

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE
DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

HAMMOND #55
Meter/Line ID - 89142

DEC 21 1998
JUL 2 1998

SITE DETAILS

Legals - Twn: 27 Rng: 08

Sec: 26

Unit: G

NMOCD Hazard Ranking: 40

Land Type: 2 - Federal

Operator: GREAT LAKES CHEMICAL CORP

Pit Closure Date: 07/28/94

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: 89142 Location: Hammond No. 55
 Operator #: 4605 Operator Name: Great Lakes Chemical District: Ballard
 Coordinates: Letter: G Section 26 Township: 27 Range: 8
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 6/13/94 Area: 07 Run: 32

NMOCD Zone:

(From NMOCD
Maps)

Inside

Outside

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 Large Canyon

(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 Zone Topo - Inside
2 pits will close. Pit has liquid in it. (called Ballard)

DIGITIZED

| | |
|-----------------------|---|
| ORIGINAL PIT LOCATION | <div data-bbox="628 288 1075 335" data-label="Section-Header"><p>ORIGINAL PIT LOCATION</p></div> <div data-bbox="209 354 1501 460" data-label="Text"><p>Original Pit : a) Degrees from North <u>260°</u> Footage from Wellhead <u>103'</u> b) Length : <u>22'</u> Width : <u>20'</u> Depth : <u>3'</u></p></div> <div data-bbox="209 496 1501 1083" data-label="Diagram"></div> |
| REMARKS | <div data-bbox="199 1142 651 1286" data-label="Text"><p>Remarks : <u>Pictures @ 0940 (4-7)</u> <u>End Dump</u></p></div> |
| | <div data-bbox="199 1749 451 1790" data-label="Text"><p>Completed By:</p></div> <div data-bbox="288 1812 799 1951" data-label="Text"><p><u>Cory Chene</u> Signature</p></div> <div data-bbox="1050 1832 1228 1957" data-label="Text"><p><u>1/13/24</u> Date</p></div> |

| | | |
|--|--|--|
| | | |
|--|--|--|

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

| | |
|---------------------------|---|
| GENERAL | <p>Meter: <u>89142</u> Location: <u>Hammond #55</u></p> <p>Coordinates: Letter: <u>G</u> Section <u>26</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7/28/94</u> Run: <u>07</u> <u>32</u></p> |
| FIELD OBSERVATIONS | <p>Sample Number(s): <u>KD 172</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>172 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p> |
| CLOSURE | <p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>90</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>7/28/94</u> Pit Closed By: <u>BEI</u></p> |
| REMARKS | <p>Remarks : <u>EXCAVATED pit to 12', TOOK PID SAMPLE, Closed Pit.</u></p> <p>_____</p> <p>_____</p> |
| | <p>Signature of Specialist: <u>Henry D. [Signature]</u></p> |



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|----------|-----------------|
| SAMPLE NUMBER: | KD172 | 945783 |
| MTR CODE SITE NAME: | 89142 | N/A |
| SAMPLE DATE TIME (Hrs): | 7-28-94 | 1500 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. ANAL.: | 8-2-94 | 8/2/94 |
| DATE OF BTEX EXT. ANAL.: | 8/4/94 | 8/5/94 |
| TYPE DESCRIPTION: | VL | Brown Sand/Clay |

REMARKS:

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|----------------|--------|-------|------------|---|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | 40.13 | MG/KG | 5 | | | |
| TOLUENE | 40.13 | MG/KG | 5 | | | |
| ETHYL BENZENE | 0.42 | MG/KG | 5 | | | |
| TOTAL XYLENES | 6.8 | MG/KG | 5 | | | |
| TOTAL BTEX | 7.5 | MG/KG | | | | |
| TPH (418.1) | 5200 | MG/KG | | | 204 | 2E |
| HEADSPACE PID | 172 | PPM | | | | |
| PERCENT SOLIDS | 88.2 | % | | | | |

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

The Surrogate Recovery was at 108 % for this sample All QA/QC was acceptable.
Narrative: ATIS results attached.

DF = Dilution Factor Used

Approved By: J.P.

