Denny-E. Stout
DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

# EL PASO FIELD SERVICES
# PRODUCTION PIT CLOSURE

Approved

RECEIVED
JUL 2 1999

**MARRON #31**
**Meter/Line ID - 71615**

## SITE DETAILS

**Legals - Twn:** 27 **Rng:** 08 **Sec:** 22 **Unit:** L
**NMOCD Hazard Ranking:** 40 **Land Type:** 4 - Fee
**Operator:** M&G DRILLING COMPANY, INC **Pit Closure Date: 08/01/94**

## 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**

Meter: 71615 Location: Marcon No. 31
Operator #: 7335 Operator Name: R & G Drilling P/L District: Ballard
Coordinates: Letter: L Section 22 Township: 27 Range: 8
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 6/11/94 Area: 07 Run: 32

**SITE ASSESSMENT**

**NMOCD Zone:** (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

**Land Type:**
BLM ☐ (1)
State ☐ (2)
Fee ☒ (3)
Indian _____

**Depth to Groundwater**
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

**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? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

**Horizontal Distance to Surface Water Body**
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body Onofre Jaquez Canyon (off of Largo)
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

**TOTAL HAZARD RANKING SCORE:** 40 **POINTS**

**REMARKS**

Remarks : Redline Book - Inside, Vulnerable Area Topo - Inside pit. Will close. Pit dry

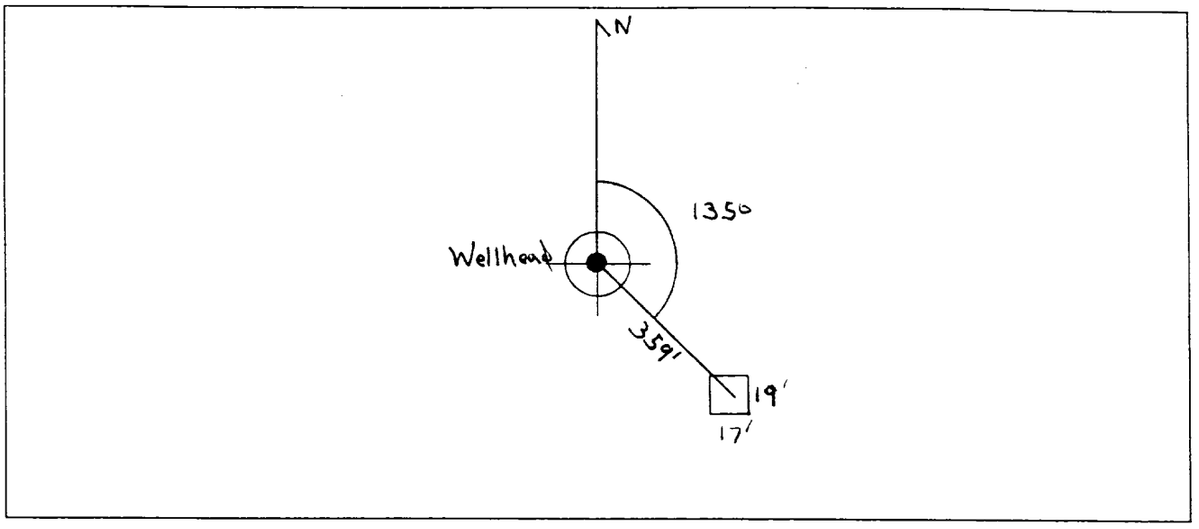
DIG & HAUL

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 135° Footage from Wellhead 359'

b) Length : 19' Width : 17' Depth : 2'




REMARKS

**Remarks :**

Pictures @ 1325 (13-16)

Dump Truck

Completed By:

Cory Chance
Signature

6/11/94
Date

# PHASE I EXCAVATION

# FIELD PIT REMEDIATION/CLOSURE FORM

## GENERAL

Meter: 71615 Location: Marron #31

Coordinates: Letter: L Section 22 Township: 27 Range: 8

Or Latitude _____ Longitude _____

Date Started : 8/1/94 Run: 07 32

## FIELD OBSERVATIONS

Sample Number(s): KD 175 KD 176 KD 177 _____

Sample Depth: 12' Feet

Final PID Reading 345 ppm PID Reading Depth 12' Feet

| | Yes | No |
|---|---|---|
| Groundwater Encountered | ☐ | ☒ |

Approximate Depth _____ Feet

## CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 70

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 8/1/94 Pit Closed By: BEI

## REMARKS

**Remarks :** Excavated pit to 12', Took PID Sample, Closed pit.

Signature of Specialist: Kenny Deans

(SP3191) 03/16/94

El Paso Natural Gas Company

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

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---|---|---|
| SAMPLE NUMBER: | KD 175 | 945797 |
| MTR CODE \| SITE NAME: | 71615 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 8-1-94 | 1215 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 8-2-94 | 8.2.94 |
| DATE OF BTEX EXT. \| ANAL.: | 8/4/94 | 8/6/94 |
| TYPE \| DESCRIPTION: | VC | Brown/Grey Sand/Clay |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | < 0.25 | MG/KG | 10 | | | |
| TOLUENE | < 0.25 | MG/KG | 10 | | | |
| ETHYL BENZENE | < 0.25 | MG/KG | 10 | | | |
| TOTAL XYLENES | 78 | MG/KG | 10 | | | |
| TOTAL BTEX | 79 | MG/KG | | | | |
| TPH (418.1) | 1850 | MG/KG | | | 2.12 | 28 |
| HEADSPACE PID | 345 | PPM | | | | |
| PERCENT SOLIDS | 91.5 | % | | | | |

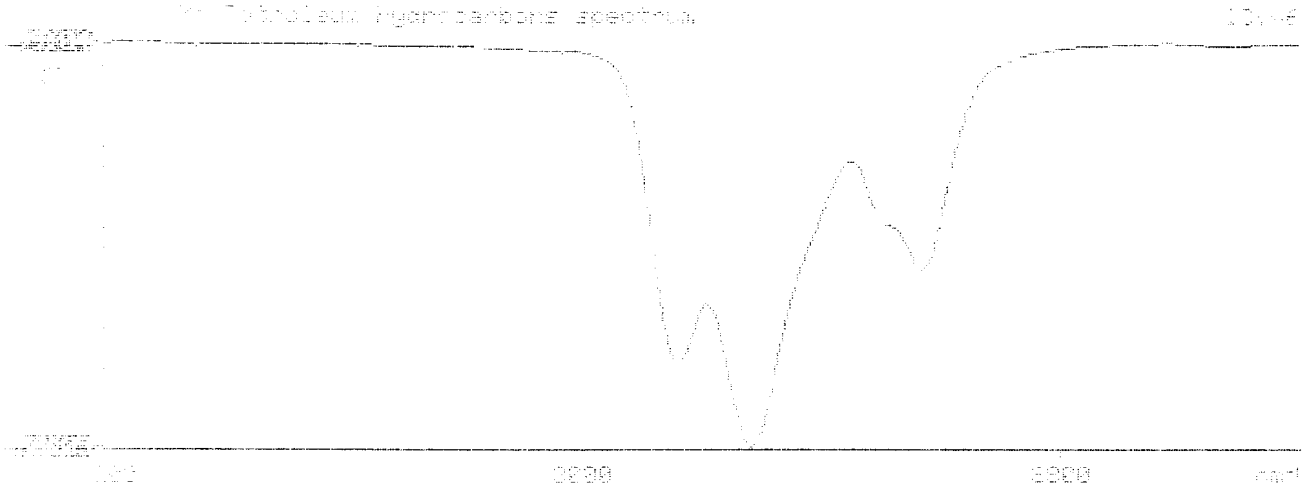
– TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 265 ~~NA~~ % for this sample All QA/QC was acceptable.
8/3/94

Narrative:
AT I results attached. Surrogate recovery was outside AT I QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By: J.S. Date: 9/2/94




ILLEGIBLE

Analytical Technologies, Inc.

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

ATI I.D. **408313**

August 12, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **08/03/94**, 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.

8015 analysis was added on 08/08/94 for sample 945789 per John Lambdin.

