TABLE 3A
Soil Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC
Chemical Name	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	Benzene	Cumene	Ethyl Benzene	Naphthalene	p-Cymene	sec-Butylbenzene	Toluene	Trichloroethene
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Industrial Direct Contact RCLs	**219**	**182**	**16.4**	**7.07**	**268**	**35.4**	**24.1**	**162**	**145**	**818**	**8.41**
Non-Industrial Direct Contact RCLs	219	182	3.74	1.6	268	8.02	5.52	162	145	818	1.3
Groundwater Pathway RCLs	*1.3787****	*1.3787****	*0.144*	*0.00512*	*NE*	*1.57*	*0.658*	*NE*	*NE*	*1.1072*	*0.00358*
20X TCLP Threshold	NE	NE	150	10	NE	NE	NE	NE	NE	NE	10

Sample ID	Boring ID	Sample Date	Start Depth (ft)	End Depth (ft)	PID Reading (ppm)	Debris	Odor	Staining	Soil Type										
WB-229-2-3.5	WB-229	9/12/2023	2	5	2.4	glass debris (<5%) at 2 to 3.5 fbg	None	None	SILT (FILL)	< 0.077	< 0.077	< 0.077	*< 0.019*	< 0.077	< 0.019	< 0.077 ^c	< 0.077	< 0.077	0.02	*< 0.038*
WB-229-10-11	WB-229	9/12/2023	10	11	2.4	None	None	None	SAND (FILL)	< 0.079	< 0.079	< 0.079	*< 0.020*	< 0.079	< 0.020	< 0.079 ^c	< 0.079	< 0.079	< 0.020	*< 0.039*
WB-230-1-2	WB-230	9/12/2023	1	2	5.4	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	< 0.067	< 0.067	< 0.067	*< 0.017*	< 0.067	< 0.017	< 0.067 ^c	< 0.067	< 0.067	< 0.017	*< 0.033*
WB-230-3-4	WB-230	9/12/2023	3	4	1.5	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	< 0.069	< 0.069	< 0.069	*< 0.017*	< 0.069	< 0.017	< 0.069 ^c	< 0.069	< 0.069	0.03	*< 0.035*
WB-230-7-8	WB-230	9/12/2023	7	8	1.4	None	None	None	SAND (FILL)	< 0.085	< 0.085	< 0.085	*< 0.021*	< 0.085	< 0.021	< 0.085 ^c	< 0.085	< 0.085	< 0.021	*< 0.043*
WB-231-2-3.5	WB-231	9/12/2023	2	5	1	pockets of debris - slag at 2 fbg, brick at 2.5 fbg, and coal at 3.5 fbg	None	None	CLAY/SAND/GRAVEL (FILL)	< 0.079	< 0.079	< 0.079	*< 0.020*	< 0.079	< 0.020	< 0.079 ^c	< 0.079	< 0.079	0.026	*< 0.039*
WB-231-11-12	WB-231	9/12/2023	11	12	2.8	metal debris at 11.5 fbg	None	None	SAND (FILL)	< 0.073	< 0.073	< 0.073	*< 0.018*	< 0.073	< 0.018	< 0.073 ^c	< 0.073	< 0.073	< 0.018	*< 0.036*
WB-232-5-7	WB-232	9/13/2023	5	7	1	slag and wood debris (25%) at 5 to 5.75 fbg	None	None	SILT (FILL)	0.041 J	< 0.063	< 0.063	*< 0.016*	< 0.063	< 0.016	0.049 JB	0.027 J	< 0.063	0.032	*< 0.032*
WB-232-11-12	WB-232	9/13/2023	11	12	6.6	None	None	None	RED CLAY	< 0.18	< 0.18	*< 0.18*	*< 0.045*	< 0.18	< 0.045	< 0.18	< 0.18	< 0.18	< 0.045	*< 0.090*
WB-233-1-3	WB-233	9/13/2023	1	3	4.6	slag debris (5%) at 1 to 4 fbg	None	None	SILT (FILL)	< 0.056	< 0.056	< 0.056	*< 0.014*	< 0.056	< 0.014	0.025 J	< 0.056	< 0.056	< 0.014	*< 0.028*
WB-233-6-8	WB-233	9/13/2023	6	8	2.9	slag and wood debris (25%) at 6 to 8 fbg	slight chemical odor	None	SAND (FILL)	< 0.070	< 0.070	< 0.070	*< 0.017*	< 0.070	< 0.017	< 0.070	< 0.070	< 0.070	< 0.017	*< 0.035*
WB-233-11-12	WB-233	9/13/2023	11	12	15.6	None	None	None	RED CLAY	< 0.11	< 0.11	< 0.11	*< 0.027*	< 0.11	< 0.027	< 0.11	< 0.11	< 0.11	< 0.027	*< 0.054*
WB-234-1-3	WB-234	9/14/2023	1	3	1.4	slag and concrete debris (15%); pockets of concrete debris at 1 fbg, 2.74 fbg, and 3.75 fbg	None	None	SILT (FILL)	< 0.059	< 0.059	< 0.059	*< 0.015*	< 0.059	< 0.015	< 0.059	< 0.059	< 0.059	< 0.015	*< 0.029*
WB-234-5-6.5	WB-234	9/14/2023	5	5	1.4	concrete and slag debris (15%) at 5 to 6.5 fbg	None	None	SILT (FILL)	< 0.060	< 0.060	< 0.060	*< 0.015*	< 0.060	< 0.015	0.084	< 0.060	< 0.060	< 0.015	*< 0.030*
WB-235-0.5-2.5	WB-235	9/14/2023	0.5	2.5	1	slag debris (5%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	< 0.068 *	< 0.068 *	< 0.068	*< 0.017*	< 0.068 *	< 0.017	< 0.068 ^c	< 0.068	< 0.068 *	0.021	*< 0.034*
WB-235-7.5-9.5	WB-235	9/14/2023	7.5	9.5	1.2	glass and wood debris (25%) at 7.25 to 9.5 fbg	None	None	SILT (FILL)	0.056 J*	< 0.10 *	< 0.10	*0.033*	< 0.10 *	0.03	0.13 ^c	< 0.10	< 0.10 *	0.49	*< 0.050*
WB-236-0.5-2.5	WB-236	9/14/2023	0.5	2.5	1.9	pockets of concrete debris (15%) at 0.5 to 3.5 fbg	None	None	RED CLAY (FILL)	< 0.074 *	< 0.074 *	< 0.074	*< 0.018*	< 0.074 *	< 0.018	< 0.074 ^c	< 0.074	< 0.074 *	0.012 J	*0.016 J*
WB-236-7.5-8.5	WB-236	9/14/2023	7.5	8.5	3	metal, glass, concrete, slag, and wood debris (30%) at 7.5 to 8.5 fbg	None	None	SILT (FILL)	0.068 J*	< 0.070 *	< 0.070	*0.03*	< 0.070 *	0.016 J	0.49 ^c	< 0.070	< 0.070 *	0.071	*< 0.035*
WB-237-1-3	WB-237	9/15/2023	1	3	2.7	pockets of wood and slg debris (5%) at 1 to 3.75 fbg	None	None	RED CLAY (FILL)	< 0.087	< 0.087	< 0.087	*< 0.022*	< 0.087	< 0.022	0.036 JB^c	< 0.087	< 0.087	< 0.022	*< 0.043*
WB-237-5.5-7	WB-237	9/15/2023	5.5	7	3.1	wood debris (15%) at 5.25 to 7 fbg	None	None	SAND (FILL)	< 0.072	< 0.072	< 0.072	*< 0.018*	< 0.072	< 0.018	< 0.072 ^c	< 0.072	< 0.072	< 0.018	*< 0.036*
WB-238-1-3	WB-238	9/15/2023	1	3	1.9	wood, slag, concrete, brick, and ceramic debris (15%) at 0.5 to 2.75 fbg	None	None	SILT (FILL)	< 0.15	< 0.15	*< 0.15*	*< 0.036*	< 0.15	< 0.036	0.091 JB^c	< 0.15	< 0.15	0.034 J	*< 0.073*
WB-238-5-7	WB-238	9/15/2023	5	7	1.6	None	None	None	SAND	< 0.081	< 0.081	< 0.081	*< 0.020*	< 0.081	< 0.020	< 0.081 ^c	< 0.081	< 0.081	< 0.020	*0.047*
WB-239 (1-2.4)	WB-239	9/12/2023	1	2.4	1.3	asphalt debris (up to 10%) at 1 to 2.4 fbg	None	None	SAND (FILL)	< 0.078	< 0.078	< 0.078	*< 0.019*	< 0.078 ^c	< 0.019	0.19 B^c	< 0.078	< 0.078	0.13	*< 0.039*
WB-239 (4.4-6)	WB-239	9/12/2023	4.4	6	0.0	None	None	None	SAND	< 0.065	< 0.065	< 0.065	*< 0.016*	< 0.065 ^c	< 0.016	0.045 JB^c	< 0.065	< 0.065	0.033	*< 0.033*
WB-240 (1-3)	WB-240	9/12/2023	1	3	0.0	None	None	None	GRAVEL (FILL)	0.025 J	< 0.061	< 0.061	*0.013 J*	< 0.061 ^c	< 0.015	0.062 B^c	< 0.061	< 0.061	0.06	*< 0.031*
WB-240 (5-7)	WB-240	9/12/2023	5	7	0.0	None	None	None	RED CLAY	< 0.070	< 0.070	< 0.070	*< 0.018*	< 0.070	< 0.018	< 0.070	< 0.070	< 0.070	< 0.018	*< 0.035*
WB-241-0.5-2	WB-241	9/12/2023	0.5	2	1.2	brick and wood debris (10%) at 0.5 to 2 fbg	None	None	GRAVEL (FILL)	< 0.073	< 0.073	< 0.073	*< 0.018*	< 0.073	< 0.018	< 0.073 ^c	< 0.073	< 0.073	< 0.018	*< 0.036*
WB-241-3-3.75	WB-241	9/12/2023	3	3.75	2.3	None	None	None	SAND (FILL)	< 0.095	< 0.095	< 0.095	*< 0.024*	< 0.095	< 0.024	< 0.095 ^c	< 0.095	< 0.095	< 0.024	*< 0.048*
WB-241-5-7	WB-241	9/12/2023	5	7	0.8	None	None	None	SAND (FILL)	< 0.082	< 0.082	< 0.082	*< 0.021*	< 0.082	< 0.021	< 0.082 ^c	< 0.082	< 0.082	< 0.021	*< 0.041*
WB-242-1.5-2.5	WB-242	9/12/2023	1.5	2.5	1	trace wood and slag debris (<5%) at 1.5 to 3 fbg	None	None	SILT (FILL)	0.025 J	< 0.060	< 0.060	*< 0.015*	< 0.060	< 0.015	0.047 J^c	< 0.060	< 0.060	0.051	*< 0.030*
WB-242-8-8.75	WB-242	9/12/2023	8	8.75	0.5	None	None	None	SAND (FILL)	< 0.069	< 0.069	< 0.069	*< 0.017*	< 0.069	< 0.017	< 0.069 ^c	< 0.069	< 0.069	< 0.017	*< 0.035*
