

Tommy
DEPUTY OIL & GAS EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

MOLLY PITCHER #1
Meter/Line ID - 90018

SITE DETAILS

Legals - Twn: 30	Rng: 14	Sec: 14	Unit: H
NMOCD Hazard Ranking: 10			Land Type: 2 - Federal
Operator: DUGAN PRODUCTION CORP			Pit Closure Date: 01/25/95

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: 90018 Location: MOLLY PITCHER #1
 Operator #: _____ Operator Name: DUGAN PROD. P/L District: KUTZ
 Coordinates: Letter: H Section 14 Township: 30 Range: 14
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 1-11-95 Area: 02 Run: 23

SITE ASSESSMENT

NMOCD Zone: (From NMOCD maps) ☒ (1) inside ☐ (2) Outside

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 CONNOR ARROYO
 (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'

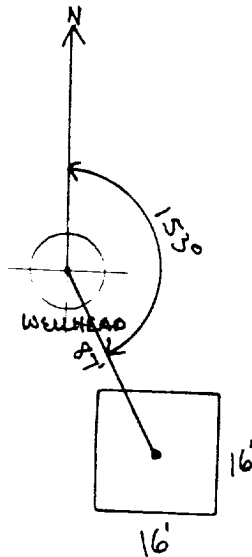
TOTAL HAZARD RANKING SCORE: _____ POINTS

REMARKS

Remarks : REDLINE & TOPO SHOW LOCATION INSIDE U.Z. 3 PITS ON LOCATION.
DENY PIT BELONGS TO EPAG. WILL CLOSE PIT. 1' OF LIQUID IN PIT.

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 153° Footage from Wellhead 87'
 b) Length : 16' Width : 16' Depth : 3'



Remarks :

PHOTOS - 1321

Completed By:

Robert Thompson
 Signature

1-11-95
 Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>90018</u> Location: <u>molly Pitcher</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>14</u> Township: <u>30</u> Range: <u>14</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>1-24-95</u> Run: <u>02</u> <u>23</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KP 390</u></p> <p>Sample Depth: <u>10'</u> Feet</p> <p>Final PID Reading <u>256</u> PID Reading Depth <u>10'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<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 type="checkbox"/> <input checked="" type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: ¹⁻²⁵⁻⁹⁵1-24-95 Pit Closed By: <u>B.E.I</u></p>
REMARKS	<p>Remarks : <u>No Lite markers. started Remediating to 12'</u></p> <p><u>Soil Turned DARK gray with A Hydrocarbon odor. Hit sand stone</u></p> <p><u>At 10'</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 390	946594
MTR CODE SITE NAME:	90018	N/A
SAMPLE DATE TIME (Hrs):	1-25-95	0900
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	1-28-95	1-28-95
DATE OF BTEX EXT. ANAL.:	1/28/95	1/28/95
TYPE DESCRIPTION:	VC	Brown sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	14.1	MG/KG	0.51480		2.59	20
TOLUENE	150	MG/KG	1		1	1
ETHYL BENZENE	13.7	MG/KG	1		1	1
TOTAL XYLENES	218	MG/KG	1		1	1
TOTAL BTEX	395	MG/KG				
TPH (418.1)	11000	MG/KG			0.390	28
HEADSPACE PID	296	PPM				
PERCENT SOLIDS	90.7	%				

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

The Surrogate Recovery was at 86.6 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: JL