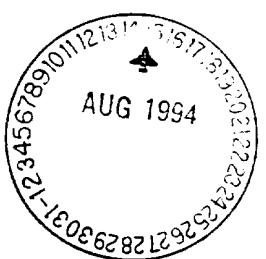
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408313

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|---|
| 10 | 945797 | NON-AQ | 08/01/94 | 08/04/94 | 08/06/94 | 10 |
| 11 | 945798 | NON-AQ | 08/01/94 | 08/04/94 | 08/06/94 | 10 |
| 12 | 945799 | NON-AQ | 08/01/94 | 08/04/94 | 08/06/94 | 1 |

| PARAMETER | UNITS | 10 | 11 | 12 |
|---|---|---|---|---|
| BENZENE | MG/KG | <0.25 | <0.25 | <0.025 |
| TOLUENE | MG/KG | <0.25 | <0.25 | <0.025 |
| ETHYLBENZENE | MG/KG | <0.25 | <0.25 | <0.025 |
| TOTAL XYLENES | MG/KG | 78 | 80 | <0.025 |
| SURROGATE: | | | | |
| BROMOFLUOROBENZENE (%) | | 265* | 250* | 92 |

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

## RECORD OF SUBSURFACE EXPLORATION

Borehole # BH1
Well #
Page 1 of 1

**Burlington Environmental Inc.**
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 Marron #31 7/6/95

Elevation
Borehole Location Letter L-S22-T27-R8
GWL Depth
Logged By John LaBarbera
Drilled By M Donahue
Date/Time Started 7/26/95 - 1110
Date/Time Completed - 1245 1300

Well Logged By John LaBarbera
Personnel On-Site M Donahue, D Cherry, M Te
Contractors On-Site
Client Personnel On-Site

Drilling Method 4.25" ID HSA
Air Monitoring Method PID/ E.G.E

| 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 BZ | BH | S | Drilling Conditions & Blow Counts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | FILL | | | | | | | |
| 5 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 20 | 1 | 18-19.5 | 18 | Brown, v. loose, silty, fn to coarse, SAND, dry, sl. odor | SM | | 2.9 | 63 | 10489 / 10.2 | | 111 |
| 25 | 2 | 23-24 | 12 | Brown, mod. stiff, v fn sandy SILT, dry | ML | | 1.1 | 15 | 10978 / 3.9 | | 162 |
| 30 | 3 | 28-29.5 | 9 | Brown, v. loose, fn to coarse, SAND, some fn gravel, trace silt, dry, no odor noted | SW | | 0 | 52 | 320 / 2.4 | | 113 |
| 35 | 4 | 33-34 | 12 | AA | | | .6 | 100 | 10940 / 2.4 | Re calibrated PID & cleared | 114 |
| 40 | 5 | 38-39 | 12 | AA TOB @ 39' | | | 0 | 66 | 11125 / 0.1 | → re check = 3.0 | 1150 |

Comments: Sample JFL 17 sent to lab for BTEX/TPH analysis. Sampled from 38-39'.

Geologist Signature John LaBarbera

El Paso Natural Gas Company

Phase II Drilling
Marron #31 (38-39)

# FIELD SERVICES LABORATORY
# ANALYTICAL REPORT
# PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---|---|---|
| SAMPLE NUMBER: | JFL 17 | 947042 |
| MTR CODE \| SITE NAME: | 71615 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 07-20-95 | 11:52 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 7-24-95 | 7-24-95 |
| DATE OF BTEX EXT. \| ANAL.: | 7-26-95 | 7-27-95 |
| TYPE \| DESCRIPTION: | VG | Brown course sand |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | <0.025 | MG/KG | 1 | | | |
| TOLUENE | <0.025 | MG/KG | 1 | | | |
| ETHYL BENZENE | <0.025 | MG/KG | 1 | | | |
| TOTAL XYLENES | <0.025 | MG/KG | 1 | | | |
| TOTAL BTEX | <0.10 | MG/KG | | | | |
| TPH (418.1) | <10 KOK 7/27/95 | MG/KG | | | 2.02 | 28 |
| HEADSPACE PID | 1125 X 3.0 7/27/95 | PPM | | | | |
| PERCENT SOLIDS | 99.7 | % | | | | |

