



2009 ANNUAL MONITORING REPORT

HIGHWAY 96 SITE WHITE BEAR TOWNSHIP, MINNESOTA

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**MARCH 2010
REF. NO. 002012 (59)**

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**2009 GROUNDWATER ELEVATIONS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>TOC (ft. AMSL)</i>	<i>12/14/2009 ¹ (ft. AMSL)</i>
<u><i>Perched Groundwater Unit</i></u>		
SUMP (pumping)	946.71	923.21
LW1	938.86	DRY
LW2	945.66	932.64
LW3	944.82	929.96
MW1S	950.65	930.33
MW4U	939.65	DRY
MW6S	948.44	928.43
MW10S	935.94	927.69
MW11S	936.34	920.32
P1	941.70	932.36
P2	946.11	926.68
P3	947.11	929.06
P4	948.16	930.65
<u><i>Glacial Drift (Lower Sand) Aquifer</i></u>		
EW1	936.66	891.96
EW1A (pumping)	938.67	871.43
MW1D	951.02	893.26
MW4S	940.33	893.51
MW4D	940.48	892.17
MW6D	948.15	893.15
MW10D	935.94	897.05
MW11D	935.40	894.94
MW12D	940.52	895.62
MW13D	937.66	894.35
MW16D	940.70	892.79
<u><i>Upper St. Peter Sandstone Aquifer</i></u>		
EW2 (pumping)	938.67	844.88
MW7B	942.91	894.29
MW8B	940.91	892.01
MW10B	936.64	892.04
MW12B	939.89	891.95
MW13B	938.34	891.89
MW16B	940.71	892.42
MW17A	914.58	889.78
MW18A	925.39	885.39
MW19A	913.56	881.79
MW21A	909.03	882.01

**2009 GROUNDWATER ELEVATIONS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>TOC (ft. AMSL)</i>	<i>12/14/2009 ¹ (ft. AMSL)</i>
<u><i>Basal St. Peter Sandstone Aquifer</i></u>		
EW3	913.88	878.33
MW17B	914.50	884.25
MW18B	925.24	883.58
MW19B	913.33	877.91
MW20B	915.04	877.97
1 Lily Pond Road #	931.18	890.98
11 Lily Pond Road #	928.54	885.01
11 Robb Farm Road #	942.63	890.31
6 Blue Goose Road #	954.15	886.90
6 West Shore Road *	920.20	881.12
38 East Oaks Road *	926.25	881.04
<u><i>Prairie du Chien Aquifer</i></u>		
MW17L	914.65	881.31
MW18L	925.44	878.39
MW19L	914.18	875.15

Notes:

TOC - Top of Casing

ft. AMSL - Feet Above Mean Sea Level

- Converted Residential Monitoring Well

* - Active Residential Well

¹ A comprehensive round of water level measurements was conducted on 10/13/2009, prior to the annual monitoring well sampling event. However, the field record form was inadvertently lost before the measurements were entered into the database. Therefore, a second round of water level measurements was conducted on 12/14/2009.

TABLE 3.2

**OPERATION AND MAINTENANCE ACTIVITY
GROUNDWATER EXTRACTION SYSTEM
JANUARY 2009 - JANUARY 2010
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Date</i>	<i>Location</i>	<i>Event</i>	<i>Remedy</i>	<i>Contractor</i>
1/29/2009	EW-1A	Pump cycling; No restart.	Troubleshoot pump operation (disconnect motor leads; test to grounded resistance); Pump motor broken; Schedule replacement.	CRA (B. Lardy)
2/24/2009 - 3/6/2009	EW-1A	Well Rehabilitation; Pump Replacement.	Mechanical Treatment (jet/brush/airlift/surge); Chemical treatment (acid/chlorine); Flush discharge line; Install new pump.	Stevens Drilling and Environmental Services
2/24/2009 - 2/26/2009	EW-2	Well Rehabilitation.	Mechanical Treatment (jet/brush/airlift/surge); Chemical treatment (acid/chlorine); Flush discharge line; Clean/inspect/re-install pump.	Stevens Drilling and Environmental Services
2/25/2009 - 2/26/2009	Sump	Routine Maintenance.	Clean/inspect/re-install pump.	Stevens Drilling and Environmental Services
2/26/2009	Main Discharge Line	Routine Maintenance.	Snake/flush line.	Stevens Drilling and Environmental Services
3/9/2009	Sump	Drawdown near pump intake (low perched groundwater conditions).	Shut-off pump to protect motor and allow recharge.	CRA (J. McKinnon)
3/25/2009	Sump	Routine maintenance.	Install new globe valve, unions, and pipe fittings.	CRA (B. Lardy)
4/1/2009	Sump	Sufficient recharge of perched groundwater system.	Restart pump.	CRA (J. McKinnon)
5/20/2009	Sump	Drawdown near pump intake (low perched groundwater conditions).	Shut-off pump to protect motor and allow recharge.	CRA (J. McKinnon)

TABLE 3.2

**OPERATION AND MAINTENANCE ACTIVITY
GROUNDWATER EXTRACTION SYSTEM
JANUARY 2009 - JANUARY 2010
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Date</i>	<i>Location</i>	<i>Event</i>	<i>Remedy</i>	<i>Contractor</i>
5/26/2009	EW-1A	Routine maintenance	Install new ball valve and pipe fittings.	CRA (B. Lardy)
6/4/2009	Sump	Sufficient recharge of perched groundwater system.	Restart pump.	CRA (J. McKinnon)
7/24/2009	Sump	Drawdown near pump intake (low perched groundwater conditions).	Shut-off pump to protect motor and allow recharge.	CRA (M. Richie)
7/29/2009	Sump	Sufficient recharge of perched groundwater system.	Restart pump.	CRA (M. Richie)
10/5/2009	EW-1A and EW-2	Well rehabilitation.	Mechanical Treatment (jet/brush/airlift); Clean/inspect/re-install pumps.	Stevens Drilling and Environmental Services
11/20/2009	EW-1A and Sump	Routine maintenance.	Replace flow meters.	CRA (B. Lardy/ M. Richie)
12/22/2009	Sump	Low flow conditions (suspect pump failure or blockage in discharge line).	Troubleshoot pump operation (disconnect motor leads; test to grounded resistance); Pump motor failing; Schedule replacement.	CRA (M. Richie)
1/6/2010	Sump	Pump Replacement; Routine Maintenance.	Install new pump; Flush discharge line.	Stevens Drilling and Environmental Services

TABLE 3.3

**2009 AVERAGE MONTHLY GROUNDWATER EXTRACTION RATES
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Month</i>	<i>Flow Rate</i>		
	<i>EW - 1A</i> <i>(gpm)</i>	<i>EW-2</i> <i>(gpm)</i>	<i>Sump</i> <i>(gpm)</i>
January	3.6	12.4	4.0
February	0.0 ^(1,2)	9.4 ⁽¹⁾	4.0
March	9.7	10.9	3.9
April	9.3	12.7	4.0
May	7.1	14.9	3.7
June	6.0	15.0	3.6
July	5.3	15.4	3.3
August	3.9	16.2	2.9
September	3.4 ⁽³⁾	14.4 ⁽³⁾	2.7
October	4.1	14.9	2.8
November	3.4	15.1	2.1
December	1.1 ⁽⁴⁾	15.0	1.3 ⁽⁵⁾

Note:

- ⁽¹⁾ - Well rehabilitation conducted on February 24-26, 2009.
- ⁽²⁾ - New pump installed on March 6, 2009.
- ⁽³⁾ - Well rehabilitation conducted on October 5, 2009.
- ⁽⁴⁾ - EW-1A scheduled to be replaced with new extraction well in March 2010.
- ⁽⁵⁾ - New pump installed on January 6, 2010.

