

Denny S. Hunt
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Bolack C LS #1
Meter/Line ID - 70469

SITE DETAILS

Approved

Legals - Twn: 27 Rng: 8
NMOCD Hazard Ranking: 40
Operator: Amoco

Sec: 28 Unit: A
Land Type: BLM

PREVIOUS ACTIVITIES

Site Assessment: 6/11/94
Monitor Well: N/A

Excavation: 8/1/94
Re-Excavation: N/A -

Soil Boring: 7/20/95
Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe, which was 12 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 420 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 325 mg/kg, and TPH was above standards at 3,200 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. A brown sandstone was encountered at 28 feet bgs and continued to the termination of the boring at 49 bgs. A soil sample was collected for BTEX and TPH analysis at 48-49 feet bgs. Laboratory analysis showed all BTEX compounds to be at or below detection limits and TPH present at 29.5 mg/kg.

RECOMMENDATIONS

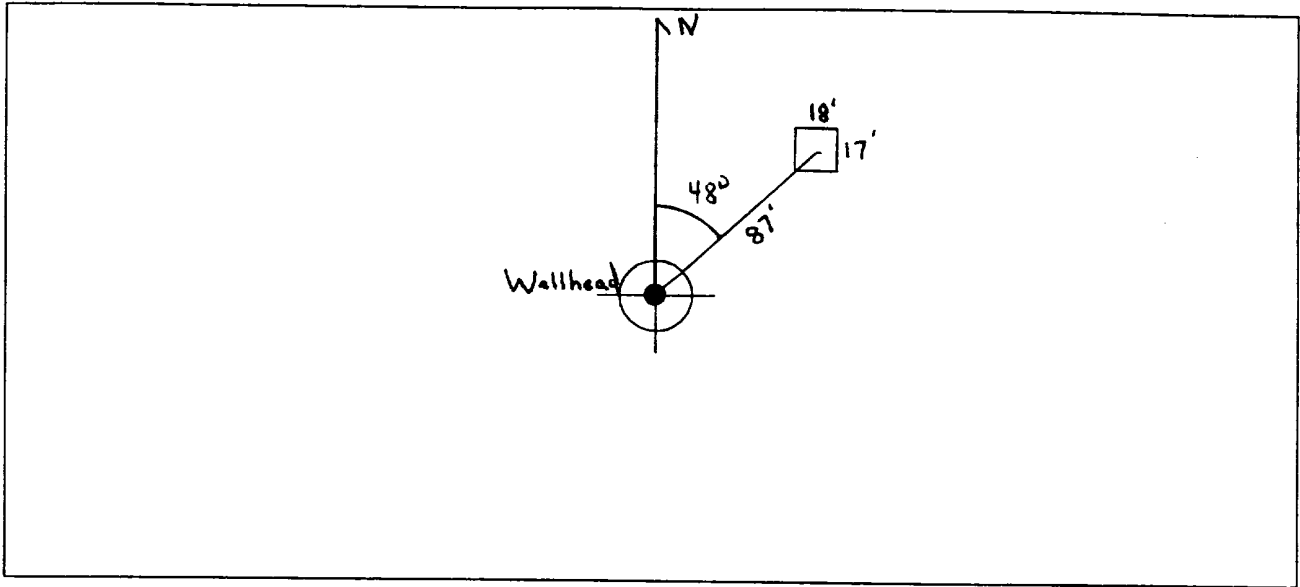
No further action is recommended at the site for the following reasons:

- The bulk of the impacted soil was removed during the phase 1 excavation.
- Test boring sample results indicated soils below standards 36 feet beneath the initial excavation.
- No groundwater was encountered in the test boring.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

RECEIVED
MAR - 9 1998
OIL CON. DIV.
DIST. 3

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>70469</u> Location: <u>Bolack C L S 1</u> Operator #: <u>02D3</u> Operator Name: <u>Amoso</u> P/L District: <u>Ballard</u> Coordinates: Letter: <u>A</u> Section: <u>28</u> Township: <u>27</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: ☒ Line Drip: _____ Other: _____ Site Assessment Date: <u>6/11/94</u> Area: <u>07</u> Run: <u>32</u>
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 <u>Ona Fee Taguez Canyon</u> (off of US 193) (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: <u>40</u> POINTS
REMARKS	Remarks : <u>Redline Book - Inside, Vulnerable Zone Type - Inside</u> <u>1 pit. Will close Pit Dry</u> <u>DIG & HAUL</u>

