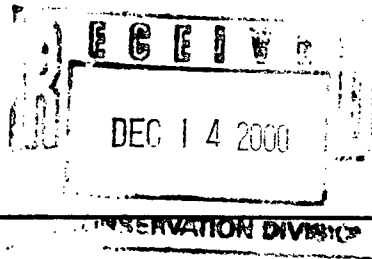


3R - 206

REPORTS

DATE:

1999



Certified Mail: # Z 213 707 369

December 13, 2000

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

**RE: Missing Information for Groundwater Sites Requested for Closure in the 1999
Pit Project Annual Groundwater Report**

Dear Mr. Olson:

El Paso Field Services Company (EPFS) hereby submits the missing information requested in our December 11, 2000 telephone conversation. You indicated the "Field Pit Assessment Form", "Field Pit Remediation / Closure Form" and supporting documentation where not included with the four non-Navajo and two Navajo pits requested for closure in the "1999 Pit Project Closure Report" submitted March 24, 2000.

Attached please find the above mentioned information for the following sites:

1. K-51 Line Drip T26N, R06W, Sec. 6, Unit A,
2. Mesa CPD T29N, R14W, Sec. 4, Unit E, Information included in 1998 Groundwater Report; copy provided.
3. Sheets Well No. 2 T31N, R9W, Sec. 28, Unit H
4. Turner A # 1 T31N, R11W, Sec. 34, Unit K, Pits 1 and 2
5. Charlie Pah # 2 T27N, R9W, Sec. 12, Unit B, (Navajo Jurisdiction)
6. John Charles # 8 Information not included. OCD approved site for closure July 8, 1998. Navajo EPA has not approved site for closure.

EPFS apologizes for omission of the attached information in the original closure request. If you have any questions or require any additional information, please contact me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

Enclosures: as stated

xc: Mr. Denny Foust, NMOCD - Aztec - Certified Mail # Z 387 666 165

K-51 Line Drip

FIELD PIT SITE ASSESSMENT FORM

LD244

A342606

GENERAL

Meter: N/A Location: K-51 line Drip
 Operator #: N/A Operator Name: EPNG P/L District: Of to
 Coordinates: Letter: A Section 34 Township: 26 Range: 06
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: X Other: _____
 Site Assessment Date: 09-12-95 Area: 06 Run: 61

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☐ (2)
 Land Type: BLM ☒ (1) State ☐ (2) Fee ☐ (3) Indian _____

Depth to Groundwater
 Less Than 50 Feet (20 points) ☒ (1)
 50 Ft to 99 Ft (10 points) ☐ (2)
 Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
 Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
 Less Than 200 Ft (20 points) ☐ (1)
 200 Ft to 1000 Ft (10 points) ☒ (2)
 Greater Than 1000 Ft (0 points) ☐ (3)

Name of Surface Water Body Tapieto Creek
 (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
 Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☒ (2) > 100'

TOTAL HAZARD RANKING SCORE: 30 POINTS

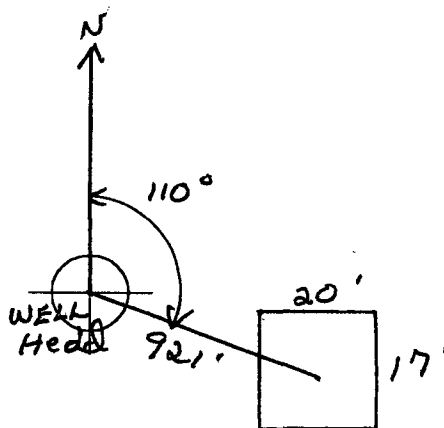
REMARKS

Remarks : Red Line + Topo Both show inside VZ.
K-51 line Drip Belongs to Epng. Will close pit

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 110° Footage from Wellhead 921'
 b) Length : 20' Width : 17' Depth : 3'

Bearing From well Loc.
 Klein #19 well Head



Remarks :

photos : 1406 5 pict

Took measurements and Bearing From
well head on Klein #19 872/18 34-26.6
distance and Bearing are approx, due to
heavy Brush + inability to see Line
Drip.

Tapicito Canyon

Directions - Go past Klein #19 (East) Look For keep Right
Sign - at Sign look Left Line Drip is just before
cotton woods in Bottom.

Completed By:

James J. Purser
 Signature

9-12-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

LD244

Meter: N/A Location: K-51 Line Drip

Coordinates: Letter: A Section 34 Township: 26 Range: 06

Or Latitude _____ Longitude _____

Date Started : 9-21-95 Run: 06 61

FIELD OBSERVATIONS

Sample Number(s): MK 470 ^{water sample} MK 471 ^{soil sample}

Sample Depth: 14 Feet

Final PID Reading 382 ppm PID Reading Depth 14' Feet

Yes No

Groundwater Encountered ☒ ☐ Approximate Depth 10 Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 230

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-25-95 Pit Closed By: Philip

REMARKS

Remarks : Arrived dug sample hole contamination started about 5' could not reach clean bottom due to cave in
N-wall 456 ppm South-wall 765 ppm E-wall 504 ppm W-wall 520 ppm Bottom 434 ppm
50 Pound Fertilizer

Signature of Specialist: Morgan Killion

[illegible]



Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

[illegible]

