

3R - 166

REPORTS

DATE:

1998

Certified Mail: #Z 211 324 121

March 31, 1999

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

RECEIVED

APR 05 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 1998 Pit Project Annual Groundwater Report

Dear Mr. Olson:

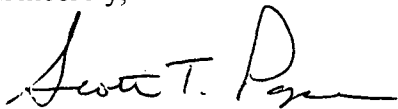
In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 49 remaining groundwater impacted locations that were identified during our pit closure project of 1994 / 1995.

Of the 49 reports, EPFS hereby requests closure of 18 of these locations. The 18 sites EPFS is requesting closure on are presented in 4 separate binders entitled "Final Closure Report for Groundwater Sites with Four Consecutive Quarters Below Standards".

The Jaquez Com. C #1 and Jaquez Com. E #1 site is included in a separate report which is entitled "Jaquez Com. C #1 and Jaquez Com. E #1 Annual Report for Soil and Groundwater Remediation".

If you have any questions concerning the enclosed reports or closure requests, please call me at (505) 599-2124.

Sincerely,



Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 211 324 122**
Mr. Bill Liesse, BLM - w / enclosures; **Certified Mail # Z 211 324 123**
Ms. Charmaine Tso, Navajo EPA - w / enclosures; **Certified Mail # Z 211 324 120**

EPFS GROUNDWATER PITS 1998 ANNUAL GROUNDWATER REPORT

D LOOP LINE DRIP
Meter/Line ID - LD169

RECEIVED

APR 05 1999

SITE DETAILS

Legals - Twn: 28N Rng: 8W
NMOCD Hazard Ranking: 30
Operator: EL PASO FIELD SERVICES

Sec: 33 Unit: 1
Land Type: FEDERAL

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

PREVIOUS ACTIVITIES

Site Assessment: Jan-95 Excavation: Feb-95 (80 cy)
Monitor Well: Nov-95 Geoprobe: Dec-96

Soil Boring: Nov-95
Quarterly Sampling Initiated: Nov-96

1998 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring continued through 1998. Groundwater analytical data are presented in Table 1. A site map is presented as Figure 1.

