

DEC 21 1998

HEATH GAS COM L#1
Meter/Line ID - 75867

RECEIVED
JUL 2 1998

OIL CON. DIV

SITE DETAILS

Approved
Legals - Twn: 30 Rng: 09

Sec: 32

Unit: B

NMOCD Hazard Ranking: 30

Land Type: 2 - Federal

Operator: AMOCO PRODUCTION COMPANY

Pit Closure Date: 05/02/94

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.

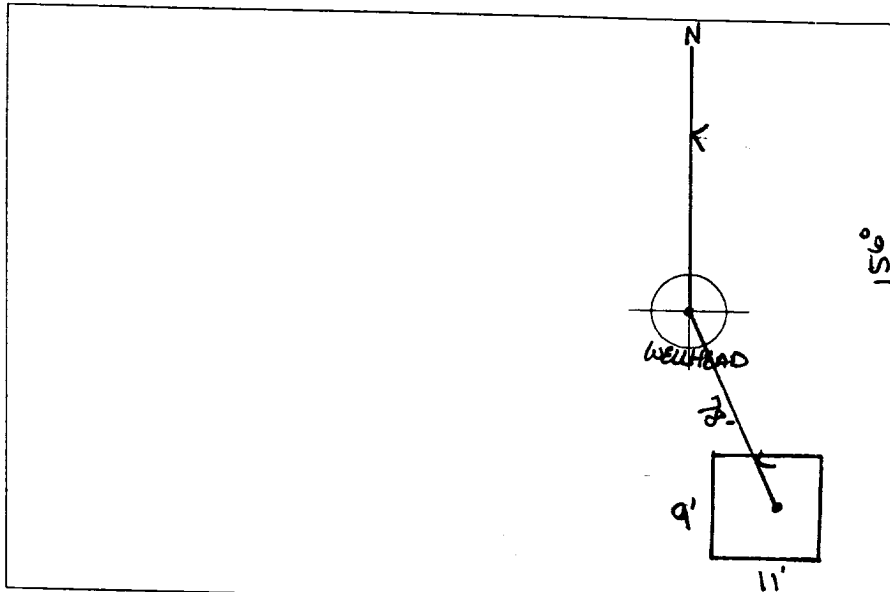
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>75867</u> Location: <u>HEATH GAS COM L#1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>B</u> Section <u>32</u> Township: <u>30</u> Range: <u>9</u></p> <p style="padding-left: 40px;">Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Visit Date: <u>4.14.94</u> Run: <u>10</u> <u>83</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: Inside _____ Land Type: BLM <input checked="" type="checkbox"/> (From NMOCD Vulnerable _____ State <input type="checkbox"/> Maps) Zone <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Outside <input type="checkbox"/> Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> 50 Ft to 99 Ft (10 points) <input type="checkbox"/> Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/></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"/> YES (20 points) <input checked="" type="checkbox"/> NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/></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>TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS</p>
REMARKS	<p>Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. DO NOT KNOW WHY LOCATION IS IN THE WATER VULNERABLE ZONE.</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 156° Footage to Wellhead 78'
b) Degrees from North _____ Footage to Dogleg _____
Dogleg Name _____
c) Length : 11' Width : 9' Depth : 2'



REMARKS

Remarks :

