

DEC 11 1995

PINON #1
Meter/Line ID - 87393

RECEIVED
DEC 11 1995

SITE DETAILS

Legals - Twn: 30 --- Rng: 14
NMOCD Hazard Ranking: 20
Operator: DUGAN PRODUCTION CORP

Sec: 13 Unit: F
Land Type: 2 - Federal
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: <u>87393</u> Location: <u>PINON #1</u> Operator #: _____ Operator Name: <u>NASSAU RESOURCES P/L</u> District: <u>KUTZ</u> Coordinates: Letter: <u>F</u> Section <u>13</u> Township: <u>30</u> Range: <u>14</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>1-11-95</u> Area: <u>02</u> Run: <u>23</u>										
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)										
	Land Type: <table border="0"> <tr> <td>BLM</td> <td>☒ (1)</td> </tr> <tr> <td>State</td> <td>☐ (2)</td> </tr> <tr> <td>Fee</td> <td>☐ (3)</td> </tr> <tr> <td>Indian</td> <td></td> </tr> </table>				BLM	☒ (1)	State	☐ (2)	Fee	☐ (3)	Indian
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 <u>CONOR ARROYO</u> (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: <u>20</u> POINTS											
REMARKS	Remarks : <u>REDLINE & TOPO SHOW LOCATION INSIDE V.Z. 3 PITS ON LOCATION.</u> <u>DEHY PIT BELONGS TO EPNG. WILL CLOSE PIT. 1/2" OF LIQUID IN PIT.</u> REMOVED FROM PITS										

ORIGINAL PIT LOCATION

A diagram showing a north arrow pointing upwards, labeled 'N'. A circle is drawn around the base of the arrow, labeled 'WELLHEAD'. A line segment connects the center of the circle to a point inside a rectangle. The rectangle is labeled with dimensions '13'' and '14''. An arc indicates an angle of 162° between the north arrow and the line segment.

REMARKS

PHOTOS - 1337

Art Thompson

1.11.95

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>87393</u> Location: <u>PINON #1</u> Coordinates: Letter: <u>F</u> Section <u>13</u> Township: <u>30</u> Range: <u>14</u> Or Latitude _____ Longitude _____ Date Started : <u>1-25-95</u> Run: <u>02</u> <u>23</u>
FIELD OBSERVATIONS	Sample Number(s): <u>MK 333</u> <u>MK 334</u> <u>MK 335</u> Sample Depth: <u>10</u> Feet Final PID Reading <u>409</u> PID Reading Depth <u>10</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ Approx. Cubic Yards <u>120</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☐ Soil Disposition: Envirotech ☐ ☒ Tierra Other Facility ☐ Name: _____ Pit Closure Date: <u>1-25-95</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Arrived Took fence down Pit Had about 3' of water & oil in it. Soil ^{was} was very wet up till about 8' deep Hit sandstone 10' Gray soil strong HYDROCARBON odor</u>
	Signature of Specialist: <u>Morgan Killian</u>



SPLIT

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 333	946599
MTR CODE SITE NAME:	87393	N/A
SAMPLE DATE TIME (Hrs):	1-25-95	1320
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	1-26-95	1-26-95
DATE OF BTEX EXT. ANAL.:	1/26/95	1/29/95 + 1/31/95
TYPE DESCRIPTION:	VC	Brown sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	6.56	MG/KG	0.51480		2.54	20	1.8
TOLUENE	8.32	MG/KG					2.4
ETHYL BENZENE	14.4	MG/KG					10.0
TOTAL XYLENES	³⁰² 287 _{1/21/95}	MG/KG	^{11/21/95} 0.7722				20.0
TOTAL BTEX	³³¹ 316 _{1/21/95}	MG/KG					21.4
TPH (418.1)	36600	MG/KG			0.150	28	41000
HEADSPACE PID	409	PPM					Surrogate % 155
PERCENT SOLIDS	89.7	%					Dilution Factor 20

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

The Surrogate Recovery was at 97.0 for this samp All QA/QC was acceptable.