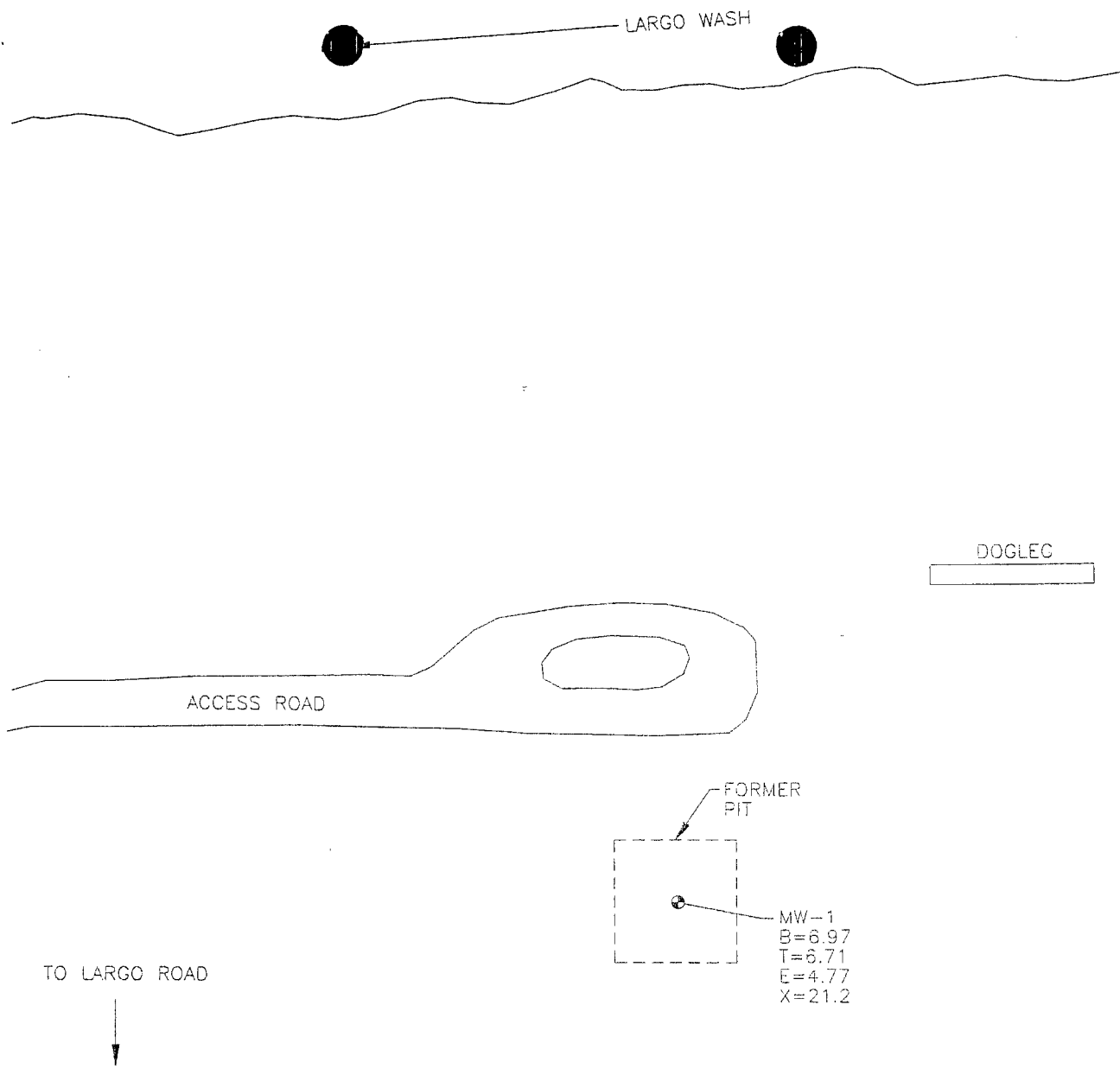
CONCLUSIONS

Analytical results of groundwater samples collected from MW-1 show levels of hydrocarbon constituents below New Mexico Groundwater Standards for all constituents during the last two sampling events in 1998. Natural attenuation has reduced benzene levels by more than 50 percent since monitoring began at this site.

Pertinent data from the 1997 groundwater report include the following: Based on groundwater levels collected from temporary well point data, the groundwater flow trends to the northwest on this site. This site is approximately 200 yards from Largo Wash in a remote location.

RECOMMENDATIONS

- The OCD requests that EPFS install groundwater monitoring wells to monitor and determine the extent of groundwater contamination. This may not be necessary if current trends continue.
- Collect groundwater sample down-gradient of MW-1. If the contaminant plume can be defined, the site may be a candidate for risk based closure.
- Quarterly sampling will continue at MW-1 until analytical results show hydrocarbon constituents are below New Mexico Groundwater Standards for four consecutive quarters.
- Following OCD approval for closure, MW-1 will be abandoned using OCD approved abandonment procedures.



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- B BENZENE (ug\L)
- T TOLUENE (ug\L)
- E ETHYL BENZENE (ug\L)
- X XYLENE (ug\L)
- ug\L MICROGRAMS PER LITER

NOT TO SCALE



COL. 175205-002



TITLE:
D LOOP LINE DRIP
LD169
NOVEMBER 3, 1998

DWN:	DES.:
TMM	CI
CHKD:	APPD:
CI	
DATE:	REV.:
2/9/99	0

PROJECT NO.:	17520
EPFS GW PITS	
FIGURE 1	

EPFS Groundwater Pits
1998 Annual Groundwater Report

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
980133	LD169	D Loop Line Drip	02/03/98	1	Sample 4 - 6th Quarter	= 28.20	= 25.10	= 33.00	= 1460.0	= 1546.0
980359	LD169	D Loop Line Drip	05/07/98	1	Sample 4 - 7th Quarter	= 82.20	= 34.20	= 123.00	= 1110.0	= 1349.0
980541	LD169	D Loop Line Drip	08/04/98	1	Sample 4 - 8th Quarter	= 4.10	= 5.84	= 6.88	= 24.9	= 41.7
980766	LD169	D Loop Line Drip	11/03/98	1	Sample 4 - 9th Quarter	= 6.97	= 6.71	= 4.77	= 21.2	= 39.6

1998 GROUNDWATER ANALYTICAL



Site Name D Loop LINE DRIP

☐	Development
☒	Purging

Well Number MW-1

Meter Code LD169

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 43.48
Initial Depth to Water (feet) 35.47
Height of Water Column in Well (feet) 8.01

Methods of Development

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

☐ Other _____

instruments

- | | |
|-------------------------------------|--------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>D.O.C</u> |

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments THE WATER HAD A LIGHT HYDROGEN SULFIDE SMELL.

