3R - 227

REPORTS

DATE:

July, 1997

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

Pit Closure Report

July 1997

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520

PHILIP ENVIRONMENTAL

Closure Checklist

Meter Code 74943

Summary	☑
Site Map	☑
Site Assessment Sheet	☑

Phase I Excavation Y

closure form	☑
soil analytical results	☑
soil chain-of-custody	☑
groundwater analytical results	☐
groundwater chain-of-custody	☐

Phase II Soil Boring Y

boring log	☑
soil analytical results	☑
soil chain-of-custody	☑
well installation form	☑
development form	☑
groundwater analytical	☑
groundwater chain-of-custody	☑

Phase III Excavation Y

closure form	☑
soil analytical results	☑
soil chain-of-custody	☑
groundwater analytical	☐
groundwater chain of-custody	☐

Recon/Geoprobe Y

groundwater analytical	☑
soil-gas analytical	☐

If item boxes are not checked they are not applicable

PHILIP ENVIRONMENTAL

Environmental Services Group
Southern Region

New Mexico Com G1
Meter Code 74943

Pit was excavated to 12 feet beneath ground surface. The headspace soil reading from the excavation bottom was 200 parts per million. Soil analytical were as follows; benzene - 3.62 mg/kg, total BTEX - 250 mg/kg, TPH - 3,720 mg/kg.

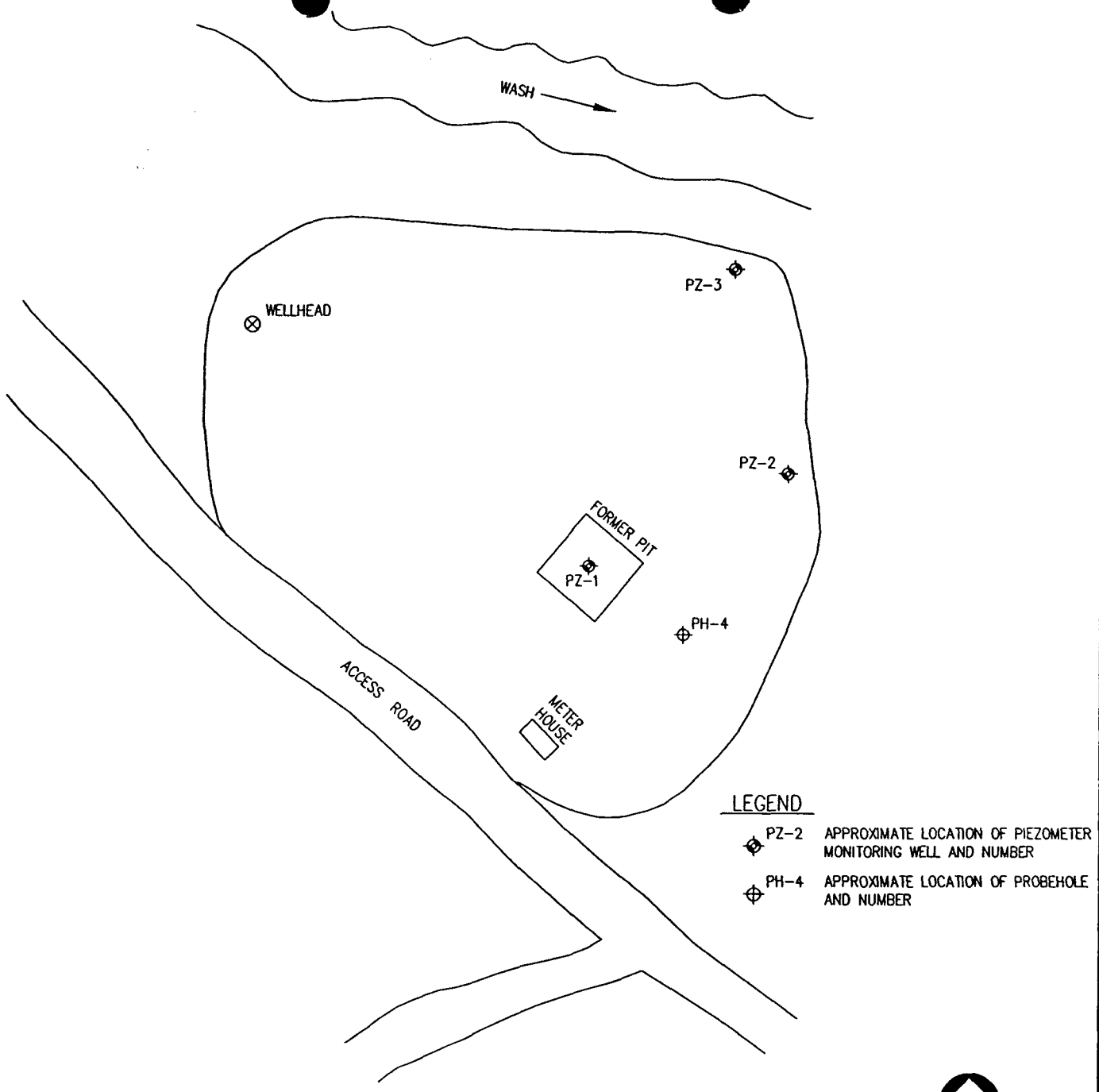
One soil boring was completed and a monitoring well was installed. A soil sample was collected from 15-17 feet beneath ground surface. Soil boring analytical are as follows: benzene <0.03 mg/kg, total BTEX - 10 mg/kg, TPH - 267 mg/kg. Groundwater was encountered at 18.7 feet beneath ground surface and a monitoring well was installed. Initial groundwater analytical were as follows: benzene - 5.52 ppb, toluene - 33.3 ppb, ethyl benzene - <2.5 ppb, total xylenes - 30.3 ppb.

