TABLE A
MCL Exceedances for Sampling Events
August 2001, October 2001, December 2001 and March 2002

SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	REPLIMIT	METHOD
10/17/2001	MWA006	3709928	MWA006	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	950		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWA006	3744794	MWA006	12/19/2001	12/14/2001	79-01-6	Trichloroethene	2300		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWA006	3744794	MWA006	12/19/2001	12/14/2001	71-55-6	1,1,1-Trichloroethane	540		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWA006	3744794	MWA006	12/19/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	480		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWA006	3744794	MWA006	12/19/2001	12/14/2001	75-35-4	1,1-Dichloroethene	140		2	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWA006	3744794	MWA006	12/19/2001	12/14/2001	75-01-4	Vinyl chloride	8	J	5	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWA006		MWA006	4/1/2002	3/28/2002	75-35-4	1,1-Dichloroethene	120		5	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWA006		MWA006	4/1/2002	3/28/2002	156-59-2	cis-1,2-Dichloroethene	1600		5	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWA006		MWA006	4/1/2002	3/28/2002	71-55-6	1,1,1-Trichloroethane	340		200	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWA006		MWA006	4/1/2002	3/28/2002	79-01-6	Trichloroethene	1800		5	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWA006		MWA006	4/1/2002	3/28/2002	75-01-4	Vinyl chloride	5	J	70	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWA006 DUPLICATE		MWA006	8/9/2001	8/3/2001	71-55-6	1,1,1-Trichloroethane	560		7	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWA006 DUPLICATE		MWA006	8/9/2001	8/3/2001	75-35-4	1,1-Dichloroethene	120		2	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWA006 DUPLICATE		MWA006	8/9/2001	8/3/2001	79-01-6	Trichloroethene	3100		2	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWA006 DUPLICATE		MWA006	8/9/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	710		2	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWB003		MWB003	8/9/2001	8/3/2001	71-55-6	1,1,1-Trichloroethane	290		70	UG/L	GROUNDWA	5	SW-846 8260B
8/2/2001	MWB003		MWB003	8/9/2001	8/3/2001	79-01-6	Trichloroethene	7200		5	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWB003		MWB003	8/9/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	2100		7	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	2000		5	UG/L	GROUNDWA	10	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	60		70	UG/L	GROUNDWA	10	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	79-01-6	Trichloroethene	6800		2	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	71-55-6	1,1,1-Trichloroethane	300		70	UG/L	GROUNDWA	5	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	75-35-4	1,1-Dichloroethene	69		5	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	75-01-4	Vinyl chloride	25		7	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB003	3709935	MWB003	10/23/2001	10/18/2001	107-06-2	1,2-Dichloroethane	50		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	79-01-6	Trichloroethene	6800		200	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	107-06-2	1,2-Dichloroethane	37		2	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	71-55-6	1,1,1-Trichloroethane	280		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	1600		5	UG/L	GROUNDWA	100	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	75-01-4	Vinyl chloride	18	J	5	UG/L	GROUNDWA	5	SW-846 8260B
12/12/2001	MWB003	3744806	MWB003	12/19/2001	12/14/2001	75-35-4	1,1-Dichloroethene	67		5	UG/L	GROUNDWA	5	SW-846 8260B
3/27/2002	MWB003		MWB003	3/30/2002	3/28/2002	75-01-4	Vinyl chloride	23		70	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWB003		MWB003	3/30/2002	3/28/2002	75-35-4	1,1-Dichloroethene	110		5	UG/L	GROUNDWA	10	SW-846 8260B
3/27/2002	MWB003		MWB003	4/1/2002	3/28/2002	156-59-2	cis-1,2-Dichloroethene	2100		5	UG/L	GROUNDWA	5	SW-846 8260B
3/27/2002	MWB003		MWB003	4/1/2002	3/28/2002	71-55-6	1,1,1-Trichloroethane	380		5	UG/L	GROUNDWA	2	SW-846 8260B
3/27/2002	MWB003		MWB003	3/30/2002	3/28/2002	107-06-2	1,2-Dichloroethane	74		5	UG/L	GROUNDWA	1	SW-846 8260B
3/27/2002	MWB003		MWB003	4/1/2002	3/28/2002	79-01-6	Trichloroethene	5800		5	UG/L	GROUNDWA	1	SW-846 8260B
12/10/2001	MWB004	3742402	MWB004	12/13/2001	12/11/2001	79-01-6	Trichloroethene	9		70	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWB005		MWB005	8/9/2001	8/3/2001	79-01-6	Trichloroethene	5.6		5	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWB006		MWB006	8/10/2001	8/3/2001	79-01-6	Trichloroethene	870		5	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWB006		MWB006	8/10/2001	8/3/2001	71-55-6	1,1,1-Trichloroethane	670		5	UG/L	GROUNDWA	5	SW-846 8260B
8/2/2001	MWB006		MWB006	8/10/2001	8/3/2001	75-35-4	1,1-Dichloroethene	88		5	UG/L	WATER	1	SW-846 8260B
8/2/2001	MWB006		MWB006	8/10/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	73		2	UG/L	GROUNDWA	5	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	7		2	UG/L	GROUNDWA	3	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	79-01-6	Trichloroethene	1300		5	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	71-55-6	1,1,1-Trichloroethane	1200		70	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	250		5	UG/L	GROUNDWA	1	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	75-35-4	1,1-Dichloroethene	190		70	UG/L	GROUNDWA	5	SW-846 8260B
10/17/2001	MWB006	3709927	MWB006	10/23/2001	10/18/2001	75-01-4	Vinyl chloride	15		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB006	3744800	MWB006	12/18/2001	12/14/2001	75-01-4	Vinyl chloride	10		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB006	3744800	MWB006	12/19/2001	12/14/2001	71-55-6	1,1,1-Trichloroethane	400		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB006	3744800	MWB006	12/19/2001	12/14/2001	79-01-6	Trichloroethene	670		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB006	3744800	MWB006	12/18/2001	12/14/2001	127-18-4	Tetrachloroethene	6		5	UG/L	GROUNDWA	1	SW-846 8260B
12/12/2001	MWB006	3744800	MWB006	12/18/2001	12/14/2001	75-35-4	1,1-Dichloroethene	76		5	UG/L	GROUNDWA	1	SW-846 8260B
3/26/2002	MWB006		MWB006	3/28/2002	3/27/2002	71-55-6	1,1,1-Trichloroethane	1200		5	UG/L	GROUNDWA	1	SW-846 8260B
3/26/2002	MWB006		MWB006	3/28/2002	3/27/2002	75-35-4	1,1-Dichloroethene	200		7	UG/L	GROUNDWA	5	SW-846 8260B
3/26/2002	MWB006		MWB006	3/28/2002	3/27/2002	79-01-6	Trichloroethene	1400		5	UG/L	GROUNDWA	5	SW-846 8260B
3/26/2002	MWB006		MWB006	3/28/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	210		70	UG/L	GROUNDWA	20	SW-846 8260B
3/26/2002	MWB006		MWB006	3/28/2002	3/27/2002	75-01-4	Vinyl chloride	12		7	UG/L	GROUNDWA	1	SW-846 8260B
8/2/2001	MWC003		MWC003	8/9/2001	8/3/2001	79-01-6	Trichloroethene	25		5	UG/L	GROUNDWA	20	SW-846 8260B

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SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	PQLIMIT	METHOD
3/26/2002	PZ007IDUP		PZ007IDUP	3/28/2002	3/27/2002	79-01-6	Trichloroethene	19			5 UG/L	GROUNDWA	50	SW-846 8260B
8/2/2001	PZ008D		PZ008D	8/9/2001	8/3/2001	79-01-6	Trichloroethene	17			2 UG/L	WATER	20	SW-846 8260B
8/2/2001	PZ008I		PZ008I	8/10/2001	8/3/2001	127-18-4	Tetrachloroethene	10000			70 UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ008I		PZ008I	8/10/2001	8/3/2001	79-01-6	Trichloroethene	1900			5 UG/L	WATER	25	SW-846 8260B
10/17/2001	PZ008I	3709929	PZ008I	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	12000			5 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ008I	3709929	PZ008I	10/23/2001	10/18/2001	79-01-6	Trichloroethene	2400			5 UG/L	WATER	2	SW-846 8260B
10/17/2001	PZ008I	3709929	PZ008I	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	110			5 UG/L	WATER	10	SW-846 8260B
12/12/2001	PZ008I	3744803	PZ008I	12/19/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	210			200 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ008I	3744803	PZ008I	12/19/2001	12/14/2001	79-01-6	Trichloroethene	3500			5 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ008I	3744803	PZ008I	12/19/2001	12/14/2001	127-18-4	Tetrachloroethene	13000			5 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ008I		PZ008I	3/29/2002	3/27/2002	127-18-4	Tetrachloroethene	18000			5 UG/L	WATER	10	SW-846 8260B
3/26/2002	PZ008I		PZ008I	3/28/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	310			70 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ008I		PZ008I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	6700			7 UG/L	WATER	20	SW-846 8260B
8/2/2001	PZ009D		PZ009D	8/10/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	150			200 UG/L	WATER	25	SW-846 8260B
8/2/2001	PZ009D		PZ009D	8/10/2001	8/3/2001	79-01-6	Trichloroethene	2000			2 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ009D	3709931	PZ009D	10/23/2001	10/18/2001	79-01-6	Trichloroethene	1700			70 UG/L	WATER	20	SW-846 8260B
10/17/2001	PZ009D	3709931	PZ009D	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	16			5 UG/L	WATER	250	SW-846 8260B
10/17/2001	PZ009D	3709931	PZ009D	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	200			7 UG/L	WATER	10	SW-846 8260B
10/17/2001	PZ009D	3709931	PZ009D	10/23/2001	10/18/2001	75-01-4	Vinyl chloride	18			5 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ009D	3744802	PZ009D	12/20/2001	12/14/2001	79-01-6	Trichloroethene	2000			7 UG/L	WATER	5	SW-846 8260B
12/12/2001	PZ009D	3744802	PZ009D	12/20/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	130			5 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ009D	3744802	PZ009D	12/20/2001	12/14/2001	75-01-4	Vinyl chloride	7	J		5 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ009D		PZ009D	3/29/2002	3/27/2002	75-01-4	Vinyl chloride	6	J		5 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ009D		PZ009D	3/29/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	130			5 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ009D		PZ009D	3/29/2002	3/27/2002	79-01-6	Trichloroethene	1900			5 UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ010I		PZ010I	8/10/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	2600			5 UG/L	WATER	20	SW-846 8260B
8/2/2001	PZ010I		PZ010I	8/10/2001	8/3/2001	79-01-6	Trichloroethene	20000			70 UG/L	WATER	20	SW-846 8260B
10/17/2001	PZ010I	3709934	PZ010I	10/24/2001	10/18/2001	79-01-6	Trichloroethene	21000			5 UG/L	WATER	50	SW-846 8260B
10/17/2001	PZ010I	3709934	PZ010I	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	2900			70 UG/L	WATER	5	SW-846 8260B
10/17/2001	PZ010I	3709934	PZ010I	10/23/2001	10/18/2001	75-01-4	Vinyl chloride	230			70 UG/L	WATER	25	SW-846 8260B
10/17/2001	PZ010I	3709934	PZ010I	10/23/2001	10/18/2001	75-35-4	1,1-Dichloroethene	15	J		5 UG/L	WATER	5	SW-846 8260B
12/12/2001	PZ010I	3744807	PZ010I	12/19/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	2800			5 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ010I	3744807	PZ010I	12/19/2001	12/14/2001	127-18-4	Tetrachloroethene	31	J		70 UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ010I	3744807	PZ010I	12/19/2001	12/14/2001	75-01-4	Vinyl chloride	240			5 UG/L	WATER	10	SW-846 8260B
12/12/2001	PZ010I	3744807	PZ010I	12/19/2001	12/14/2001	79-01-6	Trichloroethene	12000			5 UG/L	WATER	1	SW-846 8260B
3/27/2002	PZ010I		PZ010I	4/9/2002	3/28/2002	156-59-2	cis-1,2-Dichloroethene	2700			5 UG/L	WATER	5	SW-846 8260B
3/27/2002	PZ010I		PZ010I	4/9/2002	3/28/2002	75-01-4	Vinyl chloride	73	J		5 UG/L	WATER	10	SW-846 8260B
3/27/2002	PZ010I		PZ010I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	20000			7 UG/L	WATER	2	SW-846 8260B
8/2/2001	PZ012D		PZ012D	8/9/2001	8/3/2001	79-01-6	Trichloroethene	39			5 UG/L	WATER	5	SW-846 8260B
8/2/2001	PZ012I		PZ012I	8/9/2001	8/3/2001	79-01-6	Trichloroethene	61			5 UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ012I		PZ012I	8/9/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	370			70 UG/L	WATER	10	SW-846 8260B
10/15/2001	PZ012I	3707948	PZ012I	10/23/2001	10/16/2001	156-59-2	cis-1,2-Dichloroethene	420			5 UG/L	WATER	3	SW-846 8260B
10/15/2001	PZ012I	3707948	PZ012I	10/23/2001	10/16/2001	79-01-6	Trichloroethene	91			5 UG/L	WATER	10	SW-846 8260B
12/10/2001	PZ012I	3742407	PZ012I	12/13/2001	12/11/2001	75-01-4	Vinyl chloride	3	J		2 UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ012I	3742407	PZ012I	12/13/2001	12/11/2001	156-59-2	cis-1,2-Dichloroethene	500			7 UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ012I	3742407	PZ012I	12/13/2001	12/11/2001	79-01-6	Trichloroethene	110			70 UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ012I		PZ012I	3/28/2002	3/27/2002	79-01-6	Trichloroethene	110			200 UG/L	WATER	5	SW-846 8260B
3/26/2002	PZ012I		PZ012I	3/28/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	450			5 UG/L	WATER	5	SW-846 8260B
8/2/2001	PZ013I		PZ013I	8/10/2001	8/3/2001	127-18-4	Tetrachloroethene	560			5 UG/L	WATER	5	SW-846 8260B
8/2/2001	PZ013I		PZ013I	8/10/2001	8/3/2001	71-55-6	1,1,1-Trichloroethane	740			5 UG/L	WATER	2	SW-846 8260B
8/2/2001	PZ013I		PZ013I	8/10/2001	8/3/2001	79-01-6	Trichloroethene	1100			5 UG/L	WATER	20	SW-846 8260B
8/2/2001	PZ013I		PZ013I	8/10/2001	8/3/2001	75-35-4	1,1-Dichloroethene	88			2 UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ013I		PZ013I	8/10/2001	8/3/2001	156-59-2	cis-1,2-Dichloroethene	93			5 UG/L	WATER	20	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	75-35-4	1,1-Dichloroethene	56			5 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	75-01-4	Vinyl chloride	6			2 UG/L	WATER	10	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	56-23-5	Carbon tetrachloride	130			5 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	79			5 UG/L	WATER	3	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	71-55-6	1,1,1-Trichloroethane	600			5 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	550			5 UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ013I	3709926	PZ013I	10/23/2001	10/18/2001	79-01-6	Trichloroethene	750			5 UG/L	WATER	1	SW-846 8260B

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SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	REPLIMIT	METHOD
12/12/2001	PZ013I	3744792	PZ013I	12/18/2001	12/14/2001	75-01-4	Vinyl chloride	4	J	5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ013I	3744792	PZ013I	12/18/2001	12/14/2001	75-35-4	1,1-Dichloroethene	39		5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ013I	3744792	PZ013I	12/18/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	74		5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ013I	3744792	PZ013I	12/19/2001	12/14/2001	71-55-6	1,1,1-Trichloroethane	470		5	UG/L	WATER	25	SW-846 8260B
12/12/2001	PZ013I	3744792	PZ013I	12/19/2001	12/14/2001	79-01-6	Trichloroethene	480		5	UG/L	WATER	25	SW-846 8260B
12/12/2001	PZ013I	3744792	PZ013I	12/19/2001	12/14/2001	127-18-4	Tetrachloroethene	690		70	UG/L	WATER	3	SW-846 8260B
3/26/2002	PZ013I		PZ013I	3/28/2002	3/27/2002	79-01-6	Trichloroethene	390		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ013I		PZ013I	3/28/2002	3/27/2002	127-18-4	Tetrachloroethene	890		5	UG/L	WATER	10	SW-846 8260B
3/26/2002	PZ013I		PZ013I	3/28/2002	3/27/2002	71-55-6	1,1,1-Trichloroethane	450		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ013I		PZ013I	3/28/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	78		5	UG/L	WATER	25	SW-846 8260B
3/26/2002	PZ013I		PZ013I	3/28/2002	3/27/2002	75-35-4	1,1-Dichloroethene	39		5	UG/L	WATER	50	SW-846 8260B
8/2/2001	PZ014I		PZ014I	8/9/2001	8/3/2001	127-18-4	Tetrachloroethene	10		5	UG/L	WATER	100	SW-846 8260B
8/2/2001	PZ014I		PZ014I	8/9/2001	8/3/2001	79-01-6	Trichloroethene	260		5	UG/L	WATER	5	SW-846 8260B
10/15/2001	PZ014I	3707950	PZ014I	10/22/2001	10/16/2001	156-59-2	cis-1,2-Dichloroethene	83		200	UG/L	WATER	5	SW-846 8260B
10/15/2001	PZ014I	3707950	PZ014I	10/24/2001	10/16/2001	79-01-6	Trichloroethene	290		70	UG/L	WATER	50	SW-846 8260B
10/15/2001	PZ014I	3707950	PZ014I	10/22/2001	10/16/2001	127-18-4	Tetrachloroethene	12		70	UG/L	WATER	3	SW-846 8260B
12/10/2001	PZ014I	3742410	PZ014I	12/13/2001	12/11/2001	156-59-2	cis-1,2-Dichloroethene	85		2	UG/L	WATER	5	SW-846 8260B
12/10/2001	PZ014I	3742410	PZ014I	12/14/2001	12/11/2001	79-01-6	Trichloroethene	280		2	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ014I	3742410	PZ014I	12/13/2001	12/11/2001	127-18-4	Tetrachloroethene	10		200	UG/L	WATER	2	SW-846 8260B
3/26/2002	PZ014I		PZ014I	3/28/2002	3/27/2002	127-18-4	Tetrachloroethene	12		70	UG/L	WATER	25	SW-846 8260B
3/26/2002	PZ014I		PZ014I	3/28/2002	3/27/2002	79-01-6	Trichloroethene	290		7	UG/L	WATER	2	SW-846 8260B
8/2/2001	PZ015I		PZ015I	8/9/2001	8/3/2001	107-06-2	1,2-Dichloroethane	5.1		2	UG/L	WATER	2	SW-846 8260B
8/2/2001	PZ015I		PZ015I	8/9/2001	8/3/2001	79-01-6	Trichloroethene	5.8		5	UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ015I		PZ015I	8/9/2001	8/3/2001	127-18-4	Tetrachloroethene	52		5	UG/L	WATER	10	SW-846 8260B
10/15/2001	PZ015I	3707957	PZ015I	10/22/2001	10/16/2001	127-18-4	Tetrachloroethene	67		7	UG/L	WATER	5	SW-846 8260B
10/15/2001	PZ015I	3707957	PZ015I	10/22/2001	10/16/2001	107-06-2	1,2-Dichloroethane	6		200	UG/L	WATER	10	SW-846 8260B
12/10/2001	PZ015I	3742414	PZ015I	12/13/2001	12/11/2001	127-18-4	Tetrachloroethene	66		200	UG/L	WATER	5	SW-846 8260B
3/27/2002	PZ015I		PZ015I	3/29/2002	3/28/2002	107-06-2	1,2-Dichloroethane	7		5	UG/L	WATER	5	SW-846 8260B
3/27/2002	PZ015I		PZ015I	3/29/2002	3/28/2002	127-18-4	Tetrachloroethene	71		5	UG/L	WATER	1	SW-846 8260B
10/15/2001	PZ015I-DUP	3707958	PZ015I-DUP	10/22/2001	10/16/2001	107-06-2	1,2-Dichloroethane	6		70	UG/L	WATER	10	SW-846 8260B
10/15/2001	PZ015I-DUP	3707958	PZ015I-DUP	10/22/2001	10/16/2001	127-18-4	Tetrachloroethene	67		5	UG/L	WATER	100	SW-846 8260B
8/2/2001	PZ016D		PZ016D	8/9/2001	8/3/2001	127-18-4	Tetrachloroethene	170		5	UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ016D		PZ016D	8/9/2001	8/3/2001	79-01-6	Trichloroethene	14		7	UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ016D		PZ016D	8/9/2001	8/3/2001	75-01-4	Vinyl chloride	14		2	UG/L	WATER	3	SW-846 8260B
10/15/2001	PZ016D	3707951	PZ016D	10/22/2001	10/16/2001	75-01-4	Vinyl chloride	13		5	UG/L	WATER	100	SW-846 8260B
10/15/2001	PZ016D	3707951	PZ016D	10/22/2001	10/16/2001	79-01-6	Trichloroethene	12		7	UG/L	WATER	1	SW-846 8260B
10/15/2001	PZ016D	3707951	PZ016D	10/22/2001	10/16/2001	127-18-4	Tetrachloroethene	170		70	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ016D	3742411	PZ016D	12/13/2001	12/11/2001	75-01-4	Vinyl chloride	16		5	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ016D	3742411	PZ016D	12/13/2001	12/11/2001	79-01-6	Trichloroethene	11		5	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ016D	3742411	PZ016D	12/13/2001	12/11/2001	127-18-4	Tetrachloroethene	220		5	UG/L	WATER	5	SW-846 8260B
3/26/2002	PZ016D		PZ016D	3/28/2002	3/27/2002	127-18-4	Tetrachloroethene	240		2	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ016D		PZ016D	3/28/2002	3/27/2002	79-01-6	Trichloroethene	18		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ016D		PZ016D	3/28/2002	3/27/2002	75-01-4	Vinyl chloride	12		70	UG/L	WATER	10	SW-846 8260B
8/2/2001	PZ017D		PZ017D	8/10/2001	8/3/2001	75-01-4	Vinyl chloride	9.6		5	UG/L	WATER	10	SW-846 8260B
10/15/2001	PZ017D	3707944	PZ017D	10/23/2001	10/16/2001	75-01-4	Vinyl chloride	15		5	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ017D	3742406	PZ017D	12/13/2001	12/11/2001	75-01-4	Vinyl chloride	15		5	UG/L	WATER	3	SW-846 8260B
3/26/2002	PZ017D		PZ017D	3/29/2002	3/27/2002	75-01-4	Vinyl chloride	16		5	UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ017I		PZ017I	8/9/2001	8/3/2001	127-18-4	Tetrachloroethene	1700		5	UG/L	WATER	1	SW-846 8260B
8/2/2001	PZ017I		PZ017I	8/9/2001	8/3/2001	79-01-6	Trichloroethene	94		2	UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ017I	3709921	PZ017I	10/23/2001	10/18/2001	127-18-4	Tetrachloroethene	1600		7	UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ017I	3709921	PZ017I	10/23/2001	10/18/2001	79-01-6	Trichloroethene	130		70	UG/L	WATER	10	SW-846 8260B
12/12/2001	PZ017I	3744797	PZ017I	12/19/2001	12/14/2001	79-01-6	Trichloroethene	82		5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ017I	3744797	PZ017I	12/19/2001	12/14/2001	127-18-4	Tetrachloroethene	1500		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ017I		PZ017I	3/30/2002	3/27/2002	79-01-6	Trichloroethene	110		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ017I		PZ017I	4/1/2002	3/27/2002	127-18-4	Tetrachloroethene	1500		7	UG/L	WATER	3	SW-846 8260B
10/15/2001	PZ019I	3707940	PZ019I	10/22/2001	10/16/2001	79-01-6	Trichloroethene	9		2	UG/L	WATER	3	SW-846 8260B
12/10/2001	PZ019I	3742400	PZ019I	12/13/2001	12/11/2001	79-01-6	Trichloroethene	10		70	UG/L	WATER	25	SW-846 8260B
3/26/2002	PZ019I		PZ019I	3/27/2002	3/27/2002	79-01-6	Trichloroethene	9		5	UG/L	WATER	3	SW-846 8260B
10/15/2001	PZ020D	3707946	PZ020D	10/23/2001	10/16/2001	75-01-4	Vinyl chloride	3	J	5	UG/L	WATER	25	SW-846 8260B
12/12/2001	PZ020D	3744796	PZ020D	12/18/2001	12/14/2001	75-01-4	Vinyl chloride	3	J	2	UG/L	WATER	1	SW-846 8260B

TABLE A
MCL Exceedances for Sampling Events
August 2001, October 2001, December 2001 and March 2002

SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	REPLIMIT	METHOD
12/12/2001	PZ020D	3744796	PZ020D	12/18/2001	12/14/2001	79-01-6	Trichloroethene	10		5	UG/L	WATER	5	SW-846 8260B
3/26/2002	PZ020D		PZ020D	3/29/2002	3/27/2002	75-01-4	Vinyl chloride	3	J	5	UG/L	WATER	20	SW-846 8260B
10/15/2001	PZ021I	3707943	PZ021I	10/23/2001	10/16/2001	79-01-6	Trichloroethene	2		5	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ021I	3742401	PZ021I	12/13/2001	12/11/2001	79-01-6	Trichloroethene	9		5	UG/L	WATER	1	SW-846 8260B
3/26/2002	PZ021I		PZ021I	3/27/2002	3/27/2002	79-01-6	Trichloroethene	8		200	UG/L	WATER	3	SW-846 8260B
10/15/2001	PZ022I	3707935	PZ022I	10/19/2001	10/16/2001	79-01-6	Trichloroethene	10		5	UG/L	WATER	1	SW-846 8260B
12/10/2001	PZ022I	3742398	PZ022I	12/13/2001	12/11/2001	79-01-6	Trichloroethene	11		70	UG/L	WATER	1	SW-846 8260B
3/27/2002	PZ022I		PZ022I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	10		5	UG/L	WATER	25	SW-846 8260B
12/11/2001	PZ024D	3743185	PZ024D	12/15/2001	12/12/2001	79-01-6	Trichloroethene	10		5	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ024D/DUP	3743186	PZ024D/DUP	12/15/2001	12/12/2001	79-01-6	Trichloroethene	11		70	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ024I	3708794	PZ024I	10/20/2001	10/17/2001	75-01-4	Vinyl chloride	5	J	5	UG/L	WATER	5	SW-846 8260B
10/16/2001	PZ024I	3708794	PZ024I	10/20/2001	10/17/2001	75-35-4	1,1-Dichloroethene	61		70	UG/L	WATER	2	SW-846 8260B
10/16/2001	PZ024I	3708794	PZ024I	10/22/2001	10/17/2001	156-59-2	cis-1,2-Dichloroethene	580		5	UG/L	WATER	5	SW-846 8260B
10/16/2001	PZ024I	3708794	PZ024I	10/20/2001	10/17/2001	71-55-6	1,1,1-Trichloroethane	290		5	UG/L	WATER	5	SW-846 8260B
10/16/2001	PZ024I	3708794	PZ024I	10/22/2001	10/17/2001	79-01-6	Trichloroethene	840		70	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ024I	3743187	PZ024I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	930		5	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ024I	3743187	PZ024I	12/15/2001	12/12/2001	156-59-2	cis-1,2-Dichloroethene	640		5	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ024I	3743187	PZ024I	12/15/2001	12/12/2001	75-35-4	1,1-Dichloroethene	64		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ024I	3743187	PZ024I	12/15/2001	12/12/2001	71-55-6	1,1,1-Trichloroethane	250		200	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ024I	3743187	PZ024I	12/15/2001	12/12/2001	75-01-4	Vinyl chloride	5		70	UG/L	WATER	20	SW-846 8260B
3/27/2002	PZ024I		PZ024I	4/8/2002	3/28/2002	75-01-4	Vinyl chloride	4	J	5	UG/L	WATER	200	SW-846 8260B
3/27/2002	PZ024I		PZ024I	4/8/2002	3/28/2002	75-35-4	1,1-Dichloroethene	88		2	UG/L	WATER	2	SW-846 8260B
3/27/2002	PZ024I		PZ024I	4/4/2002	3/28/2002	156-59-2	cis-1,2-Dichloroethene	760		70	UG/L	WATER	2	SW-846 8260B
3/27/2002	PZ024I		PZ024I	4/4/2002	3/28/2002	71-55-6	1,1,1-Trichloroethane	370		5	UG/L	WATER	20	SW-846 8260B
3/27/2002	PZ024I		PZ024I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	1400		200	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ025D	3743182	PZ025D	12/15/2001	12/12/2001	79-01-6	Trichloroethene	15		5	UG/L	WATER	2	SW-846 8260B
10/16/2001	PZ025I	3708800	PZ025I	10/22/2001	10/17/2001	79-01-6	Trichloroethene	63		7	UG/L	WATER	2	SW-846 8260B
10/16/2001	PZ025I	3708800	PZ025I	10/22/2001	10/17/2001	75-01-4	Vinyl chloride	9		5	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ025I	3708800	PZ025I	10/22/2001	10/17/2001	75-35-4	1,1-Dichloroethene	15		70	UG/L	WATER	2	SW-846 8260B
10/16/2001	PZ025I	3708800	PZ025I	10/22/2001	10/17/2001	156-59-2	cis-1,2-Dichloroethene	1100		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ025I	3708800	PZ025I	10/22/2001	10/17/2001	107-06-2	1,2-Dichloroethane	10		2	UG/L	WATER	2	SW-846 8260B
12/11/2001	PZ025I	3743183	PZ025I	12/15/2001	12/12/2001	75-35-4	1,1-Dichloroethene	14		5	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ025I	3743183	PZ025I	12/15/2001	12/12/2001	75-01-4	Vinyl chloride	7		70	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ025I	3743183	PZ025I	12/15/2001	12/12/2001	156-59-2	cis-1,2-Dichloroethene	1100		5	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ025I	3743183	PZ025I	12/15/2001	12/12/2001	107-06-2	1,2-Dichloroethane	7		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ025I	3743183	PZ025I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	85		2	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ025I		PZ025I	3/30/2002	3/27/2002	75-01-4	Vinyl chloride	6		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ025I		PZ025I	3/30/2002	3/27/2002	75-35-4	1,1-Dichloroethene	16		2	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ025I		PZ025I	4/1/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	1200		70	UG/L	WATER	10	SW-846 8260B
3/25/2002	PZ025I		PZ025I	3/30/2002	3/27/2002	107-06-2	1,2-Dichloroethane	11		5	UG/L	WATER	100	SW-846 8260B
3/25/2002	PZ025I		PZ025I	3/30/2002	3/27/2002	79-01-6	Trichloroethene	110		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	75-01-4	Vinyl chloride	13	J	7	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	107-06-2	1,2-Dichloroethane	7	J	5	UG/L	WATER	10	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	75-35-4	1,1-Dichloroethene	31		70	UG/L	WATER	10	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	156-59-2	cis-1,2-Dichloroethene	1100		5	UG/L	WATER	100	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	71-55-6	1,1,1-Trichloroethane	220		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ026I	3708797	PZ026I	10/22/2001	10/17/2001	79-01-6	Trichloroethene	3000		2	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ026I	3743180	PZ026I	12/15/2001	12/12/2001	75-01-4	Vinyl chloride	11	J	2	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ026I	3743180	PZ026I	12/15/2001	12/12/2001	156-59-2	cis-1,2-Dichloroethene	890		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ026I	3743180	PZ026I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	2600		70	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ026I	3743180	PZ026I	12/15/2001	12/12/2001	75-35-4	1,1-Dichloroethene	22		5	UG/L	WATER	5	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	75-35-4	1,1-Dichloroethene	31		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	75-01-4	Vinyl chloride	11	J	70	UG/L	WATER	5	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	1200		5	UG/L	WATER	20	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	107-06-2	1,2-Dichloroethane	9	J	7	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	79-01-6	Trichloroethene	3600		70	UG/L	WATER	20	SW-846 8260B
3/25/2002	PZ026I		PZ026I	3/30/2002	3/27/2002	71-55-6	1,1,1-Trichloroethane	250		200	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ027D	3743176	PZ027D	12/14/2001	12/12/2001	79-01-6	Trichloroethene	75		5	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ028D	3708807	PZ028D	10/22/2001	10/17/2001	79-01-6	Trichloroethene	130		5	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ028D	3743172	PZ028D	12/14/2001	12/12/2001	79-01-6	Trichloroethene	74		5	UG/L	WATER	1	SW-846 8260B

