

**3R -** 241

# **REPORTS**

**DATE:**

1997



**Certified Mail: #Z 295 387 297; #Z 295 387 296**

February 27, 1998

Mr. William C. Olson  
New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, NM 87504

**RECEIVED**

**MAR 02 1998**

Environmental Bureau  
Oil Conservation Division

**Re: 1997 Groundwater Annual Report**

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for 57 groundwater impacted locations that were identified during our pit closure project of 1994/1995.

Of the 57 reports, EPFS hereby requests your approval for closure of 11 of these locations. The 11 reports for which EPFS requests closure, are in 2 separate binders entitled "Request for Closure".

After you have had an opportunity to review these updates, EPFS would like to schedule a meeting with you to discuss issues related to closure criteria for some of the more complex locations that are currently being addressed.

If you have any questions regarding this information, please call me at 505/599-2141. I will contact you within the next quarter to schedule a meeting.

Sincerely,

A handwritten signature in cursive script that reads 'Sandra D. Miller'.

Sandra D. Miller  
Environmental Manager

xc: Mr. Bill Liesse, BLM w/o enclosures  
Mr. Denny Foust, NMOCD - Aztec w/enclosures; **Certified Mail #Z 295 387 298; #Z 295 387 299**  
Ms. Charmaine Tso, Navajo EPA w/enclosures; **Certified Mail #Z 295 387 292**

**SAN JUAN BASIN PIT CLOSURES**  
**San Juan Basin, New Mexico**

**El Paso Field Services Pit Project**  
**Pit Closure Report**

**March 1998**

**Prepared For**

**El Paso Field Services**  
**Farmington, New Mexico**

**Project 17520**

**PHILIP**  
**ENVIRONMENTAL**

# EPFS GROUNDWATER PITS

## 1997 ANNUAL GROUNDWATER REPORT

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TRUJILLO GC #1 PC  
Meter/Line ID - 72089

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### SITE DETAILS

Legals - Twn: 29N      Rng: 10W      Sec: 21      Unit: M  
NMOCD Hazard Ranking: 60      Land Type: FEE  
Operator: AMOCO PRODUCTION COMPANY

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### PREVIOUS ACTIVITIES

Site Assessment: Oct-95      Excavation: Oct-95 (1,060 cy)      Geoprobe: Nov-95

The pit was excavated to approximately 6 feet below ground surface (bgs) and a soil sample was collected. The headspace soil reading from the excavation bottom was 483 parts per million. Soil analytical from the excavation bottom were as follows; benzene - <0.5 mg/kg, total BTEX - 1.2 mg/kg, TPH - 3,620 mg/kg. Groundwater was encountered at approximately 5 feet bgs and a groundwater sample was collected from the open excavation. The sample was above standards for benzene.

Piezometers were installed in the center, and up and down gradient of the former pit. Groundwater samples collected from the piezometers were all below standards for BTEX, as presented in Figure 1.

### CONCLUSIONS

Based on groundwater data collected from temporary piezometers, groundwater flow trends to the south, as presented in Figure 1. Although the groundwater sample collected from the excavation was above standards, it was not indicative of true groundwater conditions, due to the fact it was collected from an excavation and not a monitoring well (the sample was likely biased due to a high silt content).