Date: 2-22-95

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

95/01/22 07:50

* Sample identification

44594

* Initial mass of sample, g

0.390

* Volume of sample after extraction, ml

22.000

* Petroleum hydrocarbons, ppm

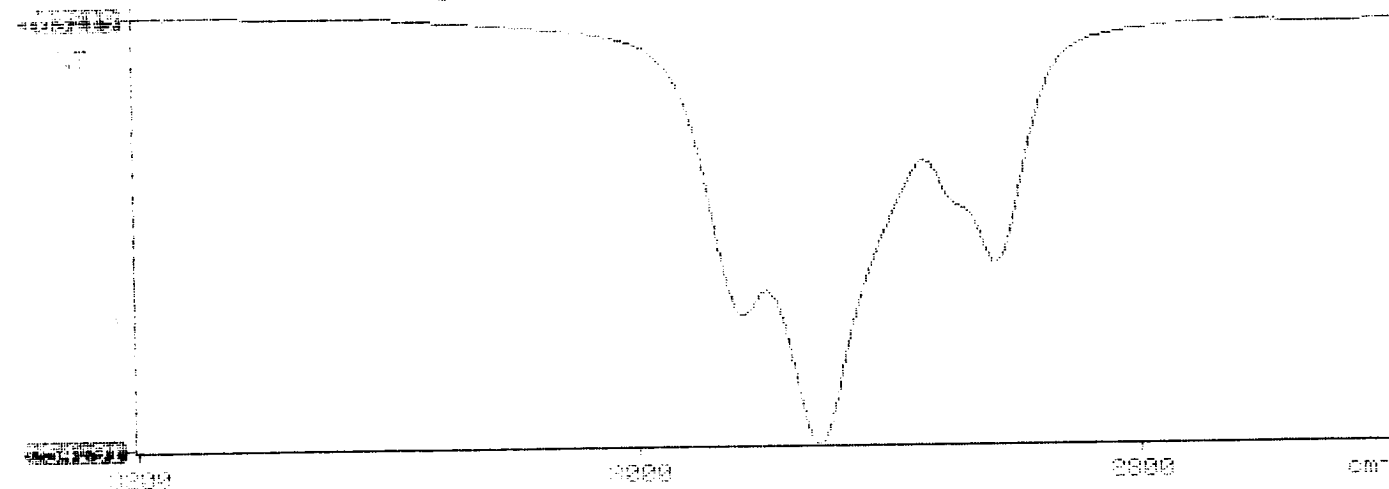
10977.213

* Net absorbance of hydrocarbons (2930 cm⁻¹)

0.071

* Petroleum hydrocarbons spectrum

07:51



BTEX SOIL SAMPLE WORKSHEET

File : 946594A
Soil Mass (g) : 2.59
Extraction vol. (mL) : 20
Shot Volume (uL) : 75

Date Printed : 1/29/95
Multiplier (L/g) : 0.00193
DF (Analytical) : 266.667
DF (Report) : 0.51480

			Det. Limit
Benzene (ug/L) :	27.46	Benzene (mg/Kg):	14.136 2.574
Toluene (ug/L) :	290.76	Toluene (mg/Kg):	149.683 2.574
Ethylbenzene (ug/L) :	26.66	Ethylbenzene (mg/Kg):	13.725 2.574
p & m-xylene (ug/L) :	329.17	p & m-xylene (mg/Kg):	169.457 5.148
o-xylene (ug/L) :	93.78	o-xylene (mg/Kg):	48.278 2.574
		Total xylenes (mg/Kg):	217.735 7.722
		Total BTEX (mg/Kg):	395.279

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946594A
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 946594,2.59G/75uL
 Acquired : Jan 29, 1995 10:16:30
 Printed : Jan 29, 1995 10:33:37
 User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.350	3536725	121531.74219	27.4558
a,a,a TFT	4.858	5338825	32055.68359	163.8510
TOLUENE	6.717	71854896	314479.71875	290.7620
ETHYLBENZENE	10.508	6011569	228573.29688	26.6622
M & P XYLENE	10.875	82867856	316768.40625	329.1673
O XYLENE	11.933	20666392	221087.17188	93.7797
BFB	13.433	82603816	944778.31250	86.6237

Totals :

272880064

1018.3016

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946594A
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 946594,2.59G/75uL
 Acquired : Jan 29, 1995 10:16:30
 Printed : Jan 29, 1995 10:33:37
 User : Tony