**HISTORICAL GROUNDWATER SAMPLING EVENT SUMMARY
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Round</i>	<i>Date</i>	<i>Sampled By</i>	<i>Description</i>
1	January 1986	USEPA	Samples from monitoring and residential wells
2	June 1987	CRA	Samples from leachate, monitoring and residential wells
3	January 1988	CRA	Samples from leachate, monitoring and residential wells
4	August 1988	CRA	Samples from leachate, monitoring and residential wells
5	March 1989	CRA	Samples from leachate, monitoring and residential wells
6	July 1989	CRA	Samples from leachate, monitoring and residential wells
7	October 1989	CRA	Samples from leachate, monitoring and residential wells
8	January 1990	CRA	Samples from leachate, monitoring and residential wells
9	May 1990	CRA	Samples from leachate, monitoring and residential wells
10	September 1990	CRA	Samples from leachate, monitoring and residential wells
11	December 1990	CRA	Samples from leachate, monitoring and residential wells
12	March 1991	CRA	Samples from leachate, monitoring and residential wells
13	June 1991	CRA	Samples from leachate, monitoring and residential wells
14	December 1991	CRA	Samples from leachate, monitoring and residential wells
15	May 1992	CRA	Samples from leachate, monitoring and residential wells
16	November 1992	CRA	Samples from leachate, monitoring and residential wells
17	May 1993	CRA	Samples from leachate, monitoring and residential wells
18	October 1993	CRA	Samples from leachate, monitoring and residential wells
19	January 1994	CRA	Samples from residential wells
20	April 1994	CRA	Samples from residential wells
21	May 1994	CRA	Samples from residential wells
22	August 1994	CRA	Samples from leachate and monitoring wells
23	November 1994	CRA	Samples from residential wells
24	December 1994	CRA	Samples from leachate, monitoring and residential wells
25	May 1995	CRA	Samples from leachate, monitoring and residential wells
26	October 1995	CRA	Samples from leachate, monitoring and residential wells
27	May 1996	CRA	Samples from leachate and monitoring wells
28	October 1996	CRA	Samples from leachate, monitoring and residential wells
29	May 1997	CRA	Samples from leachate and monitoring wells
30	October 1997	CRA	Samples from leachate, monitoring and residential wells
31	May 1998	CRA	Samples from leachate and monitoring wells
32	October 1998	CRA	Samples from leachate, monitoring and residential wells
33	October/November 1999	CRA	Samples from compliance point (pilot study), leachate, monitoring and residential wells
34	January/February 2000	CRA	Samples from compliance point wells
35	October 2000	CRA	Samples from leachate, monitoring and residential wells

**HISTORICAL GROUNDWATER SAMPLING EVENT SUMMARY
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Round</i>	<i>Date</i>	<i>Sampled By</i>	<i>Description</i>
36	November 2001	CRA	Samples from leachate, monitoring and residential wells
37	October 2002	CRA	Samples from leachate, monitoring and residential wells
38	October 2003	CRA	Samples from leachate, monitoring and residential wells
39	October 2004	CRA	Samples from leachate, monitoring and residential wells
40	January 2005	CRA	Samples from residential wells
41	February 2005	CRA/MPCA	Samples from residential wells
42	March 2005	CRA/MPCA	Samples from residential wells
43	April 2005	MPCA	Samples from residential wells
44	May 2005	CRA/MPCA	Samples from residential wells
45	June 2005	CRA/MPCA	Samples from residential wells
46	August 2005	CRA/MPCA	Samples from residential wells
47	October 2005	CRA	Samples from select monitoring wells
48	November 2005	CRA/MPCA	Samples from leachate, monitoring and residential wells
49	December 2005	CRA	Samples from select monitoring wells
50	January 2006	CRA	Samples from select monitoring wells
51	February 2006	CRA/MPCA	Samples from residential wells
52	May 2006	CRA/MPCA	Samples from residential wells
53	October 2006	CRA/MPCA	Samples from leachate, monitoring and residential wells
54	November 2006	CRA	Samples from select monitoring wells
55	January 2007	CRA	Samples from select monitoring wells
56	April 2007	CRA/MPCA	Samples from residential wells
57	October 2007	CRA/MPCA	Samples from leachate, monitoring and residential wells
58	April/May 2008	CRA/MPCA	Samples from residential wells
59	September 2008	CRA	Samples from select monitoring wells
60	October/November 2008	CRA/MPCA	Samples from leachate, monitoring and residential wells
61	April 2009	CRA/MPCA	Samples from residential wells
62	October 2009	CRA/MPCA	Samples from leachate, monitoring and residential wells

TABLE 4.2

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(PERCHED GROUNDWATER UNIT)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>Date</i>	<i>1,1-Dichloroethane ug/L</i>	<i>1,2-Dichloroethane ug/L</i>	<i>Acetone ug/L</i>	<i>Benzene ug/L</i>	<i>Bromodichloromethane ug/L</i>	<i>Chemical Oxygen Demand mg/L</i>	<i>Chloride mg/L</i>	<i>Chloroethane ug/L</i>	<i>Chloroform ug/L</i>	<i>Chloromethane ug/L</i>	<i>cis-1,2-Dichloroethene ug/L</i>	<i>Dichlorodifluoromethane ug/L</i>	<i>Dichlorofluoromethane ug/L</i>	<i>Ethyl ether ug/L</i>	<i>Ethylbenzene ug/L</i>
<i>On-Site Monitoring Wells</i>																
SUMP	1/28/09	4.4	0.71 J	< 17	3.2	< 1.7	67	NA	16	< 1.7	< 1.7	0.91	1.1 J	< 3.3	< 17	10
SUMP	2/24/09	5.2	< 2	2.6 J	3.0	< 2	NA	NA	18	< 2	< 2	0.94 J	< 2	< 4	< 20	8.2
SUMP	4/22/09	4.2	0.60 J	< 10	3.6	< 1	39	NA	15	< 1	< 1	0.97	1.8	0.65 J	< 10	9.3
SUMP	6/18/09	3.6	0.70 J	< 10	3.2	< 1	NA	NA	15	< 1	< 1	0.87	< 1	0.70 J	< 10	8.1
SUMP	7/29/09	1.5	0.61 J	< 10	2.4	< 1	< 20	NA	8.9	< 1	< 1	0.45 J	3.9	0.46 J	< 10	4.2
SUMP	8/19/09	3.0	< 1	< 10	2.8	< 1	NA	NA	14	< 1	< 1	0.79	< 1	0.77 J	< 10	6.7
SUMP	9/10/09	2.5	< 1	< 10	2.6	< 1	NA	NA	10	< 1	< 1	0.67	1.5	0.46 J	< 10	6.0
SUMP	10/15/09	2.5	< 1	< 10	2.7	< 1	27	128	12	< 1	< 1	0.68	< 1	0.53 J	< 10	5.7
SUMP	11/12/09	1.3	0.71 J	< 10	2.2	< 1	NA	NA	11	< 1	< 1	0.49 J	1.5	0.51 J	< 10	2.4
SUMP	12/15/09	1.6	< 1	< 10	2.5	< 1	NA	NA	3.2	< 1	< 1	0.64	1.1	< 2	< 10	3.9
LW2	10/15/09	0.92 J	< 1	< 10	2.8	< 1	NA	12.0	17	< 1	< 1	0.51	< 1	1.3 J	0.72 J	0.22 J
LW3	10/15/09	0.94 J	0.53 J	< 10	1.4	< 1	NA	171	1.6	< 1	< 1	0.22 J	16	1.2 J	1.0 J	< 1
MW1S	10/19/09	< 1	< 1	< 10	< 1	< 1	NA	13.9	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1

TABLE 4.2

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(PERCHED GROUNDWATER UNIT)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>Date</i>	<i>Isopropylbenzene ug/L</i>	<i>Methyl isobutyl ketone ug/L</i>	<i>Methylene chloride ug/L</i>	<i>pH</i>	<i>Solids, Total Suspended mg/L</i>	<i>Tetrachloroethene ug/L</i>	<i>Toluene ug/L</i>	<i>trans-1,2-Dichloroethene ug/L</i>	<i>Trichloroethene ug/L</i>	<i>Vinyl chloride ug/L</i>	<i>Xylenes, Total ug/L</i>	<i>Total VOCs ug/L</i>
<u>On-Site Monitoring Wells</u>													
SUMP	1/28/09	0.74 J	0.66 J	1.4 J	8.1	< 4	< 1.7	4.5	1.3	< 1.7	47	19	110.9
SUMP	2/24/09	0.76 J	< 10	0.96 J	NA	NA	< 2	4.2	1.2	< 2	52	16	113.1
SUMP	4/22/09	0.73 J	0.37 J	0.43 J	8.0	< 4	< 1	5.0	1.2	0.44 J	52	19	115.3
SUMP	6/18/09	0.66 J	< 5	< 1	NA	NA	< 1	4.8	1.2	0.47 J	42	19	100.3
SUMP	7/29/09	0.46 J	< 5	< 1	7.4	17	< 1	2.5	0.61	0.32 J	17	10	53.31
SUMP	8/19/09	0.52 J	< 5	< 1	NA	NA	< 1	4.2	1.1	0.37 J	40	17	91.25
SUMP	9/10/09	0.51 J	< 5	< 1	NA	NA	< 1	3.8	0.95	0.30 J	32	16	77.29
SUMP	10/15/09	0.46 J	< 5	< 1	7.8 J	11	< 1	3.8	1.0	0.30 J	38	15	82.67
SUMP	11/12/09	0.27 J	< 5	< 1	NA	NA	< 1	1.7	0.71	0.32 J	22	6.9	52.01
SUMP	12/15/09	0.44 J	< 5	0.46 J	NA	NA	< 1	2.7	0.82	< 1	23	10	50.36
LW2	10/15/09	0.16 J	< 5	< 1	NA	NA	< 1	0.7 J	0.71	< 1	0.25 J	< 1	25.29
LW3	10/15/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	22.89
MW1S	10/19/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	ND

