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
1220 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
defne plume

Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office
(Revised 3/9/94)

DEC 2002
RECEIVED
OIL CONS. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMAX Telephone:

Address: 30-039-23134

Facility Or: Lindrith 110E (DK), Meter 94748
Well Name

Location: Unit or Qtr/Qtr Sec C Sec 10 T 26 R 7 County Rio Arriba

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 18', width 19', depth 4'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 126'

Direction from reference: 239 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	(20 points)
	50 feet to 99 feet	(10 points)
	Greater than 100 feet	(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	(20 points)
	No	(0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet	(20 points)
	200 feet to 1000 feet	(10 points)
	Greater than 1000 feet	(0 points) 0

Revised

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 06/01/94 Date completed: 06/01/94

Remediation Method: (Check all appropriate sections.) Excavation X Approx. cubic yards 50

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: No line markers; started remediating 12'. Soil dark, smells. Lots of big rocks. At 12' soil still dark gray. PID 172. Closed pit.

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 06/01/94 Sample time 16:46

Sample Results

Benzene(ppm) 25

Total BTEX(ppm) 110

Field headspace(ppm) 172

TPH 2650

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

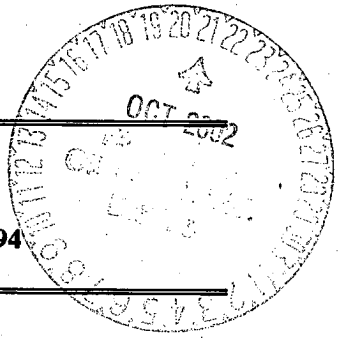
Signature Scott T. Pope

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

elpaso

PIT CLOSURE REQUEST

Lindrith 110E (DK)
Meter/Line ID 94748



SITE DETAILS

Legals - Twn: 26N **Rng:7** **Sec:10** **Unit: C**
NMOCD Hazard Ranking: 10 **Land Type: BLM**
Operator: AMAX **Pit Closure Date: 06/01/94**

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.

The pit was excavated to 12 feet (ft) below ground surface (bgs) to the practical extent of the equipment and a soil sample was collected for field headspace analysis and laboratory analysis for BTEX and TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 172 ppm; laboratory analysis indicated a benzene concentration of <0.25 mg/kg, a total BTEX concentration of 110 mg/kg, and a TPH concentration of 2,650 mg/kg. The benzene concentration was below its recommended remediation level for the Hazard Ranking Score. The total BTEX and TPH concentrations exceeded recommended remediation levels for the Hazard Ranking Score of 10.

Approximately 50 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 to 27 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 25-27 ft bgs. Headspace analysis indicated an organic vapor content of 26 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 312 mg/kg. Benzene and BTEX concentrations were below recommended remediation levels for the Hazard Ranking Score. The TPH concentration exceeded its recommended remediation level for the Hazard Ranking Score.

see revised site assessment

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

- The primary source, discharge to the pit, has been removed for over eight years.
- The impacted soil was excavated to the practical extent of the equipment and disposed of offsite.
- The excavation was backfilled 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.
- Groundwater was not encountered in the soil boring to 27 ft bgs.

- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- TPH concentrations in the soil at 27 ft bgs were about 12% of the concentration at 12 ft bgs; BTEX was non-detect at the base of the soil boring versus 110 mg/kg at 12 ft bgs. This strong attenuation with depth indicates that residual hydrocarbons will 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 2 Soil Boring Log
Laboratory Analytical Results

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 94748 Location: Lindrith 110 E (DK)
Operator #: 0114 Operator Name: AMAX P/L District: Blanco
Coordinates: Letter: C Section 10 Township: 26 Range: 7
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 5/18/94 Area: 03 Run: 72

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 Largo Canyon
(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