Narrative:

Outside ATI quality control limits due to matrix interference
ATI Results attached

DF = Dilution Factor Used

Approved By: ARDate: 2-22-95

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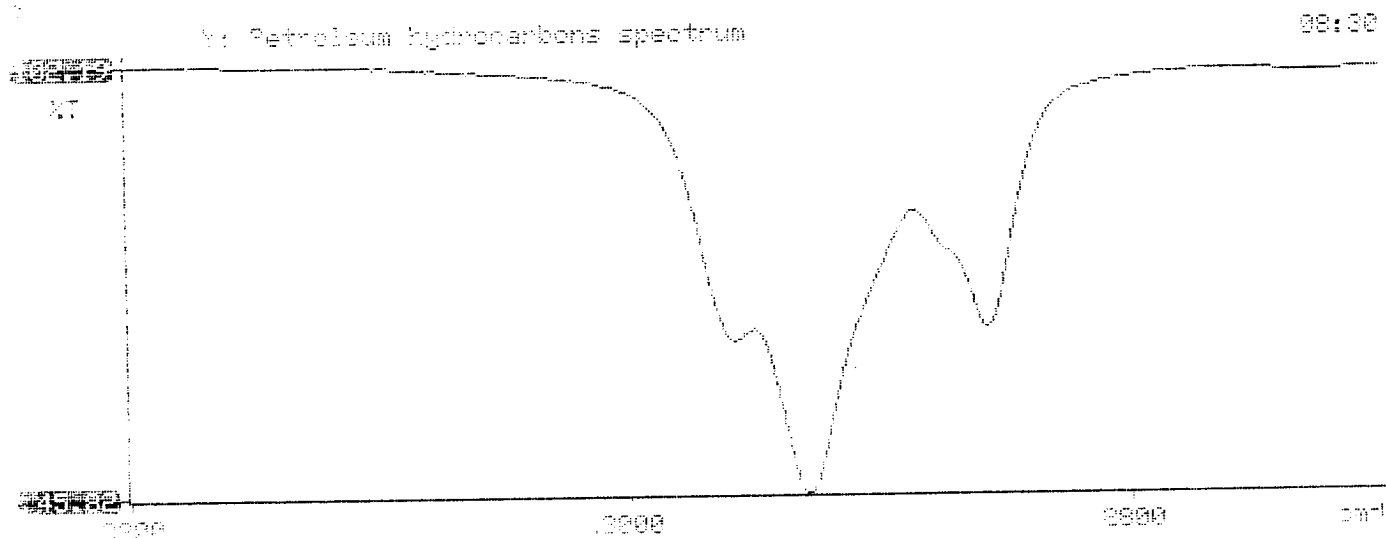
*****
Test Method for
TLC and Grease and Petroleum Hydrocarbons
in Water and Soil
*****
Perkin Elmer Model 1600 FT-IR
Analysis Report
*****

```

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05/01/95 10:30
* Sample Identification
014579
* Initial mass of sample, g
0.150
* Volume of sample after extraction, ml
28.000
* Petroleum hydrocarbons, ppm
34599.496
* Net absorbance of hydrocarbons (2930 cm-1)
0.345

```



BTEX SOIL SAMPLE WORKSHEET

File	:	946599A	Date Printed	:	1/30/95
Soil Mass (g)	:	2.59	Multiplier (L/g)	:	0.00193
Extraction vol. (mL)	:	20	DF (Analytical)	:	266.667
Shot Volume (uL)	:	75	DF (Report)	:	0.51480

