

3R - 143

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 Groundwater Report
Annual Report

March 1998

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520

PHILIP
ENVIRONMENTAL

EPFS GROUNDWATER PITS

1997 ANNUAL GROUNDWATER REPORT

2C-22 #3 LINE DRIP
Meter/Line ID - LD104

SITE DETAILS

Legals - Twn: 24N	Rng: 6W	Sec: 13	Unit: G
NMOCD Hazard Ranking: 60		Land Type: FEDERAL	
Operator: EL PASO FIELD SERVICES			

PREVIOUS ACTIVITIES

Site Assessment: Jul-94	Excavation: Sep-94 (160 cy)	Re-Excavation: Nov-95 (1,164cy)
Soil Boring: Mar-97	Monitor Well: Mar-97	

1997 ACTIVITIES

Monitor Well Installation - One groundwater monitor well was installed in the center of the former pit.

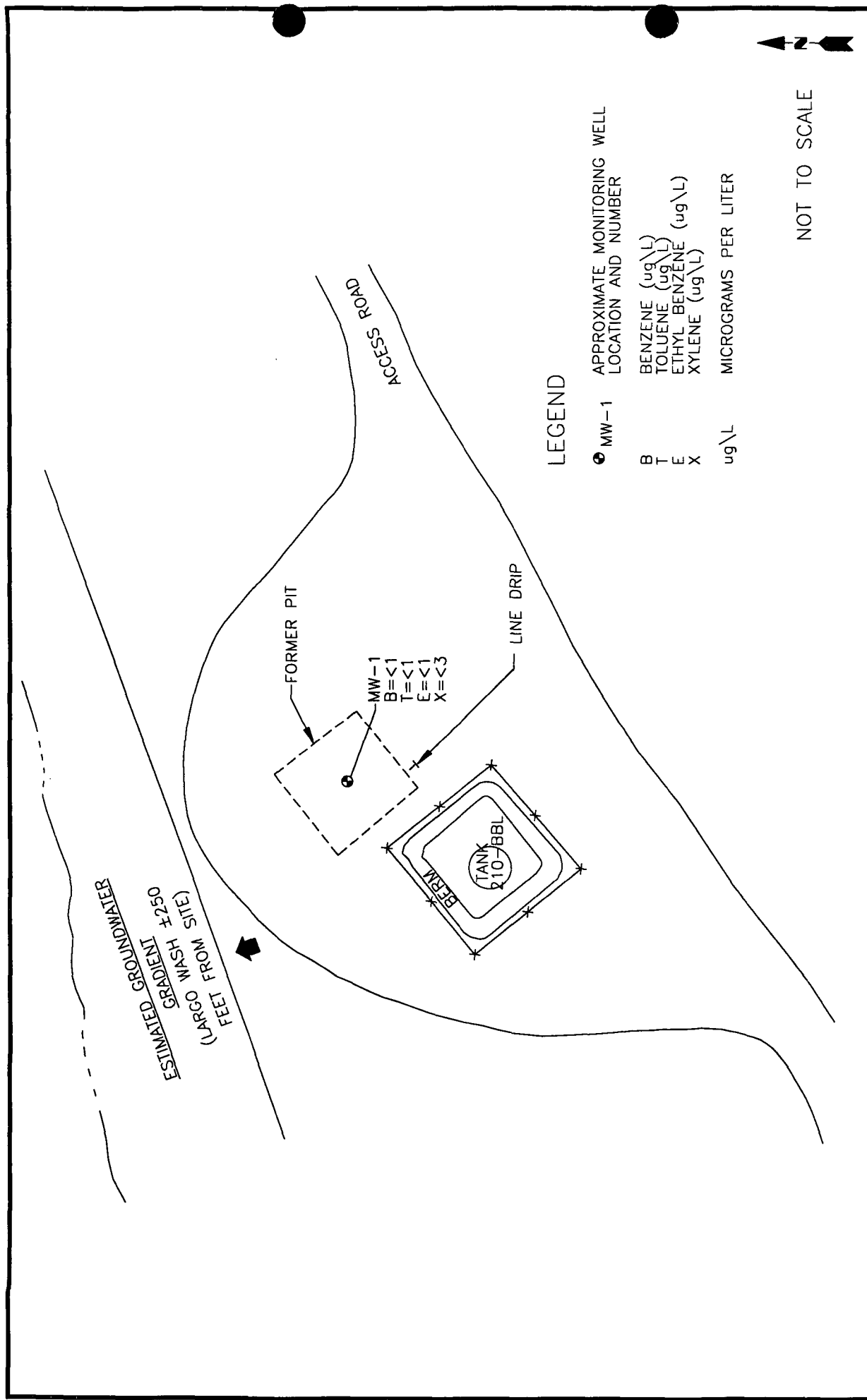
Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was initiated on 6/3/97. Groundwater analytical data are presented in Table 1. A site map is presented in Figure 1.