Developer's Signature Dennis Bird

Date 2-3-98 Reviewer _____

Jan Fuchs

Date _____



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980133
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	2/3/98	1359
PROJECT:	Sample 4 6th Quarter	
DATE OF BTEX EXT. ANAL.:	2/6/98	2/6/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	28.2	PPB				
TOLUENE	25.1	PPB				
ETHYL BENZENE	33.0	PPB				
TOTAL XYLENES	1460	PPB				
TOTAL BTEX	1546	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 108.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

Date:

2/17/98

980133BTEXMW, 2/10/98

SAMPLE 48THQTR

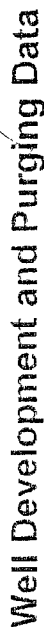


Natural Gas Company

A 2188

CHAIN OF CUSTODY RECORD

[illegible]



Site Name Loop Line Drive

☐	Development
☒	Purging

Well Number MW-1

Meter Code **LD169**

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 43.48
Initial Depth to Water (feet) 35.38
Height of Water Column in Well (feet) 8.10

47 Diameter (inches): Well Gravel Pack

Methods of Development

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

instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O.C.

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments THE WATER HAD A LIGHT HYDROGEN SULFIDE SMELL.

Developer's Signature: Dennis Bird Date: 5-7-98

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980359
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	5/7/98	1403
PROJECT:	Sample 4 7th Quarter	
DATE OF BTEX EXT. ANAL.:	5/8/98	5/8/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	82.2	PPB				
TOLUENE	34.2	PPB				
ETHYL BENZENE	123	PPB				
TOTAL XYLENES	1110	PPB	5X	D1		
TOTAL BTEX	1349	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 107.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

Narrative: _____

Approved By: _____

John T. Linder

Date: _____

5/12/98

980359BTEXMW,5/12/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980360
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	5/7/98	1403
PROJECT:	Sample 4 7th Quarter	
DATE OF BTEX EXT. ANAL.:	5/8/98	5/8/98
TYPE DESCRIPTION:	MW-1 Field Dup	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	80.9	PPB				
TOLUENE	31.9	PPB				
ETHYL BENZENE	121	PPB				
TOTAL XYLENES	1320	PPB	5X	D1		
TOTAL BTEX	1554	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 91.7 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

Narrative:

Approved By:

John Landa

Date:

5/12/98

980360BTEXMW,5/12/98



El Paso
Natural Gas Company

A 2349

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Requested Analysis		Type and No. of Sample Containers	Preservation Technique	Remarks
SAMPLER 4 7TH QTR						
MC# LD169						
SAMPLERS (Signature) <i>Donnie Bird</i>						
Date	Time	Comp.	GRAB	Sample Number		
5/7/98	1403		X	920357	X	0 Loop LINE DRIP MWL
5/7/98	1403		X	920360	X	0 Loop LINE DRIP MWL
[The following rows are crossed out with a large diagonal line]						
Relinquished by: (Signature) <i>Donnie Bird</i>		Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)		Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)		Date/Time	Received for Laboratory by: (Signature) <i>Marlon Hopper</i>	Remarks:	Date/Time	
Carrier Co:		Carrier Flight No.		Date Results Reported / by: (Signature)		



Site Name Loop LIVE DRIP

☐	Development
☒	Purging

Well Number MW-1
Meter Code LD169

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 43.48
Initial Depth to Water (feet) 36.20
Height of Water Column in Well (feet) 7.28

Instruments

- | | |
|-------------------------------------|---------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>D.O. 6</u> |

Methods of Development

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

Other ☐

Water Disposal

KUTZ SEPARATE

Water Removal Data

[illegible]

Comments THE WATER HAD A LIGHT HYDROGEN SULFIDE SMELL.

