

3R - 196

REPORTS

DATE:

2001

Certified Mail: #7001 1940 0003 1553 8513

February 28, 2002

RECEIVED

MAR 04 2002

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

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2001 Pit Project Annual Groundwater Report

Dear Mr. Olson:

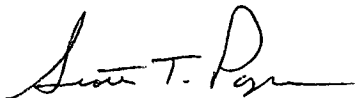
In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 30 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

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

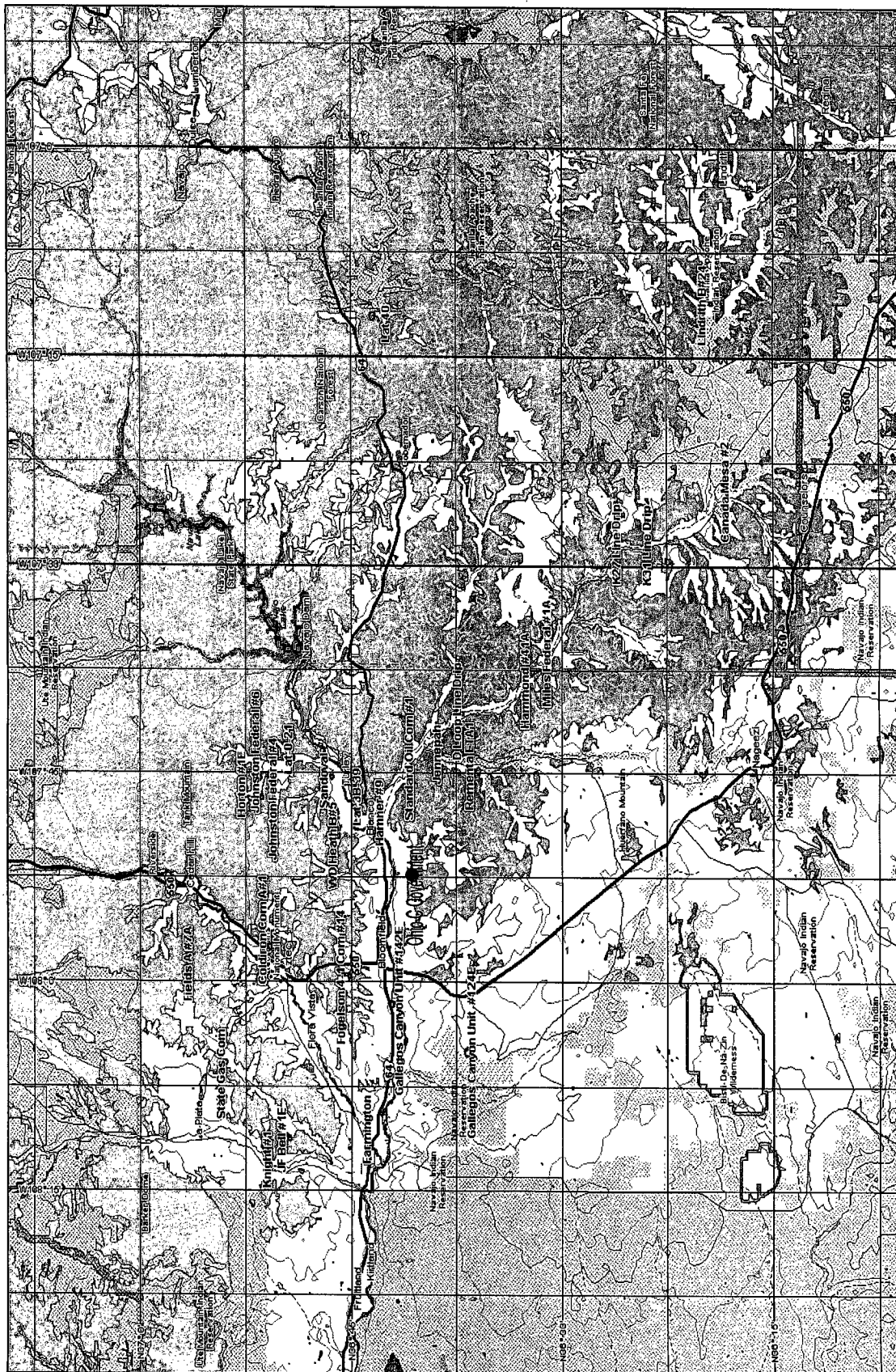
METER or LINE ID	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
89961	Fields A#7A	32N	11W	34	E
89232	Johnston Fed #6A	31N	09W	35	F
94715	James F. Bell #1E	30N	13W	10	P
89620	Sandoval GC A #1A	30N	09W	35	C
87493	W D Heath B-5	30N	09W	31	M
LD151	Lat 0-21 Line Drip	30N	09W	12	O
73220	Fogelson 4-1 Com. #14	29N	11W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



