EPFS PIT CLOSURE SUMMARY

Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Approved

Walker Com No. 2
Meter/Line ID - 70666

SITE DETAILS

Legals - Twn: 31 **Rng:** 9 **Sec:** 32 **Unit:** K
NMOCD Hazard Ranking: 40 **Land Type:** BLM
Operator: Amoco

PREVIOUS ACTIVITIES

Site Assessment: 8/30/94 **Excavation:** 9/19/94 **Soil Boring:** 7/26/95
Monitor Well: N/A **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 subsurface soils to be 584 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 97.5 mg/kg and TPH was above standards at 11,400 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 dark gray, fine grained silty sand, which continued to approximately 27 feet bgs. At 27 feet bgs an olive brown, clayey silt was encountered and continued to approximately 36 feet bgs. At 36 feet bgs the soil lithology changed again to a hard, brown, fine grained sand, which continued to the termination of the boring at 40 feet bgs. A soil sample was collected for BTEX and TPH analysis at 38-40 feet bgs. Laboratory analysis showed total BTEX and TPH to be below standards at .156 mg/kg and 48.3 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 26 feet beneath 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 in time with minimal risk to the environment.

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

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 70-666 Location: Walker COM No. 2
Operator #: 0203 Operator Name: Amoco Production P/L District: Aztec
Coordinates: Letter: K Section 32 Township: 31 Range: 9
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 8/30/94 Area: 04 Run: 83

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

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 Alamo Canyon
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

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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
Seven pits, location drip pit has liquid in it. Will close one pit.

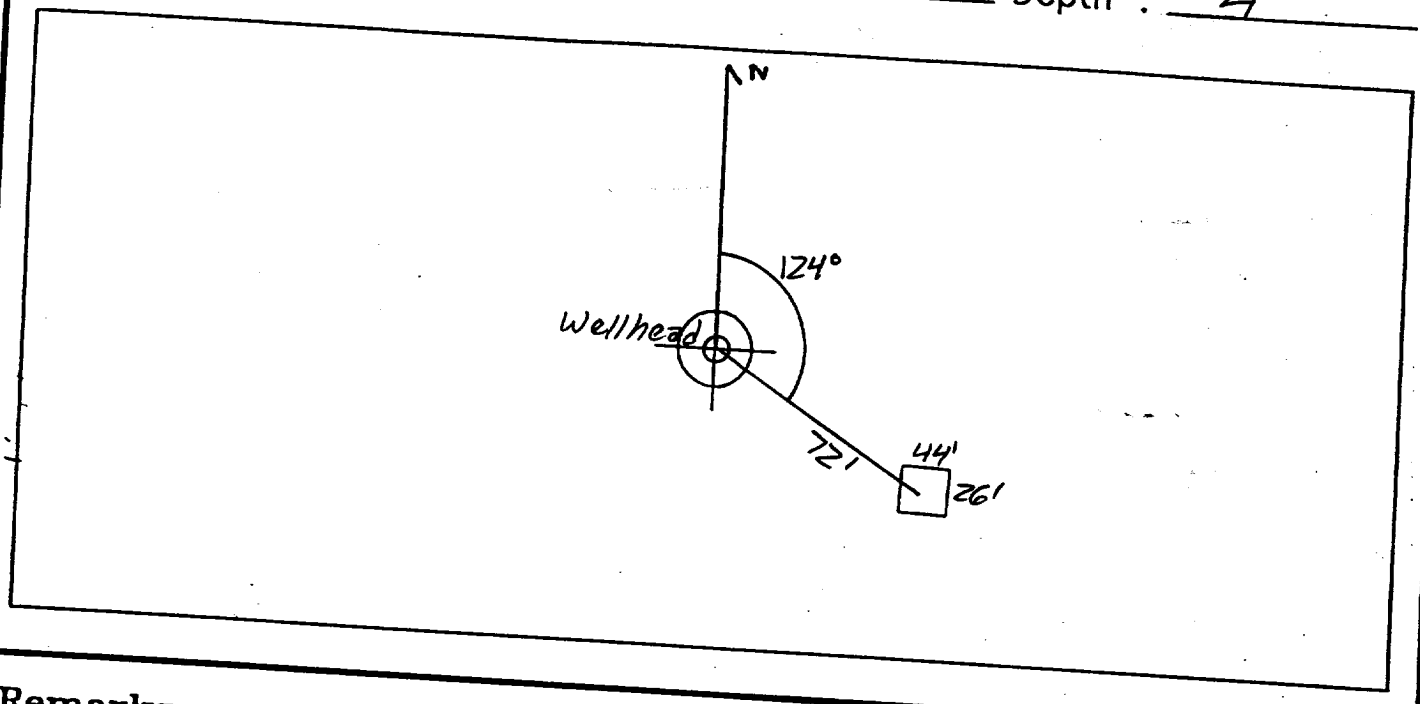
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 124° Footage from Wellhead 72'

