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**ANNUAL
MONITORING
REPORT**

2/28/2009



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February 28, 2009

Mr. Glenn von Gonten
New Mexico Oil Conservation Division (NMOCD)
1220 South St., Francis Drive
Santa Fe, New Mexico 87505

**RE: El Paso Tennessee Pipeline Company Pit Groundwater Remediation Sites
2008 Annual Reports**

Dear Mr. Von Gonten:

MWH Americas, Inc., on behalf of El Paso Tennessee Pipeline Company (EPTPC), is submitting the enclosed 2008 Annual Reports for each of EPTPC's 21 remaining San Juan River Basin pit groundwater remediation Sites. The reports present the 2008 sampling and product recovery data and include recommendations for 2009 activities at these Sites.

The 2008 Annual Reports are divided into three volumes based on location type. The volumes are as follows:

Volume Location Type

- | | |
|---|--|
| 1 | Federal Land |
| 2 | Non-Federal Land (Excl. Navajo Nation) |
| 3 | Navajo Nation |

If you have any questions concerning the enclosed reports, please call either Doug Stavinoha of EPTPC (713-420-5150) or me (303-291-2276).

Sincerely,

Jed Smith
Project Manager

encl.

cc: Bill Freeman – NNEPA, Shiprock, NM (Volume 3 Only)
Bill Liese – BLM, Farmington, NM (Volume 1 Only)
Brandon Powell – NMOCD, Aztec, NM (Volumes 1, 2, and 3)
Doug Stavinoha – EPTPC (Volumes 1, 2, and 3)

**2008 ANNUAL GROUNDWATER REPORT
FEDERAL SITES VOLUME I
EL PASO TENNESSEE PIPELINE COMPANY**

TABLE OF CONTENTS

METER or LINE ID	NMOCD CASE NO.	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
87640	3RP-155-0	Canada Mesa #2	24N	06W	24	I
89961	3RP-170-0	Fields A#7A	32N	11W	34	E
73220	3RP-068-0	Fogelson 4-1 Com. #14	29N	11W	4	P
89894	3RP-186-0	Hammond #41A	27N	08W	25	O
97213	3RP-190-0	Hamner #9	29N	09W	20	A
94715	3RP-196-0	James F. Bell #1E	30N	13W	10	P
70194	3RP-201-0	Johnston Fed #4	31N	09W	33	H
89232	3RP-202-0	Johnston Fed #6A	31N	09W	35	F
LD072	3RP-204-0	K27 LD072	25N	06W	4	E
LD174	3RP-212-0	LAT L 40	28N	04W	13	H
LD151	3RP-213-0	Lat 0-21 Line Drip	30N	09W	12	O
94810	3RP-223-0	Miles Fed 1A	26N	07W	5	F
89620	3RP-235-0	Sandoval GC A #1A	30N	09W	35	C



**2008 ANNUAL GROUNDWATER REPORT
NON-FEDERAL SITES VOLUME II
EL PASO TENNESSEE PIPELINE COMPANY**

TABLE OF CONTENTS

METER or LINE ID	NMOCD CASE NO.	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
03906	3RP-179-0	GCU Com A #142E	29N	12W	25	G
93388	3RP-192-0	Horton #1E	31N	09W	28	H
LD087	3RP-205-0	K-31 Line Drip	25N	06W	16	N
72556	3RP-207-0	Knight #1	30N	13W	5	A
94967	3RP-214-0	*Lindrith B #24	24N	03W	9	N
70445	3RP-074-0	Standard Oil Com #1	29N	09W	36	N
71669	3RP-239-0	State Gas Com N #1	31N	12W	16	H

* Lindrith B#24 Site was submitted for closure in 2006, and is pending approval from NMOCD.
There were no activities for this site in 2008.



**EPTPC GROUNDWATER SITES
2008 ANNUAL GROUNDWATER REPORT**

**Johnston Fed #6A
Meter Code: 89232**

SITE DETAILS

Legal Description:	Town: 31N	Range: 9W	Sec: 35	Unit: F
NMOCD Haz Ranking: 40	Land Type:	Federal	Operator:	Burlington Resources

PREVIOUS ACTIVITIES

Site Assessment:	8/94	Excavation:	9/94 (80cy)	Soil Boring:	8/95
Monitor Well:	8/95	Geoprobe:	NA	Additional MWs:	11/06
Downgradient MWs:	6/00	Replace MW:	NA	Quarterly Initiated:	4/96
ORC Nutrient Injection:	NA	Re-Excavation:	NA	PSH Removal Initiated:	7/97
Annual Initiated:	NA	Quarterly Resumed:	NA	PSH Removal in 2008?	Yes

SUMMARY OF 2008 ACTIVITIES

MW-1: Quarterly free-product recovery and water level monitoring were performed during 2008.

MW-2: Quarterly water level monitoring was performed during 2008.

MW-3: Quarterly free-product recovery and water level monitoring were performed during 2008.

MW-4: Annual groundwater sampling (March) and quarterly water level monitoring were performed during 2008.

MW-5: Quarterly free-product recovery and water level monitoring were performed during 2008.

MW-6: Annual groundwater sampling (March) and quarterly water level monitoring were performed during the first half of 2008. The well was damaged prior to the June gauging event, and monitoring work was discontinued at that time.

Site-Wide Activities: No other activities were performed at this Site during 2008.

SITE MAP

A Site map (March) is attached as Figure 1.

**EPTPC GROUNDWATER SITES
2008 ANNUAL GROUNDWATER REPORT**

**Johnston Fed #6A
Meter Code: 89232**

SUMMARY TABLES AND GRAPHS

- Historic analytical and water level data are summarized in Table 1 and presented graphically in Figures 2 through 7. Where applicable, static water level elevations were corrected for measurable thicknesses of free-product (specific gravity of 0.8).
- Historic free-product recovery data are summarized in Table 2 and presented graphically in Figures 8 through 10.
- The 2008 laboratory report is presented in Attachment 1 (included on CD).
- The 2008 field documentation is presented in Attachment 2 (included on CD).

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this Site during 2008.

DISPOSITION OF GENERATED WASTES

All purge water was taken to the El Paso Natural Gas Rio Vista Compressor Station. Spent absorbent socks were managed as non-hazardous solid waste.

ISOCONCENTRATION MAPS

No isoconcentration maps were prepared for this Site; however, the attached Site map presents the analytical data collected during 2008, as well as a summary of product recovery volumes.

RESULTS

- The groundwater flow gradient is generally to the northeast.
- Free-product recovery efforts at MW-1 resulted in removal of approximately 0.91 gallons of free-product, bringing the cumulative total recovered to date to 8.94 gallons.
- Free-product was not observed in MW-3 during 2008; therefore, this well can be added to the sampling program, barring recurrence of free-product. Free-product recovery can be re-initiated in the future, if needed.
- The annual groundwater sample from MW-4 indicated BTEX concentrations at or below the reporting limits. BTEX levels in MW-4 have been below standards since 2003, representing a significant decrease since 1997 (benzene concentration of 899 µg/L).

