EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEPUTY OIL & GAS INSPECTOR

DEC 2 1 1998

HARDIE #5
Meter/Line ID - 75861

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

SITE DETAILS

Legals - Twn: 28 **Rng:** 08 **Sec:** 23 **Unit:** O
NMOCD Hazard Ranking: 30 **Land Type:** 4 - Fee
Operator: CONOCO - MESA OPERATING L **Pit Closure Date:** 05/30/95

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.

1

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 75861 Location: HARDIE #5
Operator #: _____ Operator Name: NASSAU RESOURCES P/L District: BLANCO
Coordinates: Letter: O Section 23 Township: 28 Range: 8
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 12.8.94 Area: 13 Run: 62

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 VALLEJO 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: 30 **POINTS**

REMARKS

Remarks : REDLINE & TOPO SHOW LOCATION INSIDE V.Z. TWO PITS ON LOCATION, ONE BELONGS TO NASSAU. WILL CLOSE EPNGS PIT.

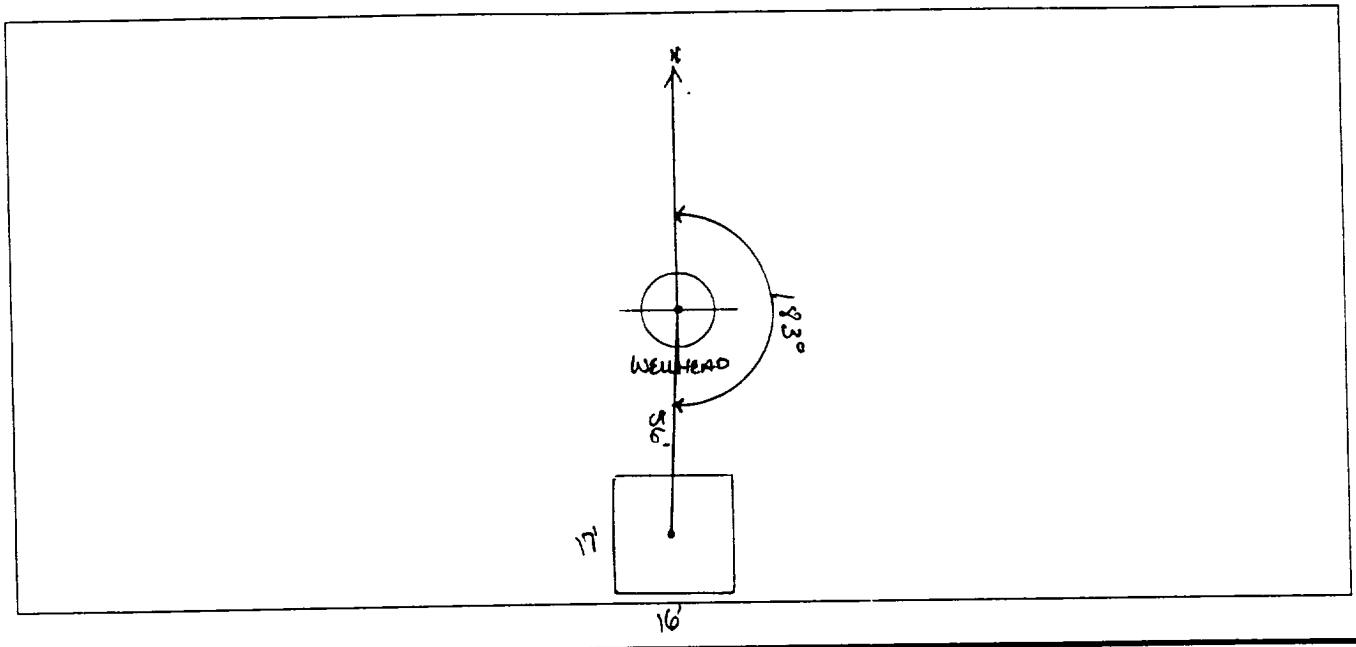
DIG & LINER

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 183° Footage from Wellhead 56'

b) Length : 17' Width : 16' Depth : 2'



REMARKS

Remarks :

PHOTOS - 1405

Completed By:

Signature

12-8-94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 75861 Location: Hardie #5

Coordinates: Letter: C Section 23 Township: 28 Range: 8

Or Latitude _____ Longitude _____

Date Started : 5/30/94 Run: 13 62

FIELD OBSERVATIONS

Sample Number(s): KD441 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 826 ppm PID Reading Depth 12 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 80
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	

Pit Closure Date: 5/30/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 12', took PID sample, closed pit.