TABLE A

MCL Exceedances for Sampling Events

August 2001, October 2001, December 2001 and March 2002

SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	RL-PQL LIMIT	METHOD
3/27/2002	PZ028D		PZ028D	4/4/2002	3/28/2002	79-01-6	Trichloroethene	140		5	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ028I	3708808	PZ028I	10/19/2001	10/17/2001	156-59-2	cis-1,2-Dichloroethene	170		2	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ028I	3708808	PZ028I	10/19/2001	10/17/2001	107-06-2	1,2-Dichloroethane	6		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ028I	3708808	PZ028I	10/22/2001	10/17/2001	79-01-6	Trichloroethene	920		7	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ028I	3708808	PZ028I	10/19/2001	10/17/2001	75-35-4	1,1-Dichloroethene	8		5	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ028I	3743174	PZ028I	12/14/2001	12/12/2001	107-06-2	1,2-Dichloroethane	6		2	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ028I	3743174	PZ028I	12/14/2001	12/12/2001	75-35-4	1,1-Dichloroethene	9		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ028I	3743174	PZ028I	12/14/2001	12/12/2001	156-59-2	cis-1,2-Dichloroethene	210		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ028I	3743174	PZ028I	12/14/2001	12/12/2001	79-01-6	Trichloroethene	1000		5	UG/L	WATER	1	SW-846 8260B
3/27/2002	PZ028I		PZ028I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	1200		5	UG/L	WATER	1	SW-846 8260B
3/27/2002	PZ028I		PZ028I	4/9/2002	3/28/2002	107-06-2	1,2-Dichloroethane	6		5	UG/L	WATER	10	SW-846 8260B
3/27/2002	PZ028I		PZ028I	4/9/2002	3/28/2002	75-35-4	1,1-Dichloroethene	10		7	UG/L	WATER	1	SW-846 8260B
3/27/2002	PZ028I		PZ028I	4/9/2002	3/28/2002	156-59-2	cis-1,2-Dichloroethene	240		200	UG/L	WATER	10	SW-846 8260B
10/16/2001	PZ029D	3708821	PZ029D	10/19/2001	10/17/2001	79-01-6	Trichloroethene	6		70	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ029I	3708820	PZ029I	10/19/2001	10/17/2001	79-01-6	Trichloroethene	34		7	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ029I	3708820	PZ029I	10/19/2001	10/17/2001	75-01-4	Vinyl chloride	16		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ029I	3743195	PZ029I	12/15/2001	12/12/2001	75-01-4	Vinyl chloride	18		5	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ029I	3743195	PZ029I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	25		200	UG/L	WATER	20	SW-846 8260B
3/27/2002	PZ029I		PZ029I	4/4/2002	3/28/2002	75-01-4	Vinyl chloride	17		70	UG/L	WATER	5	SW-846 8260B
3/27/2002	PZ029I		PZ029I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	10		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ030D	3708811	PZ030D	10/19/2001	10/17/2001	79-01-6	Trichloroethene	10		70	UG/L	WATER	20	SW-846 8260B
12/12/2001	PZ030D	3744810	PZ030D	12/19/2001	12/14/2001	79-01-6	Trichloroethene	56		5	UG/L	WATER	10	SW-846 8260B
10/16/2001	PZ030I	3708810	PZ030I	10/19/2001	10/17/2001	79-01-6	Trichloroethene	17		5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ030I	3744809	PZ030I	12/19/2001	12/14/2001	79-01-6	Trichloroethene	60		5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ030I	3744809	PZ030I	12/19/2001	12/14/2001	127-18-4	Tetrachloroethene	18		2	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ031I	3708787	PZ031I	10/19/2001	10/17/2001	79-01-6	Trichloroethene	160		7	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ031I	3743171	PZ031I	12/14/2001	12/12/2001	79-01-6	Trichloroethene	160		70	UG/L	WATER	20	SW-846 8260B
3/27/2002	PZ031I		PZ031I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	180		200	UG/L	WATER	20	SW-846 8260B
10/17/2001	PZ032D	3709913	PZ032D	10/24/2001	10/18/2001	79-01-6	Trichloroethene	280		5	UG/L	WATER	20	SW-846 8260B
12/11/2001	PZ032D	3743201	PZ032D	12/15/2001	12/12/2001	79-01-6	Trichloroethene	230		2	UG/L	WATER	5	SW-846 8260B
3/25/2002	PZ032D		PZ032D	3/29/2002	3/27/2002	79-01-6	Trichloroethene	250		7	UG/L	WATER	5	SW-846 8260B
10/17/2001	PZ032I	3709912	PZ032I	10/24/2001	10/18/2001	79-01-6	Trichloroethene	89		70	UG/L	WATER	5	SW-846 8260B
12/11/2001	PZ032I	3743200	PZ032I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	66		7	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ032I		PZ032I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	37		2	UG/L	WATER	20	SW-846 8260B
10/16/2001	PZ033D	3708813	PZ033D	10/19/2001	10/17/2001	79-01-6	Trichloroethene	11		5	UG/L	WATER	100	SW-846 8260B
12/11/2001	PZ033D	3743199	PZ033D	12/15/2001	12/12/2001	79-01-6	Trichloroethene	160		5	UG/L	WATER	100	SW-846 8260B
10/16/2001	PZ033I	3708814	PZ033I	10/19/2001	10/17/2001	79-01-6	Trichloroethene	97		5	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ033I	3743197	PZ033I	12/15/2001	12/12/2001	79-01-6	Trichloroethene	57		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ033I		PZ033I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	40		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ033IDUP		PZ033IDUP	3/29/2002	3/27/2002	79-01-6	Trichloroethene	42		2	UG/L	WATER	2	SW-846 8260B
10/16/2001	PZ034D	3708817	PZ034D	10/19/2001	10/17/2001	79-01-6	Trichloroethene	12		70	UG/L	WATER	2	SW-846 8260B
12/12/2001	PZ035D	3744813	PZ035D	12/20/2001	12/14/2001	79-01-6	Trichloroethene	47		5	UG/L	WATER	10	SW-846 8260B
10/17/2001	PZ035I	3709915	PZ035I	10/24/2001	10/18/2001	79-01-6	Trichloroethene	290		5	UG/L	WATER	10	SW-846 8260B
12/12/2001	PZ035I	3744814	PZ035I	12/20/2001	12/14/2001	127-18-4	Tetrachloroethene	19		2	UG/L	WATER	2	SW-846 8260B
12/12/2001	PZ035I	3744814	PZ035I	12/20/2001	12/14/2001	79-01-6	Trichloroethene	290		7	UG/L	WATER	2	SW-846 8260B
3/25/2002	PZ035I		PZ035I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	190		70	UG/L	WATER	2	SW-846 8260B
10/17/2001	PZ036D	3709910	PZ036D	10/24/2001	10/18/2001	79-01-6	Trichloroethene	16		5	UG/L	WATER	20	SW-846 8260B
12/12/2001	PZ036D	3744822	PZ036D	12/20/2001	12/14/2001	79-01-6	Trichloroethene	32		5	UG/L	WATER	50	SW-846 8260B
12/12/2001	PZ036D	3744822	PZ036D	12/20/2001	12/14/2001	127-18-4	Tetrachloroethene	9		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ036D		PZ036D	3/29/2002	3/27/2002	79-01-6	Trichloroethene	50		7	UG/L	WATER	2	SW-846 8260B
12/12/2001	PZ036I	3744824	PZ036I	12/20/2001	12/14/2001	79-01-6	Trichloroethene	14		70	UG/L	WATER	20	SW-846 8260B
12/12/2001	PZ036I	3744824	PZ036I	12/20/2001	12/14/2001	127-18-4	Tetrachloroethene	6		200	UG/L	WATER	2	SW-846 8260B
12/12/2001	PZ036IDUP	3744825	PZ036IDUP	12/20/2001	12/14/2001	79-01-6	Trichloroethene	11		5	UG/L	WATER	20	SW-846 8260B
10/17/2001	PZ037D	3709919	PZ037D	10/23/2001	10/18/2001	79-01-6	Trichloroethene	8		2	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ037D	3744816	PZ037D	12/20/2001	12/14/2001	79-01-6	Trichloroethene	40		7	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ037D		PZ037D	3/29/2002	3/27/2002	79-01-6	Trichloroethene	79		70	UG/L	WATER	50	SW-846 8260B
10/17/2001	PZ037I	3709918	PZ037I	10/23/2001	10/18/2001	79-01-6	Trichloroethene	3300		200	UG/L	WATER	50	SW-846 8260B
12/12/2001	PZ037I	3744817	PZ037I	12/20/2001	12/14/2001	127-18-4	Tetrachloroethene	8	J	5	UG/L	WATER	1	SW-846 8260B
12/12/2001	PZ037I	3744817	PZ037I	12/20/2001	12/14/2001	79-01-6	Trichloroethene	4700		5	UG/L	WATER	50	SW-846 8260B
3/25/2002	PZ037I		PZ037I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	3800		2	UG/L	WATER	1	SW-846 8260B

TABLE A

MCL Exceedances for Sampling Events

August 2001, October 2001, December 2001 and March 2002

SAMPDATE	SAMPLEID	LABSAMPLEID	LOCATION	ANLYDATE	RECDATE	CAS	PARAMETER	RESULTS.RESULT	RESULTS.QUALIFIER	MCL Standard	UNITS	MATRIX	REPLIMIT	METHOD
10/17/2001	PZ038D	3709906	PZ038D	10/24/2001	10/18/2001	79-01-6	Trichloroethene	980		70	UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ038D	3709906	PZ038D	10/23/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	78		5	UG/L	WATER	10	SW-846 8260B
12/12/2001	PZ038D	3744819	PZ038D	12/20/2001	12/14/2001	127-18-4	Tetrachloroethene	25		2	UG/L	WATER	2	SW-846 8260B
12/12/2001	PZ038D	3744819	PZ038D	12/20/2001	12/14/2001	79-01-6	Trichloroethene	880		5	UG/L	WATER	1	SW-846 8260B
3/25/2002	PZ038D		PZ038D	3/29/2002	3/27/2002	79-01-6	Trichloroethene	800		5	UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ038I	3709907	PZ038I	10/24/2001	10/18/2001	79-01-6	Trichloroethene	2600		5	UG/L	WATER	1	SW-846 8260B
10/17/2001	PZ038I	3709907	PZ038I	10/24/2001	10/18/2001	156-59-2	cis-1,2-Dichloroethene	160		5	UG/L	WATER	3	SW-846 8260B
12/12/2001	PZ038I	3744820	PZ038I	12/20/2001	12/14/2001	79-01-6	Trichloroethene	3200		5	UG/L	WATER	5	SW-846 8260B
12/12/2001	PZ038I	3744820	PZ038I	12/20/2001	12/14/2001	156-59-2	cis-1,2-Dichloroethene	170		2	UG/L	WATER	20	SW-846 8260B
3/25/2002	PZ038I		PZ038I	3/29/2002	3/27/2002	156-59-2	cis-1,2-Dichloroethene	190		70	UG/L	WATER	20	SW-846 8260B
3/25/2002	PZ038I		PZ038I	3/29/2002	3/27/2002	79-01-6	Trichloroethene	3200		5	UG/L	WATER	200	SW-846 8260B
10/16/2001	PZ039D	3708790	PZ039D	10/20/2001	10/17/2001	79-01-6	Trichloroethene	7		2	UG/L	WATER	1	SW-846 8260B
12/11/2001	PZ039D	3743189	PZ039D	12/15/2001	12/12/2001	79-01-6	Trichloroethene	15		5	UG/L	WATER	1	SW-846 8260B
10/16/2001	PZ039I	3708792	PZ039I	10/22/2001	10/17/2001	79-01-6	Trichloroethene	420		7	UG/L	WATER	10	SW-846 8260B
12/11/2001	PZ039I	3743190	PZ039I	12/18/2001	12/12/2001	79-01-6	Trichloroethene	370		70	UG/L	WATER	10	SW-846 8260B
3/27/2002	PZ039I		PZ039I	4/4/2002	3/28/2002	79-01-6	Trichloroethene	570		70	UG/L	WATER	1	SW-846 8260B

TABLE B
EW1 Summary

	Sampling Event			
MW008S	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	15.5	15	12	7
1,1-Dichloroethene	15.5	0.5	0.5	0.5
1,2-Dichloroethane	15.5	0.5	0.5	0.5
Carbon tetrachloride	15.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	22	31	39	30
Tetrachloroethene	1100	1100	1000	1100
Trichloroethene	440	510	430	440
Vinyl chloride	15.5	0.5	0.5	0.5

	Sampling Event			
PZ008I	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	165	42	38	46
1,1-Dichloroethene	165	5	5	5
1,2-Dichloroethane	165	5	5	5
Carbon tetrachloride	165	5	5	5
cis-1,2-Dichloroethene	85	110	210	310
Tetrachloroethene	10000	12000	13000	18000
Trichloroethene	1900	2400	3500	6700
Vinyl chloride	165	5	5	5

	Sampling Event			
PZ008D	August-01	October-01	December-01	March-02
Deep	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	1.6	0.5	0.5	0.5
1,1-Dichloroethene	0.5	0.5	0.5	0.5
1,2-Dichloroethane	0.5	0.5	0.5	0.5
Carbon tetrachloride	0.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	4.6	4	2	2
Tetrachloroethene	0.5	1	0.5	0.5
Trichloroethene	17	4	2	0.5
Vinyl chloride	0.5	0.5	0.5	0.5

	Sampling Event				Maximum
EW-1	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**60.7**	19.2	16.8	17.8	60.7
1,1-Dichloroethene	**60.3**	2.0	2.0	2.0	60.3
1,2-Dichloroethane	**60.3**	2.0	2.0	2.0	60.3
Carbon tetrachloride	**60.3**	2.0	2.0	2.0	60.3
cis-1,2-Dichloroethene	37.2	48.3	83.7	**114.0**	114.0
Tetrachloroethene	3700.2	4367.0	4666.8	**6366.8**	6366.8
Trichloroethene	785.7	971.3	1310.7	**2380.2**	2380.2
Vinyl chloride	**60.3**	2.0	2.0	2.0	60.3

TABLE B
MW008s

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MW008S	8/2/2001	71-55-6	1,1,1-Trichloroethane	31	U	UG/L	31	15.5	UG/L
MW008S	8/2/2001	75-35-4	1,1-Dichloroethene	31	U	UG/L	31	15.5	UG/L
MW008S	8/2/2001	107-06-2	1,2-Dichloroethane	31	U	UG/L	31	15.5	UG/L
MW008S	8/2/2001	56-23-5	Carbon tetrachloride	31	U	UG/L	31	15.5	UG/L
MW008S	8/2/2001	156-59-2	cis-1,2-Dichloroethene	22		UG/L	16	22	UG/L
MW008S	8/2/2001	127-18-4	Tetrachloroethene	1100		UG/L	31	1100	UG/L
MW008S	8/2/2001	79-01-6	Trichloroethene	440		UG/L	31	440	UG/L
MW008S	8/2/2001	75-01-4	Vinyl chloride	31	U	UG/L	31	15.5	UG/L
MW008S	10/17/2001	71-55-6	1,1,1-Trichloroethane	15		UG/L	1	15	UG/L
MW008S	10/17/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MW008S	10/17/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW008S	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW008S	10/17/2001	156-59-2	cis-1,2-Dichloroethene	31		UG/L	1	31	UG/L
MW008S	10/17/2001	127-18-4	Tetrachloroethene	1100		UG/L	10	1100	UG/L
MW008S	10/17/2001	79-01-6	Trichloroethene	510		UG/L	10	510	UG/L
MW008S	10/17/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MW008S	12/12/2001	71-55-6	1,1,1-Trichloroethane	12		UG/L	1	12	UG/L
MW008S	12/12/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MW008S	12/12/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW008S	12/12/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW008S	12/12/2001	156-59-2	cis-1,2-Dichloroethene	39		UG/L	1	39	UG/L
MW008S	12/12/2001	127-18-4	Tetrachloroethene	1000		UG/L	10	1000	UG/L
MW008S	12/12/2001	79-01-6	Trichloroethene	430		UG/L	10	430	UG/L
MW008S	12/12/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MW008S	3/26/2002	71-55-6	1,1,1-Trichloroethane	7		UG/L	1	7	UG/L
MW008S	3/26/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MW008S	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW008S	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW008S	3/26/2002	156-59-2	cis-1,2-Dichloroethene	30		UG/L	1	30	UG/L
MW008S	3/26/2002	127-18-4	Tetrachloroethene	1100		UG/L	10	1100	UG/L
MW008S	3/26/2002	79-01-6	Trichloroethene	440		UG/L	10	440	UG/L
MW008S	3/26/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE B
pz008i

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ008I	8/2/2001	71-55-6	1,1,1-Trichloroethane	330	U	UG/L	330	165	UG/L
PZ008I	8/2/2001	75-35-4	1,1-Dichloroethene	330	U	UG/L	330	165	UG/L
PZ008I	8/2/2001	107-06-2	1,2-Dichloroethane	330	U	UG/L	330	165	UG/L
PZ008I	8/2/2001	56-23-5	Carbon tetrachloride	330	U	UG/L	330	165	UG/L
PZ008I	8/2/2001	156-59-2	cis-1,2-Dichloroethene	170	U	UG/L	170	85	UG/L
PZ008I	8/2/2001	127-18-4	Tetrachloroethene	10000		UG/L	330	10000	UG/L
PZ008I	8/2/2001	79-01-6	Trichloroethene	1900		UG/L	330	1900	UG/L
PZ008I	8/2/2001	75-01-4	Vinyl chloride	330	U	UG/L	330	165	UG/L
PZ008I	10/17/2001	71-55-6	1,1,1-Trichloroethane	42	J	UG/L	10	42	UG/L
PZ008I	10/17/2001	75-35-4	1,1-Dichloroethene	10	U	UG/L	10	5	UG/L
PZ008I	10/17/2001	107-06-2	1,2-Dichloroethane	10	U	UG/L	10	5	UG/L
PZ008I	10/17/2001	56-23-5	Carbon Tetrachloride	10	U	UG/L	10	5	UG/L
PZ008I	10/17/2001	156-59-2	cis-1,2-Dichloroethene	110		UG/L	10	110	UG/L
PZ008I	10/17/2001	127-18-4	Tetrachloroethene	12000		UG/L	100	12000	UG/L
PZ008I	10/17/2001	79-01-6	Trichloroethene	2400		UG/L	10	2400	UG/L
PZ008I	10/17/2001	75-01-4	Vinyl Chloride	10	U	UG/L	10	5	UG/L
PZ008I	12/12/2001	71-55-6	1,1,1-Trichloroethane	38	J	UG/L	10	38	UG/L
PZ008I	12/12/2001	75-35-4	1,1-Dichloroethene	10	U	UG/L	10	5	UG/L
PZ008I	12/12/2001	107-06-2	1,2-Dichloroethane	10	U	UG/L	10	5	UG/L
PZ008I	12/12/2001	56-23-5	Carbon Tetrachloride	10	U	UG/L	10	5	UG/L
PZ008I	12/12/2001	156-59-2	cis-1,2-Dichloroethene	210		UG/L	10	210	UG/L
PZ008I	12/12/2001	127-18-4	Tetrachloroethene	13000		UG/L	100	13000	UG/L
PZ008I	12/12/2001	79-01-6	Trichloroethene	3500		UG/L	100	3500	UG/L
PZ008I	12/12/2001	75-01-4	Vinyl Chloride	10	U	UG/L	10	5	UG/L
PZ008I	3/26/2002	71-55-6	1,1,1-Trichloroethane	46	J	UG/L	10	46	UG/L
PZ008I	3/26/2002	75-35-4	1,1-Dichloroethene	10	U	UG/L	10	5	UG/L
PZ008I	3/26/2002	107-06-2	1,2-Dichloroethane	10	U	UG/L	10	5	UG/L
PZ008I	3/26/2002	56-23-5	Carbon Tetrachloride	10	U	UG/L	10	5	UG/L
PZ008I	3/26/2002	156-59-2	cis-1,2-Dichloroethene	310		UG/L	10	310	UG/L
PZ008I	3/26/2002	127-18-4	Tetrachloroethene	18000		UG/L	100	18000	UG/L
PZ008I	3/26/2002	79-01-6	Trichloroethene	6700		UG/L	100	6700	UG/L
PZ008I	3/26/2002	75-01-4	Vinyl Chloride	10	U	UG/L	10	5	UG/L

TABLE B
pz008d

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ008D	8/2/2001	71-55-6	1,1,1-Trichloroethane	1.6		UG/L	1	1.6	UG/L
PZ008D	8/2/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	8/2/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	8/2/2001	56-23-5	Carbon tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ008D	8/2/2001	156-59-2	cis-1,2-Dichloroethene	4.6		UG/L	0.5	4.6	UG/L
PZ008D	8/2/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	8/2/2001	79-01-6	Trichloroethene	17		UG/L	1	17	UG/L
PZ008D	8/2/2001	75-01-4	Vinyl chloride	1	U	UG/L	1	0.5	UG/L
PZ008D	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	10/15/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ008D	10/15/2001	156-59-2	cis-1,2-Dichloroethene	4	J	UG/L	1	4	UG/L
PZ008D	10/15/2001	127-18-4	Tetrachloroethene	1	J	UG/L	1	1	UG/L
PZ008D	10/15/2001	79-01-6	Trichloroethene	4	J	UG/L	1	4	UG/L
PZ008D	10/15/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	156-59-2	cis-1,2-Dichloroethene	2	J	UG/L	1	2	UG/L
PZ008D	12/10/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	12/10/2001	79-01-6	Trichloroethene	2	J	UG/L	1	2	UG/L
PZ008D	12/10/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	156-59-2	cis-1,2-Dichloroethene	2	J	UG/L	1	2	UG/L
PZ008D	3/26/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
PZ008D	3/26/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE C
EW2 Summary

	Sampling Event			
MWA004	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	500	10	10	10
1,1-Dichloroethene	500	47	21	41
1,2-Dichloroethane	500	10	10	10
Carbon tetrachloride	500	10	10	10
cis-1,2-Dichloroethene	5400	5100	4000	5500
Tetrachloroethene	500	27	10	10
Trichloroethene	25000	26000	27000	24000
Vinyl chloride	500	1100	1100	490

	Sampling Event			
MW010S	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	100	160	180	100
1,1-Dichloroethene	100	23	26	15
1,2-Dichloroethane	100	2.5	2.5	2.5
Carbon tetrachloride	100	2.5	2.5	2.5
cis-1,2-Dichloroethene	1000	930	1000	560
Tetrachloroethene	100	23	56	2.5
Trichloroethene	7200	7600	8300	5700
Vinyl chloride	100	9	2.5	43

	Sampling Event			
Average	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	300	85	95	55
1,1-Dichloroethene	300	35	23.5	28
1,2-Dichloroethane	300	6.25	6.25	6.25
Carbon tetrachloride	300	6.25	6.25	6.25
cis-1,2-Dichloroethene	3200	3015	2500	3030
Tetrachloroethene	300	25	33	6.25
Trichloroethene	16100	16800	17650	14850
Vinyl chloride	300	554.5	551.25	266.5

	Sampling Event			
PZ010I	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	415	12	12	10
1,1-Dichloroethene	415	15	5	10
1,2-Dichloroethane	415	5	5	10
Carbon tetrachloride	415	5	5	10
cis-1,2-Dichloroethene	2600	2900	2800	2700
Tetrachloroethene	415	5	31	10
Trichloroethene	20000	21000	12000	20000
Vinyl chloride	415	230	240	73

	Sampling Event			
PZ009D	August-01	October-01	December-01	March-02
Deep	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	41.5	0.5	1.5	1
1,1-Dichloroethene	41.5	3	1.5	1
1,2-Dichloroethane	41.5	0.5	1.5	1
Carbon tetrachloride	41.5	0.5	1.5	1
cis-1,2-Dichloroethene	150	200	130	130
Tetrachloroethene	41.5	16	1.5	1
Trichloroethene	2000	1700	2000	1900
Vinyl chloride	41.5	18	7	6

	Sampling Event				Maximum
EW-2					
Overall Average	August-01	October-01	December-01	March-02	**Value**
1,1,1-Trichloroethane	**252.2**	32.5	36.2	22.0	252.2
1,1-Dichloroethene	**252.2**	17.7	10.0	13.0	252.2
1,2-Dichloroethane	**252.2**	3.9	4.3	5.8	252.2
Carbon tetrachloride	**252.2**	3.9	4.3	5.8	252.2
cis-1,2-Dichloroethene	1983.3	**2038.3**	1810.0	1953.3	2038.3
Tetrachloroethene	**252.2**	15.3	21.8	5.8	252.2
Trichloroethene	12700.0	**13166.7**	10550.0	12250.0	13166.7
Vinyl chloride	252.2	**267.5**	266.1	115.2	267.5

TABLE C
mwa004

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWA004	8/2/2001	71-55-6	1,1,1-Trichloroethane	1000	U	UG/L	1000	500	UG/L
MWA004	8/2/2001	75-35-4	1,1-Dichloroethene	1000	U	UG/L	1000	500	UG/L
MWA004	8/2/2001	107-06-2	1,2-Dichloroethane	1000	U	UG/L	1000	500	UG/L
MWA004	8/2/2001	56-23-5	Carbon tetrachloride	1000	U	UG/L	1000	500	UG/L
MWA004	8/2/2001	156-59-2	cis-1,2-Dichloroethene	5400		UG/L	500	5400	UG/L
MWA004	8/2/2001	127-18-4	Tetrachloroethene	1000	U	UG/L	1000	500	UG/L
MWA004	8/2/2001	79-01-6	Trichloroethene	25000		UG/L	1000	25000	UG/L
MWA004	8/2/2001	75-01-4	Vinyl chloride	1000	U	UG/L	1000	500	UG/L
MWA004	10/17/2001	71-55-6	1,1,1-Trichloroethane	20	U	UG/L	20	10	UG/L
MWA004	10/17/2001	75-35-4	1,1-Dichloroethene	47	J	UG/L	20	47	UG/L
MWA004	10/17/2001	107-06-2	1,2-Dichloroethane	20	U	UG/L	20	10	UG/L
MWA004	10/17/2001	56-23-5	Carbon Tetrachloride	20	U	UG/L	20	10	UG/L
MWA004	10/17/2001	156-59-2	cis-1,2-Dichloroethene	5100		UG/L	20	5100	UG/L
MWA004	10/17/2001	127-18-4	Tetrachloroethene	27	J	UG/L	20	27	UG/L
MWA004	10/17/2001	79-01-6	Trichloroethene	26000		UG/L	100	26000	UG/L
MWA004	10/17/2001	75-01-4	Vinyl Chloride	1100		UG/L	20	1100	UG/L
MWA004	12/12/2001	71-55-6	1,1,1-Trichloroethane	20	U	UG/L	20	10	UG/L
MWA004	12/12/2001	75-35-4	1,1-Dichloroethene	21	J	UG/L	20	21	UG/L
MWA004	12/12/2001	107-06-2	1,2-Dichloroethane	20	U	UG/L	20	10	UG/L
MWA004	12/12/2001	56-23-5	Carbon Tetrachloride	20	U	UG/L	20	10	UG/L
MWA004	12/12/2001	156-59-2	cis-1,2-Dichloroethene	4000		UG/L	20	4000	UG/L
MWA004	12/12/2001	127-18-4	Tetrachloroethene	20	U	UG/L	20	10	UG/L
MWA004	12/12/2001	79-01-6	Trichloroethene	27000		UG/L	250	27000	UG/L
MWA004	12/12/2001	75-01-4	Vinyl Chloride	1100		UG/L	20	1100	UG/L
MWA004	3/26/2002	71-55-6	1,1,1-Trichloroethane	20	U	UG/L	20	10	UG/L
MWA004	3/26/2002	75-35-4	1,1-Dichloroethene	41	J	UG/L	20	41	UG/L
MWA004	3/26/2002	107-06-2	1,2-Dichloroethane	20	U	UG/L	20	10	UG/L
MWA004	3/26/2002	56-23-5	Carbon Tetrachloride	20	U	UG/L	20	10	UG/L
MWA004	3/26/2002	156-59-2	cis-1,2-Dichloroethene	5500		UG/L	20	5500	UG/L
MWA004	3/26/2002	127-18-4	Tetrachloroethene	20	U	UG/L	20	10	UG/L
MWA004	3/26/2002	79-01-6	Trichloroethene	24000		UG/L	200	24000	UG/L
MWA004	3/26/2002	75-01-4	Vinyl Chloride	490		UG/L	20	490	UG/L

TABLE C
mw010s

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MW010S	8/2/2001	71-55-6	1,1,1-Trichloroethane	200	U	UG/L	200	100	UG/L
MW010S	8/2/2001	75-35-4	1,1-Dichloroethene	200	U	UG/L	200	100	UG/L
MW010S	8/2/2001	107-06-2	1,2-Dichloroethane	200	U	UG/L	200	100	UG/L
MW010S	8/2/2001	56-23-5	Carbon tetrachloride	200	U	UG/L	200	100	UG/L
MW010S	8/2/2001	156-59-2	cis-1,2-Dichloroethene	1000		UG/L	100	1000	UG/L
MW010S	8/2/2001	127-18-4	Tetrachloroethene	200	U	UG/L	200	100	UG/L
MW010S	8/2/2001	79-01-6	Trichloroethene	7200		UG/L	200	7200	UG/L
MW010S	8/2/2001	75-01-4	Vinyl chloride	200	U	UG/L	200	100	UG/L
MW010S	10/17/2001	71-55-6	1,1,1-Trichloroethane	160		UG/L	5	160	UG/L
MW010S	10/17/2001	75-35-4	1,1-Dichloroethene	23	J	UG/L	5	23	UG/L
MW010S	10/17/2001	107-06-2	1,2-Dichloroethane	5	U	UG/L	5	2.5	UG/L
MW010S	10/17/2001	56-23-5	Carbon Tetrachloride	5	U	UG/L	5	2.5	UG/L
MW010S	10/17/2001	156-59-2	cis-1,2-Dichloroethene	930		UG/L	5	930	UG/L
MW010S	10/17/2001	127-18-4	Tetrachloroethene	23	J	UG/L	5	23	UG/L
MW010S	10/17/2001	79-01-6	Trichloroethene	7600		UG/L	50	7600	UG/L
MW010S	10/17/2001	75-01-4	Vinyl Chloride	9	J	UG/L	5	9	UG/L
MW010S	12/12/2001	71-55-6	1,1,1-Trichloroethane	180		UG/L	5	180	UG/L
MW010S	12/12/2001	75-35-4	1,1-Dichloroethene	26		UG/L	5	26	UG/L
MW010S	12/12/2001	107-06-2	1,2-Dichloroethane	5	U	UG/L	5	2.5	UG/L
MW010S	12/12/2001	56-23-5	Carbon Tetrachloride	5	U	UG/L	5	2.5	UG/L
MW010S	12/12/2001	156-59-2	cis-1,2-Dichloroethene	1000		UG/L	5	1000	UG/L
MW010S	12/12/2001	127-18-4	Tetrachloroethene	56		UG/L	5	56	UG/L
MW010S	12/12/2001	79-01-6	Trichloroethene	8300		UG/L	50	8300	UG/L
MW010S	12/12/2001	75-01-4	Vinyl Chloride	5	U	UG/L	5	2.5	UG/L
MW010S	3/27/2002	71-55-6	1,1,1-Trichloroethane	100		UG/L	5	100	UG/L
MW010S	3/27/2002	75-35-4	1,1-Dichloroethene	15	J	UG/L	5	15	UG/L
MW010S	3/27/2002	107-06-2	1,2-Dichloroethane	5	U	UG/L	5	2.5	UG/L
MW010S	3/27/2002	56-23-5	Carbon Tetrachloride	5	U	UG/L	5	2.5	UG/L
MW010S	3/27/2002	156-59-2	cis-1,2-Dichloroethene	560		UG/L	5	560	UG/L
MW010S	3/27/2002	127-18-4	Tetrachloroethene	5	U	UG/L	5	2.5	UG/L
MW010S	3/27/2002	79-01-6	Trichloroethene	5700		UG/L	50	5700	UG/L
MW010S	3/27/2002	75-01-4	Vinyl Chloride	43		UG/L	5	43	UG/L

