

Denny & Z...
DEPUTY OIL & GAS INSPECTOR

**EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE**

DEC 21 1998

Approved

**SAN JUAN 29-6 UNIT #68
Meter/Line ID - 73117**

RECEIVED
JUL 2 1998

SITE DETAILS

Legals - Twn: 29 Rng: 06

Sec: 29

Unit: A

NMOCD Hazard Ranking: 50

Land Type: 4 - Fee

Operator: PHILLIPS PETROLEUM COMPAN

Pit Closure Date: 06/23/94

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.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

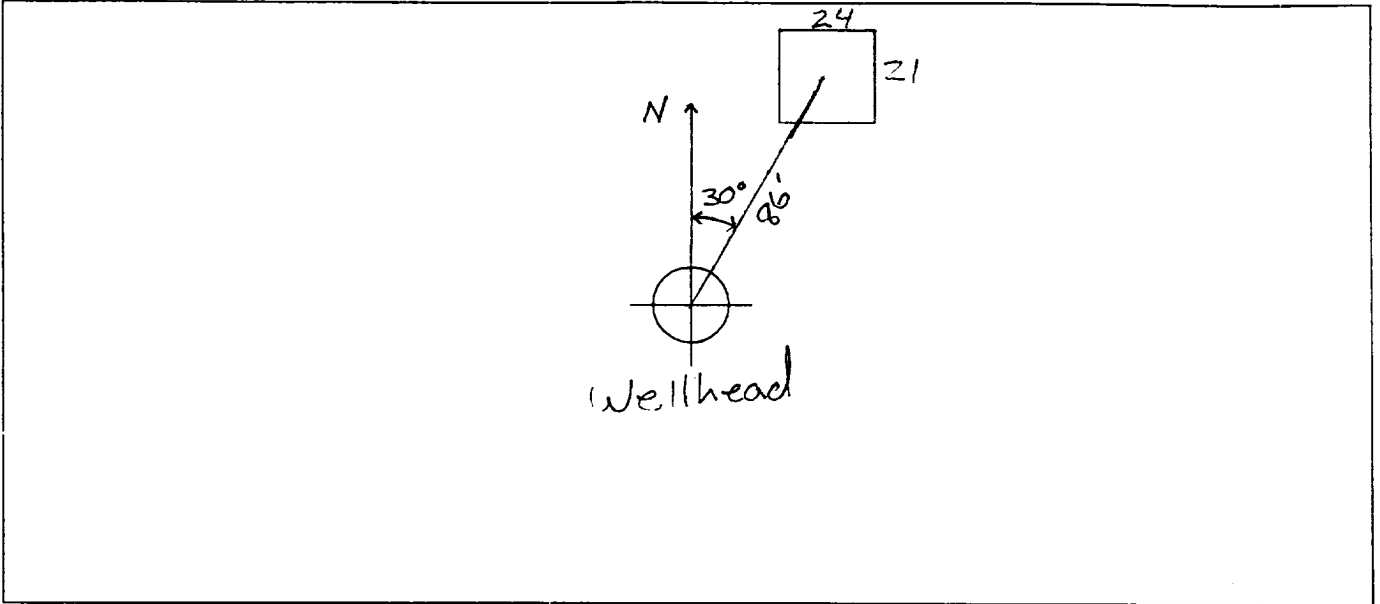
FIELD PIT SITE ASSESSMENT FORM

| | | | | | | | | | | | | | | | | | |
|------------------------|---|--------|---|-----|------------------------------|---------|------------------------------|-------|------------------------------|--|--|-----|---|--|--|--------|-------|
| GENERAL | <p>Meter: <u>73117</u> Location: <u>San Juan 29-6 unit # 68</u> Operator #: <u>Phillips</u> Operator Name: <u>7035</u> P/L District: <u>Bloomfield</u> Coordinates: Letter: <u>A</u> Section <u>29</u> Township: <u>29</u> Range: <u>6</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>6-6-94</u> Area: <u>10</u> Run: <u>61</u></p> | | | | | | | | | | | | | | | | |
| SITE ASSESSMENT | <p>NMOCD Zone: (From NMOCD Maps) Land Type:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Inside</td> <td style="width: 10%;"><input checked="" type="checkbox"/> (1)</td> <td style="width: 30%;">BLM</td> <td style="width: 30%;"><input type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td> <td><input type="checkbox"/> (2)</td> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td></td> <td></td> <td>Fee</td> <td><input checked="" type="checkbox"/> (3)</td> </tr> <tr> <td></td> <td></td> <td>Indian</td> <td>_____</td> </tr> </table> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Wellhead Protection Area : 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 checked="" type="checkbox"/> (1) YES (20 points) <input type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Gobernador Canyon</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>50</u> POINTS</p> | Inside | <input checked="" type="checkbox"/> (1) | BLM | <input type="checkbox"/> (1) | Outside | <input type="checkbox"/> (2) | State | <input type="checkbox"/> (2) | | | Fee | <input checked="" type="checkbox"/> (3) | | | Indian | _____ |
