PRODUCTION PIT CLOSURE

NMOCD Hazard Ranking: 40 - Operator: MERIDIAN OIL INC

DEC 2 (1998)

Legals - Twn: 27

SAN JUAN 28-6 #75 Meter/Line ID - 71850

SITE DETAILS

Sec: 03

Rng: 06

Unit: N

Land Type: 2 - Federal Pit Closure Date: 125 COMo DIVo

DIST. 3

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.

RATIONALE FOR RISK-BASED CLOSURE:

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.



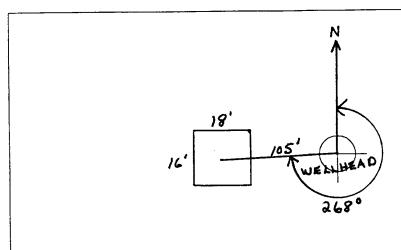
FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 7/850 Location: Sandwar 28-6 # 75 Operator #: Operator Name: Meridian P/L District: Glassfield Coordinates: Letter: N Section 03 Township: 27 Range: 06 Or Latitude Longitude Pit Type: Dehydrator X Location Drip: Line Drip: Other: Site Assessment Date: 3/9/95 Area: 10 Run: 52
	NMOCD Zone: (From NMOCD Maps) Outside Depth to Groundwater Land Type: BLM ☒ (1) State ☐ (2) ☐ (1) Fee ☐ (3) ☐ (2) Indian ———————————————————————————————————
	Less Than 50 Feet (20 points) (1) 50 Ft to 99 Ft (10 points) (2) Greater Than 100 Ft (0 points) (3)
ASSESSMENT	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)
SITE ASS	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 Munez Creek
	(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: 40 POINTS
RK	Remarks: RedLine shows inside Topo shows Inside VZ 2 pits on Loc I has Dehy in service, Old Dehy
REMARK	pit belongs to EPNG Will close old Dely pit
2	Dia+ Hanh

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 269° Footage from Wellhead 105′

b) Length : _______ Width : _______ Depth : ________ 2'___



Remarks: Photos: 13:30

REMARKS

Completed By:

Signature

3/9/95

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: 71850 Location: SAN JUAN 28-6 # 75 Coordinates: Letter: N Section 03 Township: 27 Range: 06 Or Latitude Longitude Longitude Date Started: 3-24.95 Run: 10 52
FIELD OBSERVATIONS	Sample Number(s): KP 463 Sample Depth: Feet Final PID Reading PID Reading Depth Feet Yes No Groundwater Encountered
URE	Remediation Method : Excavation Onsite Bioremediation Backfill Pit Without Excavation
CLOSURE	Soil Disposition: Envirotech Other Facility Name: Pit Closure Date: 3.24-95 Pit Closed By: B.E.T.
REMARKS	Remarks: No Line markers. Pit has water in it had to solidizy Pit before we could have off. At 12' Soil gray with A H.C ORdor. Closed Fit
	Signature of Specialist: Kelly Podille (SP3191) 03/16/94



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 463	946757
CODE SITE NAME:	71850	N/A
DATE TIME (Hrs):	3-24-95	1430
SAMPLED BY:		N/A
TPH EXT. ANAL.:	3 28 95	3/28/95
TEX EXT. ANAL.:	4/4/95	4/5/95
PE DESCRIPTION:	٧L	tray sand & clay
REMARKS:		
	RESULTS	

PARAMETER	RESULT	UNITS		QUALIFIERS		
			DF	Q	M(g)	V(ml)
BENZENE	< 1.02	MG/KG	0.40816		2.43	20
TOLUENE	33,6	MG/KG				
ETHYL BENZENE	5,49	MG/KG				
TOTAL XYLENES	10.0 TO.U	MG/KG			1	1
TOTAL BTEX	109	MG/KG				
TPH (418.1)	2810 2814 3290	≤ MG/KG			2,02	25
HEADSPACE PID	329	PPM	u kura alimbir. Matani ka 1,0,50e			
PERCENT SOLIDS	85.3	%				

The Surrogate Recovery was at

| The Surrogate Recovery was at | Narrative: | The Surrogate Recovery was at | Narrative: | The Surrogate Recovery was at | Narrative: | Narrat

DF = Dilution Factor Used

Accounted Down

(1/8/95

```
Test Method for
    Dil and Grease and Patroleum Hydrocarbons
                                           ×
              in Water and Soil
                                           火
         Perkin-Elmer Model 1600 FT-IR
91703728 15:09
Sample identification 946757
: Initial mass of sample, g
2.020
 Volume of sample after extraction, ml
25.000
 Petroleum hydrocarbons, ppm
2814.000
Net absorbance of hydrocarbons (2930 cm-1)
0.334
                                                       15:10
        Y: Petroleum hydrocarbons spectrum
':T
```

