

27  
Denny & Field SERVICES  
DEPUTY CHIEF OF PRODUCTION PIT CLOSURE

DEC 21 1998

DAWSON A #1M MV & PC  
Meter/Line ID - 93552

RECEIVED  
JUL 2 1998

SITE DETAILS

Legals - Twp 27 - Rng: 08

Sec: 04

Unit: D

NMOCD Hazard Ranking: 40

Land Type: 2 - Federal

Operator: AMOCO PRODUCTION COMPANY

OIL CON. DIV.  
DIST. 3

Pit Closure Date: 08/03/94

**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:

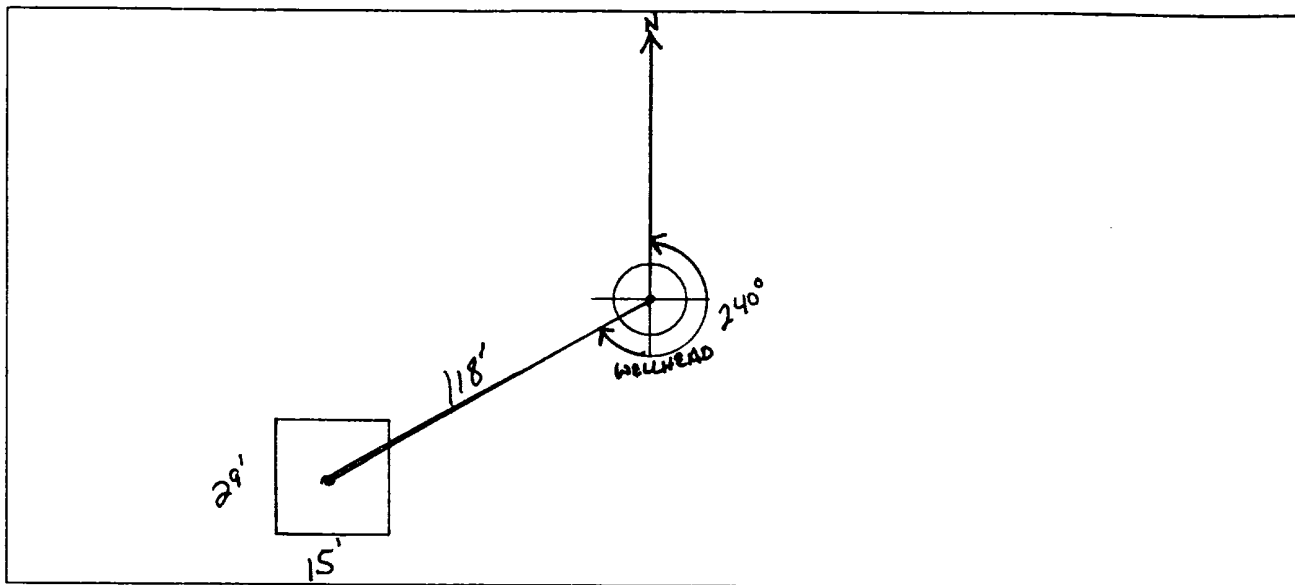
- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All 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	<p>Meter: <sup>93552</sup><u>93553</u> Location: <u>DAWSON A # 1M MV &amp; PC</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO P/L</u> District: <u>BALLARD</u></p> <p>Coordinates: Letter: <u>D</u> Section <u>4</u> Township: <u>22</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: <input checked="" type="checkbox"/> <sup>6.9.94 RT</sup> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>6.9.94</u> Area: <u>07</u> Run: <u>32</u></p>																
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p><b>Land Type:</b></p> <table border="0"> <tr> <td>Inside</td><td><input checked="" type="checkbox"/> (1)</td> <td>BLM</td><td><input checked="" type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td><td><input type="checkbox"/> (2)</td> <td>State</td><td><input type="checkbox"/> (2)</td> </tr> <tr> <td></td><td></td> <td>Fee</td><td><input type="checkbox"/> (3)</td> </tr> <tr> <td></td><td></td> <td>Indian</td><td>_____</td> </tr> </table> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b></p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>FRESNO CANYON</u></p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>40</u> POINTS</p>	Inside	<input checked="" type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)	Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)			Fee	<input type="checkbox"/> (3)			Indian	_____
Inside	<input checked="" type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)														
Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)														
		Fee	<input type="checkbox"/> (3)														
		Indian	_____														
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION WILL CLOSE ONLY ONE. PIT IS DRY.</u></p> <p><u>LOCATION IS IN FRESNO CANYON WEST OF LABGO WASH. REDLINE AND TOPO</u></p> <p><u>CONFIRMED LOCATION IS INSIDE U.Z.</u></p> <p style="text-align: right;"><u>DIC E. HARRIS</u></p>																

