PRODUCTION BIT CLOSURE

DEC 2 1 1998

Garrett Federal Com. #2-1E Meter/Line ID - 93490



SITE DETAILS

Legals - Twn: 29 Rng: 11

NMOCD Hazard Ranking: 60

Operator: MERIDIAN OIL INC

Unit: M **Sec:** 13

Land Type: 4 - Fee

Pit Closure Date: 05/25/95

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

FIELD PIT SITE ASSESSMENT FORM



GENERAL	Meter: 93490 Location: Garrett Feleral Com #2-1E Operator #: 1987 Operator Name: MDI P/L District: Bloomfield Coordinates: Letter: M Section 13 Township: 29 Range: 1/ Or Latitude Longitude Pit Type: Dehydrator \(\sqrt{Location} \) Location Drip: Line Drip: Other: Site Assessment Date: \(\sqrt{127/95} \) Area: Run:								
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside Outside Outside Depth to Groundwater Less Than 50 Feet (20 points) Greater Than 100 Ft (0 points) 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? Morizontal Distance to Surface Water Body Less Than 200 Ft (20 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) (2) Greater Than 1000 Ft (0 points) (3) Name of Surface Water Body San Juan Kiver (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: Depth to (2) 100								
REMARKS	Remarks: Redline Book: Inside Vunerable Zone Topo: Inside								
ЕМА									
R	DIG4HAUL								

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>93490</u> Location: <u>Garrett Federal Com #z-15</u> Coordinates: Letter: <u>M</u> Section <u>13</u> Township: <u>29</u> Range: <u>//</u> Or Latitude Longitude Date Started: <u>5/25/95</u> Run: <u>10</u> <u>93</u>
FIELD OBSERVATIONS	Sample Number(s):
CLOSURE	Remediation Method: Excavation Onsite Bioremediation Backfill Pit Without Excavation Soil Disposition: Envirotech Other Facility Name: Pit Closure Date: 5/25/95 Pit Closed By: 1355
REMARKS	Remarks: <u>Excavated</u> pit to s' Hit Sandstone, Took NO Sample, Gosed pit. pit HAL A Slight trickle of water Coming into it from the yord Nearby.
	Signature of Specialist: Jamy Jeann



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

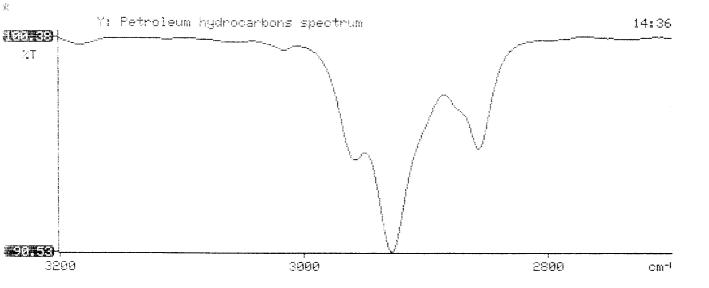
SAMPLE IDENTIFICATION

Г	Field ID			Lab ID		
SAMPLE NUMBER:	KD 437		940	840		
MTR CODE SITE NAME:	93490			N/A		
SAMPLE DATE TIME (Hrs):	5-25-95		16	50		
SAMPLED BY:		N/A	\			
DATE OF TPH EXT. ANAL.:	5-30		5	-30 - 95		
DATE OF BTEX EXT. ANAL.:	lo -1-	95	٠ وا	C-95		
TYPE DESCRIPTION:	VC		Trey San	d of Clay		
REMARKS:	RI	ESULTS				
		LOCETO				
PARAMETER	RESULT	UNITS		QUALIFII	ERS	
	Lighting Co.		DF	Q	M(g)	V(ml)
BENZENE	0.15 KOK 50-02 KOK	MG/KG	2			,
TOLUENE	0.74	MG/KG	2			
ETHYL BENZENE	0.61	MG/KG	2			
TOTAL XYLENES	٩. ٧	MG/KG	2			
TOTAL BTEX	11.3 KOK H.O WRIGS	MG/KG				
TPH (418.1)	274	MG/KG			2.07	28
HEADSPACE PID	165	PPM	The state of the s	14 4 9		
PERCENT SOLIDS	87.5	%				
ne Surrogate Recovery was at	TPH is by EPA Method 41	8.1 and BTEX is by El 6 for this sample			able.	

Approved By:

Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil Ferkin-Elmer Model 1600 FT-IR Analysis Report ****************************** ¢ 75/05/30 14:36 # Sample identification 946840 % Ini 2.070 Initial mass of sample, g * * Volume of sample after extraction, ml 28.000 * \$ Petroleum hydrocarbons, ppm 273.768 * Net absorbance of hydrocarbons (2930 cm-1) 0.045

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ATI I.D. 506301

June 8, 1995

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 06/01/95, 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.

