

EPFS PIT CLOSURE SUMMARY

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

Canyon Largo Unit # 26
Meter/Line ID - 14049

JUL 17 1998

Legals - Twn: 25 Rng: 6
NMOCD Hazard Ranking: 50
Operator: Meridian

SITE DETAILS

Sec: 4 Unit: O
Land Type: FEE

PREVIOUS ACTIVITIES

Site Assessment: 9/12/95
Monitor Well: N/A

Excavation: 9/26/95
Re-Excavation: N/A

Soil Boring: 11/2/95
Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe, which was 12 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 24 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Prior to back filling the excavation 25 pounds of nitrogen enriched fertilizer was mixed with the soils at the bottom of the excavation to enhance bio-degradation of residual hydrocarbons. Sample analysis indicated total BTEX to be below laboratory detection limits, and TPH was slightly above standards at 114 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. The soil lithology consisted of a brown silty clay, which continued to the termination of the boring at 20 feet bgs. A soil sample was collected for BTEX and TPH analysis at 18-20 feet bgs. Laboratory analysis showed all BTEX compounds and TPH to be below laboratory detection limits.

RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

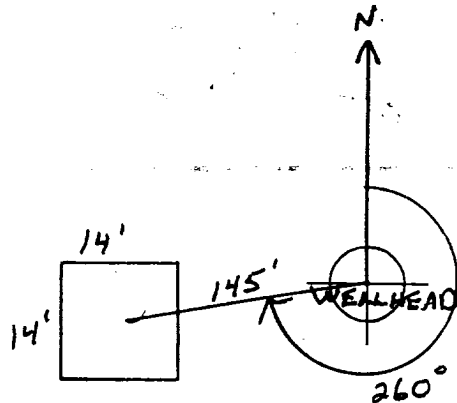
- The bulk of the impacted soil was removed during the phase I excavation.
- Test boring sample results indicated soils below standards 6 feet beneath the initial excavation.
- Twenty five pounds of nitrogen enriched fertilizer was added to the bottom of the excavation to aid bio-degradation.
- No groundwater was encountered in the test boring.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

RECEIVED
JUL - 9 1998
OIL CON. DIV.
ST. LOUIS

RECEIVED
MAR 4 1998
FBI CON. DIV.
DIST. 3

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 260° Footage from Wellhead 145'
b) Length : 14' Width : 14' Depth : 2'



REMARKS :

photos: 4 pict. 12:55

Past Dogie Camp. 1 mile, left across wash 2nd loc.

Completed By:

James L. Pearson
Signature

9-12-95
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 14049 Location: CANYON Largo unit #26

Coordinates: Letter: 0 Section 04 Township: 25 Range: 06

Or Latitude _____ Longitude _____

Date Started : 9-26-95 Run: 06 61

FIELD OBSERVATIONS

Sample Number(s): M/K 474

Sample Depth: 12' Feet

Final PID Reading 24 ppm

PID Reading Depth 12' Feet

Yes No

Groundwater Encountered ☐

☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation

☒

Approx. Cubic Yards 50

Onsite Bioremediation

☐

Backfill Pit Without Excavation

☐

Soil Disposition:

Envirotech

☒

☐

Tierra

Other Facility

☐

Name: _____

Pit Closure Date: 9-26-95

Pit Closed By: Philip

REMARKS

Remarks : Arrived dug sample hole pit appeared
to be clean initial sample came by Hot excavated
hole N-wall 5 ppm S-wall 20 ppm E-wall 4 ppm
W-wall 3 ppm Bottom - 34 ppm 25 Pound Fertilizer

Signature of Specialist: Morgan Killian



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK474	947532
MTR CODE SITE NAME:	14049	Canyon Largo #26
SAMPLE DATE TIME (Hrs):	09-26-95	1630
PROJECT:	Phase I	
DATE OF TPH EXT. ANAL.:	9-27-95	
DATE OF BTEX EXT. ANAL.:	9/27/95	9/27/95
TYPE DESCRIPTION:	VC	Porosity sand delay

Field Remarks: (N-5)(S-20)(E-4)(W-3)

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)	114	MG/KG			2.04	28
HEADSPACE PID	24	PPM				
PERCENT SOLIDS	91.0	%				

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

The Surrogate Recovery was at 97% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Date:

9-29-95

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*****1*****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