			Det. Limit
Benzene (ug/L)	:	12.75	
Toluene (ug/L)	:	16.16	
Ethylbenzene (ug/L)	:	27.88	
p & m-xylene (ug/L)	:	430.75	
o-xylene (ug/L)	:	126.10	
Benzene (mg/Kg):		6.564	2.574
Toluene (mg/Kg):		8.319	2.574
Ethylbenzene (mg/Kg):		14.353	2.574
p & m-xylene (mg/Kg):		221.750	5.148
o-xylene (mg/Kg):		64.916	2.574
Total xylenes (mg/Kg):		286.667	7.722
Total BTEX (mg/Kg):		315.902	

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946599A
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 946599,2.59G/75uL
 Acquired : Jan 30, 1995 01:13:26
 Printed : Jan 30, 1995 01:30:34
 User : Tony

Channel A Results

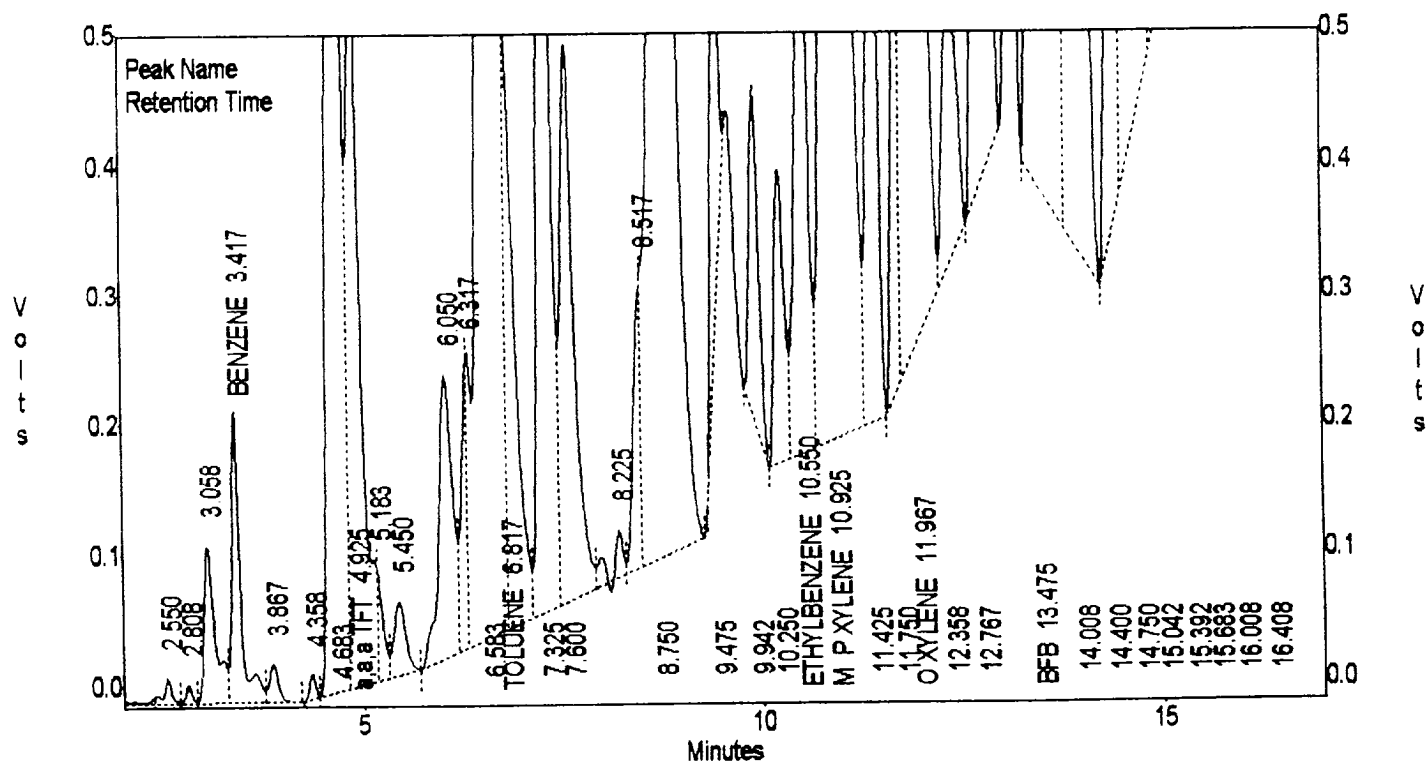
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.417	1642586	121531.74219	12.7515
a,a,a TFT	4.925	6264664	32055.68359	192.2654
TOLUENE	6.817	3994745	314479.71875	16.1648
ETHYLBENZENE	10.550	6286875	228573.29688	27.8833
M & P XYLENE	10.925	108441392	316768.40625	430.7504
O XYLENE	11.967	27788030	221087.17188	126.0962
BFB	13.475	92489944	944778.31250	96.9909