b) Length : 44' Width : 26' Depth : 4'



REMARKS

Remarks :

Pictures @ 1059 (13-16, Roll 2)
Dump Truck

Completed By:

Signature

8/30/94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70666 Location: WALKER COM #2

Coordinates: Letter: K Section 32 Township: 31 Range: 9

Or Latitude _____ Longitude _____

Date Started : 9-19-94 Run: 04 83

FIELD OBSERVATIONS

Sample Number(s): KD 266 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 584 PPm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 110
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	

Pit Closure Date: 9/19/94 Pit Closed By: BEI

REMARKS

Remarks : EXCAVATED pit to 12', TOOK PID Sample, Closed pit.

Signature of Specialist: Kurt Fow

(SP3191) 03/16/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 266	9461 58
MTR CODE | SITE NAME:	70666	N/A
SAMPLE DATE | TIME (Hrs):	9-19-94	1345
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9-20-94	9-20-94
DATE OF BTEX EXT. | ANAL.:	9-22-94	9-25-94
TYPE | DESCRIPTION:	VC	Black Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.89	MG/KG	1			
TOLUENE	15	MG/KG	1			
ETHYL BENZENE	8.6	MG/KG	1			
TOTAL XYLENES	73	MG/KG	1			
TOTAL BTEX	97.5	MG/KG				
TPH (418.1)	11,400	MG/KG			0.58	28
HEADSPACE PID	584	PPM				
PERCENT SOLIDS	84.6	%				

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

The Surrogate Recovery was at 80 % for this sample All QA/QC was acceptable.

Narrative:

