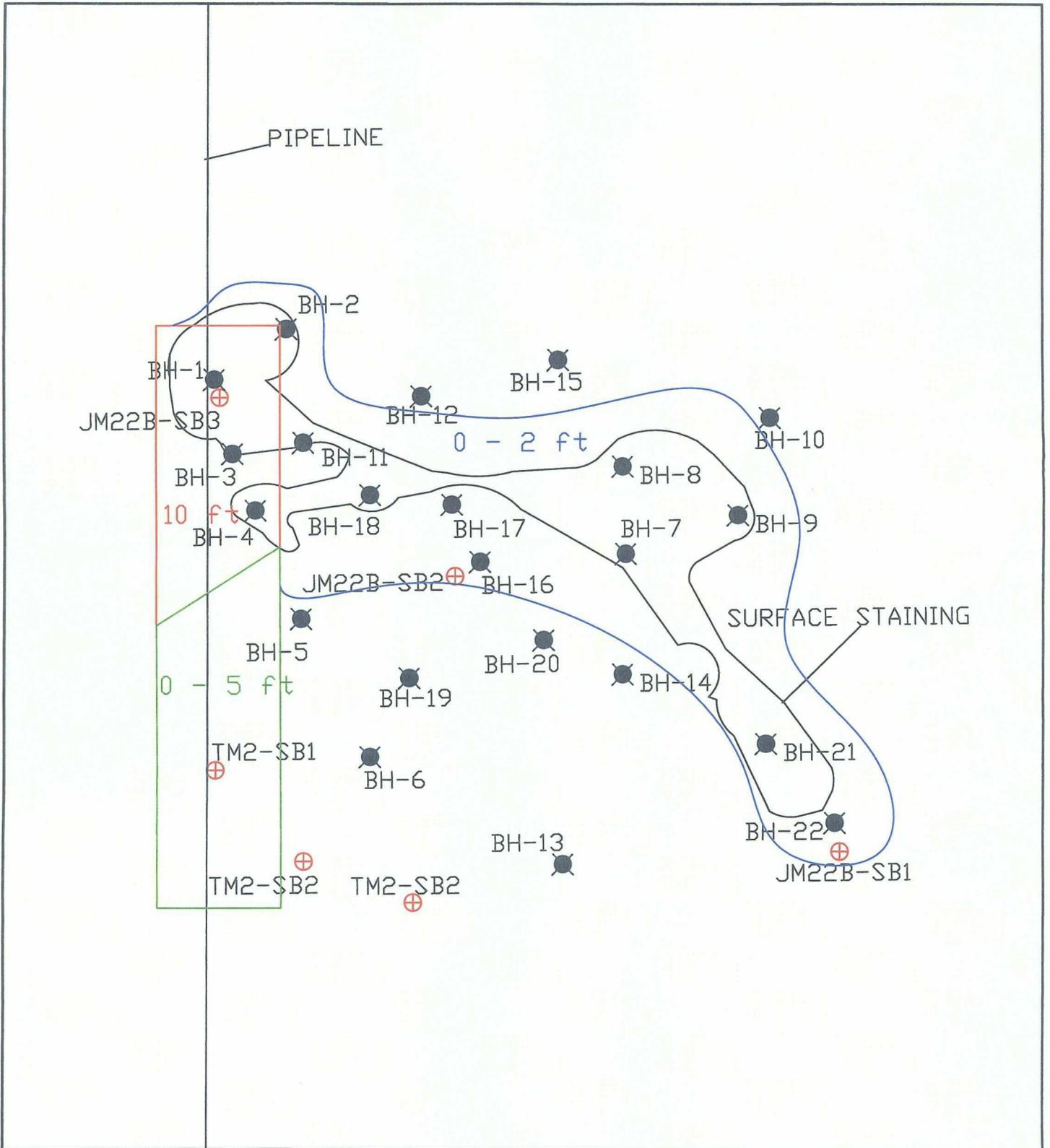


LEGEND:  
 ⊕ Soil boring Locations  
 ⊗ Historical Soil Boring Locations



Rocky Top Ranch  
 Clay Osborn Jalmat 22B and TM-0245-2  
 SRS ID: 2000-10616  
 Lea County, New Mexico

Figure 2: Soil Boring Locations



LEGEND:



Soil boring Locations



Historical Soil Boring Locations

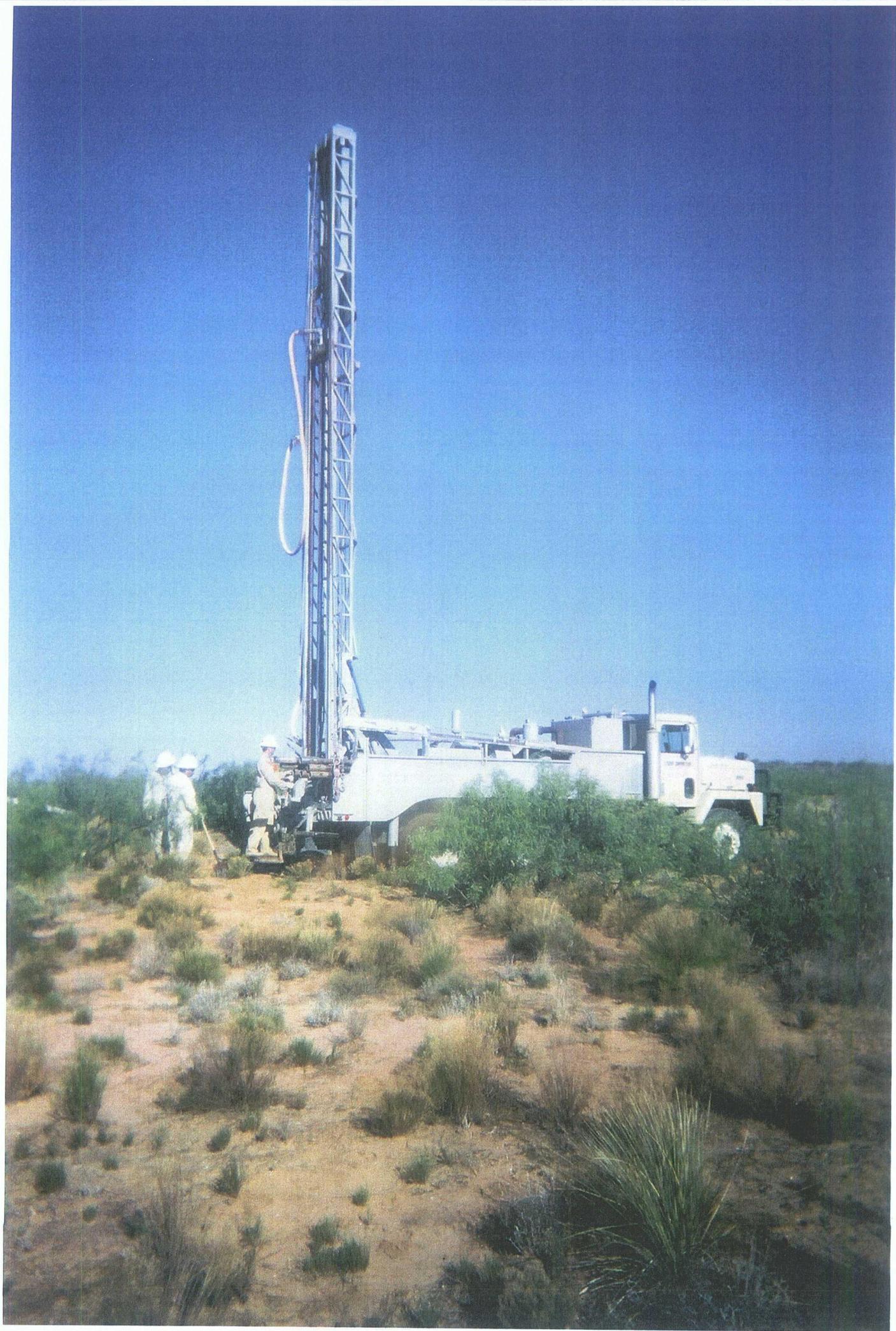


ENVIRONMENTAL SERVICES

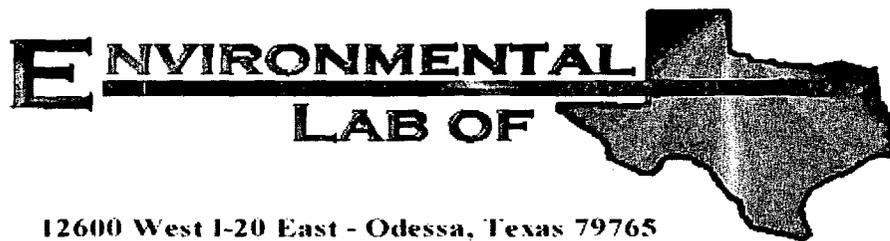
Rocky Top Ranch  
 Clay Osborn Jalmat 22B and TM-0245-2  
 EMS No:2000-10616  
 Lea County, New Mexico