Totals :

246908224

902.9024

C:\LABQUEST\CHROM001\946599A - Channel A



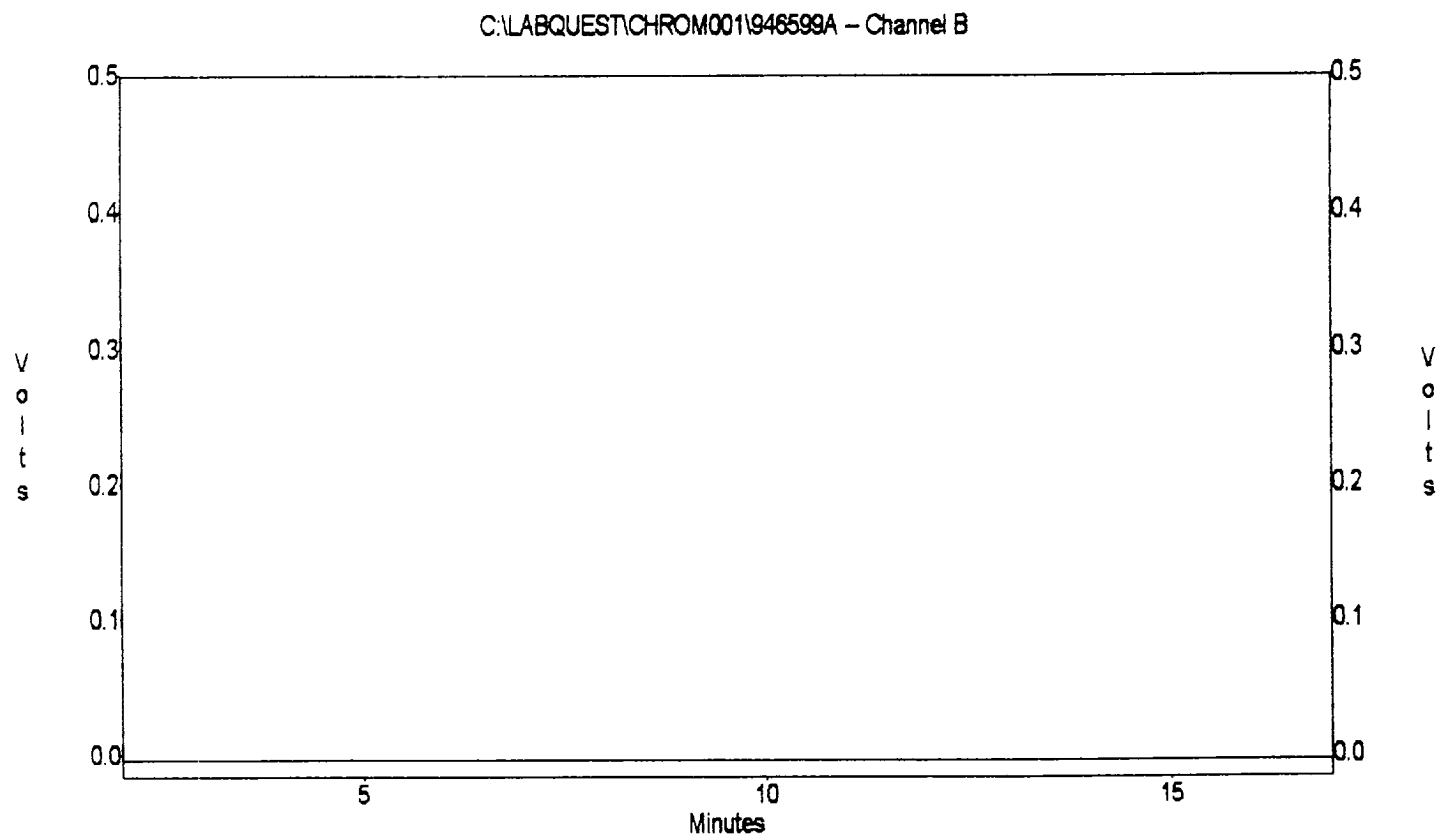
**EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS**

