

EL PASO FIELD SERVICES
DEPUTY OIL & GAS PRODUCTION PIT CLOSURE

DEC 21 1998

HUERFANITO UNIT #42-27
Meter/Line ID - 71361

RECEIVED
JUL 2 1999

SITE DETAILS

Legals - Twn: 27 Rng: 09
NMOCD Hazard Ranking: 20
Operator: MERIDIAN OIL INC

Sec: 27 Unit: E
Land Type: 2 - Federal
Pit Closure Date: 08/18/94

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: 71361 Location: Huerfano unit # 42-27
 Operator #: 2999 Operator Name: Mecidion P/L District: Ballard
 Coordinates: Letter: E Section 27 Township: 27 Range: 9W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 6-15-94 Area: 11 Run: 71

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside
Outside

Land Type:

BLM ☒ (1)
 State ☐ (2)
 Fee ☐ (3)
 Indian _____

☒ (1)
☐ (2)

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 Huerfano Canyon

(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: 20 POINTS

REMARKS

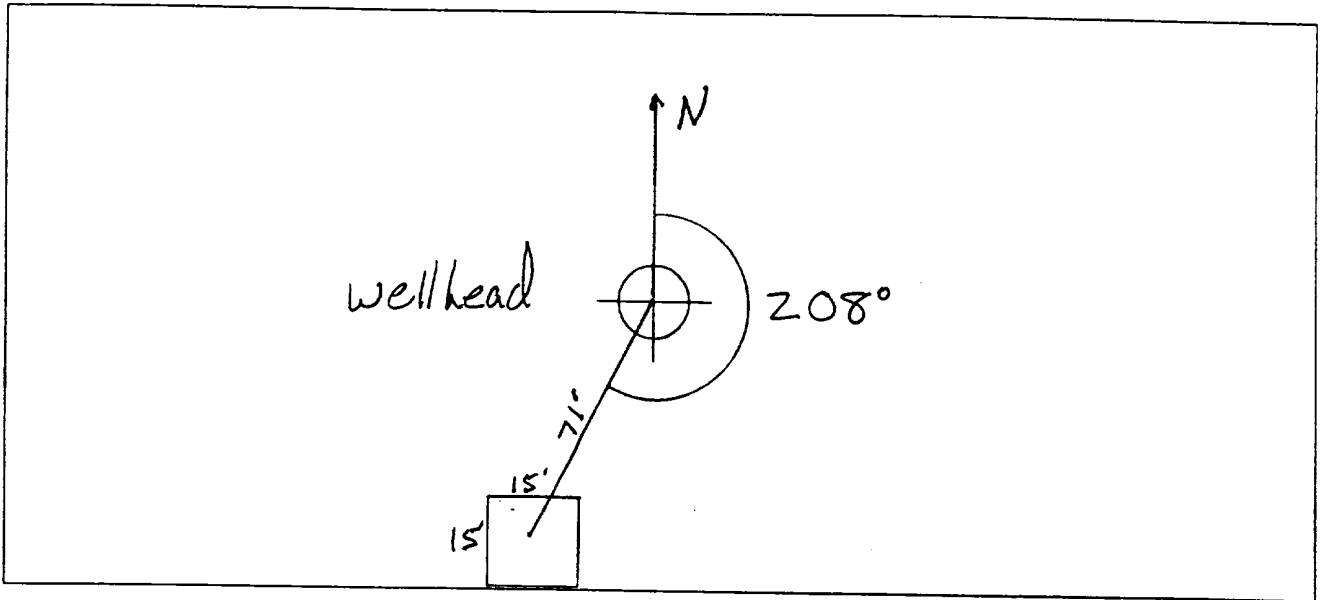
Remarks : one pit - dry

Inside V.Z. on Redline @ Topo

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 208 Footage from Wellhead 71
b) Length : 15 Width : 15 Depth : 3

ORIGINAL PIT LOCATION



Remarks :

Photos - 1304

Bobtail

REMARKS

Completed By:

Signature

6-15-94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>71361</u> Location: <u>Huertanito Unit #42-27</u> Coordinates: Letter: <u>E</u> Section <u>27</u> Township: <u>27</u> Range: <u>9W</u> Or Latitude _____ Longitude _____ Date Started : <u>8/18/94</u> Run: <u>11</u> <u>71</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD 225</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>27 PPM</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☐ Approx. Cubic Yards <u>0</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☒ Soil Disposition: Envirotech ☐ Tierra ☐ Other Facility ☐ Name: _____ Pit Closure Date: <u>8.18.94</u> Pit Closed By: <u>BET</u>
REMARKS	Remarks : <u>DUG TEST HOLE TO 12', TOOK P.I.D SAMPLE, CLOSED PIT.</u>
Signature of Specialist: <u>[Signature]</u>	



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KT 225	945966
MTR CODE SITE NAME:	71361	N/A
SAMPLE DATE TIME (Hrs):	8-18-94	1420
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8-24-94	8/24/94
DATE OF BTEX EXT. ANAL.:	8/25/94	8/25/94
TYPE DESCRIPTION:	VE	fine brown sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.025	MG/KG	1			
TOLUENE	0.092	MG/KG	1			
ETHYL BENZENE	0.026	MG/KG	1			
TOTAL XYLENES	0.14	MG/KG	1			
TOTAL BTEX	0.28	MG/KG				
TPH (418.1)	179	MG/KG			224	28
HEADSPACE PID	27	PPM				
PERCENT SOLIDS	95.7	%				

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

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

Date:

9/30/94

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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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74/08/24 11:21

% Sample identification

745766

% Initial mass of sample, g

7.240

% Volume of sample after extraction, ml

36.000

% Petroleum hydrocarbons, ppm

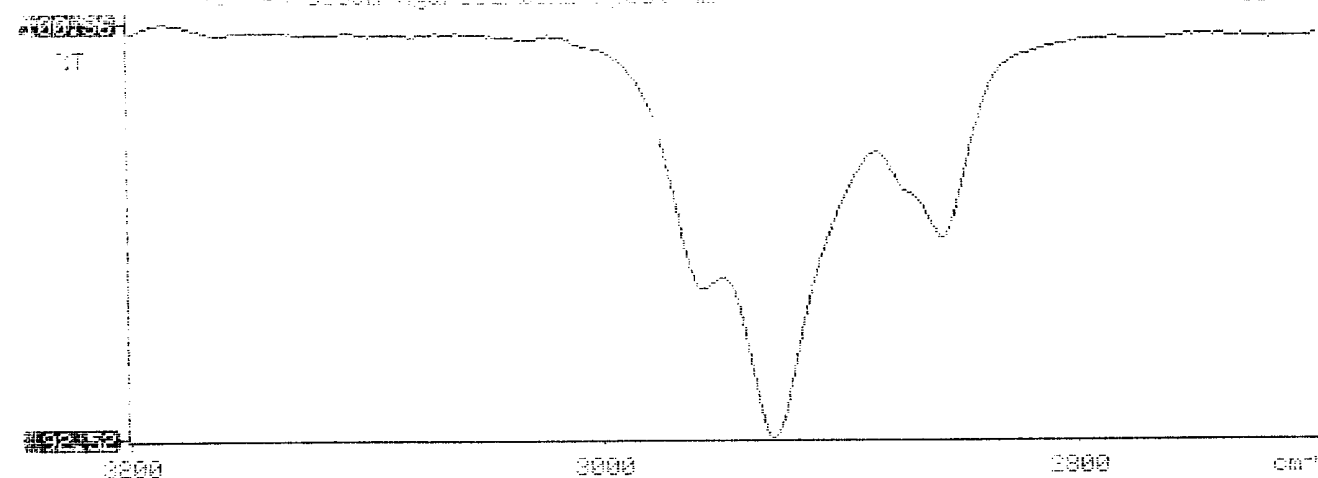
179-192

% Net Absorbance of hydrocarbons (2930 cm⁻¹)

0.034

V: Petroleum hydrocarbons spectrum

11:31





Analytical **Technologies, Inc.**

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

ATI I.D. 408397

August 29, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

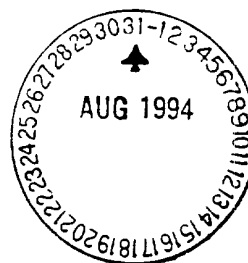
On 08/25/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

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.: 408397
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	945966	NON-AQ	08/18/94	08/25/94	08/25/94	1
05	945967	NON-AQ	08/18/94	08/25/94	08/25/94	1
06	945968	NON-AQ	08/18/94	08/25/94	08/26/94	1

