

3R - 170

REPORTS

DATE:

2002

Certified Mail: #7001 1940 0002 1371 7676

February 28, 2003

RECEIVED

MAR 05 2003

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

RE: 2002 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 Annual Reports (Volumes 1, 2 and 3) by land type. Volume 1 contains Annual Reports for sites found on Federal land. Volume 2 contains Non Federal sites and Volume 3 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 and EPFS reiterates request for closure of this site. EPFS understands closure of groundwater sites on Navajo land falls under jurisdiction of the Navajo Nation Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

Three additional sites were submitted for closure in 2002. EPFS recently has received closure on the W.D. Heath B-5. Closure approval is pending on the D Loop Line Drip and Hammond # 41A. All of these sites are included in the 2002 Annual Report.

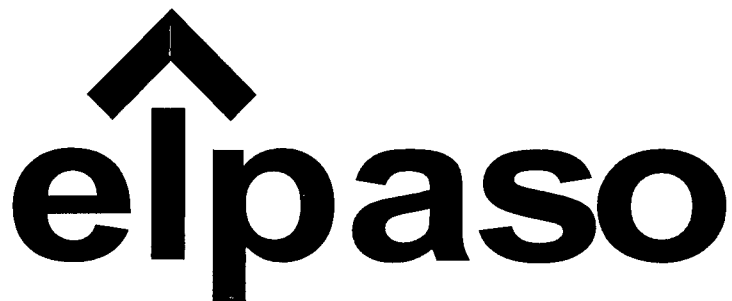
If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

Sincerely,



Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0002 1371 7669**
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), **Certified Mail # 7001 1940 0002 1371 7652**



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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

El Paso Field Services

**San Juan Basin Pit Program
Groundwater Sites Project**

**2002 Annual Report
Federal Sites (Volume 1)**

March 2003



MWH

10619 South Jordan Gateway, Suite 100
Salt Lake City, Utah 84095

EL PASO FIELD SERVICES ANNUAL GROUNDWATER REPORT

FEDERAL SITES VOLUME I

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
97213	Hamner #9	29N	09W	20	A
72890	Ohio C Government #3	28N	11W	26	P
LD169	D Loop Line Drip	28N	08W	33	I
LD174	LAT LD 40	28N	04W	13	H
89894	Hammond #41A	27N	08W	25	O
94810	Miles Fed 1A	26N	07W	5	F
LD072	K27 LD072	25N	06W	4	E
87640	Canada Mesa #2	24N	06W	24	I



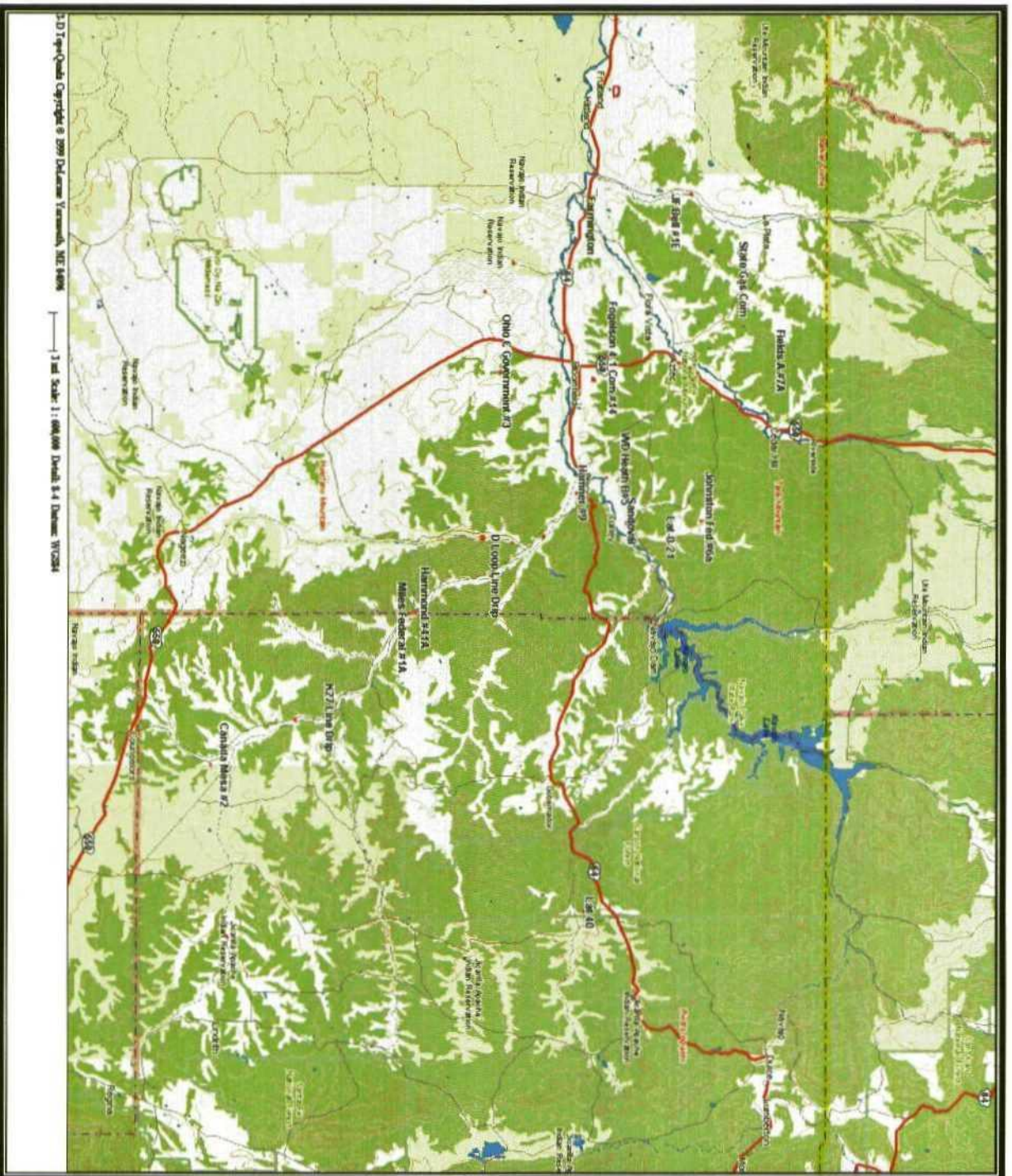
MWH

MONTGOMERY WATSON HARZA

ACRONYMS

B	Benzene
E	Ethylbenzene
EPFS	El Paso Field Services
ft	foot/feet
GWEL	groundwater elevation
ID	identifier
MW	Monitoring Well
PSH	Phase Separated Hydrocarbons
NMWQCC	New Mexico Water Quality Control Commission
T	Toluene
TOC	Top Of Casing
NE	not established
NS	not sampled
ORC	oxygen release compound
OCD	Oil Conservation Division
ppb	parts per billion
µg/L	micrograms per liter
X	Total Xylenes

Federal Groundwater Site Map



U.S. Geological Survey Copyright © 1999 Database Vermont, VT 4000
1:50,000 Scale 1:60,000 Datum NAD 83 Datum WGS84

EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT

Fields A#7A
Meter Code: 89961

SITE DETAILS

LEGAL DESCRIPTION: Twn: 32N Rng: 11W Sec: 34 Unit: E
NMOCD Haz Ranking: 40 **Land Type:** Federal **Operator:** Amoco Production Company

PREVIOUS ACTIVITIES

Site Assessment: 8/94 **Excavation:** 9/94 (70cy) **Soil Boring:** 7/95
Monitor Well: 7/95 **Geoprobe:** NA **Additional MWs:** 12/95
Downgradient MWs: 12/95 **Replace MW:** NA **Quarterly Initiated:** NA
ORC Nutrient Injection: NA **Re-Excavation:** NA **PSH Removal Initiated:** 8/97
Annual Initiated: 4/97 **Quarterly Resumed:** NA

SUMMARY OF 2002 ACTIVITIES

MW-1: Quarterly free-product recovery and water level monitoring was performed during 2002.

MW-2:

- Quarterly water level monitoring was performed during 2002.
- An annual groundwater sample was scheduled to be collected in April 2002, however there was insufficient water in the well to collect a sample.

MW-3:

- Quarterly water level monitoring was performed during 2002.
- An annual groundwater sample was scheduled to be collected in April 2002, however there was insufficient water in the well to collect a sample.

MW-4: Quarterly free-product recovery and water level monitoring was performed during 2002.

Site-Wide Activities: No other activities were performed at this site during 2002.

SUMMARY TABLES AND GRAPHS

- Historical analytical data and groundwater elevation data are presented graphically in Figures 5 through 8.
- Free-product recovery data is summarized in Table 1 and presented graphically in Figures 9 and 10.
- Field documentation is presented in Attachment 1.

SITE MAP

Site maps are attached as Figures 1 through 4.

**EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT**

**Fields A#7A
Meter Code: 89961**

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this site during 2002.

DISPOSITION OF GENERATED WASTES

All phase-separated hydrocarbons were disposed of at the EPFS Kutz Separator located in Bloomfield, New Mexico.