TABLE C
pz010i

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ010I	8/2/2001	71-55-6	1,1,1-Trichloroethane	830	U	UG/L	830	415	UG/L
PZ010I	8/2/2001	75-35-4	1,1 Dichloroethene	830	U	UG/L	830	415	UG/L
PZ010I	8/2/2001	107-06-2	1,2-Dichloroethane	830	U	UG/L	830	415	UG/L
PZ010I	8/2/2001	56-23-5	Carbon tetrachloride	830	U	UG/L	830	415	UG/L
PZ010I	8/2/2001	156-59-2	cis-1,2-Dichloroethene	2600		UG/L	420	2600	UG/L
PZ010I	8/2/2001	127-18-4	Tetrachloroethene	830	U	UG/L	830	415	UG/L
PZ010I	8/2/2001	79-01-6	Trichloroethene	20000		UG/L	830	20000	UG/L
PZ010I	8/2/2001	75-01-4	Vinyl chloride	830	U	UG/L	830	415	UG/L
PZ010I	10/17/2001	71-55-6	1,1,1-Trichloroethane	12	J	UG/L	10	12	UG/L
PZ010I	10/17/2001	75-35-4	1,1-Dichloroethene	15	J	UG/L	10	15	UG/L
PZ010I	10/17/2001	107-06-2	1,2-Dichloroethane	10	U	UG/L	10	5	UG/L
PZ010I	10/17/2001	56-23-5	Carbon Tetrachloride	10	U	UG/L	10	5	UG/L
PZ010I	10/17/2001	156-59-2	cis-1,2-Dichloroethene	2900		UG/L	10	2900	UG/L
PZ010I	10/17/2001	127-18-4	Tetrachloroethene	10	U	UG/L	10	5	UG/L
PZ010I	10/17/2001	79-01-6	Trichloroethene	21000		UG/L	100	21000	UG/L
PZ010I	10/17/2001	75-01-4	Vinyl Chloride	230		UG/L	10	230	UG/L
PZ010I	12/12/2001	71-55-6	1,1,1-Trichloroethane	12	J	UG/L	10	12	UG/L
PZ010I	12/12/2001	75-35-4	1,1-Dichloroethene	10	U	UG/L	10	5	UG/L
PZ010I	12/12/2001	107-06-2	1,2-Dichloroethane	10	U	UG/L	10	5	UG/L
PZ010I	12/12/2001	56-23-5	Carbon Tetrachloride	10	U	UG/L	10	5	UG/L
PZ010I	12/12/2001	156-59-2	cis-1,2-Dichloroethene	2800		UG/L	10	2800	UG/L
PZ010I	12/12/2001	127-18-4	Tetrachloroethene	31	J	UG/L	10	31	UG/L
PZ010I	12/12/2001	79-01-6	Trichloroethene	12000		UG/L	100	12000	UG/L
PZ010I	12/12/2001	75-01-4	Vinyl Chloride	240		UG/L	10	240	UG/L
PZ010I	3/27/2002	71-55-6	1,1,1-Trichloroethane	20	U	UG/L	20	10	UG/L
PZ010I	3/27/2002	75-35-4	1,1-Dichloroethene	20	U	UG/L	20	10	UG/L
PZ010I	3/27/2002	107-06-2	1,2-Dichloroethane	20	U	UG/L	20	10	UG/L
PZ010I	3/27/2002	56-23-5	Carbon Tetrachloride	20	U	UG/L	20	10	UG/L
PZ010I	3/27/2002	156-59-2	cis-1,2-Dichloroethene	2700		UG/L	20	2700	UG/L
PZ010I	3/27/2002	127-18-4	Tetrachloroethene	20	U	UG/L	20	10	UG/L
PZ010I	3/27/2002	79-01-6	Trichloroethene	20000		UG/L	100	20000	UG/L
PZ010I	3/27/2002	75-01-4	Vinyl Chloride	73	J	UG/L	20	73	UG/L

TABLE C
pz009d

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ009D	8/2/2001	71-55-6	1,1,1-Trichloroethane	83	U	UG/L	83	41.5	UG/L
PZ009D	8/2/2001	75-35-4	1,1-Dichloroethene	83	U	UG/L	83	41.5	UG/L
PZ009D	8/2/2001	107-06-2	1,2-Dichloroethane	83	U	UG/L	83	41.5	UG/L
PZ009D	8/2/2001	56-23-5	Carbon tetrachloride	83	U	UG/L	83	41.5	UG/L
PZ009D	8/2/2001	156-59-2	cis-1,2-Dichloroethene	150		UG/L	42	150	UG/L
PZ009D	8/2/2001	127-18-4	Tetrachloroethene	83	U	UG/L	83	41.5	UG/L
PZ009D	8/2/2001	79-01-6	Trichloroethene	2000		UG/L	83	2000	UG/L
PZ009D	8/2/2001	75-01-4	Vinyl chloride	83	U	UG/L	83	41.5	UG/L
PZ009D	10/17/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ009D	10/17/2001	75-35-4	1,1-Dichloroethene	3	J	UG/L	1	3	UG/L
PZ009D	10/17/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ009D	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ009D	10/17/2001	156-59-2	cis-1,2-Dichloroethene	200		UG/L	1	200	UG/L
PZ009D	10/17/2001	127-18-4	Tetrachloroethene	16		UG/L	1	16	UG/L
PZ009D	10/17/2001	79-01-6	Trichloroethene	1700		UG/L	20	1700	UG/L
PZ009D	10/17/2001	75-01-4	Vinyl Chloride	18		UG/L	1	18	UG/L
PZ009D	12/12/2001	71-55-6	1,1,1-Trichloroethane	3	U	UG/L	3	1.5	UG/L
PZ009D	12/12/2001	75-35-4	1,1-Dichloroethene	3	U	UG/L	3	1.5	UG/L
PZ009D	12/12/2001	107-06-2	1,2-Dichloroethane	3	U	UG/L	3	1.5	UG/L
PZ009D	12/12/2001	56-23-5	Carbon Tetrachloride	3	U	UG/L	3	1.5	UG/L
PZ009D	12/12/2001	156-59-2	cis-1,2-Dichloroethene	130		UG/L	3	130	UG/L
PZ009D	12/12/2001	127-18-4	Tetrachloroethene	3	U	UG/L	3	1.5	UG/L
PZ009D	12/12/2001	79-01-6	Trichloroethene	2000		UG/L	20	2000	UG/L
PZ009D	12/12/2001	75-01-4	Vinyl Chloride	7	J	UG/L	3	7	UG/L
PZ009D	3/26/2002	71-55-6	1,1,1-Trichloroethane	2	U	UG/L	2	1	UG/L
PZ009D	3/26/2002	75-35-4	1,1-Dichloroethene	2	U	UG/L	2	1	UG/L
PZ009D	3/26/2002	107-06-2	1,2-Dichloroethane	2	U	UG/L	2	1	UG/L
PZ009D	3/26/2002	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
PZ009D	3/26/2002	156-59-2	cis-1,2-Dichloroethene	130		UG/L	2	130	UG/L
PZ009D	3/26/2002	127-18-4	Tetrachloroethene	2	U	UG/L	2	1	UG/L
PZ009D	3/26/2002	79-01-6	Trichloroethene	1900		UG/L	20	1900	UG/L
PZ009D	3/26/2002	75-01-4	Vinyl Chloride	6	J	UG/L	2	6	UG/L

TABLE D
EW3 Summary

	Sampling Event			
MW011S	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	33.5	57	59	42
1,1-Dichloroethene	33.5	6	7	3
1,2-Dichloroethane	33.5	0.5	0.5	0.5
Carbon tetrachloride	33.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	270	180	210	150
Tetrachloroethene	33.5	25	4	1
Trichloroethene	2500	1800	2200	1200
Vinyl chloride	33.5	4	11	13

	Sampling Event			
MWB003	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	290	300	280	380
1,1-Dichloroethene	100	69	67	110
1,2-Dichloroethane	100	50	37	74
Carbon tetrachloride	100	2.5	2.5	0.5
cis-1,2-Dichloroethene	2100	2000	1600	2100
Tetrachloroethene	100	60	2.5	0.5
Trichloroethene	7200	6800	6800	5800
Vinyl chloride	100	25	18	23

	Sampling Event			
MWC003	August-01	October-01	December-01	March-02
Deep	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	0.5	0.5	0.5	0.5
1,1-Dichloroethene	0.5	0.5	0.5	0.5
1,2-Dichloroethane	0.5	0.5	0.5	0.5
Carbon tetrachloride	0.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	2.6	0.5	0.5	0.5
Tetrachloroethene	0.5	0.5	0.5	0.5
Trichloroethene	25	1	0.5	0.5
Vinyl chloride	0.5	0.5	0.5	0.5

	Sampling Event				Maximum
EW-3	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	108.0	119.2	113.2	**140.8**	140.8
1,1-Dichloroethene	**44.7**	25.2	24.8	37.8	44.7
1,2-Dichloroethane	**44.7**	17.0	12.7	25.0	44.7
Carbon tetrachloride	**44.7**	1.2	1.2	0.5	44.7
cis-1,2-Dichloroethene	**790.9**	726.8	603.5	750.2	790.9
Tetrachloroethene	**44.7**	28.5	2.3	0.7	44.7
Trichloroethene	**3241.7**	2867.0	3000.2	2333.5	3241.7
Vinyl chloride	**44.7**	9.8	9.8	12.2	44.7

TABLE D
mw011s

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MW011S	8/2/2001	71-55-6	1,1,1-Trichloroethane	67	U	UG/L	67	33.5	UG/L
MW011S	8/2/2001	75-35-4	1,1-Dichloroethene	67	U	UG/L	67	33.5	UG/L
MW011S	8/2/2001	107-06-2	1,2-Dichloroethane	67	U	UG/L	67	33.5	UG/L
MW011S	8/2/2001	56-23-5	Carbon tetrachloride	67	U	UG/L	67	33.5	UG/L
MW011S	8/2/2001	156-59-2	cis-1,2-Dichloroethene	270		UG/L	33	270	UG/L
MW011S	8/2/2001	127-18-4	Tetrachloroethene	67	U	UG/L	67	33.5	UG/L
MW011S	8/2/2001	79-01-6	Trichloroethene	2500		UG/L	67	2500	UG/L
MW011S	8/2/2001	75-01-4	Vinyl chloride	67	U	UG/L	67	33.5	UG/L
MW011S	10/17/2001	71-55-6	1,1,1-Trichloroethane	57		UG/L	1	57	UG/L
MW011S	10/17/2001	75-35-4	1,1-Dichloroethene	6		UG/L	1	6	UG/L
MW011S	10/17/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW011S	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW011S	10/17/2001	156-59-2	cis-1,2-Dichloroethene	180		UG/L	1	180	UG/L
MW011S	10/17/2001	127-18-4	Tetrachloroethene	25		UG/L	1	25	UG/L
MW011S	10/17/2001	79-01-6	Trichloroethene	1800		UG/L	20	1800	UG/L
MW011S	10/17/2001	75-01-4	Vinyl Chloride	4	J	UG/L	1	4	UG/L
MW011S	12/12/2001	71-55-6	1,1,1-Trichloroethane	59		UG/L	1	59	UG/L
MW011S	12/12/2001	75-35-4	1,1-Dichloroethene	7		UG/L	1	7	UG/L
MW011S	12/12/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW011S	12/12/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW011S	12/12/2001	156-59-2	cis-1,2-Dichloroethene	210		UG/L	20	210	UG/L
MW011S	12/12/2001	127-18-4	Tetrachloroethene	4	J	UG/L	1	4	UG/L
MW011S	12/12/2001	79-01-6	Trichloroethene	2200		UG/L	20	2200	UG/L
MW011S	12/12/2001	75-01-4	Vinyl Chloride	11		UG/L	1	11	UG/L
MW011S	3/27/2002	71-55-6	1,1,1-Trichloroethane	42		UG/L	1	42	UG/L
MW011S	3/27/2002	75-35-4	1,1-Dichloroethene	3	J	UG/L	1	3	UG/L
MW011S	3/27/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW011S	3/27/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW011S	3/27/2002	156-59-2	cis-1,2-Dichloroethene	150		UG/L	1	150	UG/L
MW011S	3/27/2002	127-18-4	Tetrachloroethene	1	J	UG/L	1	1	UG/L
MW011S	3/27/2002	79-01-6	Trichloroethene	1200		UG/L	10	1200	UG/L
MW011S	3/27/2002	75-01-4	Vinyl Chloride	13		UG/L	1	13	UG/L

TABLE D
mwb003

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWB003	8/2/2001	71-55-6	1,1,1-Trichloroethane	290		UG/L	200	290	UG/L
MWB003	8/2/2001	75-35-4	1,1-Dichloroethene	200	U	UG/L	200	100	UG/L
MWB003	8/2/2001	107-06-2	1,2-Dichloroethane	200	U	UG/L	200	100	UG/L
MWB003	8/2/2001	56-23-5	Carbon tetrachloride	200	U	UG/L	200	100	UG/L
MWB003	8/2/2001	156-59-2	cis-1,2-Dichloroethene	2100		UG/L	100	2100	UG/L
MWB003	8/2/2001	127-18-4	Tetrachloroethene	200	U	UG/L	200	100	UG/L
MWB003	8/2/2001	79-01-6	Trichloroethene	7200		UG/L	200	7200	UG/L
MWB003	8/2/2001	75-01-4	Vinyl chloride	200	U	UG/L	200	100	UG/L
MWB003	10/17/2001	71-55-6	1,1,1-Trichloroethane	300		UG/L	5	300	UG/L
MWB003	10/17/2001	75-35-4	1,1-Dichloroethene	69		UG/L	5	69	UG/L
MWB003	10/17/2001	107-06-2	1,2-Dichloroethane	50		UG/L	5	50	UG/L
MWB003	10/17/2001	56-23-5	Carbon Tetrachloride	5	U	UG/L	5	2.5	UG/L
MWB003	10/17/2001	156-59-2	cis-1,2-Dichloroethene	2000		UG/L	50	2000	UG/L
MWB003	10/17/2001	127-18-4	Tetrachloroethene	60		UG/L	5	60	UG/L
MWB003	10/17/2001	79-01-6	Trichloroethene	6800		UG/L	50	6800	UG/L
MWB003	10/17/2001	75-01-4	Vinyl Chloride	25		UG/L	5	25	UG/L
MWB003	12/12/2001	71-55-6	1,1,1-Trichloroethane	280		UG/L	5	280	UG/L
MWB003	12/12/2001	75-35-4	1,1-Dichloroethene	67		UG/L	5	67	UG/L
MWB003	12/12/2001	107-06-2	1,2-Dichloroethane	37		UG/L	5	37	UG/L
MWB003	12/12/2001	56-23-5	Carbon Tetrachloride	5	U	UG/L	5	2.5	UG/L
MWB003	12/12/2001	156-59-2	cis-1,2-Dichloroethene	1600		UG/L	50	1600	UG/L
MWB003	12/12/2001	127-18-4	Tetrachloroethene	5	U	UG/L	5	2.5	UG/L
MWB003	12/12/2001	79-01-6	Trichloroethene	6800		UG/L	50	6800	UG/L
MWB003	12/12/2001	75-01-4	Vinyl Chloride	18	J	UG/L	5	18	UG/L
MWB003	3/27/2002	71-55-6	1,1,1-Trichloroethane	380		UG/L	50	380	UG/L
MWB003	3/27/2002	75-35-4	1,1-Dichloroethene	110		UG/L	1	110	UG/L
MWB003	3/27/2002	107-06-2	1,2-Dichloroethane	74		UG/L	1	74	UG/L
MWB003	3/27/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWB003	3/27/2002	156-59-2	cis-1,2-Dichloroethene	2100		UG/L	50	2100	UG/L
MWB003	3/27/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWB003	3/27/2002	79-01-6	Trichloroethene	5800		UG/L	50	5800	UG/L
MWB003	3/27/2002	75-01-4	Vinyl Chloride	23		UG/L	1	23	UG/L

TABLE D
mwc003

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWC003	8/2/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	8/2/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	8/2/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	8/2/2001	56-23-5	Carbon tetrachloride	1	U	UG/L	1	0.5	UG/L
MWC003	8/2/2001	156-59-2	cis-1,2-Dichloroethene	2.6		UG/L	0.5	2.6	UG/L
MWC003	8/2/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	8/2/2001	79-01-6	Trichloroethene	25		UG/L	1	25	UG/L
MWC003	8/2/2001	75-01-4	Vinyl chloride	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	10/15/2001	79-01-6	Trichloroethene	1	J	UG/L	1	1	UG/L
MWC003	10/15/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	12/10/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
MWC003	3/27/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE E
EW4 Summary

	Sampling Event			
MWA006	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	540	580	540	340
1,1-Dichloroethene	110	130	140	120
1,2-Dichloroethane	50	1	1	3
Carbon tetrachloride	50	1	1	1
cis-1,2-Dichloroethene	700	950	480	1600
Tetrachloroethene	50	6	1	1
Trichloroethene	3000	2700	2300	1800
Vinyl chloride	50	10	8	5

	Sampling Event			
PZ012I	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	9	0.5	0.5	0.5
1,1-Dichloroethene	9	2	2	2
1,2-Dichloroethane	9	0.5	0.5	0.5
Carbon tetrachloride	9	0.5	0.5	0.5
cis-1,2-Dichloroethene	370	420	500	450
Tetrachloroethene	9	0.5	1	0.5
Trichloroethene	61	91	110	110
Vinyl chloride	9	2	3	2

	Sampling Event			
PZ012D	August-01	October-01	December-01	March-02
Deep	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	4.1	0.5	0.5	0.5
1,1-Dichloroethene	0.5	0.5	0.5	0.5
1,2-Dichloroethane	0.5	0.5	0.5	0.5
Carbon tetrachloride	0.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	5.8	0.5	0.5	0.5
Tetrachloroethene	0.5	0.5	0.5	0.5
Trichloroethene	39	2	2	1
Vinyl chloride	0.5	0.5	0.5	0.5

	Sampling Event				Maximum
EW-4	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	184.4	**193.7**	180.3	113.7	193.7
1,1-Dichloroethene	39.8	44.2	**47.5**	40.8	47.5
1,2-Dichloroethane	**19.8**	0.7	0.7	1.3	19.8
Carbon tetrachloride	**19.8**	0.7	0.7	0.7	19.8
cis-1,2-Dichloroethene	358.6	456.8	326.8	**683.5**	683.5
Tetrachloroethene	**19.8**	2.3	0.8	0.7	19.8
Trichloroethene	**1033.3**	931.0	804.0	637.0	1033.3
Vinyl chloride	**19.8**	4.2	3.8	2.5	19.8

TABLE E
mwa006

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWA006	8/2/2001	71-55-6	1,1,1-Trichloroethane	540		UG/L	100	540	UG/L
MWA006	8/2/2001	75-35-4	1,1-Dichloroethene	110		UG/L	100	110	UG/L
MWA006	8/2/2001	107-06-2	1,2-Dichloroethane	100	U	UG/L	100	50	UG/L
MWA006	8/2/2001	56-23-5	Carbon tetrachloride	100	U	UG/L	100	50	UG/L
MWA006	8/2/2001	156-59-2	cis-1,2-Dichloroethene	700		UG/L	50	700	UG/L
MWA006	8/2/2001	127-18-4	Tetrachloroethene	100	U	UG/L	100	50	UG/L
MWA006	8/2/2001	79-01-6	Trichloroethene	3000		UG/L	100	3000	UG/L
MWA006	8/2/2001	75-01-4	Vinyl chloride	100	U	UG/L	100	50	UG/L
MWA006	10/17/2001	71-55-6	1,1,1-Trichloroethane	580		UG/L	2	580	UG/L
MWA006	10/17/2001	75-35-4	1,1-Dichloroethene	130		UG/L	2	130	UG/L
MWA006	10/17/2001	107-06-2	1,2-Dichloroethane	2	U	UG/L	2	1	UG/L
MWA006	10/17/2001	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
MWA006	10/17/2001	156-59-2	cis-1,2-Dichloroethene	950		UG/L	25	950	UG/L
MWA006	10/17/2001	127-18-4	Tetrachloroethene	6	J	UG/L	2	6	UG/L
MWA006	10/17/2001	79-01-6	Trichloroethene	2700		UG/L	25	2700	UG/L
MWA006	10/17/2001	75-01-4	Vinyl Chloride	10	J	UG/L	2	10	UG/L
MWA006	12/12/2001	71-55-6	1,1,1-Trichloroethane	540		UG/L	2	540	UG/L
MWA006	12/12/2001	75-35-4	1,1-Dichloroethene	140		UG/L	2	140	UG/L
MWA006	12/12/2001	107-06-2	1,2-Dichloroethane	2	U	UG/L	2	1	UG/L
MWA006	12/12/2001	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
MWA006	12/12/2001	156-59-2	cis-1,2-Dichloroethene	480		UG/L	25	480	UG/L
MWA006	12/12/2001	127-18-4	Tetrachloroethene	2	U	UG/L	2	1	UG/L
MWA006	12/12/2001	79-01-6	Trichloroethene	2300		UG/L	25	2300	UG/L
MWA006	12/12/2001	75-01-4	Vinyl Chloride	8	J	UG/L	2	8	UG/L
MWA006	3/27/2002	71-55-6	1,1,1-Trichloroethane	340		UG/L	2	340	UG/L
MWA006	3/27/2002	75-35-4	1,1-Dichloroethene	120		UG/L	2	120	UG/L
MWA006	3/27/2002	107-06-2	1,2-Dichloroethane	3	J	UG/L	2	3	UG/L
MWA006	3/27/2002	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
MWA006	3/27/2002	156-59-2	cis-1,2-Dichloroethene	1600		UG/L	20	1600	UG/L
MWA006	3/27/2002	127-18-4	Tetrachloroethene	2	U	UG/L	2	1	UG/L
MWA006	3/27/2002	79-01-6	Trichloroethene	1800		UG/L	20	1800	UG/L
MWA006	3/27/2002	75-01-4	Vinyl Chloride	5	J	UG/L	2	5	UG/L

TABLE E
pz0012i

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ012I	8/2/2001	71-55-6	1,1,1-Trichloroethane	18	U	UG/L	18	9	UG/L
PZ012I	8/2/2001	75-35-4	1,1-Dichloroethene	18	U	UG/L	18	9	UG/L
PZ012I	8/2/2001	107-06-2	1,2-Dichloroethane	18	U	UG/L	18	9	UG/L
PZ012I	8/2/2001	56-23-5	Carbon tetrachloride	18	U	UG/L	18	9	UG/L
PZ012I	8/2/2001	156-59-2	cis-1,2-Dichloroethene	370		UG/L	9.1	370	UG/L
PZ012I	8/2/2001	127-18-4	Tetrachloroethene	18	U	UG/L	18	9	UG/L
PZ012I	8/2/2001	79-01-6	Trichloroethene	61		UG/L	18	61	UG/L
PZ012I	8/2/2001	75-01-4	Vinyl chloride	18	U	UG/L	18	9	UG/L
PZ012I	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	10/15/2001	75-35-4	1,1-Dichloroethene	2	J	UG/L	1	2	UG/L
PZ012I	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012I	10/15/2001	156-59-2	cis-1,2-Dichloroethene	420		UG/L	5	420	UG/L
PZ012I	10/15/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012I	10/15/2001	79-01-6	Trichloroethene	91		UG/L	1	91	UG/L
PZ012I	10/15/2001	75-01-4	Vinyl Chloride	2	J	UG/L	1	2	UG/L
PZ012I	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	12/10/2001	75-35-4	1,1-Dichloroethene	2	J	UG/L	1	2	UG/L
PZ012I	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012I	12/10/2001	156-59-2	cis-1,2-Dichloroethene	500		UG/L	5	500	UG/L
PZ012I	12/10/2001	127-18-4	Tetrachloroethene	1	J	UG/L	1	1	UG/L
PZ012I	12/10/2001	79-01-6	Trichloroethene	110		UG/L	1	110	UG/L
PZ012I	12/10/2001	75-01-4	Vinyl Chloride	3	J	UG/L	1	3	UG/L
PZ012I	3/26/2002	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	3/26/2002	75-35-4	1,1-Dichloroethene	2	J	UG/L	1	2	UG/L
PZ012I	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012I	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012I	3/26/2002	156-59-2	cis-1,2-Dichloroethene	450		UG/L	5	450	UG/L
PZ012I	3/26/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012I	3/26/2002	79-01-6	Trichloroethene	110		UG/L	1	110	UG/L
PZ012I	3/26/2002	75-01-4	Vinyl Chloride	2	J	UG/L	1	2	UG/L

TABLE E
pz0012d

MP ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ012D	8/2/2001	71-55-6	1,1,1-Trichloroethane	4.1		UG/L	1	4.1	UG/L
PZ012D	8/2/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	8/2/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	8/2/2001	56-23-5	Carbon tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012D	8/2/2001	156-59-2	cis-1,2-Dichloroethene	5.8		UG/L	0.5	5.8	UG/L
PZ012D	8/2/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	8/2/2001	79-01-6	Trichloroethene	39		UG/L	1	39	UG/L
PZ012D	8/2/2001	75-01-4	Vinyl chloride	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	10/15/2001	79-01-6	Trichloroethene	2	J	UG/L	1	2	UG/L
PZ012D	10/15/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	12/10/2001	79-01-6	Trichloroethene	2	J	UG/L	1	2	UG/L
PZ012D	12/10/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ012D	3/26/2002	79-01-6	Trichloroethene	1	J	UG/L	1	1	UG/L
PZ012D	3/26/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE F
EW5 Summary

	Sampling Event			
MWA005	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	2600	1900	2000	1900
1,1-Dichloroethene	340	300	340	330
1,2-Dichloroethane	50	6	5	4
Carbon tetrachloride	50	0.5	0.5	0.5
cis-1,2-Dichloroethene	150	170	160	150
Tetrachloroethene	50	85	68	83
Trichloroethene	1700	1500	1600	1500
Vinyl chloride	50	0.5	0.5	0.5

	Sampling Event			
PZ013I	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	740	600	470	450
1,1-Dichloroethene	88	56	39	39
1,2-Dichloroethane	15.5	1	0.5	0.5
Carbon tetrachloride	15.5	130	0.5	0.5
cis-1,2-Dichloroethene	93	79	74	78
Tetrachloroethene	560	550	690	890
Trichloroethene	1100	750	480	390
Vinyl chloride	15.5	6	4	2

	Sampling Event				Maximum
EW-5	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**1670.0**	1250.0	1235.0	1175.0	1670.0
1,1-Dichloroethene	**214.0**	178.0	189.5	184.5	214.0
1,2-Dichloroethane	**32.8**	3.5	2.8	2.3	32.8
Carbon tetrachloride	32.8	**65.3**	0.5	0.5	65.3
cis-1,2-Dichloroethene	121.5	**124.5**	117.0	114.0	124.5
Tetrachloroethene	305.0	317.5	379.0	**486.5**	486.5
Trichloroethene	**1400.0**	1125.0	1040.0	945.0	1400.0
Vinyl chloride	**32.8**	3.3	2.3	1.3	32.8

TABLE F
mwa005

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWA005	8/2/2001	71-55-6	1,1,1-Trichloroethane	2600		UG/L	100	2600	UG/L
MWA005	8/2/2001	75-35-4	1,1-Dichloroethene	340		UG/L	100	340	UG/L
MWA005	8/2/2001	107-06-2	1,2-Dichloroethane	100	U	UG/L	100	50	UG/L
MWA005	8/2/2001	56-23-5	Carbon tetrachloride	100	U	UG/L	100	50	UG/L
MWA005	8/2/2001	156-59-2	cis-1,2-Dichloroethene	150		UG/L	50	150	UG/L
MWA005	8/2/2001	127-18-4	Tetrachloroethene	100	U	UG/L	100	50	UG/L
MWA005	8/2/2001	79-01-6	Trichloroethene	1700		UG/L	100	1700	UG/L
MWA005	8/2/2001	75-01-4	Vinyl chloride	100	U	UG/L	100	50	UG/L
MWA005	10/17/2001	71-55-6	1,1,1-Trichloroethane	1900		UG/L	20	1900	UG/L
MWA005	10/17/2001	75-35-4	1,1-Dichloroethene	300		UG/L	20	300	UG/L
MWA005	10/17/2001	107-06-2	1,2-Dichloroethane	6		UG/L	1	6	UG/L
MWA005	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWA005	10/17/2001	156-59-2	cis-1,2-Dichloroethene	170		UG/L	1	170	UG/L
MWA005	10/17/2001	127-18-4	Tetrachloroethene	85		UG/L	1	85	UG/L
MWA005	10/17/2001	79-01-6	Trichloroethene	1500		UG/L	20	1500	UG/L
MWA005	10/17/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MWA005	12/12/2001	71-55-6	1,1,1-Trichloroethane	2000		UG/L	10	2000	UG/L
MWA005	12/12/2001	75-35-4	1,1-Dichloroethene	340		UG/L	10	340	UG/L
MWA005	12/12/2001	107-06-2	1,2-Dichloroethane	5	J	UG/L	1	5	UG/L
MWA005	12/12/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWA005	12/12/2001	156-59-2	cis-1,2-Dichloroethene	160		UG/L	1	160	UG/L
MWA005	12/12/2001	127-18-4	Tetrachloroethene	68		UG/L	1	68	UG/L
MWA005	12/12/2001	79-01-6	Trichloroethene	1600		UG/L	10	1600	UG/L
MWA005	12/12/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MWA005	3/26/2002	71-55-6	1,1,1-Trichloroethane	1900		UG/L	20	1900	UG/L
MWA005	3/26/2002	75-35-4	1,1-Dichloroethene	330		UG/L	20	330	UG/L
MWA005	3/26/2002	107-06-2	1,2-Dichloroethane	4	J	UG/L	1	4	UG/L
MWA005	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWA005	3/26/2002	156-59-2	cis-1,2-Dichloroethene	150		UG/L	1	150	UG/L
MWA005	3/26/2002	127-18-4	Tetrachloroethene	83		UG/L	1	83	UG/L
MWA005	3/26/2002	79-01-6	Trichloroethene	1500		UG/L	20	1500	UG/L
MWA005	3/26/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE F
pz013i