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	0.092	<0.025	0.29
ETHYLBENZENE	MG/KG	0.026	<0.025	0.034
TOTAL XYLENES	MG/KG	0.14	<0.025	0.28

SURROGATE:

BROMOFLUOROBENZENE (%) 100 97 97

PHASE II

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

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 Huerfano Unit #42-27

Well Logged By Jeff W. Kindley
Personnel On-Site G. Sudduth, D. Roberts, H. Kei
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____
Borehole Location T27, R9W, S27, E
GWL Depth _____
Logged By Jeff W. Kindley
Drilled By G. Sudduth
Date/Time Started 08/15/95 1118
Date/Time Completed 08/15/95 1217

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			Drilling Conditions & Blow Counts
							BZ	BH	S/H	
0				Back Fill material to 12'						
5										
10										
15										
20	1	18-20'	1.2 2.0	SAND, Brown/tan, Fine grained, loose, dry Boring terminated at 20'					%	1157
25										
30										
35										
40										

Comments:

Sample collected From 18 to 20 Feet. BH grouted to surface

Geologist Signature

Jeff W. Kindley



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 14	947239
MTR CODE SITE NAME:	71361	Huerfano Unit #12-27
SAMPLE DATE TIME (Hrs):	08/15/95	11:57
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL:	8/17/95	8/17/95
DATE OF BTEX EXT. ANAL:	8/18/95	8/19/95
TYPE DESCRIPTION:	V6	light brown fine sand

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)	46.3	MG/KG			2.0	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	96.5	%				

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

The Surrogate Recovery was at 93% 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 *

* 95/08/17 10:44

* Sample identification
 * 947239

* Initial mass of sample, g
 * 2.000

* Volume of sample after extraction, ml
 * 28.000

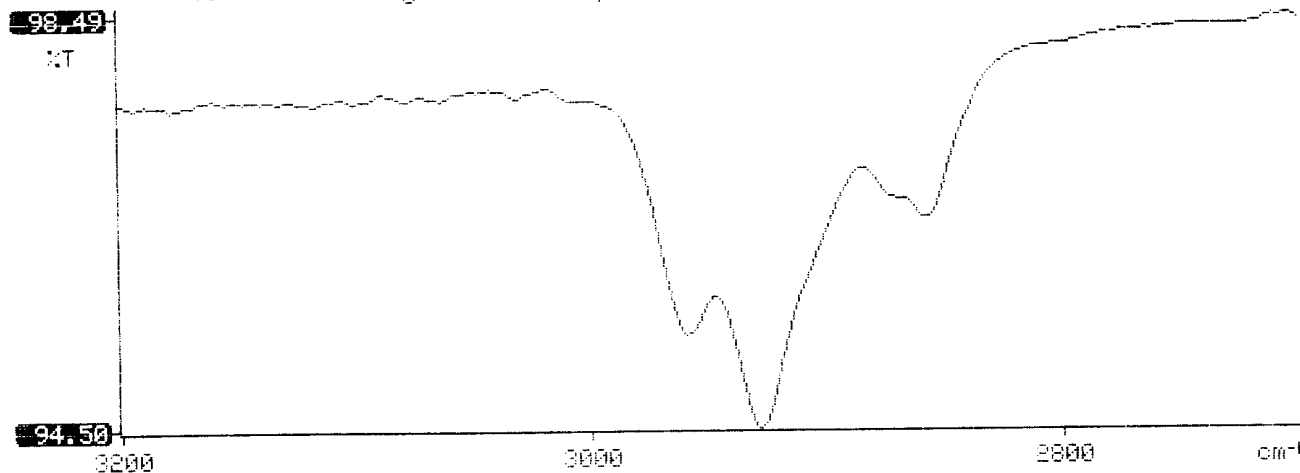
* Petroleum hydrocarbons, ppm
 * 48.270

* Net absorbance of hydrocarbons (2930 cm⁻¹)
 * 0.016

*
 *
 *

Y: Petroleum hydrocarbons spectrum

10:44



BTEX SOIL SAMPLE WORKSHEET

File	:	947239	Date Printed	:	8/23/95
Soil Mass (g)	:	4.99	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20040

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.501
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.501
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.501
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 1.002
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.501
			Total xylenes (mg/Kg):	0.000 1.503
			Total BTEX (mg/Kg):	0.000