ISOCONCENTRATION MAPS

No isoconcentration maps were prepared for this site, however, the attached site maps present the potentiometric surface data collected during 2002.

CONCLUSIONS

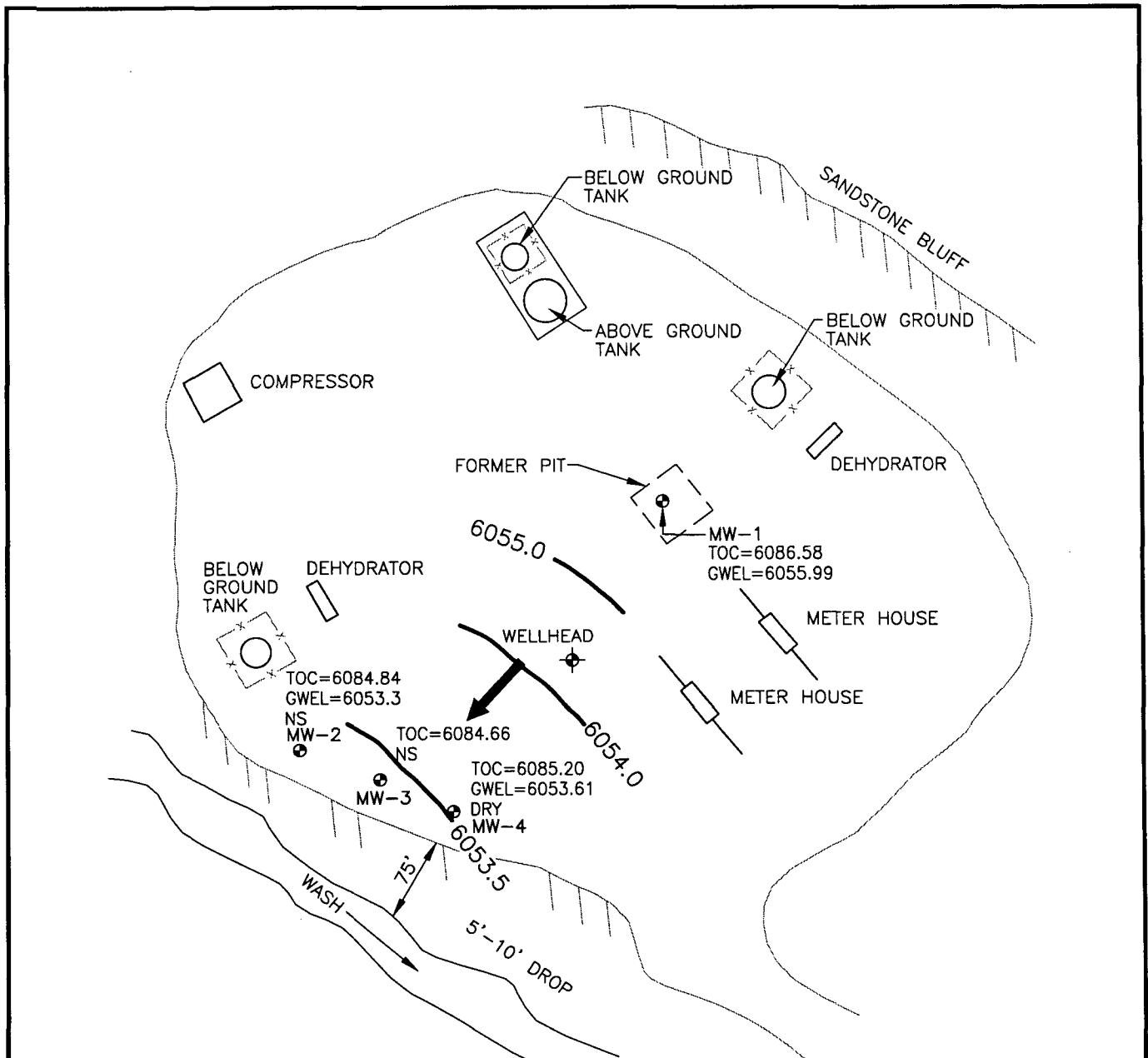
- The groundwater flow direction at this site trends to the west.
- Free-product recovery efforts at MW-1 resulted in removal of approximately 0.04 gallons of free-phase hydrocarbons bringing the cumulative total recovered to date to 12.34 gallons. Free-product in MW-1 was recoverable from January through March 2002, and was not detected in this well through the end of December 2002.
- Free-product recovery efforts at MW-4 resulted in removal of approximately 0.46 gallons of free-phase hydrocarbons bringing the cumulative total recovered to date to 1.36 gallons. Free-product in MW-4 was only recoverable from January to February 2002, and was not detected in this well through the end of December 2002.
- Annual groundwater samples were scheduled to be collected at MW-2 and MW-3 during April 2002. Both wells were unable to be sampled due to inadequate water, and have been essentially dry since May 2002.

EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT


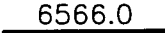

Fields A#7A
Meter Code: 89961

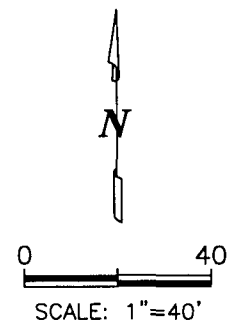
RECOMMENDATIONS

- EPFS recommends that the monitoring wells at this site be redeveloped in an attempt to increase both free-product and groundwater sample recovery.
- Assuming that the monitoring wells at this site respond to redevelopment, EPFS will continue to collect quarterly groundwater measurements and perform free-product recovery activities as necessary at MW-1 and MW-4.
- Assuming that the monitoring wells respond to redevelopment, EPFS will continue to collect quarterly groundwater level measurements and annual groundwater samples at MW-2 and MW-3.
- If free-product continues to be absent from MW-1 and MW-4, these wells will be sampled annually until the BTEX concentrations approach cleanup standards. These wells will then be scheduled for quarterly sampling until cleanup criteria have been achieved.



LEGEND

-  MW-1 Approximate Monitoring Well Location and Number
-  6566.0 Potentiometric Surface (Assumed Where Dashed)
-  Direction of Groundwater Flow (Estimated)
- GWEL Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
- NS Not Sampled
- TOC Top of Casing

