Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 0 2 1997

Approved

Meter Number:95104
Location Name:Mesa Twin Mounds #2 - 30
Location:TN-30 RG-14
SC-30 UL-L
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

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: 95104 Location: Mesa Twin Mounds #2-30
Operator #: 9391 Operator Name: Basin Engineering PC/L District: Kutz
Coordinates: Letter: L 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

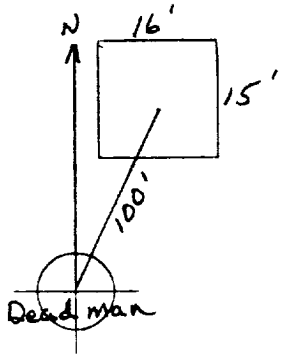
Remarks : Topo shows outside V2, Did not have this section In my Red Line
3 pits on Loc. P&A Loc 1.) Rig Blow pit, 2.) Seperator pit
3.) Loc drip belongs to EPNG will close pit.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 25° Footage from Wellhead 100'

b) Length : 16' Width : 15' Depth : 4'



REMARKS

Remarks :

photo's: 4 pict 0900

P&A Loc.

Completed By:

James L Pearce

Signature

10-17-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 95104 Location: Mesa Twin Mounds #2-30

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

Or Latitude _____ Longitude _____

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

FIELD OBSERVATIONS

Sample Number(s): 4P65 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 187 PID Reading Depth 6' 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 2 Ft. below bit bottom, hit sandstone contamination is about 1' thick on top of sandstone, took PID it was 187ppm backfilled with 10 yds.

Fencing 24x24 Netting No

Signature of Specialist: James L Pence

(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:	JP65	947689
MTR CODE | SITE NAME:	95104	Mesa Twin Mounds #2-30
SAMPLE DATE | TIME (Hrs):	10-23-95	1600
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	Red 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	8.4	MG/KG				
TOTAL XYLENES	42.6	MG/KG				
TOTAL BTEX	51.0	MG/KG				
TPH (418.1)	422	MG/KG			2.05	28
HEADSPACE PID	187	PPM				
PERCENT SOLIDS	83.4	%				

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

The Surrogate Recovery was at 97% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-26-95

