OK

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Jerry Sexton
DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

E.M. HARTMAN #1
Meter/Line ID - 90311

SITE DETAILS

Legals - Twn: 29 **Rng:** 11 **Sec:** 13 **Unit:** I
NMOCD Hazard Ranking: 10 **Land Type:** 4 - Fee
Operator: DUGAN PRODUCTION CORP **Pit Closure Date: 09/08/94**

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: 90311 Location: E.M. HARTMAN #1
Operator #: 1862 Operator Name: DUGAN PROD. P/L District: BLOOMFIELD
Coordinates: Letter: I Section 13 Township: 29 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 5.20.94 Area: 10 Run: 93

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 CITIZENS DITCH
(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: 10 **POINTS**

REMARKS

Remarks : ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS N.E. OF BLOOMFIELD AND NORTH OF CITIZENS DITCH. REDLINE AND TOPO CONFIRMED LOCATION IS INSIDE THE V.Z.

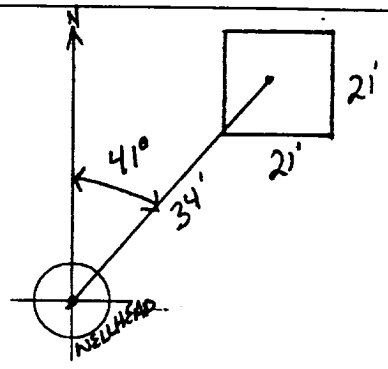
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 41° Footage from Wellhead 34'

b) Length : 21' Width : 21' Depth : 2'



REMARKS

Remarks :

TOOK PICTURES AT 3:24 P.M.

END DUMP

Completed By:

Robert Thompson

Signature

5.20.94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 90311 Location: E.M. Hartman #1

Coordinates: Letter: I Section 13 Township: 29 Range: 11

Or Latitude _____ Longitude _____

Date Started : 9-8-94 Run: 10 93

FIELD OBSERVATIONS

Sample Number(s): KP224 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 428 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 90

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-8-94 Pit Closed By: B.E.T

REMARKS

Remarks : Some Line markers. Started Remediating to 12' Soil Light gray with A smell. At 12' soil Light gray with A smell.

Signature of Specialist: Kelly Pachille

(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:	KP224	9416079
MTR CODE | SITE NAME:	90311	N/A
SAMPLE DATE | TIME (Hrs):	9-8-94	1640
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9/13/94	9/13/94
DATE OF BTEX EXT. | ANAL.:	9/14/94	9/14/94
TYPE | DESCRIPTION:	VC	Brown/Gray Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.13	MG/KG	5			
TOLUENE	<0.13	MG/KG	5			
ETHYL BENZENE	1.4	MG/KG	5			
TOTAL XYLENES	24	MG/KG	5			
TOTAL BTEX	25.7	MG/KG				
TPH (418.1)	1190 ~~1192.5~~ MS 9/16/94	MG/KG			2.12	28
HEADSPACE PID	428	PPM				
PERCENT SOLIDS	91.0	%				

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

The Surrogate Recovery was at 157 % for this sample All QA/QC was acceptable.

Narrative:
ATI Results Attached. Surrogate Recovery was outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By: _____ Date: 10/23/94

