Jennifer A. Dobson
DEPUTY OIL & GAS INSPECTOR
DEC 21 1995

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

RECEIVED
JUL 2 1996
OIL CON. DIV.
DIST. 3

Gallegos Canyon Unit 189 E
Meter/Line ID - 94229

SITE DETAILS

Legals - Twn: 29 **Rng:** 13 **Sec:** 36 **Unit:** K
NMOCD Hazard Ranking: 20 **Land Type:** 4 - Fee
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 11/07/94**

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: 94229 Location: GALLEGOS CANYON UNIT 189 E
Operator #: 0203 Operator Name: AMOCO P/L District: ANGEL PEAK
Coordinates: Letter: K Section 36 Township: 29 Range: 13
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 10/21/94 Area: 01 Run: 61

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 STEWART CANYON
(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**

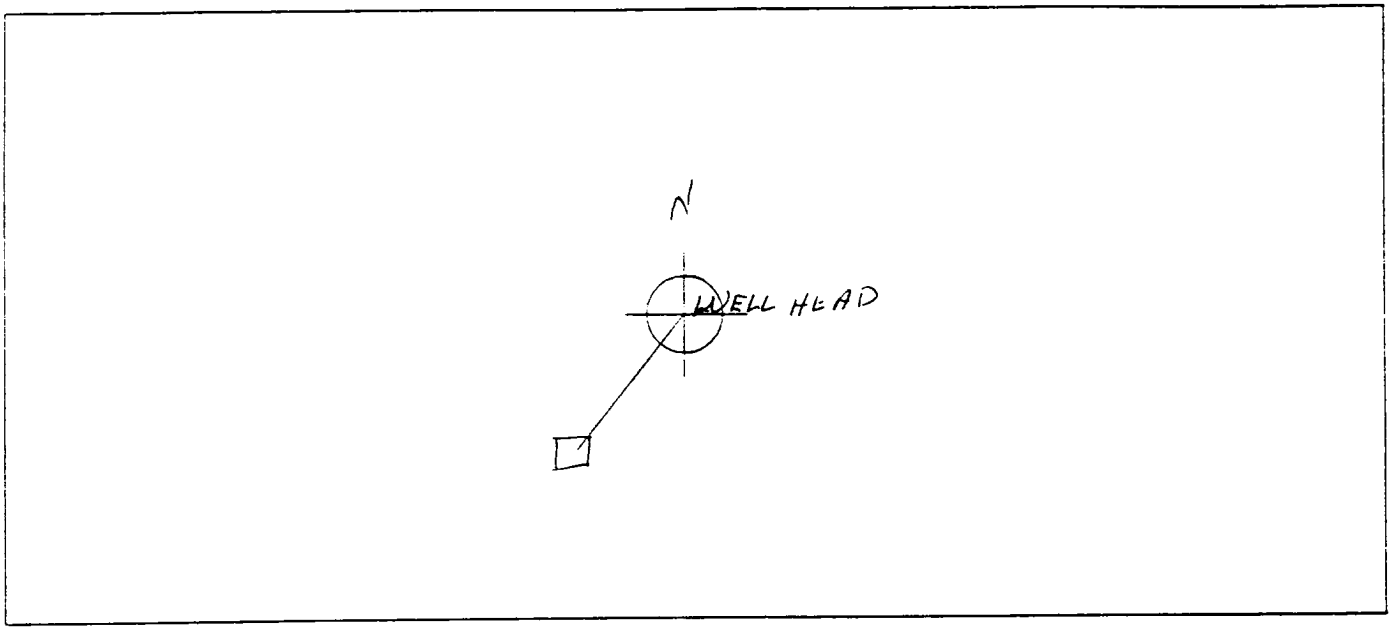
Remarks : _____

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 215 Footage from Wellhead 120

b) Length : 16 Width : 18 Depth : 28"



REMARKS

Remarks :

Completed By:

Signature

10/21/94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94229 Location: Gallegos Canyon unit # 189E

Coordinates: Letter: K Section 36 Township: 29 Range: 13

Or Latitude _____ Longitude _____

Date Started : 11/7/94 Run: 01 61

FIELD OBSERVATIONS

Sample Number(s): KD 363 _____ _____ _____

Sample Depth: 4' Feet

Final PID Reading 3ppm PID Reading Depth 4' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☐ Approx. Cubic Yards —

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☒

Soil Disposition:

Envirotech ☒ Tierra ☐

Other Facility ☐ Name: _____

Pit Closure Date: 11/7/94 Pit Closed By: BEI

REMARKS

Remarks : Dug test Hole to 4', Hit Sandstone, Took PID Sample, Closed Pit.

