

Henry
EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE
DEPUTY OIL & GAS
DEC 21 1993

Approved
LACKEY B LS 14
Meter/Line ID - 72963

RECEIVED
JUL 2 1993

SITE DETAILS

Legals - Twn: 28
NMOCD Hazard Ranking: 60
Operator: AMOCO PRODUCTION COMPANY

Rng: 09
Sec: 30
Unit: A
Land Type: 4 - Fee

OIL CON. DIV.
PIT CLOSURE DATE: 09/27/94

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.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

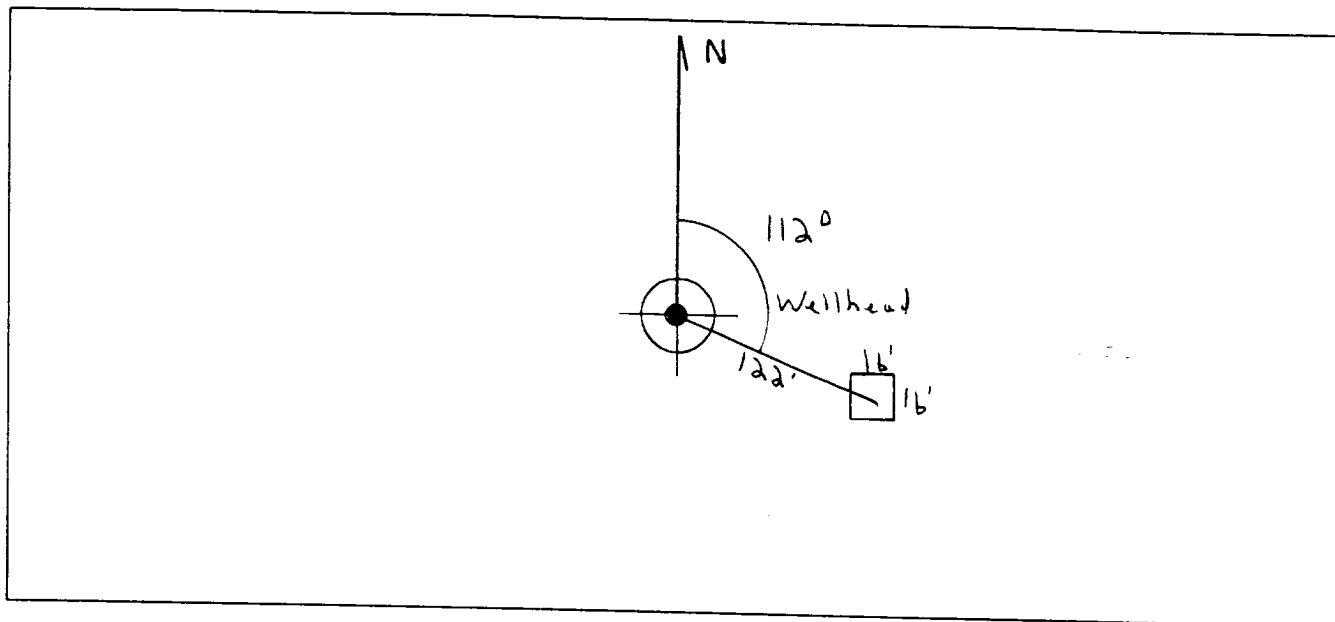
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>72963</u> Location: <u>Lackey B 14</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amace</u> P/L District: <u>Angel Peak</u></p> <p>Coordinates: Letter: <u>A</u> Section <u>30</u> Township: <u>28</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>9/13/94</u> Area: <u>01</u> Run: <u>73</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>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? <input checked="" type="checkbox"/> (1) YES (20 points) <input type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body 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)</p> <p>Name of Surface Water Body <u>Muiza Canyon (off of San Juan R.)</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) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>60</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline Book - Inside , Vulnerable Zone Topo - Inside</u></p> <p><u>Dehy pit is dry</u></p> <p><u>DIG + HAUL</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 112° Footage from Wellhead 122'
b) Length : 16' Width : 16' Depth : 3'



REMARKS

Remarks :

Pictures @ 1351 hr on 9/14/94

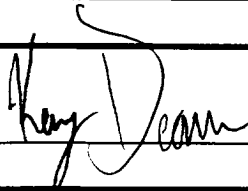
Completed By:

Cory Chase
Signature

9/13/94
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>72963</u> Location: <u>LACKEY B 14</u></p> <p>Coordinates: Letter: <u>A</u> Section <u>30</u> Township: <u>28</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9/27/96</u> Run: <u>01</u> <u>73</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 280</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>725 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>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>50</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"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>9/27/94</u> Pit Closed By: <u>BEJ</u></p>
REMARKS	<p>Remarks : <u>Excavated pit to 12', Took PID Sample, closed pit.</u></p>
	<p>Signature of Specialist: <u></u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	WD 280	946227
MTR CODE SITE NAME:	72 943	N/A
SAMPLE DATE TIME (Hrs):	9-27-94	1205
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9-29-94	9-29-94
DATE OF BTEX EXT. ANAL.:	10-3-94	10-6-94
TYPE DESCRIPTION:	VC	Dark brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	30	MG/KG	20			
ETHYL BENZENE	12	MG/KG	20			
TOTAL XYLENES	190	MG/KG	20			
TOTAL BTEX	233	MG/KG				
TPH (418.1)	1400	MG/KG			1.98	28
HEADSPACE PID	725	PPM				
PERCENT SOLIDS	86.2	%				

