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

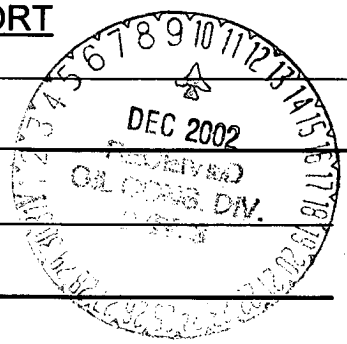
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Risk 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: Meridian Telephone:

Address: 30-045-06862

Facility Or: Filan #1, Meter 70625
Well Name

Location: Unit or Qtr/Qtr Sec H Sec 5 T 27 R 8 County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Drip

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

Pit Location: Pit dimensions: length 18', width 14', depth 1'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 108'

Direction from reference: 96 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) 0
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): 0

Date Remediation Started: 08/04/94 Date completed: 08/04/94

Remediation Method: Excavation X Approx. cubic yards 50

(Check all appropriate sections.) Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: Excavated pit to 12', took PID sample, 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 08/04/94 Sample time 10:30

Sample Results

Benzene(ppm) <0.25

Total BTEX(ppm) 271

Field headspace(ppm) 647

TPH 4120

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 1/8/93

Signature Scott T. Pope

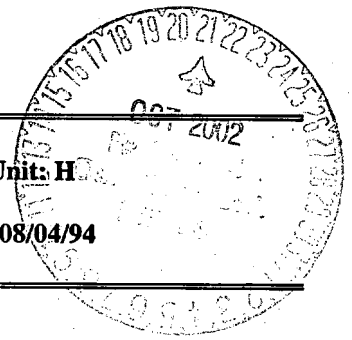
Printed Name Scott T. Pope

and Title Senior Envir Scientist

elpaso

PIT CLOSURE REQUEST

Filan #1
Meter/Line ID 70625



SITE DETAILS

Legals - Twn: 27N **Rng:8** **Sec:5** **Unit: H**
NMOCD Hazard Ranking: 0 **Land Type: State**
Operator: Meridian **Pit Closure Date: 08/04/94**

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 647 ppm; laboratory analyses indicated a TPH concentration of 4,120 mg/kg. The laboratory analyses for BTEX failed QA/QC criteria and are considered not representative. The TPH concentration was below the recommended remediation levels for the Hazard Ranking Score of 0.

Approximately 50 cubic yards of soil were excavated and hauled to Envirotech, 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 30.5 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 30-30.5 ft bgs. A field headspace analysis was not conducted because of poor sample recovery. Laboratory analysis indicated a benzene concentration of <1.3 mg/kg, a total BTEX concentration of 48.1 mg/kg, and a TPH concentration of 782 mg/kg. All analyses concentrations were below recommended remediation levels for the Hazard Ranking Score of 0.

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 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 30.5 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 30 ft bgs were about 19% of the concentration at 12 ft bgs, and were below the recommended remediation levels for this site. This strong attenuation with depth indicates that residual hydrocarbons will degrade by natural attenuation with minimal risk to the environment.

- Bedrock was encountered at 30 feet bgs making further down-gradient migration unlikely.

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: 70625 Location: FILAN #1

Operator #: 2999 Operator Name: MERIDIAN P/L District: BALLARD

Coordinates: Letter: ~~B~~ 6.9.94 H Section 5 Township: 27 Range: 8

Or Latitude _____ Longitude _____

Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____

Site Assessment Date: 6.9.94 Area: 07 Run: 32

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 FRESNO 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: 30 **POINTS**

REMARKS

Remarks : ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS IN FRESNO CANYON WEST OF LARGO WASH. REDLINE AND TOPO CONFIRMED LOCATION IS INSIDE V.Z.