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

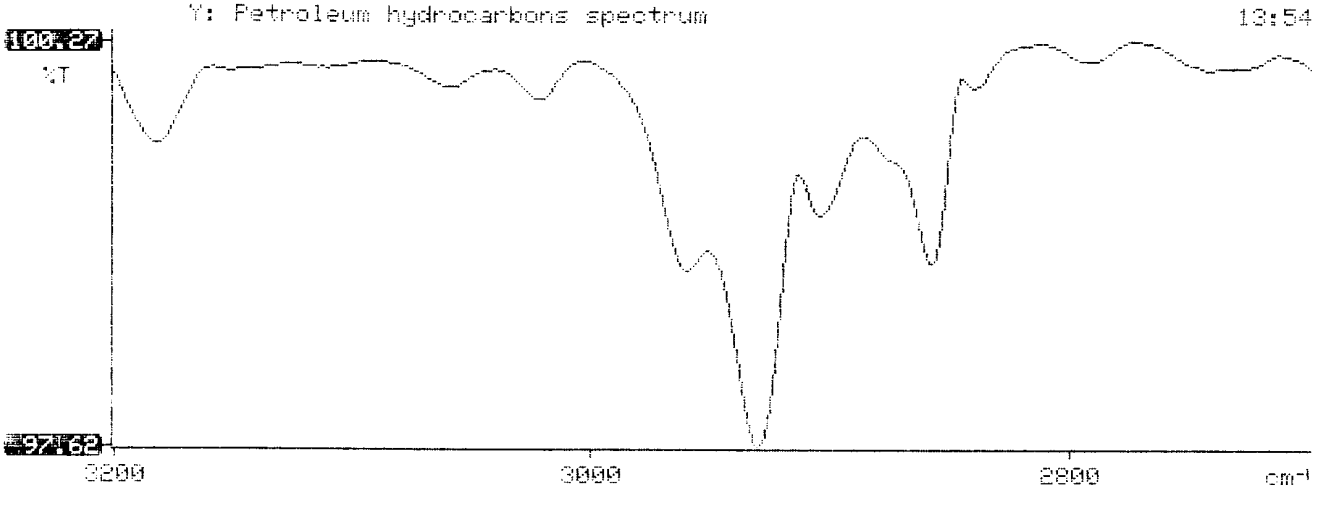
The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

**Narrative:**
ATI Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 8/22/95

```
**********************************************************
*                    Test Method for                     *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                    in Water and Soil                   *
*                                                        *
*              Perkin-Elmer Model 1600 FT-IR             *
*                    Analysis Report                     *
**********************************************************
*
 95/07/24  13:54
*
*  Sample identification
 947042
*
*  Initial mass of sample, g
 2.020
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 3.963
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.011
*
*
*
```



Analytical **Technologies,** Inc.

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

ATI I.D. **507403**

August 3, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRILLING 24324

Attention: John Lambdin

On **07/26/95**, 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.

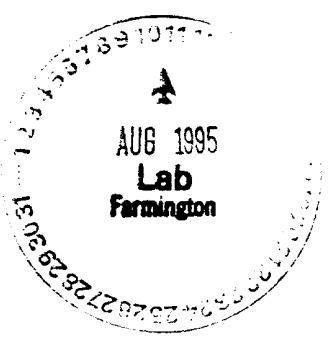
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507403

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|---|
| 01 | 947041 | NON-AQ | 07/20/95 | 07/26/95 | 07/27/95 | 1 |
| 02 | 947042 | NON-AQ | 07/20/95 | 07/26/95 | 07/27/95 | 1 |
| 03 | 947043 | NON-AQ | 07/20/95 | 07/26/95 | 07/27/95 | 1 |

| PARAMETER | UNITS | 01 | 02 | 03 |
|---|---|---|---|---|
| BENZENE | MG/KG | <0.025 | <0.025 | <0.025 |
| TOLUENE | MG/KG | <0.025 | <0.025 | <0.025 |
| ETHYLBENZENE | MG/KG | 0.051 | <0.025 | <0.025 |
| TOTAL XYLENES | MG/KG | 0.32 | <0.025 | 0.025 |
| SURROGATE: | | | | |
| BROMOFLUOROBENZENE (%) | | 87 | 104 | 96 |