Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 02 1997

Approved

Meter Number:94923
Location Name:Mesa Twin Mounds #1 - 30 DK
Location:TN-30 RG-14
SC-30 UL-D
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997
OIL CON. DIV.
DIST. 3

RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	10^{-9} to 10^{-13} cm/sec
Shale	10^{-12} to 10^{-16} cm/sec
Clay	10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

EPFS EL PASO FIELD SERVICES

GENERAL

Meter: 94923 Location: Mesa Twin Mounds #1-30 Dk
Operator #: 9391 Operator Name: ConoCo (Walsh Engineering) P/L District: Kutz
Coordinates: Letter: D Section 30 Township: 30 Range: 14
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 10-17-95 Area: 02 Run: 23

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: 0 **POINTS**

REMARKS

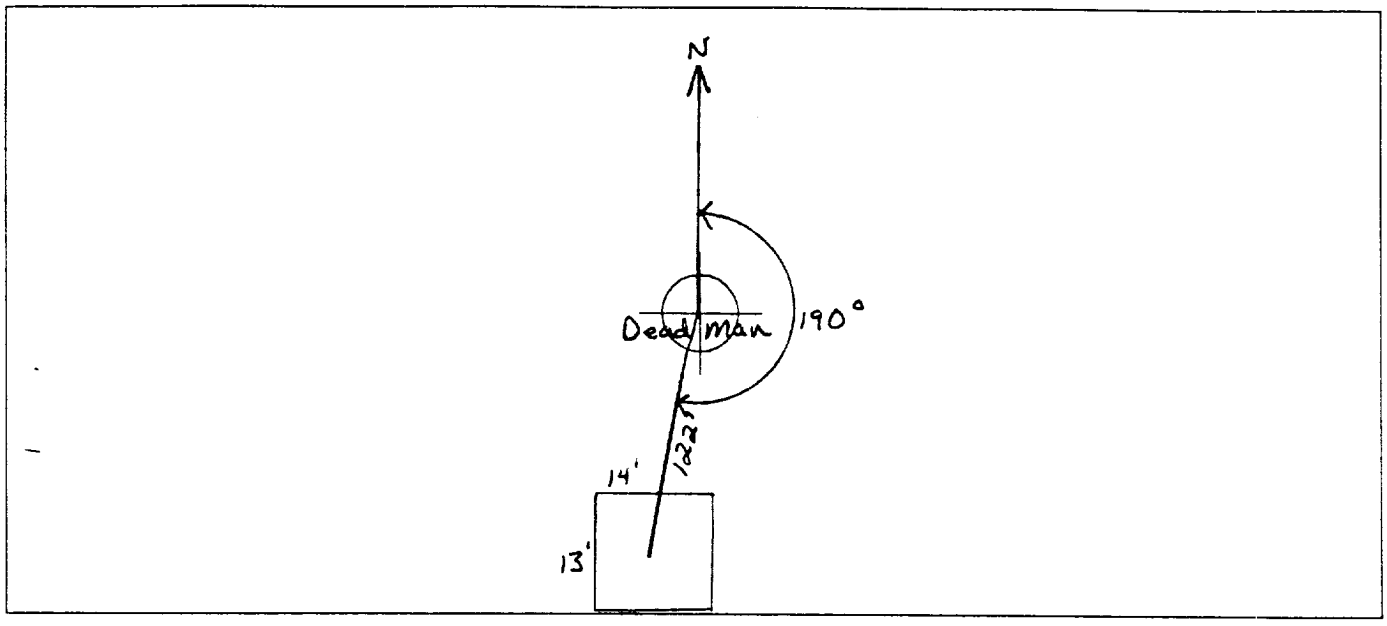
Remarks : Pit Aloc. Topo shows outside VZ, Not Jimmy Red Line 4 pits on Loc. 1.) Rig Blowpit 2.) Seperator p.t. 3.) Loc. Drip 4. Loc Drip's both belong to EPNG. Will close Both Loc Drips.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 190° Footage from Wellhead 122'

b) Length : 14' Width : 13' Depth : 5'



