

Denny & Z...
EL PASO FIELD SERVICES
DEPUTY OIL PRODUCTION PIT CLOSURE

DEC 21 1998

MARRON #94
Meter/Line ID - 90874

RECEIVED
JUL 2 1998

OIL CON. DIV.
DATE: 8

SITE DETAILS

Legals - Twn: 27 Rng: 08
NMOCD Hazard Ranking: 40
Operator: R & G DRILLING COMPANY

Sec: 23 Unit: F
Land Type: 2 - Federal
Pit Closure Date: 06/07/94

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.

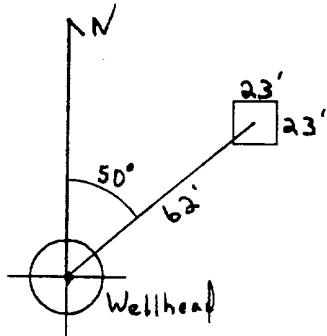
FIELD PIT SITE ASSESSMENT FORM

| | |
|-----------------|---|
| GENERAL | <p>Meter: <u>90874</u> Location: <u>Marcon # 94</u></p> <p>Operator #: <u>7335</u> Operator Name: <u>RAG Dray</u> P/L District: <u>Blanco</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>23</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5/24/94</u> Area: <u>13</u> Run: <u>31</u></p> |
| SITE ASSESSMENT | <p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater 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 type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Large Canyon/Smith Canyon Confluence</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>40</u> POINTS</p> |
| REMARKS | <p>Remarks : <u>Redline & Voln - Inside</u></p> <p><u>1 Pit Will Close. Dry</u></p> <p><u>DIG + HAUL</u></p> |

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 50° Footage from Wellhead 62'
b) Length : 23' Width : 23' Depth : 3'

ORIGINAL PIT LOCATION



REMARKS :

Pictures @ 132 D (S-8)
Dump Truck

REMARKS

Completed By:

Cory Chase
Signature

5/24/94
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

| | |
|---------------------------|---|
| GENERAL | <p>Meter: <u>50874</u> Location: <u>Maroon #94 (Cheeca)</u></p> <p>Coordinates: Letter: <u>F</u> Section <u>23</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>6/6/94</u> Area: <u>13</u> Run: <u>31</u></p> |
| FIELD OBSERVATIONS | <p>Sample Number(s): <u>4P 19</u></p> <p>Sample Depth: <u>10</u> Feet</p> <p>Final PID Reading <u>697 ppm</u> PID Reading Depth <u>10</u> F.</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ F</p> |
| CLOSURE | <p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>120</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>6/7/94</u> Pit Closed By: <u>BEI</u></p> |
| REMARKS | <p>Remarks : <u>Arrived on site at 1245 Remediated pit to 10 ft hit shale rock, continued Remediating, couldn't finish will continue tomorrow. Started Remediating took VC sample PID Reading is 697 ppm at 78 ° closed pit</u></p> <p>Signature of Specialist: <u>James J. Pinner</u></p> |



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---------------------------|----------|-------------------|
| SAMPLE NUMBER: | JP 19 | 945374 |
| MTR CODE SITE NAME: | 90874 | N/A |
| SAMPLE DATE TIME (Hrs): | 6-7-94 | 0910 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. ANAL: | 6/10/94 | 6/10/94 |
| DATE OF BTEX EXT. ANAL: | 6/14/94 | 6/14/94 |
| TYPE DESCRIPTION: | VC | Coarse Brown Sand |

REMARKS:

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|----------------|--------|-------|------------|---|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | LO.50 | MG/KG | 20 | | | |
| TOLUENE | LO.50 | MG/KG | 20 | | | |
| ETHYL BENZENE | LO.50 | MG/KG | 20 | | | |
| TOTAL XYLENES | 75 | MG/KG | 20 | | | |
| TOTAL BTEX | 77 | MG/KG | | | | |
| TPH (418.1) | 663 | MG/KG | | | 2.00 | 28 |
| HEADSPACE PID | 697 | PPM | | | | |
| PERCENT SOLIDS | 89.3 | % | | | | |

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

The Surrogate Recovery was at 98 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

