

3R - 214

REPORTS

DATE:

2000



**EL PASO
FIELD SERVICES**

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,

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



214

EPFS GROUNDWATER PITS

2000 ANNUAL GROUNDWATER REPORT

LINDRITH B #24
Meter/Line ID - 94967

SITE DETAILS

Legals - Twn: 24N	Rng: 3W	Sec: 9	Unit: N
NMOCD Hazard Ranking: 40			Land Type: FEE
Operator: MOBIL			

PREVIOUS ACTIVITIES

Site Assessment: Aug-94 **Excavation:** Oct-94 (60 cy) **Soil Boring:** Jun-95
Re-Excavation: Aug-95 (180 cy) **Monitor Well:** May-97 **Quarterly Sampling Initiated:** Aug-97
Additional Monitor Wells: Oct-99

2000 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring continued through 2000 for MW-1. Annual groundwater monitoring was conducted for MW-2 and MW-3.

SUMMARY TABLES

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

SITE MAP

Site maps showing quarterly water table elevations and groundwater gradients are presented in Figures 1 - 3.

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.

ISOCONCENTRATION MAPS

BTEX parameters at this site are at or below regulatory standards and isoconcentration maps were not generated.

CONCLUSIONS

Analytical results of groundwater samples from MW-1 show levels of BTEX decreasing and all BTEX constituents below NMWQCC groundwater standards during the last quarter.

Temporary monitor wells MW-2 and MW-3 were installed in 1999 as requested by the OCD in correspondence dated July 28, 1999. The groundwater gradient was estimated from the site topography and proximity to the Largo Wash and temporary wells were installed. Groundwater elevations from each monitor well at this site denote a groundwater flow that trends to the west. Laboratory analyses of groundwater samples from MW-2, an upgradient well, and MW-3, a cross-gradient well, reveals no detectable levels of BTEX constituents.

EPFS GROUNDWATER PITS 2000 ANNUAL GROUNDWATER REPORT

RECOMMENDATIONS

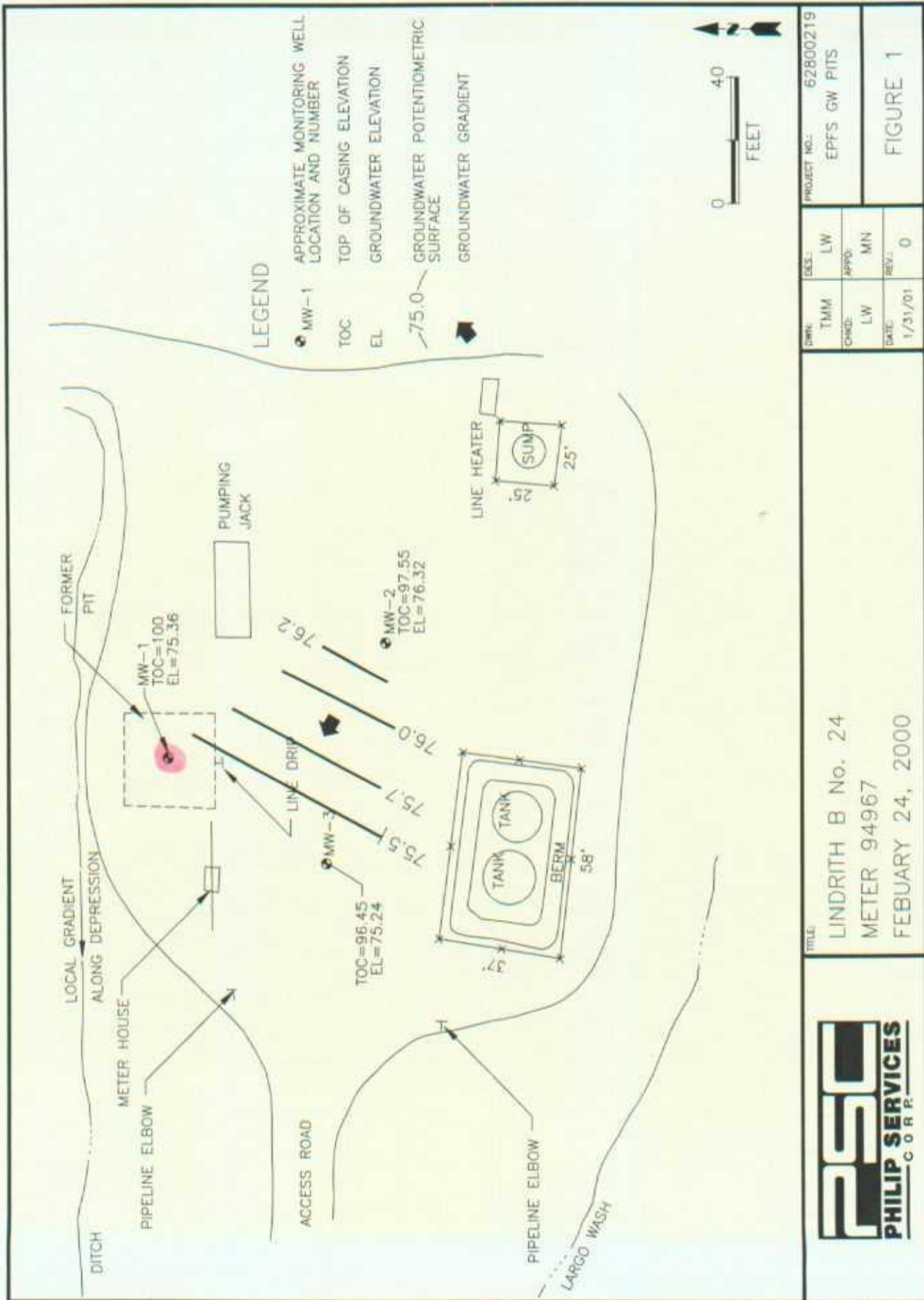
- Verify survey and groundwater data.
- If the groundwater flow is confirmed, install one additional groundwater monitor well downgradient of MW-1.
- Quarterly sampling will continue at MW-1 until analytical results show hydrocarbon constituents are below New Mexico groundwater standards for four consecutive quarters.
- Make recommendations on completion or abandonment of monitor wells MW-2 and MW-3 following re-evaluation of data.
- Following OCD approval for closure, monitor wells will be abandoned using OCD approved abandonment procedures.