**EPTPC GROUNDWATER SITES
2008 ANNUAL GROUNDWATER REPORT**

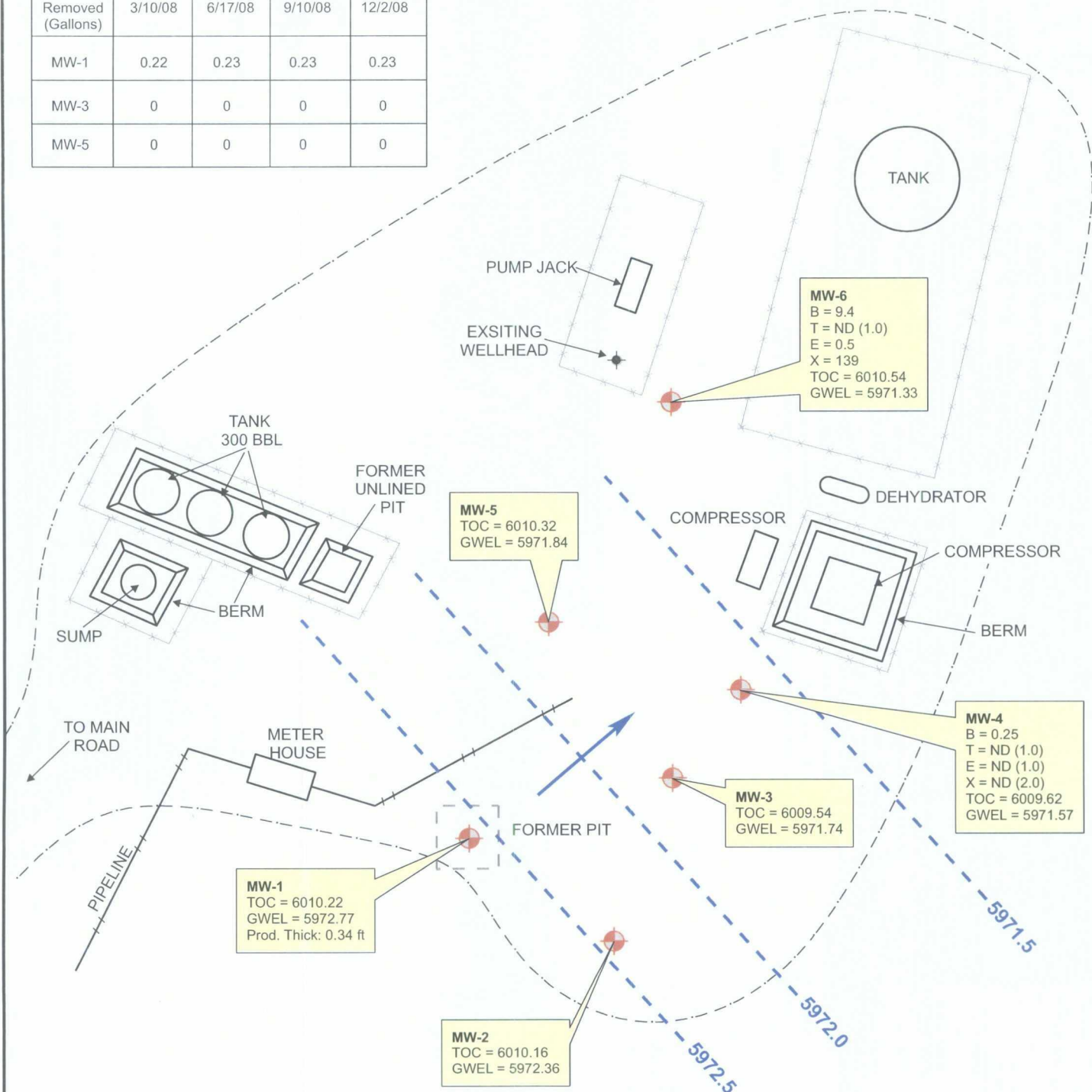
**Johnston Fed #6A
Meter Code: 89232**

- Free-product was not observed in MW-5 during 2008. This well can be added to the sampling program, barring recurrence of free-product.
- Downgradient monitor well MW-6 had detectable BTEX concentrations, but no parameters exceeded their respective NMWQCC standards. However, the benzene concentration of 9.4 µg/L was just below the standard of 10 µg/L. This well was damaged prior to the June 2008 gauging event.

RECOMMENDATIONS

- EPTPC will continue quarterly free-product recovery efforts at MW-1; however, the frequency of these activities may be adjusted based on the observed product thicknesses and amounts recovered during the monitoring visits.
- BTEX concentrations in MW-2 were below closure standards for four sampling events (1997 – 2002); therefore, EPTPC will sample MW-2 again only at closure.
- Since free-product was not observed in either MW-3 or MW-5 during 2008, these wells will be sampled annually in March and gauged quarterly to monitor for free-product.
- BTEX concentrations in MW-4 were below closure standards for the last five sampling events (2003 – 2008); therefore, EPTPC will plan to sample MW-4 again only at closure.
- EPTPC will attempt to sample MW-6 in March. EPTPC may recommend discontinuing this sampling after 2 more annual events, if BTEX concentrations remain below standards.

Product Removed (Gallons)	3/10/08	6/17/08	9/10/08	12/2/08
MW-1	0.22	0.23	0.23	0.23
MW-3	0	0	0	0
MW-5	0	0	0	0



MWH



PROJECT:

JOHNSTON FEDERAL #6A

TITLE:

Groundwater Potentiometric Surface Map,
and BTEX Concentrations - March 10, 2008

FIGURE:

1

FIGURE 2
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW01

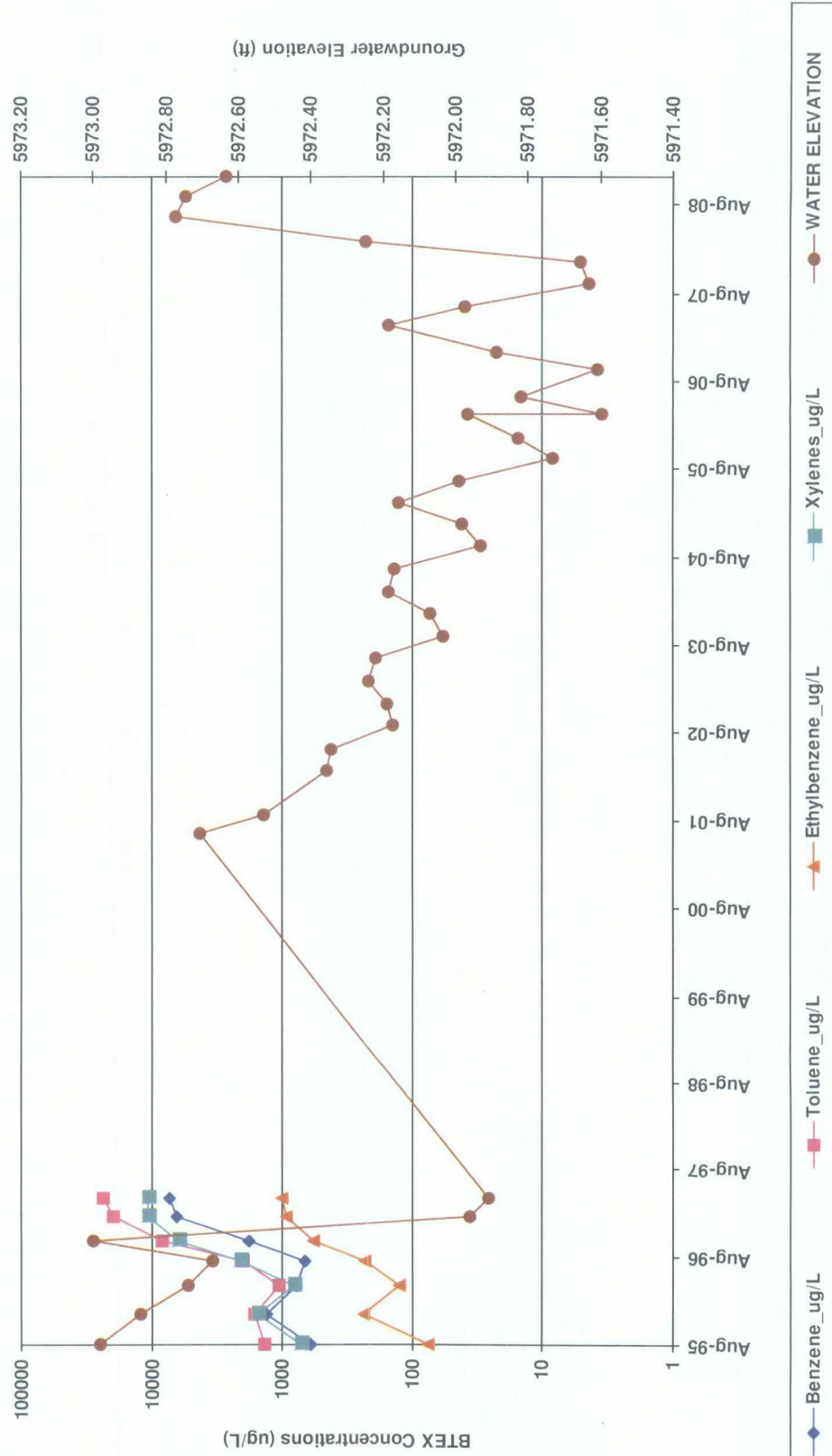


FIGURE 3
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW02

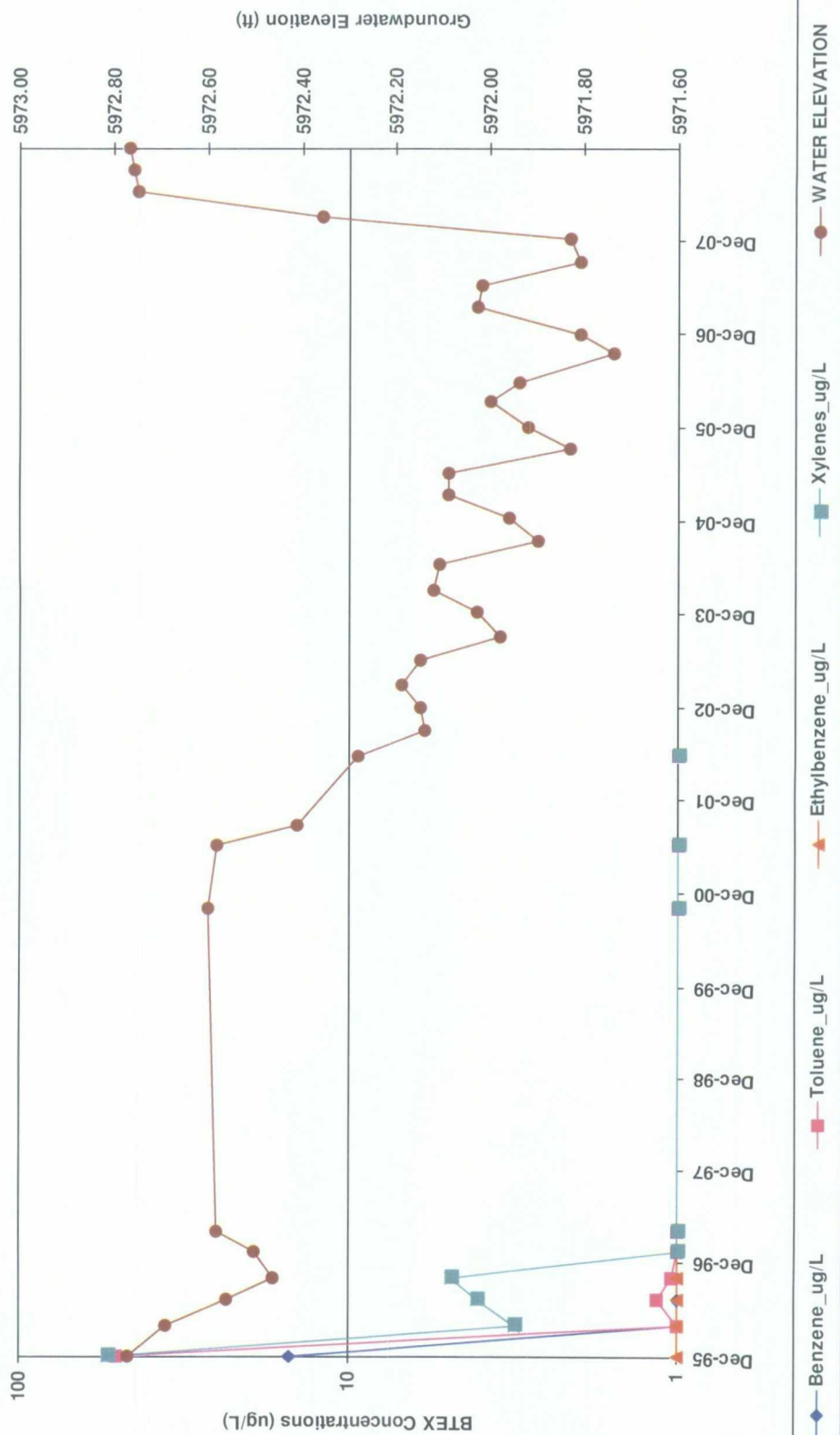


FIGURE 4
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW03

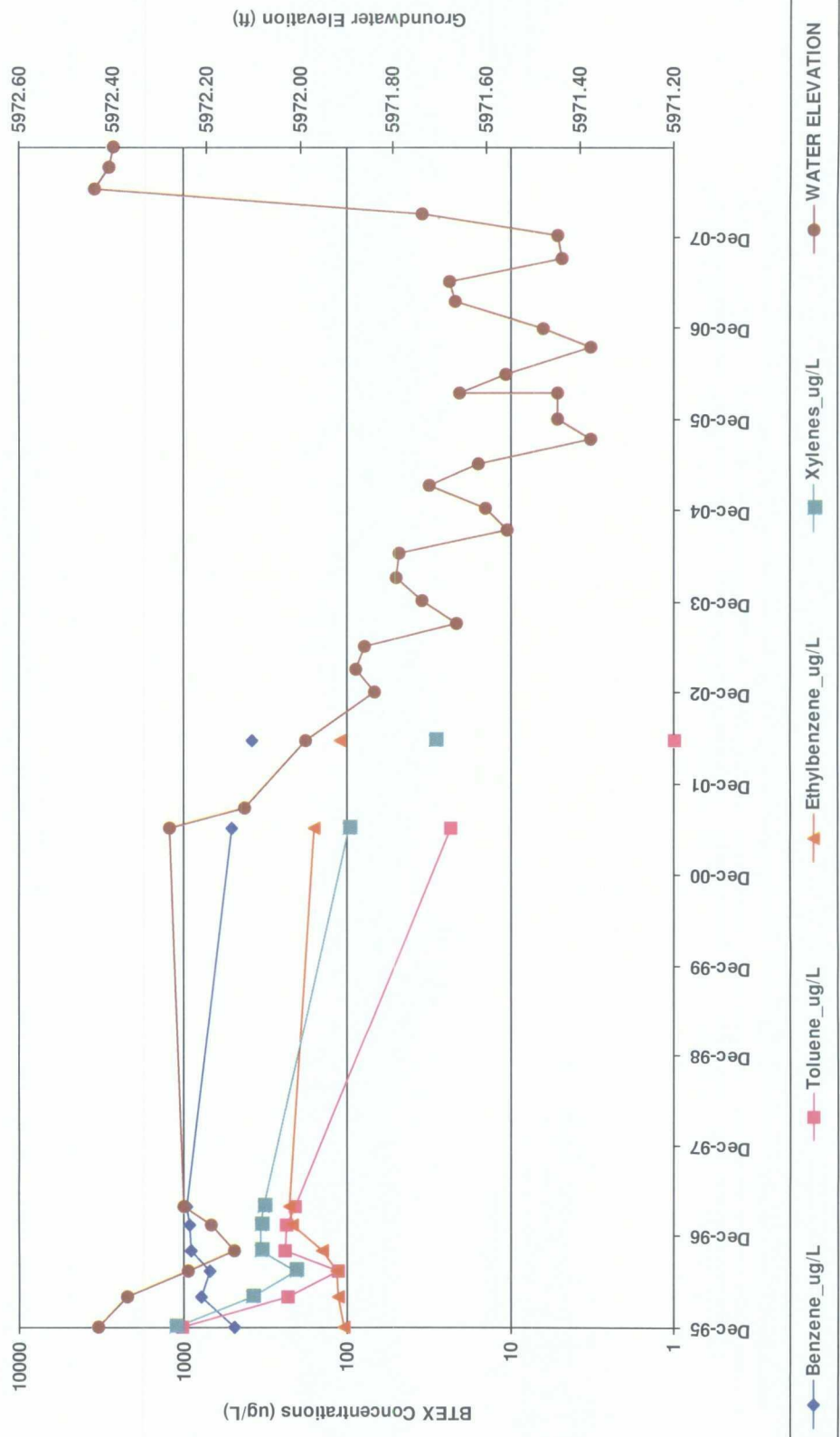


FIGURE 5
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW04

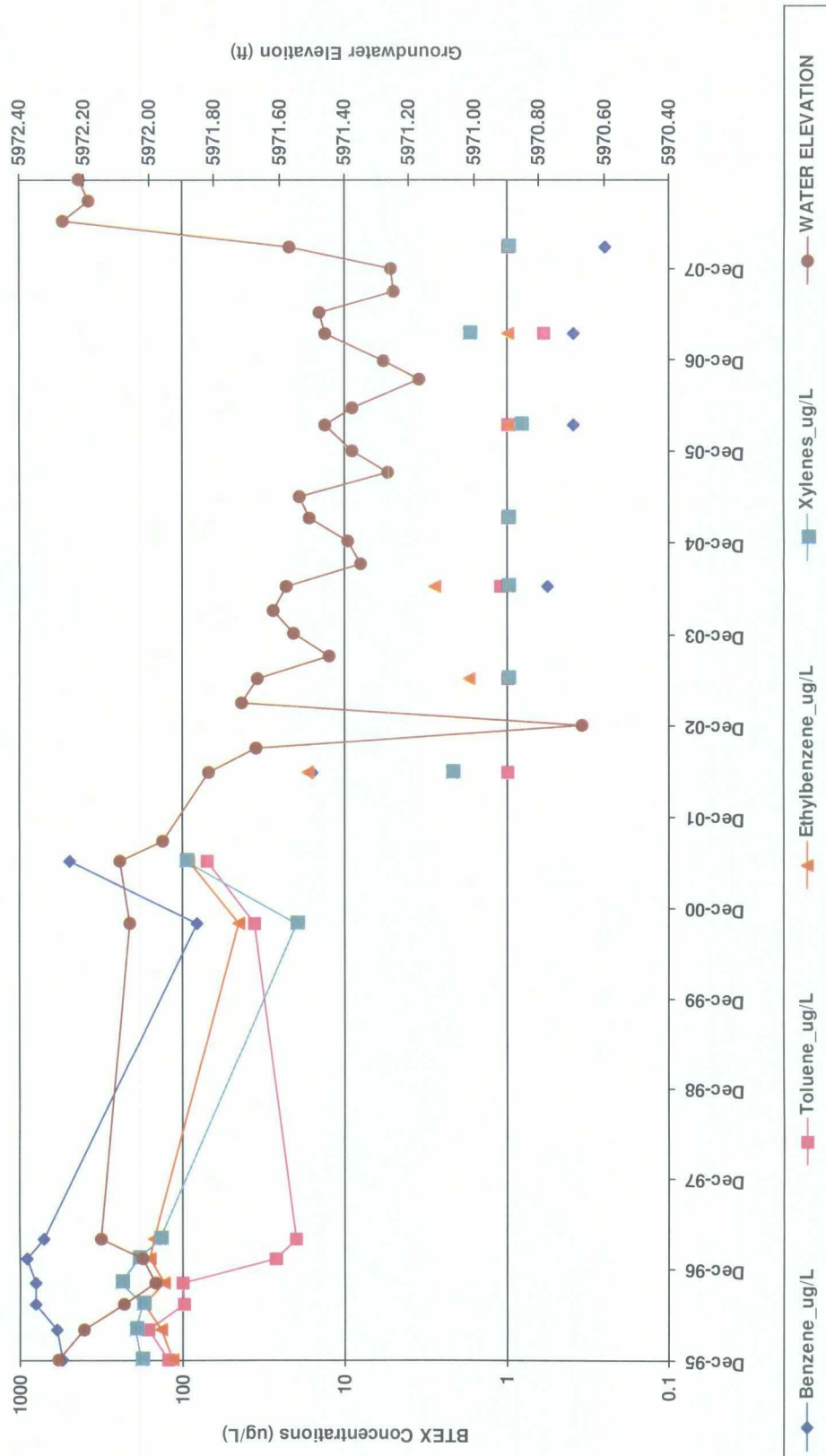


FIGURE 6
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW05

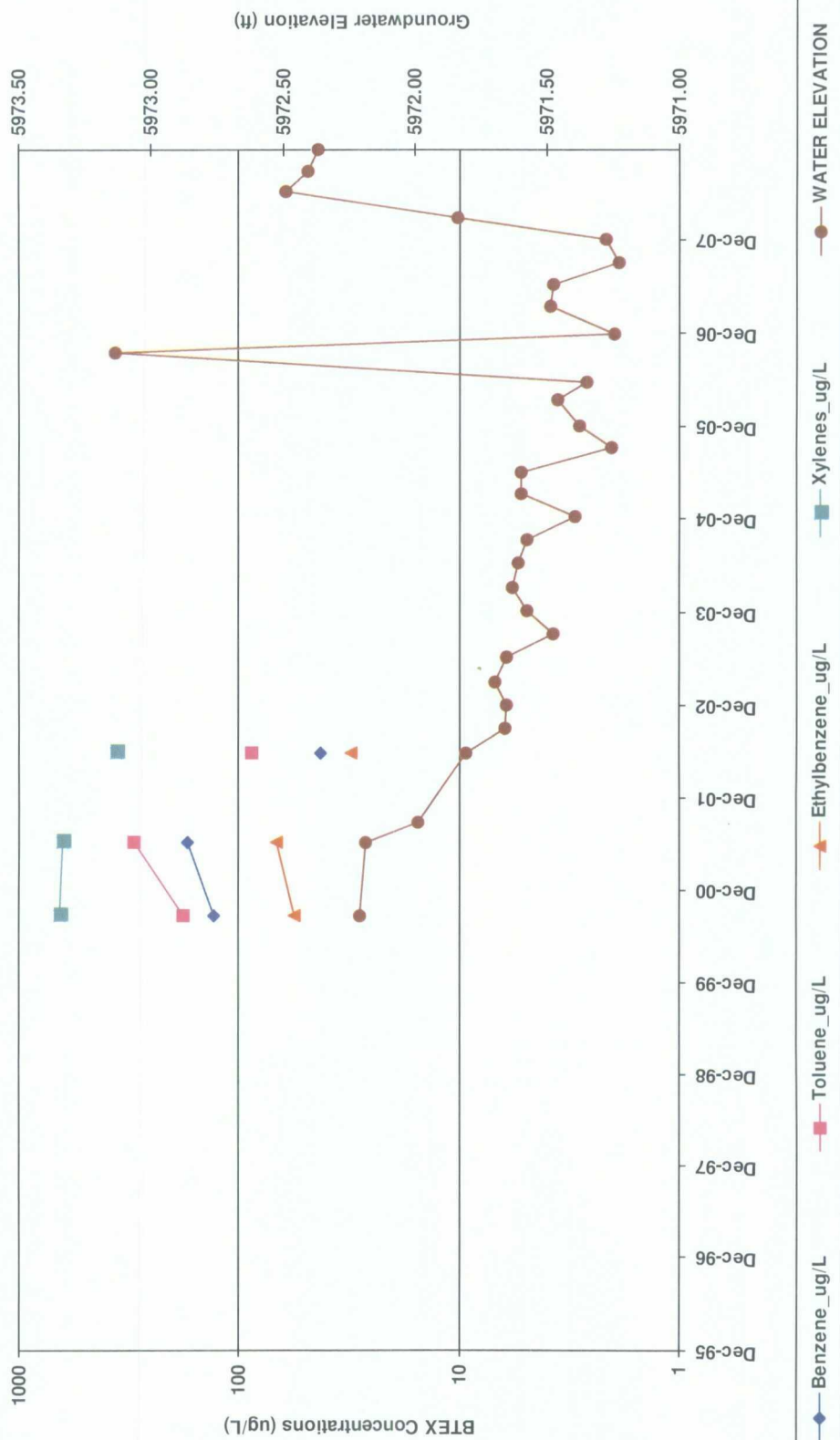


FIGURE 7
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)
MW06

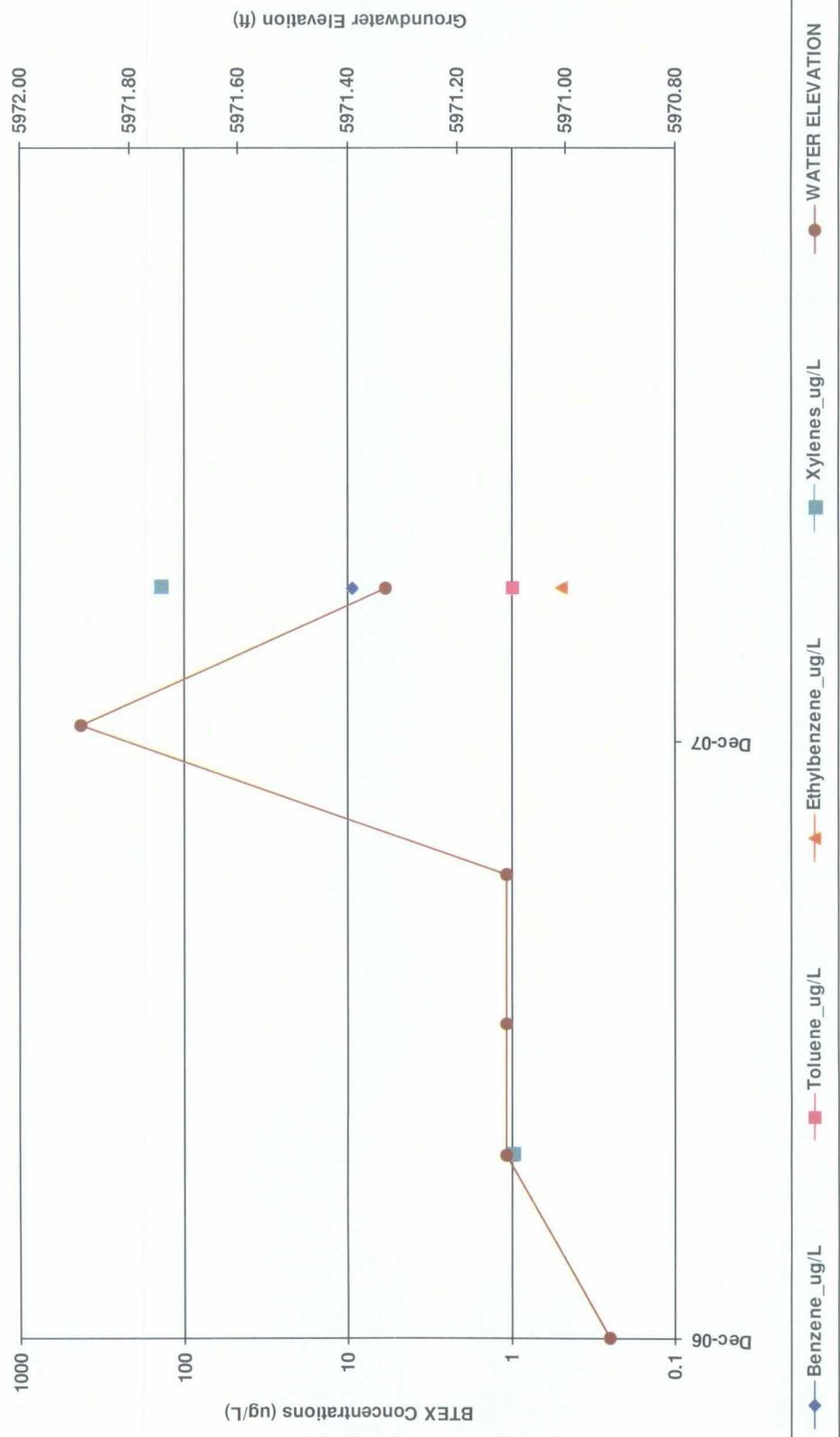


FIGURE 8
SUMMARY OF FREE-PRODUCT REMOVAL
JOHNSTON FED #6A (METER #89232)
MW01

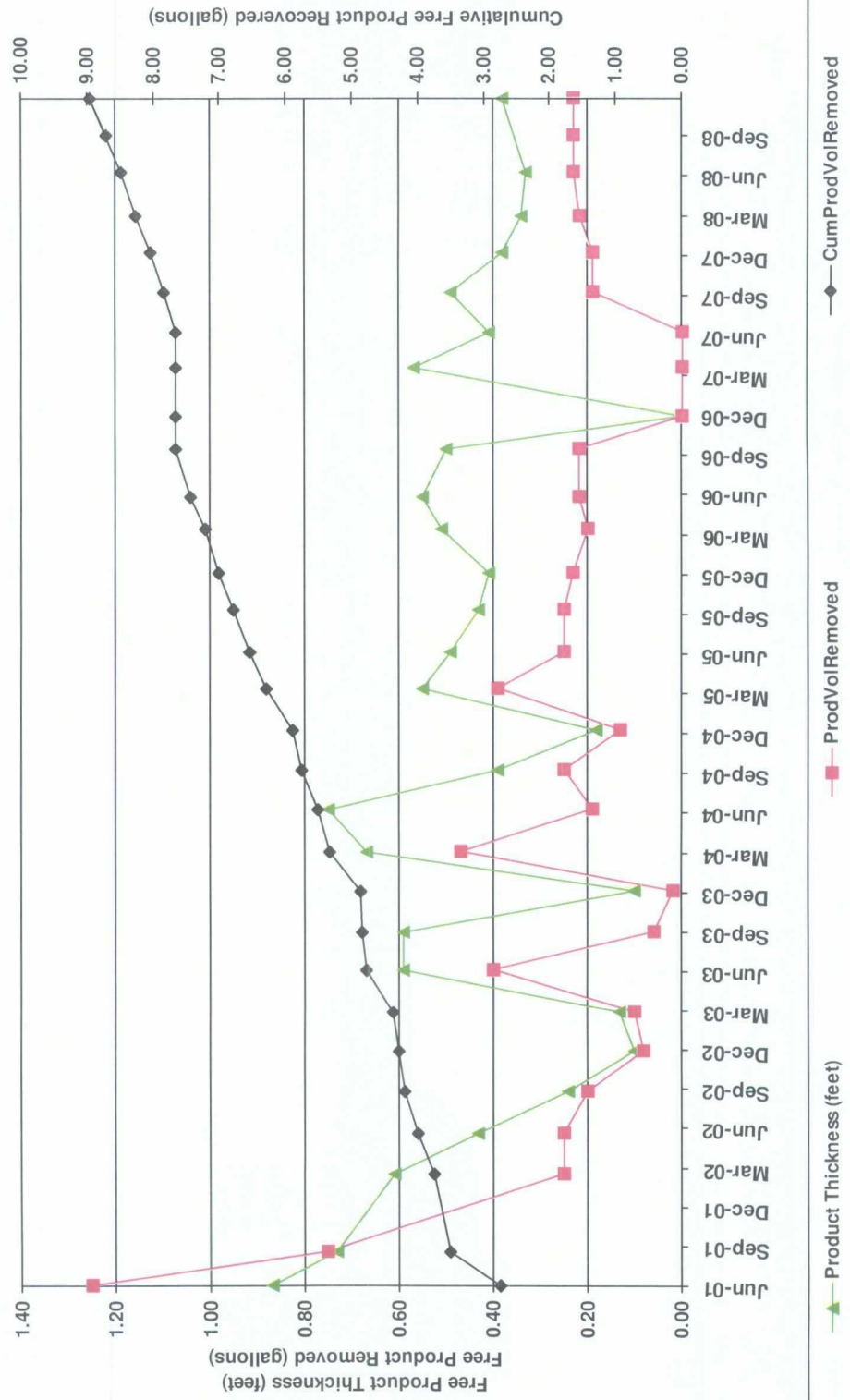


FIGURE 9
SUMMARY OF FREE-PRODUCT REMOVAL
JOHNSTON FED #6A (METER #89232)
MW03

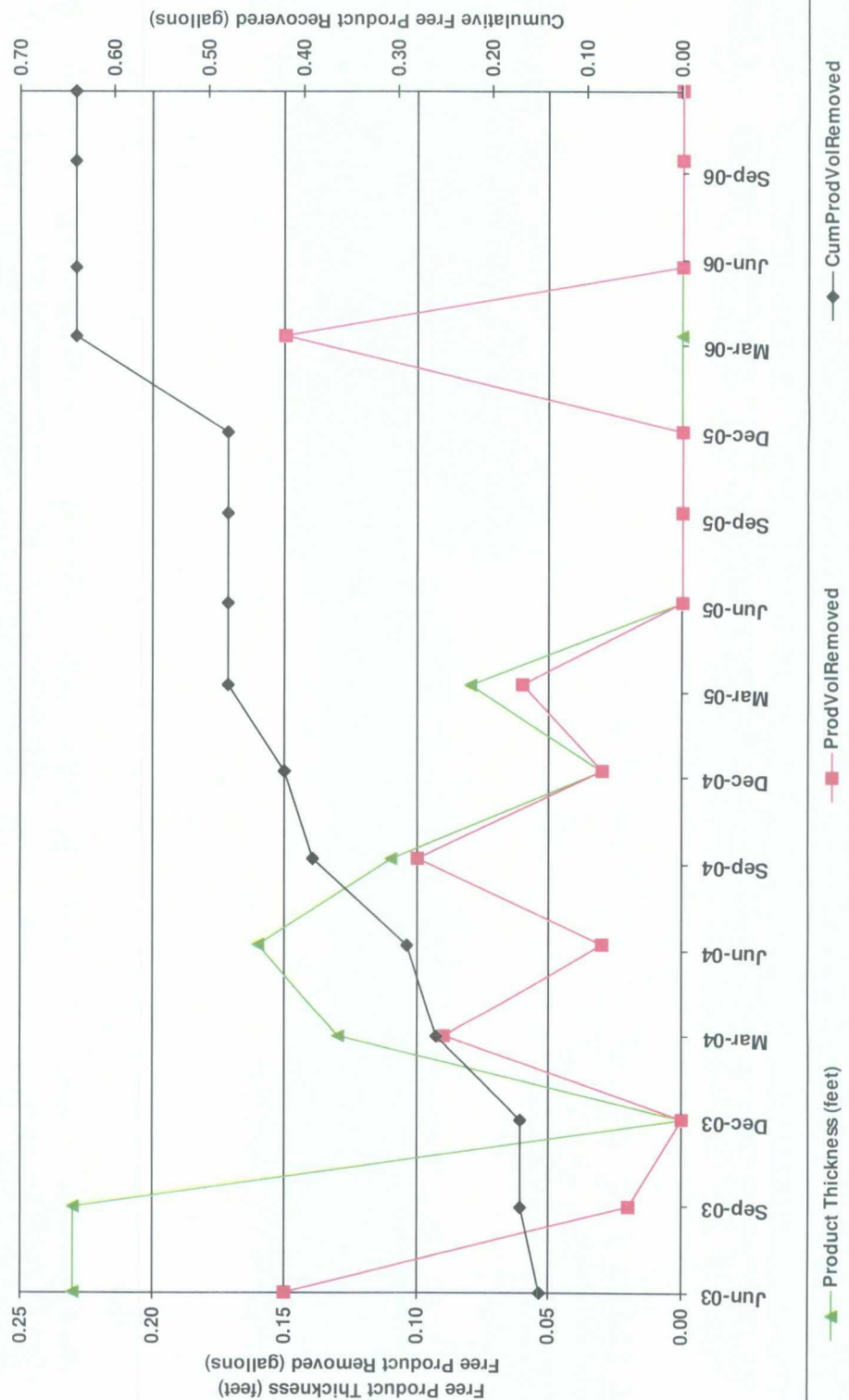


FIGURE 10
SUMMARY OF FREE-PRODUCT REMOVAL
JOHNSTON FED #6A (METER #89232)
MW05

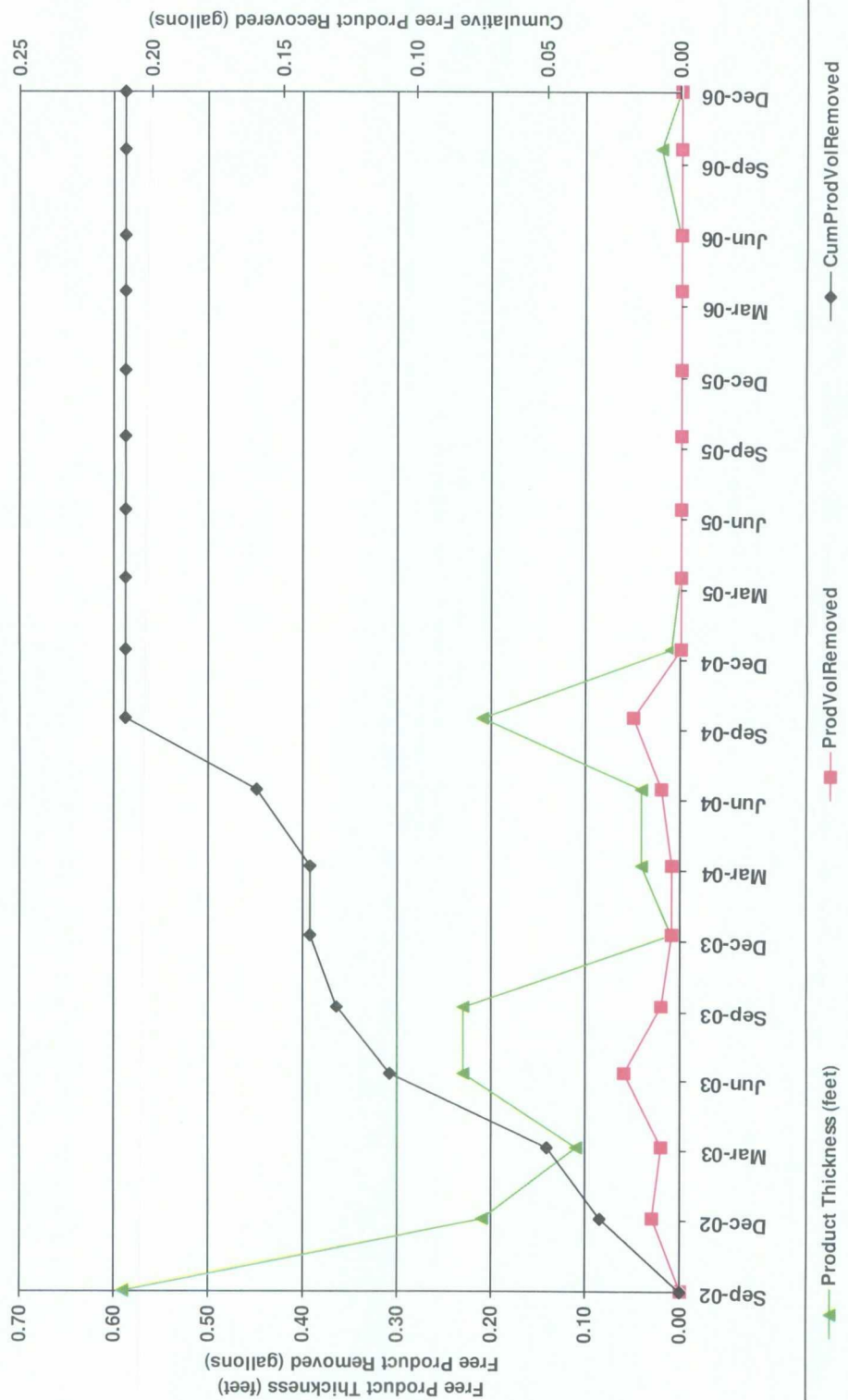


TABLE 1

**SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)**

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	8/10/1995	605	1380	74.6	718	37.24
	12/13/1995	1330	1610	235	1540	37.35
	4/11/1996	775	1070	124	810	37.48
	7/23/1996	676	1980	233	2090	37.55
	10/14/1996	1790	8350	580	6200	37.22
	1/22/1997	6420	19800	934	10700	38.26
	4/11/1997	7310	23500	1010	10800	38.31
MW02	12/13/1995	15.1	50.8	1	53.8	37.39
	4/11/1996	1	1	1	3.13	37.47
	7/23/1996	1	1.15	1	4.06	37.60
	10/14/1996	1	1.04	1	4.85	37.70
	1/22/1997	1	1	1	1	37.66
	4/11/1997	1	1	1	1	37.58
	10/9/2000	1	1	1	1	37.56
	6/18/2001	1	1	1	1	37.58
MW03	6/3/2002	1	1	1	1	37.88
	12/13/1995	488	1020	104	1120	37.11
	4/11/1996	772	231	113	379	37.17
	7/25/1996	687	112	115	209	37.30
	10/14/1996	900	240	140	340	37.40
	1/22/1997	907	234	215	340	37.35
	4/11/1997	944	209	223	322	37.29
	6/18/2001	510	23	160	98	37.26
MW04	6/3/2002	380	1	110	29	37.55
	12/13/1995	545	121	114	177	37.34
	4/11/1996	591	160	133	193	37.42
	7/25/1996	793	96.4	172	174	37.54
	10/14/1996	800	100	130	235	37.64
	1/22/1997	899	26.7	157	186	37.60
	4/11/1997	703	20.1	149	138	37.47
	10/9/2000	81	36	45	20	37.56
	6/18/2001	490	70	91	96	37.53
	6/3/2002	16	1	17	2.2	37.80
	6/18/2003	1	1	1.7	1	37.95

Note: Non Detects are represented by a value of 1.

TABLE 1

**SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JOHNSTON FED #6A (METER #89232)**

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW04	6/22/2004	0.56	1.1	2.8	1	38.04
	3/23/2005	1	1	1	0.99	38.11
	3/27/2006	0.39	1	1	0.83	38.16
	3/28/2007	0.39	0.6	1	1.7	38.16
	3/10/2008	0.25	1	1	1	38.05
MW05	8/30/2000	130	180	56	650	38.11
	6/18/2001	170	300	68	630	38.13
	6/4/2002	43	87	31	360	38.51
MW06	3/28/2007	1	1	1	1	39.43
	3/10/2008	9.4	1	0.5	139	39.21

