

### MARRON #95 Meter/Line ID - 93441

SITE DETAILS

Rng: 08 Legals - Twn: 27 NMOCD Hazard Ranking: 40

Operator: R & G DRILLING COMPANY

Sec: 23

Unit: K

Land Type: 2 - Federal OLL GONO DIV.

Pit Closure Date: 06/07 1948 3

### **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
- 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 time with the naturally degrade in minimal risk environment.

# FIELD PIT SITE ASSESSMENT FORM

| GENERAL         | Meter: 9344 Location: Marron # 95  Operator #: 7335 Operator Name:R&GDrla, C. P/L District: Blanca  Coordinates: Letter: K Section 23 Township: 27 Range: 8  Or Latitude Longitude  Pit Type: Dehydrator Location Drip: Line Drip: Other:  Site Assessment Date: 5/24/94 Area: 13 Run: 3/   |  |  |  |  |  |  |  |
|-----------------|---|--|--|--|--|--|--|--|
| SITE ASSESSMENT | NMOCD Zone:  (From NMOCD  Maps)  Inside  Outside  Outside  Depth to Groundwater  Less Than 50 Feet (20 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?  (1) YES (20 points)  Horizontal Distance to Surface Water Body  Less Than 200 Ft (20 points)  (3)  Name of Surface Water Body  Careater Than 1000 Ft (10 points)  (2)  Greater Than 1000 Ft (10 points)  (3)  Name of Surface Water Body  Careater Than 1000 Ft (10 points)  (3)  Name of Surface Water Body  Careater Than 1000 Ft (10 points)  (3)  Name of Surface Water Body  Careater Body:  (Surface Water Body:  Careater Points  (1) < 100'(Navajo Pits Only)  (2) > 100'  TOTAL HAZARD RANKING SCORE: |  |  |  |  |  |  |  |
| REMARKS         | Remarks: Redline + Vuln Inside<br>2014s. Will close 1. Pet Dry  |  |  |  |  |  |  |  |
| ЕМ              |   |  |  |  |  |  |  |  |
| R               | DIG4 HAUL   |  |  |  |  |  |  |  |

# PHASE I EXCAVATION

# FJT D PIT REMEDIATION/CLOTTRE FORM

| GENERAL            | Meter: 93441 Location: MArron \$5  Coordinates: Letter: K Section 23 Township: 27 Range: 8  Or Latitude Longitude Longitude Longitude Area: 13 Run: 31   |
|--------------------|--|
| FIELD OBSERVATIONS | Sample Number(s): KP*85  Sample Depth: 12' Feet  Final PID Reading 638  Yes No  Groundwater Encountered (1) (2) Approximate Depth Feet   |
| CLOSURE            | Remediation Method:  Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date:    (1)   (2)   (3)                   |
| REMARKS            | Remarks: Some LINE Markers Had To solidify only Side of Derm Because Hos some mud in Its Started Remediating To 12'  Soil is Black.  Signature of Specialist: Lelly Palilla  (SP3191) 04/07/94 |

