

201 S main St., Thiensville, WI

Legend



SB-6 (Sigma)  
HA-1 & SP/SD-1  
(Moraine)

SS-1

HA-3/SP-3

HA-2/SP-7

SP/SD-2

SP/SD-6

SP-8

SP-5

SP/SD-4

Google Earth



80 ft

A.2.  
Soil Analytical Results Table  
201 S Main St., Thiensville, WI

Sample ID	Same Location				5' E of HA-1				5' W of HA-1				SP-2			SP-4			SP-5			SP-6			SP-8			Groundwater Pathway RCL	Non-Industrial DC Pathway RCL	Industrial DC Pathway RCL
	SB-6	HA-1	SP-1		HA-2	SP-7		HA-3	SP-3		0-1	4	11	0-1	4	7	0-1	4	8	0-1	6	12	0-1	4	8					
Depth BGS (feet)	1	2	2-4	4-6	2	4	8	2	4	8	0-1	4	11	0-1	4	7	0-1	4	8	0-1	6	12	0-1	4	8					
Date Collected	10/10/19	1/7/20	2/7/20	2/7/20	1/7/20	1/15/21		1/7/20	1/15/21		1/15/21		1/15/21		1/15/21		1/15/21		1/15/21		1/15/21		1/15/21							
Saturated/Unsaturated (S/U)	U	U	U	S	U	U	S	U	U	S	U	U	S	U	S	S	U	S	S	U	S	S	U	S	S					
<b>Detected Volatile Organic Compounds (µg/kg)</b>																														
Tetrachloroethene (PCE)	5400	6000	502	3650	295	<22.7	<22.0	449	72.1	193	225	27.2 J	504	89.6	<22.3	23.4 J	39.6 J	<22.9	<22.2	<24.7	<22.5	<22.3	29.9 J	<22.5	<22.8	4.54	33,000	145,000		
Toluene	<32	---	<25.0	<25.0	---	<14.8	<14.3	---	<14.5	<15.6	<17.3	<15.9	<15.5	<16.8	23.5 J	38.3 J	<16.5	<14.9	<14.4	22.5 J	<14.6	28.9 J	57.3 J	17.8 J	<14.8	1,107.00	818,000	818,000		
Trichloroethene (TCE)	<41	<25.0	105	219	<25.0	23.1 J	<21.2	<25.0	<21.6	65.4	<25.7	<23.6	24.8 J	<24.9	<21.5	<21.4	<24.5	<22.1	<21.4	<23.8	<21.7	<21.5	<23.4	<21.7	<21.9	3.60	1,300	8,410		
cis-1,2-Dichloroethene	<32	<25.0	53.9 J	<25.0	<25.0	<12.5	15.8 J	<25.0	<12.3	<13.2	<14.7	<13.5	<13.2	<14.2	22.9 J	31.5 J	<14.0	<12.6	151	<13.6	<12.4	105	<13.4	<12.4	24.0 J	41.20	156,000	2,340,000		

Groundwater Pathway and Direct Contact RCLs calculated using the USEPA Regional Screening Level Web Calculator (PUB-RR-890)

All values expressed in µg/kg (micrograms per kilogram).

BGS - feet below ground surface

DC - Direct Contact

VOCs - volatile organic compounds

RCL - Residual Contaminant Level

NS - No Standard established for this analyte

< - less than the specified detection limit

J - Estimated concentration at or above the limit of detection and below the limit of quantitation

--- - sample not analyzed for this parameter

-- - no sample collected from this location

*Italics* - concentration exceeds Groundwater Pathway RCL

**Bold** - concentration exceeds Non-Industrial Direct Contact RCL

**Bold Underlined** - concentration exceeds Industrial Direct Contact

A.1.  
Groundwater Analytical Table

201 S Main St., Thiensville, WI

Monitoring Well ID	SP/SD-1		SP/SD-2	SP/SD-4	SP/SD-6	NR 140 Preventive Action Limit (PAL)	NR 140 Enforcement Standard (ES)
Sample Collection Date	2/7/20	1/19/21	1/19/21	1/19/21	1/19/21		
<b>Detected Volatile Organic Compounds (µg/L)</b>							
1,2,4-Trimethylbenzene	<0.84	<2.1	1.0 J	2.3 J	<0.84	<i>NS</i>	<b>NS</b>
Ethylbenzene	<0.22	<0.80	0.39 J	0.39 J	<0.32	<i>140</i>	<b>700</b>
Tetrachloroethene (PCE)	<b>25.7</b>	<b>270</b>	<b>28.2</b>	<0.33	<i>1.3</i>	<i>0.5</i>	<b>5</b>
Toluene	0.41 J	<0.67	0.84 J	1.0	0.32 J	<i>160</i>	<b>800</b>
Trichloroethene (TCE)	<b>30.0</b>	<b>139</b>	<b>16.4</b>	<0.26	0.26 J	<i>0.5</i>	<b>5</b>
cis-1,2-Dichloroethene	<b>154</b>	55.5	5.5	50	1.5	<i>7</i>	<b>70</b>
m&p-Xylene	<0.47	<1.2	1.4 J	1.2 J	<0.47	<i>NS</i>	<b>NS</b>
o-Xylene	<0.26	<0.65	0.57 J	0.51 J	<0.26	<i>NS</i>	<b>NS</b>
trans-1,2-Dichloroethene	<1.1	<1.2	<0.46	2.4	<0.46	<i>20</i>	<b>100</b>
Total Trimethylbenzene	<1.71	<4.3	1.0 J	2.3 J	<1.71	<i>96</i>	<b>480</b>
Total Xylenes	<0.73	<1.85	1.97 J	1.71 J	<0.73	<i>400</i>	<b>2,000</b>

All concentrations expressed in µg/L (micrograms per liter).