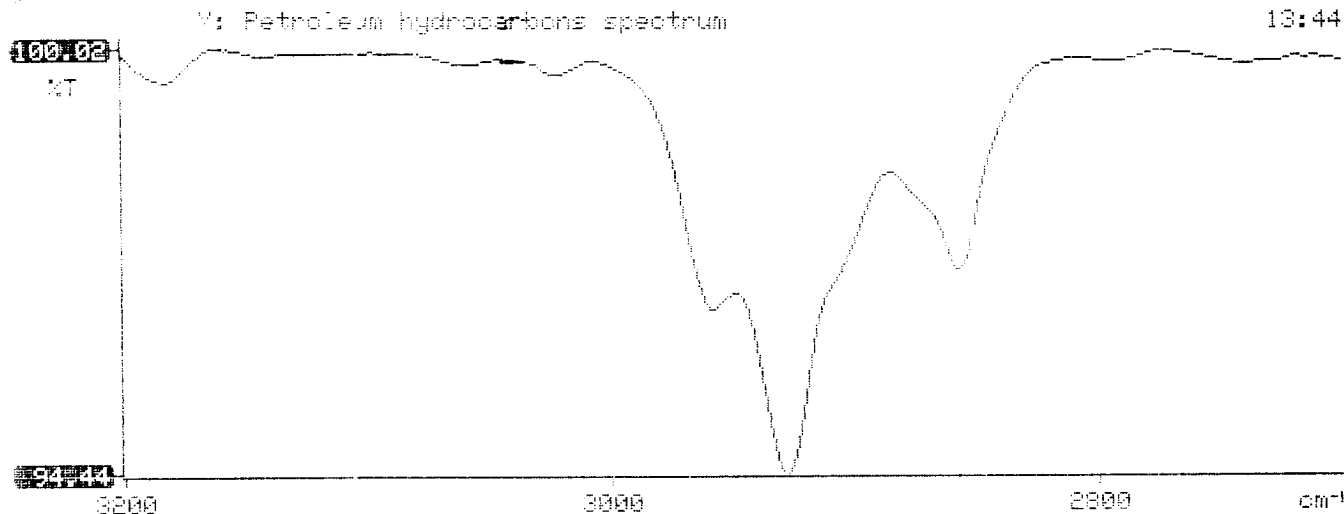
Perkin-Elmer Model 1600 FT-IR
Analysis Report
*****

