

EL PASO FIELD SERVICES  
*Henry A. Faust*  
**PRODUCTION PIT CLOSURE**  
**DEPUTY OIL & GAS INSPECTOR**

DEC 21 1998

**BASSETT GAS UNIT #1M MVDK**  
**Meter/Line ID - 94595**

RECEIVED  
JUL 2 1998  
OIL CON. DIV  
DIST. 3

*Approved*

**SITE DETAILS**

**Legals - Twn: 30**

**Rng: 10**

**Sec: 33**

**Unit: L**

**NMOCD Hazard Ranking: 30**

**Land Type: 2 - Federal**

**Operator: AMOCO PRODUCTION COMPANY**

**Pit Closure Date: 05/16/94**

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**RATIONALE FOR RISK-BASED CLOSURE:**

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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

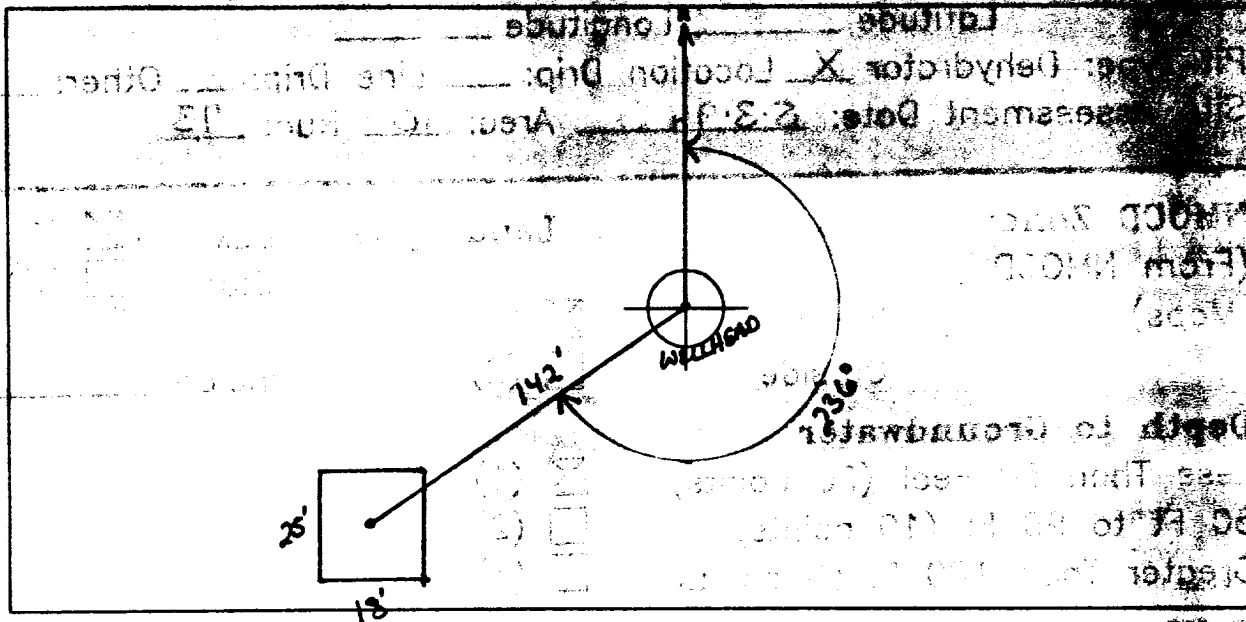
|                 |  |  |
|-----------------|--|--|
| GENERAL         | Meter: <u>94595-MV</u><br><u>94596-DK</u> Location: <u>BASSETT GAS UNIT #1M</u> <u>MV-DK</u><br>Operator #: <u>0203</u> Operator Name: <u>AMOCO P/L</u> District: <u>BLOOMFIELD</u><br>Coordinates: Letter: <u>L</u> Section <u>33</u> Township: <u>30</u> Range: <u>10</u><br>Or Latitude _____ Longitude _____<br>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____<br>Site Assessment Date: <u>5-3-94</u> Area: <u>10</u> Run: <u>73</u>  |  |
|                 |  |  |
| SITE ASSESSMENT | NMOCD Zone: (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)<br>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____<br>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)<br>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)<br>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 checked="" type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)<br>Name of Surface Water Body <u>LITTLE SLANE CANYON</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) <input type="checkbox"/> (2) > 100'<br>TOTAL HAZARD RANKING SCORE: <u>40</u> <sup>5-3-94</sup> <u>30</u> POINTS |  |
|                 |  |  |
| REMARKS         | Remarks : <u>FIVE PITS ON LOCATION. WILL CLOSE ONLY ONE PIT IS DRY.</u><br><u>REDLINE AND TOPO CONFIRMED LOCATION TO BE INSIDE THE V.Z.</u>  |  |

# ORIGINAL PIT LOCATION

b) Length : 25 Width : 18 Depth : 3

b) Length : 25 mm Width : 18 mm Depth : 3 mm

Address: Letter: Section: Township: Range: 10



## REMARKS

**Remarks :**

TOOK PICTURES AT 9:05 A.M.

