District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Risk
Bedrock

Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-045-22043

Operator: Blackwood and Nichols by EPFS Telephone _____

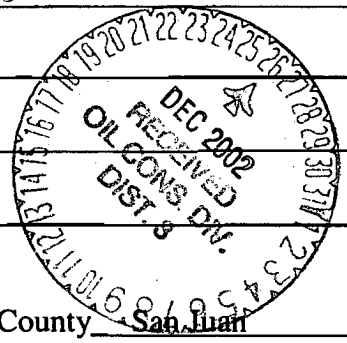
Address: _____

Facility Or Well Name: N.E. Blanco Unit No. 5A, Meter 89565

Location: Unit or Qtr/Qtr Sec K Sec 13 T 30 R 8 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

Land Type: BLM X, State _____, Fee _____ Other _____



Pit Location: Pit dimensions: length 19', width 17', depth 5'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 72'

Direction from reference: 195 Degrees X East North _____ of _____ West South _____

Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points) 10
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points) 0

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 02/14/95 Date completed: 02/14/95

Remediation Method: (Check all appropriate sections.) Excavation X Approx. cubic yards 80

Landfarmed _____ Insitu Bioremediation _____

Other _____

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility) Onsite _____ Offsite Tierra

General Description of Remedial Action: Arrived, dug sample hole. Soil turned gray after about 6". Excavated soil Is gray with strong hydrocarbon odor.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location Four walls and center of pit composite

Sample depth 12'

Sample Date 02/14/95 Sample time 13:42

Sample Results

Benzene(ppm) <0.50

Total BTEX(ppm) 83.9

Field headspace(ppm) 536

TPH 3700

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 1/8/03

Signature Scott T. Pope

Printed Name Scott T. Pope and Title Senior Env. Scientist

elpaso

PIT CLOSURE REQUEST

N.E. Blanco Unit No. 5A
Meter/Line ID 89565

SITE DETAILS

Legals - Twn: 30N	**Rng: 8W**	**Sec: 13**	**Unit: K**
NMOCD Hazard Ranking: 10		**Land Type: BLM**	
Operator: Blackwood and Nichols CO		**Pit Closure Date: 2/14/95**	

RATIONALE FOR RISK-BASED 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 test pit was excavated to 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 536 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 83.9 mg/kg, and a TPH concentration of 3,700 mg/kg. The total BTEX and TPH measurements exceeded recommended remediation levels for the Hazard Ranking Score of 10.

Approximately 80 cubic yards of soil were excavated and hauled to Tierra, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 17 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 15-17 ft bgs. Headspace analysis indicated an organic vapor content of 3,700 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 60.3 mg/kg, and a TPH concentration of 3,020 mg/kg. The benzene concentration is below recommended remediation levels for the Hazard Ranking Score.

Phase III excavation was initiated on 12/4/1995 and completed on 12/5/1995. Approximately 370 cubic yards of soil was excavated with an approximate dimension of 30 feet by 26 feet and 15 feet deep with an additional 60 cubic yards of overburden material also removed to the Envirotech land farm. Sandstone was encountered at 15 ft bgs. A composite sample headspace analysis indicated an organic vapor content of 1,382 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 119 mg/kg, and a TPH concentration of 1,090 mg/kg. The benzene concentration is below recommended remediation levels for the Hazard Ranking Score.

El Paso Field Services requests closure of the above mentioned pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over seven years.
- Contaminated media within the pit was excavated to the practical extent of the equipment and subsurface conditions.

elpaso

PIT CLOSURE REQUEST

- Bedrock was encountered at 15 ft bgs making further excavation impractical.
- The test pit was backfilled with clean soil and the former pit area graded to direct surface runoff away from the former pit.
- Backfilling the pit with clean soil eliminated the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are incomplete.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Groundwater was not encountered in Phase II soil boring to a depth of 17 ft bgs.
- The benzene concentration at the base of the Phase III excavation (15 feet bgs) is below recommended remediation levels for the Hazard Ranking Score.
- Residual hydrocarbons in the soil will likely degrade by natural attenuation with minimal risk to the environment.