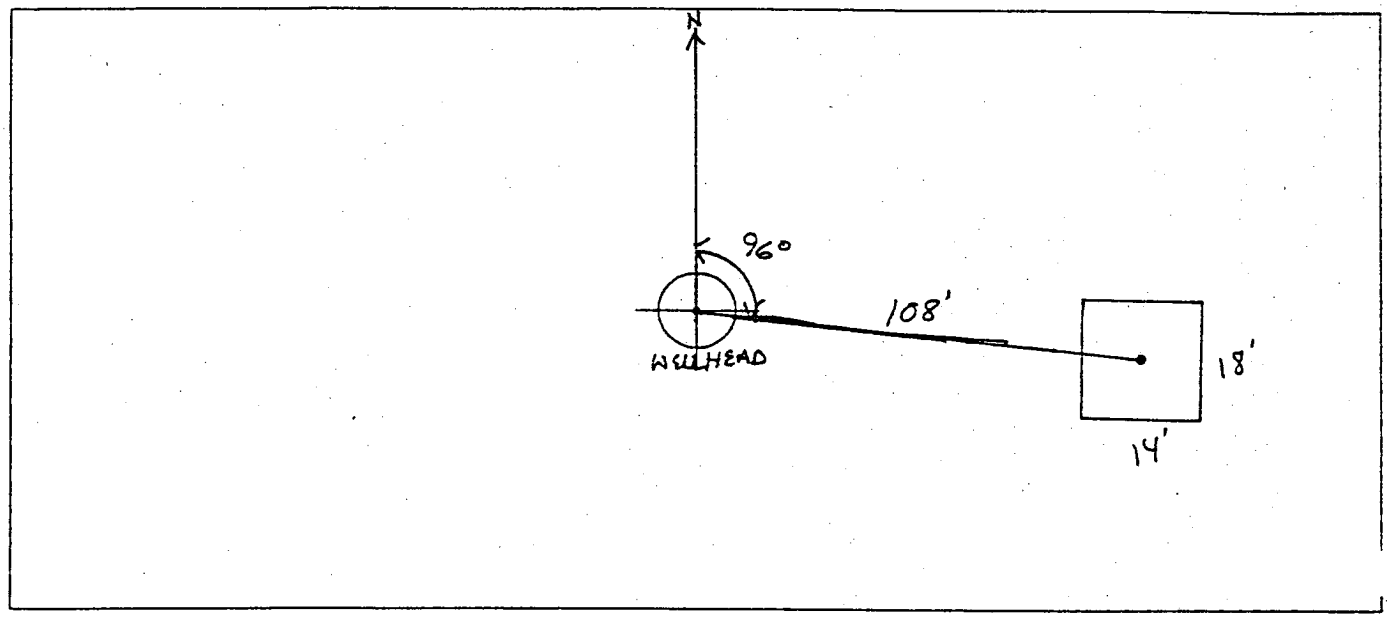
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 96° Footage from Wellhead 108'

b) Length : 18' Width : 14' Depth : 6-9-94 RT ~~3~~ 1'



REMARKS

Remarks :

TOOK PICTURES AT 11:26 A.M.

END DUMP

Completed By:

Robert Thompson
Signature

6-9-94
Date

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 70625 Location: F. Ian #1
Operator #: 2999 Operator Name: Meridian P/L District: Bloomfield
Coordinates: Letter H Section 5 Township: 27 Range: 8
or Latitude ' Longitude
Pit Type: Dehydrator Location Drip: X Line Drip: Other:
Site Assessment Date: 6/9/94 Area: 07 Run: 32
Revised Date: 9/25/02

SITE ASSESSMENT

NMOCD Zone:
(from NMCOD Maps)

Land Type:
Intside [X] (1)
Outside [ ] (2)

BLM [X] (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) [X] (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) [X] 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) [X] (3)

Name of Surface Water Body Fresno 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 0 **POINTS**

REMARKS

Remarks: Revision Based on Re-Assessment of Depth to Groundwater Using Reference Software, Distance to Nearest Surface Water 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:	KD 185	945837
MTR CODE | SITE NAME:	70625	N/A
SAMPLE DATE | TIME (Hrs):	8-4-94	1030
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8/9/94	8/9/94
DATE OF BTEX EXT. | ANAL.:	8/11/94	8/11/94
TYPE | DESCRIPTION:	VC	Brown Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.25	MG/KG	10			
TOLUENE	<0.25	MG/KG	10			
ETHYL BENZENE	<0.25	MG/KG	10			
TOTAL XYLENES	270	MG/KG	10			
TOTAL BTEX	271	MG/KG				
TPH (418.1)	4120	MG/KG			2.19	28
HEADSPACE PID	647	PPM				
PERCENT SOLIDS	93.3	%				

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

The Surrogate Recovery was at 425 % 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: J. L. Date: 9/2/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408339

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945835	NON-AQ	08/04/94	08/11/94	08/11/94	10
02	945836	NON-AQ	08/04/94	08/11/94	08/11/94	10
03	945837	NON-AQ	08/04/94	08/11/94	08/11/94	10

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	0.38	<0.25	<0.25
TOLUENE	MG/KG	26	<0.25	<0.25
ETHYLBENZENE	MG/KG	<0.25	1.2	<0.25
TOTAL XYLENES	MG/KG	4.7	31	270
SURROGATE:				
BROMOFLUOROBENZENE (%)		71	112	425*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70625 Location: Filan #1

Coordinates: Letter: H Section 5 Township: 27 Range: 8

Or Latitude _____ Longitude _____

Date Started : 8/4/94 Run: 07 32

FIELD OBSERVATIONS

Sample Number(s): KD 185 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 647 ppm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 50

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 8/4/94 Pit Closed By: BEI

REMARKS

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

Signature of Specialist: Kurt Dan

(SP3191) 03/16/94

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME	SAMPLERS: (Signature)	DATE
	Pit Closure Project # 24324	Kenny Deaver	8/4/94

