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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	Р
70194	3RP-201-0	Johnston Fed #4	31N	09W	33	Н
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	Н
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	С





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	Н
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	Ħ

^{*} 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

Hammond #41A Meter Code: 89894

SITE DI	CTAILS	
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Legal Description:	Town:	27N	Range:	8W	Sec:	25	Unit:	О
NMOCD Haz Ranking:	40	Land Type:	Federal	Operator:	М	≿G Dri	lling Com	pany

PREVIOUS ACTIVI	TIES				
Site Assessment:	6/94	Excavation:	7/94	Soil Boring:	7/95
Monitor Well:	5/97	Geoprobe:	11/96	Additional MWs:	9/99
Downgradient MWs:	9/99	Replace MW:	NA	Quarterly Initiated:	6/97
ORC Nutrient Injection:	7/98	Re- Excavation:	5/97	PSH Removal Initiated:	NA
Annual Initiated:	9/99	Quarterly Resumed:	NA	PSH Removal in 2008?	No

SUMMARY OF 2008 ACTIVITIES

- MW-1: Semiannual water level monitoring (February and August) was performed during 2008.
- MW-2: Semiannual water level monitoring (February and August) was performed during 2008.
- MW-3: Semiannual water level monitoring (February and August) was performed during 2008.
- TMW-1: Semiannual groundwater sampling (February and August) was performed during 2008.

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

SITE MAPS

Site maps (February and August) are attached as Figures 1 and 2.

SUMMARY TABLES AND GRAPHS

Historic analytical and water level data are summarized in Table 1 and presented graphically in Figures 3 through 6.

EPTPC GROUNDWATER SITES 2008 ANNUAL GROUNDWATER REPORT

Hammond #41A Meter Code: 89894

- The 2008 laboratory reports are 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.

ISOCONCENTRATION MAPS

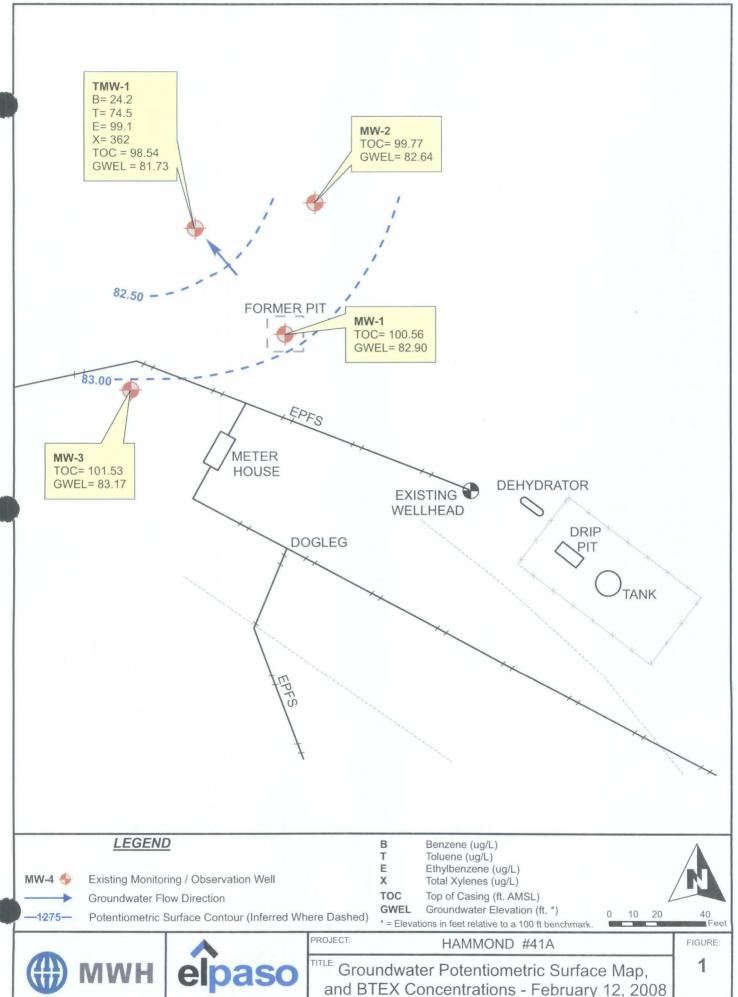
No isoconcentration maps were prepared for this Site; however, the attached Site maps present both the water level and analytical data collected during 2008.