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
*****

```

#416710 10:59

1 Sample Identification
#416710

2 Initial mass of sample, g
5.000

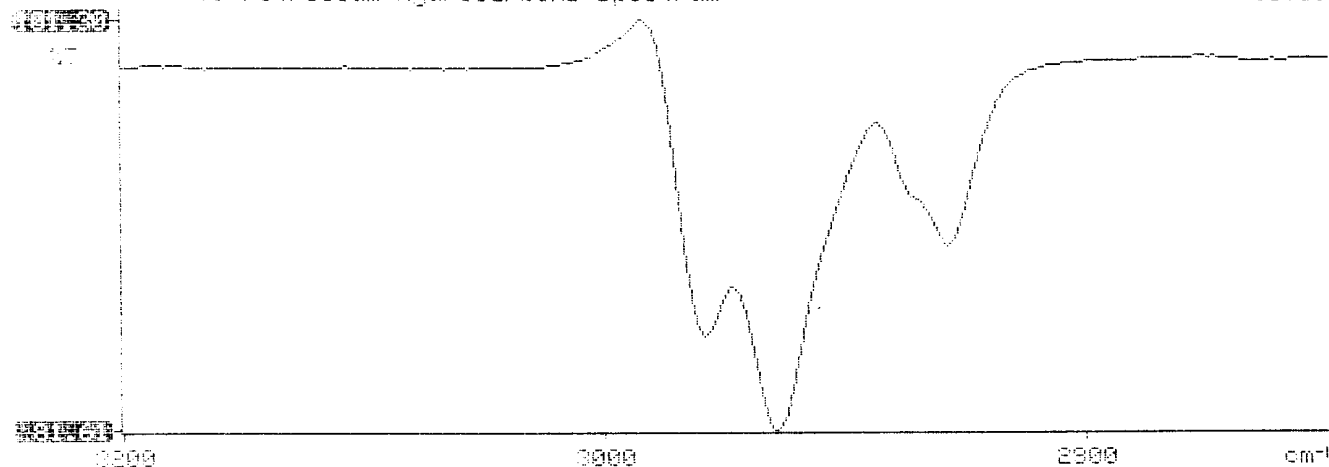
3 Volume of sample after extraction, ml
10.000

4 Petroleum hydrocarbons, ppm
662.503

5 Net absorbance of hydrocarbons (2930 cm⁻¹)
0.085

6 Petroleum hydrocarbons spectrum

10:59





Analytical **Technologies, Inc.**

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

ATI I.D. **406351**

June 21, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/14/94**, 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.

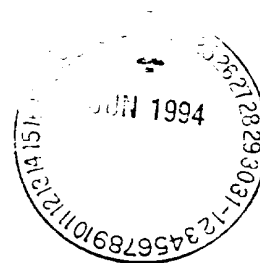
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure





GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406351
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|--------------|-------------|--------|--------------|----------------|---------------|-------------|
| 01 | 945374 | NON-AQ | 06/07/94 | 06/14/94 | 06/14/94 | 20 |
| 02 | 945375 | NON-AQ | 06/07/94 | 06/14/94 | 06/14/94 | 1 |
| 03 | 945376 | NON-AQ | 06/07/94 | 06/14/94 | 06/14/94 | 1 |

| PARAMETER | UNITS | 01 | 02 | 03 |
|---------------|-------|-------|--------|--------|
| BENZENE | MG/KG | <0.50 | <0.025 | <0.025 |
| TOLUENE | MG/KG | <0.50 | <0.025 | <0.025 |
| ETHYLBENZENE | MG/KG | <0.50 | <0.025 | <0.025 |
| TOTAL XYLENES | MG/KG | 75 | <0.025 | 0.086 |

SURROGATE:

| | | | |
|------------------------|----|-----|-----|
| BROMOFLUOROBENZENE (%) | 98 | 101 | 108 |
|------------------------|----|-----|-----|

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 Marron #94 90874

Elevation _____
Borehole Location QF-S23-T27-R8
GWL Depth _____
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 8/25/95-0940
Date/Time Completed 8/25/95-1100

Well Logged By CM Chance
Personnel On-Site K Padilla, F. Rivero, D. Gurley
Contractors On-Site _____
Client Personnel On-Site _____

Drilling Method 4 1/4" ID HSA
Air Monitoring Method PID, CGI

| 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 | HS | |
| 0 | | | | Backfill to 10' | | | | | | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | 1 | 15-17 | 6" | Br silty SAND, vf sand, dense, dry | | | 2 | 140 | $\frac{90}{69}$ | -0950h -hard drilling |
| 20 | 2 | 20-22 | 3" | AA | | | 0 | 93 | $\frac{21}{77}$ | -0957 |
| 25 | 3 | 25-26 | 3" | Br silty SAND, vf-F sand, dense, sl moist | | | 0 | 20 | $\frac{10}{28}$ | -1015 |
| | | | | TOB 26' | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | | |

Comments: CMC 92(25-26') sent to lab (BTEX, TPH). BH grouted to surface.

Geologist Signature

CM Chance



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

| | | | |