| Inside | <input checked="" type="checkbox"/> (1) | BLM | <input type="checkbox"/> (1) | | | | | | | | | | | | | | |
| Outside | <input type="checkbox"/> (2) | State | <input type="checkbox"/> (2) | | | | | | | | | | | | | | |
| | | Fee | <input checked="" type="checkbox"/> (3) | | | | | | | | | | | | | | |
| | | Indian | _____ | | | | | | | | | | | | | | |
| REMARKS | <p>Remarks : <u>one pit with tank on one end. Dry</u></p> <p><u>Location inside v.z. on Redline of Topo</u></p> <p style="text-align: right;">DIG & HAUL</p> | | | | | | | | | | | | | | | | |

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 30 Footage from Wellhead 86
b) Length : 24 Width : 21 Depth : 3

ORIGINAL PIT LOCATION



REMARKS

Remarks :
Photos - 1340 hrs
End dump

Completed By:
[Signature]
Signature

6-6-94
Date

PHASE I EXCAVATION



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil**

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|----------|-----------------|
| SAMPLE NUMBER: | KT0114 | 945504 |
| MTR CODE SITE NAME: | 73117 | N/A |
| SAMPLE DATE TIME (Hrs): | 6-23-94 | 1220 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. ANAL.: | 6/27/94 | 6/27/94 |
| DATE OF BTEX EXT. ANAL.: | 6/28/94 | 6/28/94 |
| TYPE DESCRIPTION: | VL | Brown Sand/Clay |

REMARKS: split. Rerun TPH 7/19 = 704 mg/Kg

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | | ATI RESUL |
|----------------|--------|-------|------------|---|------|-------|--------------|
| | | | DF | Q | M(g) | V(ml) | |
| BENZENE | 0.048 | MG/KG | | | | | 20.1 |
| TOLUENE | 0.147 | MG/KG | | | | | 20.1 |
| ETHYL BENZENE | 0.184 | MG/KG | | | | | 0.38 |
| TOTAL XYLENES | 5.91 | MG/KG | | | | | 12 |
| TOTAL BTEX | 6.29 | MG/KG | 0.00966 | | 2.07 | 20 | 13 |
| TPH (418.1) | 161 | MG/KG | | | 2.11 | 28 | 1000 |
| HEADSPACE PID | 698 | PPM | | | | | 629 |
| PERCENT SOLIDS | 87.1 | % | | | | | |

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

SR=94%

The Surrogate Recovery was at 173 % for this sample All QA/QC was acceptable. DF=5

Narrative:

Surrogate recovery was outside EPNG QC limits due to matrix interference. ATI results attached.

DF = Dilution Factor Used

Approved By: [Signature]

Date: 7/17/94


```

*****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil
*****
Perkin-Elmer Model 1600 FT-IR
Analysis Report
*****