Figure 3: Estimated Excavation Area and Depth

**APPENDIX A  
SITE PHOTOGRAPHS**



**APPENDIX B  
ENVIRONMENTAL LABORATORY OF TEXAS  
ANALYTICAL RESULTS**



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Jalmat Clay Osborne #22B

Project Number: 2000-10616

Location: TM-0245-2

Lab Order Number: 6E24002

Report Date: 06/01/06

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

Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
06/01/06 15:02

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TM2- SB1- 2	6E24002-01	Soil	05/23/06 09:05	05/24/06 08:00
TM2- SB1- 5	6E24002-02	Soil	05/23/06 09:10	05/24/06 08:00
TM2- SB1- 10	6E24002-03	Soil	05/23/06 09:15	05/24/06 08:00
TM2- SB1- 15	6E24002-04	Soil	05/23/06 09:20	05/24/06 08:00
TM2- SB1- 20	6E24002-05	Soil	05/23/06 09:30	05/24/06 08:00
TM2- SB2- 2	6E24002-06	Soil	05/23/06 10:15	05/24/06 08:00
TM2- SB2- 5	6E24002-07	Soil	05/23/06 10:25	05/24/06 08:00
TM2- SB2- 10	6E24002-08	Soil	05/23/06 10:35	05/24/06 08:00
TM2- SB2- 15	6E24002-09	Soil	05/23/06 10:45	05/24/06 08:00
TM2- SB2- 20	6E24002-10	Soil	05/23/06 10:55	05/24/06 08:00
TM2- SB3- 2	6E24002-11	Soil	05/23/06 11:10	05/24/06 08:00
TM2- SB3- 5	6E24002-12	Soil	05/23/06 11:15	05/24/06 08:00
TM2- SB3- 10	6E24002-13	Soil	05/23/06 11:20	05/24/06 08:00
TM2- SB3- 15	6E24002-14	Soil	05/23/06 11:25	05/24/06 08:00
TM2- SB3- 20	6E24002-15	Soil	05/23/06 11:35	05/24/06 08:00

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:02

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TM2- SB1- 2 (6E24002-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		83.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.2 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>56.4</b>	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>3290</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>860</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>4210</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		102 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		109 %	70-130		"	"	"	"	
<b>TM2- SB1- 5 (6E24002-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		94.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.8 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	ND	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		82.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		85.6 %	70-130		"	"	"	"	
<b>TM2- SB1- 10 (6E24002-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		105 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	80-120		"	"	"	"	
<b>Carbon Ranges C6-C12</b>	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	

Environmental Lab of Texas

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

Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
06/01/06 15:02

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TM2- SB1- 10 (6E24002-03) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		97.4 %	70-130		"	"	"	"	
<b>TM2- SB1- 15 (6E24002-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		106 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		108 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		99.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		103 %	70-130		"	"	"	"	
<b>TM2- SB1- 20 (6E24002-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		104 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		100 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		104 %	70-130		"	"	"	"	

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Page 3 of 14

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:02

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TM2- SB2- 2 (6E24002-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		95.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		117 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		120 %	70-130		"	"	"	"	
<b>TM2- SB2- 5 (6E24002-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	J [0.0223]	0.0250	"	"	"	"	"	"	J
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		97.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C12-C28	105	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	25.8	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	131	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		98.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		102 %	70-130		"	"	"	"	
<b>TM2- SB2- 10 (6E24002-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		97.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	

Environmental Lab of Texas

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:02

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>TM2- SB2- 10 (6E24002-08) Soil</b>										
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M		
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"		
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"		
<i>Surrogate: 1-Chlorooctane</i>		95.4 %		70-130	"	"	"	"		
<i>Surrogate: 1-Chlorooctadecane</i>		97.4 %		70-130	"	"	"	"		
<b>TM2- SB2- 15 (6E24002-09) Soil</b>										
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		101 %		80-120	"	"	"	"		
<i>Surrogate: 4-Bromofluorobenzene</i>		94.0 %		80-120	"	"	"	"		
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M		
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"		
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"		
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"		
<i>Surrogate: 1-Chlorooctane</i>		127 %		70-130	"	"	"	"		
<i>Surrogate: 1-Chlorooctadecane</i>		130 %		70-130	"	"	"	"		
<b>TM2- SB2- 20 (6E24002-10) Soil</b>										
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		98.5 %		80-120	"	"	"	"		
<i>Surrogate: 4-Bromofluorobenzene</i>		90.5 %		80-120	"	"	"	"		
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M		
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"		
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"		
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"		
<i>Surrogate: 1-Chlorooctane</i>		72.2 %		70-130	"	"	"	"		
<i>Surrogate: 1-Chlorooctadecane</i>		73.6 %		70-130	"	"	"	"		

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:02

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TM2- SB3- 2 (6E24002-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		92.5 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>78.0</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>29.3</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>107</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		121 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		126 %	70-130		"	"	"	"	
<b>TM2- SB3- 5 (6E24002-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		94.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>445</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>221</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>666</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		129 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		130 %	70-130		"	"	"	"	
<b>TM2- SB3- 10 (6E24002-13) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		97.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TM2- SB3- 10 (6E24002-13) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		89.2 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		93.8 %		70-130	"	"	"	"	
<b>TM2- SB3- 15 (6E24002-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		106 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.8 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		129 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		130 %		70-130	"	"	"	"	
<b>TM2- SB3- 20 (6E24002-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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>		98.8 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.2 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62506	05/25/06	05/29/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>65.6</b>	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>65.6</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		98.6 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		103 %		70-130	"	"	"	"	

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
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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>TM2- SB1- 2 (6E24002-01) Soil</b>									
% Moisture	3.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB1- 5 (6E24002-02) Soil</b>									
% Moisture	1.6	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB1- 10 (6E24002-03) Soil</b>									
% Moisture	9.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB1- 15 (6E24002-04) Soil</b>									
% Moisture	2.4	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB1- 20 (6E24002-05) Soil</b>									
% Moisture	2.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB2- 2 (6E24002-06) Soil</b>									
% Moisture	10.4	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB2- 5 (6E24002-07) Soil</b>									
% Moisture	13.4	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB2- 10 (6E24002-08) Soil</b>									
% Moisture	12.0	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB2- 15 (6E24002-09) Soil</b>									
% Moisture	1.9	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB2- 20 (6E24002-10) Soil</b>									
% Moisture	24.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB3- 2 (6E24002-11) Soil</b>									
% Moisture	1.3	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	

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Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

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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>TM2- SB3- 5 (6E24002-12) Soil</b>									
% Moisture	6.7	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB3- 10 (6E24002-13) Soil</b>									
% Moisture	2.4	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB3- 15 (6E24002-14) Soil</b>									
% Moisture	5.6	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>TM2- SB3- 20 (6E24002-15) Soil</b>									
% Moisture	0.8	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE62506 - Solvent Extraction (GC)**

**Blank (EE62506-BLK1)**

Prepared: 05/25/06 Analyzed: 05/31/06

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 nC6-nC35	ND	10.0	"							
Surrogate: 1-Chlorooctane	49.2		mg/kg	50.0		98.4	70-130			
Surrogate: 1-Chlorooctadecane	53.5		"	50.0		107	70-130			

**LCS (EE62506-BS1)**

Prepared: 05/25/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	567	10.0	mg/kg wet	500		113	75-125			
Carbon Ranges C12-C28	562	10.0	"	500		112	75-125			
Total Hydrocarbon nC6-nC35	1130	10.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	54.4		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	50.5		"	50.0		101	70-130			

**Calibration Check (EE62506-CCV1)**

Prepared: 05/25/06 Analyzed: 05/29/06

Carbon Ranges C6-C12	271		mg/kg	250		108	80-120			
Carbon Ranges C12-C28	290		"	250		116	80-120			
Total Hydrocarbon nC6-nC35	561		"	500		112	80-120			
Surrogate: 1-Chlorooctane	47.2		"	50.0		94.4	70-130			
Surrogate: 1-Chlorooctadecane	46.4		"	50.0		92.8	70-130			

**Matrix Spike (EE62506-MS1)**

Source: 6E24002-15

Prepared: 05/25/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	486	10.0	mg/kg dry	504	ND	96.4	75-125			
Carbon Ranges C12-C28	540	10.0	"	504	65.6	94.1	75-125			
Total Hydrocarbon nC6-nC35	1030	10.0	"	1010	65.6	95.5	75-125			
Surrogate: 1-Chlorooctane	48.4		mg/kg	50.0		96.8	70-130			
Surrogate: 1-Chlorooctadecane	46.1		"	50.0		92.2	70-130			

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE62506 - Solvent Extraction (GC)**

**Matrix Spike Dup (EE62506-MSD1)**

Source: 6E24002-15

Prepared: 05/25/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	479	10.0	mg/kg dry	504	ND	95.0	75-125	1.45	20	
Carbon Ranges C12-C28	526	10.0	"	504	65.6	91.3	75-125	2.63	20	
Total Hydrocarbon nC6-nC35	1000	10.0	"	1010	65.6	92.5	75-125	2.96	20	
Surrogate: 1-Chlorooctane	47.8		mg/kg	50.0		95.6	70-130			
Surrogate: 1-Chlorooctadecane	45.3		"	50.0		90.6	70-130			

