

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

DEC 21 1998

**HUERFANITO #6**  
**Meter/Line ID - 73913**

**RECEIVED**  
JUL 2 1998

**SITE DETAILS**

**Legals - Twn: 26 --- Rng: 09**  
**NMOCD Hazard Ranking: 20**  
**Operator: DUGAN PRODUCTION CORP**

**Sec: 11 Unit: N**  
**Land Type: 2 - Federal**  
**Pit Closure Date: 08/11/94**

**OIL CON. DIV.**

**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.

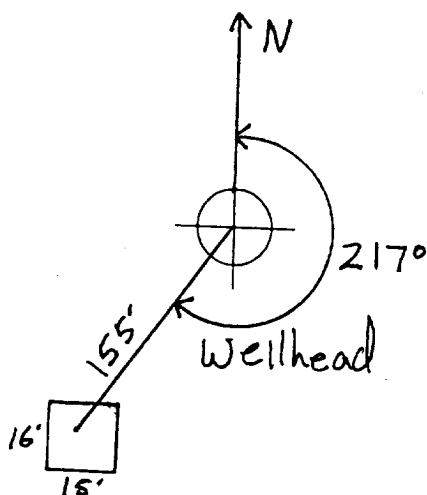
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p style="text-align: center;"><u>Disconnected Well</u></p> <p>Meter: <u>73-913</u> Location: <u>Huerfano No. 6</u></p> <p>Operator #: <u>—</u> Operator Name: <u>—</u> P/L District: <u>Ballard</u></p> <p>Coordinates: Letter: <u>6-2-94 6W</u> <del>AN</del> Section <u>11</u> Township: <u>26N</u> Range: <u>9W</u></p> <p>Or Latitude <u>—</u> Longitude <u>—</u></p> <p>Pit Type: Dehydrator <u>X</u> Location Drip: <u>—</u> Line Drip: <u>—</u> Other: <u>—</u></p> <p>Site Assessment Date: <u>6-21-94</u> Area: <u>11</u> Run: <u>91</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian <u>—</u></p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><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 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 type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Reed Canyon Wash</u> (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) <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>Three pits on location. Drydehy pit</u> <u>*No Meter house or placard to Identify location</u></p> <p><u>Inside VZ on Redline &amp; Topo</u></p>

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 217 Footage from Wellhead 155  
b) Length : 16 Width : 15 Depth : 3

ORIGINAL PIT LOCATION



Remarks :

Photos - 1429

REMARKS

Well disconnected - No placard or Meter house  
unknown operator

Completed By:

*Joe Wark*

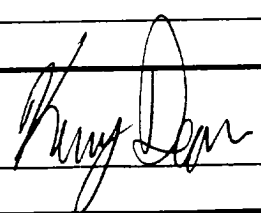
Signature

6-21-94

Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>73-913</u> Location: <u>Huerfano #6</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>11</u> Township: <u>26N</u> Range: <u>9W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8/11/94</u> Run: <u>11</u> <u>91</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KD 207</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>605 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>60</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"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8/11/94</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Excavated pit to 12', took p.i.D sample, closed pit</u></p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u></u></p>

**SPLIT****FIELD SERVICES LABORATORY****ANALYTICAL REPORT****PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone****SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	KD207	945900
MTR CODE   SITE NAME:	73913	N/A
SAMPLE DATE   TIME (Hrs):	8/11/94	1230
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8-16-94	8/16/94
DATE OF BTEX EXT.   ANAL.:	8/16/94 8/17/94 8/18/94 8/19/94	8/18/94 8/19/94 8/30/94
TYPE   DESCRIPTION:	VC	Brown Fine Sand

REMARKS: split**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	40.063	MG/KG					40.25
TOLUENE	3.11	MG/KG					2.9
ETHYL BENZENE	1.44	MG/KG					1.4
TOTAL XYLENES	18.23.5	MG/KG					25
TOTAL BTEX	28.1	MG/KG	0.0253		0.79	20	30
TPH (418.1)	1980	MG/KG			2.18	28	3200
HEADSPACE PID	605	PPM					Surrogate % 88
PERCENT SOLIDS	93.9	%					Dilution Factor 10