RESULTS

- Groundwater flow at the Site is consistently to the northwest.
- The low-level (i.e., close to or below the NMWQCC standards) BTEX concentrations remain steady in TMW-1. Benzene concentrations at TMW-1 were 24.2 µg/L and 16.7 µg/L in February and August 2008, respectively. These results were slightly above the NMWQCC benzene standard. Toluene, ethylbenzene, and total xylenes concentrations were below their respective standards during each sample event in 2008.
- As of 2002, wells MW-1, MW-2 and MW-3 have met four consecutive quarters of BTEX concentrations below NMWQCC standards. TMW-1 was installed in 2003, as requested by NMOCD.

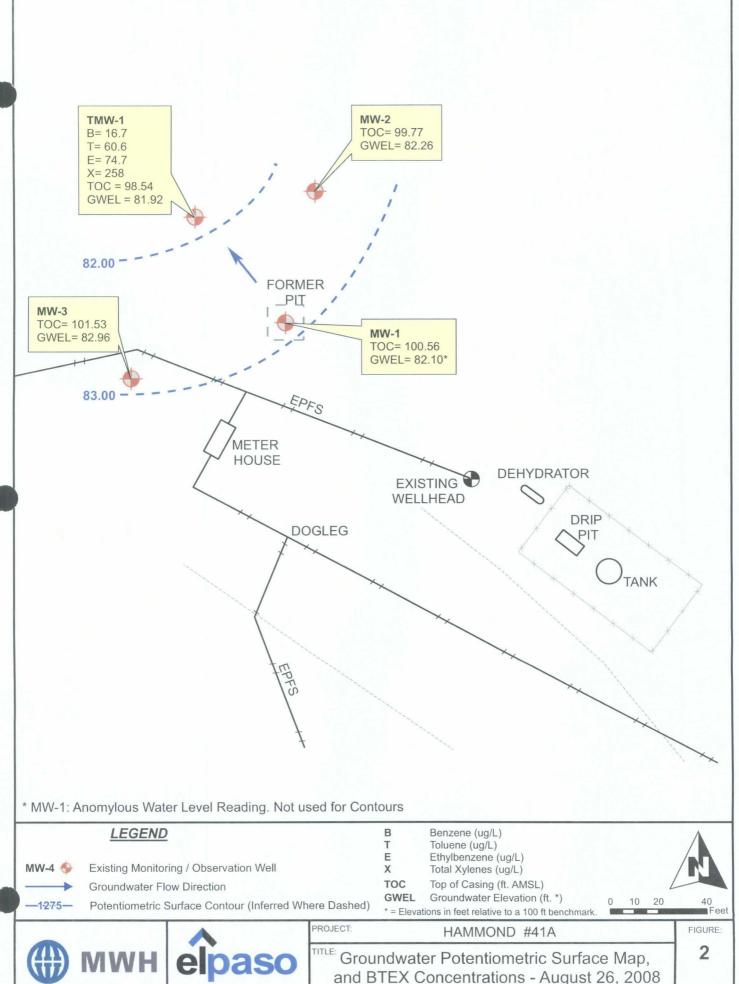
RECOMMENDATIONS

- EPTPC recommends conducting semiannual sampling of TMW-1 until BTEX concentrations fall beneath their respective NMWQCC closure standards. At that time, quarterly sampling will be conducted until four clean quarters have been observed and the Site can be submitted for closure.
- Because historic samples indicated that MW-1, MW-2, and MW-3 have achieved closure standards, these wells will be sampled again only during final closure sampling.













and BTEX Concentrations - August 26, 2008

FIGURE 3
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMMOND #41A (METER #89894)
MW01