BTEX SOIL SAMPLE WORKSHEET

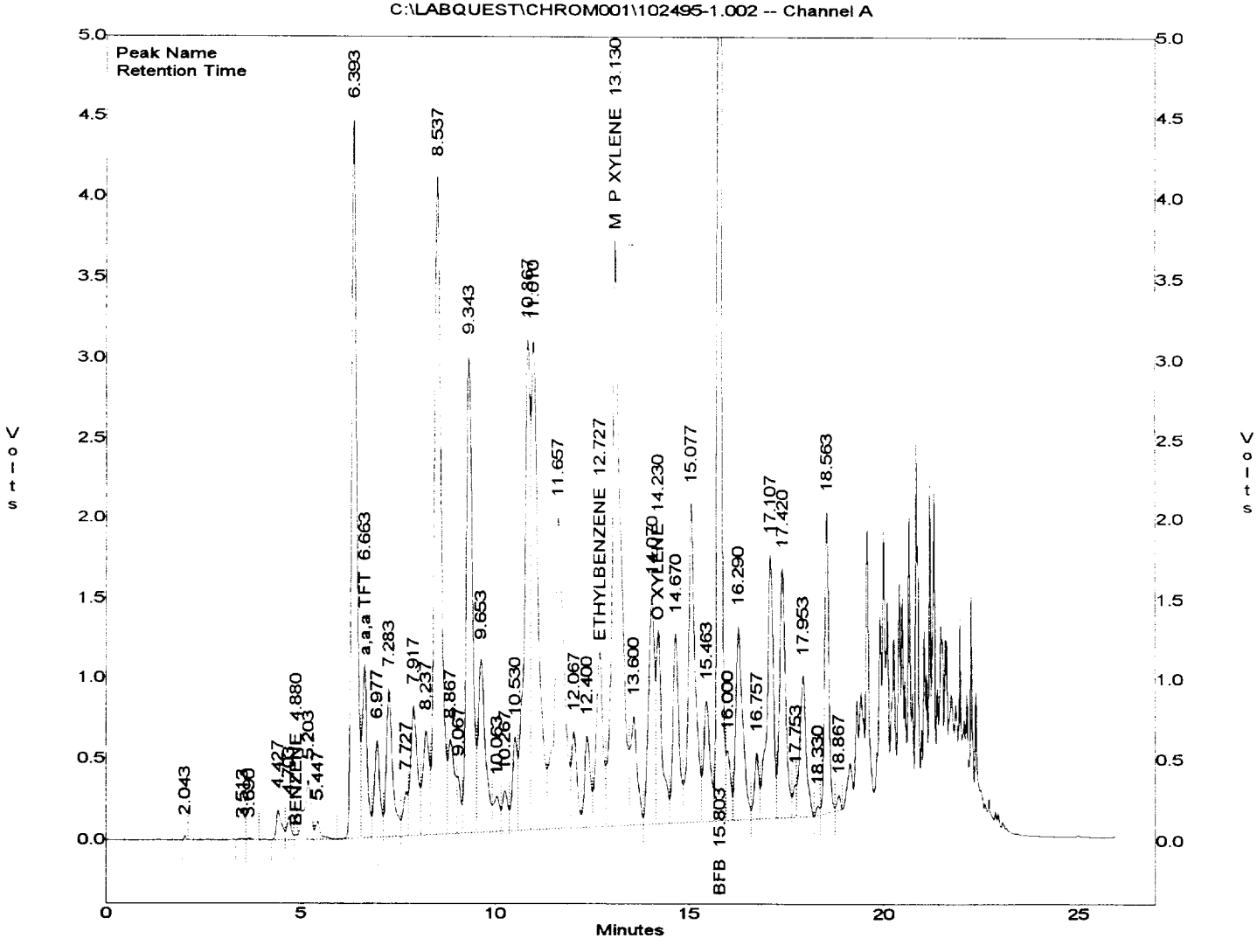
File	: 947689	**Date Printed**	: 10/25/95	
Soil Mass (g)	: 4.94	**Multiplier (L/g)**	: 0.00101	
Extraction vol. (mL)	: 10	**CAL FACTOR (Analytical):**	200	
Shot Volume (uL)	: 50	**CAL FACTOR (Report):**	0.20243	
		DILUTION FACTOR:	**1**	**Det. Limit**
Benzene (ug/L)	: 0.95	**Benzene (mg/Kg):**	**0.192**	0.506
Toluene (ug/L)	: 0.00	**Toluene (mg/Kg):**	**0.000**	0.506
Ethylbenzene (ug/L)	: 41.54	**Ethylbenzene (mg/Kg):**	**8.408**	0.506
p & m-xylene (ug/L)	: 168.63	p & m-xylene (mg/Kg):	34.136	1.012
o-xylene (ug/L)	: 41.63	o-xylene (mg/Kg):	8.427	0.506
		Total xylenes (mg/Kg):	**42.563**	1.518
		Total BTEX (mg/Kg):	**51.163**	