END DUMP

\_\_\_\_\_

(U) - 62-100000-089-17-005-221

(S) ~~(S)~~ (Group 01) F 0001 21 003

(A) [REDACTED] (b)(7)(C), (b)(7)(D), (b)(7)(F), (b)(7)(G)

DATE \_\_\_\_\_

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\_\_\_\_\_

100-443887-1000

Completed By: \_\_\_\_\_

7-10-68

Robert Thompson 5-3-94

Signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_

**QUESTION** The following are the results from a regression analysis:

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94595 94596 Location: Bassett Gas Unit #1M (mv&DK)  
 Coordinates: Letter: L Section 33 Township: 30 Range: 10  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 5-16-94 Area: 10 Run: 73

OBSERVATIONS

Sample Number(s): KD64  
 Sample Depth: 9' Feet  
 Final PID Reading 244 ppm PID Reading Depth 9' Feet  
 Yes No  
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth \_\_\_\_\_ Feet

CLOSURE

Remediation Method :  
 Excavation ☒ (1) Approx. Cubic Yards 40  
 Onsite Bioremediation ☐ (2)  
 Backfill Pit Without Excavation ☐ (3)  
 Soil Disposition:  
 Envirotech ☐ (1) ☒ (3) Tierra  
 Other Facility ☐ (2) Name: \_\_\_\_\_  
 Pit Closure Date: 5-16-94 Pit Closed By: BEI

REMARKS

Remarks : Pit was highly Contaminated, Excavated pit to 9', hit Sandstone Layer, stopped Excavation, TOOK PID Sample. Closed pit

Signature of Specialist: [Signature]



30

FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

|                            | Field ID      | Lab ID            |
|----------------------------|---------------|-------------------|
| SAMPLE NUMBER:             | KD64          | 945187            |
| MTR CODE   SITE NAME:      | 94595 / 94596 | N/A               |
| SAMPLE DATE   TIME (Hrs):  | 5-16-94       | 1535              |
| SAMPLED BY:                | N/A           |                   |
| DATE OF TPH EXT.   ANAL.:  | 5-17-94       | 5/17/94           |
| DATE OF BTEX EXT.   ANAL.: | 5/20/94       | 5/22/94           |
| TYPE   DESCRIPTION:        | VC            | Brown sand & clay |

REMARKS:

RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | 1.7    | MG/KG | 20         |   |      |       |
| TOLUENE        | 17     | MG/KG | 20         |   |      |       |
| ETHYL BENZENE  | 2.8    | MG/KG | 20         |   |      |       |
| TOTAL XYLENES  | 31     | MG/KG | 20         |   |      |       |
| TOTAL BTEX     | 53     | MG/KG |            |   |      |       |
| TPH (418.1)    | <10    | MG/KG |            |   | 2.11 | 28    |
| HEADSPACE PID  | 244    | PPM   |            |   |      |       |
| PERCENT SOLIDS | 89.5   | %     |            |   |      |       |

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

The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

*John Sader*

Date:

7/17/94

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

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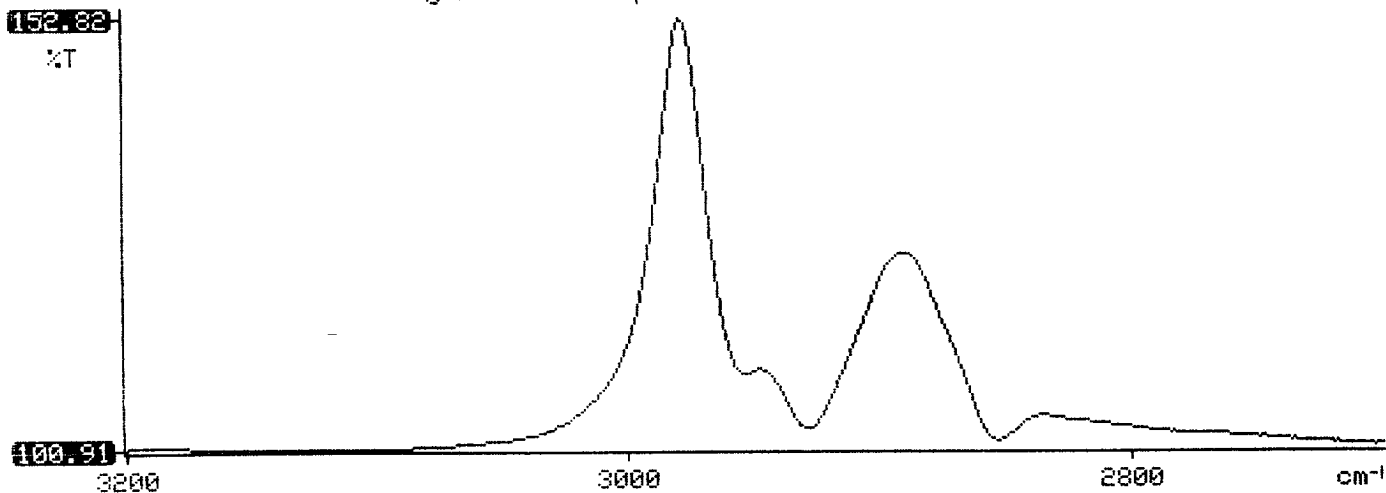
```

*
* 94/05/17 13:30
*
* Sample identification
* 945187
*
* Initial mass of sample, g
* 2.110
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* -77.496
* Net absorbance of hydrocarbons (2930 cm-1)
* -0.009
*
*
*

```

Y: Petroleum hydrocarbons spectrum

13:30





Analytical **Technologies**, Inc.

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

ATI I.D. 405378

June 2, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/18/94, 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.

Client samples 945004 and 945007 were submitted to Analytical Technologies' Albuquerque laboratory past the recommended EPA holding time. *NOTED 8/6/94*

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







Analytical Technologies, Inc.

## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405378  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

| SAMPLE<br>ID. #      | CLIENT I.D. | MATRIX | DATE<br>SAMPLED | DATE<br>EXTRACTED | DATE<br>ANALYZED | DIL.<br>FACTOR |
|----------------------|-------------|--------|-----------------|-------------------|------------------|----------------|
| 21                   | 945187      | NON-AQ | 05/16/94        | 05/20/94          | 05/22/94         | 20             |
| 22                   | 945188      | NON-AQ | 05/16/94        | 05/20/94          | 05/22/94         | 20             |
| 23                   | 945189      | NON-AQ | 05/16/94        | 05/20/94          | 05/22/94         | 20             |
| PARAMETER            |             |        | UNITS           | 21                | 22               | 23             |
| BENZENE              |             |        | MG/KG           | 1.7               | 1.5              | 1.5            |
| TOLUENE              |             |        | MG/KG           | 17                | 47               | 30             |
| ETHYLBENZENE         |             |        | MG/KG           | 2.8               | 11               | 9.9            |
| TOTAL XYLENES        |             |        | MG/KG           | 31                | 170              | 85             |
| SURROGATE:           |             |        |                 |                   |                  |                |
| TRIFLUOROTOLUENE (%) |             |        |                 | 104               | 81               | 87             |

# FIELD PIT REMEDIATION/CLOSURE FORM

|              |   |
|--------------|---|
| GENERAL      | <p>Meter: <u>94595</u> <u>94596</u> Location: <u>Bassett Gas Unit #1/M (mveDK)</u></p> <p>Coordinates: Letter: <u>L</u> Section <u>33</u> Township: <u>30</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>5-16-94</u> Area: <u>10</u> Run: <u>73</u></p>   |
| OBSERVATIONS | <p>Sample Number(s): <u>KD64</u></p> <p>Sample Depth: <u>9'</u> Feet</p> <p>Final PID Reading <u>244 ppm</u> PID Reading Depth <u>9'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>  |
| CLOSURE      | <p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>40</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>5-16-94</u> Pit Closed By: <u>BEI</u></p> |
| REMARKS      | <p>Remarks : <u>Pit was highly Contaminated, Excavated pit to 9', hit Sandstone layer, stopped Excavation, Took PID sample. Closed pit</u></p>  |
| SIGNATURE    | <p>Signature of Specialist: <u>Kerry Quinn</u></p>  |



