DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

**Meter Number:71856**
**Location Name:HAMPTON 3 MV**
**Location:TN-30 RG-11**
**SC-10 UL-B**
**4 - Fee**
**NMOCD Zone:OUTSIDE**
**Hazard Ranking Score:00**

RECEIVED
APR 14 1997
OIL CON. DIV.
DIST. 3

## RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

| | |
|---|---|
| Sandstone | $10^{-9}$ to $10^{-13}$ cm/sec |
| Shale | $10^{-12}$ to $10^{-16}$ cm/sec |
| Clay | $10^{-12}$ to $10^{-15}$ cm/sec |

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

# FIELD PIT SITE ASSESSMENT FORM

EPFS
EL PASO FIELD SERVICES

## GENERAL

Meter: 71856 Location: HAMPTON 3 MV

Operator #: 1987 Operator Name: MERIDIAN P/L District: KUTZ

Coordinates: Letter: B Section 10 Township: 30 Range: 11

Or Latitude _____ Longitude _____

Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____

Site Visit Date: 3·29·94 Run: 02 22

## SITE ASSESSMENT

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

**Land Type:**
BLM ☐
State ☐
Fee ☒
Indian _____

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

**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? ☐ YES (20 points) ☒ NO (0 points)

**Horizontal Distance to Surface Water Body**
Less Than 200 Ft (20 points) ☐
200 Ft to 1000 Ft (10 points) ☐
Greater Than 1000 Ft (0 points) ☒
Name of Surface Water Body _____
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

**TOTAL HAZARD RANKING SCORE:** 0 **POINTS**

## REMARKS

Remarks : TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. DEHY HAS NOT BEEN DISCONNECTED FROM PIT YET. PIT IS DRY.

ORIGINAL PIT LOCATION

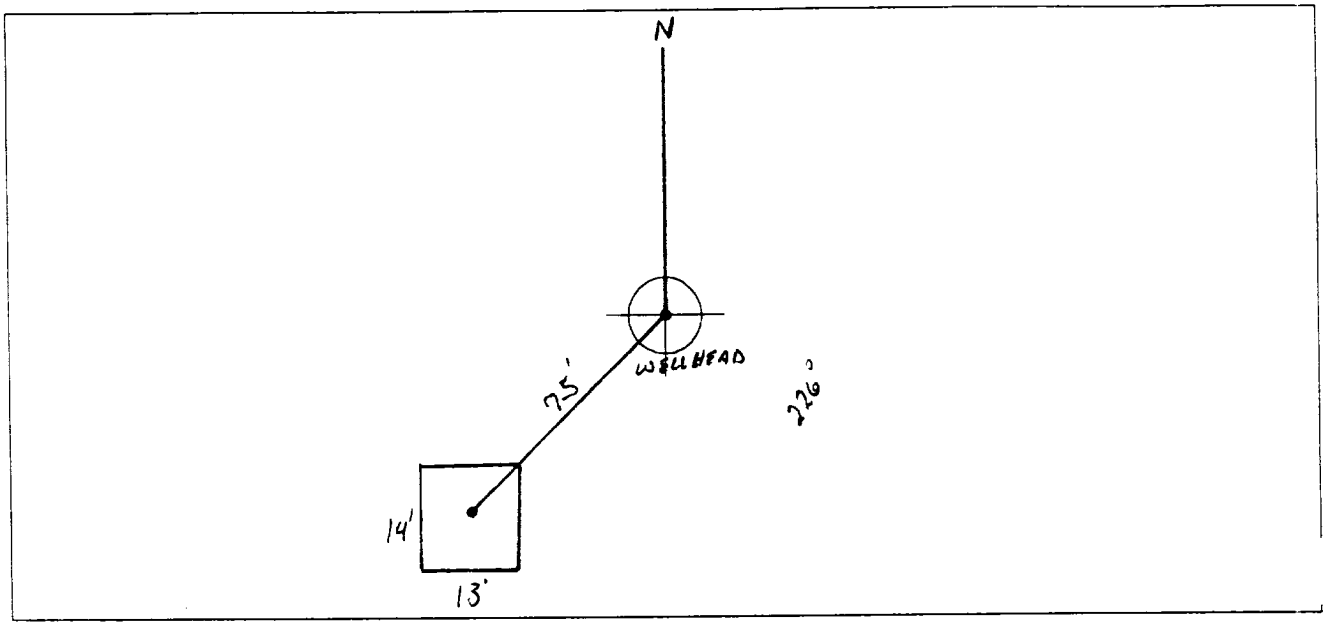
## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 226° Footage to Wellhead 75'

b) Degrees from North _____ Footage to Dogleg _____

Dogleg Name _____

c) Length : 14' Width : 13' Depth : 3'




REMARKS

**Remarks :**

STARTED TAKING PICTURES AT 9:04 A.M.