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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                *
*****************************************************
*
 94/09/13  14:07
*
*  Sample identification
 946079
*
*  Initial mass of sample, g
 2.120
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 1192.520
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.164
*
*
*
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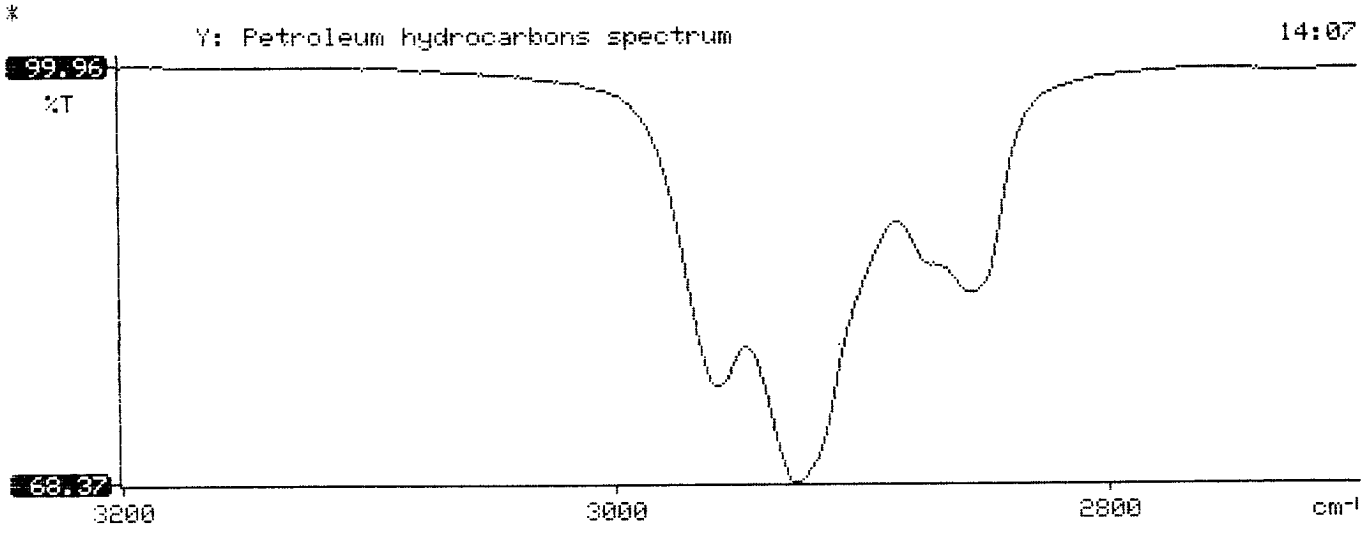


Analytical Technologies, Inc.

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

ATI I.D. **409354**

September 22, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

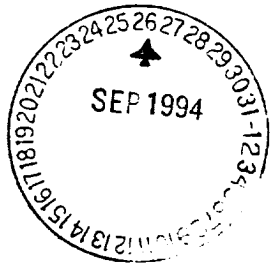
On **09/14/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409354

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946078	NON-AQ	09/08/94	09/14/94	09/16/94	1
05	946079	NON-AQ	09/08/94	09/14/94	09/16/94	5
06	946080	NON-AQ	09/08/94	09/14/94	09/16/94	10

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	<0.13	<0.25
TOLUENE	MG/KG	0.032	<0.13	<0.25
ETHYLBENZENE	MG/KG	<0.025	1.4	0.73
TOTAL XYLENES	MG/KG	<0.025	24	8.6
SURROGATE:				
BROMOFLUOROBENZENE (%)		103	157*	90

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

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 E.M. Hartman #1, 90311

Elevation
Borehole Location T29, R11, S.13, I
GWL Depth
Logged By S.Kelly
Drilled By K. Padilla
Date/Time Started 6/29/95, 1255
Date/Time Completed 6/29/95, 1500

Well Logged By S.Kelly
Personnel On-Site K. Padilla, F. Rivera, D. Chas
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/H/S	Drilling Conditions & Blow Counts
0				Backfill to 12!						
5										
10										
15	1	15-16.5	1.1'/1.5'	silty SAND, light brown, 10-20% silt, trace clay fine sand, loose, damp.					31/603	1310
20	2	20-22	.9'/20'	SAA, but with 10-20% clay.					54/721	1320
25	3	25-27	.05'/1.5'	SAA-?					19/227	1330 very poor recovery barely enough for headspace
30	4	30-32	1.0'/20'	SAA, less clay					0/0	1340
35				BOH-32'						
40										

AK 6/30/95

Comments: 30'-32' sample (SEK 26) sent to lab. (BTEX & TPH) Sample was bagged and iced prior to being ~~PAB~~ in jar. BH grouted to surface.

Geologist Signature

El Paso Natural Gas Company

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:	SEK26	946935
MTR CODE | SITE NAME:	90311	N/A
SAMPLE DATE | TIME (Hrs):	6-28-95	1340
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-4-95	7-4-95
DATE OF BTEX EXT. | ANAL.:	7-6-95	7-7-95
TYPE | DESCRIPTION:	VG	Brown fine sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG				
TOLUENE	<0.025	MG/KG				
ETHYL BENZENE	<0.025	MG/KG				
TOTAL XYLENES	<0.025	MG/KG				
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	86.8	MG/KG			1.98	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	92.3	%				

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

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.

