PRODUCTION PIT CLOSURE

**JOHNSON GAS COM D#1** Meter/Line ID - 73734

DIST, 3

SITE DETAILS

Legals - Twn: 30 Rng: 12 Sec: 15

Unit: G

Land Type: 4 - Fee

Pit Closure Date: 04/26/94

#### NMOCD Hazard Ranking: 40

**Operator:** AMOCO PRODUCTION COMPANY

#### 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 time minimal naturally degrade with risk the environment.

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#### FIELD PIT SITE ASSESSMENT FORM

Meter: 73734 Location: JOHNSON GAS COM D#1  Operator #: 0203 Operator Name: Amoco P/L District: Amoco P/L District: Coordinates: Letter: G Section 15 Township: 30 Range: 12  Or Latitude Longitude  Pit Type: Dehydrator Location Drip: Line Drip: Other  Site Visit Date: 4.6.94 Run: 02 63				
	NMOCD Zone: Inside Land Type: BLM (From NMOCD Vulnerable State Maps) Zone Soutside Indian ————————————————————————————————————			
ASSESSMENT	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?  XYES (20 points)   NO (0 points)			
SITE	Horizontal Distance to Surface Water Body  Less Than 200 Ft (20 points)  200 Ft to 1000 Ft (10 points)  Greater Than 1000 Ft (0 points)  Name of Surface Water Body TRRIGATION CANAL (FORA VISTA)  (Surface Water Body: Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)			
	TOTAL HAZARD RANKING SCORE: 40 POINTS			
REMARKS	Remarks 1 19 THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS KIND OF ON A HILL SURROUNDED BY HOUSING AND PASTURE.			

· mailine	ORIGINAL PIT LOCATION				
ATION	Original Pit: a) Degrees from North 336° Footage to Wellhead 171′ b) Degrees from North Footage to Dogleg Dogleg Name C) Length: 13′ Width: 13′ Depth: 1′				
ORIGINAL PIT LOCATION	13' 13' 13' 13' 13' 13' 13' 13' 13' 13'				
REMARKS	Remarks: STARTED TAKING PICTURES AT END DUMP				
	Completed By:  Signature  Completed By:  4.1.94  Date				

## PHASE I EXCAVATION



#### FIL ) PIT REMEDIATION/CLO. RE FORM

	·							
1-1	Meter: 73734 Location: Johnson Gas Com D#1							
GENERAL	Coordinates: Letter: <u>G</u> Section <u>15</u> Township: <u>30</u> Range: <u>12</u>							
GEN	Or Latitude Longitude							
	Date Started : 4-26-94 Area: 02 Run: 63							
	945019							
SNC	Sample Number(s): <u>IW31</u>							
ATI(	Sample Depth: Feet							
OBSERVATIONS	Final PID Reading 300 PID Reading Depth 4 Feet							
OBS	Yes No							
1	Groundwater Encountered 🗌 (1) 🛛 (2) Approximate Depth Feet							
FIELD								
! <u>-</u>								
1	Remediation Method :							
	Excavation (1) Approx. Cubic Yards 20							
떠	Excavation (1) Approx. Cubic Yards 20 Onsite Bioremediation (2)							
SURE	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  [7] (1) Approx. Cubic Yards 20  [2] (2)							
	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:							
CLOSURE	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  (1) Approx. Cubic Yards 20  (2)  (3)  (3)  Simplify:  (4)  (5)  (7)  (8)  (9)  (1)  (1)  (2)  (3)  (3)  (3)  Tierra							
	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  (1) Approx. Cubic Yards  (2)  (3)  (3)  Tierra							
$\Box$	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date: 4-26-94  Pit Closed By: BFI  1) Approx. Cubic Yards 20  (2) Approx. Cubic Yards 20  (3)  Tierra  Pit Closed By: BFI  Pit Closed By: BFI  Pit Closed By: BFI  Pit Closed By: BFI							
CLOSU	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date: 4-26-94  Pit Closed By: BFI  10 Approx. Cubic Yards 20  (2)  Approx. Cubic Yards 20  (3)  Tierra  Other Facility  Pit Closed By: BFI  10 Approx. Cubic Yards 20  Pit Closed By: BFI  Pit Closed By: BFI							
CLOSU	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date: 4-26-94  Pit Closed By: BFI  10 Approx. Cubic Yards 20  (2)  Approx. Cubic Yards 20  (3)  Tierra  Other Facility  Pit Closed By: BFI  10 Approx. Cubic Yards 20  Pit Closed By: BFI  Pit Closed By: BFI							
	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closure Date: 4-26-94  Pit Closed By: BFI  10 Approx. Cubic Yards 20  (2)  Approx. Cubic Yards 20  (3)  Tierra  Other Facility  Pit Closed By: BFI  10 Approx. Cubic Yards 20  Pit Closed By: BFI  Pit Closed By: BFI							
CLOSU	Excavation  Onsite Bioremediation  Backfill Pit Without Excavation  Soil Disposition:  Envirotech  Other Facility  Pit Closed By:  Pit Closed By:  BFI  Remarks:  Pit is My. about 10-book Davidall for and four last lawy than an Angua Pt that has Plate in it. Law outles were asking about contained in the see if							