Signature of Specialist: [signature]

(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:	KD 4/1	9416852
MTR CODE SITE NAME:	75861	N/A
SAMPLE DATE TIME (Hrs):	5-30-95	1430
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6-2-95	6-2-95
DATE OF BTEX EXT. | ANAL.:	6-5-95	6-8-95
TYPE | DESCRIPTION:	VC	Brown sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	12	MG/KG	50			
TOLUENE	220	MG/KG	50			
ETHYL BENZENE	26	MG/KG	50			
TOTAL XYLENES	350	MG/KG	50			
TOTAL BTEX	608	MG/KG				
TPH (418.1)	3180	MG/KG			1.92	28
HEADSPACE PID	826	PPM				
PERCENT SOLIDS	91.2	%				

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

The Surrogate Recovery was at 93 % for this sample All QA/QC was acceptable.

Narrative:

QA/QC Results attached

D.F. = Dilution Factor Used

Approved By: J.P. Date: 6/28/95

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

11:41

Sample Identification
SAMPLE

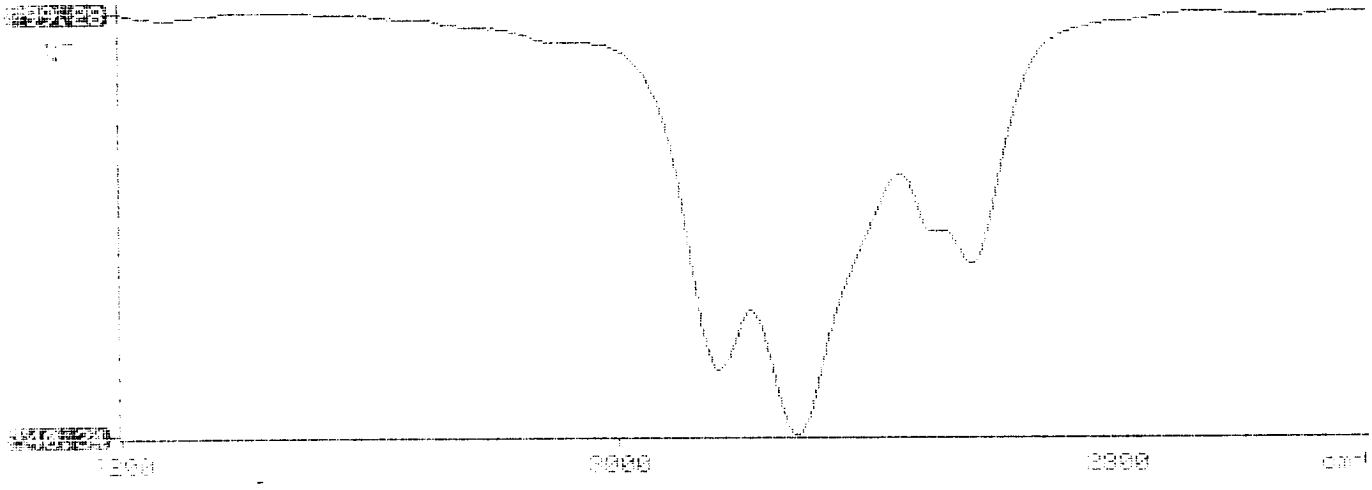
Initial mass of sample, g
1.020

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
3177.299

Net absorbance of hydrocarbons (2930 cm-1)
0.256

Y: Petroleum hydrocarbons spectrum 11:41



Analytical **Technologies,** Inc.

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

ATI I.D. **506317**

June 9, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/03/95**, 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.