STARTED TAKING PICTURES AT 2:02 P.M.
END DUMP

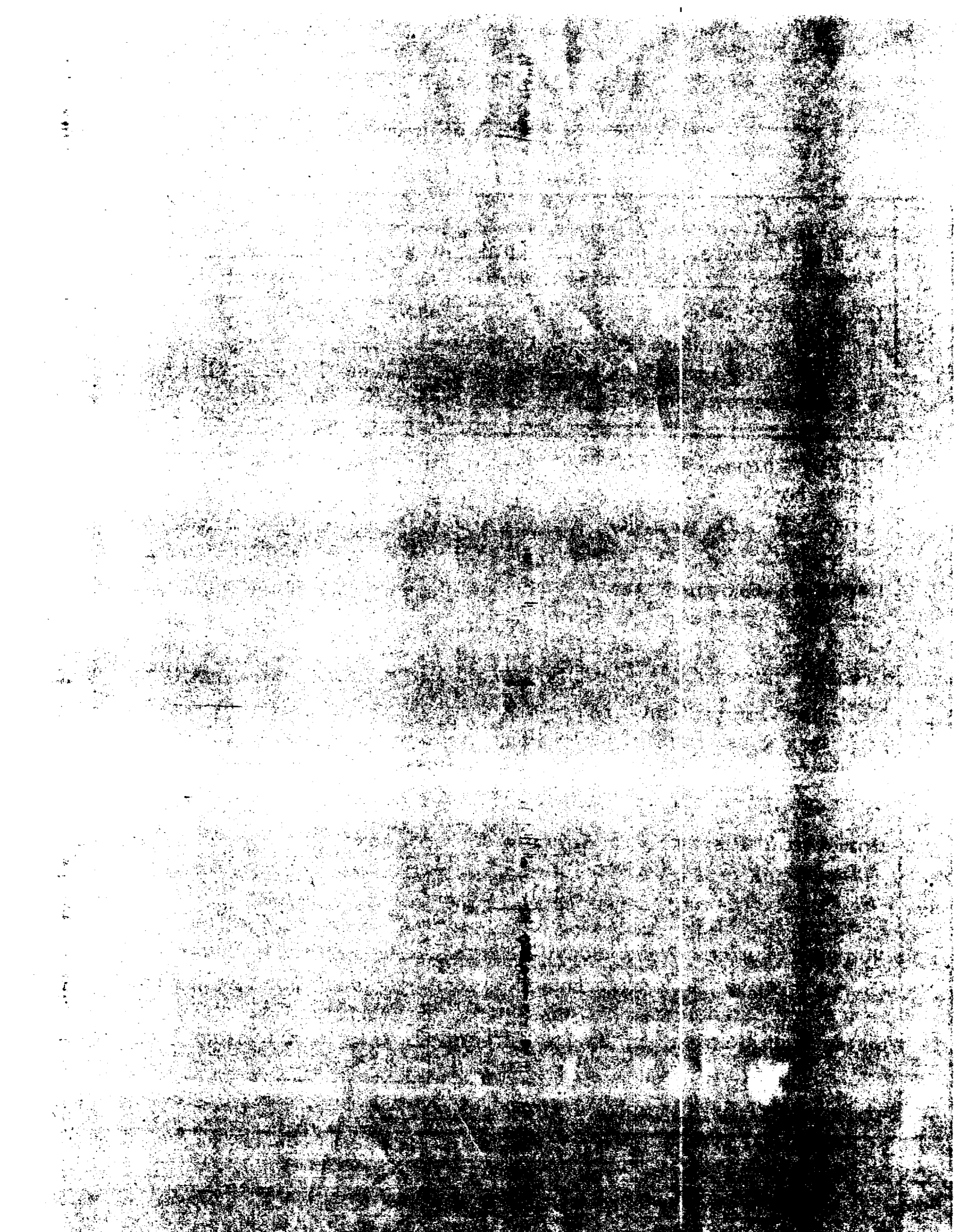
Completed By:

Robert Thompson
Signature

4.14.94
Date

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>75862</u> Location: <u>HEAD GAS COM L#1</u> Operator #: _____ Operator Name: _____ P/E District: _____ Coordinates: Letter: _____ Section: _____ Township: _____ Range: _____ Or Latitude: _____ Longitude: _____ Pit Type: Dehydrator _____ Location: Drip _____ Line Drip _____ Site Assessment Date: _____ Area: <u>10</u> Run: <u>83</u>		
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)		
	Land Types:		
	Inside: <input type="checkbox"/> (1) Outside: <input type="checkbox"/> (2)		
	BEM: <input type="checkbox"/> (1) State: <input type="checkbox"/> (2) Fee: <input type="checkbox"/> (3) Indian: _____		
REMARKS	Depth to Groundwater: Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (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? <input type="checkbox"/> (1) YES (20 points) <input type="checkbox"/> (2) NO (0 points)		
Horizontal Distance to Surface Water Body: Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)			
Name of Surface Water Body: <u>MANSEDO CANYON</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)			
Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'			
TOTAL HAZARD RANKING SCORE: <u>30</u> POINTS			
Remarks: _____ _____ _____			