```

SAJ0477 13.77

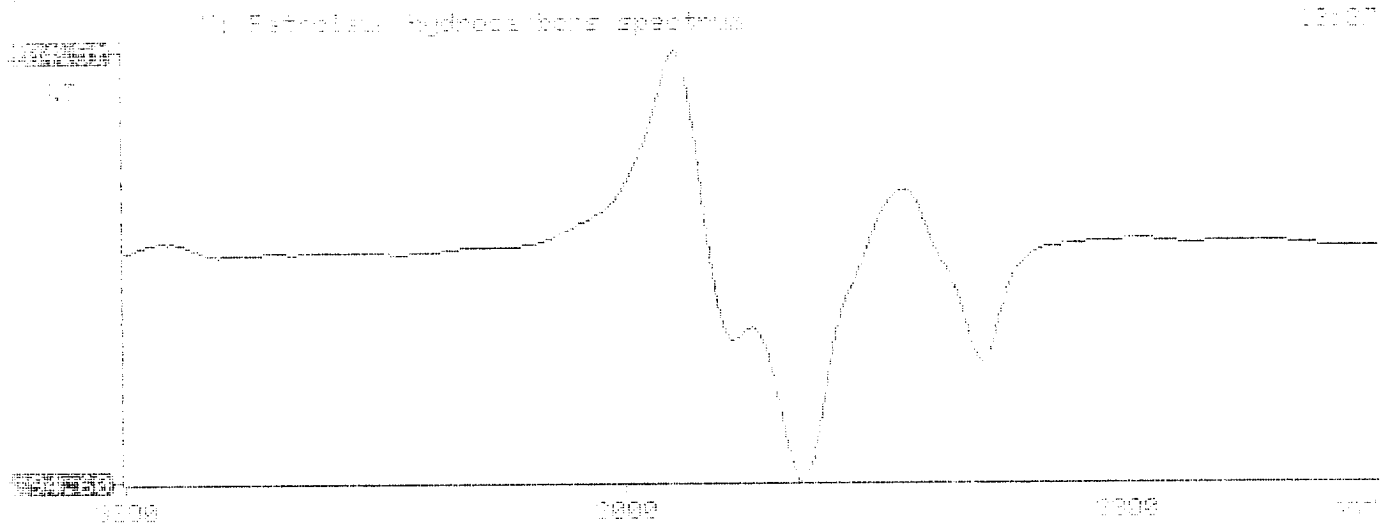
1 Sample Identification
047504

2 Initial mass of sample, g
0.110

3 Volume of sample after extraction, ml
05.000

4 Petroleum hydrocarbons, ppm
141.016

5 Net absorbance of hydrocarbons (2930 cm-1)
0.034



Sample Amt : 1.00000e+0 Dilution: 2.00000e+0

EXTERNAL STANDARD (AREA)

