EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

RECEIVED
JUL 2 1999
OIL CON. DIV.
DIST. 3

OK

Approved

FEE #5
Meter/Line ID - 93101

SITE DETAILS

Legals - Twn: 30 **Rng:** 11 **Sec:** 05 **Unit:** A
NMOCD Hazard Ranking: 40 **Land Type:** 4 - Fee
Operator: MERIDIAN OIL INC **Pit Closure Date: 12/15/94**

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: 93101 Location: FEE #5

Operator #: _____ Operator Name: MERIDIAN P/L District: KUTZ

Coordinates: Letter: A Section 5 Township: 30 Range: 11

Or Latitude _____ Longitude _____

Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____

Site Assessment Date: 12-9-94 Area: 02 Run: 73

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 _____

(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: 40 **POINTS**

REMARKS

Remarks : RED LINE - INSIDE TANK - INSIDE

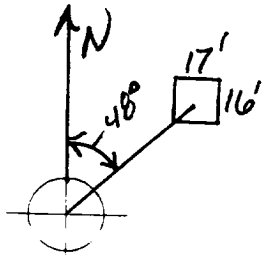
DIG + HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 48° Footage from Wellhead 98'

b) Length : 17' Width : 16' Depth : 3'



REMARKS

Remarks :

WATER IN PIT

Completed By:

Signature

12-9-94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93101 Location: FEE #5

Coordinates: Letter: A Section 5 Township: 30 Range: 11

Or Latitude _____ Longitude _____

Date Started : 12-15-94 Run: 02 73

FIELD OBSERVATIONS

Sample Number(s): KP 363 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 305 PID Reading Depth 6' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 10

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☐ ☒ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 12-15-94 Pit Closed By: B.E.I

REMARKS

Remarks : No Line markers started dig to 12' Hit sand stone At 6' sample closed Pit.

Signature of Specialist: Kelly Padilla

(SP3191) 03/16/94

~~SPLIT~~

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 363	946533
MTR CODE | SITE NAME:	93101	N/A
SAMPLE DATE | TIME (Hrs):	12-15-94	0930
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	12-21-94	12-21-94
DATE OF BTEX EXT. | ANAL.:	12/19/94	12/19/94
TYPE | DESCRIPTION:	VC	gray/Brown sand + clay

REMARKS: BTEX results from ATI and EPNG

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)	ATI Results
BENZENE	1.33	MG/KG	0.2033		4.87	20	< 0.50
TOLUENE	8.36	MG/KG					5.3
ETHYL BENZENE	3.73	MG/KG					0.87
TOTAL XYLENES	56.3	MG/KG					3.9
TOTAL BTEX	69.7	MG/KG					10.6
TPH (418.1)	~~5910~~ 5900 wet 12/21/94	MG/KG			0.30	28	—
HEADSPACE PID	305	PPM					Surrogate % 97
PERCENT SOLIDS	81.8	%					Dilution Factor 20

