

3R - 166

REPORTS

DATE:

2000



Certified Mail: #7000 1670 0012 7260 6739

February 26, 2001

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

RECEIVED

FEB 28 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2000 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 32 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

Of the 32 reports (Volumes 1-4), EPFS hereby requests closure of six sites. The six sites EPFS is requesting closure on are presented in one separate binder entitled "San Juan Basin Pit Closures, El Paso Field Services, Pit Closure Reports". Four of the six sites were submitted in last years report and a decision has not been made on closure. The remaining two sites have been submitted in previous years and denied closure.

The Jaquez Com. C #1 and Jaquez Com. E #1 site is not included in with this years report and will be submitted by the required deadline of April 1, 2001

EPFS has also included for your information six Navajo sites in a separate binder.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott T. Pope', written over a horizontal line.

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; Certified Mail # 7000 1670 0012 7260 6722
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), Certified Mail # 7000 1670 0012 7260 6715

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

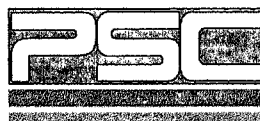
El Paso Field Services
Pit Project Groundwater Report
Annual Report
Volume III

March 2001

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800398



166

EPFS GROUNDWATER PITS

2000 ANNUAL GROUNDWATER REPORT

D LOOP LINE DRIP

Meter/Line ID - LD169

SITE DETAILS

Legals - Twn: 28N Rng: 8W Sec: 33 Unit: I
NMOCD Hazard Ranking: 30 Land Type: FEDERAL
Operator: EL PASO FIELD SERVICES

PREVIOUS ACTIVITIES

Site Assessment: Jan-95 Excavation: Feb-95 (80 cy) Soil Boring: Nov-95
Monitor Well: Nov-95 Geoprobe: Dec-96 Quarterly Sampling Initiated: Nov-96
Additional Monitor Wells: Dec-99

2000 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring continued through 2000 in MW-1.

Monitor Well Completion - A temporary monitor well installed in 1999 was completed in July of 2000.

SUMMARY TABLES

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

SITE MAP

Quarterly site maps with groundwater elevations and gradients are presented as Figures 1-4.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

The temporary monitor well, MW-2, was completed July 18, 2000. Revised well completion diagrams are included as Attachment 2.

DISPOSITION OF GENERATED WASTES

There were no wastes generated at this site in 2000.

ISOCONCENTRATION MAPS

BTEX parameters are at or below NMWQCC groundwater standards and no isoconcentration maps were generated.

CONCLUSIONS

Analytical results of groundwater samples collected from MW-1 show benzene levels above NMWQCC groundwater standards during the first three quarterly sample events in 2000 and below standards during the last quarter. Hydrocarbon concentrations are decreasing at the location.

EPFS GROUNDWATER PITS 2000 ANNUAL GROUNDWATER REPORT

Analytical results of groundwater samples collected from monitor wells MW-2 and MW-3 are below NMWQCC standards for all constituents in 2000. The groundwater gradient is to the east at this site (Figure 1).

Pertinent data from past groundwater reports include the following:

This site is approximately 200 yards from Largo Wash in a remote location.

RECOMMENDATIONS

- Complete downgradient monitor well MW-3 that was previously installed in 1999 as a temporary well.
- Quarterly sampling will continue at MW-1, MW-2, and MW-3 until analytical results show hydrocarbon constituents are below New Mexico Groundwater Standards for four consecutive quarters.
- Following OCD approval for closure, MW-1, MW-2, and MW-3 will be abandoned using OCD approved abandonment procedures.