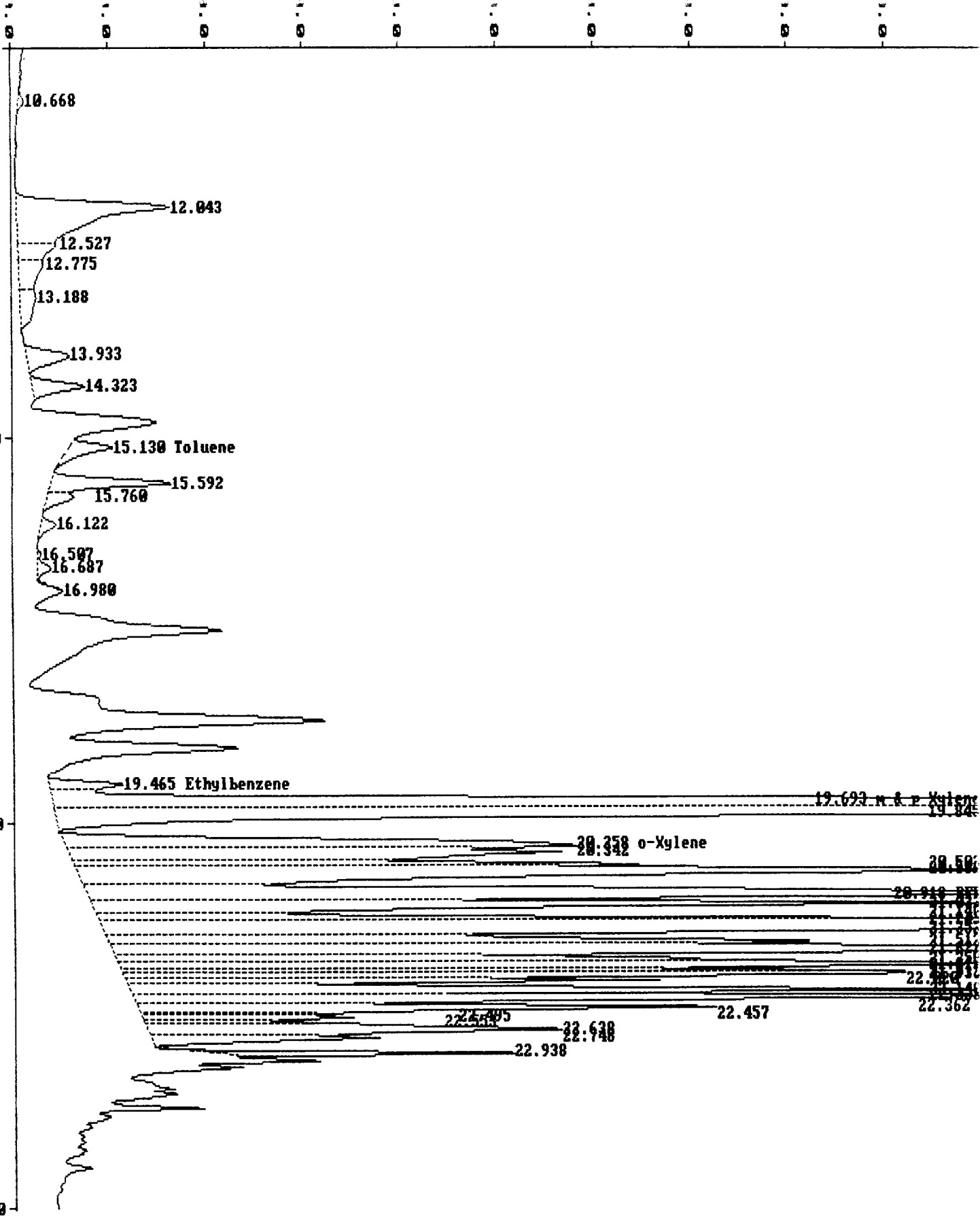
| RT | Area | BC | ExpRT | RF | ug/L | Name |
|--------|----------|----|--------|------------|----------------|--------------|
| | | | 10.282 | 8.44764e-6 | <i>LSygl</i> | Benzene |
| 10.668 | 89418 | | | 0.00000e+0 | 0.0000 | Unknown |
| 12.043 | 5867359 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 12.527 | 870698 | T | | 0.00000e+0 | 0.0000 | Unknown |
| | | | 12.648 | 1.69506e-4 | 147.6 | a, a, a TFT |
| 12.775 | 914402 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 13.188 | 750253 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 13.933 | 992355 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 14.323 | 926449 | | | 0.00000e+0 | 0.0000 | Unknown |
| 15.130 | 798296 | V | 15.174 | 9.54784e-6 | 762 15.2440 | Toluene |
| 15.591 | 1854409 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 15.760 | 491274 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 16.122 | 264867 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 16.506 | 42589 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 16.686 | 223931 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 16.980 | 35345 | | | 0.00000e+0 | 0.0000 | Unknown |
| 19.465 | 1027289 | T | 19.446 | 9.27050e-6 | 952 19.0470 | Ethylbenzene |
| 19.693 | 26767184 | T | 19.679 | 8.59200e-6 | 230.0 459.9673 | m & p-Xylene |
| 19.845 | 18641596 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 20.258 | 8205885 | T | 20.253 | 9.24567e-6 | 75.9 151.7378 | o-Xylene |
| 20.342 | 7443567 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 20.502 | 4611243 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 20.582 | 15423701 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 20.918 | 18409742 | T | 20.869 | 4.71034e-6 | 173.4324 | BFB |
| 21.033 | 9562735 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.140 | 485082 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.243 | 6279505 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.352 | 35172996 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.513 | 7244501 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.622 | 20556628 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.758 | 5111490 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.815 | 9955620 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.912 | 4061482 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 21.933 | 5624007 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.020 | 3555513 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.148 | 7870083 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.235 | 12082004 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.361 | 5715784 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.457 | 510274 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.495 | 1291749 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.553 | 897654 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.638 | 5185951 | T | | 0.00000e+0 | 0.0000 | Unknown |
| 22.748 | 1927254 | V | | 0.00000e+0 | 0.0000 | Unknown |
| 22.938 | 1389221 | V | | 0.00000e+0 | 0.0000 | Unknown |