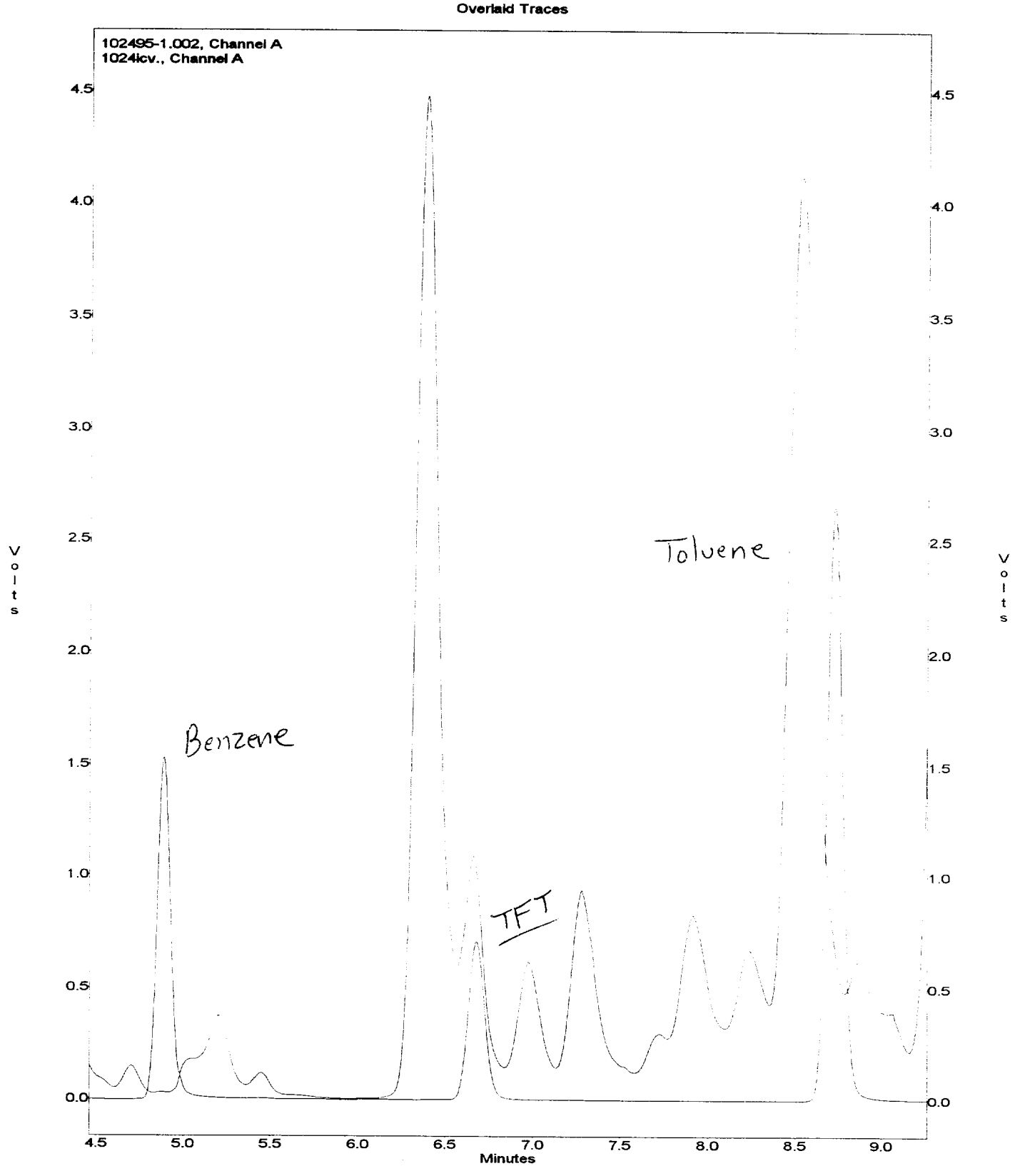
EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

