Denver & Tech

EL PASO FIELD SERVICES
DEPUTY OIL & GAS INSPECTOR

PRODUCTION PIT CLOSURE

DEC 2 1 1998

Approved

SAN JUAN 29-6 UNIT #73
Meter/Line ID - 73508

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

SITE DETAILS

Legals - Twn: 29 **Rng:** 06 **Sec:** 20 **Unit:** L
NMOCD Hazard Ranking: 10 **Land Type:** 4 - Fee
Operator: PHILLIPS PETROLEUM COMPAN **Pit Closure Date: 06/23/94**

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

6

GENERAL

Meter: 73508 Location: San Juan #73
Operator #: 7035 Operator Name: Phillips P/L District: Bloomfield
Coordinates: Letter: L Section 20 Township: 29 Range: 6
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 6-6-94 Area: 10 Run: 61

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: 10 **POINTS**

REMARKS

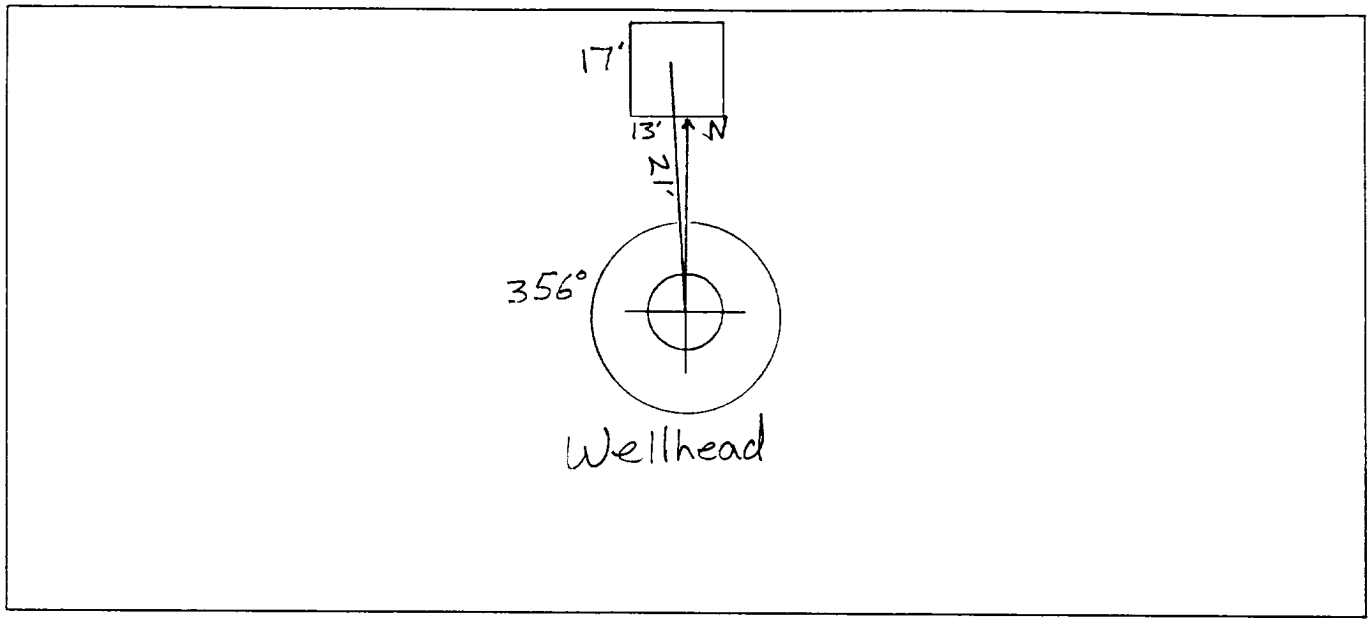
Remarks : one pit on location. Dry site just north of Hwy 64 at Gobernador Canyon
DIG & HAUL
Inside V.Z. - on Redlands and on line on Topo map

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 356 Footage from Wellhead 21

b) Length : 17 Width : 13 Depth : 2



REMARKS

Remarks : Photos at 1402 hrs.