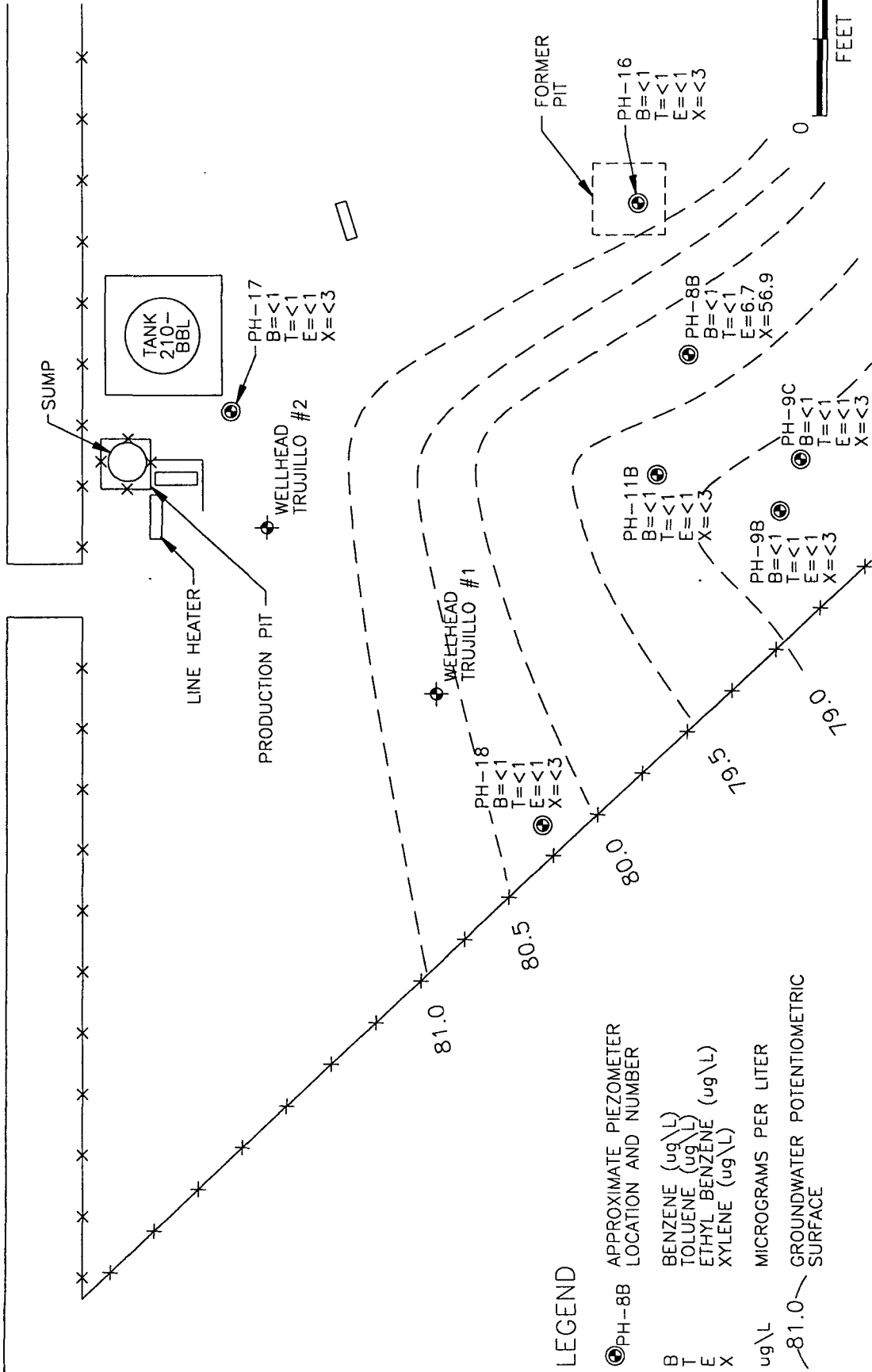
Approximately 1,060 cubic yards of soil have been excavated from this pit, and the majority of the source material has been removed.


Groundwater samples collected from PH-16, which is located in the center of the former pit, was below standards for BTEX. All groundwater samples collected from this site have been well below standards for BTEX.

### RECOMMENDATIONS

- EPFS requests closure at this site.

OLD HWY. 64



 <b>PHILIP SERVICES</b> CORP.	TITLE:  TRUJILLO GAS COM. NO. 1 PC  METER 72089					PROJECT NO.: EPFS GW PITS	17520
		DWN: TMM	DES.: CC				
		CHKD: CC	APPD:				
		DATE: 1/22/98	REV.: 0			FIGURE 1	



# FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 72089 Location: TRUSILLO GAS COM #1 PC  
 Operator #: 0203 Operator Name: AMOCO P/L District: BLOOMFIELD  
 Coordinates: Letter: M Section 21 Township: 29 Range: 10  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator \_\_\_\_\_ Location Drip: X Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 10-2-95 Area: 10 Run: 12

SITE ASSESSMENT

## NMOCD Zone:

(From NMOCD  
Maps)