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

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



SPLIT

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK471	947525
MTR CODE SITE NAME:	LD244	K-51 Line Drip
SAMPLE DATE TIME (Hrs):	09-25-95	0900
PROJECT:	Phase I	
DATE OF TPH EXT. ANAL:	9-28-95	
DATE OF BTEX EXT. ANAL:	9/26/95	9/26/95
TYPE DESCRIPTION:	VC	Dark brown Sand & clay

REMARKS: (N-456)(S-765)(E-504)(W-520)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	11.6	MG/KG	10	D			2.8
TOLUENE	188	MG/KG	10	D			34
ETHYL BENZENE	34.8	MG/KG	10	D			9.0
TOTAL XYLENES	404	MG/KG	10	D, D1			97
TOTAL BTEX	638	MG/KG	10	D			142.8
TPH (418.1)	3970	MG/KG			2.03	2.8	4000
HEADSPACE PID	382	PPM					Surrogate % 205
PERCENT SOLIDS	82.0	%					Dilution Factor 20

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

The Surrogate Recovery was at 98% for this samp All QA/QC was acceptable.

Narrative:

Result for xylenes (m+p) was above calibration range.
ATI Results attached. Surrogate recovery outside ATI QC limits due to matrix interference.
DF = Dilution Factor Used

Approved By: John FaldutDate: 10-10-95

```

*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report        *
*                               *
*****

```

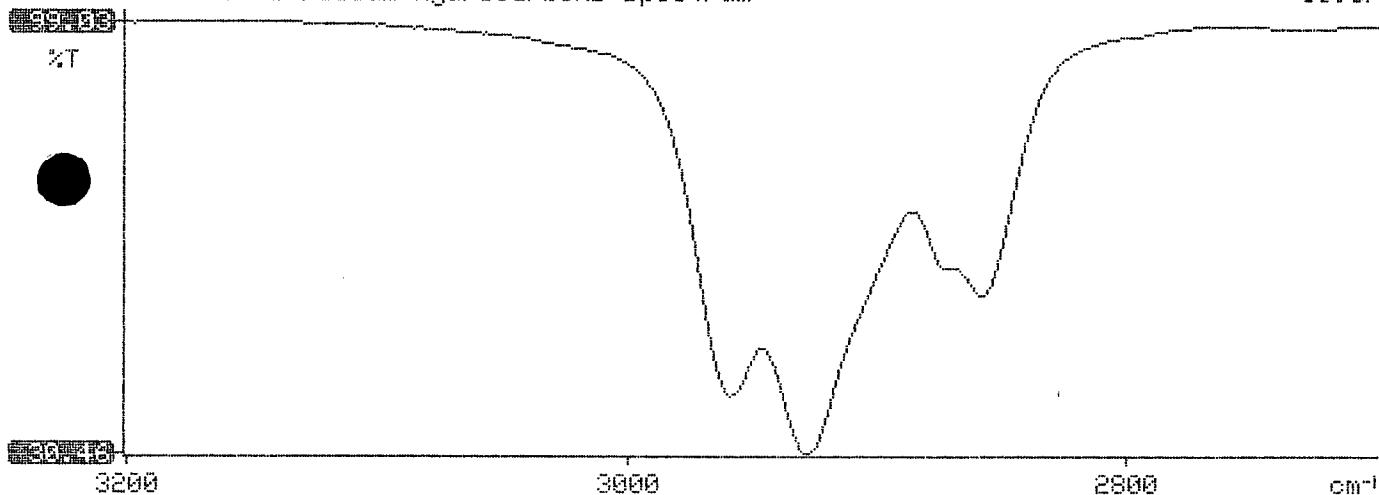
```

* 95/09/28 13:56
*
* Sample identification
* 947525
*
* Initial mass of sample, g
* 2.080
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 3974.320
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.510
*
*
*

```

Y: Petroleum hydrocarbons spectrum

13:57



BTEX SOIL SAMPLE WORKSHEET

File	:	947525	Date Printed	:	9/27/95
Soil Mass (g)	:	4.94	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	10	DF (Analytical)	:	1000
Shot Volume (uL)	:	10	DF (Report)	:	1.01215

			Det. Limit
Benzene (ug/L)	:	11.50	Benzene (mg/Kg): 11.640 2.530
Toluene (ug/L)	:	186.00	Toluene (mg/Kg): 188.259 2.530
Ethylbenzene (ug/L)	:	34.40	Ethylbenzene (mg/Kg): 34.818 2.530
p & m-xylene (ug/L)	:	319.00	p & m-xylene (mg/Kg): 322.874 5.061
o-xylene (ug/L)	:	80.30	o-xylene (mg/Kg): 81.275 2.530
			Total xylenes (mg/Kg): 404.150 7.591
			Total BTEX (mg/Kg): 638.866