Signature of Specialist: Thomas Dennis

(SP3191) 03/16/

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:	11/2/94 KDK 94' KD 3163	946477
MTR CODE | SITE NAME:	94229	N/A
SAMPLE DATE | TIME (Hrs):	11-7-94	1215
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	11-10-94	11-10-94
DATE OF BTEX EXT. | ANAL.:	11-12-94	11-13-94
TYPE | DESCRIPTION:	VG	Brown course Sand

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	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	944	MG/KG			2.47	28
HEADSPACE PID	3	PPM				
PERCENT SOLIDS	92.8	%				

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

The Surrogate Recovery was at 89 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 12-6-94

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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                  *
*****************************************************

 94/11/10  12:08

 Sample identification
 946477

 Initial mass of sample, g
 2.470

 Volume of sample after extraction, ml
 28.000

 Petroleum hydrocarbons, ppm
 941.487
 Net absorbance of hydrocarbons (2930 cm-1)
 0.132
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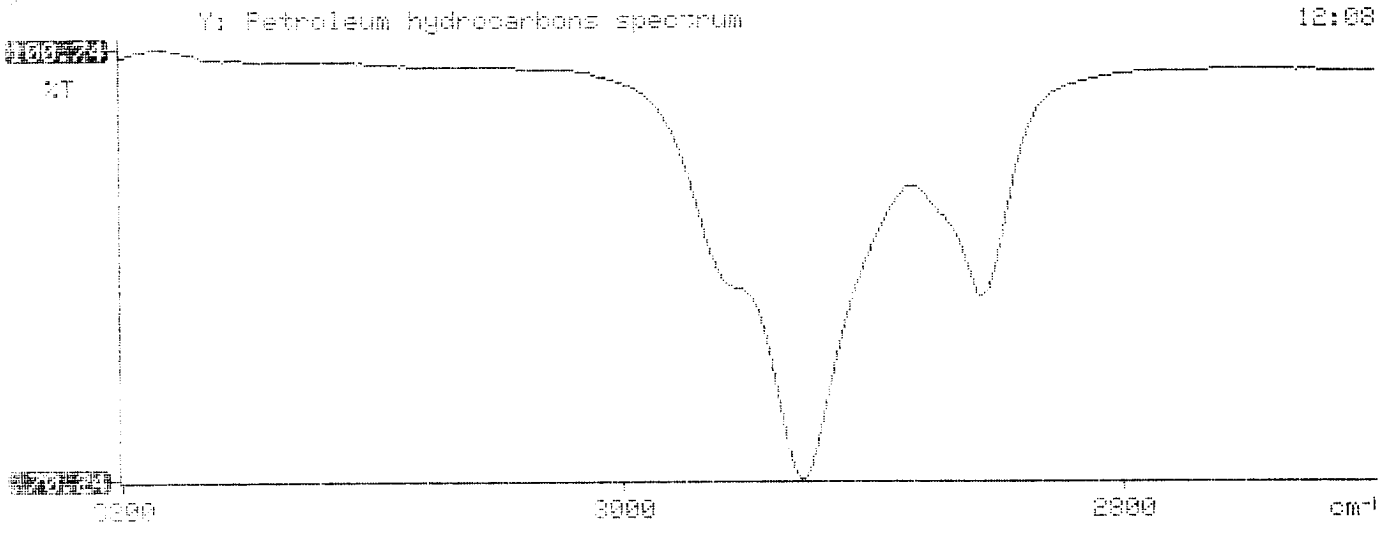


Analytical Technologies, Inc.

