

EL PASO FIELD SERVICES  
DEPUTY OIL & GAS INSPECTION  
**PRODUCTION PIT CLOSURE**

DEC 21 1998

**GARRETT D #1**  
Meter/Line ID - 90298

**RECEIVED**  
JUL 2 1998

**SITE DETAILS**

Legals - Twn: 29 Rng: 11  
NMOCD Hazard Ranking: 20  
Operator: TEXACO E&P INC

Sec: 13 Unit: F  
Land Type: 4 - Fee  
Pit Closure Date: 09/08/94

**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

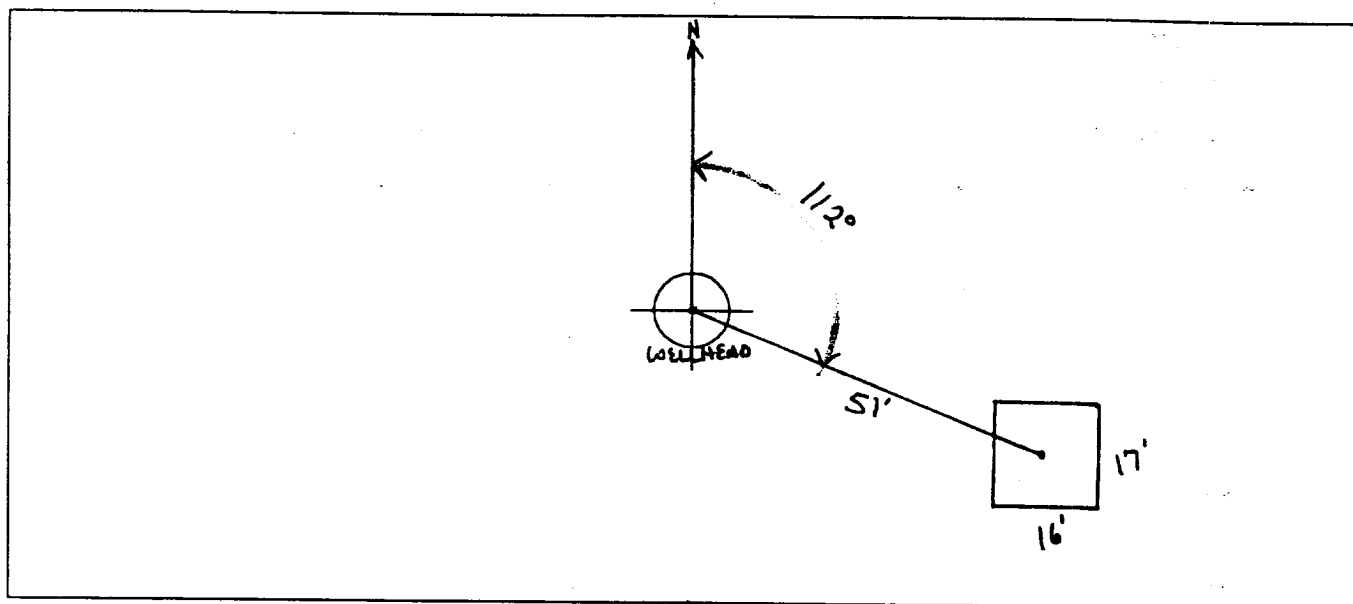
GENERAL	Meter: <u>90298</u> Location: <u>GARRETT D #1</u> Operator #: <u>0263</u> Operator Name: <u>TEXACO</u> P/L District: <u>BLOOMFIELD</u> Coordinates: Letter: <u>F</u> Section <u>13</u> Township: <u>29</u> Range: <u>11</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>5.20.94</u> Area: <u>10</u> Run: <u>93</u>								
SITE ASSESSMENT	<b>NMOCD Zone:</b> (From NMOCD Maps)								
	<b>Land Type:</b> <table border="0"> <tr> <td>BLM</td> <td><input type="checkbox"/> (1)</td> </tr> <tr> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td>Fee</td> <td><input checked="" type="checkbox"/> (3)</td> </tr> <tr> <td>Indian</td> <td>_____</td> </tr> </table>		BLM	<input type="checkbox"/> (1)	State	<input type="checkbox"/> (2)	Fee	<input checked="" type="checkbox"/> (3)	Indian
BLM	<input type="checkbox"/> (1)								
State	<input type="checkbox"/> (2)								
Fee	<input checked="" type="checkbox"/> (3)								
Indian	_____								
	<b>Depth to Groundwater</b> Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)								
	<b>Wellhead Protection Area :</b> 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)								
	<b>Horizontal Distance to Surface Water Body</b> Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)								
	Name of Surface Water Body <u>HARE CANYON</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)								
	Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'								
	<b>TOTAL HAZARD RANKING SCORE:</b> <u>20</u> POINTS								
REMARKS	Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS N.E. OF BLOOMFIELD IN HARE CANYON. PEDLINE AND TOPO CONFIRMED LOCATION IS INSIDE V.Z.</u>								

DIG & HAIL

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 112° Footage from Wellhead 51'  
b) Length : 17' Width : 16' Depth : 2'



## REMARKS

Remarks :

TOOK PICTURES AT 3:46 P.M.

END DUMP

Completed By:

Bob Champion

Signature

5-20-94

Date

# **PHASE I EXCAVATION**

# FIELD T REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>90298</u> Location: <u>Garrett D#1</u></p> <p>Coordinates: Letter: <u>F</u> Section <u>13</u> Township: <u>29</u> Range: <u>11</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9-8-94</u> Area: <u>10</u> Run: <u>93</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>pk 305</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>264</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>70</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>9-8-94</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Pit was dry soil was black for first 8-9 ft started turning brown soil was brown at sample depth still had strong hydrocarbon odor</u></p>
	<p>Signature of Specialist: <u>Morgan Killian</u></p>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	mk 305	946082
MTR CODE   SITE NAME:	90298	N/A
SAMPLE DATE   TIME (Hrs):	9-8-94	1555
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	9/13/94	9/13/94
DATE OF BTEX EXT.   ANAL.:	9/14/94	9/16/94
TYPE   DESCRIPTION:	VC	lt. Brown fine sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.025	MG/KG	1			
TOLUENE	2.0	MG/KG	1			
ETHYL BENZENE	0.6	MG/KG	1			
TOTAL XYLENES	8.7	MG/KG	1			
TOTAL BTEX	11.3	MG/KG				
TPH (418.1)	790 <i>9/16/94</i>	MG/KG			221	28
HEADSPACE PID	264	PPM				
PERCENT SOLIDS	93.4	%				

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

The Surrogate Recovery was at 87 % for this sample All QA/QC was acceptable.  
Narrative:

ATI Results Attached.

DF = Dilution Factor Used

Approved By: *JR*

Date: 10/23/94

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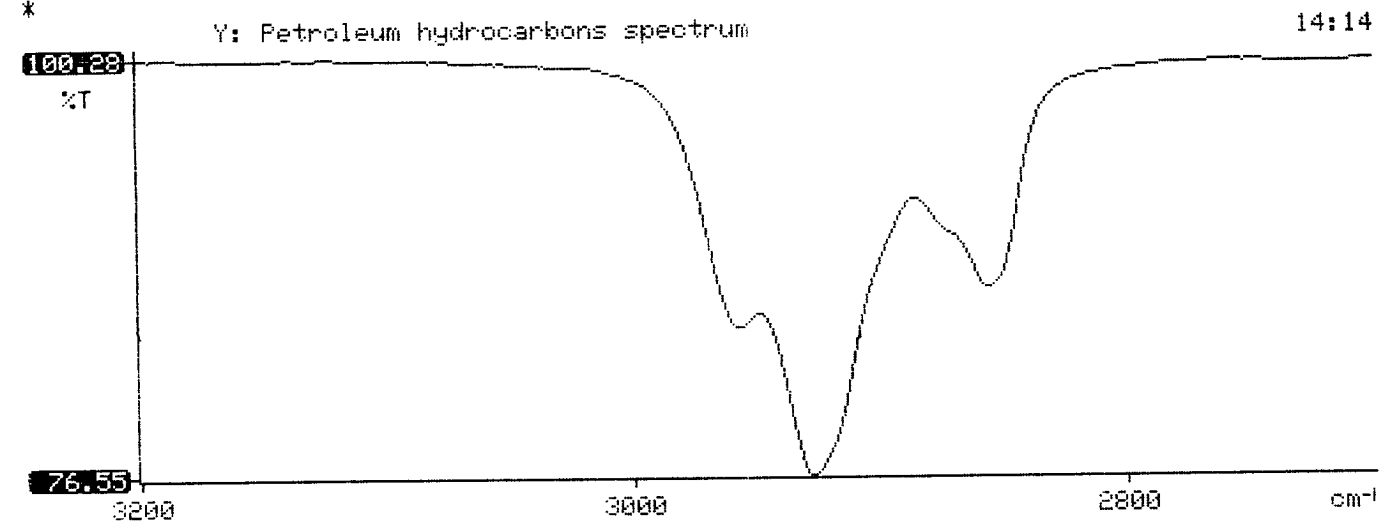
*****
*                               *
*      Test Method for          *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                    *
*      Analysis Report                       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

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* 94/09/13 14:14
*
* Sample identification
* 946082
*
* Initial mass of sample, g
* 2.210
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 790.288
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.116
*
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*

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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. 409354

September 22, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

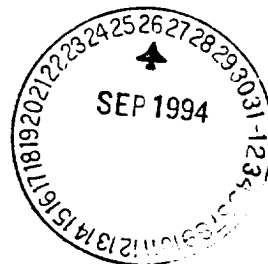
On 09/14/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

Letitia Krakowski, Ph.D.  
Project Manager

MR:jt

Enclosure





# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409354  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946081	NON-AQ	09/08/94	09/14/94	09/16/94	1
08	946082	NON-AQ	09/08/94	09/14/94	09/16/94	1
09	946083	NON-AQ	09/09/94	09/14/94	09/16/94	1
PARAMETER			UNITS	07	08	09
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	0.046	2.0	<0.025
ETHYLBENZENE			MG/KG	<0.025	0.6	<0.025
TOTAL XYLENES			MG/KG	0.11	8.7	0.025

## SURROGATE:

BROMOFLUOROBENZENE (%) 99 87 101

# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # BH1  
Well #           
Page 1 of 1

Project Name EPNG Pits  
Project Number 14509 Phase 601  
Project Location Garrett D#1, 90298

Elevation           
Borehole Location T29, R11, S.13, F  
GWL Depth           
Logged By S.Kelly  
Drilled By K. Padilla  
Date/Time Started 6/28/95, 1200  
Date/Time Completed 6/29/95, 1250

Well Logged By S.Kelly  
Personnel On-Site K. Padilla, F. Rivera, D. Chari  
Contractors On-Site           
Client Personnel On-Site           
Drilling Method 4 1/2" ID HSA  
Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ BH S/H			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15- 16.5	1.1	SAND, med. sand, light brown, very loose, damp.			0	0	0	1220.
20				BOTH 16.5						
25										
30										
35										
40										

Comments: 15'-16.5' sample (SEK 25) sent to lab (BTEX & TPH) Sample  
was bagged and iced prior to being placed in jar.  
BH grouted to surface.