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 240° Footage from Wellhead 118'  
b) Length : 29' Width : 15' Depth : 4'



### Remarks :

TOOK PICTURES AT 11:52 A.M.

END DUMP

Completed By:

Pat Thompson

Signature

6.9.94

Date

# **PHASE I EXCAVATION**

---

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>93552</u> <u>93553</u> Location: <u>Dawson A #1M (mu &amp; PC)</u></p> <p>Coordinates: Letter: <u>D</u> Section <u>4</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8/3/94</u> Run: <u>07</u> <u>32</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KD 183</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>312 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>70</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8/3/94</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Excavated pit to 12', Took pid sample, closed</u> <u>pit.</u></p>
	<p>Signature of Specialist: <u>Kenny Dem</u></p>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 183	945827
MTR CODE   SITE NAME:	93552 / 93553	N/A
SAMPLE DATE   TIME (Hrs):	8-3-94	1140
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8-4-94	8-4-94
DATE OF BTEX EXT.   ANAL.:	8/8/94	8/9/94
TYPE   DESCRIPTION:	VC	Dark Brown sand/clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	60.25	MG/KG	10			
TOLUENE	7.5	MG/KG	10			
ETHYL BENZENE	1.1	MG/KG	10			
TOTAL XYLENES	17	MG/KG	10			
TOTAL BTEX	26	MG/KG				
TPH (418.1)	1050	MG/KG			2.17	28
HEADSPACE PID	312	PPM				
PERCENT SOLIDS	90.4	%				

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

The Surrogate Recovery was at 131 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached. Surrogate recovery was outside  
ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By: J.P.

Date: 7/2/94

DATA PRINTOUT (\*\*\*\*\*)

Test Report for  
Total Petroleum Hydrocarbons  
in Water and Soil

For In-Flux Code: 1600 FT-IR

Final Report

\*\*\*\*\*

12/19/00 11:30

Sample identification  
000007

Initial mass of sample, g  
0.170

Volume of sample after extraction, ml  
0.000

Petroleum hydrocarbons, ppm  
1048.502

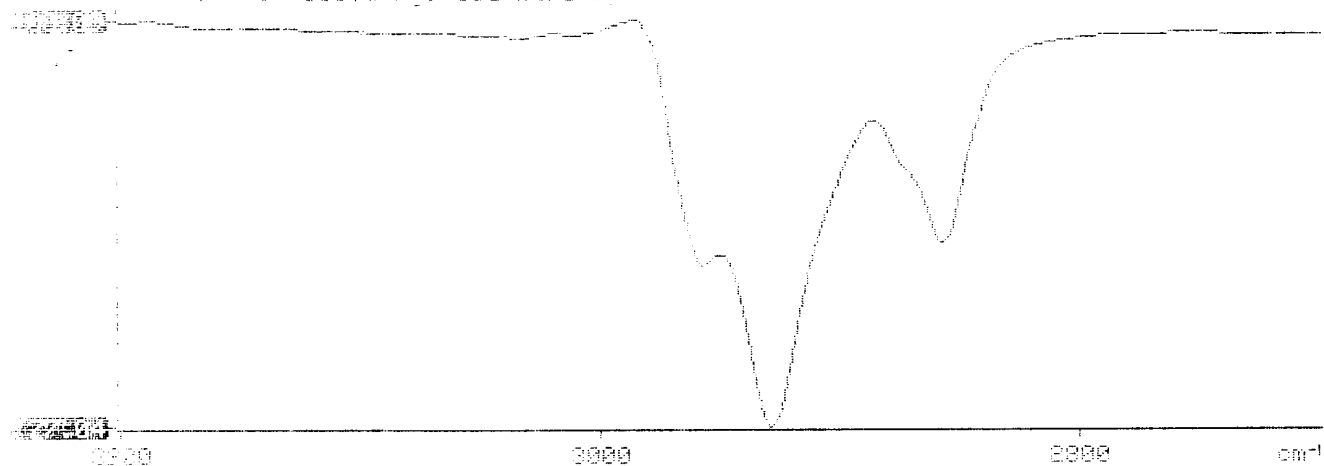
Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)