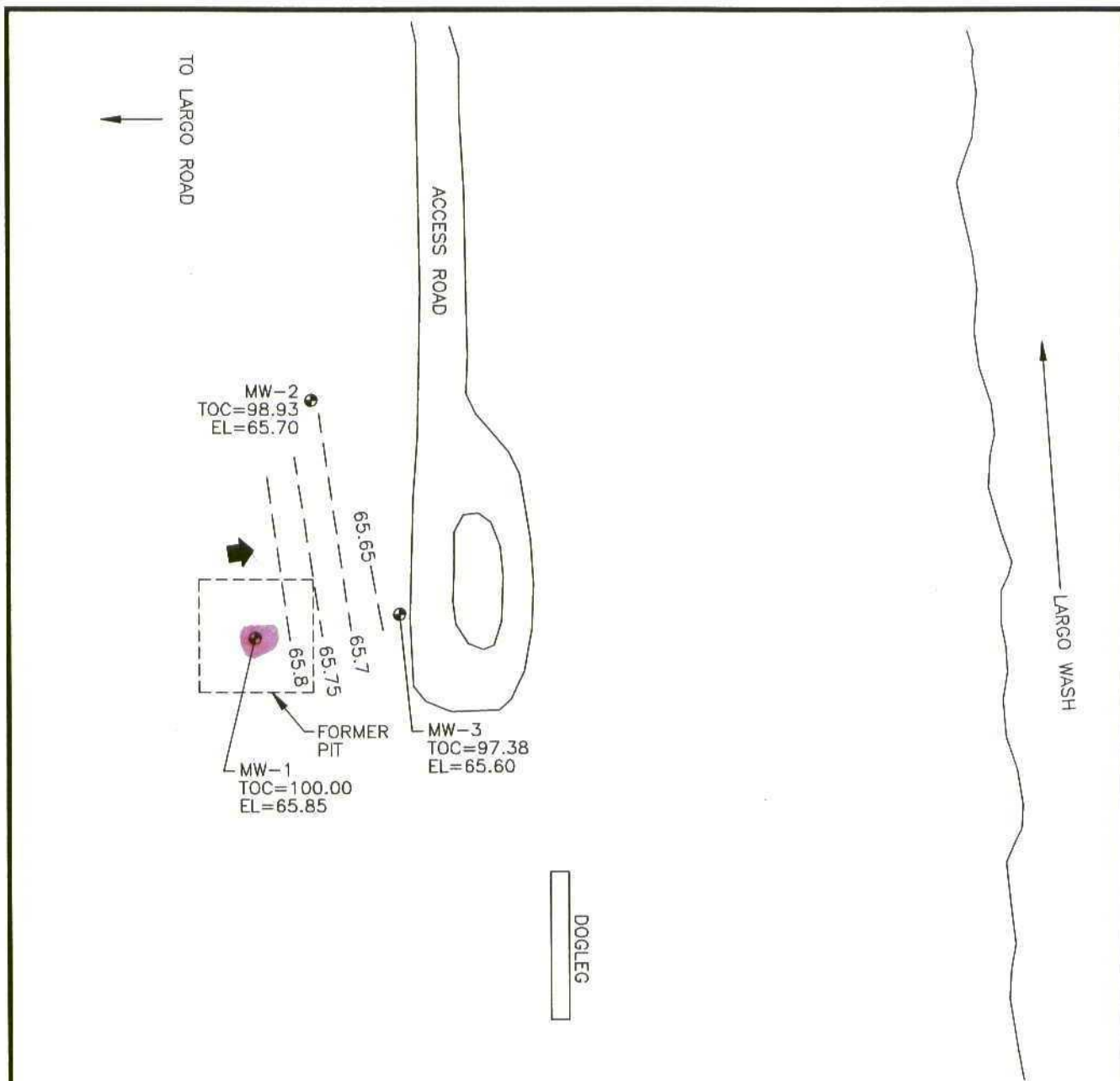
Table 1

March 2001

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX (PPB)
169-0002-MW1	LD169	D LOOP LINE DRIP	2/25/00	1	Sample 4 - 14th Quarter	= 750	= 29	= 790	= 1,600	3,169
DLO-0005-MW1	LD169	D LOOP LINE DRIP	5/24/00	1	Sample 4 - 15th Quarter	= 390	= 14	= 1,000	= 1,200	2,604
169-0008-MW1	LD169	D LOOP LINE DRIP	8/8/00	1	Sample 4 - 16th Quarter	= 35	< 0.5	= 69	= 25	129
174-0011-MW1	LD169	D LOOP LINE DRIP	11/6/00	1	Sample 4 - 17th Quarter	= 8.2	< 0.5	= 15	= 6.9	30
169-0008-MW2	LD169	D LOOP LINE DRIP	8/28/00	2	Sample 2 - 2nd Event	= 3.6	= 1.7	= 1.2	= 6.3	12.8
174-0011-MW2	LD169	D LOOP LINE DRIP	11/6/00	2	Sample 2 - 3rd Event	= 1.0	< 0.5	= 1.3	= 3.1	5.4
169-0010-MW3	LD169	D LOOP LINE DRIP	9/27/00	3	Sample 2 - 2nd Event	= 8.3	= 2.6	= 2.3	= 44	57.2
169-0012-MW3	LD169	D LOOP LINE DRIP	12/5/00	3	Sample 2 - 3rd Event	= 6.3	= 0.7	< 0.5	= 37	44

Sample 2 - Semi-annual Sampling

Sample 4 - Quarterly Sampling



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- TOC TOP OF CASING ELEVATION
- EL GROUNDWATER ELEVATION
- 58 GROUNDWATER POTENTIOMETRIC SURFACE
- GROUNDWATER GRADIENT

NOT TO SCALE

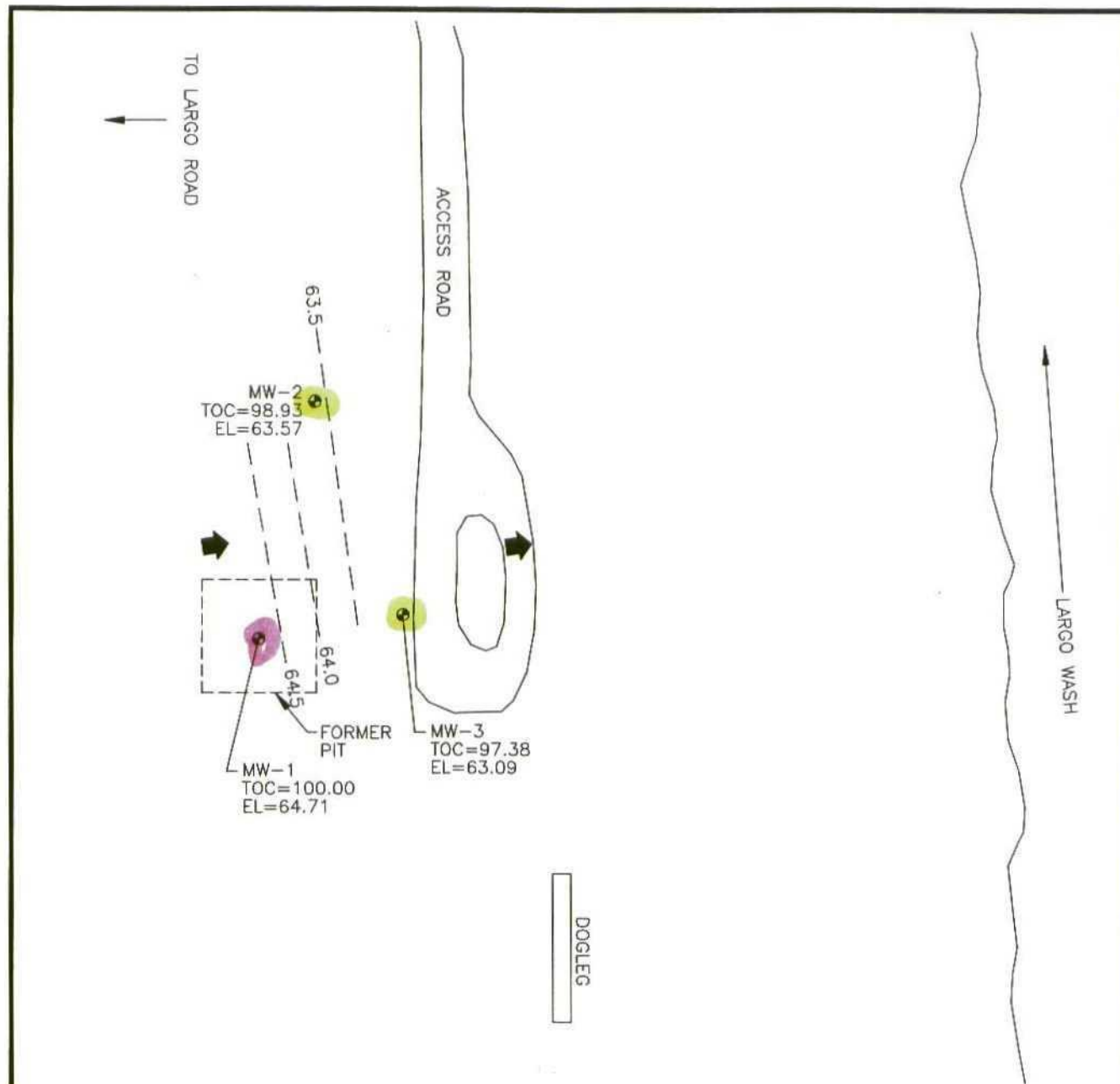
COL 628\00219BC-003



TITLE:
D LOOP LINE DRIP
LD169
FEBRUARY 11, 2000

DWN: TMM	DES.: LW
CHKD: LW	APPD: MN
DATE: 2/19/01	REV.: 0

PROJECT NO.: 62800219 EPFS GW PITS
FIGURE 1



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- TOC TOP OF CASING ELEVATION
- EL GROUNDWATER ELEVATION
- 58 GROUNDWATER POTENTIOMETRIC SURFACE
- GROUNDWATER GRADIENT