The pit was re-excavated to 21 feet beneath ground surface and the monitoring well was removed. The headspace soil reading from the excavation bottom was 12.5 parts per million. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX - <3 mg/kg, TPH - <10 mg/kg.

A Geoprobe survey was conducted and groundwater samples were collected. Groundwater analytical were as follows:
PZ1: benzene - <1 ppb, toluene - <1 ppb, ethyl benzene - <1 ppb, total xylenes - <3 ppb.
PZ2: benzene - <1 ppb, toluene - 1.2 ppb, ethyl benzene - <1 ppb, total xylenes - <3 ppb.
PZ3: benzene - <1 ppb, toluene - <1 ppb, ethyl benzene - <1 ppb, total xylenes - <3 ppb.
PH4: benzene - <1 ppb, toluene -3.55 ppb, ethyl benzene - <1 ppb, total xylenes - 3.77 ppb.

This site is ready for closure based on the following:

- Initial groundwater sample was below standards
- Re-excavation soil samples were below standards.
- Geoprobe groundwater samples from the center of the former pit and downgradient of the former pit were below standards.



NOTE: THIS FIGURE WAS PREPARED USING A SITE SKETCH MADE BY C.M. CHANCE, PHILIP ENVIRONMENTAL.

PHILIP ENVIRONMENTAL

NO.	REVISION	BY	APPR.	DATE
2	GENERAL REVISIONS	M.R.W.		4/30/97
1	GENERAL REVISIONS	M.R.W.		4/29/97

TITLE:
SITE PLAN
NM COM G1 74943
T30-R10-S36-P

SCALE	AS NOTED	DATE
DWN:	M.R.W.	4/28/97
DES:		
CHKD:		
APPD:		

PROJECT NO: 17520
EPFS PITS
BLOOMFIELD, NM

FIGURE 1 REV: 2

COL. J:\17520\...\CL1-1

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 74943 Location: NM COM G1
Operator #: 0263 Operator Name: Texaco P/L District: Bloomfield
Coordinates: Letter: P Section 36 Township: 30 Range: 10
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 1/16/95 Area: 10 Run: 83

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 Vaca Canyon (off of 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: 60 **POINTS**