MWH

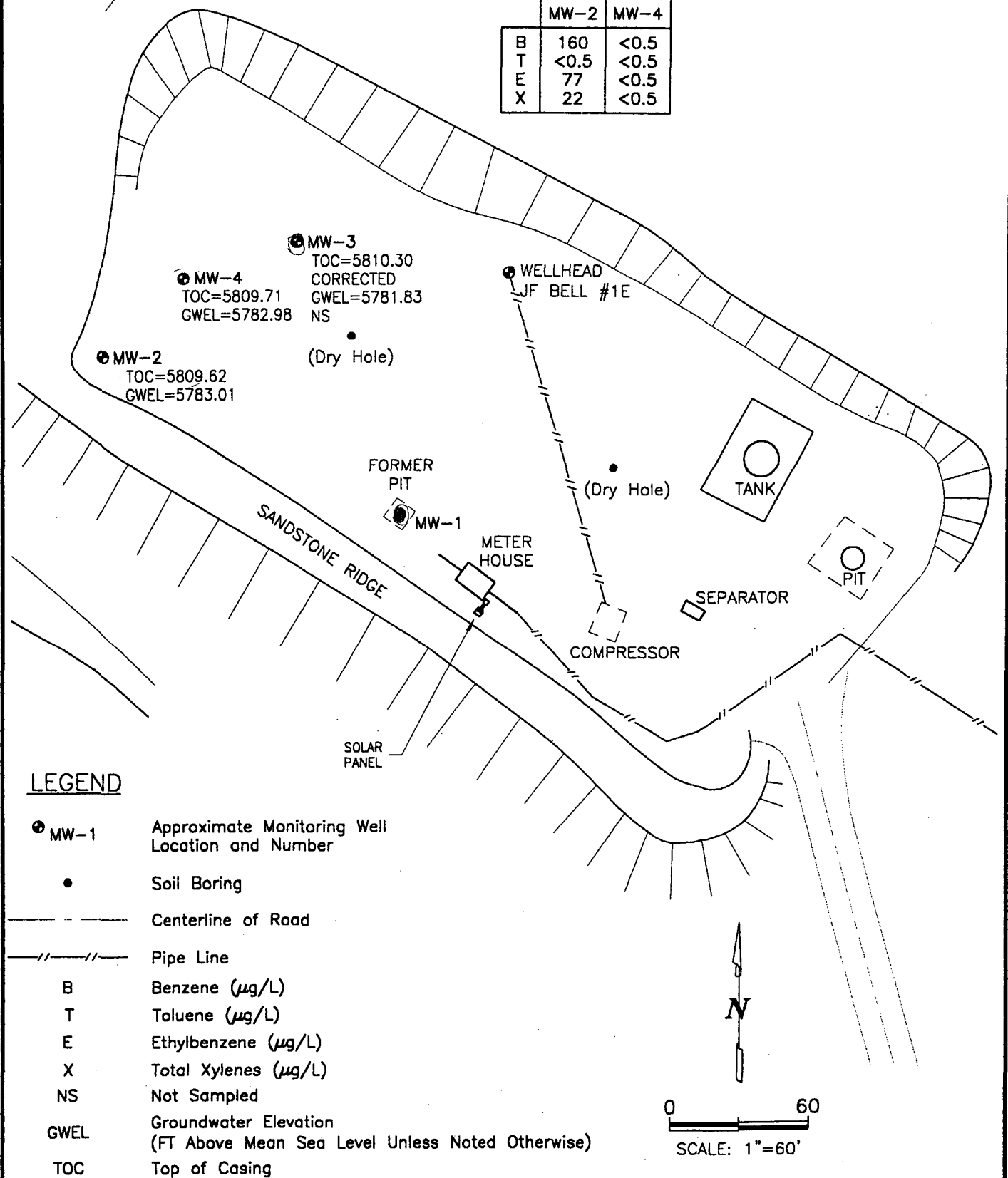
MONTGOMERY WATSON HARZA

Groundwater Site Map



3-D TopoQuads Copyright © 1999 Delorme Vermont, ME 04605 3 mi Scale: 1:600,000 Detail: 3:4 Datum: WGS84

	MW-2	MW-4
B	160	<0.5
T	<0.5	<0.5
E	77	<0.5
X	22	<0.5



J.F. BELL #1E, METER 94715
JUNE, 2001

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1

EPFS GROUNDWATER PITS

2001 ANNUAL GROUNDWATER REPORT

James F. Bell #1E

Meter Code 94715

SITE DETAILS

Legals Twn: 30N Rng: 13W Sec: 10 UNIT: P
NMOCD Haz Ranking 40 Land Type: Federal Operator: Amoco Production Company

PREVIOUS ACTIVITIES

Site Assessment: Mar-94 Excavation Apr-94 Soil Boring: Oct-95 Monitor Well: Oct-95
Geoprobe: NA Additional MWs: Jun-99 Downgradient MW's: Nov-95 Replace MW: NA
PSH Removal Initiated: Jul-97 ORC Nutrient Injection NA Re-Excavation: NA
Quarterly Initiated NA Annual Initiated Oct-00 Quarterly Resumed: NA

2001 ACTIVITY

Groundwater Monitoring - Groundwater samples were collected from MW-2 and MW-4 in June of 2001.

Phase Separated Hydrocarbons (PSH) Measurements - PSH thickness was monitored throughout 2001. PSH in MW-1 was 181.81 cumulative gallons for 2001. PSH in MW-3 was 31.5 cumulative gallons for 2001.

Specific gravity - A sample was analyzed for Specific Gravity on September 4, 2001 and the result was 0.773 g/cc.

SUMMARY TABLES AND GRAPHS

Groundwater analytical data are presented in Table 1 BTEX and the PSH recovery data are presented in the Product Removal Table. Copies of the laboratory data sheets and associated quality assurance/quality control data are presented as Attachment 1. Included are BTEX Data graphs for MW-2 through -4 and Free Product Recovery graphs for MW-1 and -3

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

The PSH removed from the monitor wells MW-1 and MW-3 were disposed of at the Kutz Separator in Bloomfield, New Mexico.

EPFS GROUNDWATER PITS

2001 ANNUAL GROUNDWATER REPORT

James F. Bell #1E

Meter Code: 94715

ISOCONCENTRATION MAPS

Isoconcentration maps were not generated at this site, because of the presence of PSH.

CONCLUSIONS

Phase separated hydrocarbons recovered at this site in 2001 totaled 213.31 gallons from MW-1 and MW-3. Cumulative phase separated hydrocarbons recovered at this site total 613.21 gallons from MW-1 and MW-3.

Benzene concentrations in MW-2 were 160 ppb benzene in 2001 and less than analytical laboratory detection limits for MW-4.