0.000

0  
0  
0

Petroleum hydrocarbons spectrum

11:52



ILLEGIBLE



Analytical **Technologies, Inc.**

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

ATI I.D. 408328

August 11, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/05/94, 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.

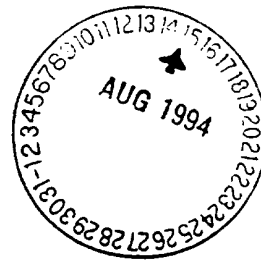
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.  
Project Manager

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.: 408328  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	945825	NON-AQ	08/03/94	08/08/94	08/08/94	1
08	945826	NON-AQ	08/03/94	08/08/94	08/09/94	20
09	945827	NON-AQ	08/03/94	08/08/94	08/09/94	10
PARAMETER			UNITS	07	08	09
BENZENE			MG/KG	<0.025	<0.5	<0.25
TOLUENE			MG/KG	<0.025	8.5	7.5
ETHYLBENZENE			MG/KG	<0.025	8.6	1.1
TOTAL XYLENES			MG/KG	<0.025	120	17

## SURROGATE:

BROMOFLUOROBENZENE (%) 96 145\* 131\*

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

---

# RECORD OF SUBSURFACE EXPLORATION

Burlington Environmental Inc.  
4000 Monroe Road  
Farmington, New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 1 of 1

Project Name EPNG PITS  
Project Number 14509 Phase 6000.77  
Project Location Dawson A #1M in Y&PC 93SE  
9355

Elevation \_\_\_\_\_  
Borehole Location Letter D-SH-T27-R8  
GWL Depth \_\_\_\_\_  
Logged By J.F. LaBarbera  
Drilled By K. Padilla  
Date/Time Started 7/7/98 - 0755  
Date/Time Completed - 1005

Well Logged By J.F. LaBarbera  
Personnel On-Site K. Padilla, F. Rivera, 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 <u>HS</u> BZ BH S			Drilling Conditions & Blow Counts
0										
5										
10										
15	1	15-15.25	3	Brown, dense, fm, SAND, dry, sl. cket. At bottom of sample - fm SANDSTONE, poorly cemented, tr. silt.	SP		8	297	<u>109</u> <u>789</u>	0814
20	2	20-21	10	Brown, stiff, SILT, tr. clay, dry, odor			0	327	<u>973</u> <u>722</u>	0835
25	3	25-25.5	6	AA - Olive	SP		38	113	<u>415</u> <u>291</u>	0850
30	4	30-31	1	AA - tr. fm sand	SP		1.5	526	<u>406</u> <u>42</u>	HS recovery 0902
35	5	32-32	1	AA - Brown	SP		1	110	<u>7</u> <u>42</u>	Refusal 0920
40				TAB at 32' - Refusal						

Comments:

Insufficient recovery for headspace - sample JFZ 8 start for BTEX/TPH analysis.

