Denied 7-20-98
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Approved

PIT CLOSURE SUMMARY

Greer # 2
Meter/Line ID - 71209

SITE DETAILS

Legals - Twn: 26 **Rng:** 9 **Sec:** 16 **Unit:** K
NMOCD Hazard Ranking: 40 **Land Type:** STATE
Operator: Koch Exploration

PREVIOUS ACTIVITIES

Site Assessment: 6/21/94 **Excavation:** 8/12/94 **Soil Boring:** 8/17/95
Monitor Well: N/A **Re-Excavation:** N/A **Geoprobe:** N/A

CONCLUSIONS

The initial test pit 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 0 ppm at 12 feet bgs. Excavation was terminated and a sample was collected and analyzed for BTEX and TPH. Sample analysis indicated total BTEX to be below standards at .137 mg/kg and TPH was above standards at 405 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of the impact to soils. The soil lithology consisted of a dark gray stiff clay, which continued to the termination of the boring at 20 feet bgs. A sample was collected for BTEX and TPH analysis at 18-20 feet bgs. Laboratory analysis showed total BTEX to be below laboratory detection limits and TPH present at 58.8 mg/kg.

RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

- Test boring sample results indicated soils below standards 3 feet beneath the initial excavation.
- The soil lithology beneath the pit consists of a clay material, which would inhibit further downward migration of residual hydrocarbons.
- 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.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 71209 Location: Greer #2
Operator #: _____ Operator Name: Koch exp P/L District: Ballard
Coordinates: Letter: K Section 16 Township: 26N Range: 9W
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 6-21-94 Area: 11 Run: 91

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)

RECEIVED
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OIL CON. DIV.
DIST. 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 Reed Canyon Wash
(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: 30 **POINTS**

REMARKS

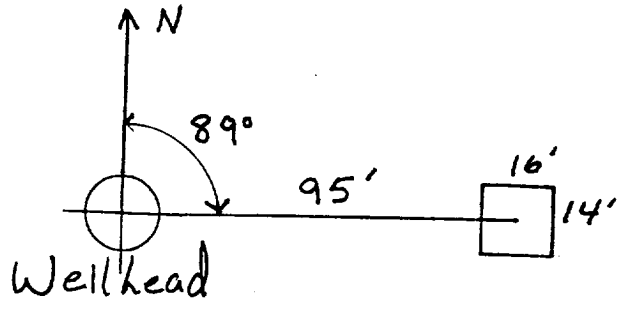
Remarks : Two pits, one with tank. Drip pit is dry
Inside V.Z. on Redline & Topo

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 89° Footage from Wellhead 95

b) Length : 16 Width : 14 Depth : 4



REMARKS

Remarks :

Photos- 1314 hrs

End dump

Completed By:

Signature

6-21-94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71209 Location: Greer #2

Coordinates: Letter: K Section 16 Township: 26 Range: 9

Or Latitude _____ Longitude _____

Date Started : 8-12-94 Run: 11 91

FIELD OBSERVATIONS

Sample Number(s): KP 185 _____ _____ _____

Sample Depth: 12' Feet 8/15/94 KOK as taken from sample jar.

Final PID Reading 000 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☐ Approx. Cubic Yards 0

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☒

Soil Disposition:

Envirotech ~~☒~~ 8/12/94 BR ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 8-12-94 Pit Closed By: B.E.T

REMARKS

Remarks : Some LINE MARKERS. Pit Looked CLEAN. dug A test hole. to 12' Closed Pit 000.

Signature of Specialist: Kelly Padilla

(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:	KP 185	94/5919
MTR CODE | SITE NAME:	71209	N/A
SAMPLE DATE | TIME (Hrs):	8/12/94	1400
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8/16/94	8/16/94
DATE OF BTEX EXT. | ANAL.:	8/17/94	8/19/94
TYPE | DESCRIPTION:	VG	Brown Fine Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	0.062	MG/KG	1			
ETHYL BENZENE	< 0.025	MG/KG	1			
TOTAL XYLENES	< 0.025	MG/KG	1			
TOTAL BTEX	0.137	MG/KG				
TPH (418.1)	405	MG/KG			2.06	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	90.5	%				

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

The Surrogate Recovery was at 90 % for this sample All QA/QC was acceptable.