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95/09/27 13:44
X
X Sample identification
947532
X
X Initial mass of sample, g
2.040
X
X Volume of sample after extraction, ml
28.000
X
X Petroleum hydrocarbons, ppm
113.665
X Net absorbance of hydrocarbons (2930 cm-1)
0.024
X
X
X

```



BTEX SOIL SAMPLE WORKSHEET

File	:	947532	Date Printed	:	9/28/95
Soil Mass (g)	:	5.11	Multiplier (L/g)	:	0.00098
Extraction vol. (mL)	:	10	DF (Analytical)	:	200
Shot Volume (uL)	:	50	DF (Report)	:	0.19569

				Det. Limit
Benzene (ug/L)	:	0.15	Benzene (mg/Kg):	0.029 0.489
Toluene (ug/L)	:	0.18	Toluene (mg/Kg):	0.035 0.489
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.489
p & m-xylene (ug/L)	:	0.25	p & m-xylene (mg/Kg):	0.049 0.978
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.489
			Total xylenes (mg/Kg):	0.049 1.468
			Total BTEX (mg/Kg):	0.114

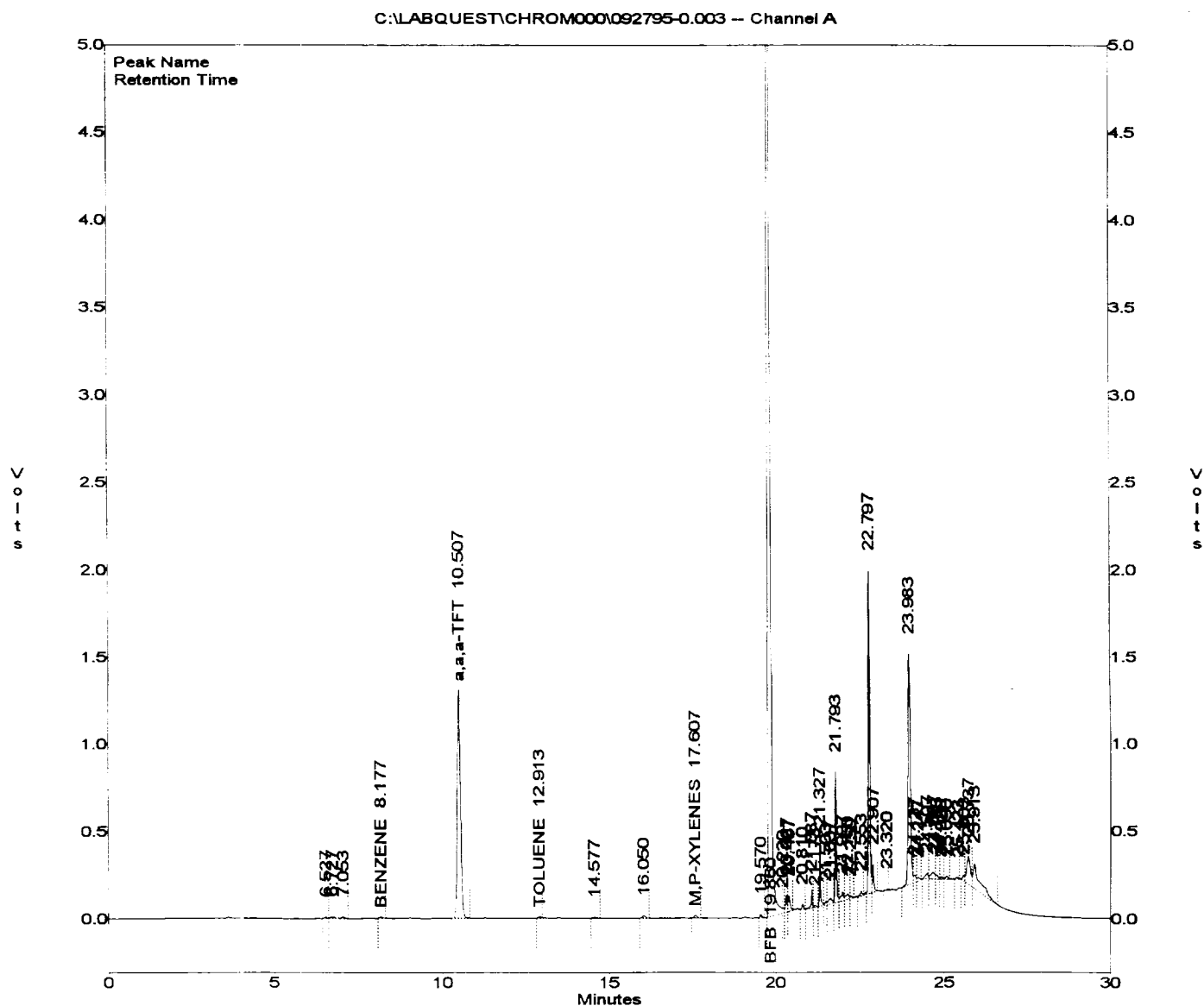
EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

EPA METHOD 8020 - BTEX SOILS

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File       : C:\LABQJEST\CHROM000\092795-0.003
Method     : C:\LABQJEST\METHODS\9000.MET
Sample ID  : 947532,5.11G,50U
Acquired   : Sep 27, '995 15:46:51
Printed    : Sep 27, '995 16:17:15
User       : MARLON
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Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.177	56501	0.1510
a,a,a-TFT	10.507	8889989	101.6164
TOLUENE	12.913	64437	0.1771
ETHYLBENZENE	17.170	0	0.0000
M,P-XYLENES	17.607	101445	0.2529
O-XYLENE	18.710	0	0.0000
BFB	19.860	53061212	97.3456



PHASE II

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(506) 326-2262 FAX (506) 326-2388

Borehole # BH-1 ✓
Well # _____
Page 1 of 1

Project Name EPNG Pits
Project Number 14509 Phase 601
Project Location Canyon Largo Unit #26, 14049

Elevation _____
Borehole Location T25, K'GSH, O
GWL Depth _____
Logged By S. Kelly
Drilled By M. Donohue
Date/Time Started 11/26/95, 0900
Date/Time Completed 11/2/95, 1045

Well Logged By S. Kelly
Personnel On-Site M. Donohue, F. Rivera
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method 4 1/4" ID HSA
Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	SH	S	
0				Backfill						
5				to 12'						
10										
15										
20	1	18'-20'	75' 2.0'	silty SAND, brown, 20-35% silt, Fine sand, loose, dry						0 0 0930