EL PASO NATURAL GAS

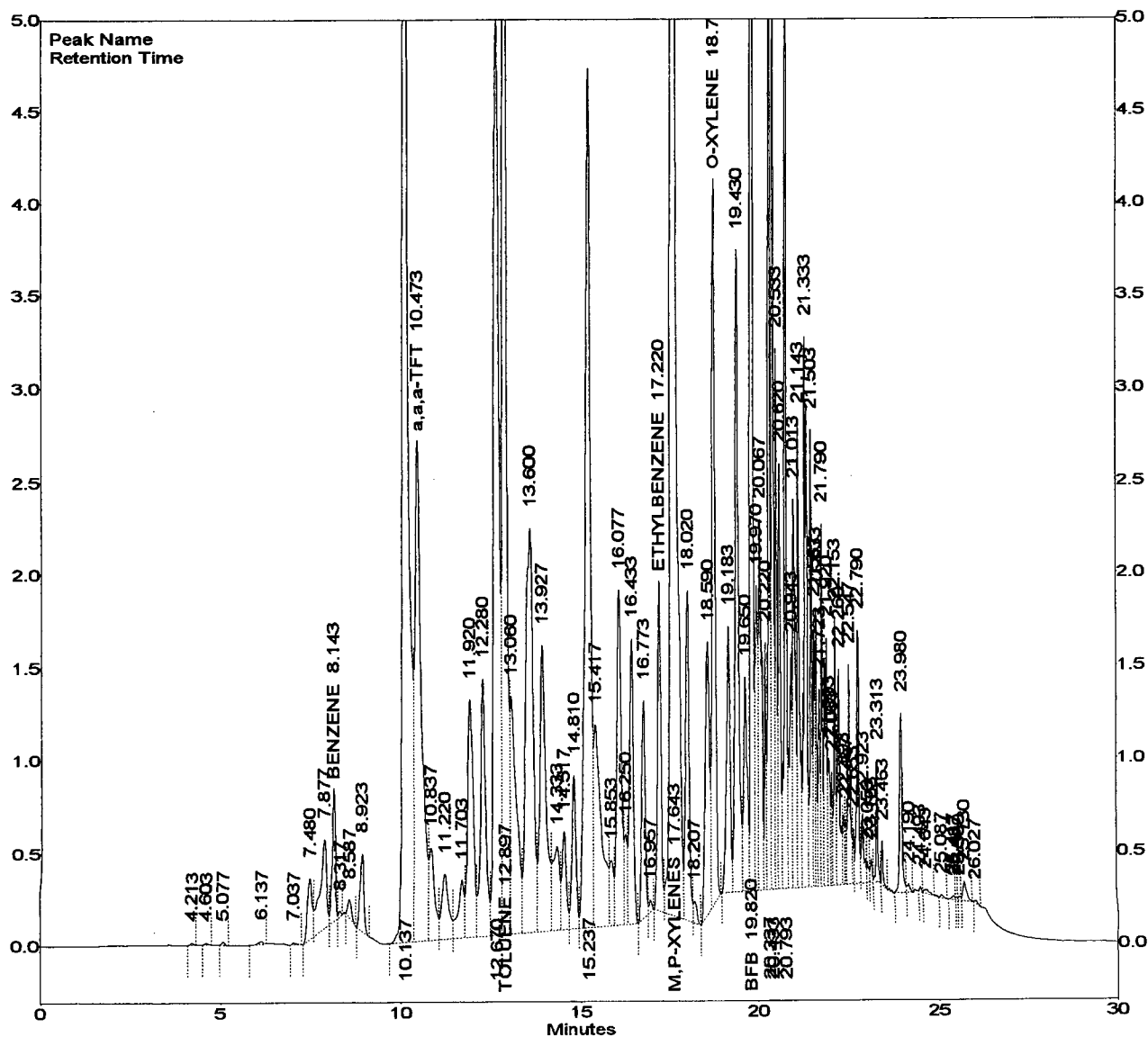
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\092695-2.002
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947525,4.94G,10U
 Acquired : Sep 26, 1995 16:27:49
 Printed : Sep 26, 1995 16:58:21
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.143	4384979	11.5038
a,a,a-TFT	10.473	34195220	390.8660
TOLUENE	12.897	62673080	185.8036
ETHYLBENZENE	17.220	11866613	34.3602
M,P-XYLENES	17.643	113318464	319.0650
O-XYLENE	18.773	26405990	80.3063
BFB	19.820	53536412	98.2174

C:\LABQUEST\CHROM000\092695-2.002 -- Channel A





Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS ATI I.D.: 509397
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
09	947525	NON-AQ	09/25/95	09/28/95	09/29/95	20
PARAMETER			UNITS	09		
BENZENE			MG/KG	2.8		
TOLUENE			MG/KG	34		
ETHYLBENZENE			MG/KG	9.0		
TOTAL XYLENES			MG/KG	97		

SURROGATE:

BROMOFLUOROBENZENE (%) 205*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



Analytical Technologies, Inc.

Sample#
947525

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS	ATI I.D.	: 509397
PROJECT #	: 24324	DATE RECEIVED	: 09/27/95
PROJECT NAME	: PIT CLOSURE/PHASE I & II	DATE ANALYZED	: 09/28/95

PARAMETER	UNITS	09
PETROLEUM HYDROCARBONS, IR	MG/KG	4000



Analytical**Technologies**, Inc.

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

ATI I.D. 509397

October 5, 1995

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

Project Name/Number: PIT CLOSURE/PHASE I & II 24324

Attention: John Lambdin

On 09/27/95, 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.