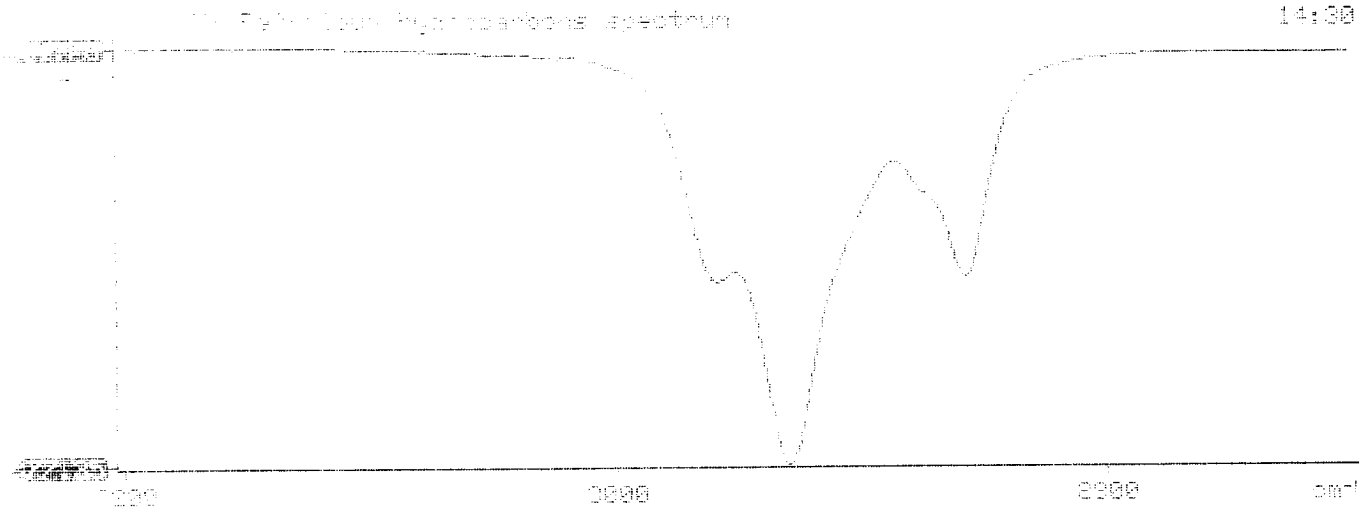
-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 138.7 for this samp All QA/QC was acceptable.

Narrative: BFB - calculated ATI Results attached

DF = Dilution Factor Used

Approved By: J. S. Date: 2-22-95


14:30
3000
2000
cm-1

BTEX SOIL SAMPLE WORKSHEET

File	946533A	**Date Printed**	12/21/94
Soil Mass (g)	4.87	**Multiplier (L/g)**	0.00103
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20534

