3R - 171

REPORTS

DATE:
1997

EL PASO ENERGY

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

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,

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**

El Paso Energy Corporation 614 Reilly Avenue Farmington, New Mexico 87401 Phone (505) 325-2841 Fax (505) 599-2119

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

FLORANCE #1
Meter/Line ID - 71512

SITE DETAILS

Legals - Twn: 30N **Rng:** 11W **Sec:** 8 **Unit:** J
NMOCD Hazard Ranking: 50 **Land Type:** FEE
Operator: KEYES

PREVIOUS ACTIVITIES

Site Assessment: Dec-94 **Excavation:** Dec-94 (60 cy) **Soil Boring:** Feb-97
Re-Excavation: Mar-97 (280 cy) **Monitor Well:** May-97

1997 ACTIVITIES

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

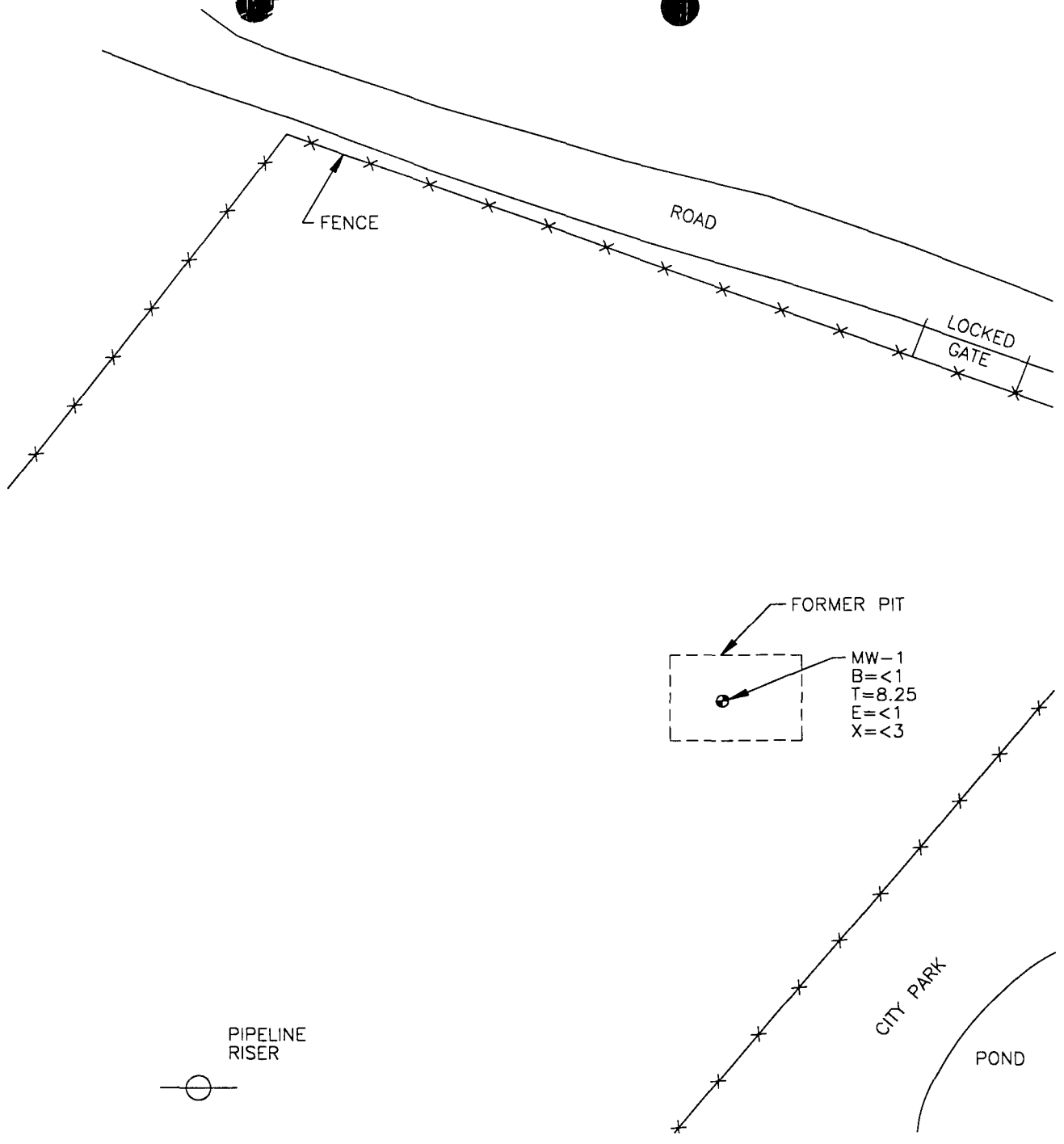
Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was initiated on 8/11/97. Groundwater analytical data are presented in Table 1. A site map is presented in Figure 1.