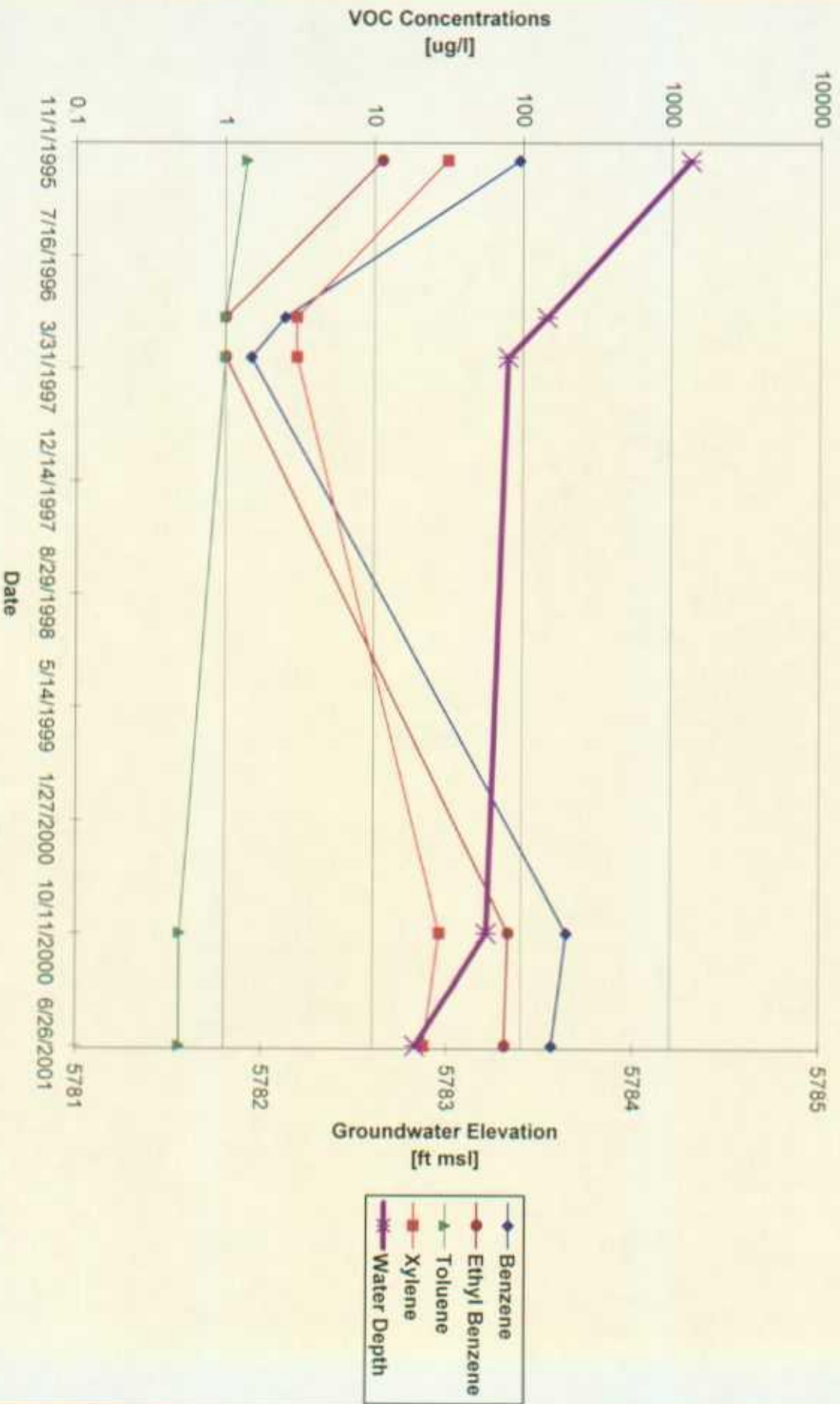
RECOMMENDATIONS

- > EPFS will conduct a review of site activities and data to evaluate the potential for continuing releases or unidentified sources of free product.
- > Monitor and remove product from MW-1 and MW-3, as needed.
- > Following product recovery, sample MW-1, MW-2, and MW-3 annually until BTEX constituents fall below NMWQCC standards, then sample quarterly for closure.
- > Drop MW-4 from the sampling program until time of closure based on <1 ppb hydrocarbons in four samples collected since December 1996.

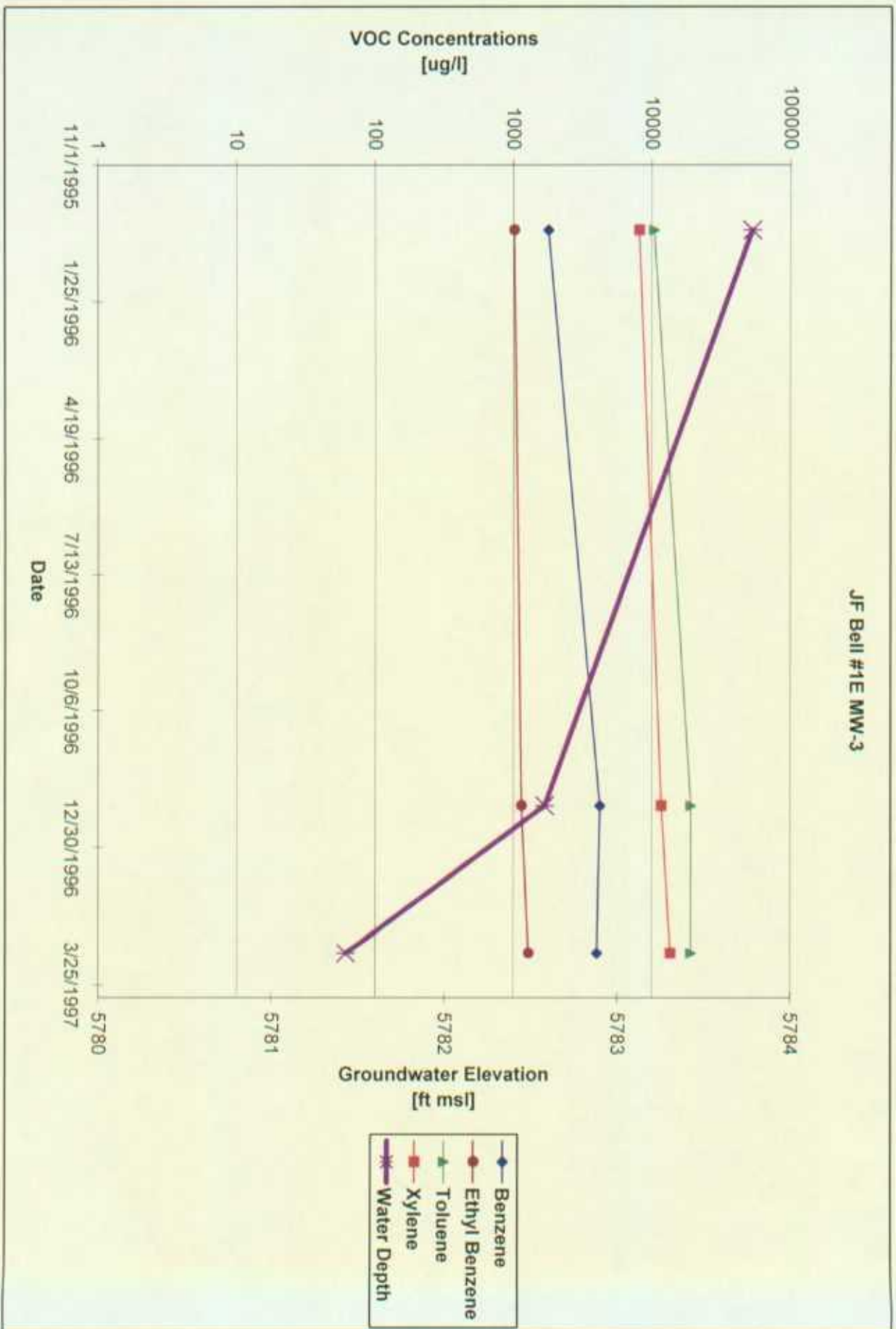
Table 1 BTEX
JF Bell #1E

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)
JFB0106	94715	James F. Bell #1E	6/25/2001	2	160	77	< 0.5	22	26.79	5782.83
JFB0106	94715	James F. Bell #1E	6/25/2001	4	< 0.5	< 0.5	< 0.5	< 0.5	26.93	5782.78