Narrative: ATI results attached.

DF = Dilution Factor Used

Approved By: J.S. 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 *
****

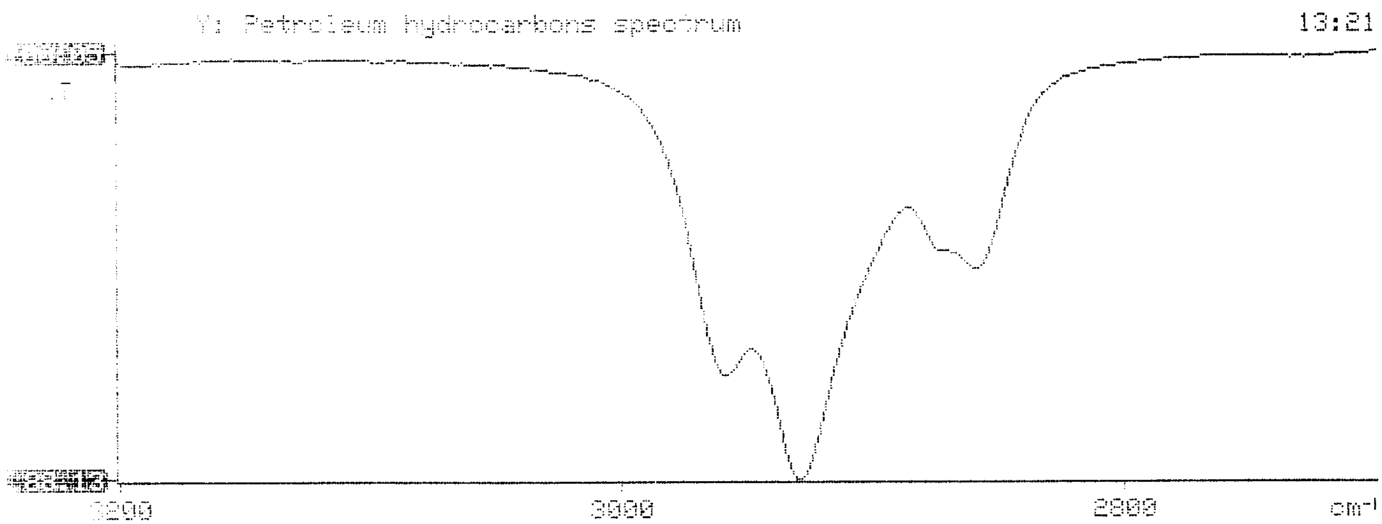
?4/?8/16 13:21

Sample identification
??7019

Initial mass of sample, g
??5?

Volume of sample after extraction, ml
??.000

Petroleum hydrocarbons, ppm
?04.681
Net absorbance of hydrocarbons (2930 cm-1)
?.?74



Analytical Technologies, Inc.

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

ATI I.D. **408364**

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **08/17/94**, 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.

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.: 408364
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	945917	NON-AQ	08/12/94	08/17/94	08/23/94	1
17	945918	NON-AQ	08/12/94	08/17/94	08/19/94	1
18	945919	NON-AQ	08/12/94	08/17/94	08/19/94	1

PARAMETER	UNITS	16	17	18
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	0.062
ETHYLBENZENE	MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES	MG/KG	<0.025	<0.025	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		88	99	90

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase 6000.77
Project Location Koch Exploration Gerrets #2 71209

Elevation
Borehole Location T26N, R9W, Sec 16, K
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Suddurth
Date/Time Started 08/17/95 1109
Date/Time Completed 08/17/95 1220

Well Logged By Jeff W. Kindley
Personnel On-Site G. Suddurth, D. Roberts, H. Keil
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 ID HSA
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S/LS	Drilling Conditions & Blow Counts
0				Excavated Soil (Backfill) to 12'						
5										
10										
15										
20	1	18-20	18/24	CLAY, dark gray, stiff, dry, no odor. Boring terminated at 20'					0/0	1202
25										
30										
35										
40										

Comments: Sample collected from 18 to 20' and submitted for analysis of BTEX and TPH. BH grouted to the surface

Geologist Signature Jeffrey Kindley

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:	JWK 21	947270
MTR CODE | SITE NAME:	71209	Koch Exploration Greer #2
SAMPLE DATE | TIME (Hrs):	08-17-95	12:02
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT. | ANAL.:	8/21/95	8/21/95
TYPE | DESCRIPTION:	VG	Dark brown sand & clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG		F		
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	RBB/25/95 ~~59~~ 58.8	MG/KG			2.0	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	94.9	%				

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

The Surrogate Recovery was at 96% for this sample All QA/QC was acceptable.

