3R - 145

AGWMR

2001

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Pit Closure Reports

March 2001

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800398

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

Sites Submitted for Closure:

TWN	RNG	SEC	UNIT	SITE NAME	METER	LAND TYPE
28	11	26	P	Ohio C Govt #3	72890	Federal
29	10	28	C	Anderson GC A #1 CH	95210	Fee

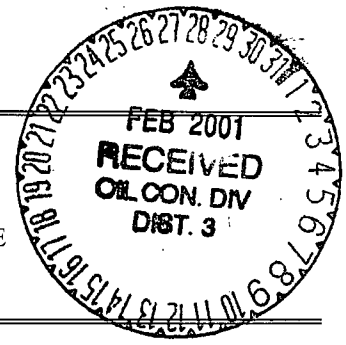
Sites Previously Submitted for Closure:

TWN	RNG	SEC	UNIT	SITE NAME	METER	LAND TYPE
31	11	34	K	Turner A #1 PM (Pit #1 and #2)	71676	State
31	9	28	H	Sheets #2	70286	Fee
29	14	4	C	Mesa CPD	02643	Fee
26	6	34	A	K-51 Line Drip	LD244	Federal

3R 145

EPFS GROUNDWATER PITS
2000 CLOSURE REPORT

ANDERSON GC A #1 CH
Meter/Line ID - 95210



SITE DETAILS

Legals - Twn: 29N **Rng:** 10W **Sec:** 28 **Unit:** C
NMOCD Hazard Ranking: 40 **Land Type:** FEE
Operator: AMOCO PRODUCTION COMPANY

PREVIOUS ACTIVITIES

Site Assessment: Apr-94
Excavation: Apr-94 (25 CY)
Geoprobe: Oct-96
Re-Excavation: Oct-96 (192 CY)
Soil Boring: Feb-97
Monitor Well: Feb-97
Submitted for Closure: Dec-98
Additional Monitor Well: Nov-99
Denied Closure: Jul-99

Following the initial site assessment in April of 1994 (previously submitted), the pit was excavated to 6 feet beneath ground surface (bgs) where groundwater was encountered. A composite soil sample was collected from the excavation bottom and four walls. Approximately 25 cubic yards were removed during excavation. The headspace soil reading from the excavation bottom was 428 ppm. Soil analytical was as follows: benzene - <0.5, total BTEX – 26.9, and TPH (418.1) 2,220 mg/kg (analytical data was submitted in the December 1998 Groundwater Closure Report).

The pit was re-excavated to 11 feet bgs and an additional 192 cubic yards of contaminated soil were removed in October of 1996 (previously submitted). Groundwater was encountered at 6 feet bgs. Excavation to the south was limited by trees and large berm used for flood control (levee) for the San Juan River. The headspace soil reading from the excavation bottom was 126 ppm. Soil analytical was as follows: benzene – non- detect, total BTEX – non- detect, and TPH – 25.0 mg/kg (analytical data was previously submitted). One half gallon of 30% hydrogen peroxide was added to the excavation to aid in the natural degradation of residual hydrocarbons.

In February of 1997 one soil boring was drilled in the center of the former pit. Groundwater was encountered at 6 feet bgs and a monitoring well was installed. No soil samples were collected. Quarterly groundwater monitoring was initiated on March 11, 1997 and continued through May 5, 1998.

Following the closure request for this site in the December 1998 annual report, two additional monitor wells were requested by the OCD in correspondence dated July 28, 1999. One monitor well, MW-2, was installed in November 1999. Groundwater analytical data from this monitor well establishes no detectable levels of hydrocarbon migration in MW-2.

For an additional monitor well to be installed downgradient of the former pit, the monitor well would have to be located south of the fence that is next to the former pit. This location, privately owned, maintains dense tree coverage and a 20-30 foot levee for the river, which prohibits drilling of the second downgradient monitor well.

Based on groundwater levels collected from Geoprobe and monitoring well data, the groundwater flow trends to the south on this site. One downgradient groundwater sample collected from PH-8 in 1996 was below standards for BTEX (Table 1 and Figure 2). Groundwater samples collected

from cross-gradient and upgradient probeholes, piezometers, and MW-2 were below regulatory standards for BTEX (analytical data previously submitted).