DUMP TRUCK - BOBTAIL

Completed By:

Robert Thompson
Signature

3.29.94
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

**GENERAL**

Meter: 71856 Location: Hampton #3 MV

Coordinates: Letter: B Section 10 Township: 30 Range: 11

Or Latitude _____ Longitude _____

Date Started : 4-26-94 Area: 02 Run: 72

**OBSERVATIONS**

Sample Number(s): 94509 KD 32 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 516 PPM PID Reading Depth 12' Feet

Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

**CLOSURE**

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 50

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Soil Disposition:

Envirotech ☐ (1) ☒ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 4-26-94 Pit Closed By: BEI

**REMARKS**

**Remarks :** Had to Excavate Pit to 12', Took PID Reading Close pit.

Signature of Specialist: Kirby Deane

# El Paso Natural Gas Company

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

changed to outside WVZ

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID (and 4/28/94) |
|---|---|---|
| SAMPLE NUMBER: | KD32 | ~~945~~ 945009 |
| MTR CODE \| SITE NAME: | 71856 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 4/26/94 | 1050 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 4/28/94 | 4/28/94 |
| DATE OF BTEX EXT. \| ANAL.: | 5/9/94 | 5/10/94 |
| TYPE \| DESCRIPTION: | VC | Brown/Grey fine Sand |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | <0.50 | MG/KG | | | | |
| TOLUENE | 3.6 | MG/KG | | | | |
| ETHYL BENZENE | 3.7 | MG/KG | | | | |
| TOTAL XYLENES | 58 | MG/KG | | | | |
| TOTAL BTEX | 65.3 | MG/KG | | | | |
| TPH (418.1) | 1700 | MG/KG | | | 2.04 | 28 |
| HEADSPACE PID | 516 | PPM | | | | |
| PERCENT SOLIDS | 88 | % | | | | |

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

The Surrogate Recovery was at 84 % for this sample All QA/QC was acceptable.

