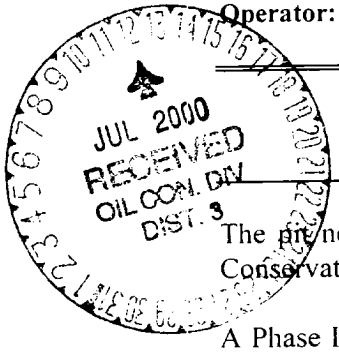
EL PASO FIELD S VICES
PRODUCTION PIT CLOSURE

OK

Canyon Largo Unit COM 314
Meter/Line ID – 03913

SITE DETAILS

Legals - Twn: 25N	**Rng: 6W**	**Sec: 21**	**Unit: J**
NMOCD Hazard Ranking: 40		**Land Type: Navajo**	Fee
Operator: Merrion Oil and Gas		**Pit Closure Date: 11/13/95**	



RATIONALE FOR CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A Phase I excavation was conducted on August 26, 1994, to 12 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the test pit. Approximately 60 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 235 ppm; laboratory analysis indicated a benzene concentration of 8.1 mg/kg, a total BTEX concentration of 356 mg/kg, and a TPH concentration of 4370 mg/kg. TPH was above required remediation levels for the Hazard Ranking Score.

On November 9, 1995, a Phase II excavation was conducted to 19 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the test pit. Approximately 668 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 14.9 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of <10 mg/kg.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for almost five years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the excavations.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene, total BTEX, and TPH were below required remediation levels for the Hazard Ranking Score.
- Excavated material has been removed from the pit eliminating potential direct contact with livestock and the public.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 03-913 Location: Canyon Largo Unit COM 314
Operator #: 5997 Operator Name: Meridian Oil & Gas P/L District: Ballard
Coordinates: Letter: J Section 21 Township: 25 Range: 6
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 7/12/94 Area: 07 Run: 42

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian ~~Jicarilla Apache~~ Navajo
B.L.M.
3-27-98

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 Largo Wash
(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**

REMARKS

Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
Three pits on site, location drip pit is dry. Will close one pit.

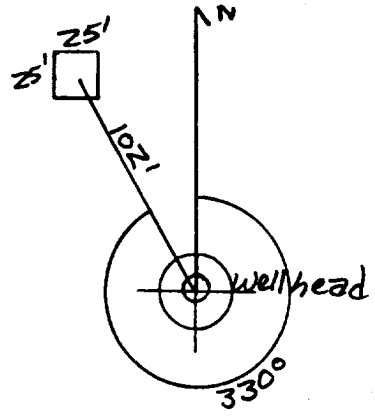
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 330° Footage from Wellhead 102'

b) Length : 25' Width : 25' Depth : 5'



REMARKS

Remarks :

Pictures @ 13:58 (15-18, Roll2)
Dump Truck
Meter # is not listed in redline book.

Completed By:

Sarah Kelly
Signature

7/12/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 03913 Location: Canyon Largo Unit Com 314

Coordinates: Letter: J Section 21 Township: 25 Range: 6

Or Latitude _____ Longitude _____

Date Started : 8/26/94 Run: 07 42

FIELD OBSERVATIONS

Sample Number(s): KD 240 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 235 ppm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 60

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ Tierra ☐

Other Facility ☐ Name: _____

Pit Closure Date: 8/26/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 12', Took PID Sample, Closed pit

Signature of Specialist: Kenny Davis

(SP3191) 03/16/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD240	946018
MTR CODE | SITE NAME:	03913	N/A
SAMPLE DATE | TIME (Hrs):	8/26/94	1415
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8-30-94	8/30/94
DATE OF BTEX EXT. | ANAL.:	8/31/94	9/7/94
TYPE | DESCRIPTION:	VC	Brown Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	8.1	MG/KG	20			
TOLUENE	86	MG/KG	20			
ETHYL BENZENE	22	MG/KG	20			
TOTAL XYLENES	240	MG/KG	20			
TOTAL BTEX	356	MG/KG				
TPH (418.1)	4370	MG/KG			2.10	28
HEADSPACE PID	235	PPM				
PERCENT SOLIDS	93.0	%				

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

The Surrogate Recovery was at 209 % for this sample All QA/QC was acceptable.