Historical analytical groundwater data is included in Table 1. Laboratory analytical data, well diagrams and boring logs were previously submitted in respective reports.

2000 ACTIVITIES

Groundwater Monitoring – Annual groundwater samples were collected from MW-1, MW-2 and former piezometer PZ-1 in 2000. Groundwater analytical data has been below standards since sampling was initiated at this site.

SUMMARY TABLES

Groundwater analytical data are presented in Table 1 and Figure 1. Copies of the laboratory data sheets and associated quality assurance/quality control data are presented as Attachment 1.

SITE MAP

A site map is presented as Figure 1. A figure previously included in the 1999 Annual Groundwater Report is offered as Figure 2 to show the groundwater gradient for this site (a current figure with groundwater elevation and gradient is not possible due to apparent damage to MW-2).

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities at this site during 2000.

DISPOSITION OF GENERATED WASTES

There were no wastes generated at this site in 2000.

CONCLUSIONS

EPFS has excavated 217 cubic yards of slightly contaminated soil from the former pit. Soil samples collected from the excavation were below regulatory standards. Laboratory analyses of groundwater from MW-1 and MW-2 have demonstrated no detectable levels of BTEX constituents since August of 1997 (Table 1).

Groundwater analytical data from a sample obtained from PZ-1, PH-2, PH-3 and PH-8 has indicated only trace levels of BTEX constituents, below the NMWQCC groundwater standards. Additional groundwater monitor wells are not feasible downgradient of the former pit. Negligible impact to groundwater has occurred at this site. Therefore, EPFS requests closure of this site.

