Denny E. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Approved

TIBBAR FED #2 (PIT 2)
Meter/Line ID - 75605

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

SITE DETAILS

Legals - Twn: 26 **Rng:** 09 **Sec:** 13 **Unit:** P
NMOCD Hazard Ranking: 20 **Land Type:** 2 - Federal
Operator: MERIDIAN OIL INC **Pit Closure Date:** 08/09/94

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

4

GENERAL

Meter: 75605 Location: Tibbar Fed #2 Meridian (Pit #4)
Operator #: ~~0640~~ 2999 (KGW 6-24-94) Operator Name: ~~Beta Dev.~~ (KGW 6-24-94) P/L District: Ballard
Coordinates: Letter: P Section 13 Township: 26 Range: 9W
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 6-24-94 Area: 11 Run: 82

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 Blanco 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: 20 **POINTS**

REMARKS

Remarks : 3 pits on location. Drip pit is dry. other pits are dehy pit (liquid&oil) and separator. See other Assessment from this location.

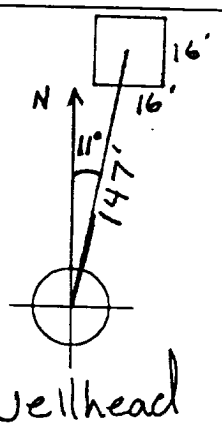
Inside V.Z. on Redline & Topo

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 11 Footage from Wellhead 147

b) Length : 16 Width : 16 Depth : 2



REMARKS

Remarks :

Photos - 1222

End dump

Completed By:

Signature

6-24-94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 75605 Location: Tibbar Fed #2

Coordinates: Letter: P Section 13 Township: 26 Range: 9

Or Latitude _____ Longitude _____

Date Started : 8-9-94 Run: 11 82

FIELD OBSERVATIONS

Sample Number(s): KP173 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 064 PID Reading Depth 12 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 50

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

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

REMARKS

Remarks : Some line markers on location. Started Remediating to 12' Soil Turned Light gray with A smell At 12' Soil Still Light gray with A Little smell Pid 064 Closed Pit. Line Drip North of meter House

Signature of Specialist: Kelly Padilla

(SP3191) 03/16/94

Analytical **Technologies,** Inc.

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

ATI I.D. **408346**

August 23, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

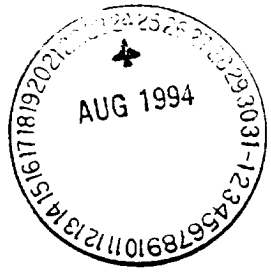
On **08/12/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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.: 408346

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945873	NON-AQ	08/09/94	08/15/94	08/17/94	1
02	945874	NON-AQ	08/09/94	08/15/94	08/18/94	20
03	945875	NON-AQ	08/09/94	08/15/94	08/17/94	10

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	2.4	1.2
TOLUENE	MG/KG	0.058	130	33
ETHYLBENZENE	MG/KG	0.041	41	7.2
TOTAL XYLENES	MG/KG	0.48	420	100
SURROGATE:				
BROMOFLUOROBENZENE (%)		85	55*	115

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

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:	KP123	945873
MTR CODE | SITE NAME:	75605	N/A
SAMPLE DATE | TIME (Hrs):	8-9-94	0925
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8/11/94	8/11/94
DATE OF BTEX EXT. | ANAL.:	8/15/94	8/17/94
TYPE | DESCRIPTION:	VC	Light brown sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	0.058	MG/KG	1			
ETHYL BENZENE	0.041	MG/KG	1			
TOTAL XYLENES	0.48	MG/KG	1			
TOTAL BTEX	0.60	MG/KG				
TPH (418.1) 236	~~240~~ ADD 8/31/94	MG/KG			2.25	28
HEADSPACE PID	64	PPM				
PERCENT SOLIDS	87.7	%				

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

The Surrogate Recovery was at 85 % for this sample All QA/QC was acceptable.

