

3R - 235

REPORTS

DATE:

2001

Certified Mail: #7001 1940 0003 1553 8513

February 28, 2002

RECEIVED

MAR 04 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

RE: 2001 Pit Project Annual Groundwater Report

Dear Mr. Olson:

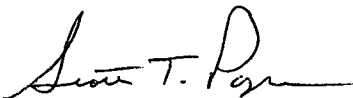
In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 30 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

EPFS has organized the 30 reports (Volumes IA, IB, II and III), reports by land type. Volume IA and IB contain annual reports for sites found on Federal land. Volume II contains Non Federal sites and Volume III contains sites on Navajo land. Of the 30 reports submitted EPFS is requesting closure of three sites located on Navajo lands. Of the three Navajo sites submitted for closure OCD has closed the Charley Pah #4 and the John Charles #8. The Rementa et al #1 has not been closed by either agency. EPFS understands closure of groundwater sites on Navajo land falls under jurisdiction of the Navajo Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

The Jaquez Com. C #1 and Jaquez Com. E #1 site is not included in with this report and will be submitted by the required deadline of April 1, 2002.

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

Sincerely,



Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0003 1553 8506**
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), **Certified Mail # 7001 1940 0003 1553 8520**

SAN JUAN BASIN PIT CLOSURES

San Juan Basin, New Mexico

**El Paso Field Services
Pit Project Groundwater Sites
Annual Report
Volume IA-Federal Sites**

March 2002

Prepared for

**El Paso Field Services
Farmington, New Mexico**



MWH
MONTGOMERY WATSON HARZA

EL PASO FIELD SERVICES ANNUAL GROUNDWATER REPORT

FEDERAL SITES VOLUME IA

TABLE OF CONTENTS

Site Map

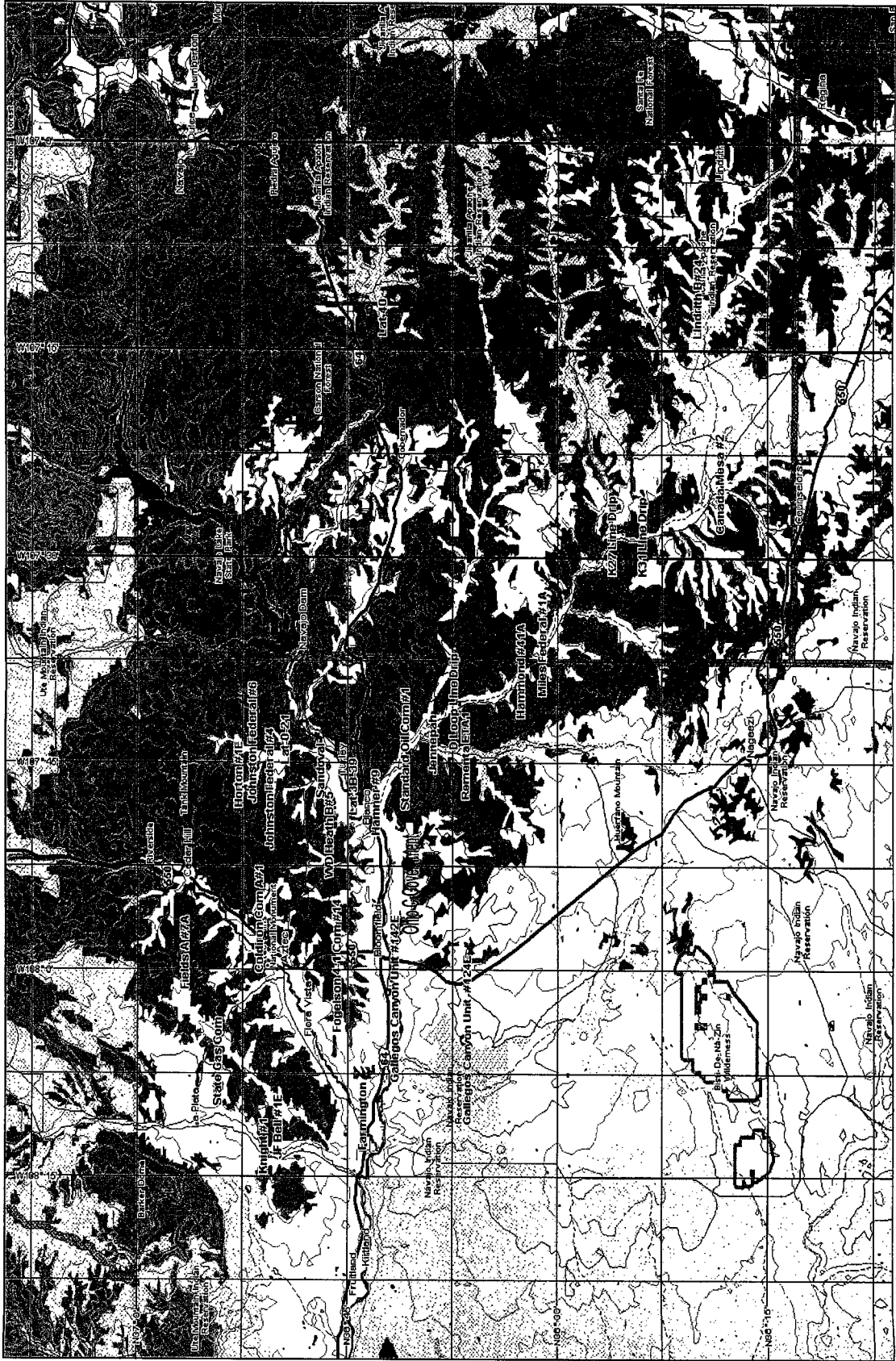
METER or LINE ID	SITE NAME	TOWNSHIP RANGE		SECTION	UNIT
89961	Fields A#7A	32N	11W	34	E
89232	Johnston Fed #6A	31N	09W	35	F
94715	James F. Bell #1E	30N	13W	10	P
89620	Sandoval GC A #1A	30N	09W	35	C
87493	W D Heath B-5	30N	09W	31	M
LD151	Lat 0-21 Line Drip	30N	09W	12	O
73220	Fogelson 4-1 Com. #14	29N	11W	4	P