Narrative: Benzene Taken from FID.

DF = Dilution Factor Used

Approved By: _____ Date: 8/24/95

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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                     *
**********************************************************
*
 95/08/21  14:57
*
*  Sample identification
 947270
*
*  Initial mass of sample, g
 2.000
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 58.830
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.017
*
*
*
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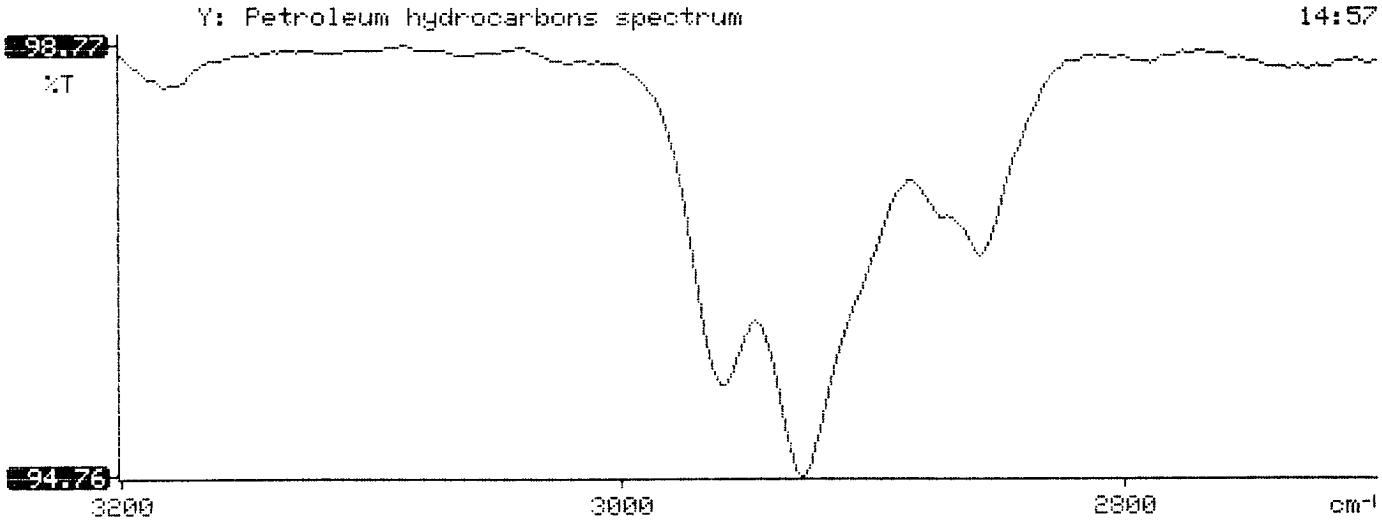


BTEX SOIL SAMPLE WORKSHEET

File	947270	**Date Printed**	8/24/95
Soil Mass (g)	4.98	**Multiplier (L/g)**	0.00100
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20080