File : C:\LABQUEST\CHROM001\946599A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946599,2.59G/75uL
Acquired : Jan 30, 1995 01:13:26
Printed : Jan 30, 1995 01:30:40
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



BTEX SOIL SAMPLE WORKSHEET

File	:	946599B	Date Printed	:	2/1/95
Soil Mass (g)	:	2.59	Multiplier (L/g)	:	0.00193
Extraction vol. (mL)	:	20	DF (Analytical)	:	400
Shot Volume (uL)	:	50	DF (Report)	:	0.77220

			Det. Limit
Benzene (ug/L)	:	7.45	
Benzene (mg/Kg):		5.753	3.861
Toluene (ug/L)	:	13.50	
Toluene (mg/Kg):		10.425	3.861
Ethylbenzene (ug/L)	:	19.36	
Ethylbenzene (mg/Kg):		14.950	3.861
p & m-xylene (ug/L)	:	310.04	
p & m-xylene (mg/Kg):		239.413	7.722
o-xylene (ug/L)	:	81.07	
o-xylene (mg/Kg):		62.602	3.861
Total xylenes (mg/Kg):		302.015	11.583
Total BTEX (mg/Kg):		333.143	

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946599B
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 946599,2.59G/50uL
 Acquired : Feb 01, 1995 01:43:51
 Printed : Feb 01, 1995 02:10:04
 User : Tony