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ013I	8/2/2001	71-55-6	1,1,1-Trichloroethane	740		UG/L	31	740	UG/L
PZ013I	8/2/2001	75-35-4	1,1-Dichloroethene	88		UG/L	31	88	UG/L
PZ013I	8/2/2001	107-06-2	1,2-Dichloroethane	31	U	UG/L	31	15.5	UG/L
PZ013I	8/2/2001	56-23-5	Carbon tetrachloride	31	U	UG/L	31	15.5	UG/L
PZ013I	8/2/2001	156-59-2	cis-1,2-Dichloroethene	93		UG/L	16	93	UG/L
PZ013I	8/2/2001	127-18-4	Tetrachloroethene	560		UG/L	31	560	UG/L
PZ013I	8/2/2001	79-01-6	Trichloroethene	1100		UG/L	31	1100	UG/L
PZ013I	8/2/2001	75-01-4	Vinyl chloride	31	U	UG/L	31	15.5	UG/L
PZ013I	10/17/2001	71-55-6	1,1,1-Trichloroethane	600		UG/L	10	600	UG/L
PZ013I	10/17/2001	75-35-4	1,1-Dichloroethene	56		UG/L	1	56	UG/L
PZ013I	10/17/2001	107-06-2	1,2-Dichloroethane	1	J	UG/L	1	1	UG/L
PZ013I	10/17/2001	56-23-5	Carbon Tetrachloride	130		UG/L	1	130	UG/L
PZ013I	10/17/2001	156-59-2	cis-1,2-Dichloroethene	79		UG/L	1	79	UG/L
PZ013I	10/17/2001	127-18-4	Tetrachloroethene	550		UG/L	10	550	UG/L
PZ013I	10/17/2001	79-01-6	Trichloroethene	750		UG/L	10	750	UG/L
PZ013I	10/17/2001	75-01-4	Vinyl Chloride	6		UG/L	1	6	UG/L
PZ013I	12/12/2001	71-55-6	1,1,1-Trichloroethane	470		UG/L	5	470	UG/L
PZ013I	12/12/2001	75-35-4	1,1-Dichloroethene	39		UG/L	1	39	UG/L
PZ013I	12/12/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ013I	12/12/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ013I	12/12/2001	156-59-2	cis-1,2-Dichloroethene	74		UG/L	1	74	UG/L
PZ013I	12/12/2001	127-18-4	Tetrachloroethene	690		UG/L	5	690	UG/L
PZ013I	12/12/2001	79-01-6	Trichloroethene	480		UG/L	5	480	UG/L
PZ013I	12/12/2001	75-01-4	Vinyl Chloride	4	J	UG/L	1	4	UG/L
PZ013I	3/26/2002	71-55-6	1,1,1-Trichloroethane	450		UG/L	10	450	UG/L
PZ013I	3/26/2002	75-35-4	1,1-Dichloroethene	39		UG/L	1	39	UG/L
PZ013I	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ013I	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ013I	3/26/2002	156-59-2	cis-1,2-Dichloroethene	78		UG/L	1	78	UG/L
PZ013I	3/26/2002	127-18-4	Tetrachloroethene	890		UG/L	10	890	UG/L
PZ013I	3/26/2002	79-01-6	Trichloroethene	390		UG/L	10	390	UG/L
PZ013I	3/26/2002	75-01-4	Vinyl Chloride	2	J	UG/L	1	2	UG/L

TABLE G
EW6 Summary

MW015S	Sampling Event			
	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	81	45	51	
1,1-Dichloroethene	8.5	3	4	
1,2-Dichloroethane	8.5	0.5	0.5	
Carbon tetrachloride	8.5	0.5	0.5	
cis-1,2-Dichloroethene	180	65	150	
Tetrachloroethene	440	510	530	
Trichloroethene	46	45	54	
Vinyl chloride	8.5	0.5	0.5	

MWA001	Sampling Event			
	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	2300	1800	1000	1000
1,1-Dichloroethene	70	69	32	42
1,2-Dichloroethane	70	0.5	1	0.5
Carbon tetrachloride	70	0.5	1	0.5
cis-1,2-Dichloroethene	3600	2400	2700	2200
Tetrachloroethene	920	920	720	760
Trichloroethene	670	580	480	390
Vinyl chloride	70	0.5	1	0.5

Average	Sampling Event			
	August-01	October-01	December-01	March-02
Shallow	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	1190.5	922.5	525.5	1000
1,1-Dichloroethene	39.25	36	18	42
1,2-Dichloroethane	39.25	0.5	0.75	0.5
Carbon tetrachloride	39.25	0.5	0.75	0.5
cis-1,2-Dichloroethene	1890	1232.5	1425	2200
Tetrachloroethene	680	715	625	760
Trichloroethene	358	312.5	267	390
Vinyl chloride	39.25	0.5	0.75	0.5

PZ017I	Sampling Event			
	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	21	50	35	47
1,1-Dichloroethene	21	3	1	0.5
1,2-Dichloroethane	21	0.5	1	0.5
Carbon tetrachloride	21	0.5	1	0.5
cis-1,2-Dichloroethene	47	47	39	44
Tetrachloroethene	1700	1600	1500	1500
Trichloroethene	94	130	82	110
Vinyl chloride	21	1	1	1

MWB002	Sampling Event			
	August-01	October-01	December-01	March-02
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	0.5	0.5	0.5	
1,1-Dichloroethene	0.5	0.5	0.5	
1,2-Dichloroethane	0.5	0.5	0.5	
Carbon tetrachloride	0.5	0.5	0.5	
cis-1,2-Dichloroethene	0.25	0.5	0.5	
Tetrachloroethene	0.5	0.5	0.5	
Trichloroethene	1.2	0.5	0.5	
Vinyl chloride	2	2	2	

Average	Sampling Event			
	UG/L	UG/L	UG/L	UG/L
Intermediate	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	10.75	25.25	17.75	47
1,1-Dichloroethene	10.75	1.75	0.75	0.5
1,2-Dichloroethane	10.75	0.5	0.75	0.5
Carbon tetrachloride	10.75	0.5	0.75	0.5
cis-1,2-Dichloroethene	23.625	23.75	19.75	44
Tetrachloroethene	850.25	800.25	750.25	1500
Trichloroethene	47.6	65.25	41.25	110
Vinyl chloride	11.5	1.5	1.5	1

PZ017D	Sampling Event			
	August-01	October-01	December-01	March-02
Deep	UG/L	UG/L	UG/L	UG/L
1,1,1-Trichloroethane	0.5	0.5	0.5	0.5
1,1-Dichloroethene	0.5	0.5	0.5	0.5
1,2-Dichloroethane	0.5	0.5	0.5	0.5
Carbon tetrachloride	0.5	0.5	0.5	0.5
cis-1,2-Dichloroethene	5.3	3	5	4
Tetrachloroethene	0.5	0.5	2	0.5
Trichloroethene	0.5	0.5	0.5	0.5
Vinyl chloride	9.6	15	15	16

EW-6	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
1,1,1-Trichloroethane	**400.6**	316.1	181.3	349.2	400.6
1,1-Dichloroethene	**16.8**	12.8	6.4	14.3	16.8
1,2-Dichloroethane	**16.8**	0.5	0.7	0.5	16.8
Carbon tetrachloride	**16.8**	0.5	0.7	0.5	16.8
cis-1,2-Dichloroethene	639.6	419.8	483.3	**749.3**	749.3
Tetrachloroethene	510.3	505.3	459.1	**753.5**	753.5
Trichloroethene	135.4	126.1	102.9	**166.8**	166.8
Vinyl chloride	**20.1**	5.7	5.8	5.8	20.1

Table F
mw018s

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MW018S	8/2/2001	71-55-6	1,1,1-Trichloroethane	81		UG/L	17	81	UG/L
MW018S	8/2/2001	75-35-4	1,1-Dichloroethene	17	U	UG/L	17	8.5	UG/L
MW018S	8/2/2001	107-06-2	1,2-Dichloroethane	17	U	UG/L	17	8.5	UG/L
MW018S	8/2/2001	56-23-5	Carbon tetrachloride	17	U	UG/L	17	8.5	UG/L
MW018S	8/2/2001	156-59-2	cis-1,2-Dichloroethene	180		UG/L	8.3	180	UG/L
MW018S	8/2/2001	127-18-4	Tetrachloroethene	440		UG/L	17	440	UG/L
MW018S	8/2/2001	79-01-6	Trichloroethene	46		UG/L	17	46	UG/L
MW018S	8/2/2001	75-01-4	Vinyl chloride	17	U	UG/L	17	8.5	UG/L
MW018S	10/15/2001	71-55-6	1,1,1-Trichloroethane	45		UG/L	1	45	UG/L
MW018S	10/15/2001	75-35-4	1,1-Dichloroethene	3	J	UG/L	1	3	UG/L
MW018S	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW018S	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW018S	10/15/2001	156-59-2	cis-1,2-Dichloroethene	65		UG/L	1	65	UG/L
MW018S	10/15/2001	127-18-4	Tetrachloroethene	510		UG/L	5	510	UG/L
MW018S	10/15/2001	79-01-6	Trichloroethene	45		UG/L	1	45	UG/L
MW018S	10/15/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MW018S	12/10/2001	71-55-6	1,1,1-Trichloroethane	51		UG/L	1	51	UG/L
MW018S	12/10/2001	75-35-4	1,1-Dichloroethene	4	J	UG/L	1	4	UG/L
MW018S	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MW018S	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MW018S	12/10/2001	156-59-2	cis-1,2-Dichloroethene	150		UG/L	1	150	UG/L
MW018S	12/10/2001	127-18-4	Tetrachloroethene	530		UG/L	5	530	UG/L
MW018S	12/10/2001	79-01-6	Trichloroethene	54		UG/L	1	54	UG/L
MW018S	12/10/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE F
mwa001

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWA001	8/1/2001	71-55-6	1,1,1-Trichloroethane	2300		UG/L	140	2300	UG/L
MWA001	8/1/2001	75-35-4	1,1-Dichloroethene	140	U	UG/L	140	70	UG/L
MWA001	8/1/2001	107-06-2	1,2-Dichloroethane	140	U	UG/L	140	70	UG/L
MWA001	8/1/2001	56-23-5	Carbon tetrachloride	140	U	UG/L	140	70	UG/L
MWA001	8/1/2001	156-59-2	cis-1,2-Dichloroethene	3600		UG/L	71	3600	UG/L
MWA001	8/1/2001	127-18-4	Tetrachloroethene	920		UG/L	140	920	UG/L
MWA001	8/1/2001	79-01-6	Trichloroethene	670		UG/L	140	670	UG/L
MWA001	8/1/2001	75-01-4	Vinyl chloride	140	U	UG/L	140	70	UG/L
MWA001	10/17/2001	71-55-6	1,1,1-Trichloroethane	1800		UG/L	20	1800	UG/L
MWA001	10/17/2001	75-35-4	1,1-Dichloroethene	69		UG/L	1	69	UG/L
MWA001	10/17/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWA001	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWA001	10/17/2001	156-59-2	cis-1,2-Dichloroethene	2400		UG/L	20	2400	UG/L
MWA001	10/17/2001	127-18-4	Tetrachloroethene	920		UG/L	20	920	UG/L
MWA001	10/17/2001	79-01-6	Trichloroethene	580		UG/L	20	580	UG/L
MWA001	10/17/2001	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L
MWA001	12/12/2001	71-55-6	1,1,1-Trichloroethane	1000		UG/L	25	1000	UG/L
MWA001	12/12/2001	75-35-4	1,1-Dichloroethene	32		UG/L	2	32	UG/L
MWA001	12/12/2001	107-06-2	1,2-Dichloroethane	2	U	UG/L	2	1	UG/L
MWA001	12/12/2001	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
MWA001	12/12/2001	156-59-2	cis-1,2-Dichloroethene	2700		UG/L	25	2700	UG/L
MWA001	12/12/2001	127-18-4	Tetrachloroethene	720		UG/L	25	720	UG/L
MWA001	12/12/2001	79-01-6	Trichloroethene	480		UG/L	2	480	UG/L
MWA001	12/12/2001	75-01-4	Vinyl Chloride	2	U	UG/L	2	1	UG/L
MWA001	3/26/2002	71-55-6	1,1,1-Trichloroethane	1000		UG/L	20	1000	UG/L
MWA001	3/26/2002	75-35-4	1,1-Dichloroethene	42		UG/L	1	42	UG/L
MWA001	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWA001	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWA001	3/26/2002	156-59-2	cis-1,2-Dichloroethene	2200		UG/L	20	2200	UG/L
MWA001	3/26/2002	127-18-4	Tetrachloroethene	760		UG/L	20	760	UG/L
MWA001	3/26/2002	79-01-6	Trichloroethene	390		UG/L	20	390	UG/L
MWA001	3/26/2002	75-01-4	Vinyl Chloride	1	U	UG/L	1	0.5	UG/L

TABLE F
pz017I

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ017I	8/2/2001	71-55-6	1,1,1-Trichloroethane	42	U	UG/L	42	21	UG/L
PZ017I	8/2/2001	75-35-4	1,1-Dichloroethene	42	U	UG/L	42	21	UG/L
PZ017I	8/2/2001	107-06-2	1,2-Dichloroethane	42	U	UG/L	42	21	UG/L
PZ017I	8/2/2001	56-23-5	Carbon tetrachloride	42	U	UG/L	42	21	UG/L
PZ017I	8/2/2001	156-59-2	cis-1,2-Dichloroethene	47		UG/L	21	47	UG/L
PZ017I	8/2/2001	127-18-4	Tetrachloroethene	1700		UG/L	42	1700	UG/L
PZ017I	8/2/2001	79-01-6	Trichloroethene	94		UG/L	42	94	UG/L
PZ017I	8/2/2001	75-01-4	Vinyl chloride	42	U	UG/L	42	21	UG/L
PZ017I	10/17/2001	71-55-6	1,1,1-Trichloroethane	50		UG/L	1	50	UG/L
PZ017I	10/17/2001	75-35-4	1,1-Dichloroethene	3	J	UG/L	1	3	UG/L
PZ017I	10/17/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017I	10/17/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017I	10/17/2001	156-59-2	cis-1,2-Dichloroethene	47		UG/L	1	47	UG/L
PZ017I	10/17/2001	127-18-4	Tetrachloroethene	1600		UG/L	20	1600	UG/L
PZ017I	10/17/2001	79-01-6	Trichloroethene	130		UG/L	1	130	UG/L
PZ017I	10/17/2001	75-01-4	Vinyl Chloride	1	J	UG/L	1	1	UG/L
PZ017I	12/12/2001	71-55-6	1,1,1-Trichloroethane	35		UG/L	2	35	UG/L
PZ017I	12/12/2001	75-35-4	1,1-Dichloroethene	2	U	UG/L	2	1	UG/L
PZ017I	12/12/2001	107-06-2	1,2-Dichloroethane	2	U	UG/L	2	1	UG/L
PZ017I	12/12/2001	56-23-5	Carbon Tetrachloride	2	U	UG/L	2	1	UG/L
PZ017I	12/12/2001	156-59-2	cis-1,2-Dichloroethene	39		UG/L	2	39	UG/L
PZ017I	12/12/2001	127-18-4	Tetrachloroethene	1500		UG/L	20	1500	UG/L
PZ017I	12/12/2001	79-01-6	Trichloroethene	82		UG/L	2	82	UG/L
PZ017I	12/12/2001	75-01-4	Vinyl Chloride	2	U	UG/L	2	1	UG/L
PZ017I	3/26/2002	71-55-6	1,1,1-Trichloroethane	47		UG/L	1	47	UG/L
PZ017I	3/26/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017I	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017I	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017I	3/26/2002	156-59-2	cis-1,2-Dichloroethene	44		UG/L	1	44	UG/L
PZ017I	3/26/2002	127-18-4	Tetrachloroethene	1500		UG/L	20	1500	UG/L
PZ017I	3/26/2002	79-01-6	Trichloroethene	110		UG/L	1	110	UG/L
PZ017I	3/26/2002	75-01-4	Vinyl Chloride	1	J	UG/L	1	1	UG/L

TABLE F
mwb002

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
MWB002	8/2/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	8/2/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	8/2/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	8/2/2001	56-23-5	Carbon tetrachloride	1	U	UG/L	1	0.5	UG/L
MWB002	8/2/2001	156-59-2	cis-1,2-Dichloroethene	0.5	U	UG/L	0.5	0.25	UG/L
MWB002	8/2/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	8/2/2001	79-01-6	Trichloroethene	1.2		UG/L	1	1.2	UG/L
MWB002	8/2/2001	75-01-4	Vinyl chloride	2		UG/L	1	2	UG/L
MWB002	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	10/15/2001	75-01-4	Vinyl Chloride	2	J	UG/L	1	2	UG/L
MWB002	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	156-59-2	cis-1,2-Dichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
MWB002	12/10/2001	75-01-4	Vinyl Chloride	2	J	UG/L	1	2	UG/L

TABLE F
pz017d

MP_ID	DATESAMP	CAS	PARAMETER	RESULT	QUAL	UNITS	REPTLIMIT	Modified Result	UNITS
PZ017D	8/2/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	56-23-5	Carbon tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	156-59-2	cis-1,2-Dichloroethene	5.3		UG/L	0.5	5.3	UG/L
PZ017D	8/2/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	8/2/2001	75-01-4	Vinyl chloride	9.6		UG/L	1	9.6	UG/L
PZ017D	10/15/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	156-59-2	cis-1,2-Dichloroethene	3	J	UG/L	1	3	UG/L
PZ017D	10/15/2001	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	10/15/2001	75-01-4	Vinyl Chloride	15		UG/L	1	15	UG/L
PZ017D	12/10/2001	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	12/10/2001	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	12/10/2001	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	12/10/2001	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017D	12/10/2001	156-59-2	cis-1,2-Dichloroethene	5	J	UG/L	1	5	UG/L
PZ017D	12/10/2001	127-18-4	Tetrachloroethene	2	J	UG/L	1	2	UG/L
PZ017D	12/10/2001	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	12/10/2001	75-01-4	Vinyl Chloride	15		UG/L	1	15	UG/L
PZ017D	3/26/2002	71-55-6	1,1,1-Trichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	75-35-4	1,1-Dichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	107-06-2	1,2-Dichloroethane	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	56-23-5	Carbon Tetrachloride	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	156-59-2	cis-1,2-Dichloroethene	4	J	UG/L	1	4	UG/L
PZ017D	3/26/2002	127-18-4	Tetrachloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	79-01-6	Trichloroethene	1	U	UG/L	1	0.5	UG/L
PZ017D	3/26/2002	75-01-4	Vinyl Chloride	16		UG/L	1	16	UG/L

TABLE G
Summary Of All EWs

EW-1	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**60.7**	19.2	16.8	17.8	60.7
1,1-Dichloroethene	**60.3**	2.0	2.0	2.0	60.3
1,2-Dichloroethane	**60.3**	2.0	2.0	2.0	60.3
Carbon tetrachloride	**60.3**	2.0	2.0	2.0	60.3
cis-1,2-Dichloroethene	37.2	48.3	83.7	**114.0**	114.0
Tetrachloroethene	3700.2	4367.0	4666.8	**6366.8**	6366.8
Trichloroethene	785.7	971.3	1310.7	**2380.2**	2380.2
Vinyl chloride	**60.3**	2.0	2.0	2.0	60.3

EW-2	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
1,1,1-Trichloroethane	**252.2**	32.5	36.2	22.0	252.2
1,1-Dichloroethene	**252.2**	17.7	10.0	13.0	252.2
1,2-Dichloroethane	**252.2**	3.9	4.3	5.8	252.2
Carbon tetrachloride	**252.2**	3.9	4.3	5.8	252.2
cis-1,2-Dichloroethene	1983.3	**2038.3**	1810.0	1953.3	2038.3
Tetrachloroethene	**252.2**	15.3	21.8	5.8	252.2
Trichloroethene	12700.0	**13166.7**	10550.0	12250.0	13166.7
Vinyl chloride	252.2	**267.5**	266.1	115.2	267.5

EW-3	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	108.0	119.2	113.2	**140.8**	140.8
1,1-Dichloroethene	**44.7**	25.2	24.8	37.8	44.7
1,2-Dichloroethane	**44.7**	17.0	12.7	25.0	44.7
Carbon tetrachloride	**44.7**	1.2	1.2	0.5	44.7
cis-1,2-Dichloroethene	**790.9**	726.8	603.5	750.2	790.9
Tetrachloroethene	**44.7**	28.5	2.3	0.7	44.7
Trichloroethene	**3241.7**	2867.0	3000.2	2333.5	3241.7
Vinyl chloride	**44.7**	9.8	9.8	12.2	44.7

EW-4	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	184.4	**193.7**	180.3	113.7	193.7
1,1-Dichloroethene	39.8	44.2	**47.5**	40.8	47.5
1,2-Dichloroethane	**19.8**	0.7	0.7	1.3	19.8
Carbon tetrachloride	**19.8**	0.7	0.7	0.7	19.8
cis-1,2-Dichloroethene	358.6	456.8	326.8	**683.5**	683.5
Tetrachloroethene	**19.8**	2.3	0.8	0.7	19.8
Trichloroethene	**1033.3**	931.0	804.0	637.0	1033.3
Vinyl chloride	**19.8**	4.2	3.8	2.5	19.8

EW-5	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**1670.0**	1250.0	1235.0	1175.0	1670.0
1,1-Dichloroethene	**214.0**	178.0	189.5	184.5	214.0
1,2-Dichloroethane	**32.8**	3.5	2.8	2.3	32.8
Carbon tetrachloride	32.8	**65.3**	0.5	0.5	65.3
cis-1,2-Dichloroethene	121.5	**124.5**	117.0	114.0	124.5
Tetrachloroethene	305.0	317.5	379.0	**486.5**	486.5
Trichloroethene	**1400.0**	1125.0	1040.0	945.0	1400.0
Vinyl chloride	**32.8**	3.3	2.3	1.3	32.8

EW-6	Sampling Event				Maximum
Overall Average	August-01	October-01	December-01	March-02	**Value**
1,1,1-Trichloroethane	**400.6**	316.1	181.3	349.2	400.6
1,1-Dichloroethene	**16.8**	12.8	6.4	14.3	16.8
1,2-Dichloroethane	**16.8**	0.5	0.7	0.5	16.8
Carbon tetrachloride	**16.8**	0.5	0.7	0.5	16.8
cis-1,2-Dichloroethene	639.6	419.8	483.3	**749.3**	749.3
Tetrachloroethene	510.3	505.3	459.1	**753.5**	753.5
Trichloroethene	135.4	126.1	102.9	**166.8**	166.8
Vinyl chloride	**20.1**	5.7	5.8	5.8	20.1

TABLE H
COMBINATIONS OF EXTRACTION WELLS AT 100 GPM EACH

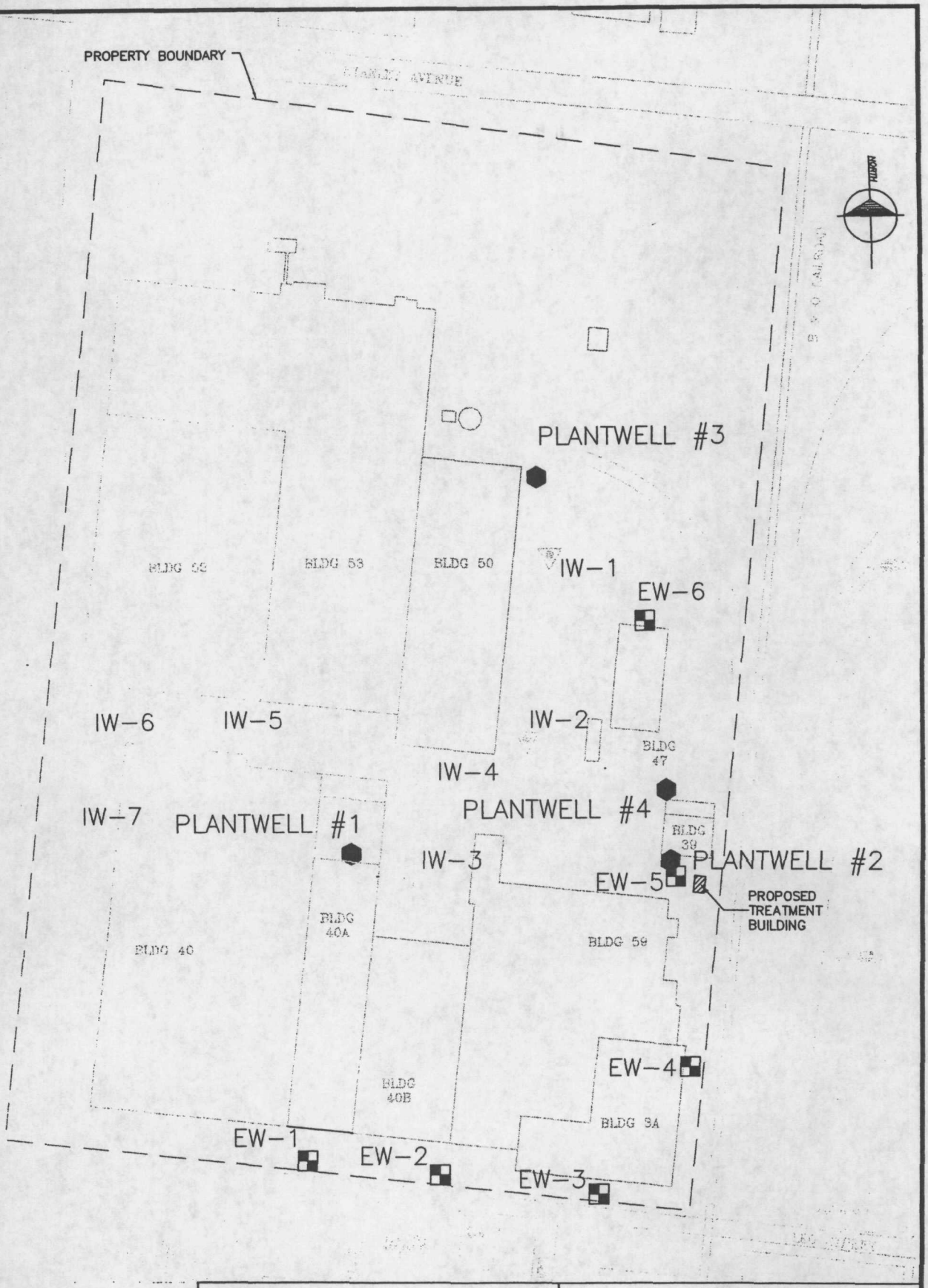
	Sampling Event				Maximum
EW-1,2,3,4	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**151.3**	91.1	86.6	73.6	151.3
1,1-Dichloroethene	**99.3**	22.3	21.1	23.4	99.3
1,2-Dichloroethane	**94.3**	5.9	4.9	8.5	94.3
Carbon tetrachloride	**94.3**	1.9	2.0	2.2	94.3
cis-1,2-Dichloroethene	792.5	817.6	706.0	**875.3**	875.3
Tetrachloroethene	1004.2	1103.3	1173.0	**1593.5**	1593.5
Trichloroethene	4440.2	**4484.0**	3916.2	4400.2	4484.0
Vinyl chloride	**94.3**	70.9	70.4	33.0	94.3

	Sampling Event				Maximum
EW-3,4,5,6	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**590.7**	469.7	427.4	444.7	590.7
1,1-Dichloroethene	**78.8**	65.0	67.1	69.4	78.8
1,2-Dichloroethane	**28.5**	5.4	4.2	7.3	28.5
Carbon tetrachloride	**28.5**	16.9	0.8	0.5	28.5
cis-1,2-Dichloroethene	477.7	432.0	382.6	**574.3**	574.3
Tetrachloroethene	219.9	213.4	210.3	**310.3**	310.3
Trichloroethene	**1452.6**	1262.3	1236.8	1020.6	1452.6
Vinyl chloride	**29.3**	5.7	5.4	5.4	29.3

	Sampling Event				Maximum
EW-1,2,3,4,5,6	August-01	October-01	December-01	March-02	**Value**
Overall Average	UG/L	UG/L	UG/L	UG/L	**UG/L**
1,1,1-Trichloroethane	**446.0**	321.8	293.8	303.1	446.0
1,1-Dichloroethene	**104.6**	46.6	46.7	48.8	104.6
1,2-Dichloroethane	**71.1**	4.6	3.8	6.1	71.1
Carbon tetrachloride	**71.1**	12.3	1.5	1.7	71.1
cis-1,2-Dichloroethene	655.2	635.8	570.7	**727.4**	727.4
Tetrachloroethene	805.3	872.7	921.7	**1269.0**	1269.0
Trichloroethene	**3216.0**	3197.8	2801.3	3118.8	3216.0
Vinyl chloride	**71.6**	48.7	48.3	23.2	71.6

Maximum Value per Compound from Above Combinations

	UG/L
1,1,1-Trichloroethane	590.7
1,1-Dichloroethene	104.6
1,2-Dichloroethane	94.3
Carbon tetrachloride	94.3
cis-1,2-Dichloroethene	875.3
Tetrachloroethene	1593.5
Trichloroethene	4484.0
Vinyl chloride	94.3



LEGEND

- PROPOSED INJECTION WELLS
- PROPOSED EXTRACTION WELLS
- EXISTING PLANT PROCESS WELLS

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

4135 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

FIGURE 1
WELL LOCATIONS
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

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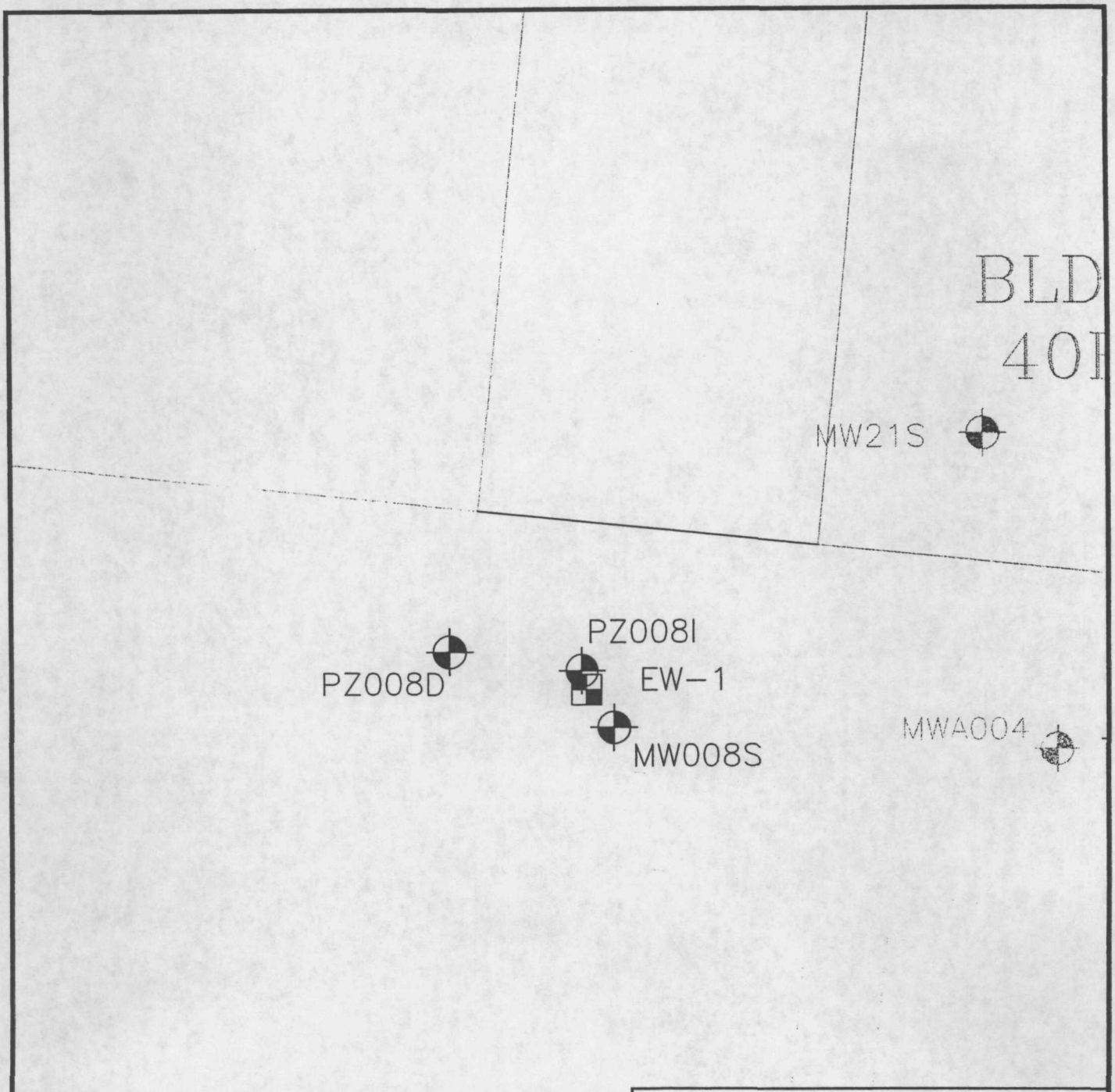
CHECKED BY: JE	DATE: FEB. 18, 2003	SCALE: 1:250	WELLS.DWG