ATTACHMENTS

Field Pit Assessment Form
Revised Field Pit Assessment Form
Field Pit Remediation/Closure Form
Phase II Soil Boring Log
Laboratory Analytical Results

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89365 Location: N.E. Blanco Unit #5A
Operator #: 0735 Operator Name: BTA P/L District: Bloomfield
Coordinates: Letter K Section 13 Township: 30 Range: E
or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: K Line Drip: _____ Other: _____
Site Assessment Date: 1/17/95 Area: 10 Run: 63
Revised Date: 12/10/02

SITE ASSESSMENT

NMOCD Zone:
(from NMCOD Maps)

Intside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater
Less than 50 Feet (20 points) ☐ (1)
50 Feet to 99 Feet (10 Points) ☒ (2)
Greater than 100 Feet (0 Points) ☐ (3)

Well Protection Area
Is it less than 1000 feet from well, spring or other source of fresh water extraction?
or; Is it less than 200 feet from a private domestic water source?

☐ YES (20 Points) ☒ NO (0 Points)

Horizontal Distance to Surface Water Body
Less than 200 Feet (20 points) ☐ (1)
200 Feet to 1000 Feet (10 Points) ☐ (2)
Greater than 1000 Feet (0 Points) ☒ (3)

Name of Surface Water Body San Juan River

(Surface Water Body: Perennial River, Stream, Creek, Irrigation Canal, Ditch, Lake, Pond)

Distance to Nearest Ephemeral Stream ☐ (1) < 100 feet (Navajo Pits Only)
☐ (2) > 100 feet

TOTAL HAZARD RANKING SCORE 10 **POINTS**

REMARKS

Remarks: Revision Based on Re-Assessment of Both Depth to Groundwater & Distance to Nearest Surface Water Body.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89565 Location: N.E. Blanco Unit No 5A
Operator #: 0735 Operator Name: Blackwood & Nichols P/L District: Bloomfield
Coordinates: Letter: K Section 13 Township: 30 Range: 8
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 1/17/95 Area: 10 Run: 63

SITE ASSESSMENT

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

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
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 San Juan R.
(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
2 pits. Closed

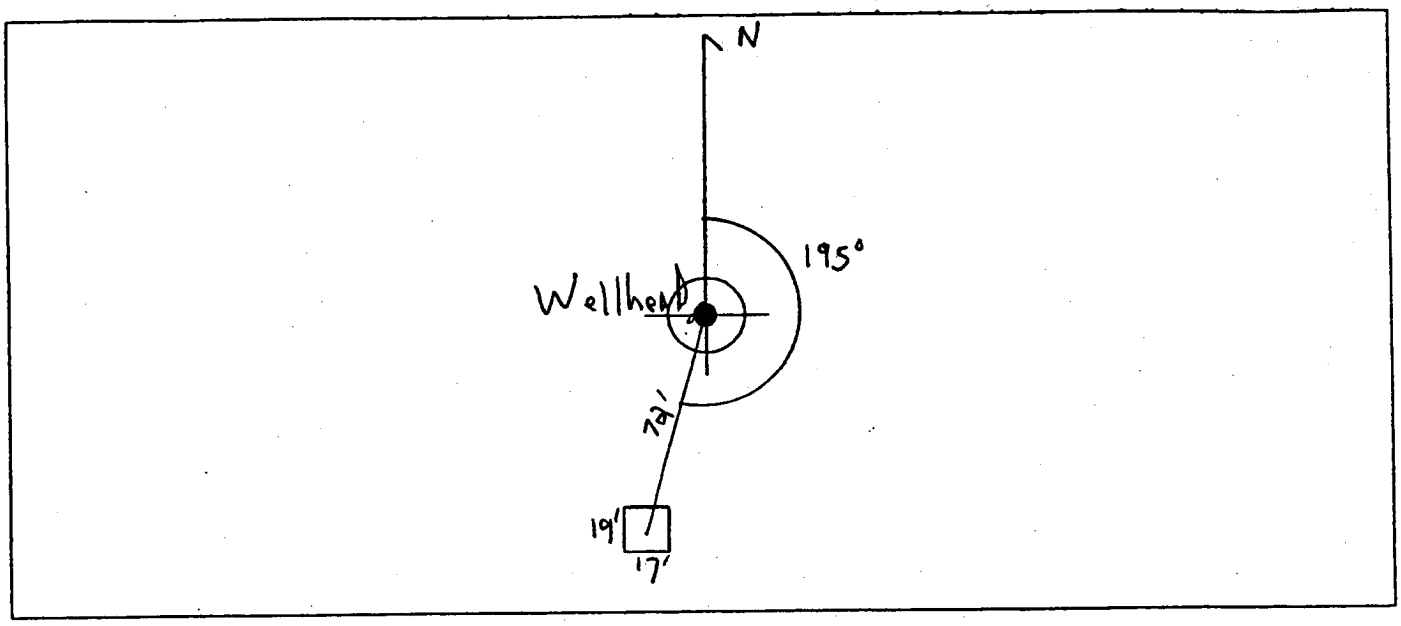
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 195° Footage from Wellhead 72'