Inside

Outside

## Land Type:

BLM

State

Fee

Indian

☐ (1)

☐ (2)

☒ (3)

☒ (1)

☐ (2)

## Depth to Groundwater

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☒ (1)

☐ (2)

☐ (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)

HOUSE W/ WELL AND STOCK APPROX. 250 FEET FROM PIT

## Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points)

200 Ft to 1000 Ft (10 points)

Greater Than 1000 Ft (0 points)

☒ (1)

☐ (2)

☐ (3)

Name of Surface Water Body IRRIGATION DITCH

(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

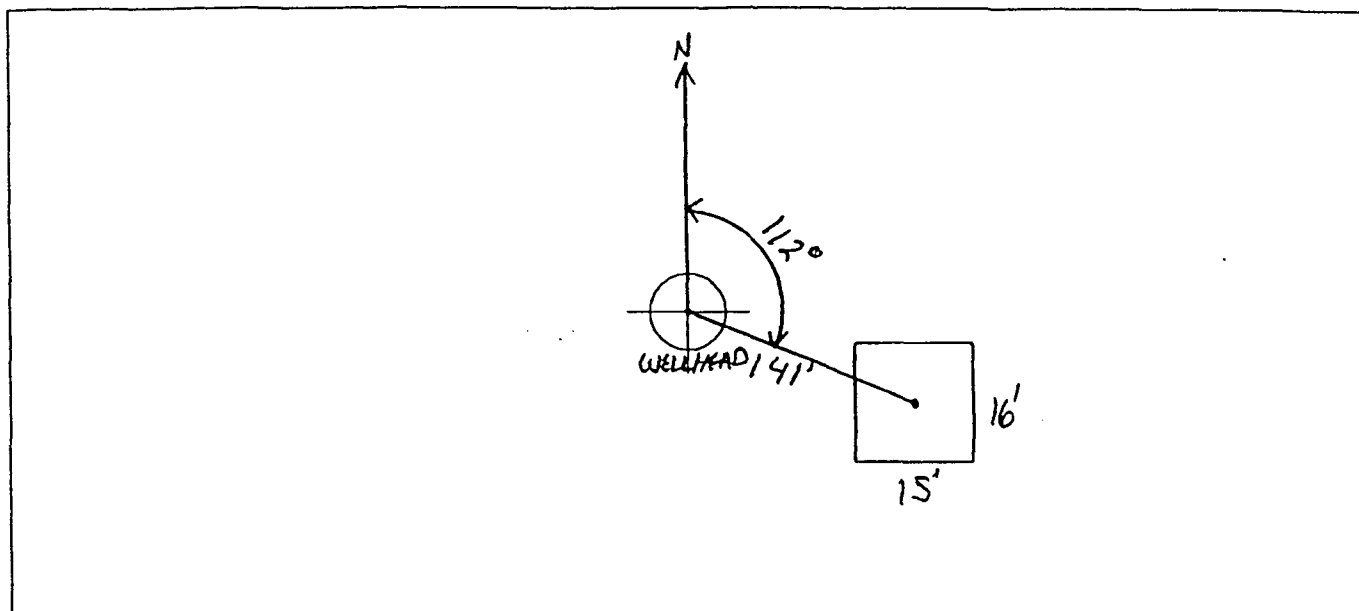
EMAF 5

Remarks : REALINE & TOPO SHOW LOCATION INSIDE V.Z. THERE IS ONLY ONE PIT ON THIS LOCATION. IT IS A LOCATION DRIP PIT AND BELONGS TO EPNG. PIT IS IN A PRIVATE OWNERS PASTURE. THERE IS VEGETATION

ORIGINAL PIT LOCATION

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 112° Footage from Wellhead 141'  
b) Length : 16' Width : 15' Depth : 2'



REMARKS

Remarks :

PHOTOS-0819

Handwritten notes and remarks section, currently blank.

