EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

NMOCD Hazard Ranking: 10

Operator: UNOCAL CORPORATION

DEC 2 1 1998

Legals - Twn: 27

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RINCON UNIT #162 Meter/Line ID - 73108 DECENIED

SITE DETAILS

Sec: 27

Rng: 06

Unit: K

Land Type: 2 - Federal

Pit Closure Date: 12/13/94

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.
- 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.

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FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 73108 Location: RINCON UNIT #162 Operator #: Operator Name: UNOCAL P/L District: BLANCO Coordinates: Letter: K Section 27 Township: 28 Range: 6 Or Latitude Longitude Pit Type: Dehydrator Location Drip: X Line Drip: Other: Site Assessment Date: 11.29.94 Area: 03 Run: 51
SITE ASSESSMENT	NMOCD Zone: Land Type: BLM (1) (From NMOCD State (2) Maps Inside (2) Indian Outside (2) 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 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: O POINTS
REMARKS	Remarks: REDLINE & TOPO SHOW LOCATION INSIDE V.Z. NO PITS ON THIS EXCATION EPAGE LOCATION DRIP HAS BEEN CLOSED, WILL READIG CLOSED PIT, NOTE ORANGE. STAKE. DIX. HAMLE

1		
	ORIGINAL	PIT LOCATION
	Original Pit : a) Degrees from N	orth <u>210°</u> Footage from Wellhead 97'
	b) Length : <u>10'</u>	Width :O
ION	:4	
ORIGINAL PIT LOCATION	10'	WELLINEAD
	Remarks : Phonos - 1259	-
S		
IARKS		
REM.		
	Completed By:	
	Sacra	•
	Signature	11.29.94 Date
	-	Date

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PHASE I EXCAVATION

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FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: 73108 Location: Rincon un: \$\frac{\pmu}{162}\$ Coordinates: Letter: K Section 27 Township: 27 Range: 6 Or Latitude Longitude Date Started: \frac{12}{13} \frac{94}{94} \text{ Run: 03 51}
FIELD OBSERVATIONS	Sample Number(s): KD 384 Sample Depth: Feet Final PID Reading PID Reading Depth Feet Yes No Groundwater Encountered
CIOSIIRE	
DAGTARGE	Remarks: Unarl had previously Guered pit. Removed 10 yDS Of Clean Overborden, Excavated pit to 12, took piD Sample Then Closed pit. Signature of Specialist: My am (SP3191) 03/16/9

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FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

_	Field ID	Lab ID			
SAMPLE NUMBER:	KD 384	946529			
MTR CODE SITE NAME:	73108	N/A			
SAMPLE DATE TIME (Hrs):	12-13-94	1130			
SAMPLED BY:	N/A				
DATE OF TPH EXT. ANAL.:	12-15-94	12-15.94			
DATE OF BTEX EXT. ANAL.:	12/14/94	12/16/94			
TYPE DESCRIPTION:	V C	light Brown Aresand			
TYPE DESCRIPTION:	V C	light Brown Aresa			

REMARKS: BTEX results from ATI and EPNG

RESULTS

PARAMETER	RESULT	UNITS		QUA	LIFIERS		ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	41.01	MG/KG	0.2024		4,94	20	< 0.50
TOLUENE	4.96	MG/KG					1.40
ETHYL BENZENE	2.34	MG/KG					0.58
TOTAL XYLENES	15.7	MG/KG					4.7
TOTAL BTEX	23.3	MG/KG	1			1	7.33
TPH (418.1)	1040	MG/KG			1.99	28	
HEADSPACE PID	439	РРМ		i Se Section of C	kij gistorromikis ud		Surrogate %
PERCENT SOLIDS	91.7	%		engan dan sebagai	tî :		Dilution Factor

The Surrogate Recovery was at 99.2% for this samp All QA/QC was acceptable.