Table 1

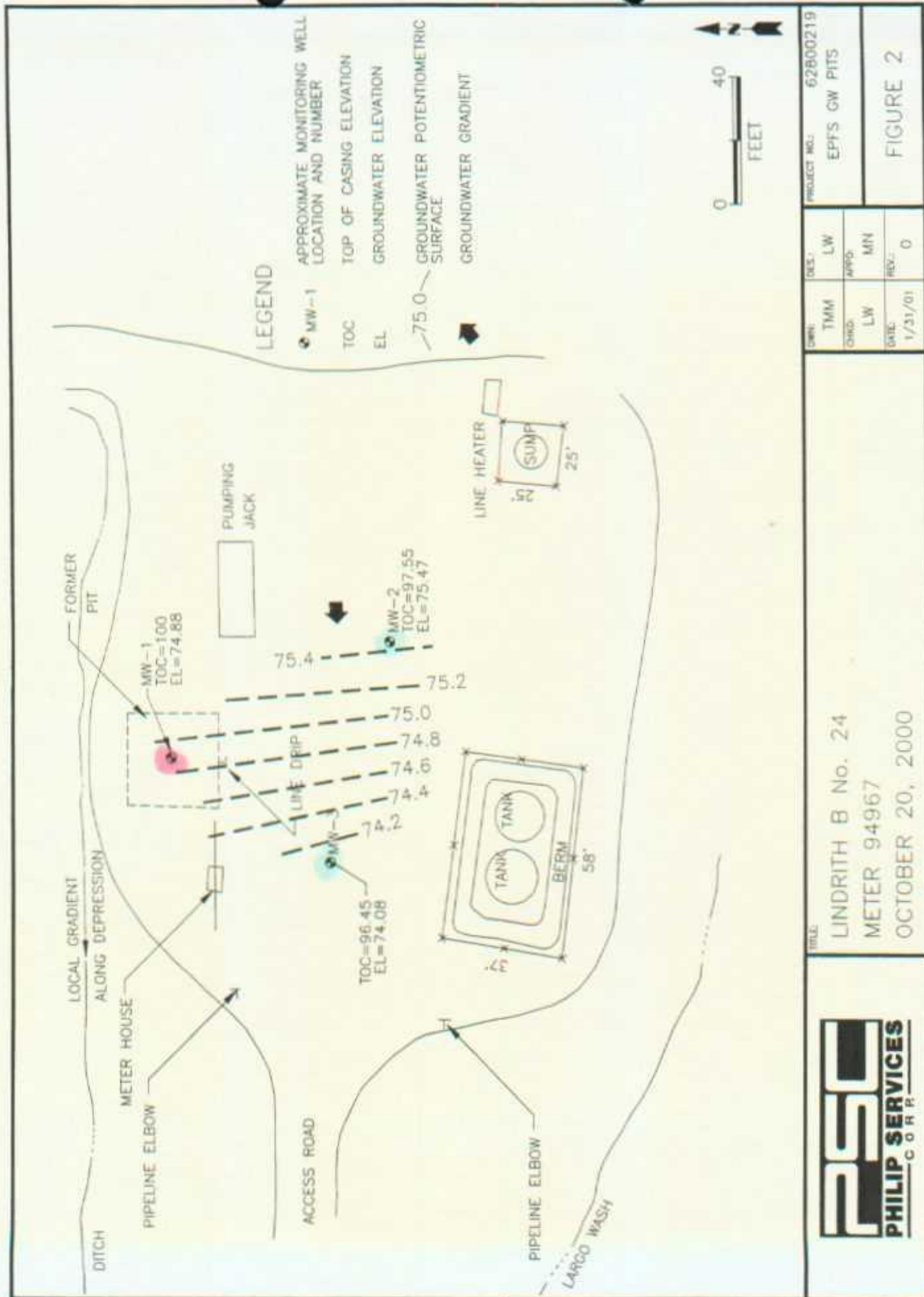
March 2001

Sample #	Meter / Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX (PPB)
LIN-0002-MW1	94967	LINDRITH B #24	2/24/00	1	Sample 4 - 11th Quarter	= 120	= 39	= 78	= 830	1067
LIN-0005-MW1	94967	LINDRITH B #24	5/18/00	1	Sample 4 - 12th Quarter	= 52	= 5.6	= 53	= 320	430.6
LIN-0008-MW1	94967	LINDRITH B #24	8/3/00	1	Sample 4 - 13th Quarter	= 41	< 5.0	= 52	= 420	513
LIN-0011-MW1	94967	LINDRITH B #24	11/7/00	1	Sample 4 - 14th Quarter	= 11	= 12	= 25	= 160	208
LIN-0010-MW2	94967	LINDRITH B #24	10/20/00	2	Sample 1 - 2nd Annual	< 0.5	< 0.5	< 0.5	< 0.5	ND
LIN-0010-MW3	94967	LINDRITH B #24	10/20/00	3	Sample 1 - 2nd Annual	< 0.5	< 0.5	< 0.5	< 0.5	ND

ND - No detectable levels
Sample 1 - Annual Sampling
Sample 4 - Quarterly Sampling