REMARKS

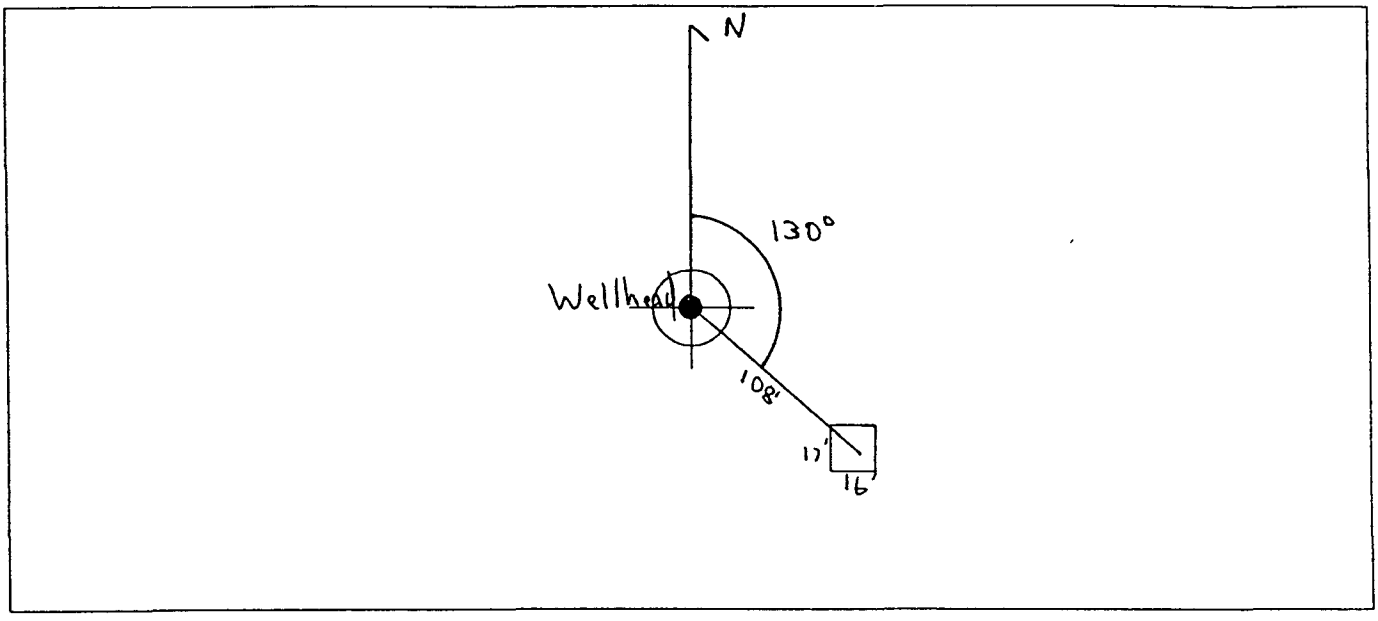
Remarks : Redline Book: Inside Vulnerable Zone Topo: Inside
1 pit. Will close. Liquid in pit

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 130° Footage from Wellhead 108'

b) Length : 17' Width : 16' Depth : 4'



REMARKS

Remarks :

Pictures @ 0846 hr 5-8 roll 1

Completed By:

Cory Chang
Signature

1/16/95
Date

Phase I Excavation

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 74943 Location: NM COM G1

Coordinates: Letter: P Section 36 Township: 30 Range: 10

Or Latitude _____ Longitude _____

Date Started : 1-31-95 Run: 10 83

FIELD OBSERVATIONS

Sample Number(s): KP401 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 200 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: 1-31-95 Pit Closed By: B.E.I

REMARKS

Remarks : Some Line markers. started Remediating to 12' Soil Turned Dark gray with a H.C ordor. At 12' Bottom of Pit Brown Looking with HC. ordor. All Four sides of Pit Black Looking with Hc. ordor.

Signature of Specialist: Kelly Padilla

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP401	946620
MTR CODE | SITE NAME:	74943	NM COM G1
SAMPLE DATE | TIME (Hrs):	1/31/95	1115
PROJECT:	Phase I ~~Drilling~~ EXCAVATION	
DATE OF TPH EXT. | ANAL.:	2/2/95	2/2/95
DATE OF BTEX EXT. | ANAL.:	2/1/95	2/2/95
TYPE | DESCRIPTION:	VC	Brown sand and clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	3.62	MG/KG				
TOLUENE	82.7	MG/KG				
ETHYL BENZENE	12.4	MG/KG				
TOTAL XYLENES	151	MG/KG				
TOTAL BTEX	250	MG/KG				
TPH (418.1)	3,720	MG/KG			1.93	28
HEADSPACE PID	200	PPM				
PERCENT SOLIDS	88.0	%				