Date: 9/2/94

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

Perkin-Elmer Model 1600 FT-IR
 Analysis Report

94/08/02 12:59

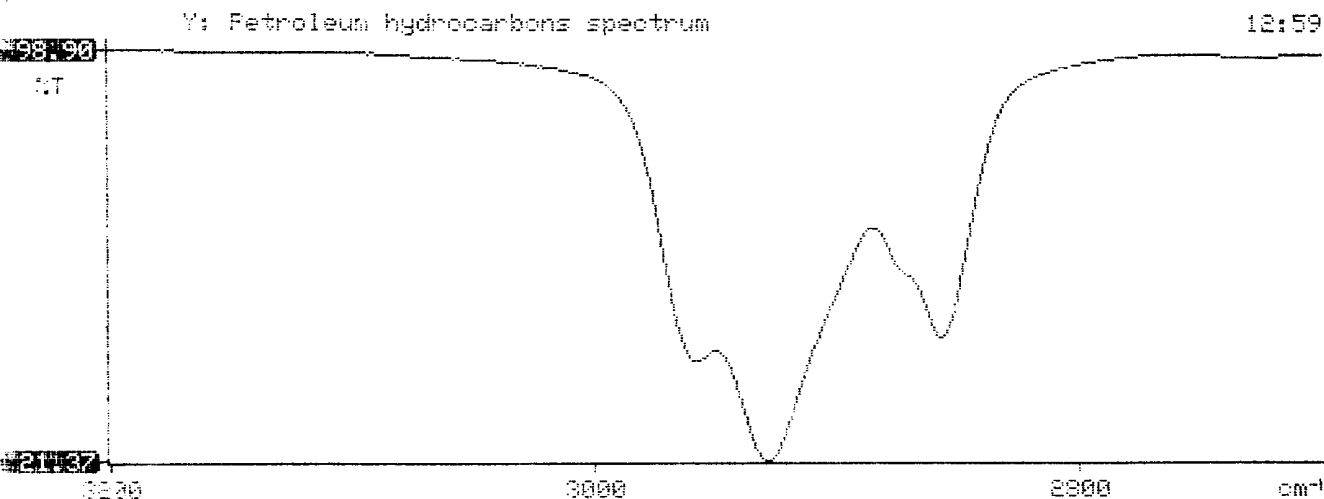
% Sample identification
 945783

% Initial mass of sample, g
 2.040

% Volume of sample after extraction, ml
 28.000

% Petroleum hydrocarbons, ppm
 5201.381

% Net absorbance of hydrocarbons (2930 cm⁻¹)
 0.663





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.

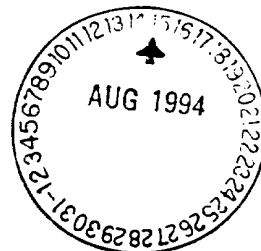
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.


Letitia Krakowski, Ph.D.
Project Manager


H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



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 |
|---------------|-------------|--------|--------------|----------------|---------------|-------------|
| 01 | 945781 | NON-AQ | 07/28/94 | 08/04/94 | 08/05/94 | 10 |
| 02 | 945782 | NON-AQ | 07/28/94 | 08/04/94 | 08/05/94 | 10 |
| 03 | 945783 | NON-AQ | 07/28/94 | 08/04/94 | 08/05/94 | 5 |
| PARAMETER | | | UNITS | 01 | 02 | 03 |
| BENZENE | | | MG/KG | <0.25 | <0.25 | <0.13 |
| TOLUENE | | | MG/KG | 10 | <0.25 | <0.13 |
| ETHYLBENZENE | | | MG/KG | 2.8 | 2.4 | 0.42 |
| TOTAL XYLENES | | | MG/KG | 54 | 37 | 6.8 |

SURROGATE:

BROMOFLUOROBENZENE (%) 71 121* 108

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

PHASE III

RECORD OF SUBSURFACE EXPLORATION

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH1
Well # 1
Page 1 of 1

Project Name EPNG PITS
Project Number 14509 Phase 6000.77
Project Location Hammond #55 59148

Well Logged By John LaBarbera
Personnel On-Site M. Danahue, D. G. H., D. C. H.
Contractors On-Site
Client Personnel On-Site

Elevation
Borehole Location Water G-524-T22-88
GWL Depth
Logged By John LaBarbera
Drilled By M. Danahue
Date/Time Started 7/19/95 - 1220
Date/Time Completed - 1305

Drilling Method 4.25" ID HSA
Air Monitoring Method PID / CGE

| Depth (Feet) | Sample Number | Sample Interval | Sample Type & Recovery (inches) | Sample Description Classification System: USCS | USCS Symbol | Depth Lithology Change (feet) | Air Monitoring Units: <u>ppm</u> BZ BH <u>AS</u> | | | Drilling Conditions & Blow Counts |
|-----------------|------------------|--------------------|--|---|----------------|--|--|-----|-------------------------|--------------------------------------|
| 0 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 18 | 1 | 18-19.5 | 15 | Brown, soft, v. fin sand, CL CLAY, wet, odor, med. plasticity At bottom of spoon, | CL | | 31 | 2.5 | <u>1000</u> <u>5</u> | at H ₂ O into 18" |
| 20 | | | | Brown, clayey, silty fin. | SC | | | | | |
| 23 | 2 | 23-24 | 12 | SAND, wet, med Brown, soft, clayey, silty, fine moist, no odor noted. At bottom of spoon - Brown, SC clayey, silty, fine med SAND | SC | | 0 | 24 | <u>100</u> <u>14</u> | at H ₂ O into 18" |
| 25 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | | |

Comments:

Sample JFL 14 sent to lab for BTEX / TPH analysis

Geologist Signature

John LaBarbera



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II Drilling
Hammond #55
(23-24')

SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|----------------------------|----------|-----------------|
| SAMPLE NUMBER: | JFL 14 | 947038 |
| MTR CODE SITE NAME: | 89142 | N/A |
| SAMPLE DATE TIME (Hrs): | 07-19-95 | 12:47 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. ANAL.: | 7-20-95 | 7-20-95 |
| DATE OF BTEX EXT. ANAL.: | 07-21-95 | 07-23-95 |
| TYPE DESCRIPTION: | V6 | Brown clay, wet |