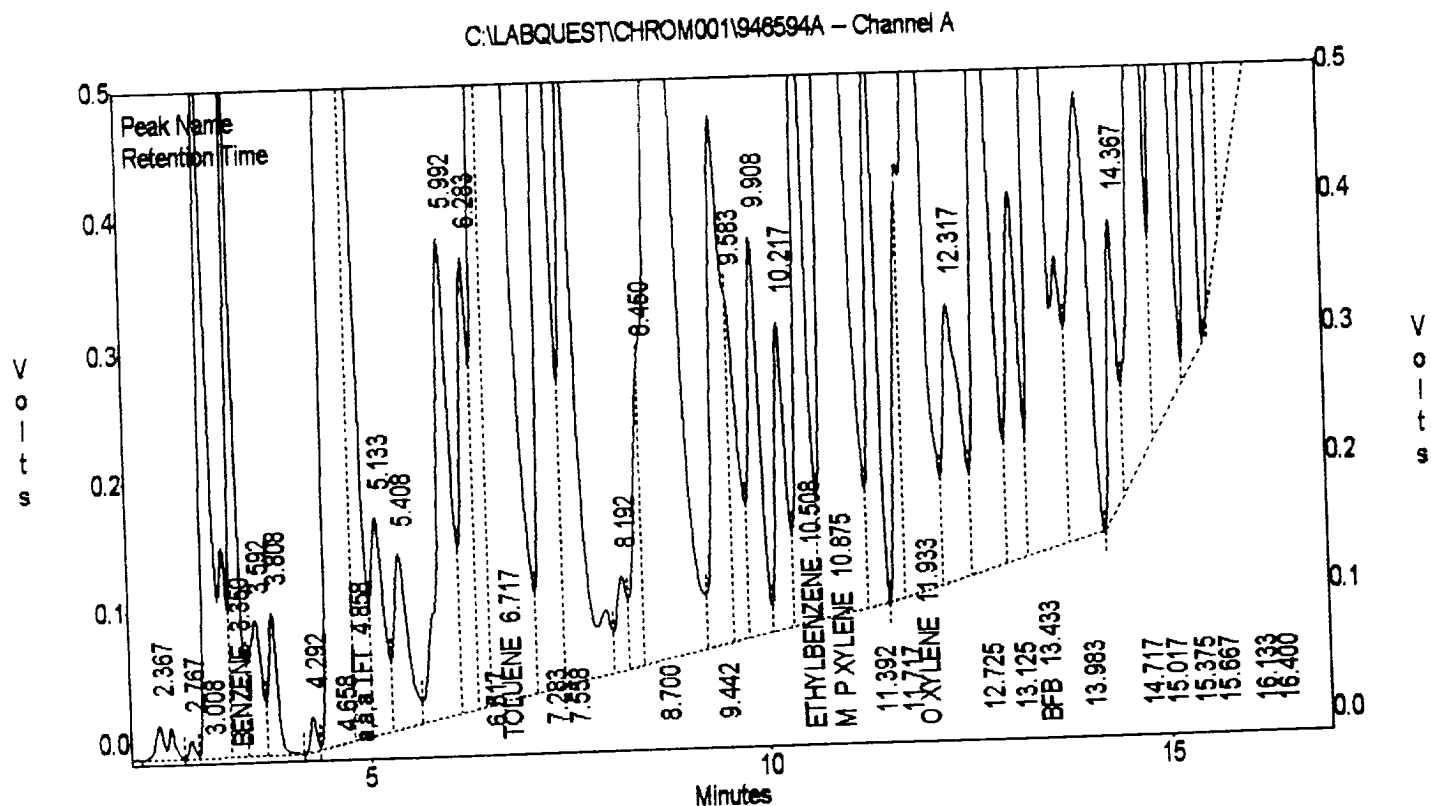
Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.350	3536725	121531.74219	27.4558
a,a,a TFT	4.858	5338825	32055.68359	163.8510
TOLUENE	6.717	71854896	314479.71875	290.7620
ETHYLBENZENE	10.508	6011569	228573.29688	26.6622
M & P XYLENE	10.875	82867856	316768.40625	329.1673
O XYLENE	11.933	20666392	221087.17188	93.7797
BFB	13.433	82603816	944778.31250	86.6237

Totals :

272880064

1018.3016



EL PASO NATURAL GAS



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946594A
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 946594,2.59G/75uL
 Acquired : Jan 29, 1995 10:16:30
 Printed : Jan 29, 1995 10:33:37
 User : Tony