1.69506e-4
12.648 → *1.69506e-4*

John Lambdin
7/11/94

MINUTES

10.0
15.0
20.0
25.0

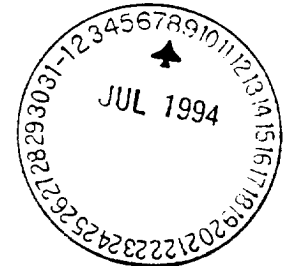




Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **406418**



July 6, 1994

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/28/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406418
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|--------------|-------------|--------|--------------|----------------|---------------|-------------|
| 01 | 945504 | NON-AQ | 06/23/94 | 06/29/94 | 06/30/94 | 5 |
| 02 | 945505 | NON-AQ | 06/23/94 | 06/29/94 | 06/30/94 | 20 |
| 03 | 945511 | NON-AQ | 06/24/94 | 06/29/94 | 06/30/94 | 20 |

| PARAMETER | UNITS | 01 | 02 | 03 |
|---------------|-------|-------|------|-----|
| BENZENE | MG/KG | <0.12 | 0.81 | 1.1 |
| TOLUENE | MG/KG | <0.12 | 105 | 47 |
| ETHYLBENZENE | MG/KG | 0.38 | 19 | 8.0 |
| TOTAL XYLENES | MG/KG | 12 | 310 | 190 |

SURROGATE:

| | | | |
|------------------------|----|-----|----|
| BROMOFLUOROBENZENE (%) | 94 | 107 | 76 |
|------------------------|----|-----|----|

Split Sample



Analytical **Technologies**, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT : EL PASO NATURAL GAS CO. ATI I.D. : 406418
PROJECT # : 24324 DATE RECEIVED : 06/28/94
PROJECT NAME : PIT CLOSURE DATE ANALYZED : 06/29/94

| PARAMETER | UNITS | 01 |
|----------------------------|-------|------|
| PETROLEUM HYDROCARBONS, IR | MG/KG | 1000 |

EPNG Sample # 945504

Split Sample

FIELD PIT REMEDIATION/CLOSURE FORM

| | |
|---------------------------|---|
| GENERAL | Meter: <u>73117</u> Location: <u>SAN JUAN 29-6 Unit #68</u> Coordinates: Letter: <u>A</u> Section <u>29</u> Township: <u>29</u> Range: <u>6</u> Or Latitude _____ Longitude _____ Date Started : <u>6-22-94</u> Area: <u>10</u> Run: <u>61</u> |
| FIELD OBSERVATIONS | Sample Number(s): <u>KD114</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>698 ppm</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet |
| CLOSURE | Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>220</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>6-23-94</u> Pit Closed By: <u>BEI</u> |
| REMARKS | Remarks : <u>Started pit on 6-22-94, continued excavation on 6-23-94</u> <u>Excavated pit to 12', took PID sample, closed pit</u> |
| | Signature of Specialist: <u>Kenny Deaver</u> |

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 2

Project Name EPNG Pits
 Project Number 14509 Phase 6000.77
 Project Location San Juan 29-6 Unit # 68
73117
 Well Logged By Jeff W. Kindley
 Personnel On-Site G. Sudduth, A. Roberts, H. Kai
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4 ID HSA
 Air Monitoring Method PID, CGI

Elevation _____
 Borehole Location T 29, R 6, S 29, A
 GWL Depth _____
 Logged By Jeff W. Kindley
 Drilled By G. Sudduth
 Date/Time Started 08/21/95 1015
 Date/Time Completed 08/21/95 1304

| Depth (Feet) | Sample Number | Sample Interval | Sample Type & Recovery (inches) | Sample Description Classification System: USCS | USCS Symbol | Depth Lithology Change (feet) | Air Monitoring | | | Drilling Conditions & Blow Counts |
|--------------|---------------|-----------------|---------------------------------|--|-------------|-------------------------------|----------------|----|------------|-----------------------------------|
| | | | | | | | BZ | BH | Units: PPM | |
| 0 | | | | Backfill material to 12' | | | | | | |
| 20 | 1 | 18-20' | 1.7 / 2.0 | CL, DK br CLAY, dry, hard low plasticity, hydrocarbon odor. | | | 428 / 340 | | 1039 | 47 blows per Foot |
| 25 | 2 | 23-25 | 1.7 / 2.0 | S.A.A. | | | 260 / 261 | | 1048 | 52 blows per Foot |
| 30 | 3 | 28-30 | 1.7 / 2.0 | S.A.A. | | | 71 / 271 | | 1054 | 45 blows per Foot |
| 35 | 4 | 33-35 | 1.7 / 2.0 | ML, BR SILT, dry, Hard, nonplastic | | | 320 / 116 | | 1104 | 50 blows per Foot |
| 40 | 5 | 38-40 | 1.6 / 2.0 | CL, DK BR CLAY, dry, hard, low plasticity, hydrocarbon odor. | | | 127 / 104 | | 1114 | 60 blows per Foot |