ORIGINAL PIT LOCATION	ORIGINAL PIT LOCATION Original Pit : a) Degrees from North <u>48°</u> Footage from Wellhead <u>87'</u> b) Length : <u>18'</u> Width : <u>17'</u> Depth : <u>2'</u> 
REMARKS	Remarks : <u>Pictures @ 1150 (1-4) call 3</u> <u>Dump Truck</u>
	Completed By: <u>Cory Chance</u> Signature <u>6/11/94</u> Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>70469</u> Location: <u>Bolack C LS #1</u> Coordinates: Letter: <u>A</u> Section <u>28</u> Township: <u>27</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>8/1/94</u> Run: <u>07 32</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD 178</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>420 ppm</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ Approx. Cubic Yards <u>40</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☐ Soil Disposition: Envirotech ☒ ☐ Tierra Other Facility ☐ Name: _____ Pit Closure Date: <u>8/1/94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Excavated pit to 12', Took PID Sample,</u> <u>closed pit.</u>
	Signature of Specialist: <u>Kenny Deane</u>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD178	945800
MTR CODE SITE NAME:	70469	Bolack CLS 1
SAMPLE DATE TIME (Hrs):	1-Aug-94	1320
PROJECT:	Phase I Excavation	
DATE OF TPH EXT. ANAL.:	8/2/94	8/2/94
DATE OF BTEX EXT. ANAL.:	8/3/94	8/4/94
TYPE DESCRIPTION:	VC	Brown/Grey Sand/Clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.11	MG/KG				
TOLUENE	<0.11	MG/KG				
ETHYL BENZENE	20.0	MG/KG				
TOTAL XYLENES	305	MG/KG				
TOTAL BTEX	325	MG/KG				
TPH (418.1)	3,200	MG/KG			2.10	28.0
HEADSPACE PID	420	PPM				
PERCENT SOLIDS	92.5	%				

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

The Surrogate Recovery was at 135 % for this sample All QA/QC was acceptable.

Narrative:

Surrogate recovery high due to co-elution.

DF = Dilution Factor Used

Approved By:

John L. Loefer

Date:

Original: 9/2/94
Re-print: 2/10/98

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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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74/08/02 13:55

Sample Identification

745800

Initial mass of sample, g

2.100

Volume of sample after extraction, ml

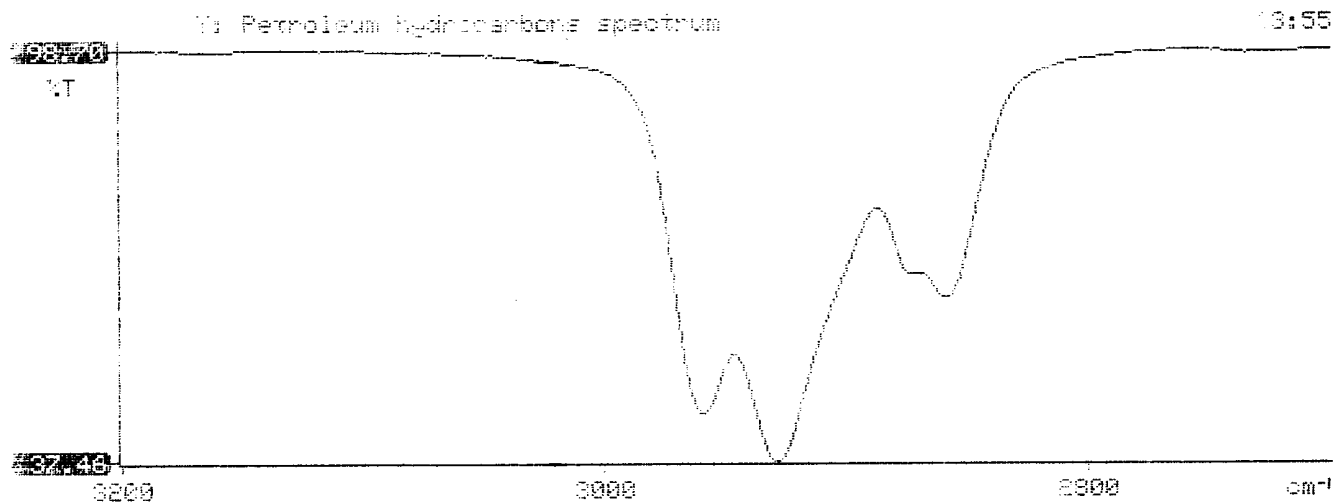
22.000

Petroleum hydrocarbons, ppm

7198.411

Net absorbance of hydrocarbons (2930 cm⁻¹)

0.421



ILLEGIBLE

See attached
5. daysEL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945800C
 Method : C:\LABQUEST\METHODS\WATERS.MET
 Sample ID : 945800 0.49g/20ml 1/50
 Acquired : Aug 04, 1994 15:58:28
 Printed : Aug 04, 1994 16:24:39
 User : STACY

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.417	0	0.00000	0.0000
a,a,a TFT	12.867	814443	12126.05859	6295.7188
TOLUENE	15.400	0	0.00000	0.0000
ETHYLBENZENE	19.550	1066068	104582.78125	489.3056
M & P XYLENE	19.750	10746895	118860.08594	4694.6533
O XYLENE	20.233	5943459	103952.14844	2780.2668
BFB	20.900	4176423	455214.09375	1161.9470

Totals :

