3R - 214

REPORTS

DATE:

1997

EL PASO ENERGY

Certified Mail: #Z 295 387 297; #Z 295 387 296

February 27, 1998

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504

Re: 1997 Groundwater Annual Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for 57 groundwater impacted locations that were identified during our pit closure project of 1994/1995.

Of the 57 reports, EPFS hereby requests your approval for closure of 11 of these locations. The 11 reports for which EPFS requests closure, are in 2 separate binders entitled "Request for Closure".

After you have had an opportunity to review these updates, EPFS would like to schedule a meeting with you to discuss issues related to closure criteria for some of the more complex locations that are currently being addressed.

If you have any questions regarding this information, please call me at 505/599-2141. I will contact you within the next quarter to schedule a meeting.

Sincerely,

Sandra D. Miller
Environmental Manager

xc: Mr. Bill Liesse, BLM w/o enclosures
Mr. Denny Foust, NMOCD - Aztec w/enclosures; **Certified Mail #Z 295 387 298; #Z 295 387 299**
Ms. Charmaine Tso, Navajo EPA w/enclosures; **Certified Mail #Z 295 387 292**

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services Pit Project Groundwater Report
Annual Report

March 1998

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520

PHILIP ENVIRONMENTAL

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

1997 ACTIVITIES

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

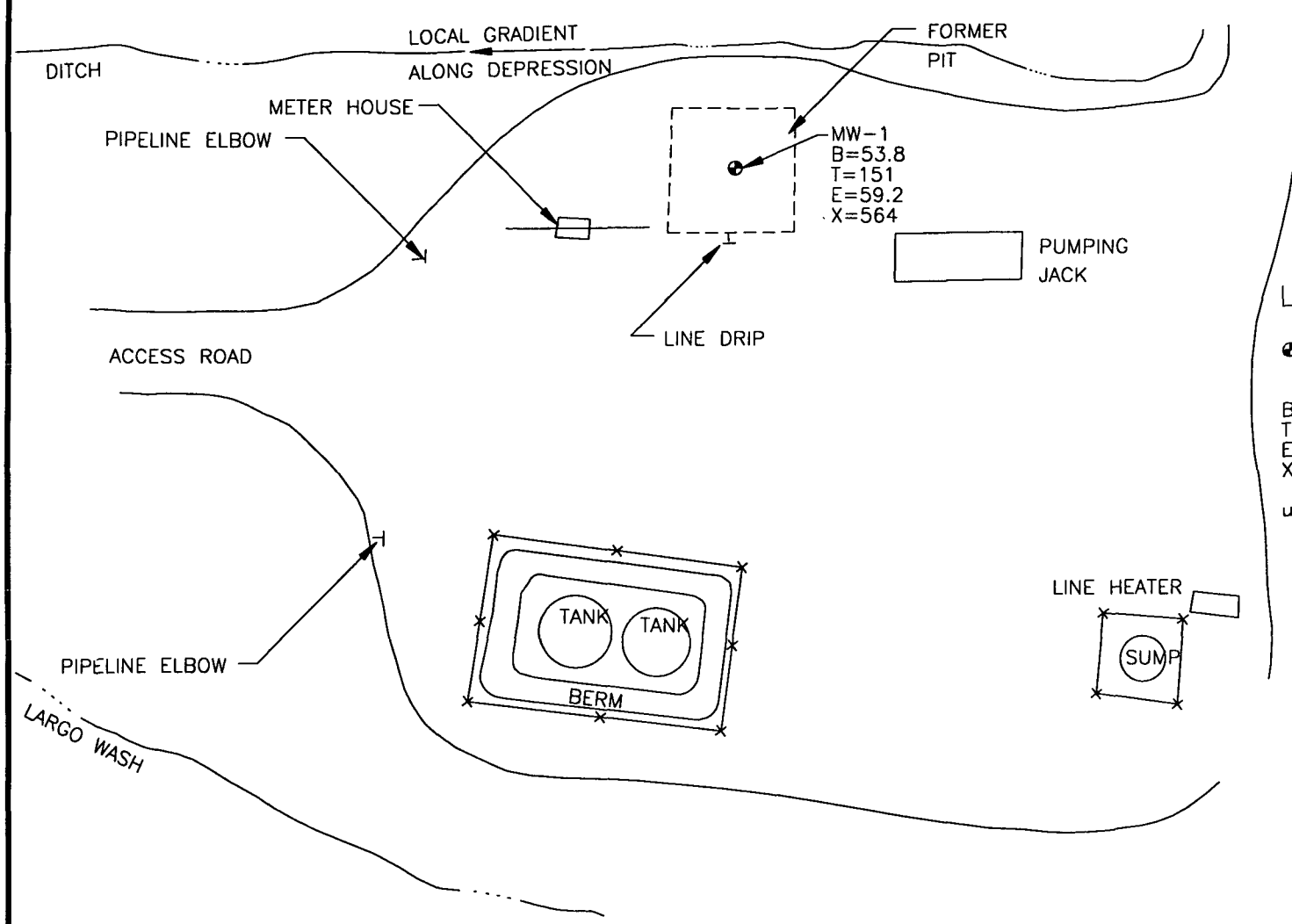
Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was initiated on 8/7/97. Groundwater analytical data are presented in Table 1.

CONCLUSIONS

The pit was re-excavated to 21 feet below ground surface where groundwater was encountered. Soil headspace reading from the pit bottom was 25 ppm. Soil analytical were as follows; benzene – ND, total BTEX – ND, TPH – 46.3 mg/kg. Initial groundwater analytical for MW-1 were above standards. BTEX levels have consistently declined since quarterly sampling was initiated. Groundwater gradient has not been established at this site.

RECOMMENDATIONS

- Install temporary groundwater monitoring wells to determine groundwater gradient and to evaluate if potential contaminant migration.
- Site may be candidate for nutrient injection.



LEGEND

⊕ MW-1	APPROXIMATE MONITORING WELL LOCATION AND NUMBER
B	BENZENE (ug\L)
T	TOLUENE (ug\L)
E	ETHYL BENZENE (ug\L)
X	XYLENE (ug\L)
ug\L	MICROGRAMS PER LITER

NOT TO SCALE

N

PHILIP SERVICES CORP

TITLE:
LINDRITH B No. 24
METER 94967

DWN: TMM	DES.: CC	PROJECT NO.: 17520	
CHKD: CC	APPD:	EPFS GW PITS	
DATE: 1/19/98	REV.: 0	FIGURE 1	

COL. 17520U-001

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
970510	94967	Lindrith B #24	5/27/97	1	Phase II Drilling - Initial	90.4	428	97.8	822	1440
970828	94967	Lindrith B #24	8/7/97	1	Sample 4 - 1st Qtr	= 69.8	= 437	= 85.5	= 785	= 1377
971218	94967	Lindrith B #24	11/14/97	1	Sample 4 - 2nd Qtr	= 53.8	= 151	= 59.2	= 564	= 828

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

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

Project Name EPNG PITS
Project Number 14509 Phase 6000 / 77
Project Location Lindrith B#24 94967

Elevation
Borehole Location
GWL Depth
Logged By CM CHANCE
Drilled By ~~M DONOHUE~~ K. Padilla
Date/Time Started 6/7/95 - 1045
Date/Time Completed 6/7/95 - 1150

Well Logged By CM Chance
Personnel On-Site K. Padilla, F. Rivera, D. Tsalatsi
Contractors On-Site
Client Personnel On-Site

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

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
15	1	15-17	8"	Redish Br silty SAND, vf-f sand, loose, sl moist, odor			0	200	955 / 642	1054 hr.
20	2	20-22	4"	Br silty SAND, vf-f sand, tr med sand, loose, saturated, strong odor. yellow liquid			0	460	758 / 795	GW @ 19.4' 1102
				TDB 22'						
25										
30										
35										
40										

Comments: Hit groundwater @ 19.7'. Water level rose to 19.4' after 10 min. Yellow liquid on tape. Backfilled BH w/ 4' Envirogrout to surface. No sample due to poor recovery & high PID.