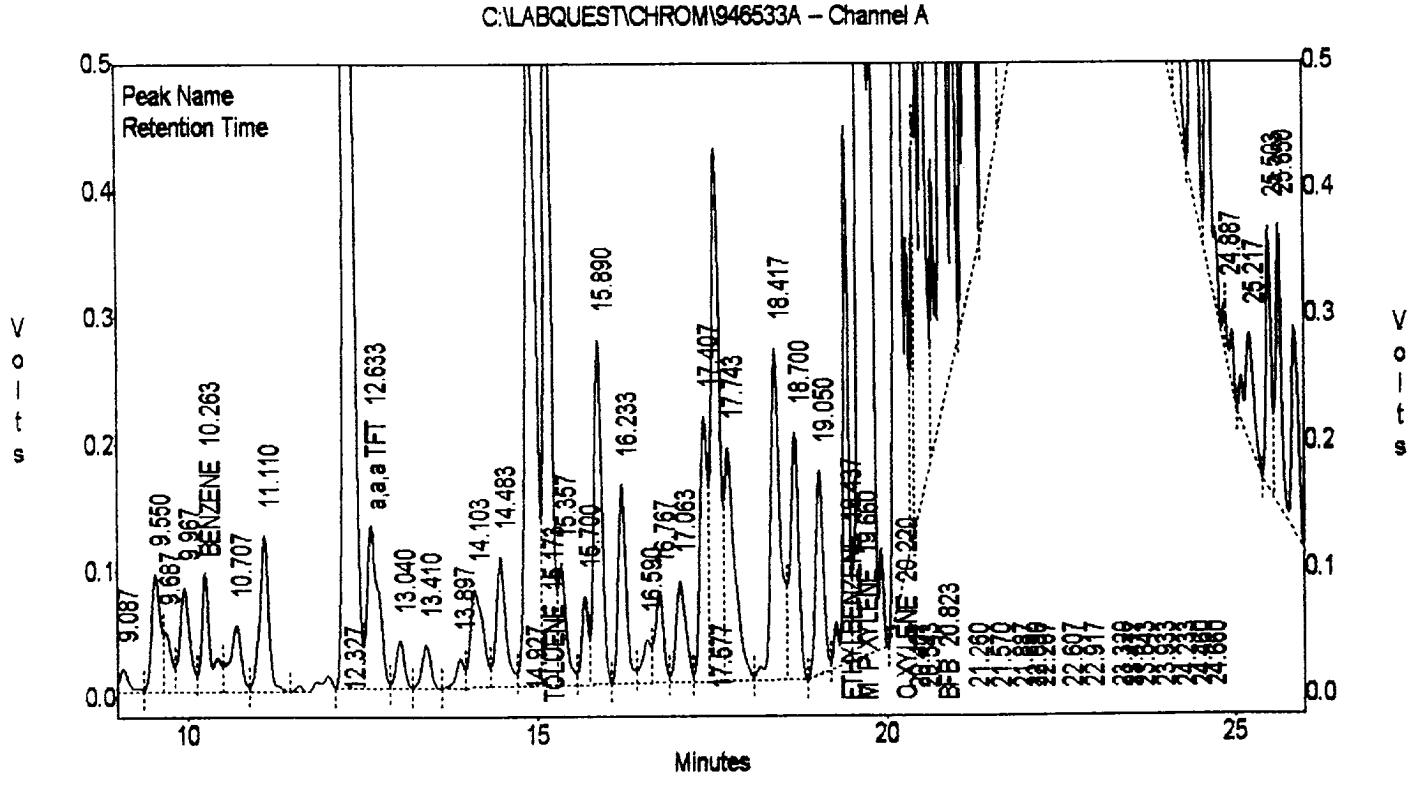
			Det. Limit
Benzene (ug/L)	6.47	**Benzene (mg/Kg):**	**1.329**	1.027
Toluene (ug/L)	40.71	**Toluene (mg/Kg):**	**8.359**	1.027
Ethylbenzene (ug/L)	18.15	**Ethylbenzene (mg/Kg):**	**3.727**	1.027
p & m-xylene (ug/L)	202.31	p & m-xylene (mg/Kg):	41.542	4.107
o-xylene (ug/L)	72.00	o-xylene (mg/Kg):	14.784	2.053
		Total xylenes (mg/Kg):	**56.326**	6.160
		Total BTEX (mg/Kg):	**69.741**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946533A
Method : C:\LABQUEST\METHODS\SOILS.MET
Sample ID : 946533,4.87G/100uL
Acquired : Dec 20, 1994 02:27:25
Printed : Dec 20, 1994 02:53:42
User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.263	870588	131872.92188	6.4660
a,a,a TFT	12.633	1426706	8403.01855	159.1156
TOLUENE	15.173	5456577	148815.51563	40.7120
ETHYLBENZENE	19.437	2179283	132895.85938	18.1507
M & P XYLENE	19.660	26259250	193528.29688	202.3085
O XYLENE	20.220	8578835	142564.65625	72.0017
BFB	20.823	28279926	199747.54688	138.6794
Totals :		73051168		637.4340