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

The Surrogate Recovery was at 84.5 for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Fullen INGVZPIT.XLS Date: 2-22-95

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Kelly Padilla DATE: 1-31-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
946620	1-31-95	1115	Soil	KP 401	1	VC	Y	X				362	

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kelly Padilla 1-31-95	1700	Brenda Kuss	Brenda Kuss	2/1/95 1010	
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-08-0565 A (Rev. 05-94)

Phase II Soil Boring

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.
4000 Monroe Road
ington, New Mexico 87401
326-2262 FAX (506) 326-2388

Borehole # BH-1
Well # MW-1
Page 1 of 1

Project Name EPNG Pits

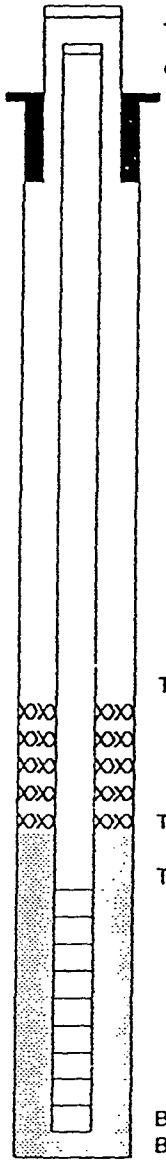
Project Number 14509 Phase 6000 77
Project Location New Mexico Com GI 74940

Elevation
Well Location
GWL Depth 16.5'
Installed By K. Padilla

Date/Time Started 5/22/95 - 1230
Date/Time Completed 5/22/95 1410

On-Site Geologist CM Chance
Personnel On-Site M. Donahue, K. Padilla, F. Rivera
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface		
Item	Material	Depth
Top of Protective Casing		NA
Bottom of Protective Casing		NA
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete		NA
Bottom of Concrete		NA
Top of Grout	3-94# bag Portland	0'
Bottom of Grout	.25-sack bag bent	6.0'
Top of Well Riser	15' sch40 PVC	+3'
Bottom of Well Riser	Well riser	11.5
Top of Well Screen	15' 0.01 slot	11.5
Bottom of Well Screen	sch40 PVC	26.7'
Top of Peltonite Seal	2-50# Bags Volclay Environplug	6.0'
Bottom of Peltonite Seal		8.5
Top of Gravel Pack	11-50# Bags	8.5
Bottom of Gravel Pack	10-20 silica sand	27'
Top of Natural Cave-In		NA
Bottom of Natural Cave-In		NA
Top of Groundwater		16.5'
Total Depth of Borehole		27'



Top of Protective Casing	NA
Top of Riser	+3'
Ground Surface	0
Top of Seal	6.0'
Top of Gravel Pack	8.5
Top of Screen	11.5
Bottom of Screen	26.7'
Bottom of Borehole	27'

Comments: Bent. hydrated w/ 5 gal potable water - ft Well protector & padlock placed on well

Geologist Signature CM Chance

-10-83 Bloomfield

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 New Mexico Com GI 74943

Elevation
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By M. Donahue/K. Padilla
Date/Time Started 5/22/95 - 1040 1114
Date/Time Completed 5/22/95 1236

Well Logged By CM Chance
Personnel On-Site M. Donahue, K. Padilla, F. Rivera
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/H S	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15-17	4"	Blk silty SAND, vf-f sand, loose, slmoist, odor			0	>	LS/80	-1129
				Br silty SAND, vf-f sand, loose, saturated						-GW 18.7'
20	2	20-22	16"	Br sandy CLAY, soft, vf sand, med plastic			0	6		-1139 SS saturated
25				TDB 22'						
30										
35										
40										

Comments: GW@17' after setting ½ hr. 15-17' sample submitted to lab (BTEX, TPH) CMC 20
2nd sample saturated