25				TOB-20!						
30										
35										
40										

Comments:

18'-20' sample (SEK 100) sent to lab. (BTX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to the surface.

Geologist Signature

Sam Kelly



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEX100	947729
MTR CODE SITE NAME:	14049	Canyon Largo Unit #26
SAMPLE DATE TIME (Hrs):	11-2-95	0930
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	11-6-95	
DATE OF BTEX EXT. ANAL.:	11/6/95	11/6/95
TYPE DESCRIPTION:	V6	DARK BROWN SAND & CLAY

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			1.94	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	92.0	%				

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

The Surrogate Recovery was at 105% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: g.f.

Date: 11/8/95

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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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95/11/06 15:02

* Sample identification

947729

* Initial mass of sample, g

1.940

* Volume of sample after extraction, ml

28.000

* Petroleum hydrocarbons, ppm

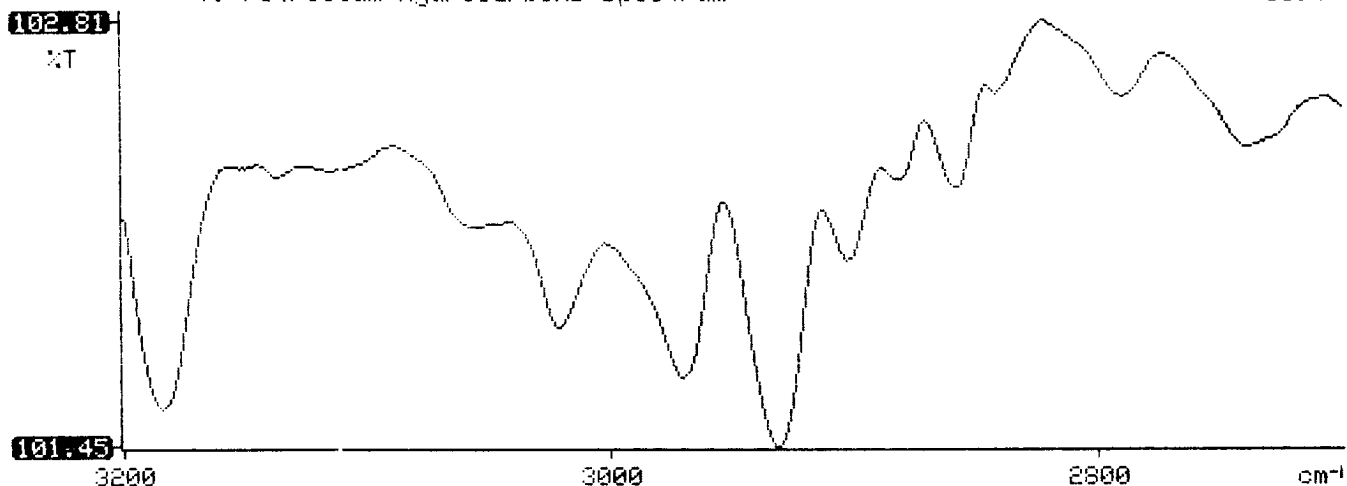
-54.313

* Net absorbance of hydrocarbons (2930 cm⁻¹)

0.004

Y: Petroleum hydrocarbons spectrum

15:02



BTEX SOIL SAMPLE WORKSHEET

File	:	947729	Date Printed	:	11/7/95
Soil Mass (g)	:	4.93	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.20284

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.11	Benzene (mg/Kg):	0.022 0.507
Toluene (ug/L)	:	0.57	Toluene (mg/Kg):	0.116 0.507
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.507
p & m-xylene (ug/L)	:	0.38	p & m-xylene (mg/Kg):	0.077 1.014
o-xylene (ug/L)	:	0.19	o-xylene (mg/Kg):	0.039 0.507
			Total xylenes (mg/Kg):	0.116 1.521
			Total BTEX (mg/Kg):	0.254

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\110695-0.018
 Method : C:\LABQUEST\METHODS\10-110295.MET
 Sample ID : 947729, 4.93G, 50U
 Acquired : Nov 07, 1995 03:26:39
 Printed : Nov 07, 1995 03:57:01
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.407	54169	0.1110
a,a,a-TFT	10.660	9780840	109.0741
TOLUENE	13.040	307211	0.5697
ETHYLBENZENE	17.303	0	0.0000
M,P-XYLENE,S	17.693	208599	0.3814
O-XYLENE	18.880	86424	0.1900
BFB	19.857	55257872	104.5418