NOT TO SCALE



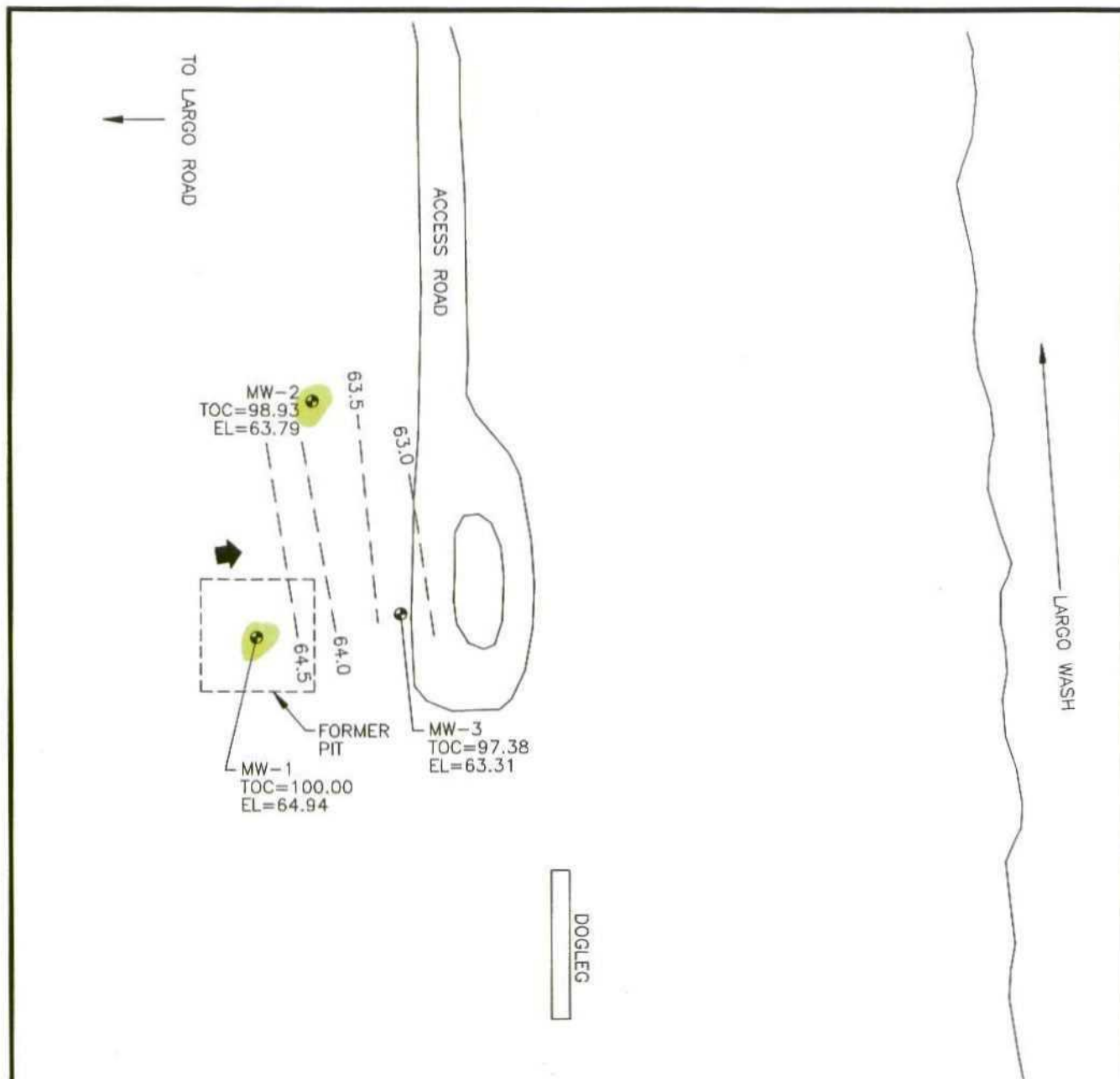
COL 628\00219BC-004



TITLE:
D LOOP LINE DRIP
LD169
SEPTEMBER 27, 2000

DWN: TMM	DES.: LW
CHKD: LW	APPD: MN
DATE: 2/19/01	REV.: 0

PROJECT NO.: 62800219 EPFS GW PITS
FIGURE 2



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- TOC TOP OF CASING ELEVATION
- EL GROUNDWATER ELEVATION
- 58 GROUNDWATER POTENTIOMETRIC SURFACE
- ➔ GROUNDWATER GRADIENT

NOT TO SCALE



COL 628\00219BC-005

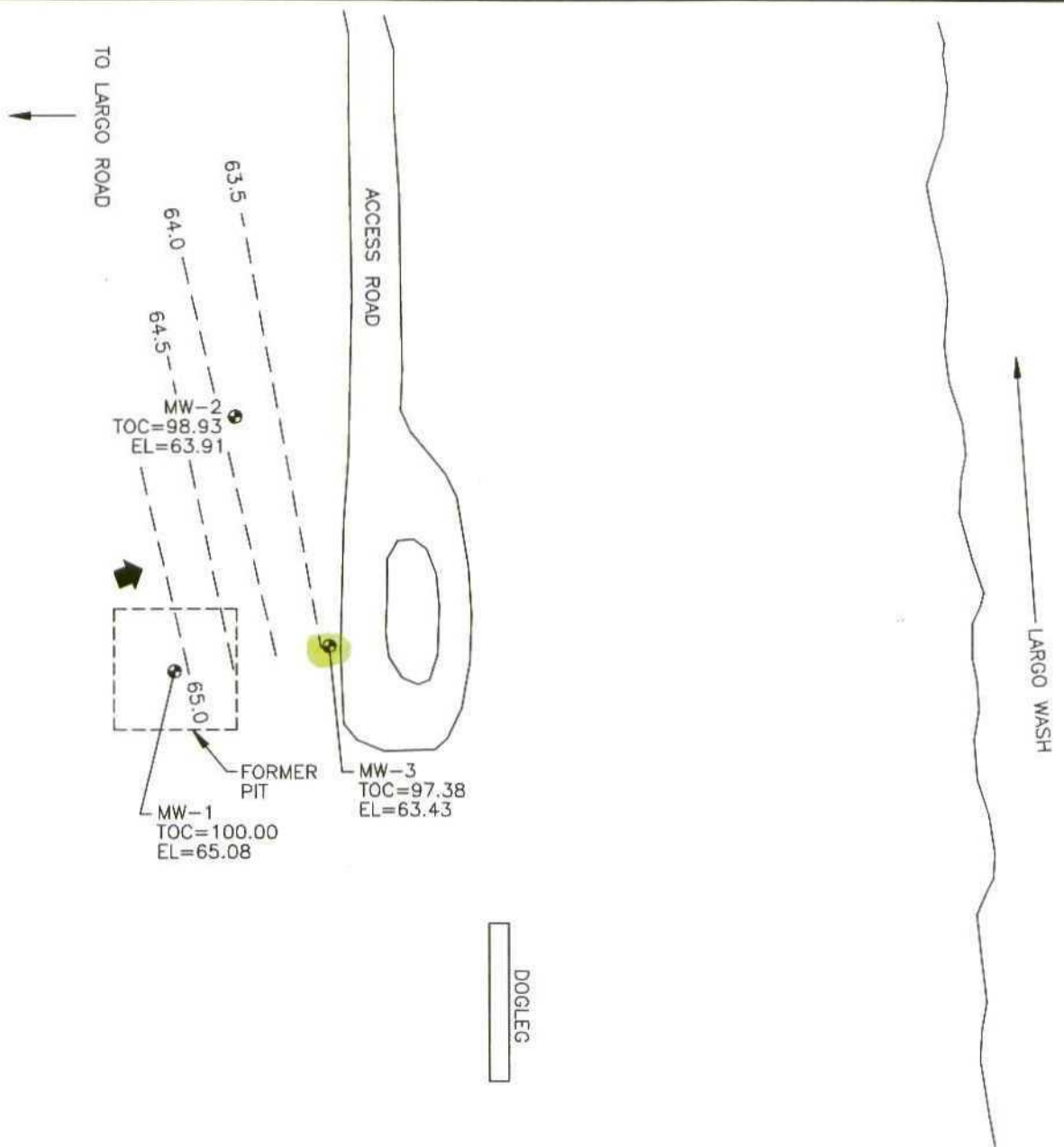


TITLE:
D LOOP LINE DRIP
LD169
NOVEMBER 6, 2000

DWN: TMM	DES.: LW
CHKD: LW	APPD: MN
DATE: 2/19/01	REV.: 0

PROJECT NO.: 62800219
EPFS GW PITS

FIGURE 3



LEGEND

- MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER
- TOC TOP OF CASING ELEVATION
- EL GROUNDWATER ELEVATION
- 58 GROUNDWATER POTENTIOMETRIC SURFACE
- GROUNDWATER GRADIENT



TITLE:
D LOOP LINE DRIP
LD169
DECEMBER 5, 2000

DWN: TMM	DES.: LW
CHKD: LW	APPD: MN
DATE: 2/19/01	REV.: 0

PROJECT NO.: 62800219
EPFS GW PITS
FIGURE 4

828\001\98C-006
COL

ATTACHMENT 1

2000 GROUNDWATER ANALYTICAL



Well Number MW-1

Serial No. WDPD-

Project Name ELFS quarterly sample

Client Company: **EPFS**

Site Name D LOOP LINE DRIP (LD169)