Notes:

NA - Not Analyzed

ND - Not Detected

J - Estimated Result

TABLE 4.3

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(LOWER SAND AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>SCG ⁽¹⁾ Date</i>	<i>70 1,1-Dichloroethane ug/L</i>	<i>4 1,2-Dichloroethane ug/L</i>	<i>700 Acetone ug/L</i>	<i>5 Benzene ug/L</i>	<i>6 Bromodichloromethane ug/L</i>	<i>- Chemical Oxygen Demand mg/L</i>	<i>- Chloride mg/L</i>	<i>- Chloroethane ug/L</i>	<i>60 Chloroform ug/L</i>	<i>- Chloromethane ug/L</i>	<i>70 cis-1,2-Dichloroethene ug/L</i>	<i>1000 Dichlorodifluoromethane ug/L</i>	<i>- Dichlorofluoromethane ug/L</i>	<i>1000 Ethyl ether ug/L</i>	<i>700 Ethylbenzene ug/L</i>
<u>On-Site Monitoring Wells</u>																
EW1A	3/24/09	9.4	< 5	< 50	< 5	< 5	< 20	NA	13	< 5	< 5	10	4.1 J	< 10	< 50	< 5
EW1A	4/22/09	11	0.58 J	< 17	0.48 J	< 1.7	23	NA	13	< 1.7	< 1.7	10	2.9	3.8	< 17	< 1.7
EW1A	5/26/09	12	< 3.3	< 33	< 3.3	< 3.3	NA	NA	11	< 3.3	< 3.3	12	3.0 J	2.6 J	< 33	< 3.3
EW1A	6/18/09	10	0.53 J	< 17	0.30 J	< 1.7	NA	NA	11	< 1.7	< 1.7	11	6.3	3.8	< 17	< 1.7
EW1A	7/29/09	8.5	< 2.5	< 25	< 2.5	< 2.5	30	NA	7.2	< 2.5	< 2.5	11	8.2	2.5 J	< 25	< 2.5
EW1A	8/19/09	9.2	< 5	< 50	< 5	< 5	NA	NA	9.8	< 5	< 5	14	2.9 J	3.9 J	< 50	< 5
EW1A	9/10/09	7.6	< 5	< 50	< 5	< 5	NA	NA	7.5	< 5	< 5	14	1.9 J	2.8 J	< 50	< 5
EW1A	10/15/09	7.3	< 5	< 50 U	< 5	< 5	< 20	59.4	8.4	< 5	< 5	15	< 5	2.6 J	< 50	< 5
EW1A	11/12/09	7.8	< 6.7	< 67	< 6.7	< 6.7	NA	NA	< 6.7	< 6.7	< 6.7	16	4.0 J	3.2 J	< 67	< 6.7
EW1A	12/10/09	6.9	< 6.7	< 67	< 6.7	< 6.7	NA	NA	3.1 J	< 6.7	< 6.7	17	< 6.7	< 13	< 67	< 6.7
MW1D	10/19/09	0.32 J	< 1	< 10	< 1	< 1	NA	15.3	< 1	< 1	< 1	< 0.5	< 1	1.1 J	< 10	< 1
MW4D	10/29/09	59	13	< 40 U	1.9 J	< 4	NA	354	110	< 4	< 4	< 2 U	< 4	3.9 J	2.2 J	< 4
MW10D	10/19/09	< 1	< 1	< 10	< 1	< 1	NA	19.3	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1
MW11D	10/19/09	0.9 J	< 1	< 10	< 1	< 1	NA	13.9	< 1	< 1	< 1	0.39 J	< 1	< 2	< 10	< 1
<u>Compliance Monitoring Wells</u>																
MW12D	10/14/09	< 1	< 1	< 10	1.2	< 1	NA	80.2	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1
MW13D	10/16/09	1.7	< 1	< 10	< 1	< 1	NA	41.8 J	< 1	< 1	< 1	0.65	< 1	< 2	< 10	< 1
MW13D	10/16/09	1.8	< 1	< 10	< 1	< 1	NA	41.3 J	< 1	< 1	< 1	0.75	< 1	< 2	< 10	< 1
MW16D	10/16/09	0.42 J	< 1	< 10	< 1	< 1	NA	48.3 J	0.86 J	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1

TABLE 4.3

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(LOWER SAND AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>Date</i>	<i>SCG ⁽¹⁾</i>	<i>Isopropylbenzene</i> 300 ug/L	<i>Methyl isobutyl ketone</i> 300 ug/L	<i>Methylene chloride</i> 5 ug/L	<i>pH</i> -	<i>Solids, Total Suspended</i> -	<i>Tetrachloroethene</i> 5 ug/L	<i>Toluene</i> 200 ug/L	<i>trans-1,2-Dichloroethene</i> 100 ug/L	<i>Trichloroethene</i> 5 ug/L	<i>Vinyl chloride</i> 2 ug/L	<i>Xylenes, Total</i> 10000 ug/L	<i>Total VOCs</i> -
<u>On-Site Monitoring Wells</u>														
EW1A	3/24/09	< 5	< 25	2.0 J	7.0	27	< 5	< 5	< 2.5	120	8.9	< 5	167.4	
EW1A	4/22/09	< 1.7	< 8.4	1.4 J	7.1	33	< 1.7	0.30 J	< 0.84	140	12	< 1.7	195.5	
EW1A	5/26/09	< 3.3	< 17	2.2 J	NA	NA	< 3.3	< 3.3	< 1.7	120	11	< 3.3	173.8	
EW1A	6/18/09	< 1.7	< 8.4	< 1.7	NA	NA	0.48 J	< 1.7	< 0.84	140	9.3	< 1.7	192.7	
EW1A	7/29/09	< 2.5	< 12	< 2.5	6.9	59	< 2.5	< 2.5	< 1.2	150	7.5	< 2.5	194.9	
EW1A	8/19/09	< 5	< 25	< 5	NA	NA	< 5	< 5	< 2.5	160	9.6	< 5	209.4	
EW1A	9/10/09	< 5	< 25	3.2 J	NA	NA	< 5	< 5	< 2.5	160	7.5	< 5	204.5	
EW1A	10/15/09	< 5	< 25	1.7 J	7.0 J	36	< 5	< 5	< 2.5	190	8.7	< 5	233.7	
EW1A	11/12/09	< 6.7	< 33	< 6.7	NA	NA	< 6.7	< 6.7	< 3.3	190	11	< 6.7	232.0	
EW1A	12/10/09	< 6.7	< 33	3.4 J	NA	NA	< 6.7	< 6.7	< 3.3	160	7.7	< 6.7	198.1	
MW1D	10/19/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	1.42	
MW4D	10/29/09	< 4	1.9 J	< 4	NA	NA	< 4	55	< 2	< 4	1.1 J	< 4	248.0	
MW10D	10/19/09	< 1	< 5	< 1	NA	NA	< 1	0.85 J	< 0.5	< 1	< 1	< 1	0.85	
MW11D	10/19/09	< 1	< 5	< 1	NA	NA	< 1	0.71 J	< 0.5	< 1	< 1	< 1	2.00	
<u>Compliance Monitoring Wells</u>														
MW12D	10/14/09	< 1	< 5	< 1	NA	NA	< 1	0.22 J	< 0.5	< 1	< 1	< 1	1.42	
MW13D	10/16/09	< 1	< 5	< 1	NA	NA	< 1	1.9	< 0.5	< 1	< 1	< 1	4.25	
MW13D	10/16/09	< 1	< 5	< 1	NA	NA	< 1	2.7	< 0.5	< 1	< 1	< 1	5.25	
MW16D	10/16/09	< 1	< 5	< 1	NA	NA	< 1	5.2	< 0.5	< 1	< 1	< 1	6.48	

Notes:

 Shaded results exceed SCGs (where applicable) ⁽¹⁾.

⁽¹⁾ - SCGs apply to compliance monitoring wells (only).