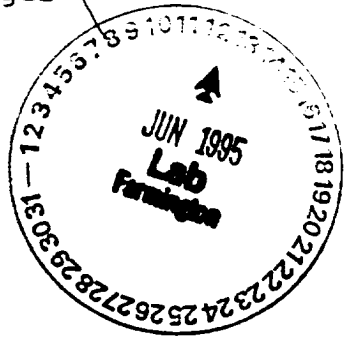
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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 ATI I.D.: 506317

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946851	NON-AQ	05/30/95	06/05/95	06/07/95	1
05	946852	NON-AQ	05/30/95	06/05/95	06/08/95	50
06	946853	NON-AQ	05/31/95	06/05/95	06/07/95	5

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	12	0.20
TOLUENE	MG/KG	0.076	220	3.3
ETHYLBENZENE	MG/KG	<0.025	26	1.3
TOTAL XYLENES	MG/KG	<0.025	350	16
SURROGATE:				
BROMOFLUOROBENZENE (%)		95	93	109

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page | of |

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 Hardie #5 75861

Elevation
Borehole Location QD - S23 - T28 - R8
GWL Depth
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 11/20/95 - 1040
Date/Time Completed 11/20/95 - 1300

Well Logged By CM Chance
Personnel On-Site K Padilla, F. Rivera, D. Chamlia
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 12'						
5										
10										
15	1	15-17	8	BIK sandy CLAY, vf-F sand, v. soft, med plastic, odor			0	87	1099/1409	1050
20	2	20-21	4	BIK SAND, med-coarse sand, v. dense, dry, odor			28	867	1093/1440	1100
25	3	25-26	4	Grn SAND, med-coarse sand, tr vF sand, dense, dry odor Grn/Br mottled CLAY, tr vf sand, low plastic, v. Hard, dry, tr quartzite filling			5	356	692/705	1114
30	4	30-32	12	AA			18	340	521/54	1127
35	5	35-37	5	Grn sandy CLAY, vF sand, hard, non plastic, tr quar. F:llings, dry			12	289	35/-2	1139
40	6	40-40.5	4	Gry SAND, tr clay, vf-F sand, tr cementation, v. Dense, dry			4	96	12/21	1152

TD 840.5'

Comments: CMC 89 sent to lab (40-40.5) (BTEX, TPH). BH grouted to surface

Geologist Signature Corey Chancy

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 189	947805
MTR CODE | SITE NAME:	75861	Hardie #5
SAMPLE DATE | TIME (Hrs):	11-20-95	1152
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	11/27/95	
DATE OF BTEX EXT. | ANAL.:	11/21/95	11/21/95
TYPE | DESCRIPTION:	VG	Grey Sand & Clay

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			2.05	28
HEADSPACE PID	21	PPM				
PERCENT SOLIDS	92.3	%				

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

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 11/28/95

BTEX SOIL SAMPLE WORKSHEET

File :	947805	**Date Printed** :	11/22/95
Soil Mass (g) :	4.97	**Multiplier (L/g)** :	0.00101
Extraction vol. (mL) :	10	**CAL FACTOR (Analytical):**	200
Shot Volume (uL) :	50	**CAL FACTOR (Report):**	0.20121