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal

☒ Stabilization of Indicator Parameters

☐ Other

Methods of Development

Pump

☐ Centrifugal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve

☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other

Water Removal Data

[illegible]

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

Comments

Developer's Signature(s)

Date

Reviewer RT Date 3/10/00



MAR 13

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

Pinnacle Lab ID number 002094
March 09, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: KELLY PADILLA

On 02/29/00 Pinnacle Laboratories, Inc. 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.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure



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

PINNACLE
LABORATORIES

CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE ID : 002094
DATE RECEIVED : 02/29/00
REPORT DATE : 03/08/00

PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	LIN-0002-MW1	AQUEOUS	02/24/00
02	146-0002-MW1	AQUEOUS	02/24/00
03	169-0002-MW1	AQUEOUS	02/25/00
04	STD-0002-MW1	AQUEOUS	02/25/00
05	HAM-0002-MW1	AQUEOUS	02/25/00
06	TNR-0002-MW2	AQUEOUS	02/28/00
07	JAQ-0002-MW4	AQUEOUS	02/24/00
08	JAQ-0002-MW3	AQUEOUS	02/24/00



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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 002094

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	LIN-0002-MW1	AQUEOUS	02/24/00	NA	03/02/00	20
02	146-0002-MW1	AQUEOUS	02/24/00	NA	03/02/00	50
03	169-0002-MW1	AQUEOUS	02/25/00	NA	03/02/00	20

PARAMETER	DET. LIMIT	UNITS	LIN-0002-MW1	146-0002-MW1	169-0002-MW1
BENZENE	0.5	UG/L	120	30	750
TOLUENE	0.5	UG/L	39	25	29
ETHYLBENZENE	0.5	UG/L	78	470	790
TOTAL XYLENES	0.5	UG/L	830	5000	1600

SURROGATE:

BROMOFLUOROBENZENE (%)

105

102

102

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 002094

PROJECT NAME: FETTER COUNTY DEPT. CAMPFIRE						
SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	STD-0002-MW1	AQUEOUS	02/25/00	NA	03/02/00	50
05	HAM-0002-MW1	AQUEOUS	02/25/00	NA	03/08/00	1
06	TNR-0002-MW2	AQUEOUS	02/28/00	NA	03/08/00	1

PARAMETER	DET. LIMIT	UNITS	STD-0002-MW1	HAM-0002-MW1	TNR-0002-MW2
BENZENE	0.5	UG/L	1300	130	2.6
TOLUENE	0.5	UG/L	1000	70	6.8
ETHYLBENZENE	0.5	UG/L	200	78	14
AL XYLENES	0.5	UG/L	1700	190	58

SURROGATE:

BROMOFLUOROBENZENE (%)

104

100

97

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 002094

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	JAQ-0002-MW4	AQUEOUS	02/24/00	NA	03/02/00	1
08	JAQ-0002-MW3	AQUEOUS	02/24/00	NA	03/02/00	1

PARAMETER	DET. LIMIT	UNITS	JAQ-0002-MW4	JAQ-0002-MW3
BENZENE	0.5	UG/L	11	30
TOLUENE	0.5	UG/L	< 0.5	21
ETHYLBENZENE	0.5	UG/L	5.6	2.8
TOTAL XYLENES	0.5	UG/L	5.5	9.4

SURROGATE:

BROMOFLUOROBENZENE (%)

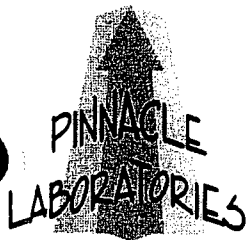
101

98

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
BLANK I. D.	: 030100	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/01/00
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:
MOFLUOROBENZENE (%) 103
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A



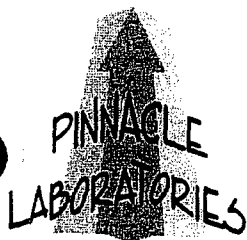
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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
BLANK I. D.	: 030200	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/02/00
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:
1,2,4-TRIMETHYLBENZENE (%) 101
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A



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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
BLANK I. D.	: 030800	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/08/00
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

PROGATE:
BROMOFLUOROBENZENE (%) 97
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

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PINNACLE
LABORATORIES

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
MSMSD #	: 030100	DATE EXTRACTED	: N/A
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 03/01/00
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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	21.8	109	21.9	110	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.4	102	20.0	100	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.2	111	22.0	110	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	62.1	104	62.9	105	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PHILIP



Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

002094

COC Serial No. C 2497

Project Name: EPFS QUARTERLY SAMPLING		Project Number: 62800107 Phase: Task 0301	
Samplers: KELLY PADILLA		Laboratory: Pinnacle Labs	
Name: PINNACLE LABS		Location: ALBUQUERQUE, NM	
Sample Number (and depth)	Date	Time	Matrix
LJN-0002-MW1	2/24/00	1410	H ₂ O
146-0002-MW1	2/24/00	1705	H ₂ O
169-0002-MW1	2/25/00	1350	H ₂ O
STD-0002-MW1	2/25/00	1545	H ₂ O
HAM-0002-MW1	2/25/00	1630	H ₂ O
TNR-0002-MW2	2/28/00	1020	H ₂ O
JAQ-0002-MW4	2/24/00	1010	H ₂ O
JAQ-0002-MW3	2/24/00	1110	H ₂ O

Type of Analysis and Bottle	Total Number of Bottles	Comments
BTX 0021 LAB ID#	01	94967
	02	LD146
	03	LD169
	04	70449
	05	97213
	06	71676
	07	CORN FIELD
	08	CORN FIELD

Relinquished by:

Kelly Padilla

Received By:

Manuel Gutierrez

Date

Time

Date

Time

2-28-00

1135

2/29/00

1015

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide Sodium hydroxide (NaOH)
☒ Volatile Organic Analysis Hydrochloric acid (HCl)
☐ Metals Nitric acid (HNO₃)
☐ TPH (418.1) Sulfuric acid (H₂SO₄)
☐ Other (Specify) _____
☐ Other (Specify) _____

Carrier: GREYHOUND

Shipping and Lab Notes:

SEND ORIGINAL ANALYTICAL RESULTS TO EL PASO FIELD SERVICES.

SEND A COPY OF THE RESULTS TO THE ADDRESS ABOVE.

Rec'd @ 14°C *no sample for PAN & NO₃ - *2/29/00*

Airbill No. GLT 160 665 0419

Project Name OPES Quarterly Sampling

Project Manager Robert Thompson

Project No. 62800-~~22~~ / 07

Client Company: EL PASO FIELD SERVICES

Phase.Task No. 0301

Site Name D. LOOP LA (LD169)

Site Address RURAL SAN JUAN CO.