Narrative: ATI results attached.

DF = Dilution Factor Used

Approved By: _____ 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

13/08/11 13:33

Sample identification
5577

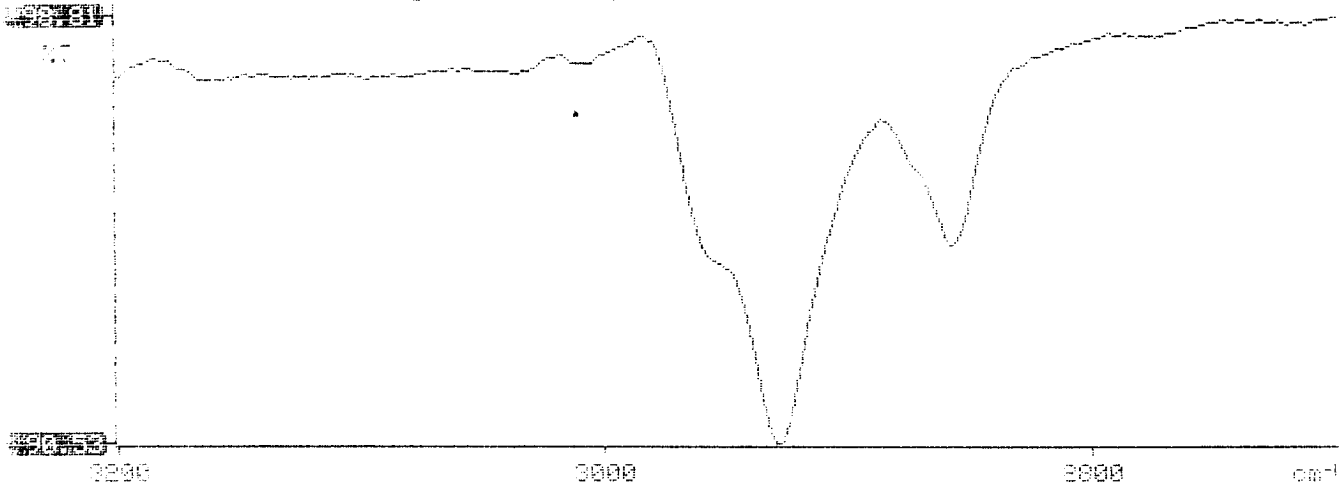
Initial mass of sample, g
1.000

Volume of sample after extraction, ml
100

Petroleum hydrocarbons, ppm
116.056

Net absorbance of hydrocarbons (2930 cm-1)
.054

Y: Petroleum hydrocarbons spectrum 13:33



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 Tibber Federal #2, 75605
Pit located 40's west of Mercury Meter Housing Unit

Elevation
Borehole Location T26N, R9W, S24, J
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Suddurth
Date/Time Started 08/16/95 1130
Date/Time Completed 08/16/95 1230

Well Logged By PAZ Jeff W. Kindley
Personnel On-Site RC D Roberts, G. Suddurth, H Kniff
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	Drilling Conditions & Blow Counts
0				Fill material to 12'						
5										
10										
15										
20	1	18-20'	18/20	CLAY, gray, stiff, dry Boring terminated at 20 Feet.					%	1210
25										
30										
35										
40										

Comments: Sample collected at 18 to 20' and submitted For analysis of BTEX and TPH. BH grouted to surface.

Geologist Signature Jeffrey Kindley

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 Tibbar Fed No 2 75605
Pit2 is 37' North of existing Mercury m Housing Unit.