REMARKS:

RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|----------------|--------|-------|------------|---|------|-------|
| | | | DF | Q | M(g) | V(ml) |
| BENZENE | 40.025 | MG/KG | 1 | | | |
| TOLUENE | 40.025 | MG/KG | 1 | | | |
| ETHYL BENZENE | 40.025 | MG/KG | 1 | | | |
| TOTAL XYLENES | 40.025 | MG/KG | 1 | | | |
| TOTAL BTEX | 40.10 | MG/KG | | | | |
| TPH (418.1) | 49.6 | MG/KG | | | 1.99 | 28 |
| HEADSPACE PID | 7 | PPM | | | | |
| PERCENT SOLIDS | 82.3 | % | | | | |

-- 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:

At 1 Results attached

DF = Dilution Factor Used

Approved By:

J.F.

Date:

8/3/95

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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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* 95/07/20 14:32

* Sample identification
947038

* Initial mass of sample, g
1.990

* Volume of sample after extraction, ml
28.000

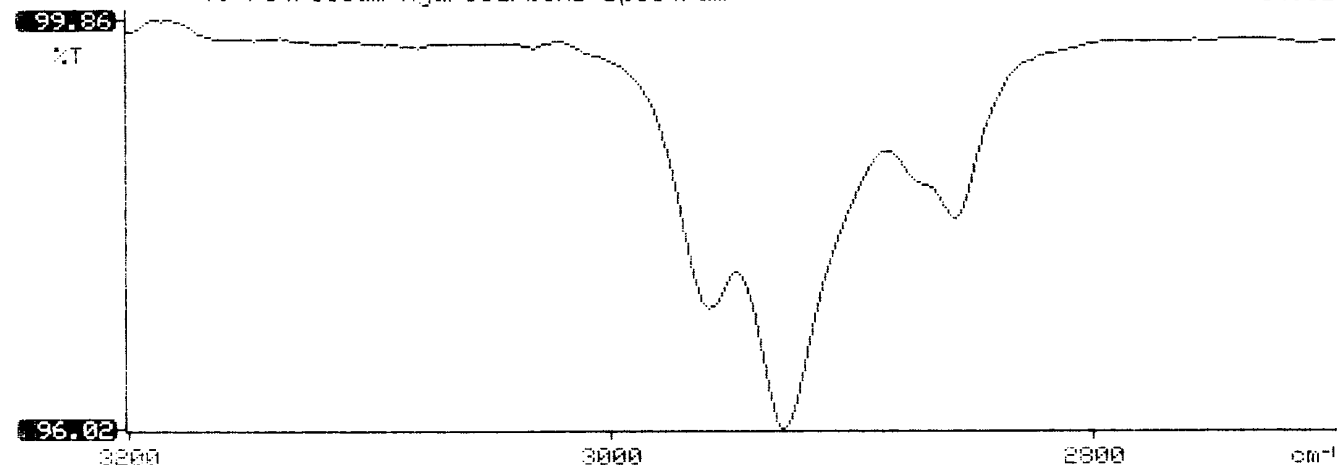
* Petroleum hydrocarbons, ppm
49.636

* Net absorbance of hydrocarbons (2930 cm⁻¹)
0.016

*
*
*

Y: Petroleum hydrocarbons spectrum

14:32





Analytical **Technologies**, Inc.

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

ATI I.D. 507388

July 26, 1995

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

Project Name/Number: PIT CLOSURE/PHII DRILL I 24324

Attention: John Lambdin

On 07/21/95, 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.

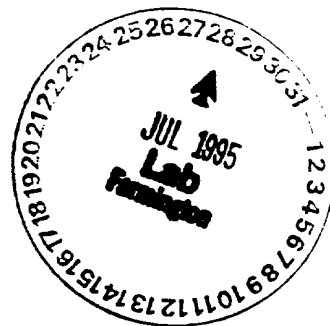
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:gsm

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507388
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHII DRILL I

| SAMPLE ID. # | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|--------------|-------------|--------|--------------|----------------|---------------|-------------|
| 04 | 947037 | NON-AQ | 07/19/95 | 07/21/95 | 07/22/95 | 1 |
| 05 | 947038 | NON-AQ | 07/19/95 | 07/21/95 | 07/23/95 | 1 |
| 06 | 947039 | NON-AQ | 07/19/95 | 07/21/95 | 07/22/95 | 50 |

| PARAMETER | UNITS | 04 | 05 | 06 |
|---------------|-------|--------|--------|------|
| BENZENE | MG/KG | <0.025 | <0.025 | <1.3 |
| TOLUENE | MG/KG | <0.025 | <0.025 | 28 |
| ETHYLBENZENE | MG/KG | <0.025 | <0.025 | 9.0 |
| TOTAL XYLENES | MG/KG | <0.025 | <0.025 | 79 |

SURROGATE:

BROMOFLUOROBENZENE (%) 106 98 NA*