MWH

MONTGOMERY WATSON HARZA

Groundwater Site Map



3-D TopoQuads Copyright © 1999 Delorme Yarmouth, ME 04956 | 3 mi Scale: 1 : 600,000 Detail: 4-4 Datum: WGS84

EPFS GROUNDWATER PITS 2001 ANNUAL GROUNDWATER REPORT

Sandoval GC A #1A

Meter Code 89620

SITE DETAILS

Legals Twn: 30N Rng: 09W Sec: 35 UNIT: C

NMOCD Haz Ranking 10 Land Type: Federal Operator: Amoco Production Company

PREVIOUS ACTIVITIES

Site Assessment: May-94 Excavation Sep-94 (50cy) Soil Boring: May-95 Monitor Well: May-95

Geoprobe: NA Additional MWs: NA Downgradient MW's: NA Replace MW: Aug-97

PSH Removal Initiated: NA ORC Nutrient Injection Oct-01 Re-Excavation: Jul-97 (504cy)

Quarterly Initiated Apr-96 Annual Initiated Apr-99 Quarterly Resumed: NA

2001 ACTIVITY

Groundwater Monitoring - Annual groundwater monitoring continued through 2001.

ORC added to MW-1, in October 2001.

SUMMARY TABLES AND GRAPHS

Groundwater analytical data is presented in Table 1 BTEX. Copies of the laboratory data sheets and the associated quality assurance/quality control data are presented in Attachment 1. Included is a BTEX Data graph for MW-1.

SITE MAP

Site Maps with BTEX concentrations and groundwater elevations are attached.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

There were no drilling activities at this site in 2001.

DISPOSITION OF GENERATED WASTES

There were no wastes generated at this site in 2001.

**EPFS GROUNDWATER PITS
2001 ANNUAL GROUNDWATER REPORT**

Sandoval GC A #1A

Meter Code: 89620

ISOCONCENTRATION MAPS

An isoconcentration map was not generated for this site.