Completed By:

Signature

6-6-94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 73508 Location: SAN JUAN 29-6 UNIT # 73

Coordinates: Letter: L Section 20 Township: 29 Range: 6

Or Latitude _____ Longitude _____

Date Started : 6-23-94 Area: KP 10 Run: 61

FIELD OBSERVATIONS

Sample Number(s): KP# 107 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 2125 PID Reading Depth 12' Feet

	Yes	No	
Groundwater Encountered	☐ (1)	☒ (2)	Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 100
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

Envirotech	☐ (1)	☒ (3)	Tierra
Other Facility	☐ (2)	Name: _____	

Pit Closure Date: 6-23-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some LINE markers started Remediating To 12' Soil Turned Dark gray with A Bad smell. AT 12 soil still The Same. But smell got Real Bad. Pid 2125 over RANGE on my instrument. All Four WALLS AND Bottom of Pit still dark gray. From about 8' down.

Signature of Specialist: Kelly Padilla

(SP3191) 04/07/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP107	945505
MTR CODE | SITE NAME:	73508	N/A
SAMPLE DATE | TIME (Hrs):	6-23-94	0948
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6/27/94	6/27/94
DATE OF BTEX EXT. | ANAL.:	6/29/94	6/30/94
TYPE | DESCRIPTION:	VL	Brown Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.81	MG/KG	20			
TOLUENE	105	MG/KG	20			
ETHYL BENZENE	19	MG/KG	20			
TOTAL XYLENES	310	MG/KG	20			
TOTAL BTEX	435	MG/KG				
TPH (418.1)	2860	MG/KG			1.93	28
HEADSPACE PID	2125	PPM				
PERCENT SOLIDS	88.1	%				

– 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: ATI results attached.

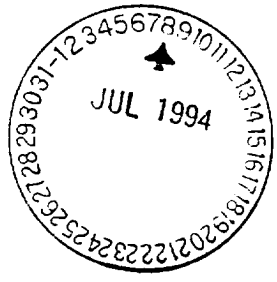
DF = Dilution Factor Used

Approved By: _____ Date: 7/7/94

Analytical **Technologies,** Inc.

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

ATI I.D. **406418**



July 6, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/28/94**, 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

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406418
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945504	NON-AQ	06/23/94	06/29/94	06/30/94	5
02	945505	NON-AQ	06/23/94	06/29/94	06/30/94	20
03	945511	NON-AQ	06/24/94	06/29/94	06/30/94	20

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.12	0.81	1.1
TOLUENE	MG/KG	<0.12	105	47
ETHYLBENZENE	MG/KG	0.38	19	8.0
TOTAL XYLENES	MG/KG	12	310	190
SURROGATE:				
BROMOFLUOROBENZENE (%)		94	107	76

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 2

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase ~~601~~ 6000
Project Location San Juan 29-6, Unit # 73, 7350'

Elevation
Borehole Location T29, R6, S. 20, L
GWL Depth
Logged By S.Kelly
Drilled By M. Donohue
Date/Time Started 8/17/95, 1445
Date/Time Completed 8/17/95,

Well Logged By S.Kelly
Personnel On-Site M. Donohue, J. O'Keife, J. Long
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼ 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 5/14/95 BZ	BH	S	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15										
20	1	18-20	.25'/2.0'	clayey SILT, dk. brown, firm, nonplastic, damp, 10-30% clay					4/290	1506
25	2	23-25	.85'/2.0	SAA					58/268	1509
30	3	28-30	.45'/2.0'	SAA					—/282	1514
35	4	33-35	.5'/2.0'	SAA, but with trace fine sand.					13/259	1520
40	5	38-40		SAA					4/260	1527

Comments:

Geologist Signature Sarah Kelly

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1
Well #
Page 2 of 2

Project Name EPNG Pits
Project Number 14509 Phase ~~601~~ 6600
Project Location San Juan 29-6, Unit #T3, 7350

Elevation
Borehole Location
GWL Depth
Logged By S.Kelly
Drilled By
Date/Time Started
Date/Time Completed

Well Logged By S.Kelly
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Drilling Method
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	Drilling Conditions & Blow Counts
0										
4	6	43 45	.7' 2.0'	SAA					71 262	1535
5										
50 10	7	48- 50	.5' 2.0'	SAA, dk grey		51			1 16	1545
55 15	8	53- 55		SAND, tan, fine sand, med. dense, dry					0 2	1555
20				TOB = 55.0'						
25										
30										
35										
40										

Comments: 53'-55' sample (SEK64) sent to lab (BTEX & TPH). BH grouted to surface.