Narrative:

Original Stimuled ATI Describe Attached

DF = Dilution Factor Used

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                  Test Method for
                                                  *
      Gil and Grease and Petroleum Hydrocarbons
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                 in Water and Soil
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           Perkin-Elmer Model 1600 FT-IR
                                                  津
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                  Analysis Report
94/12/15
         12:04
_{x}
   Sample identification
 946529
^*
   Initial mass of sample, g
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^*
   Volume of sample after extraction, ml
 28.000
2
   Petroleum hydrocarbons, ppm
 1039.236
  Net absorbance of hydrocarbons (2930 cm-1)
 0.136
 ٠Ļ٢
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常書
                                                               12:24
          M: Petroleum hydrocarbons spectrum
 100.04
  \mathbb{K}\mathbb{T}
 72 (19)
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3000

3268

2800

.cm-1

BTEX SOIL SAMPLE WORKSHEET

File	:	946529A	Date Printe	ed:	12/19/94	
Soil Mass	s (g) :	4.94	Multiplier (L/	g) :	0.00101	
Extraction vol			DF (Analytica	al) :	200	
Shot Volume	•		DF (Repor	rt) :	0.20243	
						Det. Limit
Benzene	(ug/L) :	1.45	Benzene (mg	g/Kg):	0.294	1.012
Toluene	(ug/L)		Toluene (m	g/Kg):	4.960	1.012
Ethylbenzene	(ug/L) :		Ethylbenzene (m	g/Kg):	2.338	1.012
p & m-xylene	(ug/L)		p & m-xylene (m	ng/Kg):	12.808	4.049
o-xylene	(ug/L)		o-xylene (m	ng/Kg):	2.893	2.024
O Aylollo	(~9, _)		,	g/Kg):		6.073
			•	a/Ka):		

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946529A Method : C:\LABQUEST\METHODS\SOILS.MET

Sample ID : 946529, 4.94G/100uL Acquired : Dec 16, 1994 14:17:46 Printed : Dec 16, 1994 14:44:02

User : Tony

Channel A Results

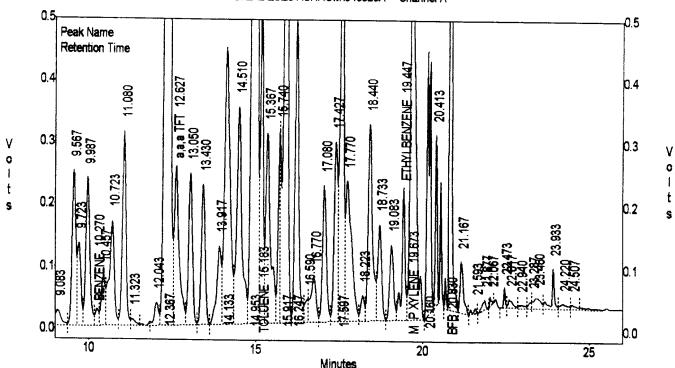
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE a,a,a TFT TOLUENE ETHYLBENZENE M & P XYLENE O XYLENE BFB	10.270 12.627 15.183 19.447 19.673 20.233 20.830	195418 2588562 3283607 1386951 8211750 0	131872.92188 8403.01855 148815.51563 132895.85938 193528.29688 0.00000	1.4514 288.6933 24.4993 11.5516 63.2656 0.0000 Y.79 99.2091

Totals :

35897300

488.6703 (21) Cell

C:\LABQUEST\CHROM\946529A - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946529A Method : C:\LABQUEST\METHODS\SOILS.MET