Geologist Signature Cay Chance

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC20	946831
MTR CODE | SITE NAME:	74943	NM COM G1
SAMPLE DATE | TIME (Hrs):	5/23/95	1129
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	5/25/95	5/251995
DATE OF BTEX EXT. | ANAL.:	5/30/95	6/1/95
TYPE | DESCRIPTION:	VG	Brown sand and clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.03	MG/KG				
TOLUENE	3.40	MG/KG				
ETHYL BENZENE	0.37	MG/KG				
TOTAL XYLENES	6.20	MG/KG				
TOTAL BTEX	10.0	MG/KG				
TPH (418.1)	267/150 (EPA SOIL)	MG/KG			1.96	28
HEADSPACE PID	803	PPM				
PERCENT SOLIDS	86.0	%				

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

The Surrogate Recovery was at 110 for this sample All QA/QC was acceptable.

Narrative:

ATI analyzed this sample.

DF = Dilution Factor Used

Approved By: John Fowler INGVZPIT.XLS Date: 6/8/95

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER: # 24324
PROJECT NAME: Pit Closure Project
SAMPLERS: (Signature) Cory Chavez
DATE: 5/23/95

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
14630	5/23/95	0851	SOIL	CMC 19	1	VG	✓	✓			83	19	64.5-65' Hovck GCA1A89881
14631		1129		CMC 20	1	VG	✓	✓			803	20	15-17 NMCOM 61 74943
		1129	CMC 5/23/95	CMC 21	1	D	✓	✓			803	21	Dup Not enough sample For Duplicate
14632		1135		CMC 21	1	B	✓	✓			NA	21	Field Blank NMCOM 61 74943
14633	5/23/95	1511	Soil	CMC 22	1	VG	✓	✓			12	22	30-32 Florance AE#1A 90547
	work 2/24/95		work 2/24/95										

CMC 5/23/95

RELINQUISHED BY: (Signature) Cory Chavez — DATE/TIME 5/23/95 1800
RECEIVED BY: (Signature) Lynn Caselee — DATE/TIME 5/24/95 1015
RELINQUISHED BY: (Signature) Lynn Caselee
RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)
RECEIVED BY: (Signature)
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 08-0565 A (Rev 05-94)

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK2	946842
MTR CODE | SITE NAME:	74943	NM COM G #1
SAMPLE DATE | TIME (Hrs):	5/30/95	1220
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. | ANAL.:	6/1/95	6/1/95
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	5.52	PPB				
TOLUENE	33.3	PPB				
ETHYL BENZENE	<2.5	PPB				
TOTAL XYLENES	30.3	PPB				
TOTAL BTEX	69.1	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 100 for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

TDS = 4,200 ppm

Approved By: John Tebbe Date: 6/7/95

946842,6/24/97

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER	PROJECT NAME	SAMPLERS: (Signature)	DATE:
	Pit Closure Project # 24324	Sarah Kelly	5/30/95

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020			TDS	SEQ #	REMARKS
946841	5/30/95	1000	W	SEK1	1	W		✓					Trip Blank 05/30/95
946842	05/30/95	1220	W	SEK2	3	W		✓			✓	1	NM Com G#1, 74-943
946843	05/30/95	1220	W	SEK3	2	WD		✓				2	NM Com G#1, 74-943
946844	05/30/95	1415	W	SEK4	3	W		✓			✓	3	W.D. Heath B-5, 87-493
946845	05/30/95	1600	W	SEK5	3	W		✓			✓	4	Sandoval GC A1A, 89-620

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Sarah Kelly	05/30/95 1605	John Ford 40°C			
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

505-599-2134 FAX: 505-599-2261

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

FM-08-0565A (Rev. 03-9-

PHILIP ENVIRONMENTAL Well Development and Purging Data

☒ Development ☐ Purging Well Number Meter # 74-943.