Development Criteria

~~10~~ to 5 Casing Volumes of Water Removal

□ Stabilization of Indicator Parameters

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 43.50 132

Initial Depth to Water (feet) 34.29 TOR

Height of Water Column in Well (feet) 9.21

Diameter (inches): Well 4" Gravel Pack:

Methods of Development

Pump
Bailer

☐ Centrifugal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve

☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal

KUTZ SEPARATOR, BLOOMFIELD NM

Water Removal Data

[illegible]

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

Comments	B-Tex Sample Collected At
	1450

Developer's Signature(s) Jean Wagner

Date 5/24/00

Reviewer RT Date 5/25/00

25/00

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2530

[illegible]

Samples Iced: ☒ Yes ☐ No		Carrier: <u>GREYHOUND LINES</u>	Airbill No. <u>6LFI1606650749</u>
Preservatives (ONLY for Water Samples)		Shipping and Lab Notes:	
☐ Cyanide Sodium hydroxide (NaOH)			
☒ Volatile Organic Analysis Hydrochloric acid (HCl)			
☐ Metals Nitric acid (HNO ₃)			
☐ TPH (418.1) Sulfuric acid (H ₂ SO ₄)			
☐ Other (Specify) _____			
☐ Other (Specify) _____			



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

Pinnacle Lab ID number **005107**
May 31, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: Robert Thompson/LeAudra Stanley

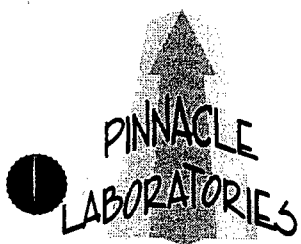
On 05/26/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are 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

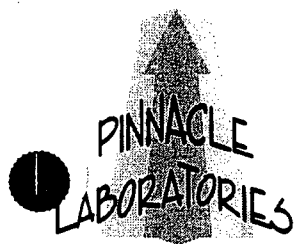
MR: jt

Enclosure



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 005107
PROJECT #	: 62800107	DATE RECEIVED	: 05/26/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 05/31/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	DLO 0005-MW01	AQUEOUS	05/24/00
02	TRIP BLANK	AQUEOUS	05/24/00



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

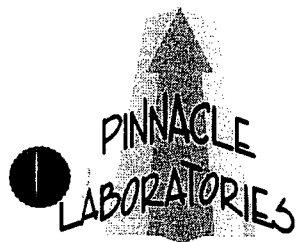
PINNACLE I.D.: 005107

ROGERS PAPER COMPANY QUARTERLY SAMPLING						
SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	DLO 0005-MW01	AQUEOUS	05/24/00	NA	05/26/00	20
02	TRIP BLANK	AQUEOUS	05/24/00	NA	05/26/00	1

PARAMETER	DET. LIMIT	UNITS	DLO 0005-MW01	TRIP BLANK
BENZENE	0.5	UG/L	390	< 0.5
TOLUENE	0.5	UG/L	14	< 0.5
ETHYLBENZENE	0.5	UG/L	1000	< 0.5
TOTAL XYLENES	0.5	UG/L	1200	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 105 95
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



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.	: 005107
BLANK I. D.	: 052600	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 05/26/00
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

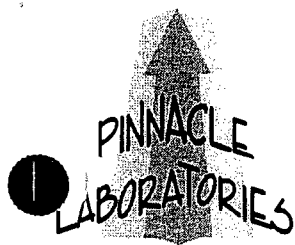
SURROGATE:

BROMOFLUOROBENZENE (%) 102

SURROGATE LIMITS: (80 - 120)

COMMENTS:

N/A



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 # : 005101-04
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 005107
DATE EXTRACTED : NA
DATE ANALYZED : 05/26/00
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	18.3	92	18.8	94	3	(80 - 120)	20
TOLUENE	<0.5	20.0	18.2	91	18.9	95	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.2	101	20.6	103	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.4	102	61.1	102	0	(80 - 120)	20

CLIENT NOTES:
NA

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

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



Chain of Custody Record

4000 Morroe Road
Farmington, NM 87401

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

COC Serial No. C 2530

005107

Project Name **EPFS QUARTERLY SAMPLING**

Project Number **68800107** Phase **Task 0301**

Sampler **J. WAGNON**

Laboratory Name **PINNACLE LABS**

Location **ALBUQUERQUE, NM**

Sample Number (and depth) Date Time Matrix

DLO 0005-mw01 5/24/00 1450 H2O

TRIP BLANK 5/24/00 1113 H2O

Total Number of Bottles

Type of Analysis and Bottle

BTEX SD21

Lab ID #

Comments

D Loop Line Del P
LD 169

Relinquished by:

Signature

Date

Time

Received By:

Signature

Date

Time

Samples Used: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

☐ Cyanide ☐ Sodium hydroxide (NaOH)

☒ Volatile Organic Analysis ☐ Hydrochloric acid (HCl)

☐ Metals ☐ Nitric acid (HNO3)

☐ TPH (418.1) ☐ Sulfuric acid (H2SO4)

☐ Other (Specify) _____

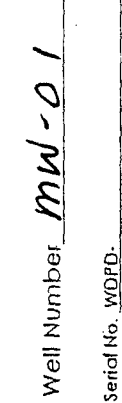
☐ Other (Specify) _____

Carrier: **GREYHOUND LINES**

Shipping and Lab Notes:

Article No. **6L11606650749**

Rec'd @ 6c



Alibi

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2618

[illegible]

Relinquished by:

Received By:

[illegible]**Samples Iced:**☐ No

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

Preservatives (ONLY for Water Samples)

☐ Cyanide Sodium hydroxide (NaOH)

☒ Volatile Organic Analysis Hydrochloric acid (HCl)☐ Metals _____ Nitric acid (HNO₃) _____

☐ IRONING ☐ TOLUENE (440-1) ☐ C-Methyl-ald (11-50-1)

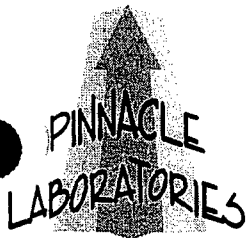
☐ IPA (418.1) Sulfuric acid (H2SO4)
☐ Other (Specify) _____

☐ Other (Specify) _____

Carrier: GREYHOG
Shipping and Lab Notes:

UNIT 2

Airbill No. 667 16066251090



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

Pinnacle Lab ID number 008038
August 11, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

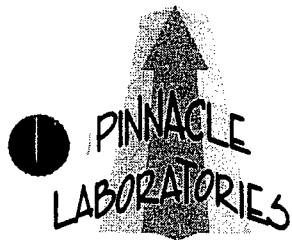
On 08/09/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008038
PROJECT #	: 62800107	DATE RECEIVED	: 08/09/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/11/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	169-0008-MW01	AQUEOUS	08/08/00
02	TRIP BLANK	AQUEOUS	08/08/00



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 008038

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	169-0008-MW01	AQUEOUS	08/08/00	NA	08/09/00	1
02	TRIP BLANK	AQUEOUS	08/08/00	NA	08/09/00	1

PARAMETER	DET. LIMIT	UNITS	169-0008-MW01	TRIP BLANK
BENZENE	0.5	UG/L	35	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	69	< 0.5
XYLENES	0.5	UG/L	25	< 0.5

SURROGATE:

BROMOFLUOROBENZENE (%)

119

86

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 008038
BLANK I. D.	: 080900	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/09/00
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 (%)

97

SPRINGER GATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



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 # : 080900
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 008038
DATE EXTRACTED : NA
DATE ANALYZED : 08/09/00
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	22.4	112	23.0	115	3	(80 - 120)	20
TOLUENE	<0.5	20.0	23.3	117	23.5	118	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.6	113	21.9	110	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	69.4	116	66.8	111	4	(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

008038

COC Serial No. C 2618

Project Name <u>EPES QUARTERLY SAMPLING</u>		Type of Analysis and Bottle	
Project Number <u>62800107 Phase Task 0301</u>		Total Number of Bottles	
Samplers <u>J. WAGNER</u>	Laboratory <u>PINNACLE LABS</u>	Location <u>ALBUQUERQUE, NM</u>	
Sample Number (and depth)	Date	Time	Matrix
<u>169-0008-MW01</u>	<u>8/8/00</u>	<u>1107</u>	<u>H2O</u>
<u>TRIP BLANK</u>	<u>8/8/00</u>	<u>1109</u>	<u>H2O</u>
Comments			
<u>#01 907</u>			
<u>Lab ID#</u>			
<u>D L000 L. Δ</u>			
<u>LΔ 169</u>			