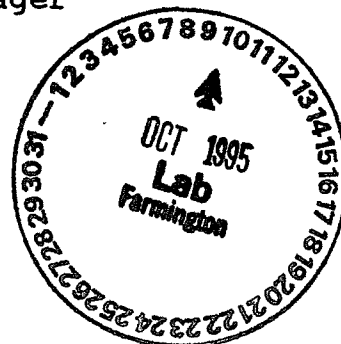
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager





FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Water

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

947520

FIELD ID:

MK470

MTR CODE:

LD244

SAMPLE DATE:

09-22-95

SAMPLE TYPE:

W (Groundwater)

SITE NAME:

K-51 Line Drip

PROJECT:

Phase I

DATE OF BTEX ANALYSIS:

9/25/95

FIELD COMMENTS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT	QUALIFIER	WQCC LIMIT PPB
TDS - TOTAL DISSOLVED SOLIDS (PPM)			None
BENZENE (PPB)	7290	D (X100)	10
TOLUENE (PPB)	13,600	D (X100)	740
ETHYL BENZENE (PPB)	556	D (X100)	750
TOTAL XYLENES (PPB)	6,650	D (X100)	620
SURROGATE % RECOVERY	102%	Allowed Range 80 to 120 %	

NOTES:

Approved By:

John Latch

Date

9-26-95

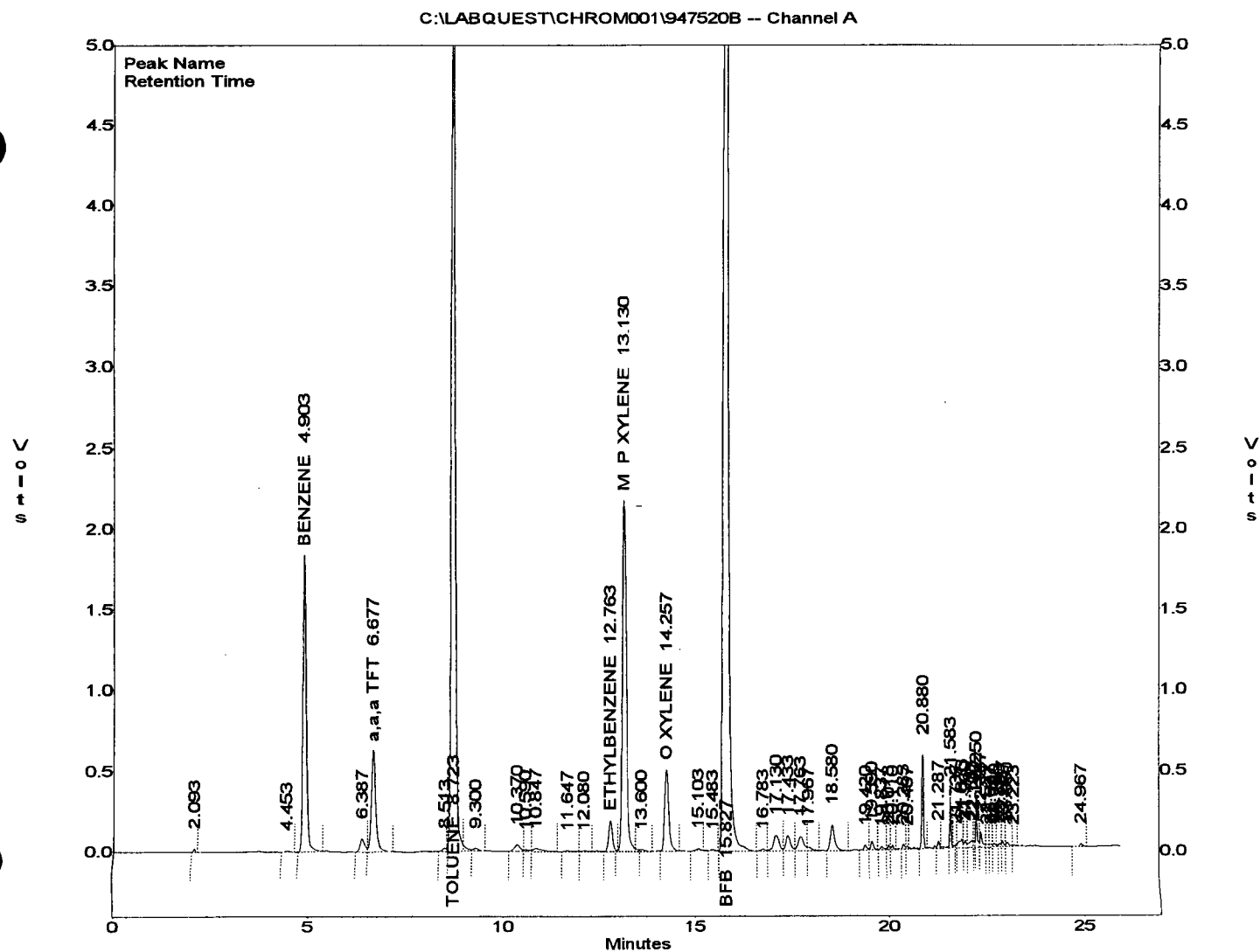
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

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 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947520x100
 Acquired : Sep 25, 1995 13:20:25
 Printed : Sep 25, 1995 13:46:52
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.903	10896136	7286.9521
a,a,a TFT	6.677	4929858	10678.2461
TOLUENE	8.723	37915244	13599.9980
ETHYLBENZENE	12.763	1368592	555.7170
M & P XYLENE	13.130	16165813	5129.3813
O XYLENE	14.257	3846558	1522.1080
BFB	15.827	73993520	10207.5234



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



Certified Mail: #Z 213 707 666 (Box 1 of 2)
#Z 213 707 664 (Box 2 of 2)

March 24, 2000

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

RECEIVED

MAR 29 2000

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 1999 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 locations that were identified during our pit closure project of 1994 / 1995.

Of the 32 reports, EPFS hereby requests closure of 4 of these locations. The 4 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".