**Batch EE63013 - EPA 5030C (GC)**

**Blank (EE63013-BLK1)**

Prepared & Analyzed: 05/30/06

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	38.3		ug/kg	40.0		95.8	80-120			
Surrogate: 4-Bromofluorobenzene	38.5		"	40.0		96.2	80-120			

**LCS (EE63013-BS1)**

Prepared & Analyzed: 05/30/06

Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.14	0.0250	"	1.25		91.2	80-120			
Ethylbenzene	1.18	0.0250	"	1.25		94.4	80-120			
Xylene (p/m)	2.61	0.0250	"	2.50		104	80-120			
Xylene (o)	1.28	0.0250	"	1.25		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.3		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	41.2		"	40.0		103	80-120			

**Calibration Check (EE63013-CCV1)**

Prepared & Analyzed: 05/30/06

Benzene	42.5		ug/kg	50.0		85.0	80-120			
Toluene	42.5		"	50.0		85.0	80-120			
Ethylbenzene	48.2		"	50.0		96.4	80-120			
Xylene (p/m)	95.0		"	100		95.0	80-120			
Xylene (o)	49.4		"	50.0		98.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.6		"	40.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	43.6		"	40.0		109	80-120			

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Project: Jalmat Clay Osborne #22B  
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**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE63013 - EPA 5030C (GC)**

Matrix Spike (EE63013-MS1)	Source: 6E24002-04			Prepared & Analyzed: 05/30/06						
Benzene	1.09	0.0250	mg/kg dry	1.28	ND	85.2	80-120			
Toluene	1.10	0.0250	"	1.28	ND	85.9	80-120			
Ethylbenzene	1.21	0.0250	"	1.28	ND	94.5	80-120			
Xylene (p/m)	2.62	0.0250	"	2.56	ND	102	80-120			
Xylene (o)	1.31	0.0250	"	1.28	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.1		ug/kg	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	44.8		"	40.0		112	80-120			

Matrix Spike Dup (EE63013-MSD1)	Source: 6E24002-04			Prepared & Analyzed: 05/30/06						
Benzene	1.08	0.0250	mg/kg dry	1.28	ND	84.4	80-120	0.943	20	
Toluene	1.09	0.0250	"	1.28	ND	85.2	80-120	0.818	20	
Ethylbenzene	1.21	0.0250	"	1.28	ND	94.5	80-120	0.00	20	
Xylene (p/m)	2.59	0.0250	"	2.56	ND	101	80-120	0.985	20	
Xylene (o)	1.29	0.0250	"	1.28	ND	101	80-120	0.985	20	
Surrogate: a,a,a-Trifluorotoluene	43.0		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	44.7		"	40.0		112	80-120			

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 Project Manager: Camille Reynolds

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE62502 - General Preparation (Prep)**

<b>Blank (EE62502-BLK1)</b>				Prepared: 05/24/06 Analyzed: 05/25/06						
% Solids	100		%							
<b>Duplicate (EE62502-DUP1)</b>				Source: 6E24002-01 Prepared: 05/24/06 Analyzed: 05/25/06						
% Solids	96.3		%		96.5			0.207	20	
<b>Duplicate (EE62502-DUP2)</b>				Source: 6E24001-06 Prepared: 05/24/06 Analyzed: 05/25/06						
% Solids	91.8		%		90.5			1.43	20	
<b>Duplicate (EE62502-DUP3)</b>				Source: 6E24006-07 Prepared: 05/24/06 Analyzed: 05/25/06						
% Solids	89.7		%		90.9			1.33	20	

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### Notes and Definitions

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

Report Approved By: \_\_\_\_\_

*Raland K Tuttle*

Date: 6/1/2006

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.





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

Client: SDG Plains  
 Date/Time: 5/24/06 8:00  
 Order #: 10E240  
 Initials: UK

**Sample Receipt Checklist**

Temperature of container/cooler?	Yes	No	0.0	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?	Yes	No	<u>Not present</u>	
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		
QC samples have zero headspace?	<input checked="" type="checkbox"/>	No	Not Applicable	

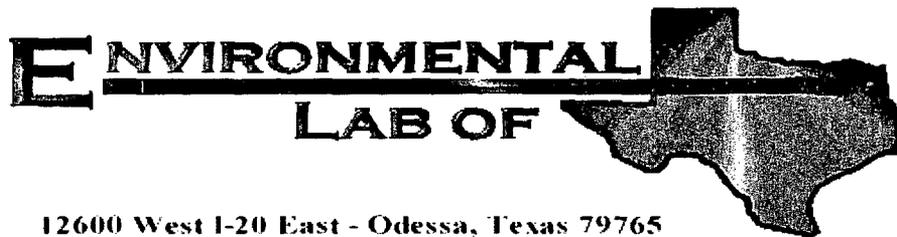
Other observations:  
 \_\_\_\_\_  
 \_\_\_\_\_

**Variance Documentation:**

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

**Corrective Action Taken:**

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



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: Jalmat Clay Osborne #22B

Project Number: 2000-10616

Location: Jalmat 22B

Lab Order Number: 6E24001

Report Date: 06/01/06

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

Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
06/01/06 15:21

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JM22B- SB1- 2	6E24001-01	Soil	05/23/06 12:10	05/24/06 08:00
JM22B- SB1- 5	6E24001-02	Soil	05/23/06 12:15	05/24/06 08:00
JM22B- SB1- 10	6E24001-03	Soil	05/23/06 12:20	05/24/06 08:00
JM22B- SB1- 15	6E24001-04	Soil	05/23/06 12:25	05/24/06 08:00
JM22B- SB1- 18	6E24001-05	Soil	05/23/06 12:30	05/24/06 08:00
JM22B- SB1- 28	6E24001-06	Soil	05/23/06 12:50	05/24/06 08:00
JM22B- SB1- 40	6E24001-07	Soil	05/23/06 14:45	05/24/06 08:00
JM22B- SB2- 2	6E24001-08	Soil	05/23/06 16:20	05/24/06 08:00
JM22B- SB2- 5	6E24001-09	Soil	05/23/06 16:25	05/24/06 08:00
JM22B- SB2- 10	6E24001-10	Soil	05/23/06 16:30	05/24/06 08:00
JM22B- SB2- 15	6E24001-11	Soil	05/23/06 16:32	05/24/06 08:00
JM22B- SB2- 20	6E24001-12	Soil	05/23/06 16:35	05/24/06 08:00
JM22B- SB2- 30	6E24001-13	Soil	05/23/06 16:50	05/24/06 08:00
JM22B- SB3- 2	6E24001-14	Soil	05/23/06 17:30	05/24/06 08:00
JM22B- SB3- 5	6E24001-15	Soil	05/23/06 17:35	05/24/06 08:00
JM22B- SB3- 10	6E24001-16	Soil	05/23/06 17:40	05/24/06 08:00
JM22B- SB3- 15	6E24001-17	Soil	05/23/06 17:45	05/24/06 08:00
JM22B- SB3- 20	6E24001-18	Soil	05/23/06 17:50	05/24/06 08:00
JM22B- SB3- 33	6E24001-19	Soil	05/23/06 18:10	05/24/06 08:00
JM22B- SB3- 40	6E24001-20	Soil	05/23/06 18:20	05/24/06 08:00

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB1- 2 (6E24001-01) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		99.8 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	20.0	mg/kg dry	2	EE62608	05/26/06	05/31/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>188</b>	20.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>56.3</b>	20.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>244</b>	20.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		45.0 %	70-130		"	"	"	"	S-06
<i>Surrogate: 1-Chlorooctadecane</i>		46.2 %	70-130		"	"	"	"	S-06
<b>JM22B- SB1- 5 (6E24001-02) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		89.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>336</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>54.3</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>390</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		111 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		113 %	70-130		"	"	"	"	
<b>JM22B- SB1- 10 (6E24001-03) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		98.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	

Environmental Lab of Texas

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Page 2 of 19

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB1- 10 (6E24001-03) Soil</b>									
<b>Carbon Ranges C12-C28</b>	<b>49.1</b>	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>49.1</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		93.0 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		96.0 %		70-130	"	"	"	"	
<b>JM22B- SB1- 15 (6E24001-04) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		101 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.0 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>171</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>22.6</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>194</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.8 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		98.8 %		70-130	"	"	"	"	
<b>JM22B- SB1- 18 (6E24001-05) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		99.0 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.0 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>ND</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		103 %		70-130	"	"	"	"	

Environmental Lab of Texas

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB1- 28 (6E24001-06) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		98.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62608	05/26/06	05/31/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		99.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		97.0 %	70-130		"	"	"	"	
<b>JM22B- SB1- 40 (6E24001-07) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		102 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		101 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		97.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		100.0 %	70-130		"	"	"	"	
<b>JM22B- SB2- 2 (6E24001-08) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		96.2 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		91.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	

Environmental Lab of Texas

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB2- 2 (6E24001-08) Soil</b>									
Carbon Ranges C12-C28	20.2	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C28-C35	J [5.53]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon nC6-nC35	20.2	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		90.6 %		70-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.2 %		70-130	"	"	"	"	
<b>JM22B- SB2- 5 (6E24001-09) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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		98.0 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	501	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	115	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	616	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		93.8 %		70-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.8 %		70-130	"	"	"	"	
<b>JM22B- SB2- 10 (6E24001-10) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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		98.0 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.0 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.8 %		70-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %		70-130	"	"	"	"	

