

Denny L. Faust
DEPUTY OIL & GAS INSPECTOR

MAR 27 1998

FIELD PIT SITE ASSESSMENT FORM

Approved

Meter: 70862 Location: McGRATH #1
Operator #: _____ Operator Name: _____ P/L District: KUTZ
Coordinates: Letter: F Section 7 Township: 30 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
Site Assessment Date: 12-12-94 Area: 02 Run: 63

NMOCD Zone:	Land Type:	BLM	☐ (1)
(From NMOCD		State	☐ (2)
Maps)	Inside	Fee	☒ (3)
	Outside	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 KACHIS ARROYO

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 30 POINTS

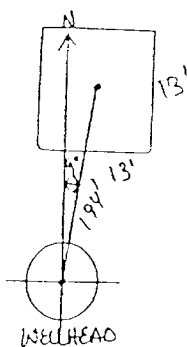
Remarks : REDLINE & TOPO SHOW LOCATION INSIDE V.Z. ONE PIT ON LOCATION -
BELONGS TO EPNG. WILL CLOSE PIT.

70862

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 9° Footage from Wellhead 194'

b) Length : 13' Width : 13' Depth : 2'



Remarks :

PHOTOS- 1357

Completed By:

Robert Thompson

12-12-94



Philip Environmental Services Corporation
10000

McGrath #1
Meter Code 70862

Pit was excavated to 6 feet beneath ground surface. The headspace soil reading from the excavation bottom was 197 parts per million. Soil analytical were as follows; benzene - <2.32 mg/kg, total BTEX - 146 mg/kg, TPH - 1970 mg/kg.

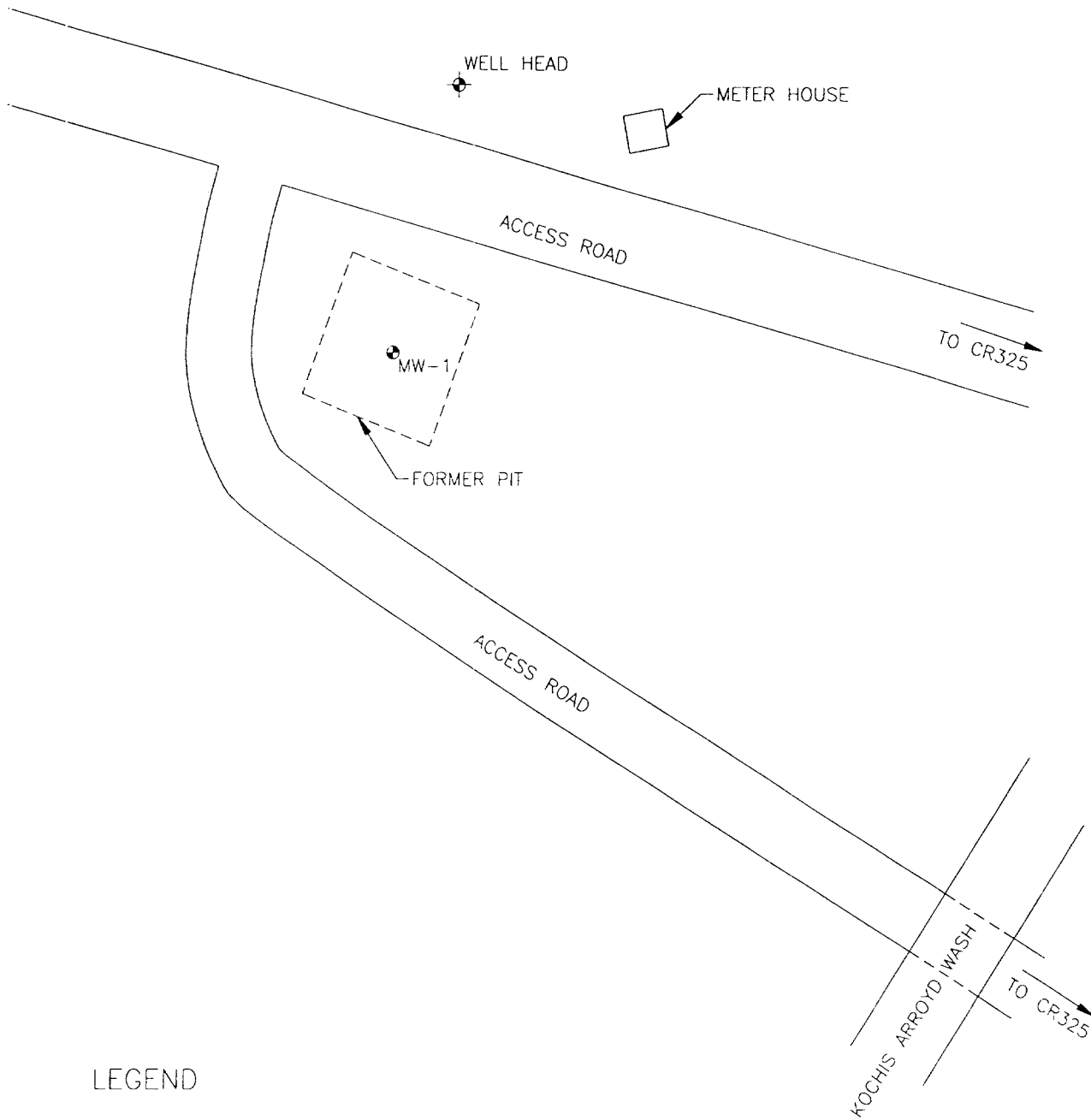
One soil boring was completed and no monitoring well was installed. No soil sample was collected due to encountering shallow groundwater.