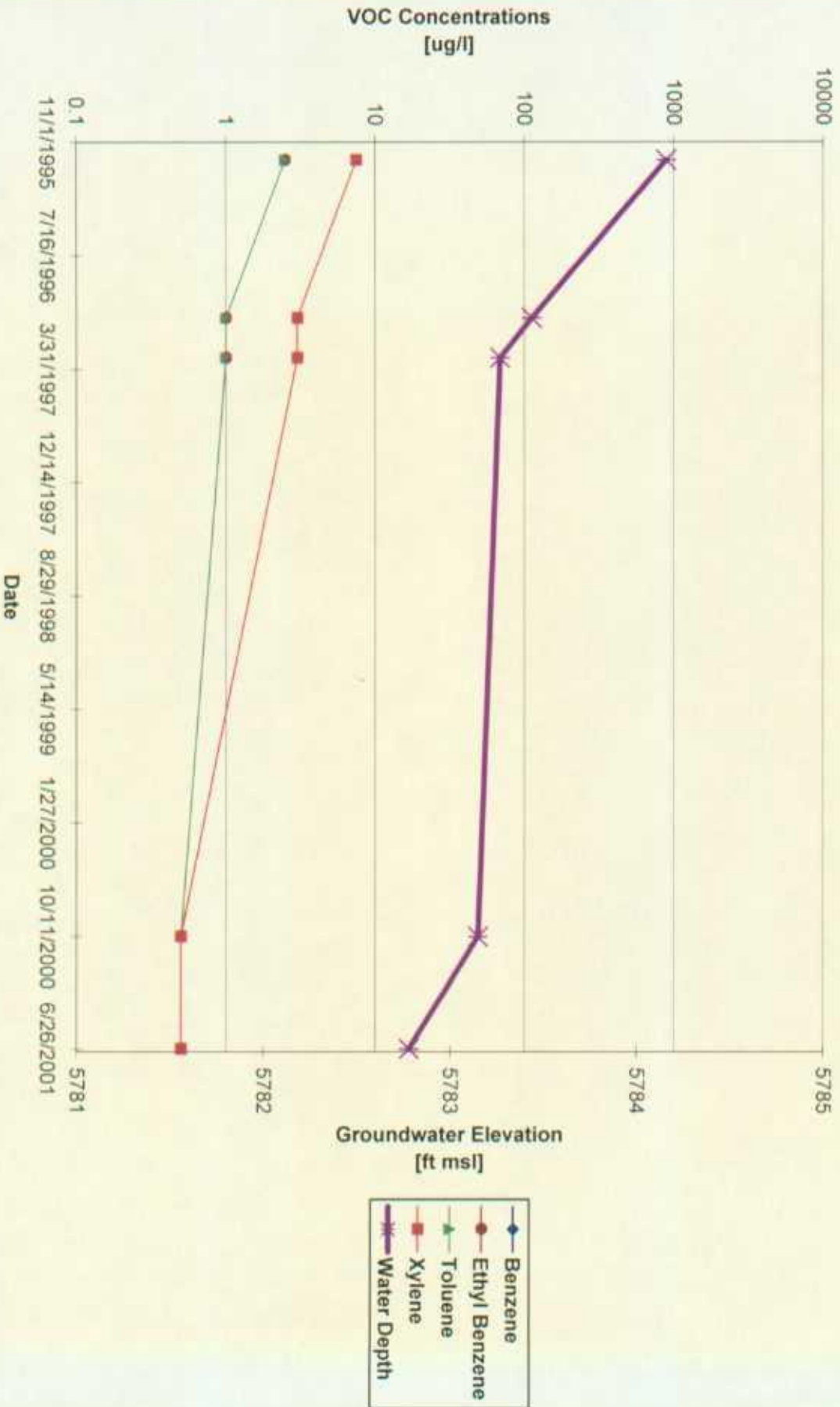
JF Bell #1E MW-2



JF Bell #1E MW-3



JF Bell #1E MW-4



Product Removal Table James F. Bell #1E

Meter Line	Site Name	MW#	Date	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Volume Removed (Gallons)	Cumulative Total (Gallons)
94715	James F. Bell #1E	1	1/16/01				11.861	443.26
94715	James F. Bell #1E	1	1/24/01				7.27	450.53
94715	James F. Bell #1E	1	1/31/01				5.93	456.46
94715	James F. Bell #1E	1	2/5/01	0	0	0	0	456.46
94715	James F. Bell #1E	1	2/8/01				3.25	459.71
94715	James F. Bell #1E	1	2/16/01				5.48	465.19
94715	James F. Bell #1E	1	2/26/01	27.61	29.06	1.45	1	466.19
94715	James F. Bell #1E	1	3/14/01	27.49	29.6	2.11	0	466.19
94715	James F. Bell #1E	1	4/6/01	27.67	29.08	1.41	5.93	472.12
94715	James F. Bell #1E	1	6/5/01				20.85	492.97
94715	James F. Bell #1E	1	6/14/01				15.5	508.47
94715	James F. Bell #1E	1	6/22/01	28.1	29.57		7	515.47
94715	James F. Bell #1E	1	6/28/01				5	520.47
94715	James F. Bell #1E	1	7/6/01				5	525.47
94715	James F. Bell #1E	1	7/11/01	27.95	28.95	1	0	525.47
94715	James F. Bell #1E	1	7/20/01				9	534.47
94715	James F. Bell #1E	1	7/26/01	28.21	29.51		5	539.47
94715	James F. Bell #1E	1	8/2/01				5.4	544.87
94715	James F. Bell #1E	1	8/8/01				3.25	548.12
94715	James F. Bell #1E	1	8/16/01	28.40	28.49	0.09	7	555.12
94715	James F. Bell #1E	1	8/20/01				3.4	558.52
94715	James F. Bell #1E	1	8/31/01				6.3	564.82
94715	James F. Bell #1E	1	9/6/01	28.41	28.46	0.05	3.8	568.62
94715	James F. Bell #1E	1	9/17/01	28.19	28.46	0.27	5.36	573.98
94715	James F. Bell #1E	1	9/26/01				5.17	579.15
94715	James F. Bell #1E	1	10/3/01				2.7	581.85
94715	James F. Bell #1E	1	10/11/01				2.7	584.55
94715	James F. Bell #1E	1	12/4/01	28.20	28.50	0.3	19.13	603.68
94715	James F. Bell #1E	1	12/13/01				2.7	606.38
94715	James F. Bell #1E	1	12/21/01				1.34	607.72
94715	James F. Bell #1E	1	12/28/01				3	610.72
94715	James F. Bell #1E	1	1/4/02				2.49	613.21
94715	James F. Bell #1E	3	3/12/01	27.84	29.18	1.34	1	1.00
94715	James F. Bell #1E	3	4/6/01	27.86	29.27	1.41	1	2.00

No product removed from MW-2 and MW-4 for 2001. MW-1 has a pump installed for product removal.