-- - Not Established

ND - Not Detected

J - Estimated Result

NA - Not Analyzed

D - Duplicate

U - Not present at or above the associated value

TABLE 4.4

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(ST. PETER SANDSTONE AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>SCG ⁽¹⁾ Date</i>	<i>1,1-Dichloroethane 70 ug/L</i>	<i>1,2-Dichloroethane 4 ug/L</i>	<i>Acetone 700 ug/L</i>	<i>Benzene 5 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chemical Oxygen Demand - mg/L</i>	<i>Chloride - mg/L</i>	<i>Chloroethane - ug/L</i>	<i>Chloroform 60 ug/L</i>	<i>Chloromethane - ug/L</i>	<i>cis-1,2-Dichloroethene 70 ug/L</i>	<i>Dichlorodifluoromethane 1000 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Ethyl ether 1000 ug/L</i>	<i>Ethylbenzene 700 ug/L</i>
<u>On-Site Monitoring Wells</u>																
EW2	1/28/09	6.5	0.70 J	< 10	< 1	< 1	120	NA	7.3	< 1	< 1	2.9	7.0	4.4	< 10	< 1
EW2	2/24/09	7.4	0.73 J	< 10	0.34 J	< 1	NA	NA	9.7	< 1	0.38 J	3.5	5.4	6.0	< 10	< 1
EW2	3/24/09	8.5	0.85 J	< 10	< 1	< 1	NA	NA	9.0	< 1	< 1	3.4	6.0	4.1	< 10	< 1
EW2	4/22/09	7.9	0.61 J	< 10	0.37 J	< 1	< 20	NA	7.5	< 1	< 1	2.8	6.9	5.1	< 10	< 1
EW2	5/26/09	8.9	0.82 J	1.1	0.59 J	< 1	NA	NA	6.8	< 1	0.32 J	4.3	7.0	3.9	< 10	< 1
EW2	6/18/09	7.2	0.72 J	< 10	0.32 J	< 1	NA	NA	8.2	< 1	0.53 J	3.7	8.8	5.3	< 10	< 1
EW2	7/29/09	7.0	0.77 J	< 10	0.35 J	< 1	< 20	NA	6.7	< 1	< 1	3.2	9.0	4.5	< 10	< 1
EW2	8/19/09	8.1	0.84 J	< 10	0.40 J	< 1	NA	NA	9.5	< 1	< 1	3.5	7.3	8.2	< 10	< 1
EW2	9/10/09	7.8	0.83 J	< 10	< 1	< 1	NA	NA	8.6	< 1	< 1	3.4	6.5	6.5	< 10	< 1
EW2	10/15/09	9.2	< 1	< 10	0.46 J	< 1	< 20	43.4	9.7	< 1	< 1	3.6	5.0	6.9	< 10	< 1
EW2	11/12/09	9.4	0.95 J	< 10	0.63 J	< 1	NA	NA	8.0	< 1	< 1	3.9	6.8	6.7	< 10	< 1
EW2	12/10/09	8.4	0.80 J	1.1	0.50 J	< 1	NA	NA	5.8	< 1	< 1	3.8	6.3	4.7	< 10	< 1
MW8B	10/15/09	< 1	0.60 J	< 10	< 1	< 1	NA	60.2	5.0	< 1	< 1	0.37 J	9.1	7.5	< 10	< 1
<u>Compliance Monitoring Wells</u>																
MW10B	10/19/09	< 1	< 1	< 10	< 1	< 1	NA	2.0	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1
MW12B	10/14/09	< 1	< 1	< 10	< 1	< 1	NA	1.6	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1
MW13B	10/19/09	0.36 J	< 1	< 10	< 1	< 1	NA	23.4	< 1	< 1	< 1	< 0.5	< 1	< 2	< 10	< 1
MW16B	10/16/09	< 1	< 1	< 10	< 1	< 1	NA	9.5 J	< 1	< 1	< 1	< 0.5	2.2	0.8 J	< 10	< 1
<u>Converted Residential Monitoring Wells</u>																
6 Blue Goose Lane	10/16/09	0.1 J	< 0.2	< 20	< 0.2	< 0.2	NA	5.5	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
1 Lily Pond Road	10/15/09	9.0	0.3	< 20	< 0.2	< 0.2	NA	17.5	0.6	< 0.1	< 1	< 0.2	12	3	< 2	< 0.5
11 Lily Pond Road	10/15/09	< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	4.1	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
11 Robb Farm Road	10/16/09	0.6	< 0.2	< 20	< 0.2	< 0.2	NA	10.1	< 0.5	< 0.1	< 1	< 0.2	< 1	0.4 J	< 2	< 0.5

TABLE 4.4

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(ST. PETER SANDSTONE AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>SCG ⁽¹⁾ Date</i>		<i>1,1-Dichloroethane 70 ug/L</i>	<i>1,2-Dichloroethane 4 ug/L</i>	<i>Acetone 700 ug/L</i>	<i>Benzene 5 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chemical Oxygen Demand - mg/L</i>	<i>Chloride - mg/L</i>	<i>Chloroethane - ug/L</i>	<i>Chloroform 60 ug/L</i>	<i>Chloromethane - ug/L</i>	<i>cis-1,2-Dichloroethene 70 ug/L</i>	<i>Dichlorodifluoromethane 1000 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Ethyl ether 1000 ug/L</i>	<i>Ethylbenzene 700 ug/L</i>
<u>Off-Site Monitoring Wells</u>																	
EW3	10/14/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	< 20	5.3 J	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW17A	10/16/09		0.9	< 0.2	< 20	< 0.2	< 0.2	NA	69.7	< 0.5	< 0.1	< 1	0.6	0.7 J	0.4 J	< 2	< 0.5
MW17B	10/16/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	43.4	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW18A	10/16/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	38.3	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW18B	10/16/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	23.2	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW18B	10/16/09	D	< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	22.7	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW19A	10/14/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	82 J	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW19B	10/14/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	10.5 J	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW19B	10/14/09	D	< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	10.7 J	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW20B	10/14/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	6.7	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW21A	10/14/09		< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	2.6 J	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5

TABLE 4.4

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(ST. PETER SANDSTONE AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>SCG ⁽¹⁾ Date</i>	<i>Isopropylbenzene 300 ug/L</i>	<i>Methyl isobutyl ketone 300 ug/L</i>	<i>Methylene chloride 5 ug/L</i>	<i>pH</i>	<i>Solids, Total Suspended mg/L</i>	<i>Tetrachloroethene 5 ug/L</i>	<i>Toluene 200 ug/L</i>	<i>trans-1,2-Dichloroethene 100 ug/L</i>	<i>Trichloroethene 5 ug/L</i>	<i>Vinyl chloride 2 ug/L</i>	<i>Xylenes, Total 10000 ug/L</i>	<i>Total VOCs ug/L</i>
<u>On-Site Monitoring Wells</u>													
EW2	1/28/09	< 1	< 5	< 1	7.2	19	< 1	0.68 J	< 0.5	17	3.0	< 1	49.48
EW2	2/24/09	< 1	< 5	< 1	NA	NA	< 1	0.63 J	< 0.5	21	3.5	< 1	58.58
EW2	3/24/09	< 1	< 5	< 1	NA	NA	< 1	0.68 J	< 0.5	21	3.6	< 1	57.13
EW2	4/22/09	< 1	< 5	< 1	7.2	37	< 1	0.69 J	< 0.5	18	4.6	< 1	54.47
EW2	5/26/09	< 1	< 5	< 1	NA	NA	< 1	0.79 J	< 0.5	22	3.5	< 1	60.02
EW2	6/18/09	< 1	< 5	< 1	NA	NA	< 1	0.62 J	< 0.5	26	2.9	< 1	64.29
EW2	7/29/09	< 1	< 5	< 1	7.2	24	< 1	0.46 J	< 0.5	21	2.6	< 1	55.58
EW2	8/19/09	< 1	< 5	< 1	NA	NA	< 1	0.56 J	< 0.5	20	3.1	< 1	61.50
EW2	9/10/09	< 1	< 5	< 1	NA	NA	< 1	0.61 J	< 0.5	21	2.7	< 1	57.94
EW2	10/15/09	< 1	< 5	< 1	7.2 J	22	< 1	0.86 J	< 0.5	21	4.0	< 1	60.72
EW2	11/12/09	< 1	< 5	< 1	NA	NA	< 1	0.77 J	< 0.5	26	4.6	< 1	67.75
EW2	12/10/09	< 1	< 5	0.63 J	NA	NA	< 1	0.71 J	< 0.5	22	3.3	< 1	58.04
MW8B	10/15/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	0.58 J	< 1	23.15
<u>Compliance Monitoring Wells</u>													
MW10B	10/19/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	ND
MW12B	10/14/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	ND
MW13B	10/19/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	0.36
MW16B	10/16/09	< 1	< 5	< 1	NA	NA	< 1	< 1	< 0.5	< 1	< 1	< 1	3.0
<u>Converted Residential Monitoring Well</u>													
6 Blue Goose Lane	10/16/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	0.1
1 Lily Pond Road	10/15/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	24.9
11 Lily Pond Road	10/15/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
11 Robb Farm Road	10/16/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	1.0