b) Length : 19' Width : 17' Depth : 5'



REMARKS

Remarks :

Pictures @ 0909hr 1-5 roll 1

Completed By:

Cory Chase
Signature

1/17/95
Date

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:	MK 387	94684
MTR CODE | SITE NAME:	89565	N/A
SAMPLE DATE | TIME (Hrs):	2-14-95	1342
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	2/17/95	2/17/95
DATE OF BTEX EXT. | ANAL.:	2/20/95	2/20/95
TYPE | DESCRIPTION:	VC	Brown sand and clay

REMARKS: BTEX and TPH done at ATI

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.50	MG/KG	20			
TOLUENE	4.5	MG/KG	20			
ETHYL BENZENE	2.9	MG/KG	20			
TOTAL XYLENES	76	MG/KG	20			
TOTAL BTEX	83.9	MG/KG				
TPH (418.1)	3700	MG/KG				
HEADSPACE PID	536	PPM				
PERCENT SOLIDS	93.7	%				

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

The Surrogate Recovery was at 186 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached. Surrogate Recovery outside ATI QC limits due to matrix interference

DF = Dilution Factor Used

Approved By: Date: 3-20-95

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 502381

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
27	946684	NON-AQ	02/14/95	02/20/95	02/20/95	20

PARAMETER	UNITS	27
BENZENE	MG/KG	<0.50
TOLUENE	MG/KG	4.5
ETHYLBENZENE	MG/KG	2.9
TOTAL XYLENES	MG/KG	76

SURROGATE:

BROMOFLUOROBENZENE (%) 186*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 502381
PROJECT #	: 24324	DATE RECEIVED	: 02/17/95
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 02/17/95

PARAMETER	UNITS	25	26	27
PETROLEUM HYDROCARBONS, IR	MG/KG	1100	250	3700

FIEL. PIT REMEDIATION/CLOSU E FORM

GENERAL

Meter: 89565 Location: N.E. Blanco Unit No 51

Coordinates: Letter: K Section 13 Township: 30 Range: 8

Or Latitude _____ Longitude _____

Date Started : 2-14-95 Run: 10 63

FIELD OBSERVATIONS

Sample Number(s): MK 387 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 536 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 80

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☐ ☒ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 2-14-95 Pit Closed By: BES

REMARKS

Remarks : Arrived Dug sample Hole Soil turn Gray after about 6" Excavated soil is Gray with Strong Hydrocarbon odor

Signature of Specialist: Morgan Killion

(SP3191) 03/16/94

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL
[redacted]000 Monroe Road
[redacted]rmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG PITS
Project Number 14509 Phase 6000 77
Project Location N.E. Blanco Unit No. SA 89565

Elevation
Borehole Location
GWL Depth
Logged By CM CHANCE
Drilled By ~~K Padilla~~ M. Donahue
Date/Time Started 7/12/95 0820
Date/Time Completed 7/12/95 0920

Well Logged By CM Chance
Personnel On-Site ~~K Padilla~~ M. Donahue, J. O'Keefe
Contractors On-Site J. LaBarbera
Client Personnel On-Site

Drilling Method 4 1/4" ID HSA
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
12	1	13-15	4"	Br silty SAND, abt silt, ~~med~~ dense, dry, tr-mod gravel, odor			1	38	1299 / 699	Cobbles @ 12' Refusal @ 15'
15	2	15-17	4"	AA			1	292	900 / 370	0850 0905
				TD 17'						
20										
25										
30										
35										
40										

Comments: Coordinates Letter: K, S-13, T-30, R-8. CMC 62 (15-17') sent to lab (BTEX, TAH)
Insufficient recovery for QA samples. BH grouted to surface.