Note: Non Detects are represented by a value of 1.

TABLE 2

**SUMMARY OF FREE-PRODUCT REMOVAL
JOHNSTON FED #6A (METER #89232)**

Monitoring Well	Removal Date	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Volume of Product Removed (gallons)
MW01	6/18/2001	37.34	38.21	0.87	1.25	2.75
	9/4/2001	37.54	38.27	0.73	0.75	3.50
	3/4/2002	37.74	38.35	0.61	0.25	3.75
	6/4/2002	37.81	38.14	0.33	0.25	4.00
	9/10/2002	38.00	38.24	0.24	0.20	4.20
	12/12/2002	38.01	38.11	0.10	0.08	4.28
	3/14/2003	37.95	38.08	0.13	0.10	4.38
	6/18/2003	37.88	38.47	0.59	0.40	4.78
	9/16/2003	38.17	38.25	0.08	0.06	4.84
	12/17/2003	38.13	38.23	0.10	0.02	4.87
	3/16/2004	37.90	38.57	0.67	0.47	5.34
	6/22/2004	37.90	38.65	0.75	0.19	5.52
	9/22/2004	38.21	38.60	0.39	0.25	5.77
	12/21/2004	38.20	38.38	0.18	0.13	5.90
	3/23/2005	37.95	38.50	0.55	0.39	6.29
	6/17/2005	38.13	38.62	0.49	0.25	6.54
	9/20/2005	38.40	38.83	0.43	0.25	6.79
	12/14/2005	38.31	38.72	0.41	0.23	7.02
	3/25/2006	38.15	38.66	0.51	0.20	7.21
	6/6/2006	38.29	38.84	0.55	0.22	7.43
	9/25/2006	38.51	39.01	0.50	0.22	7.65
	12/7/2006		38.33	0.00	0.00	7.65
	3/28/2007	38.02	38.09	0.07	0.00	7.65
	6/18/2007	38.09	38.86	0.77	0.00	7.65
	9/17/2007	38.40	39.32	0.92	0.19	7.84
	12/17/2007	38.42	39.13	0.71	0.19	8.03
	3/10/2008	37.90	38.24	0.34	0.22	8.25
	6/17/2008	37.38	37.71	0.33	0.23	8.48
	9/10/2008	37.41	37.72	0.31	0.23	8.71
	12/2/2008	37.51	37.89	0.38	0.23	8.94
MW03	6/18/2003	37.63	37.87	0.24	0.15	0.15
	9/16/2003	37.87	37.88	0.01	0.02	0.17
	12/17/2003		37.80	0.00	0.00	0.17
	3/16/2004	37.72	37.85	0.13	0.09	0.26
	6/22/2004	37.72	37.88	0.16	0.03	0.29
	9/22/2004	37.96	38.07	0.11	0.10	0.39
	12/21/2004	37.93	37.96	0.03	0.03	0.42
	3/23/2005	37.80	37.88	0.08	0.06	0.48
	6/17/2005		37.92	0.00	0.00	0.48

TABLE 2

**SUMMARY OF FREE-PRODUCT REMOVAL
JOHNSTON FED #6A (METER #89232)**