WB-243-2-4	WB-243	9/12/2023	2	4	0.8	trace wood and slag debris (<5%) at 0.5 to 3 fbg	None	None	GRAVEL/SAND (FILL)	< 0.075	< 0.075	< 0.075	*< 0.019*	< 0.075	< 0.019	< 0.075 ^c	< 0.075	< 0.075	0.035	*< 0.038*
WB-243-10-12	WB-243	9/12/2023	10	12	0.9	None	None	None	RED CLAY	< 0.15	< 0.15	*< 0.15*	*0.022 J*	< 0.15	< 0.037	0.11 J^c	< 0.15	< 0.15	0.3	*< 0.075*
WB-244-5-7	WB-244	9/12/2023	5	7	2.1	trace slag debris (<5%) at 5 to 7 fbg	None	None	SAND (FILL)	0.034 J	< 0.087	< 0.087	*< 0.022*	< 0.087	< 0.022	0.053 J^c	< 0.087	< 0.087	0.052	*< 0.043*
WB-244-10.5-11.5	WB-244	9/12/2023	10.5	11.5	2	trace wood debris (<5%) at 10.5 to 11.5 fbg	None	None	RED CLAY	< 0.36	< 0.36	*< 0.36*	*< 0.091*	< 0.36	< 0.091	< 0.36 ^c	< 0.36	< 0.36	< 0.091	*< 0.18*
WB-245-1-3	WB-245	9/12/2023	1	3	1.6	pockets of slag debris at 1.5 fbg and 2.75 fbg	None	None	RED CLAY (FILL)	< 0.081	< 0.081	< 0.081	*< 0.020*	< 0.081	< 0.020	< 0.081 ^c	< 0.081	< 0.081	0.03	*< 0.041*
WB-245-10.5-12	WB-245	9/12/2023	10.5	12	2	trace wood and ceramic debris (<5%) at 10.5 to 12 fbg	None	None	RED CLAY	< 0.16	< 0.16	*< 0.16*	*< 0.040*	< 0.16	< 0.040	< 0.16 ^c	< 0.16	< 0.16	0.028 J	*< 0.081*
WB-246-1-3	WB-246	9/13/2023	1	3	1.2	trace debris at 0 to 3.5 fbg	None	None	SILT (FILL)	< 0.097	< 0.097	< 0.097	*< 0.024*	< 0.097	< 0.024	< 0.097	< 0.097	< 0.097	< 0.024	*< 0.049*
WB-246-7.5-9-DEBRIS	WB-246	9/13/2023	7.5	9	5.6	brick, glass, metal, slag, and wood debris (80%) at 7 to 8 fbg	moderate chemical-like odor	dark iridescent sheen	SAND (FILL)	--	--	--	--	--	--	--	--	--	--	--
WB-246-10.5-12	WB-246	9/13/2023	10.5	12	3.6	None	None	None	RED CLAY	< 0.077	< 0.077	< 0.077	*< 0.019*	< 0.077	< 0.019	< 0.077	< 0.077	< 0.077	< 0.019	*< 0.039*
WB-247-0-1.25	WB-247	9/13/2023	0	1.25	1.5	None	None	None	SILT (FILL)	< 0.085	< 0.085	< 0.085	*< 0.021*	< 0.085	< 0.021	0.054 J	< 0.085	< 0.085	< 0.021	*< 0.043*
WB-247-6.25-8.25	WB-247	9/13/2023	6.25	8.25	2.6	wood and slag debris (5%) at 5 to 8.5 fbg	slight to strong chemical odor	None	SAND (FILL)	0.73	< 0.12	< 0.12	*0.051*	< 0.12	0.054	< 0.12	< 0.12	0.42	0.043	*< 0.058*
WB-247-11.5-13.25	WB-247	9/13/2023	11.5	13.25	5.9	None	None	None	RED CLAY	< 0.15	< 0.15	*< 0.15*	*< 0.037*	< 0.15	< 0.037	< 0.15	< 0.15	< 0.15	< 0.037	*< 0.075*
WB-248-1-3	WB-248	9/13/2023	1	3	4.6	wood, concrete, slag, and bituminous debris (25%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	0.022 J	< 0.058	< 0.058	*0.17*	< 0.058	< 0.015	0.062	< 0.058	< 0.058	0.043	*< 0.029*
WB-248-6-7	WB-248	9/13/2023	6	7	3.9	wood and slag debris (25%) at 5 to 7 fbg	None	None	SILT (FILL)	< 0.090	< 0.090	< 0.090	*< 0.022*	< 0.090	< 0.022	0.048 J	< 0.090	< 0.090	< 0.022	*< 0.045*
WB-249-2-3	WB-249	9/13/2023	2	3	3.9	concrete and slag debris (5%) at 2 to 3 fbg	None	None	SILT (FILL)	0.39	< 0.15	*< 0.15*	*0.069*	< 0.15	< 0.039	< 0.15	< 0.15	< 0.15	0.2	*< 0.077*
WB-249-5-6.5	WB-249	9/13/2023	5	6.5	4.9	slag, wood, and concrete debris (25%) at 5 to 6.5 fbg	None	None	SILT (FILL)	0.15	0.075	< 0.075	*< 0.019*	< 0.075	< 0.019	0.093	< 0.075	< 0.075	0.056	*< 0.037*
WB-250-0.5-2	WB-250	9/14/2023	0.5	2	2.6	wood, glass, and concrete debris (15%) at 2.5 to 4 fbg	None	None	SILT (FILL)	< 0.061 *	< 0.061 *	< 0.061	*< 0.015*	< 0.061 *	< 0.015	< 0.061 ^c	< 0.061	< 0.061 *	< 0.015	*< 0.031*
WB-250-7-8	WB-250	9/14/2023	7	8	1.8	wood, slag, glass, and concrete debris (15%) at 6.25 to 9.25 fbg	None	None	SILT (FILL)	< 0.073 *	< 0.073 *	< 0.073	*< 0.018*	< 0.073 *	< 0.018	0.074 ^c	< 0.073	< 0.073 *	0.017 J	*< 0.037*
WB-251-2-3.5	WB-251	9/13/2023	2	3.5	2.2	None	None	None	RED CLAY (FILL)	< 0.069	< 0.069	< 0.069	*< 0.017*	< 0.069	< 0.017	0.054 J	< 0.069	< 0.069	< 0.017	*< 0.035*
WB-251-11-13	WB-251	9/13/2023	11	13	2.6	wood debris (5%) at 11 to 13.5 fbg	None	None	SAND (FILL)	< 0.087	< 0.087	< 0.087	*< 0.022*	< 0.087	< 0.022	< 0.087	0.048 J	< 0.087	0.041	*< 0.044*
WB-252-0-1.75	WB-252	9/14/2023	0	1.75	2.4	None	None	None	SILT (FILL)	< 0.075 *	< 0.075 *	< 0.075	*< 0.019*	< 0.075 *	< 0.019	0.028 J^c	< 0.075	< 0.075 *	0.025	*< 0.037*
WB-252-5-7	WB-252	9/14/2023	5	7	4.3	wood, metal, glass, concrete, ceramic, and brick debris (60%) at 5 to 8 fbg	None	None	SILT (FILL)	< 0.095 *	< 0.095 *	< 0.095	*0.016 J*	< 0.095 *	< 0.024	*0.76 ^c*	< 0.095	< 0.095 *	0.053	*< 0.047*
WB-253-1-3	WB-253	9/14/2023	1	3	1.7	wood, concrete, and coal debris (5%) at 1 to 4.75 fbg	None	None	RED CLAY (FILL)	< 0.075 *	< 0.075 *	< 0.075	*< 0.019*	< 0.075 *	< 0.019	0.081 ^c	< 0.075	< 0.075 *	0.018 J	*< 0.037*
WB-253-7.25-9.25	WB-253	9/14/2023	7.25	9.25	2.6	brick, glass, slag, and wood debris (50%) at 7 to 9.25 fbg	slight chemical odor	None	SILT (FILL)	0.061 J*	0.040 J*	< 0.085	*0.075*	< 0.085 *	0.033	0.23 ^c	< 0.085	< 0.085 *	0.11	*< 0.042*
WB-253-11.5-13	WB-253	9/14/2023	11.5	13	3.9	wood debris (20%) at 11.5 to 13 fbg	None	None	ORGANIC MATERIAL (FILL)	< 0.19	< 0.19	*< 0.19*	*< 0.046*	< 0.19	< 0.046	< 0.19	< 0.19	< 0.19	< 0.046	*< 0.093*
WB-254-1-2.25	WB-254	9/14/2023	1	2.25	1.5	None	None	None	SILT/RED CLAY (FILL)	0.10 *	0.074 J*	< 0.075	*< 0.019*	0.070 J*	< 0.019	*0.89 ^c*	< 0.075	< 0.075 *	0.077	*< 0.037*
WB-254-5-6.5	WB-254	9/14/2023	5	6.5	2.7	wood and glass debris (30%) at 5 to 7 fbg	None	None	SILT (FILL)	< 0.090 *	< 0.090 *	< 0.090	*< 0.022*	< 0.090 *	< 0.022	0.30 ^c	0.67	< 0.090 *	0.020 J	*< 0.045*
WB-255-1-3	WB-255	9/14/2023	1	3	1.9	pocket of concrete debris (10%) at 1.25 fbg	None	None	RED CLAY (FILL)	< 0.11 *	< 0.11 *	< 0.11	*0.016 J*	< 0.11 *	< 0.027	0.096 J^c	< 0.11	< 0.11 *	0.024 J	*< 0.054*
WB-255-5-6	WB-255	9/14/2023	5	6	2.5	wood and glass debris (30%) at 5 to 6 fbg	None	None	SILT (FILL)	0.053 J*	< 0.079 *	< 0.079	*0.028*	< 0.079 *	0.017 J	*1.8 ^c*	< 0.079	< 0.079 *	0.039	*< 0.040*
WB-255-12-13	WB-255	9/14/2023	12	13	5.4	None	None	None	RED CLAY	< 0.19	< 0.19	*< 0.19*	*< 0.047*	< 0.19	< 0.047	< 0.19	< 0.19	< 0.19	< 0.047	*< 0.094*
WB-256-0.5-2	WB-256	9/15/2023	0.5	2	2.4	None	None	None	SILT (FILL)	< 0.074	< 0.074	< 0.074	*0.011 J*	< 0.074	< 0.018	0.032 JB^c	< 0.074	< 0.074	0.026	*< 0.037*
WB-256-5-6.5	WB-256	9/15/2023	5	6.5	1.6	wood, slag, metal, and glass debris (50%) at 5 to 6.5 fbg	None	None	SAND (FILL)	< 0.12	< 0.12	< 0.12	*< 0.030*	< 0.12	< 0.030	0.062 JB^c	< 0.12	< 0.12	< 0.030	*< 0.060*
WB-257-1-3	WB-257	9/15/2023	1	3	5.9	wood, concrete, and slag debris (5%) at 0.75 to 3 fbg	None	None	SILT (FILL)	0.038 J	< 0.063	< 0.063	*0.014 J*	< 0.063	0.018	0.33 B^c	1.1	< 0.063	0.063	*< 0.031*
WB-257-7-9	WB-257	9/15/2023	7	9	1.6	wood, slag, plastic, metal, glass, concrete, brick, and ceramic debris (60%) at 6 to 9 fbg	slight tire-like odor	None	SILT (FILL)	0.049 J	< 0.085	0.047 J	*0.035*	< 0.085	0.021	*1.1 B^c*	0.21	< 0.085	0.075	*< 0.042*
WB-257-11.5-13.5	WB-257	9/15/2023	11.5	13.5	1.2	None	None	None	RED CLAY	< 0.086	< 0.086	< 0.086	*< 0.022*	< 0.086	< 0.022	0.038 JB^c	< 0.086	< 0.086	< 0.022	*< 0.043*