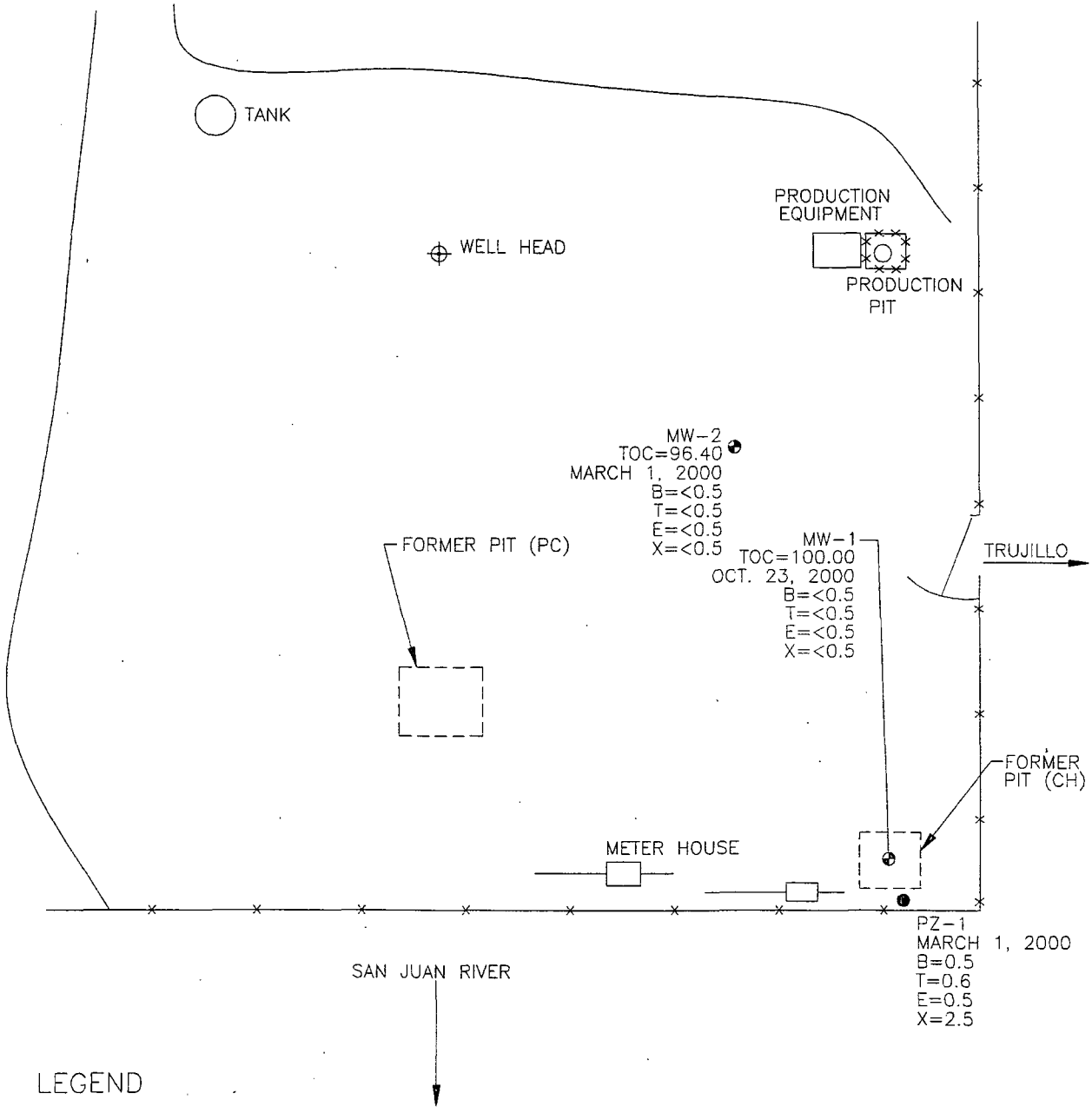
RECOMMENDATIONS

- EPFS requests closure of this site.
- Following OCD approval for closure, MW-1 and MW-2 will be abandoned in accordance with the Monitoring Well Abandonment Plan.

Table 1

Sample #	Meter / Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX (PPB)
970206	95210	ANDERSON GC A #1 CH	3/11/97	1	Phase II Drilling - Initial	< 1	< 1	= 3.5	= 25.6	29.1
970805	95210	ANDERSON GC A #1 CH	8/4/97	1	Sample 2 - 1st Event	< 1	< 1	< 1	< 3	ND
980144	95210	ANDERSON GC A #1 CH	2/5/98	1	Sample 2 - 2nd Event	< 1	< 1	< 1	< 3	ND
980347	95210	ANDERSON GC A #1 CH	5/5/98	1	Sample 2 - 3rd Event	< 1	< 1	< 1	< 3	ND
AND-0010-MW1	95210	ANDERSON GC A #1 CH	10/23/00	1	Sample 1 - 4th Event	< 0.5	< 0.5	< 0.5	< 0.5	ND
AND-0003-MW2	95210	ANDERSON GC A #1 CH	3/1/00	2	Sample 1 - 2nd Annual	< 0.5	< 0.5	< 0.5	< 0.5	ND
AND-0003-PZ1A	95210	ANDERSON GC A #1 CH	3/1/00	PZ1	Sample 1 - 2nd Annual	< 0.5	= 0.6	= 0.5	= 2.5	3.6
947934	95210	ANDERSON GC A #1 CH	10/21/96	PH2	Sample 1	= 1.28	= 2.34	= 16.5	= 85.7	105.8
947936	95210	ANDERSON GC A #1 CH	10/23/96	PH3	Sample 1	< 1	= 1.77	< 1	= 2.32	4.09
947941	95210	ANDERSON GC A #1 CH	10/23/96	PH8	Sample 1	< 1	< 1	< 1	< 3	ND

ND - No detectable levels
Sample 1 - Annual Sampling
Sample 2 - Semi-annual Sampling



LEGEND

⊕ MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
TOC	TOP OF CASING ELEVATION
B	BENZENE (ug\L)
T	TOLUENE (ug\L)
E	ETHYL BENZENE (ug\L)
X	XYLENE (ug\L)
ug\L	MICROGRAMS PER LITER
●PH-4	APPROXIMATE PROBEHOLE LOCATION AND NUMBER