AT 1 Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 10/23/94

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

94/09/20 13:40

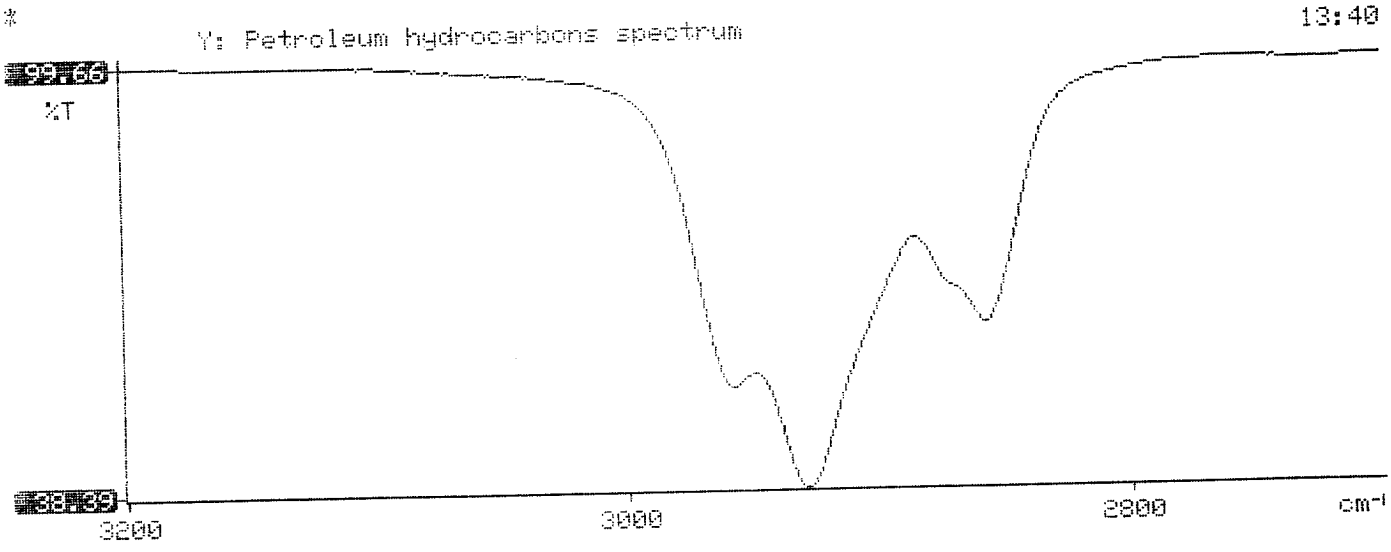
Sample identification
946158

Initial mass of sample, g
0.580

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
11369.420

Net absorbance of hydrocarbons (2930 cm-1)
0.412



Analytical Technologies, Inc.

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

ATI I.D. **409389**

September 29, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/21/94**, 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

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS ATI I.D.: 409389

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	946158	NON-AQ	09/19/94	09/22/94	09/25/94	1
14	946159	NON-AQ	09/19/94	09/22/94	09/25/94	1

PARAMETER	UNITS	13	14
BENZENE	MG/KG	0.89	<0.025
TOLUENE	MG/KG	15	<0.025
ETHYLBENZENE	MG/KG	8.6	<0.025
TOTAL XYLENES	MG/KG	73	0.14
SURROGATE:			
BROMOFLUOROBENZENE (%)		80	92

PHASE II

RECORD OF SUBSURFACE EX. .JRATION

Borehole # BH-1
Well #
Page 1 of 1

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase ~~601~~ 6000
Project Location Walker Com No. 2, 70-66E

Elevation
Borehole Location T31, R9, S.32, K
GWL Depth
Logged By S.Kelly
Drilled By M Donohue
Date/Time Started 7/26/95, 1230
Date/Time Completed 7/26/95, 1500

Well Logged By S.Kelly
Personnel On-Site M. Donohue, D. Charley
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼" 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 BZ	BH	S/HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15				silty SAND, dk grey, 5-15% silt, fine sand, loose, damp. ↓						
20	1	18-20	1.1'						126/223	1250
25	2	23-25	1.0'	SAA					21/331	1255
30	3	28-30	1.0'	clayey SILT, olive brown, 5-15% clay, stiff, dry		27			2/319	1300 hard drilling, like rock.
35	4	33-35	1.0'	SAA		36			13/173	1320
40	5	38-40	.7'	SAND, rust/brown, fine sand, hard, dry.					D/7	1350
				BOH - 40.0'						

Comments: 38'-40' sample (SEK41) sent to lab (BTEX + TPH.) BH grouted to surface.

Geologist Signature Sarah Kelly

El Paso Natural Gas Company

Phase II Drills
Walker Com No. 2
(38'-40')

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK41	947086
MTR CODE | SITE NAME:	70666	N/A
SAMPLE DATE | TIME (Hrs):	07-26-95	13:50
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	07-27-95	07-27-95
DATE OF BTEX EXT. | ANAL.:	8-1-95	8-1-95
TYPE | DESCRIPTION:	VG	

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	0.026	MG/KG	1			
TOTAL XYLENES	0.13	MG/KG	1			
TOTAL BTEX	0.156	MG/KG				
TPH (418.1)	48.3	MG/KG			1.97	28
HEADSPACE PID	7	PPM				
PERCENT SOLIDS	88.2	%				

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

The Surrogate Recovery was at 111 % for this sample All QA/QC was acceptable.