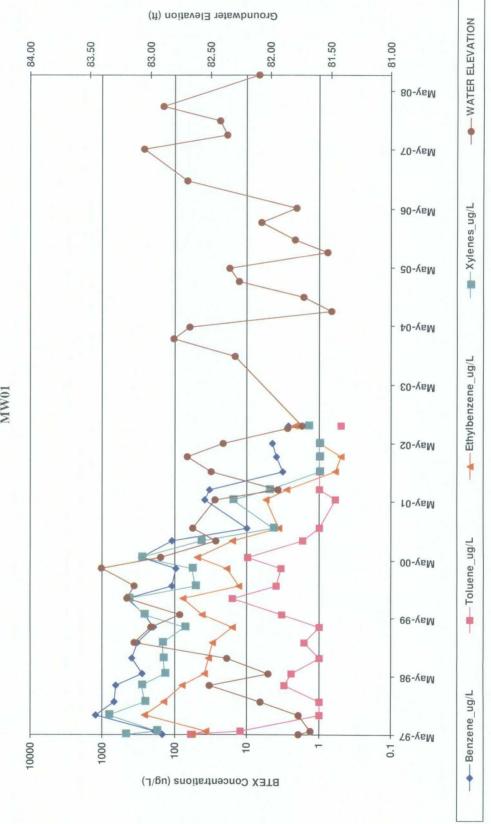
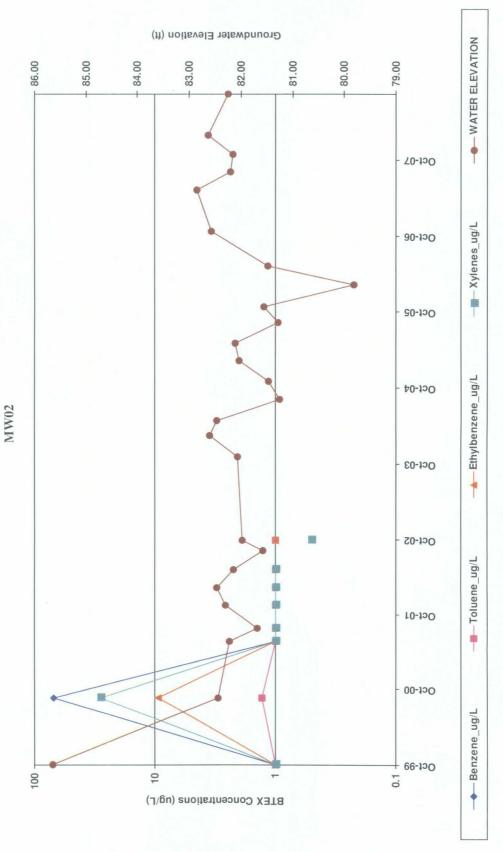


FIGURE 4
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMMOND #41A (METER #89894)



WATER ELEVATION 85.50 85.00 84.50 84.00 83.50 83.00 82.50 81.00 82.00 81.50 70-10O SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES ____Xylenes_ug/L 90-10O Oct-05 HAMMOND #41A (METER #89894) --- Ethylbenzene_ug/L P0-150 MW03 Oct-03 Oct-02 ____Toluene_ug/L Po-150 00-10O --- Benzene_ug/L 66-1₂O 0.1 BTEX Concentrations (ug/L)

FIGURE 5

Groundwater Elevation (ft)

SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMMOND #41A (METER #89894)