Channel A Results

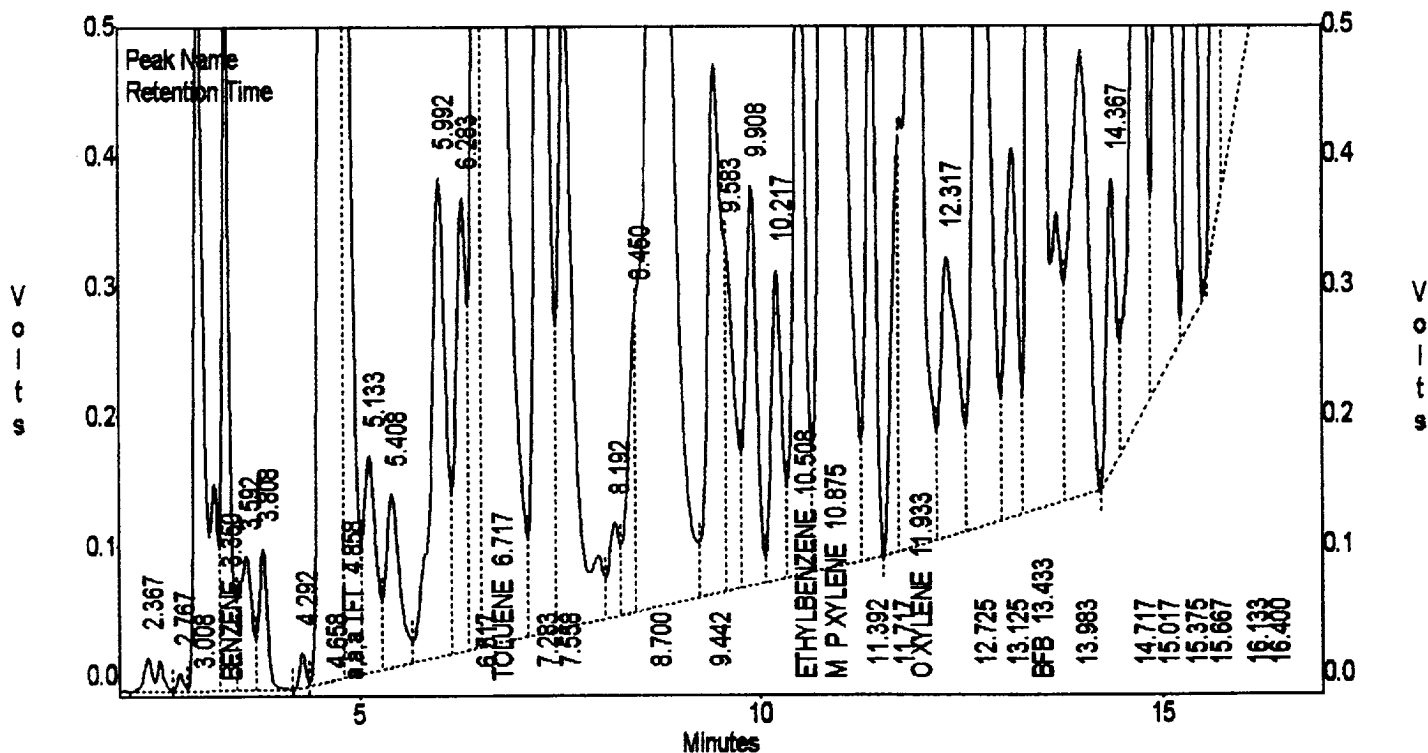
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.350	3536725	121531.74219	27.4558
a,a,a TFT	4.858	5338825	32055.68359	163.8510
TOLUENE	6.717	71854896	314479.71875	290.7620
ETHYLBENZENE	10.508	6011569	228573.29688	26.6622
M & P XYLENE	10.875	82867856	316768.40625	329.1673
O XYLENE	11.933	20666392	221087.17188	93.7797
BFB	13.433	82603816	944778.31250	86.6237

Totals :