REMARKS

Remarks :

photos: 10:08 4pict

P+A Loc

Completed By:

James F Reeves

Signature

10-17-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94923 Location: Mesa Twin Mounds #1-30 Dk

Coordinates: Letter: D Section 30 Township: 30 Range: 14

Or Latitude _____ Longitude _____

Date Started : 10-23-95 Run: 02 23

FIELD OBSERVATIONS

Sample Number(s): 4P67 _____ _____ _____

Sample Depth: 8' Feet

Final PID Reading 16.5 ppm PID Reading Depth 8' 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 ☐ ☒ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 10-23-95 Pit Closed By: Philip Env.

REMARKS

Remarks : Dug to 8 Ft hit sandstone, Took PID it was 165 ppm
Backfilled using 10 cu yds.
Contamination approx 1½ Ft thick above sandstone.
Fencing 18X17 Netting! No

Signature of Specialist: James F. Thomas

(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:	JP67	947691
MTR CODE | SITE NAME:	94923	Mesa Twin Mounds #1-30 DK
SAMPLE DATE | TIME (Hrs):	10-23-95	1730
PROJECT:	Phase I	
DATE OF TPH EXT. | ANAL.:	10/25/95	
DATE OF BTEX EXT. | ANAL.:	10/24/95	10/24/95
TYPE | DESCRIPTION:	VG	Gray Clay & Sand Stone

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.2	MG/KG				
TOLUENE	29.3	MG/KG				
ETHYL BENZENE	9.8	MG/KG				
TOTAL XYLENES	60.6	MG/KG				
TOTAL BTEX	100.9	MG/KG				
TPH (418.1)	1400	MG/KG			2.03	28
HEADSPACE PID	165	PPM				
PERCENT SOLIDS	77.1	%				

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

The Surrogate Recovery was at 98% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-26-95