Elevation
Borehole Location T 26, R9W, S13, P
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Sudduth
Date/Time Started 08/17/95 0822
Date/Time Completed 08/17/95 1000

Well Logged By Jeff W. Kindley
Personnel On-Site D. Roberts, G. Sudduth, 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/HS	Drilling Conditions & Blow Counts
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20	17/24.0	CLAY, dark gray, stiff, dry odor,					118/125	0905
25	2	23-25	18/24.0	S.A.A.					38/87	0911
30	3	28-30	18/24.0	S.A.A. Boring terminated at 30'					13/18	0918
35										
40										

Comments: Sample collected for analysis of BTEX/TPH at 28 to 30'. BH grouted to 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:	JWK18	947252
MTR CODE | SITE NAME:	75605	Tibbet Federal #2
SAMPLE DATE | TIME (Hrs):	08-16-95	12:10
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	8/17/95	
DATE OF BTEX EXT. | ANAL.:	8/21/95	
TYPE | DESCRIPTION:	VG	light grey sand & clay - sandstone

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	37.0	MG/KG			2.04	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	88.8	%				

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

The Surrogate Recovery was at 108% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 8/25/95

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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                     *
**********************************************************
*
 95/08/17   14:30
*
*  Sample identification
 947252
*
*  Initial mass of sample, g
 2.040
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 36.965
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.015
*
*
*
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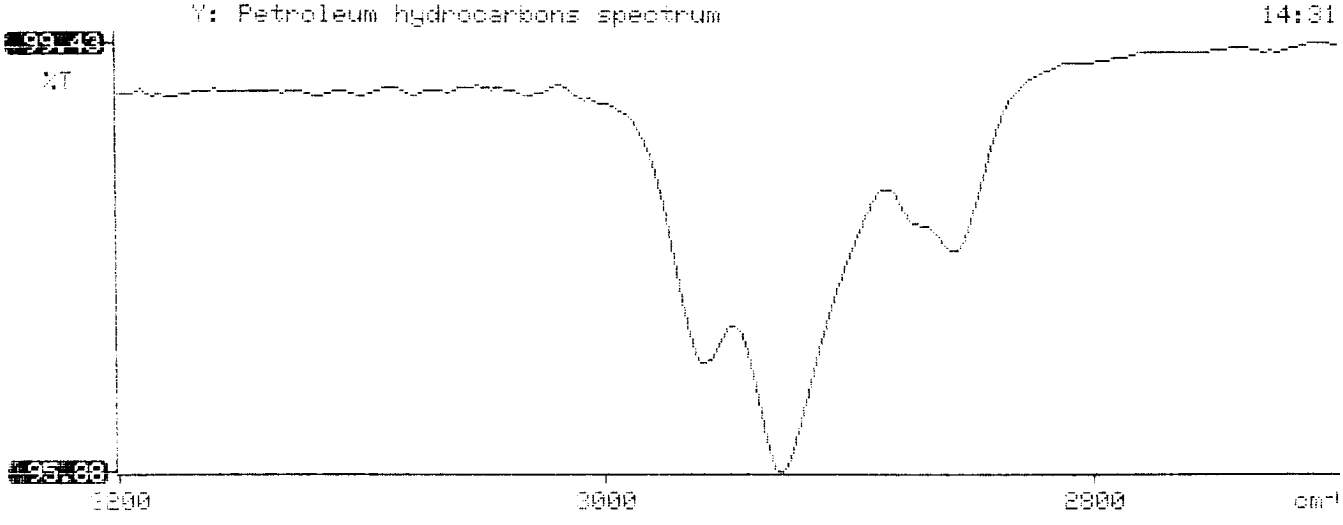


BTEX SOIL SAMPLE WORKSHEET

File	947252	**Date Printed**	8/24/95
Soil Mass (g)	5.00	**Multiplier (L/g)**	0.00100
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20000