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB2- 15 (6E24001-11) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		102 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.5 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		90.4 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		93.8 %		70-130	"	"	"	"	
<b>JM22B- SB2- 20 (6E24001-12) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	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>		88.8 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		97.0 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		100 %		70-130	"	"	"	"	
<b>JM22B- SB2- 30 (6E24001-13) Soil</b>									
Benzene	J [0.00816]	0.0250	mg/kg dry	25	EE62604	05/29/06	05/29/06	EPA 8021B	J
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>		106 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.5 %		80-120	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB2- 30 (6E24001-13) Soil</b>									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		98.0 %	70-130		"	"	"	"	
<b>JM22B- SB3- 2 (6E24001-14) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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		111 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	50.2	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	11.0	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	61.2	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		100 %	70-130		"	"	"	"	
<b>JM22B- SB3- 5 (6E24001-15) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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		99.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	37.3	20.0	mg/kg dry	2	EE62508	05/25/06	05/25/06	EPA 8015M	
Carbon Ranges C12-C28	1540	20.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	554	20.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	2130	20.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		45.6 %	70-130		"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		47.0 %	70-130		"	"	"	"	S-06

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

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB3- 10 (6E24001-16) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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>		100 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.8 %		80-120	"	"	"	"	
<b>Carbon Ranges C6-C12</b>	<b>13.4</b>	10.0	mg/kg dry	1	EE62508	05/25/06	05/26/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	<b>170</b>	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	<b>23.0</b>	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	<b>206</b>	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		91.8 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		94.2 %		70-130	"	"	"	"	
<b>JM22B- SB3- 15 (6E24001-17) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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>		95.5 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.5 %		80-120	"	"	"	"	
<b>Carbon Ranges C6-C12</b>	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/26/06	EPA 8015M	
<b>Carbon Ranges C12-C28</b>	ND	10.0	"	"	"	"	"	"	
<b>Carbon Ranges C28-C35</b>	ND	10.0	"	"	"	"	"	"	
<b>Total Hydrocarbon nC6-nC35</b>	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		87.4 %		70-130	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		90.4 %		70-130	"	"	"	"	
<b>JM22B- SB3- 20 (6E24001-18) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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>		98.0 %		80-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.2 %		80-120	"	"	"	"	
<b>Carbon Ranges C6-C12</b>	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/26/06	EPA 8015M	

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 Midland TX, 79706-4476

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB3- 20 (6E24001-18) Soil</b>									
Carbon Ranges C12-C28	71.4	10.0	mg/kg dry	1	EE62508	05/25/06	05/26/06	EPA 8015M	
Carbon Ranges C28-C35	J [8.77]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon nC6-nC35	71.4	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		91.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.4 %	70-130		"	"	"	"	
<b>JM22B- SB3- 33 (6E24001-19) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE62604	05/29/06	05/30/06	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		99.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/30/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		90.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.0 %	70-130		"	"	"	"	
<b>JM22B- SB3- 40 (6E24001-20) Soil</b>									
Benzene	ND	0.0250	mg/kg dry	25	EE63013	05/30/06	05/30/06	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		99.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE62508	05/25/06	05/30/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		93.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.8 %	70-130		"	"	"	"	

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Midland TX, 79706-4476

Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
Reported:  
06/01/06 15:21

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>JM22B- SB1- 2 (6E24001-01) Soil</b>									
% Moisture	2.6	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 5 (6E24001-02) Soil</b>									
% Moisture	9.8	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 10 (6E24001-03) Soil</b>									
% Moisture	2.9	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 15 (6E24001-04) Soil</b>									
% Moisture	3.0	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 18 (6E24001-05) Soil</b>									
% Moisture	10.9	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 28 (6E24001-06) Soil</b>									
% Moisture	9.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB1- 40 (6E24001-07) Soil</b>									
% Moisture	7.0	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB2- 2 (6E24001-08) Soil</b>									
% Moisture	2.8	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB2- 5 (6E24001-09) Soil</b>									
% Moisture	13.2	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB2- 10 (6E24001-10) Soil</b>									
% Moisture	18.1	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB2- 15 (6E24001-11) Soil</b>									
% Moisture	3.4	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
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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>JM22B- SB2- 20 (6E24001-12) Soil</b>									
% Moisture	4.9	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB2- 30 (6E24001-13) Soil</b>									
% Moisture	8.1	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 2 (6E24001-14) Soil</b>									
% Moisture	6.6	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 5 (6E24001-15) Soil</b>									
% Moisture	7.1	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 10 (6E24001-16) Soil</b>									
% Moisture	12.1	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 15 (6E24001-17) Soil</b>									
% Moisture	4.1	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 20 (6E24001-18) Soil</b>									
% Moisture	1.8	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 33 (6E24001-19) Soil</b>									
% Moisture	8.0	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	
<b>JM22B- SB3- 40 (6E24001-20) Soil</b>									
% Moisture	9.5	0.1	%	1	EE62502	05/24/06	05/25/06	% calculation	

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 Project Manager: Camille Reynolds

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Reported:  
 06/01/06 15:21

**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 EE62508 - Solvent Extraction (GC)**

**Blank (EE62508-BLK1)**

Prepared & Analyzed: 05/25/06

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 nC6-nC35	ND	10.0	"							
Surrogate: 1-Chlorooctane	44.0		mg/kg	50.0		88.0	70-130			
Surrogate: 1-Chlorooctadecane	46.1		"	50.0		92.2	70-130			

**LCS (EE62508-BS1)**

Prepared & Analyzed: 05/25/06

Carbon Ranges C6-C12	539	10.0	mg/kg wet	500		108	75-125			
Carbon Ranges C12-C28	481	10.0	"	500		96.2	75-125			
Total Hydrocarbon nC6-nC35	1020	10.0	"	1000		102	75-125			
Surrogate: 1-Chlorooctane	47.6		mg/kg	50.0		95.2	70-130			
Surrogate: 1-Chlorooctadecane	44.0		"	50.0		88.0	70-130			

**Calibration Check (EE62508-CCV1)**

Prepared: 05/25/06 Analyzed: 05/26/06

Carbon Ranges C6-C12	283		mg/kg	250		113	80-120			
Carbon Ranges C12-C28	295		"	250		118	80-120			
Total Hydrocarbon nC6-nC35	578		"	500		116	80-120			
Surrogate: 1-Chlorooctane	48.0		"	50.0		96.0	70-130			
Surrogate: 1-Chlorooctadecane	47.6		"	50.0		95.2	70-130			

**Matrix Spike (EE62508-MS1)**

Source: 6E24001-07

Prepared & Analyzed: 05/25/06

Carbon Ranges C6-C12	578	10.0	mg/kg dry	538	ND	107	75-125			
Carbon Ranges C12-C28	462	10.0	"	538	ND	85.9	75-125			
Total Hydrocarbon nC6-nC35	1040	10.0	"	1080	ND	96.3	75-125			
Surrogate: 1-Chlorooctane	51.6		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	48.3		"	50.0		96.6	70-130			

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Project: Jalmat Clay Osborne #22B  
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 Project Manager: Camille Reynolds

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Reported:  
 06/01/06 15:21

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

Analytic	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE62508 - Solvent Extraction (GC)**

Matrix Spike Dup (EE62508-MSD1)	Source: 6E24001-07			Prepared & Analyzed: 05/25/06						
Carbon Ranges C6-C12	586	10.0	mg/kg dry	538	ND	109	75-125	1.37	20	
Carbon Ranges C12-C28	471	10.0	"	538	ND	87.5	75-125	1.93	20	
Total Hydrocarbon nC6-nC35	1060	10.0	"	1080	ND	98.1	75-125	1.90	20	
Surrogate: 1-Chlorooctane	52.3		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	48.7		"	50.0		97.4	70-130			

**Batch EE62604 - EPA 5030C (GC)**

Blank (EE62604-BLK1)	Prepared: 05/26/06 Analyzed: 05/29/06									
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	40.5		ug/kg	40.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	39.7		"	40.0		99.2	80-120			

**LCS (EE62604-BS1)**

LCS (EE62604-BS1)	Prepared: 05/26/06 Analyzed: 05/29/06									
Benzene	1.13	0.0250	mg/kg wet	1.25		90.4	80-120			
Toluene	1.12	0.0250	"	1.25		89.6	80-120			
Ethylbenzene	1.22	0.0250	"	1.25		97.6	80-120			
Xylene (p/m)	2.58	0.0250	"	2.50		103	80-120			
Xylene (o)	1.29	0.0250	"	1.25		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.0		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	43.9		"	40.0		110	80-120			

**Calibration Check (EE62604-CCV1)**

Calibration Check (EE62604-CCV1)	Prepared: 05/26/06 Analyzed: 05/30/06									
Benzene	0.0458		mg/kg wet	0.0500		91.6	80-120			
Toluene	0.0457		"	0.0500		91.4	80-120			
Ethylbenzene	0.0471		"	0.0500		94.2	80-120			
Xylene (p/m)	0.104		"	0.100		104	80-120			
Xylene (o)	0.0514		"	0.0500		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.3		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	41.2		"	40.0		103	80-120			