Geologist Signature Sarah Kelly

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:	SEK 63	947267
MTR CODE | SITE NAME:	73508	San Juan 29-6, #73
SAMPLE DATE | TIME (Hrs):	08-17-95	15:55
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT. | ANAL.:	8/21/95	8/21/95
TYPE | DESCRIPTION:	VG	Brown sand + clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG		F		
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	43.2 RB 8/23/95	MG/KG			2.14	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	95.0	%				

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

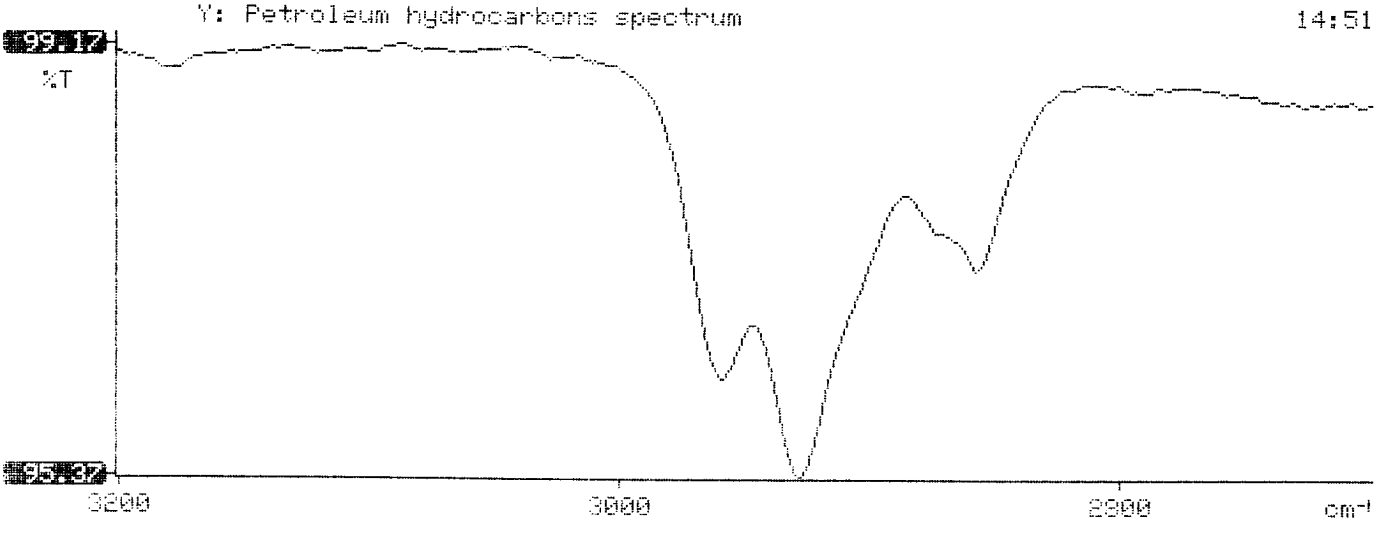
The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative: Benzene Taken from FID

DF = Dilution Factor Used

Approved By: _____ Date: 8/24/95

```
**********************************************************
*                    Test Method for                     *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                   in Water and Soil                    *
*                                                        *
*             Perkin-Elmer Model 1600 FT-IR              *
*                    Analysis Report                     *
**********************************************************
*
 95/08/21   14:51
*
*   Sample identification
 947267
*
*   Initial mass of sample, g
 2.040
*
*   Volume of sample after extraction, ml
 28.000
*
*   Petroleum hydrocarbons, ppm
 43.157
*   Net absorbance of hydrocarbons (2930 cm-1)
 0.016
*
*
*
```