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

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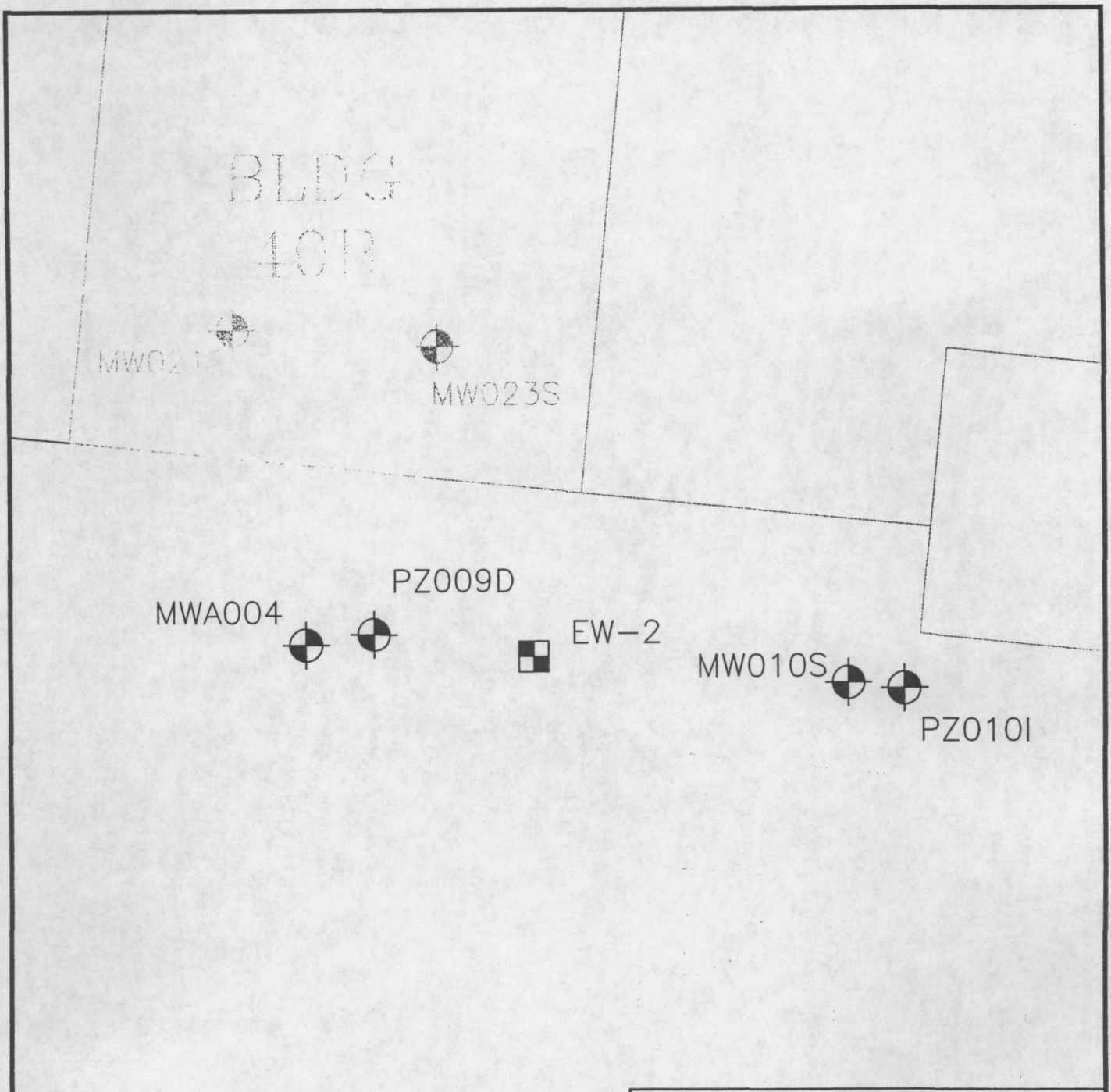
FILE NAME: EXTRACTION WELL DATA	

FIGURE 2
EXTRACTION WELL 1

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

100

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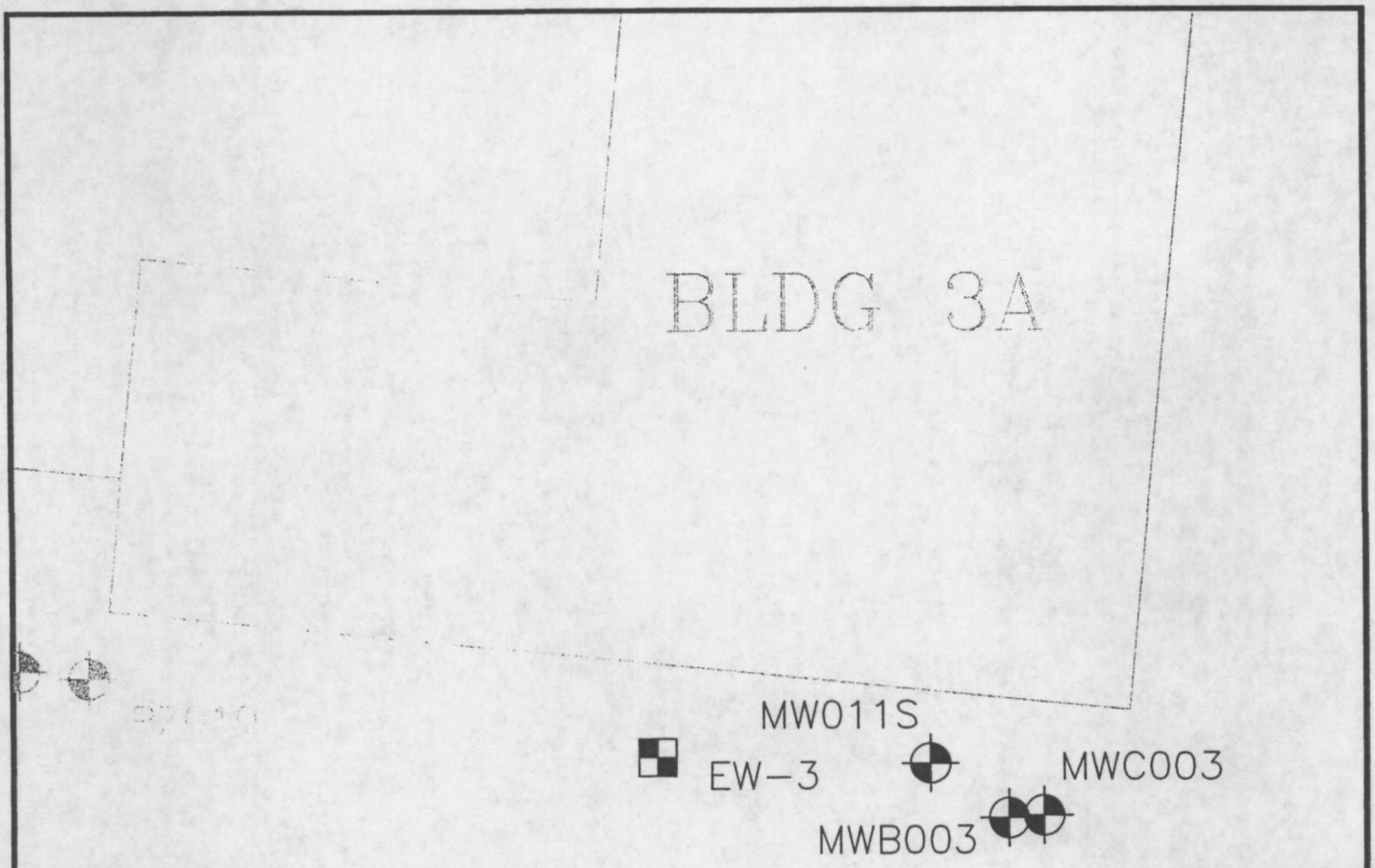
FIGURE 3
EXTRACTION WELL 2

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

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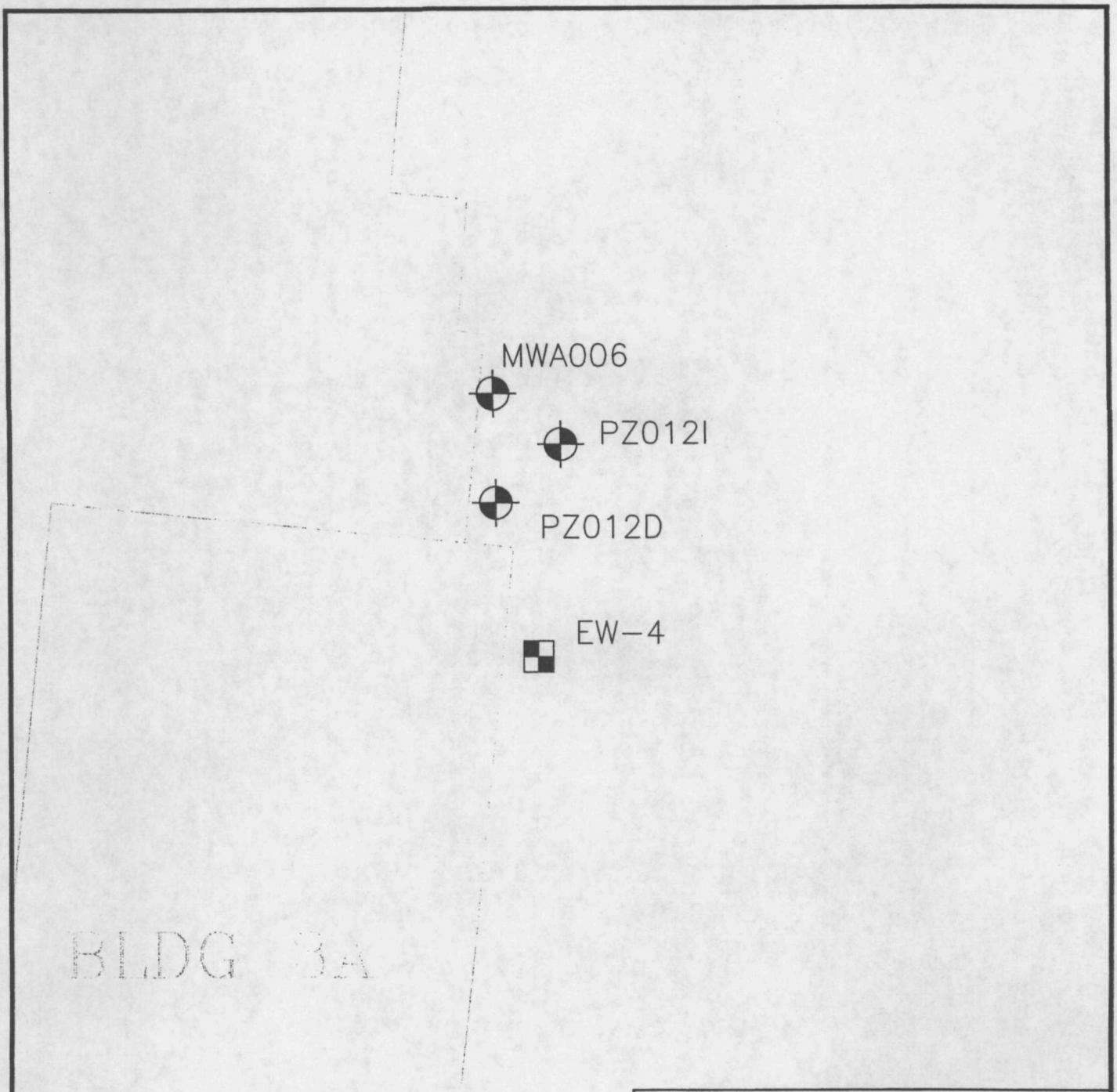
FIGURE 4
EXTRACTION WELL 3

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

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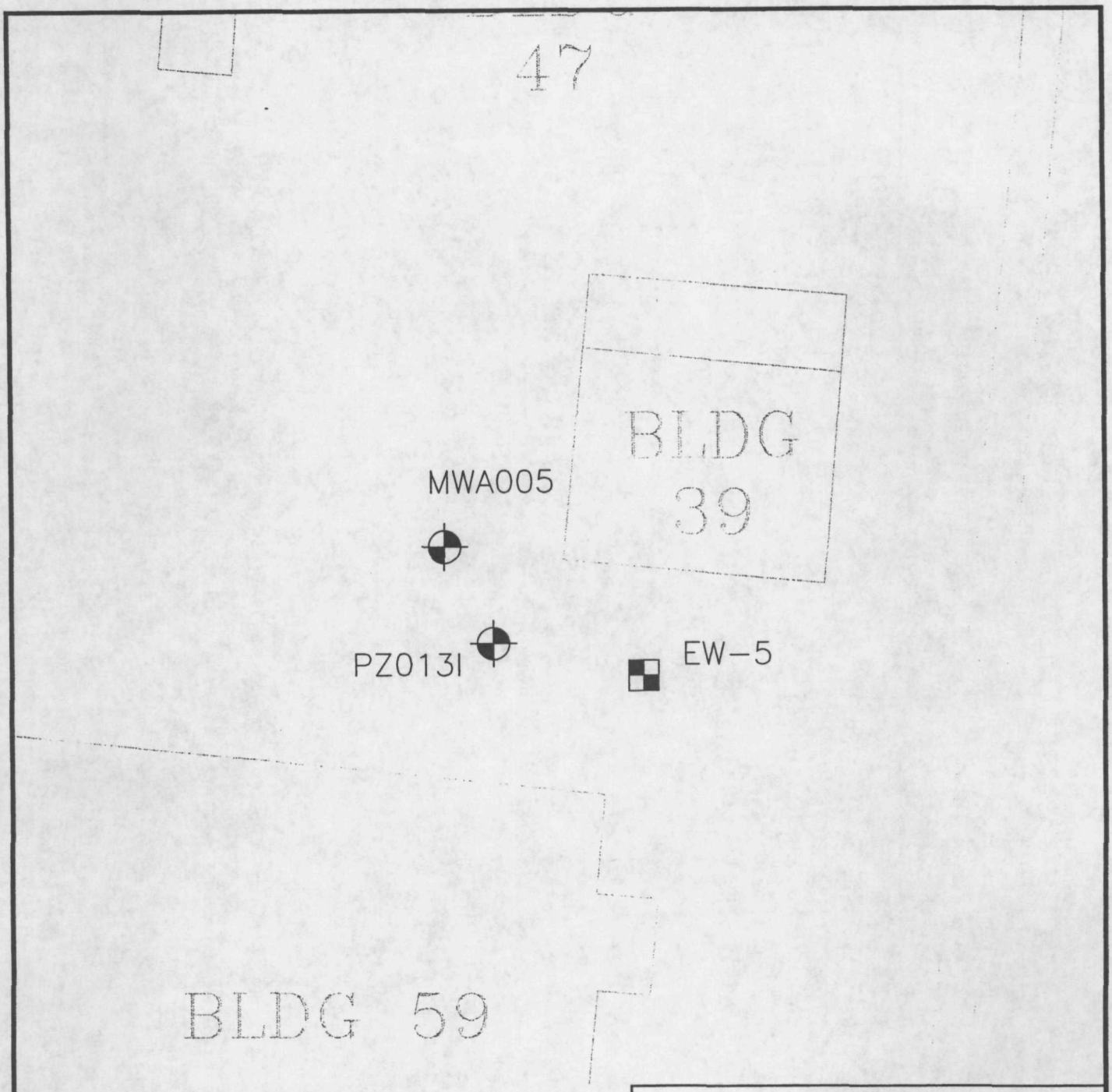
FILE NAME: EXTRACTION WELL DATA	

FIGURE 5
EXTRACTION WELL 4

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

50

SCALE IN FEET

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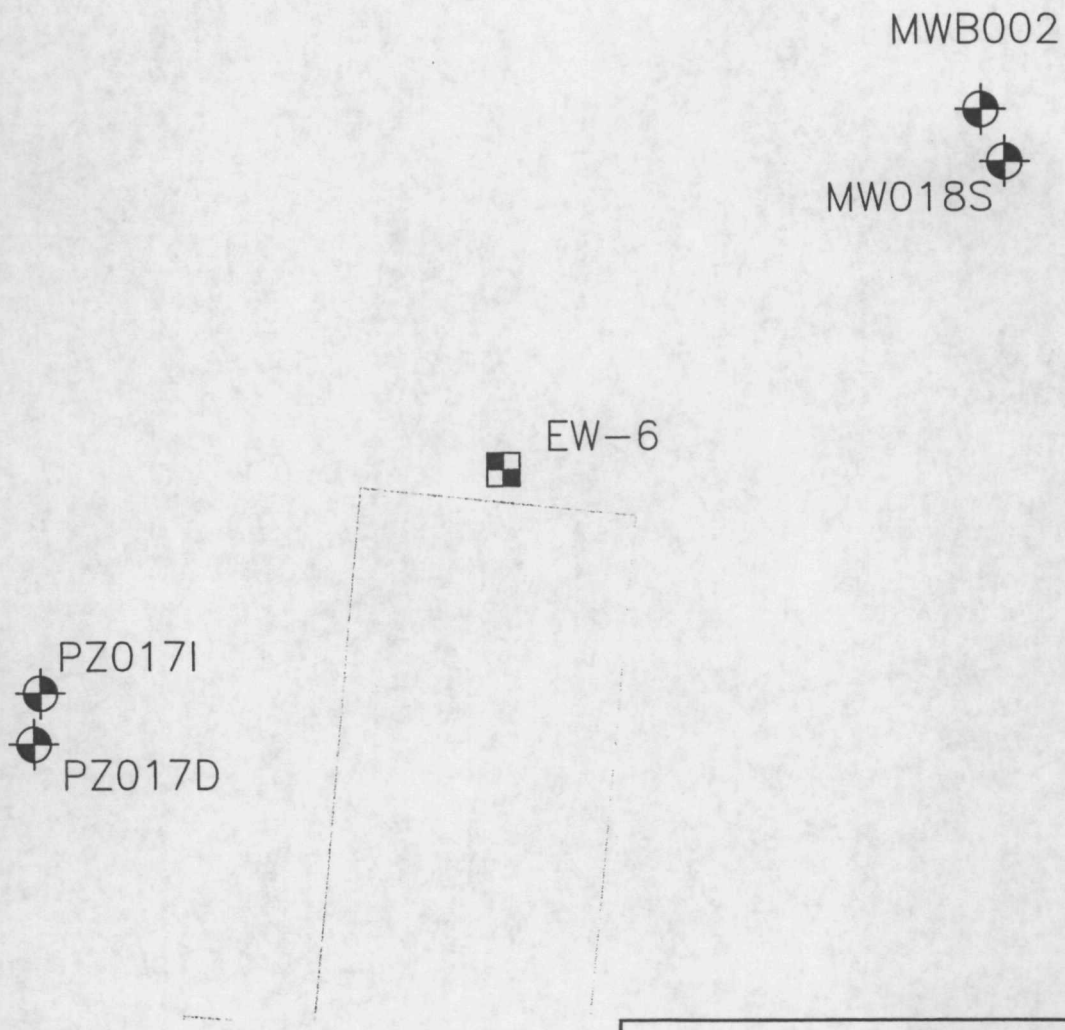
FIGURE 6
EXTRACTION WELL 5

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- EXTRACTION WELL
- MONITORING WELL USED IN CALCULATION
- MONITORING WELL NOT USED

NORTH

0 50

SCALE IN FEET

EARTH TECH

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FILE NAME: EXTRACTION WELL DATA	

FIGURE 7
EXTRACTION WELL 6

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465

Material Safety Data Sheet

Sodium Lactate, 60% **24 Hour Emergency Phone: CHEMTREC 1-800-424-9300**

Date of Preparation: 9/17/02 Revision: 9/17/02

Section 1 - Chemical Product and Company Identification

Synonyms: Lacolin; Lactic Acid, monosodium Salt; Propanioc acid, 2-hydroxy-, monosodium salt
CAS No: 72-17-3
Molecular Weight: 112.07
Chemical Formula: C3H5O3Na
Distributed by:
Hawkins, Inc. 3100 E. Hennepin Avenue Minneapolis, MN 55413 (612-331-6910)

Section 2 - Composition / Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Lactate	72-17-3	60%	Yes

Section 3 - Hazards Identification

Emergency Overview

CAUTION! MAY CAUSE EYE IRRITATION.

Potential Health Effects

To the best of our knowledge, the toxicological properties of this material have not been thoroughly investigated.

Inhalation: No adverse health effects expected from inhalation.

Ingestion: Not expected to be a health hazard via ingestion.

Skin Contact: Not expected to be a health hazard from skin exposure.

Eye Contact: May cause mild irritation, possible reddening.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: No information found.

Section 4 - First Aid Measures

Inhalation:
Not expected to require first aid measures. Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:
Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:
Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

Section 5 - Fire-Fighting Measures

NFPA Ratings:
Health: 1 Flammability: 0 Reactivity: 0

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6 - Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

Section 7 - Handling and Storage

Keep in a tightly closed container, stored in a cool (> 65°F), dry, ventilated area. Protect against physical damage. Avoid long storage times. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Section 8 - Exposure Controls / Personal Protection

Airborne Exposure Limits: None established.

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved):
For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection:
Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical and Chemical Properties

Appearance:
Colorless to yellow liquid.

Odor:
Odorless.

Solubility:
Complete (100%)

Specific Gravity:
1.31

pH:
6.5 - 8.5

Boiling Point:
110C (230F)

Melting Point:
17C (63F)

Vapor Density (Air=1):
0.7

Vapor Pressure (mm Hg):
14 @ 20C (68F)

Evaporation Rate (BuAc=1):
No information found.

% Volatiles by volume @ 21C (70F):
No information found.

Section 10 - Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: No information found.

Conditions to Avoid: None.

Section 11- Toxicological Information

Oral rat LD50: 2000 mg/Kg. Irritation Data for Sodium Lactate: (Std Draize, rabbit, eye): 100 mg - mild.

--------\Cancer Lists\----------

Ingredient	---NTP Carcinogen--- Known	Anticipated	IARC Category
Sodium Lactate (72-17-3)	No	No	None

Section 12 - Ecological Information

Environmental Fate:
Mobility: Completely soluble.
Persistence / degradability: Product is a salt of lactic acid, which is readily biodegradable.
Bioaccumulation: Unlikely.
Ecotoxicity: Ecological injuries are not known or expected under normal use; (No effect on Daphnia @ 10g/L).

Environmental Toxicity: No information found.

Section 13 - Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14 - Transport Information

Not regulated.

Section 15 - Regulatory Information

--------\Chemical Inventory Status - Part 1\----------

Ingredient	TSCA	EC	Japan	Australia
Sodium Lactate (72-17-3)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\----------

Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Sodium Lactate (72-17-3)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------

Ingredient	-SARA 302- RQ	TPQ	------SARA 313------ List	Chemical Catg.
Sodium Lactate (72-17-3)	No	No	No	No

--------\Federal, State & International Regulations - Part 2\----------

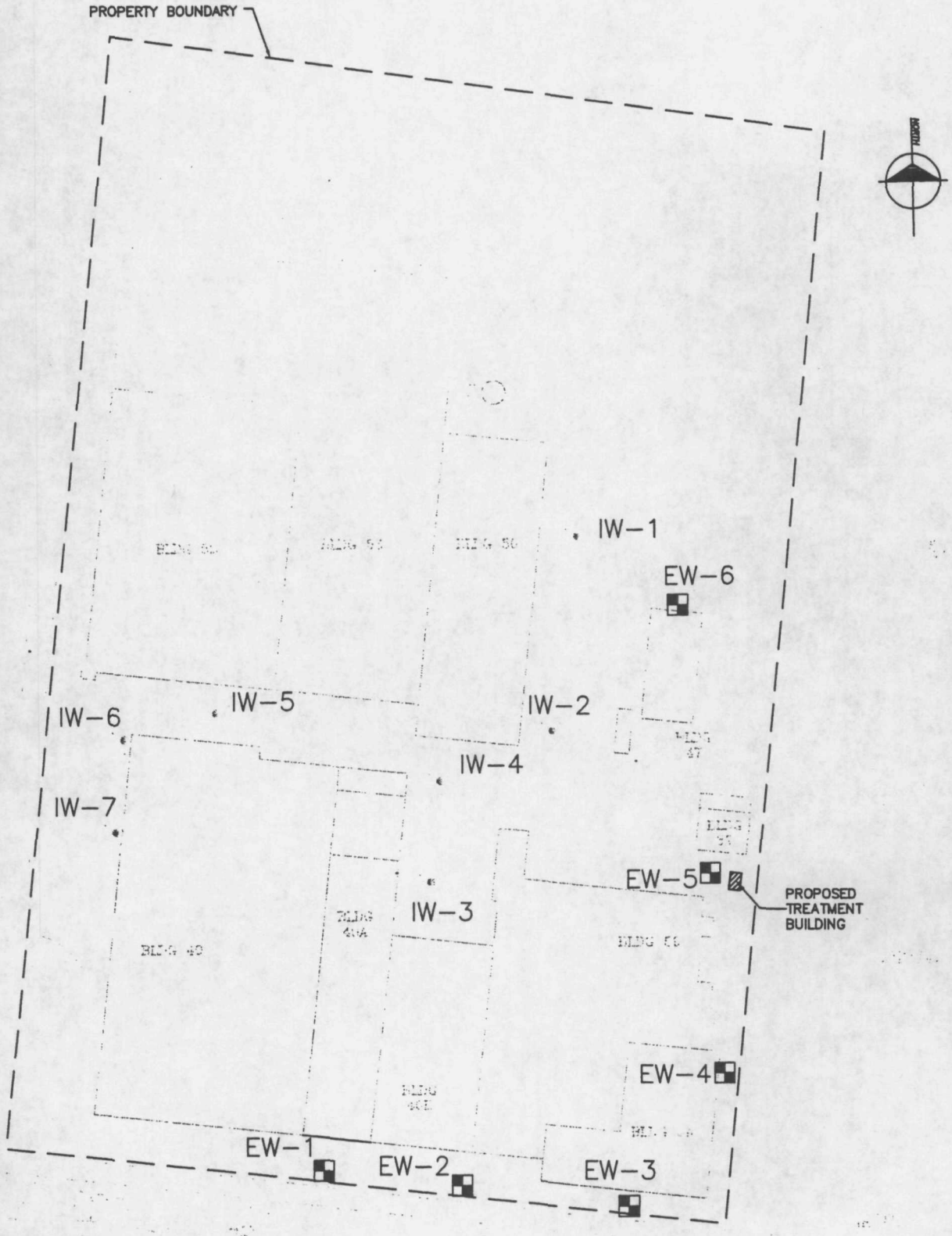
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Sodium Lactate (72-17-3)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Mixture / Liquid)

Section 16 - Other Information

Prepared By: Chris W. Gibson
Revision Notes: New Product
Disclaimer:
Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information.

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the customer. No suggestions are intended as, and should not be construed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.



