DEPUTY OIL & GAS INSPECTOR

JUL 1 7 1998

77

Ballard No. 10 Meter/Line ID - 70770

Legals - Twn: 26

NMOCD Hazard Ranking: 20

Operator: Meridian

SITE DETAILS

Sec: 15

Unit: L

Land Type: BLM

PREVIOUS ACTIVITIES

Site Assessment: 6/21/94 Monitor Well: N/A

Excavation: 8/12/94

Soil Boring: 8/18/95

Re-Excavation: N/A

Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe which was 12 feet below ground surface (bgs). PID field screening indicated soils to be below 100 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated BTEX compounds were below standards, but TPH was above standards at 106 mg/kg. A test boring was advanced in the center of the initial excavation to determine the extent of the impact to soils. The soil lithology consisted of brown silty sand. A soil sample was collected for BTEX and TPH analysis at 18-20 feet bgs. Laboratory analysis showed all BTEX compounds to be below detection limits and TPH analysis indicated 25.1 mg/kg present in the soil.

RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

- The bulk of the impacted soil was removed during the phase 1 excavation.
- Test boring sample results indicated soils below standards 6 feet below the initial excavation.
- No groundwater was encountered in the test boring.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade with time with minimal risk to the environment.

PECEIVED MAR - 9 1993 OIL CON. DIV. DIST. 3

FIELD PIT SITE ASSESSMENT FORM

| <u></u> | |
|------------|--|
| GENERAL | Meter: 70770 Location: Rallard #10 Operator #: 2999 Operator Name: Meridian P/L District: Ballard Coordinates: Letter: Section 15 Township: 26 W Range: 9 W Or |
| | NMOCD Zone: (From NMOCD Maps) Inside Outside Land Type: BLM (1) State (2) Fee (3) Outside |
| | Depth to Groundwater Less Than 50 Feet (20 points) |
| ASSESSMENT | 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) |
| SITE ASS | 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 Office Water Body (1) MAR - 9 1998 Office Water Body (2) Office Water Body (3) |
| | (Surface Water Body Reed Canyon Wash DIST 3 (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: 20 POINTS |
| RKS | Remarks: One pit on location. Dry |
| REMARKS | Inside V.Z. on Redline & Topo |
| <u>R</u> | |

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

| GENERAL | Meter: 70770 Location: Sallard # 10 Coordinates: Letter: L Section 15 Township: 26w Range: 9w Or Latitude Longitude Date Started: 8/12/94 Run: 11 91 |
|--------------------|---|
| FIELD OBSERVATIONS | Sample Number(s): KD 209 Sample Depth: 12' Feet Final PID Reading 2pp PID Reading Depth 12' Feet Yes No Groundwater Encountered Approximate Depth Feet |
| CLOSURE | Remediation Method: Excavation |
| REMARKS | Remarks: Dug test Hole to 12', Took 7:0 Sample, Closed pit Signature of Specialist: My Pura (SP3191) 03/16/94 |



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

| | SAMPLE | IDENTIFICA | TION | | | |
|--|----------------------|-----------------|----------------------------|----------|------------|-------------|
| | Field | ID | | Lab iD | | |
| SAMPLE NUMBER: | KD2 | 09 | 945 | 5912 | | |
| MTR CODE SITE NAME: | 70770 |) | | N/A | | |
| SAMPLE DATE TIME (Hrs): | 8/12/94 | | | 2915 | | |
| SAMPLED BY: | | N | I/A | | | |
| DATE OF TPH EXT. ANAL.: | 8/14/9 | | 8/ | 16/94 | | |
| DATE OF BTEX EXT. ANAL.: | 8 | 117/94 | 81 | 19194 | | |
| TYPE DESCRIPTION: | V € | | Charse | Brown Su | ~e | - |
| REMARKS: | | DECLUITO | | | | |
| | | RESULTS | | | | |
| PARAMETER | RESULT | UNITS | DF | QUALIFIE | RS M(g) | V(mi) |
| BENZENE | 20,025 | MG/KG | | | | |
| TOLUENE | 40.025 | MG/KG | | | | |
| ETHYL BENZENE | 40.025 | MG/KG | | | | |
| TOTAL XYLENES | 40,025 | MG/KG | | | | |
| TOTAL BTEX | 40.10 | MG/KG | | | | |
| TPH (418.1) | 10le | MG/KG | | | 2.10 | 28 |
| HEADSPACE PID | 2 | PPM | | | | |
| PERCENT SOLIDS | 93.8 | % | ering (dag) Led ering (| | | |
| The Surrogate Recovery was at Narrative: | TPH is by EPA Method | % for this samp | | | ble. | |
| ATI resu | uts all | ached. | | | | |
| OF = Dilution Factor Used | | | | | | |