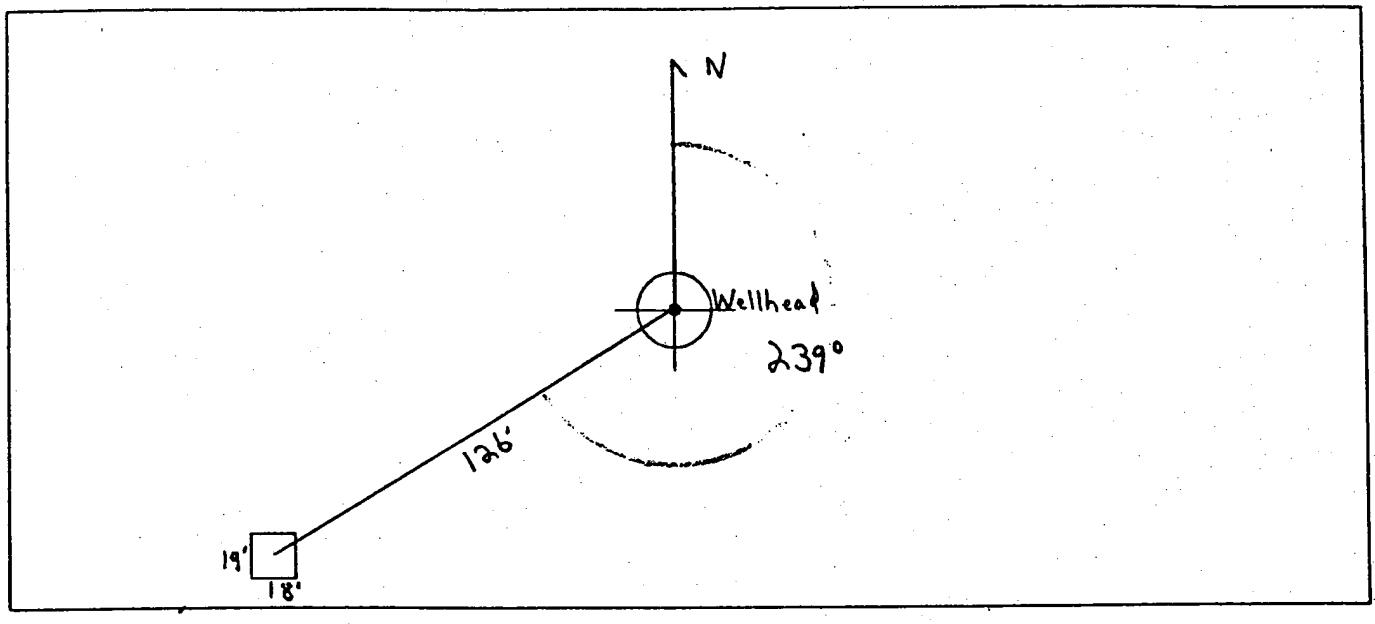
Remarks : Redline & Vuln - Inside
6 pits. Will close 2. (1 BL & 1 DK) Pits Dry. Trash in DK
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 239° Footage from Wellhead 126'

b) Length : 18' Width : 19' Depth : 4'



REMARKS

Remarks :

Pictures @ 1153 (14-18)

Dump Truck

Completed By:

Cory Chase
Signature

5/18/94
Date

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 94748 Location: LINDRETH 110 E (DK)
Operator #: 0114 Operator Name: AMAX P/L District: BLANCO
Coordinates: Letter C Section 10 Township: 26 Range: 7
or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: ✓ Line Drip: _____ Other: _____
Site Assessment Date: 5/18/94 Area: 03 Run: 72
Revised Date: 9/25/02

SITE ASSESSMENT

NMOCD Zone:
(from NMCOD Maps)

Land Type:
Intside ☒ (1)
Outside ☐ (2)

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 LARGO CANYON

(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 DEPTH TO GROUNDWATER USING DEISSEME SOFTWARE. DISTANCE TO NEAREST SURFACE WATER BODY WAS ALSO RE-EVALUATED.

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP77	945333
MTR CODE | SITE NAME:	94748	N/A
SAMPLE DATE | TIME (Hrs):	6-1-94	1646
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6-2-94	6/2/94
DATE OF BTEX EXT. | ANAL.:	6/6/94	6/8/94
TYPE | DESCRIPTION:	VC	BROWN GRAY MEDIUM SAND

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.25	MG/KG	10			
TOLUENE	9.4	MG/KG	10			
ETHYL BENZENE	<0.25	MG/KG	10			
TOTAL XYLENES	100	MG/KG	10			
TOTAL BTEX	110	MG/KG				
TPH (418.1)	2650	MG/KG			2.01	28
HEADSPACE PID	172	PPM				
PERCENT SOLIDS	90.8	%				

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

The Surrogate Recovery was at 140 % 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: John Franklin Date: 7/14/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS ATI I.D.: 406313
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	945332	NON-AQ	06/01/94	06/06/94	06/07/94	1
17	945333	NON-AQ	06/01/94	06/06/94	06/08/94	10

PARAMETER	UNITS	16	17
BENZENE	MG/KG	0.044	<0.25
TOLUENE	MG/KG	<0.025	9.4
ETHYLBENZENE	MG/KG	0.47	<0.25
TOTAL XYLENES	MG/KG	6.4	100
SURROGATE:			
BROMOFLUOROBENZENE (%)		120*	140*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

FIE! PIT REMEDIATION/CLOSU E FORM

GENERAL

Meter: 94748 Location: Lindrith 110E (DK)

Coordinates: Letter: C Section 10 Township: 26 Range: 7

Or Latitude _____ Longitude _____

Date Started : 6-1-94 Area: 03 Run: 72

FIELD OBSERVATIONS

Sample Number(s): KPH 77 _____ _____ _____

Sample Depth: 12 Feet

Final PID Reading 172 PID Reading Depth 12 Feet

	Yes	No	
Groundwater Encountered	☐ (1)	☒ (2)	Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 50
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

Envirotech	☐ (1)	☒ (3)	Tierra
Other Facility	☐ (2)	Name:	_____

Pit Closure Date: 6-1-94 Pit Closed By: B.E.I

REMARKS

Remarks : No Line markers. Started Remediating 12' Soil Dark. Smells. Lots of Big Rocks. At 12 soil Still Dark gray. P.I.D. 172 Closed Pit

Signature of Specialist: Kelly Pickett

(SP3191) 04/07/94

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
11957	Pit Closure Project # 24324