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil

copy  
original  
with  
mtr # 94596

## SAMPLE IDENTIFICATION

|                            | Field ID      | Lab ID            |
|----------------------------|---------------|-------------------|
| SAMPLE NUMBER:             | KD64          | 945187            |
| MTR CODE   SITE NAME:      | 94595 / 94596 | N/A               |
| SAMPLE DATE   TIME (Hrs):  | 5-16-94       | 1535              |
| SAMPLED BY:                | N/A           |                   |
| DATE OF TPH EXT.   ANAL.:  | 5-17-94       | 5/17/94           |
| DATE OF BTEX EXT.   ANAL.: | 5/20/94       | 5/22/94           |
| TYPE   DESCRIPTION:        | VC            | Brown sand & clay |

REMARKS:

## RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | 1.7    | MG/KG | 20         |   |      |       |
| TOLUENE        | 17     | MG/KG | 20         |   |      |       |
| ETHYL BENZENE  | 2.8    | MG/KG | 20         |   |      |       |
| TOTAL XYLENES  | 31     | MG/KG | 20         |   |      |       |
| TOTAL BTEX     | 53     | MG/KG |            |   |      |       |
| TPH (418.1)    | <10    | MG/KG |            |   | 2.11 | 28    |
| HEADSPACE PID  | 244    | PPM   |            |   |      |       |
| PERCENT SOLIDS | 89.5   | %     |            |   |      |       |

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

The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

Date:

7/17/94

# 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

Bassett GU #1-M 9495/9496 OK

Elevation

Borehole Location

GWL Depth

Logged By

CM CHANCE

Drilled By

K Padilla

Date/Time Started

6/21/95 - 1410

Date/Time Completed

6/21/95 - 1520

Well Logged By

CM Chance

Personnel On-Site

K Padilla, F. Rivera

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 | HS         |                                      |
| 0               |                  |                    |  | Backfill to 9'                                      |                |  |                              |    |            |                                      |
| 5               |                  |                    |  |   |                |  |                              |    |            |                                      |
| 10              | 1                | 10-11.5'           | 6"                                       | Br silty SAND, vf-f sand, + med sand, dense, odor   |                |  | 0                            | 1  | 311<br>250 | 1420h                                |
| 15              | 2                | 15-17'             | 8"                                       | lt Br SANDSTONE, vf-f sand, + med sand, sl cemented |                |  | 0                            | 18 | 309<br>249 | 1421                                 |
| 20              | 3                | 20-21.5'           | 6"                                       | AA  |                |  | 0                            | 6  | 1<br>204   | 1441<br>-Drilling harder             |
| 25              | 4                | 25-26'             | 6"                                       | Br silty CLAY, stiff, non-plastic, dry              |                |  | 0                            | 4  | 1<br>1     | 1455<br>-Refusal @ 26'               |
|                 |                  |                    |  | TDB 26'   |                |  |                              |    |            |                                      |
| 30              |                  |                    |  |   |                |  |                              |    |            |                                      |
| 35              |                  |                    |  |   |                |  |                              |    |            |                                      |
| 40              |                  |                    |  |   |                |  |                              |    |            |                                      |

Comments:

Refusal @ 26' 25-26' sample (CMC 61) sent to lab (BTEX, TPH). B14  
grouted to surface

Geologist Signature



Phase II Drilling  
Bassett GV #1 m

## FIELD SERVICES LABORATORY

### ANALYTICAL REPORT

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

#### SAMPLE IDENTIFICATION

|                            | Field ID    | Lab ID            |
|----------------------------|-------------|-------------------|
| SAMPLE NUMBER:             | CMC 61      | 946921            |
| MTR CODE   SITE NAME:      | 94595/94596 | N/A               |
| SAMPLE DATE   TIME (Hrs):  | 6-21-95     | 1455              |
| SAMPLED BY:                | N/A         |                   |
| DATE OF TPH EXT.   ANAL.:  | 6-23-95     | 6-23-95           |
| DATE OF BTEX EXT.   ANAL.: | 6-29-95     | 6-30-95           |
| TYPE   DESCRIPTION:        | VG          | Brown sand & clay |

REMARKS:

#### RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | 10.025 | MG/KG | 1          |   |      |       |
| TOLUENE        | 10.025 | MG/KG | 1          |   |      |       |
| ETHYL BENZENE  | 10.025 | MG/KG | 1          |   |      |       |
| TOTAL XYLENES  | 10.025 | MG/KG | 1          |   |      |       |
| TOTAL BTEX     | 10.10  | MG/KG |            |   |      |       |
| TPH (418.1)    | 51.8   | MG/KG |            |   | 1.99 | 28    |
| HEADSPACE PID  | 1      | PPM   |            |   |      |       |
| PERCENT SOLIDS | 86.8   | %     |            |   |      |       |