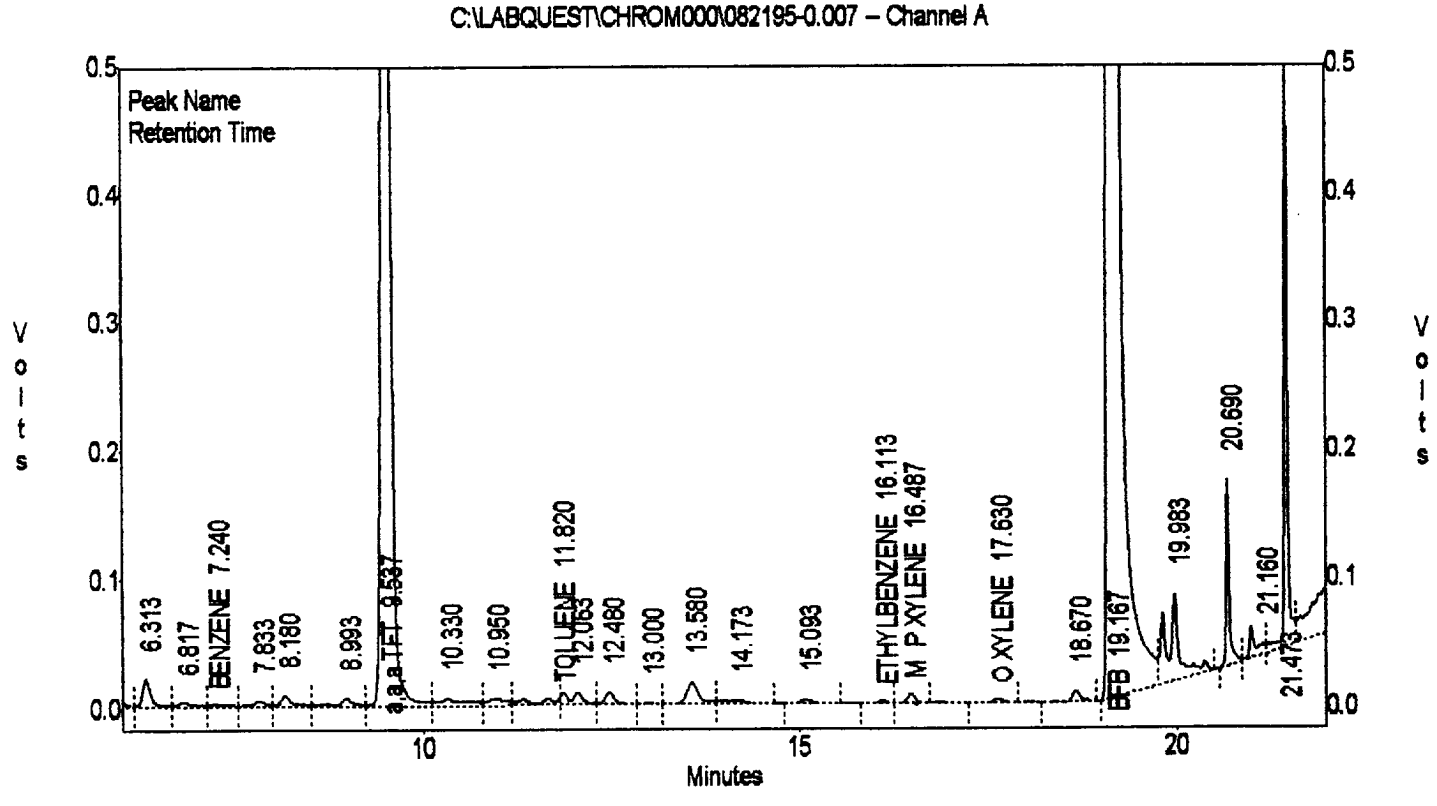
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.502
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.502
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.502
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	1.004
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.502
		Total xylenes (mg/Kg):	**0.000**	1.506
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.007
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947270,4.98G,100U
Acquired : Aug 21, 1995 16:37:54
Printed : Aug 21, 1995 17:04:09
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.240	13839	-2.4289
a,a,a TFT	9.537	8927028	90.5352
TOLUENE	11.820	107289	-0.5821
ETHYLBENZENE	16.113	15486	-0.3208
M & P XYLENE	16.487	54844	-3.0933
O XYLENE	17.630	31273	-0.1956
BFB	19.167	72101552	95.9600



EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.007
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947270,4.98G,100U
Acquired : Aug 21, 1995 16:37:54
Printed : Aug 21, 1995 17:04:14
User : MARLON

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.290	0	0.0000
a,a,a TFT	9.543	294463	96.4527
TOLUENE	11.897	0	0.0000
ETHYLBENZENE	16.147	0	0.0000
M & P XYLENE	16.530	0	0.0000
O XYLENE	17.667	0	0.0000
BFB	19.193	1662397	103.7973