

*El Paso Field Services*  
**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**  
**DEC 21 1998**

*Approved*  
**AZTEC 4 #35**  
**Meter/Line ID - 93335**

**RECEIVED**  
JUL 7 1999

**SITE DETAILS**

**Legals - Twn: 30 Rng: 14**  
**NMOCD Hazard Ranking: 20**  
**Operator: QUESTAR ENERGY CORP.**

**Unit: N**  
**Land Type: 2 - Federal**  
**Pit Closure Date: 01/12/95**

**OIL CON. DIV.**

**RATIONALE FOR RISK-BASED CLOSURE:**

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

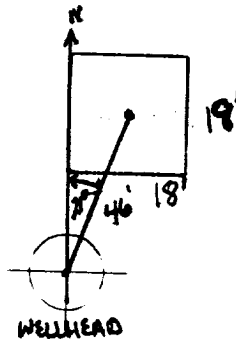
# FIELD PIT SITE ASSESSMENT FORM

|   |   |  |
|---|---|--|
| GENERAL   | Meter: <u>93335</u> Location: <u>AZTEC 4 #35</u><br>Operator #: _____ Operator Name: <u>AMAX</u> P/L District: <u>KUTZ</u><br>Coordinates: Letter: <u>N</u> Section <u>35</u> Township: <u>30</u> Range: <u>14</u><br>Or Latitude _____ Longitude _____<br>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____<br>Site Assessment Date: <u>1.3.95</u> Area: <u>02</u> Run: <u>23</u> |  |
|   |   |  |
| SITE ASSESSMENT   | <b>NMOCD Zone:</b><br>(From NMOCD Maps)   |  |
|   | Land Type: BLM <input checked="" type="checkbox"/> (1)<br>State <input type="checkbox"/> (2)<br>Fee <input type="checkbox"/> (3)<br>Indian _____<br>Inside <input checked="" type="checkbox"/> (1)<br>Outside <input type="checkbox"/> (2)  |  |
| REMARKS   | <b>Depth to Groundwater</b><br>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)<br>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)<br>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)  |  |
|   | <b>Wellhead Protection Area :</b><br>Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)  |  |
| <b>Horizontal Distance to Surface Water Body</b><br>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)<br>200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2)<br>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)  |   |  |
| Name of Surface Water Body <u>LAKE ARROYO</u><br>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)<br>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only)<br><input type="checkbox"/> (2) > 100' |   |  |
| <b>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</b>   |   |  |
| Remarks : <u>REDLINE 6- TOPO SHOW LOCATION INSIDE V.Z. ONLY ONE PIT ON LOCATION</u><br><u>PIT BELONGS TO EPNG. WILL CLOSE PIT.</u><br><div style="text-align: right;">PUSH IN</div>   |   |  |

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 21° Footage from Wellhead 46'  
b) Length : 19' Width : 18' Depth : 3'



REMARKS

Remarks :

Photos - 1250

Blank lined area for additional remarks.

Completed By:

Robert Champion

Signature

1.3.94

Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

|                    |  |
|--------------------|--|
| GENERAL            | <p>Meter: <u>93335</u> Location: <u>AZtec 4-#35</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>35</u> Township: <u>30</u> Range: <u>14</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>1-12-95</u> Run: <u>02</u> <u>23</u></p>   |
| FIELD OBSERVATIONS | <p>Sample Number(s): <sup>mk 1/13/95</sup> <u>mk 325</u></p> <p>Sample Depth: <u>5'</u> Feet</p> <p>Final PID Reading <u>37</u> PID Reading Depth <u>5'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input type="checkbox"/> Approximate Depth _____ Feet</p>   |
| CLOSURE            | <p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>1-12-95</u> Pit Closed By: <u>BEI</u></p> |
| REMARKS            | <p>Remarks : <u>Arrived took Fence down Dug test Hole</u></p> <p><u>Hit sandstone 5' Soil Brown No Hydrocarbon odor</u></p>  |
|                    | <p>Signature of Specialist: <u>Morgan Killion</u></p>  |