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

The Surrogate Recovery was at 113% for this samp All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By: J.L.Date: 9/2/94



# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945900B  
 Method : C:\LABQUEST\METHODS\SOILS.MET  
 Sample ID : 945900 1/10 0.79G/20ML  
 Acquired : Aug 30, 1994 10:53:58  
 Printed : Aug 30, 1994 11:20:12  
 User : STACY

### Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.767	0	0.00000	0.0000
a,a,a TFT	13.000	1197877	7303.77002	1637.9479
TOLUENE	15.517	1709070	128167.09375	123.0225
ETHYLBENZENE	19.600	724739	116407.63281	56.8120
M & P XYLENE	19.783	9926204	167589.01563	710.1678
O XYLENE	20.317	2738135	115447.89063	218.4299
BFB	20.883	20854422	169985.04688	1132.2776

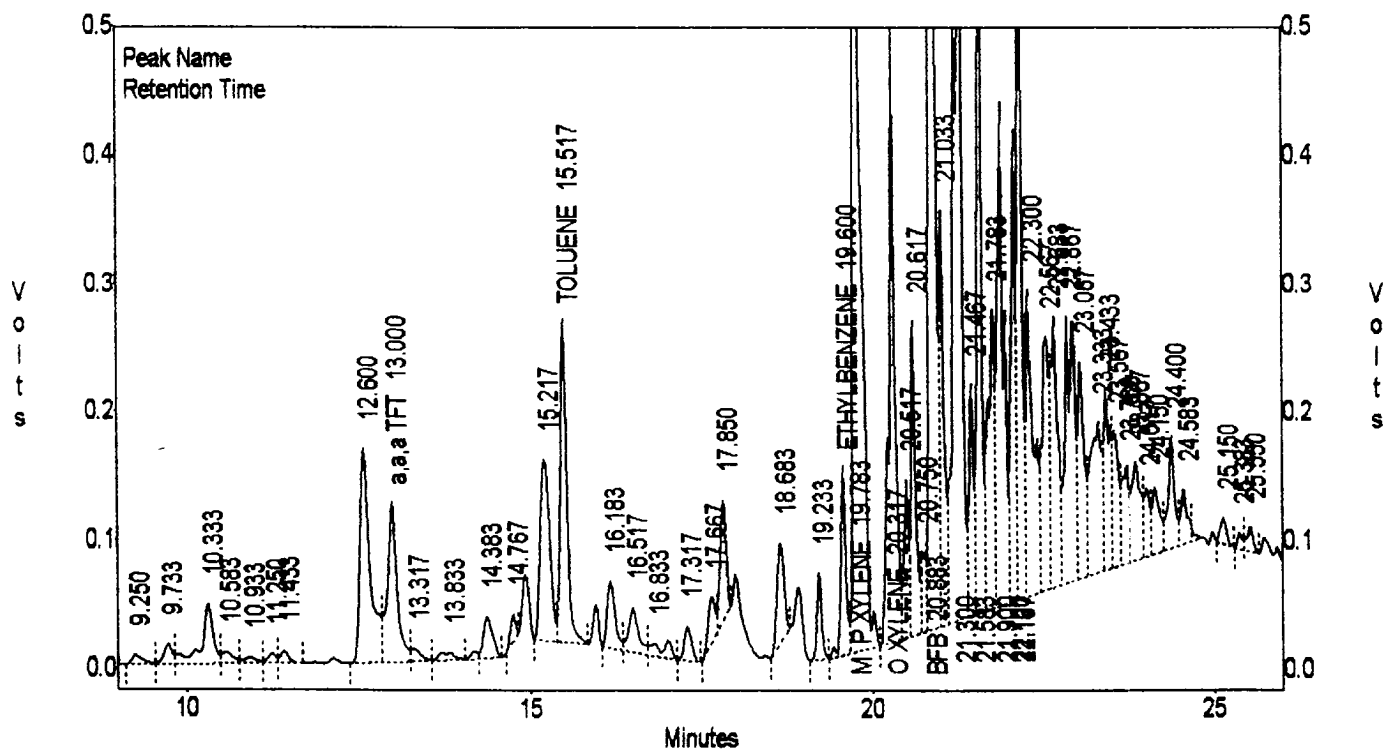
Totals :