CONCLUSIONS

Groundwater analytical data has been below standards since quarterly sampling was initiated at MW-1. Minimal impact to groundwater has occurred at this site.

RECOMMENDATIONS

- Quarterly sampling will continue at MW-1 until 4 consecutive clean quarters are achieved.
- Following OCD approval for closure, MW-1 will be abandoned following OCD approved abandonment procedures.



PHILIP SERVICES CORP	TITLE: LATERAL 2C-22 NO. 3 LINE DRIP LD104		PROJECT NO.: 17520 EPFS GW PITS	
	DWN: TMM	DES.: CC	17520	
	CHKD: CC	APPD: CC	17520	
DATE: 11/4/97		REV.: 0	FIGURE 1	

EPFS Groundwater Pits
1997 Annual Groundwater Report

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Nylenes (PPB)	Total BTEX
970268	LD104	2C-22 #3 Line Drip	4/11/97	1	Phase II Drilling - Initial	< 1	< 1	< 1	= 3.78	= 4
970522	LD104	2C-22 #3 Line Drip	6/3/97	1	Sample 4 - 1st Qtr	< 1	< 1	< 1	< 3	< 6
971000	LD104	2C-22 #3 Line Drip	9/18/97	1	Sample 4 - 2nd Qtr	< 1	< 1	< 1	< 3	< 6
971296	LD104	2C-22 #3 Line Drip	12/11/97	1	Sample 4 - 3rd Qtr	< 1	< 1	< 1	< 3	< 6

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL SERVICES INC.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-2
Well # 1
Page 1 of 1

Project Name EPFS GW PITS
Project Number 17520 Phase 600277
Project Location 2C-22 #3 LINE DRIP - L0104

Elevation _____
Borehole Location T24 RB - S13 - Ltr G
GWL Depth 110' BGS
Logged By D CESARK
Drilled By K PADILLA
Date/Time Started 3/27/97 - 0900
Date/Time Completed " - 1000

Well Logged By D CESARK
Personnel On-Site ~~D CESARK~~, C MAIZ
Contractors On-Site JAMES KIRBY
Client Personnel On-Site _____

Drilling Method 4 1/4" ID 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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0										
5				BACKFILL						
10				TO						
15				21'						
20				GWC 16' BGS						
25				HIGHLY CONTAM. SOIL						
30				TD = 27.5'						
35										
40										

Comments:

ENCOUNTERED GW C 16' BGS. OVER-DRILLED + SET GW MW-1. HIGHLY
CONTAM. SOIL TO TD. NO SAMPLES COLLECTED. PLEASE REFER TO MW
INSTALLATION RECORD.

Geologist Signature

[Signature]

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # 2
Well # 1
Page 1 of 1

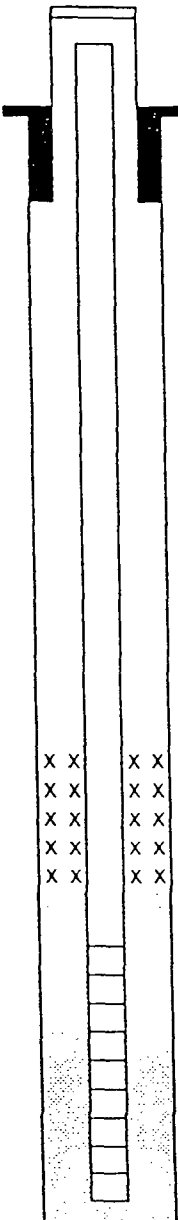
Project Name EPFS GW PITS
Project Number 17520 Phase 6005.77
Site Location 2C-22 #3 LINE DRIP-LD104