The Jaquez Com. C #1 and Jaquez Com. E #1 site is included in a separate report which is entitled "Jaquez Com. C #1 and Jaquez Com. E #1 Annual Report for Soil and Groundwater Remediation".

EPFS has also included for your information five Navajo sites in a separate binder and a separate report for the Bisti Flare Pit #1.

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

Sincerely,

A handwritten signature in dark ink that reads "Scott T. Pope".

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 213 707 667**
Mr. Bill Liesse, BLM - w / enclosures; **Certified Mail # Z 213 707 668**
Mr. John Jaquez, - w / Jaquez enclosures; **Certified Mail # Z 213 707 669**
Ms. Charmaine Tso, Navajo EPA - w / enclosures; **Certified Mail # Z 213 707 670**

bc: J. A. Lambdin w / enclosures

Philip Services Corp. – Cecil Irby, w / o enclosures

B. B. McDaniel / 24321 – NMOCD Regulatory w / o

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Pit Closure Reports

RECEIVED

MAR 20 2000

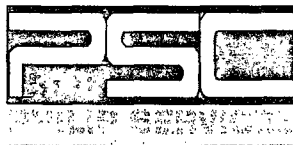
March 2000

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 62800158



EPFS GROUNDWATER PITS 1999 CLOSURE REPORT

K-51 LINE DRIP Meter/Line ID - LD244

SITE DETAILS

Legals - Twn: 26N Rng: 6W Sec: 34 Unit: A
NMOCD Hazard Ranking: 30 Land Type: FEDERAL
Operator: EL PASO FIELD SERVICES

PREVIOUS ACTIVITIES

Site Assessment: Sep-95 Excavation: Sep-95 (230 cy) Soil Boring: May-97
Monitor Well: May-97 Quarterly Sampling Initiated: July-97

All supporting documentation for activities prior to 1999 can be found in the Annual Report for the year the activity occurred.

1999 ACTIVITIES

Quarterly Groundwater Monitoring - Quarterly groundwater samples were collected from monitoring well MW-1 for BTEX.

SUMMARY TABLES

A summary of analytical results is presented in Table 1. Copies of the 1999 laboratory data sheets and associated quality assurance/quality control data are presented in Attachment 1.

SITE MAP

A site map is presented as Figure 1.

GEOLOGICAL LOGS AND WELL COMPLETION DIAGRAMS

No drilling activities occurred in 1999 at this site.

DISPOSITION OF GENERATED WASTES

There were no generated wastes at this site during 1999.

ISOCONCENTRATION MAPS

BTEX parameters are below regulatory standards and isoconcentration maps were not generated.

CONCLUSIONS

Analytical results of groundwater samples collected from MW-1 show levels of hydrocarbon constituents below New Mexico Groundwater Standards for all analytes during the last four consecutive quarters that were sampled.

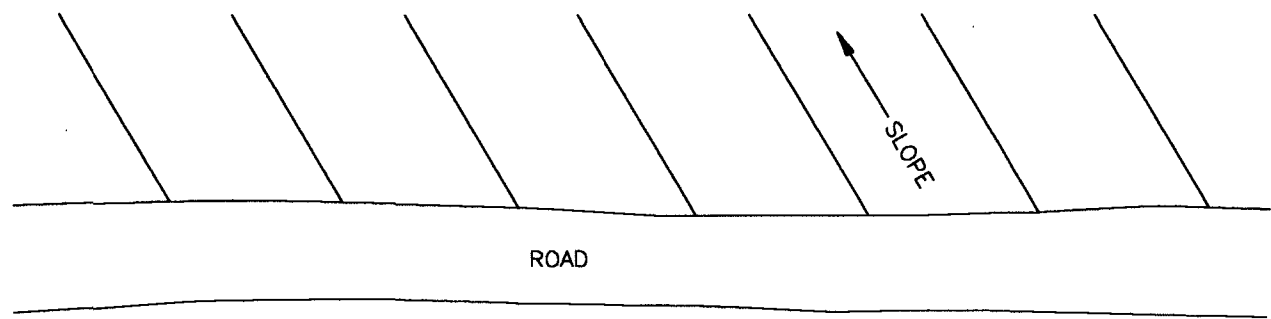
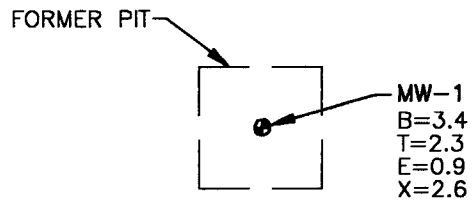
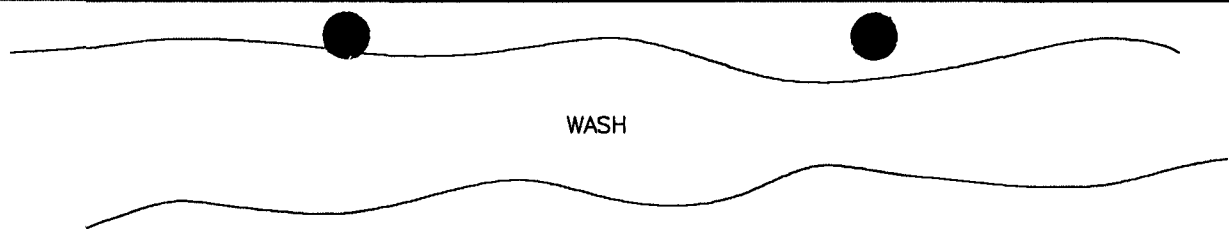
EPFS has demonstrated four consecutive quarters below NMWQCC Standards for BTEX in groundwater. EPFS requests closure of this site.