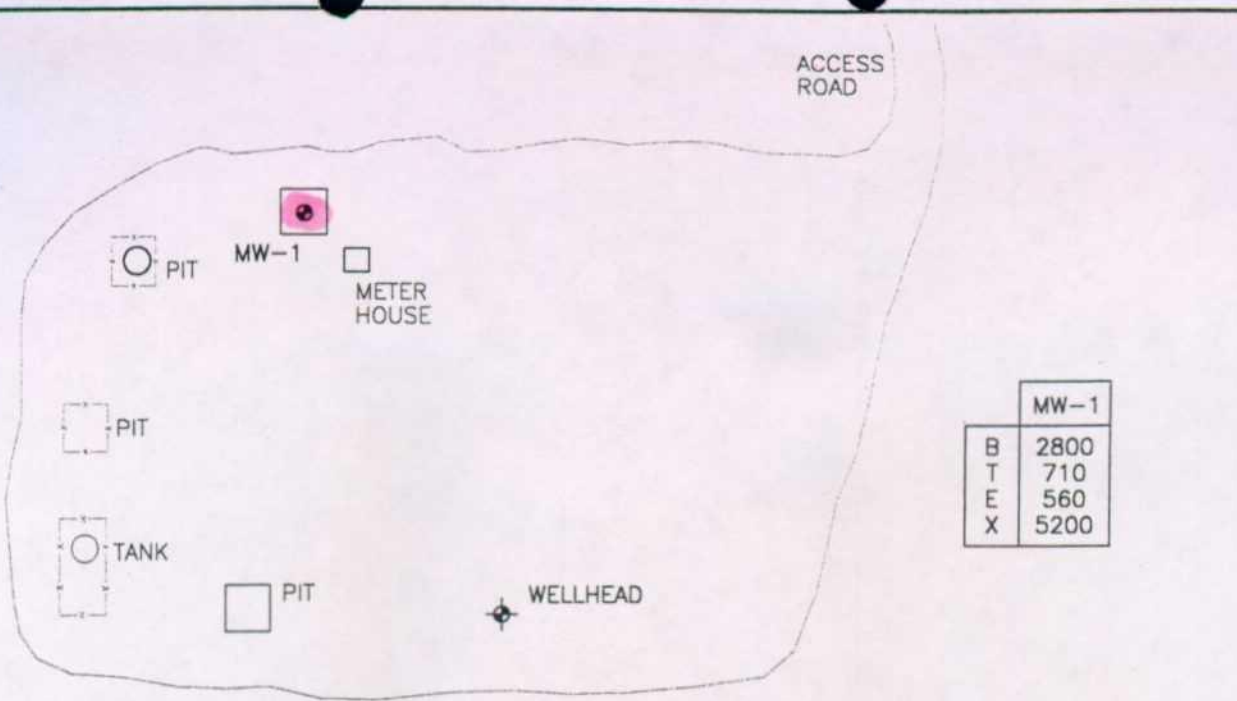
CONCLUSIONS

MW-1 was exhibiting slight decreases in concentration, but the May 2001 sampling event still detected 2,800 ppb benzene. In October 8, 2001, EPFS elected to add oxygenation to the source area by installing an ORC sock.

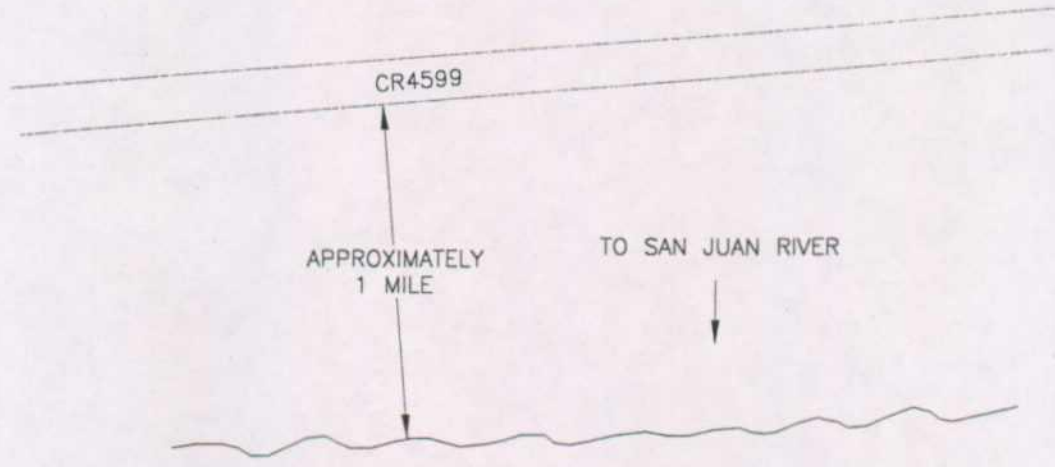
Previous attempts to add monitoring wells at this site have resulted in drilling refusal. The installation of any additional wells at this time is not considered feasible.