3886

2890

 $\cap \mathbb{M}^{-1}$

3299

BTEX SOIL SAMPLE WORKSHEET

File		:	946757A	Date Printed : 4/7/95
Soil Mass	(g)	:	2.45	Multiplier (L/g) : 0.00204
Extraction vol.	(mL)	:	20	DF (Analytical) : 200
Shot Volume	(uL)	:	100	DF (Report) : 0.40816

						Det. Limit
Benzene	(ug/L) :	0.00	Benzene	(mg/Kg):	0.000	1.020
Toluene	(ug/L) :	82.39	Toluene	(mg/Kg):	33.629	1.020
Ethylbenzene	(ug/L) :	13.46	Ethylbenzene	(mg/Kg):	5.494	1.020
p & m-xylene	(ug/L) :	139.21	p & m-xylene	(mg/Kg):	56.820	2.041
o-xylene	(ug/L) :	32.26	o-xylene	(mg/Kg):	13.167	1.020
			Total xylenes	(mg/Kg):	69.988	3.061
			Total BTEX	(mg/Kg):	109.110	

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946757A Method : C:\LABQUEST\METHODS\9001.MET

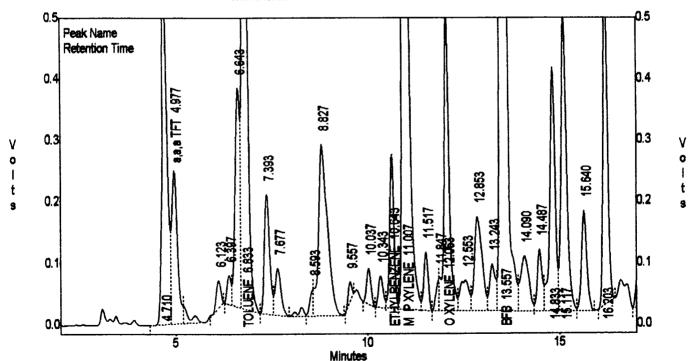
Sample ID : 946757,2.45/100uL Acquired : Apr 05, 1995 12:59:11 Printed : Apr 06, 1995 12:37:15

User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
Densens	3.403	0	0.00000	0.0000
a,a,a TFT	4.977	2603191	17915.06641	82.3883
TOLUENE	6.833	13067234	152782.21875	
ETHYLBENZENE	10.643	1952299	137111.50000	13.4645
M & P XYLENE	11.007	22739872	163191.95313	139.2100
o x ylene	12.063	4576223	131788.42188	32.2568
BFB	13.557	57217044	563092.56250	100.8586
Totals:		102155856		510.6479

C:\LABQUEST\CHROM001\946757A - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946757A Method : C:\LABQUEST\METHODS\9001.MET

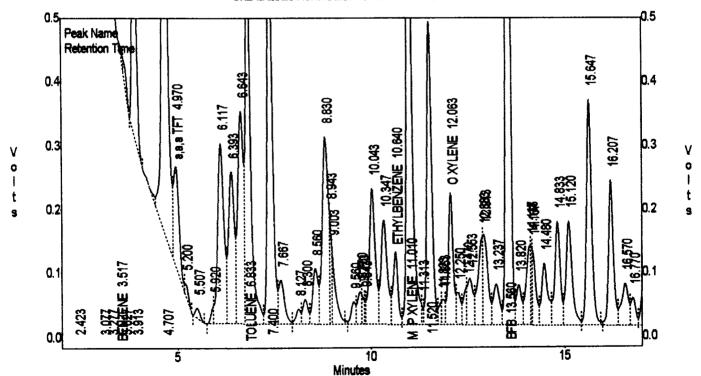
Sample ID : 946757,2.45/100uL Acquired : Apr 05, 1995 12:59:11 Printed : Apr 06, 1995 12:37:21

User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.517	72237	68742.85938	1.3242
a,a,a TFT	4.970	1509446	9297.03906	154.9164
TOLUENE	6.833	5734690	47965.40234	112.0108
ETHYLBENZENE	10.640	1009442	46856.76953	20.1218
M & P XYLENE	11.010	8550913	48130.08203	168.6860
o xylene	12.063	1808453	46848.81250	35.8600
BFB	13.560	12757276	96504.81250	130.4205
Totals :				
		31442460		623.3397

C:\LABQUEST\CHROM001\946757A -- Channel B



PHASE II

RECORD OF SUBSURFACE EX RATION

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

Fermington, New Mexico 87401 (506) 326-2262 FAX (505) 326-2388

Borehole # BH | Page | of |

Project Name EPNG Pits
Project Number 14509 Phase 601 6000 Project Location 5an Juan 28-6 #75, 71850