Developer's Signature Dennis Bied

Date 8-4-98 Reviewer

John F. Fisher

Date _____



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980541
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	8/4/98	1019
PROJECT:	Sample 4 8th Quarter	
DATE OF BTEX EXT. ANAL.:	8/10/98	8/10/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	D		
BENZENE	4.10	PPB	2	D		
TOLUENE	5.84	PPB	2	D		
ETHYL BENZENE	6.88	PPB	2	D		
TOTAL XYLENES	24.9	PPB	2	D		
TOTAL BTEX	41.7	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By:

John Sander

Date:

8/12/98

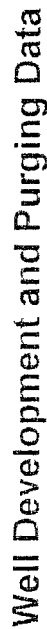
980541BTEXMW,8/11/98



A 2375

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Requested Analysis				Remarks					
Samplers: (Signature)		Type and No. of Sample Containers	Preservation Technique	Date/Time	Received by: (Signature)						
MC # LD169	Date: 8-4-98										
WATER 8-4-98	1019	5-1	4°C	X	D LOOP LINE DRIP MW-1						
WATER 8-4-98	---	5-1	4°C	X	TRIP BLANK						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)						
WATER 8-4-98	8-4-98 1710										
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)						
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:							
		M. Anderson	8/10/98 0720								
Carrier Co:	Date Results Reported / by: (Signature)										



Well Number MW-1
Meter Code LD169

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 43.48
Initial Depth to Water (feet) 35.57
Height of Water Column in Well (feet) 7.91

4 Diameter (inches): Well

Item	Water Volume in Well			Gallons to be Removed
	Cubic Feet	Gallons		
Well Casing		5.3		15.7
Gravel Pack				
Drilling Fluids				
Total				

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O.C.

Water Disposal

KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments THE WATER HAD A LIGHT HYDROGEN SULFIDE SMELL.

Developer's Signature *Dennis Bird*

Date 11-3-98 Reviewer

John Fowler

Date 11/9/98



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980767
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	11/3/98	1012
PROJECT:	Sample 4 9th Quarter	
DATE OF BTEX EXT. ANAL.:	11/5/98	11/5/98
TYPE DESCRIPTION:	MW-1 Field Dup	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	6.96	PPB	2	D		
TOLUENE	6.84	PPB	2	D		
ETHYL BENZENE	5.33	PPB	2	D		
TOTAL XYLENES	22.4	PPB	2	D		
TOTAL BTEX	41.5	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 101.9 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By:

Date:

11/9/98

980767BTEXMW,11/6/98



FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980766
MTR CODE SITE NAME:	LD169	D Loop Line Drip
SAMPLE DATE TIME (Hrs):	11/3/98	1012
PROJECT:	Sample 4 9th Quarter	
DATE OF BTEX EXT. ANAL.:	11/5/98	11/5/98
TYPE DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	6.97	PPB	2	D		
TOLUENE	6.71	PPB	2	D		
ETHYL BENZENE	4.77	PPB	2	D		
TOTAL XYLENES	21.2	PPB	2	D		
TOTAL BTEX	39.6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 101.1 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indicates that the analyte calculated is based on a secondary dilution factor.

Narrative: _____

Approved By: _____

980766BTEXMW,11/6/98

Date: _____

11/9/98



A 2401

SAMPLE 4 97407R

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Requested Analysis				Type and No. of Sample Containers	Preservation Technique	Remarks
SAMPLERS (Signature) <i>[Signature]</i> Date: 11-3-98								
Date	Time	Comp.	GRAB	Sample Number				
11-3-98	1012	X	X	980766	G-1 30°F	X	0 Loop BLUE GRIP MW-1	
11-3-98	1013	X	X	980767	G-1 30°F	X	0 Loop BLUE GRIP FIELD USE	
11-3-98	---	X	X	---	G-1 30°F	X	TRIP BLANK	
[Large diagonal line across the table]								
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)		Date/Time	Relinquished by: (Signature)			
Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)			
Relinquished by: (Signature)		Received for Laboratory by: (Signature) <i>[Signature]</i>		Date/Time	Remarks: 11/4/98 1530			
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)				