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

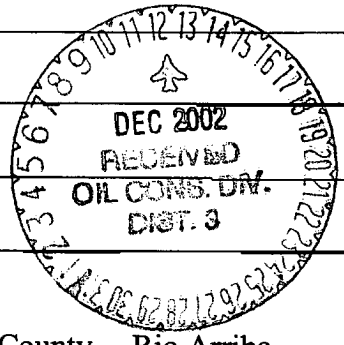
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RISK bedrock defined extent of plume

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

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT



Operator: Conoco Mesa Operating Telephone

Address: 30-039-07412

Facility Or: San Juan 28-7 Unit 75, Meter 02376
Well Name

Location: Unit or Qtr/Qtr Sec L Sec 15 T 28 R 7 County Rio Arriba

Pit Type: Separator _____ Dehydrator X Other _____

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

Pit Location: Pit dimensions: length 28', width 24', depth 4'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 69'

Direction from reference: 150 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

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 06/13/94 Date completed: 06/14/94

Remediation Method: (Check all appropriate sections.) Excavation X Approx. cubic yards 30

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: Remediated pit to 4', hit hard sandstone. Took VC sample. Meter reading Was 202 ppm at 85 degrees. Could not complete backfilling pit. Held sample over one night. Will backfill tomorrow And turn in sample with 6/14/94 samples. Cooler temp. was 35 degrees. I checked before I left and this morn.

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 4'

Sample Date 06/13/94 Sample time 16:20

Sample Results

Benzene(ppm) 0.42

Total BTEX(ppm) 23

Field headspace(ppm) 202

TPH 39600

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

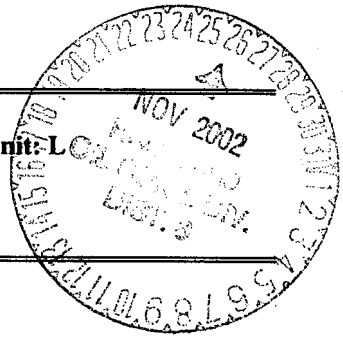
Signature Scott T. Pope

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

elpaso

PIT CLOSURE REQUEST

San Juan 28-7 Unit 75
Meter/Line ID 02376



SITE DETAILS

Legals - Twn: 28N **Rng: 7W** **Sec: 15** **Unit: L**
NMOCD Hazard Ranking: 10 **Land Type: Federal**
Operator: Conoco Mesa Operating **Pit Closure Date: 6/14/94**

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.

A test pit was excavated to 4 feet (ft) below ground surface (bgs) where sandstone was encountered and a soil sample was collected for field headspace analysis and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 202 ppm; laboratory analysis indicated a benzene concentration of 0.42 mg/kg, a total BTEX concentration of 23 mg/kg, and a TPH concentration 39,600 mg/kg. The headspace analysis and TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

Approximately 30 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 refusal at 17 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 16-17 ft bgs. Headspace analysis indicated an organic vapor content of 7 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 311 mg/kg. The benzene, BTEX, and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

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.
- Bedrock was encountered at 4 feet bgs making additional excavation impractical.
- The test pit 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 17 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene and BTEX were non-detect at the base of the Phase II soil boring.

- The TPH concentrations at the bottom of the Phase II boring are less than 1 percent of the concentration at 4 ft bgs, and below NMOCD standards, indicating that residual hydrocarbons are degrading by natural attenuation with minimal risk to the environment.
- The majority of the impacted soils have been removed. Residual hydrocarbons in soil will likely degrade by natural attenuation with minimal risk to human health and 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

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 02376 Location: San Juan 28-7 Unit 75
Operator #: 0203 Operator Name: Amoco P/L District: Blanco
Coordinates: Letter: L Section 15 Township: 28 Range: 7
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ✓ Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 6/2/94 Area: 03 Run: 41

SITE ASSESSMENT

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

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

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 Delgadita 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