TABLE 4.4

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(ST. PETER SANDSTONE AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>SCG ⁽¹⁾ Date</i>		<i>Isopropylbenzene 300 ug/L</i>	<i>Methyl isobutyl ketone 300 ug/L</i>	<i>Methylene chloride 5 ug/L</i>	<i>pH</i>	<i>Solids, Total Suspended mg/L</i>	<i>Tetrachloroethene 5 ug/L</i>	<i>Toluene 200 ug/L</i>	<i>trans-1,2-Dichloroethene 100 ug/L</i>	<i>Trichloroethene 5 ug/L</i>	<i>Vinyl chloride 2 ug/L</i>	<i>Xylenes, Total 10000 ug/L</i>	<i>Total VOCs ug/L</i>
<u>Off-Site Monitoring Wells</u>														
EW3	10/14/09		< 0.5	< 5	< 0.5	9.6 J	6	< 0.2	2.1	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	2.1
MW17A	10/16/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	0.8	ND ⁽²⁾	3.4
MW17B	10/16/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	0.3	ND ⁽²⁾	0.3
MW18A	10/16/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW18B	10/16/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW18B	10/16/09	D	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW19A	10/14/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW19B	10/14/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW19B	10/14/09	D	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW20B	10/14/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND
MW21A	10/14/09		< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽²⁾	ND

Notes:

 Shaded results exceed SCGs (where applicable) ⁽¹⁾.

-- - Not Established

⁽¹⁾ - SCGs apply to compliance monitoring wells (only).

⁽²⁾ - m/p-xylene and o-xylene were analyzed separately and were not detected.

NA - Not Analyzed

ND - Not Detected

D - Duplicate

J - Estimated Result

TABLE 4.5

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(PRAIRIE DU CHIEN AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

Location	Date	1,1-Dichloroethane ug/L	1,2-Dichloroethane ug/L	Acetone ug/L	Benzene ug/L	Bromodichloromethane ug/L	Chemical Oxygen Demand mg/L	Chloride mg/L	Chloroethane ug/L	Chloroform ug/L	Chloromethane ug/L	cis-1,2-Dichloroethene ug/L	Dichlorodifluoromethane ug/L	Dichlorofluoromethane ug/L	Ethyl ether ug/L	Ethylbenzene ug/L
<u>Off-Site Monitoring Wells</u>																
MW17L	10/16/09	< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	8.5	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW18L	10/16/09	0.19 J	< 0.2	< 20	< 0.2	< 0.2	NA	15.4	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5
MW19L	10/15/09	< 0.2	< 0.2	< 20	< 0.2	< 0.2	NA	11.2	< 0.5	< 0.1	< 1	< 0.2	< 1	< 0.5	< 2	< 0.5

TABLE 4.5

**2009 GROUNDWATER DATA DETECTIONS - MONITORING WELLS
(PRAIRIE DU CHIEN AQUIFER)
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

Location	Date	Isopropylbenzene ug/L	Methyl isobutyl ketone ug/L	Methylene chloride ug/L	pH	Solids, Total Suspended mg/L	Tetrachloroethene ug/L	Toluene ug/L	trans-1,2-Dichloroethene ug/L	Trichloroethene ug/L	Vinyl chloride ug/L	Xylenes, Total ug/L	Total VOCs ug/L
<u>Off-Site Monitoring Wells</u>													
MW17L	10/16/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	0.4 J	< 0.1	< 0.1	< 0.2	ND ⁽¹⁾	0.4
MW18L	10/16/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	< 0.5	< 0.1	< 0.1	< 0.2	ND ⁽¹⁾	0.19
MW19L	10/15/09	< 0.5	< 5	< 0.5	NA	NA	< 0.2	0.1 J	< 0.1	< 0.1	< 0.2	ND ⁽¹⁾	0.1

Notes:

⁽¹⁾ - m/p-xylene and o-xylene were analyzed seperately and were not detected

NA - Not Analyzed

ND - Not Detected

J - Estimated Result

TABLE 4.6

**2009 GROUNDWATER DATA DETECTIONS - RESIDENTIAL WELLS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>HRL ⁽¹⁾ Date</i>	<i>1,1-Dichloroethane 100 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chloride - mg/L</i>	<i>Chloroform 30 ug/L</i>	<i>cis-1,2-Dichloroethene 50 ug/L</i>	<i>Dichlorodifluoromethane 700 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Toluene 200 ug/L</i>	<i>Vinyl chloride 0.2 ug/L</i>	<i>Total VOCs - ug/L</i>
1 Birch Lane	10/6/09	< 0.2	< 0.2	3.4	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
2 Birch Lane	10/6/09	< 0.2	< 0.2	11.1	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
3 Birch Lane	10/6/09	< 0.2	< 0.2	3.6	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
1 Buffalo Road	4/20/09	< 0.2	< 0.2	17.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Buffalo Road	4/20/09	D < 0.2	< 0.2	17.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Buffalo Road	10/6/09	< 0.2	< 0.2	23.0	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Buffalo Road	4/20/09	< 0.2	< 0.2	18.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Buffalo Road	10/6/09	< 0.2	< 0.2	34.1	< 0.1	< 0.2	0.6 J	0.3 J	< 0.5	< 0.2	0.9
2 Cardinal	10/5/09	< 0.2	< 0.2	17.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
9 Duck Pass Road	10/5/09	< 0.5	< 0.2	27.5	< 0.1	< 0.2	1.5	0.4 J	< 0.5	< 0.2	2.4
11 Duck Pass Road	10/5/09	< 0.2	< 0.2	126	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
13 Duck Pass Road	10/5/09	< 0.2	< 0.2	16.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
15 Duck Pass Road	10/7/09	< 0.2	< 0.2	17.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
20 Duck Pass Road	10/5/09	< 0.3	< 0.2	38.0	< 0.1	< 0.2	1.6	0.5	< 0.5	< 0.2	2.4
22 Duck Pass Road	10/5/09	< 1.4	< 0.2	65.5	< 0.1	< 0.2	6.9	1.8	< 0.5	< 0.2	10.1
24 Duck Pass Road	10/5/09	< 0.2	< 0.2	4.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
24 Duck Pass Road	10/5/09	D < 0.2	< 0.2	4.6	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
26 Duck Pass Road	10/5/09	< 0.2	< 0.2	20.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
28 Duck Pass Road	10/5/09	< 0.2	< 0.2	109	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Eagle Ridge Road	4/20/09	< 0.2	< 0.2	15.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	21.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Eagle Ridge Road	4/20/09	< 0.2	< 0.2	22.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	28.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Eagle Ridge Road	4/20/09	< 0.2	< 0.2	38.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	38.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
4 Eagle Ridge Road	4/20/09	< 0.2	< 0.2	21.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
4 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	21.9	< 0.1	< 0.2	< 1	< 0.5	12	< 0.2	12
5 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	35.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
5 Eagle Ridge Road	10/6/09	D < 0.2	< 0.2	35.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Eagle Ridge Road	4/20/09	< 0.2	< 0.2	67.0	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND

TABLE 4.6

**2009 GROUNDWATER DATA DETECTIONS - RESIDENTIAL WELLS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>HRL ⁽¹⁾ Date</i>	<i>1,1-Dichloroethane 100 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chloride - mg/L</i>	<i>Chloroform 30 ug/L</i>	<i>cis-1,2-Dichloroethene 50 ug/L</i>	<i>Dichlorodifluoromethane 700 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Toluene 200 ug/L</i>	<i>Vinyl chloride 0.2 ug/L</i>	<i>Total VOCs - ug/L</i>
6 Eagle Ridge Road	10/6/09	< 0.2	< 0.2	61.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
10 Eagle Ridge Road	10/5/09	< 0.2	< 0.2	9.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
32 East Oaks Road	10/5/09	< 0.2	< 0.2	22.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
36 East Oaks Road	10/5/09	< 0.2	< 0.2	16.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
38 East Oaks Road	10/5/09	< 0.2	< 0.2	1.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
44 East Oaks Road	4/20/09	< 0.2	< 0.2	7.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
44 East Oaks Road	10/7/09	< 0.2	< 0.2	9.5	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
50 East Oaks Road	10/7/09	< 0.2	< 0.2	18.0	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Gadwall	10/5/09	< 0.2	< 0.2	21.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Gadwall	10/5/09	< 0.2	< 0.2	17.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Gadwall	10/5/09	< 0.2	< 0.2	16.5	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
4 Gadwall	10/5/09	< 0.2	< 0.2	22.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Heron Lane	10/6/09	< 0.2	< 0.2	41.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Hummingbird Hill	4/28/09	< 0.2	< 0.2	20.6	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
1 Hummingbird Hill	10/7/09	< 0.2	< 0.2	17.8	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Hummingbird Hill (Old)	9/17/09	0.10 J	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	0.10 J	0.2
2 Hummingbird Hill (New)	3/6/09	< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Hummingbird Hill (New)	9/17/09	< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Hummingbird Hill (New)	9/17/09 D	< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Mallard Lane	10/5/09	< 0.2	< 0.2	11.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
5 Mallard Lane	10/5/09	< 0.2	< 0.2	2.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Mallard Lane	10/5/09	< 0.2	< 0.2	2.0	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Mallard Lane	10/5/09 D	< 0.2	< 0.2	2.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
7 Mallard Lane	10/7/09	< 0.2	< 0.2	3.3	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND

TABLE 4.6

**2009 GROUNDWATER DATA DETECTIONS - RESIDENTIAL WELLS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>HRL ⁽¹⁾</i>	<i>Date</i>	<i>1,1-Dichloroethane 100 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chloride - mg/L</i>	<i>Chloroform 30 ug/L</i>	<i>cis-1,2-Dichloroethene 50 ug/L</i>	<i>Dichlorodifluoromethane 700 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Toluene 200 ug/L</i>	<i>Vinyl chloride 0.2 ug/L</i>	<i>Total VOCs - ug/L</i>
1 Poplar Lane		10/9/09	< 0.2	< 0.2	< 1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 Poplar Lane	D	10/9/09	< 0.2	< 0.2	< 1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Poplar Lane		10/9/09	< 0.2	< 0.2	14.6	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
4 Poplar Lane		10/9/09	< 0.2	< 0.2	11.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Poplar Lane		10/9/09	< 0.2	< 0.2	2.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
8 Poplar Lane		4/20/09	< 0.2	< 0.2	67.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
8 Poplar Lane		10/9/09	< 0.2	< 0.2	40.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
10 Poplar Lane		4/20/09	< 0.2	< 0.2	7.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
10 Poplar Lane		10/7/09	< 0.2	< 0.2	8.5	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
1 Quail Lane		10/6/09	< 0.2	< 0.2	20.1	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
3 Quail Lane		4/21/09	< 0.2	< 0.2	10.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Quail Lane		10/6/09	< 0.2	< 0.2	10.6	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
1 Robb Farm Road		10/5/09	< 0.2	< 0.2	< 1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Robb Farm Road		10/9/09	< 0.2	< 0.2	9.6	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
35 Robb Farm Road		10/6/09	< 0.2	< 0.2	28.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
37 Robb Farm Road		10/6/09	< 0.2	< 0.2	3.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
43 Robb Farm Road		10/6/09	< 0.2	< 0.2	16.6	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
44 Robb Farm Road		10/6/09	< 0.2	< 0.2	20.2	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
45 Robb Farm Road		10/6/09	< 0.2	< 0.2	15.9	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
2 Ski Lane		4/21/09	< 0.2	< 0.2	20.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
2 Ski Lane		10/6/09	< 0.2	< 0.2	18.0	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
4 Ski Lane		4/21/09	< 0.2	< 0.2	30.4	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
4 Ski Lane		10/6/09	< 0.2	< 0.2	37.1	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
6 Ski Lane		4/21/09	< 0.2	< 0.2	23.0	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Ski Lane	D	4/21/09	< 0.2	< 0.2	23.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
6 Ski Lane		10/6/09	< 0.2	< 0.2	22.8	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
8 Ski Lane		4/21/09	< 0.2	< 0.2	10.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
8 Ski Lane		10/6/09	< 0.2	< 0.2	14.0	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
10 Ski Lane		4/21/09	< 0.2	< 0.2	22.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
10 Ski Lane		10/6/09	< 0.2	< 0.2	21.9	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND

TABLE 4.6

**2009 GROUNDWATER DATA DETECTIONS - RESIDENTIAL WELLS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>HRL ⁽¹⁾ Date</i>		<i>1,1-Dichloroethane 100 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chloride - mg/L</i>	<i>Chloroform 30 ug/L</i>	<i>cis-1,2-Dichloroethene 50 ug/L</i>	<i>Dichlorodifluoromethane 700 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Toluene 200 ug/L</i>	<i>Vinyl chloride 0.2 ug/L</i>	<i>Total VOCs - ug/L</i>
12 Ski Lane	4/21/09		< 0.2	< 0.2	11.5	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
12 Ski Lane	10/6/09		< 0.2	< 0.2	8.7	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
14 Ski Lane	4/21/09		< 0.2	< 0.2	20.7	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
14 Ski Lane	10/6/09		< 0.2	< 0.2	27.5	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
16 Ski Lane	4/21/09		< 0.2	< 0.2	20.6	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
16 Ski Lane	10/6/09		< 0.2	< 0.2	19.5	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
16 Ski Lane	10/6/09	D	< 0.2	< 0.2	19.7	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
1 Thompson Lane	4/21/09		< 0.2	< 0.2	15.9	1.0	< 0.2	< 1	< 0.5	< 0.5	< 0.2	1
1 Thompson Lane	10/7/09		< 0.2	0.1 J	11.4	0.8	< 0.2	< 1	< 0.5	< 0.5	< 0.2	0.9
2 Thompson Lane (Old)	4/28/09		< 0.2	< 0.2	13.3	0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	0.1
2 Thompson Lane (New)	10/7/09		< 0.2	< 0.2	< 1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
3 Thompson Lane	4/21/09		< 0.2	< 0.2	5.7	< 0.1	< 0.2	< 1	< 0.5	0.2 J	< 0.2	0.2
3 Thompson Lane	10/6/09		< 0.2	< 0.2	4.2	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
4 Thompson Lane	4/28/09		< 0.2	< 0.2	157	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
4 Thompson Lane	10/7/09		< 0.2	< 0.2	142	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
1 West Shore Road	10/6/09		< 0.2	< 0.2	34.3	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
2 West Shore Road	10/6/09		< 0.2	< 0.2	48.1	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
2 West Shore Road	10/6/09	D	< 0.2	< 0.2	48.3	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
3 West Shore Road	10/7/09		< 0.2	< 0.2	3.2	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
4 West Shore Road	10/7/09		< 0.2	< 0.2	56.0	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
5 West Shore Road	10/7/09		< 0.2	< 0.2	5.5	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
6 West Shore Road	10/7/09		< 0.2	< 0.2	2.7	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
7 West Shore Road	10/7/09		< 0.2	< 0.2	7.8	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
8 West Shore Road	4/28/09		< 0.2	< 0.2	12.3	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
8 West Shore Road	4/28/09	D	< 0.2	< 0.2	12.2	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
8 West Shore Road	10/7/09		< 0.2	< 0.2	7.9	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
8 West Shore Road	10/7/09	D	< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
9 West Shore Road	4/22/09		< 0.2	< 0.2	5.1	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
9 West Shore Road	10/7/09		< 0.2	< 0.2	21.3	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND

TABLE 4.6

**2009 GROUNDWATER DATA DETECTIONS - RESIDENTIAL WELLS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Location</i>	<i>HRL ⁽¹⁾ Date</i>		<i>1,1-Dichloroethane 100 ug/L</i>	<i>Bromodichloromethane 6 ug/L</i>	<i>Chloride - mg/L</i>	<i>Chloroform 30 ug/L</i>	<i>cis-1,2-Dichloroethene 50 ug/L</i>	<i>Dichlorodifluoromethane 700 ug/L</i>	<i>Dichlorofluoromethane - ug/L</i>	<i>Toluene 200 ug/L</i>	<i>Vinyl chloride 0.2 ug/L</i>	<i>Total VOCs - ug/L</i>
10 West Shore Road	4/22/09		0.18 J	< 0.2	27.5	< 0.1	0.10 J	< 1	< 0.5	< 0.5	0.16 J	0.44
10 West Shore Road	10/7/09		0.15 J	< 0.2	26.5	< 0.1	0.10 J	< 1 UJ	< 0.5	< 0.5	< 0.2	0.25
10 West Shore Road	10/7/09	D	0.15 J	< 0.2	26.6	< 0.1	0.10 J	< 1 UJ	< 0.5	< 0.5	0.11 J	0.36
11 West Shore Road	4/22/09		< 0.2	< 0.2	7.3	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
11 West Shore Road	10/6/09		< 0.2	< 0.2	6.6	< 0.1	< 0.2	< 1 UJ	< 0.5	< 0.5	< 0.2	ND
12 West Shore Road	4/28/09		0.3	< 0.2	25.6	< 0.1	0.2 J	< 1 UJ	< 0.5	< 0.5	0.2	0.7
13 West Shore Road (Old)	3/18/09		0.3	< 0.2	NA	< 0.1	0.2	< 1	< 0.5	< 0.5	0.2	0.7
13 West Shore Road (New)	3/12/09		< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
13 West Shore Road (New)	3/12/09	D	< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
13 West Shore Road (New)	9/17/09		< 0.2	< 0.2	NA	< 0.1	< 0.2	< 1	< 0.5	< 0.5	< 0.2	ND
15 West Shore Road	4/20/09		< 0.2	< 0.2	28.6	< 0.1	< 0.2	< 1	< 0.5	0.2 J	< 0.2	0.2
15 West Shore Road	10/7/09		0.2	< 0.2	30.3	< 0.1	0.15 J	< 1 UJ	< 0.5	< 0.5	0.14 J	0.49

Notes:

Shaded results exceed HRL

⁽¹⁾ - HRL (Health Risk Limit) established by Minnesota Department of Health.⁽²⁾ - m/p-xylene & o-xylene were analyzed separately and not detected.