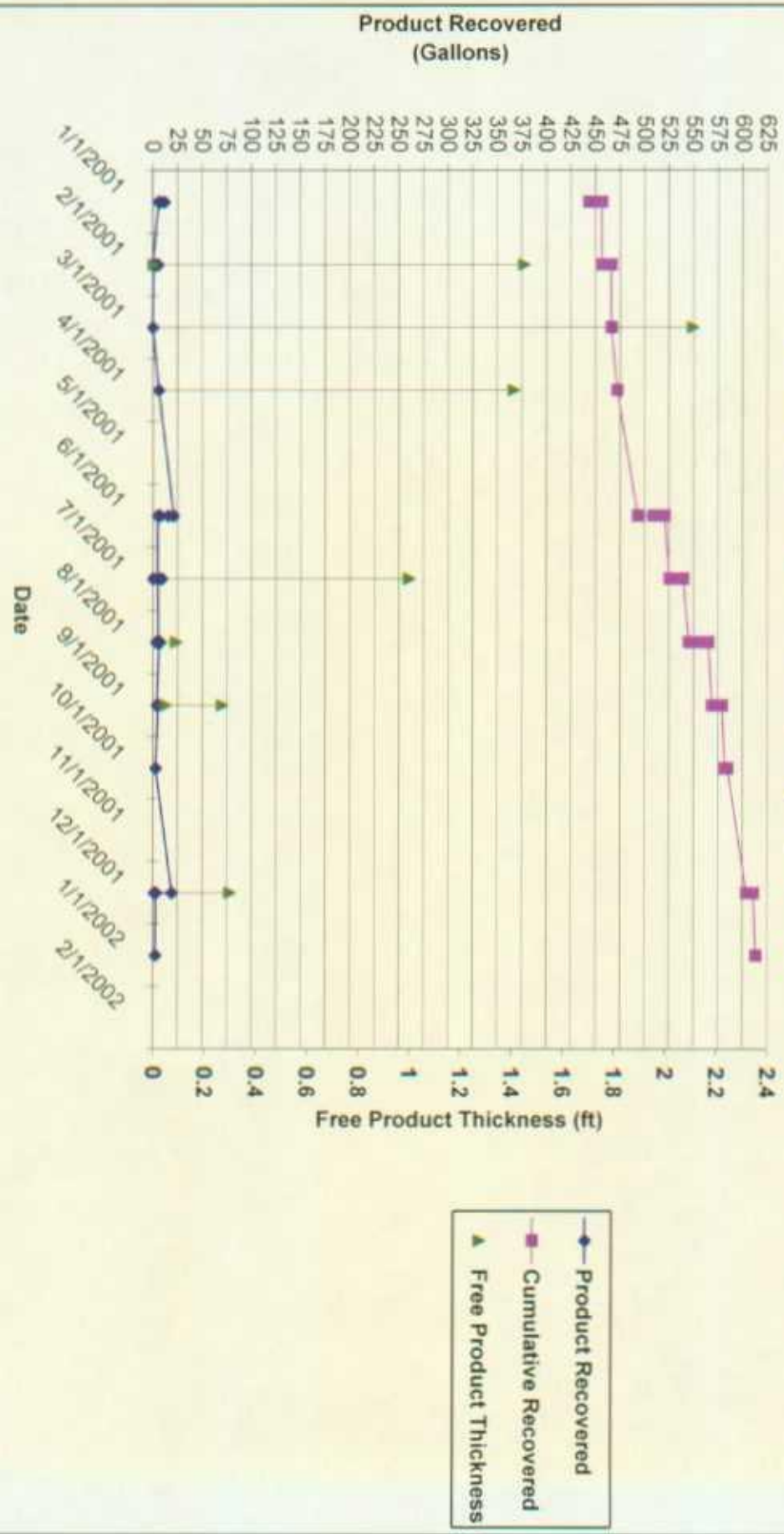
Product Removal Table
James F. Bell #1E

Meter Line	Site Name	MW#	Date	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Volume Removed (Gallons)	Cumulative Total (Gallons)
94715	James F. Bell #1E	3	6/5/01	28.06	29.48	1.42	1	3.00
94715	James F. Bell #1E	3	6/14/01	27.98	29.41	1.43	1.25	4.25
94715	James F. Bell #1E	3	6/22/01			1.42	1	5.25
94715	James F. Bell #1E	3	6/28/01	28.15	29.57	1.42	1.25	6.50
94715	James F. Bell #1E	3	7/6/01	28.06	29.41	1.35	1.25	7.75
94715	James F. Bell #1E	3	7/11/01	28.26	29.61	1.35	1.25	9.00
94715	James F. Bell #1E	3	7/20/01	28.13	29.43	0.27	1.25	10.25
94715	James F. Bell #1E	3	7/26/01			1.25	1.25	11.50
94715	James F. Bell #1E	3	8/2/01	28.22	29.5	1.28	1.25	12.75
94715	James F. Bell #1E	3	8/8/01	28.16	29.4	1.24	1.25	14.00
94715	James F. Bell #1E	3	8/16/01	28.21	29.46	1.25	1.25	15.25
94715	James F. Bell #1E	3	8/20/01	28.31	29.61	1.3	1.25	16.50
94715	James F. Bell #1E	3	8/31/01	28.17	29.47	1.3	1.25	17.75
94715	James F. Bell #1E	3	9/6/01	28.31	29.62	1.31	1.25	19.00
94715	James F. Bell #1E	3	9/17/01	28.34	29.62	1.28	1.25	20.25
94715	James F. Bell #1E	3	9/25/01	28.22	29.48	1.26	1.25	21.50
94715	James F. Bell #1E	3	10/3/01	28.25	29.47	1.21	1.25	22.75
94715	James F. Bell #1E	3	10/11/01	28.23	29.50	1.27	1.25	24.00
94715	James F. Bell #1E	3	12/4/01	28.55	29.89	0.34	1.25	25.25
94715	James F. Bell #1E	3	12/13/01	28.54	29.89	0.35	1.25	26.50
94715	James F. Bell #1E	3	12/13/01	28.54	29.89	0.35	1.25	27.75
94715	James F. Bell #1E	3	12/21/01	28.36	29.63	1.21	1.25	29.00
94715	James F. Bell #1E	3	12/28/01	28.43	29.68	1.25	1.25	30.25
94715	James F. Bell #1E	3	1/4/02	28.39	29.63	1.36	1.25	31.50