RECOMMENDATIONS

- > Continue oxygenation of the source area.
- > Continue annual monitoring in MW-1, until groundwater constituents are near NMWQCC groundwater standards, then sample quarterly for closure.



MW-1	
B	2800
T	710
E	560
X	5200



LEGEND

- ⊙ MW-1 Approximate Monitoring Well Location and Number
- B Benzene ($\mu\text{g/L}$)
- T Toluene ($\mu\text{g/L}$)
- E Ethylbenzene ($\mu\text{g/L}$)
- X Total Xylenes ($\mu\text{g/L}$)



NOT TO SCALE

SANDOVAL GAS COM A #1A, METER 89620
MAY, 2001

GROUNDWATER SITES
EL PASO FIELD SERVICES

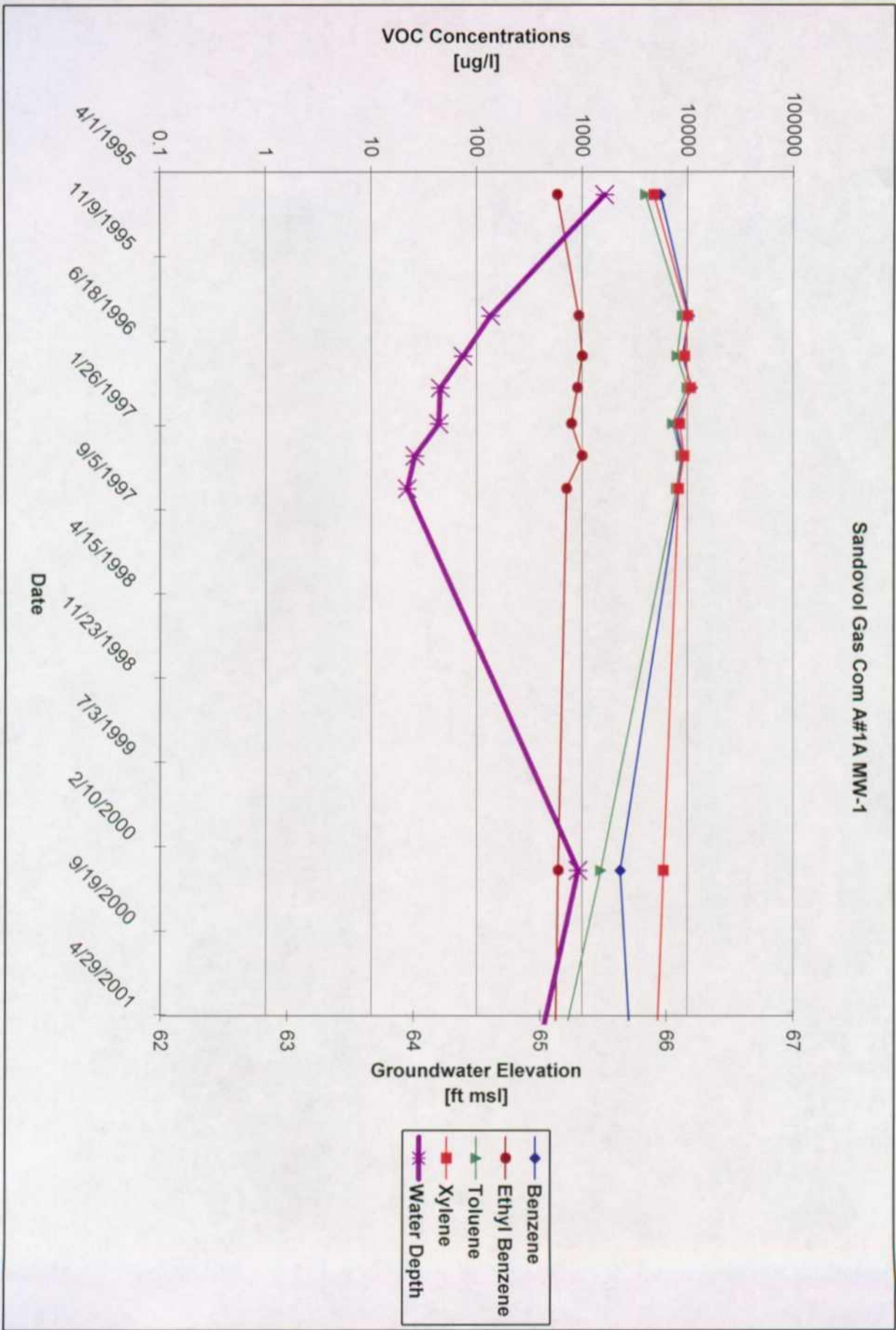
FIGURE 1

sandovalgas_01.dwg

Table 1 BTEX
Sandoval Gas Com A#1A

Sample #	Meter Line #	Site Name	Sample Date	MW#	Benzene (µg/l)	Ethyl Benzene (µg/l)	Toluene (µg/l)	Total Xylenes (µg/l)	Depth to Water (Feet)	Groundwater Elevation (feet)
SAN0105	89620	Sandoval GC A #1A	5/30/2001	1	2800	560	710	5200	34.97	65.03

Sandovol Gas Com A#1A MW-1



ATTACHMENT 1

2001 GROUNDWATER ANALYTICAL



WELL OBSERVATION DATA

Project Name EPAFS Remediation project

Project No. 6169

Project Manager LISA Winn

Cost Code _____

Client Company El Paso Field Services

Date 10-8-01

Site Name Sandoval A #1A (89620)

Well or Piezometer	Time	Reason Not Measured	Depth to Flooding Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
Mw 1				35.19		38.31			

Reason Not Measured: D = Dry; O = Obstructed; N = Not Accessible

Comments Installed 3 ORC SOCKS

Signature [Signature]

Date 10-8-01

PINNACLE
LABORATORIES

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

Pinnacle Lab ID number **106002**
June 05, 2001

GOLDEN ENVIRONMENTAL MNGT.
906 SAN JUAN BLVD.