Geologist Signature

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH 1
Well # MW 1
Page of

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

Project Name EPFS GW PITS
Project Number 17520 Phase 6002.77
Project Location Lindrith B 24 94967

Elevation
Borehole Location Lat N-59-T24-R3
GWL Depth 20.5'
Logged By CM Chance
Drilled By R. Padilla
Date/Time Started 5/27/97-1000
Date/Time Completed 5/27/97-1125

Well Logged By CM Chance
Personnel On-Site D Charley, R. Thompson
Contractors On-Site
Client Personnel On-Site

Drilling Method 6¼ ID HSA
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0										
5										
10										
15										
20				Backfill to 21'						-GW@20.5'
25				Br-gry clayey SAND, vF-F, saturated						
30				Br SAND, F-med, saturated						
35				TDB 30'						
40										

Comments: No sample collected (backfill to GW). GW @ 20.5' BGS. TDB 30'
Set well

Geologist Signature Cory Chance

MONITORING WELL INSTALLATION RECORD

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

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

Project Name EPFS GW
Project Number 17520 Phase 6002
Site Location Lindrith B24 94967

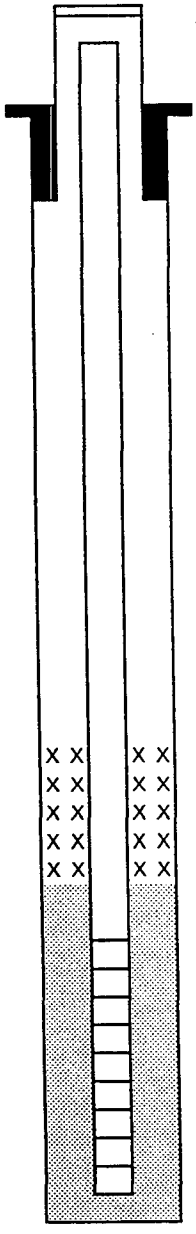
Elevation
Well Location T24 R3 S9 LTR N
GWL Depth 20.5' BGS
Installed By K Padilla

Date/Time Started 5/27/97-1125
Date/Time Completed 5/27/97-1330

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY, R Thompson
Contractors On-Site
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" steel well vault	+3.1
Bottom of Protective Casing		1.9
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		NA
Bottom of Concrete		NA
Top of Grout	Type I/II Portland cement	0
Bottom of Grout	Powder Bentonite	8.6
Top of Well Riser	4" SCH 40 PVC	+3
Bottom of Well Riser	FLUSH THREAD	13.6
Top of Well Screen	4" SCH 40 PVC	13.6
Bottom of Well Screen	0.01 SLOT FLUSH THREAD	28.6
Top of Peltonite Seal	ENVIROPLUG	8.6
Bottom of Peltonite Seal		10.6
Top of Gravel Pack	10-20 SILICA SAND	10.6
Bottom of Gravel Pack		28.6
Top of Natural Cave-In		28.6
Bottom of Natural Cave-In		30
Top of Groundwater		20.5
Total Depth of Borehole		30



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

MWINSTAL.wk1

Geologist Signature Cory Chance

PHASE I EXCAVATION

El Paso Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Kelly Padilla DATE: 10-11-94

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
946394	10-11-94	0900	Soil	KP 306	1	VC	X	X				278	
946395	10-11-94	0930	Soil	KP 307	1	VC	X	X				279	94967
946396	10-11-94	1121	Soil	KP 308	1	VG	X	X				280	
946397	10-11-94	1121	Soil	KP 309	1	D	X	X					
946398	10-11-94	1126	Soil	KP 310	1	B	X	X					
946399	10-11-94	1530	Soil	KP 311	1	VC	X	X				281	
946400	10-11-94	1600	Soil	KP 312	1	VG	X	X				282	

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kelly Padilla 10-11-94	2000	Brenda Kiess	Brenda Kiess	10/14/94 0925	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH _____

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

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

Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP307	946395
MTR CODE | SITE NAME:	KDK 10/19/94 949167	N/A
SAMPLE DATE | TIME (Hrs):	10-11-94	0930
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	10-17-94	10.17.94
DATE OF BTEX EXT. | ANAL.:	10-19-94	10-23-94
TYPE | DESCRIPTION:	VC	Brown Sand & Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	3.2	MG/KG	20			
TOLUENE	15	MG/KG	20			
ETHYL BENZENE	<0.5	MG/KG	20			
TOTAL XYLENES	55	MG/KG	20			
TOTAL BTEX	73.7	MG/KG				
TPH (418.1)	4270	MG/KG			2.15	28
HEADSPACE PID	233	PPM				
PERCENT SOLIDS	90.3	%				

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

e Surrogate Recovery was at 90 % for this sample All QA/QC was acceptable.

rrative:

AT 1 Results attached.

= Dilution Factor Used

Date: 11/3/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 410405

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946395	NON-AQ	10/11/94	10/19/94	10/23/94	20
05	946396	NON-AQ	10/11/94	10/19/94	10/19/94	1
06	946397	NON-AQ	10/11/94	10/19/94	10/19/94	1

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	3.2	<0.025	<0.025
TOLUENE	MG/KG	15	<0.025	<0.025
ETHYLBENZENE	MG/KG	<0.5	<0.025	<0.025
TOTAL XYLENES	MG/KG	55	<0.025	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		90	101	102

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **410405**

October 26, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **10/18/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-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.

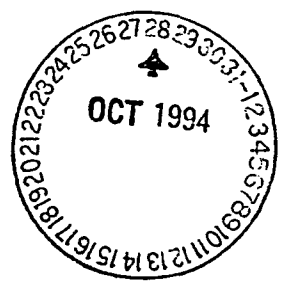
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

CLIENT : EL PASO NATURAL GAS CO.
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

DATE RECEIVED : 10/18/94
REPORT DATE : 10/26/94

ATI ID: 410405

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	946392	NON-AQ	10/10/94
02	946393	NON-AQ	10/10/94
03	946394	NON-AQ	10/11/94
04	946395	NON-AQ	10/11/94
05	946396	NON-AQ	10/11/94
06	946397	NON-AQ	10/11/94
07	946398	NON-AQ	10/11/94
08	946399	NON-AQ	10/11/94
09	946400	NON-AQ	10/11/94
10	946401	NON-AQ	10/11/94
11	946402	NON-AQ	10/11/94
12	946403	NON-AQ	10/11/94
13	946404	NON-AQ	10/11/94
14	946405	NON-AQ	10/11/94
15	946406	NON-AQ	10/11/94
16	946407	NON-AQ	10/12/94
17	946408	NON-AQ	10/12/94
18	946409	NON-AQ	10/12/94
19	946410	NON-AQ	10/12/94
20	946411	NON-AQ	10/12/94
21	946412	NON-AQ	10/12/94
22	946413	NON-AQ	10/12/94
23	946414	NON-AQ	10/13/94
24	946415	NON-AQ	10/13/94
25	946416	NON-AQ	10/13/93
26	946417	NON-AQ	10/13/94
27	946418	NON-AQ	10/13/94
28	946419	NON-AQ	10/13/94
29	946421	NON-AQ	10/14/94
30	946422	NON-AQ	10/14/94
31	946423	NON-AQ	10/14/94
32	946424	NON-AQ	10/14/94

---TOTALS---

MATRIX	#SAMPLES
NON-AQ	32

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 410405
PROJECT #	: 24324	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: PIT CLOSURE	UNITS	: MG/KG

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC.	% REC
PETROLEUM HYDROCARBONS	41040509	<20	<20	NA	140	140	100

Acceptable.
10/31/96

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

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

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: BTEX (EPA 8020)	ATI I.D.	: 410405
BLANK I.D.	: 101994	MATRIX	: NON-AQ
CLIENT	: EL PASO NATURAL GAS CO.	DATE EXTRACTED	: 10/19/94
PROJECT #	: 24324	DATE ANALYZED	: 10/20/94
PROJECT NAME	: PIT CLOSURE	DILUTION FACTOR	: 1

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%)	96

Acceptable JF 10/31/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

REAGENT BLANK

TEST	: BTEX (EPA 8020)	ATI I.D.	: 410405
BLANK I.D.	: 101994B	MATRIX	: NON-AQ
CLIENT	: EL PASO NATURAL GAS CO.	DATE EXTRACTED	: 10/19/94
PROJECT #	: 24324	DATE ANALYZED	: 10/19/94
PROJECT NAME	: PIT CLOSURE	DILUTION FACTOR	: 1

PARAMETER	UNITS	
BENZENE	MG/KG	<0.025
TOLUENE	MG/KG	<0.025
ETHYLBENZENE	MG/KG	<0.025
TOTAL XYLENES	MG/KG	<0.025
SURROGATE:		
BROMOFLUOROBENZENE (%)		101

Acceptable
10/21/94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: BTEX (EPA 8020)		
MSMSD #	: 41040514	ATI I.D.	: 410405
CLIENT	: EL PASO NATURAL GAS CO.	DATE EXTRACTED	: 10/19/94
PROJECT #	: 24324	DATE ANALYZED	: 10/19/94
PROJECT NAME	: PIT CLOSURE	SAMPLE MATRIX	: NON-AQ
REF. I.D.	: 41040514	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.025	1.0	0.94	94	0.97	97	3
TOLUENE	0.16	1.0	1.0	84	1.0	84	0
ETHYLBENZENE	<0.025	1.0	0.90	90	0.94	94	4
TOTAL XYLENES	0.054	3.0	2.8	92	2.9	95	4