Narrative: ATI results attached

DF = Dilution Factor Used

Approved By: John Pantle Date: 5/21/94

**********  **********

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

**********  **********

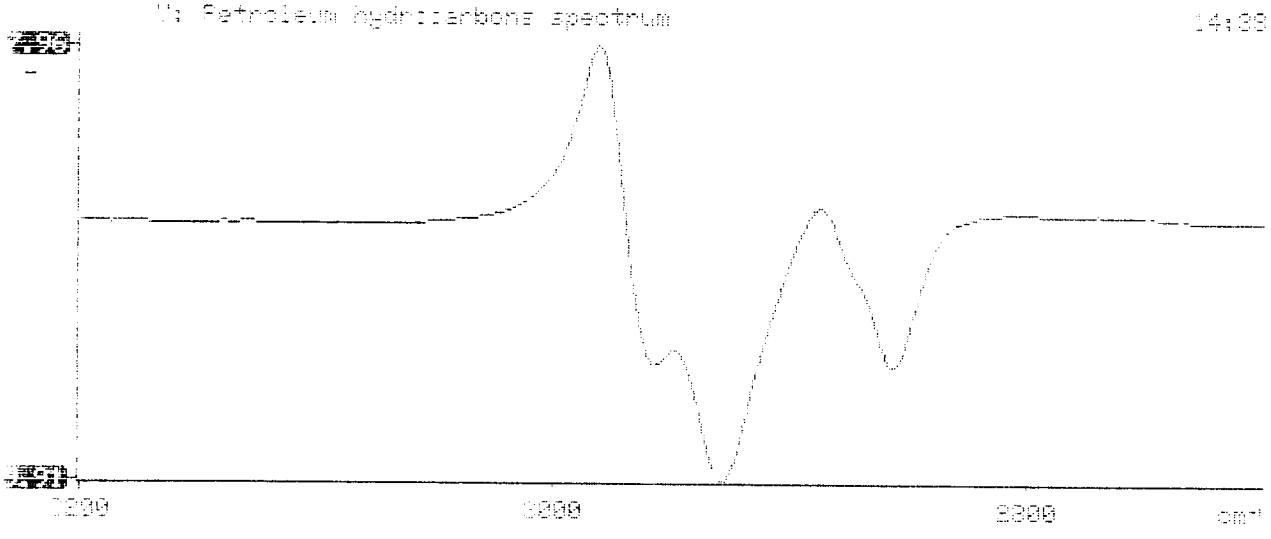
1/04/28  14:38

Sample identification
5009

Initial mass of sample, g
040

Volume of sample after extraction, ml
3.000

Petroleum hydrocarbons, ppm
79.476
Net absorbance of hydrocarbons (2930 cm-1)
.125



Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405313

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|---|
| 01 | 945008 | NON-AQ | 04/26/94 | 05/09/94 | 05/10/94 | 1 |
| 02 | 945009 | NON-AQ | 04/26/94 | 05/09/94 | 05/10/94 | 20 |
| 03 | 945010 | NON-AQ | 04/26/94 | 05/09/94 | 05/10/94 | 20 |

| PARAMETER | UNITS | 01 | 02 | 03 |
|---|---|---|---|---|
| BENZENE | MG/KG | <0.025 | <0.50 | 4.1 |
| TOLUENE | MG/KG | <0.025 | 3.6 | 88 |
| ETHYLBENZENE | MG/KG | 0.14 | 3.7 | 32 |
| TOTAL XYLENES | MG/KG | 3.9 | 58 | 380 |
| METHYL-t-BUTYL ETHER | MG/KG | <0.12 | <2.4 | 2.5 |
| SURROGATE: | | | | |
| BROMOFLUOROBENZENE (%) | | 170* | 84 | 187* |

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Analytical Technologies, Inc.

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

ATI I.D. **405313**


May 13, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/03/94**, 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.

EPA Method 8015 analysis was added on 05/05/94 for sample 945008 per Stacy Sendler.

The matrix spike/spike duplicate data from the samples extracted on 05/05/94 is reported twice reflecting quantification using both the internal standard and external standard protocols. Both protocols were employed to quantify the samples submitted for this project.

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.

COPY

ORIGINAL

# INVOICE

AL 72053


Albuquerque Office: 2709-D Pan American Fwy., N E
Albuquerque, NM 87107
(505) 344-3777

Remit To:
Analytical Technologies, Inc.
P. O. Box 840436
Dallas, Texas 75284-0436


Billed to: EL PASO NATURAL GAS COMPANY
P.O. BOX 4990
FARMINGTON, NM 87499

Accession No.: 9405-313
Date: 05/13/94
Client No.: 850-020
810

Attention: ACCOUNTS PAYABLE

Telephone: 505-325-2841

Authorized by: JOHN LAMBDIN

P.O. Number: 38822

Samples: 39 NON-AQ

EPNG Sample # 945008 to 945027
945032, 945033, 945035 to 945039, 945041 to 945050, 945034 and 945040 received 05/03/94

Project: PIT CLOSURE
Project No.: 24324

| TEST DESCRIPTION | | QUANTITY | PRICE | TOTAL |
|---|---|---|---|---|
| EPA METHOD 8015M/8020 | -10 % | 1 | 125.00 | 112.50 |
| BTEX/MTBE (8020) | -10 % | 38 | 80.00 | 2736.00 |
| NM GROSS RECEIPTS TAX | | 1 | 165.57 | 165.57 |

MAY 1994 RECEIVED

**********
Amount due: 3014.07
**********

5/17/94
APPROVED FOR PAYMENT

DATE _____
CHARGE 50% 108-52452-24-0001-0012-51-2010
50% 108-51570-24-0001-0012-51-2010
SIGNATURE _____
David Hall
541-3531

TERMS: Net 30 Days - 1½% Finance Charge on Balance Due over 30 days.

ATI-003

DISTRIBUTION: White-Customer, Yellow-File, Pink-Accounting