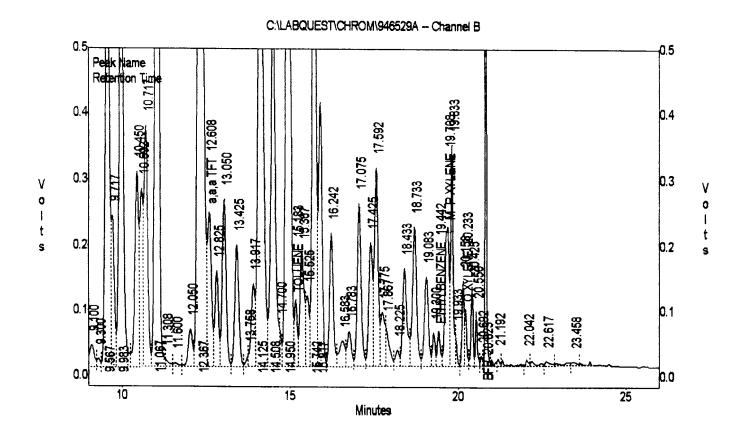
Sample ID : 946529, 4.94G/100uL Acquired : Dec 16, 1994 14:17:46 Printed : Dec 16, 1994 14:44:08

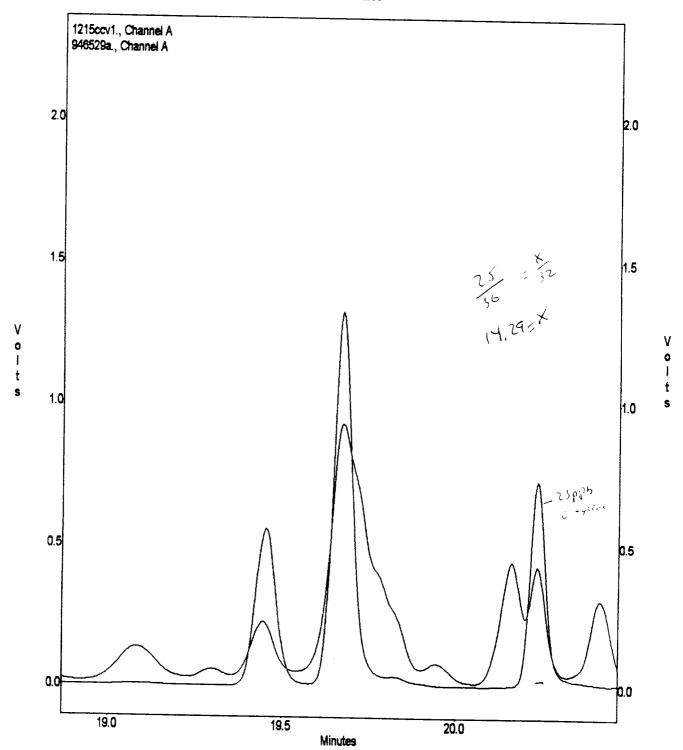
User : Tony

Channel B Results

Totals :

8076631 1017.7818







ATI I.D. 412379

December 29, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 12/16/94, 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

MR:jt

Enclosure

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141



GAS CHROMATOGRAPHY RESULTS >

: BTEX (EPA 8020)

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS ATI I.D.: 412379

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPL	-	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946526	NON-AQ	12/13/94	12/19/94	12/28/94	1
02	946528	NON-AQ	12/13/94	12/19/94	12/28/94	20
03	946529	NON-AQ	NON-AQ 12/13/94 12/19/94 12/28/94			
PARAM	METER		UNITS	01	02	03
BENZE	ENE		MG/KG	0.10	<0.50	<0.50
TOLUE	ENE		MG/KG	1.5	18	1.6
ETHYI	LBENZENE		MG/KG	0.18	2.8	0.53
TOTAL	L XYLENES		MG/KG	1.8	27	4.7
SURRO	DGATE:					
BROMO	OFLUOROBENZENE (%)		89	109	90

PHASE II

RECORD OF SUBSURFACE EXPLORATION

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

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

Date/Time Completed 9/15

Elevation
Borehole Location 727, R.C., S., 27, R.