LEGEND

- PROPOSED INJECTION WELLS
- PROPOSED EXTRACTION WELLS

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY
4138 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

WELL LOCATIONS
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

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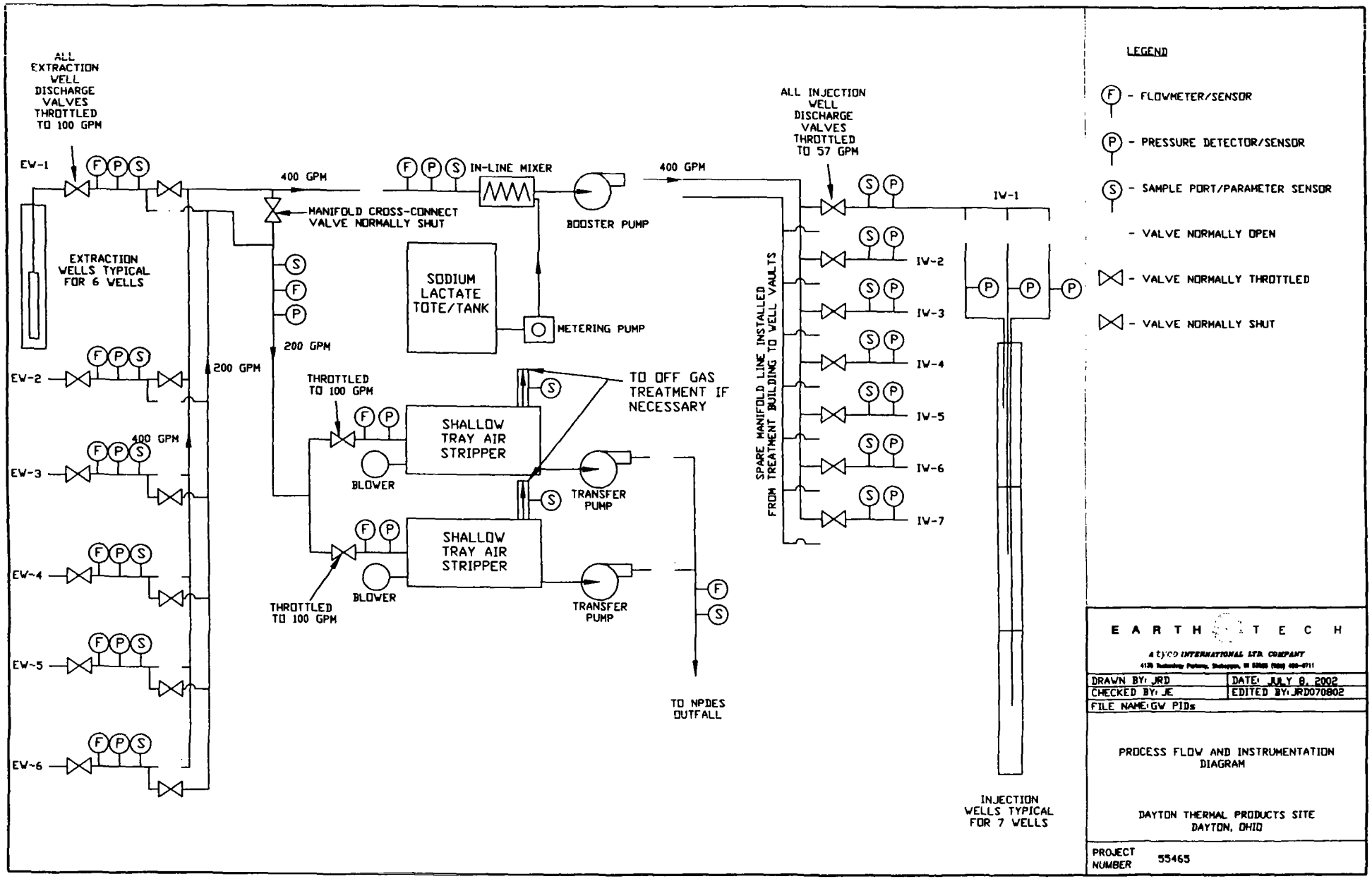
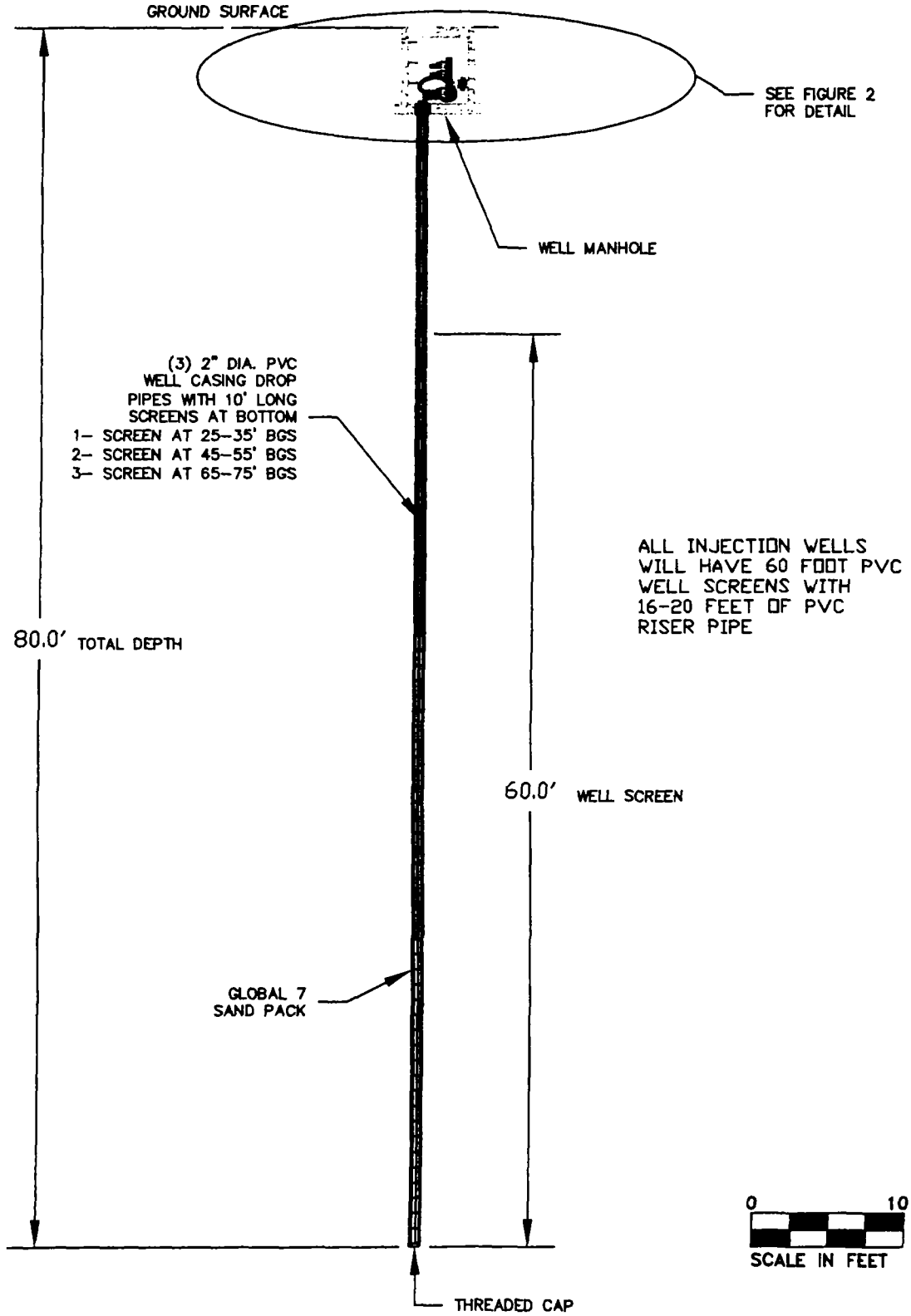

ALL EXTRACTION WELL DISCHARGE VALVES THROTTLED TO 100 GPM
EW-1
EW-2
EW-3
EW-4
EW-5
EW-6
EXTRACTION WELLS TYPICAL FOR 6 WELLS
400 GPM
200 GPM
MANIFOLD CROSS-CONNECT VALVE NORMALLY SHUT
IN-LINE MIXER
BOOSTER PUMP
SODIUM LACTATE TOTE/TANK
METERING PUMP
THROTTLED TO 100 GPM
SHALLOW TRAY AIR STRIPPER
BLOWER
TRANSFER PUMP
TO OFF GAS TREATMENT IF NECESSARY
TO NPDES OUTFALL
ALL INJECTION WELL DISCHARGE VALVES THROTTLED TO 57 GPM
SPARE MANIFOLD LINE INSTALLED FROM TREATMENT BUILDING TO WELL VAULTS
IW-1
IW-2
IW-3
IW-4
IW-5
IW-6
IW-7
INJECTION WELLS TYPICAL FOR 7 WELLS
LEGEND
F - FLOWMETER/SENSOR
P - PRESSURE DETECTOR/SENSOR
S - SAMPLE PORT/PARAMETER SENSOR
- VALVE NORMALLY OPEN
- VALVE NORMALLY THROTTLED
- VALVE NORMALLY SHUT
EARTH TECH
A TYCO INTERNATIONAL LTD. COMPANY
DRAWN BY: JRD
DATE: JULY 8, 2002
CHECKED BY: JE
EDITED BY: JRD070802
FILE NAME: GW PIDs
PROCESS FLOW AND INSTRUMENTATION DIAGRAM
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO
PROJECT NUMBER 55465



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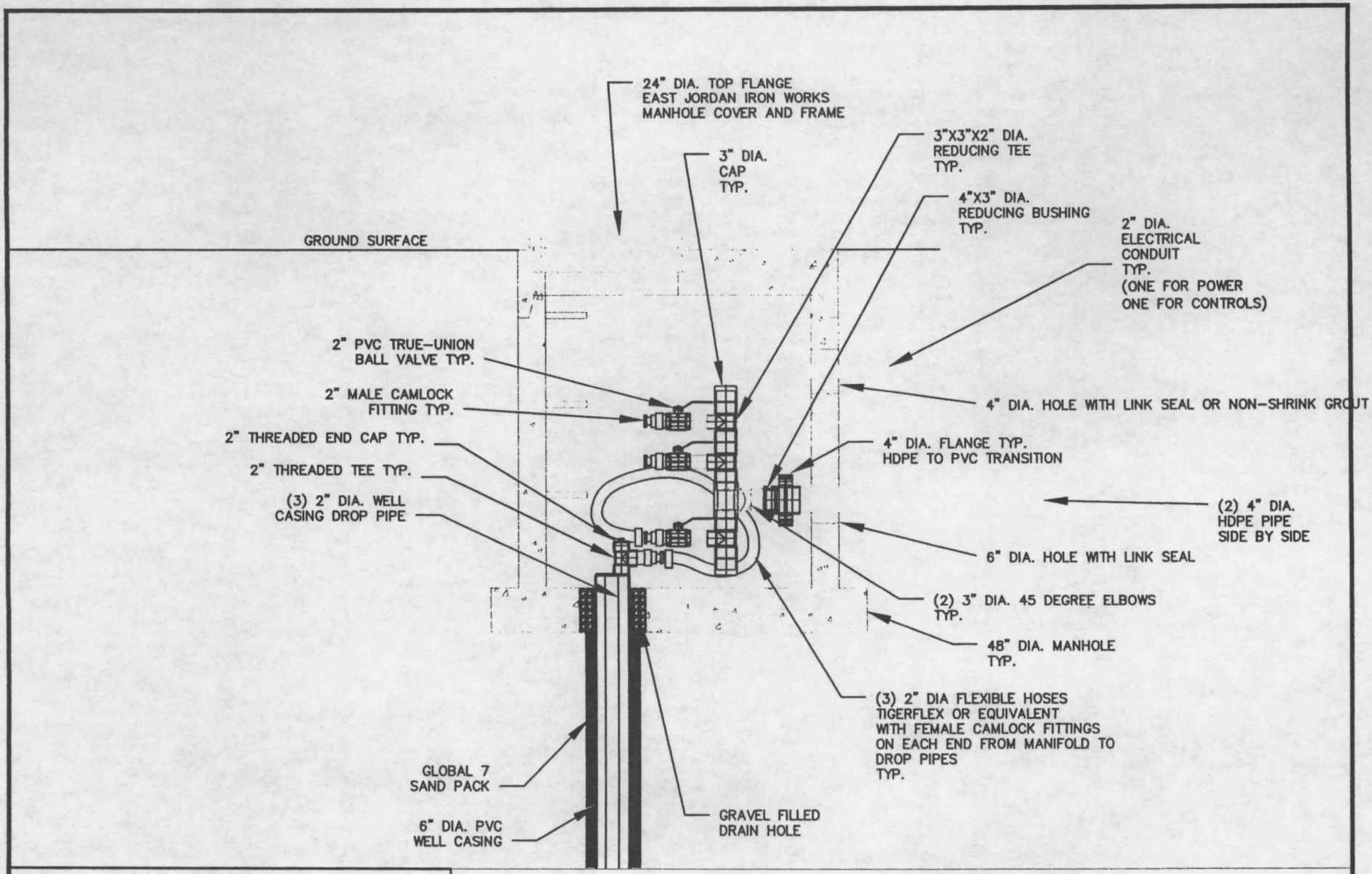
DRAWN BY: JRD	DATE: FEB. 5, 2003
CHECKED BY: JE	EDITED BY: JRD
FILE NAME: INJECTION WELL DETAIL	

FIGURE 1

TYPICAL INJECTION WELL CROSS-SECTION

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO



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FILE NAME: INJECTION WELL DETAIL	

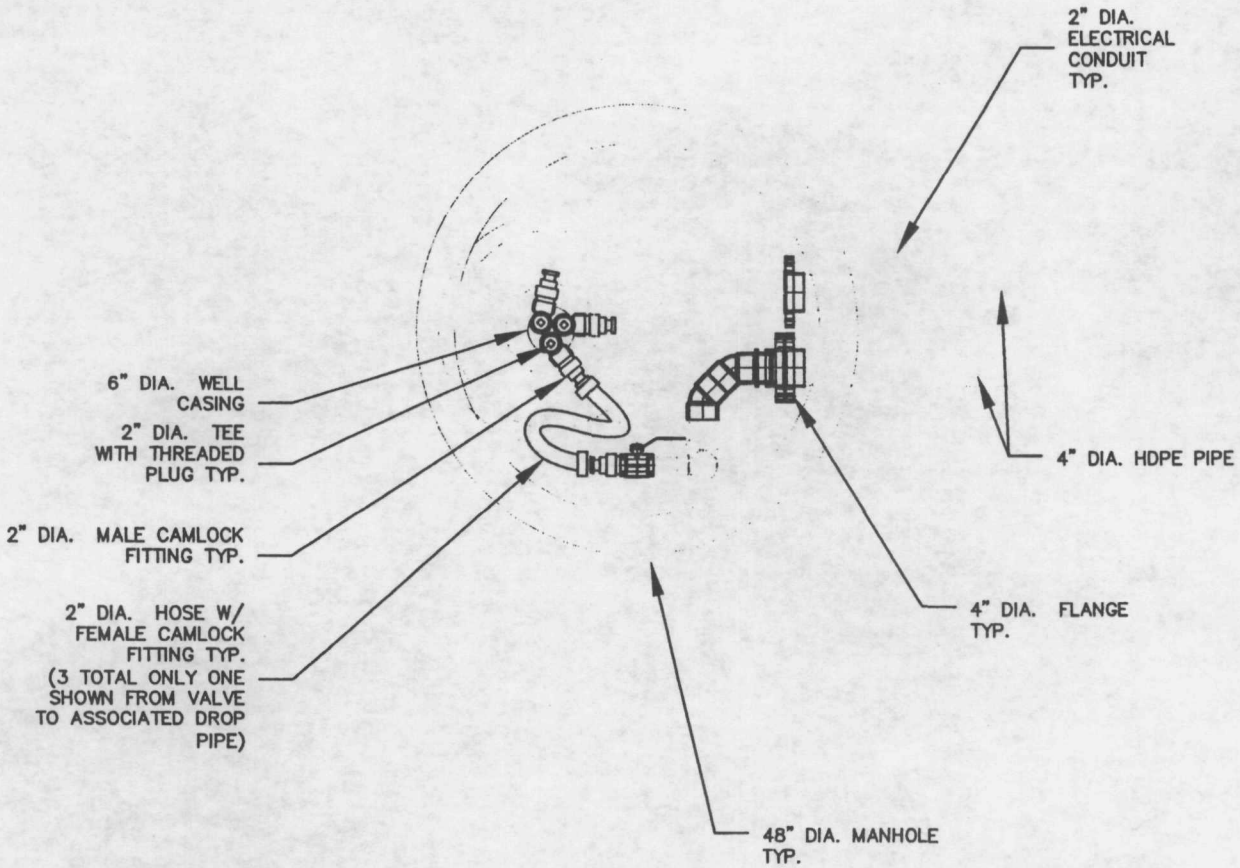
FIGURE 2

TYPICAL INJECTION WELL
PROFILE DETAIL

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

0 2

SCALE IN FEET



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CHECKED BY: JE	EDITED BY: JRD
FILE NAME: INJECTION WELL DETAIL	

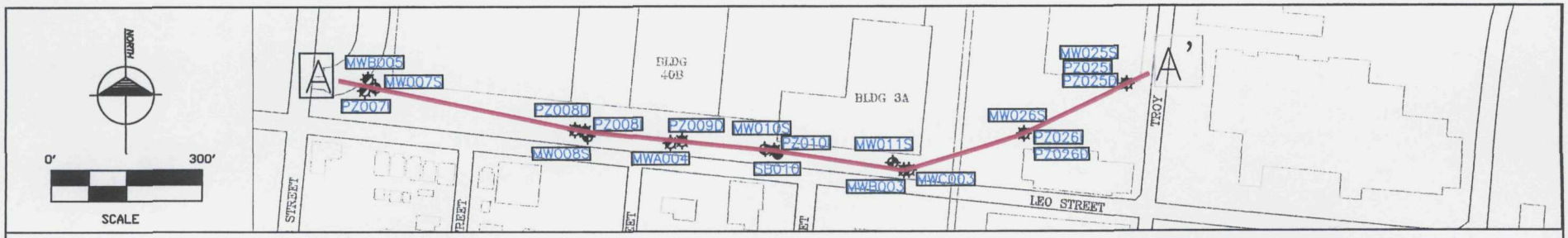
FIGURE 3

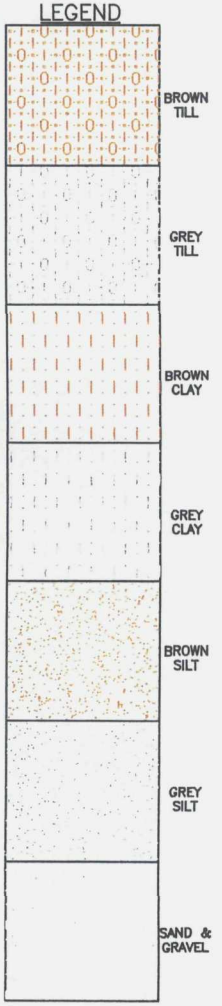
TYPICAL INJECTION WELL PLAN DETAIL

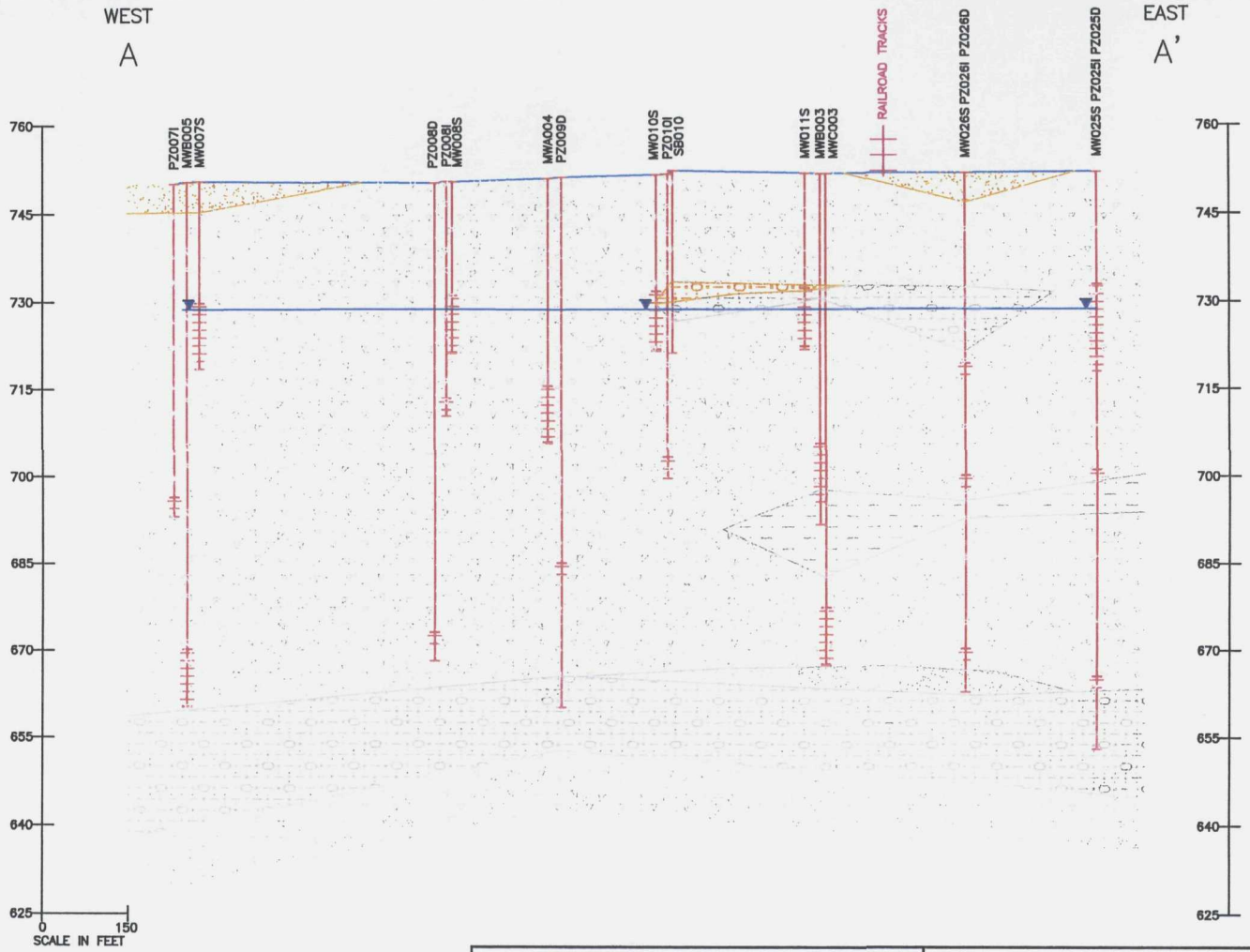
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

0 2

SCALE IN FEET







SOURCE: LBG DRAWING 3CHDA14I AND 3CHDA14K

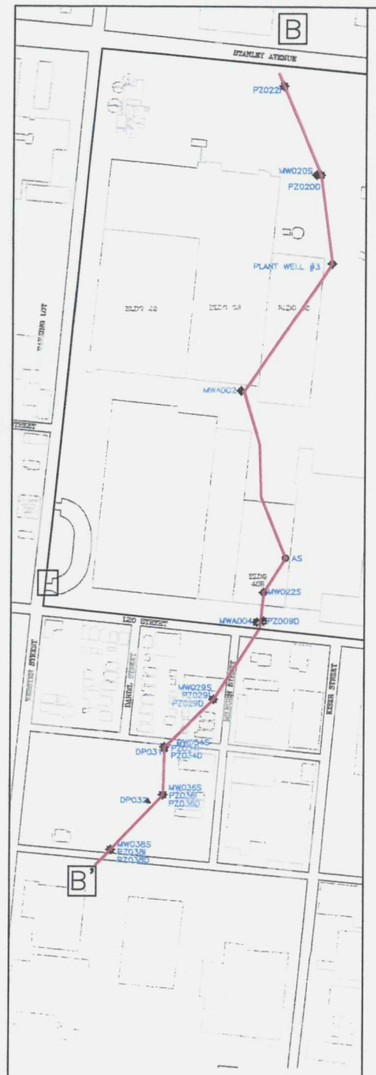
EARTH TECH

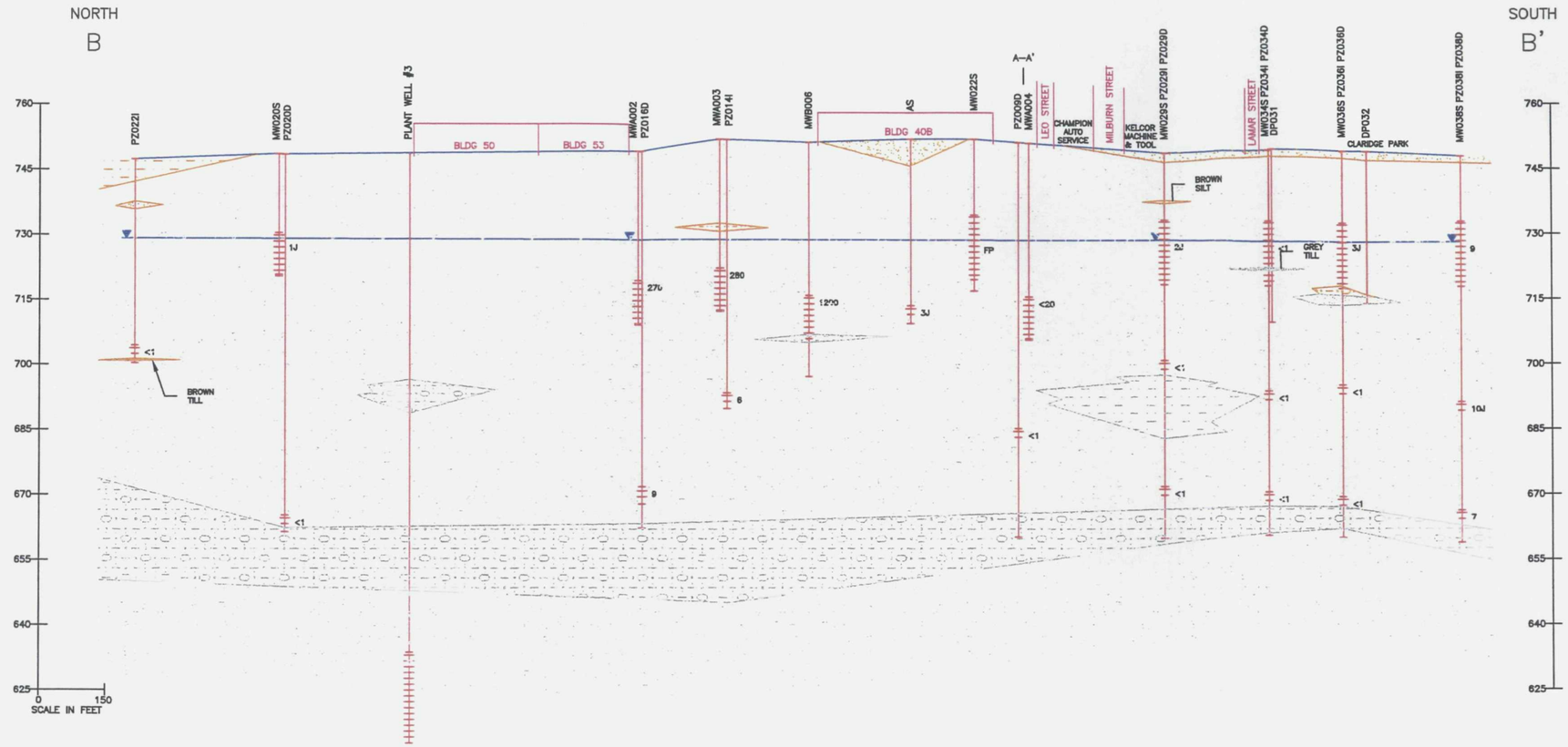
A tyco INTERNATIONAL LTD. COMPANY
4135 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

DRAWN BY: JRD	EDITED BY: JRD	PROJECT NUMBER: 55465	FILE NAME:
CHECKED BY: MA	DATE: JAN. 23, 2003	SCALE: -------	CROSS EW

SITE SPECIFIC WEST-EAST GEOLOGICAL CROSS-SECTION

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO





LEGEND

SOURCE: LBG DRAWING 3CHDA14I AND 3CHDA14K

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY
4135 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

DRAWN BY: JRD	EDITED BY: JRD	PROJECT NUMBER: 55465	FILE NAME:
CHECKED BY: MA	DATE: JAN. 23, 2003	SCALE: ------	CROSS NS

SITE SPECIFIC NORTH-SOUTH GEOLOGICAL CROSS-SECTION

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

#81

COPY

DAIMLERCHRYSLER

March 14, 2003

DaimlerChrysler Corporation

Valerie J. Orr
Underground Injection Control Program
Ohio Environmental Protection Agency
Division of Drinking and Ground Waters
122 South Front Street,
Columbus, Ohio 43216-1049

DAIMLERCHRYSLER DOCUMENT CONTROL NO.
SC001. 04/16/2003. 601

RE: UIC Permit to Install Application
Dayton Thermal Products
Dayton, Ohio.

Dear Ms. Orr,

Please find the five (5) copies of the "UIC Permit to Install" application for the Dayton Thermal Products facility located in Dayton, Ohio. To aid in your review of the permit and to provide background information regarding the facility, please see Attachment A from the permit application. This attachment provides an overview of the remediation strategy for the Dayton Thermal Products facility and includes a detailed discussion of the groundwater remediation system design.

In addition, please find the enclosed check for the total of $2000.00 to cover the cost of permit review.

Below is the certification statement required by Ohio Administrative Code Chapter 3745-34-17, "Signatories to permit applications and reports:"

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Sincerely,

Gregory M. Rose
Senior Manager
Assessment, Deactivation & Remediation

DaimlerChrysler Corporation
800 Chrysler Drive CIMS 482-00-51

DAIMLERCHRYSLER

COPY

DaimlerChrysler Corporation

March 14, 2003

Valerie J. Orr
Underground Injection Control Program
Ohio Environmental Protection Agency
Division of Drinking and Ground Waters
122 South Front Street,
Columbus, Ohio 43216-1049

RE: UIC Permit to Install Application
Dayton Thermal Products
Dayton, Ohio.

Dear Valerie,

I'm looking forward to meeting you again and give you a tour of our Dayton plant on March 14, at 1:00pm. Hopefully you will have a chance to take a quick look at the two permit applications. Please call me if you see any corrections that I may be able to bring with me. My office number is 248-576-7365.

Sincerely,

Gary M. Stanczuk
Remediation Specialist
Assessment, Deactivation & Remediation

DaimlerChrysler Corporation
800 Chrysler Drive CIMS 482-00-51
Auburn Hills MI USA 48326-2757

For Office Use Only
PTI Application No. _____
Fee _____

DIVISION OF DRINKING AND GROUND WATER
UNDERGROUND INJECTION CONTROL PROGRAM
CLASS V INJECTION WELL
CLASS V – INJECTION WELL AREA PERMIT FOR REMEDIATION
APPLICATION FOR PERMIT TO DRILL (CONSTRUCT AND INSTALL)

Dayton Thermal Products **3585**
Facility Name Primary Sic Code

Gary Stanczuk
Person to Contact

1600 Webster Street
Facility Address

800 Chrysler Drive East CIMS 482-00-51
Mailing Address

Dayton **OH** **45404**
City State Zip

Auburn Hills **MI** **48326-2757**
City State Zip

Area 937 Number 224-2900
Telephone

Area **248** Number **576-7365**
Telephone

[ ] Federal [ ] State [X] Private [ ] Public [ ] Other
Entity Status (check on)

Yes [ ] No [X]
Is Facility on Indian Land?

DaimlerChrysler Corporation, 1000 Chrysler Drive, Auburn Hills, MI 48326
If Corporation, Name and Address of Statutory Agency

South Plant: Section 5, North Plant: Section 6, **T1** **R7** **Montgomery County**
Location of tract of land where the proposed well is to located, including: Section or Lot Number, City/Village, Township and County

Latitude (North) 39.782570 - 39° 46' 57.3" **Longitude (West) 84.182100 - 84° 10' 55.6"**
Latitude and longitude of proposed well locations

IW-1 through IW-7
Designation of the wells by number and name

I, being the individual specified in Rule 3745-34-17 of the Ohio Administrative Code (OAC), hereby apply for a Permit to Drill for the Class V Underground Injection Well described herein.

Authorized Signature
(Pursuant to OAC Rule 3745-34-17)

Title

3.14.2003
Date

Please be advised that this application must be accompanied by a non-refundable fee of $2,000.00 pursuant to OAC Rule 3745-34-16 (G)(1).

PTD-UIC

Please Note: Operation of an injection well without an effective Underground Injection Control Permit to Operate is prohibited pursuant to Ohio Revised Code 6111.044.

Completed by _____

Title _____

Date _____

DIVISION OF DRINKING AND GROUNDWATER UNDERGROUND INJECTION CONTROL PROGRAM CLASS V INJECTION WELL APPLICATION FOR AREA PERMIT TO DRILL (CONSTRUCT AND INSTALL)

1. **No. of Wells Proposed** **Max. Well Depth**
Min. Well Depth **Ave. Elevation of Wells** **(GL)**

A total of seven (7) injection wells will be installed under the current groundwater remediation design. It is anticipated that three (3) additional wells may be required. A total of ten (10) injection wells are requested for this permit. The injection wells will be installed to a depth of approximately 80 feet (to the top of the glacial rich till zone) with the well screen interval extending from a depth of approximately 20 feet to 80 feet. Average elevation of the injection wells will be 750 feet +/- 5 feet MSL.

2. **Max. Inj. Rate (GPM)** **Avg. Inj. Rate (GPM)** **Max. Surf. Injection Pressure (PSIG)**

The maximum injection rate per well is 100 gpm. The average injection rate per well is estimated to be 60 gpm. The maximum surface injection pressure per well is 30 psig.

3. **Name and Depth of Injection Zone** **KB to Ground Level**

The injection zone is the Upper Great Miami Buried Valley Aquifer formation, a quaternary age valley fill sand and gravel outwash unit that extends from ground surface to a depth of approximately 80 feet. The saturated thickness of the Upper Great Miami Buried Valley Aquifer is approximately 60 feet. A glacial till rich zone, encountered at a depth of approximately 80 feet, separates the Upper and Lower sand and gravel units of the Great Miami Buried Valley Aquifer. The glacial till rich zone ranges in thickness from 25 to 5 feet. The depth of the injection zone is approximately 20 to 80 feet below ground surface in the Upper Great Miami Buried Valley Aquifer.

KB to Ground Level: N/A.

4. **Provide a brief description of the nature of your firm's business.**

The Dayton Thermal Products Plant is an automotive component manufacturing plant. Manufactured products include automotive thermal products including air conditioners, radiators, and ventilation systems.

5. **Describe activities conducted by the applicant which require that permits be obtained under the following environmental programs as applicable:**
   a. **Resource Conservation & Recovery Act (RCRA);**
   b. **Underground Injection Control Program (UIC);**

c. **The National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act, and Chapter 6111. of the *Ohio Revised Code;* and***
d. **The Prevention of Significant Deterioration Program (PSD) under the Clean Air Act and Chapter 3704. of the Ohio Revised Code.**

<u>*Please Note:</u> If liquid or semi-liquid wastes are discharged to a POTW, provide the POTW NPDES permit number.

Activities to be conducted in conjunction with the groundwater remediation project, which require a permit include:

- Construction, installation, and operation of Class V Injection Wells under the Underground Injection Control Program (UIC)
- Discharge from two air strippers of approximately 200 gpm of treated groundwater under the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act (CWA) and Chapter 6111. of the Ohio Revised Code. NPDES permit # OH 000 9199

A comprehensive description of the groundwater and soil remediation activities to be completed at the facility is presented in Attachment A.

Currently, there are no other groundwater remediation activities being conducted at the site which require a permit.