BTEX SOIL SAMPLE WORKSHEET

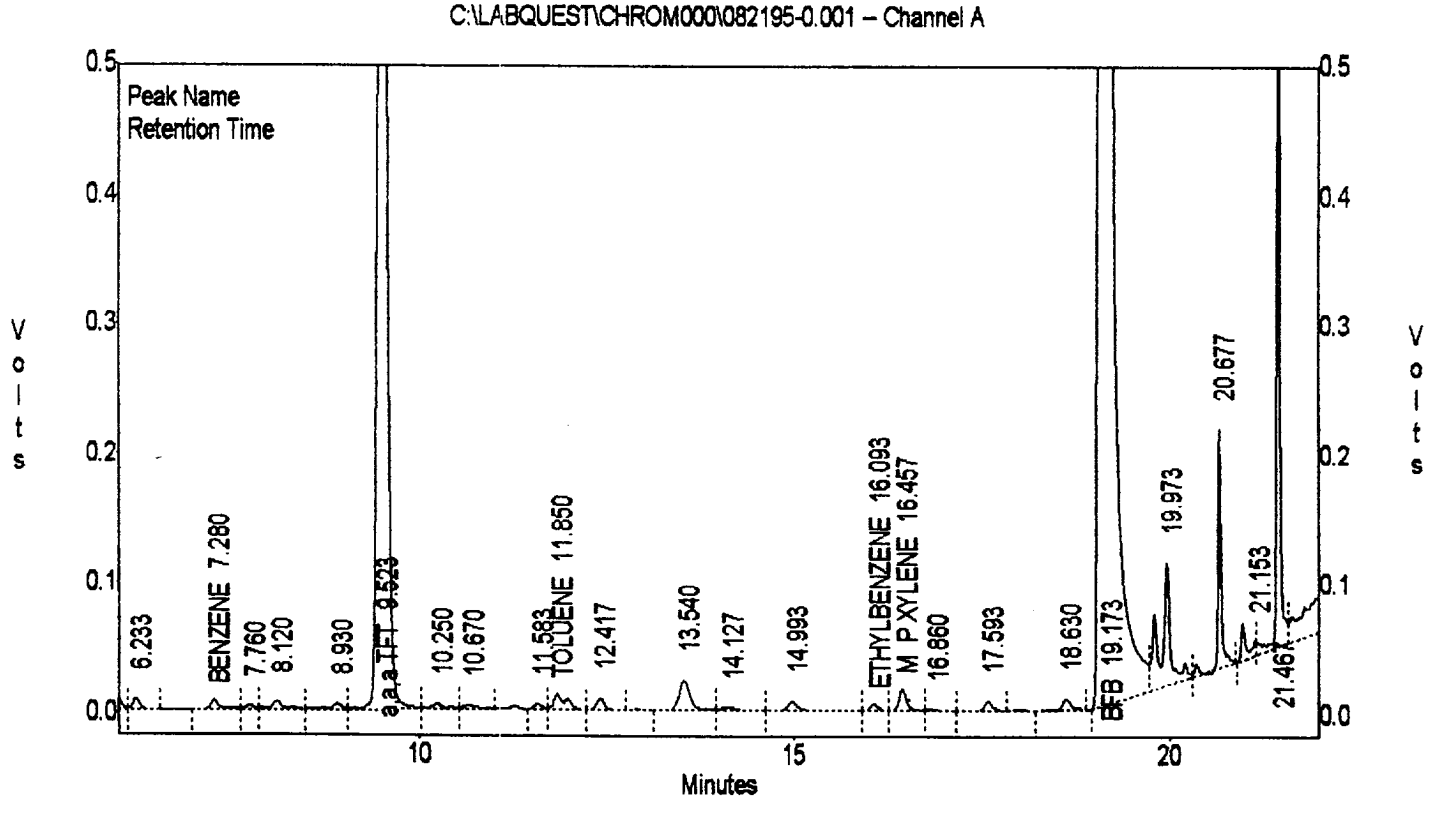
File	947267	**Date Printed**	8/24/95	
Soil Mass (g)	5.03	**Multiplier (L/g)**	0.00099	
Extraction vol. (mL)	20	**DF (Analytical)**	200	
Shot Volume (uL)	100	**DF (Report)**	0.19881	
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.497
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.497
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.497
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	0.994
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.497
		Total xylenes (mg/Kg):	**0.000**	1.491
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.001
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947267,5.03G,100U
Acquired : Aug 21, 1995 12:39:41
Printed : Aug 22, 1995 07:46:24
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.280	59656	-2.3029
a,a,a TFT	9.523	9580705	97.1646
TOLUENE	11.850	135644	-0.5167
ETHYLBENZENE	16.093	35907	-0.2682
M & P XYLENE	16.457	125915	-2.9208
O XYLENE	17.673	0	0.0000
BFB	19.173	78466336	104.4309



EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.001
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947267,5.03G,100U
Acquired : Aug 21, 1995 12:39:41
Printed : Aug 22, 1995 07:46:31
User : MARLON

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.277	0	0.0000
a,a,a TFT	9.530	310521	101.7125
TOLUENE	11.900	0	0.0000
ETHYLBENZENE	16.143	0	0.0000
M & P XYLENE	16.523	0	0.0000
O XYLENE	17.657	0	0.0000
BFB	19.163	1772551	110.6752