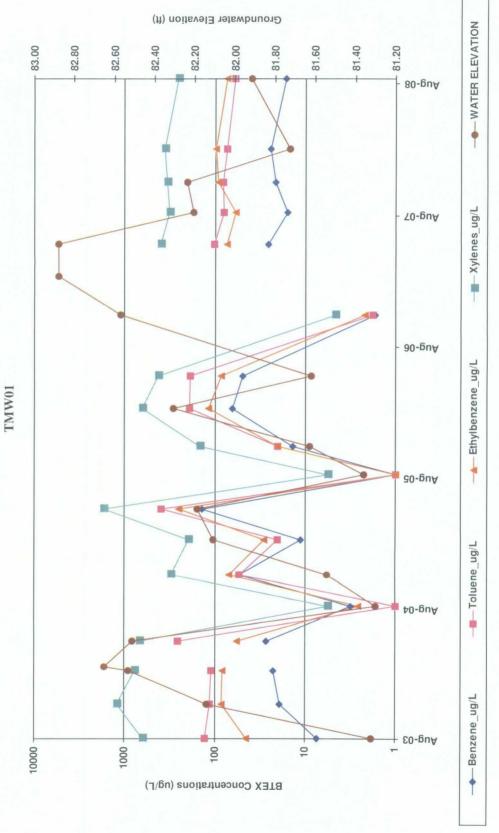


TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMMOND #41A (METER #89894)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	5/21/1997	150	60.1	56.7	484	18.79
	6/9/1997	190	12.3	36.9	181	18.89
	9/17/1997	1230	1	263	830	18.79
	12/9/1997	685	1	141	261	18.47
÷	3/20/1998	662	3.06	78.7	292	18.05
	6/4/1998	286	2.43	38.4	140	18.54
	9/10/1998	391	1	34	144	18.19
	12/17/1998	330	1.6	30	150	17.42
	3/23/1999	197	1	15.8	74.1	17.56
	6/11/1999	260	3.3	42	270	17.80
	9/20/1999	460	16	78	440	17.36
	12/9/1999	110	3.9	13	53	17.42
	3/31/2000	98	3.4	19	59	17.15
	6/9/2000	290	9.7	49	290	17.64
	9/21/2000	110	1.7	16	44	18.10
	12/5/2000 (10	1	3.6	4.3	17.91
	6/4/2001	39	0.6	5.5	16	18.09
	8/7/2001	33	· 1	2.8	4.9	18.62
	11/27/2001	3.2	1	0.6	1	18.06
	2/25/2002	3.9	1	0.5	1.	17.86
	5/21/2002	4.4	1	1	1	18.16
	9/5/2002	2.7	0.5	2.2	1.4	18.82
MW02	10/15/1999	1	1	1	1	14.12
	8/28/2000	69	1.3	9.4	28	17.32
	6/4/2001	I	. 1	1	1	17.54
	8/7/2001	1	1	1	ĺ	18.08
	11/27/2001	1	1	1	1	17.47
	2/25/2002	. 1	1	ï.	. 1	17.30
	5/21/2002	1	1	· 1	1	17.62
	10/8/2002	1	1	1 .	0.5	17.80
MW03	10/15/1999	i	1	1	<u> </u>	16.43
	8/28/2000	· · 1	1	1	1	18.96
	8/7/2001	1	1	1	1	19.58
	10/8/2002	- 1	1	1	0.6	19.38

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

TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMMOND #41A (METER #89894)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
TMW01	8/13/2003	7.3	128	44.8	625	17.22
	11/15/2003	19.2	113	84.6	1200	16.40
	2/17/2004	22.3	109	83.2	7.74	16.01
	5/11/2004	27.2	255	56.6	685	16.03
	8/19/2004	3.1	1	2.6	5.6	17.24
	11/16/2004	55.2	53.3	70.7	306	17.00
	2/21/2005	11.2	20.2	28.9	196	16.43
	5/18/2005	140	398	252	1710	16.35
	8/23/2005	1	1	· · · · · · · · · · · · · · · · · · ·	5.6	17.18
	11/8/2005	13.9	20.1	20.1	149	16.91
	2/23/2006	64.2	195		641	16.23
· ·	5/23/2006	49.2	188	85.1	429	16.92
	11/8/2006	1.7	1.8	2.2	4.7	15.97
	5/24/2007	25.8	103	74.3	399	15.66
	8/21/2007	15.9	81 .	59.6	322	16.33
	11/13/2007	21.7	83	93.4	343	16.30
	2/12/2008	24.2	74.5	99.1	362	16.81
•	8/26/2008	16.7	60.6	74.7	258	16.62

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