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.



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

N

PHILIP SERVICES CORP

TITLE:
FLORANCE #1
71512

DWN:	DES.:
TMM	CC
CHKD:	APPD:
CC	
DATE:	REV.:
1/19/98	0

PROJECT NO.: 17520
EPFS GW PITS

FIGURE 1

COL. 17520AP-001

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
970464	71512	Florance #1	5/19/97	1	Phase II Drilling - Initial	< 1	< 1	< 1	= 6.99	= 7
970842	71512	Florance #1	8/11/97	1	Sample 4 - 1st Qtr	< 1	= 11.7	< 1	< 3	= 12
971188	71512	Florance #1	11/5/97	1	Sample 4 - 2nd Qtr	1	8.25	1	3	8

RECORD OF SUBSURFACE EXPLORATION

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

PHILIP ENVIRONMENTAL SERVICES INC.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Number 17520 Phase 6001
Project Location Florance #1 7/512

Elevation
Borehole Location T30-R11-S8-Ltr J
GWL Depth
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 5/7/97 -1300
Date/Time Completed 5/7/97 -1345

Well Logged By CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Drilling Method 6 1/4 ID HSA
Air Monitoring Method 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: PPM BZ	BH	S	Drilling Conditions & Blow Counts
0										
5										
10										GW@12.9'
15				Backfill to 15'						Gravel@17'
20				Grey-Br SAND, F-med, mod gravel, saturated						Refusal@18.5'
25										
30										
35										
40										

Comments: No sample collected. Backfill to 15', GW@12.9'

Geologist Signature Cory Chance

MONITORING WELL INSTALLATION RECORD

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

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

Project Name EPFS GW
Project Number 17520 Phase 6002
Site Location Florance #1 71512

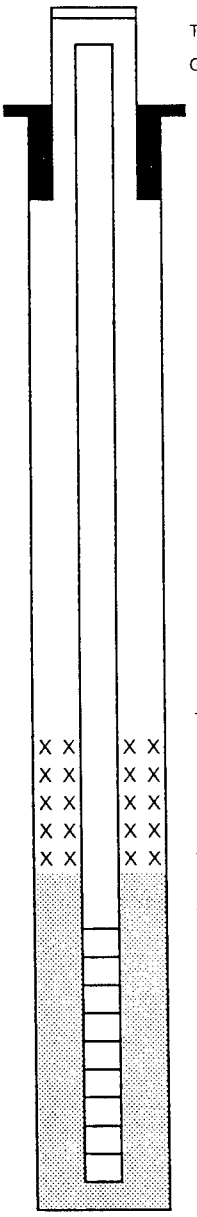
Elevation
Well Location T30R11W S 8 LTR J
GWL Depth 12.9' BGS
Installed By K Padilla

Date/Time Started 5/7/97 - 1345
Date/Time Completed 5/7/97

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" steel well vault	+3.1
Bottom of Protective Casing		2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		NA
Bottom of Concrete		NA
Top of Grout	Type I/II Portland cement	NA
Bottom of Grout	Powder Bentonite	NA
Top of Well Riser	4" SCH 40 PVC	+3
Bottom of Well Riser	FLUSH THREAD	2.5
Top of Well Screen	4" SCH 40 PVC	2.5
Bottom of Well Screen	0.01 SLOT FLUSH THREAD	17.5
Top of Peltonite Seal	ENVIROPLUG	0
Bottom of Peltonite Seal		1.5
Top of Gravel Pack	10-20 SILICA SAND	1.5
Bottom of Gravel Pack		17.5
Top of Natural Cave-In		17.5
Bottom of Natural Cave-In		18.5
Top of Groundwater		12.9
Total Depth of Borehole		18.5'