TABLE 3A
Soil Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

Category	VOC	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH
Chemical Name	Xylenes (total)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Industrial Direct Contact RCLs	**260**	**72.7**	**3010**	**45200**	**NE**	**100000**	**20.8**	**2.11**	**21.1**	**NE**	**211**	**2110**
Non-Industrial Direct Contact RCLs	260	17.6	239	3590	NE	17900	1.14	0.115	1.15	NE	11.5	115
Groundwater Pathway RCLs	*3.96*	*NE*	*NE*	*NE*	*NE*	*196.9*	*NE*	*0.47*	*0.478*	*NE*	*NE*	*0.144*
20X TCLP Threshold	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Sample ID	Boring ID	Sample Date	Start Depth (ft)	End Depth (ft)	PID Reading (ppm)	Debris	Odor	Staining	Soil Type									
WB-229-2-3.5	WB-229	9/12/2023	2	5	2.4	glass debris (<5%) at 2 to 3.5 fbg	None	None	SILT (FILL)	< 0.038	0.082 JF1	0.097 F1	0.33 F1	0.020 JF1	1.1 F1	2.8 F1	***2.4 F1***	***2.9 F1***	1.0 F1	1.1 F1	***2.8 F1***
WB-229-10-11	WB-229	9/12/2023	10	11	2.4	None	None	None	SAND (FILL)	< 0.039	< 0.087	< 0.087	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043 ^c	< 0.043	< 0.043
WB-230-1-2	WB-230	9/12/2023	1	2	5.4	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	< 0.033	0.11	0.14	0.12	0.049	0.27	0.68	***0.76***	***0.91***	0.45	0.27	***0.69***
WB-230-3-4	WB-230	9/12/2023	3	4	1.5	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	< 0.035	0.16	0.22	0.092	0.028 J	0.16	0.31	0.33	0.42	0.23	0.12	***0.35***
WB-230-7-8	WB-230	9/12/2023	7	8	1.4	None	None	None	SAND (FILL)	< 0.043	< 0.087	< 0.087	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043	< 0.043
WB-231-2-3.5	WB-231	9/12/2023	2	5	1	pockets of debris - slag at 2 fbg, brick at 2.5 fbg, and coal at 3.5 fbg	None	None	CLAY/SAND/GRAVEL (FILL)	0.034 J	0.022 J	0.032 J	0.019 J	0.033 J	0.073	0.45	***0.48***	***0.84***	0.38	0.29	***0.58***
WB-231-11-12	WB-231	9/12/2023	11	12	2.8	metal debris at 11.5 fbg	None	None	SAND (FILL)	< 0.036	< 0.081	< 0.081	< 0.040	< 0.040	0.012 J	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
WB-232-5-7	WB-232	9/13/2023	5	7	1	slag and wood debris (25%) at 5 to 5.75 fbg	None	None	SILT (FILL)	< 0.032	0.039 J	0.051 J	0.071	0.0084 J	0.23	0.52	***0.58***	***0.65***	0.33 ^c*	0.24	***0.64***
WB-232-11-12	WB-232	9/13/2023	11	12	6.6	None	None	None	RED CLAY	< 0.090	< 0.14	< 0.14	< 0.069	< 0.069	< 0.069	0.026 J	< 0.069	0.019 J	< 0.069 ^c*	< 0.069	< 0.069
WB-233-1-3	WB-233	9/13/2023	1	3	4.6	slag debris (5%) at 1 to 4 fbg	None	None	SILT (FILL)	< 0.028	< 0.066	0.0080 J	< 0.033	< 0.033	0.012 J	0.041	0.043	0.054	0.037 ^c*	0.015 J	0.052
WB-233-6-8	WB-233	9/13/2023	6	8	2.9	slag and wood debris (25%) at 6 to 8 fbg	slight chemical odor	None	SAND (FILL)	< 0.035	0.34	0.4	0.013 J	0.0076 J	0.037 J	0.057	0.044	0.056	0.043 ^c*	0.018 J	0.079
WB-233-11-12	WB-233	9/13/2023	11	12	15.6	None	None	None	RED CLAY	< 0.054	< 0.086	< 0.086	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042
WB-234-1-3	WB-234	9/14/2023	1	3	1.4	slag and concrete debris (15%); pockets of concrete debris at 1 fbg, 2.74 fbg, and 3.75 fbg	None	None	SILT (FILL)	< 0.029	0.015 JF1	0.022 JF1	0.032 JF1	0.0095 JF1	0.075 F1	0.22 F1	0.21 F1	0.26 F1	0.11 F1	0.098 F1	***0.24 F1***
WB-234-5-6.5	WB-234	9/14/2023	5	5	1.4	concrete and slag debris (15%) at 5 to 6.5 fbg	None	None	SILT (FILL)	< 0.030	0.13 J	0.17 J	0.42	0.034 J	0.87	1.8	***2***	***2.2***	1.1	0.87	***1.8***
WB-235-0.5-2.5	WB-235	9/14/2023	0.5	2.5	1	slag debris (5%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	< 0.034	0.050 J	0.063 J	0.13	0.019 J	0.25	0.6	***0.64***	***0.69***	0.35	0.29	***0.61***
WB-235-7.5-9.5	WB-235	9/14/2023	7.5	9.5	1.2	glass and wood debris (25%) at 7.25 to 9.5 fbg	None	None	SILT (FILL)	0.11	0.09	0.13	0.098	0.037 J	0.23	0.7	***0.8***	***0.95***	0.49	0.32	***0.73***
WB-236-0.5-2.5	WB-236	9/14/2023	0.5	2.5	1.9	pockets of concrete debris (15%) at 0.5 to 3.5 fbg	None	None	RED CLAY (FILL)	< 0.037	0.012 J	0.012 J	0.058	< 0.040	0.088	0.21	0.21	0.25	0.13	0.1	***0.22***
WB-236-7.5-8.5	WB-236	9/14/2023	7.5	8.5	3	metal, glass, concrete, slag, and wood debris (30%) at 7.5 to 8.5 fbg	None	None	SILT (FILL)	0.09	0.31 J	0.29 J	0.97	0.26 J	1.9	5	***5.2***	***5.6***	2.9	1.9	***6.3***
WB-237-1-3	WB-237	9/15/2023	1	3	2.7	pockets of wood and slg debris (5%) at 1 to 3.75 fbg	None	None	RED CLAY (FILL)	< 0.043	0.026 J	0.034 J	0.13	0.0072 J	0.35	0.56	***0.56***	***0.64***	0.3	0.26	***0.67***
WB-237-5.5-7	WB-237	9/15/2023	5.5	7	3.1	wood debris (15%) at 5.25 to 7 fbg	None	None	SAND (FILL)	< 0.036	0.045 J	0.057 J	0.012 J	0.0074 J	0.037 J	0.1	0.11	0.12	0.071	0.046	0.12
WB-238-1-3	WB-238	9/15/2023	1	3	1.9	wood, slag, concrete, brick, and ceramic debris (15%) at 0.5 to 2.75 fbg	None	None	SILT (FILL)	0.056 J	0.86 J	0.84 J	3.2	1.6	13	33	***37***	***43***	17	15	***32***
WB-238-5-7	WB-238	9/15/2023	5	7	1.6	None	None	None	SAND	< 0.041	< 0.083	< 0.083	< 0.041	< 0.041	0.015 J	0.053	0.057	0.059	0.037 J	0.024 J	0.049
WB-239 (1-2.4)	WB-239	9/12/2023	1	2.4	1.3	asphalt debris (up to 10%) at 1 to 2.4 fbg	None	None	SAND (FILL)	0.12	0.055 J	0.071 J	0.037 J	0.011 J	0.13	0.63	***0.58***	***0.7***	0.29	0.27	***0.61***
WB-239 (4.4-6)	WB-239	9/12/2023	4.4	6	0.0	None	None	None	SAND	0.018 J	0.024 J	0.032 J	0.0079 J	0.0060 J	0.019 J	0.074	0.075	0.082	0.04	0.034 J	0.064
WB-240 (1-3)	WB-240	9/12/2023	1	3	0.0	None	None	None	GRAVEL (FILL)	0.078	0.060 J	0.078	0.026	0.026 J	0.1	0.3	0.38	0.45	0.24	0.15	***0.38***
WB-240 (5-7)	WB-240	9/12/2023	5	7	0.0	None	None	None	RED CLAY	< 0.035	< 0.080	< 0.080	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039
WB-241-0.5-2	WB-241	9/12/2023	0.5	2	1.2	brick and wood debris (10%) at 0.5 to 2 fbg	None	None	GRAVEL (FILL)	< 0.036	0.020 J	0.030 J	0.034 J	0.24	0.24	0.9	***2.1***	***1.8***	1.3 ^c	0.79	***1***
WB-241-3-3.75	WB-241	9/12/2023	3	3.75	2.3	None	None	None	SAND (FILL)	< 0.048	< 0.15	0.020 J	0.014 J	< 0.075	0.040 J	0.16	0.14	0.15	0.075	0.066 J	0.14
WB-241-5-7	WB-241	9/12/2023	5	7	0.8	None	None	None	SAND (FILL)	< 0.041	< 0.086	< 0.086	< 0.042	< 0.042	< 0.042	0.022 J	0.042	0.039 J	0.034 J^c	< 0.042	0.014 J
WB-242-1.5-2.5	WB-242	9/12/2023	1.5	2.5	1	trace wood and slag debris (<5%) at 1.5 to 3 fbg	None	None	SILT (FILL)	0.065	0.11	0.14	0.29	0.039	0.66	1.4	***1.5***	***1.7***	0.76	0.64	***1.3***
WB-242-8-8.75	WB-242	9/12/2023	8	8.75	0.5	None	None	None	SAND (FILL)	< 0.035	< 0.078	< 0.078	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038
WB-243-2-4	WB-243	9/12/2023	2	4	0.8	trace wood and slag debris (<5%) at 0.5 to 3 fbg	None	None	GRAVEL/SAND (FILL)	0.045	< 0.086	< 0.086	< 0.042	< 0.042	< 0.042	0.030 J	0.029 J	0.029 J	0.015 J	< 0.042	0.023 J
WB-243-10-12	WB-243	9/12/2023	10	12	0.9	None	None	None	RED CLAY	0.11	0.027 J	0.039 J	0.029 J	0.029 J	0.067	0.19	0.22	0.28	0.11 ^c	0.1	***0.23***
WB-244-5-7	WB-244	9/12/2023	5	7	2.1	trace slag debris (<5%) at 5 to 7 fbg	None	None	SAND (FILL)	0.086	0.13	0.19	0.23	0.0077 J	0.35	0.54	***0.56***	***0.64***	0.3	0.26	***0.57***
WB-244-10.5-11.5	WB-244	9/12/2023	10.5	11.5	2	trace wood debris (<5%) at 10.5 to 11.5 fbg	None	None	RED CLAY	< 0.18	< 0.25	< 0.25	< 0.12	< 0.12	0.025 J	0.057 J	< 0.12	0.040 J	< 0.12 ^c	< 0.12	< 0.12
WB-245-1-3	WB-245	9/12/2023	1	3	1.6	pockets of slag debris at 1.5 fbg and 2.75 fbg	None	None	RED CLAY (FILL)	< 0.041	< 0.089	< 0.089	< 0.044	< 0.044	< 0.044	0.013 J	< 0.044	< 0.044	< 0.044	< 0.044	< 0.044
WB-245-10.5-12	WB-245	9/12/2023	10.5	12	2	trace wood and ceramic debris (<5%) at 10.5 to 12 fbg	None	None	RED CLAY	< 0.081	< 0.13	< 0.13	< 0.066	< 0.066	< 0.066	0.025 J	< 0.066	0.017 J	< 0.066 ^c	< 0.066	< 0.066
WB-246-1-3	WB-246	9/13/2023	1	3	1.2	trace debris at 0 to 3.5 fbg	None	None	SILT (FILL)	< 0.049	0.0095 J	0.013 J	0.0067 J	0.011 J	0.026 J	0.16	0.23	0.31	0.15 ^c*	0.11	***0.25***
WB-246-7.5-9-DEBRIS	WB-246	9/13/2023	7.5	9	5.6	brick, glass, metal, slag, and wood debris (80%) at 7 to 8 fbg	moderate chemical-like odor	dark iridescent sheen	SAND (FILL)	--	0.25 J	0.29 J	0.34	0.17 J	1.3	2.3	***2.3***	***2.2***	1.1	0.7	***3.1***
WB-246-10.5-12	WB-246	9/13/2023	10.5	12	3.6	None	None	None	RED CLAY	< 0.039	< 0.085	< 0.085	< 0.042	< 0.042	0.012 J	0.046	0.043	0.048	0.022 J	0.018 J	0.041 J
WB-247-0-1.25	WB-247	9/13/2023	0	1.25	1.5	None	None	None	SILT (FILL)	< 0.043	0.016 J	0.022 J	0.010 J	< 0.042	0.033 J	0.1	0.14	0.16	0.066 ^c*	0.049	0.12
WB-247-6.25-8.25	WB-247	9/13/2023	6.25	8.25	2.6	wood and slag debris (5%) at 5 to 8.5 fbg	slight to strong chemical odor	None	SAND (FILL)	0.39	0.73	0.35	0.7	0.1	5.5	6.5	***5.6***	***6***	2.5 ^c*	2.6	***6.2***
WB-247-11.5-13.25	WB-247	9/13/2023	11.5	13.25	5.9	None	None	None	RED CLAY	< 0.075	< 0.12	< 0.12	< 0.057	< 0.057	< 0.057	0.020 J	< 0.057	0.013 J	< 0.057	< 0.057	< 0.057
WB-248-1-3	WB-248	9/13/2023	1	3	4.6	wood, concrete, slag, and bituminous debris (25%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	0.049	0.12	0.18	0.66	0.018 J	1	2.5	***2.5***	***3***	0.93 ^c*	1.3	***2.9***
WB-248-6-7	WB-248	9/13/2023	6	7	3.9	wood and slag debris (25%) at 5 to 7 fbg	None	None	SILT (FILL)	< 0.045	0.029 J	0.040 J	0.026 J	< 0.047	0.051	0.13	0.14	0.17	0.084 ^c*	0.06	0.14
WB-249-2-3	WB-249	9/13/2023	2	3	3.9	concrete and slag debris (5%) at 2 to 3 fbg	None	None	SILT (FILL)	0.56	0.12	0.14	0.16	0.088	0.38	0.92	***1.1***	***1.2***	0.67 ^c*	0.49	***0.96***
WB-249-5-6.5	WB-249	9/13/2023	5	6.5	4.9	slag, wood, and concrete debris (25%) at 5 to 6.5 fbg	None	None	SILT (FILL)	0.16	0.012 J	0.018 J	0.011 J	< 0.040	0.021 J	0.065	0.068	0.074	0.046 ^c*	0.034 J	0.063
WB-250-0.5-2	WB-250	9/14/2023	0.5	2	2.6	wood, glass, and concrete debris (15%) at 2.5 to 4 fbg	None	None	SILT (FILL)	< 0.031	< 0.071	< 0.071	0.0091 J	< 0.035	0.023 J	0.11	0.12	0.15	0.086	0.05	0.11
WB-250-7-8	WB-250	9/14/2023	7	8	1.8	wood, slag, glass, and concrete debris (15%) at 6.25 to 9.25 fbg	None	None	SILT (FILL)	< 0.037	0.22	0.34	0.53	0.062	1.1	2	***2***	***2.4***	1.2	0.87	***2.2***
WB-251-2-3.5	WB-251	9/13/2023	2	3.5	2.2	None	None	None	RED CLAY (FILL)	< 0.035	0.031 J	0.038 J	0.064	0.014 J	0.2	0.67	***0.82***	***0.87***	0.42	0.33	***0.68***
WB-251-11-13	WB-251	9/13/2023	11	13	2.6	wood debris (5%) at 11 to 13.5 fbg	None	None	SAND (FILL)	< 0.044	< 0.083	< 0.083	< 0.041	< 0.041	0.013 J	0.035 J	0.029 J	0.026 J	0.013 J^c*	0.013 J	0.031 J
WB-252-0-1.75	WB-252	9/14/2023	0	1.75	2.4	None	None	None	SILT (FILL)	< 0.037	0.016 J	0.021 J	0.043	0.011 J	0.09	0.21	0.26	0.32	0.16	0.099	***0.25***
WB-252-5-7	WB-252	9/14/2023	5	7	4.3	wood, metal, glass, concrete, ceramic, and brick debris (60%) at 5 to 8 fbg	None	None	SILT (FILL)	0.034 J	0.16	0.24	0.36	0.059	0.89	2.1	***2.1***	***2.4***	1	0.94	***2.1***
WB-253-1-3	WB-253	9/14/2023	1	3	1.7	wood, concrete, and coal debris (5%) at 1 to 4.75 fbg	None	None	RED CLAY (FILL)	< 0.037	0.023 J	0.028 J	0.036 J	0.0070 J	0.11	0.28	0.31	0.33	0.17	0.12	***0.3***
WB-253-7.25-9.25	WB-253	9/14/2023	7.25	9.25	2.6	brick, glass, slag, and wood debris (50%) at 7 to 9.25 fbg	slight chemical odor	None	SILT (FILL)	0.16	0.39 J	0.6	0.26	0.13 J	0.99	3	***3.4***	***3.4***	2.7	1.3	***3.2***
WB-253-11.5-13	WB-253	9/14/2023	11.5	13	3.9	wood debris (20%) at 11.5 to 13 fbg	None	None	ORGANIC MATERIAL (FILL)	< 0.093	< 1.7	< 1.7	0.35 J	< 0.84	0.27 J	0.78 J	0.44 J	***0.50 J***	< 0.84	< 0.84	***0.59 J***
WB-254-1-2.25	WB-254	9/14/2023	1	2.25	1.5	None	None	None	SILT/RED CLAY (FILL)	0.056	0.025 J	0.023 J	0.030 J	0.0073 J	0.087	0.24	0.27	0.31	0.16	0.12	***0.26***
WB-254-5-6.5	WB-254	9/14/2023	5	6.5	2.7	wood and glass debris (30%) at 5 to 7 fbg	None	None	SILT (FILL)	< 0.045	0.039 J	0.046 J	0.036 J	0.037 J	0.4	1.6	***2***	***2.2***	1.2	0.71	***1.6***
WB-255-1-3	WB-255	9/14/2023	1	3	1.9	pocket of concrete debris (10%) at 1.25 fbg	None	None	RED CLAY (FILL)	< 0.054	0.017 J	0.011 J	0.1	< 0.041	0.28	0.53	***0.65***	***0.58***	0.37	0.25	***0.52***
WB-255-5-6	WB-255	9/14/2023	5	6	2.5	wood and glass debris (30%) at 5 to 6 fbg	None	None	SILT (FILL)	0.15	1.6	2.2	7	0.10 J	14	24	***23***	***25***	9.8	9.4	***22***
WB-255-12-13	WB-255	9/14/2023	12	13	5.4	None	None	None	RED CLAY	< 0.094	0.071 J	0.14 J	0.24	0.042 J	0.47	1.5	***1.5***	***1.9***	0.69	0.74	***1.9***
WB-256-0.5-2	WB-256	9/15/2023	0.5	2	2.4	None	None	None	SILT (FILL)	0.027 J	0.14 J	0.12 J	0.85	0.026 J	2.1	4.3	***4.9***	***4.6***	2.5	2	***4.3***
WB-256-5-6.5	WB-256	9/15/2023	5	6.5	1.6	wood, slag, metal, and glass debris (50%) at 5 to 6.5 fbg	None	None	SAND (FILL)	< 0.060	< 0.55	0.091 J	0.13 J	0.11 J	0.5	1.6	***1.7***	***1.8***	0.83	0.79	***1.8***
WB-257-1-3	WB-257	9/15/2023	1	3	5.9	wood, concrete, and slag debris (5%) at 0.75 to 3 fbg	None	None	SILT (FILL)	0.045	0.62	0.93	1.5	0.22	3	5.6	***5.8***	***6.8***	2.8	2.5	***5.8***
WB-257-7-9	WB-257	9/15/2023	7	9	1.6	wood, slag, plastic, metal, glass, concrete, brick, and ceramic debris (60%) at 6 to 9 fbg	slight tire-like odor	None	SILT (FILL)	0.056	0.42	0.52	0.78	0.38	2.0 F1	5.0 F2F1	***4.9 F2F1***	***5.4 F1***	2.4 F2F1	2	***5.1 F2F1***
WB-257-11.5-13.5	WB-257	9/15/2023	11.5	13.5	1.2	None	None	None	RED CLAY	< 0.043	< 0.089	< 0.089	< 0.044	< 0.044	0.0094 J	0.029 J	0.022 J	0.022 J	< 0.044	< 0.044	0.019 J

TABLE 3A
Soil Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

	Category	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PCB	PCB	PCB
	Chemical Name	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene	Aroclor-1254	Aroclor-1260	PCBs (total)
	Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
	Industrial Direct Contact RCLs	**2.11**	**30100**	**30100**	**21.1**	**24.1**	**3.97**	**NE**	**22600**	**0.988**	**1**	**0.967**
	Non-Industrial Direct Contact RCLs	0.115	2390	2390	1.15	5.52	1.02	NE	1790	0.239	0.243	0.234
	Groundwater Pathway RCLs	*NE*	*88.9*	*14.8*	*NE*	*0.658*	*0.00276*	*NE*	*54.54*	*NE*	*NE*	*0.009384*
	20X TCLP Threshold	NE	NE	NE	NE	NE	2000	NE	NE	NE	NE	NE