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

The Surrogate Recovery was at 146 % for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached surrogate recovery was outside ATI QC
limits due to matrix interference

DF = Dilution Factor Used

Approved By: JPDate: 10/23/94

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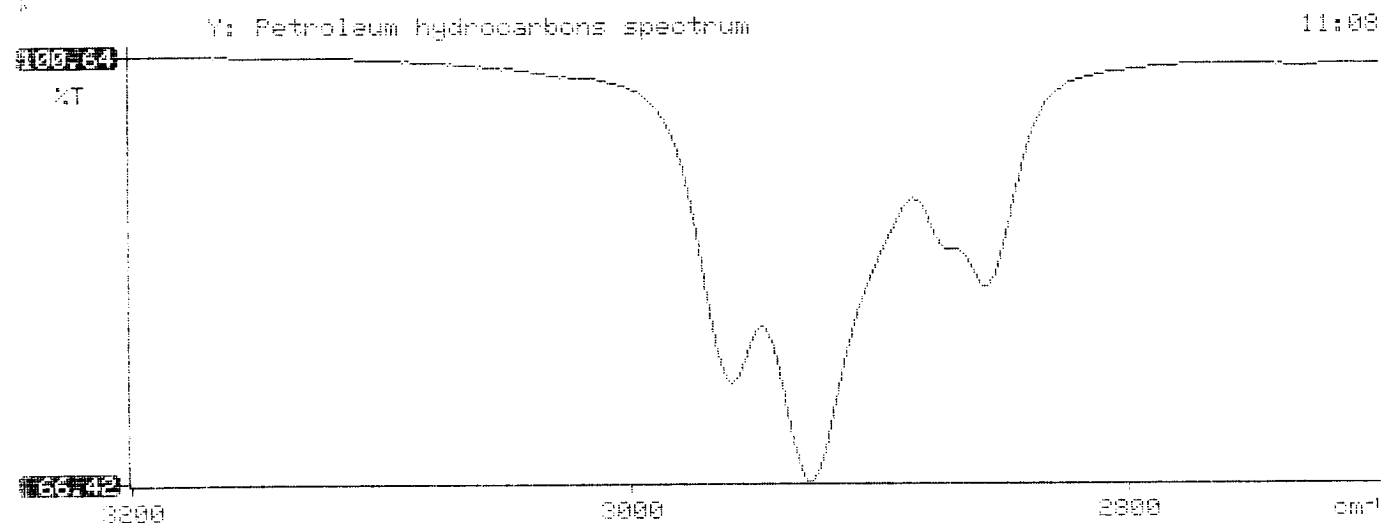
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report    *
*****

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94/09/27  11:07
*
* Sample identification
* 646227
*
* Initial mass of sample, g
* 1.980
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 1396.868
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.179
*
*
*

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Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE
Phone (505) 344-3777

Tuerque, NM 87107
AX (505) 344-4413

ATI I.D. **409445**

October 13, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/30/94**, 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



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409445
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946227	NON-AQ	09/27/94	10/03/94	10/06/94	20
02	946228	NON-AQ	09/27/94	10/03/94	10/06/94	5
03	946229	NON-AQ	09/27/94	10/03/94	10/06/94	5
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.5	0.50	<0.13
TOLUENE			MG/KG	30	0.61	0.19
ETHYLBENZENE			MG/KG	12	0.70	0.50
TOTAL XYLENES			MG/KG	190	9.2	1.0

SURROGATE:

BROMOFLUOROBENZENE (%) 166* 71 63*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

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

B # 1
We
Page of

Project Name EPNG Pits
Project Number 14509 Phas 000.77
Project Location Lackey B-14 2963

Elevation
Borehole Location T28, R9, S30, A
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Sudduth
Date/Time Started 08/31/95 0944
Date/Time Completed 08/31/95 1135

Well Logged By Jeff W. Kindley
Personnel On-Site G. Sudduth, D. Eckert, H. Ke
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	1.8 2.0	SW, BR/BK SAND, coarse, grained, moist, loose, hydrocarbon odor					176 193	0958 6 blows per Foot
25	2	23-25	1.0 2.0	S.A.A					193 215	1000 10 blows per Foot
30	3	28-30	1.1 2.0	S.A.A					196 227	1004 8 blows per Foot
35	4	33-35	1.2 2.0	S.A.A					175 216	1008 8 blows per Foot
40	5	38-40	1.1 2.0	S.A.A					192 227	1014 8 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

B # E
We
Page 2 of

Project Name EPNG Pits
Project Number 14509 Phase 000.77
Project Location Lackey B-14 2963

Elevation _____
Borehole Location T28, R9, S30, A
GWL Depth _____
Logged By Jeff W. Kindley
Drilled By G. Sudduth
Date/Time Started 08/31/95 0944
Date/Time Completed 08/31/95 1135