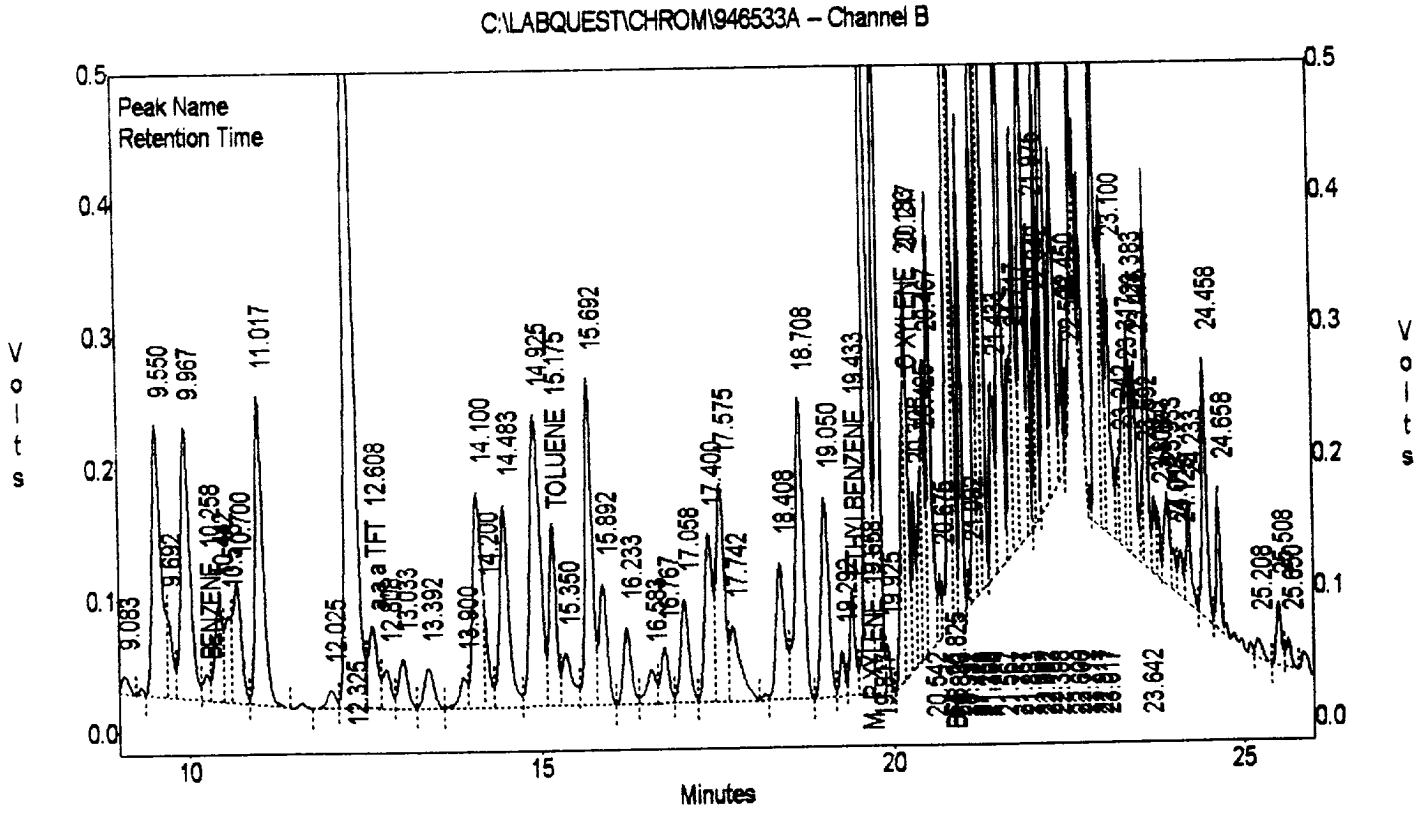


EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946533A
Method : C:\LABQUEST\METHODS\SOILS.MET
Sample ID : 946533,4.87G/100uL
Acquired : Dec 20, 1994 02:27:25
Printed : Dec 20, 1994 02:53:48
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.258	141531	21915.75586	6.2323
a,a,a TFT	12.608	549628	2414.15015	215.3702
TOLUENE	15.175	922379	24426.96680	40.8724
ETHYLBENZENE	19.433	407150	22761.56836	18.9602
M & P XYLENE	19.658	4297830	24867.57227	204.3539
O XYLENE	20.183	824511	23922.60938	38.7819
BFB	20.825	4351057	23067.31836	179.8009
Totals :		11494088		704.3718



Analytical Technologies, Inc.

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

ATI I.D. **412409**

January 5, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **12/22/94**, 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.

Sample 946534 was analyzed within EPA recommended hold time (2A). However, after further examination of the continuing standard, it was determined that xylenes exceeded criteria (117 vs. 115). The sample was then analyzed outside of hold time (2B) to confirm the earlier result and satisfy calibration criteria. Both sets of data are reported.