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

ATI I.D. **411348**

November 17, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

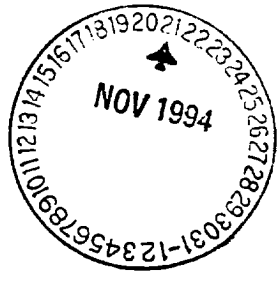
On **11/11/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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.: 411348

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946477	NON-AQ	11/07/94	11/12/94	11/13/94	1
02	946478	NON-AQ	11/07/94	11/12/94	11/13/94	1
03	946479	NON-AQ	11/08/94	11/12/94	11/13/94	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	0.048
ETHYLBENZENE	MG/KG	<0.025	<0.025	0.035
TOTAL XYLENES	MG/KG	<0.025	<0.025	0.22
SURROGATE:				
BROMOFLUOROBENZENE (%)		89	93	89

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 Gallegos Canyon Unit 189E 94229

Elevation
Borehole Location QK - S36 - T29 - R13
GWL Depth
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 11/8/95-0900
Date/Time Completed 11/8/95-1035

Well Logged By CM Chance
Personnel On-Site K Padilla, 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 4'						
5										hard @ ~5'
10	1	10-12	8	DK Gry SAND, vF-F sand, tr med, med dense, dry, odor			0	378	1013/1160	0912 hr
15	2	15-16	6	Br SAND, vF-F sand, dense, dry, odor			10	280	1045/1074	0918 Drlg harder
20	3	20-21	5	Reddish Br SAND, vF sand, tr cementation, v. dense, dry			8	672	728/76	0929
25	4	25-25.3	4	lt Br SILTSTONE, mod. cemented, v. hard,			10	665	97/49	0938 Refusal @ 26.5'
	5	26.5-26.6	2	AA			0	210	29/NA	0951 Insufficient volume for sample & HS.
30				TD 26.6'						
35										
40										

Comments: Refusal @ 26.5' w/ augers. CMC 183 (26.5-26.6) 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:	CMC 183	947763
MTR CODE | SITE NAME:	94229	Gallegos Canyon Unit 189E
SAMPLE DATE | TIME (Hrs):	11-08-95	0951
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	11/9/95	
DATE OF BTEX EXT. | ANAL.:	11/9/95	11/9/95
TYPE | DESCRIPTION:	VG	BROWN SAND & CLAY

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	0.6	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	3.4	MG/KG				
TOTAL BTEX	4.0	MG/KG				
TPH (418.1)	RLB 11/14/95 261.6	MG/KG			2.0	28
HEADSPACE PID	n/a	PPM				
PERCENT SOLIDS	93.6	%				

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

The Surrogate Recovery was at 109% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 11-15-95