Monitoring Well	Removal Date	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Volume of Product Removed (gallons)
MW03	9/20/2005		38.16	0.00	0.00	0.48
	12/14/2005		38.09	0.00	0.00	0.48
	3/25/2006		38.09	0.00	0.15	0.64
	6/6/2006		37.98	0.00	0.00	0.64
	9/25/2006		38.16	0.00	0.00	0.64
	12/7/2006		38.06	0.00	0.00	0.64
MW05	9/10/2002	38.54	39.13	0.58	0.00	0.00
	12/12/2002	38.62	38.83	0.21	0.03	0.03
	3/14/2003	38.60	38.70	0.10	0.02	0.05
	6/18/2003	38.62	38.85	0.23	0.06	0.11
	9/16/2003	38.83	38.88	0.05	0.02	0.13
	12/17/2003	38.74	38.75	0.01	0.01	0.14
	3/16/2004	38.68	38.72	0.04	0.01	0.14
	6/22/2004	38.70	38.74	0.04	0.02	0.16
	9/22/2004	38.74	38.74	0.00	0.05	0.21
	12/21/2004	38.92	38.93	0.01	0.00	0.21
	3/23/2005		38.72	0.00	0.00	0.21
	6/17/2005		38.72	0.00	0.00	0.21
	9/20/2005		39.06	0.00	0.00	0.21
	12/14/2005		38.94	0.00	0.00	0.21
	3/27/2006		38.86	0.00	0.00	0.21
	6/6/2006		38.97	0.00	0.00	0.21
	9/25/2006	37.18	37.20	0.02	0.00	0.21
	12/7/2006		39.07	0.00	0.00	0.21