RECOMMENDATIONS

EPFS requests closure of this site.

**EPFS GROUNDWATER PITS
1999 CLOSURE REPORT**

- Following OCD approval for closure, MW-1 will be abandoned in accordance with the Monitoring Well Abandonment Plan.



LEGEND

- MW-1 MONITORING WELL NUMBER AND APPROXIMATE LOCATION
- 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

	TITLE:	DWN:	DES.:	PROJECT NO.:
	K-51 LINE DRIP	CJG	CI	17520
	LD244	CHKD:	APPD:	EPFS GW PITS
	OCTOBER 11, 1999	DATE:	REV.:	FIGURE 1
		02/11/00	0	

COL 17520A1-003

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Xylenes (PPB)	Total BTEX
970512	LD244	K-51 Line Drip	05/29/1997	1	Phase II Drilling - Initial	= 93	= 283	= 21.6	= 184	= 582
970700	LD244	K-51 Line Drip	07/22/1997	1	Sample 4 - 1st Quarter	= 81.90	= 117	= 10.20	= 92.90	= 302
971124	LD244	K-51 Line Drip	10/21/1997	1	Sample 4 - 2nd Quarter	= 6.01	= 1.35	< 1.00	= 4.88	= 13.24
980015	LD244	K-51 Line Drip	01/08/98	1	Sample 4 - 3rd Quarter	= 5.76	< 1.00	< 1.00	= 2.09	= 8.00
980313	LD244	K-51 Line Drip	04/23/98	1	Sample 4 - 4th Quarter	= 16.70	= 11.90	= 1.12	= 8.99	= 39.00
980533	LD244	K-51 Line Drip	07/21/98	1	Sample 4 - 5th Quarter	= 14.90	= 6.85	< 1.00	= 4.21	= 26.00
980696	LD244	K-51 Line Drip	10/08/98	1	Sample 4 - 6th Quarter	= 1.36	< 1.00	< 1.00	< 3.00	= 1.36
990012	LD244	K-51 Line Drip	01/14/00	1	Sample 4 - 7th Quarter	= 3.87	< 1.00	< 1.00	< 3.00	= 4.00
990174	LD244	K-51 Line Drip	04/15/99	1	Sample 4 - 8th Quarter	= 5.31	= 3.09	< 1.00	< 3.00	= 8.00
990395	LD244	K-51 Line Drip	09/27/99	1	Sample 4 - 9th Quarter	= 3.40	= 2.30	= 0.90	= 2.60	= 9.20

ATTACHMENT 1
1999 GROUNDWATER ANALYTICAL

Sample 4 7TH QTR



Natural Gas Company

CHAIN OF CUSTODY RECORD

Project No.		Project Name		MC # LD244		Date: 1-14-99		Remarks	
Samplers: (Signature)		Dennis Bird		Date: 1-14-99		Sample Number		Type and No. of Sample Containers	
Date	Time	Comp.	GRAB	Sample Number		Type and No. of Sample Containers		Requested Analysis	
1-14-99	1324		X	970013		G1		R-51 LINE DRIP	
Relinquished by: (Signature) Received by: (Signature) Relinquished by: (Signature) Received by: (Signature) Relinquished by: (Signature) Received by: (Signature)									
Carrier Co.: <i>Dennis Bird</i> Carrier Phone No. <i>1-15-99 1515</i> Date Results Reported / by: (Signature)									



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990012
MTR CODE SITE NAME:	LD244	K-51 Line Drip
SAMPLE DATE TIME (Hrs):	1/14/99	1324
PROJECT:	Sample 4 7th Quarter	
ATE OF BTEX EXT. ANAL.:	NA	1/15/99
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	3.87	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	<3	PPB				
TOTAL BTEX	4	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 96.8 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

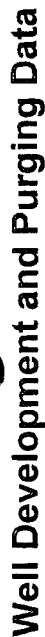
Approved By:

John Swaden

Date:

1-18-99

990012BTEXMonitorWel, 1/18/99



Well Development and Purging Data

Site Name K-51 GINÉ DRIP

☐	Development
☒	Purging

Well Number AW-1

Meter Code 70244

Development Criteria

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

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 23.00
Initial Depth to Water (feet) 12.03
Height of Water Column in Well (feet) 10.98

Diameter (inches): Well 4 Gravel Pack _____

Instruments

- | | |
|-------------------------------------|--------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>DO</u> |

Water Disposal

1672 SEP 19 1970

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.3	31.8
Gravel Pack			
Drilling Fluids			
Total			

Water Removal Data

[illegible]

Comments

Comments _____

Developer's Signature *Ennis Brad*

Date 1-14-99

John Ford.