37150448

3878.6577

L2.5  
 113  
*Stacy*  
 8/31/94

C:\LABQUEST\CHROM\945900B - Channel A





# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945900B  
 Method : C:\LABQUEST\METHODS\SOILS.MET  
 Sample ID : 945900 1/10 0.79G/20ML  
 Acquired : Aug 30, 1994 10:53:58  
 Printed : Aug 30, 1994 11:20:18  
 User : STACY

### Channel B Results

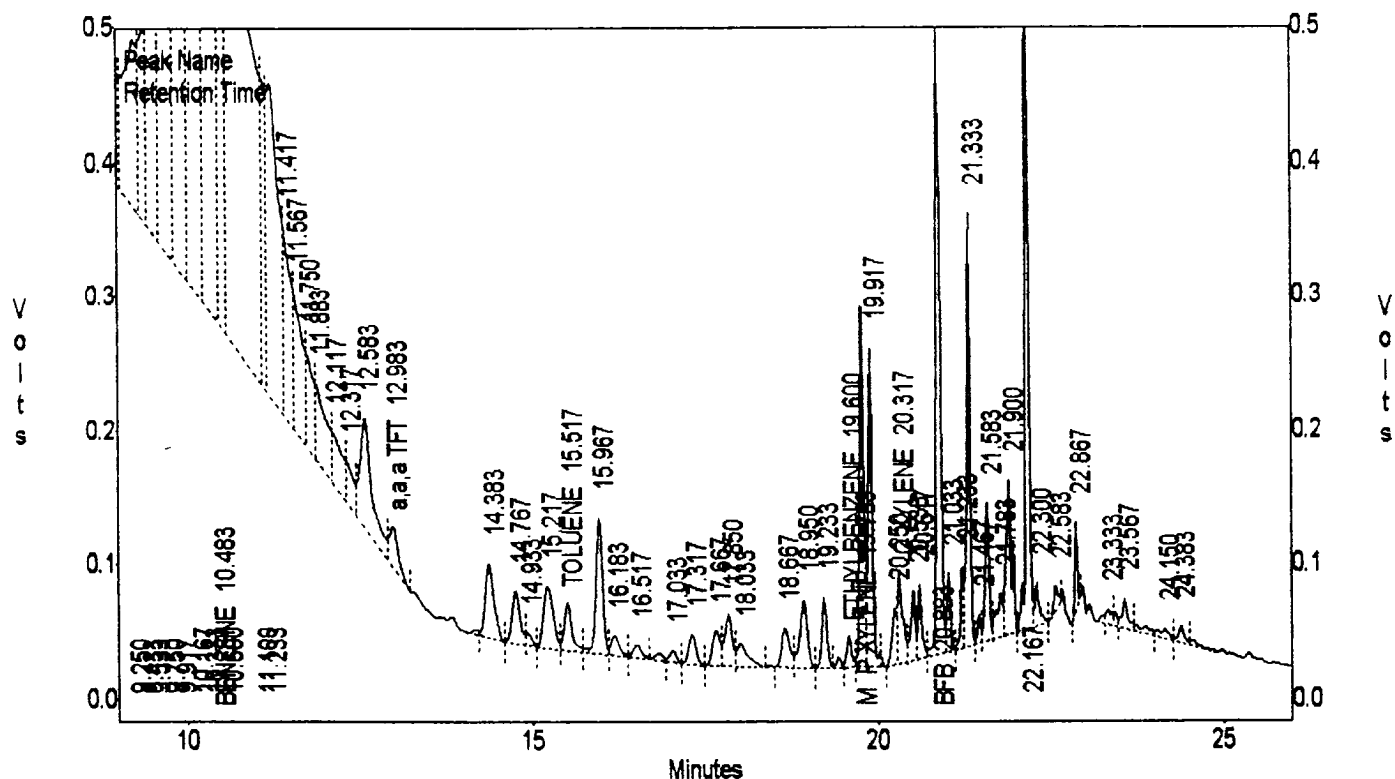
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.483	1850944	17134.41016	961.9005
1,2,3,4-TET	12.983	270074	1612.93142	1674.3997
TOLUENE	15.517	270630	16955.15430	141.8973
ETHYLBENZENE	19.600	116959	15800.91699	64.7201
M & P XYLENE	19.783	1119249	16103.94629	619.4233
O XYLENE	20.317	342593	15663.30664	191.9427
BFB	20.883	1996823	18546.16797	1105.2200