Top of Protective Casing +3.1'
Top of Riser +3'
Ground Surface 0
Top of Seal 0
Top of Gravel Pack 1.5'
Top of Screen 2.5'
Bottom of Screen 17.5
Bottom of Borehole 18.5

Comments: Seal hydrated w/ 5 gal potable water. Locking well cap & padlock placed on well

Geologist Signature Cory Chance

MWINSTAL.wk1

1997 GROUNDWATER ANALYTICAL

BRILLING INITIAL WELL SAMPLE

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Robert Thompson DATE: 5-19-97

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
970464	5-19-97	1457	H_2O	RT1	2			X					FLORANCE #1 – 71512
970465	5-19-97			TRIP BLANK	1								
													Cool

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Robert Thompson	5-19-97 1630		Cari Williams	5-20-97 10:55	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
				5/20/97 1055	Marsden Hoppe

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

6-11-97

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	RT1	970464
MTR CODE | SITE NAME:	71512	Florance #1
SAMPLE DATE | TIME (Hrs):	5/19/97	1457
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. | ANAL.:	5/23/97	5/23/97
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	6.99	PPB				
TOTAL BTEX	6.99	PPB				

The Surrogate Recovery was at 95.8 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By: John Faulkner Date: 6/3/97

970464,6/2/97

PHILIP ENVIRONMENTAL

Well Number 71512 (MW-1)

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS GW PITS | Project Manager CORY CHANCE | Project No. 17520

Client Company EL PASO FIELD SERV. | Phase.Task No. 6003.77

Site Name FLORANCE #1 | Site Address AZTEC, NM

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) 20.23
Initial Depth to Water (feet) 16.43
Height of Water Column in Well (feet) 3.80
Diameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	3.80	2.49	12.45
Gravel Pack			
Drilling Fluids			
Total			12.45

Instruments

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

Water Disposal

ON GROUND ON SITE

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 (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5-19-97	1300		X				2	2			20.8	7.21	1230		BROWN - SILTY
5-19-97	1307		X				2	4			18.1	7.36	1250		BROWN - SILTY
5-19-97	1345		X				2	6			18.9	7.21	1220		BROWN - SILTY
5-19-97	1430		X				2	8			18.5	7.20	1300		LIGHT BROWN

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

Comments WELL BAILED DRY AFTER 4 GAL. LET RECOVER FOR 20 MIN. BAILED AN ADDITIONAL 2 GAL. BAILED DRY AGAIN ~~LET~~ RECOVER 30 MIN. BAILED 2 MORE GAL. BAILED DRY AGAIN. LET RECOVER AND SAMPLED.

Developer's Signature(s) Robert Thompson Date 5-19-97 Reviewer _____ Date _____

PHILIP ENVIRONMENTAL

Location No. 71512 (MW-1)

Serial No. WSD-

WATER SAMPLING DATA

Group List Number _____

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other _____ Date 5·19·97

Project Name EPFS GW PITS Project No. 17520

Project Manager CORY CHANCE Phase.Task No. 6003.77

Site Name FLORANCE #1

Sampling Specifications

Requested Sampling Depth Interval (feet) 3'

Requested Wait Following Development/Purging (hours) N/A

Initial Measurements

Time Elapsed From Final Development/Purging (hours) 27 MIN.

Initial Water Depth (feet) 16.43

Nonaqueous Liquids Present (Describe) N/A

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. (µmhos/cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (ft)	Bail	Final Water Depth ft)	
	SEE WELL DEVELOPMENT AND PURGING DATA FORM											

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

Sample Containers

Preservatives: H = HCl; N = HNO_3; S = H_2SO_4; 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	
BTEX	2	V	40		X	H	X		SAMPLED AT 1457

Filter Type NONE Chain-of-Custody Form Number EPFS COC

Comments _____

Signature Robert Thompson Date 5·19·97 Reviewer _____ Date _____

El Paso Natural Gas Company

A 2052

Sample 4 - 1st Qtr

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis				Remarks
	AZTEC PIPELINE			BTXE	GENERAL CHEMISTRY	8 METALS		
Samplers: (Signature) Dennis Bird	Date: 8-11-97							