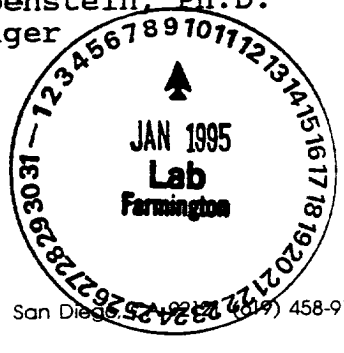
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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 CO ATI I.D.: 412409

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946533	NON-AQ	12/15/94	12/27/94	12/29/94	20
02A	946534	NON-AQ	12/15/94	12/27/94	12/29/94	10
02B	946534	NON-AQ	12/15/94	12/27/94	01/04/95	10

PARAMETER	UNITS	01	02A	02B
BENZENE	MG/KG	<0.50	1.7	1.2
TOLUENE	MG/KG	5.3	14	13
ETHYLBENZENE	MG/KG	0.87	0.36	0.30
TOTAL XYLENES	MG/KG	3.9	2.3	2.1
SURROGATE:				
BROMOFLUOROBENZENE (%)		97	74	68

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 Fee #5 93101

Elevation
Borehole Location QA - SS - TJD - RI
GWL Depth
Logged By CM CHANCE
Drilled By ~~K Padilla~~ F. Rivera
Date/Time Started 10/19/95 - 0905
Date/Time Completed 10/19/95 - 1030

Well Logged By CM Chance
Personnel On-Site ~~K Padilla~~ F. Rivera, D. Charlie
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 to 6'						
5										
10	1	10-12	10"	lt grg clayey SAND, vf-f sand, med dense, dry			3	38	470/259	0919 hr
				Br silty CLAY, med stiff, low plastic, dry		11				
15	2	15-16	8"	DK grg SHALE, tr vf sand, tr xtln seams, hard		15	0	18	21/68	0931
20	2	20-20.5	8"	Grg SHALE, tr vf sand, tr xtln seams, hard			0	2	0/0	0943
				TAB 20.5'						
25										
30										
35										
40										

Comments: CMC 156 (20-20.5) 157 (Duplicate of 156) & 158 (Field Blank) sent to lab (BTEX, TPH). BH grouted to surface

Geologist Signature Cory Chance

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:	CMC156	947677
MTR CODE | SITE NAME:	93101	Fee #5
SAMPLE DATE | TIME (Hrs):	10-19-95	0943
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	10/20/95	
DATE OF BTEX EXT. | ANAL.:	10/20/95	10/20/95
TYPE | DESCRIPTION:	VG	Grey Sand + Sand Stone

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	<10	MG/KG			2.02	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	93.5	%				

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

The Surrogate Recovery was at 110% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-25-95