Channel A Results

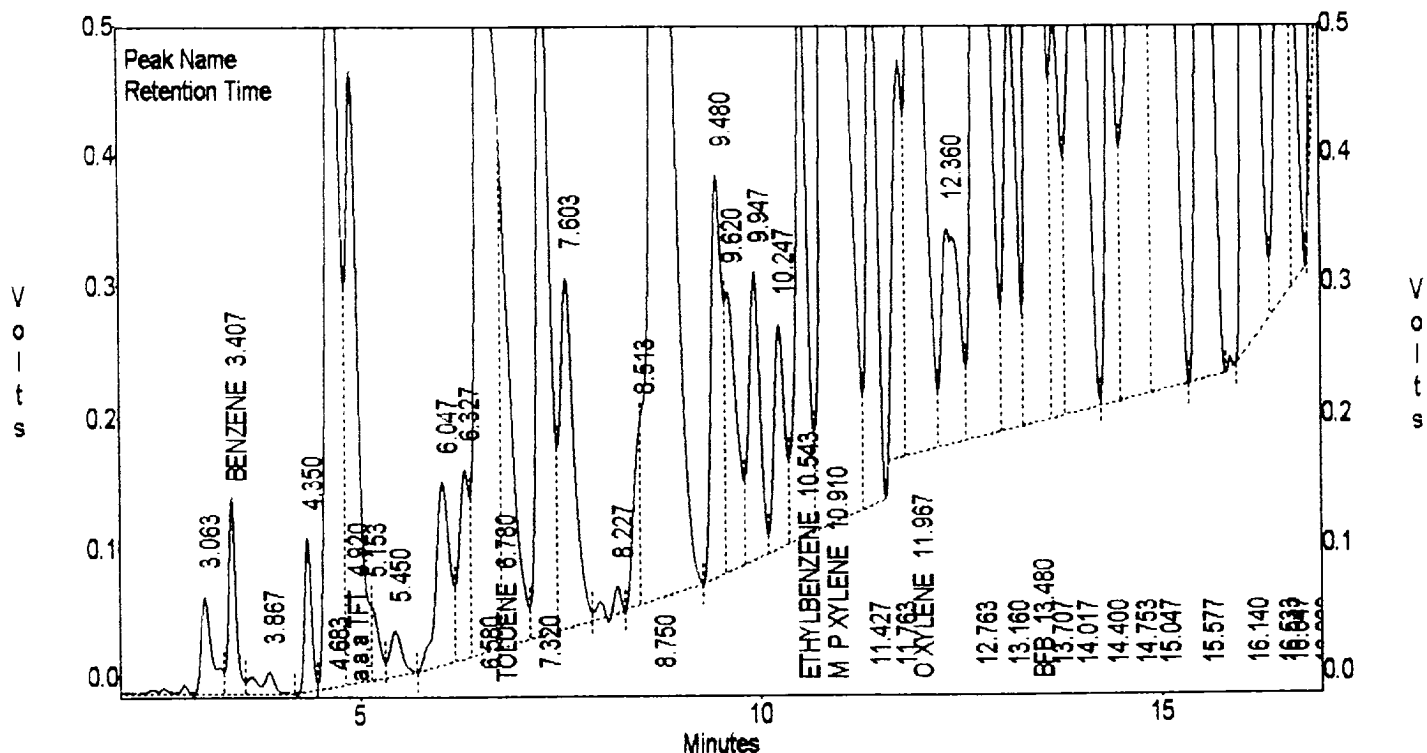
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.407	959416	121531.74219	7.4480
a,a,a TFT	4.920	4885145	32055.68359	149.9273
TOLUENE	6.780	3335073	314479.71875	13.4954
ETHYLBENZENE	10.543	4364697	228573.29688	19.3581
M & P XYLENE	10.910	78053480	316768.40625	310.0437
O XYLENE	11.967	17865126	221087.17188	81.0681
BFB	13.480	87441152	944778.31250	91.6964

Totals :