MATRIX	Date	Time	Comp.	GRAB	Sample Number							
WATER	8/11/97	1532		X	970942	5/2	4°C	X	X	X		FLORANCE #1 MW1 MC 7/512

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	8/11/97 1635				
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)	Date/Time	Remarks:	
		Marlon Hopper	8/12/97 0810		

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:	N/A	970842
MTR CODE | SITE NAME:	71512	Florance #1 MW-1
SAMPLE DATE | TIME (Hrs):	8/11/97	1532
PROJECT:	Sample 4 - 1st Quarter	
DATE OF BTEX EXT. | ANAL.:	8/13/97	8/13/97
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	11.7	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	12	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 89.6 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Labrier Date: 8/27/97

970842BTEX,8/25/97

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970842
DATE SAMPLED:	08/11/97
TIME SAMPLED (Hrs):	1532
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	71512
SAMPLE SITE NAME:	Florance #1
SAMPLE POINT:	MW-1

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.06	Units	08/14/97
Alkalinity as $C0_3$	0	PPM	08/14/97
Alkalinity as $HC0_3$	473	PPM	08/14/97
Calcium as Ca	155	PPM	08/13/97
Magnesium as Mg	19.1	PPM	08/13/97
Total Hardness as $CaC0_3$	466	PPM	08/13/97
Chloride as Cl	66.5	PPM	08/13/97
Sulfate as $S0_4$	317	PPM	08/13/97
Fluoride as F	0.83	PPM	08/14/97
Nitrate as $N0_3$-N	<0.6	PPM	08/13/97
Nitrite as $N0_2$-N	<0.6	PPM	08/13/97
Ammonium as NH_4^+	<0.1	PPM	08/13/97
Phosphate as PO_4	<0.6	PPM	08/13/97
Potassium as K	5.2	PPM	08/13/97
Sodium as Na	152	PPM	08/13/97
Total Dissolved Solids	1,010	PPM	08/14/97
Conductivity	1,440	umhos/cm	08/14/97
Anion/Cation %	0.7%	%, <5.0 Accepted	08/22/97

Lab Remarks:

Reported By: CV Approved By: John Faubion Date: 8/25/97

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	970842
SAMPLE DATE:	08/11/97
SAMPLE TIME (Hrs):	1532
SAMPLED BY:	D. Bird
MATRIX:	Water
METER CODE:	71512
SAMPLE SITE NAME:	Florance #1
SAMPLE POINT:	MW-1

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
ARSENIC (As)	0.004	0.100
BARIUM (Ba)	0.13	1.00
CADMIUM (Cd)	<0.0002	0.010
CHROMIUM (Cr)	<0.004	0.050
LEAD (Pb)	<0.003	0.050
MERCURY (Hg)	<0.0002	0.002
SELENIUM (Se)	<0.011	0.050
SILVER (Ag)	<0.0004	0.050

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.

od 7761, Silver (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Reported By: CV Approved By: John Fowler Date: 9-11-97

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 970842
Date Reported: 09/05/97

STANDARD REFERENCE MATERIAL

Analyte	Found Result (mg/L)	Known Value (mg/L)	% Recovery
Arsenic	0.031	0.032	94.4%
Barium	0.064	0.065	98.8%
Cadmium	0.0013	0.0012	110%
Chromium	0.008	0.007	103%
Lead	0.044	0.042	105%
Mercury	0.0041	0.0046	89.3%
Selenium	0.040	0.041	98.8%
Silver	0.0062	0.0068	91.2%

DUPLICATE ANALYSIS (mg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Arsenic	0.008	0.008	0.8%
Barium	0.106	0.114	7.3%
Cadmium	ND	ND	NA
Chromium	0.004	0.005	4.7%
Lead	ND	ND	NA
Mercury	ND	ND	NA
Selenium	ND	ND	NA
Silver	ND	ND	NA

SPIKE ANALYSIS (mg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Arsenic	0.008	0.118	0.100	107%
Barium	0.106	0.997	1.00	89.1%
Cadmium	ND	0.0105	0.010	99.7%
Chromium	0.004	0.052	0.050	94.9%
Lead	ND	0.054	0.050	102%
Mercury	ND	0.0017	0.0020	89.0%
Selenium	ND	0.054	0.050	105%
Silver	ND	0.0393	0.005	78.4%