Date 1-18-99



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 990010 to 990013

QA/QC for 1/15/99 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	XR	ACCEPTABLE	
					YES	NO
ICV LA-52589 25 PPB					RANGE	
Benzene	Standard	25.0	26.2	105	75 - 125 %	X
Toluene	Standard	25.0	26.3	105	75 - 125 %	X
Ethylbenzene	Standard	25.0	26.6	106	75 - 125 %	X
m & p - Xylene	Standard	50	51.7	103	75 - 125 %	X
o - Xylene	Standard	25.0	26.8	107	75 - 125 %	X
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	27.7	111	39 - 150	X
Toluene	Standard	25.0	27.6	110	46 - 148	X
Ethylbenzene	Standard	25.0	27.1	109	32 - 160	X
m & p - Xylene	Standard	50.0	53.1	106	Not Given	X
o - Xylene	Standard	25.0	27.9	112	Not Given	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990010					RANGE	
Benzene	Matrix Duplicate	13.3	13.3	0.13	+/- 20 %	X
Toluene	Matrix Duplicate	2.5	2.5	0.16	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	7.03	6.97	0.90	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	5.00	5.0	0.31	+/- 20 %	X
o - Xylene	Matrix Duplicate	2.50	2.49	0.57	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	XR	ACCEPTABLE	
					YES	NO
2nd Analysis 990010					RANGE	
Benzene	25	13.3	38.4	100.4	75 - 125 %	X
Toluene	25	2.5	28.4	103.5	75 - 125 %	X
Ethylbenzene	25	7.0	32.4	101.3	75 - 125 %	X
m & p - Xylene	50	5.0	56.8	103.5	75 - 125 %	X
o - Xylene	25	2.5	28.5	104.1	75 - 125 %	X

Narrative: Acceptable

Narrative: Acceptable

AUTO BLANK	SOURCE	PPB (3 analyzed with set)	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (none analyzed with set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (none analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

1/14/99 TRIP BLANK	SOURCE	PPB (one analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: J.F.

Approved By: John F. Lavelle

Date: 1-18-99



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990174
MTR CODE SITE NAME:	LD244	K-51 Line Drip
SAMPLE DATE TIME (Hrs):	4/15/99	1328
PROJECT:	Sample 4 - 8th Quarter	
DATE OF BTEX EXT. ANAL.:	NA	4/22/99
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	5.31	PPB				
TOLUENE	3.09	PPB				
ETHYL BENZENE	<1.0	PPB				
TOTAL XYLENES	<3.0	PPB				
TOTAL BTEX	8	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 112.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John L. Linder

Date:

4/23/99



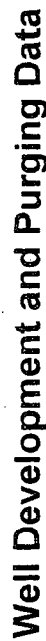
Natural Gas Company

A 2445

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
Samplers: (Signature) <i>[Signature]</i> Date: 4-10-99					
Date	Time	Comp.	GRAB	Sample Number	
4-10-99	1328		X	990174	

Relinquished by: (Signature) <i>[Signature]</i> Date/Time 4-10-99 1738					
Received by: (Signature) _____ Date/Time _____					
Relinquished by: (Signature) _____ Date/Time _____					
Received by: (Signature) _____ Date/Time _____					
Relinquished by: (Signature) _____ Date/Time _____					
Received for Laboratory by: (Signature) <i>[Signature]</i> Date/Time 4-22-99 1445					
Remarks: <i>[Signature]</i> <i>[Signature]</i>					
Carrier Co: _____ Carrier Phone No. _____					
Date Results Reported / by: (Signature) <i>[Signature]</i>					



☐	Development
☒	Purging

Well Number MW-1
Meter Code LD344

Development Criteria

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

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 23.00
Initial Depth to Water (feet) 11.95
Height of Water Column in Well (feet) 11.05

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.3	21.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|-------------------------------------|---------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>D.O. C</u> |

Water Disposal

K072 SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature
Dennis Bird

Date: 4-15-99 Reviewer:

John F. Fisher

Date 4/23/99



EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 990173 to 990181

QA/QC for 04/22/99 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	47.1	94.2	75 - 125 %	X
Toluene	Standard	50.0	46.9	93.7	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.6	95.1	75 - 125 %	X
m & p - Xylene	Standard	100	95.8	95.8	75 - 125 %	X
o - Xylene	Standard	50.0	47.2	94.4	75 - 125 %	X
SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	22.7	91	39 - 150	X
Toluene	Standard	25.0	22.7	91	46 - 148	X
Ethylbenzene	Standard	25.0	23.0	92	32 - 160	X
m & p - Xylene	Standard	50.0	46.1	92	Not Given	X
o - Xylene	Standard	25.0	22.9	92	Not Given	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
990173					RANGE	
Benzene	Matrix Duplicate	10.5	10.7	1.61	+/- 20 %	X
Toluene	Matrix Duplicate	1.52	1.54	0.86	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	9.36	9.63	2.79	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	3.50	3.57	2.05	+/- 20 %	X
o - Xylene	Matrix Duplicate	1.16	1.19	2.51	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 990173					RANGE	
Benzene	25	10.5	31.6	84	75 - 125 %	X
Toluene	25	1.52	21.9	81	75 - 125 %	X
Ethylbenzene	25	9.36	30.4	84	75 - 125 %	X
m & p - Xylene	50	3.50	45.9	85	75 - 125 %	X
o - Xylene	25	1.16	22.0	83	75 - 125 %	X

Narrative: Acceptable.

AUTO BLANK	SOURCE	PPB (1 analyzed with set)	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (one analyzed with set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (one analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

TRIP BLK 04/15,16,19/99	SOURCE	PPB (three analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: J.L.