Geologist Signature

El Paso Natural Gas Company

Phase II

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	cmc 62	9169 84
MTR CODE | SITE NAME:	89565	N/A
SAMPLE DATE | TIME (Hrs):	7/12/95	0905
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-13-95	7-13-95
DATE OF BTEX EXT. | ANAL.:	07-17-95	07-18-95
TYPE | DESCRIPTION:	V G	

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20			
TOLUENE	6.2	MG/KG	20			
ETHYL BENZENE	4.1	MG/KG	20			
TOTAL XYLENES	50	MG/KG	20			
TOTAL BTEX	60.3	MG/KG				
TPH (418.1)	3020	MG/KG				28
HEADSPACE PID	3700	PPM				
PERCENT SOLIDS	96.9	%				

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

The Surrogate Recovery was at 203 % for this sample All QA/QC was acceptable.

Narrative:
ATI Results for BTEX and modified 8015 attached. Surrogate Recovery outside ATI QC limits due to matrix interference

DF = Dilution Factor Used

Approved By: _____ Date: 8/3/95

Analytical Technologies, Inc.

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

SAMPLE ID. #	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

PARAMETER	UNITS	14	15	16
BENZENE	MG/KG	<0.025	<0.5	<0.025
TOLUENE	MG/KG	<0.025	6.2	<0.025
ETHYLBENZENE	MG/KG	<0.025	4.1	<0.025
TOTAL XYLENES	MG/KG	<0.025	50	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		99	203*	100

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Analytical Technologies, Inc.

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

PARAMETER	UNITS	12	14	15
FUEL HYDROCARBONS	MG/KG	82	<5	1400
HYDROCARBON RANGE		C10-C32	-	C6-C14
HYDROCARBONS QUANTITATED USING		DIESEL	-	GASOLINE
SURROGATE:				
O-TERPHENYL (%)		118	108	83

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 89565 Location: North East Blanco Unit #5A

Coordinates: Letter: K Section 13 Township: 30 Range: 08

Or Latitude _____ Longitude _____

Date Started : 12-4-95 Area: 10 Run: 63

FIELD OBSERVATIONS

Sample Number(s): SP100 _____ _____ _____

Sample Depth: 15 Feet

Final PID Reading 1382 PID Reading Depth 15 Feet

Yes No

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

Final Dimensions: Length 30 Width 26 Depth 15

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 370 LT 12/6/95

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards 60 LT 12/6/95

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 12-5-95 Pit Closed By: Philips Env

Phase III Used 50lbs Fertilizer

REMARKS

Remarks : Rig to Ft & hit sand stone, Took PID readings N wall 28 ppm S wall over range ppm E wall 10 ppm W wall 1790 ppm Bot 799 ppm Comp 1382 ppm, Could not dig South, East, or West walls anymore due to pipe Line's

Signature of Specialist: James L Pearce

(SP3195) 05/01/95

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:	JP100	947831
MTR CODE | SITE NAME:	89565	N.E.B.U. #5A
SAMPLE DATE | TIME (Hrs):	12-5-95	1045
PROJECT:	Phase III Exc.	
DATE OF TPH EXT. | ANAL.:	12/6/95	
DATE OF BTEX EXT. | ANAL.:	12/6/95	12/7/95
TYPE | DESCRIPTION:	VC	Light brown sand & clay

Field Remarks: (N-28)(S-out of range)(E-10)(W-1790

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	6.8	MG/KG				
ETHYL BENZENE	4.4	MG/KG				
TOTAL XYLENES	108	MG/KG	2	D,D1		
TOTAL BTEX	119	MG/KG				
TPH (418.1)	1090	MG/KG			2.08	28
HEADSPACE PID	1382	PPM				
PERCENT SOLIDS	90.3	%				

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

The Surrogate Recovery was at 97%/99% for this sample All QA/QC was acceptable.

Narrative: Result for m/p xylenes was over calibration -mk

DF = Dilution Factor Used

Approved By: John Goldsmith Date: 12/11/95