|----------------------------|-------------------------------|--------|-----------------------|
| SAMPLE NUMBER: | 947 ^{8/28/95} CMC 92 | Lab ID | 947338 |
| MTR CODE SITE NAME: | 90874 | | Marron #94 |
| SAMPLE DATE TIME (Hrs): | 08-25-95 | | 1015 |
| PROJECT: | Phase II Drilling | | |
| DATE OF TPH EXT. ANAL.: | 8/28/95 | | |
| DATE OF BTEX EXT. ANAL.: | 8/28/95 | | 8/31/95 |
| TYPE DESCRIPTION: | VG | | light brown fine sand |

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 | < 3.0 | MG/KG | | | | |
| TPH (418.1) | ^{RB 9/5/95} 70.5 | MG/KG | | | 2.28 | 28 |
| HEADSPACE PID | 28 | PPM | | | | |
| PERCENT SOLIDS | 94.6 | % | | | | |

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

The Surrogate Recovery was at 94% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: 

Date: 9-5-95

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

* 95/08/28 14:50

* Sample identification
947338

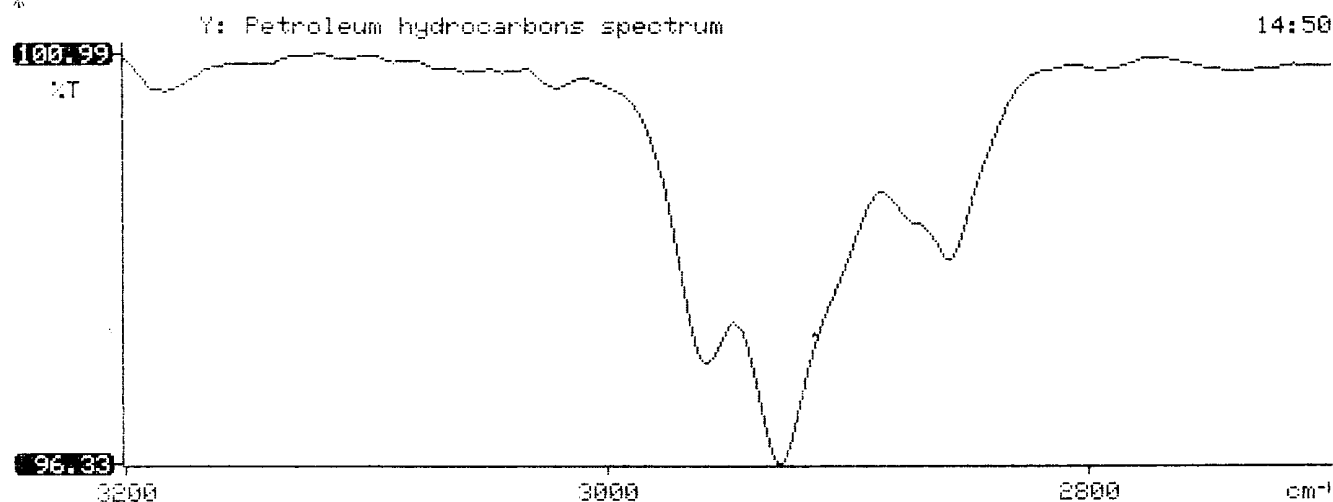
* Initial mass of sample, g
2.280

* Volume of sample after extraction, ml
28.000

* Petroleum hydrocarbons, ppm
70.535

* Net absorbance of hydrocarbons (2930 cm⁻¹)
0.020

*
*
*



BTEX SOIL SAMPLE WORKSHEET

| | | | | | |
|-----------------------------|----------|---------------|-------------------------|----------|----------------|
| File | : | 947338 | Date Printed | : | 9/1/95 |
| Soil Mass (g) | : | 5.15 | Multiplier (L/g) | : | 0.00097 |
| Extraction vol. (mL) | : | 20 | DF (Analytical) | : | 200 |
| Shot Volume (uL) | : | 100 | DF (Report) | : | 0.19417 |

| | | | | Det. Limit |
|--------------------------------|----------|-------------|----------------------------------|--------------------|
| Benzene (ug/L) | : | 0.00 | Benzene (mg/Kg): | 0.000 0.485 |
| Toluene (ug/L) | : | 0.00 | Toluene (mg/Kg): | 0.000 0.485 |
| Ethylbenzene (ug/L) | : | 0.00 | Ethylbenzene (mg/Kg): | 0.000 0.485 |
| p & m-xylene (ug/L) | : | 0.00 | p & m-xylene (mg/Kg): | 0.000 0.971 |
| o-xylene (ug/L) | : | 0.00 | o-xylene (mg/Kg): | 0.000 0.485 |
| | | | Total xylenes (mg/Kg): | 0.000 1.456 |
| | | | Total BTEX (mg/Kg): | 0.000 |

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\083195-1.007
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947338,5.15G,100U
 Acquired : Aug 31, 1995 21:12:13
 Printed : Sep 01, 1995 07:15:49
 User : MARLON

Channel A Results

| COMPONENT | RET TIME | AREA | CONC (ug/L) |
|--------------|----------|----------|-------------|
| BENZENE | 3.257 | 0 | 0.0000 |
| a,a,a TFT | 4.887 | 2333203 | 98.0375 |
| TOLUENE | 6.490 | 0 | 0.0000 |
| ETHYLBENZENE | 10.160 | 0 | 0.0000 |
| M & P XYLENE | 10.473 | 0 | 0.0000 |
| O XYLENE | 11.567 | 0 | 0.0000 |
| BFB | 13.210 | 32996300 | 93.9404 |

C:\LABQUEST\CHROM001\083195-1.007 -- Channel A