SAMPLERS: (Signature) Kelly Padilla

DATE: 6-1-94

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020		SOIL			REMARKS
94 S329	6-1-94	1122	Soil	KP#73	1	VG	X	X		65			
94 S330	6-1-94	1150	Soil	KP#74	1	VG	X	X		66			
94 S331	6-1-94	1220	Soil	KP#75	1	VG	X	X		67			
94 S332	6-1-94	1534	Soil	KP#76	1	VG	X	X		68			
94 S333	6-1-94	1646	Soil	KP#77	1	VG	X	X		69			

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kelly Padilla	6-1-94 1830	Brenda Kiess 28°	Brenda Kiess	6/6/94 1015	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

33°

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH _____

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

FM-08-0565A (Rev. 03-94)

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG PITS
Project Number 14509 Phase 6000 77
Project Location Lindrith 110E (DK) 94748

Elevation
Borehole Location QC - S10 - T26 - R7
GWL Depth
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 9/19/95 - 0916
Date/Time Completed 9/19/95 - 1030

Well Logged By CM Chance
Personnel On-Site K Padilla, F. Rivera, J. Johnson
Contractors On-Site
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'						
15	1	15-17	6"	DK gry silty SAND, vf-f sand, v. loose, sl moist, odor			0	~~200~~ 20	1098/1223	0924 hrs
20	2	20-22	4"	Br sandy SILT, vf sand, v. Loose, dry			5	38	50/69	0930
25	3	25-27	6"	AA			0	23	27/26	0935
				TDB 27'						
30										
35										
40										

Comments: CMC 114 (25-27') sent to lab (BTEX/TPH). Sample bagged & iced prior to containerization. BH grouted to surface

Geologist Signature Cory Chance

El Paso Natural Gas Company

Phase II Drilling

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Cory Chavez DATE: 9/19/95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID		PID HS ppm	SEQUENCE #	REMARKS
947497	9/19/95	0935	SOIL	CMC114	1	VG	✓	✓			26	106	Bagged & Iced 25-27' Lindrith 11DE(DK) 94748
947498	↑	1123	↑	CMC115	1	VG	✓	✓			24	107	Bagged & Iced 30-32' MKL 16R 94809
947499	↓	1328	↓	CMC116	1	VG	✓	✓			8	108	Bagged & Iced 25-26 Hammond No.8 93189
947500	9/19/95	1510	SOIL	CMC117	1	VG	✓	✓			1	109	30-31' San Juan 28-7 Unit #16 70865

Cory 9/19/95

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Cory Chavez	9/19/95 1730	Julie Diddle	Julie Diddle	9/20/95 9:05	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
					Khan Bg

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
505-599-2144 FAX: 505-599-2261

CONTRACT LABORATORY P. O. NUMBER

White - *Testing Laboratory* Canary - *EPNG Lab* Pink - *Field Sampler*

FM-08-0565 A (Rev. 05-94)

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:	CMC 114	947497
MTR CODE | SITE NAME:	94748	Lindrith 110E DK
SAMPLE DATE | TIME (Hrs):	09-19-95	0935
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	9-20-95	
DATE OF BTEX EXT. | ANAL.:	9/20/95	9/22/95
TYPE | DESCRIPTION:	V6	Light brown sand and clay

Field Remarks: _____

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	< ~~0.5~~ 1.5 mh	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	312	MG/KG			1.98	28
HEADSPACE PID	26	PPM				
PERCENT SOLIDS	93.8	%				

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

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

Narrative: ATI Results for mod 8015 attached (98).

DF = Dilution Factor Used

Approved By: _____ Date: 9-26-95

BTEX SOIL SAMPLE WORKSHEET

File	947497	Date Printed	9/25/95	
Soil Mass (g)	5.02	Multiplier (L/g)	0.00100	
Extraction vol. (mL)	10	DF (Analytical)	200	
Shot Volume (uL)	50	DF (Report)	0.19920	

			Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.498
Toluene (ug/L)	0.23	**Toluene (mg/Kg):**	**0.046**	0.498
Ethylbenzene (ug/L)	0.14	**Ethylbenzene (mg/Kg):**	**0.028**	0.498
p & m-xylene (ug/L)	0.76	p & m-xylene (mg/Kg):	0.151	0.996
o-xylene (ug/L)	0.24	o-xylene (mg/Kg):	0.048	0.498
		Total xylenes (mg/Kg):	**0.199**	1.494
		Total BTEX (mg/Kg):	**0.273**	

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED

CLIENT : EL PASO NATURAL GAS ATI I.D.: 509397

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947482	NON-AQ	09/16/95	09/28/95	09/28/95	1
05	947494	NON-AQ	09/19/95	09/28/95	09/29/95	10
06	947497	NON-AQ	09/19/95	09/28/95	09/28/95	1

PARAMETER	UNITS	04	05	06
FUEL HYDROCARBONS	MG/KG	42	4800	98
HYDROCARBON RANGE		C9-C32	C6-C14	C10-C36
HYDROCARBONS QUANTITATED USING		DIESEL	GASOLINE	DIESEL
SURROGATE:				
O-TERPHENYL (%)		80	74	93