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 Midland TX, 79706-4476

Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:21

**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 EE62604 - EPA 5030C (GC)**

<b>Matrix Spike (EE62604-MS1)</b>		<b>Source: 6E24001-01</b>		<b>Prepared: 05/26/06</b>		<b>Analyzed: 05/30/06</b>	
Benzene	1.26	0.0250	mg/kg dry	1.28	ND	98.4	80-120
Toluene	1.18	0.0250	"	1.28	ND	92.2	80-120
Ethylbenzene	1.28	0.0250	"	1.28	ND	100	80-120
Xylene (p/m)	2.72	0.0250	"	2.57	ND	106	80-120
Xylene (o)	1.36	0.0250	"	1.28	ND	106	80-120
Surrogate: a,a,a-Trifluorotoluene	45.8		ug/kg	40.0		114	80-120
Surrogate: 4-Bromofluorobenzene	44.5		"	40.0		111	80-120

<b>Matrix Spike Dup (EE62604-MSD1)</b>		<b>Source: 6E24001-01</b>		<b>Prepared: 05/26/06</b>		<b>Analyzed: 05/30/06</b>			
Benzene	1.25	0.0250	mg/kg dry	1.28	ND	97.7	80-120	0.714	20
Toluene	1.17	0.0250	"	1.28	ND	91.4	80-120	0.871	20
Ethylbenzene	1.29	0.0250	"	1.28	ND	101	80-120	0.995	20
Xylene (p/m)	2.72	0.0250	"	2.57	ND	106	80-120	0.00	20
Xylene (o)	1.35	0.0250	"	1.28	ND	105	80-120	0.948	20
Surrogate: a,a,a-Trifluorotoluene	39.0		ug/kg	40.0		97.5	80-120		
Surrogate: 4-Bromofluorobenzene	42.5		"	40.0		106	80-120		

**Batch EE62608 - Solvent Extraction (GC)**

<b>Blank (EE62608-BLK1)</b>				<b>Prepared: 05/26/06</b>		<b>Analyzed: 05/31/06</b>	
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 nC6-nC35	ND	10.0	"				
Surrogate: 1-Chlorooctane	47.6		mg/kg	50.0		95.2	70-130
Surrogate: 1-Chlorooctadecane	43.9		"	50.0		87.8	70-130

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:21

**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 EE62608 - Solvent Extraction (GC)**

**LCS (EE62608-BS1)**

Prepared: 05/26/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	585	10.0	mg/kg wet	500		117	75-125			
Carbon Ranges C12-C28	565	10.0	"	500		113	75-125			
Total Hydrocarbon nC6-nC35	1150	10.0	"	1000		115	75-125			
Surrogate: 1-Chlorooctane	55.9		mg/kg	50.0		112	70-130			
Surrogate: 1-Chlorooctadecane	45.0		"	50.0		90.0	70-130			

**Calibration Check (EE62608-CCV1)**

Prepared: 05/26/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	297		mg/kg	250		119	80-120			
Carbon Ranges C12-C28	299		"	250		120	80-120			
Total Hydrocarbon nC6-nC35	596		"	500		119	80-120			
Surrogate: 1-Chlorooctane	63.9		"	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	62.4		"	50.0		125	70-130			

**Matrix Spike (EE62608-MS1)**

Source: 6E25029-23

Prepared: 05/26/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	609	10.0	mg/kg dry	549	6.70	110	75-125			
Carbon Ranges C12-C28	598	10.0	"	549	48.4	100	75-125			
Total Hydrocarbon nC6-nC35	1210	10.0	"	1100	48.4	106	75-125			
Surrogate: 1-Chlorooctane	55.4		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	44.7		"	50.0		89.4	70-130			

**Matrix Spike Dup (EE62608-MSD1)**

Source: 6E25029-23

Prepared: 05/26/06 Analyzed: 05/31/06

Carbon Ranges C6-C12	606	10.0	mg/kg dry	549	6.70	109	75-125	0.494	20	
Carbon Ranges C12-C28	603	10.0	"	549	48.4	101	75-125	0.833	20	
Total Hydrocarbon nC6-nC35	1210	10.0	"	1100	48.4	106	75-125	0.00	20	
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	45.2		"	50.0		90.4	70-130			

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Project: Jalmat Clay Osborne #22B  
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 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 06/01/06 15:21

**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 EE63013 - EPA 5030C (GC)**

**Blank (EE63013-BLK1)**

Prepared & Analyzed: 05/30/06

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	38.3		ug/kg	40.0		95.8	80-120			
Surrogate: 4-Bromofluorobenzene	38.5		"	40.0		96.2	80-120			

**LCS (EE63013-BS1)**

Prepared & Analyzed: 05/30/06

Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.14	0.0250	"	1.25		91.2	80-120			
Ethylbenzene	1.18	0.0250	"	1.25		94.4	80-120			
Xylene (p/m)	2.61	0.0250	"	2.50		104	80-120			
Xylene (o)	1.28	0.0250	"	1.25		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.3		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	41.2		"	40.0		103	80-120			

**Calibration Check (EE63013-CCV1)**

Prepared & Analyzed: 05/30/06

Benzene	42.5		ug/kg	50.0		85.0	80-120			
Toluene	42.5		"	50.0		85.0	80-120			
Ethylbenzene	48.2		"	50.0		96.4	80-120			
Xylene (p/m)	95.0		"	100		95.0	80-120			
Xylene (o)	49.4		"	50.0		98.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.6		"	40.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	43.6		"	40.0		109	80-120			

**Matrix Spike (EE63013-MS1)**

Source: 6E24002-04

Prepared & Analyzed: 05/30/06

Benzene	1.09	0.0250	mg/kg dry	1.28	ND	85.2	80-120			
Toluene	1.10	0.0250	"	1.28	ND	85.9	80-120			
Ethylbenzene	1.21	0.0250	"	1.28	ND	94.5	80-120			
Xylene (p/m)	2.62	0.0250	"	2.56	ND	102	80-120			
Xylene (o)	1.31	0.0250	"	1.28	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.1		ug/kg	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	44.8		"	40.0		112	80-120			

Environmental Lab of Texas

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

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

**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 EE63013 - EPA 5030C (GC)**

**Matrix Spike Dup (EE63013-MSD1)**

Source: 6E24002-04

Prepared & Analyzed: 05/30/06

Benzene	1.08	0.0250	mg/kg dry	1.28	ND	84.4	80-120	0.943	20	
Toluene	1.09	0.0250	"	1.28	ND	85.2	80-120	0.818	20	
Ethylbenzene	1.21	0.0250	"	1.28	ND	94.5	80-120	0.00	20	
Xylene (p/m)	2.59	0.0250	"	2.56	ND	101	80-120	0.985	20	
Xylene (o)	1.29	0.0250	"	1.28	ND	101	80-120	0.985	20	
Surrogate: a,a,a-Trifluorotoluene	43.0		ug/kg	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	44.7		"	40.0		112	80-120			

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Project: Jalmat Clay Osborne #22B  
 Project Number: 2000-10616  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 06/01/06 15:21

**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 EE62502 - General Preparation (Prep)</b>										
<b>Blank (EE62502-BLK1)</b>										
					Prepared: 05/24/06 Analyzed: 05/25/06					
% Solids	100		%							
<b>Duplicate (EE62502-DUP1)</b>										
					Source: 6E24002-01 Prepared: 05/24/06 Analyzed: 05/25/06					
% Solids	96.3		%		96.5			0.207	20	
<b>Duplicate (EE62502-DUP2)</b>										
					Source: 6E24001-06 Prepared: 05/24/06 Analyzed: 05/25/06					
% Solids	91.8		%		90.5			1.43	20	
<b>Duplicate (EE62502-DUP3)</b>										
					Source: 6E24006-07 Prepared: 05/24/06 Analyzed: 05/25/06					
% Solids	89.7		%		90.9			1.33	20	

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Project: Jalmat Clay Osborne #22B  
Project Number: 2000-10616  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
06/01/06 15:21

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: \_\_\_\_\_

*Raland K Tuttle*

Date: \_\_\_\_\_

6/1/2006

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.