Completed By:

Robert Thompson

10.2.95

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# **PHASE I EXCAVATION**

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# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 72089 Location: TRUJILLO Gas com #1 P

Coordinates: Letter: m Section 21 Township: 29 Range: 10

Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Date Started : 10-2-95 Run: 10 12

FIELD OBSERVATIONS

Sample Number(s): MK 477 <sup>H<sub>2</sub>O</sup> MK 478 MK 479 MK 480  
MK 481 MK 482 MK 483

Sample Depth: 6 Feet

Final PID Reading 4183 PPM PID Reading Depth 6 Feet

Yes No

Groundwater Encountered ☒ ☐ Approximate Depth 5 Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 1060

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☐ ☒ Tierra

Other Facility ☐ Name: \_\_\_\_\_

Pit Closure Date: 10-9-95 Pit Closed By: Philip

REMARKS

Remarks : Dug sample hole hit water all sample  
were grab TOOK ON 10-5-95 EXCEPT water which was  
Taken on 10-2-95 S-wall 37 PPM E-wall - 71 PPM Bottom - 35 PPM  
Test Hole 40' from Hole 4 PPM W-wall 566 PPM N-wall - 28 PPM

Signature of Specialist: \_\_\_\_\_



**El Paso**  
**Natural Gas Company**

Share I

## CHAIN OF CUSTODY RECORD

Page \_\_\_\_\_ of \_\_\_\_\_

[illegible]



## Page \_\_\_\_\_ of \_\_\_\_\_.

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



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER: 947568  
FIELD ID: MK 477  
MTR CODE: 72089  
SAMPLE DATE: 10-02-95  
SAMPLE TYPE: W [Exc]  
SITE NAME: Trujillo Gas Com #1  
PROJECT: Phase I Excavation  
DATE OF BTEX ANALYSIS: 10/3/95  
FIELD COMMENTS: TPH & BTEX Requested

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	NA		None
BENZENE (PPB)	814 <del>799</del>	(X100) <del>799</del>	10
TOLUENE (PPB)	< 250	D (X100)	740
ETHYL BENZENE (PPB)	701	D (X100)	750
TOTAL XYLENES (PPB)	8710	D (X100)	620
SURROGATE % RECOVERY	96%	Allowed Range 80 to 120 %	

NOTES:



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 478	947584
MTR CODE   SITE NAME:	<del>78</del> <sup>K60445</sup> 72089	Trujillo Gas Com #1 PC
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL:	10/5/95	
DATE OF BTEX EXT.   ANAL:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: South Wall

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	1.0	MG/KG				
TOTAL XYLENES	8.7	MG/KG				
TOTAL BTEX	9.7	MG/KG				
TPH (418.1)	157	MG/KG			215	28
HEADSPACE PID	377	PPM				
PERCENT SOLIDS	81.7	%				

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

The Surrogate Recovery was at 101% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By: John F. [Signature]Date: 10-9-95



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 477	947585
MTR CODE   SITE NAME:	<del>78</del> <sup>KEDRICKS</sup> 72089	Trujillo Gas Com #1 PC
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL.:	10/6/95	
DATE OF BTEX EXT.   ANAL.:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: East wall

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			204	25
HEADSPACE PID	71	PPM				
PERCENT SOLIDS	83.7	%				

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

The Surrogate Recovery was at 101% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

*[Signature]*

Date:

10-9-95



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 480	947586
MTR CODE   SITE NAME:	78 <sup>600465</sup> 72089	Trujillo Gas Com #1 PC
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL.:	10/6/95	
DATE OF BTEX EXT.   ANAL.:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: Test Hole 40' From Edge of Pit

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			1.94	25
HEADSPACE PID	4	PPM				
PERCENT SOLIDS	85.1	%				

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

The Surrogate Recovery was at 98% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

*John Landon*

Date: 10-9-95



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 481	947587
MTR CODE   SITE NAME:	<del>78</del> <sup>K600485</sup> 72089	Trujillo Gas Com #1 PL
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL.:	10-6-95	
DATE OF BTEX EXT.   ANAL.:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: West WALL

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	2.4	MG/KG				
TOTAL XYLENES	7.8	MG/KG				
TOTAL BTEX	10.2	MG/KG				
TPH (418.1)	367	MG/KG			211	3P
HEADSPACE PID	566	PPM				
PERCENT SOLIDS	84.3	%				

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

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

*Ver. L. H.*

Date:

10-9-95





FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 482	947588
MTR CODE   SITE NAME:	<del>72</del> <sup>KBR/45</sup> 72089	Trujillo Gas Com #1 PC
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL:	10/6/95	
DATE OF BTEX EXT.   ANAL:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: NORTH WALL

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			2.57	22
HEADSPACE PID	28	PPM				
PERCENT SOLIDS	86.8	%				

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

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

DF = Dilution Factor Used

Approved By: [Signature]

Date: 10-9-95



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 483	947589
MTR CODE   SITE NAME:	<del>78</del> <sup>KODICKS</sup> 72089	Trujillo Gas Com #1 AC
SAMPLE DATE   TIME (Hrs):	10-05-95	
PROJECT:	Phase I	
DATE OF TPH EXT.   ANAL.:	10/6/95	
DATE OF BTEX EXT.   ANAL.:	10/6/95	10/6/95
TYPE   DESCRIPTION:	VG	

Field Remarks: BOTTOM

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	1.2	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	1.2	MG/KG				
TPH (418.1)	3620	MG/KG			210	23
HEADSPACE PID	359	PPM				
PERCENT SOLIDS	84.1	%				

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

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

DF = Dilution Factor Used

Approved By: John R. [Signature]Date: 10-9-95



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER: 947861  
FIELD ID: Trujillo -08B [KBG]  
MTR CODE: 72089  
SAMPLE DATE: 12/15/95  
SAMPLE TYPE: W  
SITE NAME: Trujillo Gas Com No. 1 PC PH-08B  
PROJECT: Recon  
DATE OF BTEX ANALYSIS: 12/18/95

FIELD COMMENTS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	N/A	N/A	None
BENZENE (PPB)	<12.5	D (x5)	10
TOLUENE (PPB)	<12.5	D (x5)	740
ETHYL BENZENE (PPB)	86.6	D (x10)	750
TOTAL XYLENES (PPB)	752	D, X.3 (x10)	620
SURROGATE % RECOVERY	98/114	Allowed Range 80 to 120 %	

NOTES:

Identification and quantification of peaks is complicated by matrix interference, esp. xylenes. -mh  
Xylenes probably biased high

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# **PIEZOMETERS**

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Natural Gas Company

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2328

# CHAIN OF CUSTODY RECORD

Project Name		Date		Sample Number		Type and No. of Sample Containers		Preservation Technique		Requested Analysis		Remarks	
2297	EPFS PITS	7/17/96						BTEX		Trueillo Gas Cont #/PC 72089			
18	7/17/96 1310	Water	CMC 193	2/60A	HC4/9	X			PZ-08B				
19	1320		CMC 194			X			PZ-11B				
20	1335		CMC 195			X			PZ-9B				
21	1345		CMC 196			X			PZ-9C				
22	1359		CMC 197			X			PZ-16				
23	1412		CMC 198			X			PZ-17				
24	1425		CMC 199			X			PZ-18				
25	7/17/96 -	TB	CMC 192	2/1 HC4/9		X			PZ-5MS	7/17/96 Trip Blank			
<p>NOTE - PZ 9B &amp; 9C required to be bailed each to collect 2-40ml bottles (26 (1 bail per bottle) due to low volume.</p> <p>PZ-16 - bottle very difficult to remove all air.</p>													
Received by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
my Chase		7/17/96 1515											
Received by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
Received by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Remarks: Fax to Gary on Martin	
				John Kulla		7/17/96 1515						Fax: 326-2386	
Carrier Phone No.		Date Results Reported / by: (Signature)											



Location No. \_\_\_\_\_

**WATER SAMPLING DATA**

Serial No. WSD- \_\_\_\_\_

Group List Number \_\_\_\_\_

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other \_\_\_\_\_Date 7/17/96Project Name EPFS PitsProject No. 16297Project Manager M. Neer

Phase/Task No. \_\_\_\_\_

Site Name Trujillo Gas Com #1 AC 72089**Sampling Specifications**

Requested Sampling

Depth Interval (feet) NA

Requested Wait Following

Development/Purging (hours) NA**Initial Measurements**Time Elapsed From Final Development/Purging (hours) NA