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	REQUESTED ANALYSIS: BTEX EPA 8020					REMARKS
SB 37	8/4/94	1030	Soil	KD 185	1	VC	X	X				167	
SB 38	8/4/94	1215	Soil	KD 186	1	VC	X	X				168	
SB 39	8/4/94	1415	Soil	KD 187	1	VG	X	X				169	Sample very wet
SB 40	8/4/94	1440	Soil	KD 188	1	VG	X	X				170	

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kenny Deaver	1650 8/4/94	Brenda Kiess	Brenda Kiess	8/5/94 1020	
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*

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~~ 70625
Project Location: Filan #1

Well Logged By: CM Chance
Personnel On-Site: K Padilla, F. Rivera, D. Goya
Contractors On-Site:
Client Personnel On-Site:

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

Elevation:
Borehole Location: QH-S5-T27-R8
GWL Depth:
Logged By: CM CHANCE
Drilled By: K Padilla
Date/Time Started: 7/24/95 - 1245
Date/Time Completed: 7/24/95 - 1415

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	12"	Gry silty SAND, vf-f sand, loose, moist, odor			0	80	581/585	-1252
20	2	20-21	4"	AA			0	89	264/370	-1300 -hard
25	3	25-26	2"	AA			2	28	120/360	-1311
										-hard drilling
30	4	30-30.5	1"	AA Br Sandstone, med-coarse sand, well cemented TOB 30.5'			0	30	88/NA	-1325 -Insuff [illegible] volume for HS -Refusal [illegible] Sampled to [illegible]
35										
40										

Comments: CMC 72 (30-30.5') sent to lab (BTEX, TPH). Insufficient volume for headspace. BH grouted to surface.

Geologist Signature: Cory Chance

El Paso Natural Gas Company

Phase II Drilling

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
24324	Pit Closure Project

SAMPLERS: (Signature) Cory Chavez DATE: 7/24/95

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
47067	7/24/95	0856	Soil	CMC7D	1	VG	✓	✓			2	66	30-32' Schultz #1 71033
47068	↓	1110	↓	CMC7J	1	VG	✓	✓			333	67	35-36 D-5 Line Drip H-16-27-8
47069	↓	1325	↓	CMC72	1	VG	✓	✓			NA	68	30-305 Filan #1 70625

CONTRACT LABORATORY P. O. NUMBER

REQUESTED ANALYSIS

Cmc 7/24/95

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Cory Chavez	7/24/95 1530	Kelly Stovall	Kelly Stovall	7/25/95 1100	
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

El Paso Natural Gas Company

Phase II Drilling
Filan #1

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC 72	947069
MTR CODE | SITE NAME:	70625	N/A
SAMPLE DATE | TIME (Hrs):	07-24-95	13:25
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-25-~~95~~ RB 8/21/95	7-25-95
DATE OF BTEX EXT. | ANAL.:	7-27-95	7-27-95
TYPE | DESCRIPTION:	VG	Light grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<1.3	MG/KG	50			
TOLUENE	<1.3	MG/KG	50			
ETHYL BENZENE	4.1	MG/KG	50			
TOTAL XYLENES	44	MG/KG	50			
TOTAL BTEX	48.1	MG/KG				
TPH (418.1)	782	MG/KG			2.06	28
HEADSPACE PID	N/A	PPM				
PERCENT SOLIDS	90.0	%				

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

The Surrogate Recovery was at 91 % for this sample All QA/QC was acceptable.

Narrative: ATI Results for BTEX and modified 8015 attached

DF = Dilution Factor Used

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507411
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947067	NON-AQ	07/24/95	07/27/95	07/27/95	1
02	947068	NON-AQ	07/24/95	07/27/95	07/27/95	50
03	947069	NON-AQ	07/24/95	07/27/95	07/27/95	50

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<1.3	<1.3
TOLUENE	MG/KG	<0.025	2.8	<1.3
ETHYLBENZENE	MG/KG	<0.025	4.1	4.1
TOTAL XYLENES	MG/KG	<0.025	37	44
SURROGATE:				
BROMOFLUOROBENZENE (%)		103	113	91

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507411

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
02	947068	NON-AQ	07/24/95	07/27/95	07/27/95	1
03	947069	NON-AQ	07/24/95	07/27/95	07/28/95	10
08	947077	NON-AQ	07/25/95	07/27/95	07/27/95	1

PARAMETER	UNITS	02	03	08
FUEL HYDROCARBONS	MG/KG	730	1200	67
HYDROCARBON RANGE		C6-C12	C7-C12	C9-C18
HYDROCARBONS QUANTITATED USING		GASOLINE	GASOLINE	DIESEL
FUEL HYDROCARBONS	MG/KG	460	-	-
HYDROCARBON RANGE	MG/KG	C12-C36	-	-
HYDROCARBONS QUANTITATED USING	MG/KG	DIESEL	-	-
SURROGATE:				
O-TERPHENYL (%)		95	109	108