BTEX SOIL SAMPLE WORKSHEET

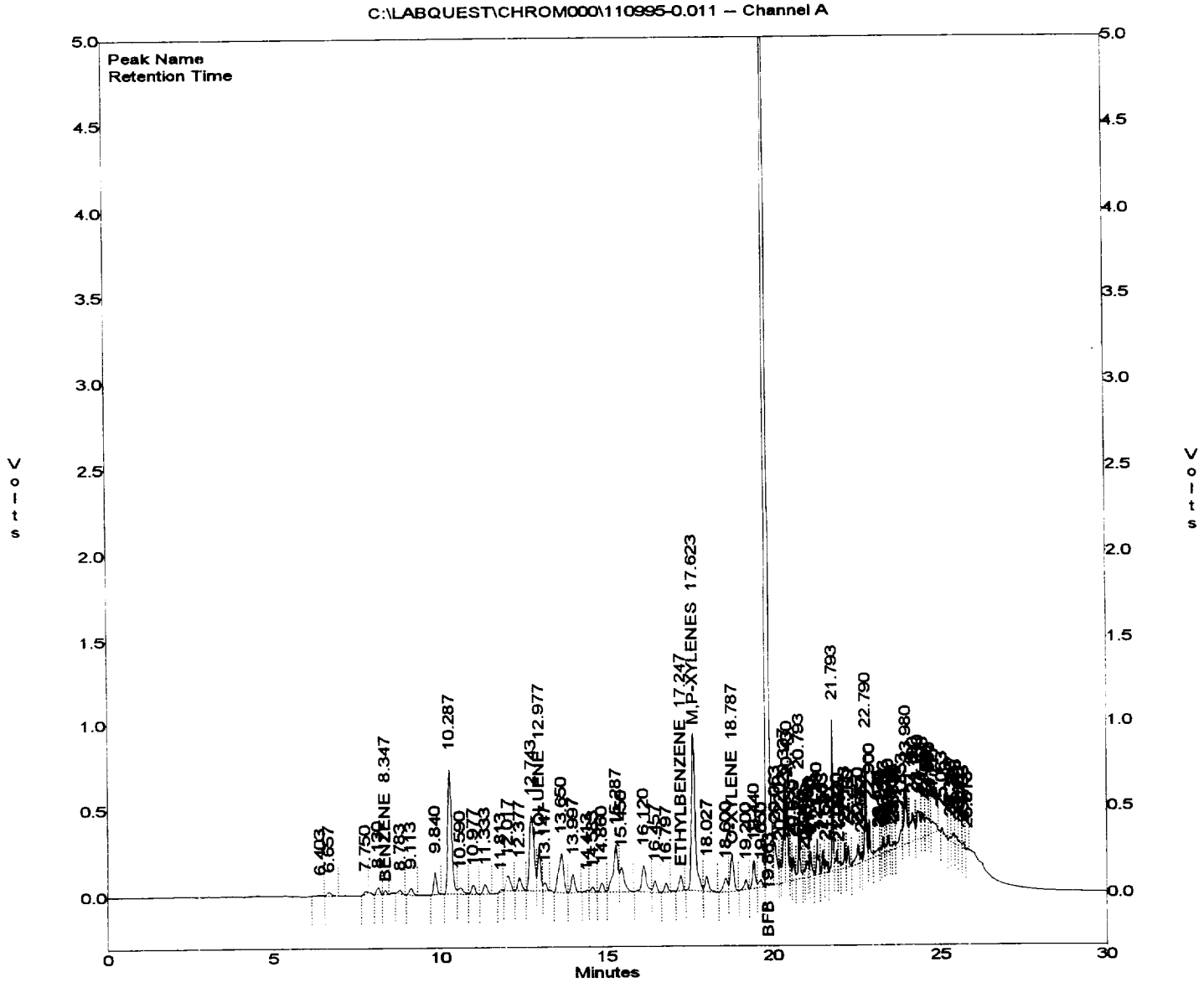
File	947763	**Date Printed**	11/10/95		
Soil Mass (g)	5.00	**Multiplier (L/g)**	0.00100		
Extraction vol. (mL)	10	**CAL FACTOR (Analytical):**	200		
Shot Volume (uL)	50	**CAL FACTOR (Report):**	0.20000		
		DILUTION FACTOR:	**1**	**Det. Limit**	
Benzene (ug/L)	0.30	**Benzene (mg/Kg):**	**0.060**	0.500	
Toluene (ug/L)	2.95	**Toluene (mg/Kg):**	**0.590**	0.500	
Ethylbenzene (ug/L)	1.40	**Ethylbenzene (mg/Kg):**	**0.280**	0.500	
p & m-xylene (ug/L)	13.44	p & m-xylene (mg/Kg):	2.688	1.000	
o-xylene (ug/L)	3.31	o-xylene (mg/Kg):	0.662	0.500	
		Total xylenes (mg/Kg):	**3.350**	1.500	
		Total BTEX (mg/Kg):	**4.280**		

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\110995-0.011
Method : C:\LABQUEST\METHODS\0-110295.MET
Sample ID : 947763,5.00G,50U
Acquired : Nov 09, 1995 18:25:53
Printed : Nov 09, 1995 18:56:19
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.347	144273	0.2957
TOLUENE	12.977	1590162	2.9500
ETHYLBENZENE	17.247	628001	1.4041
M,P-XYLENES	17.623	7146962	13.4433
O-XYLENE	18.787	1490655	3.3134
BFB	19.863	57358024	108.5151



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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                     *
*                                                        *
**********************************************************
*
 95/11/09  15:03
*
*  Sample identification
 947763
*
*  Initial mass of sample, g
 2.000
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 61.610
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.018
*
*
*
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