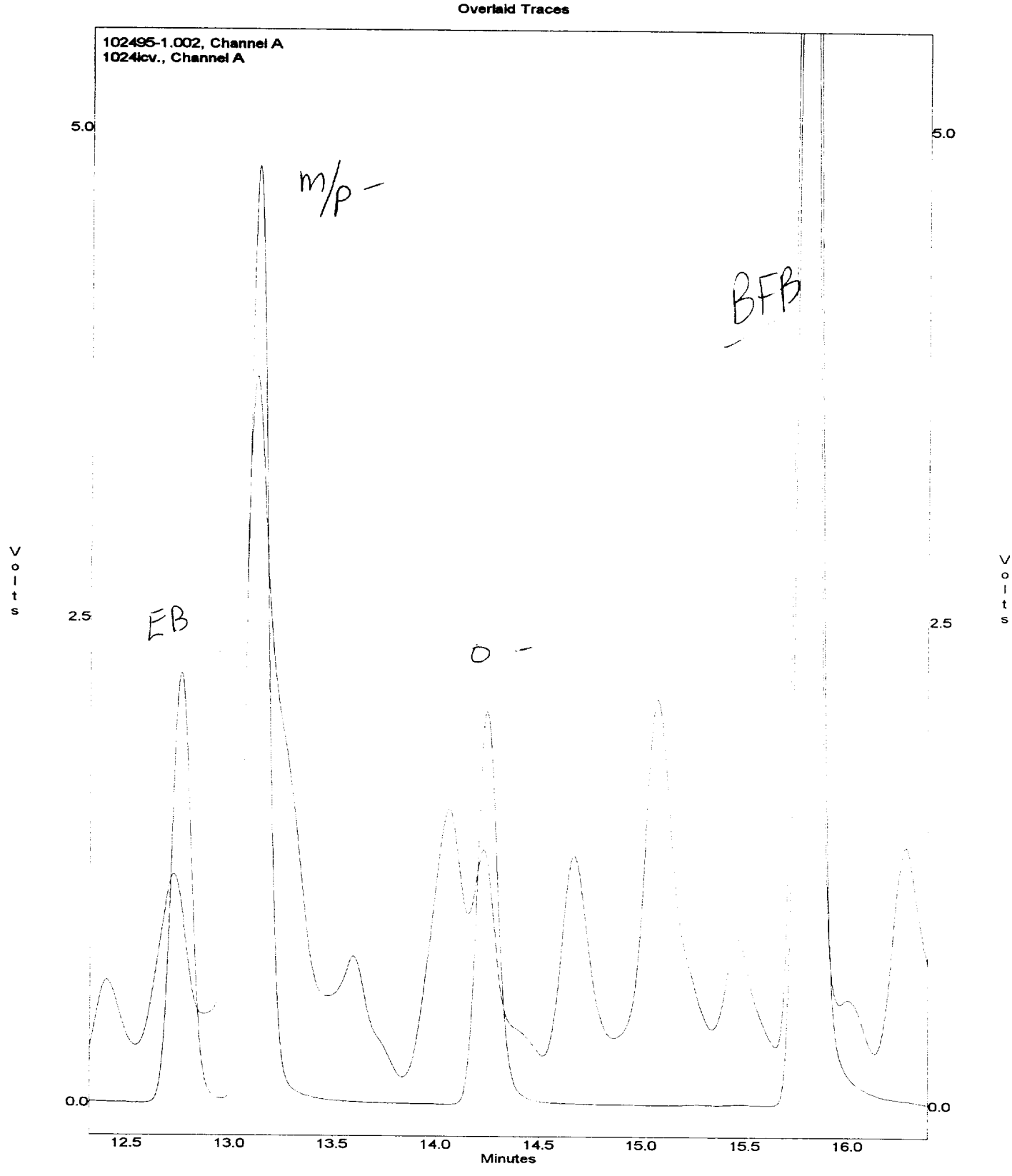
File : C:\LABQUEST\CHROM001\102495-1.002
Method : C:\LABQUEST\METHODS\1-101395.MET
Sample ID : 947689,4.94G,50U
Acquired : Oct 24, 1995 14:05:25
Printed : Oct 24, 1995 14:31:53
User : MARLON

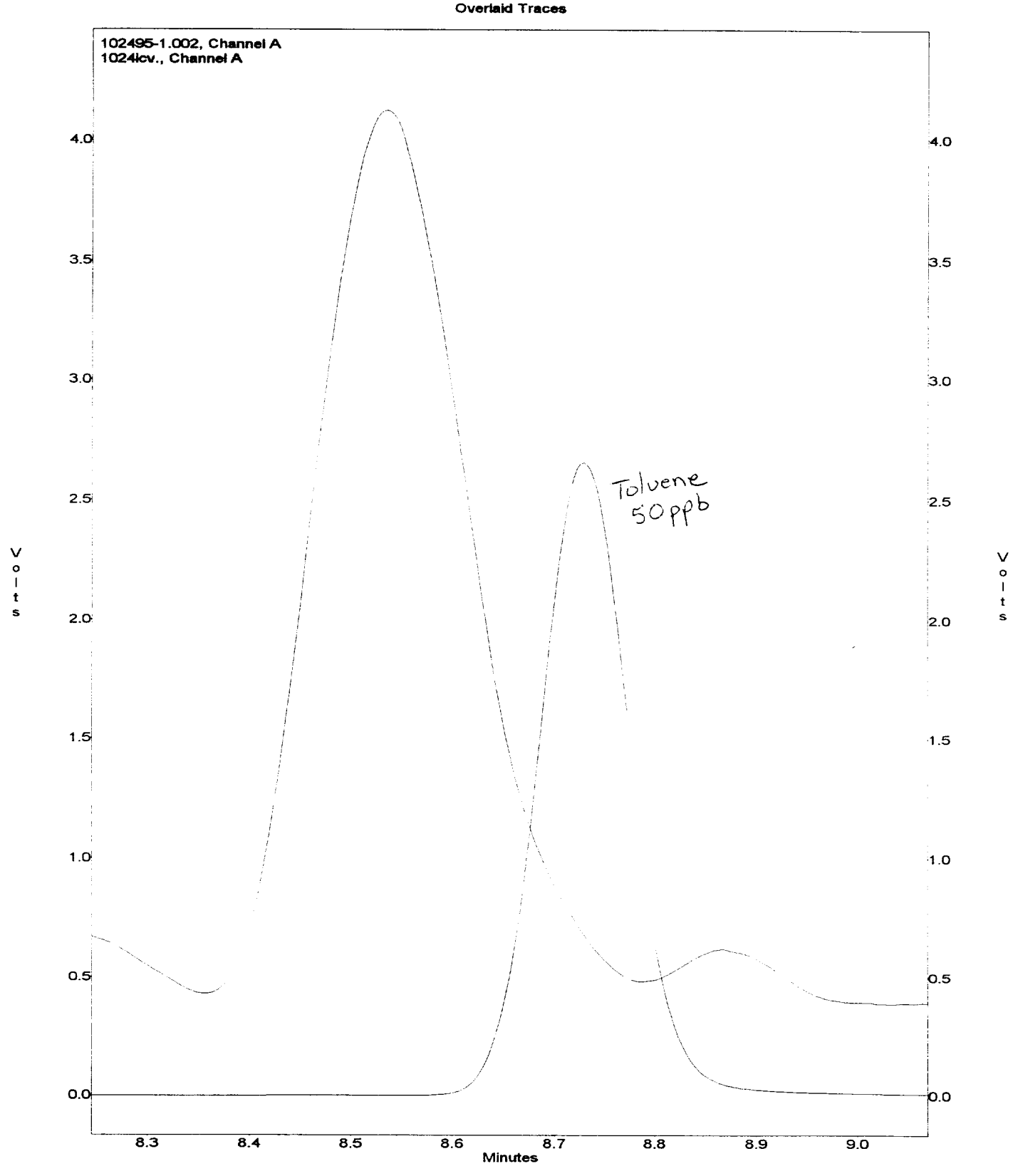
Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.880	149839	0.9507
a,a,a TFT	6.663	9313823	207.9271
TOLUENE	8.717	0	0.0000
ETHYLBENZENE	12.727	12677903	41.5360
M & P XYLENE	13.130	54232160	168.6295
O XYLENE	14.230	12227833	41.6341
BFB	15.803	66541140	96.5460




Overlaid Traces
102495-1.002, Channel A
1024icv., Channel A
Volts
Minutes
Benzene
Toluene
TFT
4.5
4.0
3.5
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


Overlaid Traces
102495-1.002, Channel A
1024icv., Channel A
5.0
2.5
0.0
Volts
m/p -
BFB
EB
O -
12.5
13.0
13.5
14.0
14.5
15.0
15.5
16.0
Minutes


Overlaid Traces
102495-1.002, Channel A
1024icv., Channel A
Toluene
50ppb
Volts
Volts
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
8.3
8.4
8.5
8.6
8.7
8.8
8.9
9.0
Minutes

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report
****

95/10/25 14:57

Sample identification
947689

Initial mass of sample, g
2.050

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
4223.099
Net absorbance of hydrocarbons (2930 cm-1)
0.534