METHOD BLANK

Analyte	Found Result (mg/L)	Detection Level (mg/L)
Arsenic	ND	0.004
Barium	ND	0.019
Cadmium	ND	0.0002
Chromium	ND	0.004
Lead	ND	0.003
Mercury	ND	0.00019
Selenium	ND	0.011
Silver	ND	0.0004

ND: Not Detected at stated detection level. NA: Not Applicable.

Reported By: mh Approved By: [signature] Date: 9-8-97

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name FLORANCE #1

Meter Code 71512

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removed
☐ 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) 20.30
Initial Depth to Water (feet) 16.30
Height of Water Column in Well (feet) 4.00
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		2.6	7.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
8-11-97	1354										20.3	6.82	1706		
8-11-97	1402						2.0	2.0			19.6	6.79	1713		
8-11-97	1412						1.0	3.0			19.7	6.84	1618	1.5	

Comments THE WELL BAILED DRY @ 3.0 GALLONS

Developer's Signature Dennis Bird Date 8-11-97 Reviewer John Hardi Date 8/25/97

SAMPLE 4 2ND QTR

El Paso Natural Gas Company

A 2127

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Samplers: (Signature)	Date
	MC # 71512	Dennis Bird	11-5-97

MATRIX	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTXE				Remarks
WATER	11-5-97	1110		X	971188	G-1	4°C	X				FLORANCE #1 MW-1

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	11-5-97 1615				
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)	Date/Time	Remarks:	
		Marlon Hoppe	11/6/97 0715		

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:	N/A	971188
MTR CODE | SITE NAME:	71512	Florance #1
SAMPLE DATE | TIME (Hrs):	11/5/97	1110
PROJECT:	Sample 4 2nd Quarter	
DATE OF BTEX EXT. | ANAL.:	11/6/97	11/6/97
TYPE | DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	8.25	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	8	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 88.3 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Narrative:

Approved By: John Scalla Date: 11/12/97

971188BTEXMW,11/10/97

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name FLORANCE #1

Meter Code 71512

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removel
☐ 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) 20.30
Initial Depth to Water (feet) 16.51
Height of Water Column in Well (feet) 3.79
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		2.5	7.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. CHEMETS KIT

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
11-5-97	1037										17.6	6.70	1888		
11-5-97	1045						2.0	2.0			17.1	6.81	1883		
11-5-97	1103						2.0	4.0			16.9	6.93	1700	1.5	

Comments THE WELL BAILED DRY @ 4.0 GALLONS.

Developer's Signature Dennis Bird Date 11-5-97 Reviewer John Loehr Date 11/12/97

EL PASO
FIELD SERVICES

Bill Olson
New Mexico Oil Conservation Commission
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Date: June 2, 1997

Subject: Semi-Annual El Paso Field Services Pit Project Groundwater Report

Mr. Olson,

El Paso Field Services (EPFS) has encountered groundwater at various locations while investigating and or remediating exempt hydrocarbon unlined pits. The enclosed list includes all locations which are in this category. Please find enclosed, the locations and status of each individual pit.

These pits are being remediated according to the "EPFS Remediation Plan for Groundwater Encountered During Pit Closure Activities" dated November 29,1995.

EPFS requests that future reports for this project be submitted on a yearly basis to begin December 1, 1997 which will include soil boring logs, monitoring well completion diagrams, analytical data, groundwater elevation data, any risk analysis and type of remediation method.

For questions regarding this report please contact Ricky Cosby at (505)599-2158.