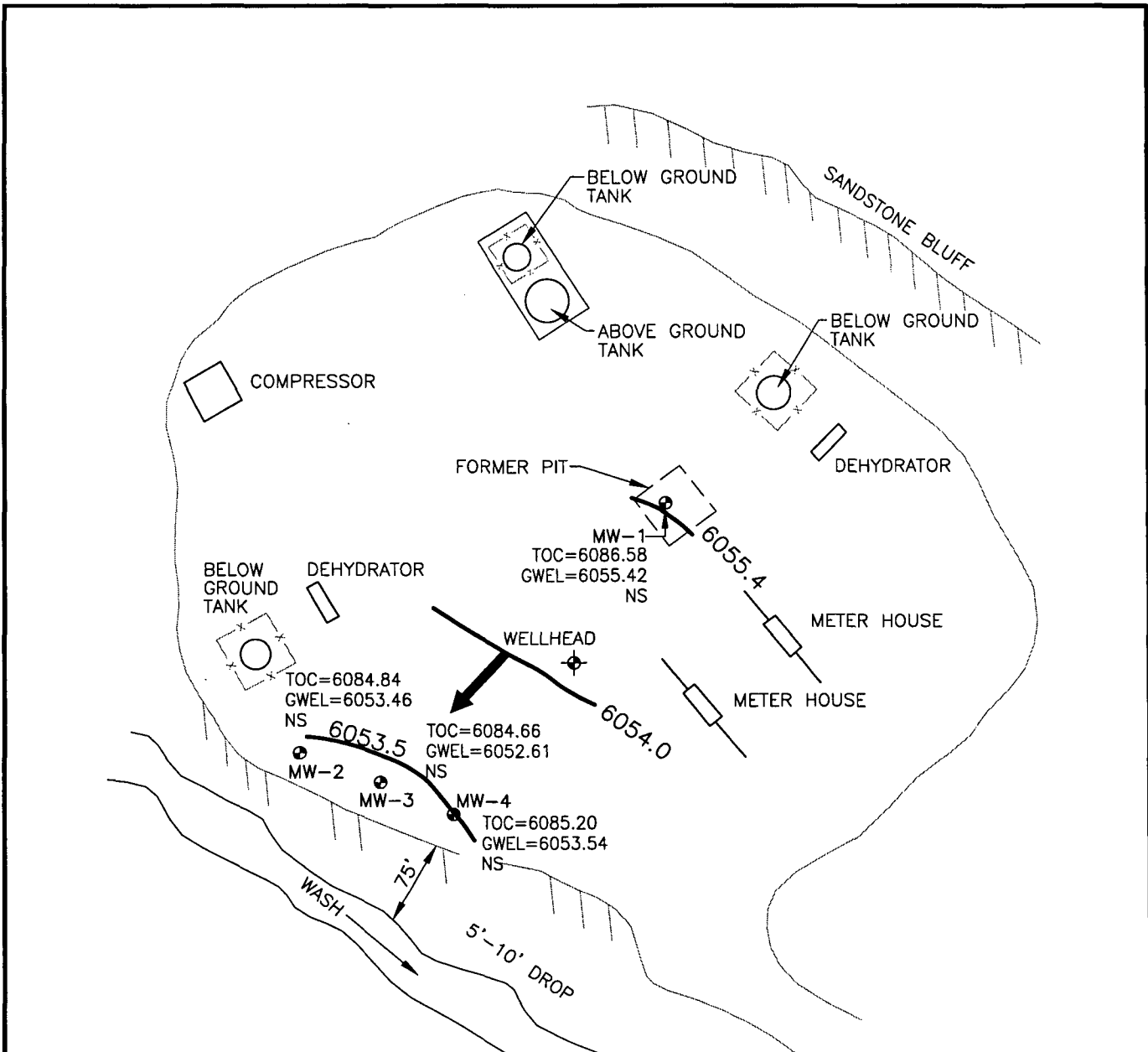


fieldsa7_02.dwg

FIELDS A #7A, METER 89961/97546
 JANUARY, 2002

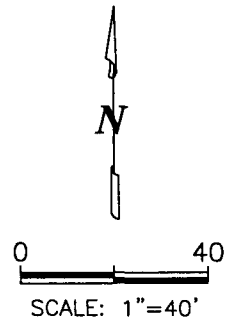
GROUNDWATER SITES
 EL PASO FIELD SERVICES

FIGURE 1



LEGEND

- MW-1 Approximate Monitoring Well Location and Number
- 6566.0 Potentiometric Surface (Assumed Where Dashed)
- ➔ Direction of Groundwater Flow (Estimated)
- GWEL Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
- NS Not Sampled
- TOC Top of Casing

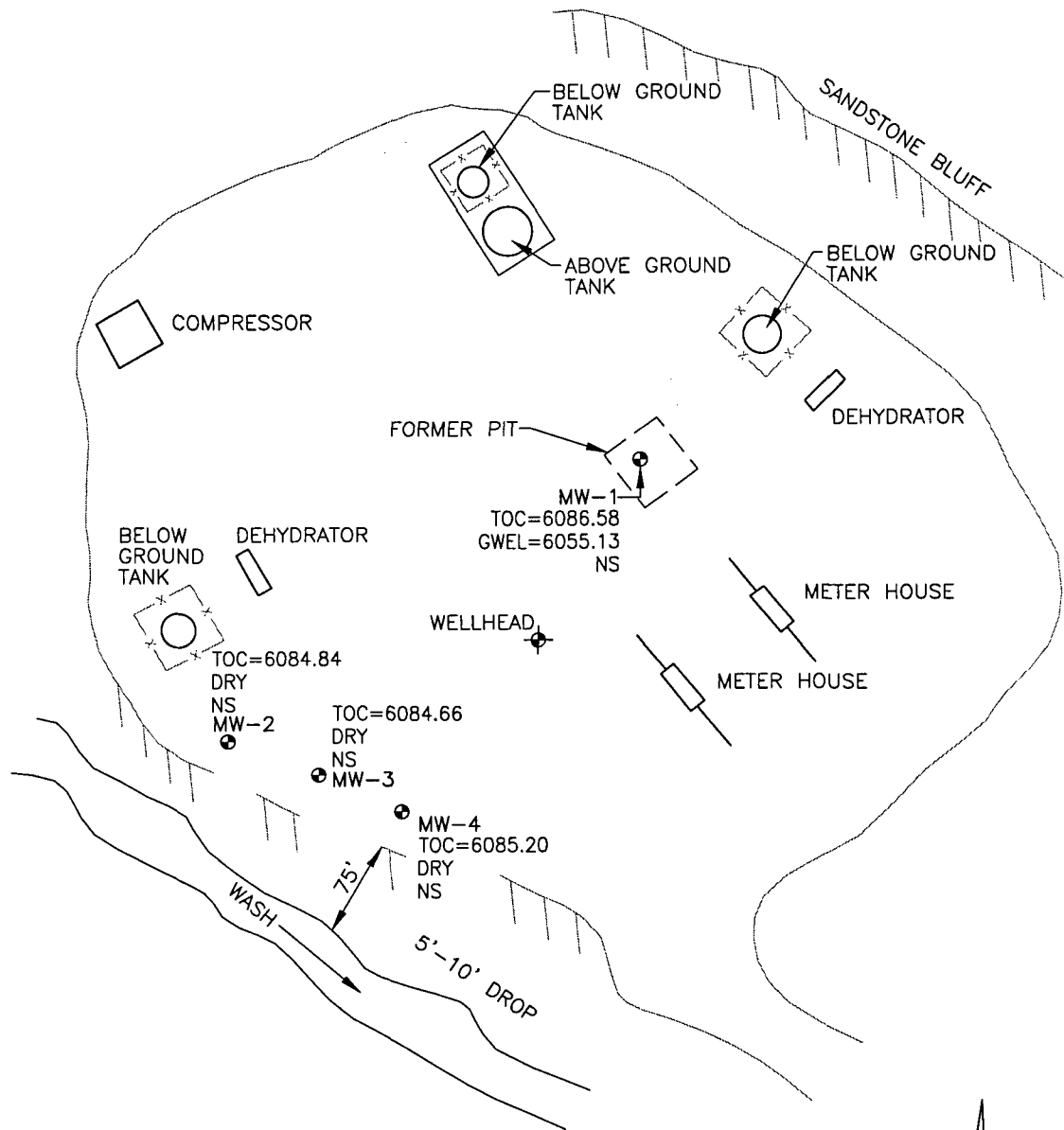


fields7_02.dwg

FIELDS A #7A, METER 89961/97546
MAY, 2002

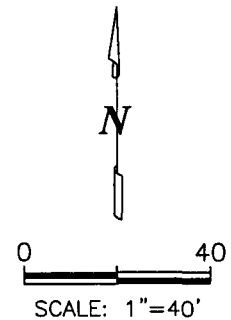
GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 2



LEGEND

- MW-1 Approximate Monitoring Well Location and Number
- GWEL Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
- NS Not Sampled
- TOC Top of Casing