EL PASO NATURAL GAS

EPA METHOD 8020 - SOILS

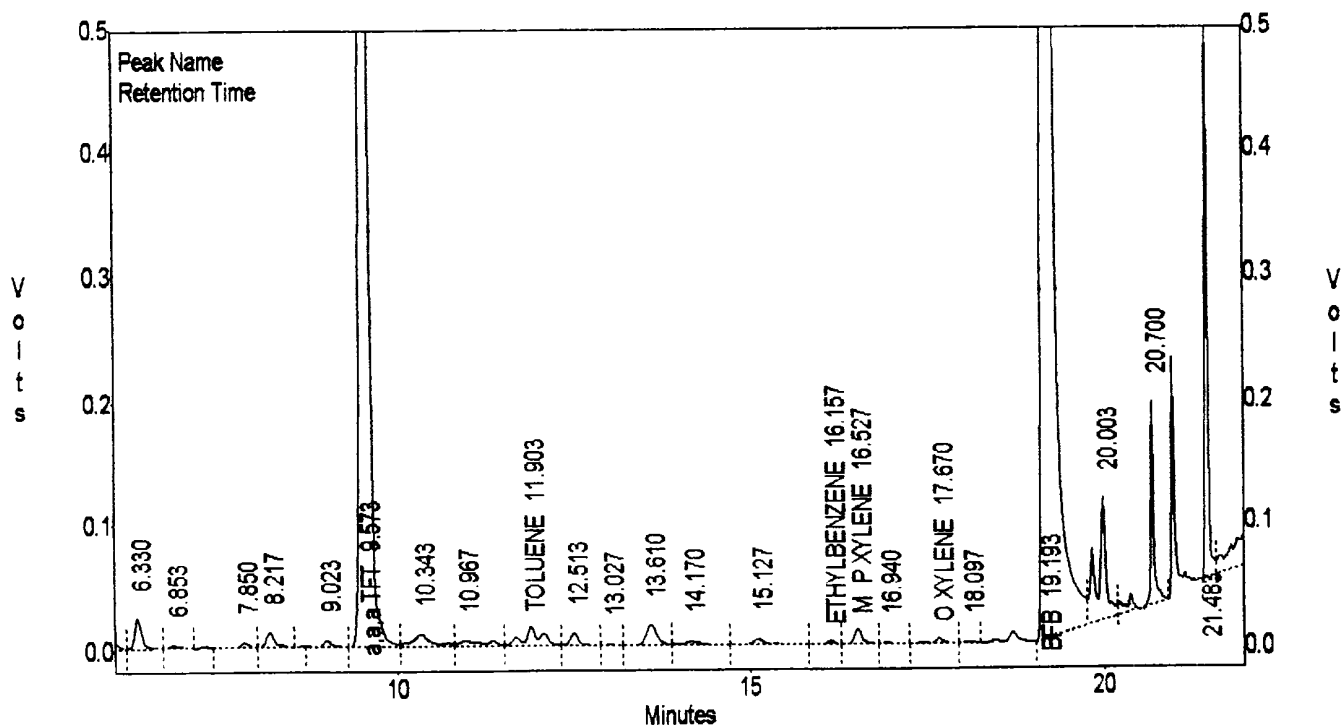
File : C:\LABQUEST\CHROM000\081895.015
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947239,4.99G,100U
 Acquired : Aug 19, 1995 12:01:59
 Printed : Aug 21, 1995 14:05:27
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.303	0	0.0000
a,a,a TFT	9.573	9484779	96.1918
TOLUENE	11.903	265618	-0.2170
ETHYLBENZENE	16.157	24043	-0.2988
M & P XYLENE	16.527	96491	-2.9922
O XYLENE	17.670	43941	-0.1621
BFB	19.193	69579312	92.9051

-OK mh 8/23

C:\LABQUEST\CHROM000\081895.015 - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\081895.015
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947239,4.99G,100U
 Acquired : Aug 19, 1995 02:01:59
 Printed : Aug 21, 1995 14:05:35
 User : MARLON

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.500	0	0.0000
a,a,a TFT	9.580	301412	98.7288
TOLUENE	11.893	0	0.0000
ETHYLBENZENE	16.120	0	0.0000
M & P XYLENE	16.497	0	0.0000
O XYLENE	17.637	0	0.0000
BFB	19.220	1575164	98.3507

C:\LABQUEST\CHROM000\081895.015 - Channel B