Serial No. WDPD- Page ____ of ____

Project Name EPNG Drilling Project Manager ____ Project No. 14509

Client Company EPNG Phase.Task No. 6003.77

Site Name N.M. 6 25 Com G #1, Site Address ____

Development Criteria

- ☒ 3 to 5 Casing Volumes of Water Removal
- ☒ Stabilization of Indicator Parameters
- ☐ Other ____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other ____

Water Volume Calculation

Initial Depth of Well (feet) 30.23

Initial Depth to Water (feet) 16.21

Height of Water Column in Well (feet) 14.02

Diameter (inches): Well 2" Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing			2.38
Gravel Pack		X3	
Drilling Fluids			
Total			7.15

Instruments

	Serial No. (If applicable)
☒ pH Meter	
☐ DO Monitor	
☒ Conductivity Meter	
☒ Temperature Meter	
☐ Other	

Water Disposal

Into drums

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/30/95	1050		X				3	3			59.0	6.83	3340		brown, silty
	1105		X		AK	5/30/95	35	38			62.1	6.98	3230		" "
	1120		X				5	13			59.3	7.14	3400		" "
	1130		X				4	17			59.3	7.19	3430		" brown, cloudy
	1140		X				3	20			61.9	7.22	3840		" "
	1150		X				2	22			60.6	7.26	3656		" "
	1155		X				2	24			63.4	7.26	3860		" "
	1200		X				2	26			63.9	7.26	3860		" "

Circle the date and time that the development criteria are met.

Comments Sampled at 1220.

Developer's Signature(s) Sarah Kelly Date 5/30/95 Reviewer ____ Date ____

Form A0101 Rev. 03/21/94

EL PASO NATURAL GAS - FIELD SERVICES LAB

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

PIT PROJECT PHASE II Monitor Well Waters: 946841 to 946847

QA/QC for 6/01/95

LABORATORY DUPLICATES:

SAMPLE NUMBER 946842	TYPE	SAMPLE RESULT (S) (PPB)	DUPLICATE RESULT (D) (PPB)	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	2nd Run	5.52	5.45	1%	+/- 35 %	X	
Toluene	2nd Run	33.3	32.8	2%	+/- 35 %	X	
Ethyl benzene	2nd Run	0.79	0.80	1%	+/- 35 %	X	
Total Xylenes	2nd Run	30.3	29.7	2%	+/- 35 %	X	

Narrative: Acceptable.

LABORATORY CALIBRATION CHECKS, LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV 50 PPB std	TYPE	KNOWN RESULT (PPB)	FOUND RESULT (PPB)	%R	ACCEPTABLE RANGE	YES	NO
Benzene	Standard	50.0	45.8	91.6	75 - 125 %	X	
Toluene	Standard	50.0	47.0	93.9	75 - 125 %	X	
Ethyl benzene	Standard	50.0	46.0	92.0	75 - 125 %	X	
Total Xylenes	Standard	150	140.4	93.6	75 - 125 %	X	

SAMPLE NUMBER LCS 50 PPB	TYPE	KNOWN RESULT (PPB)	FOUND RESULT (PPB)	%R	ACCEPTABLE RANGE	YES	NO
Benzene	Standard	50.0	44.8	90	39 - 150	X	
Toluene	Standard	50.0	45.7	91	46 - 148	X	
Ethyl benzene	Standard	50.0	44.0	88	32 - 160	X	
Total Xylenes	Standard	150	134.9	90	Not Given	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE NUMBER 946842	SPIKE ADDED (SA) PPB	SAMPLE RESULT (S) (PPB)	SPIKE SAMPLE RESULT (SR) (PPB)	%R	ACCEPTABLE RANGE	YES	NO
Benzene	50.0	5.52	45.2	79	75 - 125 %	X	
Toluene	50.0	33.3	78	89	75 - 125 %	X	
Ethyl benzene	50.0	0.79	45.0	88	75 - 125 %	X	
Total Xylenes	150	30.3	168	92	75 - 125 %	X	

Narrative: Matrix interference problems with this sample.

LABORATORY , REAGENT AND TRIP BLANKS:

SAMPLE ID	SOURCE	Component (PPB)	STATUS
Benzene	EPNG Water/MeOH	<2.5	ACCEPTABLE
Toluene	EPNG Water/MeOH	<2.5	ACCEPTABLE
Ethyl benzene	EPNG Water/MeOH	<2.5	ACCEPTABLE
Total Xylenes	EPNG Water/MeOH	<7.5	ACCEPTABLE

Narrative: Acceptable!