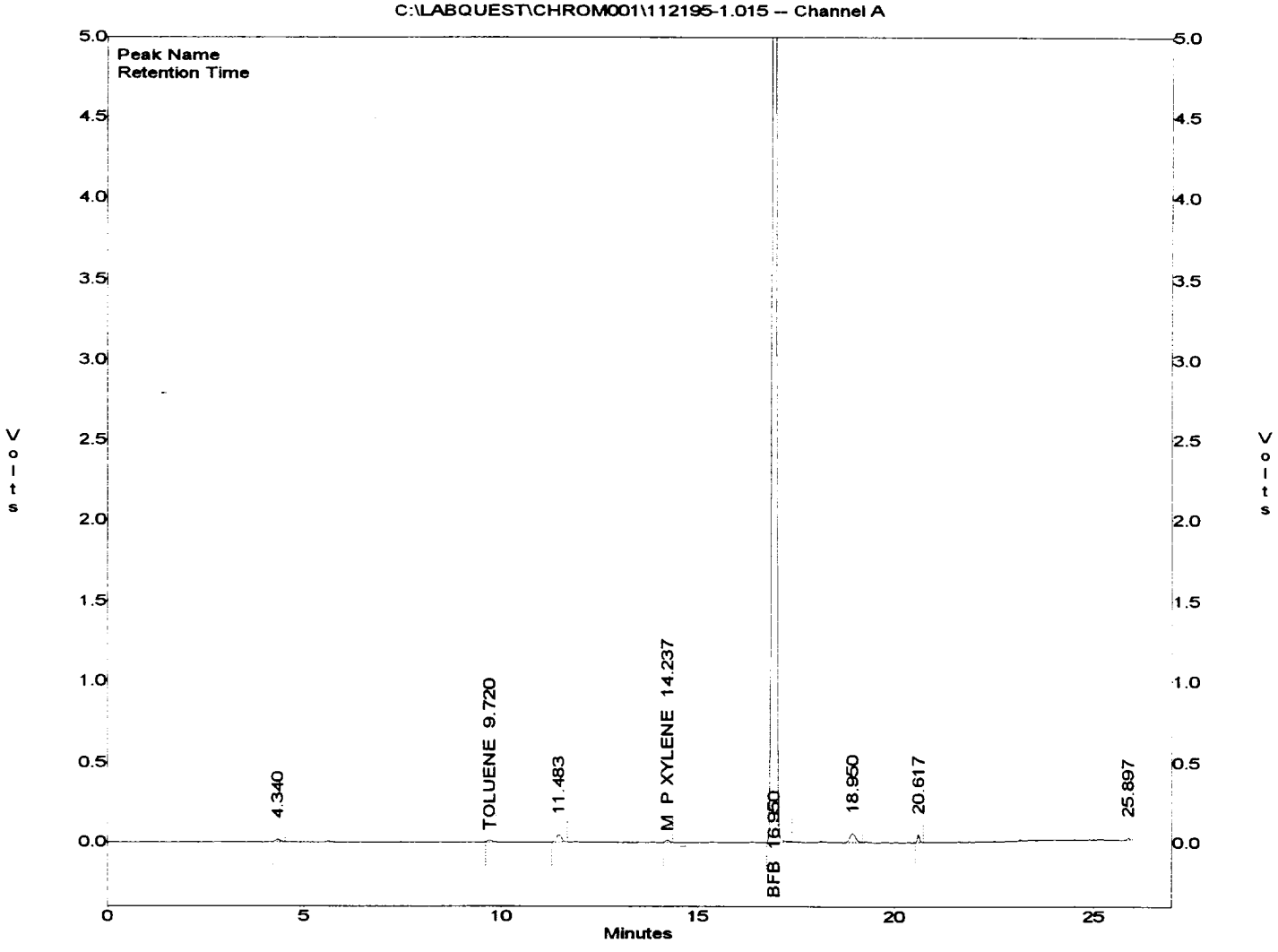
		DILUTION FACTOR:	**1**	**Det. Limit**
Benzene (ug/L) :	0.00	**Benzene (mg/Kg):**	**0.000**	0.503
Toluene (ug/L) :	0.32	**Toluene (mg/Kg):**	**0.064**	0.503
Ethylbenzene (ug/L) :	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.503
p & m-xylene (ug/L) :	0.33	p & m-xylene (mg/Kg):	0.066	1.006
o-xylene (ug/L) :	0.00	o-xylene (mg/Kg):	0.000	0.503
		Total xylenes (mg/Kg):	**0.066**	1.509
		Total BTEX (mg/Kg):	**0.131**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\112195-1.015
Method : C:\LABQUEST\METHODS\1-112095.MET
Sample ID : 947805,4.97G,50U
Acquired : Nov 22, 1995 00:10:37
Printed : Nov 22, 1995 00:36:57
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	5.603	0	0.0000
TOLUENE	9.720	83837	0.3153
ETHYLBENZENE	13.837	0	0.0000
M & P XYLENE	14.237	84705	0.3278
O XYLENE	15.357	0	0.0000
BFB	16.950	67672608	102.7983



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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                     *
**********************************************************
*
 95/11/27  12:49
*
*  Sample identification
 947805
*
*  Initial mass of sample, g
 2.050
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 -9.484
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.009
*
*
*
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