Elevation _____
Well Location T24N-R6W-S13-L6'
GWL Depth 16' BGS
Installed By K PADILLA

On-Site Geologist D CESARK
Personnel On-Site ~~D CESARK~~, C MAIZ
Contractors On-Site J KIRBY
Client Personnel On-Site _____

Date/Time Started 3/27/97 - 0000
Date/Time Completed 4 - 1130

Depths in Reference to Ground Surface		
Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout	CEMENT	-2'
Bottom of Grout	"	-6'
Top of Well Riser	SCH 40 PVC	+3'
Bottom of Well Riser	"	-11'
Top of Well Screen	1.010 SLOT	-11'
Bottom of Well Screen	"	-26'
Top of Peltonite Seal	ENVIROPLUG	-6'
Bottom of Peltonite Seal	"	-8'
Top of Gravel Pack	10-20 S. SAND	-8'
Bottom of Gravel Pack	"	-26'
Top of Natural Cave-In		-26'
Bottom of Natural Cave-In		-27.5'
Top of Groundwater		-16'
Total Depth of Borehole		-27.5'



Top of Protective Casing +3'

Top of Riser +3'

Ground Surface -0'

Top of Seal -6'

Top of Gravel Pack -8'

Top of Screen -11'

Bottom of Screen -26'

Bottom of Borehole -27.5'

Comments: _____

P. A.

**1997 GROUNDWATER
ANALYTICAL**

PHASE II DRILLING - INITIAL WATER SAMPLING

CHAIN OF CUSTODY RECORD

[illegible]



424-97

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID DRC35	Lab ID 970268
MTR CODE SITE NAME:	LD104	2C-22 #3 Line Drip
SAMPLE DATE TIME (Hrs):	4/10/97	1350
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. ANAL.:	4/11/97	4/11/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	3.78	PPB				
TOTAL BTEX	3.78	PPB				

The Surrogate Recovery was at 99.3 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: _____

4/16/97

970268,4/16/97

Well Development and Purging Data

~~Development~~
~~Purging~~

Page 1 of 1

CHANCE

17520

Phase.Task No. 6003.77

Site Address

Water Volume Calculation

Initial Depth of Well (feet) 26' BGS
Initial Depth to Water (feet) 12' BGS

☐ Other

Water Disposal

[illegible]

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

Comments FIRST 2 BAILERS CLEAR SLIGHTLY MUDDY THEREAFTER. LITTLE SILT / SAND REMOVED. DID NOT BAIL WELL DRY. NO EVIDENCE OF PETRO. HCS.

Reviewer _____ Date _____



Water Sampling Data

Location No. MW-1

Serial No. WSD- _____

Group List Number _____

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other _____ Date 4/10/97Project Name EPFS GW PITS Project No. 17520Project Manager C CHANCE Phase Task No. 6003.77Site Name 2C-22 #3 LINE DRIP — LD104

Sampling Specifications

Requested Sampling _____

Depth Interval (feet) _____

Requested Wait Following _____

Development/Purging (hours) _____

Initial Measurements

Time Elapsed From Final Development/Purging (hours) _____

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 Comments Below)
			Temp. (°C)	pH	DO (mg/L)	Cond. (µmhos/ cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (feet)	Bail	Final Water Depth (feet)	

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

Sample Containers

Preservatives: H = HCl; N = HNO₃; S = H₂SO₄; A = NaOH; O = Other (Specify); -- = None

Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments
	Number	Type	Volume (mL)	Yes	No		Yes	No	
EPA 8020 BTEX	3	G/VV	40		X	Y	X		DRC 35 — MW-1
"	1	"	"				X		DRC 33 — TRIP BLANK

Water Type _____ Chain-of-Custody Form Number _____

Comments * PLEASE REFER TO WELL DEVELOPMENT + PURGING DATA FORM.Signature [Signature] Date 4/10/97 Reviewer _____ Date _____