-2-



# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	4/23/44 Lab ID
SAMPLE NUMBER:	VW 31	945019 945019
MTR CODE   SITE NAME:	73 734	NIA
SAMPLE DATE   TIME (Hrs):	4/26.194	1120
SAMPLED BY:	NIF	
DATE OF TPH EXT.   ANAL.:	4-28-94	4/28/94
DATE OF BTEX EXT.   ANAL.:	519194	5/10/94
TYPE   DESCRIPTION:	VC	Grey Sand/Clay

REMARKS:	
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#### **RESULTS**

PARAMETER	RESULT UNITS	QUALIFIERS				
LAUVIAITIE	112021		DF	Q	M(g)	V(ml)
BENZENE	LO.5	MG/KG				
TOLUENE	7.4	MG/KG				
ETHYL BENZENE	4.3	MG/KG				_
TOTAL XYLENES	86	MG/KG		· ·		
TOTAL BTEX	98.2	MG/KG				
трн (418.1) 2440	AND 511/194	MG/KG			2,16	28
HEADSPACE PID	300	PPM				
PERCENT SOLIDS	90	%	18 S.			

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

The Surrogate	e Recovery was at	:	% for this sample	All QA/QC was acceptable.	
Narrative:	779	Alin or	attached		
	1114	100000	CC 0.57, C		
DF = Dilution	Factor Used	D		- / /	

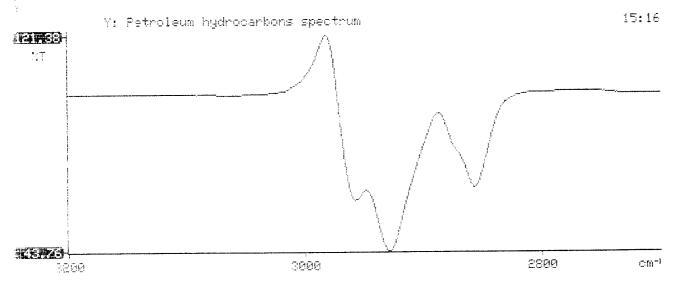
1					

Test Method for \* Gil and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Model 1600 FT-IR Analysis Report 94/04/28 15:16 Sample identification 545019 Initial mass of sample, g

Volume of sample after extraction, ml 38.000

Petroleum hydrocarbons, ppm 2644.061

\* Net absorbance of hydrocarbons (2930 cm-1) 0,361





ATI I.D. 405313

May 13, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/03/94, 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.

EPA Method 8015 analysis was added on 05/05/94 for sample 945008 per Stacy Sendler.

The matrix spike/spike duplicate data from the samples extracted on 05/05/94 is reported twice reflecting quantification using both the internal standard and external standard protocols. Both protocols were employed to quantify the samples submitted for this project.

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:jd

Enclosure



#### GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT

: EL PASO NATURAL GAS CO. ATI I.D.: 405313

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPL ID. #		MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	945017	NON-AQ	04/25/94	05/09/94	05/10/94	1
11	945018	NON-AQ	04/25/94	05/09/94	05/10/94	5
12	945019	NON-AQ	04/26/94	05/09/94	05/10/94	20
PARAM	ETER		UNITS	10	11	12
BENZE	NE		MG/KG	<0.025	<0.12	<0.5
TOLUE	ENE		MG/KG	<0.025	<0.12	7.4
ETHYL	BENZENE		MG/KG	<0.025	<0.12	4.3
TOTAL	XYLENES		MG/KG	<0.025	0.77	86
METHY	L-t-BUTYL ETHER		MG/KG	<0.12	<0.60	<2.4
SURRO	GATE:					
BROMO	FLUOROBENZENE (%)			104	149*	101

<sup>\*</sup>OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFENCE

JRIGINAL . INVOICE

Albuquerque Office: 2709-D Pan American Fwy., N E Albuquerque, NM 87107

(505) 344-3777

Authorized by: JOHN LAMBDIN

Remit To: Analytical Technologies, Inc. P. O. Box 840436 Dailas, Texas 75284-0436

AL 72053

Billed to:

EL PASO NATURAL GAS COMPANY

P.O. BOX 4990

FARMINGTON, NM 87499

Accession No.: 9405-313

Date: 05/13/94

Client No.: 850-020

Attention:

ACCOUNTS PAYABLE

Telephone:

505-325-2841

EPN6 SAMPLE # 945008

945027

P.O. Number:

38822

945032, 945033, 945035 +0945039, 945041

to 945050, 945034 and 945040

Samples:

39 NON-AQ

received 05/03/94

Project:

PIT CLOSURE

Project No.: 24324

TEST DESCRIPTION	QUANTITY	PRICE	TOTAL
	0 % 1 0 % 38 1	125.00 80.00 165.57	112.50 2736.00 165.57
BTEX/MTBE (8020) NM GROSS RECEIPTS TAX  NAV 1884  CONTROL 1889  NAV 1884  CONTROL 1889  NAV 1884  NAV 1884  NAV 1884  NAV 1884	**** Amou ****	*********** nt due: ******	3014.07
5/17/94  APPROVED FOR PAYMENT  DATE	. 20 U - 2010		
SIGNATURE			

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### 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

Elevation

Borehole Location 130, R12, 5. 5, G

GWL Depth
Logged By
Drilled By
Date/Time Started

SKelly

Drilled By
Date/Time Started

3orehole # BH-|
Nell #
Page | of |

Project Name
Project Number
Project Location
Project Location
Project Location
Project Location
Project Name
Project Number
Project Name
Project Nam

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

Drilling Method 474" ID HSH
Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)		r Monitor Inits: ND BH		Drilling Conditions & Blow Counts
10		3-15	(inches)	Backfill, to 4! Silty SAND, tan, 5-15% Silt, Fine sand, dense, peorly graded, Fine. 10B-15.01		(feet)	BZ	вн	10	1525

comments: 13-15 sample (SEK 93) sant to lab. (BTEX &TPH) Sample was bagged and iced prior to being put in jar. BH growted to the

Geologist Signature

Sarah Helly



### FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

	SAMPLE I	DENTIFICA	TION			
	Field II	D		Lab ID		
SAMPLE NUMBER:	SEK 93		9479			
MTR CODE   SITE NAME:	73734		Johuson	Gascom	D#1	
SAMPLE DATE   TIME (Hrs):	10-05-95	5	1529	<u> </u>		
PROJECT:	Phase II Dr	illing				
DATE OF TPH EXT.   ANAL.:		95	15/	<del></del>		
DATE OF BTEX EXT.   ANAL.:	10/6/95	<u> </u>	10/6			
TYPE   DESCRIPTION:	VG		34,54	24/1 15/1	(47.41)	
Field Remarks:	R	ESULTS				
PARAMETER	RESULT	UNITS	DF	QUALIFI	ERS M(g)	V(mi)
BENZENE	4 0.5	MG/KG				
TOLUENE	۷ 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)	110	MG/KG			198	25
HEADSPACE PID	0	РРМ		a e		
PERCENT SOLIDS	92.6	%				1000
		410 1 and DTEV is bu	EPA Method 8020 -	•		

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Test Method for
    Dil and Grease and Petroleum Hydrocarbons
              in Water and Soil
         Perkin-Elmer Model 1600 FT-IR
95/10/06 16:04
  Sample identification
947595
*
  Initial mass of sample, g
  Volume of sample after extraction, ml
28.000
  Fetroleum hydrocarbons, ppm
 -293.013
* Net absorbance of hydrocarbons (2930 cm-1)
-0.025
*
...
                                                     15:04
        Y: Petroleum hydrocarbons spectrum
ŹΤ
2800
                                                       om⁻¹
                         3000
    3299
```

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#### **BTEX SOIL SAMPLE WORKSHEET**

File :	947595	Date Printed : 10/7/95
Soil Mass (g):	5.03	Multiplier (L/g) : 0.00099
Extraction vol. (mL):	10	DF (Analytical) : 200
Shot Volume (uL):	50	<b>DF</b> (Report) : 0.19881
		Det. Limit
Benzene (ug/L) :	0.18	Benzene (mg/Kg): 0.036 0.497

497 Toluene (ug/L): 0.19 Toluene (mg/Kg): 0.038 0.497 Ethylbenzene (mg/Kg): 0.024 Ethylbenzene (ug/L) : 0.497 0.12 0.076 0.994 p & m-xylene (ug/L): p & m-xylene (mg/Kg): 0.38 o-xylene (mg/Kg): o-xylene (ug/L): 0.18 0.036 0.497

Total xylenes (mg/Kg): 0.111
Total BTEX (mg/Kg): 0.209

1.491

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

File : C:\LABQUEST\CHROM000\100695-0.012 Method : C:\LABQUEST\METHODS\0-092095.MET

Sample ID : 947595,5.03G,50U Acquired : Oct 06, 1995 22:46:15 Printed : Oct 06, 1995 23:16:38

User : MARLON

#### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.157	67078	0.1793
a,a,a-TFT	10.510	8817946	100.7929
TOLUENE	12.923	67752	0.1862
ETHYLBENZENE	17.267	41735	0.1240
M, P-XYLENES	17.643	153470	0.3825
O-XYLENE	18.813	59544	0.1818
BFB	19.877	51880424	95.1793

#### C:\LABQUEST\CHROM000\100695-0.012 -- Channel A