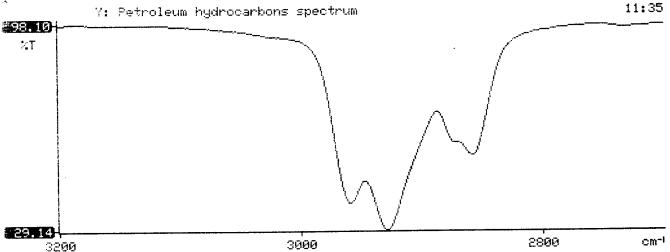
-2-



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

|   | SAMPLE  | IDENTIFICA | TION       |               |              | · · · · · · · · · · · · · · · · · · · |  |
|---|---|------------|------------|---------------|--------------|---------------------------------------|--|
|   | Field   | ID         |            | Lab ID        |              |                                       |  |
| SAMPLE NUMBER:  | KP 85   |            | 945        | 374           |              |                                       |  |
| MTR CODE   SITE NAME:   | 93441   |            |            | N/A           | <u>-</u>     | [                                     |  |
| SAMPLE DATE   TIME (Hrs):   | 6-7-9   | 4          |            | <b>७१</b> ५८  | <del>.</del> |                                       |  |
| SAMPLED BY:   |   |            | /A         |               |              |                                       |  |
| DATE OF TPH EXT.   ANAL.:   | 0/1   | 0194       | (c         | 110194        |              |                                       |  |
| DATE OF BTEX EXT.   ANAL.:  |   | ,//4/94    | 6          | 14/49         |              | 1                                     |  |
| TYPE   DESCRIPTION:   | ٧८  |            | Grey (     | JAY           |              | j                                     |  |
|   |   |            | O          |               |              |                                       |  |
| REMARKS:  |   |            |            | <del></del>   | <u>-</u>     |                                       |  |
|   |   | RESULTS    |            |               |              |                                       |  |
|   |   |            | ·          | <u>.</u>      |              |                                       |  |
| PARAMETER   | RESULT UNITS  |            | QUALIFIERS |               |              |                                       |  |
|   |   |            | DF         | Q             | M(g)         | V(ml)                                 |  |
| BENZENE   | 1.8   | MG/KG      | 20         |               |              |                                       |  |
| TOLUENE   | 62  | MG/KG      | 20         |               |              |                                       |  |
| ETHYL BENZENE   | 15  | MG/KG      | 20         |               |              |                                       |  |
| TOTAL XYLENES   | 240   | MG/KG      | 20         |               | <u> </u>     |                                       |  |
| TOTAL BTEX  | 319   | MG/KG      |            | <u> </u>      |              |                                       |  |
| TPH (418.1)   | 7640  | MG/KG      |            |               | 1.10         | 28                                    |  |
| HEADSPACE PID   | 638   | PPM        |            | .*            | . 34         |                                       |  |
| PERCENT SOLIDS  | 77.3  | %          |            |               |              |                                       |  |
|   | - TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 |            |            |               |              |                                       |  |
| The Surrogate Recovery was at 135 % for this sample All QA/QC was acceptable.  Narrative: |   |            |            |               |              |                                       |  |
| . 1   | ttached S   | umpate     | reares     | $\sim \omega$ | 000          | Aside                                 |  |
| ATIQC lim   | its due   | to I mad   |            | Ateren C      |              |                                       |  |
| DF = Dilution Factor Used   |   | •          |            | U             |              |                                       |  |

Test Method for Gil and Grease and Petroleum Hydrocarbons \* in Water and Soil Perkin-Elmer Model 1600 FT-IR 74/06/10 11:35 Sample identification Initial mass of sample, g 1.100 × Volume of sample after extraction, ml 28.000 Petroleum hydrocarbons, ppm 7638.501 \* Net absorbance of hydrocarbons (2930 cm-1) 0.526 X \$





### 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

MR:jd

Enclosure

H. Mitchell Rubenstein, Ph.D. Laboratory Manager

Corporate Offices: 5550 Morehouse Drive San Diego. CA 92121 (619) 458-9141



### GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406351
PROJECT # : 24324

PROJECT #

PROJECT NAME : PIT CLOSURE

| SAMP: |                | MATRIX | DATE<br>SAMPLED | DATE<br>EXTRACTED | DATE<br>ANALYZED | DIL.<br>FACTOR |
|-------|----------------|--------|-----------------|-------------------|------------------|----------------|
| 04    | 945377         | NON-AQ | 06/07/94        | 06/14/94          | 06/14/94         | 1              |
| 05    | 945378         | NON-AQ | 06/07/94        | 06/14/94          | 06/14/94         | 1              |
| 06    | 945379         | NON-AQ | 06/07/94        | 06/14/94          | 06/14/94         | 20             |
| PARA  | METER          |        | UNITS           | 04                | 05               | 06             |
| BENZ  | ENE            |        | MG/KG           | <0.025            | <0.025           | 1.8            |
| TOLU  | ENE            |        | MG/KG           | <0.025            | <0.025           | 62             |
| ETHY  | LBENZENE       |        | MG/KG           | <0.025            | <0.025           | 15             |
|       | L XYLENES      |        | MG/KG           | <0.025            | 0.070            | 240            |
|       |                |        |                 |                   |                  |                |
| SURR  | ROGATE:        |        |                 |                   |                  |                |
| BROM  | OFLUOROBENZENE | (%)    |                 | 115               | 104              | 135*           |