272880064

1018.3016

C:\LABQUEST\CHROM001\946594A - Channel A



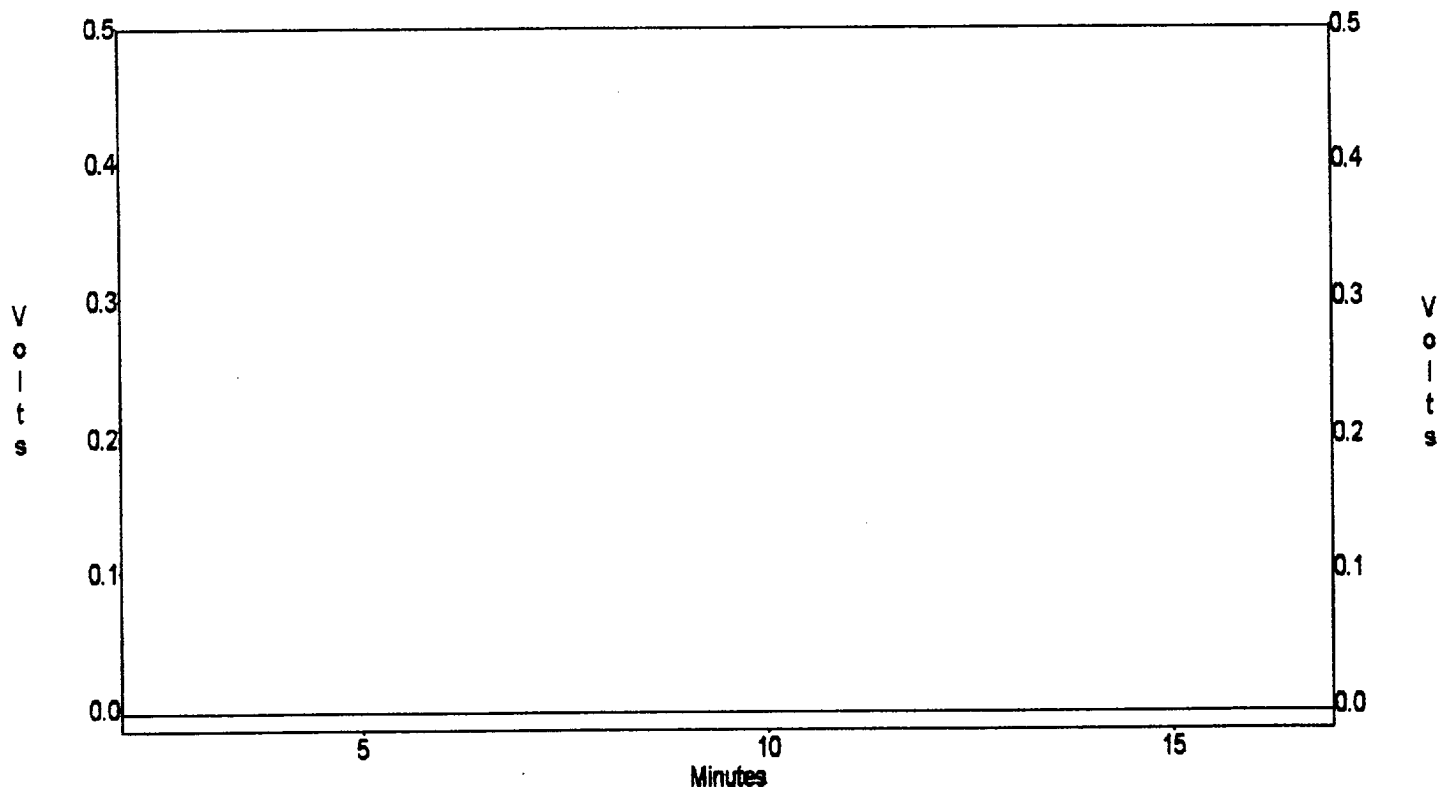
EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946594A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946594,2.59G/75uL
Acquired : Jan 29, 1995 10:16:30
Printed : Jan 29, 1995 10:33:43
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.367	0	0.00000	0.0000
a,a,a TFT	4.883	0	0.00000	0.0000
TOLUENE	6.700	0	0.00000	0.0000
ETHYLBENZENE	10.480	0	0.00000	0.0000
M & P XYLENE	10.833	0	0.00000	0.0000
O XYLENE	11.900	0	0.00000	0.0000
BFB	13.400	0	0.00000	0.0000
Totals :		0		0.0000

C:\LABQUEST\CHROM001\946594A - Channel B



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 Molly Pitcher #1 90018

Elevation _____
Borehole Location T30, R14, S14, H
GWL Depth _____
Logged By Jeff W. Kindley
Drilled By Mike Donahue
Date/Time Started 09/27/95 1019
Date/Time Completed 09/27/95

Well Logged By Jeff W. Kindley
Personnel On-Site M. Donahue, J. Long, C. Millican
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 10'						
15	1	13-15	18 2.0	SW, BR SAND, medium-grained dry, dense, hydrocarbon odor						104 122 1034 36 blows per foot
20	2	18-20	16 2.0	SW, BR/TN SAND, medium- coarse grained, dry, medium dense, hydrocarbon odor.						131 408 1040 14 blows per foot
25	3	23-25	16 2.0	S.A.A.						38 52 1050 11 blows per foot
30	4	28-30	14 2.0	SW, Yellow SAND, coarse-grained dry, medium dense, hydro- carbon odor.						29 51 1100 19 blows per foot
35	5	33-35	13 2.0	S.A.A. Boring terminated at 35 feet						12 11 1115 35 blows per foot
40										

Comments:

Sample collected from 33-35 feet (JWK 91 and 92). Duplicate also collected. Samples analyzed for BTEX /TPH. 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:	JWK91	947557
MTR CODE SITE NAME:	90018	Molly Pitcher #1
SAMPLE DATE TIME (Hrs):	09-27-95	1115
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9/28/95	
DATE OF BTEX EXT. ANAL.:	9/28/95	9/28/95
TYPE DESCRIPTION:	V6	light brown sand & sand stone

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	< 10	MG/KG			1.97	28
HEADSPACE PID	11	PPM				
PERCENT SOLIDS	91.8	%				

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

The Surrogate Recovery was at
Narrative:

96%

for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

9-29-95


```

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

```

```

*
* 95/09/28 14:32
*
* Sample identification
* 947557
*
* Initial mass of sample, g
* 1.970
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 3.070
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.011
*
*
*

```