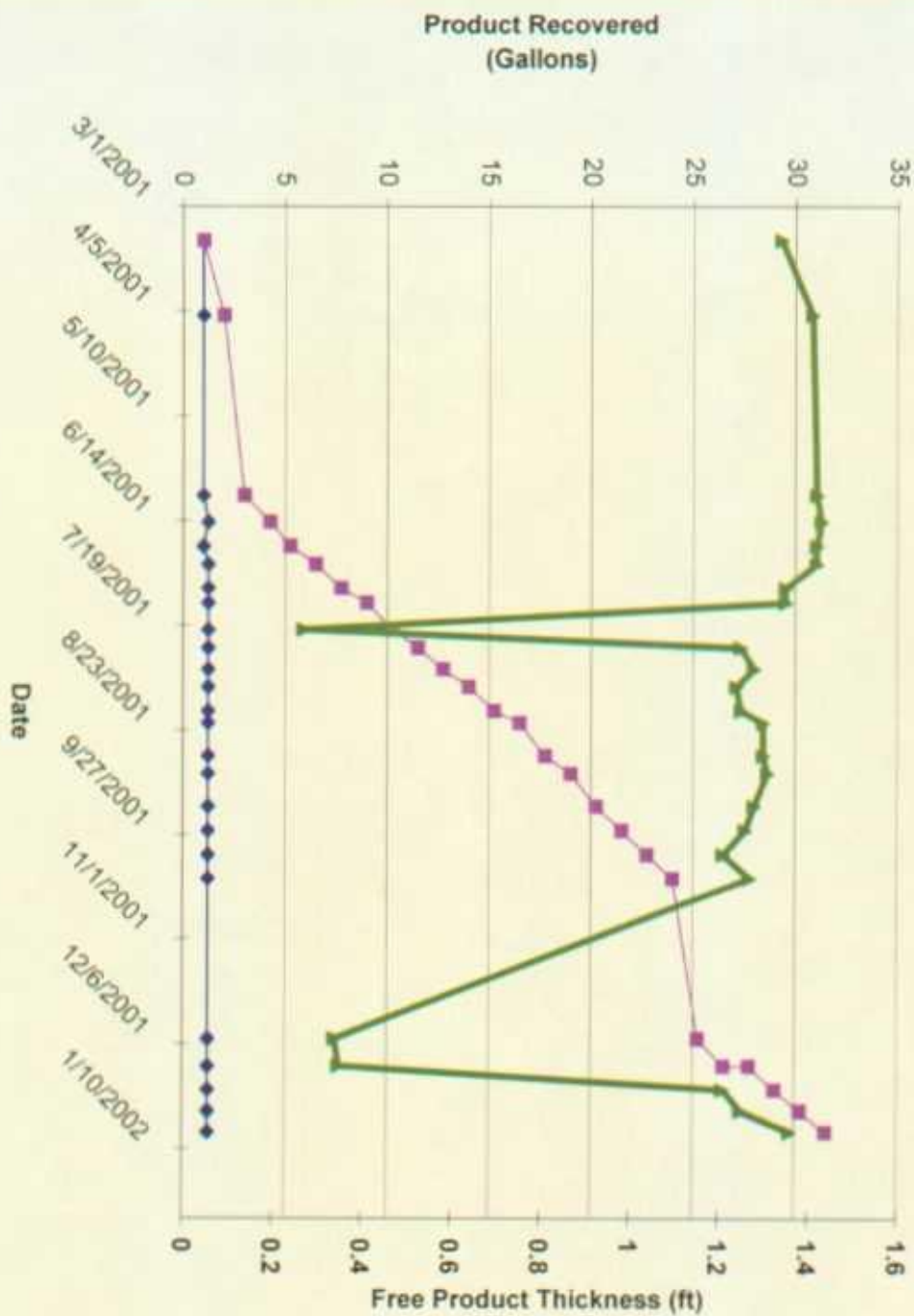
No product removed from MW-2 and MW-4 for 2001. MW-1 has a pump installed for product removal.

Free Product Recovery
JF Bell #1E MW-1
Pump Installed

Note: Δ Free Product Thickness measurements were not taken for all dates, because of installed pump.



Free Product Recovery
JF Bell #1E MW-3
Skimmer Installed



ATTACHMENT 1

2001 GROUNDWATER ANALYTICAL

amec

Project Name: EpFS Gw project

Project Mngr: LISA brinn

Client Co.: El Paso Field Services

Site Name: J.F. Bell #1E (94715)

Task: 3

Date: 1 - 4 - 02

[illegible]

Comments: MW1 Runtime 1-10 2.65 Recovery .13 Converted to gal. = 2,487
NO water Recovered in either MW1 or MW3

Signature: Christ May Date: 1 4 62

amec

Project No.: 15/7000/21

Task: 5

Date: 12-28-61

[illegible]

Comments/MW 1 Run Time 1-10 Drum Level 2.64 N/O water Recovered MW 3
NO water Recovered

Date: 12-28-01

amec

Project No.: 1517 000

Task:

Date: 12-21-01

Date: 12-21-01

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

ML#3 NO water Recovered ML#1 NO water Recovered

Signature: Chris A. May Date: 12-21-01

Date: 12-21-01

amec

Project No.: 15/7000/21

Task: 3

Date: 2-3-01

Site Name: J.F. Bell #1E(94715)

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

Signature: Chris M... Date: 12-13-01

amec

Project No.: 15/17 000 121

Task: _____

Date: 12-4-01

[illegible]

Comments: Min/Run Time 5-00 Draw Level 1.77 Recover 0.91 CONLOC 1-15 19.33G
Min 3 Draw Level 1.05 and 10 feet 11.00G

Signature: [Signature] Date: 2-4-01



Project No. 6169

Cost Code

Date 10-11-01

[illegible]

Date 10-11-01

1.9.13
0.765

Date 9-26-01

Date 9-17-01

Date 9-6-01

Date 8-31-01

Date 7-20-61

Date 8-16-01

Date 8-7-01

Date 8-2-01

Date 7-26-01

Date 7-26-01

Date 7-20-01

Date 7 11 01

Date 7-6-01



Well Development and Purging Data

Project No. G169 Development ☐ Purging ☒ Page 1 of 1

Task No. 2 Site Name/Identification JF Bell #1E (94715) Site Address Rural San Juan CO.

Well No. Mur 2 Client/Project Name El Paso Field Services EPCS Remediation project Project Manager Lisa Ann

Development Criteria
#3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Water Volume Calculation
Initial Depth of Well (feet) 34.041
Initial Depth to Water (feet) 26.29
Height of Water Column in Well (feet) 7.25
Diameter (inches): Well 4" Gravel Pack _____

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

Water Disposal
☐ Other _____

Item	Water Volume in Well Cubic Feet	Gallons	Gallons to be Removed
Well Casing	2.25	4.738	14.19
Gravel Pack			
Drilling Fluids			
Total			14.19

Sampling Activities
Type of Container VOA No. of Containers 2
Parameters Sampled For BTEX

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	Bailer				Increment	Cumulative	Increment	Cumulative					
05/01/2006	1530		X				3	3			23.2	6.75	0480		Cloudy obs
	1535		X				3	6			19.1	6.94	04150		"
	1541		X				3	9			18.2	6.82	0440		"
	1546		X			3054	3	12			17.3	6.84	0430		"
							3	15			17.4	6.81	0440		no change

Circle the date and time that the development criteria are met.
Comments Sampled for BTEX 1600
Developer's Signature [Signature] Date 05-01-06 Duration 1 hr

Page 1 of 1

Client/Project Name	El Paso Field Services EPI's Remediation project
Project Manager	List with

Other _____

Serial No. (if applicable) Hydac

Instruments

☒ PH Meter

☐ DO Monitor

☒ Conductivity Meter

☒ Temperature Meter

Hydac

Hydac

Hydac

☐ Other

Sampling Activities	
Type of Container	<u>VOA</u> No. of Containers <u>2</u>
Parameters Sampled For	<u>STEx</u>

Water Disposal
Kew-Tz Separator Blumfield A/C

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 (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
6-25-01	1613		X				3	3			21.3	7.0	0540		Clear No obs.
	1616		x				3	6			18.4	7.3	0530	"	"
	1621		x				3	9			18.1	7.0	0520	"	"
	1627		x				3	12			18.1	7.0	0530	"	"
	1631		X			31.80	3	15			17.6	7.0	0530		No Change

SHADED AREAS ARE FOR LAB USE ONLY.