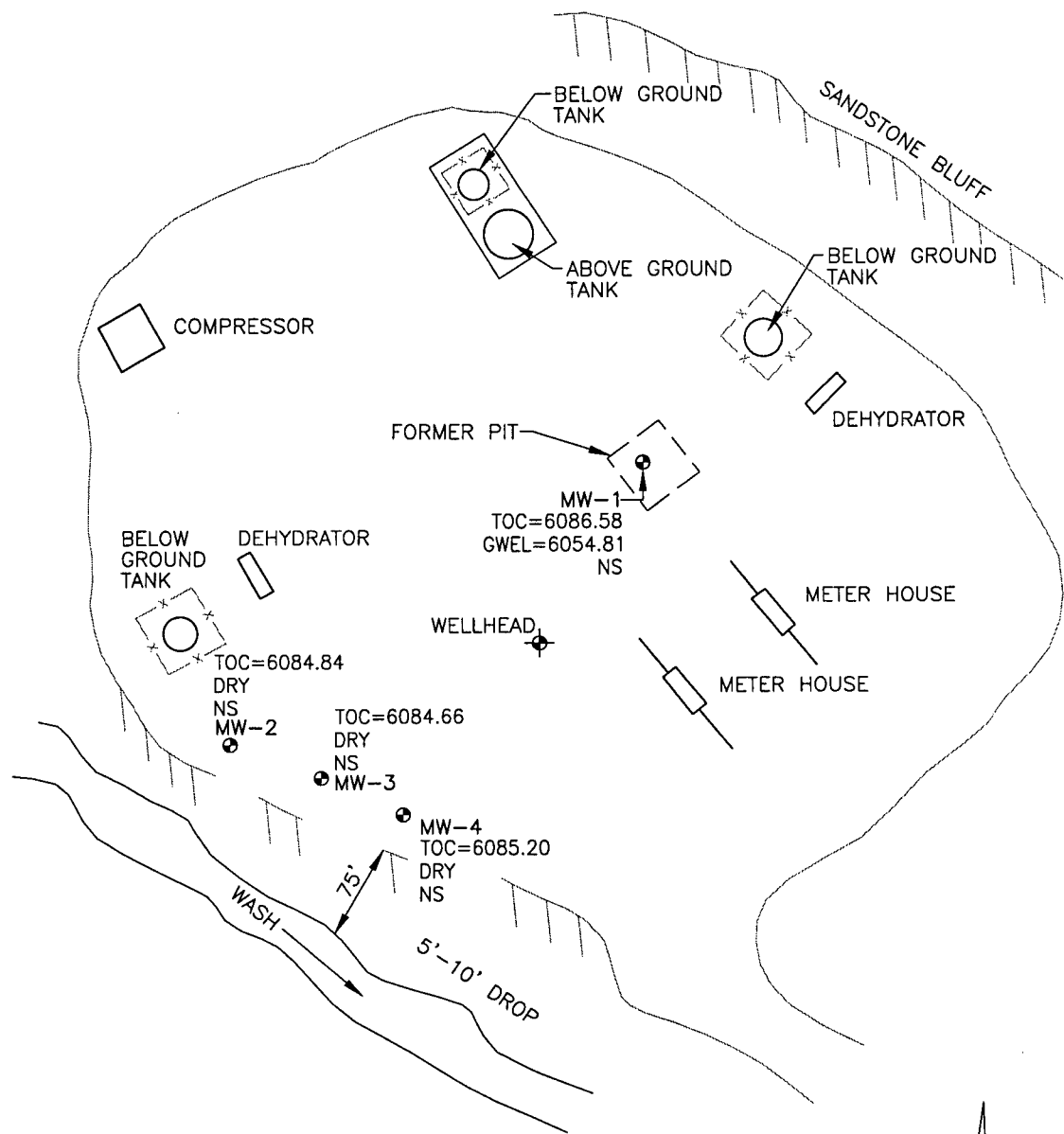


fieldsa7_02.dwg

FIELDS A #7A, METER 89961/97546
JULY, 2002

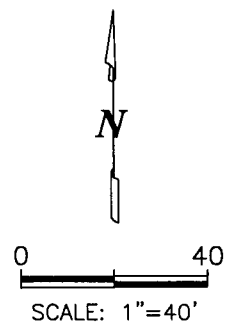
GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 3



LEGEND

- MW-1 Approximate Monitoring Well Location and Number
- GWEL Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
- NS Not Sampled
- TOC Top of Casing



fields7_02.dwg

FIELDS A #7A, METER 89961/97546
OCTOBER, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 4

Figure 5
 Historical BTEX Concentration and Groundwater Elevation vs. Time
 Fields A#7A (Meter #89961)
 MW-1

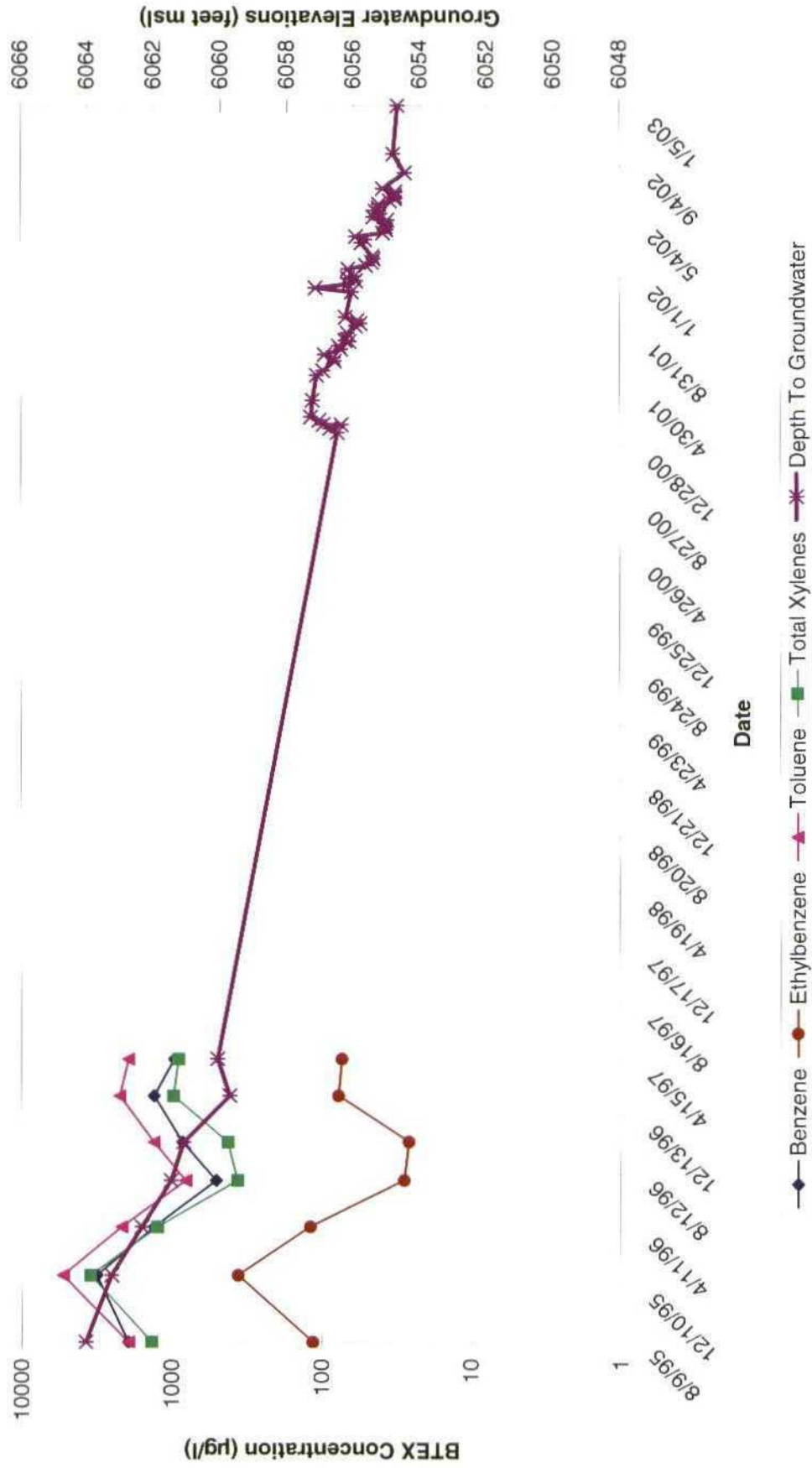


Figure 6
 Historical BTEX Concentration and Groundwater Elevation vs. Time
 Fields A#7A (Meter #89961)
 MW-2

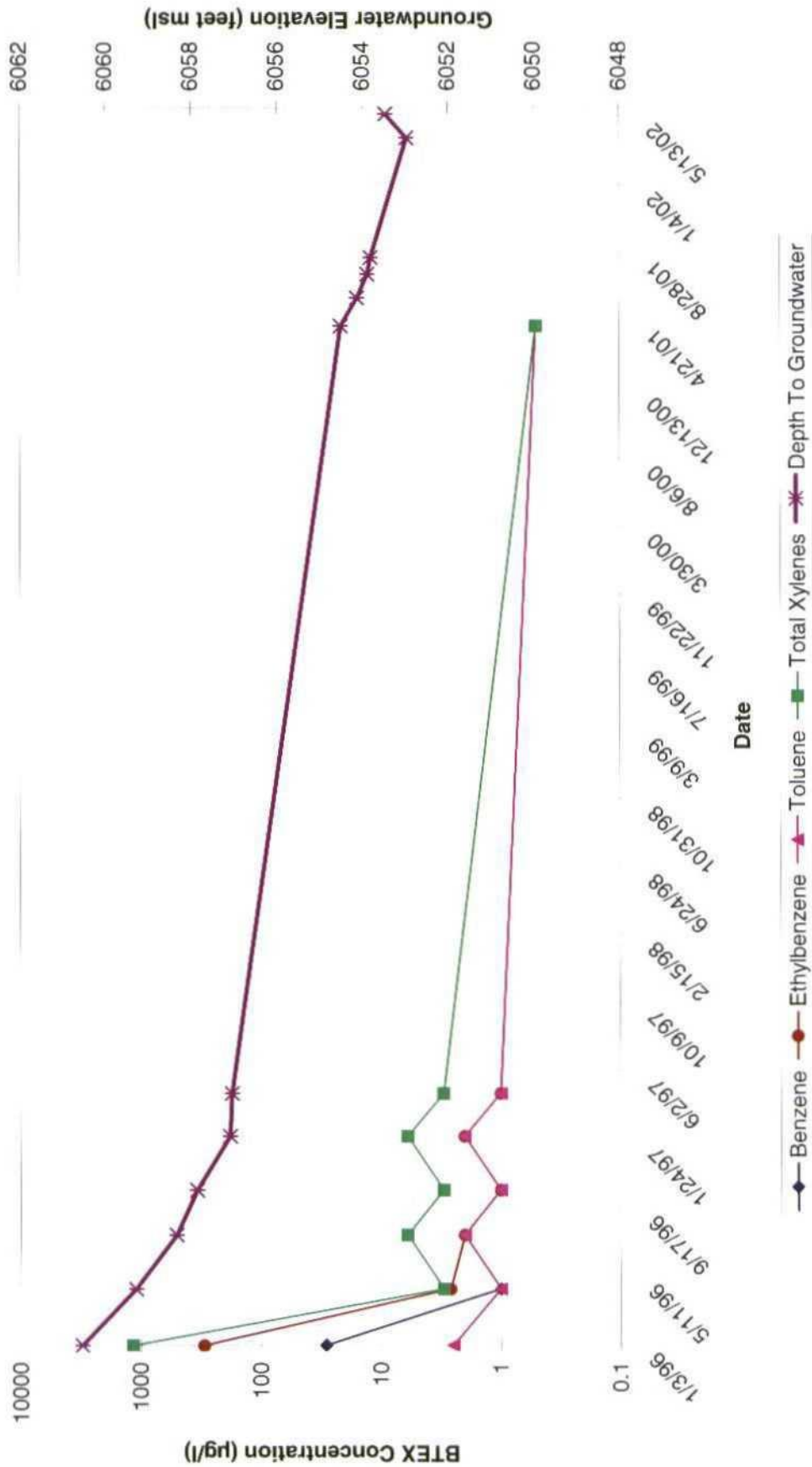


Figure 7
 Historical BTEX Concentration and Groundwater Elevation vs. Time
 Fields A#7A (Meter #89961)
 MW-3