Well Logged By
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Drilling Method 4/4" ID HSH
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)		r Monitor Inits: ND BH		Drilling Conditions & Blow Counts
10 - 10 - 15 - 20 - 25 - 30 - 35		1516 2021 1516 - 15.	المان المالية	Backfill to Z. SILT, greenish grey, hard, dry SAND, light brown, fine to med sand, dense, dry BOH- Z1.5			7	303	6	drilling feels like rock et 12! 1450 slow drilling 1505

comments: 20-21.5' sample (SEK 37) Sent to lab. (BTEX 4TPH.) Not enough sample recovered to take headspace. BH growted to

Geologist Signature

nature Such Polly



Phase I

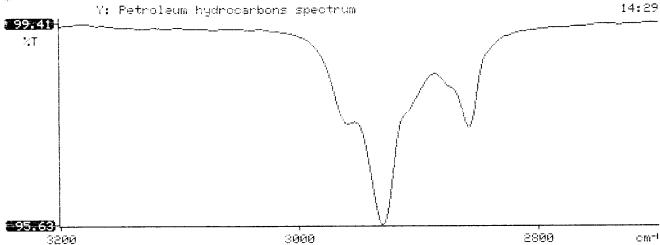
FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

	SAMPLE	IDENTIFICA	TION		<u> </u>	
	Field	I ID		Lab ID		
SAMPLE NUMBER:	SEY	37	94			
MTR CODE SITE NAME:	718:			N/A		
SAMPLE DATE TIME (Hrs):	7-12 -	95	150	25		
SAMPLED BY:		N//	Α		-	
DATE OF TPH EXT. ANAL.:	7-13-	9.5	_7-	13-95		
DATE OF BTEX EXT. ANAL.:	67-17-		07-	17-95		
TYPE DESCRIPTION:	V G	- 	<u>l</u>			
REMARKS:						
		RESULTS				
PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1	-		
TOLUENE	20.025	MG/KG)			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	20.025	MG/KG	1			
TOTAL BTEX	K0.10	MG/KG				
TPH (418.1)	51.6	MG/KG			2.05	28
HEADSPACE PID	11	PPM				
PERCENT SOLIDS	94.8	%		i de la companya de l		
The Surrogate Recovery was at	TPH is by EPA Method	418.1 and BTEX is by EF			able.	
Narrative: ATI Results	^ -	and Modifi			1	
DF = Dilution Factor Used				5//		

Approved By:

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                  Test Method for
     Oil and Grease and Petroleum Hydrocarbons
                                                     宯
*
                                                     *
*
                 in Water and Soil
                                                     漱
*
                                                     ^*
*
           Perkin-Elmer Model 1600 FT-IR
                  Analysis Report
******************
95/07/13 14:29
粜
Sample identification 946983 <del>DUP</del> kay 14 /95
*
   Initial mass of sample, g
 2.050
   Volume of sample after extraction, ml
*
 28.000
  Petroleum hydrocarbons, ppm
 51.630
  Net absorbance of hydrocarbons (2930 cm-1)
 0.017
*
^{*}
\Psi
          Y: Petroleum hydrocarbons spectrum
```





ATI I.D. 507340

July 20, 1995

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

Project Name/Number: PIT CLOSURE/PHASE I PHASE II 24324

Attention: John Lambdin

On 07/14/95, 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.

Madell

Kimberly D. McNeill Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D. Laboratory Manager

A not to will faith

Corporate Offices: 5550 Morenouse Crive San Diego, CA 92121 (619) 458-9141



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507340

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE I PHASE II

SAMPLI ID. #	E CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
14	946983	NON-AQ	07/12/95	07/17/95	07/18/95	1
15	946984	NON-AQ	07/12/95	07/17/95	07/18/95	20
16	946985	NON-AQ	07/12/95	07/17/95	07/18/95	1
PARAM	ETER		UNITS	14	15	16
BENZE	 NE		MG/KG	<0.025	<0.5	<0.025
TOLUE	NE		MG/KG	<0.025	6.2	<0.025
ETHYL	BENZENE		MG/KG	<0.025	4.1	<0.025
TOTAL XYLENES			MG/KG	<0.025	50	<0.025
SURRO	GATE:					
	FLUOROBENZENE	(%)		99	203*	100

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507340

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE I PHASE II

SAMPLE ID. #	CLIENT	I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
12	946981		NON-AQ	07/12/95	07/14/95	07/14/95	1
14	946983		NON-AQ	07/12/95	07/14/95	07/15/95	1
15	946984		NON-AQ	07/12/95	07/14/95	07/17/95	10
PARAME	TER			UNITS	12	14	15
FUEL H	YDROCARE	BONS	<u> </u>	MG/KG	82	<5	1400
HYDROC	ARBON RA	ANGE			C10-C32	-	C6-C14
HYDROC	ARBONS (QUANTITATED	USING		DIESEL	-	GASOLINE
SURROG	ATE:						
O-TERP	HENYL (S	≰)			118	108	83