Geologist Signature

J.F. LaBarbera



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II  
Graham #53 (30-31.25  
Dawson A #1 m mvdpc  
(32')

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL8	947007
MTR CODE   SITE NAME:	93552/93553	N/A
SAMPLE DATE   TIME (Hrs):	7/17/95	09:20
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7-18-95	7-18-95
DATE OF BTEX EXT.   ANAL.:	7-19-95	7-20-95
TYPE   DESCRIPTION:	VG	Brown sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.025	MG/KG	1			
TOLUENE	0.076	MG/KG	1			
ETHYL BENZENE	40.025	MG/KG	1			
TOTAL XYLENES	0.13	MG/KG	1			
TOTAL BTEX	0.206	MG/KG				
TPH (418.1)	76.0	MG/KG			1.98	28
HEADSPACE PID	42 na	PPM				
PERCENT SOLIDS	87.8	%				

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

The Surrogate Recovery was at 94 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

8/3/95

```

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

```

95/07/18 10:24

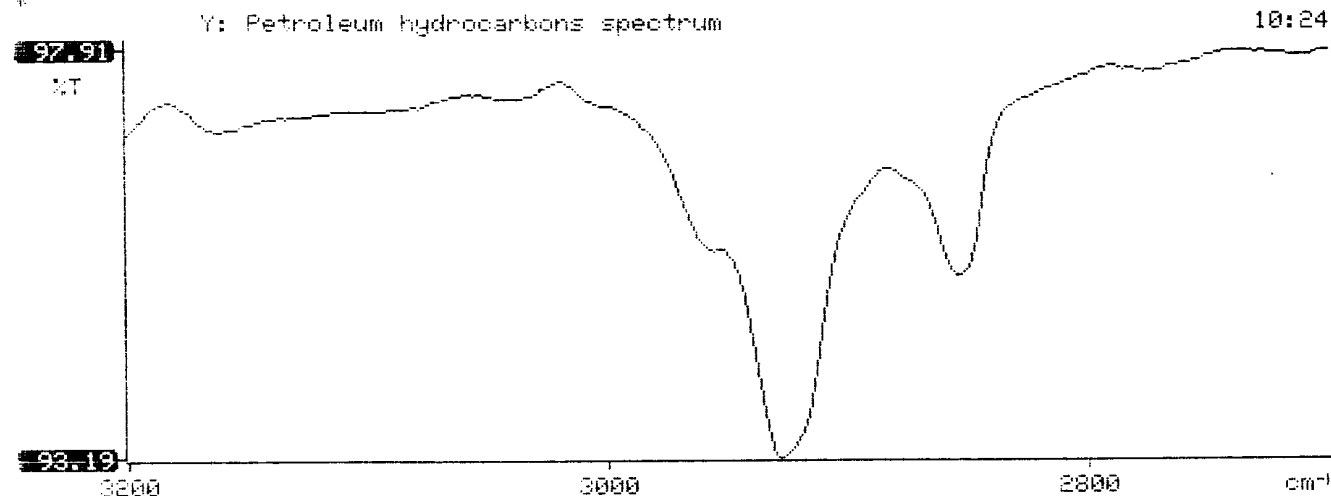
\* Sample identification  
947007

\* Initial mass of sample, g  
1.980

\* Volume of sample after extraction, ml  
28.000

\* Petroleum hydrocarbons, ppm  
75.975

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.019





Analytical **Technologies, Inc.**

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

ATI I.D. 507358

July 25, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRIL M/W 24324

Attention: John Lambdin

On 07/19/95, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous and 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

MR:jtt

Enclosure

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager





## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507358  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE/PHASE II DRIL

SAMPLE ID #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
11	947006	NON-AQ	07/14/95	07/19/95	07/19/95	1
12	947007	NON-AQ	07/17/95	07/19/95	07/20/95	1
13	947008	NON-AQ	07/17/95	07/19/95	07/20/95	1

PARAMETER	UNITS	11	12	13
BENZENE	MG/KG	0.026	<0.025	<0.025
TOLUENE	MG/KG	0.19	0.076	<0.025
ETHYLBENZENE	MG/KG	0.052	<0.025	<0.025
TOTAL XYLENES	MG/KG	0.5	0.13	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)	110	94	99
------------------------	-----	----	----