Acceptable
10/21/94

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

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

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: BTEX (EPA 8020)		
MSMSD #	: 41040524	ATI I.D.	: 410405
CLIENT	: EL PASO NATURAL GAS CO.	DATE EXTRACTED	: 10/19/94
PROJECT #	: 24324	DATE ANALYZED	: 10/20/94
PROJECT NAME	: PIT CLOSURE	SAMPLE MATRIX	: NON-AQ
REF. I.D.	: 41040524	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.025	1.0	0.91	91	0.92	92	1
TOLUENE	0.029	1.0	0.91	88	0.90	87	1
ETHYLBENZENE	<0.025	1.0	0.88	88	0.88	88	0
TOTAL XYLENES	0.040	3.0	2.8	92	2.8	92	0

Accepted
10/31/94

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

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

Analytical **Technologies,** Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 10/[illegible]/94 PAGE 1 OF 4

ATI LAB I.D. 41040[illegible]

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER:	JOHN LAMBDIN
COMPANY:	EL PASO NATURAL GAS
ADDRESS:	P.O. BOX 4990
	FARMINGTON, NM 87499
PHONE:	(505) 599-2144
FAX:	(505) 599-2261
BILL TO:	SAME AS ABOVE
COMPANY:	
ADDRESS:	

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)	BETX (8020)	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal	The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	# CONTAINERS
946392	10/10/94	1120	Soil	01					X																1
946393	10/10/94	1445		02					X																1
946394	10/11/94	0900		03					X																1
946395		0930		04					X																1
946396		1121		05					X																1
946397		1121		06					X																1
946398		1126		07					X																1
946399		1530		08					X																1
KDK 10/17/94 ~~946400~~ 946400	10/11/94	1600	Soil	09	X				X																1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	24324	NO. CONTAINERS	9
PROJ. NAME:	PIT CLOSURE	CUSTODY SEALS	(Y) N / NA
P.O. NO.:	38822	RECEIVED INTACT	Y
SHIPPED VIA:	FEDERAL EXPRESS	RECEIVED COLD	Y 3°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:

CHARGE CODE: 50% 108-51570-24-0001-0012-31-~~2010~~ 7210
50% 108-52452-24-0001-0012-31-~~2010~~ 7210

QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Time:	Signature: Kim Kirby Time: 1515	Signature: Time:
Printed Name: Date:	Printed Name: Kim Kirby Date: 10/17/94	Printed Name: Date:
Company: Phone:	Company: EL PASO NATURAL GAS	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 1130
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 10/18/94
Company:	Company:	Analytical Technologies, Inc.

Analytical Technologies, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 10/17/94 PAGE 2 OF 4

ATI LAB I.D. 41048

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO NATURAL GAS
ADDRESS: P.O. BOX 4990
FARMINGTON, NM 87499
PHONE: (505) 599-2144
FAX: (505) 599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	BETX (8020)	NUMBER OF CONTAINERS
9464 01	10/11/94	0850	Soil	10	X	1
9464 02	"	1215	"	11	X	1
9464 03		1545		12	X	1
9464 04		1545		13	X	1
9464 05		1550		14	X	1
9464 06	10/11/94	1615		15	X	1
9464 07	10/12/94	0920		16	X	1
9464 08	10/12/94	1320		17	X	1
9464 09	10/12/94	1545	Soil	18	X	1

Petroleum Hydrocarbons (418.1); (MOD 8015) Gas/Diesel; Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020); BTXE/MTBE (8020); Chlorinated Hydrocarbons (601/8010); Aromatic Hydrocarbons (602/8020); SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.; Pesticides/PCB (608/8080); Herbicides (615/8150); Base/Neutral/Acid Compounds GC/MS (625/8270); Volatile Organics GC/MS (624/8240); Polynuclear Aromatics (610/8310); SDWA Primary Standards - Arizona; SDWA Secondary Standards - Arizona; SDWA Primary Standards - Federal; SDWA Secondary Standards - Federal; The 13 Priority Pollutant Metals; RCRA Metals by Total Digestion; RCRA Metals by TCLP (1311)

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.: 24324		NO. CONTAINERS	9
PROJ. NAME: PIT CLOSURE		CUSTODY SEALS	(Y) N / NA
P.O. NO.: 38822		RECEIVED INTACT	Y
SHIPPED VIA: FEDERAL EXPRESS		RECEIVED COLD	Y 3°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:
CHARGE CODE: 50% 108-51570-24-0001-0012-31-~~2010~~ 7210
50% 108-52452-24-0001-0012-31-~~2010~~ 7210
QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Time:	Signature: Kim Kirby Time: 1515	Signature: Time:
Printed Name: Date:	Printed Name: Kim Kirby Date: 10/17/94	Printed Name: Date:
Company: Phone:	Company: EL PASO NATURAL GAS	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY:(LAB) 3.**
Signature: Time:	Signature: Time:	Signature: Time: 1130
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 10/18/94
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

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CHAIN OF CUSTODY

DATE: 10/17/94 PAGE 3 OF 4

ATI LAB I.D. 46405

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PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO NATURAL GAS
ADDRESS: P.O. BOX 4990
FARMINGTON, NM 87499
PHONE: (505) 599-2144
FAX: (505) 599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	BETX (8020)	CONTAINERS NUMBE
946410	10/12/94	0845	Soil	19	X	1
946411	↑	0955	↑	20	X	1
946412	↓	1300		21	X	1
946413	10/12/94	1615		22	X	1
946414	10/13/94	1330		23	X	1
946415	↑	1800		24	X	1
946416		0915		25	X	1
946417	↓	1040	↓	26	X	1
946418	10/13/94	1350	Soil	27	X	1

Just Broke

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.: 24324		NO. CONTAINERS	9
PROJ. NAME: PIT CLOSURE		CUSTODY SEALS	(Y) N / NA
P.O. NO.: 38822		RECEIVED INTACT	Y N
SHIPPED VIA: FEDERAL EXPRESS		RECEIVED COLD	Y 3°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:
CHARGE CODE: 50% 108-51570-24-0001-0012-31-~~2010~~ 7210
50% 108-52452-24-0001-0012-31-~~2010~~ 7210

QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Time:	Signature: Kim Kirby Time: 1515	Signature: Time:
Printed Name: Date:	Printed Name: Kim Kirby Date: 10/17/94	Printed Name: Date:
Company: Phone:	Company: EL PASO NATURAL GAS	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 1130
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 10/18/94
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

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CHAIN OF CUSTODY

DATE: 10-17-94 PAGE 1 OF 1

ATI LAB I.D. 4 10408

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO NATURAL GAS
ADDRESS: P.O. BOX 4990
FARMINGTON, NM 87499
PHONE: (505) 599-2144
FAX: (505) 599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	BETX (8020)	NUMBER OF CONTAINERS
946419	10/13/94	1130	soil	26	X	1
946421	10/14/94	1000	↑	29	X	1
946422	↑	1030	↓	30	X	1
946423	↓	1100	↓	31	X	1
946424	10/14/94	1320	soil	32	X	1

Petroleum Hydrocarbons (418.1)
(MOD 8015) Gas/Diesel
Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)
BTXE/MTBE (8020)
Chlorinated Hydrocarbons (601/8010)
Aromatic Hydrocarbons (602/8020)
SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.
Pesticides/PCB (608/8080)
Herbicides (615/8150)
Base/Neutral/Acid Compounds GC/MS (625/8270)
Volatile Organics GC/MS (624/8240)
Polynuclear Aromatics (610/8310)
SDWA Primary Standards - Arizona
SDWA Secondary Standards - Arizona
SDWA Primary Standards - Federal
SDWA Secondary Standards - Federal
The 13 Priority Pollutant Metals
RCRA Metals by Total Digestion
RCRA Metals by TCLP (1311)

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.: 24324		NO. CONTAINERS	5
PROJ. NAME: PIT CLOSURE		CUSTODY SEALS	Y / N / NA
P.O. NO.: 38822		RECEIVED INTACT	Y
SHIPPED VIA: FEDERAL EXPRESS		RECEIVED COLD	Y 3° C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:
CHARGE CODE: 50% 108-51570-24-0001-0012-31-2010 7210
50% 108-52452-24-0001-0012-31-2010 7210
QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Time:	Signature: Kim Kinsey Time: 1515	Signature: Time:
Printed Name: Date:	Printed Name: Kim Kinsey Date: 10-17-94	Printed Name: Date:
Company: Phone:	Company: EL PASO NATURAL GAS	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 1130
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 10/18/94
Company:	Company:	Analytical Technologies, Inc.

QUALITY CONTROL REPORT

418.1 by Modified 418.1 by Infrared

Date of Analysis: October 17, 1994 — **36 Samples**

LABORATORY CONTROL SAMPLES: CALIBRATION CHECKS

SAMPLE ID	SOURCE	TRUE VALUE (PPM)	FOUND (MG/KG)	%R	ACCEPTABLE RANGE 75-125 %R YES	NO
INITIAL CALIBRATION VERIF. "B" Heavy Oil (Lot MOR9480)	HORIBA	100	109	109	X	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE NUMBER	TYPE	SAMPLE RESULT (S)MG/KG	DUPLICATE RESULT (D)MG/KG	RPD	ACCEPTABLE RANGE + / - 35% YES	NO
946392	2nd Extract	909	838	8.1	X	
946394	2nd Extract	1050	1230	15.8	X	

Narrative : Acceptable.