Sample ID	Boring ID	Sample Date	Start Depth (ft)	End Depth (ft)	PID Reading (ppm)	Debris	Odor	Staining	Soil Type										
WB-229-2-3.5	WB-229	9/12/2023	2	5	2.4	glass debris (<5%) at 2 to 3.5 fbg	None	None	SILT (FILL)	0.39 F1	6.3 F1	0.29 F1	1.4 ^cF1	0.095 F1	--	3.4 F1	5.9 F1	< 0.021	0.04	*0.04*
WB-229-10-11	WB-229	9/12/2023	10	11	2.4	None	None	None	SAND (FILL)	< 0.043	< 0.043	< 0.043	< 0.043 ^c	< 0.043	--	< 0.043	< 0.043	< 0.022	< 0.022	*< 0.022*
WB-230-1-2	WB-230	9/12/2023	1	2	5.4	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	0.14	1.5	0.11	0.63 ^c	0.12	--	1.2	1.4	--	--	--
WB-230-3-4	WB-230	9/12/2023	3	4	1.5	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	0.084	0.68	0.08	0.32 ^c	0.19	--	0.66	0.64	--	--	--
WB-230-7-8	WB-230	9/12/2023	7	8	1.4	None	None	None	SAND (FILL)	< 0.043	< 0.043	< 0.043	< 0.043 ^c	< 0.043	--	< 0.043	< 0.043	--	--	--
WB-231-2-3.5	WB-231	9/12/2023	2	5	1	pockets of debris - slag at 2 fbg, brick at 2.5 fbg, and coal at 3.5 fbg	None	None	CLAY/SAND/GRAVEL (FILL)	0.14	0.74	0.026 J	0.56 ^c	0.032 J	--	0.3	0.73	--	--	--
WB-231-11-12	WB-231	9/12/2023	11	12	2.8	metal debris at 11.5 fbg	None	None	SAND (FILL)	< 0.040	0.010 J	0.0098 J	< 0.040 ^c	0.017 J	--	0.068	0.0087 J	--	--	--
WB-232-5-7	WB-232	9/13/2023	5	7	1	slag and wood debris (25%) at 5 to 5.75 fbg	None	None	SILT (FILL)	0.11	1.1	0.085	0.43 ^c	0.032 J	--	0.79	1.1	--	--	--
WB-232-11-12	WB-232	9/13/2023	11	12	6.6	None	None	None	RED CLAY	< 0.069	0.035 J	< 0.069	< 0.069 ^c	0.014 J	--	0.026 J	0.033 J	--	--	--
WB-233-1-3	WB-233	9/13/2023	1	3	4.6	slag debris (5%) at 1 to 4 fbg	None	None	SILT (FILL)	< 0.033	0.075	0.0064 J	0.059 ^c	< 0.033	--	0.049	0.07	< 0.017	< 0.017	*< 0.017*
WB-233-6-8	WB-233	9/13/2023	6	8	2.9	slag and wood debris (25%) at 6 to 8 fbg	slight chemical odor	None	SAND (FILL)	0.031 J	0.09	0.023 J	0.053 ^c	0.24	--	0.27	0.08	< 0.020	< 0.020	*< 0.020*
WB-233-11-12	WB-233	9/13/2023	11	12	15.6	None	None	None	RED CLAY	< 0.042	0.0093 J	< 0.042	< 0.042 ^c	< 0.042	--	0.0070 J	< 0.042	< 0.021	< 0.021	*< 0.021*
WB-234-1-3	WB-234	9/14/2023	1	3	1.4	slag and concrete debris (15%); pockets of concrete debris at 1 fbg, 2.74 fbg, and 3.75 fbg	None	None	SILT (FILL)	0.039 F1	0.52 F1	0.032 JF1	0.12 F1	0.022 JF1	--	0.37 F1	0.42 F1	--	--	--
WB-234-5-6.5	WB-234	9/14/2023	5	5	1.4	concrete and slag debris (15%) at 5 to 6.5 fbg	None	None	SILT (FILL)	0.42	4.4	0.47	1.7 ^c	0.27	--	3.1	3.8	--	--	--
WB-235-0.5-2.5	WB-235	9/14/2023	0.5	2.5	1	slag debris (5%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	0.14	1.3	0.098	0.49 ^c	0.069	--	0.94	1.2	--	--	--
WB-235-7.5-9.5	WB-235	9/14/2023	7.5	9.5	1.2	glass and wood debris (25%) at 7.25 to 9.5 fbg	None	None	SILT (FILL)	0.18	1.3	0.1	0.68 ^c	0.21	--	0.88	1.4	--	--	--
WB-236-0.5-2.5	WB-236	9/14/2023	0.5	2.5	1.9	pockets of concrete debris (15%) at 0.5 to 3.5 fbg	None	None	RED CLAY (FILL)	0.061	0.53	0.041	0.21 ^c	0.027 J	--	0.42	0.46	--	--	--
WB-236-7.5-8.5	WB-236	9/14/2023	7.5	8.5	3	metal, glass, concrete, slag, and wood debris (30%) at 7.5 to 8.5 fbg	None	None	SILT (FILL)	1.6	11	1.4	4.0 ^c	0.43	--	7.3	11	--	--	--
WB-237-1-3	WB-237	9/15/2023	1	3	2.7	pockets of wood and slag debris (5%) at 1 to 3.75 fbg	None	None	RED CLAY (FILL)	0.077	1.7	0.15	0.33	0.067	--	1.6	1.6	--	--	--
WB-237-5.5-7	WB-237	9/15/2023	5.5	7	3.1	wood debris (15%) at 5.25 to 7 fbg	None	None	SAND (FILL)	0.017 J	0.18	0.014 J	0.075	0.046	--	0.14	0.19	--	--	--
WB-238-1-3	WB-238	9/15/2023	1	3	1.9	wood, slag, concrete, brick, and ceramic debris (15%) at 0.5 to 2.75 fbg	None	None	SILT (FILL)	5.1	74	3.3	24	*1.2*	--	47	*78*	< 0.042	< 0.042	*< 0.042*
WB-238-5-7	WB-238	9/15/2023	5	7	1.6	None	None	None	SAND	0.012 J	0.099	< 0.041	0.035 J	< 0.041	--	0.040 J	0.088	< 0.061	< 0.061	*< 0.061*
WB-239 (1-2.4)	WB-239	9/12/2023	1	2.4	1.3	asphalt debris (up to 10%) at 1 to 2.4 fbg	None	None	SAND (FILL)	0.068	1	0.029 J	0.31	0.051	--	0.49	1	< 0.020	0.034	*0.034*
WB-239 (4.4-6)	WB-239	9/12/2023	4.4	6	0.0	None	None	None	SAND	0.011 J	0.14	0.013 J	0.046	0.034 J	--	0.069	0.12	< 0.028	< 0.028	*< 0.028*
WB-240 (1-3)	WB-240	9/12/2023	1	3	0.0	None	None	None	GRAVEL (FILL)	0.06	0.67	0.041	0.26	0.07	--	0.4	0.62	0.32	< 0.037	*0.32*
WB-240 (5-7)	WB-240	9/12/2023	5	7	0.0	None	None	None	RED CLAY	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	--	< 0.039	< 0.039	< 0.019	< 0.019	*< 0.019*
WB-241-0.5-2	WB-241	9/12/2023	0.5	2	1.2	brick and wood debris (10%) at 0.5 to 2 fbg	None	None	GRAVEL (FILL)	0.37 ^c	1.6	0.079	1.8 ^c	0.056	*< 0.77*	0.75	1.6	--	--	--
WB-241-3-3.75	WB-241	9/12/2023	3	3.75	2.3	None	None	None	SAND (FILL)	0.020 J	0.29	0.017 J	0.083	0.023 J	*< 1.5*	0.15	0.28	--	--	--
WB-241-5-7	WB-241	9/12/2023	5	7	0.8	None	None	None	SAND (FILL)	< 0.042 ^c	0.018 J	< 0.042	0.041 J^c	< 0.042	*< 0.86*	0.011 J	0.024 J	--	--	--
WB-242-1.5-2.5	WB-242	9/12/2023	1.5	2.5	1	trace wood and slag debris (<5%) at 1.5 to 3 fbg	None	None	SILT (FILL)	0.23	3	0.31	1.1 ^c	0.16	--	2.7	3	--	--	--
WB-242-8-8.75	WB-242	9/12/2023	8	8.75	0.5	None	None	None	SAND (FILL)	< 0.038	< 0.038	< 0.038	< 0.038 ^c	< 0.038	--	< 0.038	< 0.038	--	--	--
WB-243-2-4	WB-243	9/12/2023	2	4	0.8	trace wood and slag debris (<5%) at 0.5 to 3 fbg	None	None	GRAVEL/SAND (FILL)	0.029 J	0.045	< 0.042	0.040 J^c	< 0.042	--	0.024 J	0.046	< 0.021	< 0.021	*< 0.021*
WB-243-10-12	WB-243	9/12/2023	10	12	0.9	None	None	None	RED CLAY	0.065	0.47	0.037 J	0.19 ^c	0.11	--	0.3	0.48	< 0.030	< 0.030	*< 0.030*
WB-244-5-7	WB-244	9/12/2023	5	7	2.1	trace slag debris (<5%) at 5 to 7 fbg	None	None	SAND (FILL)	0.13	1.2	0.28	0.45 ^c	0.53	--	1.4	1	< 0.022	< 0.022	*< 0.022*
WB-244-10.5-11.5	WB-244	9/12/2023	10.5	11.5	2	trace wood debris (<5%) at 10.5 to 11.5 fbg	None	None	RED CLAY	< 0.12	0.099 J	0.021 J	< 0.12 ^c	< 0.12	--	0.098 J	0.079 J	< 0.064	< 0.064	*< 0.064*
WB-245-1-3	WB-245	9/12/2023	1	3	1.6	pockets of slag debris at 1.5 fbg and 2.75 fbg	None	None	RED CLAY (FILL)	< 0.044	0.023 J	0.0077 J	< 0.044 ^c	< 0.044	--	0.014 J	0.020 J	--	--	--
WB-245-10.5-12	WB-245	9/12/2023	10.5	12	2	trace wood and ceramic debris (<5%) at 10.5 to 12 fbg	None	None	RED CLAY	< 0.066	0.033 J	< 0.066	< 0.066 ^c	< 0.066	--	0.018 J	0.030 J	--	--	--
WB-246-1-3	WB-246	9/13/2023	1	3	1.2	trace debris at 0 to 3.5 fbg	None	None	SILT (FILL)	0.071	0.28	0.0073 J	0.22 ^c	0.013 J	--	0.092	0.32	--	--	--
WB-246-7.5-9-DEBRIS	WB-246	9/13/2023	7.5	9	5.6	brick, glass, metal, slag, and wood debris (80%) at 7 to 8 fbg	moderate chemical-like odor	dark iridescent sheen	SAND (FILL)	0.35	4.6	0.81	0.96	0.46	--	4.2	4.9	< 0.043	< 0.043	*< 0.043*
WB-246-10.5-12	WB-246	9/13/2023	10.5	12	3.6	None	None	None	RED CLAY	< 0.042	0.08	< 0.042	0.054 ^c	< 0.042	--	0.043	0.069	--	--	--
WB-247-0-1.25	WB-247	9/13/2023	0	1.25	1.5	None	None	None	SILT (FILL)	0.047	0.22	0.011 J	0.12 ^c	0.020 J	--	0.12	0.23	< 0.022	< 0.022 F1	*< 0.022*
WB-247-6.25-8.25	WB-247	9/13/2023	6.25	8.25	2.6	wood and slag debris (5%) at 5 to 8.5 fbg	slight to strong chemical odor	None	SAND (FILL)	0.82	17	1.8	3.4 ^c	0.35	--	15	14	< 0.55	7.1	*7.1*
WB-247-11.5-13.25	WB-247	9/13/2023	11.5	13.25	5.9	None	None	None	RED CLAY	< 0.057	0.024 J	< 0.057	0.039 J^c	< 0.057	--	0.015 J	0.022 J	< 0.030	< 0.030	*< 0.030*
WB-248-1-3	WB-248	9/13/2023	1	3	4.6	wood, concrete, slag, and bituminous debris (25%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	0.34	6.5	0.67	1.5 ^c	0.59	--	5.8	5.8	0.019	< 0.019	*0.019*
WB-248-6-7	WB-248	9/13/2023	6	7	3.9	wood and slag debris (25%) at 5 to 7 fbg	None	None	SILT (FILL)	0.054	0.25	0.027 J	0.14 ^c	0.047	--	0.2	0.23	< 0.023	< 0.023	*< 0.023*
WB-249-2-3	WB-249	9/13/2023	2	3	3.9	concrete and slag debris (5%) at 2 to 3 fbg	None	None	SILT (FILL)	0.24	2.1	0.18	0.93 ^c	0.15	--	1.8	1.9	--	--	--
WB-249-5-6.5	WB-249	9/13/2023	5	6.5	4.9	slag, wood, and concrete debris (25%) at 5 to 6.5 fbg	None	None	SILT (FILL)	0.038 J	0.14	0.011 J	0.080 ^c	0.018 J	--	0.099	0.13	--	--	--
WB-250-0.5-2	WB-250	9/14/2023	0.5	2	2.6	wood, glass, and concrete debris (15%) at 2.5 to 4 fbg	None	None	SILT (FILL)	0.044	0.21	0.0078 J	0.13 ^c	0.0064 J	--	0.096	0.19	--	--	--
WB-250-7-8	WB-250	9/14/2023	7	8	1.8	wood, slag, glass, and concrete debris (15%) at 6.25 to 9.25 fbg	None	None	SILT (FILL)	0.37	4.9	0.66	1.5 ^c	0.51	--	4.6	4.2	--	--	--
WB-251-2-3.5	WB-251	9/13/2023	2	3.5	2.2	None	None	None	RED CLAY (FILL)	0.17	1.3	0.071	0.63 ^c	0.042	--	0.71	1.2	--	--	--
WB-251-11-13	WB-251	9/13/2023	11	13	2.6	wood debris (5%) at 11 to 13.5 fbg	None	None	SAND (FILL)	< 0.041	0.053	< 0.041	0.039 J^c	< 0.041	--	0.045	0.056	--	--	--
WB-252-0-1.75	WB-252	9/14/2023	0	1.75	2.4	None	None	None	SILT (FILL)	0.039	0.51	0.036 J	0.18	0.022 J	--	0.39	0.47	--	--	--
WB-252-5-7	WB-252	9/14/2023	5	7	4.3	wood, metal, glass, concrete, ceramic, and brick debris (60%) at 5 to 8 fbg	None	None	SILT (FILL)	0.37	3.8	0.4	1.5 ^c	*0.66*	--	3.2	3.6	--	--	--
WB-253-1-3	WB-253	9/14/2023	1	3	1.7	wood, concrete, and coal debris (5%) at 1 to 4.75 fbg	None	None	RED CLAY (FILL)	0.085	0.52	0.052	0.26 ^c	0.028 J	--	0.36	0.53	--	--	--
WB-253-7.25-9.25	WB-253	9/14/2023	7.25	9.25	2.6	brick, glass, slag, and wood debris (50%) at 7 to 9.25 fbg	slight chemical odor	None	SILT (FILL)	0.52	5.1	0.41	2.2	0.64	--	3.6	7.8	--	--	--
WB-253-11.5-13	WB-253	9/14/2023	11.5	13	3.9	wood debris (20%) at 11.5 to 13 fbg	None	None	ORGANIC MATERIAL (FILL)	< 0.84	1.7	0.13 J	0.30 J	*< 0.84*	--	1.1	1.4	--	--	--
WB-254-1-2.25	WB-254	9/14/2023	1	2.25	1.5	None	None	None	SILT/RED CLAY (FILL)	0.071	0.53	0.027 J	0.23 ^c	0.1	--	0.32	0.46	--	--	--
WB-254-5-6.5	WB-254	9/14/2023	5	6.5	2.7	wood and glass debris (30%) at 5 to 7 fbg	None	None	SILT (FILL)	0.37	2.7	0.056	1.5 ^c	0.064	--	1.2	2.6	--	--	--
WB-255-1-3	WB-255	9/14/2023	1	3	1.9	pocket of concrete debris (10%) at 1.25 fbg	None	None	RED CLAY (FILL)	0.11	1.1	0.094	0.48 ^c	0.016 J	--	0.81	1.2	< 0.021	< 0.021	*< 0.021*
WB-255-5-6	WB-255	9/14/2023	5	6	2.5	wood and glass debris (30%) at 5 to 6 fbg	None	None	SILT (FILL)	3.5	58	8.6	14 ^c	*5.1*	--	59	48	< 0.020	< 0.020	*< 0.020*
WB-255-12-13	WB-255	9/14/2023	12	13	5.4	None	None	None	RED CLAY	0.28	3.8	0.13 J	1.1	0.19 J	--	2.2	4	< 0.093	< 0.093	*< 0.093*
WB-256-0.5-2	WB-256	9/15/2023	0.5	2	2.4	None	None	None	SILT (FILL)	0.47	10	0.66	2.6	0.15 J	--	7.1	11	--	--	--
WB-256-5-6.5	WB-256	9/15/2023	5	6.5	1.6	wood, slag, metal, and glass debris (50%) at 5 to 6.5 fbg	None	None	SAND (FILL)	0.26 J	3.4	0.17 J	0.88	0.13 J	--	2	3.4	--	--	--
WB-257-1-3	WB-257	9/15/2023	1	3	5.9	wood, concrete, and slag debris (5%) at 0.75 to 3 fbg	None	None	SILT (FILL)	0.82	13	1.7	3.1	*2.2*	--	11	11	--	--	--
WB-257-7-9	WB-257	9/15/2023	7	9	1.6	wood, slag, plastic, metal, glass, concrete, brick, and ceramic debris (60%) at 6 to 9 fbg	slight tire-like odor	None	SILT (FILL)	0.59 F1	9.7 F2F1	1	2.7 F2F1	*1.1*	--	7.7 F2F1	8.6 F2F1	--	--	--
WB-257-11.5-13.5	WB-257	9/15/2023	11.5	13.5	1.2	None	None	None	RED CLAY	< 0.044	0.043 J	< 0.044	0.015 J	< 0.044	--	0.032 J	0.040 J	--	--	--