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
<u>J. Wagner</u>	<u>8/8/00</u>	<u>1500</u>	<u>J. Wagner</u>	<u>8/9/00</u>	<u>0900</u>

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide Sodium hydroxide (NaOH)
☒ Volatile Organic Analysis Hydrochloric acid (HCl)
☐ Metals Nitric acid (HNO3)
☐ TPH (418.1) Sulfuric acid (H2SO4)
☐ Other (Specify) _____
☐ Other (Specify) _____

Carrier: GREYHOUND LINES

Shipping and Lab Notes:

RCV'D OK 6.1°C on 10/20 1.2°C
Amk

Airbill No. 621 1606651090



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

Pinnacle Lab ID number **008104**
August 30, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 08/29/00 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



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008104
PROJECT #	: 62800107	DATE RECEIVED	: 08/29/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/30/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	169-0008-MW02	AQUEOUS	08/28/00



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 008104

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	169-0008-MW02	AQUEOUS	08/28/00	NA	08/29/00	1

PARAMETER	DET. LIMIT	UNITS	169-0008-MW02
BENZENE	0.5	UG/L	3.6
TOLUENE	0.5	UG/L	1.7
ETHYLBENZENE	0.5	UG/L	1.2
TOTAL XYLENES	0.5	UG/L	6.3

SURROGATE:

BROMOFLUOROBENZENE (%)

109

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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.	: 008104
BLANK I. D.	: 082900	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/29/00
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 (%)

97

SURROGATE LIMITS:

(80 - 120)

CHEMIST NOTES:

N/A



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 008103-01
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 008104
DATE EXTRACTED : NA
DATE ANALYZED : 08/29/00
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	19.7	99	19.6	98	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.5	103	19.9	100	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.9	105	20.5	103	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	62.2	104	61.2	102	2	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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



Chain of Custody Record

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

COC Serial No. C 2653

008104

Project Name EPFS QUARTERLY SAMPLING

Project Number 62800107 Phase Task 0301

Samplers J. WAGNER

Laboratory Name PINNACLE

Location AUBG, NM

Sample Number (and depth) 169-0008-MW12 Date 8/28/09 Time 1347 Matrix H₂O

Type of Analysis and Bottle

Total Number of Bottles

BTEX SO₂/CO₂/ID#

Comments

D 600P LD
LD 169

01

Relinquished by:

Signature

Date

Time

Received By:

Signature

Date

Time

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide
- ☐ Volatile Organic Analysis
- ☐ Metals
- ☐ TPH (418.1)
- ☐ Other (Specify)
- ☐ Other (Specify)
- ☐ Sodium hydroxide (NaOH)
- ☐ Hydrochloric acid (HCl)
- ☐ Nitric acid (HNO₃)
- ☐ Sulfuric acid (H₂SO₄)

Carrier: GREYHOUND LINES

Shipping and Lab Notes:

Rec'd @ 4.3°C

Philip

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2653

[illegible]

Relinquished by:

Received By:

[illegible]

Samples Iced:

☐ No

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

☐ Cyanide Sodium hydroxide (NaOH)
☐ Volatile Organic Analysis Hydrochloric acid (HCl)
☐ Metals Nitric acid (HNO₃)
☐ TPH (418.1) Sulfuric acid (H₂SO₄)
☐ Other (Specify) _____
☐ Other (Specify) _____

Carrier: GLS

Carrier:

GOVERNMENT LINKS

Airbill No. 6L F1606918533

☒ ² Development
☐ Purgings

WELL DEVELOPMENT AND PURGING DATA

Page _____ of _____

Client Company: EFSS
Phase/Task No. 0301

File Name: 07 Dec 2007 (b2107)

Site Address:

Development Criteria

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

Methods of Development

Pump ☐ Centrifugal ☒ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer

☐ Submersible ☐ Peristaltic ☐ Other

Bailer

Water Volume Calculation

Initial Depth of Well (feet) 40.19
Initial Depth to Water (feet) 34.29
Height of Water Column in Well (feet) 5.9
Diameter (inches): Well 2 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	5.9	0.96 x 3	2.88
Gravel Pack			
Drilling Fluids			
Total			2.88

Instruments

☒ pH Meter

☐ DO Monitor

☒ Conductivity Meter

☒ Temperature Meter

☐ Other _____

Water Disposal

Water Disposal
KwTZ Separator Bloomfield NM

Water Removal Data

[illegible]

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

Comments	Sampled for BTEX	LOOI

Developer's Signature(s) Chris A. M... Date 09-27-00 Reviewer _____ Date _____

Chain of Custody, Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2457

[illegible]

Relinquished by:

Received By:

[illegible]**Samples Iced:**☒ Yes ☐ No

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

☐ Cyanide Sodium hydroxide (NaOH)

☐ Volatile Organic Analysis Hydrochloric acid (HCl)☐ Metals Nitric acid (HNO₃)

☐ **TPH (418.1)** **Sulfuric acid (H₂SO₄)**

☒ Other (Specify) $H < Cl$ H_2SO_4

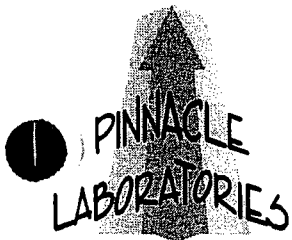
☒ Other (Specify) _____

☐ Other (Specify) _____

Carrier: Greyhound

Shipping and Lab Notes:

Airbill No. GLI 1606918676



OCT 12 2000

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

Pinnacle Lab ID number 010007
October 09, 2000

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/LEAUDRA STANLEY

On 10/03/00 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



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 010007
PROJECT #	: 62800107	DATE RECEIVED	: 10/03/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 10/09/00
PIN			DATE
D. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	169-0010-MW03	AQUEOUS	10/02/00
02	169-0010-MW53	AQUEOUS	10/02/00



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 010007

SAMPLE			DATE	DATE	DATE	DIL.
D. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	169-0010-MW03	AQUEOUS	10/02/00	NA	10/08/00	1
02	169-0010-MW53	AQUEOUS	10/02/00	NA	10/08/00	1

PARAMETER	DET. LIMIT	UNITS	169-0010-MW03	169-0010-MW53
BENZENE	0.5	UG/L	8.3	8.6
TOLUENE	0.5	UG/L	2.6	3.7
ETHYLBENZENE	0.5	UG/L	2.3	2.9
TOTAL XYLENES	0.5	UG/L	44	47

SURROGATE:

BROMOFLUOROBENZENE (%)

161*

170*

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

Surrogate recovery was high due to matrix interference.



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 010007

SAMPLE			DATE	DATE	DATE	DIL.
D. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	169-0010-MW03	AQUEOUS	10/02/00	NA	10/08/00	1
02	169-0010-MW53	AQUEOUS	10/02/00	NA	10/08/00	1

PARAMETER	DET. LIMIT	UNITS	169-0010-MW03	169-0010-MW53
BENZENE	0.5	UG/L	8.3	8.6
TOLUENE	0.5	UG/L	2.6	3.7
ETHYLBENZENE	0.5	UG/L	2.3	2.9
TOTAL XYLENES	0.5	UG/L	44	47

SURROGATE:
BROMOFLUOROBENZENE (%) 161* 170*
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

Surrogate recovery was high due to matrix interference.