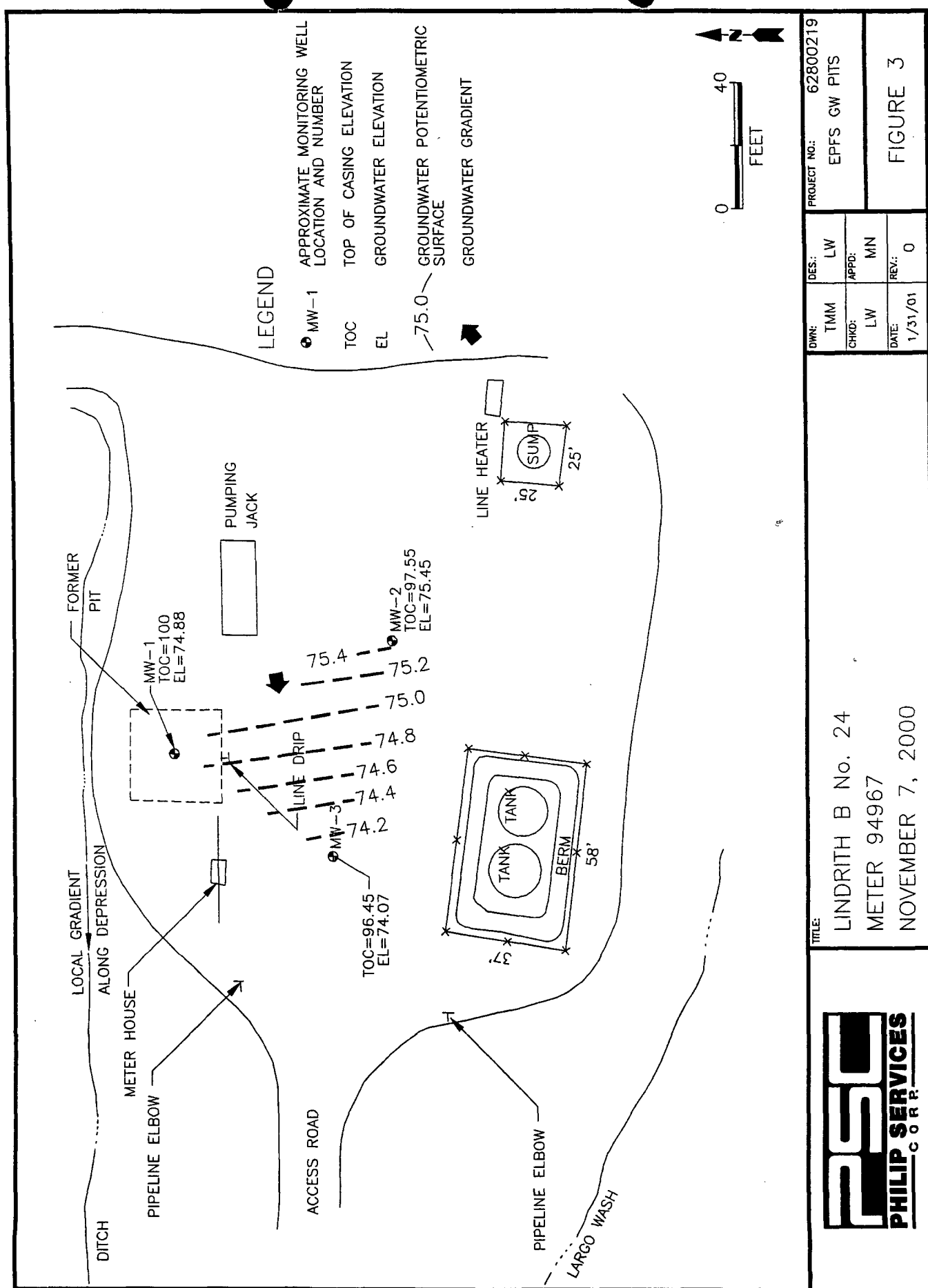


PHILIP SERVICES CORP.		TITLE: LINDRITH B No. 24 METER 94967 FEBRUARY 24, 2000		PROJECT NO.: 62800219 EPFS GW PITS	
DWG: TMM CHD: LW	DES: LW APP: MN	DATE: 1/31/01	REV: 0	FIGURE 1	



CDL 628/00219/004

PROJECT NO.: 62800219		EPFS GW PITS	
DESIGN: TMM	DESIGN: LW	APPROVED: MN	REVISION: 0
DATE: 1/31/01	FIGURE 2		
TITLE: LINDRITH B No. 24 METER 94967 OCTOBER 20, 2000		PHILIP SERVICES CORP	



PHILIP SERVICES CORP.		TITLE: LINDRITH B No. 24 METER 94967 NOVEMBER 7, 2000		PROJECT NO.: 62800219 EPFS GW PITS	
DWN:	DES:	TMM LW APPD: MN DATE: 1/31/01 REV.: 0		FIGURE 3	

ATTACHMENT 1

2000 GROUNDWATER ANALYTICAL

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

PINNACLE
LABORATORIES

MAR 13

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.



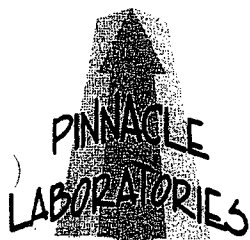
Kimberly D. McNeill
Project Manager



H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

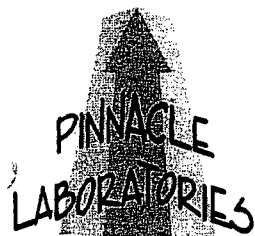
Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 002094
PROJECT #	: 62800107	DATE RECEIVED	: 02/29/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	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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GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D.: 002094

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	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

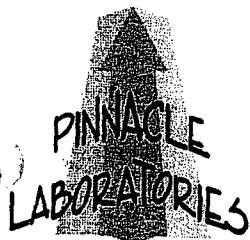
102

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

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	
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
			1300	130	2.6