196904096

673.0370

C:\LABQUEST\CHROM001\946599B - Channel A

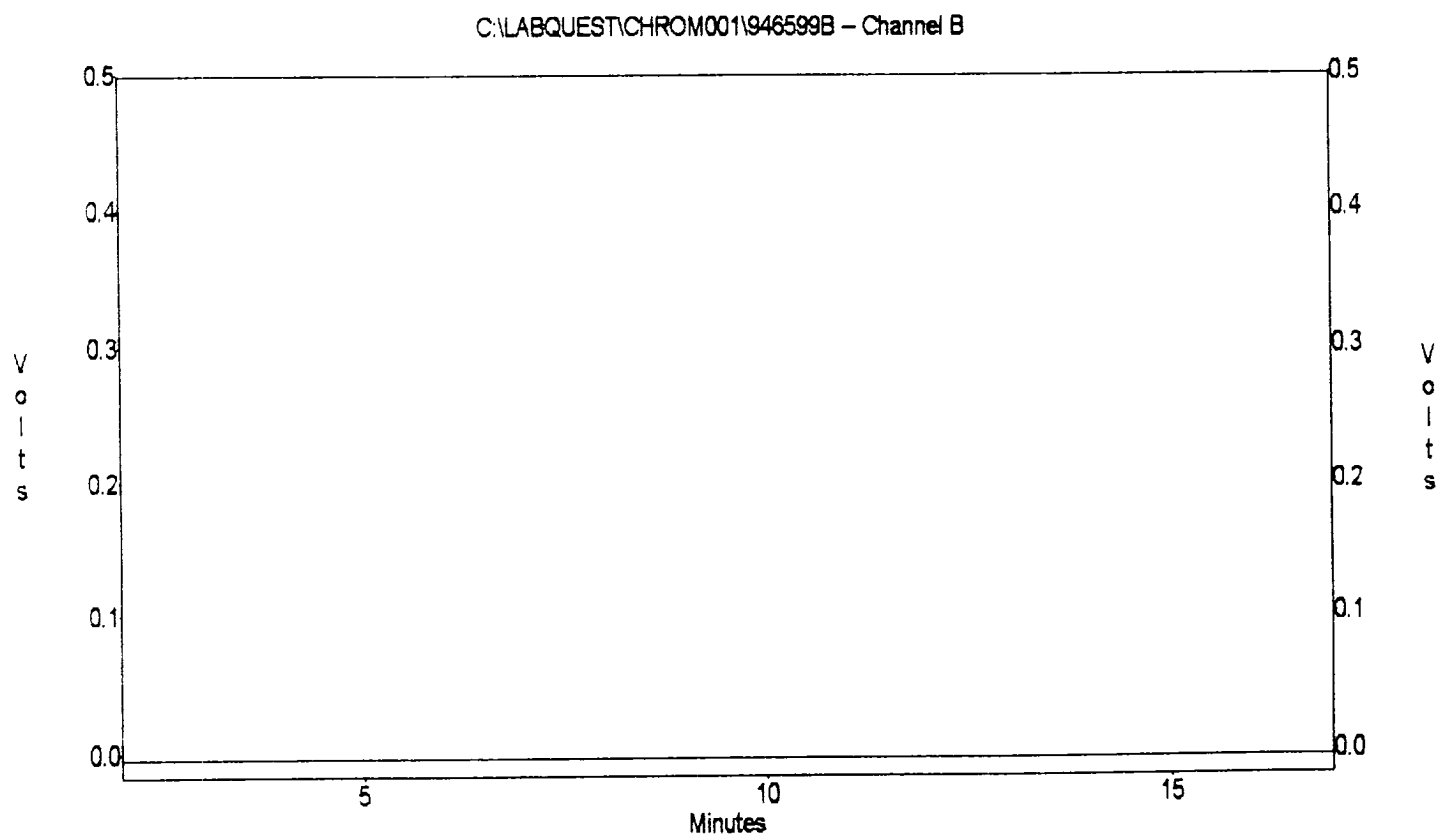


EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946599B
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946599, 2.59G/50uL
Acquired : Feb 01, 1995 01:43:51
Printed : Feb 01, 1995 02:10:10
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.450	0	0.00000	0.0000
a,a,a TFT	4.950	0	0.00000	0.0000
TOLUENE	6.787	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





Analytical **Technologies, Inc.**

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

ATI I.D. **502307**

February 8, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 02/02/95, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** sample(s). The sample(s) 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.

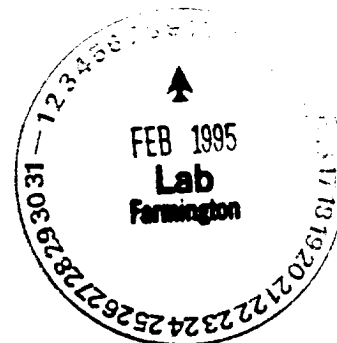
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 502307
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946599	NON-AQ	01/25/95	02/02/95	02/03/95	20
PARAMETER			UNITS	01		
BENZENE			MG/KG	1.8		
TOLUENE			MG/KG	2.4		
ETHYLBENZENE			MG/KG	10		
TOTAL XYLENES			MG/KG	200		

SURROGATE:

BROMOFLUOROBENZENE (%) 155*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 502307
PROJECT #	: 24324	DATE RECEIVED	: 02/02/95
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 02/02/95