PLI Accession #

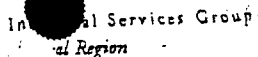
DISTRIBUTION: White - PLI, Canary - Original

Date 6-25-01

Date 6 22 01

Date 6-5-01

Date 6-14-01



Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell # 1E
Date:	4-6-01
MW:	3
Depth to Product:	27.86
Depth to Water:	29.27
Product Thickness:	1.41
Volume Removed:	1 gal.
Comments:	no water recovered

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell # 1E
Date:	4-6-01
MW:	1
Depth to Product:	27.67
Depth to Water:	29.08
Product Thickness:	1.41
Volume Removed:	5.93 gal
Comments:	Run Time 20-42 Solenoid NOT operating properly Replaced empty BOTTLE with full one noticed Supply Line going into Control Box Leaking when Location Vandalized Damaged Fitting Repaired, System operating normal upon Leaving Location

Product Recovery

Meter/Line #:

94715

Location/Line Name:

J.F. Bell # 1E

Date:

3-14-01

MW:

1

Depth to Product:

27 44

Depth to Water:

29 60

Product Thickness:

2.11

Volume Removed:

Comments:

Repaired pump p-T system
Back on Line

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell #1E
Date:	3-12-01
MW:	3
Depth to Product:	27.84
Depth to Water:	29.18
Product Thickness:	1.34
Volume Removed:	1 gal.
Comments:	no water recovered

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell #1 E
Date:	2-5-01
MW:	01
Depth to Product:	
Depth to Water:	
Product Thickness:	
Volume Removed:	0
Comments:	Run Time 1 hr

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell #1E
Date:	2-26-01
MW:	01
Depth to Product:	27.61
Depth to Water:	29.06
Product Thickness:	1.45
Volume Removed:	1 GAL
Comments:	

Run Time 1-30

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.E. Bell #1E
Date:	2-16-01
MW:	01
Depth to Product:	
Depth to Water:	
Product Thickness:	
Volume Removed:	5.48 gal.
Comments:	Runtime 1-12 BOTTLE empty Refilled Turned system Back on installed secondary containment

Product Recovery

Meter/Line #:	94715
Location/Line Name:	JF. BELL # 1E
Date:	01-31-01
MW:	01
Depth to Product:	
Depth to Water:	
Product Thickness:	
Volume Removed:	5.93 GAL.
Comments:	1-10 Time

Product Recovery

Meter/Line #:	94715
Location/Line Name:	JF Bell #1E
Date:	012401
MW:	01
Depth to Product:	
Depth to Water:	
Product Thickness:	
Volume Removed:	7.27 GAL

Comments:

Run Time 1-20

Product Recovery

Meter/Line #:	94715
Location/Line Name:	J.F. Bell #1E
Date:	01-16-01
MW:	01
Depth to Product:	
Depth to Water:	
Product Thickness:	
Volume Removed:	11.861 Gal
Comments:	Timer 1-00 Recovered 11.861 Gal. Product



Date: 9/11/01
Client: Golden Environmental Management
Lab ID: 0301W03833 - 3843
Project: G169

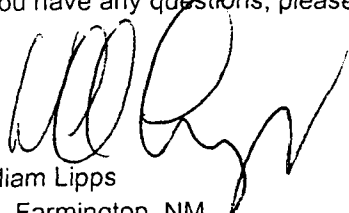
Dear Client:

The samples were received for analysis at Inter-Mountain Laboratories (IML), Farmington, New Mexico. Enclosed are the results of these analyses.

Comment:

Analytical results were obtained by approved methods. Sample analyses were obtained within the method specific holding times. Practical Quantitation Limits (PQL's) are based on method requirements, and any dilutions necessary to maintain proper method response without matrix interference.

If you have any questions, please call me at (505) 326-4737.



William Lipps
IML-Farmington, NM

Analytical Report

Client: Golden Environmental Management
Project: G169
IML Set: 0301W03833

Page 1 of 1

Date Received: 09/06/01**Date Reported:** 09/11/01

Lab Id	Sample Id	Date Sampled	Specific Gravity g/cc
0301W03833	LIN-0109-MW1	09/04/01	0.811
0301W03834	CAN-0109-MW1	09/04/01	0.736
0301W03835	GAL-0109-MW1	09/04/01	0.833
0301W03836	JFB-0109-MW3	09/04/01	0.773
0301W03837	072-0109-MW2	09/04/01	0.751
0301W03838	MIL-0109-MW1	09/04/01	0.754

Reviewed By:



Analytical Report

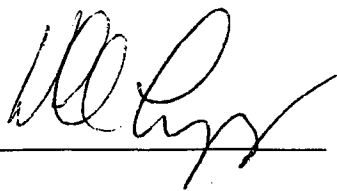
Client: Golden Environmental Management
Project: G169
IML Set: 0301W03839

Page 1 of 1

Date Received: 09/06/01
Date Reported: 09/11/01

Lab Id	Sample Id	Date Sampled	Specific Gravity g/cc
0301W03839	JOH-0109-MW1	09/05/01	0.750
0301W03839D	JOH-0109-MW1	09/05/01	0.751
0301W03840	JON-0109-MW1	09/05/01	0.757
0301W03841	KNI-0109-MW1	09/05/01	0.790
0301W03842	STA-0109-MW3	09/05/01	0.741
0301W03843	JEN-0109-MW1	09/05/01	0.761

Reviewed By:



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 9-6-01 PAGE: 1 OF 2

PROJECT MANAGER: LISA WILSON

COMPANY: GOLDEN ENVIRONMENTAL MGMT.
ADDRESS: 706 S. - JAMES BLVD. STATE D
FARMINGTON NM. 87401
PHONE: (505) 566-9116
FAX: (505) 566-7120
BILL TO: SCOTT POPE
COMPANY: El Paso Field Services
ADDRESS: 601 RALLY AVE
FARMINGTON NM. 87401

ANALYSIS REQUEST

COMPANY:	ADDRESS:	PHONE:	FAX:	BILL TO:	COMPANY:	ADDRESS:	SAMPLE ID	DATE	TIME	MATRIX	LAB ID.
GOLDEN ENVIRONMENTAL MGMT.	706 S. JAMES BLVD. SUITE D	FARMINGTON NM. 87401	(505) 566-9114	SCOTT POPE	GP PASS FIELD SERVICES	604 RALLY AVE	JOH-0109-MW 1	9-5-01	0700	LIQ. HC	
							JOH-0109-MW 1	9-5-01	1000	LIQ. HC	
							RNT-0109-MW 1	9-5-01	1100	LIQ. HC	
							STA-0109-MW 3	9-5-01	1200	LIQ. HC	
							JEN-0109-MW 1	9-5-01	1300	LIQ. HC	

SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT INFORMATION

PROJ. NO.:	5169
PROJ. NAME:	EPDS Remediation Project
P.O. NO.:	

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/CE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

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

CERTIFICATION REQUIRED: ☐ NM ☐ SOWA ☐ OTHER

METHANOL PRESERVATION ☐

RELINQUISHED BY: 1.