Narrative:
ATI results attached. Surrogate recovery was outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By: _____ Date: 9/30/94

Analytical **Technologies,** Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **408425**

September 12, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **08/31/94**, 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.

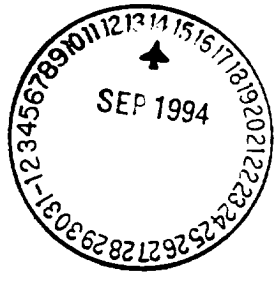
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408425
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946018	NON-AQ	08/26/94	08/31/94	09/07/94	20
08	946025	NON-AQ	08/29/94	08/31/94	09/07/94	10
09	946026	NON-AQ	08/29/94	08/31/94	09/06/94	1

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	8.1	<0.25	<0.025
TOLUENE	MG/KG	86	8.8	0.038
ETHYLBENZENE	MG/KG	22	3.5	0.096
TOTAL XYLENES	MG/KG	240	16	0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		209*	127*	93

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTÈRFERENCE

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 03-913 Location: Canyon Largo Unit Com 314

Coordinates: Letter: J Section 21 Township: 25 Range: 6

Or Latitude _____ Longitude _____

Date Started : 11/9/95 Area: 07 Run: 42

FIELD OBSERVATIONS

Sample Number(s): JK130 _____ _____ _____

Sample Depth: 19' Feet

Final PID Reading 14.9 PID Reading Depth 19' Feet

Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

Final Dimensions: Length 34' Width 25' Depth 19'

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 668 cy 11/15/95

Onsite Bioremediation ☐ (2) Approved for Closure by Alton James 11-6-95

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards 20 yds 116 cy 11/15/95

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 11/13/95 Pit Closed By: Philip

REMARKS

Remarks : Pit Pid Readings (N-49.9)(S-80.0)(E-95.5)(W-200.9)
More Than 100' From Ephemral Strem No Fence
Took 20 yds of Overburden out. Then it started Looking contaminated.
E.P.N.G Alton James on site. Had Drill Pot on west side could not dig

Signature of Specialist: James K. Kirby

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK130	947766
MTR CODE | SITE NAME:	03913	Canyon Largo Unit Com. 314
SAMPLE DATE | TIME (Hrs):	11-09-95	1330
PROJECT:	Phase I Navajo	
DATE OF TPH EXT. | ANAL.:	11/10/95	
DATE OF BTEX EXT. | ANAL.:	11/10/95	11/10/95
TYPE | DESCRIPTION:	VG	BROWN SAND & CLAY

Field Remarks: (N-49.9)(S-80.0)(E-95.5)(W-200.9)

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			2.08	28
HEADSPACE PID	14.9	PPM				
PERCENT SOLIDS	77	%				

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

The Surrogate Recovery was at 96% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 11-15-95

BTEX SOIL SAMPLE WORKSHEET

File	947766	**Date Printed**	11/13/95		
Soil Mass (g)	5.07	**Multiplier (L/g)**	0.00099		
Extraction vol. (mL)	10	**CAL FACTOR (Analytical):**	200		
Shot Volume (uL)	50	**CAL FACTOR (Report):**	0.19724		
		DILUTION FACTOR:	**1**	**Det. Limit**	
Benzene (ug/L)	0.14	**Benzene (mg/Kg):**	**0.028**	0.493	
Toluene (ug/L)	0.46	**Toluene (mg/Kg):**	**0.091**	0.493	
Ethylbenzene (ug/L)	0.21	**Ethylbenzene (mg/Kg):**	**0.041**	0.493	
p & m-xylene (ug/L)	0.85	p & m-xylene (mg/Kg):	0.168	0.986	
o-xylene (ug/L)	0.34	o-xylene (mg/Kg):	0.067	0.493	
		Total xylenes (mg/Kg):	**0.235**	1.479	
		Total BTEX (mg/Kg):	**0.394**		