<sup>\*</sup>OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

### RECORD OF SUBSURFACE EXPLORATION

Borehole Location QK-Sa3-Ta7-R8

CM CHANCE

8/29/95-1045

K Padilla

PHILIP ENVIRONMENTAL

4000 Monroe Road

Elevation

GWL Depth

Logged By Drilled By

Date/Time Started

Date/Time Completed

Farmington, New Mexico 87401 (505) 326-2282 FAX (505) 326-2388 Project Name Project Number Project Location EPNG PITS

14509 Phase 6000 77

Marcan # 95 93441

Borehole #

Well Logged By Personnel On-Site CM Chance
K Padilla, F. Rivera, D. Charlis

Contractors On-Site
Client Personnel On-Site

K Padilla, F. Kivera, D. Charlie

**BH-1** 

**Drilling Method** 

4 1/4" ID HSA

Air Monitoring Method

PID, CGI

| Depth S.  | ample  | Sample   | Sample<br>Type &     | Sample Description          | uscs   | Depth<br>Lithology | Air         | Monitor   | ing            | Drilling Conditions |
|-----------|--------|----------|----------------------|-----------------------------|--------|--------------------|-------------|-----------|----------------|---------------------|
|           | lumber | Interval | Recovery             | Classification System: USCS | Symbol | Change<br>(feet)   | Units<br>8Z | PPM<br>BH | <u>s</u><br>HS | & Blow Counts       |
| (Feet) Ni | lumber | Interval | Recovery<br>(inches) |                             | 1      | Change             |             | вн        | 77<br>28       | -1054 hn            |
| 40        |        |          |                      |                             |        |                    |             |           |                |                     |

Comments: (M(96(20-22) Sent to lab (BTEXTOH). BH growted 18 surface
(Sample bagged ticed prier to Containerization)

Geologist Signature



## FIELD SERVICES LABORATORY ANALYTICAL REPORT

# PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

|  | SAMPLE              | IDENTIFICA               | TION      |               |       |       |  |
|--|---------------------|--------------------------|-----------|---------------|-------|-------|--|
|  | Fiel                | d ID                     |           | Lab ID        |       |       |  |
| SAMPLE NUMBER:                           | CMC9                | 6                        | 947       | 357           |       |       |  |
| MTR CODE   SITE NAME:                    | 93441               |                          | Ma        | rron #9       | 5     |       |  |
| SAMPLE DATE   TIME (Hrs):                | 08-29               | -95                      | 110       | )O            |       |       |  |
| PROJECT:                                 | PhaseII             | Drillin                  |           |               |       |       |  |
| DATE OF TPH EXT.   ANAL.:                | 9/3¢                | 195                      |           |               |       |       |  |
| DATE OF BTEX EXT. ANAL.:                 | E/30                | 5/95                     | 9/:       | 3/95 <u> </u> |       |       |  |
| TYPE   DESCRIPTION:                      | VG                  |                          | Light Wor | msmd + 0      | lan   |       |  |
| Field Remarks:                           |                     |                          |           |               |       |       |  |
| PARAMETER                                | RESULT              | UNITS .                  |           | QUALIFIERS    |       |       |  |
|  |                     | 43:                      | DF        | Q             | M(g)  | V(mi) |  |
| BENZENE                                  | 4.5                 | MG/KG                    |           |               |       |       |  |
| TOLUENE                                  | < 5                 | MG/KG                    |           |               |       |       |  |
| ETHYL BENZENE                            | 4.5                 | MG/KG                    |           |               |       |       |  |
| TOTAL XYLENES                            | 41,5                | MG/KG                    |           |               |       |       |  |
| TOTAL BTEX                               | 4 3                 | MG/KG                    |           |               |       |       |  |
| TPH (418.1)                              | 61.9                | MG/KG                    |           |               | 2.04  | 28    |  |
| HEADSPACE PID                            | 17                  | PPM                      |           |               |       |       |  |
| PERCENT SOLIDS                           | 95.6                | %                        |           |               |       |       |  |
| The Surrogate Recovery was at Narrative: | TPH is by EPA Metho | d 418.1 and BTEX is by i |           |               | able. |       |  |
| DF = Dilution Factor Used                |                     |                          |           | 6.2-9         |       |       |  |

```
Test Method for
    Gil and Grease and Petroleum Hydrocarbons
                                         本
                                         *
             in Water and Soil
                                         *
         Perkin-Elmer Model 1600 FT-IR
                                         *
95/08/30 13:39
( Initial mass of sample, g
  Volume of sample after extraction, ml
2
28.000
\frac{dr}{dt}
 Petroleum hydrocarbons, ppm
61.918
* Met absorbance of hydrocarbons (2930 cm-1)
0.018
*
幸
\star
                                                    13:39
       Y: Petroleum hydrocarbons spectrum
XT.
```