BENZENE	0.5	UG/L	1300	130	2.6
TOLUENE	0.5	UG/L	1000	70	6.8
ETHYLBENZENE	0.5	UG/L	250	78	14
AL XYLENES	0.5	UG/L	1700	190	58

SURROGATE:

BROMOFLUOROBENZENE (%)

104

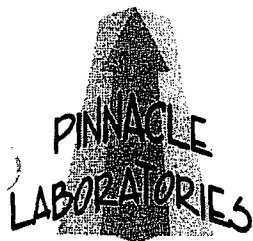
100

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

HOUSEHOLD WASTE - PETROLEUM-CONTAMINATED SAMPLES						
SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	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	2.3
TOTAL XYLENES	0.5	UG/L	5.5	9.4

SURROGATE:

BROMOFLUOROBENZENE (%)

101

98

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



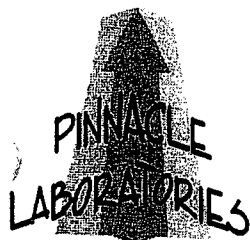
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

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



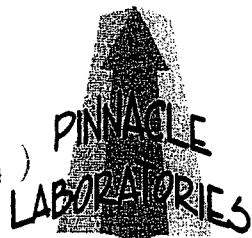
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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

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:
BROMOFLUOROBENZENE (%) 101
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A



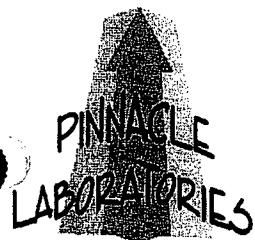
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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 002094
BLANK I. D.	: 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

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



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GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 030100
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 002094
DATE EXTRACTED : N/A
DATE ANALYZED : 03/01/00
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	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