TABLE 3A
Soil Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

Category	ORGANOTINS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS
Chemical Name	Tributyltin	Arsenic	Barium	Cadmium	Chromium (total)	Lead	Mercury	Selenium	Silver
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Soil Background Threshold Values	NE	8.3	364	1.07	43.5	51.6	NE	NE	NE
Industrial Direct Contact RCLs	**350**	**3**	**100000**	**985**	**100000****	**800**	**3.13**	**5840**	**5840**
Non-Industrial Direct Contact RCLs	23.5	0.677	15300	71.1	100000**	400	3.13	391	391
Groundwater Pathway RCLs	*NE*	*0.584*	*164.8*	*0.752*	*360000*	*27*	*0.208*	*0.52*	*0.849*
20X TCLP Threshold	NE	100	2000	20	100	100	4	20	100

Sample ID	Boring ID	Sample Date	Start Depth (ft)	End Depth (ft)	PID Reading (ppm)	Debris	Odor	Staining	Soil Type									
WB-229-2-3.5	WB-229	9/12/2023	2	5	2.4	glass debris (<5%) at 2 to 3.5 fbg	None	None	SILT (FILL)	--	***4.2***	141	*< 3.0*	18.2	***46.9***	0.036 J	***0.84***	*< 3.0*
WB-229-10-11	WB-229	9/12/2023	10	11	2.4	None	None	None	SAND (FILL)	--	***1.2***	10.3 J	< 0.64	5.7	2.8	< 0.043	*< 0.64*	< 0.64
WB-230-1-2	WB-230	9/12/2023	1	2	5.4	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	--	***4.5 J***	81.2	0.45 J	24.7	*151*	0.13	0.13 J	< 0.51
WB-230-3-4	WB-230	9/12/2023	3	4	1.5	pockets of debris - red brick at 2 fbg and slag at 4 fbg	None	None	CLAY (FILL)	--	***6.3***	79.5	*0.81*	19.9	*223*	0.14	***0.95***	< 0.47
WB-230-7-8	WB-230	9/12/2023	7	8	1.4	None	None	None	SAND (FILL)	--	***1.3***	9.3 J	< 0.52	5.8	2.9	< 0.040	*< 0.52*	< 0.52
WB-231-2-3.5	WB-231	9/12/2023	2	5	1	pockets of debris - slag at 2 fbg, brick at 2.5 fbg, and coal at 3.5 fbg	None	None	CLAY/SAND/GRAVEL (FILL)	--	***4.1***	126	0.48 J	37.1	*112*	0.073	*< 0.59*	< 0.59
WB-231-11-12	WB-231	9/12/2023	11	12	2.8	metal debris at 11.5 fbg	None	None	SAND (FILL)	--	***1.2***	15.7 J	< 0.49	6.3	2.6	< 0.037	< 0.49	< 0.49
WB-232-5-7	WB-232	9/13/2023	5	7	1	slag and wood debris (25%) at 5 to 5.75 fbg	None	None	SILT (FILL)	--	***3.7***	73.6	0.33 JF1	22.7	*38.0 F1*	0.023 J	< 0.45 F1	< 0.45 F1
WB-232-11-12	WB-232	9/13/2023	11	12	6.6	None	None	None	RED CLAY	--	***3.4***	49.4	0.20 J	8.3	3.5	0.058 J	***0.71 J***	*< 0.98*
WB-233-1-3	WB-233	9/13/2023	1	3	4.6	slag debris (5%) at 1 to 4 fbg	None	None	SILT (FILL)	--	***1.8***	60.2	0.14 J	13.5	15.9	< 0.033	< 0.51	< 0.51
WB-233-6-8	WB-233	9/13/2023	6	8	2.9	slag and wood debris (25%) at 6 to 8 fbg	slight chemical odor	None	SAND (FILL)	--	***2.7***	122	0.36 J	16.5	*50.9*	0.091	***0.82***	< 0.60
WB-233-11-12	WB-233	9/13/2023	11	12	15.6	None	None	None	RED CLAY	--	***2.8***	*179*	0.28 J	45.1	11.6	< 0.042	*< 0.53*	< 0.53
WB-234-1-3	WB-234	9/14/2023	1	3	1.4	slag and concrete debris (15%); pockets of concrete debris at 1 fbg, 2.74 fbg, and 3.75 fbg	None	None	SILT (FILL)	--	***4.0 F1F2***	*331 F1*	0.41 J	27.7 F1F2	*71.9 F1*	0.12 F1	0.42 JF1F2	< 0.56
WB-234-5-6.5	WB-234	9/14/2023	5	5	1.4	concrete and slag debris (15%) at 5 to 6.5 fbg	None	None	SILT (FILL)	--	***3.4***	89.9	0.68	48.7	*125*	0.16	0.48 J	< 0.53
WB-235-0.5-2.5	WB-235	9/14/2023	0.5	2.5	1	slag debris (5%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	--	***1.6***	*395*	0.44 J	27.6	*74*	0.12	*< 0.60*	< 0.60
WB-235-7.5-9.5	WB-235	9/14/2023	7.5	9.5	1.2	glass and wood debris (25%) at 7.25 to 9.5 fbg	None	None	SILT (FILL)	--	***3.5***	130	*0.84*	20.9	*151*	***0.6***	0.35 J	< 0.61
WB-236-0.5-2.5	WB-236	9/14/2023	0.5	2.5	1.9	pockets of concrete debris (15%) at 0.5 to 3.5 fbg	None	None	RED CLAY (FILL)	--	***3.4***	120	0.56	40.1	*163*	0.095	0.15 J	< 0.46
WB-236-7.5-8.5	WB-236	9/14/2023	7.5	8.5	3	metal, glass, concrete, slag, and wood debris (30%) at 7.5 to 8.5 fbg	None	None	SILT (FILL)	--	***6.1***	*211*	*0.79*	14	*307*	***0.43***	***0.54***	< 0.50
WB-237-1-3	WB-237	9/15/2023	1	3	2.7	pockets of wood and slg debris (5%) at 1 to 3.75 fbg	None	None	RED CLAY (FILL)	--	***9.6***	157 F1	0.48 J	34.3 F1	*33.8 F1*	0.068 B	0.12 JF1	< 0.45
WB-237-5.5-7	WB-237	9/15/2023	5.5	7	3.1	wood debris (15%) at 5.25 to 7 fbg	None	None	SAND (FILL)	--	***1.7 B***	134	0.20 J	8.1	14.3	< 0.038	***1***	< 0.45
WB-238-1-3	WB-238	9/15/2023	1	3	1.9	wood, slag, concrete, brick, and ceramic debris (15%) at 0.5 to 2.75 fbg	None	None	SILT (FILL)	--	***1.5***	*185*	0.37 J	6.4	*71.6*	*0.49 B*	*1.1*	< 0.53
WB-238-5-7	WB-238	9/15/2023	5	7	1.6	None	None	None	SAND	--	***0.73***	29.1	0.13 J	7.2	2.5	0.039 B	0.14 J	< 0.48
WB-239 (1-2.4)	WB-239	9/12/2023	1	2.4	1.3	asphalt debris (up to 10%) at 1 to 2.4 fbg	None	None	SAND (FILL)	< 0.0038 *	***61.0 F1***	48.3	0.29 J	17.5	*49.4 F2F1*	0.14 F1	0.19 J	< 0.57
WB-239 (4.4-6)	WB-239	9/12/2023	4.4	6	0.0	None	None	None	SAND	< 0.0035 *	***1.6***	18.9	0.097 J	10.5	10.2	< 0.036	< 0.42	< 0.42
WB-240 (1-3)	WB-240	9/12/2023	1	3	0.0	None	None	None	GRAVEL (FILL)	< 0.0034 *	***4.9***	*259*	0.45 J	41.2	*583*	***1.8***	< 0.40	< 0.40
WB-240 (5-7)	WB-240	9/12/2023	5	7	0.0	None	None	None	RED CLAY	< 0.0035 *	***1.6***	30	0.14 J	12.7	6.2	< 0.038	< 0.41	< 0.41
WB-241-0.5-2	WB-241	9/12/2023	0.5	2	1.2	brick and wood debris (10%) at 0.5 to 2 fbg	None	None	GRAVEL (FILL)	--	***11.4***	45.3	0.53 J	20.8	*104*	0.029 J	0.18 J	< 0.54
WB-241-3-3.75	WB-241	9/12/2023	3	3.75	2.3	None	None	None	SAND (FILL)	--	***1.9***	28.3	0.10 J	12.1	10.1	< 0.045	*< 0.68*	< 0.68
WB-241-5-7	WB-241	9/12/2023	5	7	0.8	None	None	None	SAND (FILL)	--	***1.4***	14.1 J	0.077 J	10	4.7	< 0.041	< 0.46	< 0.46
WB-242-1.5-2.5	WB-242	9/12/2023	1.5	2.5	1	trace wood and slag debris (<5%) at 1.5 to 3 fbg	None	None	SILT (FILL)	--	***4.8***	120	0.56	25	*200*	*0.51*	0.42	< 0.36
WB-242-8-8.75	WB-242	9/12/2023	8	8.75	0.5	None	None	None	SAND (FILL)	--	***1.2***	9.5 J	< 0.59	6.4	2.9	< 0.039	*< 0.59*	< 0.59
WB-243-2-4	WB-243	9/12/2023	2	4	0.8	trace wood and slag debris (<5%) at 0.5 to 3 fbg	None	None	GRAVEL/SAND (FILL)	< 0.0039 *	***2***	45.1	0.14 J	12.5	*32.8*	< 0.038	0.15 J	< 0.53
WB-243-10-12	WB-243	9/12/2023	10	12	0.9	None	None	None	RED CLAY	< 0.0054 *	***4.2***	102	*0.79*	26.4	*128*	***0.7***	0.46 J	< 0.74
WB-244-5-7	WB-244	9/12/2023	5	7	2.1	trace slag debris (<5%) at 5 to 7 fbg	None	None	SAND (FILL)	< 0.0041 *	***6.5***	57	0.61	31	*32*	0.059	0.27 J	< 0.48
WB-244-10.5-11.5	WB-244	9/12/2023	10.5	11.5	2	trace wood debris (<5%) at 10.5 to 11.5 fbg	None	None	RED CLAY	< 0.012 *	***8***	53.9 J	0.51 J	9.9	6.1	< 0.13	***0.91 J***	*< 1.4*
WB-245-1-3	WB-245	9/12/2023	1	3	1.6	pockets of slag debris at 1.5 fbg and 2.75 fbg	None	None	RED CLAY (FILL)	--	***3.5***	*180*	0.49	39.5	*50.3*	< 0.042	< 0.45	< 0.45
WB-245-10.5-12	WB-245	9/12/2023	10.5	12	2	trace wood and ceramic debris (<5%) at 10.5 to 12 fbg	None	None	RED CLAY	--	***4.4***	121	0.67	40	*67*	***0.55***	0.33 J	< 0.67
WB-246-1-3	WB-246	9/13/2023	1	3	1.2	trace debris at 0 to 3.5 fbg	None	None	SILT (FILL)	--	***2.2***	27.8	0.15 J	10.2	16.8	0.04	0.17 J	0.14 J
WB-246-7.5-9-DEBRIS	WB-246	9/13/2023	7.5	9	5.6	brick, glass, metal, slag, and wood debris (80%) at 7 to 8 fbg	moderate chemical-like odor	dark iridescent sheen	SAND (FILL)	< 0.0051	***43.3***	*1980*	*3.5*	63.5	*6200*	*0.33 B*	*2.1*	< 0.82
WB-246-10.5-12	WB-246	9/13/2023	10.5	12	3.6	None	None	None	RED CLAY	--	***1.5***	58	0.11 J	19.1	8	0.029 J	*< 0.57*	0.17 J
WB-247-0-1.25	WB-247	9/13/2023	0	1.25	1.5	None	None	None	SILT (FILL)	< 0.0039	***10.4***	53.8	0.45 J	18	*30.7*	0.05	*0.63*	< 0.54
WB-247-6.25-8.25	WB-247	9/13/2023	6.25	8.25	2.6	wood and slag debris (5%) at 5 to 8.5 fbg	slight to strong chemical odor	None	SAND (FILL)	< 0.0049	***4.3***	91.8	0.74	24.5	*60.8*	*0.73*	0.49 J	< 0.73
WB-247-11.5-13.25	WB-247	9/13/2023	11.5	13.25	5.9	None	None	None	RED CLAY	< 0.0054	***3.9***	*181*	0.31 J	44.9	15.6	0.067	*< 0.85*	*< 0.85*
WB-248-1-3	WB-248	9/13/2023	1	3	4.6	wood, concrete, slag, and bituminous debris (25%) at 0.25 to 3.5 fbg	None	None	SILT (FILL)	< 0.0034	***2.8***	46.7	0.28 J	23.6	*56.1*	*0.3*	0.22 J	< 0.41
WB-248-6-7	WB-248	9/13/2023	6	7	3.9	wood and slag debris (25%) at 5 to 7 fbg	None	None	SILT (FILL)	< 0.0043	***2.5***	49.5	0.21 J	12.2	*33.1*	0.040 J	0.35 J	< 0.71
WB-249-2-3	WB-249	9/13/2023	2	3	3.9	concrete and slag debris (5%) at 2 to 3 fbg	None	None	SILT (FILL)	--	***2.7***	140	0.42 J	37.4	*54.6*	0.075	0.15 J	< 0.60
WB-249-5-6.5	WB-249	9/13/2023	5	6.5	4.9	slag, wood, and concrete debris (25%) at 5 to 6.5 fbg	None	None	SILT (FILL)	--	***3.8***	85.6	0.32 J	19.1	*65.8*	0.12	0.31 J	< 0.59
WB-250-0.5-2	WB-250	9/14/2023	0.5	2	2.6	wood, glass, and concrete debris (15%) at 2.5 to 4 fbg	None	None	SILT (FILL)	--	***1.6***	30.3	0.34 J	15.3	11.8	0.026 J	0.12 J	< 0.48
WB-250-7-8	WB-250	9/14/2023	7	8	1.8	wood, slag, glass, and concrete debris (15%) at 6.25 to 9.25 fbg	None	None	SILT (FILL)	--	***2.6***	136	*0.82*	32.3	*142*	0.13	0.43 J	< 0.48
WB-251-2-3.5	WB-251	9/13/2023	2	3.5	2.2	None	None	None	RED CLAY (FILL)	--	***3.3***	141	0.35 J	36	*45*	0.030 J	< 0.45	< 0.45
WB-251-11-13	WB-251	9/13/2023	11	13	2.6	wood debris (5%) at 11 to 13.5 fbg	None	None	SAND (FILL)	--	***2.3***	35.1	0.24 J	12.7	10.4	< 0.040	*< 0.55*	< 0.55
WB-252-0-1.75	WB-252	9/14/2023	0	1.75	2.4	None	None	None	SILT (FILL)	--	***3.1***	79.3	0.47 J	20.8	*31.6*	0.042	0.16 J	< 0.49
WB-252-5-7	WB-252	9/14/2023	5	7	4.3	wood, metal, glass, concrete, ceramic, and brick debris (60%) at 5 to 8 fbg	None	None	SILT (FILL)	--	***5.5***	*277*	*1.5*	27.4	*393*	*0.48*	*0.79*	*853*
WB-253-1-3	WB-253	9/14/2023	1	3	1.7	wood, concrete, and coal debris (5%) at 1 to 4.75 fbg	None	None	RED CLAY (FILL)	--	***1.9***	94.6	0.49 J	28.2	22.4	0.044	*< 0.54*	< 0.54
WB-253-7.25-9.25	WB-253	9/14/2023	7.25	9.25	2.6	brick, glass, slag, and wood debris (50%) at 7 to 9.25 fbg	slight chemical odor	None	SILT (FILL)	--	***10.4***	*371*	*2.1*	23.1	*556*	*0.71*	*1.2*	< 0.63
WB-253-11.5-13	WB-253	9/14/2023	11.5	13	3.9	wood debris (20%) at 11.5 to 13 fbg	None	None	ORGANIC MATERIAL (FILL)	--	***2.8***	133	0.46 J	44.3	15.7	0.13	***0.54 J***	*< 1.6*
WB-254-1-2.25	WB-254	9/14/2023	1	2.25	1.5	None	None	None	SILT/RED CLAY (FILL)	--	***2.3***	127	0.6	36.6	*91.6*	0.11	0.20 J	< 0.46
WB-254-5-6.5	WB-254	9/14/2023	5	6.5	2.7	wood and glass debris (30%) at 5 to 7 fbg	None	None	SILT (FILL)	--	***3.1***	*235*	0.53	40.4	*29.7*	0.045	*< 0.52*	< 0.52
WB-255-1-3	WB-255	9/14/2023	1	3	1.9	pocket of concrete debris (10%) at 1.25 fbg	None	None	RED CLAY (FILL)	< 0.0037	***2.4***	137	0.43 J	31.8	9.7	< 0.040	*< 0.55*	< 0.55
WB-255-5-6	WB-255	9/14/2023	5	6	2.5	wood and glass debris (30%) at 5 to 6 fbg	None	None	SILT (FILL)	< 0.0036	***6.6***	*368*	*2.6 J*	27	*685*	***1.3***	*0.67*	< 0.49
WB-255-12-13	WB-255	9/14/2023	12	13	5.4	None	None	None	RED CLAY	< 0.011	***15.1***	*292*	*2.5*	51.8	*384*	***15.7***	*2.6*	*2.9*
WB-256-0.5-2	WB-256	9/15/2023	0.5	2	2.4	None	None	None	SILT (FILL)	--	***4.2 B***	149	0.68	56.5	*135*	*0.28 B*	0.34 J	< 0.36
WB-256-5-6.5	WB-256	9/15/2023	5	6.5	1.6	wood, slag, metal, and glass debris (50%) at 5 to 6.5 fbg	None	None	SAND (FILL)	--	***2.4***	91.7	0.36 J	81.8	*68.7*	0.11 B	0.16 J	< 0.67
WB-257-1-3	WB-257	9/15/2023	1	3	5.9	wood, concrete, and slag debris (5%) at 0.75 to 3 fbg	None	None	SILT (FILL)	--	***3.2***	82	0.42 J	285	*66.5*	0.066 B	0.46	< 0.35
WB-257-7-9	WB-257	9/15/2023	7	9	1.6	wood, slag, plastic, metal, glass, concrete, brick, and ceramic debris (60%) at 6 to 9 fbg	slight tire-like odor	None	SILT (FILL)	--	***10.9***	*277*	*3.5*	15.2	*492*	*0.31 B*	*1.2*	< 0.54
WB-257-11.5-13.5	WB-257	9/15/2023	11.5	13.5	1.2	None	None	None	RED CLAY	--	***2.3***	129	0.31 J	34.7	16.1	0.063 B	0.18 J	< 0.37