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

Client: SDG / Hairs  
 Date/Time: 5/24/06 8:00  
 Order #: 10F240  
 Initials: CK

### Sample Receipt Checklist

	Yes	No	
Temperature of container/cooler?			0,0 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not present
Custody Seals intact on sample bottles?	<input type="checkbox"/>	<input type="checkbox"/>	<u>Not present</u>
Chain of custody present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Container labels legible and intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Samples properly preserved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample bottles intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Nct Aplicable

Other observations:

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### Variance Documentation:

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

Corrective Action Taken:

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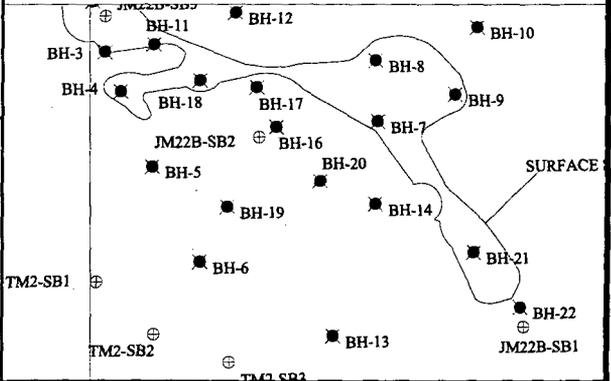
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**APPENDIX C  
SOIL BORING LOGS**



**ENVIRONMENTAL SERVICES**

**LOCATION MAP**



SOIL BORING NUMBER TM2-SB1  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 25' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straub Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

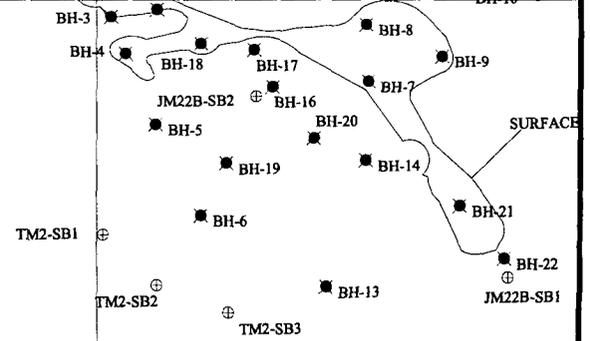
INTERVAL	SAMPLE RECOVERY %	LOG	PID (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
0 - 2	100	[Pattern]	21.7	TM2-SB1-2	Sand, tan, fine grained, well sorted, rounded, dry, with caliche	Faint odor No Staining
2 - 4		[Pattern]			Sand, pink, fine grained, well sorted, rounded, dry, with caliche and some fine gravel	
4 - 6	100	[Pattern]	9.6	TM2-SB2-5		Faint odor No Staining
6 - 10		[Pattern]			Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	
10 - 14	100	[Pattern]	0.0	TM2-SB2-10		No odor No Staining
14 - 16		[Pattern]			Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	
16 - 20	100	[Pattern]	0.0	TM2-SB2-15		No odor No Staining
20 - 22		[Pattern]			Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	
22 - 26		[Pattern]			Gravel, fine to coarse, with sandstone, tan	
26 - 28					TD= 25'	
28 - 30						
30 - 32						
32 - 34						
34 - 36						
36 - 38						
38 - 40						



**ENVIRONMENTAL SERVICES**

SOIL BORING NUMBER TM2-SB2  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 20' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straub Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

**LOCATION MAP**



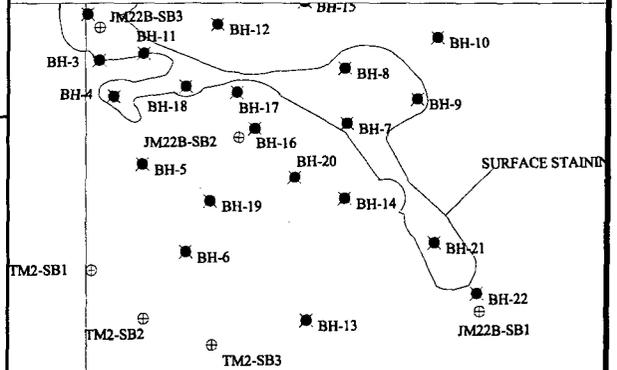
INTERVAL	SAMPLE RECOVERY %	LOG	PID (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
0					Sand, tan, fine grained, well sorted, rounded, dry, with caliche	No odor No Staining
2	100		21.7	TM2-SB2-2	Sand, pink, fine grained, well sorted, rounded, dry, with caliche and some fine gravel	Faint odor No Staining
4	100		11.1	TM2-SB2-5	Sand, tan, fine grained, well sorted, rounded, dry, with some fine gravel	No odor No Staining
6						
8						
10	100		7.3	TM2-SB2-10	Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	No odor No Staining
12						
14	100		28.7	TM2-SB2-15	Gravel, fine to coarse, with sand, red, fine grained, well sorted, rounded, dry.	No odor No Staining
16						
18					Gravel, fine to coarse, with sand, tan, fine grained, well sorted, rounded, dry.	No odor No Staining
20	100			TM2-SB2-20		No odor No Staining
22					<b>TD= 20'</b>	
24						
26						
28						
30						
32						
34						
36						
38						
40						



**ENVIRONMENTAL SERVICES**

SOIL BORING NUMBER TM2-SB3  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 20' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straub Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

**LOCATION MAP**

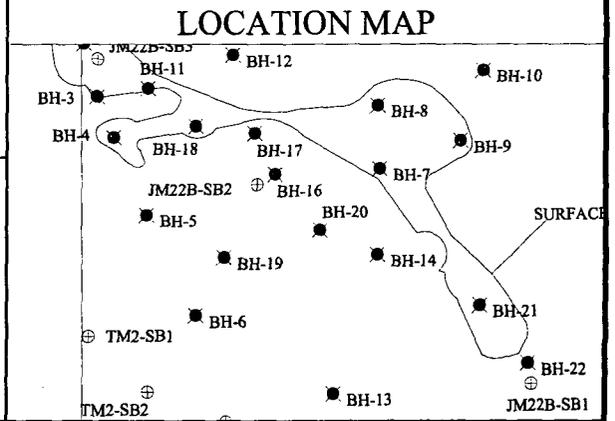


INTERVAL	RECOVERY %	LOG	PID (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS	
0					Sand, tan, fine grained, well sorted, rounded, dry, with caliche	Slight odor No Staining	
2	100		31.1	TM2-SB3-2	Sand, pink, fine grained, well sorted, rounded, dry, with caliche and some fine gravel	No odor No Staining	
4	100		13.7	TM2-SB3-5	Sand, tan, fine grained, well sorted, rounded, dry, with some fine gravel	No odor No Staining	
6							
8							
10	100		12.5	TM2-SB3-10	Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	No odor No Staining	
12							
14	100		8.1	TM2-SB3-15	Gravel, fine to coarse, with sand, red, fine grained, well sorted, rounded, dry.		
16							
18						Sandstone, tan well consolidated	No odor No Staining
20	100				TM2-SB3-20		No odor No Staining
22						TD= 20'	
24							
26							
28							
30							
32							
34							
36							
38							
40							



**ENVIRONMENTAL SERVICES**

SOIL BORING NUMBER JM22B-SB1  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 75' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straub Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A



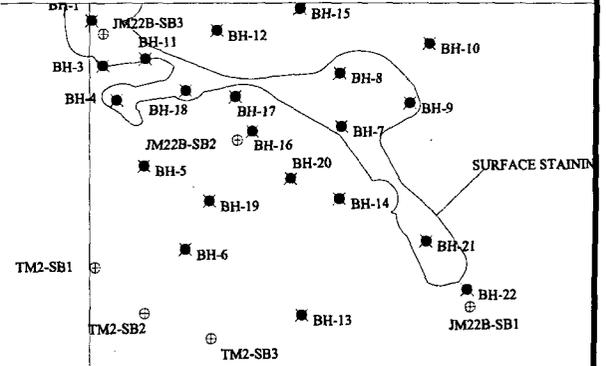
INTERVAL	SAMPLE RECOVERY %	LOG	PID (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
0					Sand, red, fine grained, well sorted, rounded, dry.	No odor No Staining
2	100		0.0	TM2-SB2-2	Sand, tan, fine grained, well sorted, rounded, dry, with caliche and some fine gravel	No odor No Staining
4	100		0.0	TM2-SB2-5		
6					Sand, pink, fine grained, well sorted, rounded, dry, with some fine gravel	No odor No Staining
8						
10	100		0.0	TM2-SB2-10	Sand, pink, fine grained, well sorted, rounded, dry, with some fine and coarse gravel	Faint odor No Staining
12						
14	100		0.0	TM2-SB2-15	Gravel and sand, red, fine grained, well sorted, rounded, dry.	
16	0					
18	100			TM2-SB2-18	Sandstone, tan well consolidated	No odor No Staining
20					Sandstone, tan well consolidated, drill through	
22						
24						
26						
28	100			TM2-SB2-28	Sandstone, tan well consolidated, with some fine gravel.	
30					Sandstone, tan well consolidated, interbedded with sandy clay, red, dense, hard dry.	No odor No Staining
32						
34						
36						
38						
40	100			TM2-SB2-40		No odor No Staining



**ENVIRONMENTAL SERVICES**

SOIL BORING NUMBER JM22B-SB1  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 75' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straub Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

**LOCATION MAP**

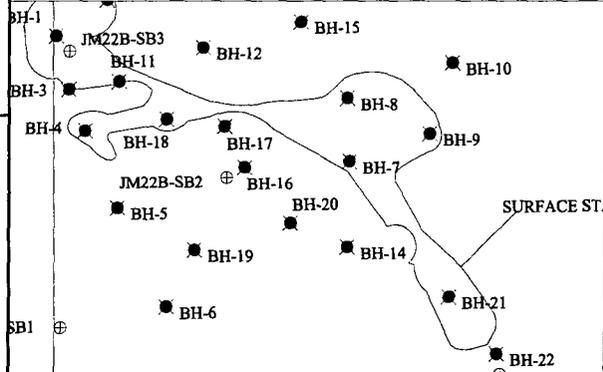


INTERVAL	SAMPLE RECOVERY %	LOG	PID (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
40	100	[Hatched pattern]	0.0	JM22-SB1-40	Sandstone, tan well consolidated, interbedded with sandy clay, red, dense, hard dry.	No odor No Staining
42						
44						
46						
48						
50						
52					Sandstone, tan well consolidated, interbedded with silty clay, red, dense, hard dry.	No odor No Staining
54						
56						
58						
60						
62						
64						
66						
68						
70						
72						
74						
76					TD= 75'	No odor No Staining
78						
80						