NOT TO SCALE

N

PHILIP SERVICES CORP

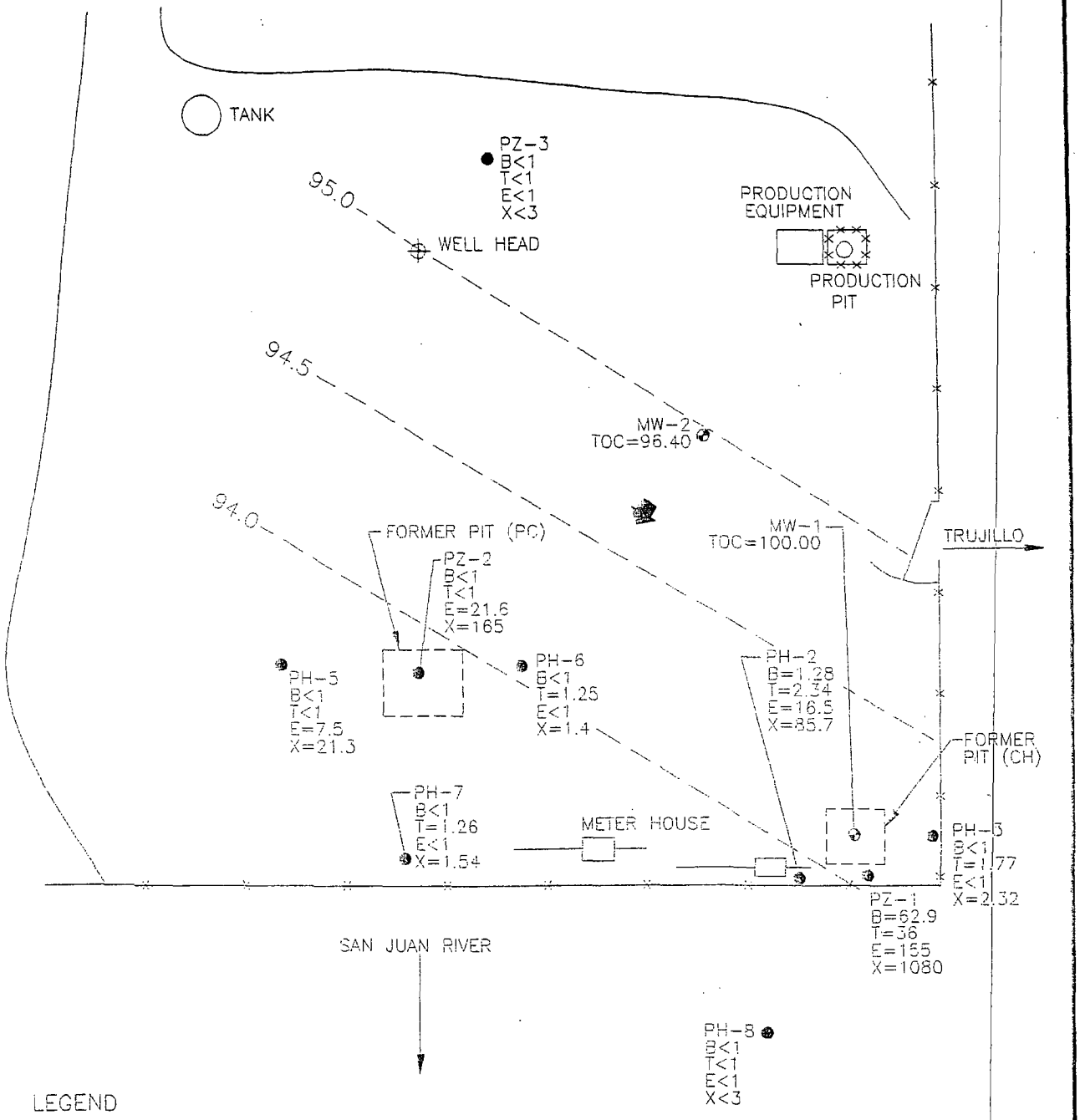
TITLE:
ANDERSON GC A#1 CH
METER 95210
JANUARY 31, 2001

DWN:	DES.:
TMM	LW
CHKD:	APPD:
LW	MN
DATE:	REV.:
3/20/00	0

PROJECT NO.: 62800219
EPFS GW PITS

FIGURE 1

CDL 628\002195-003



LEGEND

B	BENZENE (ug/L)
T	TOLUENE (ug/L)
E	ETHYL BENZENE (ug/L)
X	XYLENE (ug/L)
ug/L	MICROGRAMS PER LITER
●PH-4	APPROXIMATE PROBEHOLE LOCATION AND NUMBER
94.0	GROUNDWATER POTENTIOMETRIC SURFACE
	APPROXIMATE GROUNDWATER GRADIENT