LABORATORY SPIKES:

SAMPLE NUMBER	SPIKE ADDED (SA)MG/KG	SAMPLE RESULT (S)MG/KG	SPIKE SAMPLE RESULT (SR)MG/KG	%R	ACCEPTABLE RANGE 75-125 %R YES	NO
946392	2240	909	3380	110	X	
946394	2510	1050	4040	119	X	

Narrative: Acceptable.

REFERENCE SOIL (Laboratory Control Sample):

SAMPLE ID	SOURCE	KNOWN VALUE (MG/KG)	SAMPLE RESULT FOUND (MG/KG)	MFG SPECIFIED RANGE	ACCEPTABLE YES	NO
ERA TPH STANDARD #1 LOT # 91026	ENVIRONMENTA RESOURCE ASS.	1340	1470	804 - 1680	X	
ERA TPH STANDARD #2 w/int LOT # 91026	ENVIRONMENTA RESOURCE ASS.	2590	2950	1550 - 3240	X	

Narrative: Acceptable.

LABORATORY REAGENT BLANK:

SAMPLE ID	SOURCE	TPH LEVEL (MG/KG)	STATUS
Freon Solvent	EPNG Lab	<10.0	ACCEPTABLE
Reagent Blank	EPNG Lab	<10.0	ACCEPTABLE

Narrative: Acceptable.

Extracted: 10/17/94

Approved By: _____ Date: 19-Oct-94

RE-EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 94967 Location: Lindrith B # 24

Coordinates: Letter: N Section 09 Township: 24 Range: 03

Or Latitude _____ Longitude _____

Date Started : 8-28-95 Area: 08 Run: 83

FIELD OBSERVATIONS

Sample Number(s): 94P54 94P55 _____ _____

Sample Depth: 21 Feet

Final PID Reading 25 ppm PID Reading Depth 21 Feet

Yes No

Groundwater Encountered ☒ (1) ☐ (2) Approximate Depth 21' Feet

Final Dimensions: Length 32 Width 34 Depth 21'

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 180 @ 9/19/95

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards 88 @ 9/19/95

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 8-29-95 Pit Closed By: Philip Env.

REMARKS

Phase III

Remarks : Encountered ground water at 21'ft, Took PID's West wall was 03ppm, South wall was 03ppm North wall was 27ppm, East wall was 55 ppm. Comp. Sample was 25 ppm Used 25 Lbs Fertilizer

Signature of Specialist: James F Thomas

El Paso Natural Gas Company

Phase III Excavation

CHAIN OF CUSTODY RECORD

Page ______ of ______

PROJECT NUMBER: # 24324
PROJECT NAME: Pit Closure Project
SAMPLERS: (Signature) James F. Pavur (signature) DATE: 8-29-95
CONTRACT LABORATORY P. O. NUMBER:

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	~~TPH~~ TDS EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
947371	8-29-95	0900	Water	AP 54	2	VG	X	X				48	Lindrith B#24 94967

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
James F. Pavur (signature)	8-30-95 1730	(signature)	(signature)	8/31/95 9:45	(line)

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
					(signature)

REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH ______

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

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

FM-08-0565 A (Rev. 05-94)

El Paso Natural Gas Company

Phase III Excavation

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME												CONTRACT LABORATORY P. O. NUMBER
# 24324	Pit Closure Project												
SAMPLERS: (Signature)	James F Powers	DATE: 8-29-95											
LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
947372	8-29-95	1115	Soil	SP55	1	VC	X	X				49	Lindrith B #24 94967

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
James F Powers	8-30-95 1730	Julie Dibbs	Julie Dibbs	8/31/95 9:45	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH _____

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

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

FM-08-0565 A (Rev. 05-94)

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	947371
FIELD ID:	JP54
MTR CODE:	94967
SAMPLE DATE:	08-29-95
SAMPLE TYPE:	~~Phase~~ FB 8/31/95 Excavation
SITE NAME:	Lindrith
PROJECT:	Phase III Excavation
DATE OF BTEX ANALYSIS:	9/1/95

FIELD COMMENTS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)	NA		None
BENZENE (PPB)	12,60	D	10
TOLUENE (PPB)	3260	D	740
ETHYL BENZENE (PPB)	6210	D	750
TOTAL XYLENES (PPB)	4610	D	620
SURROGATE % RECOVERY	87/85	Allowed Range 80 to 120 %	

NOTES:

The D qualifier indicates that the sample was run at a dilution for quantitation.

Approved By: John Fadlin 9-7-95

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP55	947372
MTR CODE | SITE NAME:	94967	Lindrith B #24
SAMPLE DATE | TIME (Hrs):	08-29-95	1115
PROJECT:	Phase II Excavation	
DATE OF TPH EXT. | ANAL.:	8-31-95	
DATE OF BTEX EXT. | ANAL.:	8/31/95 9/1/95	9/5/95
TYPE | DESCRIPTION:	~~VG~~ VC	BROWN SAND + CLAY

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	46.3	MG/KG			2.00	28
HEADSPACE PID		PPM				
PERCENT SOLIDS	89.0	%				

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

Narrative: The Surrogate Recovery was at 93% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

QUALITY CONTROL REPORT
TPH by Modified 418.1 by Infrared

Date of Analysis: August 31, 1995

9 Pit Samples

LABORATORY CONTROL SAMPLES: CALIBRATION CHECKS

SAMPLE ID	SOURCE	TRUE VALUE (PPM)	FOUND (MG/KG)	%R	ACCEPTABLE RANGE 75-125 %R YES	NO
INITIAL CALIBRATION VERIF. "B" Heavy Oil (Lot M3G9616)	HORIBA	100	not run	0	X	

Narrative: New batch not ready for use.

LABORATORY DUPLICATES:

SAMPLE NUMBER	TYPE	SAMPLE RESULT (S)MG/KG	DUPLICATE RESULT (D)MG/KG	RPD	ACCEPTABLE RANGE + / - 35% YES	NO
947370	2nd Extract	296	281	5.20	X	

Narrative : Acceptable.

LABORATORY SPIKES:

SAMPLE NUMBER	SPIKE ADDED (SA)MG/KG	SAMPLE RESULT (S)MG/KG	SPIKE SAMPLE RESULT (SR)MG/KG	%R	ACCEPTABLE RANGE 75-125 %R YES	NO
947370	1600	296	2070	111	X	

Narrative: Acceptable.

REFERENCE SOIL (Laboratory Control Sample):

SAMPLE ID	SOURCE	KNOWN VALUE (MG/KG)	SAMPLE RESULT FOUND (MG/KG)	MFG SPECIFIED RANGE	ACCEPTABLE YES	NO
ERA TPH STANDARD #1 LOT # 91030	ENVIRONMENTA RESOURCE ASS.	2920	3120	1900 - 3360	X	
ERA TPH STANDARD #2 w/int LOT # 91030	ENVIRONMENTA RESOURCE ASS.	1150	1210	750 - 1320	X	

Narrative: Acceptable.

LABORATORY REAGENT BLANK:

SAMPLE ID	SOURCE	TPH LEVEL (MG/KG)	STATUS
Freon Solvent	EPNG Lab	<10.0	ACCEPTABLE
Reagent Blank	EPNG Lab	<10.0	ACCEPTABLE

Narrative: Acceptable.