BTEX SOIL SAMPLE WORKSHEET

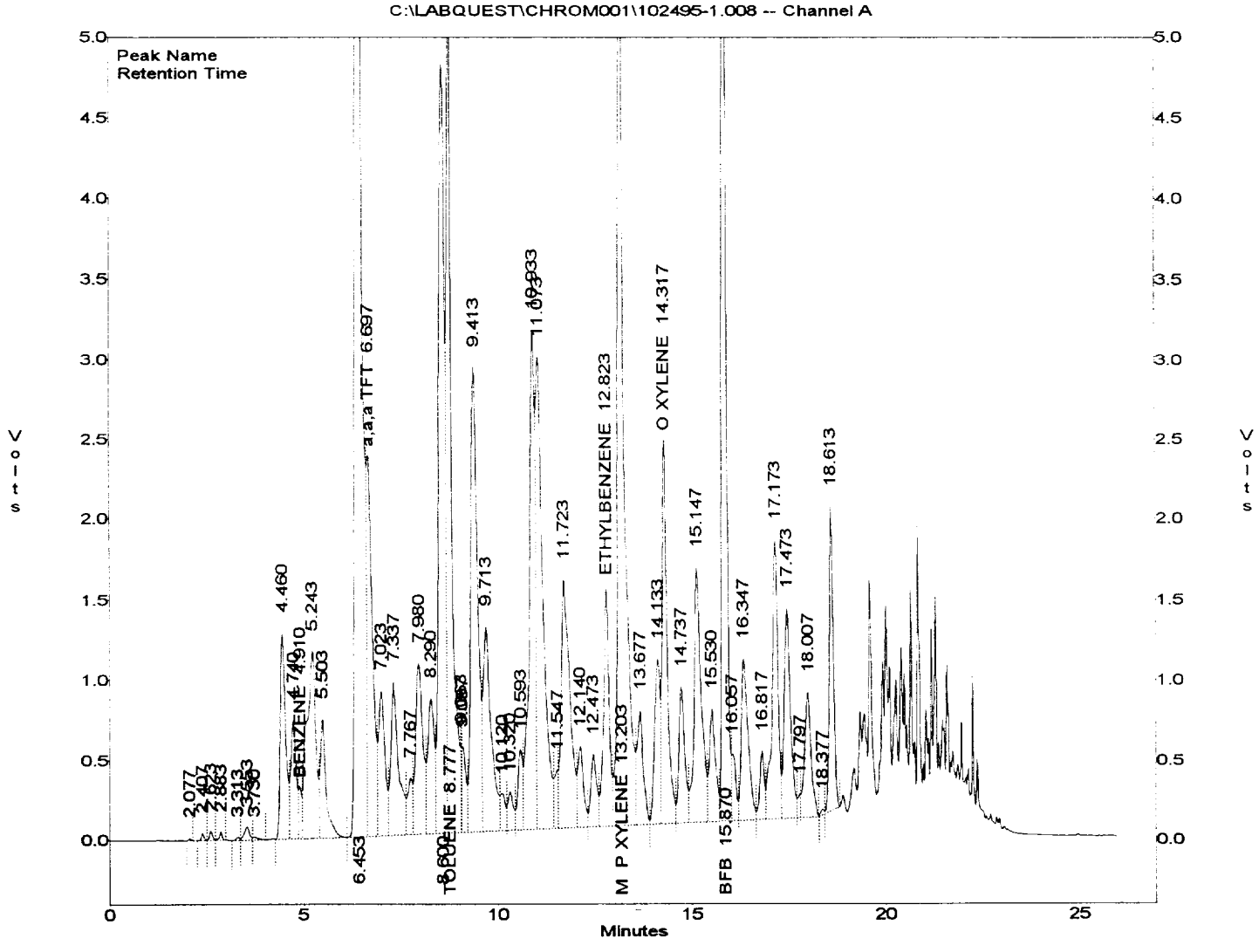
File :	947691	**Date Printed** :	10/25/95	
Soil Mass (g) :	4.99	**Multiplier (L/g)** :	0.00100	
Extraction vol. (mL) :	10	**CAL FACTOR (Analytical):**	200	
Shot Volume (uL) :	50	**CAL FACTOR (Report):**	0.20040	
		DILUTION FACTOR:	**1**	**Det. Limit**
Benzene (ug/L) :	11.05	**Benzene (mg/Kg):**	**2.214**	0.501
Toluene (ug/L) :	146.42	**Toluene (mg/Kg):**	**29.343**	0.501
Ethylbenzene (ug/L) :	48.82	**Ethylbenzene (mg/Kg):**	**9.784**	0.501
p & m-xylene (ug/L) :	225.73	p & m-xylene (mg/Kg):	45.236	1.002
o-xylene (ug/L) :	76.88	o-xylene (mg/Kg):	15.407	0.501
		Total xylenes (mg/Kg):	**60.643**	1.503
		Total BTEX (mg/Kg):	**101.984**	