D - Duplicate

J - Estimated Result

UJ - Estimated Reporting Limit

TABLE 5.1

**HISTORICAL MSA GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

Page 1 of 3

<i>Probe</i>	<i>Date</i>	<i>Pressure (in. w.c.)</i>	<i>% Combustible Gas</i>	
			<i>w/charcoal</i>	<i>w/o charcoal</i>
GP1	5/19/1995	NM	10.0	NM
	6/29/1995	0.0	35.0	25.0
	9/6/1995	0.0	NM	16.0
	11/16/1995	NM	11.0	9.0
	5/20/1996	0.0	50.0	50.0
	8/9/1996	0.0	NM	32.0
	10/11/1996	0.0	25.0	32.0
	6/6/1997	0.0	30.0	34.0
	9/18/1997	0.0	70.0	71.0
	11/25/1997	NM	54.0	54.0
	5/18/1998	0.0	54.0	56.0
	9/23/1998	0.0	48.0	58.0
	10/26/1998	0.0	68.0	58.0
	4/8/1999	0.0	24.0	36.0
	7/16/1999	0.0	16.0	12.0
	11/2/1999	0.0	1.1	4.6
	6/30/2000	0.0 ⁽¹⁾	56.0	44.0
	9/21/2000	0.0 ⁽¹⁾	0.0	0.0
	1/5/2001	0.2 ⁽¹⁾	57.0	54.0
GP2	5/19/1995	NM	45.0	NM
	6/29/1995	0.0	42.0	30.0
	9/6/1995	0.0	NM	48.0
	11/16/1995	NM	50.0	50.0
	5/20/1996	0.0	32.0	40.0
	8/9/1996	0.0	NM	24.0
	10/11/1996	0.0	13.0	20.0
	6/6/1997	0.0	17.0	24.0
	9/18/1997	0.0	54.0	70.0
	11/25/1997	NM	25.0	34.0
	5/18/1998	0.0	29.0	35.0
	9/23/1998	0.0	4.4	2.6
	10/26/1998	0.0	3.8	22.0
	4/8/1999	0.0	0.0	0.0
	7/16/1999	0.0	15.0	16.0
	11/2/1999	0.0	2.0	3.6
	6/30/2000	0.4 ⁽¹⁾	12.0	8.0
	9/21/2000	0.0 ⁽¹⁾	5.0	9.0
	1/5/2001	0.0 ⁽¹⁾	32.0	32.0

TABLE 5.1

**HISTORICAL MSA GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

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<i>Probe</i>	<i>Date</i>	<i>Pressure (in. w.c.)</i>	<i>% Combustible Gas</i>	
			<i>w/charcoal</i>	<i>w/o charcoal</i>
GP3	5/19/1995	NM	76.0	NM
	6/29/1995	0.0	70.0	70.0
	9/6/1995	0.0	NM	78.0
	11/16/1995	NM	72.0	72.0
	5/20/1996	0.0	82.0	82.0
	8/9/1996	0.0	NM	85.0
	10/11/1996	0.0	75.0	75.0
	6/6/1997	0.0	8.0	14.0
	9/18/1997	0.0	90.0	90.0
	11/25/1997	NM	93.0	93.0
	5/18/1998	0.0	80.0	84.0
	9/23/1998	0.0	78.0	90.0
	10/26/1998	0.0	88.0	88.0
	4/8/1999	0.0	100*	110*
	7/16/1999	0.0	0.0	0.0
	11/2/1999	0.0	9.0	11.0
	6/30/2000	0.1 ⁽¹⁾	23.0	22.0
	9/21/2000	0.0 ⁽¹⁾	0.0	0.0
	1/5/2001	0.1 ⁽¹⁾	38.0	36.0
GP4	5/19/1995	NM	79.0	NM
	6/29/1995	>5	54.0	40.0
	9/6/1995	>5	NM	72.0
	11/16/1995	NM	80.0	82.0
	5/20/1996	1.0	40.0	40.0
	8/9/1996	0.0	NM	28.0
	10/11/1996	0.0	72.0	74.0
	6/6/1997	0.0	0.3	0.8
	9/18/1997	0.0	63.0	78.0
	11/25/1997	NM	83.0	85.0
	5/18/1998	0.0	30.0	44.0
	9/23/1998	0.0	26.0	26.0
	10/26/1998	0.0	44.0	40.0
	4/8/1999	0.0	8.0	0.0
	7/16/1999	0.0	0.0	0.0
	11/2/1999	0.0	0.3	0.9
	6/30/2000	0.0 ⁽¹⁾	0.0	0.0
	9/21/2000	0.1 ⁽¹⁾	0.0	0.0
	1/5/2001	0.0 ⁽¹⁾	52.0	56.0

TABLE 5.1

**HISTORICAL MSA GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

Page 3 of 3

<i>Probe</i>	<i>Date</i>	<i>Pressure (in. w.c.)</i>	<i>% Combustible Gas</i>	
			<i>w/charcoal</i>	<i>w/o charcoal</i>
GP5	5/19/1995	NM	82.0	NM
	6/29/1995	0.0	80.0	80.0
	9/6/1995	0.0	NM	88.0
	11/16/1995	NM	80.0	80.0
	5/20/1996	0.0	82.0	82.0
	8/9/1996	0.0	NM	29.0
	10/11/1996	0.0	46.0	46.0
	6/6/1997	0.0	16.0	28.0
	9/18/1997	0.0	33.0	34.0
	11/25/1997	NM	50.0	52.0
	5/18/1998	0.0	40.0	42.0
	9/23/1998	0.0	30.0	32.0
	10/26/1998	0.0	24.0	28.0
	4/8/1999	0.0	102*	140*
	7/16/1999	0.0	10.0	0.0
	11/2/1999	0.0	0.0	0.0
	6/30/2000	0.0 ⁽¹⁾	33.0	32.0
	9/21/2000	0.0 ⁽¹⁾	0.0	0.0
	1/5/2001	0.0 ⁽¹⁾	45.0	42.0
GP6	5/19/1995	NM	0.5	NM
	6/29/1995	0.0	5.7	4.5
	9/6/1995	0.0	NM	50.0
	11/16/1995	NM	18.0	18.0
	5/20/1996	0.0	30.0	35.0
	8/9/1996	0.0	NM	0.0
	10/11/1996	0.0	8.0	9.0
	6/6/1997	0.0	0.0	0.0
	9/18/1997	0.0	1.5	1.6
	11/25/1997	NM	39.0	40.0
	5/18/1998	0.0	47.0	52.0
	9/23/1998	0.0	1.5	1.4
	10/26/1998	0.0	0.0	0.0
	4/8/1999	0.0	19.0	30.0
	7/16/1999	0.0	0.0	0.0
	11/2/1999	0.0	0.0	0.0
	6/30/2000	0.0 ⁽¹⁾	32.0	30.0
	9/21/2000	0.0 ⁽¹⁾	0.0	0.0
	1/5/2001	0.0 ⁽¹⁾	42.0	40.0

Notes:

* Data point ignored

⁽¹⁾ Pressure measured with LandTec GEM 500

**LANDTEC GEM 500
GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Probe</i>	<i>Date</i>	<i>LandTec GEM 500 Readings*</i>			
		<i>Pressure (in. H₂O)</i>	<i>%CH₄</i>	<i>%CO₂</i>	<i>%O₂</i>
GP1	11/02/99	0.0	1.3	17.6	3.5
GP1	06/30/00	0.0	46.3	13.2	5.1
GP1	09/21/00	0.0	3.6	1.4	19.3
GP1	01/05/01	0.2	62.4	12.3	2.3
GP1	05/18/01	0.0	0.0	8.1	6.8
GP1	08/17/01	0.0	0.4	12.4	1.9
GP1	06/17/02	0.0	0.0	7.3	6.0
GP1	11/04/02	0.0	0.0	4.2	14.9
GP1	05/20/03	0.0	0.0	2.5	15.2
GP1	08/13/03	0.0	0.0	18.2	1.7
GP1	04/14/04	0.0	2.0	8.5	7.3
GP1	07/08/04	0.0	0.1	6.1	12.8
GP1	04/27/05	0.0	0.0	2.5	18.9
GP1	07/06/05	0.0	0.0	13.9	7.2
GP1	04/26/06	0.0	0.0	4.6	15.0
GP1	09/20/06	0.0	0.1	8.2	7.4
GP1	06/13/07	0.0	6.3	14.0	2.5
GP1	09/20/07	0.0	31.9	11.2	8.9
GP1	06/12/08	0.0	0.0	10.4	6.5
GP1	08/26/08	0.0	0.0	3.4	16.1
GP1	06/24/09	0.0	2.0	10.5	2.8
GP1	09/17/09	0.0	11.3	4.9	12.9
GP2	11/02/99	0.0	6.1	14.2	1.0
GP2	06/30/00	0.4	11.0	15.6	0.0
GP2	09/21/00	0.0	10.2	15.9	1.8
GP2	01/05/01	0.0	34.7	8.7	2.5
GP2	05/18/01	0.0	13.6	6.1	6.3
GP2	08/17/01	0.0	14.3	15.7	0.8
GP2	06/17/02	0.0	0.0	2.4	16.9
GP2	11/04/02	0.0	23.2	10.5	4.2
GP2	05/20/03	0.0	0.0	0.5	19.7
GP2	08/13/03	0.0	9.8	0.7	11.4
GP2	04/14/04	0.0	0.0	16.7	2.0
GP2	07/08/04	0.0	0.1	12.6	4.9
GP2	04/27/05	0.0	0.0	1.9	16.2
GP2	07/06/05	0.0	0.3	7.8	6.7
GP2	04/26/06	0.0	0.0	0.9	19.5
GP2	09/20/06	0.0	3.4	8.3	7.7
GP2	06/13/07	0.0	0.1	6.0	15.0
GP2	09/20/07	0.0	15.0	9.1	7.5
GP2	06/12/08	0.0	0.0	6.1	9.9
GP2	08/26/08	0.0	2.9	6.1	7.9
GP2	06/24/09	0.0	8.2	9.4	2.3
GP2	09/17/09	0.0	8.1	3.4	14.3

**LANDTEC GEM 500
GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Probe</i>	<i>Date</i>	<i>LandTec GEM 500 Readings*</i>			
		<i>Pressure (in. H₂O)</i>	<i>%CH₄</i>	<i>%CO₂</i>	<i>%O₂</i>
GP3	11/02/99	0.0	15.1	0.7	3.8
GP3	06/30/00	0.1	24.6	3.5	0.0
GP3	09/21/00	0.0	0.0	0.0	21.1
GP3	01/05/01	0.1	36.2	2.2	0.0
GP3	05/18/01	-0.1	15.0	3.3	0.4
GP3	08/17/01	0.0	0.0	0.0	20.4
GP3	06/17/02	0.0	34.4	2.9	0.6
GP3	11/04/02	0.0	48.4	2.4	0.2
GP3	05/20/03	0.0	1.4	0.3	19.3
GP3	08/13/03	0.0	12.8	4.4	1.4
GP3	04/14/04	0.0	20.2	0.2	3.8
GP3	07/08/04	0.0	25.5	0.4	3.0
GP3	04/27/05	0.0	0.0	0.0	21.3
GP3	07/06/05	0.0	25.3	3.3	0.1
GP3	04/26/06	0.0	0.0	0.0	20.4
GP3	09/20/06	0.0	0.0	1.4	17.6
GP3	06/13/07	0.0	0.0	0.3	20.8
GP3	09/20/07	0.0	25.0	4.3	3.4
GP3	06/12/08	0.0	12.4	2.1	10.8
GP3	08/26/08	0.0	17.5	1.8	12.5
GP3	06/24/09	0.0	13.6	2.6	2.5
GP3	09/17/09	0.0	19.2	1.5	6
GP4	11/02/99	0.0	20.8	0.3	0.1
GP4	06/30/00	0.0	0.0	0.1	19.8
GP4	09/21/00	0.1	0.0	0.0	21.1
GP4	01/05/01	0.0	73.5	1.5	4.0
GP4	05/18/01	0.0	0.0	0.1	20.0
GP4	08/17/01	0.0	0.1	2.9	15.8
GP4	06/17/02	0.0	0.0	0.0	20.0
GP4	11/04/02	0.0	0.9	0.4	19.8
GP4	05/20/03	0.0	0.0	0.0	20.7
GP4	08/13/03	0.0	0.0	15.4	2.4
GP4	04/14/04	0.0	0.0	6.1	3.5
GP4	07/08/04	0.0	3.0	2.5	7.4
GP4	04/27/05	0.0	0.0	0.0	21.2
GP4	07/06/05	0.0	64.6	3.9	3.3
GP4	04/26/06	0.1	40.2	2.3	9.3
GP4	09/20/06	0.0	0.7	4.8	9.9
GP4	06/13/07	0.0	63.5	3.0	0.3
GP4	09/20/07	0.0	4.5	6.7	3.7
GP4	06/12/08	0.0	0.0	0.0	20.4
GP4	08/26/08	0.0	9.6	20.7	2.8
GP4	06/24/09	0.0	62.5	1	0
GP4	09/17/09	0.0	34.3	0.9	6.6

**LANDTEC GEM 500
GAS PROBE MONITORING RESULTS
HIGHWAY 96 SITE
WHITE BEAR TOWNSHIP, MINNESOTA**

<i>Probe</i>	<i>Date</i>	<i>LandTec GEM 500 Readings*</i>			
		<i>Pressure (in. H₂O)</i>	<i>%CH₄</i>	<i>%CO₂</i>	<i>%O₂</i>
GP5	11/02/99	0.0	3.6	1.0	19.0
GP5	06/30/00	0.0	36.0	5.4	0.0
GP5	09/21/00	0.0	1.4	0.3	20.5
GP5	01/05/01	0.0	43.8	3.2	0.4
GP5	05/18/01	0.0	17.1	2.1	0.4
GP5	08/17/01	0.0	0.0	1.7	15.1
GP5	06/17/02	0.0	33.8	3.0	2.7
GP5	11/04/02	0.0	11.1	1.5	1.1
GP5	05/20/03	0.0	1.8	0.0	19.3
GP5	08/13/03	0.0	0.0	15.9	1.2
GP5	04/14/04	0.0	28.5	0.2	2.9
GP5	07/08/04	0.0	10.7	1.8	4.8
GP5	04/27/05	0.1	0.0	0.0	21.2
GP5	07/06/05	0.0	28.8	3.6	0.1
GP5	04/26/06	0.0	0.0	0.2	19.9
GP5	09/20/06	0.0	0.0	0.4	20.0
GP5	06/13/07	0.0	0.0	0.1	21.2
GP5	09/20/07	0.0	0.0	0.2	20.9
GP5	06/12/08	0.0	0.0	0.0	20.4
GP5	08/26/08	0.0	0.0	1.0	18.2
GP5	06/24/09	0.0	0.0	0.0	19.9
GP5	09/17/09	0.0	0.0	0.2	19.9
GP6	11/02/99	0.0	0.3	0.3	20.8
GP6	06/30/00	0.0	31.2	6.0	0.0
GP6	09/21/00	0.0	0.0	0.0	21.0
GP6	01/05/01	0.0	40.0	5.1	1.5
GP6	05/18/01	0.0	28.2	3.3	0.4
GP6	08/17/01	0.0	0.0	1.8	17.8
GP6	06/17/02	0.0	0.0	2.6	12.0
GP6	11/04/02	0.0	12.0	1.7	0.3
GP6	05/20/03	0.0	0.0	1.3	15.5
GP6	08/13/03	0.0	0.0	17.4	2.3
GP6	04/14/04	0.0	0.1	16.3	1.1
GP6	07/08/04	0.0	16.4	0.3	2.8
GP6	04/27/05	0.0	0.0	0.6	17.2
GP6	07/06/05	0.0	27.5	3.5	0.1
GP6	04/26/06	0.0	0.0	1.7	17.7
GP6	09/20/06	0.0	0.0	4.3	14.5
GP6	06/13/07	0.0	0.1	6.1	14.2
GP6	09/20/07	0.0	0.1	10	3.8
GP6	06/12/08	0.0	16.7	3.0	9.5
GP6	08/26/08	0.0	0.0	5.3	15.6
GP6	06/24/09	0.0	0.0	3.6	15.9
GP6	09/17/09	0.0	0.0	4.5	14.6

Notes:

* - Readings captured once stabilized, after at least 60 seconds of purging.