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

|                            | Field ID | Lab ID                         |
|----------------------------|----------|--------------------------------|
| SAMPLE NUMBER:             | MW 325   | 946572                         |
| MTR CODE   SITE NAME:      | 93335    | N/A                            |
| SAMPLE DATE   TIME (Hrs):  | 1-12-95  | 0830                           |
| SAMPLED BY:                | N/A      |                                |
| DATE OF TPH EXT.   ANAL.:  | 1-17-95  | 1-17-95                        |
| DATE OF BTEX EXT.   ANAL.: | 1/25/95  | 1/25/95                        |
| TYPE   DESCRIPTION:        | VC       | light brown fine sand and clay |

REMARKS:

## RESULTS

| PARAMETER      | RESULT   | UNITS | QUALIFIERS |   |      |       |
|----------------|--|-------|------------|---|------|-------|
|                |  |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | <0.005   | MG/KG | 0.00100    |   | 4.99 | SV    |
| TOLUENE        | <0.005   | MG/KG | I          |   | I    | I     |
| ETHYL BENZENE  | <0.005   | MG/KG | I          |   | I    | I     |
| TOTAL XYLENES  | <0.015   | MG/KG | I          |   | I    | I     |
| TOTAL BTEX     | <sup>20.030</sup><br><0.015 <sup>1/15/95</sup> | MG/KG |            |   |      |       |
| TPH (418.1)    | 430  | MG/KG |            |   | 2.02 | 28    |
| HEADSPACE PID  | 37   | PPM   |            |   |      |       |
| PERCENT SOLIDS | 92.2   | %     |            |   |      |       |

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 133 % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By: JJ.Date: 2-22-95

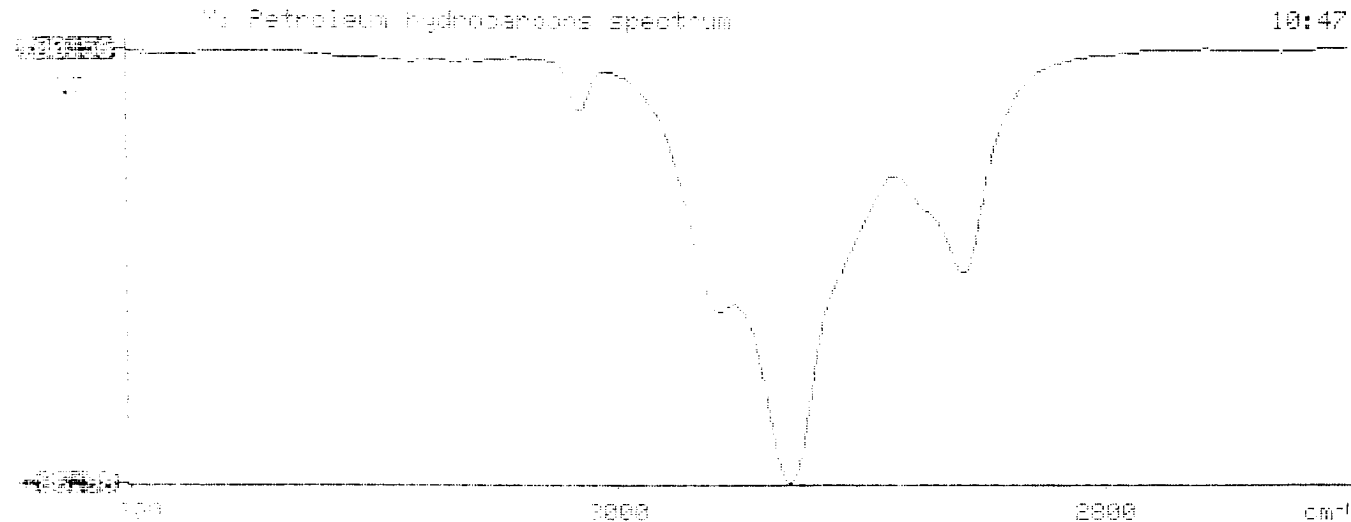
and 2. were not in the peak of chain hydrocarbons