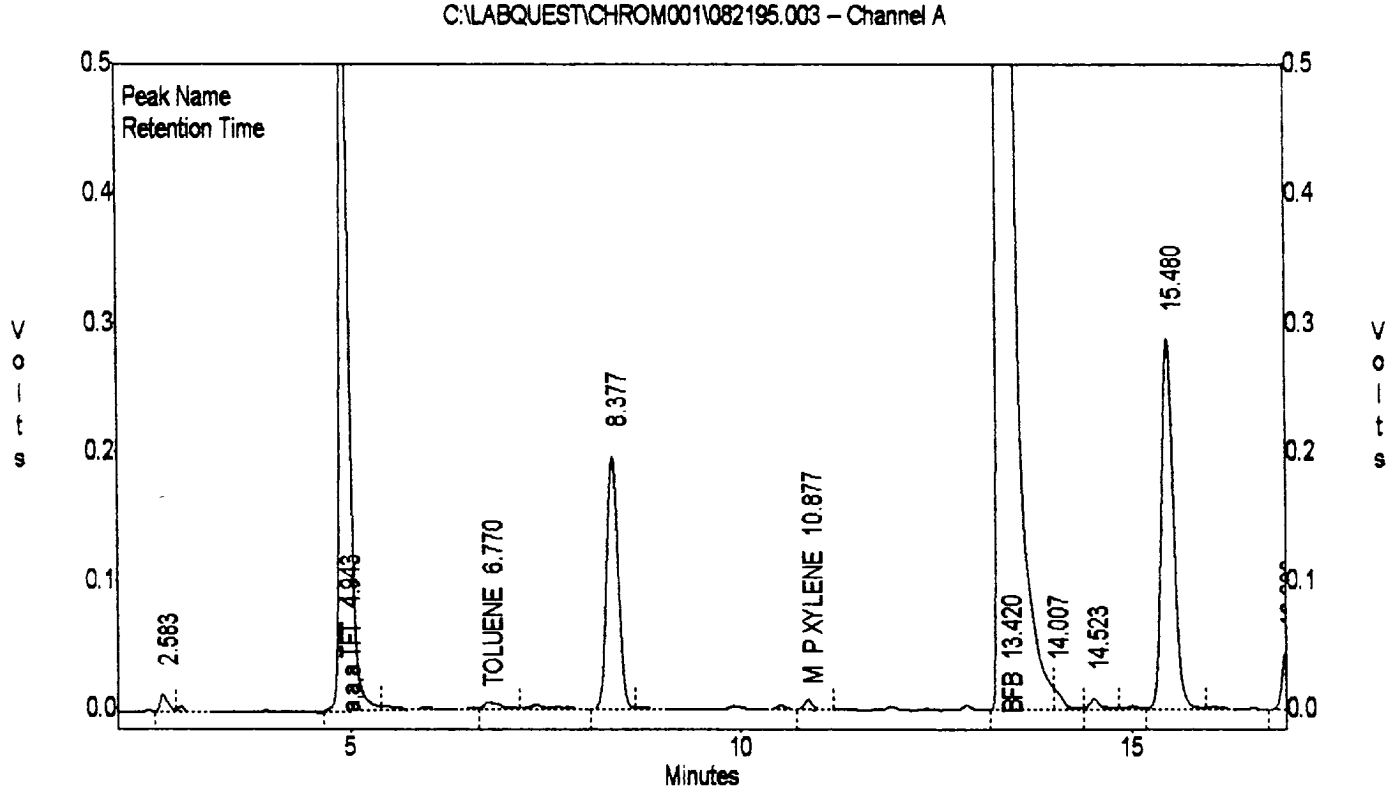
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.500
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.500
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.500
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	1.000
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.500
		Total xylenes (mg/Kg):	**0.000**	1.500
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082195.003
Method : C:\LABQUEST\METHODS\9001.met
Sample ID : 947252,5.00G,100U
Acquired : Aug 21, 1995 14:35:37
Printed : Aug 22, 1995 07:09:00
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.467	0	0.0000
a,a,a TFT	4.943	5121060	98.4636
TOLUENE	6.770	84308	-0.5142
ETHYLBENZENE	10.500	0	0.0000
M & P XYLENE	10.877	54500	-5.0166
O XYLENE	11.913	0	0.0000
BFB	13.420	78140824	108.4781