Extracted: 08/31/95

Approved By: John Ladd Date: 1-Sep-95

EL PASO NATURAL GAS - FIELD SERVICES LAB

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 947359, 947361 thru 947365, 947367 thru 947369, 947372, 947374 thru 947376, and 947378 thru 947380

QA/QC for 9/5/95 Sample Set

LABORATORY CALIBRATION CHECKS, LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-41626 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	RANGE	ACCEPTABLE YES	NO
Benzene	Standard	50.0	40.6	81.2	75 - 125 %	X	
Toluene	Standard	50.0	43.1	86.2	75 - 125 %	X	
Ethyl benzene	Standard	50.0	42.2	84.4	75 - 125 %	X	
m & p - Xylene	Standard	100	87	87.0	75 - 125 %	X	
o - Xylene	Standard	50.0	40.5	81.0	75 - 125 %	X	

SAMPLE NUMBER LCS 08-00050 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	RANGE	ACCEPTABLE YES	NO
Benzene	Standard	25.0	20.6	82.4	39 - 150	X	
Toluene	Standard	25.0	21.0	84.0	46 - 148	X	
Ethyl benzene	Standard	25.0	20.3	81.2	32 - 160	X	
m & p - Xylene	Standard	50.0	42.0	84.0	Not Given	X	
o - Xylene	Standard	25.0	19.7	78.8	Not Given	X	

SAMPLE NUMBER CCV1 LA-41626 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	RANGE	ACCEPTABLE YES	NO
Benzene	Standard	50.0	45.7	91.4	75 - 125 %	X	
Toluene	Standard	50.0	46.0	92.0	75 - 125 %	X	
Ethyl benzene	Standard	50.0	44.8	89.6	75 - 125 %	X	
m & p - Xylene	Standard	100	93	93.4	75 - 125 %	X	
o - Xylene	Standard	50.0	44.1	88.2	75 - 125 %	X	

SAMPLE NUMBER CCV2 LA-41626 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	RANGE	ACCEPTABLE YES	NO
Benzene	Standard	50.0	42.8	85.6	75 - 125 %	X	
Toluene	Standard	50.0	44.1	88.2	75 - 125 %	X	
Ethyl benzene	Standard	50.0	44.1	88.2	75 - 125 %	X	
m & p - Xylene	Standard	100	91	90.6	75 - 125 %	X	
o - Xylene	Standard	50.0	43.2	86.4	75 - 125 %	X	

SAMPLE NUMBER CCV3 LA-41626 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	RANGE	ACCEPTABLE YES	NO
Benzene	Standard	50.0	41.3	82.6	75 - 125 %	X	
Toluene	Standard	50.0	42.7	85.4	75 - 125 %	X	
Ethyl benzene	Standard	50.0	41.3	82.6	75 - 125 %	X	
m & p - Xylene	Standard	100	86	85.5	75 - 125 %	X	
o - Xylene	Standard	50.0	40.9	81.8	75 - 125 %	X	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE NUMBER 947363	TYPE (Analysis, Portion, or Sample)	SAMPLE RESULT PPM (mg/Kg)	DUPLICATE RESULT PPM (mg/Kg)	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Extraction Dup	<2.5	<2.5	0	+/- 35 %	X	
Toluene	Extraction Dup	<2.5	<2.5	0	+/- 35 %	X	
Ethyl benzene	Extraction Dup	<2.5	<2.5	0	+/- 35 %	X	
m & p - Xylene	Extraction Dup	<5	<5	0	+/- 35 %	X	
o - Xylene	Extraction Dup	<2.5	<2.5	0	+/- 35 %	X	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE NUMBER NA	TYPE (Analysis, Portion, or Sample)	SAMPLE RESULT PPM (mg/Kg)	DUPLICATE RESULT PPM (mg/Kg)	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Extraction Dup			0	+/- 35 %	NA	
Toluene	Extraction Dup			0	+/- 35 %	NA	
Ethyl benzene	Extraction Dup			0	+/- 35 %	NA	
m & p - Xylene	Extraction Dup			0	+/- 35 %	NA	
o - Xylene	Extraction Dup			0	+/- 35 %	NA	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE NUMBER 947363	TYPE (Analysis, Portion, or Sample)	SAMPLE RESULT PPM (mg/Kg)	DUPLICATE RESULT PPM (mg/Kg)	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Matrix Duplicate	<2.5	<2.5	0	+/- 35 %	X	
Toluene	Matrix Duplicate	<2.5	<2.5	0	+/- 35 %	X	
Ethyl benzene	Matrix Duplicate	<2.5	<2.5	0	+/- 35 %	X	
m & p - Xylene	Matrix Duplicate	<5	<5	0	+/- 35 %	X	
o - Xylene	Matrix Duplicate	<2.5	<2.5	0	+/- 35 %	X	

Narrative: Acceptable,

LABORATORY DUPLICATES:

SAMPLE NUMBER NA	TYPE (Analysis, Portion, or Sample)	SAMPLE RESULT PPM (mg/Kg)	DUPLICATE RESULT PPM (mg/Kg)	RPD	ACCEPTABLE RANGE	YES	NO
Benzene	Matrix Duplicate			0	+/- 35 %	NA	
Toluene	Matrix Duplicate			0	+/- 35 %	NA	
Ethyl benzene	Matrix Duplicate			0	+/- 35 %	NA	
m & p - Xylene	Matrix Duplicate			0	+/- 35 %	NA	
o - Xylene	Matrix Duplicate			0	+/- 35 %	NA	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE NUMBER 947363	SPIKE ADDED PPB 50.00	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE RANGE	YES	NO
Benzene	50.0	<2.5	44.5	89	75 - 125 %	X	
Toluene	50.0	<2.5	46.3	93	75 - 125 %	X	
Ethyl benzene	50.0	<2.5	45.2	90	75 - 125 %	X	
m & p - Xylene	100.0	<5	94.2	94	75 - 125 %	X	
o - Xylene	50.0	<2.5	44.2	88	75 - 125 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE NUMBER NA	SPIKE ADDED PPB 50.00	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	RANGE	ACCEPTABLE YES NO
Benzene	50.0			0	75 - 125 %	NA
Toluene	50.0			0	75 - 125 %	NA
Ethyl benzene	50.0			0	75 - 125 %	NA
m & p - Xylene	100.0			0	75 - 125 %	NA
o - Xylene	50.0			0	75 - 125 %	NA

Narrative: Acceptable.

ADDITIONAL ANALYTICAL BLANKS:

SAMPLE ID AUTO BLANK/BOILED WATER	SOURCE	PPB	STATUS
Benzene	Boiled Water	<2.5	ACCEPTABLE
Toluene	Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	Boiled Water	<7.5	ACCEPTABLE

Narrative: Acceptable

SAMPLE ID SOIL VIAL BLANK	SOURCE	PPB	STATUS
Benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Toluene	Vial + Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<7.5	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID EXTRACTION BLANK	SOURCE Lot # H18318	PPB (In 100 ul shot)	STATUS
Benzene	Methanol	<2.5	ACCEPTABLE
Toluene	Methanol	<2.5	ACCEPTABLE
Ethyl benzene	Methanol	<2.5	ACCEPTABLE
Total Xylenes	Methanol	<7.5	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID Carryover contamination checks	SOURCE	NARRATIVE (No Checks Performed)	STATUS
0/0	Vial + Boiled Water	NA	ACCEPTABLE
0/0	Vial + Boiled Water	NA	ACCEPTABLE
0/0	Vial + Boiled Water	NA	ACCEPTABLE
0/0	Vial + Boiled Water	NA	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID METHANOL CHECK	SOURCE Lot # H18318	PPB (No checks performed in this run)	STATUS
Benzene	MeOH/Boiled Water	<2.5	ACCEPTABLE
Toluene	MeOH/Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	MeOH/Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	MeOH/Boiled Water	<7.5	ACCEPTABLE

rative: Acceptable

Approved By: _____ Date: 6-Sep-95

EL PASO NATURAL GAS - FIELD SERVICES LAB

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 947321 to 947323, 947333 to 947335, and 947371

QA/QC for 9/1/95 Sample Set

LABORATORY CALIBRATION CHECKS, LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-45473 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	ACCEPTABLE YES	ACCEPTABLE NO
Benzene	Standard	50.0	54.4	108.8	75 - 125 %	X	
Toluene	Standard	50.0	52.3	104.6	75 - 125 %	X	
Ethyl benzene	Standard	50.0	51.2	102.4	75 - 125 %	X	
m & p - Xylene	Standard	100	106	106.3	75 - 125 %	X	
o - Xylene	Standard	50.0	50.2	100.4	75 - 125 %	X	

SAMPLE NUMBER LCS LA-45476 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	ACCEPTABLE YES	ACCEPTABLE NO
Benzene	Standard	25.0	23.3	93.2	39 - 150	X	
Toluene	Standard	25.0	24.5	98.0	46 - 148	X	
Ethyl benzene	Standard	25.0	23.7	94.8	32 - 160	X	
m & p - Xylene	Standard	50	49	98.0	Not Given	X	
o - Xylene	Standard	25.0	23.5	94.0	Not Given	X	

SAMPLE NUMBER CCV LA-45473 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE RANGE	ACCEPTABLE YES	ACCEPTABLE NO
Benzene	Standard	50.0	50.6	101.2	75 - 125 %	X	
Toluene	Standard	50.0	55.4	110.8	75 - 125 %	X	
Ethyl benzene	Standard	50.0	49.7	99.4	75 - 125 %	X	
m & p - Xylene	Standard	100	108	108.3	75 - 125 %	X	
o - Xylene	Standard	50.0	49.6	99.2	75 - 125 %	X	

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE NUMBER 947334	TYPE (Analysis, Portion, or Sample)	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE RANGE	ACCEPTABLE YES	ACCEPTABLE NO
Benzene	2nd Analysis	<2.5	<2.5	0	+/- 35 %	X	
Toluene	2nd Analysis	<2.5	<2.5	0	+/- 35 %	X	
Ethyl benzene	2nd Analysis	<2.5	<2.5	0	+/- 35 %	X	
m & p - Xylene	2nd Analysis	<5.0	<5.0	0	+/- 35 %	X	
o - Xylene	2nd Analysis	<2.5	<2.5	0	+/- 35 %	X	

Narrative: Acceptable.