Approved By: John Larden

Date: 4-23-99



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	990395
MTR CODE SITE NAME:	LD244	K-51 Line Drip
SAMPLE DATE TIME (Hrs):	09/27/1999	1401
PROJECT:	Sample 4 9th Quarter	
DATE OF BTEX EXT. ANAL.:	N/A	10/01/1999
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	3.4	PPB				
TOLUENE	2.3	PPB				
ETHYL BENZENE	0.9	PPB				
TOTAL XYLENES	2.6	PPB				
TOTAL BTEX	9.2	PPB				

—BTEX is by EPA Method 8021 —

The Surrogate Recovery was at 107.0 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Sample Analyzed by Pinnacle Laboratories, Albuquerque, NM.

Approved By:

John L. Linder

Date:

10-11-99



Sample 4 - 5th Quarter

Well Development and Purging Data

Site Name K-51 LINE DRIP

Well Number MW-1

Meter Code LD244

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) 73.00

Initial Depth to Water (feet) 12.58

Height of Water Column in Well (feet) 10.42

Diameter (inches): Well 4 Gravel PackDiameter (inches): Well 4 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.9	28.7
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|-------------------------------------|--------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>D.O.C</u> |

Water Disposal

DATA SEPARATOR

Water Removal Data

[illegible]

Comments

Developer's Signature *Tennis Bird*

Date 9-27-99 Reviewer

John F. J. J. J. Date 10-11-99

PINNACLE
LABORATORIES

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

Pinnacle Lab ID number 909086
October 06, 1999

EL PASO FIELD SERVICES
770 WEST NAVAJO
FARMINGTON, NM 87401



Project Name PIT MONITOR WELL
Project Number (none)

LD244

K-51 Line Drip

Attention: JOHN LAMBDIN

Sample 4 - 9th Qtr

On 9/30/99 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.

[Signature]
for

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

Reviewed & Approved
J. Lauter 10/11/99

PINNACLE
LABORATORIES

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

CLIENT	: EL PASO FIELD SERVICES	PINNACLE ID	: 909086
PROJECT #	: (none)	DATE RECEIVED	: 9/30/99
PROJECT NAME	: PIT MONITOR WELL	REPORT DATE	: 10/6/99
PIN			DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	990395	AQUEOUS	9/27/99
02	TRIP BLANK	AQUEOUS	9/27/99



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 : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PIT MONITOR WELL

PINNACLE I.D.: 909086

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	990395	AQUEOUS	9/27/99	NA	10/1/99	1
02	TRIP BLANK	AQUEOUS	9/27/99	NA	10/1/99	1
PARAMETER		DET. LIMIT	UNITS	990395	TRIP BLANK	
BENZENE		0.5	UG/L	3.4	< 0.5	
TOLUENE		0.5	UG/L	2.3	< 0.5	
ETHYLBENZENE		0.5	UG/L	0.9	< 0.5	
TOTAL XYLENES		0.5	UG/L	2.6	< 0.5	

SURROGATE:

BROMOFLUOROBENZENE (%)

107

102

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.	: 909086
BLANK I. D.	: 100199	DATE EXTRACTED	: NA
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 10/1/99
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: PIT MONITOR WELL		

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 (%) 103
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 # : 100199
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PIT MONITOR WELL

PINNACLE I.D. : 909086
DATE EXTRACTED : NA
DATE ANALYZED : 10/1/99
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	19.5	98	19.4	97	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.6	98	19.8	99	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.7	99	20.1	101	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	60.0	100	60.9	102	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

DATE: 9-29-99 PAGE: 1 OF 1

AEN(NM) Accession #

909086

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: JOHN LAMBLIN COMPANY: EL PASO FIELD SERVICES ADDRESS: 770 WEST ALBUQUERQUE PHONE: (505) 579-2144 FAX: (505) 579-2261 BILL TO: SAME AS ABOVE COMPANY: ADDRESS:		ANALYSIS REQUEST Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject (M8015) Gas/Purge & Trap 8021 (BTEX)/8015 (Gasoline) 8021 (BTEX) ☒ MTBE ☐ TMB ☐ PCE 8021 (TCL) 8021 (EDX) 8021 (HALO) 8021 (CUST) 504.1 EDB ☐ / DBCP ☐ 8260 (TCL) Volatile Organics 8260 (Full) Volatile Organics 8260 (CUST) Volatile Organics 8260 (Landfill) Volatile Organics Pesticides /PCB (608/8081) Herbicides (615/8151) Base/Neutral/Acid Compounds GC/MS (625/8270) Polynuclear Aromatics (610/8310) General Chemistry: Priority Pollutant Metals (13) Target Analyte List Metals (23) RCRA Metals (8) RCRA Metals by TCLP (Method 1311) Metals: NUMBER OF CONTAINERS	
PROJECT INFORMATION PROJ. NO.: PROJ. NAME: PT MASTER WELL P.O. NO.: SHIPPED VIA: FED-X SAMPLE RECEIPT NO. CONTAINERS: 3 CUSTODY SEALS: Y/N (N) RECEIVED INTACT: YES BL: 2ICE 16°C		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS (RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER METHANOL PRESERVATION ☐ COMMENTS: FIXED FEE ☐	
RELINQUISHED BY: Signature: <i>John Lamblin</i> Time: 11:23 Printed Name: DENNIS BIRD Date: 9-29-99 Company: EL PASO FIELD SERVICES		RELINQUISHED BY: Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company: _____	
RECEIVED BY: Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company: _____		RECEIVED BY (LAB): Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company: American Environmental Network (NM), Inc.	