-- 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: 28

Date: 7/17/95

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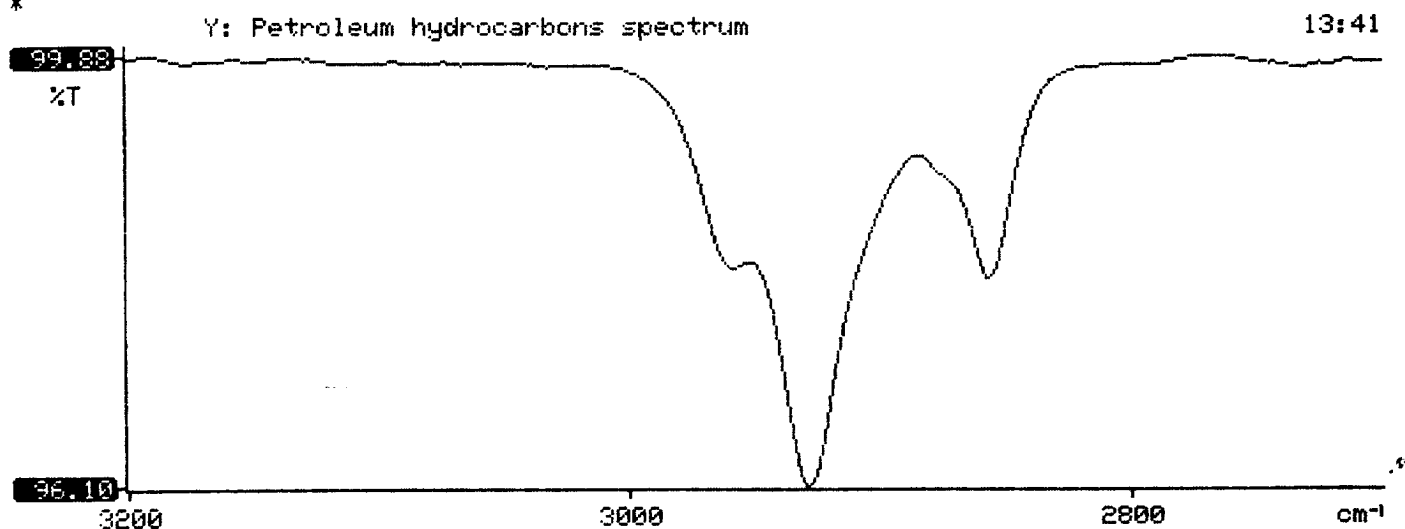
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report                          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

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* 95/06/23 13:41
*
* Sample identification
* 946921
*
* Initial mass of sample, g
* 1.990
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 51.831
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.017
*
*
*

```





Analytical **Technologies**, Inc.

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

ATI I.D. **506426**

July 10, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 06/29/95, 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.

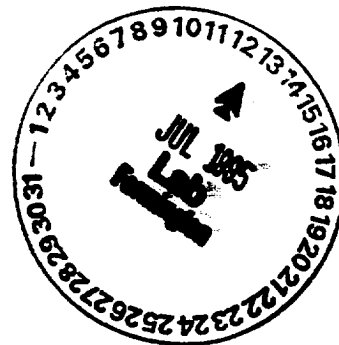
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill  
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager







Analytical **Technologies**, Inc.

### GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO.      ATI I.D.: 506426  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|--------------|-------------|--------|--------------|----------------|---------------|-------------|
| 04           | 946921      | NON-AQ | 06/21/95     | 06/29/95       | 06/30/95      | 1           |
| 05           | 946923      | NON-AQ | 06/22/95     | 06/29/95       | 06/30/95      | 1           |
| 06           | 946924      | NON-AQ | 06/22/95     | 06/29/95       | 06/30/95      | 1           |

| PARAMETER     | UNITS | 04     | 05     | 06     |
|---------------|-------|--------|--------|--------|
| BENZENE       | MG/KG | <0.025 | <0.025 | <0.025 |
| TOLUENE       | MG/KG | <0.025 | <0.025 | <0.025 |
| ETHYLBENZENE  | MG/KG | <0.025 | <0.025 | <0.025 |
| TOTAL XYLENES | MG/KG | <0.025 | 0.077  | <0.025 |

**SURROGATE:**

|                        |    |     |     |
|------------------------|----|-----|-----|
| BROMOFLUOROBENZENE (%) | 98 | 101 | 106 |
|------------------------|----|-----|-----|