Approved By:

Test Method for

Cil and Grease and Petroleum Hydrocarbons

Mater and Soil

**

74/08/16 12:46

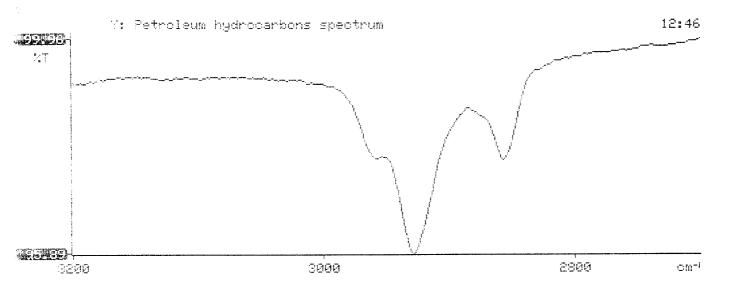
Sample identification 245912

* Initial mass of sample, g

Volume of sample after extraction, ml

Petroleum hydrocarbons, ppm 105.626

Net absorba**nce** of hydrocarbons (2930 cm-1)





ATI I.D. 408364

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/17/94, 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.

H. Mitchell Rubenstein, Ph.D.

Laboratory Manager

MR:jt

Enclosure





GAS CHROMATOGRAPHY RESULTS

TEST

: BTEX (EPA 8020)

CLIENT

: BTEX (EPA 8020)
: EL PASO NATURAL GAS CO. ATI I.D.: 408364

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

| SAMPL | | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|-------|-------------------|--------|-----------------|-------------------|------------------|----------------|
| 10 | 945907 | NON-AQ | 08/11/94 | 08/17/94 | 08/19/94 | 10 |
| 11 | 945912 | NON-AQ | 08/12/94 | 08/17/94 | 08/19/94 | 1 |
| 12 | 945913 | NON-AQ | 08/12/94 | 08/17/94 | 08/19/94 | 20 |
| PARAM | IETER | | UNITS | 10 | 11 | 12 |
| BENZE | ENE | | MG/KG | <0.25 | <0.025 | 10 |
| TOLUE | ENE | | MG/KG | 39 | <0.025 | 110 |
| ETHYI | LBENZENE | | MG/KG | 3.0 | <0.025 | 20 |
| TOTAL | XYLENES | | MG/KG | 69 | <0.025 | 190 |
| SURRO | DGATE: | | | | | |
| BROMO | OFLUOROBENZENE (% |) | | 277* | 94 | 350* |

^{*}OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road Farmington, New Mexico 87401 (506) 326-2262 FAX (506) 326-2388

Elevation Borehole Location 724 K 9W **GWL** Depth Jeff W. Kindley Logged By Drilled By 0915 08/18/95 Date/Time Started Date/Time Completed 08118195 1806 JWX26

BH-1

EPNG Pits Project Name 6000.77 Phase 14509 Project Number 70770 Ballard #10 **Project Location**

Jeff W. Kindley Well Logged By Personnel On-Site Contractors On-Site Client Personnel On-Site

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

| (Feet) No | ample umber | Sample Interval | Sample Type & Recovery (inches) | Semple Description Classification System: USCS | USCS Symbol | Depth Lithology Change (feet) | • | Monitoring its: PPM BH | s/ H \$ | Drilling Conditions & Blow Counts |
|-----------|----------------|--------------------|--|--|----------------|-------------------------------|---|------------------------------|----------------|--------------------------------------|
| | | (₹ bo 2 | (A) N | SM, Br silty sund, iny, olense, nonplastic, modern. Borng terminated at 20 | | | | | % | 0945 35 blow awats partook |

at 18 to 20' and Submitted For Comments: Geologist Signature



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

| | Field IDab 195 | Lab 10,00/21/95 |
|---------------------------|-------------------|-------------------|
| SAMPLE NUMBER: | JWK 286 | 9472820 |
| MTR CODE SITE NAME: | 70770 | Ballard #10 |
| SAMPLE DATE TIME (Hrs): | 08-18-95 | 11: 25 09: 45 |
| PROJECT: | Phase II Drilling | |
| DATE OF TPH EXT. ANAL.: | 8/21/05 | 8-21-95 |
| DATE OF BTEX EXT. ANAL.: | 8/23/95 | 8/23/95 |
| TYPE DESCRIPTION: | V6 | Brown Sand & Clay |
| , | | |