Narrative: ATI Results attached

DF = Dilution Factor Used

Approved By: A.S. Date: 8/22/95

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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                      *
*                                                        *
**********************************************************
*
 95/07/27  14:38
*
*  Sample identification
 947086
*
*  Initial mass of sample, g
 1.970
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 48.322
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.016
*
*
*
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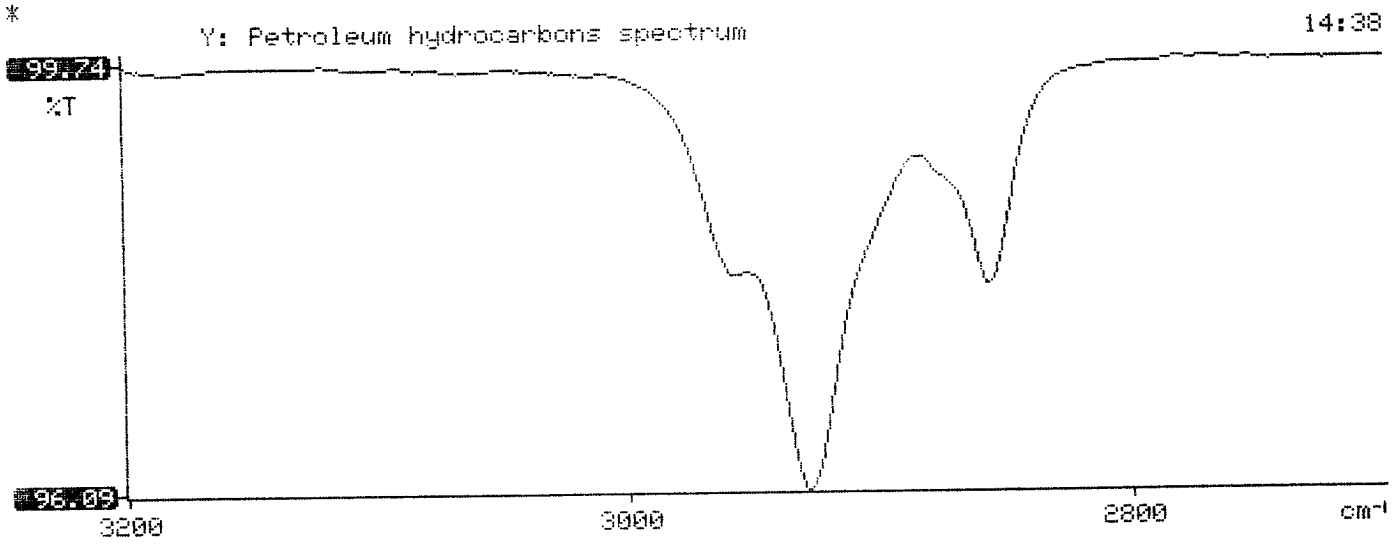


Analytical Technologies, Inc.

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

ATI I.D. **508302**

August 11, 1995

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

Project Name/Number: PIT CLOSURE/PHASE I & II 24324

Attention: John Lambdin

On **08/01/95**, 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.

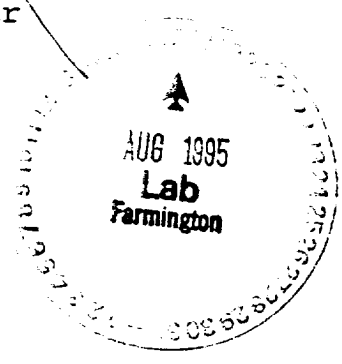
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 508302

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947086	NON-AQ	07/26/95	08/01/95	08/01/95	1
05	947087	NON-AQ	07/26/95	08/01/95	08/01/95	1
06	947088	NON-AQ	07/26/95	08/01/95	08/01/95	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	0.026	<0.025	<0.025
TOTAL XYLENES	MG/KG	0.13	0.030	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		111	109	103