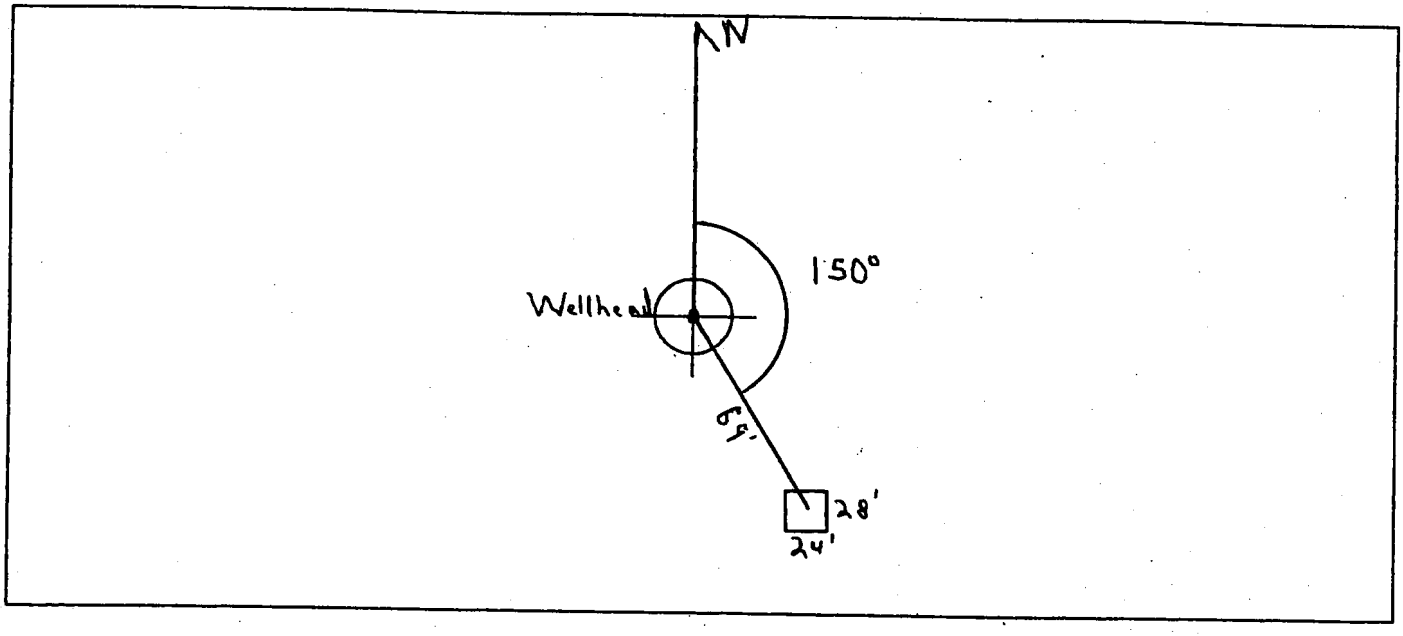
Remarks : Redline - NA, Vuln. - INSIDE. Site was not on either map. Location was estimated using closest well.
2 pits. Close 1. Pit Dry Coil stained)
DIG + HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 150° Footage from Wellhead 69'

b) Length : 28' Width : 24' Depth : 4'



REMARKS

Remarks :

Pictures @ 1614 (1-5) roll 3

Dump Truck

Completed By:

Signature

6/2/94

Date

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 02376 Location: SAN JUAN 28-7 UNIT 75
Operator #: 0203 Operator Name: AMOCO P/L District: BLANCO
Coordinates: Letter L Section 15 Township: 28 Range: 7
or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: _____ Line Drip: _____ Other: _____
Site Assessment Date: 6/2/94 Area: 03 Run: 41
Revised Date: _____

SITE ASSESSMENT

NMOCD Zone:
(from NMCOD Maps)

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

BLM ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____
PATENTED

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 CARRIZO CREEK (CANYON)

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

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

TOTAL HAZARD RANKING SCORE 10 **POINTS**

REMARKS

Remarks: REVISION BASED ON RE-ASSESSMENT OF DEPTH TO GROUNDWATER AND DISTANCE TO NEAREST SURFACE WATER BODY

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 02376 Location: San Juan 28-7 unit 75

Coordinates: Letter: L Section 15 Township: 28 Range: 7

Or Latitude _____ Longitude _____

Date Started : 6/13/94 Area: 03 Run: 41

FIELD OBSERVATIONS

Sample Number(s): 4P35 _____ _____ _____

Sample Depth: 4 Feet

Final PID Reading 202 ppm PID Reading Depth 4 Feet

	Yes	No
Groundwater Encountered	☐ (1)	☒ (2)

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 30
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

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

Pit Closure Date: 6/14/94 Pit Closed By: BEI

REMARKS

Remarks : Remediated pit to 4 ft, hit hard sandstone. Took VC Sample, meter reading was 202 ppm at 85° could not complete backfilling pit. Held sampler over one nite. will backfill tommorrow and turn in sample with 6/14/94 Samples. Cooler temp. was 35° I checked before I left and this morn.

Signature of Specialist: James F Lewis

(SP3191) 04/07/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP35	943444
MTR CODE | SITE NAME:	02376	N/A
SAMPLE DATE | TIME (Hrs):	6-13-94	1620
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6/16/94	6/16/94
DATE OF BTEX EXT. | ANAL.:	6/17/94	6/20/94
TYPE | DESCRIPTION:	VC	Grey Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS DF	Q	M(g)	V(ml)
BENZENE	0.42	MG/KG	5			
TOLUENE	11	MG/KG	5			
ETHYL BENZENE	0.82	MG/KG	5			
TOTAL XYLENES	11	MG/KG	5			
TOTAL BTEX	23	MG/KG				
TPH (418.1)	39,600	MG/KG			0.20	28
HEADSPACE PID	202	PPM				
PERCENT SOLIDS	90.6	%				

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

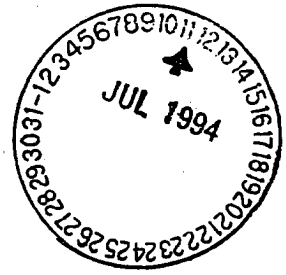
The Surrogate Recovery was at 63 ~~N/A~~ % for this sample All QA/QC was acceptable.