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust - Aztec District

El Paso Field Services
Pit Project Ground Water Report

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
MCGRATH #1	F	07	30	11	+1	GW encountered during drilling activities, MW results below standards, Develop Closure Plan	17'	No
Mae Gail Com #1	E	24	29	11		PZ1 in center of pit below standards. All other samples below standards. Develop Closure Plan	0.5'-6'	No
NM COM G1	P	36	30	10		MW1 was removed during site re-excavation, PZ1 installed with samples below standards. Develop Closure Plan.	17'-18'	No
MARY ACKROYD #1	J	18	30	11		Geoprobe samples all below standards. Develop Closure Plan.	3'-6'	No
JACQUEZ #3	E	25	30	09	-1	MW1 removed during re-excavation. 3 piezos and 1 probehole around pit all below standards. Operator has placed a production tank over the pit location. Develop Closure Plan.	13'-15'	No
SALAZAR G 34-1	K	34	25	06	+1	MW1 results all below standards. Develop Closure Plan.	35'	No
ANDERSON GAS COM A#1 PC	C	28	29	10		PH4 in center of pit is below standards. All of PH's around pit below standards. Develop Closure Plan.	5'-9'	No
GALLEGOS CANYON UT 145 E	D	26	29	12		PZ1 in center of pit below standards.	6'-9'	No
JOHNSTON FEDERAL #3A	I	12	30	09	+1	Develop Closure Plan. 4 clean quarters.	67.5'	No
FLORANCE #1	J	08	30	11	+1	MW1 installed 05/07/97. Develop and sample MW1.	14'	No
DE-NA-HAZ-ZA #1	D	18	26	08	+1	MW1 installed 05/06/97. Develop and sample MW1.	14'	No
Ramenta Et Al #1	J	13	27	09	+1	MW1 installed 05/06/97. Develop and sample MW1.	5'-9'	No
HAMMOND 41 A	O	25	27	08	+1	MW1 installed 05/05/97. Develop and sample MW1.	15'-24'	No
VALDEZ GAS UNIT A #1E CH	G	24	29	11	-1, +1	MW1 installed 05/07/97. Develop and sample MW1.	11'-12'	No

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
GALLEGOS CANYON COM A142E	G	25	29	12	+1	MW1 Developed and sampled 03/10/97. Evaluate Data.	13'	No
GALLEGOS CANYON UT D#160	I	27	29	12	+1	MW1 Developed and sampled 03/10/97. Evaluate Data.	19.1'	No
HARRINGTON #1	M	31	27	07	+1	MW1 Developed and sampled 04/02/97. Evaluate Data.	13'	No
Turner A1 "PM" (Pit #2)	G	34	31	11	+1	MW1 Developed and sampled 03/12/97. Evaluate Data.	2.3'--2.5'	No
TURNER #1A (Pit #1)	K	34	31	11	+1	Same as Above	5'	No
SAN JUAN 28-6 UNIT #79 MV	M	11	27	06	+1	MW1 Developed and sampled 04/14/97. Evaluate Data.	30'	No
KNIGHT #1	A	05	30	13	+4	Installed Oxegenate Socks 11/25/96. Geoprobe 02/25/97. Evaluate Data.	22'-25'	No
Ohio C. Govt. #3	P	26	28	11		Install MW1 and sample quarterly.	6'-16'	No
NICKLES #1	K	11	31	13	+1	MW1 Developed and sampled 03/28/97. Evaluate Data.	12'-15'	No
BUD-DOS-PAH #1	M	19	26	08		Soil Boring 02/19/97. Operator has placed a compressor over excavated pit area. Evaluate Data.	13'	No
SANCHEZ GAS COM B#1	G	28	29	10	+1	MW1 Developed and sampled 03/11/97. Evaluate Data.	6'-9'	No
GE-ELE-GU-LITH-E #2	L	07	26	08		Soil Boring 02/20/97. Operator has placed a compressor over excavated pit area. Evaluate Data.	13'	No
JOHN CHARLES #8	B	13	27	09	+1	MW1 Developed and sampled 03/13/97. Evaluate Data.	19'	No
CANDADO 23 MV	B	09	26	07	+1	MW1 Developed and sampled 04/16/97. Evaluate Data.	6'-9'	No