Notes

1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations

CCV -- Continuing Calibration Verification
fbg -- feet below grade
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PAH -- Polycyclic aromatic hydrocarbons
PCB -- Polychlorinated biphenyls
PID -- photoionization detector
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds

Qualifiers

J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

		Category	WATER QUALITY	WATER QUALITY	WATER QUALITY	WATER QUALITY	WATER QUALITY	WATER QUALITY	VOC	VOC	VOC	VOC	VOC	VOC
		Chemical Name	Biological Oxygen Demand (BOD)	pH	Phosphorus (total)	Suspended solids (total)	HEM Oil/Grease	Chlorine, free/residual	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	Benzene	Chloromethane	Cumene
		Unit	µg/l	SU	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
		Wisconsin Enforcement Standard (ES)	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**75**	**5**	**30**	**NE**
		Wisconsin Preventive Action Limit (PAL)	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*15*	*0.5*	*3*	*NE*
		WPDES Discharge Limit	NE	<6.0, >9.0	NE	40000	10000	19	NE	NE	NE	50	NE	NE
		City of Superior WWTP Discharge Limit	250000	< 5.5, > 9.5	7000	500000	150000	NE	NE	NE	NE	NE	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**												
WB-229	2.47	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-230	3.10	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-231	3.89	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-232	4.29	9/13/2023	--	--	--	--	--	--	7.9	1.2	< 0.36	*0.71*	0.42 JB	0.48 J
WB-233	5.99	9/13/2023	--	--	--	--	--	--	2.2	0.61 J	< 0.36	*1.2*	< 0.32	< 0.39
WB-234	5.75	9/14/2023	--	--	--	--	--	--	0.58 J	< 0.25	< 0.36	0.17 J	< 0.32 ^c	< 0.39
WB-235	6.35	9/14/2023	--	--	--	--	--	--	5.0	1.9	< 0.36	*0.85*	< 0.32 ^c	< 0.39
WB-236	5.35	9/14/2023	--	--	--	--	--	--	1.4	0.40 J	< 0.36	*0.65*	< 0.32 ^c	< 0.39
WB-237	4.91	9/15/2023	--	--	--	--	--	--	0.43 J	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39 ^c
WB-238	4.15	9/15/2023	5000 H*	7.5 HF	330	240000	1400 J	< 200 HF	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39 ^c
WB-239	2.72	9/12/2023	16500	7.5 HF	1700	528000	1900 JF1	< 200 HF	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39
WB-240	2.90	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39
WB-241	2.41	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-242	3.08	9/12/2023	--	--	--	--	--	--	0.50 J	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-243	2.92	9/12/2023	6300 b	7.7 HF	560 B	385000	< 1300	< 200 HF	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-244	3.79	9/12/2023	--	--	--	--	--	--	1.3	< 0.25	< 0.36	0.22 J	< 0.32 ^c	< 0.39 ^c
WB-245	2.48	9/12/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32 ^c	< 0.39 ^c
WB-246	4.2	9/13/2023	18300 H*	7.7 HF	61	457000	2400 JF1	350 HF	3.7	0.72 J	< 0.36	*0.64*	< 0.32	0.40 J
WB-247	4.02	9/13/2023	--	--	--	--	--	--	2.9	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39
WB-248	5.82	9/13/2023	--	--	--	--	--	--	4.8	1.7	< 0.36	*0.65*	< 0.32	< 0.39
WB-249	5.68	9/13/2023	--	--	--	--	--	--	0.94 J	0.49 J	< 0.36	0.19 J	< 0.32	< 0.39
WB-250	5.95	9/14/2023	--	--	--	--	--	--	4.4	1.6	< 0.36	*1.1*	0.53 J^c	< 0.39
WB-251	5.33	9/13/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39
WB-252	5.64	9/14/2023	--	--	--	--	--	--	2.7	0.73 J	< 0.36	*0.51*	< 0.32 ^c	< 0.39
WB-253	5.43	9/14/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	0.27 J	< 0.32 ^c	< 0.39
WB-254	6.26	9/14/2023	--	--	--	--	--	--	1.2	0.29 J	1.5	*1.7*	< 0.32 ^c	< 0.39
WB-255	5.85	9/14/2023	84500 *	8.0 HF	1100 B	7070000	10000 F1	300 HF	< 0.36	< 0.25	< 0.36	0.46 J	< 0.32 ^c	< 0.39
WB-256	4.07	9/15/2023	7200 H*	8.0 HF	470	296000	1900 JF1	< 200 HF	0.83 J	< 0.25	< 0.36	0.44 J	< 0.32	< 0.39
WB-257	9.18	9/15/2023	--	--	--	--	--	--	< 0.36	< 0.25	< 0.36	< 0.15	< 0.32	< 0.39

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

		Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC
		Chemical Name	Naphthalene	p-Cymene	sec-Butylbenzene	Toluene	Xylenes (total)	BTEX (total)	Volatile Organic Compounds
		Unit	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
		Wisconsin Enforcement Standard (ES)	**100**	**NE**	**NE**	**800**	**2000**	**NE**	**NE**
		Wisconsin Preventive Action Limit (PAL)	*10*	*NE*	*NE*	*160*	*400*	*NE*	*NE*
		WPDES Discharge Limit	70	NE	NE	NE	NE	750	NE
		City of Superior WWTP Discharge Limit	NE	NE	NE	NE	NE	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**							
WB-229	2.47	9/12/2023	0.52 JB	3.9	< 0.40	< 0.15	< 0.22	< 0.22	4.42
WB-230	3.10	9/12/2023	0.51 JB	< 0.36	< 0.40	0.20 J	< 0.22	0.2 J	0.71 J
WB-231	3.89	9/12/2023	0.56 JB	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	0.56 JB
WB-232	4.29	9/13/2023	4.0 ^cB	< 0.36	0.45 J	< 0.15	0.61 J	1.32	15.77
WB-233	5.99	9/13/2023	1.7 ^cB	< 0.36	< 0.40	0.69	0.57 J	2.46	6.97
WB-234	5.75	9/14/2023	3.8 F2^c	< 0.36	< 0.40	< 0.15	< 0.22	0.17 J	4.55 F2^c
WB-235	6.35	9/14/2023	2.6 ^c	< 0.36	< 0.40	0.28 J	1.4	2.53	12.03
WB-236	5.35	9/14/2023	3.2 ^c	< 0.36	< 0.40	0.40 J	0.67 J	1.72	6.72
WB-237	4.91	9/15/2023	0.88 JB	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	1.31 J
WB-238	4.15	9/15/2023	0.66 JB	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	0.66 JB
WB-239	2.72	9/12/2023	< 0.34 ^c	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	< 2.0
WB-240	2.90	9/12/2023	< 0.34 ^c	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	< 2.0
WB-241	2.41	9/12/2023	0.49 JB	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	0.49 JB
WB-242	3.08	9/12/2023	0.50 JB	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	1 J
WB-243	2.92	9/12/2023	0.47 JB	< 0.36	< 0.40	0.15 J	< 0.22	0.15 J	0.62 J
WB-244	3.79	9/12/2023	0.81 JB	< 0.36	< 0.40	< 0.15	< 0.22	0.22 J	2.33
WB-245	2.48	9/12/2023	0.55 JBF2	< 0.36	< 0.40	< 0.15	< 0.22	< 0.22	0.55 JBF2
WB-246	4.2	9/13/2023	2.5 ^cB	0.70 J	< 0.40	0.16 J	0.62 J	1.42	9.44
WB-247	4.02	9/13/2023	0.94 J^cB	< 0.36	0.48 J	< 0.15	< 0.22	< 0.22	4.32
WB-248	5.82	9/13/2023	7.9 ^cB	0.52 J	< 0.40	0.24 J	1.1	1.99	16.91
WB-249	5.68	9/13/2023	*59 ^cB*	< 0.36	< 0.40	0.36 J	1.6	2.15	62.58
WB-250	5.95	9/14/2023	*13 ^c*	< 0.36	< 0.40	1.1	1.5	3.7	23.23
WB-251	5.33	9/13/2023	6.2 ^cB	5.5	< 0.40	< 0.15	< 0.22	< 0.22	11.7
WB-252	5.64	9/14/2023	3.2 ^c	< 0.36	< 0.40	0.23 J	0.73 J	1.47	8.1
WB-253	5.43	9/14/2023	< 0.34 ^c	< 0.36	< 0.40	0.19 J	< 0.22	0.46 J	0.46 J
WB-254	6.26	9/14/2023	1.7 ^c	< 0.36	< 0.40	0.22 J	0.30 J	2.22	6.91
WB-255	5.85	9/14/2023	2.4 ^c	< 0.36	< 0.40	< 0.15	0.27 J	0.73 J	3.13 ^c
WB-256	4.07	9/15/2023	0.62 J^c	< 0.36	< 0.40	< 0.15	< 0.22	0.44 J	1.89 J
WB-257	9.18	9/15/2023	0.45 J^c	< 0.36	< 0.40	0.26 J	< 0.22	0.26 J	0.71 J