Narrative:

QA/QC Results attached

DF = Dilution Factor Used

Approved By: JP

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                     *
**********************************************************
*
 95/07/04  09:47
*
*  Sample identification
 946935
*
*  Initial mass of sample, g
 1.980
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 86.841
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.021
*
*
*
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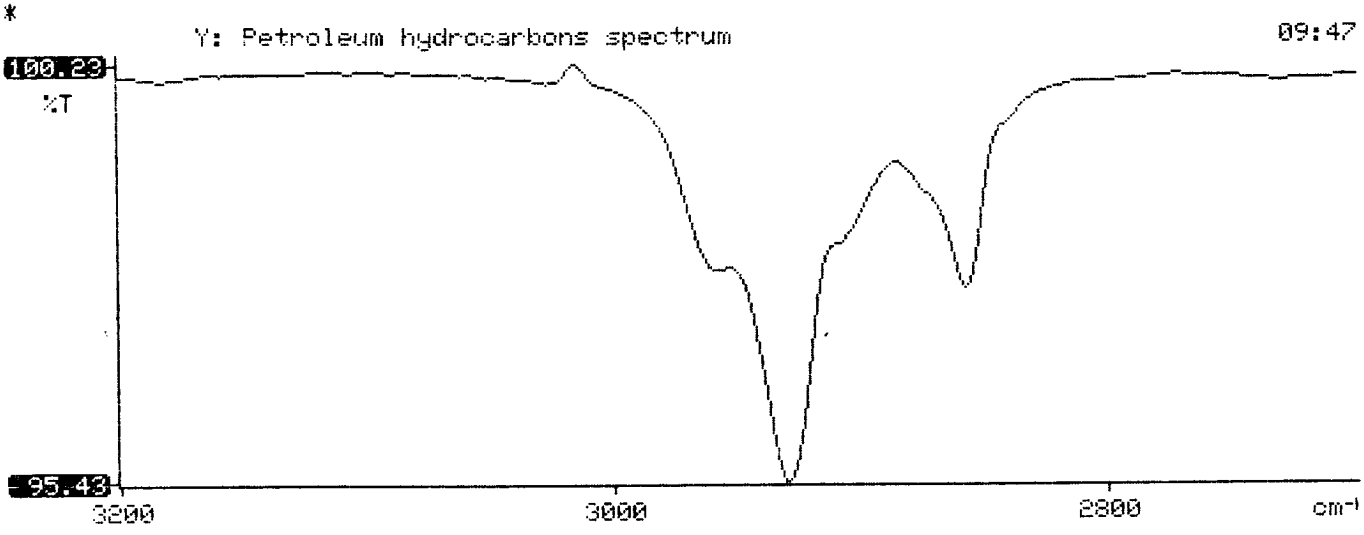


Analytical Technologies, Inc.

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

ATI I.D. **507308**

July 13, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II 38822

Attention: John Lambdin

On **07/06/95**, 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.

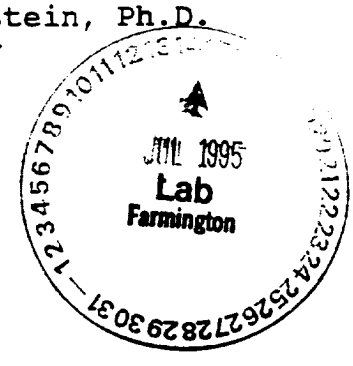
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:gsm

Enclosure



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS COMPANY ATI I.D.: 507308
PROJECT # : 38822
PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946934	NON-AQ	06/28/95	07/06/95	07/07/95	1
02	943635	NON-AQ	06/28/95	07/06/95	07/07/95	1
03	946936	NON-AQ	06/28/95	07/06/95	07/07/95	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<0.025	0.063
TOLUENE	MG/KG	<0.025	<0.025	1.1
ETHYLBENZENE	MG/KG	<0.025	<0.025	0.22
TOTAL XYLENES	MG/KG	<0.025	<0.025	1.5
SURROGATE:				
BROMOFLUOROBENZENE (%)		107	100	96