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
GALLEGOS CANYON UNIT 188E	B	30	29	12	+ 1	MW1 Developed and sampled 04/03/97. Evaluate Data.	3'-5'	No
JOHNSON #1E	P	21	31	13	+ 1	MW1 Developed and sampled 03/28/97. Evaluate Data.	3'-9'	No
MILES FEDERAL #1E	N	05	26	07	+ 1	MW1 Developed and sampled 04/02/97. Evaluate Data.	13.5'-30'	No
TRUJILLO GAS COM A#1	C	28	29	10	+ 1	MW1 Developed and sampled 04/03/97. Evaluate Data.	3'-9'	No
ANDERSON GAS COM A#1 CH	C	28	29	10	+ 1	MW1 Developed and sampled 03/11/97. Evaluate Data.	5'-9'	No
TRUNK D LINE DRIP (LOOPD8)	F	20	28	08	+ 1	MW1 Developed and sampled 03/31/97. Evaluate Data.	10.8'-24'	No
K-31 LINE DRIP	N	16	25	06	+ 1	MW1 Developed and sampled 04/16/97. Evaluate Data.	18'-24'	No
K-17 LINE DRIP	C	26	27	08	+ 1	MW1 Developed and sampled 03/31/97. Evaluate Data.	17.8'-27'	No
TRUNK 2B DRIP X-1	J	01	27	11	+ 1	MW1 Developed and sampled 03/11/97. Evaluate Data.	6'-10'	No
Trujillo Gas Com #1 PC	M	21	29	10		Install MW1	4'	No
OHIO C GOVERNMENT #3 TD	P	26	28	11		Install MW1	6'-16'	No
LINDRITH B #24	N	09	24	03		Install MW1	21'-27'	No
K - 51 Line Drip	A	34	26	06		Install MW1	10'	No
Mesa CPD	C	04	29	14	+ 1	Install well points around pit and sample. MW1 needs 3 more clean quarters.	3'-6.5'	No
STANDARD OIL COM #1	N	36	29	09	+ 1	Install well points on four sides of pit to establish gradient.	20.89'	No
W.D. HEATH B#5	M	31	30	09	+ 1	Install well points on four sides of pit to establish gradient.	30'-36'	No
CANYON LARGO UNIT 304	C	11	24	06	+ 1	Install downgradient well points and sample.	17.5'-18'	No

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
K-27 LINE DRIP	E	04	25	06	+1	Establish gradient with well points.	40'	No
LAT 0-21 LINE DRIP	O	12	30	09	+1	Establish gradient with well points.	33'-36'	No
Trunk D loop Line Drip	I	33	28	08	+1	Establish gradient with well points.	33'-36'	No
Bisti Flare Pit	C	21	12	26		Establish GW gradient	15'	No
LAT L-40 LINE DRIP	H	13	28	04	+1	Install downgradient well points and sample.	40'	No
HAMNER #9	A	20	29	09	+1	Establish gradient with well points.	29'-31'	No
GARTNER LS #7	K	26	30	08		NMOCD Closure Approved	NA	No
HAMMOND FED #1	L	25	27	08	+1	NMOCD Closure Approved	NA	No
BURROUGHS COM #1	H	36	27	08		NMOCD Closure Approved	NA	No
CLEVELAND #6	B	21	27	09	+1	NMOCD Closure Approved	NA	No
CHARLEY PAH 4	K	12	27	09		NMOCD Closure Approved	NA	No
GRACE PEARCE #1	O	22	29	11		NMOCD Closure Approved	NA	No
HAMMOND #7	G	26	27	08		NMOCD Closure Approved	NA	No
ONA MCGEE #1	P	04	30	11		NMOCD Closure Approved	NA	No
CUTLER #2	A	14	24	06		NMOCD Closure Approved	NA	No
LINDRITH UNIT #23	D	09	24	03		NMOCD Closure Approved	NA	No
GREEN COM #1	E	36	29	09		NMOCD Closure Approved	NA	No
HAMMOND FED #5	D	25	27	08	+1	NMOCD Closure Approved	NA	No
FLORA VISTA #1	F	22	30	12		NMOCD Closure Approved	NA	No
MARSHALL B #1J	O	14	27	09		NMOCD Closure Approved	NA	No
HAMMOND #92	O	25	27	08		NMOCD Closure Approved	NA	No
PRICE #3	A	15	28	08		NMOCD Closure Approved	NA	No