A 2472

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks					
Samplers: (Signature)		Date: 6-3-97		Type and No. of Sample Containers							
Date	Time	Comp.	GRAB	Sample Number							
6-3-97	1454		X	970572							
BTKE GENERAL ANALYSIS PRESERVATION TECHNIQUE 2C-72 #3 LINE DRIP MW LMC L0104								BTKE	GENERAL ANALYSIS	PRESERVATION TECHNIQUE	2C-72 #3 LINE DRIP MW LMC L0104
Relinquished by: (Signature)				Date/Time	Received by: (Signature)	Date/Time	Received by: (Signature)				
Dennis Bied				6-3-97 1732							
Relinquished by: (Signature)				Date/Time	Received by: (Signature)	Date/Time	Received by: (Signature)				
Relinquished by: (Signature)				Date/Time	Received for Laboratory by: (Signature)	Remarks:					
					4/14/97 0730						
Carrier Co:				Date Results Reported / by: (Signature)							
Air Bill No.:											



EL PASO FIELD SERVICES



6-18-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT PROJECT CLOSURE

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970522
MTR CODE SITE NAME:	LD104	2C-22 #3 Line Drip MW-1
SAMPLE DATE TIME (Hrs):	6/3/97	1454
PROJECT:	Sample 4 - 1st Quarter	
DATE OF BTEX EXT. ANAL.:	6/6/97	6/6/97
TYPE DESCRIPTION:	Monitor Well	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				

The Surrogate Recovery was at 92.7 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Latta

Date:

6/14/97

970522,6/10/97



6-18-97

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970522
DATE SAMPLED:	06/03/97
TIME SAMPLED (Hrs):	1454
SAMPLED BY:	N/A
MATRIX:	Water
METER CODE:	LD104
SAMPLE SITE NAME:	2C-22 #3 Line Drip
SAMPLE POINT:	MW-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.6	Units	06/04/97
Alkalinity as CO ₃	0.0	PPM	06/04/97
Alkalinity as HCO ₃	471	PPM	06/04/97
Calcium as Ca	148	PPM	06/04/97
Magnesium as Mg	54	PPM	06/04/97
Total Hardness as CaCO ₃	593	PPM	06/04/97
Chloride as Cl	15	PPM	06/04/97
Sulfate as SO ₄	1,000	PPM	06/04/97
Fluoride as F	0.8	PPM	06/04/97
Nitrate as NO ₃ -N	<0.6	PPM	06/04/97
Nitrite as NO ₂ -N	<0.6	PPM	06/04/97
Ammonium as NH ₄ ⁺	<0.3	PPM	06/04/97
Phosphate as PO ₄	<0.6	PPM	06/04/97
Potassium as K	1.4	PPM	06/04/97
Sodium as Na	454	PPM	06/04/97
Total Dissolved Solids	1,900	PPM	06/04/97
Conductivity	2,470	umhos/cm	06/04/97
Anion/Cation %	4.3%	%, <5.0 Accepted	06/10/97

Lab Remarks:

Reported By: Indu

Approved By: John L. Latta

Date: 6/14/97



7-21-97

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	970522
SAMPLE DATE:	06/03/97
SAMPLE TIME (Hrs):	1454
SAMPLED BY:	N/A
MATRIX:	Water
METER CODE:	LD104
SAMPLE SITE NAME:	2C-22 #3 Line Drip
SAMPLE POINT:	MW-1

REMARKS:

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
ARSENIC	<.029	0.100
BARIUM	0.11	1.00
CADMIUM	<0.0002	0.010
CHROMIUM	0.018	0.050
LEAD	0.005	0.050
MERCURY	<0.0002	0.002
SELENIUM	<0.005	0.050
SILVER	0.0060	0.050

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7061A, Arsenic (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.
Method 7081, Barium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7421, Lead (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.
Method 7741A, Selenium (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1994.
Method 7761, Silver (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Reported By: mdcApproved By: John TellerDate: 7/17/97



QUALITY CONTROL REPORT

Sample ID: 970522
Date Reported: 07/16/97

LABORATORY CONTROL SAMPLE

Analyte	Found Result (mg/L)	Known Value (mg/L)	% Recovery
Arsenic	0.031	0.032	97%
Barium	0.062	0.065	96%
Cadmium	0.0025	0.0024	104%
Chromium	0.0049	0.0048	103%
Lead	0.033	0.030	111%
Mercury	0.0043	0.0046	93%
Selenium	0.038	0.041	94%
Silver	0.0051	0.0043	118%