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

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

Chain of Custody record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2497

002094

Project Name: EPFS QUARTERLY SAMPLING				Type of Analysis and Bottle	Total Number of Bottles	BTEX 8021	#DI 907	Comments	
Laboratory		Sample Number (and depth)							
Samplers: KELLY PADILLA		Name: PINNACLE LABS		Date		Time		Matrix	
Location: ALBUQUERQUE, NM		Sample Number (and depth)		Date		Time		Matrix	
Project Number 62800107 Phase Task 0301									
LIN-0002-MW1				2	X		01	94967	
146-0002-MW1				2	X		02	LD146	
169-0002-MW1				2	X		03	LD169	
STD-0002-MW1				2	X		04	70449	
HAM-0002-MW1				2	X		05	97213	
TNR-0002-MW2				2	X		06	71676	
JAG-0002-MW4				2	X		07	CORN FIELD	
JAG-0002-MW3				2	X		08	CORN FIELD	

Relinquished by:

Received By:

Received at:	Signature	Date	Time	Signature	Date	Time
Received at:	Kelly Padella	2-28-00	1135	Francine Murio	2/29/00	1015

Samples Iced: ☒ Yes ☐ No

Carrier: GREY HOUND

Airbill No. G/T 1100 1205 0419

Preservatives (ONLY for Water Samples)

Preservatives (ONLY for Water Samples)

☐ Cyanide Sodium hydroxide (NaOH)

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

☐ **Relais** : 0033 (0)2 38 53 00 00 **S. Mouton** (M-SC)

☐ IPH (418.1) Sulfuric acid (H₂SO₄)

☐ Other (Specify) _____

Shipping and Lab Notes:

Shipping and Lab Notes: SEND ORIGINAL ANALYTICAL RESULTS TO EL PASO FIELD SERVICES.

SEND A COPY OF THE RESULTS TO THE ADDRESS ABOVE.

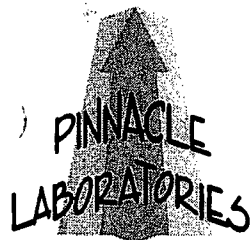
Doc'd @ 14⁰⁰ *no sample for PAN & NO3-~~2129/00~~ 2129/00

Chain of Custody, Record

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

COC Serial No. C 2548

PE-176 4/95



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

Pinnacle Lab ID number **005083**
May 26, 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

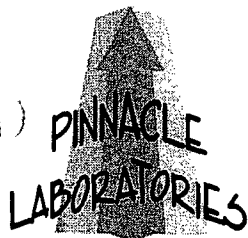
On 05/19/00 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592 pending), received a request to analyze aqueous samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

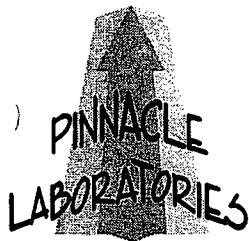
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 005083
PROJECT #	: 62800107	DATE RECEIVED	: 05/19/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 05/26/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	LIN-0005-MW01	AQUEOUS	05/18/00



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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

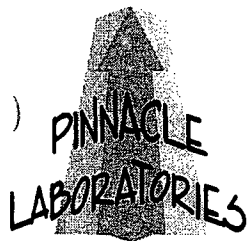
PINNACLE I.D.: 005083

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	LIN-0005-MW01	AQUEOUS	05/18/00	NA	05/23/00	10

PARAMETER	DET. LIMIT	UNITS	LIN-0005-MW01
BENZENE	0.5	UG/L	52
TOLUENE	0.5	UG/L	5.6
ETHYLBENZENE	0.5	UG/L	53
TOTAL XYLENES	0.5	UG/L	320

SURROGATE:
BROMOFLUOROBENZENE (%) 102
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.	: 005083
BLANK I. D.	: 052300	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 05/23/00
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

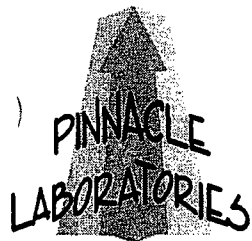
SURROGATE:

1,2-DIFLUOROBENZENE (%) 106

...OGATE 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 # : 005081-02
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 005083
DATE EXTRACTED : NA
DATE ANALYZED : 05/23/00
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	20.4	102	20.1	101	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.5	103	20.6	103	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	20.8	104	0	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	63.0	105	62.1	104	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

Chain of Custody Record



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

COC Serial No. C 2548

Project Name <u>EPFS Quarterly Sampling</u>				Type of Analysis and Bottle	Total Number of Bottles	Comments
Project Number <u>62800107 Phase 1 Task 0301</u>						
Samplers <u>R. Thompson</u>				STEX 8021	2	X
Laboratory		Name <u>Pinnacle Labs</u>				
Sample Number (and depth)		Date	Time	Matrix		
<u>LIN-0005 - MW015/18/00</u>		<u>1218</u>	<u>H2O</u>			

Relinquished by:

Requisitioned by:	Signature	Date	Time	Signature	Date	Time
	Robert Chambers	5/19/00	0825	[Signature]	5/19	16:45

Received By:

Signature	Date	Time
<i>[Signature]</i>	5/19	16:45

Samples Iced: ☒ Yes ☐ No		Carrier: <u>GREYHOUND LINES</u>	Airbill No. <u>GLI 1606650760</u>
Preservatives (ONLY for Water Samples) ☐ Cyanide Sodium hydroxide (NaOH) ☒ Volatile Organic Analysis Hydrochloric acid (HCl) ☐ Metals Nitric acid (HNO ₃) ☐ TPH (#18.1) Sulfuric acid (H ₂ SO ₄) ☐ Other (Specify) _____ ☐ Other (Specify) _____		Shipping and Lab Notes: <i>notice</i> <i>4.6 C</i>	

4000

now ice

PHILIP

ENVIRONMENTAL

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 2616

Project Name <u>EPFS QUARTERLY SAMPLING</u>		Type of Analysis and Bottle		Comments
Project Number <u>62800107 Phase Task 0301</u>		Total Number of Bottles		
Samplers <u>J. WAGNER</u>		Name <u>PINNACLE ABS</u>		LINDSEY B #24967
Laboratory		Location <u>ALBUQUERQUE, NM</u>		
Sample Number (and depth)	Date	Time	Matrix	
<u>LIN-0008-MW01</u>	<u>8/3/00</u>	<u>1250</u>	<u>H2O</u>	<u>X</u>
<u>TRIP BLANK</u>	<u>8/3/00</u>	<u>1250</u>	<u>H2O</u>	<u>X</u>
/				

Relinquished by:

Signature

Date

Time

Received By:

Signature

Date

Time

<u>J. Wagner</u>	<u>8/14/00</u>	<u>0915</u>		
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Samples Iced: ☒ Yes ☐ No

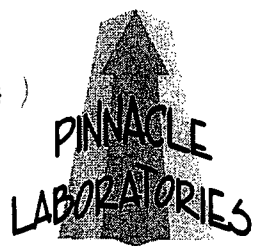
Preservatives (ONLY for Water Samples)

- ☐ 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:

Airbill No. 6LF16006651080



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

Pinnacle Lab ID number 008026
August 08, 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

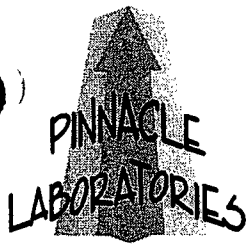
On 08/04/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

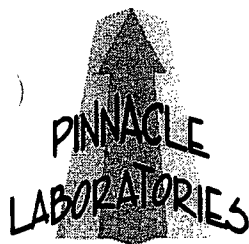
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 008026
PROJECT #	: 62800107	DATE RECEIVED	: 08/04/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 08/08/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	LIN-0008-MW01	AQUEOUS	08/03/00
02	TRIP BLANK	AQUEOUS	08/03/00



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

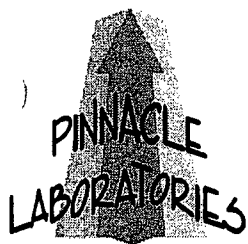
PINNACLE I.D.: 008026

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	LIN-0008-MW01	AQUEOUS	08/03/00	NA	08/07/00	10
02	TRIP BLANK	AQUEOUS	08/03/00	NA	08/07/00	1

PARAMETER	DET. LIMIT	UNITS	LIN-0008-MW01	TRIP BLANK
BENZENE	0.5	UG/L	41	< 0.5
TOLUENE	0.5	UG/L	< 5.0	< 0.5
BENZENE	0.5	UG/L	52	< 0.5
TOTAL XYLENES	0.5	UG/L	420	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 101 89
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



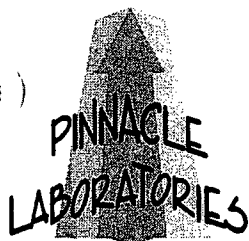
2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 008026
BLANK I. D.	: 080700	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 08/07/00
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 (%) 93
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 QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 080700
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 008026
DATE EXTRACTED : NA
DATE ANALYZED : 08/07/00
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	19.0	95	20.1	101	6	(80 - 120)	20
TOLUENE	<0.5	20.0	19.6	98	20.7	104	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.1	101	20.5	103	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.4	102	63.1	105	3	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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



Chain of Custody Record

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

COC Serial No. C 2616

Project Name		Project Number		Phase		Task		Type of Analysis and Bottle		Total Number of Bottles		Comments	
Sample Number (and depth)	Date	Time	Matrix										
LIN-0008-MW01	8/3/00	1250	H2O										
TRIP BLANK	8/3/00	1250	H2O										
BTEX 8021													
LIND 81738 #2434967													

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
J. Wagon	8/14/00	0915	J. Wagon	8/14/00	1730

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:

temp 2.3

Airbill No. BLI 1606651080

WELL DEVELOPMENT AND PURGING DATA

☐ Development

Well Number MW 02

Serial No. WDPD-

Page 1 of 1

Project Name EPFS quarterly Samplings

Project Manager: R Thompson

Project No. 62800/07

Client Company: E.P.F.S.