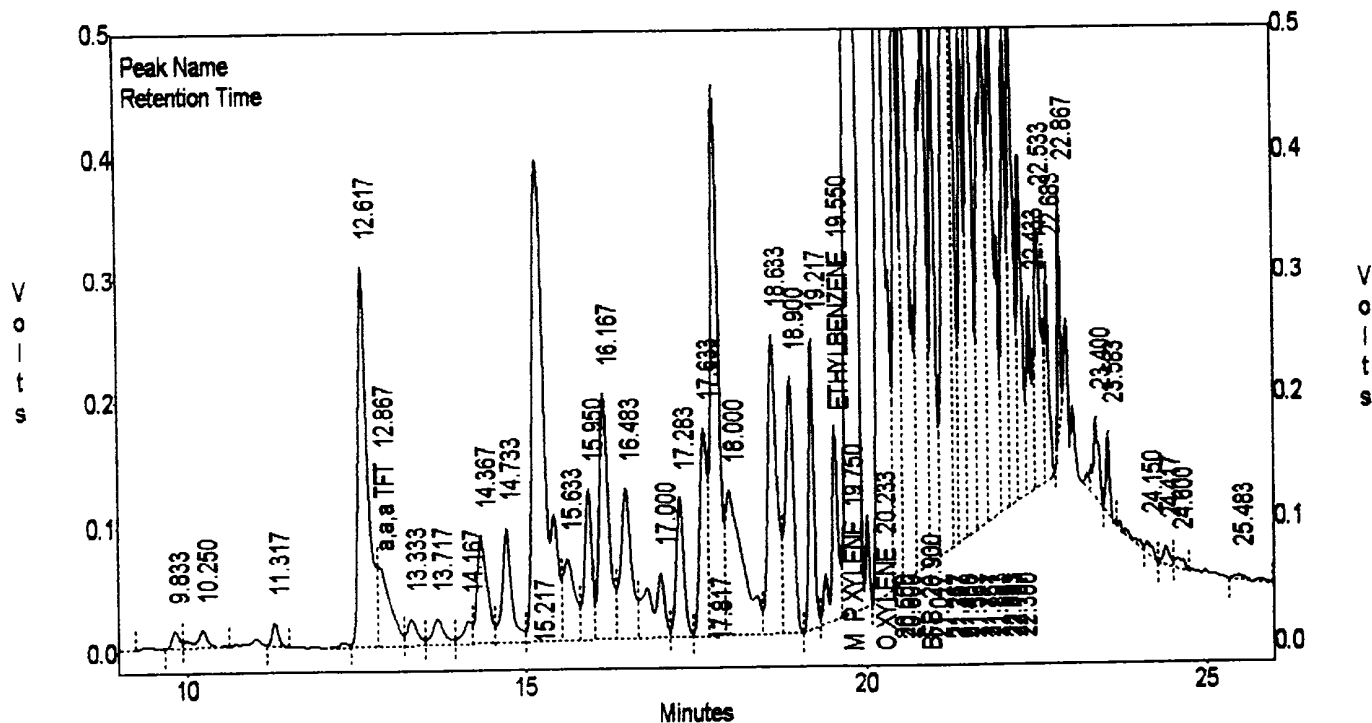
22747290

15421.8916

from 1/20 Chromatogram

Jullender
8/6/94

C:\LABQUEST\CHROM\945800C - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

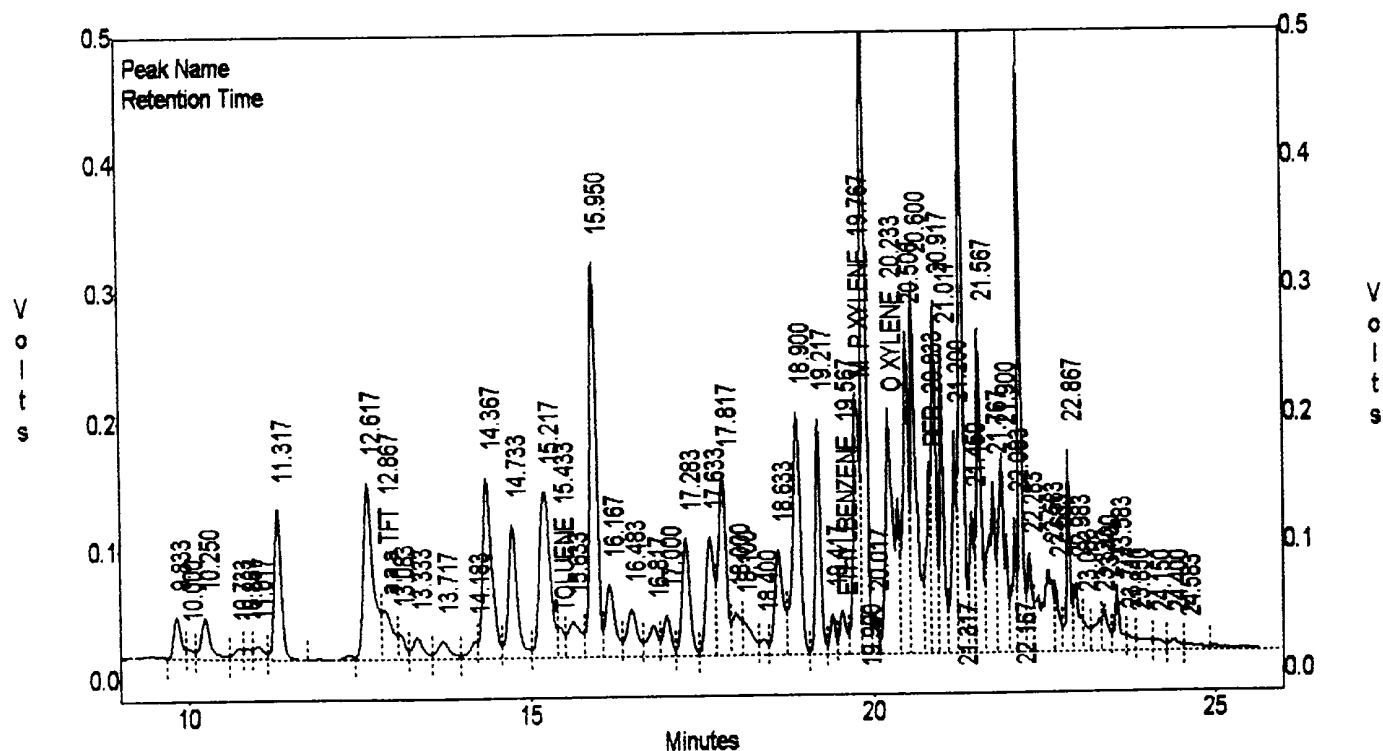
File : C:\LABQUEST\CHROM\945800C
 Method : C:\LABQUEST\METHODS\WATERS.MET
 Sample ID : 945800 0.49g/20ml 1/50
 Acquired : Aug 04, 1994 15:58:28
 Printed : Aug 04, 1994 16:24:44
 User : STACY