**ENVIRONMENTAL SERVICES**

**LOCATION MAP**



SOIL BORING NUMBER JM22B-SB2  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 30' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straun Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

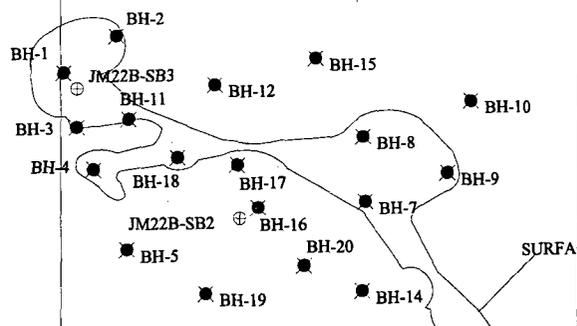
INTERVAL	SAMPLE RECOVERY %	LOG	PID (ppm)	SAMPLE	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
0 - 2	100	[Pattern]	0.0	JM22B-SB2-2	Sand, pink, fine grained, well sorted, well rounded, with caliche	No odor No Staining
2 - 4		[Pattern]			Sand, tan, fine grained, well sorted, well rounded, with caliche	Slight odor No Staining
4 - 6	100	[Pattern]	14.7	JM22B-SB2-5		Slight odor No Staining
6 - 10		[Pattern]			Sand, red, fine grained, well sorted, well rounded, dry.	
10 - 14	100	[Pattern]	1.1	JM22B-SB2-10		No odor No Staining
14 - 16		[Pattern]			Sand, red, fine grained, well sorted, well rounded, some fine gravel.	
16 - 20	100	[Pattern]	0.0	JM22B-SB2-15		No odor No Staining
20 - 22		[Pattern]			Sand, red to pink, fine grained, well sorted, well rounded, increasing gravel.	
22 - 24		[Pattern]				
24 - 26		[Pattern]				
26 - 28		[Pattern]				
28 - 30	100	[Pattern]	0.0	JM22B-SB2-20	Gravel	No odor No Staining
30 - 32		[Pattern]			Tan sandstone, well consolidated	
32 - 34		[Pattern]				
34 - 36		[Pattern]				
36 - 38		[Pattern]				
38 - 40		[Pattern]				
30 - 32		[Pattern]	0.0	JM22B-SB2-30	Sandy clay, red, dense, strong, dry, interbedded with gravel	No odor No Staining
					<b>TD= 30'</b>	



**ENVIRONMENTAL SERVICES**

SOIL BORING NUMBER JM22B-SB3  
 PROJECT 2000-10616 LOCATION Jal, N.M.  
 TOTAL BORING DEPTH 40' BOREHOLE DIA (in) 8.25"  
 DRILLING CO. Straun Drilling DRILLING METHOD HSA  
 GEOLOGIST Kenneth Cody DATE DRILLED 5/23/06  
 TOP OF CASING ELEV. (ft) N/A GROUND SURFACE ELV. (ft) N/A

**LOCATION MAP**



INTERVAL	SAMPLE RECOVERY %	LOG	PJD (ppm)	Sample	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS
0						
2	100		12.2	JM22B-SB3-2	Sand, pink, fine grained, well sorted, well rounded, with caliche	Slight odor No Staining
4	100		12.3	JM22B-SB3-5	Sand, tan, fine grained, well sorted, well rounded, with some coarse gravel	Slight odor No Staining
6					Sand, tan, fine grained, well sorted, well rounded, dry.	Moderate odor No Staining
10	100		17.3	JM22B-SB3-10	Sand, red, fine grained, well sorted, well rounded, some fine gravel.	No odor No Staining
16	100		2.1	JM22B-SB3-15	Sand, red to pink, fine grained, well sorted, well rounded, increasing gravel.	No odor No Staining
20	100		1.4	JM22B-SB3-20	Sand, red to pink, fine grained, well sorted, well rounded, increasing gravel.	No odor No Staining
24					Gravel	
26					Tan sandstone, well consolidated	
32	100		0.0	JM22B-SB3-33	Sandy clay, red, dense, strong, dry, interbedded with gravel	No odor No Staining
40	100		0.0	JM22B-SB3-40		

TD= 40'

**APPENDIX D**  
**EPI August 2000 Soil Sample Results**

E.O.T.T. Energy Pipeline Clay Osborn Jalm at #22B

Borehole	Sampling Interval (FT, BGS <sup>1</sup> )	SAMPLE ID#	Date	Lithology	HEADSPACE				BTEX	Benzene	Toluene	Ethyl Benzene	m,p-Xylene	o-Xylene
					VOC <sup>2</sup> (ppm)	GRO <sup>3</sup> mg/Kg	DRO <sup>4</sup> mg/Kg	TPH <sup>5</sup> mg/Kg						
1	2	EC022BGP1-02	8/4/2000	Sand	1.7	50	50	100.0	0.159	0.025	0.039	0.025	0.025	0.025
	5	EC022BGP1-05	8/4/2000	Sand	5.2	50	749	799.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP1-10	8/4/2000	Sand	22.0	114	2119	2233.0	0.161	0.025	0.061	0.025	0.025	0.025
	15	EC022BGP1-15	8/4/2000	Sand	0.2	107	2100	2207.0	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP2-02	8/4/2000	Sand	1.1	10	56	66.0	0.130	0.025	0.030	0.025	0.025	0.025
2	5	EC022BGP2-05	8/4/2000	Sand	1.1	10	11	21.0	0.125	0.025	0.035	0.025	0.025	0.025
	10	EC022BGP2-10	8/4/2000	Sand	0.5	10	10	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP2-15	8/4/2000	Sand	0.0	10	10	20.0	0.128	0.025	0.028	0.025	0.025	0.025
	2	EC022BGP3-02	8/4/2000	Sand	0.0	10	10	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP3-05	8/4/2000	Sand	0.0	10	100	110.0	0.125	0.025	0.025	0.025	0.025	0.025
3	10	EC022BGP3-10	8/4/2000	Sand	0.0	10	13	23.0	0.786	0.055	0.131	0.145	0.323	0.132
	15	EC022BGP3-15	8/4/2000	Sand	0.0	10	31	41.0	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP4-02	8/4/2000	Sand	0.0	10	35	45.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP4-05	8/4/2000	Sand	0.0	10	51	61.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP4-10	8/4/2000	Sand	0.0	10	1059	1069.0	0.125	0.025	0.025	0.025	0.025	0.025
4	15	EC022BGP4-15	8/4/2000	Sand	0.0	10	809	819.0	0.133	0.025	0.033	0.025	0.025	0.025
	2	EC022BGP5-02	8/4/2000	Sand	0.0	10	28	38.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP5-05	8/4/2000	Sand	0.0	10	57	67.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP5-10	8/4/2000	Sand	0.0	10	10	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP5-15	8/4/2000	Sand	0.0	10	10	20.0	0.125	0.025	0.025	0.025	0.025	0.025
5	2	EC022BGP6-02	8/7/2000	Sand	0.0	50	50	100.0	0.213	0.025	0.103	0.025	0.032	0.028
	5	EC022BGP6-05	8/7/2000	Sand	0.0	10	17	27.0	0.180	0.025	0.080	0.025	0.025	0.025
	10	EC022BGP6-10	8/7/2000	Sand	0.0	10	128	138.0	0.129	0.025	0.029	0.025	0.025	0.025
	15	EC022BGP6-15	8/7/2000	Sand	0.0	10	139	149.0	4.860	0.025	4.760	0.025	0.025	0.025
	2	EC022BGP7-02	8/7/2000	Sand	0.0	100	152	232.0	0.125	0.025	0.025	0.025	0.025	0.025
6	5	EC022BGP7-05	8/7/2000	Sand	0.0	10	43	53.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP7-10	8/7/2000	Sand	0.0	10	259	269.0	0.202	0.025	0.079	0.034	0.025	0.039
	15	EC022BGP7-15	8/7/2000	Sand	0.0	10	274	284.0	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP8-02	8/7/2000	Sand	0.0	10	45	55.0	0.469	0.025	0.177	0.025	0.170	0.072
	5	EC022BGP8-05	8/7/2000	Sand	0.0	10	27	37.0	0.347	0.028	0.128	0.053	0.086	0.052
7	10	EC022BGP8-10	8/7/2000	Sand	0.0	10	26	36.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP8-15	8/7/2000	Sand	0.0	10	10	20.0	0.269	0.025	0.118	0.025	0.063	0.038

<sup>1</sup>bgs - below ground surface  
<sup>2</sup>VOC-Volatile Organic Contaminants/Constituents  
<sup>3</sup>GRO-Gasoline Range Organics C<sub>6</sub>-C<sub>10</sub>  
<sup>4</sup>DRO-Diesel Range Organics C<sub>10</sub>-C<sub>28</sub>  
<sup>5</sup>TPH-Total Petroleum Hydrocarbon = GRO+DRO.  
<sup>6</sup>Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter  
<sup>7</sup>Italicized values are < the instrument detection limit.  
<sup>8</sup>N/A Not Analyzed  
 Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.