Comments: _____

Geologist Signature _____

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
 Well # _____
 Page 2 of 2

PHILIP ENVIRONMENTAL

4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 6000.77
 Project Location San Juan 29-6 Unit # 62
 73117
 Well Logged By Jeff W. Kindley
 Personnel On-Site G. S. Sudduth, D. Roberts, H. Ke
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4 ID HSA
 Air Monitoring Method PID, CGI

Elevation _____
 Borehole Location T 29, R 6, S 29, A
 GWL Depth _____
 Logged By Jeff W. Kindley
 Drilled By G Sudduth
 Date/Time Started 08/21/95 1015
 Date/Time Completed 08/21/95 1304

| Depth (Feet) | Sample Number | Sample Interval | Sample Type & Recovery (inches) | Sample Description Classification System: USCS | USCS Symbol | Depth Lithology Change (feet) | Air Monitoring Units: PPM | | | Drilling Conditions & Blow Counts |
|--------------|---------------|-----------------|---------------------------------|--|-------------|-------------------------------|------------------------------|----|--------|-----------------------------------|
| | | | | | | | BZ | BH | S/H/S | |
| 40 | | | | | | | | | | |
| 45 | 6 | 43-45 | $\frac{16}{2.0}$ | S.A.A | | | | | 114/89 | 1123 45 blows per Foot |
| 50 | 7 | 48-50 | $\frac{18}{2.0}$ | CL, DK BR CLAY, moist very stiff, medium plasticity no odor, | | | | | 30/45 | 1138 30 blows per foot |
| 55 | 8 | 53-55 | $\frac{16}{2.0}$ | S.A.A Boring terminated at 55' | | | | | 6/22 | 1158 30 blows per Foot |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | | |

Comments: Sample collected at 53 to 55 feet and submitted for analysis of BTEX and TPH. BH grouted to the surface

Geologist Signature Jeffrey Kindley



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|-------------------|------------------------|
| SAMPLE NUMBER: | JWK 37 | 947290 |
| MTR CODE SITE NAME: | 73117 | San Juan 29-6 Unit #68 |
| SAMPLE DATE TIME (Hrs): | 08/28/95 | 11:58 |
| PROJECT: | Phase II Drilling | |
| DATE OF TPH EXT. ANAL.: | 8/22/95 | 08-22-95 |
| DATE OF BTEX EXT. ANAL.: | 8/23/95 | 8/23/95 |
| TYPE DESCRIPTION: | VG | Brown Clay |

Field Remarks: _____

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|----------------|-------------------|-------|------------|---|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | < .5 | MG/KG | | | | |
| TOLUENE | < .5 | MG/KG | | | | |
| ETHYL BENZENE | < .5 | MG/KG | | | | |
| TOTAL XYLENES | < 1.5 | MG/KG | | | | |
| TOTAL BTEX | < 3 | MG/KG | | | | |
| TPH (418.1) | 8/24/95 6766.8 | MG/KG | | | 2.17 | 28 |
| HEADSPACE PID | 22 | PPM | | | | |
| PERCENT SOLIDS | 80.7 | % | | | | |

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

The Surrogate Recovery was at 110% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: _____

Date: _____

8/28/95

* Test Method for *
* Oil and Grease and Petroleum Hydrocarbons *
* in Water and Soil *
* Perkin-Elmer Model 1600 FT-IR *
* Analysis Report *