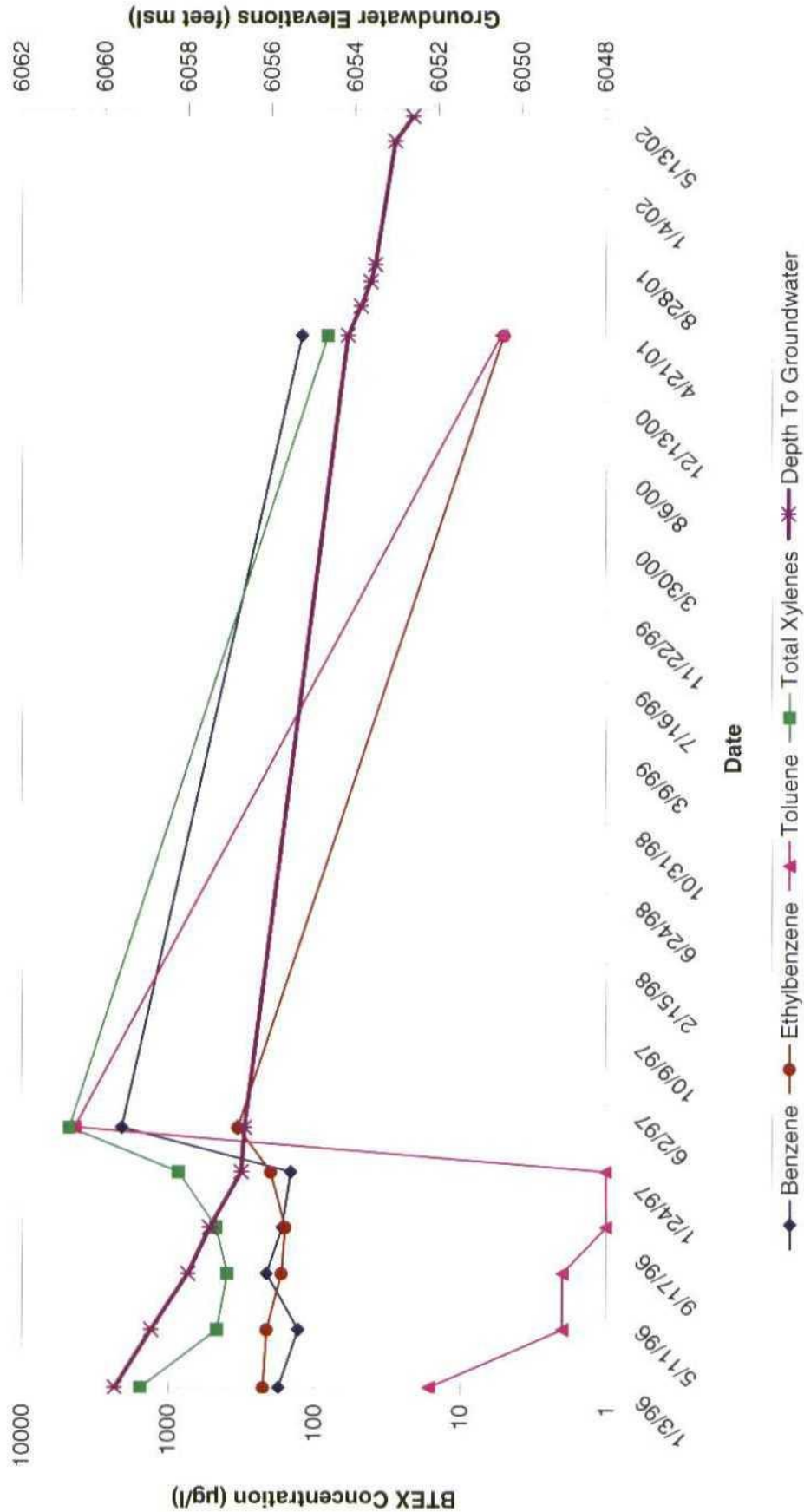


Figure 8
Historical BTEX Concentration and Groundwater Elevation vs. Time
Fields A#7A (Meter #89961)
MW-4

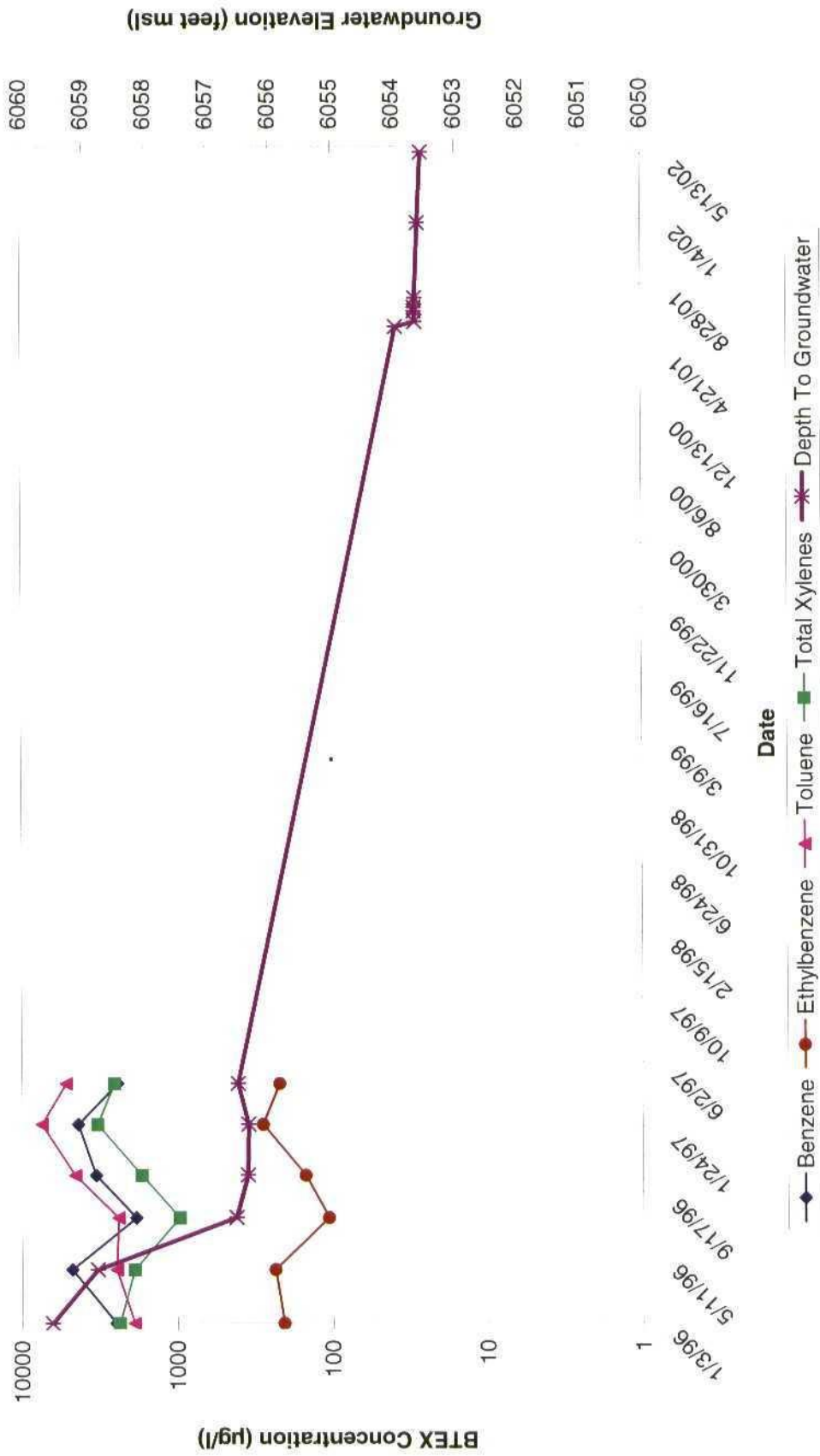


TABLE 1

FREE-PRODUCT RECOVERY
 FIELDS A#7A (METER # 89961)
 (Page 1 of 3)

MW Identification	Date	Depth to Product (feet bgs)	Depth to Water (feet bgs)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removed (gallons)
1	03-Jan-2002	30.69	30.40	0.00	0.00	12.30
1	07-Jan-2002	30.58	30.59	0.01	0.00	12.30
1	23-Jan-2002	30.40	30.41	0.00	0.01	12.31
1	31-Jan-2002	30.94	30.95	0.01	0.00	12.31
1	07-Feb-2002	31.11	31.12	0.01	0.00	12.31
1	14-Feb-2002	31.17	31.18	0.01	0.00	12.31
1	20-Feb-2002	31.14	31.15	0.01	0.00	12.31
1	21-Mar-2002	30.78	30.80	0.02	0.00	12.31
1	28-Mar-2002	NA	30.92	0.00	0.01	12.32
1	04-Apr-2002	NA	30.64	0.00	0.00	12.32
1	12-Apr-2002	NA	31.45	0.00	0.00	12.32
1	19-Apr-2002	NA	31.56	0.00	0.00	12.32
1	25-Apr-2002	NA	31.54	0.00	0.00	12.32
1	03-May-2002	NA	31.51	0.00	0.00	12.32
1	10-May-2002	NA	31.59	0.00	0.00	12.32
1	17-May-2002	NA	31.16	0.00	0.00	12.32
1	24-May-2002	NA	31.38	0.00	0.00	12.32
1	31-May-2002	NA	31.23	0.00	0.00	12.32
1	06-Jun-2002	NA	31.32	0.00	0.00	12.32
1	14-Jun-2002	NA	31.34	0.00	0.00	12.32

No product was removed from MW-2 and MW-3 in 2002.