PHASE I EXCAVATION

FIELD IT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>25867</u> Location: <u>Heath Gas Com L#1</u></p> <p>Coordinates: Letter: <u>B</u> Section <u>32</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>5-2-94</u> Area: <u>10</u> Run: <u>83</u></p>
FIELD OBSERVATIONS	<p style="text-align: center;">945057</p> <p>Sample Number(s): <u>4P11</u></p> <p>Sample Depth: <u>12</u> Feet</p> <p>Final PID Reading <u>365 ppm</u> PID Reading Depth <u>12</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>45</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>5-2-94</u> Pit Closed By: <u>KEI</u></p>
REMARKS	<p>Remarks : <u>Started Remediating pit to 12'. Took VC sample</u> <u>PID Reading was 365 ppm at 84". East wall still black.</u> <u>Closed pit.</u></p>
	<p>Signature of Specialist: <u>James J. Penrose</u></p>

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP11	945057
MTR CODE SITE NAME:	75867	N/A
SAMPLE DATE TIME (Hrs):	5/2/94	1420
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5/5/94	5/5/94
DATE OF BTEX EXT. ANAL.:	5/9/94	5/12/94
TYPE DESCRIPTION:	VC	Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<1.2	MG/KG	50			
TOLUENE	<1.2	MG/KG	50			
ETHYL BENZENE	4.2	MG/KG	50			
TOTAL XYLENES	64	MG/KG	50			
TOTAL BTEX	70.6	MG/KG				
TPH (418.1)	85%	MG/KG			2.08	28
HEADSPACE PID	365	PPM				
PERCENT SOLIDS	86.8	%				

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

The Surrogate Recovery was at 50 % for this sample All QA/QC was acceptable.

Narrative:

ATI BTEX Results attached. Surrogate Recovery outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

John Landi

Date:

7/14/94

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

* 04/05/05 12:33

* Sample identification
 * 045057

* Initial mass of sample, g
 * 2.080

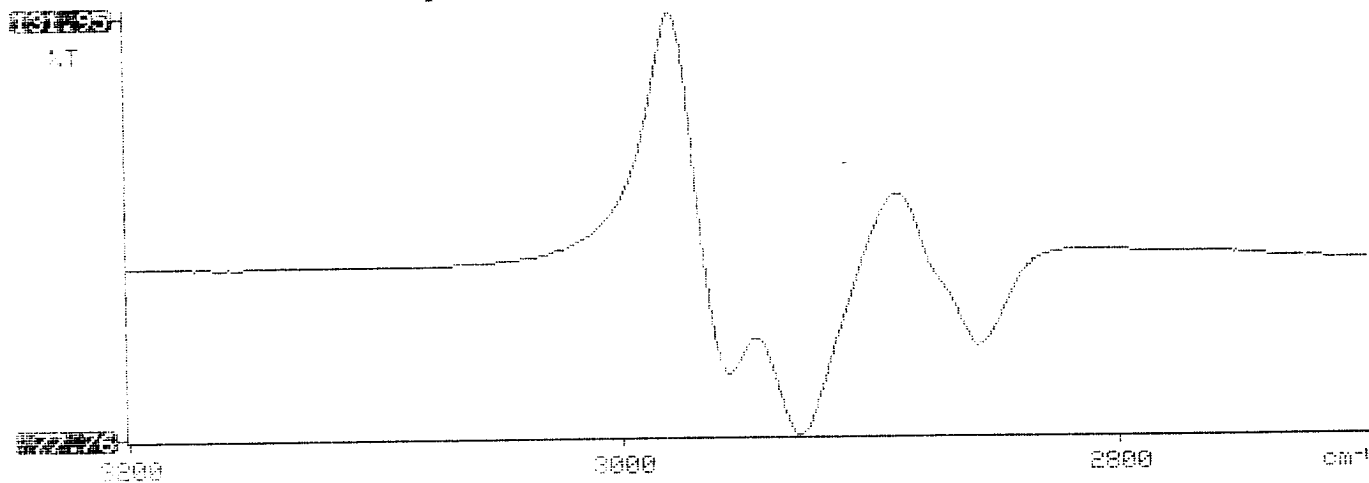
* Volume of sample after extraction, ml
 * 10.000