Phase.Task No. 0301

Site Name Lindith B#24 (94967)

Site Address Rural San Juan Co.

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) 22.06

Height of Water Column in Well (feet) 8.93

Diameter (inches): Well 2" Gravel Pack

Methods of Development

Pump

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

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	8.73	1.45 x 3	4.35
Gravel Pack			
Drilling Fluids			
Total			4.35

Instruments

☒ pH Meter

☐ DO Monitor☒ Conductivity Meter

☒ Temperature Meter

☐ Other _____

Serial No. If applicable]

Hydac

Hvdac

Hydac

Water Disposal

Water Disposal
KATZ Separator Bloomfield NM.

Water Removal Data

[illegible]

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

Comments Sampled for BText at 1321

Developer's Signature(s) *Chia A. May*

01/02-2010

Reviewer RT

Date 10/27/00

Chain of Custody, Record

4000 Monroe Road
Farmington, NM 87401

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

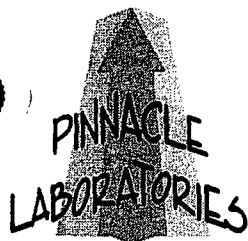
COC Serial No. C 2678

Relinquished by:

Received By:

Signature		Date	Time	Signature		Date	Time
Chris A. May		10-25-00	1600				

Samples Iced: ☒ Yes ☐ No 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) <u>H₂SO₄</u> ☐ Other (Specify) _____	Carrier: <u>Greyhound</u> Shipping and Lab Notes:	Airbill No. <u>6LT/606918731</u>
--	--	----------------------------------



NOV - 6 2000

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

Pinnacle Lab ID number 010100
November 01, 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

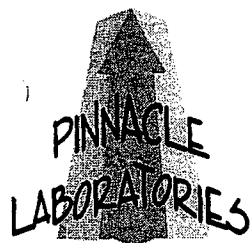
On 10/26/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

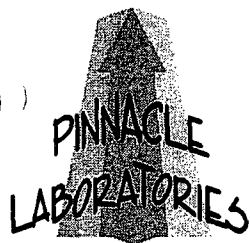
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 010100
PROJECT #	: 62800107	DATE RECEIVED	: 10/26/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 11/02/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	LIN-0010-MW 02	AQUEOUS	10/20/00
02	LIN-0010-MW 03	AQUEOUS	10/20/00



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.: 010100

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	LIN-0010-MW 02	AQUEOUS	10/20/00	NA	10/30/00	1
02	LIN-0010-MW 03	AQUEOUS	10/20/00	NA	10/30/00	1
PARAMETER		DET. LIMIT	UNITS	LIN-0010-MW 02	LIN-0010-MW 03	
BENZENE		0.5	UG/L	< 0.5	< 0.5	
TOLUENE		0.5	UG/L	< 0.5	< 0.5	
ETHYL BENZENE		0.5	UG/L	< 0.5	< 0.5	
XYLENES		0.5	UG/L	< 0.5	< 0.5	

SURROGATE:

BROMOFLUOROBENZENE (%)

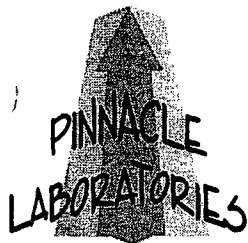
109

107

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



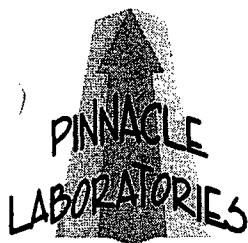
2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 010100
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:
1,2-DIFLUOROBENZENE (%) 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 QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 010100-01
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D. : 010100
DATE EXTRACTED : NA
DATE ANALYZED : 10/30/00
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	19.9	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

COC Serial No. C 2678

0100D

Project Name <u>PF5 quarterly Sampling</u>		Type of Analysis and Bottle	
Project Number <u>628 00107 Phase Task 0301</u>		Brex 9021	
Samplers <u>C. Macz</u>		Lab ID#	
Laboratory		Total Number of Bottles	
Sample Number (and depth)	Date	Time	Matrix
<u>LN-0010-MW-02</u>	<u>10-20-00</u>	<u>1321</u>	<u>H₂O</u>
<u>LN-0010-MW-03</u>	<u>10-20-00</u>	<u>1234</u>	<u>H₂O</u>
Comments			
<u>Lindrich B#24</u>			
<u>Lindrich B#24</u>			

Relinquished by:

Received By:

Signature	Date	Signature	Date	Time
<u>Chris A. May</u>	<u>10-25-00</u>	<u>James J. Jann</u>	<u>1640</u>	<u>10/26/00</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) H₂SO₄
☐ Other (Specify) _____

Carrier: Greyhound
Shipping and Lab Notes:

Airbill No. GLI/60691 8731

Rec'd @ 5:10

Project Name EpFS Quarterly Sampling
 Client Company EL Paso Field Services
 Site Name Lindbergh B # 24 (94967)
 Project Manager R Thompson
 Project No. 62200107
 Phase/Task No. 0301
 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 ☐ Centrifugal ☒ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer

☐ Submersible ☐ Peristaltic ☐ Other

Bajler

Water Volume Calculation

Initial Depth of Well (feet) 31.81
Initial Depth to Water (feet) 25.14
Height of Water Column in Well (feet) 6.67
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	6.67	4,358.33	13.05
Gravel Pack			
Drilling Fluids			
Total			13.05

Instruments

☒ pH Meter

☐ DO Monitor

☒ Conductivity Meter

☒ Temperature Meter

☐ Other

Water Disposal
K-12 Separator Bloomfield NM

Water Removal Data

[illegible]

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

Comments	25.11 TO Floating product Thickness -03
Sampled for BTex 1145	

Developer's Signature(s) *Ch. A. Meyer*

Date // -07-00

Reviewer RT

Date 11/14/00

PHILIP

ENVIRONMENTAL

Chain of Custody Record

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

COC Serial No. C 2780

Project Name <u>EPFS quarterly Sampling</u>		Type of Analysis and Bottle	
Project Number <u>62900107 Phase Task 0301</u>		Total Number of Bottles	
Samplers <u>C. maez</u>		BTX 8021	
Laboratory			
Name <u>PINNACLE</u>			
Location <u>ALBQ NM</u>			
Sample Number (and depth)	Date	Time	Matrix
<u>KIN-0011 - MW011</u>	<u>11-07-00</u>	<u>1145</u>	<u>H₂O</u>
Comments <u>(94967) Lindgren B # 24</u>			

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
<u>Chris A M</u>	<u>11-13-00</u>	<u>1630</u>			

Samples Iced: ☒ Yes ☐ No

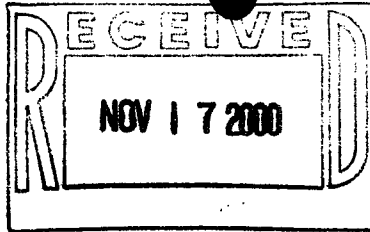
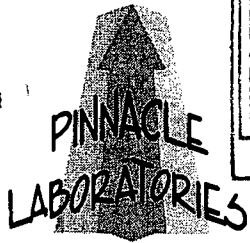
Preservatives (ONLY for Water Samples)

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

Carrier: Greyhound

Shipping and Lab Notes:

Airbill No.



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

Pinnacle Lab ID number 011040
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

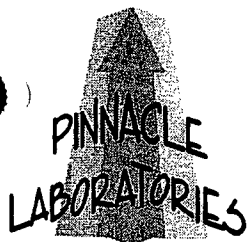
On 11/14/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze aqueous samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

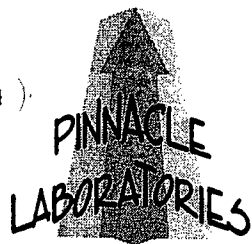
MR: jt

Enclosure



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

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 011040
PROJECT #	: 62800107	DATE RECEIVED	: 11/14/00
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 11/15/00
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	LIN-0011-MW01	AQUEOUS	11/07/00



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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.: 011040

SAMPLE	DATE	DATE	DATE	DIL.		
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	LIN-0011-MW01	AQUEOUS	11/07/00	NA	11/14/00	2

PARAMETER	DET. LIMIT	UNITS	LIN-0011-MW01
BENZENE	0.5	UG/L	11
TOLUENE	0.5	UG/L	12
ETHYLBENZENE	0.5	UG/L	25
TOTAL XYLENES	0.5	UG/L	160

SURROGATE:

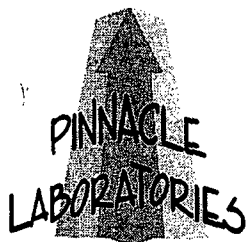
BROMOFLUOROBENZENE (%)

102

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A



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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 011040
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

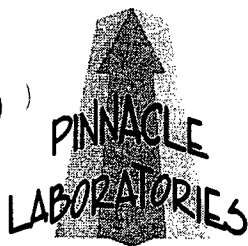
SURROGATE:

1,2-DIFLUOROBENZENE (%) 114

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A



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GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

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

PINNACLE I.D. : 011040
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

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

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

011040

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

COC Serial No. C 2780

Philip

ENVIRONMENTAL

[illegible]

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
Chris A. M...	11-13-00	16 30	Janeane J...	11/14/00	0920

Samples Iced: ☒ Yes ☐ No		Carrier: <u>Greyhound</u> Airbill No. _____
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) <u>HSC12</u> ☐ Other (Specify) _____		
Shipping and Lab Notes:		<u>Rec'd @ 3.3°C</u>

Rec'd @ 3.30