TABLE 1

FREE-PRODUCT RECOVERY
 FIELDS A#7A (METER # 89961)
 (Page 2 of 3)

MW Identification	Date	Depth to Product (feet bgs)	Depth to Water (feet bgs)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removed (gallons)
1	21-Jun-2002	NA	31.67	0.00	0.00	12.32
1	27-Jun-2002	NA	31.81	0.00	0.00	12.32
1	02-Jul-2002	NA	31.82	0.00	0.00	12.32
1	11-Jul-2002	NA	31.84	0.00	0.00	12.32
1	18-Jul-2002	NA	31.45	0.00	0.00	12.32
1	21-Aug-2002	NA	32.12	0.00	0.00	12.32
1	01-Oct-2002	NA	31.77	0.00	0.02	12.34
4	03-Jan-2002	31.61	NA	0.04	0.01	1.36
4	07-Jan-2002	31.61	NA	0.04	0.00	1.36
4	23-Jan-2002	31.62	NA	0.04	0.00	1.36
4	31-Jan-2002	31.61	NA	0.04	0.00	1.36
4	07-Feb-2002	31.60	NA	0.05	0.00	1.36
4	14-Feb-2002	31.62	NA	0.03	0.00	1.36
4	20-Feb-2002	31.62	NA	0.03	0.00	1.36
4	21-Mar-2002	Dry	Dry	0.00	0.00	1.36
4	02-Apr-2002	Dry	Dry	0.00	0.00	1.36
4	17-May-2002	Dry	Dry	0.00	0.00	1.36
4	24-May-2002	Dry	Dry	0.00	0.00	1.36
4	31-May-2002	Dry	Dry	0.00	0.00	1.36
4	06-Jun-2002	Dry	Dry	0.00	0.00	1.36

No product was removed from MW-2 and MW-3 in 2002.

TABLE 1

FREE-PRODUCT RECOVERY
 FIELDS A#7A (METER # 89961)

(Page 3 of 3)

MW Identification	Date	Depth to Product (feet bgs)	Depth to Water (feet bgs)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removed (gallons)
4	14-Jun-2002	Dry	Dry	0.00	0.00	1.36
4	18-Jul-2002	Dry	Dry	0.00	0.00	1.36
4	01-Oct-2002	Dry	Dry	0.00	0.00	1.36

No product was removed from MW-2 and MW-3 in 2002.

Figure 9
Free-Product Recovery vs. Time
Fields A#7A (Meter #89961)
MW-1

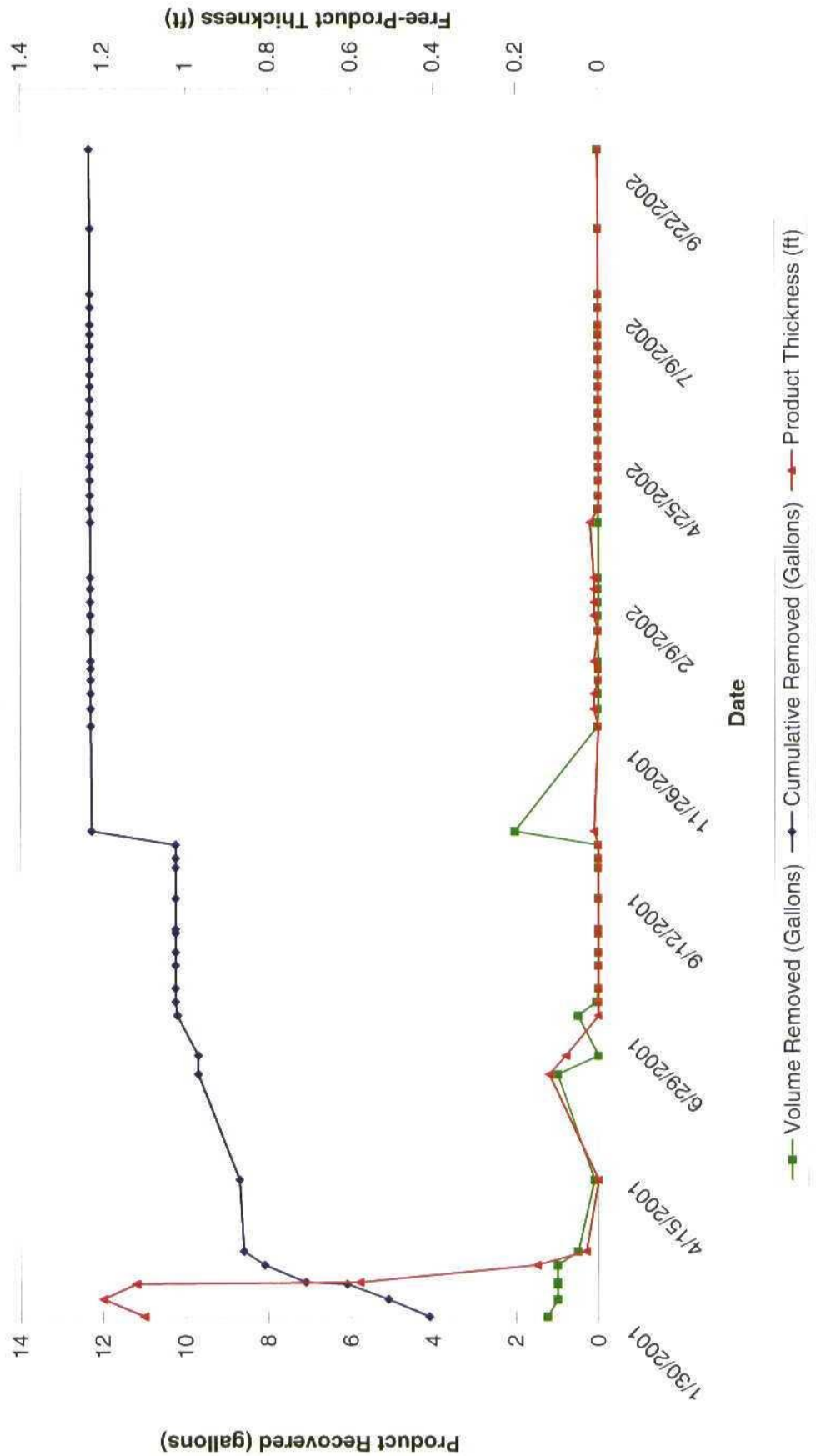
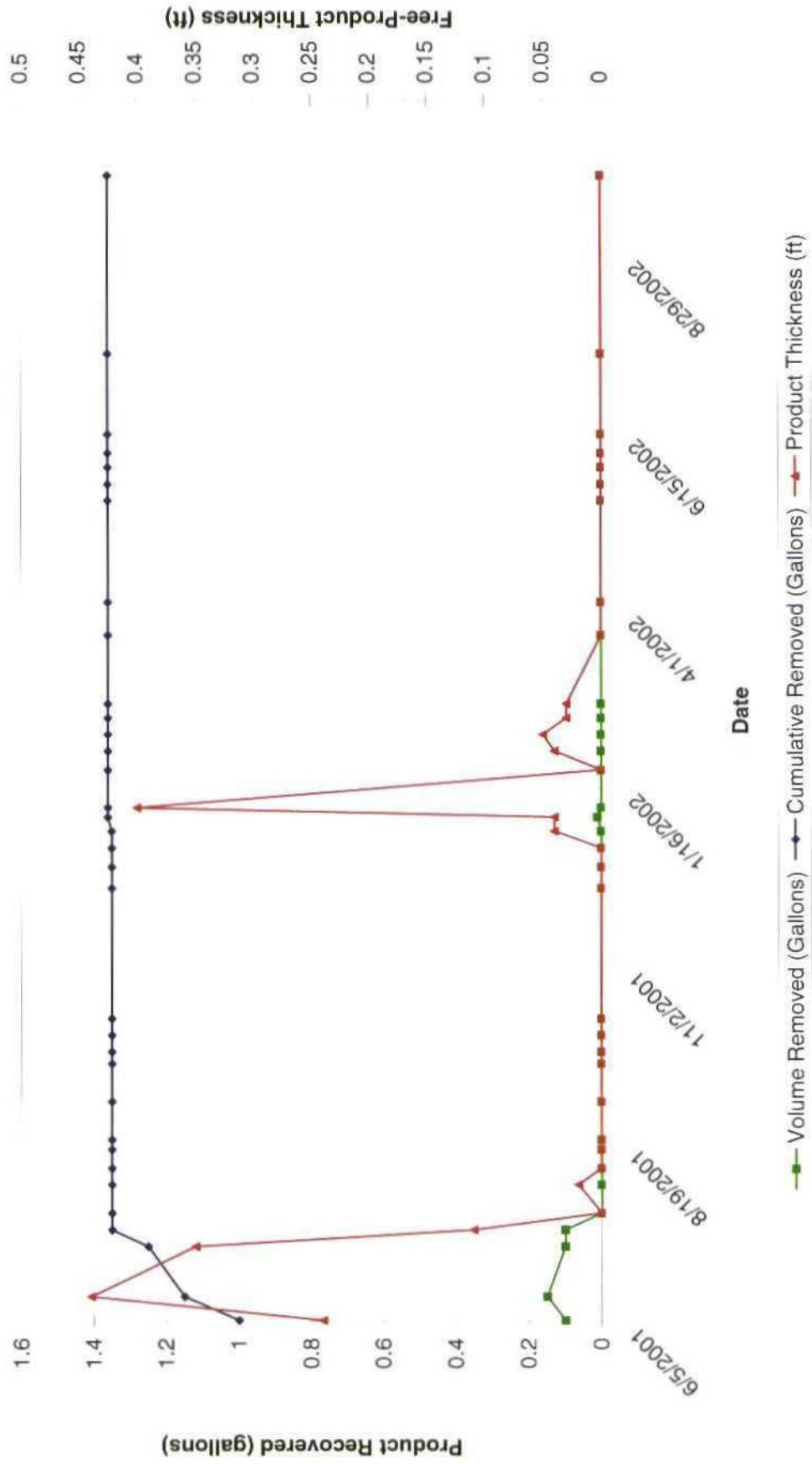