* Petroleum hydrocarbons, ppm
 * 851.393

* Net absorbance of hydrocarbons (2930 cm⁻¹)
 * 0.109

Y: Petroleum hydrocarbons spectrum

12:33





Analytical **Technologies**, Inc.

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

ATI I.D. 405331

May 19, 1994

El Paso Natural Gas Company
770 W. Navajo
Farmington, NM 87401

Project Name/Number: PIT PROJECT 24324

Attention: John Lambdin

On 05/06/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** and **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.

Upon arrival, it was noted that sample 945055 contained headspace. The client was notified and the sample was analyzed "as is."

The laboratory was instructed to correct the sampling data for sample 945075 to 05/04/94.

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:jd

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405331
 PROJECT # : 24324
 PROJECT NAME : PIT PROJECT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
08	945056	NON-AQ	05/02/94	05/09/94	05/13/94	25
09	945057	NON-AQ	05/02/94	05/09/94	05/12/94	50
10	945058	NON-AQ	05/02/94	05/09/94	05/13/94	50
PARAMETER			UNITS	08	09	10
BENZENE			MG/KG	<0.62	<1.2	17
TOLUENE			MG/KG	<0.62	<1.2	420
ETHYLBENZENE			MG/KG	3.1	4.2	66
TOTAL XYLENES			MG/KG	36	64	690

SURROGATE:
 BROMOFLUOROBENZENE (%) 103 50* 160*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # BH-1
Well # _____
Page 1 of 1

Project Name EPMB Pits
Project Number 14509 Phase 6DDP 77
Project Location Heath Gas Com L#1 75867

Elevation _____
Borehole Location _____
GWL Depth _____
Logged By CM Chance
Drilled By M. Donohue
Date/Time Started 5/22/95 - 0750
Date/Time Completed 5/22/95 - 0855

Well Logged By CM Chance
Personnel On-Site M. Donohue, K. Padilla, F. Rivera
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method 4 1/4" ID HSA
Air Monitoring Method PIR, C/GT

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 FS			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15-17	6"	Gray silty CLAY, med stiff, nonplastic, dry			6	13	216/1046	0805 Drilling Harder
20	2	20-22	10"	Gray silty CLAY, med stiff, nonplastic, dry, + ox staining			12	108	140/1100	0815 Hard Drilling
25	3	22.5-23.5	8"	A/A			11	120	210/1112	Refusal @ 22.5' 0829
30				TDB 22.5'						
35										
40										

Comments: 22.5-23.5' sample submitted for lab analysis (PTX, TPH) CMCLIS
Refusal @ 22.5'
6-94 H bags Type I cement, .5-50# bag Bentonite
Geologist Signature _____



Phase II

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CWC 15	946826
MTR CODE SITE NAME:	75867	N/A
SAMPLE DATE TIME (Hrs):	5-22-95	0828
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-23-95	5-23-95
DATE OF BTEX EXT. ANAL.:	5-24-95	5-26-95
TYPE DESCRIPTION:	VG	Light grey sand stone

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	0.036	MG/KG	1			
TOTAL XYLENES	0.29	MG/KG	1			
TOTAL BTEX	0.376	MG/KG				
TPH (418.1)	80.3	MG/KG			2.02	28
HEADSPACE PID	1112	PPM				
PERCENT SOLIDS	92.6	%				