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 19	947268
MTR CODE | SITE NAME:	75605	Tibbar Fed No. 2
SAMPLE DATE | TIME (Hrs):	08-17-95	09:18
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	Light 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				~~25~~
TPH (418.1)	~~RES 2295 DF~~ 63.6	MG/KG			2.05	28
HEADSPACE PID	18	PPM				
PERCENT SOLIDS	93.8	%				

-- 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

LD

Kular

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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   14:53
*
*  Sample identification
 947268
*
*  Initial mass of sample, g
 2.050
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 63.578
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.018
*
*
*
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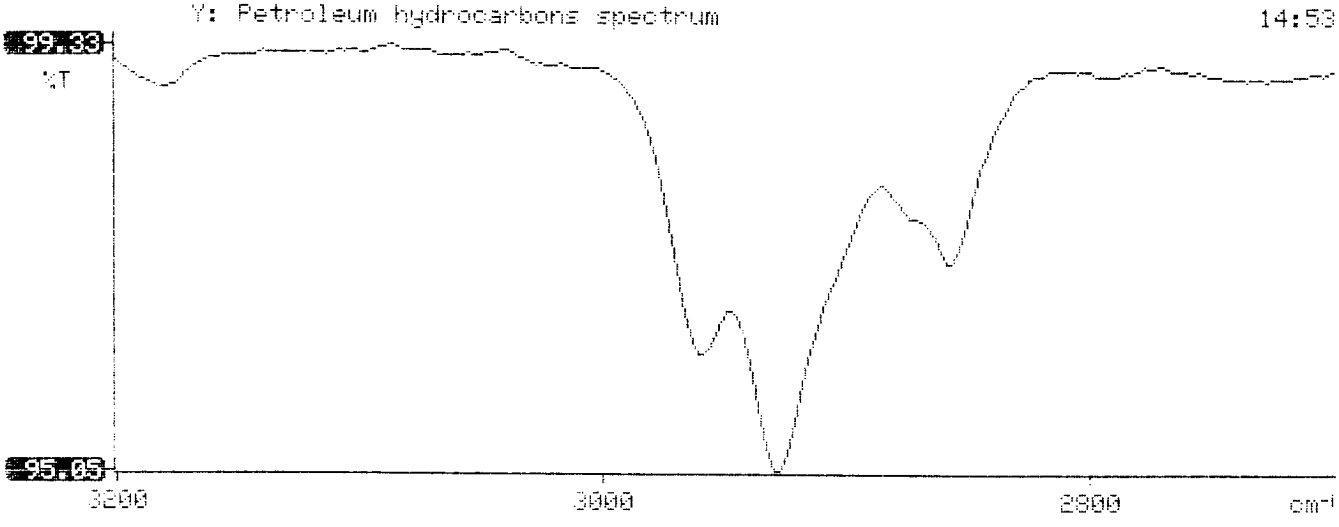


BTEX SOIL SAMPLE WORKSHEET

File	947268	**Date Printed**	8/24/95
Soil Mass (g)	4.97	**Multiplier (L/g)**	0.00101
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20121