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Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 010007
BLANK I. D.	: 100600	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 10/06/00
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 (%) 101
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 100600
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 010007
DATE EXTRACTED : NA
DATE ANALYZED : 10/06/00
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	19.4	97	19.6	98	1	(80 - 120)	20
OLUENE	<0.5	20.0	20.7	104	21.0	105	1	(80 - 120)	20
THYLBENZENE	<0.5	20.0	21.9	110	21.9	110	0	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.1	110	69.3	116	5	(80 - 120)	20

CHEMIST NOTES:
NA

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

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

Project Name EPFS Quarterly Sampling

Project Manager R Thompson

Project No. 628 22107

Client Company: El Paso Field Services

File Name 0100p12 (2017-17) LD169 AD

Site Address 2001 San Juan Co

Phase Task No. 0301

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal

☒ Stabilization of Indicator Parameters

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 47.52

Initial Depth to Water (feet) 35.14

Height of Water Column in Well (feet) 9.38

Diameter (inches): Well 211 Gravel pack

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	9.38	1.53 x 3	4.59
Gravel Pack			
Drilling Fluids			
Total			4.59

Methods of Development

Pump: Bailer

☐ Centrifugal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve

☐ Peristaltic ☐ Stainless-steel Kemmerer

3

☐ Other

Water Removal Data

[illegible]

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

Comments	Sampled for BTEX	1148

Meter for D Loop LD (LD169) was incorrectly marked (LD174) and sample ID mislabeled

Developer's Signature(s) Chris A. M...

00-70-00

Reviewer

Date 11/14/00

Well Number **Mw 01**

- ☐ Development
- ☒ Training

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page / of /

Project Name EPFS Quarterly Sampling

Project Manager R Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

File Name D LOOP LD LD+74 LD169₈₀

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal

Stabilization of Indicator Parameters

☐ Other

Water Volume Calculation

Initial Depth of Well (feet)

Initial Depth to Water (feet)
35.06

Height of Water Column in Well (feet)

Diameter (inches): Well 4" Gravel Pack

Methods of Development

Bailer
Pump

☐ Centrifugaal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve☐ Peristaltic ☐ Stainless-steel Kemmerer

Other

Instruments

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

Other ☐

Water Disposal

KWTZ Separator Bloomfield NM.

Water Removal Data

[illegible]

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

	Samples for BTEX	Comments
10-78	1033	

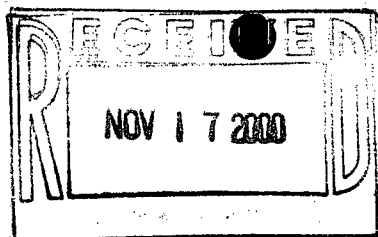
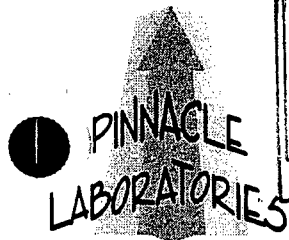
Meter for DLoopID (LD1169) was incorrectly marked (LD174) and Sample ID mislabeled

Developer's Signature(s) Chris M...

Date 11-06-00

Reviewer RT

Date 11/14/00



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

Pinnacle Lab ID number **011042**
November 15, 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

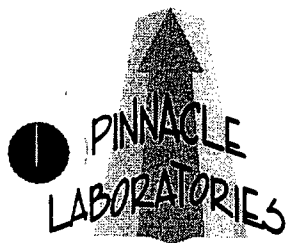
On 11/14/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 011042
PROJECT #	: 62800107	DATE RECEIVED	: 11/14/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 11/15/00
PIN			
D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	174-0011-MW01	AQUEOUS	11/06/00
02	174-0011-MWS1	AQUEOUS	11/06/00
03	174-0011-MW02	AQUEOUS	11/06/00



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
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 011042

SAMPLE			DATE	DATE	DATE	DIL.
D. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	174-0011-MW01	AQUEOUS	11/06/00	NA	11/14/00	1
02	174-0011-MWS1	AQUEOUS	11/06/00	NA	11/14/00	1
03	174-0011-MW02	AQUEOUS	11/06/00	NA	11/14/00	1

PARAMETER	DET. LIMIT	UNITS	174-0011- MW01	174-0011- MWS1	174-0011- MW02
BENZENE	0.5	UG/L	8.2	7.9	1.0
TOLUENE	0.5	UG/L	< 0.5	0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	15	15	1.3
TO XYLENES	0.5	UG/L	6.9	7.7	3.1

SURROGATE:
BROMOFLUOROBENZENE (%) 118 119 111
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 011042
BLANK I. D.	: 111400	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 11/14/00
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 (%) 114

SURROGATE LIMITS: (80 - 120)

NOTES:

U/A



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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

EST : EPA 8021 MODIFIED
MSMSD # : 111400
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 011042
DATE EXTRACTED : NA
DATE ANALYZED : 11/14/00
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	18.0	90	17.7	89	2	(80 - 120)	20
TOLUENE	<0.5	20.0	19.9	100	19.5	98	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.3	107	20.7	104	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	62.5	104	60.6	101	3	(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

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

011042

COC Serial No. C 2682

Project Name <u>EpFS Quarterly Sampling</u>		Project Number <u>62800107</u> Phase . Task <u>0301</u>		Samplers <u>C mce2</u>		Laboratory Name <u>PINNACLE</u>		Location <u>ALBQ N.M.</u>		Total Number of Bottles		Type of Analysis and Bottle		Comments	
Sample Number (and depth)	Date	Time	Matrix												
174-0011-MW 01	11-06-00	10 33	H ₂ O								2	X		01	D Loop LD (174)
174-0011-MW 51	11-06-00	10 33	H ₂ O								2	X		02	Duplicate of mw D Loop LD (174)
174-0011-MW 02	11-06-00	11 48	H ₂ O								2	X		03	D Loop LD (174)
(BTEX 8021) (Lab ID#)															

Relinquished by:

Signature

Date

Time

Received By:

Signature

Date

Time

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide Sodium hydroxide (NaOH)
☐ Volatile Organic Analysis Hydrochloric acid (HCl)
☐ Metals Nitric acid (HNO₃)
☐ TPH (418.1) Sulfuric acid (H₂SO₄)
☒ Other (Specify) HSCl₂
☐ Other (Specify) _____

Carrier: Greyhound

Shipping and Lab Notes:

Rec'd @ 3.3c

Project Name EPOS quarterly Sampling

Project Manager: R Thompson

Project No. 62800107

Client Company EL Paso Field Services

Phase, Task No. 030/

Site Name D Loop LD. (LD.169)

site address Rural San Juan Co.

Development Criteria

3 to 5 Casing Volumes of Water-Removal

Stabilization of Indicator Parameters

☐ Other[illegible]

Initial Enrollment Year (year)

Initial Derivative Value Test

Height of Water Column in Well (feet) 6.24
Diameter (inches) 9" Gravel Pack

Diameter (Inches): Well **2"** Ground Pack

Methods of Development

Pump · Bailor

☐ Centrifugal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve

☐ Peristaltic ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal

K_WTZ Separator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume (gallons)		Temperature (°F)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Comments
		Pump	Boiler				Increment	Exhaust					
12-05-00	1209		X				75	75	12.3	7.20	4320		cloudy grey water
	1212		X				75	15	13.3	7.01	4360		"
	1215		X				75	25	13.5	6.74	4410		"
	1218		X				75	3	13.3	6.55	4080		"
	1222		X				75	3.75	13.5	6.57	4250		no change

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

Comments Sampled For BTex 1227

Developer's Signature(s) Dr. A. M. S.