Figure 10
 Free-Product Recovery vs. Time
 Fields A#7A (Meter #89961)
 MW-4



ATTACHMENT 1
FIELD DOCUMENTATION

Product Recovery and Well Observation Data

Project Name: San Juan River Basin
 Project Manager: Ashley Lowe
 Client Company: MWH
 Site Name: Fields A 7A

Project No: 220013
 Date: 10/01/02

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Volume Removed	Comments
MW-4	10:25	Dry	Dry	31.62	—	—	Dry Well
MW-3	10:28	Dry	Dry	31.987	—	—	Dry Well
MW-2	10:30	Dry	Dry	31.925	—	—	Dry Well
MW-1	10:36	31.770	None	39.920	—	3oz	No product indicated 3oz removed from skimmer w/ 5oz water

COMMENTS: _____

Signature: Ashley Lowe

Date: 10/01/02

AESE

WELL OBSERVATION DATA

906 San Juan Blvd.Ste.D
Farmington, NM 87401
505.566.9116(9120fax)

Project Name San Juan River Basin

Project No. 220013

Project Manager Ashley Lowe

Date 08/21/02

Client Company Montgomery Watson Harza

Site Name Fields #7

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Comments
MW-1	12:15	32.12	—	39.920	—	no product measured

Comments This visit is not on the schedule, but was requested by L. Benally to collect a sample for specific gravity. There was no product measured in the well after removing the skimmer. A small amount of product + water (>50 cc) was purged from the skimmer & collected in an amber vial. L. Benally asked that we go ahead & send that small sample to the lab.

Vial was rinsed free of HCl preservative before use.

Signature Ashley Lowe

Date 08/21/02

AESE

PRODUCT RECOVERY

906 San Juan Blvd. Ste. D
Farmington, NM 87401
505.566.9116(9120fax)

Project Name San Juan River Basin

Project No. _____

Project Manager Ashley Lowe

Date 07/18/02

Client Company Montgomery Watson Harza

Site Name Fields A 7A

Well	Meter/Line No.	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW-1		15:28	—	31.454	0.00	~1 tbsp
MW-4		16:04	—	—	—	—

TD = 39.920'
~~FD = 31.507'~~
TD = 31.589'

Comments _____

MW-1: no product indicated by oil-water interface probe
Total Depth = 39.920'

most of recovery in skimmer was water - light gray in color - strong odor
No survey marks are visible on casing - took measurement from N side

MW-4: Dry well - nothing on probe, no odors

2 survey marks on casing - used N one.

Signature Ashley Lowe

Date 07/18/02

AESE

WELL OBSERVATION DATA

906 San Juan Blvd. Ste. D
Farmington, NM 87401
505.566.9116(9120fax)

Project Name San Juan River Basin

Project No. _____

Project Manager Ashley Lowe

Date 07/18/02

Client Company Montgomery Watson Harza

Site Name Fields A 7A

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Comments
MW-2	15:42	—	—	31.930	—	Dry well - grassy material on probe
MW-3	15:56	—	—	31.965	—	Dry well 2 marks on casing - used N mark to measure TD

Comments Dry Wells

Signature Ashley Lowe Date 07/18/02

WELL OBSERVATION DATA



Project Name: EPPS GW PROJECT

Project No.: 1S17000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 7-11-02

Site Name: FIELDS A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1450		—	31.84		—	No LIQUIDS RECOVERED

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

Comments: _____

Signature: Robert Chapman

Date: 7-11-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT
 Project Mngr: LISA WINN
 Client Co.: EL PASO FIELD SERVICES
 Site Name: FIELDS A#7A

Project No.: 1517000121
 Task: 3
 Date: 7-2-02

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1500		—	31.82		—	No LIQUIDS RECOVERED.

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

Comments: _____

Signature: Robert Champion Date: 7-2-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 6-27-02

Site Name: FIELDS A #7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1503		—	31.81		—	NO LIQUIDS RECOVERED

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

Comments: _____

Signature: Pat Chapman

Date: 6-27-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 6-21-02

Site Name: FIELDS A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1423		—	31.67		—	

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

Comments: _____

Signature: *Pat Champion*

Date: 6-21-02

WELL OBSERVATION DATA



Project Name: EPFS G.W. project
 Project Mngr: LISA WINN
 Client Co.: El Paso Field Services
 Site Name: FIELDS A#7A (89961/97546)

Project No.: 1517000121
 Task: 3
 Date: 6-14-02

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Product Volume (Gallons)	Product Volume (Barrels)	Comments
MW 1	1057			31.34					
MW 9	1052					31.66			Dry

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

Comments: NO product Recovered in Skimmer NO product Detected using water/oil probe

Signature: Chris A. May Date: 6-14-02

WELL OBSERVATION DATA



Project Name: EpFS G.W. project
 Project Mngr: LISA Winn
 Client Co.: El Paso Field Services
 Site Name: Fields A#7A 89961/97546

Project No.: 1517000121
 Task: 3
 Date: 6-6-02

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Product Thickness	Product Volume	Comments
MW 1	1320			31.32					0
MW 4	1315					31.66			Dry

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

Comments: MW 1 Skimmer empty NO product detected on probe

Signature: [Signature] Date: 6-6-02

WELL OBSERVATION DATA



Project Name: EPFS GW. PROJECT

Project No.: 1517000121

Project Mngr: LISA Winn

Task: 3

Client Co.: El Paso Field Services

Date: 5-31-02

Site Name: Fields #7A 89961/97542

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Release Product Thickness	Spill Product Thickness	Comments
MW 1	0950			31.23					NO product recovered
MW 4	0943					31.66			Dry

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

Comments: MW 4 Dry well MW 1 NO product recovered NO product detected with water/oil probe

Signature: Phil A. May

Date: 5-31-02

WELL OBSERVATION DATA



Project Name: EpFS G.W. project

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: El Paso Field Services

Date: 5-24-02

Site Name: Fields #7A 89961/97546

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Recovery Product (Feet)	Sinking Product (Feet)	Approximate Product Recovery Comments
MW1	1215			31.38					O
MW4	1209					31.66			Dry

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

Comments: NO product recovered NO product detected with water -oil probe

Signature: Christina M...

Date: 5-24-02

WELL OBSERVATION DATA



Project Name: EpFS G.W. PROJECT

Project No.: 1517000121

Project Mngr: LISA MINN

Task: 3

Client Co.: El Paso Field Services

Date: 5-17-02

Site Name: Fields A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)		Comments
MW 1	1030			31.16				
MW 2	1017			31.38		32.01		Dry
MW 3	1020			32.05		32.06		Dry
MW 4	1023					31.66		Dry

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

Comments: NO product Recovered or Detected in MW 1 MW 2
MW 3 MW 4 Dry wells

Signature: Chris A. Mann

Date: 5-17-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1S17000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICE

Date: 5-10-02

Site Name: FIELDS A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1456			31.59'		0.00	NO LIQUIDS RECOVERED.