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

		Category	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH
		Chemical Name	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene
		Unit	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
		Wisconsin Enforcement Standard (ES)	**NE**	**NE**	**NE**	**3000**	**NE**	**0.2**	**0.2**	**NE**	**NE**	**0.2**
		Wisconsin Preventive Action Limit (PAL)	*NE*	*NE*	*NE*	*600*	*NE*	*0.02*	*0.02*	*NE*	*NE*	*0.02*
		WPDES Discharge Limit	NE	NE	NE	NE	NE	0.1	NE	NE	NE	NE
		City of Superior WWTP Discharge Limit	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**										
WB-229	2.47	9/12/2023	< 0.25	< 0.055	< 0.26	< 0.28	< 0.048	*< 0.083 ^c*	*< 0.068*	< 0.32	< 0.054 *	*< 0.057*
WB-230	3.10	9/12/2023	< 0.24	< 0.052	< 0.24	< 0.26	< 0.045	*< 0.078 ^c*	*< 0.064*	< 0.30	< 0.051 *	*< 0.054*
WB-231	3.89	9/12/2023	< 0.27	0.066 J	0.34 J	< 0.30	< 0.051	*< 0.089 ^c*	*< 0.073*	< 0.34	< 0.058 *	*< 0.061*
WB-232	4.29	9/13/2023	1.1 J	0.63 J	0.71 J	0.60 J	1.2	*1.0 ^c*	*1.3 ^c*	0.62 J	0.53	*1.3*
WB-233	5.99	9/13/2023	< 0.48	0.28 J	< 0.49	< 0.53	0.67	*0.51 ^c*	*0.57 ^c*	< 0.60	< 0.10	*0.62*
WB-234	5.75	9/14/2023	1.3 J	1.3 J	2.1	0.66 J	0.60	*0.50 ^c*	*0.52*	0.31 J	0.23	*0.54*
WB-235	6.35	9/14/2023	0.79 J	0.47 J	0.86 J	< 0.29	0.17	*0.11 J^c*	*0.16 J*	< 0.33	< 0.056	*0.18*
WB-236	5.35	9/14/2023	1.1 J	0.58 J	1.2	0.35 J	0.40	*0.27 ^c*	*0.30*	< 0.32	0.15 J	*0.44*
WB-237	4.91	9/15/2023	< 0.24	0.074 J	0.42 J	< 0.27	0.47	*0.42 ^c*	*0.45 ^c*	< 0.30	0.25	*0.37*
WB-238	4.15	9/15/2023	< 0.26	< 0.055	< 0.26	< 0.28	0.21	*0.24 ^c*	*0.21 ^c*	< 0.32	< 0.054	*0.12 J*
WB-239	2.72	9/12/2023	< 0.25	< 0.054	< 0.26	< 0.28	< 0.047	*< 0.082 ^c*	*< 0.067*	< 0.31	< 0.053 *	*< 0.056*
WB-240	2.90	9/12/2023	< 0.25	< 0.053	< 0.25	< 0.27	< 0.046	*< 0.081 ^c*	*< 0.066*	< 0.31	< 0.052 *	*< 0.056*
WB-241	2.41	9/12/2023	< 0.24	< 0.051	< 0.24	< 0.26	< 0.045	*< 0.078 ^c*	*0.16*	< 0.30	< 0.050 *	*< 0.054*
WB-242	3.08	9/12/2023	< 0.26	< 0.055	< 0.26	< 0.28	< 0.048	*< 0.084 ^c*	*< 0.068*	< 0.32	< 0.054 *	*< 0.058*
WB-243	2.92	9/12/2023	< 0.29	< 0.062	< 0.29	< 0.32	< 0.054	*< 0.094 ^c*	*< 0.076*	< 0.35	< 0.061 *	*< 0.064*
WB-244	3.79	9/12/2023	< 0.26	0.14 J	< 0.27	< 0.29	< 0.049	*< 0.086 ^c*	*< 0.070*	< 0.33	< 0.056 *	*< 0.059*
WB-245	2.48	9/12/2023	< 0.24	< 0.052	< 0.25	< 0.27	0.11 J	*< 0.079 ^c*	*0.11 J*	< 0.30	0.066 J*	*0.076 J*
WB-246	4.2	9/13/2023	1.2 J	1.0 J	1.1 J	0.71 J	1.2	*1.2 ^c*	*1.3 ^c*	0.85 J	0.48	*1.3*
WB-247	4.02	9/13/2023	1.3 J	< 0.054	0.34 J	< 0.28	0.16 J	*< 0.082 ^c*	*< 0.067 ^c*	< 0.31	< 0.053	*< 0.056*
WB-248	5.82	9/13/2023	3.3	3.3	1.4 J	0.74 J	0.90	*0.97 ^c*	*1.3 ^c*	< 0.60	0.52	*1.0*
WB-249	5.68	9/13/2023	5.4	7.5	6.5	4.3	2.7	*2.6 ^c*	*2.9 ^c*	1.1 J	1.4	*2.5*
WB-250	5.95	9/14/2023	1.7 J	1.0 J	1.4	< 0.32	0.34	*0.25 ^c*	*0.26*	< 0.36	0.15 J	*0.28*
WB-251	5.33	9/13/2023	< 0.50	< 0.11	0.83 J	1.1 J	1.7	*1.9 ^c*	*2.3 ^c*	0.82 J	0.98	*2.1*
WB-252	5.64	9/14/2023	0.61 J	0.37 J	0.73 J	0.67 J	1.0	*0.90 ^c*	*0.95*	0.44 J	0.53	*1.0*
WB-253	5.43	9/14/2023	< 0.25	< 0.055	0.50 J	< 0.28	0.20	*0.089 J^c*	*0.22*	< 0.32	< 0.054	*0.084 J*
WB-254	6.26	9/14/2023	0.61 J	0.33 J	0.48 J	< 0.28	0.30	*0.26 ^c*	*0.27*	< 0.31	0.15 J	*0.24*
WB-255	5.85	9/14/2023	0.81 J	0.88 J	2.3	1.4	1.0	*0.92 ^c*	*1.1*	0.51 J	0.39	*1.0*
WB-256	4.07	9/15/2023	0.29 J	0.19 J	0.36 J	< 0.28	0.31	*0.22 ^c*	*0.27 ^c*	< 0.32	0.094 J	*0.23*
WB-257	9.18	9/15/2023	0.45 J	0.41 J	1.4	2.0	3.7	*3.7 ^c*	*4.2 ^c*	1.9	1.7	*3.3*

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

		Category	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PCB	ORGANOTINS
		Chemical Name	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene	WI Group of 10 PAHs	PCBs (total)	Tributyltin
		Unit	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
		Wisconsin Enforcement Standard (ES)	**NE**	**400**	**400**	**NE**	**100**	**1**	**NE**	**250**	**NE**	**0.03**	**NE**
		Wisconsin Preventive Action Limit (PAL)	*NE*	*80*	*80*	*NE*	*10*	*0.1*	*NE*	*50*	*NE*	*0.003*	*NE*
		WPDES Discharge Limit	NE	NE	NE	NE	70	NE	NE	NE	0.1	NE	NE
		City of Superior WWTP Discharge Limit	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**											
WB-229	2.47	9/12/2023	< 0.043	< 0.38	< 0.21	< 0.063 ^c	< 0.26	--	< 0.25	< 0.36	< 0.38	*< 0.21*	--
WB-230	3.10	9/12/2023	< 0.040	< 0.36	< 0.19	< 0.059 ^c	< 0.24	--	< 0.24	< 0.34	< 0.36	--	--
WB-231	3.89	9/12/2023	< 0.046	< 0.41	< 0.22	< 0.067 ^c	< 0.28	--	< 0.27	< 0.38	< 0.41	--	--
WB-232	4.29	9/13/2023	< 0.084	2.3	0.72 J	0.71 ^c	4.5	--	2.1	1.7	0.3399	--	--
WB-233	5.99	9/13/2023	< 0.081	1.4 J	0.52 J	0.25 J^c	1.9	--	1.7	1.0 J	0.15372	*< 0.20*	--
WB-234	5.75	9/14/2023	0.10 J	1.3	1.8	0.27 ^c	7.0	--	2.8	1.0	0.25004	--	--
WB-235	6.35	9/14/2023	< 0.044	0.42 J	0.63 J	0.10 J^c	3.4	--	1.5	< 0.37	0.0451	--	--
WB-236	5.35	9/14/2023	< 0.044	1.3	0.89	0.15 J^c	3.9	--	1.7	1.1	0.09104	--	--
WB-237	4.91	9/15/2023	0.073 J	0.79 J	0.29 J	0.38 ^c	0.27 J	--	0.82	0.78 J	0.20826	--	--
WB-238	4.15	9/15/2023	< 0.043	< 0.39	< 0.21	0.17 ^c	< 0.26	--	< 0.26	< 0.36	0.05912	*< 0.20*	--
WB-239	2.72	9/12/2023	< 0.042	< 0.38	< 0.20	< 0.062	< 0.26	--	0.47 J	< 0.35	0.00047 J	*< 0.22*	< 0.0011
WB-240	2.90	9/12/2023	< 0.042	< 0.37	< 0.20	< 0.061	< 0.25	--	< 0.25	< 0.35	< 0.37	*< 0.22*	< 0.0012
WB-241	2.41	9/12/2023	< 0.040	< 0.36	< 0.19	< 0.059 ^c	< 0.24	*< 3.1*	< 0.24	< 0.34	0.016	--	--
WB-242	3.08	9/12/2023	< 0.043	< 0.38	< 0.21	< 0.063 ^c	< 0.26	--	< 0.26	< 0.36	< 0.38	--	--
WB-243	2.92	9/12/2023	< 0.048	< 0.43	< 0.23	< 0.071 ^c	< 0.29	--	< 0.29	< 0.40	< 0.43	*< 0.21*	< 0.0012
WB-244	3.79	9/12/2023	< 0.044	< 0.39	< 0.21	< 0.065 ^c	0.57 J	--	< 0.26	< 0.37	< 0.39	*< 0.22*	< 0.0013
WB-245	2.48	9/12/2023	< 0.041	< 0.36	< 0.19	< 0.060 ^c	< 0.25	--	< 0.24	< 0.34	0.022736 J	--	--
WB-246	4.2	9/13/2023	< 0.080	2.6	1.3 J	0.91 ^c	2.3	--	3.4	1.9	0.3635	--	--
WB-247	4.02	9/13/2023	< 0.042	< 0.38	0.22 J	< 0.062 ^c	< 0.26	--	< 0.25	< 0.35	0.016 J	*< 0.23*	< 0.0014
WB-248	5.82	9/13/2023	< 0.081	2.3	1.3 J	0.56 ^c	*11*	--	2.7	1.5 J	0.2887	*< 0.20*	< 0.0012
WB-249	5.68	9/13/2023	0.37 J	7.5	6.9	1.5 ^c	*56*	--	14	4.9	1.1339	--	--
WB-250	5.95	9/14/2023	< 0.048	0.62 J	0.71 J	0.20 ^c	*14*	--	1.0	0.58 J	0.08398	--	--
WB-251	5.33	9/13/2023	0.28 J	4.3	0.80 J	1.1 ^c	< 0.52	--	3.9	3.2	0.8215	--	--
WB-252	5.64	9/14/2023	0.14 J	2.6	1.2	0.57 ^c	4.2	--	3.5	2.0	0.4108	--	--
WB-253	5.43	9/14/2023	< 0.043	< 0.38	< 0.21	0.096 J^c	< 0.26	--	0.32 J	< 0.36	0.052004	--	--
WB-254	6.26	9/14/2023	< 0.043	0.39 J	0.37 J	0.25 ^c	2.4	--	0.59 J	0.43 J	0.08515	--	--
WB-255	5.85	9/14/2023	0.13 J	2.7	1.9	0.57 ^c	3.8	--	5.4	2.2	0.4173	*< 2.2*	< 0.0012
WB-256	4.07	9/15/2023	< 0.043	0.45 J	0.27 J	0.12 J^c	1.1	--	0.49 J	0.43 J	0.07254	--	--
WB-257	9.18	9/15/2023	0.44	7.6	1.3	2.5 ^c	1.3	--	6.9	6.9	1.5407	--	--

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

			Category	METALS	METALS	METALS	METALS	METALS	METALS	METALS	METALS	METALS
			Chemical Name	Arsenic (Dissolved)	Barium (Dissolved)	Cadmium (Dissolved)	Chromium (total) (Dissolved)	Copper (Dissolved)	Lead (Dissolved)	Mercury (Dissolved)	Selenium (Dissolved)	Silver (Dissolved)
			Unit	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
			Wisconsin Enforcement Standard (ES)	10	2000	5	100	1300	15	2	50	50
			Wisconsin Preventive Action Limit (PAL)	*1*	*400*	*0.5*	*10*	*130*	*1.5*	*0.2*	*10*	*10*
			WPDES Discharge Limit	NE	NE	NE	NE	NE	NE	NE	NE	NE
			City of Superior WWTP Discharge Limit	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**										
WB-229	2.47	9/12/2023		0.85 J	269	< 0.071	2.7	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-230	3.10	9/12/2023		0.94 J	187	< 0.071	4.3	--	0.34 J	< 0.043	< 0.44	< 0.036
WB-231	3.89	9/12/2023		*1.1*	210	< 0.071	2.2	--	1.4	< 0.043	< 0.44	< 0.036
WB-232	4.29	9/13/2023		*3.6*	*408*	< 0.071	1.2 J	--	*13.6*	< 0.043	< 0.44	< 0.036
WB-233	5.99	9/13/2023		*3.8*	225	0.087 J	0.49 J	--	0.95 J	< 0.043	< 0.44	< 0.036
WB-234	5.75	9/14/2023		*2.5*	*531*	< 0.071	0.56 J	--	0.55 J	< 0.043	< 0.44	< 0.036
WB-235	6.35	9/14/2023		*6.4*	*489*	*0.53*	6.3	--	***143***	0.14 J	< 0.44	0.21 J
WB-236	5.35	9/14/2023		*4.9*	*892*	0.25 J	3.3	--	***180***	< 0.043	< 0.44	0.062 J
WB-237	4.91	9/15/2023		*2.6*	*944 B*	< 0.071	0.77 JB	--	0.39 J	< 0.043	< 0.44	< 0.036
WB-238	4.15	9/15/2023		*1.3*	*448 B*	< 0.071	1.5 B	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-239	2.72	9/12/2023		0.45 J	217 B	< 0.071	0.78 JB	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-240	2.90	9/12/2023		0.50 J	278 B	< 0.071	2.1 B	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-241	2.41	9/12/2023		0.90 J	204	< 0.071	3.1	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-242	3.08	9/12/2023		*7.0*	225	0.37 J	*37.5*	--	***130***	0.17 J	0.65 J	0.11 J
WB-243	2.92	9/12/2023		0.79 J	198	< 0.071	2.0	--	< 0.17	< 0.043	< 0.44	< 0.036
WB-244	3.79	9/12/2023		*5.1*	275	< 0.071	1.3 J	--	*7.3*	< 0.043	< 0.44	< 0.036
WB-245	2.48	9/12/2023		*7.7*	39.1	< 0.071	1.1 J	--	0.90 J	< 0.043	*20.7*	< 0.036
WB-246	4.2	9/13/2023		***18.7***	*463*	< 0.071	0.68 J	--	*2.2*	< 0.043	< 0.44	< 0.036
WB-247	4.02	9/13/2023		*2.3*	314	< 0.071	2.4	--	1.4	< 0.043	0.49 J	< 0.036
WB-248	5.82	9/13/2023		*4.2*	381	0.086 J	2.0	--	***16.2***	< 0.043	< 0.44	0.077 J
WB-249	5.68	9/13/2023		*6.0*	254	0.071 J	1.8	--	***15.5***	< 0.043	0.55 J	0.048 J
WB-250	5.95	9/14/2023		*8.8*	*505*	*2.1*	*29.9*	--	***343***	*0.30*	< 0.44	0.31 J
WB-251	5.33	9/13/2023		*6.3*	356	0.23 J	5.6	--	***92.8***	0.058 J	< 0.44	0.074 J
WB-252	5.64	9/14/2023		*3.5*	*571*	0.21 J	2.2	--	***58.9***	0.062 J	< 0.44	0.041 J
WB-253	5.43	9/14/2023		*5.4*	*445*	*0.51*	2.3	--	***58.1***	< 0.043	< 0.44	0.039 J
WB-254	6.26	9/14/2023		*2.1*	*545*	< 0.071	0.83 J	--	*11.2*	< 0.043	< 0.44	< 0.036
WB-255	5.85	9/14/2023		*5.2*	*746*	0.080 J	1.2 J	3.6	***20.9***	< 0.043	0.85 J	< 0.036
WB-256	4.07	9/15/2023		*2.6*	*932 B*	< 0.071	0.99 JB	--	*8.1*	< 0.043	< 0.44	< 0.036
WB-257	9.18	9/15/2023		*5.2*	316 B	0.22 J	2.7 B	--	***61.4***	< 0.043	0.87 J	0.093 J