VOCs - Volatile Organic Compounds

PAL - Preventive Action Limit, as established in Wisconsin Administrative Code Chapter NR 140

ES - Enforcement Standard, as established in Wisconsin Administrative Code Chapter NR 140

NS - No Standard established for this analyte

< - less than the specified detection limit

J - Estimated concentration at or above the limit of detection and below the limit of quantitation

--- - sample not analyzed for this parameter

-- - no sample collected from this location

*Italics* - concentration exceeds NR 140 PAL

**Bold** - concentration exceeds NR 140 ES

**A.4.**  
**Vapor Sample Results**  
**201 S Main St**  
**Thiensville, WI**

Sample ID	SS-1	WDNR Standards		
		Residential	Small Commercial	Large Commercial
Date Collected	2/21/2020	AF = 0.03	AF = 0.03	AF = 0.01
AA=Ambient Air/SS=Sub-Slab	SS	Sub-Slab VRSL	Sub-Slab VRSL	Sub-Slab VRSL
<b>Volatile Organic Compounds (µg/m<sup>3</sup>) by EPA Method TO-15</b>				
1,1,1-Trichloroethane	<0.57	170,000	730,000	2,200,000
1,1,2,2-Tetrachloroethane	<0.57	16	70	210
1,1,2-Trichloroethane	<0.44	60	260	770
1,1,2-Trichlorotrifluoroethane	<1.0	---	---	---
1,1-Dichloroethane	<0.41	600	2,600	7,700
1,1-Dichloroethene	<0.50	7,000	29,000	88,000
1,2,4-Trichlorobenzene	<6.8	700	2,900	8,800
1,2,4-Trimethylbenzene	80.4	2,100	8,700	26,000
1,2-Dibromoethane (EDB)	<0.67	1.6	6.7	20
1,2-Dichlorobenzene	<0.91	7,000	29,000	88,000
1,2-Dichloroethane	<0.27	37	160	470
1,2-Dichloropropane	<0.42	93	400	1,200
1,3,5-Trimethylbenzene	25.6	2,100	8,700	26,000
1,3-Butadiene	<0.23	31	137	410
1,3-Dichlorobenzene	<1.1	---	---	---
1,4-Dichlorobenzene	<1.8	87	370	1,100
2-Butanone (MEK)	21.2	170,000	730,000	2,200,000
2-Hexanone	<1.4	1,000	4,300	13,000
2-Propanol	7.3	---	---	---
4-Ethyltoluene	25.6	---	---	---
4-Methyl-2-pentanone (MIBK)	12.5	100,000	430,000	1,300,000
Acetone	76.5	1,070,000	4,700,000	14,000,000
Benzene	30	120	530	1,600
Benzyl chloride	<2.2	19	84	250
Bromodichloromethane	1.3 J	25	110	330
Bromoform	<2.6	870	3,670	11,000
Bromomethane	<0.42	170	730	2,200
Carbon disulfide	1.6	24,000	100,000	310,000
Carbon tetrachloride	<0.79	160	670	2,000
Chlorobenzene	<0.50	1,700	7,330	22,000
Chloroethane	<0.48	---	---	---
Chloroform	3.1	40	180	530
Chloromethane	<0.29	3,100	13,000	39,000
Cyclohexane	147	21,000	870,000	2,600,000
Dibromochloromethane	<1.3	---	---	---
Dichlorodifluoromethane	2.8	3,300	15,000	44,000
Dichlorotetrafluoroethane	<0.80	---	---	---
Ethanol	421	---	---	---
Ethyl acetate	<0.35	2,400	12,000	35,000
Ethylbenzene	69.3	370	1,600	4,900
Hexachloro-1,3-butadiene	<3.6	43	190	560
Methyl-tert-butyl ether	<1.2	3,700	16,000	47,000
Methylene Chloride	5.0 J	21,000	87,000	260,000
Naphthalene	23.4	28	120	360
Propylene	<0.26	100,000	430,000	1,300,000
Styrene	3.6	330,000	150,000	440,000
Tetrachloroethene	180	1,400	6,000	18,000
Tetrahydrofuran	<0.48	---	---	---
Toluene	545	170,000	730,000	2,200,000
Trichloroethene	1.5	70	290	880
Trichlorofluoromethane	1.5 J	---	---	---
Vinyl acetate	<0.49	7,000	29,000	88,000
Vinyl chloride	<0.23	57	930	2,800
cis-1,2-Dichloroethene	<0.40	---	---	---
cis-1,3-Dichloropropene	<0.56	---	---	---
m&p-Xylene	247	3,300	15,000	44,000
n-Heptane	96.8	---	---	---
n-Hexane	105	24,000	100,000	310,000
o-Xylene	86.2	3,300	15,000	44,000
trans-1,2-Dichloroethene	<0.52	---	---	---
trans-1,3-Dichloropropene	<0.81	230	1,000	3,100

**Note:**

Sub-slab and soil gas samples collected for an approximate 30 minute duration; ambient air samples collected for an approximate 24 hour duration

Sub-slab samples collected using the water dam and shut-in test methods. No leaks detected.

Soil gas samples collected using the helium shroud and shut-in test methods combined with post-run tubing (PRT) sample train. No leaks detected.

µg/m<sup>3</sup> = micrograms per cubic meter

AF = Attenuation Factor

VAL = Vapor Action Level

VRSL = Vapor Risk Screening Level

--- No standard or parameter not analyzed

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

*Italicized text exceeds Residential Standards*

**Bold text exceeds Small Commercial Standards**

**Bold & Underlined text exceeds Large Commercial Standards**