Totals :

5967274

4759.5034

C:\LABQUEST\CHROM\945900B - Channel B





Analytical **Technologies**, Inc.

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

ATI I.D. 408364

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

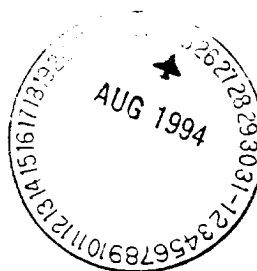
On **08/17/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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





Analytical **Technologies**, Inc.

## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408364  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945898	NON-AQ	08/11/94	08/17/94	08/18/94	1
02	945899	NON-AQ	08/11/94	08/17/94	08/18/94	1
03	945900	NON-AQ	08/11/94	08/17/94	08/18/94	10
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<0.025	<0.25
TOLUENE			MG/KG	<0.025	<0.025	2.9
METHYLBENZENE			MG/KG	<0.025	<0.025	1.4
TOTAL XYLENES			MG/KG	<0.025	<0.025	25

### SURROGATE:

BROMOFLUOROBENZENE (%) 98 94 88

*Split Sample*



Analytical **Technologies**, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 408364
PROJECT #	: 24324	DATE RECEIVED	: 08/17/94
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 08/18/94

PARAMETER	UNITS	03	19
PETROLEUM HYDROCARBONS, IR	MG/KG	3200	<20

EPNG Sample #945900  
Split Sample

# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

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

JWK 31

Borehole # BH-1

Well #

Page 1 of 2

Project Name EPNG Pits

Project Number 14509 Phase 6000.77

Project Location Huerfano No. 6 73-913

Elevation

Borehole Location T26N, R9W, S11, N

GWL Depth

Logged By Jeff W. Kindley

Drilled By G. Sudduth

Date/Time Started 08/18/95 1353

Date/Time Completed 08/18/95 1615

Well Logged By Jeff W. Kindley

Personnel On-Site G. Sudduth, D. Roberts, H. Kahl

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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20	1.0 2.0	SW, gr. sand, coarse grained, dry, very dense, hydrocarbon odor				72/89		1407 67 blows per Foot
25	2	23-25	1.0 2.0	SW, br. sand, coarse grained, dry, very dense, hydrocarbon odor				64/67		1414 100 blows per Foot
30	3	28-30	1.7 2.0	S.A.A.				27/65		1428 95 blows per Foot
35	4	33-35	1.9 2.0	S.A.A.				28/54		1444 88 blows per Foot
40	5	38-40	1.8 2.0	S.A.A.				28/50		1500 100 blows per Foot

Comments:

Geologist Signature

Jeffrey Kindley

# 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 2 of 2

Project Name EPNG Pits

Project Number 14509 Phase 6000.77

Project Location Huerfano No. 6 73-913

Elevation

Borehole Location T26N, R9W, S11, N

GWL Depth

Logged By Jeff W. Kindley

Drilled By G. Sudduth

Date/Time Started 08/18/95 1353

Date/Time Completed 08/18/95 1615

Well Logged By

Jeff W. Kindley

Personnel On-Site

G. Sudduth, D. Roberts, M. Kai

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			Drilling Conditions & Blow Counts
							BZ	BH	S/H/S	
40										
45	6	43-45'	1.1 2.0	CL, gr. clay, dry, hard, low plasticity, no odor Boring terminated at 45'				6/10		1520 100 blows per Foot.
10										
15										
20										
25										
30										
35										
40										

Comments:

Sample collected from 43 to 45'. BTEX, TPH analysis run on soil sample.  
BH grouted to the surface