Acres de la face

Letitia Krakowski, Ph.D. Project Manager

H. Mitchell Rubenstein, Ph.D. Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506301

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946838	NON-AQ	05/25/95	06/01/95	06/05/95	1
05	946839	NON-AQ	05/25/95	06/01/95	06/05/95	20
06	946840	NON-AQ	05/25/95	06/01/95	06/05/95	2
PARAME	TER	······································	UNITS	04	05	06
BENZEN	ΙΕ		MG/KG	<0.025	<0.5	0.15
TOLUEN	ΙE		MG/KG	<0.025	13	0.74
ETHYLE	BENZENE		MG/KG	<0.025	11	0.61
TOTAL	XYLENES		MG/KG	<0.025	100	9.8
METHYI	-t-BUTYL ETHER		MG/KG	<0.12	<2.4	<0.24
SURROG	GATE:					
BROMOFLUOROBENZENE (%)				99	128*	78

^{*}OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp. 4000 Monroe Road Farmington, New Mexico 87401

(606) 326-2262 FAX (606) 326-2388

Elevation Borehole Location TZ9, RII, 5.13, M GWL Depth S.Kelly Logged By Drilled By Date/Time Started Date/Time Completed _____

Well # Page

EPNG Pits Project Name Phase 14509 Project Number GATTEH FEDERAL COM# Project Location Well Logged By M. Donohue, F. Rivera Personnel On-Site Contractors On-Site

Drilling Method Air Monitoring Method

Client Personnel On-Site

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		
5				Backfill to 5	_				
10	1	9- 11	2/20	light SAND, grey, fine to med. sand- cemented, v. dense, dry.			3 5	Hit what sounds like cobble at approx. 9! 1440 Sample maybe a piece of a large cobble OR bedrock	
15 15				TOB-11.01 Auger refusalat9!				cobble OR bedioc	と
20				muger remoderation.				·	
25 									
30									
35									
40									

Comments:

9'-11' sample (SEK 105) sent to lab (BTEX a TPH) sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sauch Helly



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 105	947755
MTR CODE SITE NAME:	93490	Garrett Federal Com. #2-1E
SAMPLE DATE TIME (Hrs):	11-06-95	1440
PROJECT:	Phase II Nrilling	
DATE OF TPH EXT. ANAL.:	11.7-95	
DATE OF BTEX EXT. ANAL.:	11/7/95	11/7/95
TYPE DESCRIPTION:	VG	LIGHT SPAY JAND + SANDSTAND
·		

Field Remarks:	

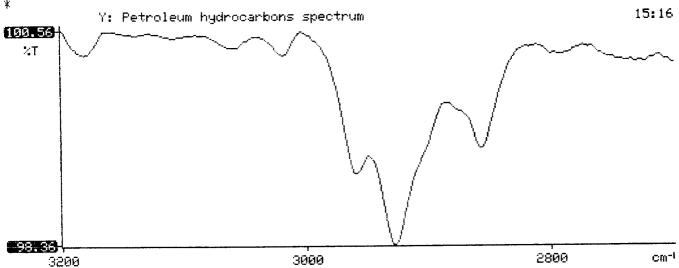
RESULTS

	RESULT	UNITS	QUALIFIERS			
PARAMETER	, LESUE		DF Q	M(g) V(ml)		
BENZENE	4 0.5	MG/KG				
TOLUENE	4 0.5	MG/KG				
ETHYL BENZENE	4 0.5	MG/KG				
TOTAL XYLENES	4 1.5	MG/KG				
TOTAL BTEX	43	MG/KG				
TPH (418.1)	210	MG/KG		1.98 28		
HEADSPACE PID	5	PPM				
PERCENT SOLIDS	96.8	%				

PERCENT SOLIDS	96.8	%	
The Surrogate Recovery was at Narrative:	TPH is by EPA Method		A Method 8020 All QA/QC was acceptable.
DF = Dilution Factor Used			

Approved By:

********************* Test Method for Oil and Grease and Petroleum Hydrocarbons 岸 in Water and Soil Perkin-Elmer Model 1600 FT-IR Analysis Report **************** * 95/11/07 15:16 * Sample identification * 947755 * Initial mass of sample, g 1.960 Volume of sample after extraction, ml * 28.000 Petroleum hydrocarbons, ppm * -12.836 Net absorbance of hydrocarbons (2930 cm-1) 0.009 * ¥



BTEX SOIL SAMPLE WORKSHEET

F116	:	947755	Date Printed :	11/8/95
Soil Mass	s (g):	4.98	Multiplier (L/g) :	0.00100
Extraction vol	. (mL) :	10	CAL FACTOR (Analytical):	200
Shot Volume	e (uL) :	50	CAL FACTOR (Report):	0.20080
			DILUTION FACTOR:	1 Det. Limit
Benzene	(ug/L) :	0.12	DILUTION FACTOR: Benzene (mg/Kg):	1 Det. Limit 0.024 0.502
Benzene Toluene	(ug/L) : (ug/L) :	_		

0.33

0.14

p & m-xylene (ug/L):

o-xylene (ug/L):

o-xylene (mg/Kg): 0.028 0.502 Total xylenes (mg/Kg): 0.094 1.506

0.066

1.004

Total BTEX (mg/Kg): 0.249

p & m-xylene (mg/Kg):

EL PASO NATURAL GAS EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\110795-0.012 Method : C:\LABQUEST\METHODS\0-110295.MET

Sample ID : 947755,4.98G,50U Acquired : Nov 07, 1995 22:00:47 Printed : Nov 07, 1995 22:31:11

User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.440	60374	0.1238
TOLUENE	13.073	350625	0.6502
ETHYLBENZENE	17.303	0	0.0000
M, P-XYLENES	17.723	181126	0.3311
O-XYLENE	18.897	65684	0.1444
BFB	19.910	56597088	107.0755