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number (NONE)

SANDOVAL Gas Com A #1A
Metn 89620

Attention: LISA WINN/SCOTT POPE

On 06/01/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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



H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE
LABORATORIES

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

CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE ID : 106002
PROJECT # : (NONE) DATE RECEIVED : 06/01/01
PROJECT NAME : EPFS QUARTERLY SAMPLING REPORT DATE : 06/05/01

PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
106002 - 01	SAN-0105-MW1	AQUEOUS	05/30/01
106002 - 02	TRIP BLANK	AQUEOUS	05/30/01

**PINNACLE
LABORATORIES**

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

GAS CHROMATOGRAPHY RESULTS

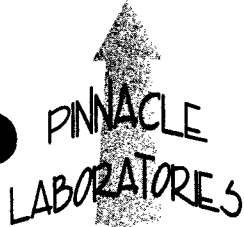
TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 106002
PROJECT # : (NONE)
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE	DATE	DATE	DATE	DIL.		
D. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	SAN-0105-MW1	AQUEOUS	05/30/01	NA	06/04/01	50
02	TRIP BLANK	AQUEOUS	05/02/01	NA	06/04/01	1

PARAMETER	DET. LIMIT	UNITS	SAN-0105-MW1	TRIP BLANK
BENZENE	0.5	UG/L	2800	< 0.5
TOLUENE	0.5	UG/L	710	< 0.5
ETHYLBENZENE	0.5	UG/L	560	< 0.5
TOT. XYLENES	0.5	UG/L	5200	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 100 115
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.	: 106002
BLANK I. D.	: 060101	DATE EXTRACTED	: N/A
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 06/01/01
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 99
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