DUPLICATE ANALYSIS (mg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Arsenic	ND	ND	NA
Barium	ND	ND	NA
Cadmium	ND	ND	NA
Chromium	0.0052	0.0048	8.3%
Lead	ND	ND	NA
Mercury	ND	ND	NA
Selenium	ND	ND	NA
Silver	0.0024	0.0023	4.3%

SPIKE ANALYSIS (mg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Arsenic	0.012	0.107	0.100	95.1%
Barium	0.018	0.960	1.00	94.2%
Cadmium	ND	0.0091	0.010	91.2%
Chromium	0.005	0.054	0.050	96.9%
Lead	ND	0.039	0.050	77.3%
Mercury	ND	0.0017	0.0020	84.5%
Selenium	ND	0.047	0.050	93.2%
Silver	0.0020	0.0509	0.050	97.8%

METHOD BLANK

Analyte	Found Result (mg/L)	Detection Level (mg/L)
Arsenic	ND	0.027
Barium	ND	0.019
Cadmium	ND	0.0002
Chromium	ND	0.004
Lead	ND	0.002
Mercury	ND	0.0002
Selenium	ND	0.011
Silver	ND	0.0005

ND: Not Detected at stated detection level.

NA: Not Applicable.

Reported By: mh

Approved By: John Fard

Date: 7/17/97



KUTZ SEPARATOR

SAMPLE 4 2ND QTR



A 2085

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks	
Samplers: (Signature) <i>Dennis Bied</i>		MC# L0104		Date: 9-18-97			
Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	
9/18/97	1416		X	971000	G-1	4°C X	2C-22 #3 DRIP K-1 MW-1
[The following rows are crossed out with a diagonal line]							
Relinquished by: (Signature) <i>Dennis Bied</i>		Date/Time 9-18-97 1721		Received by: (Signature)		Date/Time	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature) <i>M. Hopper</i>		Remarks: 9/19/97 0730	
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)			
Air Bill No.:							



FIELD SERVICES LABORATORY

ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971000
MTR CODE SITE NAME:	LD104	2C-22 #3 Line Drip Y-1
SAMPLE DATE TIME (Hrs):	9/18/97	1416
PROJECT:	Sample 4 2nd Quarter	
DATE OF BTEX EXT. ANAL.:	9/23/97	9/23/97
TYPE DESCRIPTION:	MW-1	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 93.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 9/29/97

971000BTEXMW,9/25/97



Well Development and Purging Data

Well Number 22W-1

Meter Code L0104

Site Name 7C-22 #3 DRIP Y-1

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) 30.0

Initial Depth to Water (feet) 13.73
Height of Water Column in Well (feet) 116.17

Height of water column in well (feet)	112.1
Diameter (inches)	Well
	Gravel Pack

Diameter (inches):	Well	Gravel Pack	Gallons
		Water Volume in Well	

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		9.4	28.1
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 0.0.0

Water Disposal
KUTZ SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature _____

Tennis Bred

Date 9-18-97 R

Reviewer:

John Falla

Date _____

9/29/57



SAMPLE 43 RD 97R

A 2166

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks									
Samplers: (Signature)		Date: 12-11-97		Type and No. of Sample Containers		Preservation Technique									
Date	Time	Comp.	GRAB	Sample Number											
12/11/97	1335	X		971296		5-1 40C X									
2C-22#3 DRIP Y-1 MW-1															
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Remarks:									
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)											
Air Bill No.:															



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971296
MTR CODE SITE NAME:	LD104	2C-22 #3 Drip Y-1
SAMPLE DATE TIME (Hrs):	12/11/97	1335
PROJECT:	Sample 4 3rd Quarter	
DATE OF BTEX EXT. ANAL.:	12/16/97	12/16/97
TYPE DESCRIPTION:	MW-1	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 94.9 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Larkin

Date:

1/2/98

971296BTEXMW,12/16/97



Well Number MW-1
Meter Code LD/04

Development Criteria

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

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

Initial Depth of Well (feet) 30.0
Initial Depth to Water (feet) 15.77
Height of Water Column in Well (feet) 14.33

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		9.5	28.4
Gravel Pack			
Drilling Fluids			
Total			

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO

K072 SEPARATOR

[illegible]

Developer's Signature Lennie Bird

Date 12-11-97 Reviewer _____

John F. Zulli Date 1/2/98