Initial Water Depth (feet) \_\_\_\_\_

Nonaqueous Liquids Present (Describe) \_\_\_\_\_

**Water Quality/Water Collection**

DO = Dissolved Oxygen; Cond. = Conductivity

Date	Time	Sampler Initials	Water Quality Readings				Water Collection Data					Notes (Explain in Comment Below)
			Temp (°C)	pH	DO (mg/L)	Cond (umhos/cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (ft)	Bail Depth (ft)	Final Water Depth (ft)	

Container Type: G = Clear Glass; A = Amber Glass; P = Plastic; V = VOA Vial (Glass); O = Other (Specify)

**Sample Containers**Preservatives: H = HCl; N = HNO<sub>3</sub>; S = H<sub>2</sub>SO<sub>4</sub>; A = NaOH; O = Other (Specify); Blank = None

Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments		
	Number	Type	Volume (mL)	Yes	No		Yes	No	Location	Sample I.D.	Time Well
W TDR											
2.01'	BTEX	2	V	40		✓	HCL	✓	PZ-08B	CMC193	1316 6'
3.96									PZ-11B	CMC194	1320 9'
2.40									PZ-9B	CMC195	1335 6'
3.32									PZ-9C	CMC196	1345 4.6
3.96									PZ-16	CMC197	1359
5.87									PZ-17	CMC198	1412
5.08	✓	✓	✓	✓	✓	✓	✓	✓	PZ-18	CMC199	1425
									Trip Blank	CMC192	

Filter Type \_\_\_\_\_

Chain-of-Custody Form Number \_\_\_\_\_

Comments PZ-9B & PZ-9C required required 2 separate bails for each 40ml vial  
due to low vol. in pizza. Also appeared to have dissolved phase hydro.

PZ-16 had 1-40ml vial very difficult to remove all air. PZ-18 had foam on EW4T.

Signature Sony ChanceDate 7/17/96

Reviewer \_\_\_\_\_

Date \_\_\_\_\_

# EPFS

## EL PASO FIELD SERVICES

### FIELD SERVICES LABORATORY ANALYTICAL REPORT

#### SAMPLE IDENTIFICATION

EPFS SAMPLE ID:	960618
SAMPLE NUMBER:	PZ-08B
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1310
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	<1.0	
TOLUENE	<1.0	
ETHYL BENZENE	6.7	
TOTAL XYLENES	56.9	
SURROGATE % RECOVERY	97.4	Allowed Range 80 to 120 %

NOTES:

# **EPFS**

## **EL PASO FIELD SERVICES**

### **FIELD SERVICES LABORATORY ANALYTICAL REPORT**

#### **SAMPLE IDENTIFICATION**

EPFS SAMPLE ID:	960619
SAMPLE NUMBER:	PZ-11B
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1320
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### **EPA Method 8020 (BTEX) RESULTS**

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	< 1.0	
TOLUENE	< 1.0	
ETHYL BENZENE	< 1.0	
TOTAL XYLENES	< 3.0	
SURROGATE % RECOVERY	93.3	Allowed Range 80 to 120 %

NOTES:



# **EPFS**

## **EL PASO FIELD SERVICES**

### **FIELD SERVICES LABORATORY ANALYTICAL REPORT**

#### **SAMPLE IDENTIFICATION**

EPFS SAMPLE ID:	960620
SAMPLE NUMBER:	PZ-9B
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1335
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### **EPA Method 8020 (BTEX) RESULTS**

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	<1.0	
TOLUENE	<1.0	
ETHYL BENZENE	<1.0	
TOTAL XYLENES	<3.0	
SURROGATE % RECOVERY	93.9	Allowed Range 80 to 120 %

NOTES:

# **EPFS**

## **EL PASO FIELD SERVICES**

### **FIELD SERVICES LABORATORY ANALYTICAL REPORT**

#### **SAMPLE IDENTIFICATION**

EPFS SAMPLE ID:	960621
SAMPLE NUMBER:	PZ-9C
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1345
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### **EPA Method 8020 (BTEX) RESULTS**

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	<1.0	
TOLUENE	<1.0	
ETHYL BENZENE	<1.0	
TOTAL XYLENES	<3.0	
SURROGATE % RECOVERY	94.4	Allowed Range 80 to 120 %

NOTES:

# EPFS

## EL PASO FIELD SERVICES

### FIELD SERVICES LABORATORY ANALYTICAL REPORT

#### SAMPLE IDENTIFICATION

EPFS SAMPLE ID:	960622
SAMPLE NUMBER:	PZ-16
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1359
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	1.35	
TOLUENE	<1.0	
ETHYL BENZENE	<1.0	
TOTAL XYLENES	<3.0	
SURROGATE % RECOVERY	94.2	Allowed Range 80 to 120 %

NOTES:

# **EPFS**

## **EL PASO FIELD SERVICES**

### **FIELD SERVICES LABORATORY ANALYTICAL REPORT**

#### **SAMPLE IDENTIFICATION**

EPFS SAMPLE ID:	960623
SAMPLE NUMBER:	PZ-17
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1412
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### **EPA Method 8020 (BTEX) RESULTS**

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	< 1.0	
TOLUENE	< 1.0	
ETHYL BENZENE	< 1.0	
TOTAL XYLENES	< 3.0	
SURROGATE % RECOVERY	93.4	Allowed Range 80 to 120 %

NOTES:

# EPFS

## EL PASO FIELD SERVICES

### FIELD SERVICES LABORATORY ANALYTICAL REPORT

#### SAMPLE IDENTIFICATION

EPFS SAMPLE ID:	960624
SAMPLE NUMBER:	PZ-18
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	1425
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/23/96
SAMPLE TYPE:	Water

REMARKS:

#### EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	<1.0	
TOLUENE	<1.0	
ETHYL BENZENE	<1.0	
TOTAL XYLENES	<3.0	
SURROGATE % RECOVERY	92.0	Allowed Range 80 to 120 %

NOTES:

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# **EPFS**

## **EL PASO FIELD SERVICES**

### **FIELD SERVICES LABORATORY ANALYTICAL REPORT**

#### **SAMPLE IDENTIFICATION**

EPFS SAMPLE ID:	Trip Blank
SAMPLE NUMBER:	7/17/96 Trip Blank
SITE NAME:	Trujillo Gas Com#1PC 72089
SAMPLE DATE:	07/17/96
SAMPLE TIME (Hrs):	NA
SAMPLED BY:	C. Chance
DATE OF BTEX ANALYSIS:	07/22/96
SAMPLE TYPE:	Water

REMARKS: \_\_\_\_\_

#### **EPA Method 8020 (BTEX) RESULTS**

PARAMETER	RESULT PPB	QUALIFIER
BENZENE	<1.0	
TOLUENE	<1.0	
ETHYL BENZENE	<1.0	
TOTAL XYLENES	<3.0	
SURROGATE % RECOVERY	98.7	Allowed Range 80 to 120 %

NOTES:

# EPFS

## EPA SO FIELD SERVICES

### QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

s 960618 thru 960623, 960625, 960628, and 960630 thru 960632

QA/QC for 07/23/96 Sample Set

#### LABORATORY CALIBRATION CHECKS, I

#### LABORATORY CONTROL SAMPLES:

<b>SAMPLE NUMBER</b> ICV LA-52589 50 PPB
Benzene
Toluene
Ethyl benzene
m & p - Xylene
o - Xylene
<b>SAMPLE NUMBER</b> LCS LA-45476 25 PPB
Benzene
Toluene
Ethyl benzene
m & p - Xylene
o - Xylene
<b>SAMPLE NUMBER</b> CCV1 LA-52589 50 PPB
Benzene
Toluene
Ethyl benzene
m & p - Xylene
o - Xylene
<b>SAMPLE NUMBER</b> CCV2 LA-52589 50 PPB
Benzene
Toluene
Ethyl benzene
m & p - Xylene
o - Xylene
<b>SAMPLE NUMBER</b> CCV3 LA-52589 50 PPB
Benzene
Toluene
Ethyl benzene
m & p - Xylene
o - Xylene

TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
				YES	NO
				RANGE	
Standard	50.0	46.2	92.4	75 - 125 %	X
Standard	50.0	45.9	91.8	75 - 125 %	X
Standard	50.0	45.9	91.8	75 - 125 %	X
Standard	100	93.2	93.2	75 - 125 %	X
Standard	50.0	45.8	91.6	75 - 125 %	X
TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
				YES	NO
				RANGE	
Standard	25.0	22.1	88.4	39 - 150	X
Standard	25.0	22.5	90.0	46 - 148	X
Standard	25.0	22.7	90.8	32 - 160	X
Standard	50.0	46.3	92.6	Not Given	X
Standard	25.0	22.1	91.2	Not Given	X
TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
				YES	NO
				RANGE	
Standard	50.0	47.6	95.2	75 - 125 %	X
Standard	50.0	47.4	94.8	75 - 125 %	X
Standard	50.0	47.1	94.2	75 - 125 %	X
Standard	100	94.6	94.6	75 - 125 %	X
Standard	50.0	47.1	94.2	75 - 125 %	X
TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
				YES	NO
				RANGE	
Standard	50.0	49.5	99.0	75 - 125 %	X
Standard	50.0	49.3	98.6	75 - 125 %	X
Standard	50.0	49.1	98.2	75 - 125 %	X
Standard	100	98.3	98.3	75 - 125 %	X
Standard	50.0	49.1	98.2	75 - 125 %	X
TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
				YES	NO
				RANGE	
Standard	50.0	48.5	97.0	75 - 125 %	X
Standard	50.0	48.1	96.2	75 - 125 %	X
Standard	50.0	47.6	95.2	75 - 125 %	X
Standard	100	95.1	95.1	75 - 125 %	X
Standard	50.0	47.8	95.6	75 - 125 %	X

# QUALITY CONTROL REPORT

## EPA METHOD 8020 - BTEX

Samples: 960618 thru 960623, 960625, 960628, and 960630 thru 960632

QA/QC for 07/23/96 Sample Set

### LABORATORY DUPLICATES:

SAMPLE NUMBER	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960619					RANGE	
Benzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Ethyl benzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X

Narrative: Acceptable.

### LABORATORY DUPLICATES:

SAMPLE NUMBER	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960628					RANGE	
Benzene	Matrix Duplicate	35.0	34.8	1	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Ethyl benzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	17.8	17.7	1	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X

Narrative: Acceptable.

### LABORATORY SPIKES:

SAMPLE NUMBER	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
960619					RANGE	
Benzene	50.0	<1.0	48.6	97.2	75 - 125 %	X
Toluene	50.0	<1.0	49.7	99.4	75 - 125 %	X
Ethyl benzene	50.0	<1.0	48.2	96.4	75 - 125 %	X
m & p - Xylene	100.0	<2.0	97.4	97.4	75 - 125 %	X
o - Xylene	50.0	<1.0	48.7	97.4	75 - 125 %	X

Narrative: Acceptable.

### LABORATORY SPIKES:

SAMPLE NUMBER	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
960628					RANGE	
Benzene	50.0	35.0	82.8	95.6	75 - 125 %	X
Toluene	50.0	<1.0	48.7	97.4	75 - 125 %	X
Ethyl benzene	50.0	<1.0	47.5	95.0	75 - 125 %	X
m & p - Xylene	100.0	17.8	112	93.8	75 - 125 %	X
o - Xylene	50.0	<1.0	47.2	94.4	75 - 125 %	X

Narrative: Acceptable.



# QUALITY CONTROL REPORT

## EPA METHOD 8020 - BTEX

Samples: 960618 thru 960623, 960625, 960628, and 960630 thru 960632

QA/QC for 07/23/96 Sample Set

### ADDITIONAL ANALYTICAL BLANKS:

SAMPLE ID	SOURCE	PPB	STATUS
AUTO BLANK/BOILED WATER			
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethyl benzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID	SOURCE	PPB	STATUS
SOIL VIAL BLANK	Lot MB1461		
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethyl benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

	SOURCE	NARRATIVE	STATUS
Carryover contamination checks		(Two analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethyl benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID	SOURCE	PPB	STATUS
TRIP BLANK	Lot # H18318	(Three analyzed with this set)	
Benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Toluene	Vial + Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<7.5	ACCEPTABLE

Narrative: Acceptable.

Reported By:

*mlh*

Approved By:

*John F. Smith*

Date:

7/24/96