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

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST : EPA 8021 MODIFIED PINNACLE I.D. : 106002
BLANK I. D. : 060401 DATE EXTRACTED : N/A
CLIENT : GOLDEN ENVIRONMENTAL MNGT. DATE ANALYZED : 06/04/01
PROJECT # : (NONE) SAMPLE MATRIX : AQUEOUS
PROJECT NAME : EPFS QUARTERLY SAMPLING

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 114
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

PINNACLE
LABORATORIES

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

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 106002
MSMSD #	: 060101	DATE EXTRACTED	: N/A
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 06/01/01
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	18.0	90	18.6	93	3	(80 - 120)	20
TOLUENE	<0.5	20.0	18.6	93	19.2	96	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.5	97	20.2	101	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	58.0	97	60.1	100	4	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

PROJECT MANAGER: <i>Lisa Winn</i>			SAMPLE ID			DATE			TIME			MATRIX			LAB ID		
COMPANY: <i>GEM</i>			<i>SAN-0105-MW1</i>			<i>5-30-01</i>			<i>1700</i>			<i>H2O</i>			<i>01</i>		
ADDRESS: <i>906 San Juan Blvd Farmington N.M. 87401</i>			<i>Trip Blank</i>			<i>5-20-01</i>			<i>1600</i>			<i>H2O</i>			<i>02</i>		
PHONE: <i>(505) 566-9116</i>																	
FAX: <i>(505) 566-9120</i>																	
BILL TO: <i>El Paso Field Services</i>																	
COMPANY: <i>El Paso Field Services</i>																	
ADDRESS: <i>614 Reilly Ave Farmington N.M. 87499</i>																	

ANALYSIS REQUEST										
Petroleum Hydrocarbons (418.1) TRPH										
(MOD.8015) Diesel/Direct Inject										
(M8015) Gas/Purge & Trap										
8021 (BTEX)/8015 (Gasoline) MTBE										
8021 (BTEX) MTBE	X									
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 (608/8081/8082)										
Herbicides (615/8151)										
Base/Neutral/Acid Compounds GC/MS (625/8270)										
Polynuclear Aromatics (610/8310/8270-SIMS)										
General Chemistry:										
Priority Pollutant Metals (13)										
Target Analyte List Metals (23)										
RCRA Metals (8)										
RCRA Metals by TCLP (Method 1311)										
Metals:										
NUMBERS - CONTAINERS										

PROJECT INFORMATION	PROJ. NO:	
	PROJ. NAME:	<i>EP's Quarterly Sampling</i>
	P.O. NO:	
	SHIPPED VIA:	
SAMPLE RECEIPT	NO. CONTAINERS:	<i>3</i>
	CUSTODY SEALS:	<i>YIM (NA)</i>
	RECEIVED INTACT:	<i>YES</i>
	BLUE ICING:	<i>6-2-01</i>

PROJECT AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS (RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK		(NORMAL) <input checked="" type="checkbox"/>
CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		
METHANOL PRESERVATION <input type="checkbox"/>		
COMMENTS: <i>Fax Results to Lisa Winn</i>		

RELINQUISHED BY: 1	RELINQUISHED BY: 2
Signature: <i>Lisa Winn</i>	Signature: <i>[Blank]</i>
Printed Name: <i>Lisa Winn</i>	Printed Name: <i>[Blank]</i>
Date: <i>5-30-01</i>	Date: <i>[Blank]</i>
Company: <i>GEM</i>	Company: <i>[Blank]</i>
Time: <i>1500</i>	Time: <i>[Blank]</i>
RECEIVED BY: 1	RECEIVED BY: (LAB) 2
Signature: <i>Chris A-Mez</i>	Signature: <i>[Signature]</i>
Printed Name: <i>Chris A-Mez</i>	Printed Name: <i>[Blank]</i>
Date: <i>5-30-01</i>	Date: <i>[Blank]</i>
Company: <i>[Blank]</i>	Company: <i>Pinnacle Laboratories Inc.</i>
Time: <i>[Blank]</i>	Time: <i>[Blank]</i>
See reverse side (Force Majeure)	See reverse side (Force Majeure)

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.