NOT TO SCALE

N

PHILIP SERVICES CORP

TITLE: ANDERSON GC A#1 CH 95210

DWN:	DES.:
TMM	LW
CHKD:	APPD:
LW	MN
DATE:	REV.:
1/21/98	0

PROJECT NO.: 62800219
EPFS GW PITS

FIGURE 2

COL 628\00219S-002

ATTACHMENT 1

2000 GROUNDWATER ANALYTICAL

PHILIP ENVIRONMENTAL

Well Number MW 01

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Serial No. WDPD-

Project Name EPFS quarterly Sampling Project Manager R Thompson Project No. 62800107

Client Company EPFS Phase.Task No. 0301

Site Name Anderson GC A II (95210) Site Address Rural San Juan CO.

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) 16.34
Initial Depth to Water (feet) 8.53
Height of Water Column in Well (feet) 7.81
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	7.81	5.09 x 3	15.27
Gravel Pack			
Drilling Fluids			
Total			15.27

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

KT2 Separator Bloomfield NM

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
10/23/00				1238			3.25	3.25			18.5	7.48	1790		Clear no odor
				1242			3.25	6.50			17.8	7.23	1680		" "
				1247			3.25	9.75			17.6	7.20	1670		" "
				1251			3.25	13			17.6	7.16	1670		" "
				1254			3.25	16.25			17.5	7.17	1660		no Change

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

Comments Sampled for BTEX at 1301

Developer's Signature(s) Chris M Date 10-23-00 Reviewer RT Date 10/27/00

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2679

Project Name EPFS Quarterly Sampling
Project Number 628001.07 Phase . Task 0301
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Comments
AND-0010-MW-01	10 25 00	1301	H20	2	X	ANDERSON GC # 1
						2802

Relinquished by:

Signature	Date	Time
Chris M.	10 25 00	1600

Received By:

Signature	Date	Time

Samples Iced: ☐ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☑ Other (Specify) $HgCl_2$
- ☐ Other (Specify)

Carrier: Greyhound

Airbill No. GLT 1606918731

Shipping and Lab Notes:

PE-176 4/95

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

NOV - 6 2000

Pinnacle Lab ID number **010102**
November 02, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 10/26/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 010102
PROJECT #	: 62800107	DATE RECEIVED	: 10/26/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 11/02/00

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	AND-0010-MW 01	AQUEOUS	10/23/00

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PINNACLE I.D.: 010102
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AND-0010-MW 01	AQUEOUS	10/23/00	NA	10/30/00	1

PARAMETER	DET. LIMIT	UNITS	AND-0010-MW 01
BENZENE	0.5	UG/L	< 0.5
TOLUENE	0.5	UG/L	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5
TO XYLENES	0.5	UG/L	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 111
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 010102
BLANK I. D.	: 103000	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 10/30/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		105
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 010100-01	PINNACLE I.D.	: 010102
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 10/30/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.9	100	17.6	88	12	(80 - 120)	20
TOLUENE	<0.5	20.0	19.9	100	19.9	100	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.3	107	21.5	108	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	62.4	104	62.6	104	0	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

010102

COC Serial No. C 2679

Project Name EPFS Quarterly Sampling
Project Number 62800107 Phase . Task 0301
Samplers C. Maez
Laboratory Name PINNACLE
Location AlBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021				Lab ID #								Comments
AND-0010-MW 01	10 23 00	1301	H20	2	X				01								ANDERSON GC A# 1

Relinquished by:

Signature	Date	Time
Chris A. Maez	10 25 00	1600

Received By:

Signature	Date	Time
Francine Jaime	1640	10/26/00

Samples Iced: ☐ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☑ Other (Specify) H_2Cl_2
- ☐ Other (Specify)

Carrier: Greyhound

Airbill No. GLI 160691873 1

Shipping and Lab Notes:

Rec'd @ 5.1°C

WELL DEVELOPMENT AND PURGING DATA

Well Number PZ-1 ☐ Dev ☒ Purg

Serial No. WDPD-

Page 1 of 1

Project Name EPFS GW PITS | Project Manager STEVE STELLAVATO | Project No. 62800018

Client Company EL PASO FIELD SERVICES | Phase,Task No.