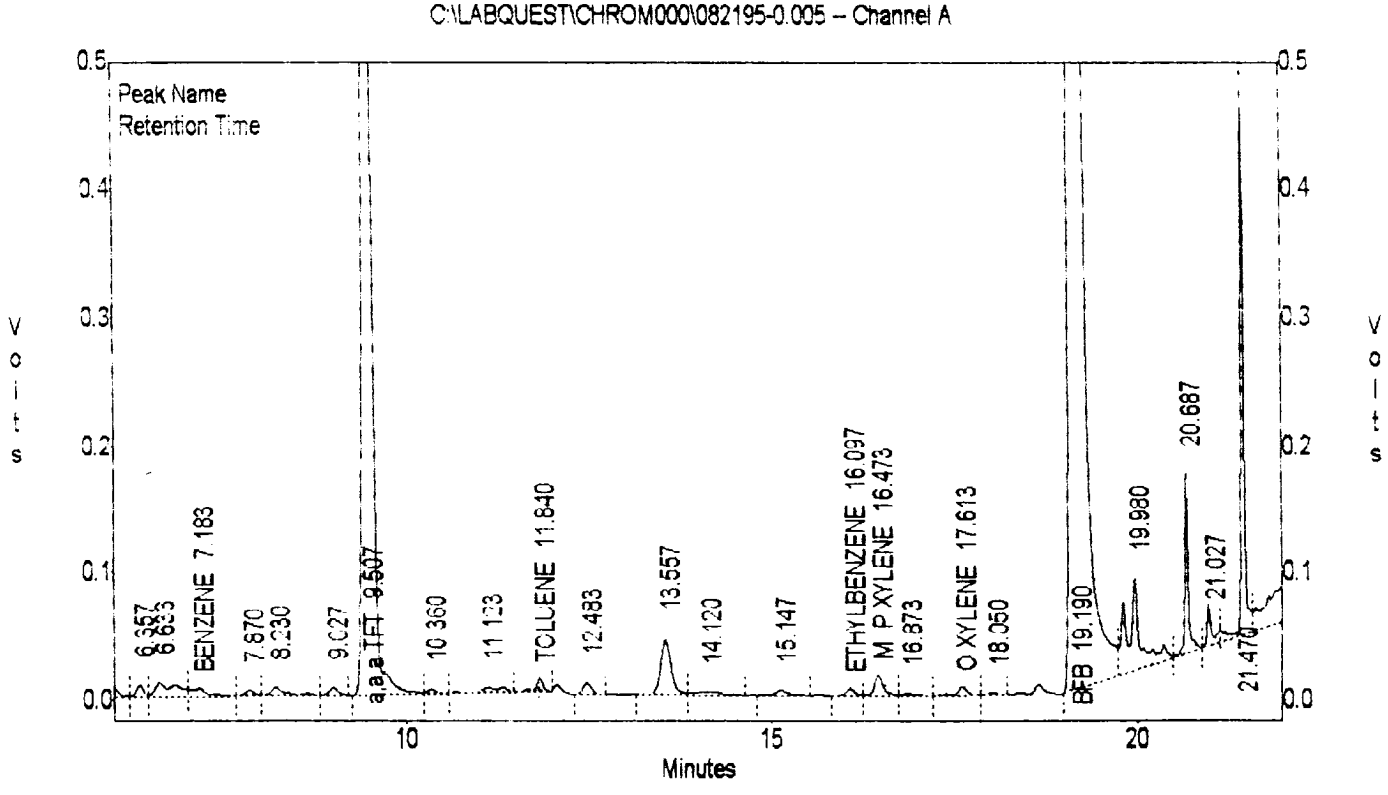
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.503
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.503
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.503
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	1.006
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.503
		Total xylenes (mg/Kg):	**0.000**	1.509
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.005
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947268,4.97G,100U
Acquired : Aug 21, 1995 15:17:47
Printed : Aug 24, 1995 11:36:09
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.183	91926	-2.2141
a,a,a TFT	9.507	8880157	90.0599
TOLUENE	11.840	31406	-0.7571
ETHYLBENZENE	16.097	40989	-0.2551
M & P XYLENE	16.473	133917	-2.9014
O XYLENE	17.613	63844	-0.1095
BFB	19.190	72396376	96.3524



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.005
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947268,4.97G,100U
Acquired : Aug 21, 1995 15:17:47
Printed : Aug 24, 1995 11:36:15
User : MARLON

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.267	0	0.0000
a,a,a TFT	9.510	338310	110.8149
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	19.190	1751652	109.3704