[illegible][illegible]

Full name of sample, q

Volume of sample after extraction, ml

3. Aromatic hydrocarbons, ppm

 $\epsilon$ : absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )

## BTEX SOIL SAMPLE WORKSHEET

File : 946572C  
Soil Mass (g) : 4.99  
Extraction vol. (mL) : SV  
Shot Volume (uL) : SV

Date Printed : 1/28/95  
Multiplier (L/g) : 0.00100  
DF (Analytical) : 1  
DF (Report) : 0.00100

|                       |      |                        |       | Det. Limit |
|-----------------------|------|------------------------|-------|------------|
| Benzene (ug/L) :      | 0.00 | Benzene (mg/Kg):       | 0.000 | 0.005      |
| Toluene (ug/L) :      | 2.30 | Toluene (mg/Kg):       | 0.002 | 0.005      |
| Ethylbenzene (ug/L) : | 0.46 | Ethylbenzene (mg/Kg):  | 0.000 | 0.005      |
| p & m-xylene (ug/L) : | 2.01 | p & m-xylene (mg/Kg):  | 0.002 | 0.010      |
| o-xylene (ug/L) :     | 1.85 | o-xylene (mg/Kg):      | 0.002 | 0.005      |
|                       |      | Total xylenes (mg/Kg): | 0.004 | 0.015      |
|                       |      | Total BTEX (mg/Kg):    | 0.007 |            |



# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946572C  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 946572, 4.99G  
 Acquired : Jan 26, 1995 06:49:14  
 Printed : Jan 26, 1995 07:06:21  
 User : Tony

### Channel A Results

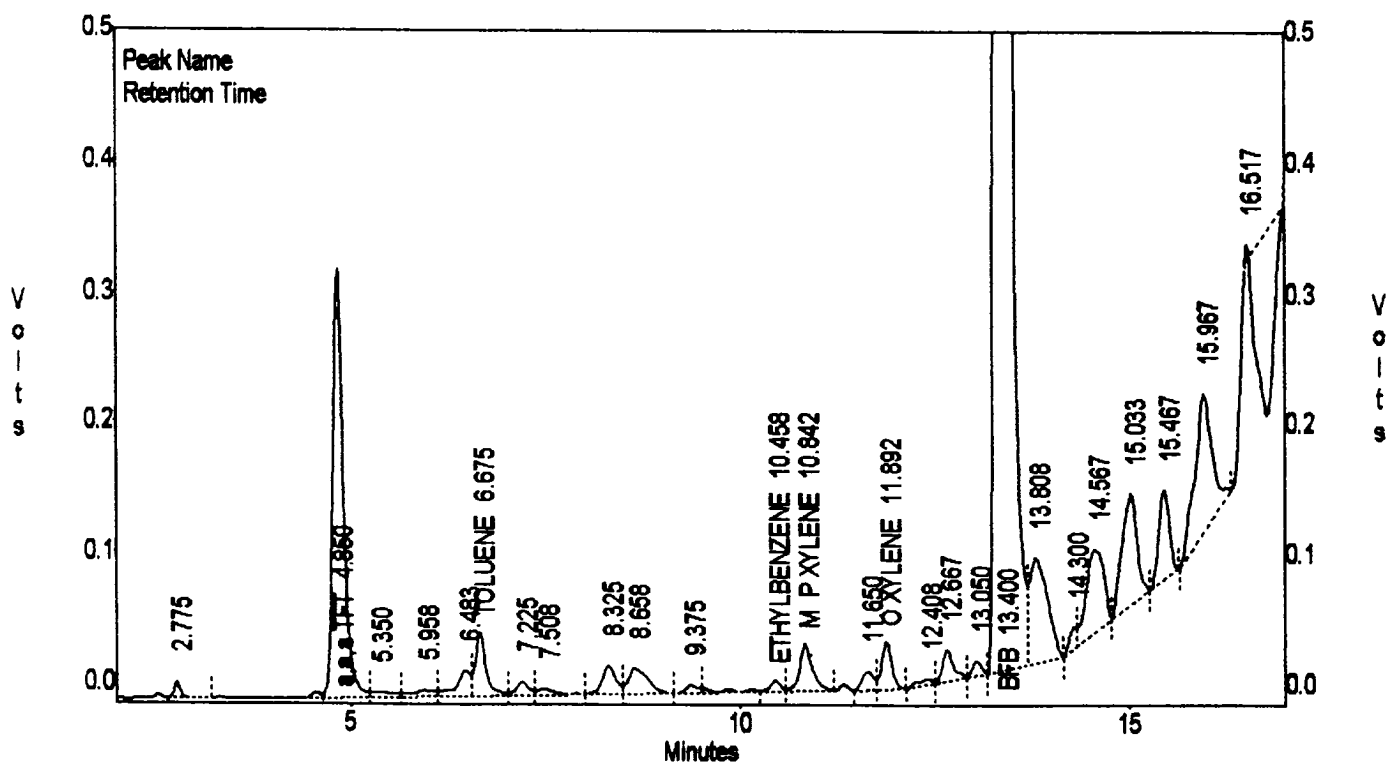
| COMPONENT    | RET TIME | AREA     | AVG RF       | CONC (ug/L) |
|--------------|----------|----------|--------------|-------------|
| BENZENE      | 3.350    | 0        | 0.00000      | 0.0000      |
| a,a,a TFT    | 4.850    | 3082084  | 16441.05469  | 154.2995    |
| TOLUENE      | 6.675    | 478408   | 263791.65625 | 2.3001      |
| ETHYLBENZENE | 10.458   | 83593    | 189312.21875 | 0.4587      |
| M & P XYLENE | 10.842   | 419304   | 265882.84375 | 2.0073      |
| O XYLENE     | 11.892   | 329491   | 184211.78125 | 1.8526      |
| BFB          | 13.400   | 91618680 | 596815.06250 | 133.8970    |

Totals :