Page 12-05-00

Reviewer RT Date 12/17/00

Date 12/7/00

PHILIP

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

COC Serial No. C 2804

[illegible]

Relinquished by:

Received By:

Received by:		Signature		Date		Time	
Chris A May				12-07-00		1430	

Samples Iced:

☒ Yes ☐ No

Samples Iced: ☐ Yes ☒ No

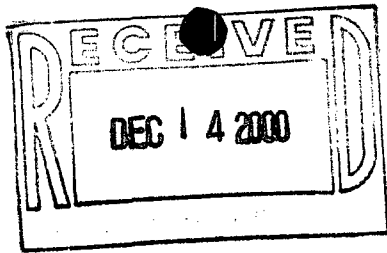
Preservatives (ONLY for Water Samples)

residues (O&A for water samples)

☐	Cyanide	Sodium hydroxide (NaOH)
☐	Volatile Organic Analysis	Hydrochloric acid (HCl)
☐	Metals	Nitric acid (HNO ₃)
☐	TPH (418.1)	Sulfuric acid (H ₂ SO ₄)
☒	Other (Specify) <i>H₂SO₄</i>	
☐	Other (Specify)	

Carrier: Greyhound

Airbill No. GLT160691998S



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

Pinnacle Lab ID number **012035**
December 13, 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

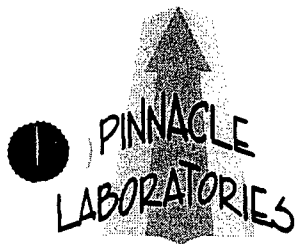
On 12/08/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

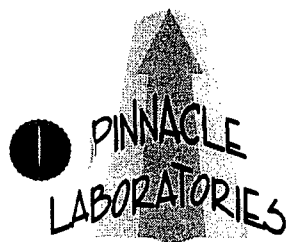
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 012035
PROJECT #	: 62800107	DATE RECEIVED	: 12/08/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 12/13/00
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
012035 - 01	169-0012-MW03	AQUEOUS	12/05/00



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

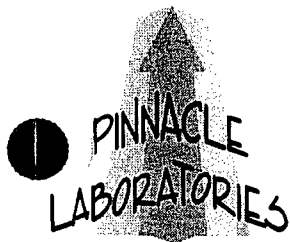
TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 012035

SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	169-0012-MW03	AQUEOUS	12/05/00	NA	12/12/00	1
PARAMETER		DET. LIMIT	UNITS	169-0012-MW03		
BENZENE		0.5	UG/L	6.3		
TOLUENE		0.5	UG/L	0.7		
ETHYLBENZENE		0.5	UG/L	< 0.5		
TOTAL XYLENES		0.5	UG/L	37		

SURROGATE:
BROMOFLUOROBENZENE (%) 105
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



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.	: 012035
BLANK I. D.	: 121200	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 12/12/00
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:

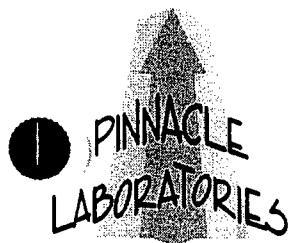
BROMOFLUOROBENZENE (%)

96

SPRINKLE GATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



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 # : 012033-01
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 012035
DATE EXTRACTED : NA
DATE ANALYZED : 12/12/00
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	19.7	99	19.9	100	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.2	96	19.4	97	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.7	104	20.9	105	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	60.5	101	61.1	102	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

COC Serial No. C 2804

012035

Project Name <i>EPFS quarterly Sampling</i>		Type of Analysis and Bottle		Comments	
Project Number <i>62800207 Phase Task 0301</i>		Total Number of Bottles		Date	
Samplers <i>C. Maerz</i>		Type of Analysis and Bottle		Date	
Laboratory Name <i>PINNACLE</i>		Type of Analysis and Bottle		Date	
Location <i>ALBQ N.M.</i>		Type of Analysis and Bottle		Date	
Sample Number (and depth)	Date	Time	Matrix	Comments	
<i>169-0012-MW03</i>	<i>12-05-00</i>	<i>12:27</i>	<i>H₂O</i>	<i>01</i>	
<i>ISTEX 8021</i>					
<i>Lab 707</i>					
<i>01000 LD (0169)</i>					

Relinquished by:

Signature	Date	Time	Signature	Date	Time
<i>Chris A May</i>	<i>12-07-00</i>	<i>1430</i>	<i>Glennine Janni</i>	<i>12/8/00</i>	<i>1005</i>

Received By:

Samples Iced: ☒ Yes ☐ No	Carrier: <i>Greyhound</i>	Airbill No. <i>611606919985</i>
Preservatives (ONLY for Water Samples)		
☐ Cyanide Sodium hydroxide (NaOH)		
☐ Volatile Organic Analysis Hydrochloric acid (HCl)		
☐ Metals Nitric acid (HNO ₃)		
☐ TPH (418.1) Sulfuric acid (H ₂ SO ₄)		
☒ Other (Specify) <i>H₂SO₄</i>		
☐ Other (Specify) _____		
<i>Rec'd @ 4:30</i>		

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2682

[illegible]

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
<i>R. A. May</i>	<i>11-13-20</i>	<i>11:30</i>			

Samples Iced:

Yes ☐ No ☐

Carrier:

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Airbill No.

Preservatives (ONLY for Water Samples)

Shipping and Lab Notes:

☐ Cyanide	Sodium hydroxide (NaOH)
☐ Volatile Organic Analysis	Hydrochloric acid (HCl)
☐ Metals	Nitric acid (HNO ₃)
☐ TPH (419.1)	Sulfuric acid (H ₂ SO ₄)
☒ Other (Specify) <u>HCl</u>	
☐ Other (Specify) _____	

ATTACHMENT 2

**MONITOR WELL COMPLETION
RECORDS**

MONITORING WELL INSTALLATION RECORD

Philip Services Corporation

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # TW-1 SW

Well # MW-2

Page 1 of 1

Elevation

Well Location T-1 South West

GWL Depth ~ 32-33'

Installed By K. Padilla

Project Name EPFS

Project Number _____ Cost Code _____

Project Location D Loop Drip

On-Site Geologist D. Fernald

Personnel On-Site Fernald, K. Padilla, D. Padilla

Contractors On-Site NONE

Client Personnel On-Site NONE

Date/Time Started 10:15 AM 12-21-99

Date/Time Completed 11:10 AM 12-21-99

Depths in Reference to Ground Surface				
Item	Material	Depth (feet)		
Top of Protective Casing	Steel	~2.5'	Top of Protective Casing	<u>+3.5'</u>
Bottom of Protective Casing	"	-6"	Top of Riser	<u>+3.0'</u>
Top of Permanent Borehole Casing		2'	Ground Surface	<u>0</u>
Bottom of Permanent Borehole Casing		40'		
Top of Concrete		-		
Bottom of Concrete		-		
Top of Grout	Grout	-		
Bottom of Grout	"	21'		
Top of Well Riser	2" steel pipe	24'		
Bottom of Well Riser	"	25'		
Top of Well Screen	10 screen	25'	Top of Seal	<u>21'</u>
Bottom of Well Screen	"	40'		
Top of Peltonite Seal	3/8" bentonite	21'	Top of Gravel Pack	<u>23'</u>
Bottom of Peltonite Seal	"	23'	Top of Screen	<u>25'</u>
Top of Gravel Pack	10-20 sand	23'		
Bottom of Gravel Pack	"	40'		
Top of Natural Cave-In	—	—		
Bottom of Natural Cave-In	—	—		
Top of Groundwater	—	~32'	Bottom of Screen	<u>40'</u>
Total Depth of Borehole	—	40'	Bottom of Borehole	<u>40'</u>

Comments: MW-2 (temporary well) was completed 7/18/00

Geologist Signature