-- 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:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

6/8/95

```

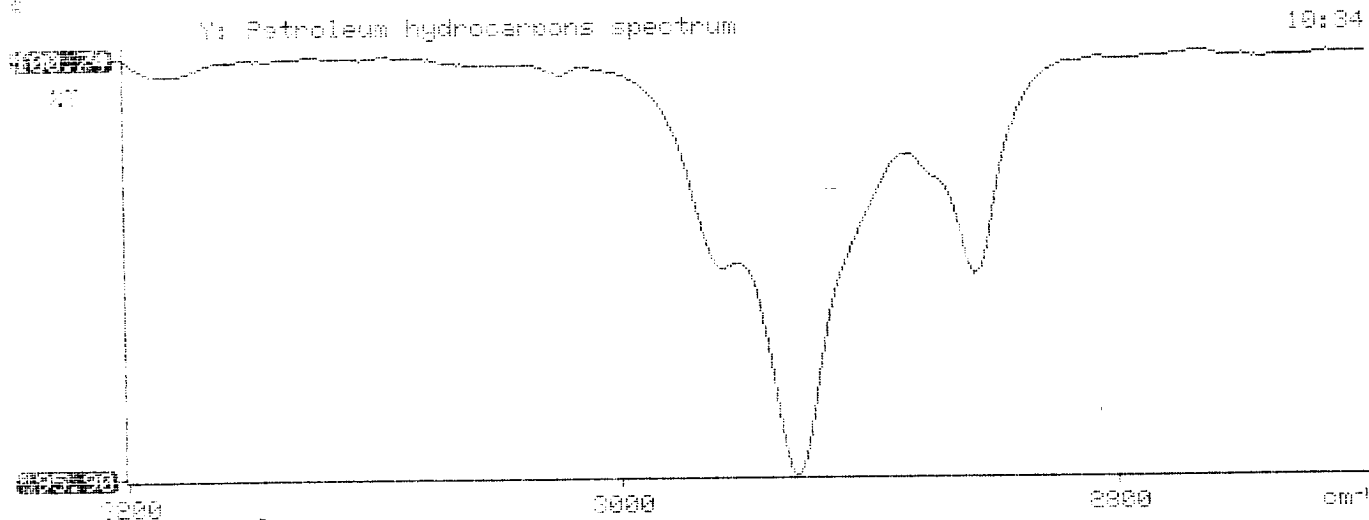
*****
*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum *
*      Hydrocarbons                 *
*      in Water and Soil            *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report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

```

```

95/05/23 10:34
*
* Sample Identification
* 844826
*
* Initial mass of sample, g
* 2.020
*
* Volume of sample after extraction, ml
* 29.000
*
* Petroleum hydrocarbons, ppm
* 99.334
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.021
*

```





Analytical **Technologies**, Inc.

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

ATI I.D. 505387

June 2, 1995

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

Project Name/Number: PIT CLOSURE 24024

Attention: John Lambdin

On 05/24/95, 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.

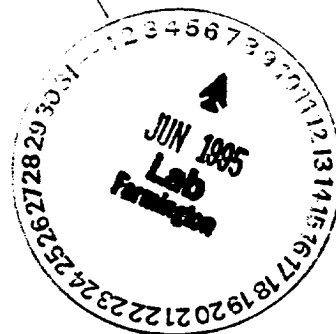
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 505387
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946826	NON-AQ	05/22/95	05/24/95	05/26/95	1
05	946827	NON-AQ	05/22/95	05/24/95	05/26/95	5
06	946828	NON-AQ	05/22/95	05/24/95	05/26/95	1
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.025	<0.12	0.083
TOLUENE			MG/KG	<0.025	3.1	<0.025
ETHYLBENZENE			MG/KG	0.036	0.67	0.36
TOTAL XYLENES			MG/KG	0.29	3.2	1.6

SURROGATE:

BROMOFLUOROBENZENE (%) 98 142* 102

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE