

Denny E. Faust
EPFS PIT CLOSURE SUMMARY
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Stewart LS #1
Meter/Line ID - 70117

Approved

SITE DETAILS

Legals - Twn: 30 Rng: 10
NMOC Hazard Ranking: 10
Operator: Amoco

Sec: 28 Unit: K
Land Type: BLM

PREVIOUS ACTIVITIES

Site Assessment: 5/3/94
Monitor Well: N/A

Excavation: 5/16/94
Re-Excavation: N/A

Soil Boring: 6/22/95
Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the top of bedrock, which was 6 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 298 ppm at 6 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 126 mg/kg and TPH was above standards at 1,110 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. The soil lithology beneath the excavation consisted of a light tan, fine to medium grained sand (sandstone), which continued to 10.5 feet bgs where refusal was encountered. A soil sample was collected for BTEX and TPH analysis at 10-10.5 feet bgs. Laboratory analysis showed total BTEX and TPH to be below standards at .077 mg/kg and 167 mg/kg respectively.

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 4 feet beneath the initial excavation.
- The excavation was terminated in bedrock.
- 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 in time with minimal risk to the environment.

RECEIVED
MAR - 9 1998
OIL CON. DIV.
DIST. 3

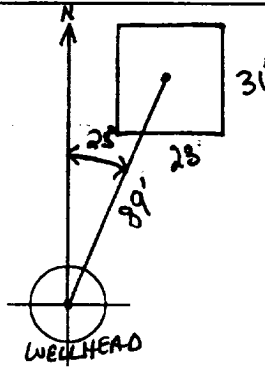
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>70117</u> Location: <u>STEWART LS #1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>K</u> Section <u>28</u> Township: <u>30</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5.3.94</u> Area: <u>10</u> Run: <u>73</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Wellhead Protection Area :</p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0' points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>10</u> POINTS</p>
REMARKS	<p>Remarks : <u>THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT HAS SOME PARAFIN IN IT. REDLINE AND TOPO CONFIRMED LOCATION TO BE INSIDE THE V.Z.</u></p> <p><u>DIG & HAUL</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 23° Footage from Wellhead 89'
b) Length : 31' Width : 23' Depth : 2'



REMARKS

Remarks :

TOOK PICTURES AT 11:37 A.M.

END DUMP

Completed By:

Robert Thompson

Signature

5.3.94

Date

PHASE I EXCAVATION

GENERAL	Meter: <u>10117</u> Location: <u>STEWART LS #1</u> Coordinates: Letter: <u>K</u> Section <u>28</u> Township: <u>30</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Date Started : <u>5-16-94</u> Area: <u>10</u> Run: <u>73</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KP #51</u> Sample Depth: <u>6'</u> Feet Final PID Reading <u>298</u> PID Reading Depth <u>6'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>70</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>5-16-94</u> Pit Closed By: <u>B.E.F.</u>
REMARKS	Remarks : <u>SOME LINE MARKERS ON LOCATION. GOT SOME</u> <u>SLUG ON SIDE OF PIT. UNDER SLUG IS ABOUT 14" OF WATER. 3'</u> <u>HE STARTED HITTING SANDSTONE 6' COULD NOT DIG ANY MORE SANDSTONE.</u> Signature of Specialist: <u>Kelly Padilla</u>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 51	945189
MTR CODE SITE NAME:	70117	N/A
SAMPLE DATE TIME (Hrs):	5-16-94	1200
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-17-94	5/17/94
DATE OF BTEX EXT. ANAL.:	5/20/94	5/22/94
TYPE DESCRIPTION:	VC	Coarse Sand & Clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	1.5	MG/KG	20			
TOLUENE	30	MG/KG	20			
ETHYL BENZENE	9.9	MG/KG	20			
TOTAL XYLENES	85	MG/KG	20			
TOTAL BTEX	126	MG/KG				
TPH (418.1)	1110	MG/KG			2.07	28
HEADSPACE PID	298	PPM				
PERCENT SOLIDS	90.0	%				

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

The Surrogate Recovery was at 87 % for this sample All QA/QC was acceptable.

Narrative:

ATZ results attached.

DF = Dilution Factor Used

Approved By:

John Lambden

Date:

7/14/94

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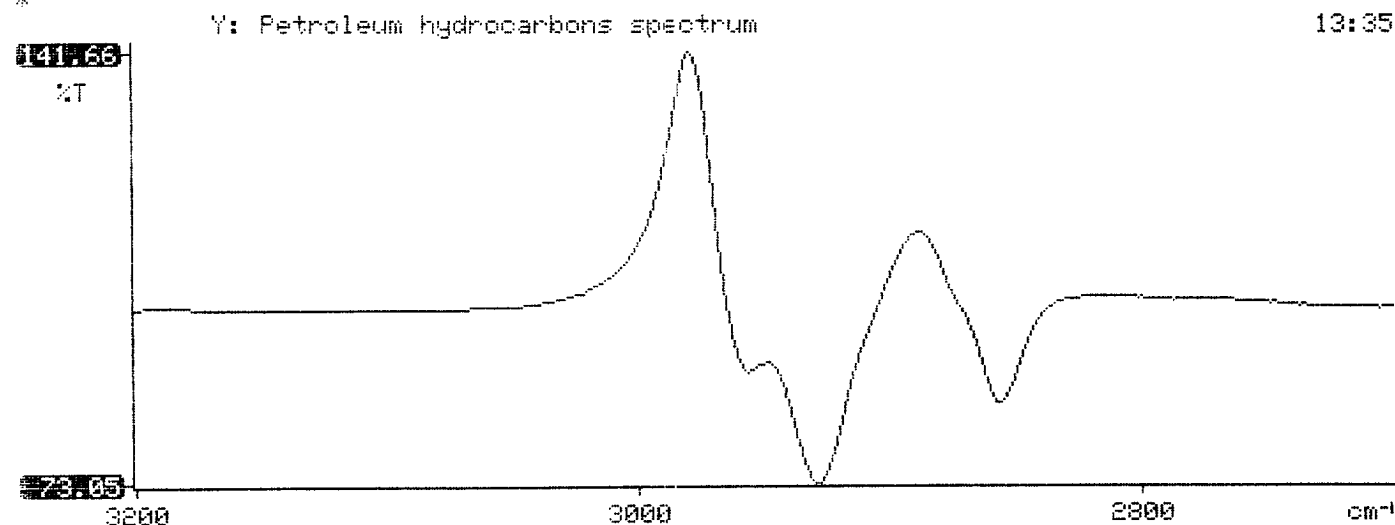
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*                                     *
*               Test Method for      *
*   Oil and Grease and Petroleum Hydrocarbons   *
*               in Water and Soil.          *
*                                     *
*               Perkin-Elmer Model 1600 FT-IR   *
*               Analysis Report              *
*****

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* 94/05/17 13:35
*
* Sample identification
* 945189
*
* Initial mass of sample, g
* 2.070
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 1110.165
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.141
*

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Analytical Technologies, Inc.

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

ATI I.D. 405378

June 2, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/18/94, 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.

Client samples 945004 and 945007 were submitted to Analytical Technologies' Albuquerque laboratory past the recommended EPA holding time.

NOTED
8
6/6/94

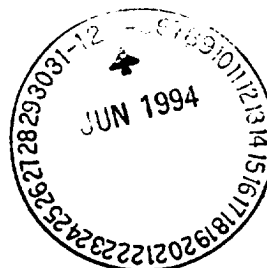
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405378
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
21	945187	NON-AQ	05/16/94	05/20/94	05/22/94	20
22	945188	NON-AQ	05/16/94	05/20/94	05/22/94	20
23	945189	NON-AQ	05/16/94	05/20/94	05/22/94	20

PARAMETER	UNITS	21	22	23
BENZENE	MG/KG	1.7	1.5	1.5
TOLUENE	MG/KG	17	47	30
ETHYLBENZENE	MG/KG	2.8	11	9.9
TOTAL XYLENES	MG/KG	31	170	85

SURROGATE:

TRIFLUOROTOLUENE (%) 104 81 87

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

BH-1

Well #

Page

1 of 1

Project Name

EPNG Pits

Project Number

14509

Phase

601 600

Project Location

STEWART LS #1, 70117

Elevation

Borehole Location

GWL Depth

Logged By

S.Kelly

Drilled By

K. Padilla

Date/Time Started

6/22/95, 0945

Date/Time Completed

6/22/95, 1015

Well Logged By

S.Kelly

Personnel On-Site

K. Padilla, F. Rivera, J. Tipton

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4" ID HSA

Air Monitoring Method

CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU 5/15 BZ BH S	Drilling Conditions & Blow Counts
0				Backfill to 6'				
5								
10	1	10-12	5'	SAND, light tan with rust mottling, fine to med sand, dry, dense, May be weathered rock		0	8	2H AK 6/22/95 → at 8'
15				BOH- 10.5 Refusal at 10.5'				2H 15 1010-at 10' split spoon driven only 5' with 30 b
20								
25								
30								
35								
40								

Comments:

10'-10.5' sample (SER 18) sent to lab (BTEX + TPH). Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature

Mark Kelly



Phase II - Drilling

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SRK 18	92/6923
MTR CODE SITE NAME:	70117	N/A
SAMPLE DATE TIME (Hrs):	6-22-95	1010
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6-23-95	6-23-95
DATE OF BTEX EXT. ANAL.:	6-29-95	6-30-95
TYPE DESCRIPTION:	VG	light brown sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	0.077	MG/KG	1			
TOTAL BTEX	0.077 0.152	MG/KG				
TPH (418.1)	167	MG/KG			1.98	28
HEADSPACE PID	15	PPM				
PERCENT SOLIDS	92.3	%				

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

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached for BTEX and EPA 8015 modified

DF = Dilution Factor Used

Approved By:

Date:

7/17/95

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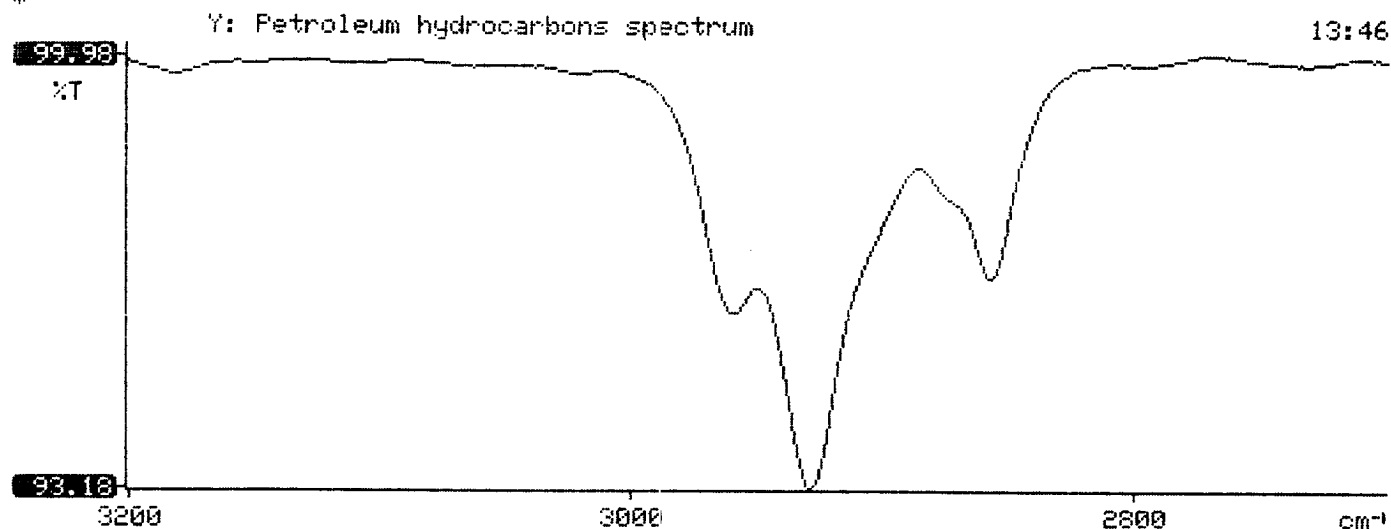
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons . *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report         *
*****

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* 95/06/23 13:46
*
* Sample identification
* 946923
*
* Initial mass of sample, g
* 1.980
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 166.500
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.030
*
*
*

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Analytical **Technologies**, Inc.

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

ATI I.D. **506426**

July 10, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

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

Kimberly D. McNeill
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager





GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506426
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946921	NON-AQ	06/21/95	06/29/95	06/30/95	1
05	946923	NON-AQ	06/22/95	06/29/95	06/30/95	1
06	946924	NON-AQ	06/22/95	06/29/95	06/30/95	1
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES			MG/KG	<0.025	0.077	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 98 101 106



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506426
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
05	946923	NON-AQ	06/22/98	06/30/95	07/06/95	1
08	946926	NON-AQ	06/26/95	06/30/95	06/30/95	1
09	946927	NON-AQ	06/26/95	06/30/95	06/30/95	1
PARAMETER			UNITS	05	08	09
FUEL HYDROCARBONS			MG/KG	<5	<5	<5
HYDROCARBON RANGE				-	-	-
HYDROCARBONS QUANTITATED USING				-	-	-
SURROGATE:						
O-TERPHENYL (%)				108	94	93