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.500	0	0.00000	0.0000
a,a,a TFT	12.867	417854	1556.41406044636608	0.0000
TOLUENE	15.433	150333	16277.60938	436.7692
ETHYLBENZENE	19.567	219616	15369.43262	680.6971
M & P XYLENE	19.767	1340950	15419.21973	4192.7026
O XYLENE	20.233	1714755	15228.25098	5368.0635
BFB	20.833	622028	29268.63867	1936.1223

Totals :
 4465538 1044649280.0000

C:\LABQUEST\CHROM\945800C - Channel B

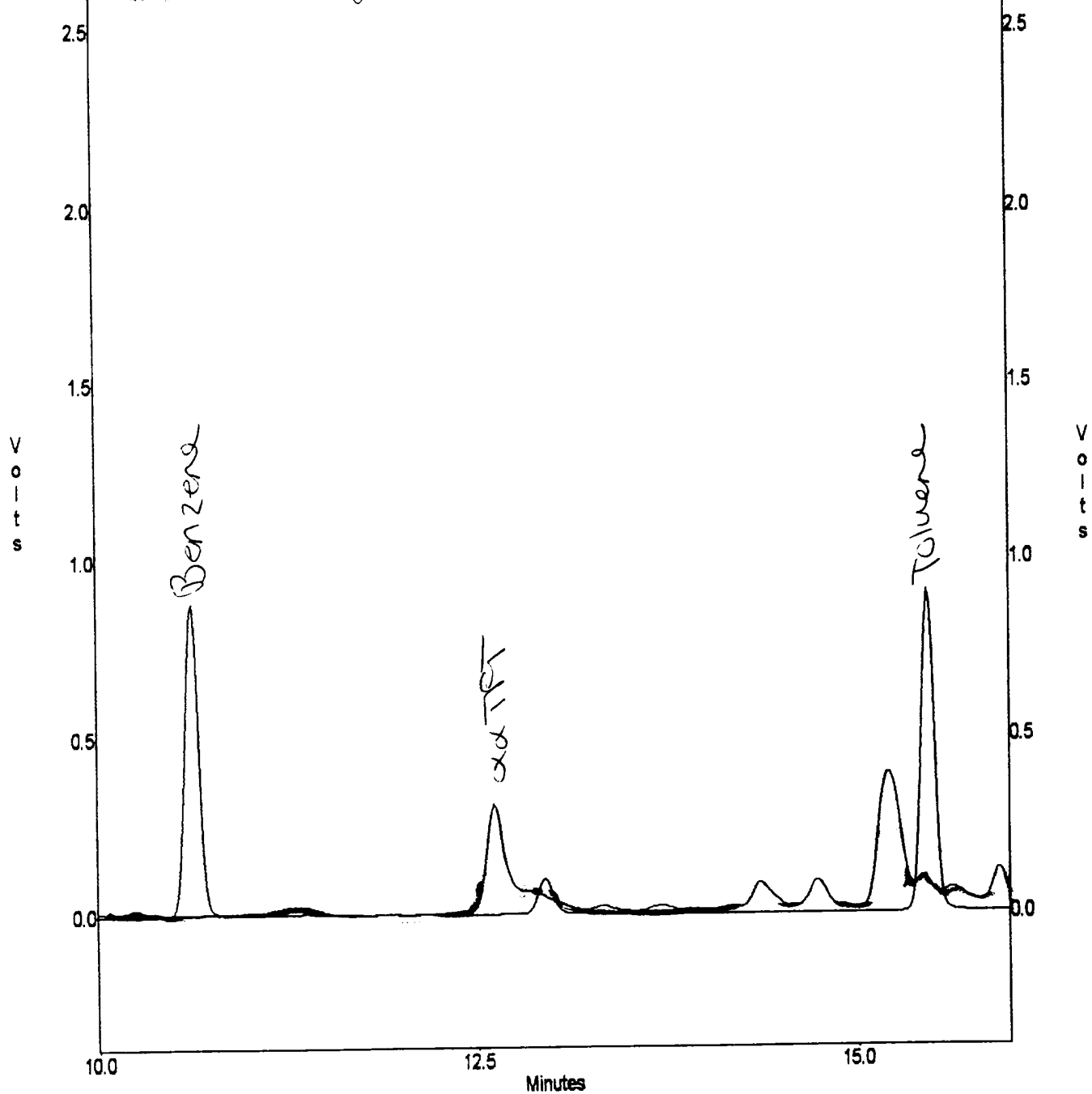


Overlaid Traces

841cv50, Channel A

965800, Channel A

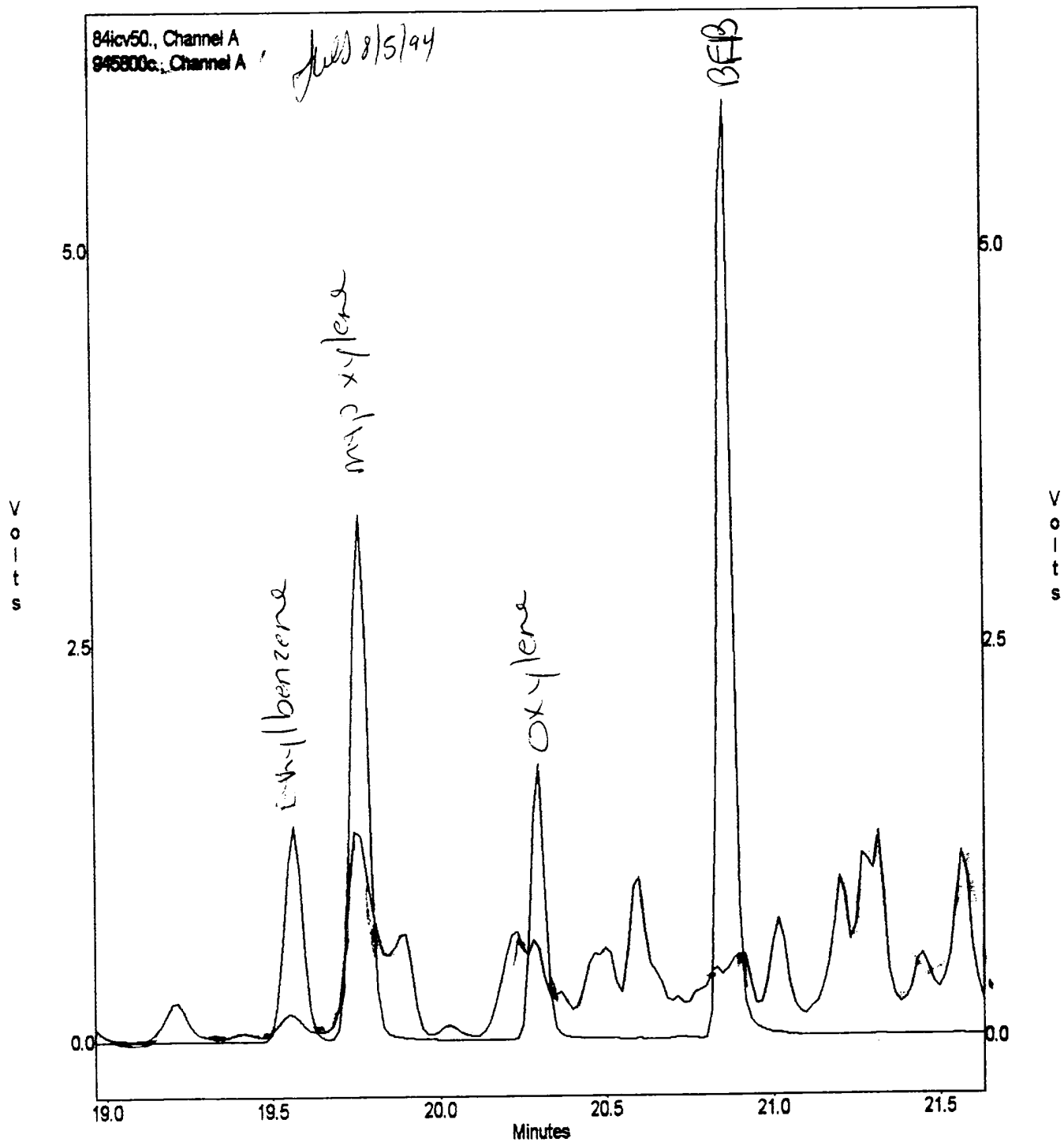
50 July 8/5/94



Overlaid Traces

841cv50, Channel A
945800c, Channel A

Jul 8/5/94



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945800D
 Method : C:\LABQUEST\METHODS\WATERS.MET
 Sample ID : 945800 0.49g/20ml 1/20
 Acquired : Aug 04, 1994 17:31:18
 Printed : Aug 04, 1994 17:57:30
 User : STACY