6. **Provide a listing of all permits or construction approvals received or applied for under any of the following programs:**
   a. **Hazardous Waste Management Program under RCRA and Chapter 3734. of the Ohio Revised code;**
   b. **UIC Program under the Safe Drinking Water Act (SDWA) and Chapter 6111. of the Ohio Revised Code;**
   c. **NPDES Program under the Clean Water Act (CWA) and Chapter 611. of the Ohio Revised Code;**
   d. **The Prevention of Significant Deterioration Program (PSD) under the Clean Air Act and Chapter 3704. of the Ohio Revised Code;**
   e. **Nonattainment Program under the Clean Air Act and Chapter 3704. of the Ohio Revised Code;**
   f. **National Emission Standard of Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act of Chapter 32704. of the Ohio Revised Code.**
   g. **Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act;**
   h. **Dredge and Fill Permits under Section 404 of the CWA and Chapter 3745-32 of the Ohio Administrative Code; and**

i. Other relevant environmental permits, including state permits.

The permits applied for in conjunction with the groundwater remediation project include:

- UIC Permit to Operate a Class V-Injection Well Area Permit for Remediation;
- UIC Permit to Drill Permit to Drill (Construct and Install) a Class V – Injection Well Area Permit for Remediation
- Modification of NPDES Permit #OH 000 9199

Existing / Operating permits currently in-place at the Dayton Thermal Facility include:

a. Hazardous Waste Management Program under RCRA and Chapter 3734. of the Ohio Revised code: OHD074703547
b. UIC Program under the Safe Drinking Water Act (SDWA) and Chapter 6111. of the Ohio Revised Code: None
c. NPDES Program under the Clean Water Act (CWA) and Chapter 611. of the Ohio Revised Code: OH0009199
d. The Prevention of Significant Deterioration Program (PSD) under the Clean Air Act and Chapter 3704. of the Ohio Revised Code: None
e. Nonattainment Program under the Clean Air Act and Chapter 3704. of the Ohio Revised Code: None
f. National Emission Standard of Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act of Chapter 32704. of the Ohio Revised Code: Facility ID: 0857040734, Source #'s P019, P020, P021, P022, P025, P030-P044, P045-P049, P050, P051, P052, P053, P057, P062, P065, P067, P068, P071, P072, P080, P085, P086, P087, P088, P089, P090, P093, P095, P096, P098, P099, P100, P101, & P102. B001, B002, B003, & B004. T005, T006, T007-T011, T012, & T0013.
g. Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act: None
h. Dredge and Fill Permits under Section 404 of the CWA and Chapter 3745-32 of the Ohio Administrative Code: None
i. Other relevant environmental permits, including state permits: None

7. **Provide a topographical map (or other map if a topographical map is unavailable) on a scale not smaller than four hundred feet to the inch, prepared by an Ohio Registered surveyor, extending one mile beyond the property boundaries of the source depicting the facility and each of its intake and discharge; each of its hazardous waste treatment, storage or disposal facilities, including but not limited to neutralization ponds, segregating or mixing tanks, and any solid waste disposal areas on site; each well where fluids from the facility are injected underground, including but not limited to known mines, mineral deposits, and other oil and gas**

reserves; and those wells, springs and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a quarter mile of the facility property boundary. If the well is or is to be located within the excavations and workings of a mine, the map shall also include the location of such mine, the name of the mine, and the name of the person operating the mine.

The topographical map certified by a State of Ohio registered surveyor is presented in Attachment B.

8. **Describe the type of drilling, completion, construction, and injection equipment to be used.**

Drilling for the installation of the injection wells will be completed using a Roto-Sonic drill rig. The injection wells will be installed with a well screen interval extending from a depth of approximately 20 feet to 80 feet below ground surface. Wells will consist of 6" PVC piping and well screens sized to match the formation materials. The well screen interval will be backfilled with appropriately sized filter pack sand or natural in-situ formation materials. From ground surface to the well screen interval will be sealed with bentonite. A subterranean vault with a manhole will be constructed for each well to house the injection well manifold equipment.

The injection process and associated equipment includes up to ten injection wells, six groundwater extraction wells, distribution piping, and sodium lactate/groundwater mixing equipment. The groundwater will be pumped at a combined rate of approximately 600 gpm from six extraction wells located along the south and east property boundary. Of the 600 gpm removed by the extraction wells, approximately 400 gpm will be injected back into the aquifer. The remaining 200 gpm of the extracted groundwater will be treated with an air stripper and discharged to the storm sewer system under an NPDES permit. The 400 gpm of injected groundwater will remain untreated and will be augmented with sodium lactate prior to injection to promote reductive dechlorination of chlorinated VOCs. The water will be managed to minimize altering the natural groundwater geochemistry (increased dissolved oxygen, etc.) during the sodium lactate dosing and injection process. The groundwater, augmented with sodium lactate, will be injected at a rate of approximately 60 gpm (100 gpm maximum rate) at each injection well. Each injection well will be fitted with an injection piping system that allows discrete injection at the 25 to 35 foot, 40 to 50 foot, and 60 to 70 foot below grade elevations to provide even application of injected water across the thickness of the aquifer. Injection equipment and process flow diagrams are presented in Attachment C.

9. **Provide a plan for the disposal of water and other waste substances resulting, obtained or produced in connection with the injection process.**

It is not anticipated that water or waste products will be generated in connection with the injection process. Approximately 600 gpm of groundwater will be pumped by the six groundwater extraction wells. The 600 gpm flow rate will be segregated into two separate lines to allow flexibility in directing the water for air stripping or injection. Approximately 200 gpm will be treated with an air stripper to reduce concentrations to meet applicable NPDES permit requirements and discharged to the storm sewer under an NPDES permit. The remaining 400 gpm of groundwater will remain untreated and will be augmented with sodium lactate prior to injection to promote reductive dechlorination of chlorinated volatile organic compounds present in the groundwater. Groundwater will be either re-introduced into the aquifer through injection or discharged to the storm sewer under an NPDES permit.

10. State the chemical composition and physical properties of the substance to be injected.

The substance to be injected is groundwater, impacted with chlorinated volatile organic compounds, pumped from the south and east property boundary. The groundwater will be augmented with sodium lactate prior to injection to promote the reductive dechlorination of the chlorinated volatile organic compounds present in the aquifer. The injected groundwater will be captured down gradient of the injection wells by the extraction well capture zone located along the south and east property boundary. Travel time from the injection wells to the extraction wells is estimated to be one year based on groundwater flow modeling. The chemical composition of the impacted groundwater, based on laboratory analytical results from adjacent monitoring wells, is presented in Attachment D. Based on the information presented in Attachment D, the highest average concentration of groundwater pumped from the east and south property boundary and the requested injection permit concentration limits to account for uncertainty in the concentration analysis and fluctuations in groundwater quality are as follows:

Maximum Concentrations Possible From Combinations Analyzed and Requested Permit Limits

Chemical of Interest	Highest Average Concentration from Attachment D **Combined (ug/l)**	Requested Permit Concentration Limits to Account for Uncertainty in the Analysis of Attachment D. **Combined (ug/l)**
1,1,1-Trichloroethane	590.7	710
1,1-Dichloroethene	104.6	126
1,2-Dichloroethane	94.3	114
Carbon Tetrachloride	94.3	114

Cis-1, 2-Dichloroethene	875.3	1051
Tetrachloroethene	1593.5	1913
Trichloroethene	4484.0	5381
Vinyl Chloride	94.3	114

The MSDS for sodium lactate is included in Attachment E.

11. Submit with this application your plans for testing, drilling, construction and installation.

Drilling for the installation of the injection wells will be completed using a Rotosonic drill rig. The injection wells will be installed with a well screen interval extending from the water table to the top of the glacial till rich unit, a depth of approximately 20 feet to 80 feet below ground surface. Wells will consist of 6" PVC piping and well screens sized to match the formation materials. The well screen interval will be backfilled with appropriately sized filter pack sand or natural in-situ formation materials. From Ground surface to the well screen interval will be sealed with bentonite.

12. Provide a map showing the injection well(s) for which a permit is sought and the applicable area of review. The area of review shall be one-quarter mile beyond the injection well(s). Within the area of review, the map must show the number or name, and location of:

a. **all producing oil and natural gas wells** (None Identified);
b. **injection wells** (As Proposed);
c. **abandoned wells** (None Identified);
d. **dry holes** (None Identified);
e. **surface bodies of water** (None Identified);
f. **springs** (None Identified);
g. **mines (surface and subsurface)** (None Identified);
h. **quarries** (None Identified);
i. **water supply wells** (As Shown);
j. **other pertinent surface features including residences and roads** (As Shown); **and**
k. **faults, if known or suspected** (None Identified).

The applicable area of review is presented in Attachment F.

13. Provide maps and cross sections indicating the general vertical and lateral limits of all underground sources of drinking water within the area of review, their position relative to the injection formation and the direction of water movement where known, in each underground source of drinking water which may be affected by the proposed injection.

The following text is the description of geologic units for the North Dayton Area (pages 44 and 45) from the Ground-Water Resources of the Dayton Area, Ohio U.S. Geological Survey Water Supply Paper 1808. The maps and cross-sections referenced in the text are presented in Attachment G.

NORTH DAYTON AREA

Geologic sections D-D' and D'-D'' illustrate the character of the valley-fill deposits in the northern part of Dayton. Section D-D' is based on meager data, chiefly that from wells drilled at the plants of the Dayton Castings Co., Premier Rubber Co., and the Chrysler Airtemp Sales Corp., but it is presented to show that in this area, too, the valley fill deposits evidently are separated by till into an upper and a lower sand and gravel aquifer, similar to generally prevailing conditions in the Dayton Area.

Geologic section D'-D'' is drawn northward from the corner of Troy and Valley Streets through the Miami River well field of the City of Dayton, on the west bank of the Miami River approximately 3.5 miles northeast of the center of Dayton. Logs of wells drilled at the Miami River well field clearly show the till-rich zone, which separates the sand and gravel deposits into an upper and lower aquifer. The upper aquifer, lying immediately beneath the soil and the river alluvium, consists of 30 – 40 feet of coarse sand and gravel, into which the Miami River has cut its channel. Beneath the upper aquifer are deposits of till, reported in nearly all the well logs, constituting a well defined till-rich zone between depths of about 40 to 90 feet.

Beneath the till-rich zone at the Miami River well field are 50 – 70 feet of coarse sand and gravel. The lower sand and gravel aquifer is generally underlain by till, which in turn overlies the shale bedrock. Most wells are screened between depths of about 65 and 130 feet, as the test holes records show that in this interval the sand and gravel deposits are coarsest.

Within the area of review, the Great Miami Buried Valley Aquifer is a quaternary age valley fill sand and gravel outwash unit that is separated into an upper and lower aquifer unit by a glacial till rich zone, encountered at a depth of approximately 80 feet. The glacial till rich zone ranges in thickness from 25 to 5 feet. The saturated thickness of the Upper Great Miami Buried Valley Aquifer is approximately 60 feet and the depth of the injection zone is approximately 20 to 80 feet below ground surface. The Lower Great Miami Buried Valley Aquifer is likely 60 to 100 feet thick sequence of outwash sand and

gravel deposits. In the area of review, the groundwater flow direction of the Great Miami Buried Valley Aquifer is predominantly from the northwest to the south and southeast.

Based on the USGS investigations, the Great Miami Buried Valley Aquifer in the area of review is underlain by glacial till, which in turn overlies shale bedrock. The glacial till and the shale bedrock are not used as a source of drinking water in the area of review.

14. Provide the following information as indicated:

a. maps and cross sections detailing the geologic structure of the local area;
b. generalized maps and cross sections illustrating the regional geologic setting; and
c. proposed injection procedure; and
d. schematic or other appropriate drawings of the surface and subsurface construction details of the well.

Maps, cross-sections, procedures, and construction details are presented in Attachment H.

Drilling for the installation of the injection wells will be completed using a Roto-Sonic drill rig. The injection wells will be installed with a well screen interval extending from a depth of approximately 20 feet to 80 feet below ground surface. Wells will consist of 6" PVC piping and well screens sized to match the formation materials. The well screen interval will be backfilled with appropriately sized filter pack sand or natural in-situ formation materials. From ground surface to the well screen interval will be sealed with bentonite. A subterranean vault with a manhole will be constructed for each well to house the injection well manifold equipment.

The injection process and associated equipment includes up to ten injection wells, six groundwater extraction wells, distribution piping, and sodium lactate/groundwater mixing equipment. The groundwater will be pumped at a combined rate of approximately 600 gpm from six extraction wells located along the south and east property boundary. Of the 600 gpm removed by the extraction wells, approximately 400 gpm will be injected back into the aquifer. The remaining 200 gpm of the extracted groundwater will be treated with an air stripper and discharged to the storm sewer system under an NPDES permit. The 400 gpm of injected groundwater will remain untreated and will be augmented with sodium lactate prior to injection to promote reductive dechlorination of chlorinated VOCs. The water will be managed to minimize altering the natural groundwater geochemistry (increased dissolved oxygen, etc.) during the sodium lactate dosing and injection process. The groundwater, augmented with sodium lactate, will be injected at a rate of approximately 60 gpm (100 gpm maximum rate) at each injection well. Each injection well will be fitted with an injection piping system that allows discrete injection at the 25 to 35 foot, 40 to 50 foot, and 60 to 70 foot below grade elevations to provide

even application of injected water across the thickness of the aquifer. Injection equipment and process flow diagrams are presented in Attachment H.

15. **Drilling and construction shall be supervised by a qualified drilling engineer who has authority to act for the company on matters concerning drilling.**

    Injection well, drilling and construction, will be conducted by Bowser Morner Drilling, Dayton, Ohio, under the supervision of an Earth Tech Geologist.

16. **Provisions for collecting the information below for a "completion report" to be submitted not later than 60 days after the completion of the well. The completion report is to include:**
    a. **The number of wells drilled;**
    b. **The depth of each well drilled; and**
    c. **The total volume of grout injected.**

    A Completion Report will be submitted no more than 60 days after well completion.

17. **Submit with this application, a plan for plugging and abandonment per applicable rules of the Ohio Administrative Code.**

    Where well abandonment is necessary, the well will either be completely filled with grout or such other material to prevent contaminants from entering ground water in compliance with the Ohio Administrative Code 3745-9-10 – "Abandonment of Test Holes and Wells".

Completed by_____

Title_____

Date_____

Soil and Groundwater Remediation Summary – Dayton Thermal Products, Dayton, Ohio

PREPARED FOR: Gary Stanczuk – DaimlerChrysler Corporation
Mike Curry – DaimlerChrysler Corporation

PREPARED BY: Rob Stenson – Earth Tech

COPIES: Susan Shultz - Earth Tech
Chris Winkeljohn - Earth Tech

DATE: March 4, 2003

Introduction

This technical memorandum has been prepared to outline the soil and groundwater remediation activities and off-site groundwater contaminant plume delineation activities to be conducted at the Dayton Thermal Products facility located in Dayton, Ohio. The facility location is presented on Figure 1. The on-site soil and groundwater remediation strategies include soil vapor extraction, groundwater extraction and re-injection, and in-situ reductive dechlorination. The remediation strategies, developed over the course of the last year, emphasis completing construction and system start-up activities during the summer of 2003. The off-site groundwater contaminant plume delineation strategy is currently being developed and field activities will be initiated in the spring of 2003.

The SVE system has been designed to provide coverage of the primary contaminant source area (defined as the area having a high probability of soil contamination). The SVE well points, with overlapping radii of influences, will remove contaminants from the unsaturated zone and the upper portion of the capillary fringe. Operation of SVE system across the primary contaminant source area will remediate the wide spread contamination. Over time, as portions of the source area are remediated, monitoring and optimization of the extraction and injection well points will focus the soil remediation efforts in the remaining hot spot areas.

The groundwater extraction/re-injection system is designed to contain the down-gradient migration of the contaminated groundwater at the south and east property boundaries and dose the up-gradient edge of the contaminant plume with sodium lactate to enhance the reductive dechlorination process. As this augmented groundwater travels from the re-injection wells to the extraction wells, reductive dechlorination will breakdown the CVOCs and remediate the groundwater beneath the facility. Reductive dechlorination at the capillary fringe will occur during remediation of the groundwater, and this will also promote the breakdown of CVOCs within the unsaturated zone above the capillary fringe.

Available historic information suggests the main body of the contaminant plume extends to the southeast, south, and southwest of the facility in the direction of the predominant groundwater flow direction. Lower concentrations of contaminants to the east and northeast of the facility, are likely due

to intermittent changes in the groundwater flow direction toward the northeast. Plume delineation activities will be conducted to evaluate the off-site geology, hydrogeology, groundwater chemistry, natural attenuation capacity of the aquifer, and to delineate the horizontal and vertical extent of the contaminant plume. The results of the plume delineation will be used for the design and installation of an effective monitoring well network to monitor groundwater chemistry and the natural attenuation of contaminants. Following the delineation of the off-site plume, the design and installation of a permanent monitoring well network will be completed.

Soil Remediation

The nature and extent of soil impacts at the facility and the potential for the migration of contaminants in the subsurface have been investigated in sufficient detail to complete the design, construction, and operation of SVE remediation system. The potential soil contaminant sources encompass approximately the southern two-thirds of the facility. The estimated delineation of the primary contaminant source area, presented on Figure 2, is based on potential contaminant sources, the delineation of CVOCs identified in groundwater, and through SVE pilot-scale testing in the field (discussed below). The primary contaminant source area is the focus of the SVE Pre-design Investigation and SVE system design, construction, and operation.

Based on the current understanding of the site and the identified primary contaminant source area, an innovative source delineation and remediation strategy has been developed. The remediation strategy consists of estimating the extent of the primary contaminant source area based on available site information, installing SVE wells at regularly spaced intervals throughout the source area, and monitoring the SVE well performance to determine the effectiveness of the soil remediation.

To increase the confidence that the SVE system will remediate the primary contaminant source area, SVE pilot-scale testing was performed at 17 suspected source areas prior to the SVE system design. The SVE pilot-scale testing identified and confirmed potential sources within the 25 to 50 foot radius of influence at the vapor extraction point and demonstrated that a significant volume of VOCs can be recovered using SVE technology. The results of the pilot-scale testing are presented on Figure 3.

Soil Vapor Extraction System Overview

The strategy for SVE to remediate the primary contaminant source area is to provide coverage of the source area with extraction/injection well points. The SVE design objectives included the following:

- Provide a reliable design to remove soil contaminants to prevent the migration of contaminants to groundwater;
- Provide SVE coverage of the primary contaminant source area;
- Provide an integrated extraction/injection system to focus remediation in hot spot areas;
- Install the SVE extraction points at regularly spaced intervals based on the radius of influence measured during the SVE pilot-scale testing and operation of the existing SVE system in Building 40B;
- Install extraction points screened near the capillary fringe to promote potential hot spot remediation;
- Evaluate contaminants at individual extraction points to map the distribution of contaminants within the primary contaminant source area;
- Design a flexible system to accommodate the initial removal of contaminants over a wide area and long term focused remediation at the capillary fringe and hot spots;

- Design an expandable system to remediate contaminants delineated outside the primary contaminant source area, if deemed necessary; and,
- Monitor system performance to maximize contaminant removal and effectively manage system to remediate contaminant hot spots and demonstrate contaminate removal to obtain a "No Further Action Letter" from Ohio EPA.

The SVE system is designed as two independent units and is presented in Figure 4. The northern unit provides coverage for Buildings 50, and 53, and part of 59 and the truck-way. The southern unit, which includes the integration of the existing SVE system in Building 40B, provides coverage for Buildings 40, 40A, 40B, and the remaining portion of Building 59. Each unit consists of independently-operated banks of up to 10 SVE well points activated by pneumatic valves set by timers. Banks of well points, cycled by timers, are necessary to maintain the required vacuum (or pressure) for establishing the radius of influence at each well point. A total of 117 soil vapor extraction/injection well points are located within the buildings and beneath the concrete in the truck-way.

Each unit includes a skid-mounted building with blowers capable of achieving 1000 scfm at 8-inches of mercury and a knock out chamber capable of removing entrained moisture at the maximum capacity of 1000 SCFM. The vacuum will be induced by the use of two regenerative blowers driven by 30 HP motors. The banks are connected to both the extraction and the injection manifolds to provide flexibility to use a well point bank as an extraction or injection system. The combined ability to both extract and inject air provides the flexibility to focus the flow of air as needed during remediation. The process flow diagram for the SVE system is presented in Figure 5.

Each well point, used as either an extraction or injection point, will be plumbed in banks not exceeding 10 well points per bank. Each bank will be connected to both an extraction and an injection manifold actuated automatically by use of pneumatically operated valves. The SVE wells will be installed at approximately 80- foot centers as shown on Figure 4. Each well will be screened across the twenty foot unsaturated zone below the surface. Well points will consist of 1.5-inch PVC screened from a depth of approximately 5 feet to 20 feet below ground surface. The wells will be installed near to or adjacent to the structural columns. Piping will be trenched from the well to the column and routed up to the well bank main piping. Well points will be installed by Geoprobe direct push methods.

The distribution and concentration of contaminants in the primary contaminant source area will be mapped based on the analytical laboratory results and the radius of influence of the extraction points. Air emissions will be directed through granulated carbon pending the results of the analytical laboratory testing. Mapping the distribution and concentration of contaminants will allow the system to be operated as a conventional SVE system in areas of wide spread contamination and be focused using a combination of extraction and injection points in hot spot areas and potential void zones encountered by equipment in the plant. As areas are remediated to acceptable concentrations to protect groundwater, individual well points can be shut down to increase the vacuum and airflow in other well points in the bank. The net effect of shutting down well points and focusing extraction/injection as the remediation progresses is to increase the strength of the SVE system for the remediation of the highest concentration areas.

SVE System Start-up

During the system start-up, each well point bank will be balanced and operated for several days to up to one week. Individual well points and bank samples will be collected at regular intervals to evaluate maximum contaminant removal per bank to estimate daily emission rates. Individual well point samples will be used to estimate concentrations and determine if any points can be shut down early in the start-up process. The start-up monitoring will also be used to optimize the duration that individual banks will be operated within the cycling regime of the multiple well point bank system The radius of

influence of select wells will also be confirmed during start-up. During start-up, air emissions will be directed through granulated carbon pending the results of the analytical laboratory testing.

The results for individual well points will be mapped to delineate the extent of contamination within the system coverage area and monitor progress of the remediation effort. At completion of the start-up phase, the system will be optimized for contaminant removal and bank cycle duration and the contaminant distribution will be established. This information will be used to project the estimated time required to complete the SVE remediation.

The emission requirements for full-scale operation will also be evaluated at the completion of the start-up phase. Air emission requirements under OEPA allow for de minis emissions of 10 pounds per day and 1 ton per month for each operating system. The maximum for the multiple remediation systems would be 25 tons per year. The system emission rates established during start-up and the decline in removal rates over time will be considered when recommending the emission control system if one is required. For example, because the system is operated in a cycled bank regime, granulated carbon may be used only on the banks that exceed the de minis 10 pounds per day and not on the remaining banks in the system. Carbon use would then be discontinued when the limits are attained.

SVE System Operation and Maintenance

The operation and maintenance will include monitoring the output by sampling and balancing and tuning of the system based on the sample results, field measurements, and an on-going evaluation of the contaminant distribution and concentrations. Monitoring of the system will allow the operator to continue to maximize the remediation by adjusting individual well banks and begin to integrate air injection into the operational cycles of the system. Injection will be focused to drive air to identified contaminant hot spots. The decrease in concentrations over time will determine the approximate location of persistent hot spots and allow the focus of more intense SVE efforts in these areas. Emission test results will be tracked and documented for regulatory compliance. Operation and maintenance will also include routine maintenance of the mechanical system as recommended by the equipment manufacturers.

Groundwater Remediation

The groundwater remedial approach consists of the design, construction and operation of a groundwater containment system along the south and east property boundaries and an on-site groundwater remediation system using a combination of air stripping and in-situ reductive dechlorination technologies. The groundwater containment system design will prevent off-site migration of chlorinated volatile organic compounds (CVOCs) and establish hydraulic control of groundwater flow at the site. The reductive dechlorination technology consists of the up-gradient re-injection of extraction well groundwater augmented with sodium lactate to promote in-situ reductive dechlorination of CVOCs. The reductive dechlorination will degrade the PCE, TCE, DCE, and VC to ethane and will significantly reduce the timeframe for operating a conventional groundwater containment system. The objectives of the groundwater remedial approach include the following:

- Design a reliable containment system to prevent further off-site migration of contaminants;
- Recover and remediate the contaminant hot spot on the southern site boundary within the radius of influence of the extraction wells;

- Remediate the on-site dissolved phase CVOC plume;
- Design a flexible system to accommodate variations in groundwater flow direction and groundwater contaminant concentrations;
- Perform system monitoring to demonstrate the effectiveness of in-situ reductive dechlorination and, demonstrate contaminate removal to obtain a "No Further Action Letter" from Ohio EPA.
- Minimize interruption to plant activities.

Pre-Design Investigation

Pre-Design Investigation activities were conducted to achieve the following objectives:

- Obtain and evaluate site-specific aquifer hydraulic conductivity data to confirm the physical parameters of the aquifer; and,
- Obtain and evaluate site-specific groundwater geochemistry data to assess the suitability and feasibility of reductive dechlorination.

This data was necessary to support groundwater-modeling efforts and quantify the groundwater extraction well capture zones and groundwater mounding expected with up-gradient groundwater re-injection. The groundwater geochemistry data was evaluated to establish the sodium lactate dosage rate and identify other nutrient requirements necessary to promote reductive dechlorination.

Hydraulic Conductivity

Earth Tech conducted a total of 21 in-situ hydraulic conductivity tests at 11 locations during the Pre-design Investigation to confirm the in-situ hydraulic conductivity. The hydraulic conductivity data evaluation was performed using the AQTESOLV program and a program developed by the Kansas Geological Survey to evaluate the oscillating data collected during some of the field tests. The hydraulic conductivities calculated using the AQTESOLV program ranged from 0.001 to 0.20 cm/sec (4 to 560 ft/day) and 0.03 to 0.09 cm/sec (96 to 264 ft/day) using the oscillating data program. The hydraulic conductivity of the adjacent GEM City well pump test data is approximately 0.23 cm/sec (750 ft/day), which is similar to the values calculated using the AQTESOLV data analysis.

A hydraulic conductivity value of 0.35 cm/sec (1000 ft/day) was selected for design analysis. This value is about 35% greater than the average value calculated from the GEM City pump test and on-site slug tests. A higher design value was chosen to allow for flexibility in system pumping rates. This flexibility is recommended to account for several potential changes in the aquifer system including hydraulic conductivity, transmissivity, and groundwater flow direction. Details of the hydraulic conductivity testing are presented in the Hydraulic Conductivity Technical Memorandum is included in Appendix A.

Groundwater Geochemistry

Pre-design Investigation groundwater geochemistry samples were collected from 30 groundwater monitoring wells located both on-site and within the down-gradient contamination plume to assess overall groundwater geochemistry and evaluate contaminant reductive dechlorination and natural attenuation processes. The groundwater geochemistry sampling and data evaluation indicates the groundwater geochemistry and the native microbial population present at the site are well suited for reductive dechlorination. Currently, PCE and TCE are breaking down to cis-1, 2-dichloroethylene, and with additional augmentation of an electron donor (sodium lactate), the breakdown process will

be enhanced and accelerated. Details of the groundwater geochemistry are presented in the Groundwater Geochemistry Technical Memorandum included in Appendix B.

Groundwater Remediation System Overview

The groundwater remediation system will provide hydraulic capture in the area of highest concentration of contaminants along the southern and eastern border of the property, and inject an electron donor (sodium lactate) into and up-gradient of the PCE/TCE plume to promote reductive dechlorination of the groundwater contaminants. The system design is comprised of three major components including groundwater extraction wells, groundwater treatment system (for water to be discharged to the storm sewer under NPDES permit, and for water to be re-injected), and groundwater re-injection wells. Six groundwater extraction wells will be installed to establish hydraulic control and seven re-injection wells will be installed in the interior of the site. The groundwater extraction and re-injection well locations and the proposed location of the treatment building are presented in Figure 6.

Hydraulic Control System

Based on the design maximum hydraulic conductivity of 0.35 cm/sec (1000 ft/day), groundwater modeling established that a groundwater extraction rate of 600 gpm (100 gpm from six extraction wells) would be required to maintain capture of the groundwater plume at the south and east property boundaries. The modeling also included the up-gradient re-injection of 400 gpm of groundwater to accommodate the dosing of the aquifer with sodium lactate. The remaining 200 gpm of groundwater is treated with an air stripper and discharged to the storm sewer under an NPDES permit to maintain a negative groundwater balance on-site.

The groundwater extraction and re-injection system will create hydraulic containment conditions along the south and east property boundary and groundwater mounding conditions at the injection wells located within the truck way between Buildings 40, 40A, 59 and 39 to the south and Buildings 50, 52 and 53 to the north. The groundwater flow paths shown on Figure 7 present the capture zone of the extraction wells and the reductive dechlorination zone created by the injection of groundwater augmented with sodium lactate. The groundwater flow paths indicate the following benefits of hydraulic control and re-injection:

- Off-site groundwater contamination south and east of the property boundary will be pulled back to the property boundary and recovered;
- On-site groundwater contamination is captured at the south and east property boundaries;
- The reductive dechlorination zone will be established by injection of groundwater, dosed with sodium lactate, into the upgradient portion of the contaminant plume. The reductive dechlorination zone will gradually move downgradient to the capture zone at the south and east property boundary.
- The capture zone, in conjunction with the re-injection wells, will maintain containment of the highly contaminated groundwater located in the central portion of the facility during periods of groundwater flow variation.

The 6-inch diameter extraction wells will be constructed with well screens penetrating the entire saturated thickness of the aquifer (approximately 60 feet). The 600 gpm flow rate will be segregated into two separate lines based on relative contaminant concentrations to allow flexibility in directing the water for air stripping or re-injection. Approximately 200 gpm of the highest contaminant concentration groundwater will be treated with an air stripper to reduce concentrations to meet

applicable NPDES permit requirements and discharged to the storm sewer under an NPDES permit. The remaining 400 gpm of groundwater will remain untreated and be augmented with sodium lactate prior to re-injection. The water segregated for re-injection will be managed to minimize altering the natural geochemistry (increased dissolved oxygen, etc.) during the lactate dosing and re-injection. Re-injection will be through seven 6-inch diameter, fully penetrating PVC well screens. Extraction and re-injection well and piping locations are presented in Figure 8.

Groundwater, augmented with sodium lactate, will be injected at a rate of approximately 60 gpm at each well. Distribution piping will connect the wells and will be routed from the groundwater/lactate mixer by a booster pump. Each injection well will be fitted with an injection system that allows discrete injection at the 25 to 35 foot, 40 to 50, and 60 to 70 foot below grade elevations to provide even application of injected water across the thickness of the aquifer. The necessary permits for the installation and operation of a Class V – Injection Well Area Permit for Remediation will be prepared and submitted for approval to the Ohio EPA, Division of Drinking and Groundwater, Underground Injection Control Section.

Groundwater Treatment System

The treatment system will include four main components consisting of two skid-mounted low-profile air stripper systems each rated at 100 gpm, a lactate/groundwater mixing system with lactate storage tank, and a programmable logic controller (PLC) to control and monitor system performance. The system flow diagram is presented in Figure 9. Groundwater entering the treatment system will be divided using the two distribution manifolds to route approximately 200 gpm of the groundwater volume to the air stripper manifold. The groundwater contaminant concentration will be monitored and maintained by adjusting the groundwater flow using the distribution line manifolds from the extraction wells. A transfer pump connected to the base of the stripper will convey the water from the air stripper to an existing 30" storm sewer pipe running north along Webster Avenue. The discharge of the treated groundwater will be performed following modification to the existing NPDES Permit for the facility.