EL PASO NATURAL GAS - FIELD SERVICES LAB

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 947321 to 947323, 947333 to 947335, and 947371

LABORATORY SPIKES:

SAMPLE NUMBER 2nd Analysis 947334	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	RANGE	ACCEPTABLE YES	ACCEPTABLE NO
Benzene	50.0	<2.5	47.2	94	75 - 125 %	X	
Toluene	50.0	<2.5	47.0	94	75 - 125 %	X	
Ethyl benzene	50.0	<2.5	45.3	91	75 - 125 %	X	
m & p - Xylene	100.0	<5.0	97.3	97	75 - 125 %	X	
o - Xylene	50.0	<2.5	45.0	90	75 - 125 %	X	

Narrative: Acceptable.

ADDITIONAL ANALYTICAL BLANKS:

SAMPLE ID AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<2.5	ACCEPTABLE
Toluene	Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	Boiled Water	<7.5	ACCEPTABLE

Narrative: Acceptable.

SAMPLE ID SOIL VIAL BLANK	SOURCE	PPB	STATUS
Benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Toluene	Vial + Boiled Water	<2.5	ACCEPTABLE
Ethyl benzene	Vial + Boiled Water	<2.5	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<7.5	ACCEPTABLE

Narrative: Acceptable.

REAGENT BLANKS:

SAMPLE ID BOILED WATER	SOURCE	PPB	STATUS
Benzene	Boiled Water	<2.5	NA
Toluene	Boiled Water	<2.5	NA
Ethyl benzene	Boiled Water	<2.5	NA
Total Xylenes	Boiled Water	<7.5	NA

Narrative: Acceptable.

SAMPLE ID METHANOL CHECK	SOURCE Lot H18318	PPB	STATUS
Benzene	MeOH/Boiled Water	<2.5	NA
Toluene	MeOH/Boiled Water	<2.5	NA
Ethyl benzene	MeOH/Boiled Water	<2.5	NA
Total Xylenes	MeOH/Boiled Water	<7.5	NA

Narrative: Acceptable.

Approved By: John Franklin Date: 5-Sep-95

1997 GROUNDWATER ANALYTICAL

DRILLING INITIAL WELL SAMPLE

EL PASO Natural Gas Company

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER	PROJECT NAME
# 24324	Pit Closure Project

SAMPLERS: (Signature) Robert Champion DATE: 5-27-97

LAB ID	DATE	TIME	MATRIX	FIELD ID	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020	LAB PID			SEQUENCE #	REMARKS
	5-27-97	1447	H_2O	RT 7	2			X					LINDRITH B #24 - 94967
	5-27-97			TRIP BLANK									

CONTRACT LABORATORY P. O. NUMBER

36°

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Robert Champion	5-27-97 1750		Cari Williams	5/29/97 9:25	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)
					Marian Kapper

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

505-599-2144 FAX: 505-599-2261

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

FM-08-0565 A (Rev. 05-94)

EL PASO FIELD SERVICES

6-18-97

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	RT7	970510
MTR CODE | SITE NAME:	94967	Lindrith B #24
SAMPLE DATE | TIME (Hrs):	5/27/97	1447
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. | ANAL.:	5/30/97	5/30/97
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	90.4	PPB	5	D		
TOLUENE	428	PPB	5	D		
ETHYL BENZENE	97.8	PPB	5	D		
TOTAL XYLENES	822	PPB	5	D		
TOTAL BTEX	1440	PPB				

The Surrogate Recovery was at 88.6 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used
The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: _____ Date: 5/31/97

PHILIP ENVIRONMENTAL

Well Number MW-1

Serial No. WDPD-

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page 1 of 1

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

Client Company EL PASO FIELD SERVICES | Phase/Task No. 6003.77

Site Name LINDRITH B #24 (94967) | Site Address RIO ARRIBA CO., NM

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 32.15 TOB
Initial Depth to Water (feet) 23.90 TOB
Height of Water Column in Well (feet) 8.25
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	8.25	5.39	26.95
Gravel Pack			
Drilling Fluids			
Total			26.95

Instruments

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

Water Disposal

ON GROUND ON SITE

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5-27-97	1342		X				5	5			14.4	6.90	1010		DARK BROWN
5.27.97	1353		X				5	10			13.4	7.20	990		DARK BROWN
5.27.97	1401		X				5	15			14.9	7.24	980		DARK BROWN
5.27.97	1412		X				5	20			12.5	7.37	980		DARK BROWN
5.27.97	1422		X				5	25			12.6	7.37	970		DARK BROWN
5.27.97	1432		X				5	30			13.3	7.41	970		BROWN

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

Comments

Developer's Signature(s) Bret Thompson Date 5.27.97 Reviewer Date

PHILIP ENVIRONMENTAL

Location No. MW-1

Serial No. WSD-

WATER SAMPLING DATA

Group List Number _____

Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other _____ Date 5·27·97

Project Name EPFS GW - PITS Project No. 17520

Project Manager CORY CHANCE Phase.Task No. 6003.77

Site Name LINDRITH B #24

Sampling Specifications

Requested Sampling Depth Interval (feet) TOP 3'

Requested Wait Following Development/Purging (hours) NONE

Initial Measurements

Time Elapsed From Final Development/Purging (hours) 15 MIN.

Initial Water Depth (feet) 23.90

Nonaqueous Liquids Present (Describe) NONE

Water Quality/Water Collection

DO = Dissolved Oxygen; Cond. = Conductivity

Date	Time	Sampler Initials	Water Quality Readings				Water Collection Data					Notes (Explain in Comment Below)
			Temp. (°C)	pH	DO (mg/L)	Cond. (µmhos/cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (ft)	Bail	Final Water Depth ft)	
	SEE	WELL	DEVELOPMENT	AND	PURGING	DATA	FORM					

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

Sample Containers

Preservatives: H = HCl; N = HNO_3; S = H_2SO_4; A = NaOH; O = Other (Specify); — = None

Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments
	Number	Type	Volume (mL)	Yes	No		Yes	No	
BTEX	2	V	40		X	H	X		SAMPLED AT 1447

Filter Type NONE Chain-of-Custody Form Number EPFS

Comments _____

Signature Robert Thompson Date 5·27·97 Reviewer _____ Date _____

Sample 4 - 1st Qtr.

El Paso Natural Gas Company

A 2047

CHAIN OF CUSTODY RECORD

Project No.:

Project Name: OJITO PIPELINE

Samplers: (Signature) Dennis Bird   Date: 8-7-97

	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	BTXE	GENERAL CHEMISTRY	8 RCRA METALS		Remarks
WATER	8-7-97	1239		X	970828	G-2 P-2	4°C	X	X	X		LINDRITH B-34 MW1 MC 94967
WATER	8-7-97	—		X	—	G-1	4°C	X				TRIP BLANK

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	8-7-97 1602				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:
		Marlon Hopper	8/8/97 0800	

Carrier Co:

Air Bill No.:

Carrier Phone No.

Date Results Reported / by: (Signature)

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970828
MTR CODE | SITE NAME:	94967	Lindrith B-24 MW-1
SAMPLE DATE | TIME (Hrs):	8/7/97	1239
PROJECT:	Sample 4 - 1st Quarter	
DATE OF BTEX EXT. | ANAL.:	8/12/97	8/12/97
TYPE | DESCRIPTION:	Monitor Well	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	69.8	PPB	2	D		
TOLUENE	437	PPB	10	D		
ETHYL BENZENE	85.5	PPB	2	D		
TOTAL XYLENES	785	PPB	2	D		
TOTAL BTEX	1377	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.0 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: John Fowler Date: 8/25/97

EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970828
DATE SAMPLED:	08/07/97
TIME SAMPLED (Hrs):	1239
SAMPLED BY:	DB
MATRIX:	Water
METER CODE:	94967
SAMPLE SITE NAME:	Lindrith B-24
SAMPLE POINT:	MW-1

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.65	Units	08/11/97
Alkalinity as $C0_3$	0	PPM	08/11/97
Alkalinity as $HC0_3$	479	PPM	08/11/97
Calcium as Ca	65.7	PPM	08/11/97
Magnesium as Mg	15.2	PPM	08/11/97
Total Hardness as $CaC0_3$	227	PPM	08/11/97
Chloride as Cl	9.15	PPM	08/08/97
Sulfate as $S0_4$	192	PPM	08/08/97
Fluoride as F	0.59	PPM	08/11/97
Nitrate as $N0_3$-N	<0.1	PPM	08/08/97
Nitrite as $N0_2$-N	<0.1	PPM	08/08/97
Ammonium as NH_4^+	<0.1	PPM	08/11/97
Phosphate as PO_4	<0.1	PPM	08/08/97
Potassium as K	1.8	PPM	08/11/97
Sodium as Na	187	PPM	08/11/97
Total Dissolved Solids	718	PPM	08/11/97
Conductivity	1,090	umhos/cm	08/11/97
Anion/Cation %	2.3%	%, <5.0 Accepted	08/22/97

Lab Remarks:

Reported By: CV Approved By: John Fowler Date: 8/29/97

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	970828
SAMPLE DATE:	08/07/97
SAMPLE TIME (Hrs):	1239
SAMPLED BY:	D. Bird
MATRIX:	Water
METER CODE:	94967
SAMPLE SITE NAME:	Lindrith B-24
SAMPLE POINT:	MW-1

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
ARSENIC (As)	<0.0004	0.100
BARIUM (Ba)	0.20	1.00
CADMIUM (Cd)	<0.0002	0.010
CHROMIUM (Cr)	<0.004	0.050
LEAD (Pb)	<0.003	0.050
MERCURY (Hg)	<0.0002	0.002
SELENIUM (Se)	<0.011	0.050
SILVER (Ag)	<0.0004	0.050

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.