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.633	114394	110084.15625	19.5145 0.975
a,a,a TFT	12.850	2939584	12126.05859	9089.2988
TOLUENE	15.383	1148666	113262.99219	191.5340 9.55
ETHYLBENZENE	19.533	2343792	104582.78125	430.3028 21.5
M & P XYLENE	19.733	28181110	118860.08594	4924.2334 246.2
O XYLENE	20.267	15193697	103952.14844	2842.9595 142.1
BFB	20.833	24334312	455214.09375	2708.0764 135.4

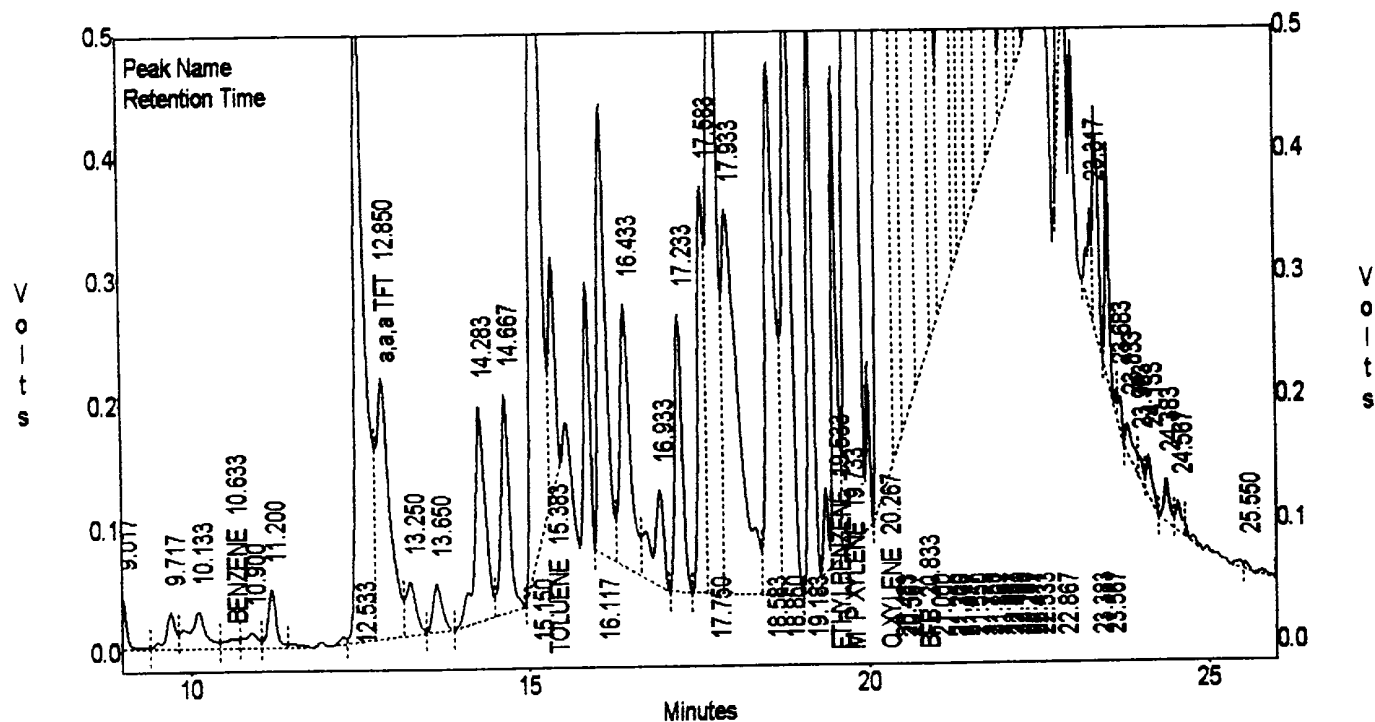
Totals :