The pit was re-excavated to 16 feet beneath ground surface and groundwater was not encountered. The headspace soil reading from the excavation bottom was 4 parts per million. Soil analytical were as follows; benzene - <0.5 mg/kg, total BTEX - <3 mg/kg, TPH - <10 mg/kg.

A groundwater monitoring well was installed and groundwater samples were collected. Groundwater analytical results were as follows: benzene - <1 ppb, toluene - <1 ppb, ethyl benzene - <1 ppb, total xylenes - <3 ppb.

This site is ready for closure based on the following:

- Re-excavation soil samples were below standards on benzene and total BTEX, and TPH.
- Groundwater samples were below standards.



LEGEND


 MW-1 APPROXIMATE WELL LOCATION AND NUMBER

NOT TO SCALE



COL. 17520G



TITLE: McGrath #1-70862

DWN: TMM

DES.: CC

PROJECT NO.: 17520
 EPFS GW PITS

CHKD: CC

APPD:

DATE: 7/11/97

REV.: 0

FIGURE 1

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP370	946546
MTR CODE SITE NAME:	70862	McGrath #1
SAMPLE DATE TIME (Hrs):	12/22/94	1350
PROJECT:	Phase I Drilling EXCAVATION	
DATE OF TPH EXT. ANAL.:	12/28/94	12/28/94
DATE OF BTEX EXT. ANAL.:	12/28/94	1/4/95
TYPE DESCRIPTION:	VC	Gray sand/clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.32	MG/KG				
TOLUENE	40.2	MG/KG				
ETHYL BENZENE	10.4	MG/KG				
TOTAL XYLENES	93.3	MG/KG				
TOTAL BTEX	146	MG/KG				
TPH (418.1)	1,970	MG/KG			1.94	28
HEADSPACE PID	197	PPM				
PERCENT SOLIDS	91.6	%				

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

The Surrogate Recovery was at 163 for this sample All QA/QC was acceptable.

Narrative:

BFB co-dated

DF = Dilution Factor Used

Approved By: _____

INGVZPIT.XLS

Date: 3-20-95

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER 11957		PROJECT NAME Pit Closure Project # 24324		DATE 12.22.94		SAMPLERS: (Signature) Kelly Padilla		SAMPLER NUMBER		SAMPLER TYPE		REQUESTED ANALYSIS		CONTACT LABORATORY P. O. NUMBER	
ID	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE	TIME	SAMPLE NUMBER	TPH EPA 418.1	BTEX EPA 8020	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	REMARKS	DATE/TIME	RECEIVED BY: (Signature)
6544	12-22-94	1030	SOIL	KP 368	1	VC	1	X	X	VC	X	X	Soil Real Sandy	30	30
6545	12-22-94	1230	SOIL	KP 369	1	VG	1	X	X	VG	X	X		30	30
6546	12-22-94	1350	SOIL	KP 370	1	VC	1	X	X	VC	X	X		30	30
(The following section is crossed out with a large diagonal line)															
RELINQUISHED BY: (Signature) Kelly Padilla								DATE/TIME 12-22-94 1500		RECEIVED BY: (Signature) Deborah L. Lee		DATE/TIME 12-22-94 0935		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)								DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH								SAMPLE RECEIPT REMARKS		RESULTS & INVOICES TO:		FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P.O. BOX 4990 FARMINGTON, NEW MEXICO 87499			
CARRIER CO.								CHARGE CODE		505-599-2144		FAX: 505-599-2261			
BILL NO.:															

CORD OF SUBSURFACE EXPLORATION

Slip Environmental Services Corp.