E.O.T.T. Energy Pipeline Clay Osborn Jalmat #22B

Borehole	Sampling Interval (FT, BGS <sup>1</sup> )	SAMPLE ID#	Date Taken	Lithology	HEADSPACE VOC <sup>2</sup> (ppm)	GRO <sup>3</sup> mg/Kg	DRO <sup>4</sup> mg/Kg	TPH <sup>5</sup> mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	m,p-Xylene mg/Kg	o-Xylene mg/Kg
9	2	EC022BGP9-02	8/7/2000	Sand	0.0	70	83	93.0	0.191	0.025	0.091	0.025	0.025	0.025
	5	EC022BGP9-05	8/7/2000	Sand	0.0	70	69	79.0	0.130	0.025	0.030	0.025	0.025	0.025
	10	EC022BGP9-10	8/7/2000	Sand	0.0	70	930	<b>940.0</b>	0.659	0.025	0.122	0.083	0.291	0.138
	15	EC022BGP9-15	8/7/2000	Sand	0.0	70	924	<b>934.0</b>	0.264	0.025	0.060	0.034	0.089	0.056
	2	EC022BGP10-02	8/7/2000	Sand	0.0	70	25	35.0	0.590	0.025	0.129	0.077	0.247	0.112
10	5	EC022BGP10-05	8/7/2000	Sand	0.0	70	81	91.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP10-10	8/7/2000	Sand	0.0	70	67	77.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP10-15	8/7/2000	Sand	0.0	70	32	42.0	0.170	0.025	0.070	0.025	0.025	0.025
	2	EC022BGP11-02	8/7/2000	Sand	0.0	70	70	20.0	0.593	0.025	0.078	0.029	0.061	0.400
	5	EC022BGP11-05	8/7/2000	Sand	0.0	70	70	20.0	0.500	0.025	0.025	0.025	0.025	0.025
11	10	EC022BGP11-10	8/7/2000	Sand	0.0	70	70	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP11-15	8/7/2000	Sand	0.0	70	70	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP12-02	8/9/2000	Sand	0.0	70	70	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP12-05	8/9/2000	Sand	0.0	70	70	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP12-15	8/9/2000	Sand	0.0	70	70	20.0	0.126	0.025	0.026	0.025	0.025	0.025
12	2	EC022BGP13-02	8/9/2000	Sand	0.0	70	70	20.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP13-05	8/9/2000	Sand	0.0	70	14	24.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP13-10	8/9/2000	Sand	0.0	70	512	<b>522.0</b>	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP13-15	8/9/2000	Sand	0.0	70	497	<b>507.0</b>	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP14-02	8/9/2000	Sand	0.0	70	38	48.0	0.125	0.025	0.025	0.025	0.025	0.025
13	5	EC022BGP14-05	8/9/2000	Sand	0.0	70	26	36.0	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP14-10	8/9/2000	Sand	0.0	70	103	113.0	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP14-15	8/9/2000	Sand	0.0	70	140	150.0	0.128	0.025	0.025	0.025	0.028	0.025
	2	EC022BGP15-02	8/9/2000	Sand	0.0	70	40	50.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP15-05	8/9/2000	Sand	0.0	70	14	24.0	0.125	0.025	0.025	0.025	0.025	0.025
14	10	EC022BGP15-10	8/9/2000	Sand	0.0	70	275	<b>288.0</b>	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP15-15	8/9/2000	Sand	0.0	70	305	<b>318.0</b>	0.136	0.025	0.036	0.025	0.025	0.025
	2	EC022BGP16-02	8/9/2000	Sand	0.0	70	87	97.0	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP16-05	8/9/2000	Sand	0.0	70	219	<b>229.0</b>	0.156	0.025	0.056	0.025	0.025	0.025
	10	EC022BGP16-10	8/9/2000	Sand	0.0	70	1319	<b>1329.0</b>	0.134	0.025	0.025	0.025	0.034	0.025
15	15	EC022BGP16-15	8/9/2000	Sand	0.0	70	1407	<b>1417.0</b>	0.125	0.025	0.025	0.025	0.025	0.025

<sup>1</sup>bgs - below ground surface

<sup>2</sup>VOC-Volatile Organic Contaminants/Constituents

<sup>3</sup>GRO-Gasoline Range Organics C<sub>6</sub>-C<sub>10</sub>

<sup>4</sup>DRO-Diesel Range Organics C<sub>10</sub>-C<sub>28</sub>

<sup>5</sup>TPH-Total Petroleum Hydrocarbon = GRO + DRO.

<sup>6</sup>Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

<sup>7</sup>Italicized values are < the instrument detection limit.

<sup>8</sup>N/A Not Analyzed

Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.

E.O.T.T. Energy Pipeline Clay Osborn Jalm at #22B

Borehole	Sampling Interval (FT. BGS <sup>1</sup> )	SAMPLE ID#	Date Taken	Lithology	HEADSPACE		GRO <sup>3</sup> mg/Kg	DRO <sup>4</sup> mg/Kg	TPH <sup>5</sup> mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	m,p- Xylene mg/Kg	o-Xylene mg/Kg
					VOA <sup>2</sup> (ppm)	TOC <sup>2</sup> (ppm)									
17	2	EC022BGP17-02	8/9/2000	Sand	0.0	0.0	10	66	76.000	0.131	0.025	0.031	0.025	0.025	0.025
	5	EC022BGP17-05	8/9/2000	Sand	0.0	0.0	10	44	54.000	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP17-10	8/9/2000	Sand	0.0	0.0	10	90	100.000	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP17-15	8/9/2000	Sand	0.0	0.0	10	101	111.000	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP18-02	8/10/2000	Sand	0.0	0.0	10	60	70.000	0.125	0.025	0.025	0.025	0.025	0.025
18	5	EC022BGP18-05	8/10/2000	Sand	0.0	0.0	10	10	20.000	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP18-10	8/10/2000	Sand	0.0	0.0	10	20	30.000	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP18-15	8/10/2000	Sand	0.0	0.0	10	31	41.000	0.136	0.035	0.036	0.025	0.025	0.025
	2	EC022BGP19-02	8/10/2000	Sand	0.0	0.0	10	12	22.000	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP19-05	8/10/2000	Sand	0.0	0.0	10	25	35.000	0.125	0.025	0.025	0.025	0.025	0.025
19	10	EC022BGP19-10	8/10/2000	Sand	0.0	0.0	10	303	313.000	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP19-15	8/10/2000	Sand	0.0	0.0	10	300	310.000	0.125	0.025	0.025	0.025	0.025	0.025
	2	EC022BGP20-02	8/10/2000	Sand	0.0	0.0	10	10	20.000	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP20-05	8/10/2000	Sand	0.0	0.0	10	10	20.000	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP20-10	8/10/2000	Sand	0.0	0.0	10	27	37.000	0.125	0.025	0.025	0.025	0.025	0.025
20	15	EC022BGP20-15	8/10/2000	Sand	0.0	0.0	10	22	32.000	0.134	0.025	0.034	0.025	0.025	0.025
	2	EC022BGP21-02	8/10/2000	Sand	0.0	0.0	10	21	31.000	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP21-05	8/10/2000	Sand	0.0	0.0	10	36	46.000	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP21-10	8/10/2000	Sand	0.0	0.0	10	10	20.000	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP21-15	8/10/2000	Sand	0.0	0.0	10	136	146.000	0.137	0.025	0.037	0.025	0.025	0.025
21	2	EC022BGP22-02	8/10/2000	Sand	0.0	0.0	10	86	96.000	0.125	0.025	0.025	0.025	0.025	0.025
	5	EC022BGP22-05	8/10/2000	Sand	0.0	0.0	10	21	31.000	0.125	0.025	0.025	0.025	0.025	0.025
	10	EC022BGP22-10	8/10/2000	Sand	0.0	0.0	10	168	178.000	0.125	0.025	0.025	0.025	0.025	0.025
	15	EC022BGP22-15	8/10/2000	Sand	0.0	0.0	10	147	157.000	0.129	0.025	0.029	0.025	0.025	0.025
	2	EC022BGP22-02	8/10/2000	Sand	0.0	0.0	10	86	96.000	0.125	0.025	0.025	0.025	0.025	0.025

<sup>1</sup>bgs - below ground surface

<sup>2</sup>VOC-Volatile Organic Contaminants/Constituents

<sup>3</sup>GRO-Gasoline Range Organics C<sub>6</sub>-C<sub>10</sub>

<sup>4</sup>DRO-Diesel Range Organics C<sub>10</sub>-C<sub>28</sub>

<sup>5</sup>TPH-Total Petroleum Hydrocarbon = GRO+DRO.

<sup>6</sup>Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

<sup>7</sup>Italicized values are < the instrument detection limit.

<sup>8</sup>N/A Not Analyzed

Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.