74255552

20205.9199

Stacy
8/6/94

C:\LABQUEST\CHROM\945800D - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

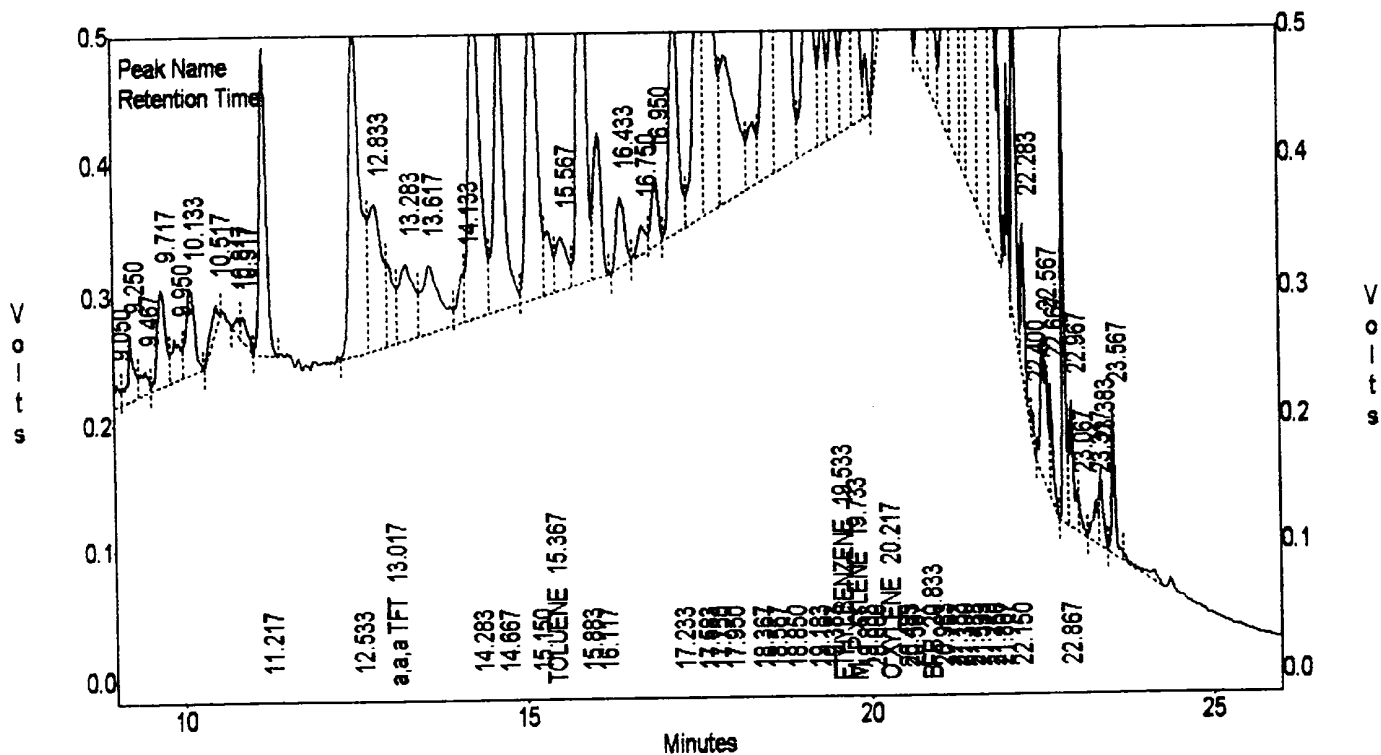
File : C:\LABQUEST\CHROM\945800D
 Method : C:\LABQUEST\METHODS\WATERS.MET
 Sample ID : 945800 0.40g/20ml 1/20
 Acquired : Aug 04, 1994 17:31:18
 Printed : Aug 04, 1994 17:57:36
 User : STACY

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.633	0	0.00000	0.0000
a,a,a TFT	13.017	477675	1556.414064	77675872.0000
TOLUENE	15.367	370365	16277.60938	430.4146
ETHYLBENZENE	19.533	882994	15369.43262	1094.7291
M & P XYLENE	19.733	3587956	15419.21973	4487.3359
O XYLENE	20.217	2150329	15228.25098	2692.6536
BFB	20.833	4724093	29268.63867	5881.6748

Totals : 12193415 477690432.0000

C:\LABQUEST\CHROM\945800D - Channel B



PHASE II

RECORD OF SUBSURFACE EXPLORATION

Burlington Environmental Inc.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

BH1

Well #

Page

1 of 2

Project Name

EPNG PITS

Project Number

14509

Phase

6000.77

Project Location

Balock, C. 151

70469

Well Logged By

John LaBarbera

Personnel On-Site

M. Duran, D. Schaefer, M. Tera

Contractors On-Site

Client Personnel On-Site

Elevation

Borehole Location

GWL Depth

Logged By

Drilled By

Date/Time Started

Date/Time Completed

Drilling Method

Air Monitoring Method

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} NO ₂ ^{mg} CO ^{mg} H ₂ S			Drilling Conditions & Blow Counts
0							BZ	BH	NS	
5										
10										
15										
18	1	18-19.5	18	Tan, loose, silty, v. fine to coarse SAND, damp, clay	SM		C	43	383/230	1335
20										
23	2	23-	-	no recovery			9.1	69		
25										
28	3	28-29.5	18	Brown, fine to coarse, SAND, STONY, 2 in size and fine gravel, poorly cemented, no color noted	X		1.6	62	195/0.2	1347
30										
33	4	33-38	12	AA, no fine gravel			0	87	2993/5.6	1358
35										
38	5	38-39.5	18	Brown, fine SANDSTONE, poorly cemented			0	19	4194/1.1	1365
40										

Comments:

Geologist Signature

John LaBarbera

RECORD OF SUBSURFACE EXPLORATION

Burlington Environmental Inc.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 328-2262 FAX (505) 326-2388

Borehole # BH1

Well # _____

Page 2 of 2

Project Name EPNG PITS

Project Number 14509 Phase 6000.77

Project Location Bolack C. 651 70429

Well Logged By John LaBarbera

Personnel On-Site John LaBarbera, D. Schmitt, MRS

Contractors On-Site _____

Client Personnel On-Site _____

Drilling Method 4.35" ID HSA

Air Monitoring Method P-22/C-5

Elevation _____

Borehole Location 1000-A-525-TAR-R8

GWL Depth _____

Logged By John LaBarbera

Drilled By John LaBarbera

Date/Time Started 7/20/85-1325

Date/Time Completed 21540

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: <u>ppm</u>			Drilling Conditions & Blow Counts
							BZ	BH	S	
40										
45	6	43-44	12	AR					468 0.2	✓ed w/ calibration MS - OK M/S
50	7	48-49	12	Drill core, fine to coarse SAND- STONE, some fine gravel, partly cemented				343	37 2.5	1443
55				TAB at 49'						
15										
20										
25										
30										
35										
40										

Comments:

Sample JFL 18 sent to lab for BTEX/TPH analysis.
Sampled from 48-49'.