Well Development and Purging Data

Project No. 6669 Development Purging Page 1 of 1

Task No. 2 Site Name/Identification Sandoval GC Com. A#1 (89620) Site Address Rural San Juan CO

Well No. MW 1 Client/Project Name El Paso 50 Field Services EPFS quarterly Sampling Project Manager List winna

Development Criteria 3 to 5 Casing Volumes of Water Removal Water Volume Calculation 39.3 Instruments PH Meter Hydax
 Stabilization of Indicator Parameters Initial Depth of Well (feet) 34.97 DO Monitor
 Height of Water Column in Well (feet) 3.34 Conductivity Meter Hydax
 Diameter (inches): Well 4" Gravel Pack _____ Temperature Meter Hydax

Methods of Development Other _____
 Pump Centrifugal Bailor Bottom Valve
 Submersible Double Check Valve
 Peristaltic Stainless-steel Kemmerer

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	3,341	2,198.3	6,544
Gravel Pack			
Drilling Fluids			
Total			6,544

Water Disposal Other _____
Water to Separator Bloomfield W.N.
 Sampling Activities
 Type of Container VOA No. of Containers 2
 Parameters Sampled For STOX FOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailor				Increment	Cumulative	Increment	Cumulative					
5-30-01	16:32		X				1.5	1.5			21.6	5.88	3580		20-171 BACT spores
	16:34		X				1.5	3			19.1	5.94	3370		Standard Prod. at 100'
	16:37		X				1.5	4.5			17.8	5.94	3390		"
	16:40		X			37.92	1.5	6			17.4	5.94	3380		no change

(Circle the date and time that the development criteria are met.)
 Comments Water Bailing Approximately 6 gal Bailed well Dry let Revers Sampled
 For RTOX 1700
 Developer's Sig. AS: A. M. M. Date 5-30-01 Reviewer 6/5/01 Johnson



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 5-30-01 PAGE: 1 OF 1

SHADED AREAS: FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA WILSON

COMPANY: GEM

ADDRESS: 906 San Juan Blvd

PHONE: (505) 568-9116

FAX: (505) 568-9120

BILL TO: El Paso Field Services

COMPANY: El Paso Field Services

ADDRESS: 614 Reilly Ave

ADDRESS: Farmington NM 87499

SAMPLE ID: SAN-0105-Mix 1

DATE: 5-30-01

TIME: 1700

MATRIX: H2O

LAB ID: Trip Blank

ANALYSIS REQUIRED	DATE	TIME	MATRIX	LAB ID
Petroleum Hydrocarbons (418.1) TRPH				
(MOD.8015) Diesel/Direct Inject				
(M8015) Gas/Purge & Trap				
8021 (BTEX)/8015 (Gasoline) MTBE				
8021 (BTEX) <input type="checkbox"/> MTBE <input type="checkbox"/> TMB <input type="checkbox"/> PCE				
8021 (TCL)				
8021 (EDX)				
8021 (HALO)				
8021 (CUST)				
504.1 EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>				
8260 (TCL) Volatile Organics				
8260 (Full) Volatile Organics				
8260 (CUST) Volatile Organics				
8260 (Landfill) Volatile Organics				
Pesticides /PCB (608/8081/8082)				
Herbicides (615/8151)				
Base/Neutral/Acid Compounds GC/MS (625/8270)				
Polynuclear Aromatics (610/8310/8270-SIMS)				
General Chemistry:				
Priority Pollutant Metals (13)				
Target Analyte List Metals (23)				
RCRA Metals (8)				
RCRA Metals by TCLP (Method 1311)				
Metals:				

PROJECT INFORMATION

PROJ. NO.: EPT 5 Quarterly Samples

PROJ. NAME: EPT 5 Quarterly Samples

PO. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS

CUSTODY SEALS Y/N/NA

RECEIVED INTACT

BLUE 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

Fax RESULTS TO LISA WILSON

RELINQUISHED BY

Signature: [Signature] Time: 1600

Printed Name: [Name] Date: 5-31-01

Company: [Company]

See reverse side (Force Majeure)

RECEIVED BY

Signature: [Signature] Time:

Printed Name: [Name] Date:

Company: [Company]

RELINQUISHED BY

Signature: [Signature] Time:

Printed Name: [Name] Date:

Company: [Company]

RECEIVED BY (LAB)

Signature: [Signature] Time:

Printed Name: [Name] Date:

Company: [Company]