Approved By: John Fowler Date: 1-Jun-95

WQ060195.XLS

Phase III Excavation

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 74943 Location: NM com G1

Coordinates: Letter: P Section 34 Township: 30 Range: 10

Or Latitude _____ Longitude _____

Date Started : 11-15-95 Area: 10 Run: 83

OBSERVATIONS

Sample Number(s): DS132 _____ _____ _____

Sample Depth: 21 Feet

Final PID Reading 12.5 PID Reading Depth 21 Feet

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

Final Dimensions: Length 45 Width 28 Depth 21

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 1304 LT 11/21/95
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Overburden Cubic Yards 40 LT 11/21/95

Soil Disposition:

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

Pit Closure Date: 11-17-95 Pit Closed By: Philip

Approv. By ALTON JAMES (E.P.N.G.

REMARKS

Remarks : EXCAVATED pit - REMOVED MONITOR WELL - PIT SIZE 45x28x21 PID READINGS (N- 45)(S- 3.5) (E- 57)(W- 1.9)

Signature of Specialist: Nicholas Schaller

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NS132	947784
MTR CODE | SITE NAME:	74943	NM COM G #1
SAMPLE DATE | TIME (Hrs):	11/15/95	1430
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. | ANAL.:	11/17/95	11/17/95
DATE OF BTEX EXT. | ANAL.:	11/16/95	11/16/95
TYPE | DESCRIPTION:	VG	Light brown 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)	<10	MG/KG			1.99	28
HEADSPACE PID	12.5	PPM				
PERCENT SOLIDS	85.3	%				

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

The Surrogate Recovery was at 91.0 for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Keller INGVZPIT.XLS Date: 1/21/95

El Paso Natural Gas Company

Phase III

CHAIN OF CUSTODY RECORD

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Nicholas Schmaltz

DATE: 11-15-95

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	REQUESTED ANALYSIS: BTEX EPA 8020	REQUESTED ANALYSIS: LAB PID			SEQUENCE #	REMARKS
947784	11-15-95	1130	Soil	NS132	1	VG	X	X				119	74943 NM COM G-1

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Nicholas Schmaltz	11-15-95 1730	Julie Dudde	Julie Dudde	11/16/95 900	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR 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*

RECON®/Geoprobe

SITE ACTIVITIES

21-Feb-97

Meter/Line #: 74943

Location/Line #: NM Com G #1

MW#:

Depth to GW:

Depth to Product:

Product Thickness:

Date: 10/24/96

Activity: Geoprobe

Comments: Install 3 piezos & 1 probe hole. PZ1 in center of pit

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC227	947951
MTR CODE | SITE NAME:	74943	NM Com G 1
SAMPLE DATE | TIME (Hrs):	10/24/96	1505
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	10/28/96	10/28/96
TYPE | DESCRIPTION:	PZ1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 97.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: _____ Date: 10/30/96

947950.XLS,10/29/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC228	947952
MTR CODE | SITE NAME:	74943	NM Com G 1
SAMPLE DATE | TIME (Hrs):	10/24/96	1620
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	10/28/96	10/28/96
TYPE | DESCRIPTION:	PH4	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	3.55	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	3.77	PPB				
TOTAL BTEX	7.32	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 94.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Loudon Date: 10/30/96

947952.XLS,10/29/96

El Paso Natural Gas Company

A 2346

CHAIN OF CUSTODY RECORD

Project No.	Project Name
16297	EPFS PITS

Samplers: (Signature) Cory Chavez Date: 10/24/96

mw	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX				Remarks
~~47950~~	10/24/96				TRIPBLANK	1	ICE/4°C					TRIP BLANK
47950		1005		✓	CMC226	2						PH6 Mae Gail Com 1 73079
47951		1505		✓	CMC227	2						PZ1 NM COM G 1 74943
47952		1620		✓	CMC228	2						PH4 "

Cmvs 10/24/96

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cory Chavez	10/24/96 1730	Kelly Stovall	Kelly Stovall	10/25/96 11:20	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
				10-25-96 1120	Maria Armenta
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	

Carrier Co:	Carrier Phone No.	Date Results Reported / by: (Signature)
Air Bill No.:		