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

DF = Dilution Factor Used

Approved By: [signature] Date: 7/07/94

Analytical Technologies, Inc.



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406367

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	945436	NON-AQ	06/13/94	06/17/94	06/20/94	1
05	945444	NON-AQ	06/13/94	06/17/94	06/20/94	5
06	945445	NON-AQ	06/14/94	06/17/94	06/20/94	10

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	0.10	0.42	<0.25
TOLUENE	MG/KG	0.55	11	<0.25
ETHYLBENZENE	MG/KG	1.7	0.82	1.9
TOTAL XYLENES	MG/KG	42 D5	11	32
SURROGATE:				
BROMOFLUOROBENZENE (%)		90	63*	56*

D5=DILUTED 5X, ANALYZED 06/21/94
*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME	SAMPLERS: (Signature)	DATE:
	Pit Closure Project # 24324	James F Peirce	6/14/94

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020				SEQ #	REMARKS
94/5444	6/13/94	1620	Soil	4P35	1	VC	X	X				31	Hotel sample overnite at 35' Hit hard sandstone at 4 Ft
94/5445	6/14/94	1120	Soil	4P36	1	VC	X	X				32	Floor still black
	6/14/94												

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
James F Peirce	6/14/94 1900 (35')	Brenda Kiess	Brenda Kiess	6/15/94 0845 (26')	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

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*

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

Burlington Environmental Inc.
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 San Juan 28-7 Unit 75 02376

Elevation
Borehole Location QL-S15-T28-R7
GWL Depth
Logged By Phillip Moss
Drilled By E. Padilla
Date/Time Started 9-7-95 / 11:22
Date/Time Completed 9-7-95 / 12:15

Well Logged By Phillip Moss
Personnel On-Site E. Padilla, E. Rivera, D. Charles, P. Moss
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 I.D. 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	Drilling Conditions & Blow Counts
0				Backfill to 4'.						
			SS							
5	1	5-7'	6"	Sandstone, f-g., grayish green, poorly-cemented, hydrocarbon odor			0	2.1	128/164	- 11:27
			SS							
10	2	10-12'	7"				28	89	25/179	- 11:36
				11' - mudstone, grayish brown, laminated, poorly-cemented, no odor.		11'				
15	3	15-17'	5S	Sandstone, brown, f-g., poorly-cemented, no odor.		14'	1	343	33/7	- 11:51
				17' TD						
20										
25										
30										
35										
40										

Comments: PLM 8 (15-17') sent to lab (BTEX, TPH). Sample homogenized & screened before placing in jar. BH grouted to the surface.

Geologist Signature Phillip L Moss

El Paso Natural Gas Company

Phase II Drilling

CHAIN OF CUSTODY RECORD

PROJECT NUMBER:

PROJECT NAME: Pit Closure Project # 24324

SAMPLERS: (Signature) Philip L. Moz

DATE: 9/7/95

CONTRACT LABORATORY P. O. NUMBER:

	LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020			Field PID	Sequence #	REMARKS
47	420	9/7/95	11:57	Soil	PLM 8	1	VG	X	X			~~243~~ 7	6	San Juan 28-7 Unit 75, 02376 (15-17')
47	421	9/7/95	13:07	Soil	PLM 9	1	VG	X	X			21	7	San Juan 28-7 Unit 241E, 93656 (15-17')
47	422	9/7/95	14:19	Soil	PLM 10	1	VG	X	X			0	8	San Juan 28-7 Unit 73, 71909 (20-22')

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Philip L. Moz	32°F 9/7/95 16:15	Julie Diddy	Julie Diddy	9/8/95 9:35 26'	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
					[signature]

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)

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:	PLM8	947420
MTR CODE | SITE NAME:	02376	San Juan 28-7 Unit 75
SAMPLE DATE | TIME (Hrs):	09-07-95	1157
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	9-8-95	
DATE OF BTEX EXT. | ANAL.:	9/8/95	9/12/95
TYPE | DESCRIPTION:	VG	LIGHT BROWN SAND & 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	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	311	MG/KG			2.02	28
HEADSPACE PID	7	PPM				
PERCENT SOLIDS	93.4	%				

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

The Surrogate Recovery was at 94 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 9-13-95

BTEX SOIL SAMPLE WORKSHEET

File	947420	Date Printed	9/13/95
Soil Mass (g)	5.06	Multiplier (L/g)	0.00099
Extraction vol. (mL)	20	DF (Analytical)	200
Shot Volume (uL)	100	DF (Report)	0.19763

			Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.494
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.494
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.494
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	0.988
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.494
		Total xylenes (mg/Kg):	**0.000**	1.482
		Total BTEX (mg/Kg):	**0.000**	