1 Monroe Road

Farmington, New Mexico 87401

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

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

Project Name EPNG Pits
Project Number 14509 Phase 6016000
Project Location McGrath #1, 70862

Elevation _____
Borehole Location: T30, R11, S. 7, E
GWL Depth _____
Logged By S. Kelly
Drilled By M. Donohue
Date/Time Started 10/6/95, 1040
Date/Time Completed _____

Well Logged By S. Kelly
Personnel On-Site J. Long, J. Johnson
Contractors On-Site _____
Client Personnel On-Site _____

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

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NOU			Drilling Conditions & Blow Counts
0				Backfill to 6'			BZ	SH	S	
5				1K 10/6/95						
10				Hit water at 11.7' 17.0' No sample taken due to shallow groundwater. No split spoon driven due to shallow ground- water. Water rose to 11.7' after 10 min.						
15										
20				TOB-18.0'						
25										
30										
35										
40										

Comments:

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

Meter: 50862 Location: Mc Grath #1

Coordinates: Letter: E Section 07 Township: 30 Range: 11

Or Latitude _____ Longitude _____

Date Started : 11-28-95 Area: 02 Run: 63

Sample Number(s): 4P90 4P91 4P92

Sample Depth: 16 Feet

Final PID Reading 04 PID Reading Depth 16 Feet
Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

Final Dimensions: Length 35 Width 22 Depth 16

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 530 LT 11/30/95

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards 13 LT 11/30/95

Soil Disposition:

Envirotech ☐ (1) ☒ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 11-28-95

Pit Closed By: Philip Env

Phase III

Remarks : Dug pit to 16 Ft through sand stone, did not encounter
fer. Took PID readings Wall 06 ppm Swall 17 ppm E wall 05 ppm
4.0 wall 04 ppm Bot 01 ppm Comp 04 ppm No Fertilizer used

1. P

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID JP90	Lab ID 947810
MTR CODE SITE NAME:	70862	McGrath #1
SAMPLE DATE TIME (Hrs):	11/28/95	1130
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. ANAL.:	11/30/95	11/30/95
DATE OF BTEX EXT. ANAL.:	11/29/95	11/29/95
TYPE DESCRIPTION:	VC	Brown fine sand

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	4	PPM				
PERCENT SOLIDS	89.4	%				

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

The Surrogate Recovery was at 96.0 for this sample All QA/QC was acceptable.

Narrative: _____

DF = Dilution Factor Used

Approved By: _____

INGVZPIT.XLS

Date: 12/4/95



Page _____ of _____

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

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 MCGRATH #1-70862

Elevation _____
Borehole Location T-D-R 11-S 7-Ltr F
GWL Depth 17' BGS
Logged By D CESARK
Drilled By K PADILLA
Date/Time Started 3/26/97 - 1215
Date/Time Completed 1430

Well Logged By D CESARK
Personnel On-Site ~~D CESARK~~, C MAIZ
Contractors On-Site _____
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				BACKFILL						
5				TO						
10				16'						
15										
20				SS @ 17' (DIFFICULT DRILLING) GWC 17'						
25				TD=22.5'						
30										
35										
40										

Comments:

ENCOUNTERED SS + GWC 17' BGS. OVER-DRILLED + COMPLETED GW
MW-1. AUGER REFUSAL @ 22.5' BGS. NO SAMPLES COLLECTED. PLEASE
REFER TO MW INSTALLATION RECORD.

Geologist Signature

[Signature]

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services, Inc.

4000 Monroe Rd.

Farming on, 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 MCGRATH HI - 70802