Method 7061A, Arsenic (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Method 7081, Barium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 7421, Lead (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.

Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Method 7741A, Selenium (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1994.

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

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

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 970828
Date Reported: 09/05/97

STANDARD REFERENCE MATERIAL

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

DUPLICATE ANALYSIS (mg/L)

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

SPIKE ANALYSIS (mg/L)

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

METHOD BLANK

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

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

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

EPFS
EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name LINDRITH B-24

Meter Code 94967

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 31.75
Initial Depth to Water (feet) 24.46
Height of Water Column in Well (feet) 7.29
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		4.8	14.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
8-7-97	1117										15.3	6.52	1202		
8-7-97	1123						5.0	5.0			14.0	6.81	1236		
8-7-97	1129						5.0	10.0			13.8	6.95	1144		
8-7-97	1141						5.0	15.0			14.1	7.16	1158		
8-7-97	1147						5.0	20.0			14.3	7.26	1083	0.5	

Comments HAD 0.19' OF FREE PRODUCT WITH OILY APPEARANCE.

Developer's Signature Dennis Bird Date 8-7-97 Reviewer John Fuller Date 8/22/97

American Environmental Network, Inc.

AEN I.D. 708333

August 27, 1997

El Paso Field Service
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: UNDRITH B-24 (NONE) mc#94967

Attention: John Lambdin

On **08/12/97**, American Environmental Network (NM), Inc., (ADHS License No. AZ0015) received a request to analyze **aqueous** sample(s). The sample(s) 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.

All analyses were performed by American Environmental Network (FL) Inc., 11 East Olive Road, Pensacola, FL.

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:ft

Enclosure

American Environmental Network

CLIENT	: EL PASO FIELD SERVICE	DATE RECEIVED	: 08/12/97
PROJECT #	: (NONE)		
PROJECT NAME	: UNDRITH B-24	REPORT DATE	: 08/27/97

AEN ID: 708333

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	708333-01	970828	AQUEOUS	08/07/97

Lindrith B-24
mc# 94967
MW-1

---TOTALS---

MATRIX	#SAMPLE(S)
AQUEOUS	1

AEN STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

970828

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession:	708225
Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number:	708333
Project Name:	EPFSC
Project Location:	UNDRITH B-12
Test:	POLYNUCLEAR AROMATICS BY 8310
Analysis Method:	8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method:	3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix:	WATER
QC Level:	II

Lab Id:	001		Sample Date/Time:	07-AUG-97 1527
Client Sample Id:	708333-01		Received Date:	14-AUG-97
Batch: PAW156			Extraction Date:	14-AUG-97
Blank: A	Dry Weight %:	N/A	Analysis Date:	20-AUG-97

Parameter:	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	0.7	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	5	1	
FLUORENE	UG/L	2	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	42	1	
PHENANTHRENE	UG/L	3	1	
PYRENE	UG/L	8	1	
1-METHYLNAPHTHALENE	UG/L	46	1	
2-METHYLNAPHTHALENE	UG/L	25	1	
2-CHLOROANTHRACENE	%REC/SURR	70	28-138	
ANALYST	INITIALS	JO		

Comments:

American Environmental Network

970828

"Method Report Summary"

Accession Number: 708225
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 708333
Project Name: EPFSC
Project Location: UNDRITH B-12
Test: POLYNUCLEAR AROMATICS BY 8310

Client Sample Id:	Parameter:	Unit:	Result:
708333-01	FLUORANTHENE	UG/L	5
	FLUORENE	UG/L	2
	NAPHTHALENE	UG/L	42
	PHENANTHRENE	UG/L	3
	PYRENE	UG/L	8
	1-METHYLNAPHTHALENE	UG/L	46
	2-METHYLNAPHTHALENE	UG/L	25

Benzo(a) Pyrene = < 0.7 ug/L

Total Naphthalenes = 113 ug/L

"QC Report"

Title: Water Blank
Batch: PAW156
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Blank Id: A Date Analyzed: 20-AUG-97 Date Extracted: 14-AUG-97

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO(a)ANTHRACENE	UG/L	ND	1
BENZO(a)PYRENE	UG/L	ND	1
BENZO(b)FLUORANTHENE	UG/L	ND	1
BENZO(g,h,i)PERYLENE	UG/L	ND	1
BENZO(k)FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	76	28-138
ANALYST	INITIALS	JO	

Comments:

American Environmental Network Inc.

"QC Report"

Title: Water Reagent
Batch: PAW156
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

RS Date Analyzed: 20-AUG-97 RS Date Extracted: 14-AUG-97
RSD Date Analyzed: 20-AUG-97 RSD Date Extracted: 14-AUG-97

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	7.4	74	7.9	79	7	35	45-127
BENZO(k)FLUORANTHENE	10.0	<1	8.3	83	8.4	84	1	23	68-131
CHRYSENE	10.0	<1	7.8	78	7.9	79	1	24	69-131
PHENANTHRENE	10.0	<1	7.8	78	7.8	78	0	26	63-124
PYRENE	10.0	<1	7.8	78	7.7	77	1	25	61-126
Surrogates:									
2-CHLOROANTHRACENE				80		74			28-138

Comments:

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

American Environmental Network

"QC Report"

Title: Water Matrix
Batch: PAW156
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Dry Weight %: N/A
Sample Spiked: 708222-1

MS Date Analyzed: 20-AUG-97
MSD Date Analyzed: 20-AUG-97

MS Date Extracted: 14-AUG-97
MSD Date Extracted: 14-AUG-97

Parameters:	Spike Added	Sample Conc	MS Conc	MS %Rec	MSD Conc	MSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	24	15.5	-85*	13.4	-106*	22	51	18-146
BENZO(k)FLUORANTHENE	10.0	<1	5.8	58	5.0	50	15	40	26-137
CHRYSENE	10.0	<1	6.6	66	6.6	66	0	69	16-156
PHENANTHRENE	10.0	<1	10.6	106	10.3	103	3	36	30-145
PYRENE	10.0	<1	11.2	112	8.7	87	25	41	39-137
Surrogates:									
2-CHLOROANTHRACENE				73		44			28-138

Comments:
MATRIX SPIKE/MATRIX SPIKE DUPLICATE HAD RECOVERY(S) AND/OR RPD(S) OUTSIDE ACCEPTANCE LIMITS DUE TO MATRIX INTERFERENCE. REFER TO REAGENT SPIKE/REAGENT SPIKE DUPLICATE DATA.

Notes:
N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG = MICROGRAMS
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/M3 = MILLIGRAM PER CUBIC METER.
PPMV = PART PER MILLION BY VOLUME.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
< = LESS THAN.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS
Y = IMPROPER PRESERVATION, NO PRESERVATIVE PRESENT IN SAMPLE UPON RECEIPT.

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LMTS = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

AEN/GC/FID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

AEN/GC/FIX
AEN GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

AEN/GC/FPD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

AEN/GC/PID
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

AEN/GC/TCD
AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

SW-846 METHOD 9020
PARTICULATE MATTER IS REMOVED BY ALLOWING PARTICULATES TO SETTLE IN THE SAMPLE CONTAINER AND DECANTING THE SUPERNATANT LIQUID. EXCESSIVE PARTICULATES ARE REMOVED BY FILTRATION OF THE SUPERNATANT LIQUID.

AEN-PN USES THE MOST CURRENT PROMULGATED METHODS CONTAINED IN THE REFERENCE MANUALS.