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

Comments: _____

Signature: Robert Champion Date: 5-10-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1S17000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICE

Date: 5-3-02

Site Name: FIELDS A #7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1530		—	31.51		0.00	NO LIQUIDS RECOVERED.

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

Comments: _____

Signature: *Robert Thompson* Date: 5-3-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 4-25-02

Site Name: FIELDS A #7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-01	1458		—	31.54		0.00	NO LIQUIDS RECOVERED.

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

Comments: _____

Signature: Robert Chapman

Date: 4-25-02



WELL DEVELOPMENT AND PURGING DATA FORM

- Development
- Purging

Well Number Mw 2 Page 1 of 1
 Project Name EPFS GW PROJECT Project Manager Lisa Winn
 Client Company EL PASO Field Services Site Address Rural San Juan CO.
 Site Name Fields A#7A (89961/97546) Project No. 57000121

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

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

Water Volume Calculation

Initial Depth of Well (feet) 32.01
 Initial Depth to Water (feet) 31.57
 Height of Water Column in Well (feet) 0.14
 Diameter (Inches): Well 4" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	0.14		
Gravel Pack			
Drilling Fluids			
Total			

Instruments
 pH Meter
 DO Monitor
 Conductivity Meter
 Temperature Meter
 Other _____

Serial No. (If applicable)
YSI 63
YSI 95-
YSI 63
YSI 63

Water Disposal 4.72 Separator Bloomfield NM

Water Removal Data

Date	Time	Development Method	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
						Increment	Cumulative					
<u>4-2-02</u>	<u>0:00</u>											

Comments Could not do water quantity readings or to collect Sample - Dry well

Developer's Signature(s) [Signature] Date 4-2-02 Reviewer [Signature] Date 4/4/02
 L:\forms\MW Dvlpmnt 2.doc 11/29/01

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number MW 3 Project Name EPS G.W. Project
 Client Company El Paso Field Services Project Manager LISA WINN
 Site Name Fields A#7A (89961/97546) Site Address Rural Sam-John CO.

Instruments
 pH Meter YSI 63 Serial No. (if applicable)
 DO Monitor YSI 95
 Conductivity Meter YSI 63
 Temperature Meter YSI 63
 Other _____

Water Volume Calculation
 Initial Depth of Well (feet) 32.06
 Initial Depth to Water (feet) 31.62
 Height of Water Column in Well (feet) 0.44
 Diameter (inches): Well 4" Gravel Pack _____

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

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

Methods of Development
 Pump
 Centrifugal
 Submersible
 Peristaltic
 Other _____

Bailor
 Bottom Valve
 Double Check Valve
 Stainless-steel Kemmerer
 Other _____

Water Disposal
KUTZ Separator Bloomfield AM.

Water Removal Data

Date	Time	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
					Increment	Cumulative					
<u>4-2-02</u>	<u>1449</u>			<u>32.04</u>	<u>.15</u>	<u>15</u>	<u>23.3</u>	<u>7.02</u>	<u>5.91</u>		<u>Cloudy Dark Grey Sulfur Odor</u>

Comments AFTER Bailing Approximately 15 gal Bailed well Dry, did NOT Recover enough to collect samples

Developer's Signature(s) Chris X. M... Date 4-2-02 Reviewer LISA WINN Date 4/4/02

WELL OBSERVATION DATA



Project Name: EpFS GW project

Project No.: 1517000/21

Project Mngr: LISA Winn

Task: 3

Client Co.: El Paso Field Services

Date: 4-2-02

Site Name: Fields A#7A (89961/97546)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Approximate Depth to Skimmer (Feet)	Approximate Depth to Product (Feet)	Approximate Product Recovery
MW 1	1515			30.94					O
MW 4	1500					31.61			Dry

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

Comments: NO product recovered in skimmer NO product detected using water oil probe MW 4 Dry well

Signature: Chris A. Many

Date: 4-2-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 4-19-02

Site Name: FIELDS A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Comments
MW-1	1133		—	31.56		0.00	NO LIQUIDS RECOVERED

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

Comments: _____

Signature: *Paul Chapman*

Date: 4-19-02

WELL OBSERVATION DATA



Project Name: EPFS GW PROJECT

Project No.: 151700121*

Project Mngr: LISA WINN

Task: 2

Client Co.: EL PASO FIELD SERVICES

Date: 4-12-02

Site Name: FIELDS A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
MW-1	1420			31.45			0.00		NO PRODUCT RECOVERED
MW-4	1428			DRY			0.00		DRY WELL
MW-3	1433			32.05			0.00		
MW-2	1437			31.95			0.00		

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

Comments: _____

Signature: *Paul Chapman*

Date: 4-12-02

WELL OBSERVATION DATA



Project Name: EpFS GW project

Project No.: 1517000121

Project Mngr: LISA Winn

Task: 3

Client Co.: El Paso Field Services

Date: 3-28-02

Site Name: Fields A#7A (89961/97546)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)		Approximate Product Recovery	Comments
Mw1	1306			30.92				1.02	
Mw2	1310			31.86					
Mw3	1313			31.61					
Mw4	1319			Dry		31.61			Dry

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

Comments: NO water recovered in Mw1 NO product detected using water oil probe Mw4 Dry well

Signature: Chris A. May

Date: 3-28-02

1300

1350

WELL OBSERVATION DATA

Project Name: EPFS Gw projectProject No.: 1517 000 121Project Mngr: Lisa WinnTask: 3Client Co.: EL PASO Field ServicesDate: 3-21-02Site Name: Fields A#7A

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)		Comments
MW 1	1324		30.79	30.80				O
MW 4	1311					51.64		Dry

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

Comments: NO activity in Skimmer adjusted Screen levelMW 4 Dry wellSignature: [Signature]Date: 3-21-02

WELL OBSERVATION DATA

1249-1310

amec

Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 02-20-02

Site Name: FIELDS A#7A (89961/97456)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Intervals	Sinking Product Intervals	APPROX. PROD. RECOVERY
MW1			31.14	31.15			01		Ø
MW2				31.78					
MW3				31.64					
MW4			31.62	31.62 ^{8mg/l}		31.65	03		DRY

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

Comments: _____

Signature: Jacq McComb

Date: 02-20-02

WELL OBSERVATION DATA



Project Name: EPPS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 02-14-02

Site Name: FIELDS ATA (89961/97456)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Flowing Product (Feet)	Static Product (Feet)	PROD. Comments RECOVER
MW1	1254		31.17	31.18					⊖
MW2	1255			31.76					
MW3	1256			31.63					
MW4	1259		31.62	—		31.65			DRY

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

Comments: _____

Signature: Jacene M^c Curtain

Date: 02-14-02

1277-1301

WELL OBSERVATION DATA

amec

Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 02-07-02

Site Name: FIELDS A #7A (89961/97456)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Reason Not Measured	Reason Not Measured	APPROX. PROD. RECOVERY
MW1			31.11	31.12					0
MW2				31.72					
MW3				31.62					
MW4			31.60	—		31.65			DRY

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

Comments: _____

Signature: Jacey McCurtain

Date: 02-07-02

1221-1268

amec

WELL OBSERVATION DATA

Project Name: EPFS GW PROJECT

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 01-31-02

Site Name: FIELDS A #7A (89961/97456)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Heating Product Thickness	Sinking Product Thickness	APPROX. PRODUCTS RECOVERY
MW1				30.95	30.94		O		O
MW2				31.68					
MW3				31.60					
MW4			31.61	—		31.65	O		DRY
MW1				30.94	30.95				O

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

Comments: _____

Signature: Jacey McCurtain

Date: 01-31-02

1240 -1320

WELL OBSERVATION DATA



Project Name: EPFS

Project No.: 1517000121

Project Mngr: LISA WINN

Task: 3

Client Co.: EL PASO FIELD SERVICES

Date: 01-23-02

Site Name: FIELDS #1A (89961/97456)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	APPROX. PRESENT RECOVERY
MW1	1255		30.40	30.41			0.01		1 OZ.
MW2	1259			31.65					
MW3	1302			31.62					
MW4	1304		31.62						DRY

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

Comments: _____

Signature: Jacey McArthur

Date: 01-23-02



WELL OBSERVATION DATA

Project Name: EpFs G.W. project
 Project Mngr: Lisa Winn
 Client Co.: El Paso Field Services
 Site Name: Fields 1#2A (99961/97456)

Project No.: 1517000121
 Task: 3
 Date: 1-7-02

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Incidences	Sinking Product Incidences	Approximate Product Recovery Comments
MW 1	1359		30.58	30.59			O		O
MW 2	1340			31.54					
MW 3	1343			31.59					
MW 4	1349		31.61	—		31.65			Dry

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

Comments: _____

Signature: Chris J. M. Date: 1-7-02