GWL Depth
Logged By
Drilled By
Date/Time Started

Borehole #	R4-1
Well #	-4) -1-1
Page	of [

Project Name
Project Number
Project Location

Well Logged By
Personnel On-Site

Project Name
Phase
Pha

Client Personnel On-Site

Drilling Method

Air Monitoring Method

CGI, PID

Contractors On-Site

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Monitori its: ND BH		Drilling Conditions & Blow Counts
10	I IX Allockies Z	らればるない	(inches)	SILT, reddish brown, medidense, dry SILT, lightbrown, vidense, dry SILT, lightbrown, vidense, dry, trace clay(5-152) TCB-76,5	Symbol	- 1	6H	<i>े</i> षा_	1325 drillinggot hard at 25 1401
40						·			

Comments:	25-265' sample (SEK8Z) sent to lab (BTEX4 TPH) Sample
	was bagged and iced prior to being put in jar- Bit
	grented to surface
	Geologist Signature
	The state of the s



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field I	D		Lab ID		
SAMPLE NUMBER:	SEK82		947481			
MTR CODE SITE NAME:	73108		Rinconlinit#162			
SAMPLE DATE TIME (Hrs):	09-15-95		134	1349		
PROJECT:	PhaseII [Drilling				
DATE OF TPH EXT. ANAL.:	9-1	6-45				
DATE OF BTEX EXT. ANAL.:	9/18/95			9/21/95		
TYPE DESCRIPTION:	VG		light grey	Said & Sa	indstones	
			1 1 1			
Field Remarks:						
		RESULTS				
		ILGULIU				
PARAMETER	RESULT	UNITS		QUALIFIERS		
		OMITS	DF	Q	M(g)	V(ml
BENZENE	Z 0.5	MG/KG		ļ		
TOLUENE	4 0.5	MG/KG				
ETHYL BENZENE	40.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	43	MG/KG				
TPH (418.1)	R189/14/5 +4 13.9	MG/KG			2.0	28
HEADSPACE PID	3	PPM				
PERCENT SOLIDS	94.3	%				
		418 1 and BTEY is by	EPA Method 8020			

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                  Test Method for
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*
     Oil and Grease and Petroleum Hydrocarbons
*
                 in Water and Soil
                                                    *
¥
           Perkin-Elmer Model 1600 FT-IR
Analysis Report
************************
95/09/18
         14:05
  Sample identification
 947481
   Initial mass of sample, q
 2.000
  Volume of sample after extraction, ml
 28.000
   Fetroleum hydrocarbons, ppm
 13.926
*
  Net absorbance of hydrocarbons (2930 cm-1)
 0.012
¥
*
*
                                                                   14:05
          Y: Petroleum hydrocarbons spectrum
100.31
  %T
```

3000

2800

om⁻¹

97.37

3200

BTEX SOIL SAMPLE WORKSHEET

File : Soil Mass (g) : Extraction vol. (mL) : Shot Volume (uL) :	947481	Date Printed :	9/22/95
	5.02	Multiplier (L/g) :	0.00100
	20	DF (Analytical) :	200
	100	DF (Report) :	0.19920
Benzene (ug/L): Toluene (ug/L): Ethylbenzene (ug/L): p & m-xylene (ug/L): o-xylene (ug/L):	0.11 0.35 0.24 0.78 0.23	Benzene (mg/Kg): Toluene (mg/Kg): Ethylbenzene (mg/Kg): p & m-xylene (mg/Kg): o-xylene (mg/Kg): Total xylenes (mg/Kg): Total BTEX (mg/Kg):	Det. Limit 0.022 0.498 0.070 0.498 0.048 0.498 0.155 0.996 0.046 0.498 0.201 1.494 0.341

EL PASO NATURAL GAS EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\092195-0.011 : C:\LABQUEST\METHODS\9000.MET Method

Sample ID : 947481,5.02G,100U : Sep 21, 1995 16:41:00 Acquired : Sep 21, 1995 17:11:23 Printed

User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.100	42336	0.1131
a,a,a-TFT	10.450	8423720	96.2867
TOLUENE	12.870	126005	0.3462
ETHYLBENZENE	17.210	79429	0.2359
M, P-XYLENES	17.587	314282	0.7834
O-XYLENE	18.760	75802	0.2315
BFB	19.857	54541956	100.0621