BTEX SOIL SAMPLE WORKSHEET

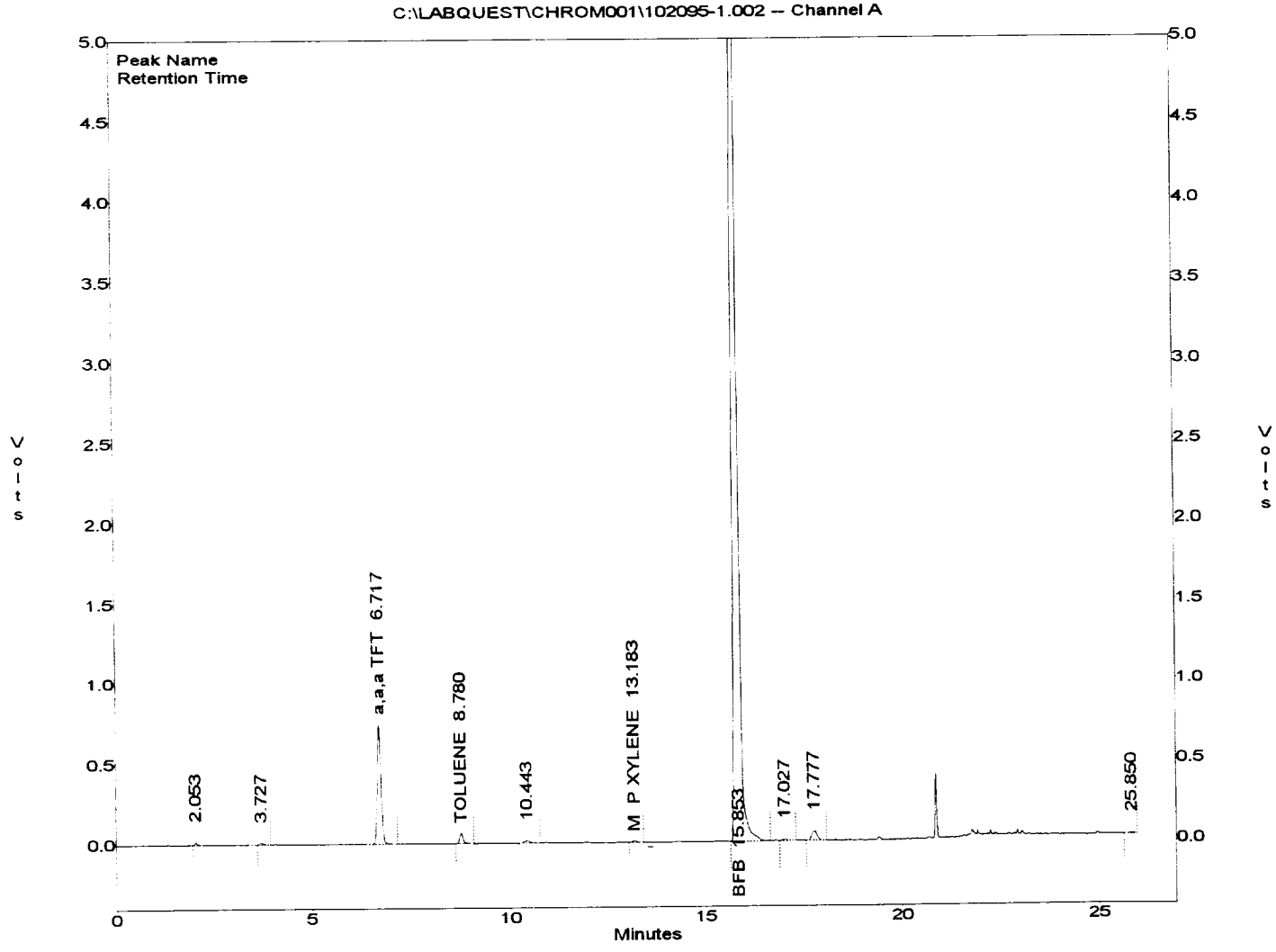
File	947677	**Date Printed**	10/23/95		
Soil Mass (g)	4.95	**Multiplier (L/g)**	0.00101		
Extraction vol. (mL)	10	**CAL FACTOR (Analytical):**	200		
Shot Volume (uL)	50	**CAL FACTOR (Report):**	0.20202		
		DILUTION FACTOR:	**1**	**Det. Limit**	
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.505	
Toluene (ug/L)	1.10	**Toluene (mg/Kg):**	**0.222**	0.505	
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.505	
p & m-xylene (ug/L)	0.19	p & m-xylene (mg/Kg):	0.038	1.010	
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.505	
		Total xylenes (mg/Kg):	**0.038**	1.515	
		Total BTEX (mg/Kg):	**0.261**		

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\102095-1.002
Method : C:\LABQUEST\METHODS\1-101395.MET
Sample ID : 947677,4.95G,50U
Acquired : Oct 20, 1995 14:29:45
Printed : Oct 20, 1995 14:56:06
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.873	0	0.0000
a,a,a TFT	6.717	5063002	113.0293
TOLUENE	8.780	395293	1.0987
ETHYLBENZENE	12.740	0	0.0000
M & P XYLENE	13.183	75112	0.1855
O XYLENE	14.223	0	0.0000
BFB	15.853	75542856	109.6068



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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

14:39

Sample identification

Initial mass of sample, g

Volume of sample after extraction, ml

Petroleum hydrocarbons, ppm

Net absorbance of hydrocarbons (2930 cm-1)

Petroleum hydrocarbons spectrum

14:39

3400

2930

cm-1