96011560

294.8152

C:\LABQUEST\CHROM\946572C - Channel A

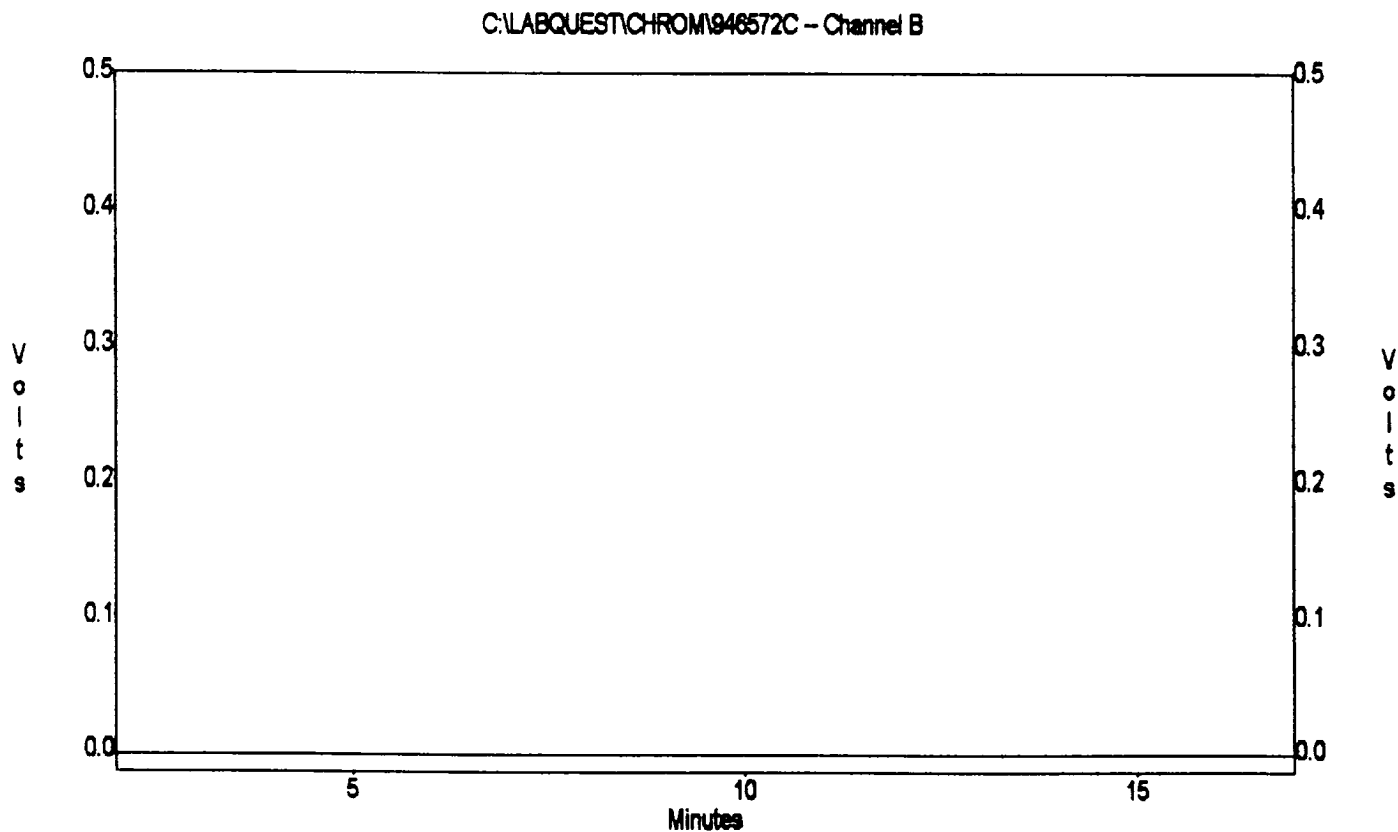


**EL PASO NATURAL GAS  
EPA METHOD 8020 - BTEX SOILS**

File : C:\LABQUEST\CHROM\946572C  
Method : C:\LABQUEST\METHODS\9001.MET  
Sample ID : 946572, 4.99G  
Acquired : Jan 26, 1995 06:49:14  
Printed : Jan 26, 1995 07:06:25  
User : Tony

## Channel B Results

| COMPONENT    | RET TIME | AREA | AVG RF  | CONC (ug/L) |
|--------------|----------|------|---------|-------------|
| BENZENE      | 3.367    | 0    | 0.00000 | 0.0000      |
| a,a,a TFT    | 4.883    | 0    | 0.00000 | 0.0000      |
| TOLUENE      | 6.700    | 0    | 0.00000 | 0.0000      |
| ETHYLBENZENE | 10.480   | 0    | 0.00000 | 0.0000      |
| M & P XYLENE | 10.833   | 0    | 0.00000 | 0.0000      |
| O XYLENE     | 11.900   | 0    | 0.00000 | 0.0000      |
| BFB          | 13.400   | 0    | 0.00000 | 0.0000      |
| Totals :     |          | 0    |         | 0.0000      |



# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1

Well #

Page 1 of 1

Project Name EPNG Pits

Project Number 14509 Phase 6000.77

Project Location Aztec 4- #35 93335

Elevation

Borehole Location T30, R14, S35, N

GWL Depth

Logged By Jeff W. Kindley

Drilled By Steve Snider

Date/Time Started 09/26/95 0810

Date/Time Completed 09/26/95 0910

Well Logged By Jeff W. Kindley

Personnel On-Site S. Snider, D. Roberts

Contractors On-Site

Client Personnel On-Site

Drilling Method 4 1/4 ID HSA

Air Monitoring Method PID, CGI

| Depth<br>(Feet) | Sample<br>Number | Sample<br>Interval | Sample<br>Type &<br>Recovery<br>(inches) | Sample Description<br>Classification System: USCS                                      | USCS<br>Symbol | Depth<br>Lithology<br>Change<br>(feet) | Air Monitoring<br>Units: PPM |    |   | Drilling Conditions<br>& Blow Counts |
|-----------------|------------------|--------------------|--|--|----------------|--|------------------------------|----|---|--------------------------------------|
|                 |                  |                    |  |  |                |  | BZ                           | BH | S |                                      |
| 0               |                  |                    |  | Backfill material<br>to 5'   |                |  |                              |    |   |                                      |
| 5               |                  |                    |  |  |                |  |                              |    |   |                                      |
| 10              | 1                | 10-12              | 1.9<br>2.0                               | CL, GRAY CLAY, DRY, very<br>stiff, low plasticity, no odor<br>Boring terminated at 12' |                |  |                              |    |   | 0827<br>25 blows per foot            |
| 15              |                  |                    |  |  |                |  |                              |    |   |                                      |
| 20              |                  |                    |  |  |                |  |                              |    |   |                                      |
| 25              |                  |                    |  |  |                |  |                              |    |   |                                      |
| 30              |                  |                    |  |  |                |  |                              |    |   |                                      |
| 35              |                  |                    |  |  |                |  |                              |    |   |                                      |
| 40              |                  |                    |  |  |                |  |                              |    |   |                                      |

Comments:

Sample collected from 10 to 12' (JWK 86). Sample submitted  
for analysis of BTEX and TPH. BH grouted to the surface

Geologist Signature

Jeff W. Kindley



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

|                            | Field ID          | Lab ID            |
|----------------------------|-------------------|-------------------|
| SAMPLE NUMBER:             | JWK 86            | 947544 ✓          |
| MTR CODE   SITE NAME:      | 93335             | Aztec 4 - #35     |
| SAMPLE DATE   TIME (Hrs):  | 09-26-95          | 0827              |
| PROJECT:                   | Phase II Drilling |                   |
| DATE OF TPH EXT.   ANAL.:  | 9-27-95           |                   |
| DATE OF BTEX EXT.   ANAL.: | 9/27/95           | 9/27/95           |
| TYPE   DESCRIPTION:        | VG                | Brown sand & clay |

Field Remarks:

## RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | < 0.5  | MG/KG |            |   |      |       |
| TOLUENE        | < 0.5  | MG/KG |            |   |      |       |
| ETHYL BENZENE  | < 0.5  | MG/KG |            |   |      |       |
| TOTAL XYLENES  | < 1.5  | MG/KG |            |   |      |       |
| TOTAL BTEX     | < 3    | MG/KG |            |   |      |       |
| TPH (418.1)    | 8      | MG/KG |            |   | 1.94 | 28    |
| HEADSPACE PID  | 0      | PPM   |            |   |      |       |
| PERCENT SOLIDS | 90.7   | %     |            |   |      |       |

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at  
Narrative:

98%

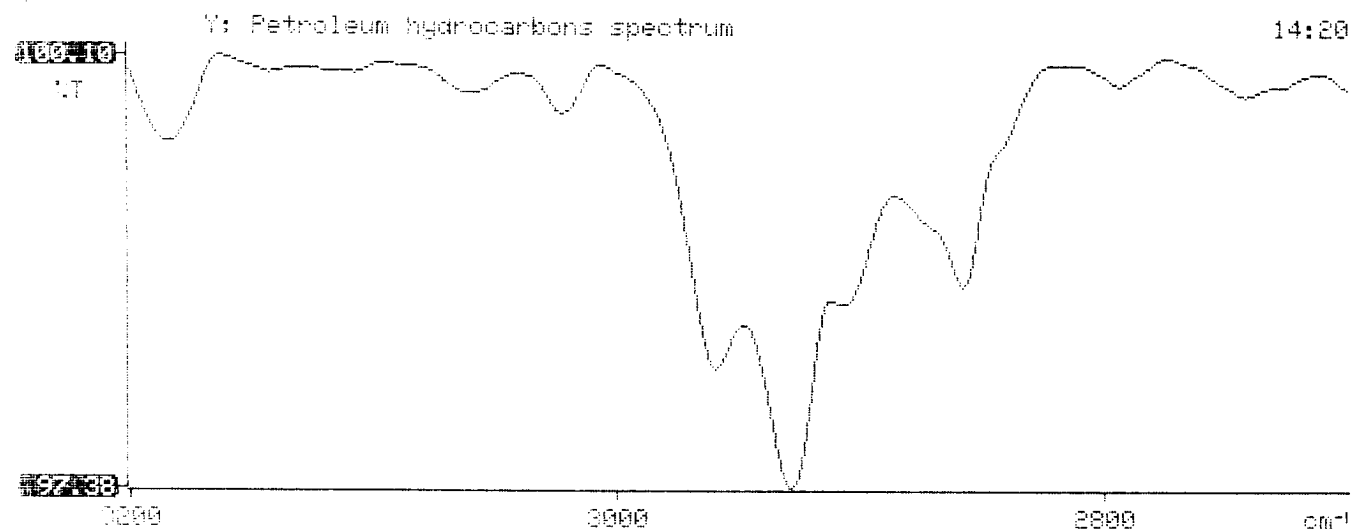
for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

9-29-95

Perkin-Elmer Model 1600 FT-IR  
Analysis Report

## BTEX SOIL SAMPLE WORKSHEET

|                      |   |        |                  |   |         |
|----------------------|---|--------|------------------|---|---------|
| File                 | : | 947544 | Date Printed     | : | 9/28/95 |
| Soil Mass (g)        | : | 4.97   | Multiplier (L/g) | : | 0.00101 |
| Extraction vol. (mL) | : | 10     | DF (Analytical)  | : | 200     |
| Shot Volume (uL)     | : | 50     | DF (Report)      | : | 0.20121 |

|                     |   |      |                        | Det. Limit  |
|---------------------|---|------|------------------------|-------------|
| Benzene (ug/L)      | : | 0.13 | Benzene (mg/Kg):       | 0.026 0.503 |
| Toluene (ug/L)      | : | 0.42 | Toluene (mg/Kg):       | 0.085 0.503 |
| Ethylbenzene (ug/L) | : | 0.20 | Ethylbenzene (mg/Kg):  | 0.040 0.503 |
| p & m-xylene (ug/L) | : | 0.88 | p & m-xylene (mg/Kg):  | 0.177 1.006 |
| o-xylene (ug/L)     | : | 0.20 | o-xylene (mg/Kg):      | 0.040 0.503 |
|                     |   |      | Total xylenes (mg/Kg): | 0.217 1.509 |
|                     |   |      | Total BTEX (mg/Kg):    | 0.368       |

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\092795-0.017  
 Method : C:\LABQUEST\METHODS\9000.MET  
 Sample ID : 947544,4.97G,50U  
 Acquired : Sep 28, 1995 01:04:24  
 Printed : Sep 28, 1995 01:34:48  
 User : MARLON

### Channel A Results

| COMPONENT    | RET TIME | AREA     | CONC (ug/L) |
|--------------|----------|----------|-------------|
| BENZENE      | 8.133    | 47903    | 0.1280      |
| a,a,a-TFT    | 10.480   | 9129434  | 104.3533    |
| TOLUENE      | 12.900   | 151873   | 0.4173      |
| ETHYLBENZENE | 17.230   | 67835    | 0.2015      |
| M,P-XYLENES  | 17.610   | 353457   | 0.8810      |
| O-XYLENE     | 18.783   | 65636    | 0.2004      |
| BFB          | 19.863   | 53186780 | 97.5759     |