The remaining 70% of the groundwater flow (400 gpm) will flow in the second manifold and pass directly into the lactate/groundwater mixer for sodium lactate augmentation. A booster pump will convey the augmented groundwater to the re-injection well distribution piping.

The system performance will be monitored by a PLC. The water elevation in the extraction and re-injection wells will be recorded by the PLC from calibrated input signals from pressure transducers located in each extraction and injection well. This water elevation data will be used to:

- Monitor that the capture zone is maintained by comparison to groundwater elevations in monitoring points near the extraction wells;
- Monitor that the re-injection rates do not exceed the capacity of the injection wells;
- Monitor the potential for well fouling over time; and,
- Plan well maintenance to minimize well down time of the system.

In addition to monitoring water levels, the PLC will monitor individual flow rates from each extraction well and the total combined flow to the air stripper system and the lactate augmentation system. The PLC will also monitor the collection sump within the treatment building containment for the presence of water. In the event of an abrupt change in water level in a well, a drop in the system flow, or detection of water in the collection sump, the PLC will shut the system down and notify the operator via the auto-dialer that system maintenance is required. During the system shut down, the

water elevations in the capture zone and the re-injection mound will return to the regional levels and flow direction. As a result of the relatively flat groundwater gradient at the site, the contaminants will gradually migrate (1.3 ft/day) in the direction of the regional groundwater flow. The re-start of the extraction system will recover the groundwater because of the 150 to 250 foot off-property capture zone.

System Start-up and Monitoring

During the system start-up, the extraction wells and re-injection wells will be brought on-line in a pre-determined sequence to provide an opportunity to perform field scale studies of the pumping rates and sodium lactate dose ratio. Field scale testing of the system will be prior to full-scale operation. Field scale testing will provide an opportunity to optimize the pumping rates of individual and combinations of extraction wells and measure the effective capture zone. The re-injection groundwater mounding will also be evaluated during this period.

The pilot-scale testing of the reductive dechlorination process will be evaluated during the system start-up and operation.

To monitor the groundwater anaerobic conditions and the dechlorination progress, groundwater samples will be collected from monitoring wells within the treatment zone. Analysis will include:

- VOCs and bioactivity indicators to evaluate sodium lactate dose requirements;
- Indicator parameters including Total Organic Carbon, Chemical Oxygen Demand, nitrates, manganese, iron, sulfate, and redox potential; and,
- Microcosm studies will be performed to evaluate nutritional needs and monitor the system's capacity to complete the dechlorination process. This information will be used to optimize the reductive dechlorination process.

The specific monitoring wells to be sampled will be determined during the start-up phase of the project. Samples will also be collected from the treatment system to determine the mass of contaminants removed and treatment efficiencies.

Off-Site Plume Delineation

The off-site groundwater plume delineation activities consist of the investigation of the geology and hydrogeology of the aquifer, and the groundwater chemistry and aquifer natural attenuation parameters of the contaminant plume. The plume delineation activities will be focused in the area presented on Figure 10. The objectives of the plume delineation strategy include the following:

- Identify and map the lower confining layer present beneath the site;
- Support the design and implementation of a monitored natural attenuation remedy for the off-site groundwater plume;
- Design and installation of an effective monitoring well network to monitor groundwater chemistry and the natural attenuation of contaminants;
- Design a flexible system to accommodate variations in groundwater flow direction and groundwater contaminant concentrations;

To delineate the horizontal and vertical extent of the plume, field activities include a Geoprobe membrane interface probe and electric conductivity (MIP/EC) investigation, groundwater interval sampling, existing well sampling, water well installation, and groundwater elevation monitoring. The Geoprobe MIP/EC investigation will provide semi-quantitative/qualitative information on volatile organic compound (VOC) contaminant levels in groundwater using the membrane interface probe and subsurface stratigraphy using the electrical conductivity probe. The real-time VOC contaminant level and stratigraphic data acquired with the MIP/EC probe will be evaluated on-site to select groundwater sample intervals. The fieldwork will be performed throughout the potential plume area to expand the understanding of geology and hydrogeology and groundwater chemistry and natural attenuation parameters. The fieldwork will be completed as an iterative process with field data integrated into a working model of the hydrogeologic processes and a 3-dimensional delineation of the contaminant plume. The groundwater plume delineation activities include the following:

Groundwater Level Measurements and Monitoring

To document the groundwater elevation and flow direction during plume delineation activities, ten temporary 1.5-inch diameter monitoring wells will be installed across the plume delineation area. Proposed temporary water table well locations are presented on Figure 1. The wells will be installed prior to the start of the Geoprobe investigation and the groundwater interval sampling (discussed below) to provide time to develop the wells, record water elevations, survey the well head top of casing, and prepare a groundwater flow map. The wells will be installed by direct push methods using a Geoprobe and will be and completed with a 15-foot well screens, concrete collars and locking flush mount covers.

The Geoprobe rig mobilized to install the temporary wells will be equipped with the MIP/EC probe system, which will be used to complete a MIP/EC sounding to the top of the confining layer at each location. Groundwater interval samples will also be collected as described in Task 4. The EC stratigraphic information will be used to select the well screen interval and map the top of the confining layer on a regional level. The MIP/EC data, groundwater laboratory analytical results and the groundwater elevations from the temporary wells will provide a preliminary indication of the groundwater flow direction, stratigraphy, and plume location.

To monitor and document short and long fluctuations in groundwater elevation and subsequent changes in groundwater flow direction, twelve dedicated pressure transducers will be installed to record continuous water level information. The transducers will be installed at selected existing monitoring well locations and the temporary wells described above. The selected locations will be equally spaced across the existing monitoring well network and plume delineation area. Water level data will be downloaded and contoured to document groundwater flow conditions in the investigation area.

Groundwater Monitoring Well Sampling

To provide a current baseline of groundwater contaminant concentrations within the contaminant plume, 16 well nest locations for a total of 42 existing groundwater monitoring wells will be sampled and analyzed for VOCs and natural attenuation parameters. The groundwater contaminant concentrations within the presently identified limits of the plume will be evaluated prior to the delineation field activities to direct the proposed field activities. The laboratory analytical results from both the existing monitoring wells and the in-situ groundwater samples collected by Geoprobe sampling will be integrated into the final interpretation of the horizontal and vertical extent of the contaminant plume.

Geoprobe Investigation and Groundwater Interval Sampling

To delineate the horizontal and vertical extent of the plume, a Geoprobe investigation and Geoprobe groundwater sampling will be completed at the locations presented on Figure 10. The 60 proposed locations encompass the anticipated extent of the plume surrounding the facility. A Geoprobe rig equipped with a MIP/EC probe will provide semi-quantitative/qualitative information on volatile organic compound (VOC) contaminant levels in groundwater and stratigraphy. The real-time VOC contaminant level and stratigraphic data acquired with the MIP/EC probe will be evaluated on-site to select up to three Geoprobe groundwater sample intervals. Geoprobe groundwater samples will be collected to provide OEPA VAP certified laboratory analytical results for the groundwater plume delineation and to confirm the MIP probe results during the investigation. The Geoprobe groundwater samples will be collected using a second Geoprobe drill rig. Groundwater samples will be sent to a DCX partner laboratory for VOC and natural attenuation parameters analysis.

To initiate the plume delineation, the MIP/EC Geoprobe rig will begin sampling within the middle of the groundwater plume. The investigation will progress in a circular pattern around the known extent of the plume to close existing data gaps in the vertical extent of the plume and allow time for the laboratory to analyze the samples. Follow-up sample locations will be determined based on the MIP/EC probe results and laboratory analytical results with the objective to further delineate the leading edge of the plume. Following delineation of the leading edge of the contaminant plume, the remaining investigation locations within the plume would be completed to map the geology and hydrogeology and vertical extent of the contaminant plume.

A review of the site stratigraphy, groundwater flow, and contaminant distribution will be completed prior to demobilization. The objective of this review is to determine if the data collected are sufficient to support a natural attenuation remedy or if additional investigation of the contaminant plume is required. In the event additional investigation locations are selected based on the information review, the required utility clearance and final field investigation activities would be completed.

The Geoprobe groundwater sampling will be completed with a second Geoprobe rig by re-occupying the MIP/EC boring location and advancing an adjacent deep boring to the deepest Geoprobe groundwater sample interval. The deepest interval will be sampled first with progressively more shallow intervals sampled as the drill rods are withdrawn from the borehole. At each interval, the drill rods will be pulled back exposing the well screen to the formation and three volumes of the standing water in the drill rod will be removed by pumping the water from the top of the water column. The sample tubing will then be lowered to the bottom of the well screen and the groundwater purged and sampled. Groundwater samples will be collected with a peristaltic pump using low-flow sampling procedures. Upon completion of groundwater sampling, the second drill rig will seal both boreholes with bentonite grout. Boring locations will be surveyed for x, y, z coordinates by GPS upon completion of the drilling program.

Groundwater samples will be collected for VOC analysis to investigate the horizontal and vertical extent of the contaminant plume and to evaluate contaminant breakdown daughter products. Groundwater samples for natural attenuation parameter analysis will also be collected to evaluate the natural attenuation capacity of the aquifer. The natural attenuation and geochemistry sample parameters include the following:

- Oxidation Reduction Potential (ORP) – by Horiba
- Sulfates / Sulfites
- Nitrates / Nitrites
- Ferrous / Ferric Iron

- Dissolved oxygen (DO) – by Horiba
- PH – by Horiba
- Alkalinity
- Hardness
- Manganese
- Chemical Oxygen Demand (COD) – filtered and unfiltered
- Ethene and Ethane

Data Evaluation, Mapping, and Technical Memoranda

As stated previously, the goal of the proposed plume delineation is to develop sufficient understanding and documentation of existing groundwater conditions to support the design and implementation of a monitored natural attenuation remedy for the off-site groundwater plume. An off-site groundwater summary document and a series of technical memoranda for the plume delineation field activities will be completed following field activities. The off-site groundwater summary document will present an overview of the physical setting (geology and hydrogeology) for the plume and nature of the contaminants present with the objective of (a) evaluating the applicability of a natural attenuation remedy and (b) outlining the data collection requirements for implementation of a monitored natural attenuation remedy. The technical memoranda, which will be appended to the summary document, will contain concise presentations of the information collected during the investigation.

The following is a summary of the technical memoranda that will be prepared to document the existing conditions for the off-site groundwater plume.

- Geology and Hydrogeology. This memorandum will contain a compilation of previous and newly collected data on the physical setting in which the plume occurs (contaminant data will be addressed separately). Information presented in the document will include: a summary of the field program completed, electrical conductivity (EC) logs collected Geoprobe boring, up to four geologic cross sections, the final topographic map of the top of the confining layer, boring logs, monitoring well construction diagrams, groundwater level measurement data, groundwater potentiometric maps, a of summary groundwater flow directions and estimated flow rates, and a focused discussion of the geologic and hydrogeologic setting for the off-site plume.

- Groundwater Plume. This memorandum will combine previous and newly collected data on the nature of groundwater impacts in the off-site plume. Information presented in this document will include: a summary of the field program completed, tables summarizing membrane interface probe (MIP) measurements collected during Geoprobe borings, tables summarizing contaminant laboratory analytical data, tables summarizing measurement of natural attenuation parameters, up to three maps showing distribution for individual contaminants (and daughter products), up to four cross sections showing contaminant distribution data in profile, and a focused discussion summarizing the extent of the plume, the area of contaminant exceedances, and natural attenuation parameters.

Figures

Figure 1 – Site Location Map

Figure 2 – Primary Soil Contaminant Source Area

Figure 3 – SVE Pilot Scale Testing Results

Figure 4 – SVE System Layout

Figure 5 – SVE Process Flow and Instrumentation Diagram

Figure 6 – Groundwater System Layout

Figure 7 – Groundwater Flow Path – Normal Conditions

Figure 8 – Groundwater Piping Layout

Figure 9 – Groundwater Process Flow and Instrumentation Diagram

Figure 10 – Groundwater Plume Delineation Proposed Sample Locations

Appendices

Appendix A - Hydraulic Conductivity Technical Memorandum

Appendix B - Geochemistry Technical Memorandum

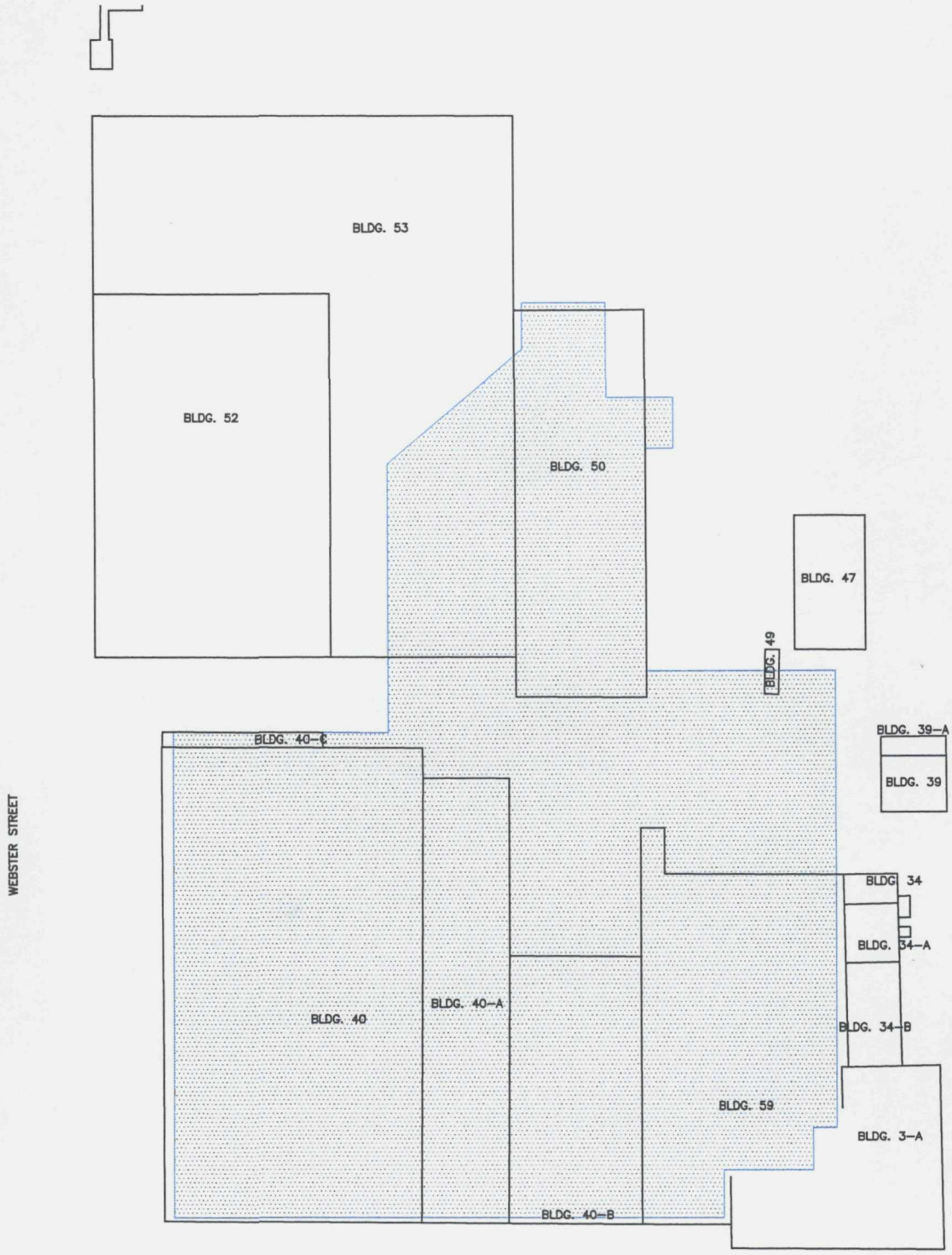
NORTH

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY
4135 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

FIGURE 1
VICINITY MAP
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

DRAWN BY: JRD	EDITED BY: JRD	PROJECT NUMBER: 55465	FILE NAME:
CHECKED BY: JE	DATE: DEC. 20, 2002	SCALE: ------	WELL PLACEMENT REV1



LEGEND

– PRIMARY SOIL CONTAMINANT SORCE AREA AND APPROXIMATE SVE SYSTEM COVERAGE

BASED ON DRAWING 3CHDA08K BY LBG.

SOURCE FOR BUILDING OUTLINE:
RALPH L. WOOLPERT CO.,
CONSULTING ENGINEERS,
DAYTON, OHIO DECEMBER 1967

SOURCE FOR HAZARDOUS WASTE STREAM & STORAGE TANK FACILITIES:
HUBBELL, ROTH & CLARK, INC.,
CONSULTING ENGINEERS,
BLOOMFIELD HILLS, MICHIGAN JUNE 1989

NORTH

0 400 800
SCALE IN FEET

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

4135 Technology Parkway, Sheboygan, WI 53083 (920) 458-8711

DRAWN BY: JRD	DATE: SEPT. 5, 2002
CHECKED BY: RS	EDITED BY: JRD090502
FILE NAME: SOURCE OVERLAY	

FIGURE 2

PRIMARY SOURCE AREA LOCATION MAP

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465

SVE POINT LEGEND

- > 15 LBS/MONTH VOC PRODUCTION @ 100 SCFM
- 5 – 15 LBS/MONTH VOC PRODUCTION @ 100 SCFM
- < 5 LBS/MONTH VOC PRODUCTION @ 100 SCFM
- PRIMARY SOIL CONTAMINANT SORCE AREA AND APPROXIMATE SVE SYSTEM COVERAGE

BASED ON DRAWING 3CHDA08K BY LBG.

SOURCE FOR BUILDING OUTLINE:
RALPH L. WOOLPERT CO.,
CONSULTING ENGINEERS,
DAYTON, OHIO DECEMBER 1967

SOURCE FOR HAZARDOUS WASTE STREAM & STORAGE TANK FACILITIES:
HUBBELL, ROTH & CLARK, INC.,
CONSULTING ENGINEERS,
BLOOMFIELD HILLS, MICHIGAN JUNE 1989

NORTH

0 400 800
SCALE IN FEET

EARTH TECH
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DRAWN BY: JRD	DATE: SEPT. 5, 2002
CHECKED BY: RS	EDITED BY: JRD090502
FILE NAME: SOURCE OVERLAY	

FIGURE 3

SVE PILOT AND EXISTING WELL LOCATIONS

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465

LEGEND

- EXISTING SVE WELL PAIR (SHALLOW AND DEEP)
- NEW WELLS (COLORS INDICATE BANKS)
- SVE PIPING
- SVE SYSTEM BUILDING

TURN

0 250 500

SCALE IN FEET

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

4135 Technology Parkway, Sheboygan, WI 53083 (920) 458-8711

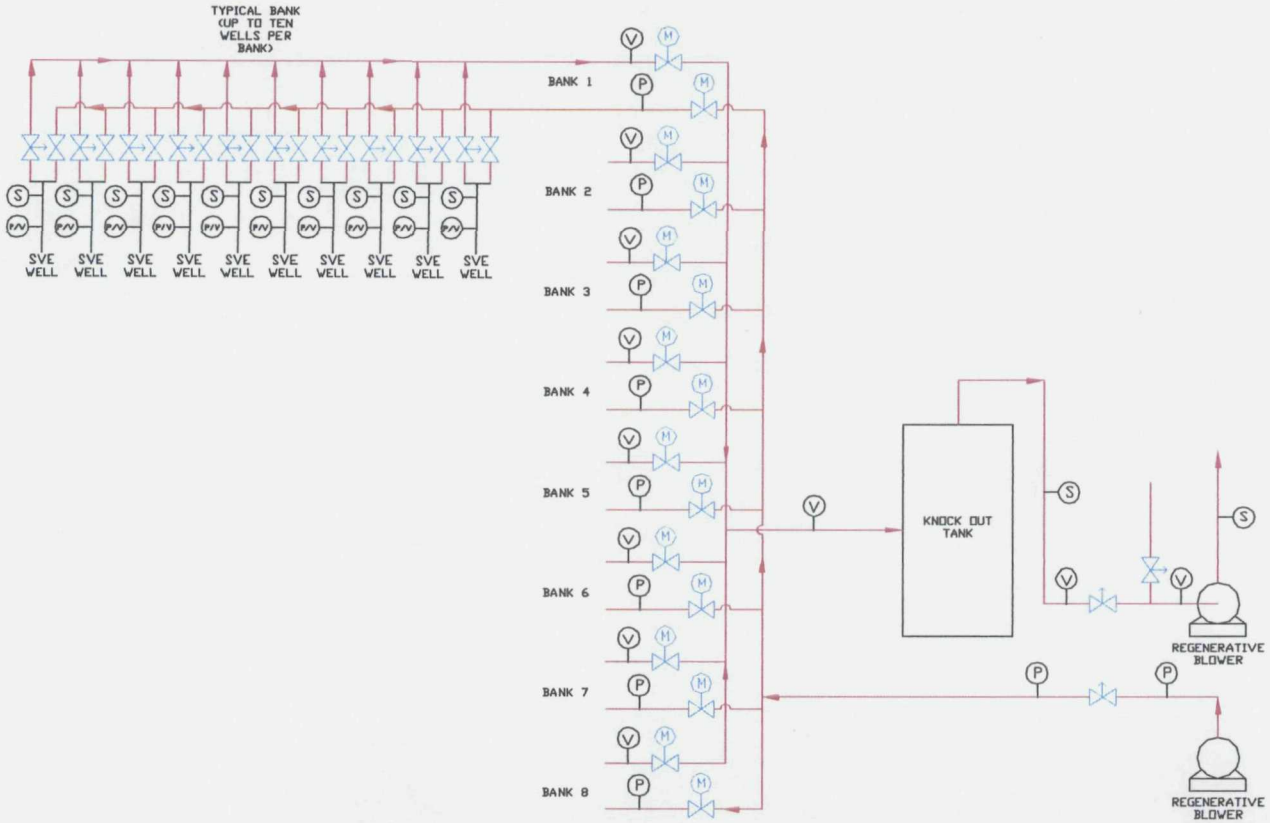
DRAWN BY: JRD	DATE: SEPT. 11, 2002
CHECKED BY: JE	EDITED BY: JRD091102
FILE NAME: BUILDING 40B SYSTEM	

FIGURE 4

SVE SYSTEM LAYOUT
WELL AND PIPING LOCATION

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- COMBINED PRESSURE VACUUM GUAGE/SENSOR
- PRESSURE GUAGE/SENSOR
- VACUUM GUAGE/SENSOR
- SAMPLE PORT/PARAMETER SENSOR
- THROTTLE VALVE
- ISOLATION VALVE
- MOTORIZED BUTTERFLY VALVE
- EXTRACTION PIPING
- INJECTION PIPING

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

4135 Technology Parkway, Sheboygan, WI 53083 (920) 458-8711

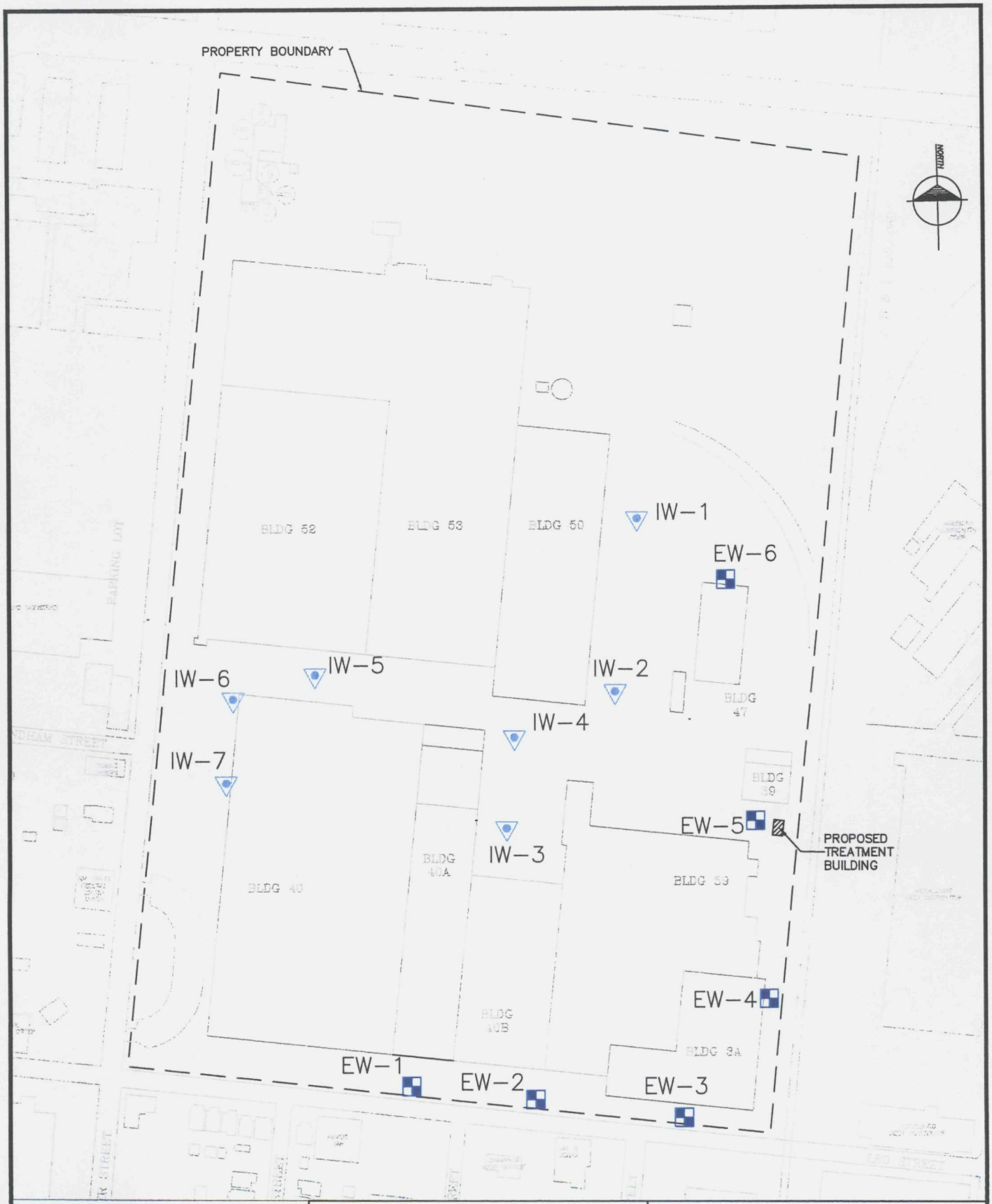
DRAWN BY: JRD	DATE: JULY 8, 2002
CHECKED BY: JE	EDITED BY: JRD070802
FILE NAME: GW PIDs	

FIGURE 5

SOIL VAPOR EXTRACTION PROCESS FLOW AND INSTRUMENTATION DIAGRAM

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- PROPOSED INJECTION WELLS
- PROPOSED EXTRACTION WELLS

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

4135 TECHNOLOGY PARKWAY, SHEBOYGAN, WISCONSIN 53083

FIGURE 6
WELL LOCATIONS
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

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LEGEND

- PROPOSED EXTRACTION WELL LOCATION
- PROPOSED INJECTION WELL LOCATION
- PARTICLE TRACE
- PROPERTY BOUNDARY
- SODIUM LACTATE TREATMENT ZONE
- APPROXIMATE CAPTURE ZONE

N

0' 150' 300' 600'
SCALE

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY
4135 Technology Parkway, Sheboygan, WI 53083 (920) 458-8711

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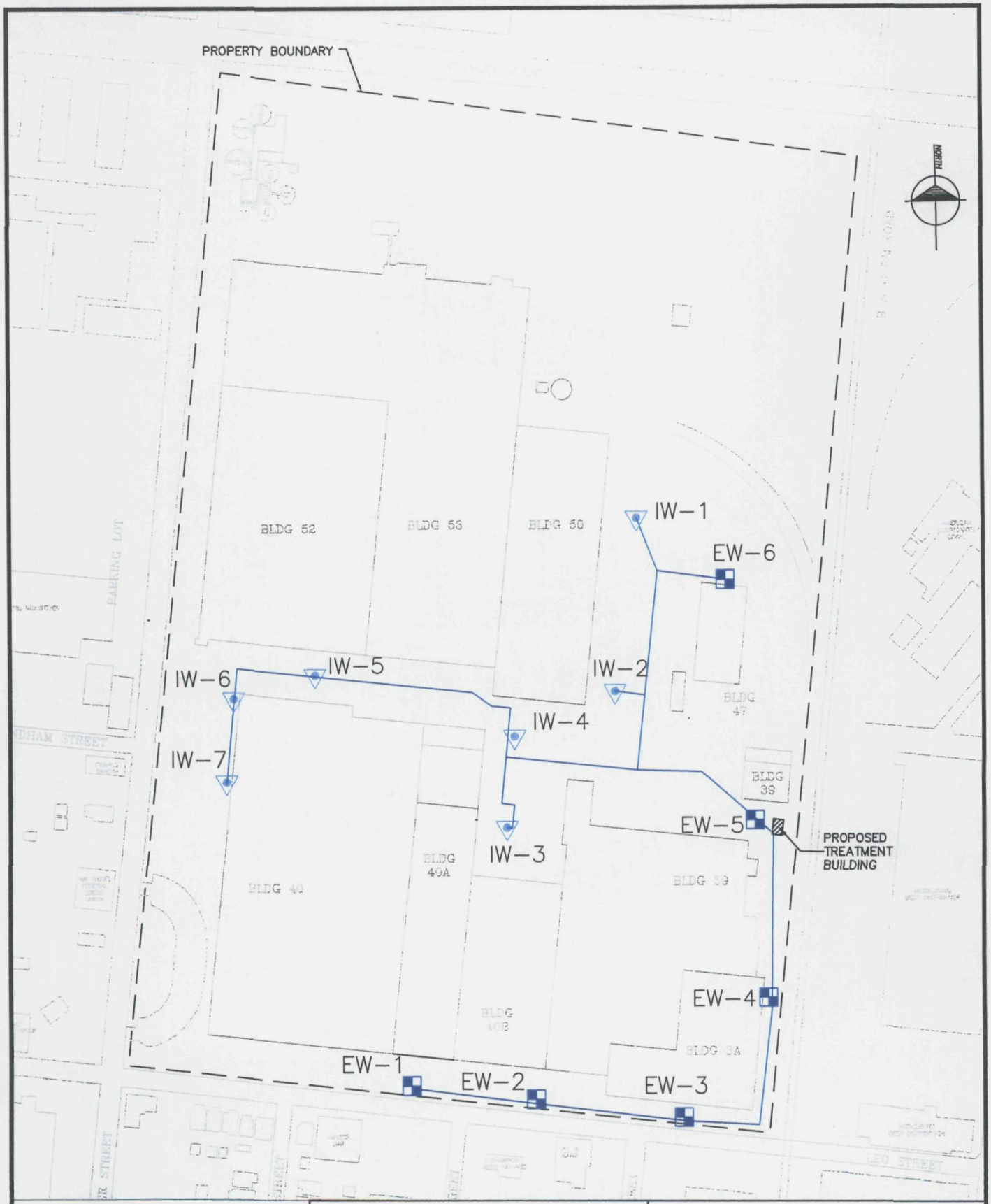
FILE NAME: FLOW MODEL NORMAL	

FIGURE 7

CAPTURE ZONE AND
STREAMLINES FOR GROUNDWATER
REMEDY UNDER NORMAL FLOW DIRECTION

DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

PROJECT NUMBER 55465



LEGEND

- PROPOSED INJECTION WELLS
- PROPOSED EXTRACTION WELLS
- TRENCH AND PIPE

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

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FIGURE 8
WELL LOCATIONS
DAYTON THERMAL PRODUCTS SITE
DAYTON, OHIO

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