Geologist Signature

John LaBarbera



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II Drilling

Balazs CLSI

(28-49')

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL 18	947043
MTR CODE SITE NAME:	70469	N/A
SAMPLE DATE TIME (Hrs):	07-20-95	14:43
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7-24-95	7-24-95
DATE OF BTEX EXT. ANAL.:	7-26-95	7-27-95
TYPE DESCRIPTION:	V6	Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	/			
TOLUENE	<0.025	MG/KG	/			
ETHYL BENZENE	<0.025	MG/KG	/			
TOTAL XYLENES	0.025	MG/KG	/			
TOTAL BTEX	0.025	MG/KG				
TPH (418.1)	^{EXX/95} ^{7/27/95} 29 29.5	MG/KG			2.03	28
HEADSPACE PID	37	PPM				
PERCENT SOLIDS	94.6	%				

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

The Surrogate Recovery was at 96 % for this sample All QA/QC was acceptable.

Narrative:

AT1 Results attached

DF = Dilution Factor Used

Approved By:

JF

Date:

8/22/95

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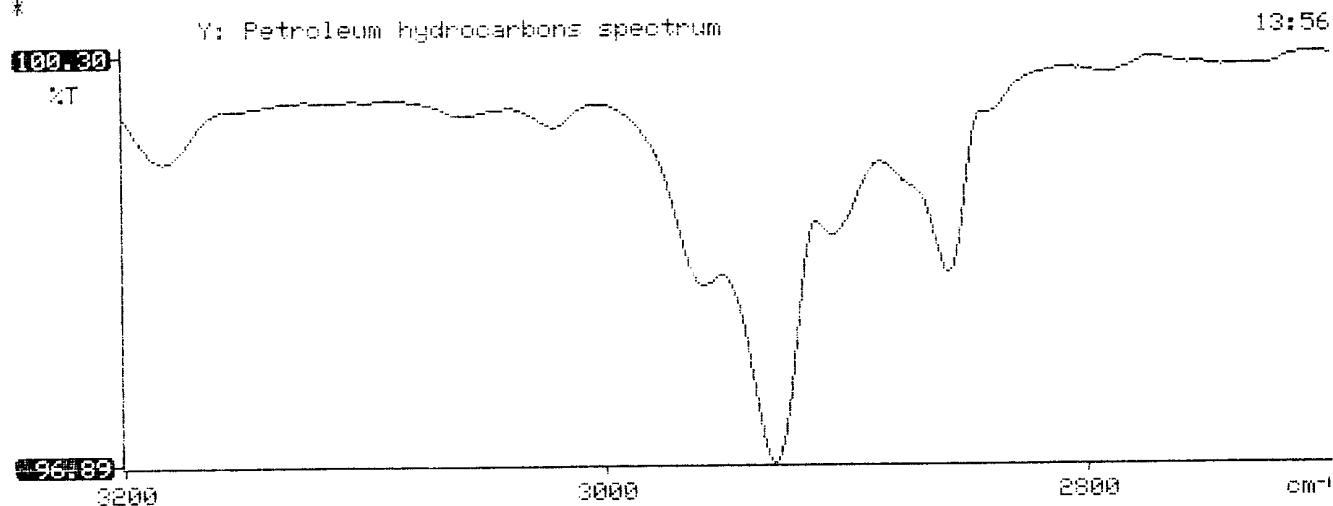
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report        *
*                               *
*****

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* 95/07/24 13:56
*
* Sample identification
* 947043
*
* Initial mass of sample, g
* 2.030
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 29.471
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.014
*
*
*

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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. 507403

August 3, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRILLING 24324

Attention: John Lambdin

On 07/26/95, 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.

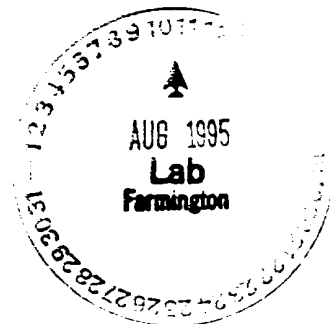
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507403
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947041	NON-AQ	07/20/95	07/26/95	07/27/95	1
02	947042	NON-AQ	07/20/95	07/26/95	07/27/95	1
03	947043	NON-AQ	07/20/95	07/26/95	07/27/95	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE	MG/KG	0.051	<0.025	<0.025
TOTAL XYLENES	MG/KG	0.32	<0.025	0.025

SURROGATE:

BROMOFLUOROBENZENE (%)	87	104	96
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