Geologist Signature

Jeffery Kindley



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 31	947285
MTR CODE   SITE NAME:	73913	Huerfano No. 6
SAMPLE DATE   TIME (Hrs):	08-18-95	15:20
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT. ANAL.:	8/23/95	8/23/95
TYPE   DESCRIPTION:	YG	light gray sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	<sup>208/23/95</sup> 32.9	MG/KG			2.02	28
HEADSPACE PID	10	PPM				
PERCENT SOLIDS	90.9	%				

-- 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:

DF = Dilution Factor Used

Approved By: SP

Date: 8/28/95



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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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95/08/21 16:05

\* Sample identification  
947285

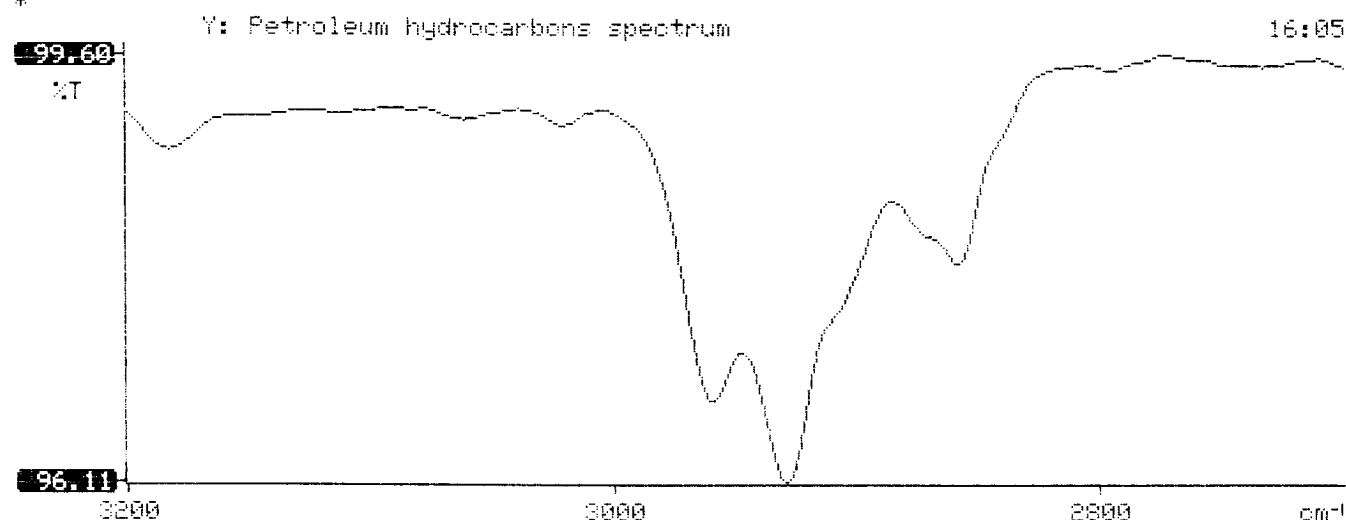
\* Initial mass of sample, g  
2.020

\* Volume of sample after extraction, ml  
28.000

\* Petroleum hydrocarbons, ppm  
32.855

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.014

\*  
\*  
\*



## BTEX SOIL SAMPLE WORKSHEET

File	:	947285	Date Printed	:	8/25/95
Soil Mass (g)	:	4.98	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20080

			Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg): 0.000 0.502
Toluene (ug/L)	:	0.00	Toluene (mg/Kg): 0.000 0.502
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg): 0.000 0.502
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg): 0.000 1.004
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg): 0.000 0.502
			Total xylenes (mg/Kg): 0.000 1.506
			Total BTEX (mg/Kg): 0.000

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082395-1.022  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947285,4.98G,100U  
 Acquired : Aug 24, 1995 05:04:15  
 Printed : Aug 24, 1995 05:30:29  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.440	0	0.0000
a,a,a TFT	4.900	4796137	92.2162
TOLUENE	6.723	56035	-0.5925
ETHYLBENZENE	10.513	0	0.0000
M & P XYLENE	10.867	0	0.0000
O XYLENE	11.957	0	0.0000
BFB	13.383	75152712	104.3299