3000

2800

 $\odot m^{-1}$ 

95 49

3299

### BTEX SOIL SAMPLE WORKSHEET

| File          | <del>)</del> | : | 947357 | Date Printed        | :            | 9/6/95  |            |
|---------------|--------------|---|--------|---------------------|--------------|---------|------------|
| Soil Mas      | s (g)        | : | 5.12   | Multiplier (L/g)    | :            | 0.00098 |            |
| Extraction vo | i. (mL)      | : | 20     | DF (Analytical)     | :            | 200     |            |
| Shot Volume   | e (uL)       | : | 100    | DF (Report)         | :            | 0.19531 |            |
|               |              |   |        |                     |              |         |            |
|               |              |   |        |                     |              |         | Det. Limit |
| Benzene       | (ug/L)       | : | 0.00   | Benzene (mg/ł       | <b>(</b> g): | 0.000   | 0.488      |
| Toluene       | (ug/L)       | : | 0.14   | Toluene (mg/l       | (g):         | 0.027   | 0.488      |
| Ethylbenzene  | (ug/L)       | : | 0.00   | Ethylbenzene (mg/ł  | <b>(</b> g): | 0.000   | 0.488      |
| p & m-xylene  | (ug/L)       | : | 0.00   | p & m-xylene (mg/   | Kg):         | 0.000   | 0.977      |
| o-xylene      | (ug/L)       | : | 0.00   | o-xylene (mg/       | Kg):         | 0.000   | 0.488      |
| -             |              |   |        | Total xylenes (mg/l | <b>(</b> g): | 0.000   | 1.465      |
|               |              |   |        | Total BTEX (mg/l    | <b>(</b> g): | 0.027   |            |

### EL PASO NATURAL GAS EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090395-1.021 Method : C:\LABQUEST\METHODS\9001.MET

Sample ID : 947357,5.12G,100U Acquired : Sep 03, 1995 03:03:56 Printed : Sep 04, 1995 11:18:11

User : MARLON

### Channel A Results

| COMPONENT    | RET TIME | AREA     | CONC (ug/L) |
|--------------|----------|----------|-------------|
|              |          |          |             |
| BENZENE      | 3.390    | 0        | 0.0000      |
| a,a,a TFT    | 4.947    | 2006392  | 84.3054     |
| TOLUENE      | 6.767    | 266039   | 0.1386      |
| ETHYLBENZENE | 10.520   | 55003    | -0.2429     |
| M & P XYLENE | 10.870   | 362834   | -2.2047     |
| O XYLENE     | 11.877   | 0        | 0.0000      |
| BFB          | 13.410   | 30896634 | 87.9627     |

### C:\LABQUEST\CHROM001\090395-1.021 -- Channel A