Site Name ANDERSON GAS COM A #1 | Site Address BLOOMFIELD, 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) ?
Initial Depth to Water (feet) ?
Height of Water Column in Well (feet) ?
Diameter (inches): Well 1" Gravel Pack

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

Instruments

	Serial No. (If applicable)
☒ pH Meter	EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ 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

NO DATA COLLECTED DUE TO INSUFFICIENT WELL VOLUME.

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

Comments WATER LEVEL AND TOTAL WELL DEPTH WERE NOT RECORDED DUE TO IMPROPER SIZE OIL/WATER INTERFACE PROBE. WELL DIAMETER WAS TO SMALL FOR DIAMETER OF PROBE.

Developer's Signature(s) Robert Crampton Date 3/1/00 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number MW-2

☐ Development ☒ Purging

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

Project Name EPFS GW PITS

Project Manager STEVE STELLAVATO

Project No. 628000018

Client Company EL PASO FIELD SERVICES

Phase.Task No.

Site Name ANDERSON GAS COM A #1

Site Address BLOOMFIELD, 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) 15.33' TOR
Initial Depth to Water (feet) 4.41' TOR
Height of Water Column in Well (feet) 10.92'
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing			1.78 x 3
Gravel Pack			
Drilling Fluids			
Total			5.30

Instruments

	Serial No. (if applicable)
☒ pH Meter	EXTECH
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ 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
31.00	1136		X				1	1			12.2	8.00	1840 1.84 mmc		
	1142		X				1	2			10.5	7.4	1600		
	1146		X				1	3			10.5	7.4	1570		
	1150		X				1	4			10.2	7.3	1580		
	1154		X				1	5			10.3	7.4	1490		
	1157		X				1	6			10.4	7.2	1500		
	1200		X				1	7			10.5	7.3	1460		

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

Comments SAMPLED WELL FOR BTEX AT 1203.

Developer's Signature(s) Robert Thompson Date 3/1/00 Reviewer Date

PHILIP ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2498

Project Name EPFS GW INVEST.

Project Number 62800018 Phase Task 35

Samplers R. THOMPSON

Laboratory Name PINNACLE LABS

Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Comments
AND-0003-MW2	3/1/00	1203	H_2O	2	X	95210
AND-0003-PZ1	3/1/00	1225	H_2O	2	X	95210

Relinquished by:

Signature	Date	Time
Robert Thompson	3/1/00	1435

Received By:

Signature	Date	Time

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: GREYHOUND

Airbill No. GLI 160 665 0727

Shipping and Lab Notes: RUSH SAMPLES - INVOICE EL PASO NORMAL RATE, INVOICE PHILIP SERVICES FOR RUSH CHARGE.

PE-176 4/95

PHILIP ENVIRONMENTAL

Chain of Custody Record

003010

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2498

Project Name EPFS GW INVEST.
Project Number 62800018 Phase . Task 35
Samplers R. THOMPSON
Laboratory Name PINNACLE LABS
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX 8021	Lab ID#	Comments
AND-0003-MW2	3/1/00	1203	H_2O	2	X	01	95210
AND-0003-PZ1A	3/1/00	1225	H_2O	2	X	02	95210

RUSH!

Relinquished by:

Signature	Date	Time
Robert Thompson	3/1/00	1435

Received By:

Signature	Date	Time
Francine Favio	3/2/00	1015

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)
- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: GREYHOUND

Airbill No.

Shipping and Lab Notes: RUSH SAMPLES - INVOICE EL PASO NORMAL RATE. INVOICE PHILIP SERVICES FOR RUSH CHARGE.

Rec'd @ 4°C

PE-176 4/95

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800018
PROJECT NAME : EPFS GW INVEST.

PINNACLE I.D.: 003010

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AND-0003-MW2	AQUEOUS	03/01/00	NA	03/02/00	1
02	AND-0003-PZ1	AQUEOUS	03/01/00	NA	03/02/00	1

PARAMETER	DET. LIMIT	UNITS	AND-0003-MW2	AND-0003-PZ1A
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	0.6
ETHYLBENZENE	0.5	UG/L	< 0.5	0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	2.5

MW-2 PZ-1A

SURROGATE:
BROMOFLUOROBENZENE (%) 101 95
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A