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
KRAUSE WN FEDERAL #1E	C	32	28	11		NMOCD Closure Approved	NA	No
CANYON LARGO UNIT #298	A	03	24	06		NMOCD Closure Approved	NA	No
ARGO #1E	N	18	27	10		NMOCD Closure Approved	NA	No
CANYON LARGO UNIT #302	J	03	24	06		NMOCD Closure Approved	NA	No
FEDERAL 6 #32 CH	G	06	26	07		NMOCD Closure Approved	NA	No
SANCHEZ GAS COM C#1	A	28	29	10		NMOCD Closure Approved	NA	No
VALDEZ #2	G	24	29	11	-1	NMOCD Closure Approved	NA	No
FEDERAL R #2	P	15	27	08	+1	NMOCD Closure Approved	NA	No
CANYON LARGO UNIT #336	C	24	25	06		NMOCD Closure Approved	NA	No
CANDELARIA GAS COM C #1	C	27	29	10		NMOCD Closure Approved	NA	No
HOWELL #3	C	03	27	08		NMOCD Closure Approved	NA	No
LAT 2C-55 LINE DRIP	F	17	25	07	+1	NMOCD Closure Approved	NA	No
HORTON 1-E	H	28	31	09	+1	MW1 above B standards. Inject nutrient slurry in corners of pit.	5.3'	No
LAT 3B-39	M	10	29	09	+1	MW1 above B standards. Inject nutrient slurry in corners of pit.	31'-36'	No
JOHNSTON FEDERAL #4	H	33	31	09	+3	Determine Remedial Design Options.	48.94'--50.38'	Yes
STATE GAS COM N #1	H	16	31	12	+4	Determine Remedial Design Options.	75.66'--76.90'	Yes
COLDIRON COM A#1	K	02	30	11	+1	Determine Remedial Design Options.	35.4'	Yes
JOHNSTON FEDERAL #6A	F	35	31	09	+4	Determine Remedial Design Options.	40'-44.6'	Yes
JAMES F. BELL #1E	P	10	30	13	+4	Determine Remedial Design Options.	23.5'-24.5'	Yes
CANADA MESA #2	I	24	24	06	+1	Determine Remedial Design Options.	30'	Yes

Location/Line Name	LTR	Sec	TN	RG	Monitor Well Status	Status	Depth to GW	Product Level
FIELDS A #7A	E	34	32	11	+4	Confirm groundwater gradient. Initiate product removal from MW4.	21.8'-28.8'	Yes
FOGELSON 4-1 COM #14	P	04	29	11	+1	Re-excavate site. Evaluate operators open pits as sources of contamination.	31'-36'	No
SANDOVAL GAS COM A 1A	C	35	30	09	+1	Refusal with Geoprobe. Re-excavate pit and re-install MW1.	35'	No
MILES FEDERAL 1A (CH)	F	05	26	07	+1	Evaluate Data. Sandstone refusal at 25'.	29'	Yes
SHEETS #2	H	28	31	09	+4	Sample Quarterly. Steady drop in B analysis through 4 quarters.	46.3'--50.31'	No
JENNAPAH #1	H	36	28	09	+1	Sample Quarterly. Develop and Sample MW1 03/13/97.	20'	No
FLORANCE C LS 7	F	30	28	08	+1	Sample Quarterly. Need 2 more clean quarters.	40'	No
GRAHAM #53	L	10	27	08	+1	Sample Quarterly. Need 3 more clean samples	28.33'	No
MILES FEDERAL 1 A MV	F	05	26	07	+1	Sample Quarterly. Need 2 more clean quarters.	27.8'	No
LAT. H-37 DRIP Y-3	F	01	31	13	+4	Sample Quarterly. Remove socks. 4 clean quarters with ORB socks.	24.5'-25'	No
2C-22 #1 LINE DRIP	N	35	24	06	+1	Develop Closure Plan. 4 clean quarters.	28.8'	No
2C-22 #3 LINE DRIP	G	13	24	06	+1	Sample Quarterly. Need 3 more clean quarters.	14'-24'	No
2C - 45 Line Drip	P	13	25	06	+1	Sample Quarterly. Need 3 more clean quarters.	42.2'	No
USSELMAN GAS COM #1	B	04	31	10	+1	Sample Quarterly. Need 2 more clean quarters	10'	No
Note:								
MW = Monitor Well								
PZ = Piezometer								
BH = Bore Hole								