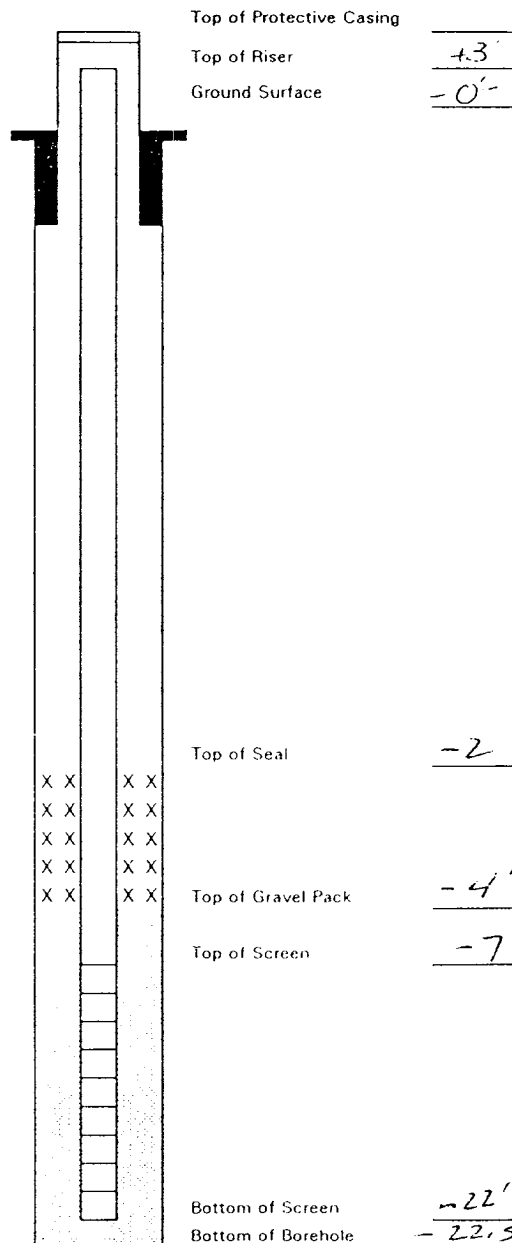
Elevation _____
Well Location T30N-R11W-S7-L F'
GWL Depth 17' BES
Installed By K PADILLA

On-Site Geologist D CESARK
Personnel On-Site D CHARLEY, C MAIZ
Contractors On-Site _____
Client Personnel On-Site _____

Date/Time Started 3/20/97 - 1430
Date/Time Completed " - 1545

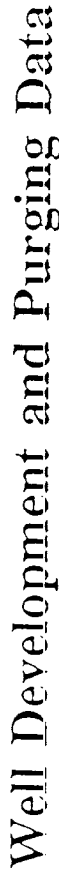
Depths in Reference to Ground Surface

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		
Bottom of Grout		
Top of Well Riser	SCH 40 PVC	+3'
Bottom of Well Riser	"	-7'
Top of Well Screen	1010 SLOT	-7'
Bottom of Well Screen	"	-22'
Top of Peltonite Seal	ENVIROPUK	-2'
Bottom of Peltonite Seal	"	-4'
Top of Gravel Pack	10-20 S.SAND	-4'
Bottom of Gravel Pack	"	-22'
Top of Natural Cave-In		-22'
Bottom of Natural Cave-In		-22.5'
Top of Groundwater		-17'
Total Depth of Borehole		-22.5'



Comments: _____

Geologist Signature



~~Development~~
~~Purging~~

Page 1 of 1

CHANCE

Project No. 17520

Phase, Task No. 6003, 77

Site Address

Water Volume Calculation

Water Column Calculation

Initial Depth of Well (feet)	<u>22' 865</u>
Initial Depth to Water (feet)	<u>12' 865</u>
Height of Water Column in Well (feet)	10'

☒ pH Meter

Serial No. (If applicable)

Pump
Bailer

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

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		60.5	
Gravel Pack			
Drilling Fluids			
Total			33.5

[illegible]

Circle the date and time that the development criteria are met

Comments	Remarks
First 2-3 birds were clear, muddy thereafter. Well singing - mostly solo. Well built ^{very}	
next day 20 beyond of HC's.	

Developer's Signature(s)

Date 4/9/97

Reviewer _____ Date _____



Water Sampling Data

Location No. MW-1Serial No. WSD-Group List Number Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other Date 4/9/97Project Name EPFS GW PITS Project No. 17520Project Manager C CHANCE Phase Task No. 6003.77Site Name MC GRATH #1-70862

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

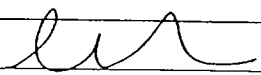
Date	Time	Sampler Initials	Water Quality Readings				Water Collection Data					Notes (Explain in Comments Below)
			Temp. (°C)	pH	DO (mg/L)	Cond. (µmhos/ cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (feet)	Bail	Final Water Depth (feet)	

Sample Containers

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

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 31 (MW-1)
"	1	"	"				X		DRC 30 (TRIP BLANK)

Filter Type Chain-of-Custody Form Number Comments * PLEASE REFER TO WELL DEVELOPMENT + PURGING DATA FORM.Signature  Date 4/9/97 Reviewer Date



EL PASO FIELD SERVICES



4-23-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	DRC31	970260
MTR CODE SITE NAME:	70862	McGrath #1
SAMPLE DATE TIME (Hrs):	4/9/97	1103
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	PPB				
TOTAL BTEX	<6	PPB				

The Surrogate Recovery was at 104 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Latta

Date:

4/16/97



CHAIN OF CUSTODY RECORD

Page:

White - Testing Laboratory Canary - EPNGLab Pink - Field Sampler