Signature: Chris May Time: 0711
Printed Name: Chris May Date: 9-6-01
Company: _____

RECEIVED BY: 1.

Signature: [Signature] Time: 5:10
Printed Name: Robert Armstrong Date: 10/21
Company: _____

Pinnacle Laboratories Inc.

11/10/98 PLI Inc.: Pinnacle Laboratories, Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413 • E-mail: PIN_LAB@WORLDNET.ATT.NET

PLEASE FILL THIS FORM IN COMPLETELY.

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

PLI Accession #:

DATE: 7-6-01 PAGE: 1 OF 1

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PROJECT MANAGER: Lisa Winn			
COMPANY:	GOLDEN Environmental Mgmt.		
ADDRESS:	901 San Jacinto Blvd. Suite D		
PHONE:	Farmington NM. 87410		
FAX:	505-566-9116		
BILL TO:	SCOTT POPE		
COMPANY:	EL Paso Field Services		
ADDRESS:	604 Kelly Ave		
	Farmington NM. 87410		

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
WIN-0109-MW1	9-4-01	1100	Lg HC	
CAN-0109-MW1	9-4-01	1300	Lg HC	
GAL-0109-MW1	9-4-01	1400	Lg HC	
JFB 009-MW3	9-4-01	1500	Lg HC	
DD-0109-MW2	9-4-01	1600	Lg HC	
MIL-0109-MW1	9-4-01	1700	Lg HC	

ANALYSIS REQUEST		RELINQUISHED BY:	
504.1 EDB □ / DBCP □	8260 (TCL) Volatile Organics	Signature:	Time:
	8260 (Full) Volatile Organics	<i>Chris Adams</i>	0911
	8260 (CUST) Volatile Organics	Printed Name:	Date:
	8260 (Landfill) Volatile Organics	<i>Chris Adams</i>	9-6-01
	Pesticides / PCB (608/8081/8082)	Company:	
	Herbicides (615/8151)	See reverse side (Force Majeure)	
	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)		
	NUMBER OF CONTAINERS		2

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS	
PROJ NO:	PROJ NAME:	(RUSH) ☐ 124hr ☐ 48hr ☐ 72hr ☐ 1 WEEK	(NORMAL) ☒
6169	EL PASO Environmental		
	P.O. NO.:	CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER	
	SHIPPED VIA:	METHANOL PRESERVATION ☐	
SAMPLE RECEIPT		COMMENTS: FIXED FEE ☐	
NO. CONTAINERS	Y/N/NA	LINDRITH B#24 (94967)	
CUSTODY SEALS		CANADA MESA #2 (97610)	
RECEIVED INTACT		GALLAGHER #134E (95-605)	
BLUE ICE/ICE		JF Bell #1E (9475)	
		K-27 LD (LD 072)	
		MILES FED #1A (94810)	

RECEIVED BY: (LAB)		RECEIVED BY:	
Signature:	Time:	Signature:	Time:
		<i>Chris Adams</i>	9-6-01
		Printed Name:	Date:
		Company:	
		See reverse side (Force Majeure)	

RECEIVED BY: (LAB)		RECEIVED BY:	
Signature:	Time:	Signature:	Time:
		<i>Chris Adams</i>	9-6-01
		Printed Name:	Date:
		Company:	
		See reverse side (Force Majeure)	

PINNACLE
LABORATORIES

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

Pinnacle Lab ID number 106128
July 03, 2001

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

EL PASO FIELD SERVICES
614 RIELLY AVENUE
FARMINGTON, NM 87401

Project Name EPFS REMEDIATION PROJ.
Project Number 6169

Attention: LISA WINN/SCOTT POPE

JF BELL #1 94715

On 06/27/01 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: ft

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	: 106128
PROJECT #	: 6169	DATE RECEIVED	: 06/27/01
PROJECT NAME	: EPFS REMEDIATION PROJ.	REPORT DATE	: 07/03/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
106128 - 01	JFB-0106-MW2	AQUEOUS	06/25/01
106128 - 02	JFB-0106-MW4	AQUEOUS	06/25/01
106128 - 03	TRIP BLANK	AQUEOUS	06/18/01

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

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT.
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJ.

PINNACLE I.D.: 106128

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	JFB-0106-MW2	AQUEOUS	06/25/01	NA	07/02/01	1
02	JFB-0106-MW4	AQUEOUS	06/25/01	NA	07/02/01	1
03	TRIP BLANK	AQUEOUS	06/18/01	NA	07/02/01	1

PARAMETER	DET. LIMIT	UNITS	JFB-0106-MW2	JFB-0106-MW4	TRIP BLANK
BENZENE	0.5	UG/L	160	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	77	< 0.5	< 0.5
AL XYLENES	0.5	UG/L	22	< 0.5	< 0.5

SURROGATE:

BROMOFLUOROBENZENE (%)

125**

93

94

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

**Surrogate out of range due to matrix interference.

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

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 106128
BLANK I. D.	: 070201	DATE EXTRACTED	: NA
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 07/02/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJ.		

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

SURROGATE:

BROMOFLUOROBENZENE (%)

96

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

I/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.	: 106128
MSMSD #	: 106128-02	DATE EXTRACTED	: NA
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 07/02/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJ.	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.7	99	19.1	96	3	(80 - 120)	20
TOLUENE	<0.5	20.0	21.1	106	20.8	104	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	22.2	111	21.8	109	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	66.3	111	65.5	109	1	(80 - 120)	20

CHEMIST NOTES:
N/A

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

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

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PROJECT MANAGER: Lisa Vinn				ANALYSIS REQUEST																											
COMPANY: GEM.																															
ADDRESS: 906 San Juan Blvd. Farmington N.M. 87401																															
PHONE: (505) 568-9116																															
FAX: (505) 566 9120																															
BILL TO: SCOTT pope																															
COMPANY: El Paso Field Services																															
ADDRESS: 614 Reilly Ave Farmington N.M. 87499																															
SAMPLE ID	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) □ 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 (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GCMS (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 OF CONTAINERS		
F.F.B - 0106-MW 2	6-25-01	1600	H ₂ O	01	X																										2
F.F.B. 0106 - MW 4	6-25-01	1640	H ₂ O	02	X																										2
Trip Blank	6-19-01	1350	H ₂ O	03	X																										1