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC229	947953
MTR CODE | SITE NAME:	74943	NM Com G 1
SAMPLE DATE | TIME (Hrs):	10/25/96	1000
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	10/28/96	10/28/96
TYPE | DESCRIPTION:	PZ2	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	1.20	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	1.20	PPB				

–BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 96.3 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: John Loehr Date: 10/30/96

947953.XLS,10/29/96

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC230	947954
MTR CODE | SITE NAME:	74943	NM Com G 1
SAMPLE DATE | TIME (Hrs):	10/25/96	1015
PROJECT:	Geoprobe	
DATE OF BTEX EXT. | ANAL.:	10/28/96	10/28/96
TYPE | DESCRIPTION:	PZ3	Water

Field Remarks: ______

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	<6	PPB				

—BTEX is by EPA Method 8020—

The Surrogate Recovery was at 97.1 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: *[signature]* Date: 10/30/96

947953.XLS,10/29/96

4°C

A 2347

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Project No.	Project Name
16297	EPFS PITS

Samplers: (Signature) Cory Chavez

Date: 10/25/96

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTEX	Remarks
7953	10/25/96	1000		✓	CMC229	2	HCl/4°	X	PZ2 NM COMGI 74943
7954	↓	1015		✓	CMC230	2	↓	X	PZ3 "
	↓				TRIP BLANK	1	↓		

CMC 10/25/96

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Cory Chavez	10/25/96	Kelly Stovall	Kelly Stovall	10/25/96 11:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
				10-25-96 1130	Maria Armenta
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	

Carrier Co: | Carrier Phone No. | Date Results Reported / by: (Signature)

Air Bill No.:

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX

Samples: 947950 - 947955

QA/QC for 10/28/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	Standard	50.0	53.6	107	75 - 125 %	X	
Toluene	Standard	50.0	52.8	106	75 - 125 %	X	
Ethylbenzene	Standard	50.0	52.8	106	75 - 125 %	X	
m & p - Xylene	Standard	100	102	102	75 - 125 %	X	
o - Xylene	Standard	50.0	53.0	106	75 - 125 %	X	
SAMPLE NUMBER LCS LA-45476 25 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	25.0	26.9	108	39 - 150	X	
Toluene	Standard	25.0	26.4	106	46 - 148	X	
Ethylbenzene	Standard	25.0	26.5	106	32 - 160	X	
m & p - Xylene	Standard	50.0	50.7	101	Not Given	X	
o - Xylene	Standard	25.0	26.7	107	Not Given	X	
SAMPLE NUMBER CCV LA-52589 50 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	50.0	52.0	104	75 - 125 %	X	
Toluene	Standard	50.0	50.9	102	75 - 125 %	X	
Ethylenzene	Standard	50.0	51.0	102	75 - 125 %	X	
m & p - Xylene	Standard	100	97.1	97.1	75 - 125 %	X	
o - Xylene	Standard	50.0	51.3	103	75 - 125 %	X	
SAMPLE NUMBER CCV LA-52589 50 PPB	**TYPE**	**EXPECTED RESULT PPB**	**ANALYTICAL RESULT PPB**	**%R**	**ACCEPTABLE RANGE**	**YES**	**NO**
Benzene	Standard	50.0	51.8	104	75 - 125 %	X	
Toluene	Standard	50.0	50.7	101	75 - 125 %	X	
Ethylbenzene	Standard	50.0	50.6	101	75 - 125 %	X	
m & p - Xylene	Standard	100	96.4	96.4	75 - 125 %	X	
o - Xylene	Standard	50.0	51.2	102	75 - 125 %	X	

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 947950 - 947955

LABORATORY DUPLICATES:

SAMPLE ID 947951	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X	
Toluene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X	
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X	
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0.00	+/- 20 %	X	
o - Xylene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis 947951	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	50	<1.0	52.4	105	75 - 125 %	X	
Toluene	50	<1.0	51.9	104	75 - 125 %	X	
Ethylbenzene	50	<1.0	51.7	103	75 - 125 %	X	
m & p - Xylene	100	<2.0	97.9	97.9	75 - 125 %	X	
o - Xylene	50	<1.0	52.0	104	75 - 125 %	X	

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (None analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: Mdw Approved By: John Taylor Date: 10/30/96

QW1023.XLS