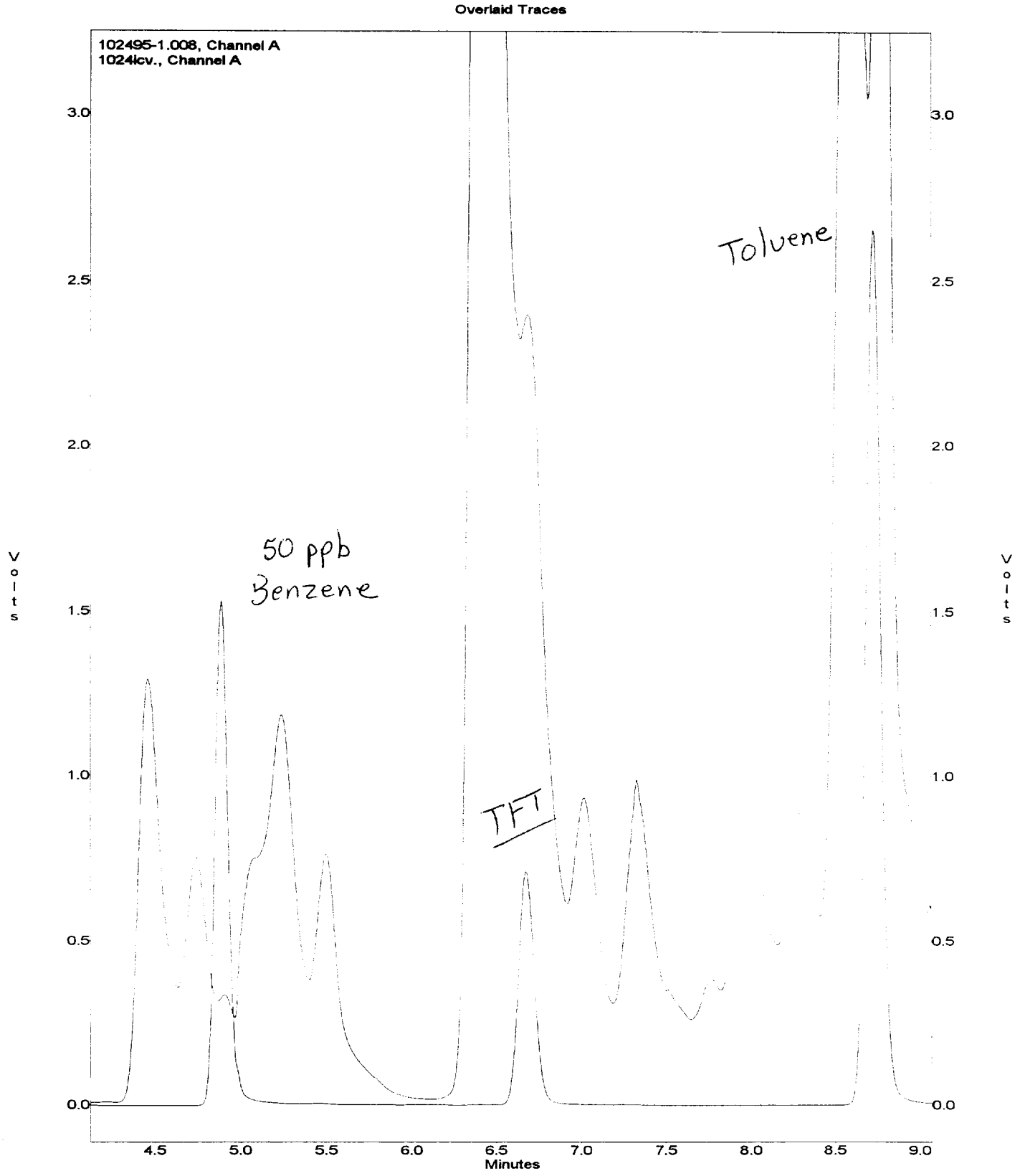
EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\102495-1.008
Method : C:\LABQUEST\METHODS\1-101395.MET
Sample ID : 947691,4.99G,50U
Acquired : Oct 24, 1995 17:40:57
Printed : Oct 24, 1995 18:07:26
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.910	1880039	11.0497
a,a,a TFT	6.697	24802110	553.6964
TOLUENE	8.777	47449228	146.4206
ETHYLBENZENE	12.823	14871712	48.8163
M & P XYLENE	13.203	70015432	225.7331
O XYLENE	14.317	21897544	76.8839
BFB	15.870	67402672	97.7960




Overlaid Traces
102495-1.008, Channel A
1024icv., Channel A
Toluene
50 ppb
Benzene
TFT
Volts
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
Minutes

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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                   *
*****************************************************
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95/10/25 16:21

Sample identification
947691

Initial mass of sample, g
2.030

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
1400.099

Net absorbance of hydrocarbons (2930 cm-1)
0.182

Y: Petroleum hydrocarbons spectrum 16:21