Well Logged By Jeff W. Kindley
Personnel On-Site G. Sudduth, D. Roberts, H. Keil
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	
40										
45	6	43-45	$\frac{.5}{2.0}$	CL, BK CLAY, stiff, moist, medium plasticity, hydrocarbon odor.					56/ 210	1021 10 blows per Foot.
50	7	48-50	$\frac{.9}{2.0}$	S. A. A.					49/ 52	1025 8 blows per Foot
55	8	53-55	$\frac{1.3}{2.0}$	SW, BR medium grained SAND, moist, medium dense, hydrocarbon odor.					49/ 61	1033 25 blows per Foot
60	9	58-60	$\frac{1.1}{2.0}$	SW, BR medium grained SAND, moist, medium dense no odor Boring terminated at 60'					10/ 2	1052 11 blows per Foot
25										
30										
35										
40										

Comments:

Sample collected from 58 to 60 feet. (JWK 59). Sample submitted
to laboratory for analysis of BTEX and TPH. BH grouted to the
surface

Geologist Signature

Jeffrey Kindley



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 59	947382
MTR CODE SITE NAME:	22963	Lackey B-14
SAMPLE DATE TIME (Hrs):	08-31-95	1052
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9-5-95	
DATE OF BTEX EXT. ANAL.:	9/1/95	9/6/95
TYPE DESCRIPTION:	V6	DARK BROWN 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)	18.5	MG/KG			2.14	2P
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	95.5	%				

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

The Surrogate Recovery was at 92% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By:

JD

Date:

9-11-95

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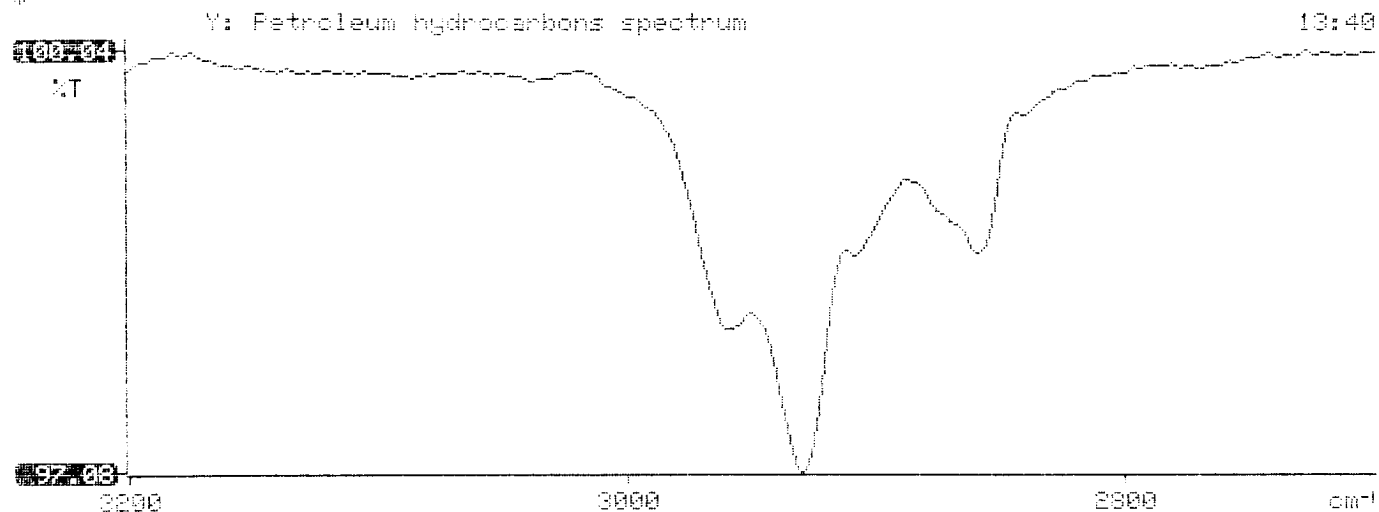
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                    *
*      Analysis Report      *
*****

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95/09/05 13:40
*
* Sample identification
947382
*
* Initial mass of sample, g
2.140
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
18.505
* Net absorbance of hydrocarbons (2930 cm-1)
0.013
*
*

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BTEX SOIL SAMPLE WORKSHEET

File	:	947382	Date Printed	:	9/7/95
Soil Mass (g)	:	5.06	Multiplier (L/g)	:	0.00095
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.19763

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.494
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.494
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.494
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 0.988
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.494
			Total xylenes (mg/Kg):	0.000 1.482
			Total BTEX (mg/Kg):	0.000

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090695-1.013
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947382,5.06G,100U
 Acquired : Sep 06, 1995 16:58:36
 Printed : Sep 06, 1995 17:24:58
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.977	1910749	80.2866
TOLUENE	6.807	104566	-0.8497
ETHYLBENZENE	10.563	56494	-0.2327
M & P XYLENE	10.913	309694	-2.5316
O XYLENE	11.877	0	0.0000
BFB	13.460	32237904	91.7813