Geologist Signature [Signature]



Phase II - Drilling

FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEW 25	946934
MTR CODE   SITE NAME:	90298	N/A
SAMPLE DATE   TIME (Hrs):	6-28-95	1220
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7-4-95	7-4-95
DATE OF BTEX EXT.   ANAL.:	7-6-95	7-7-95
TYPE   DESCRIPTION:	VG	Brown Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	88.3	MG/KG			2.00	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	94.2	%				

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

The Surrogate Recovery was at 107 % for this sample All QA/QC was acceptable.  
Narrative:

All Results Attached

DF = Dilution Factor Used

Approved By:

J-P

Date:

7/17/95

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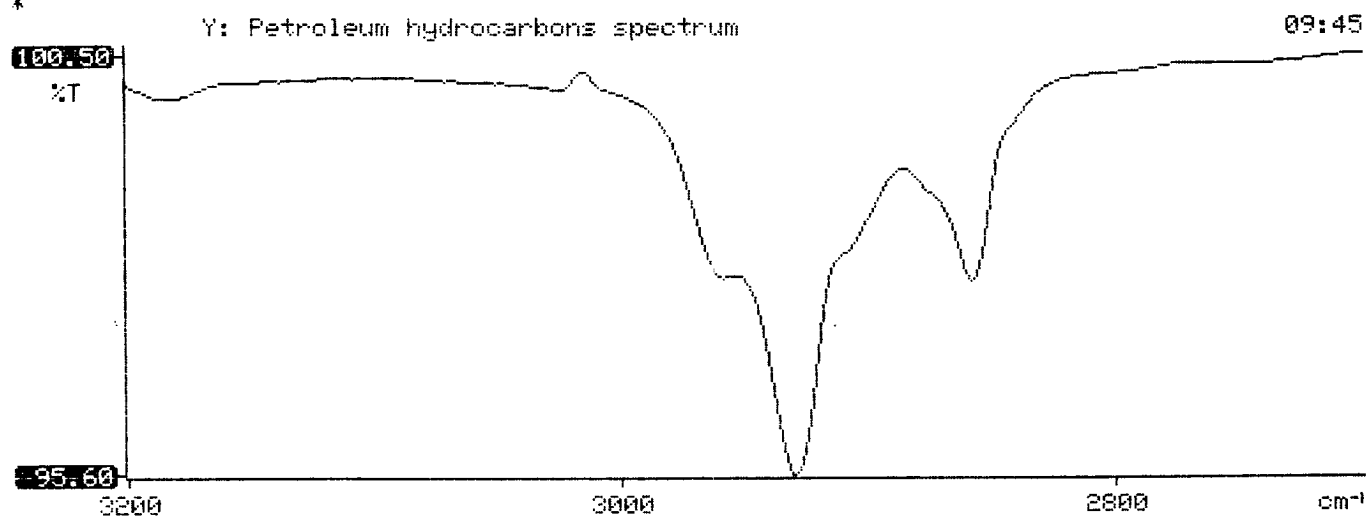
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report                          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

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* 95/07/04 09:45
*
* Sample identification
* 946934
*
* Initial mass of sample, g
* 2.000
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 88.335
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.021
*
*
*

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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. 507308

July 13, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II 38822

Attention: John Lambdin

On 07/06/95, 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.

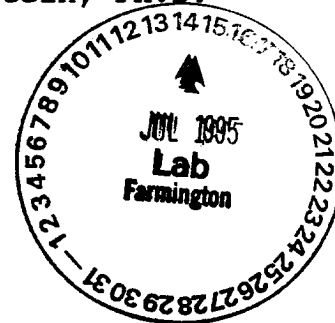
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill  
Project Manager

MR:gsm

Enclosure

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager





Analytical Technologies, Inc.

## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS COMPANY ATI I.D.: 507308  
PROJECT # : 38822  
PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946934	NON-AQ	06/28/95	07/06/95	07/07/95	1
02	943635	NON-AQ	06/28/95	07/06/95	07/07/95	1
03	946936	NON-AQ	06/28/95	07/06/95	07/07/95	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<0.025	0.063
TOLUENE			MG/KG	<0.025	<0.025	1.1
ETHYLBENZENE			MG/KG	<0.025	<0.025	0.22
TOTAL XYLENES			MG/KG	<0.025	<0.025	1.5

### SURROGATE:

BROMOFLUOROBENZENE (%) 107 100 96