SW = STEVE WILHITE
RW = ROBERT WOLFE
KS = KENDALL SMITH
KL = KERRY LEMONT
JO = JENNIFER O'NEAL
LP = LEVERNE PETERSON
PLD = PAULA DOUGHTY

American Environmental Network of Florida
PROJECT SAMPLE INSPECTION FORM

Accession #: 708225 Date Received: 14-Aug-97

1.	Was there a Chain of Custody?	(Yes)	No*	8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative except VOA vials that require zero headspace)* +	(Yes)	No* N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*	9.	Is there sufficient volume for analysis requested?	(Yes)	No*
3.	Were samples received cold? (Criteria: 1° - 4°C: AEN-SOP 1055)	(Yes)	No* N/A	10.	Were samples received within Holding Time? (REFER TO AEN-SOP 1040)	(Yes)	No*
4.	Were all samples properly labeled and identified?	(Yes)	No*	11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No (N/A)
5.	Did samples require splitting? Req By: PM Client Other*	Yes*	(No)	12.	If sent, were matrix spike bottles returned?	Yes	No* (N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*	13.	Was Project Manager notified of problems? (initials:_____)	Yes	No* (N/A)
7.	Were all sample containers received intact?	(Yes)	No*				

Airbill Number(s): 2911689182 Shipped By: Fedex

Cooler Number(s): N/S Shipping Charges: N/A

Cooler Weight(s): N/A Cooler Temp(s) (°C): 4°C

CCK6
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

(USE BACK OF PSIFFOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: L. Kitt Date: 14-Aug-97 Logged By: L. Kitt Date: 14-Aug-97

Note all Out-of-Control and/or questionable events on Comment Section of this form.
Note who requested the splitting of samples on the Comment Section of this form.
All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (AEN-SOP 938, section 2.2.9).
According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, AEN makes it policy to record any headspace as out-of-control (AEN-SOP 938, section 2.2.12).

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 8-12 PAGE 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

708225

CLIENT PROJECT MANAGER:

Kim McNeill

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
708333-01	8-7-97	15:27	AQ	

ANALYSIS REQUEST

Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
																		X										

PROJECT INFORMATION

PROJECT NUMBER: 708333
PROJECT NAME: EPFSC
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT (STANDARD) RUSH!

DUE DATE: 8-25-97
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: YES NO

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

SAMPLES SENT TO:

- SAN DIEGO
- Paragon
- RENTON
- PENSACOLA X
- PORTLAND
- PHOENIX

RELINQUISHED BY: 1.

Signature: Time: 1200
Printed Name: Brian Price Date: 8-12-97
Albuquerque NM

RECEIVED BY: 1.

Signature: Time: 0902
Printed Name: Linda Kitt Date: 8/1/97
Company: AEN 71

RELINQUISHED BY: 2.

Signature: Time
Printed Name: Date
Company

RECEIVED BY: (LAB) 2.

Signature: Time:
Printed Name: Date:
Company:

American Environmental Network (NM), Inc.

Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 5-7-97 PAGE: 1 OF 1

AEN LAB I.D. [illegible]

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO FIELD SERVICES

ADDRESS: P.O. BOX 4990
FARMINGTON N.M. 87499

PHONE: [illegible]

FAX: [illegible]

BILL TO: SAME AS ABOVE

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
970525	5-7-97	1238	WATER	-01

ANALYSIS REQUEST

Analysis	Sample -01
Petroleum Hydrocarbons (418.1) TRPH	
(MOD.8015) Diesel/Direct/Inject	
(M8015) Gas/Purge & Trap	
Gasoline/BTEX & MTBE (M8015/8020)	
BTXE/MTBE (8020)	
BTEX & Chlorinated Aromatics (602/8020)	
BTEX/MTBE/EDC & EDB (8020/8010/Short)	
Chlorinated Hydrocarbons (601/8010)	
504 EDB ☐ / DBCP ☐	
Polynuclear Aromatics (610/8310)	X
Volatile Organics (624/8240) GC/MS	
Volatile Organics (8260) GC/MS	
Pesticides/PCB (608/8080)	
Herbicides (615/8150)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
General Chemistry:	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8)	
RCRA Metals by TCLP (Method 1311)	
Metals:	
NUMBER OF CONTAINERS	2

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: LINDRITH B-24

P.O. NO.:

SHIPPED VIA: FED-X

SAMPLE RECEIPT

NO. CONTAINERS: 2

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr ☐48hr ☐72hr ☐1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐NM ☐SDWA ☐OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LOW LEVEL BENZO(A)PYRENE <0.7 PPB

RELINQUISHED BY: 1.

Signature: Dennis Bird Time: 1537

Printed Name: DENNIS BIRD Date: 5-7-97

Company: EL PASO FIELD SERVICES

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature Time

Printed Name Date

Company

RECEIVED BY: (LAB) 2.

Signature: [illegible] Time: 1300

Printed Name: [illegible] Date: [illegible]

American Environmental Network (NM), Inc.

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 8-7-97 PAGE: 1 OF 1

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: JOHN CAMERON

COMPANY: EL PASO FIELD SERVICES
ADDRESS: P.O. BOX 4990
FARMINGTON N.M. 87499
PHONE: 505-599-2144
FAX: 505-599-2261
BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
970825	8797	1239	WATER	-01

ANALYSIS REQUEST (checked for sample 970825):

Analysis	
Petroleum Hydrocarbons (418.1) TRPH	
(MOD.8015) Diesel/Direct/Inject	
(M8015) Gas/Purge & Trap	
Gasoline/BTEX & MTBE (M8015/8020)	
BTXE/MTBE (8020)	
BTEX & Chlorinated Aromatics (602/8020)	
BTEX/MTBE/EDC & EDB (8020/8010/Short)	
Chlorinated Hydrocarbons (601/8010)	
504 EDB ☐ / DBCP ☐	
Polynuclear Aromatics (610/8310)	X
Volatile Organics (624/8240) GC/MS	
Volatile Organics (8260) GC/MS	
Pesticides/PCB (608/8080)	
Herbicides (615/8150)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
General Chemistry:	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8)	
RCRA Metals by TCLP (Method 1311)	
Metals:	
NUMBER OF CONTAINERS	2

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: LINDRITH B-24
P.O. NO.:
SHIPPED VIA: FED-X

SAMPLE RECEIPT

NO. CONTAINERS: 2
CUSTODY SEALS:
RECEIVED INTACT:
BLUE ICE/ICE:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐
LOW LEVEL BENZO(A)PYRENE <0.7 PPB

RELINQUISHED BY: 1.
Signature: Dennis Bird Time: 1537
Printed Name: DENNIS BIRD Date: 8-7-97
Company: EL PASO FIELD SERVICES

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time: 1300
Printed Name: Date: 8-12-97
American Environmental Network (NM), Inc.

SAMPLE 4 2ND QTR

El Paso Natural Gas Company

A 2141

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Samplers: (Signature)	Date
	MC # 94967	Dennis Bird	11-14-97

MATRIX	Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis: BTXE				Remarks
WATER	11-14-97	1325		X	971218	G-2	4°C	X				LINDRITH B #24 MW-1
WATER	11-14-97	—		X	—	G-1	4°C	X				TRIP BLANK

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Dennis Bird	11-14-97 1635				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
		Marlon Hopper	11/17/97 0720		

Carrier Co:	Carrier/Phone No.	Date Results Reported / by: (Signature)
Air Bill No.:	11/17/97 mh	

san juan repro Form 71-55 A

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971218
MTR CODE | SITE NAME:	94967	Lindrith B #24
SAMPLE DATE | TIME (Hrs):	11/14/97	1325
PROJECT:	Sample 4 2nd Quarter	
DATE OF BTEX EXT. | ANAL.:	11/17/97	11/17/97
TYPE | DESCRIPTION:	MW-1	Water

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	53.8	PPB	2	D		
TOLUENE	151	PPB	2	D		
ETHYL BENZENE	59.2	PPB	2	D		
TOTAL XYLENES	564	PPB	2	D		
TOTAL BTEX	828	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 91.2 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: _____ Date: 11/18/97

971218BTEXMW,11/18/97

EL PASO FIELD SERVICES

Well Development and Purging Data

☐ Development
☒ Purging

Well Number MW-1

Site Name LINDRITH B #24

Meter Code 94967

Development Criteria

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

Methods of Development

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

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 31.75
Initial Depth to Water (feet) 24.43
Height of Water Column in Well (feet) 7.32
Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		4.8	14.5
Gravel Pack			
Drilling Fluids			
Total			

Instruments

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

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate	Intake Depth	Ending Water Depth	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Conductivity µmho/cm	Dissolved Oxygen mg/L	Comments
		Pump	Bailer	(gal/min)	(feet)	(feet)	Increment	Cumulative	Increment	Cumulative					
11-14-97	1251										11.4	6.43	1181		
11-14-97	1257						5.0	5.0			11.2	6.85	1152		
11-14-97	1303						5.0	10.0			11.0	7.04	1089		
11-14-97	1310						5.0	15.0			10.8	7.13	1074		
11-14-97	1316						5.0	20.0			10.8	7.18	1032	0.5	

Comments THE WELL HAD 0.07' OF FREE PRODUCT WITH OILY APPEARANCE.

Developer's Signature Dennis Bird Date 11-14-97 Reviewer John Labrie Date 11/18/97