95/08/22 13:48

* Sample identification
947290

* Initial mass of sample, g
2.170

* Volume of sample after extraction, ml
28.000

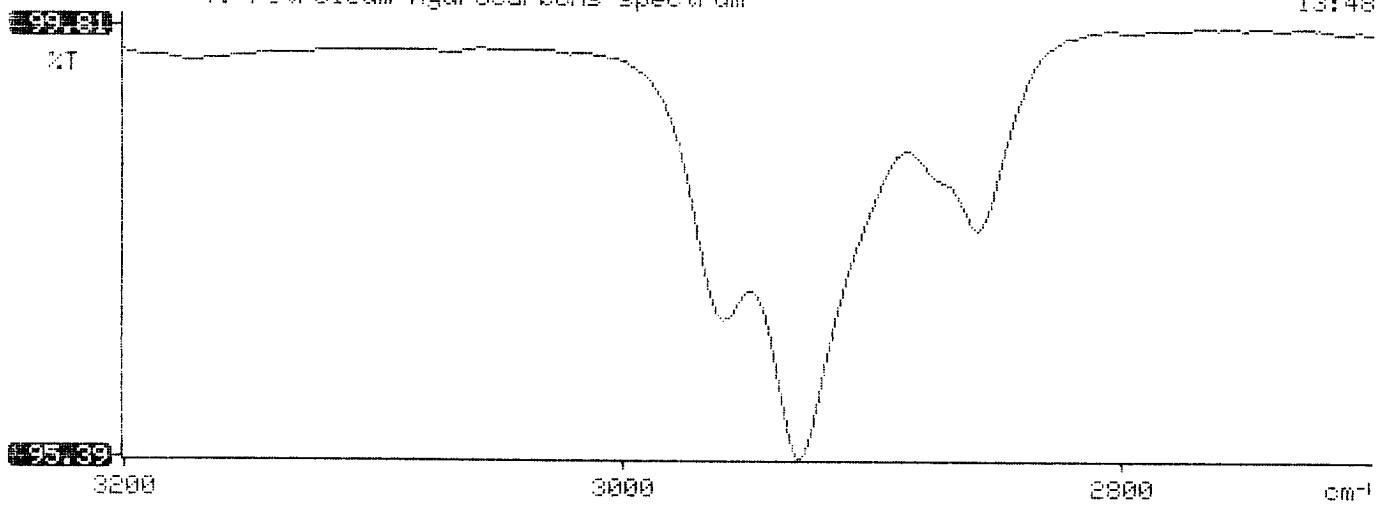
* Petroleum hydrocarbons, ppm
66.811

* Net absorbance of hydrocarbons (2930 cm-1)
0.019

*
*
*

Y: Petroleum hydrocarbons spectrum

13:48



BTEX SOIL SAMPLE WORKSHEET

| | | | | | |
|----------------------|---|--------|------------------|---|---------|
| File | : | 947290 | Date Printed | : | 8/25/95 |
| Soil Mass (g) | : | 4.97 | Multiplier (L/g) | : | 0.00101 |
| Extraction vol. (mL) | : | 20 | DF (Analytical) | : | 200 |
| Shot Volume (uL) | : | 100 | DF (Report) | : | 0.20121 |

| | | | | Det. Limit |
|---------------------|---|------|------------------------|-------------|
| Benzene (ug/L) | : | 1.52 | Benzene (mg/Kg): | 0.306 0.503 |
| Toluene (ug/L) | : | 0.00 | Toluene (mg/Kg): | 0.000 0.503 |
| Ethylbenzene (ug/L) | : | 0.00 | Ethylbenzene (mg/Kg): | 0.000 0.503 |
| p & m-xylene (ug/L) | : | 0.00 | p & m-xylene (mg/Kg): | 0.000 1.006 |
| o-xylene (ug/L) | : | 0.00 | o-xylene (mg/Kg): | 0.000 0.503 |
| | | | Total xylenes (mg/Kg): | 0.000 1.509 |
| | | | Total BTEX (mg/Kg): | 0.306 |

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082395-1.027
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947290,4.97G,100U
 Acquired : Aug 24, 1995 08:04:18
 Printed : Aug 24, 1995 08:30:53
 User : MARLON

Channel A Results

| COMPONENT | RET TIME | AREA | CONC (ug/L) |
|--------------|----------|----------|-------------|
| BENZENE | 3.427 | 194149 | 1.5232 |
| a,a,a TPT | 4.950 | 5152903 | 99.0758 |
| TOLUENE | 6.887 | 0 | 0.0000 |
| ETHYLBENZENE | 10.563 | 57949 | -0.3574 |
| M & P XYLENE | 10.907 | 361139 | -4.1047 |
| O XYLENE | 11.963 | 57251 | -0.2038 |
| BFB | 13.447 | 79107360 | 109.8199 |

C:\LABQUEST\CHROM001\082395-1.027 - Channel A