PARAMETER	UNITS	01
PETROLEUM HYDROCARBONS, IR	MG/KG	41000

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 2

Project Name EPNG Pits

Project Number 14509 Phase 6000.77

Project Location PINON #1 87393

Elevation

Borehole Location T30, R14, S13, F

GWL Depth

Logged By Jeff W. Kindley

Drilled By

Date/Time Started 09/27/95 1210

Date/Time Completed 09/27/95

Well Logged By Jeff W. Kindley

Personnel On-Site M. Donahue, T. Long, C. Mullica

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				Back Fill material to 12'						
15	1	13-15	1.9 2.0	SW, BI/BR SAND, medium grained, loose, dry, hydrocarbon staining and odor.					43 84	1215 8 blows per Foot
20	2	18-20	1.5 2.0	SW, BR SAND, medium-grained dry, loose, hydrocarbon odor					41 109	1225 9 blows per Foot
25	3	23-25	1.6 2.0	SC, BL CLAYEY SAND (20% clay) medium-grained, dry, dense, hydrocarbon staining and odor					48 107	1236 286 blows per Foot
30	4	28-30	1.4 2.0	SW, BR SAND, moist, medium dense, hydrocarbon staining and odor, medium-grained					52 68	1240 156 blows per Foot
35	5	33-35	1.2 2.0	SW, GR SAND, dry, medium dense, hydrocarbon odor, medium grained					66 94	1246 17 blows per Foot
40	6	38-40	1.7 2.0	S.A. A					49 125	1254 19 blows per Foot

Comments:

Geologist Signature

Jeff W. 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 PNDW #1 87393

Elevation

Borehole Location T 20, R 14, S 13, F

GWL Depth

Logged By Jeff W. Kindley

Drilled By M. Donahue

Date/Time Started 09/27/95 1210

Date/Time Completed 09/27/95

Well Logged By Jeff W. Kindley

Personnel On-Site M. Donahue, J. Long, C. Mullican

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 BZ BH S			Drilling Conditions & Blow Counts
40										
45	7	43-45	1.6 2.0	SW, BR/BI SAND, coarse-grained, dry, dense, hydrocarbon stained/odor.					25 80	1305 426 blows per foot
50	8	48-50	1.3 2.0	SW, BR/BL SAND, coarse grained, medium dense, hydro- carbon stained, hydrocarbon odor, dry					21 71	1315 276 blows per foot
55	9	53-55	.4 2.0	SW, BR SAND, coarse-grained, medium dense, slight hydro- carbon odor, dry Boring terminated at 55'					13 14	1330 266 blows per foot
20										
25										
30										
35										
40										

Comments:

Sample collected from 53 to 55 feet (JWK 93). Sample analyzed for
BTX/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:	JWK93	947559
MTR CODE SITE NAME:	87393	Pinon #1
SAMPLE DATE TIME (Hrs):	09-27-95	1330
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:	YG	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)	69	MG/KG			2.0%	2.8
HEADSPACE PID	14	PPM				
PERCENT SOLIDS	22.8	%				

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

The Surrogate Recovery was at 94% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By:

Date:

9-29-95

BTEX SOIL SAMPLE WORKSHEET

File	:	947559	Date Printed	:	9/29/95
Soil Mass (g)	:	5.02	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	10	DF (Analytical)	:	200
Shot Volume (uL)	:	50	DF (Report)	:	0.19920

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.498
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.498
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.498
p & m-xylene (ug/L)	:	0.24	p & m-xylene (mg/Kg):	0.048 0.996
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.498
			Total xylenes (mg/Kg):	0.048 1.494
			Total BTEX (mg/Kg):	0.048

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092895-1.014
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947559.5.02G.50U
 Acquired : Sep 28, 1995 20:45:11
 Printed : Sep 28, 1995 21:11:36
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.647	4480910	97.0581
TOLUENE	8.737	0	0.0000
ETHYLBENZENE	12.710	0	0.0000
M & P XYLENE	13.063	79500	0.2399
O XYLENE	14.208	0	0.0000
BFB	15.737	67996736	93.8026