| Field Remarks: | |
|----------------|--|
| Field Remarks: | |

RESULTS

| PARAMETER | RESULT | UNITS | | QUALIFIE | RS | |
|---------------------|--------|-------------|----|----------|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | 4 .5 | MG/KG | | | | |
| TOLUENE | 4 .5 | MG/KG | | | | |
| ETHYL BENZENE | < .5 | MG/KG | | | | |
| TOTAL XYLENES | < 1.5 | MG/KG | | | | |
| TOTAL BTEX | < 3 | MG/KG | | | | |
| TPH (418.1) | 25.1 1 | zakis MG/KG | | | 2.01 | 28 |
| HEADSPACE PID | 0 | PPM | | | | |
| PERCENT SOLIDS | 91,6 | % | | | | |

The Surrogate Recovery was at 106 % for this sample All QA/QC was acceptable.

Narrative:

| | | | | | |
|---------------------------|----------|------|-------|---------|--|
| | | | | | |
| DF = Dilution Factor Used | | | | | |
| | o D | | | Stolar | |
| Approved By: | <u> </u> | | Date: | 0(00/4) | |

```
Test Method for
     Oil and Grease and Petroleum Hydrocarbons
                                                   *
                 in Water and Soil
                                                   *
                                                   *
                                                   *
           Perkin-Elmer Model 1600 FT-IR
                                                   *
                  Analysis Report
*****************
         15:28
95/08/21
  Sample identification
947280
  Initial mass of sample, g
*
  Volume of sample after extraction, ml
  Petroleum hydrocarbons, ppm
25.074
 Net absorbance of hydrocarbons (2930 cm-1)
0.013
*
         Y: Petroleum hydrocarbons spectrum
99.58
 ^{2}T
```

3999

3200

15:29

 cm^{-1}

2800

BTEX SOIL SAMPLE WORKSHEET

| File | ; | : | 947280 | Date Printed : 8/25/95 | |
|-----------------------|----------|---|--------|-----------------------------------|--|
| Soil Mass | s (g) | : | 4.95 | Multiplier (L/g) : 0.00101 | |
| Extraction vol | . (mL) | : | 20 | DF (Analytical) : 200 | |
| Shot Volume | (uL) | : | 100 | DF (Report) : 0.20202 | |
| | | | | Det. Limit | |
| Benzene | (ug/L) | : | 0.00 | Benzene (mg/Kg): 0.000 0.505 | |
| Toluene | (ug/L) | : | 0.00 | Toluene (mg/Kg): 0.000 0.505 | |
| Ethylbenzene | (ug/L) | : | 0.00 | Ethylbenzene (mg/Kg): 0.000 0.505 | |
| p & m-xylene | (ug/L) | : | 0.00 | p & m-xylene (mg/Kg): 0.000 1.010 | |
| a milana | 100011 | | 0.00 | o vylono (ma/Ka): 0.000 0.505 | |

0.00

o-xylene (ug/L):

Total xylenes (mg/Kg): 0.000 Total BTEX (mg/Kg): 0.000

o-xylene (mg/Kg):

0.000

0.505

1.515

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082395-1.017
Method : C:\LABQUEST\METHODS\9001.MET

Sample ID : 947280,4.95G,100U Acquired : Aug 24, 1995 02:04:12 Printed : Aug 24, 1995 02:30:25

User : MARLON

Channel A Results

| COMPONENT | RET TIME | AREA | CONC (ug/L) |
|--------------|----------|----------|-------------|
| | | | |
| BENZENE | 3.440 | 0 | 0.0000 |
| a,a,a TFT | 4.920 | 4749485 | 91.3192 |
| TOLUENE | 6.743 | 82970 | -0.5179 |
| ETHYLBENZENE | 10.513 | 74365 | -0.3055 |
| M & P XYLENE | 10.857 | 75369 | -4.9546 |
| O XYLENE | 11.943 | 0 | 0.0000 |
| B F B | 13.420 | 76170704 | 105.7431 |

C:\LABQUEST\CHROM001\082395-1.017 -- Channel A