TABLE 3B
Groundwater Sampling Results
Fraser Shipyard (Cumming Slip)
John A. Blatnik Bridge 2023 Phase II Investigation
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

		Category	METALS	METALS	METALS	METALS	METALS	METALS	LEAD CALC	LEAD CALC	METALS	METALS	METALS
		Chemical Name	Arsenic	Barium	Cadmium	Chromium (total)	Copper	Lead	Hardness (as CaCO3)	Daily Max Lead Limit	Mercury	Selenium	Silver
		Unit	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
		Wisconsin Enforcement Standard (ES)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
		Wisconsin Preventive Action Limit (PAL)	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*
		WPDES Discharge Limit	NE	NE	NE	NE	NE	Depends on Daily Max Lead Limit	NE	NE	NE	NE	NE
		City of Superior WWTP Discharge Limit	NE	NE	1150	NE	10450	15200	NE	NE	20	NE	NE
Sample ID/ Boring ID	**Depth to Water (fbg)**	**Sample Date**											
WB-229	2.47	9/12/2023	1.3	286	< 0.071	8.5	--	2.8	560000	564.90	< 0.043	< 0.44	< 0.036
WB-230	3.10	9/12/2023	3.5	265	0.13 J	81.0	--	17.6	560000	564.90	< 0.043	< 0.44	0.056 J
WB-231	3.89	9/12/2023	4.5	267	0.19 J	53.2	--	43.2	560000	564.90	0.072 J	< 0.44	0.084 J
WB-232	4.29	9/13/2023	12.5	711	1.8	30.4	--	451	560000	564.90	0.39	0.64 J	0.27 J
WB-233	5.99	9/13/2023	22.3	824	7.7	72.0	--	610	560000	564.90	1.5	1.4	0.57
WB-234	5.75	9/14/2023	27.2	2170	6.2	110 B	--	4830	560000	564.90	1.4	1.5	1.8
WB-235	6.35	9/14/2023	35.6	1720	5.9	70.0 B	--	2180	560000	564.90	2.2	2.1	2.3
WB-236	5.35	9/14/2023	7.7	1260	1.0	10.5 B	--	665	560000	564.90	0.28	< 0.44	0.17 J
WB-237	4.91	9/15/2023	4.5	1110	0.60	10.2 B	--	210	560000	564.90	0.30	< 0.44	0.57
WB-238	4.15	9/15/2023	2.5	543	0.40 J	17.1 B	23.0	33.6	560000	564.90	0.13 J	0.75 J	0.091 J
WB-239	2.72	9/12/2023	3.4	549	0.33 J	21.1 B	--	68.9	940000	931.77	0.12 J	< 0.44	0.081 J
WB-240	2.90	9/12/2023	1.2	282	< 0.071	11.7 B	--	6.5	940000	931.77	< 0.043	< 0.44	< 0.036
WB-241	2.41	9/12/2023	5.8	340	0.36 J	110	--	27.9	940000	931.77	0.073 J	0.56 J	0.13 J
WB-242	3.08	9/12/2023	8.2	253	0.44 J	45.2	--	159	940000	931.77	0.26	0.64 J	0.16 J
WB-243	2.92	9/12/2023	2.9	278	0.14 J	56.8	47.4 B	26.7	440000	447.48	0.055 J	< 0.44	0.054 J
WB-244	3.79	9/12/2023	22.3	890	2.0	65.4	--	671	440000	447.48	0.52	1.6	0.62
WB-245	2.48	9/12/2023	16.5	147	0.30 J	20.2	--	60.3	440000	447.48	0.068 J	20.8	0.056 J
WB-246	4.2	9/13/2023	46.4	1000	2.5	37.0	110 B	577	460000	467.12	0.78	1.6	0.77
WB-247	4.02	9/13/2023	4.7	391	0.28 J	18.8	--	14.6	460000	467.12	0.067 J	0.65 J	0.050 J
WB-248	5.82	9/13/2023	14.1	781	1.3	32.2	--	316	460000	467.12	0.69	0.72 J	1.1
WB-249	5.68	9/13/2023	13.2	513	1.1	22.3	--	267	460000	467.12	0.41	0.98 J	0.32 J
WB-250	5.95	9/14/2023	23.3	1020	8.1	122 B	--	1370	460000	467.12	1.5	1.0	1.2
WB-251	5.33	9/13/2023	28.3	1540	4.4	73.5	--	2160	460000	467.12	0.99	1.6	1.2
WB-252	5.64	9/14/2023	13.1	873	2.8	29.5 B	--	1040	460000	467.12	1.9	0.64 J	0.66
WB-253	5.43	9/14/2023	104	4830	48.4	162 B	--	7130	460000	467.12	5.7	5.7	4.4
WB-254	6.26	9/14/2023	23.3	1910	6.2	55.4 B	--	3280	460000	467.12	2.3	1.3	1.3
WB-255	5.85	9/14/2023	45.8	3460	14.8	128 B	659 B	5180	460000	467.12	9.7	2.5	5.6
WB-256	4.07	9/15/2023	8.7	1310	3.1	28.8 B	71.9	849	400000	408.12	1.0	0.64 J	0.75
WB-257	9.18	9/15/2023	22.9	1150	5.0	49.6 B	--	1580	400000	408.12	2.0	1.8	2.0

Notes

1 -- All concentrations are presented in micrograms per liter (µg/l) or parts per billion (ppb).

2 -- **Concentration exceeds the WI Enforcement Standard (ES)**

3 -- *Concentration exceeds the WI Preventive Action Limit (PAL)*

4 -- Concentration exceeds the WPDES Discharge Limit

5 -- Concentration exceeds the City of Superior WWTP Discharge Limit

6 -- WI Group of PAHs: The PAH group of 10 value is calculated by multiplying the concentration of each PAH compound by its corresponding TEF value, and the determining the sum of the concentrations; Source: WPDES Permit No. WI-0046566-07-0, Contaminated Groundwater from Remedial Action Operations

7 -- Per the WPDES Permit No. WI-0046566-07-0 *Contaminated Groundwater from Remedial Action Operations* document, the Daily Maximum Lead Limit is calculated using the hardness value of each boring sampled. Data collected were used to estimate values in adjacent borings where samples were not obtained.

8 -- Source for City of Superior WWTP Discharge Limits: https://www.ci.superior.wi.us/795/Pretreatment

Abbreviations:

BETX -- Benzene, Ethylbenzene, Toluene, and Total Xylenes
CCV -- Continuing Calibration Verification
fbg -- feet below grade
HEM -- Hexane Extractable Material
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PAH -- Polycyclic aromatic hydrocarbons
PCB -- Polychlorinated biphenyls
QC -- Quality Control
SU -- standard units
TEF -- Toxicity Equivalent Factor
VOCs -- Volatile Organic Compounds
WPDES -- Wisconsin Pollutant Discharge Elimination System
WWTP -- Wastewater Treatment Plant

Qualifiers

* -- LCS or LCSD is outside acceptance limits
^c -- CCV Recovery is outside acceptance limits.
B -- Compound was found in the blank and sample.
F1 -- MS and/or MSD recovery exceeds control limits
F2 -- MS/MSD RPD exceeds control limits
HF -- Parameter with a holding time of 15 minutes.
J -- Reported value was between the limit of detection and the limit of quantitation.
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC
								Chemical Name	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**12.3**	**640**	**3.6**	**7.01**	**22.2**	**1190**	**NE**	**934**	**0.109**	**113**	**219**	**0.0923**
								Non-Industrial Direct Contact RCLs	2.78	640	0.81	1.59	5.06	320	NE	62.6	0.0051	24	219	0.0075
								Groundwater Pathway RCLs	*0.0534*	*0.1402*	*0.000156*	*0.00324*	*0.483*	*0.00502*	*NE*	*NE*	*0.052*	*0.408*	*1.3787****	*0.0001728*
								20X TCLP Threshold	NE	NE	NE	NE	NE	14	NE	NE	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**													
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.048	< 0.033 ^c	< 0.047	< 0.053	< 0.026	< 0.035	< 0.024	< 0.025	< 0.11	< 0.022	< 0.022	< 0.29 ^c
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.22	< 0.15	< 0.22	< 0.24	< 0.12	< 0.16	< 0.11	< 0.12	< 0.50	< 0.10	< 0.10	< 1.4 ^c
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	< 0.024	< 0.023	< 0.014	< 0.018	< 0.026	< 0.029	< 0.021	< 0.039	< 0.019	< 0.032	0.036 J	< 0.042
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	< 0.042	< 0.040	< 0.024	< 0.031	< 0.045	< 0.051	< 0.036	< 0.067	< 0.033	< 0.055	0.043 J	< 0.073
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	< 0.034	< 0.033	< 0.019	< 0.025	< 0.037	< 0.041	< 0.029	< 0.054	< 0.026	< 0.045	0.069 J	< 0.059
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	< 0.030	< 0.029	< 0.017	< 0.022	< 0.032	< 0.036	< 0.026	< 0.048	< 0.023	< 0.040	< 0.029	< 0.052
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	< 0.047	< 0.046	< 0.027	< 0.035	< 0.051	< 0.057	< 0.041	< 0.076	< 0.037	< 0.062	< 0.046	< 0.082
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	< 0.016	< 0.015	< 0.0090	< 0.012	< 0.017	< 0.019	< 0.014	< 0.026	< 0.012	< 0.021	< 0.016	< 0.028
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	< 0.046	< 0.045	< 0.026	< 0.034	< 0.050	< 0.056	< 0.040	< 0.074	< 0.036	< 0.061	0.048 J	< 0.080
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	< 0.029	< 0.028	< 0.016	< 0.021	< 0.031	< 0.035	< 0.025	< 0.047	< 0.023	< 0.038	0.094 J	< 0.051
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	< 0.040	< 0.039	< 0.023	< 0.030	< 0.044	< 0.049	< 0.035	< 0.065	< 0.032	< 0.054	< 0.040	< 0.071
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	< 0.039	< 0.038	< 0.022	< 0.029	< 0.042	< 0.047	< 0.034	< 0.063	< 0.030	< 0.052	< 0.038	< 0.068
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	< 0.027	< 0.026	< 0.015	< 0.020	< 0.029	< 0.033	< 0.023	< 0.043	< 0.021	< 0.036	0.17	< 0.047
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	< 0.031	< 0.030	< 0.018	< 0.023	< 0.033	< 0.037	< 0.027	< 0.050	< 0.024	< 0.041	< 0.030	< 0.054
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	< 0.023	< 0.023	< 0.013	< 0.017	< 0.025	< 0.028	< 0.020	< 0.038	< 0.018	< 0.031	0.072 J	< 0.041
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	< 0.026	< 0.025	< 0.015	< 0.019	< 0.028	< 0.031	< 0.023	< 0.042	< 0.020	< 0.034	0.037 J	< 0.045
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	< 0.084	< 0.082	< 0.048	< 0.062	< 0.092	< 0.10	< 0.074	< 0.14	< 0.066	< 0.11	< 0.083	< 0.15
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	< 0.027	< 0.026	< 0.016	< 0.020	< 0.030	< 0.033	< 0.024	< 0.044	< 0.021	< 0.036	< 0.027	< 0.048
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	< 0.044	< 0.043	< 0.025	< 0.032	< 0.048	< 0.053	< 0.038	< 0.071	< 0.034	< 0.058	0.051 J	< 0.077
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	< 0.025	< 0.024	< 0.014	< 0.018	< 0.027	< 0.030	< 0.022	< 0.040	< 0.019	< 0.033	< 0.024	< 0.043
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	< 0.028	< 0.027	< 0.016	< 0.021	< 0.030	< 0.034	< 0.024	< 0.045	< 0.022	< 0.037	0.038 J	< 0.049
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	< 0.026	< 0.025	< 0.015	< 0.019	< 0.028	< 0.031	< 0.023	< 0.042	< 0.020	< 0.034	< 0.025	< 0.045

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC
								Chemical Name	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	Benzene
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**0.221**	**376**	**2.87**	**15**	**182**	**297**	**1490**	**16.4**	**191**	**907**	**253**	**7.07**
								Non-Industrial Direct Contact RCLs	0.05	376	0.652	3.4	182	297	1490	3.74	191	907	253	1.6
								Groundwater Pathway RCLs	*0.0000282*	*1.168*	*0.00284*	*0.00332*	*NE*	*1.15*	*NE*	*0.144*	*NE*	*NE*	*NE*	*0.00512*
								20X TCLP Threshold	NE	NE	10	NE	NE	NE	NE	150	NE	NE	NE	10
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.041	< 0.034	< 0.042	< 0.027	< 0.021	< 0.029	< 0.040	< 0.033	< 0.035 ^c	< 0.026	< 0.025	< 0.0089
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.19	< 0.16	< 0.19	< 0.12	< 0.096	< 0.14	< 0.19	< 0.15	< 0.16	< 0.12	< 0.11	< 0.041
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	< 0.015	< 0.022	< 0.034	< 0.014	< 0.025	< 0.023	< 0.015	< 0.012	< 0.019	< 0.032	< 0.017	< 0.016
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	< 0.026	< 0.037	< 0.060	< 0.024	< 0.044	< 0.039	< 0.027	< 0.020	< 0.033	< 0.056	< 0.030	< 0.028
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	< 0.021	< 0.030	< 0.048	< 0.019	< 0.036	< 0.032	< 0.022	< 0.017	< 0.027	< 0.045	< 0.024	< 0.022
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	< 0.018	< 0.027	< 0.043	< 0.017	< 0.031	< 0.028	< 0.019	< 0.015	< 0.024	< 0.040	< 0.021	< 0.020
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	< 0.029	< 0.042	< 0.067	< 0.027	< 0.050	< 0.044	< 0.030	< 0.023	< 0.037	< 0.063	< 0.033	< 0.031
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	< 0.0097	< 0.014	< 0.023	< 0.0090	< 0.017	< 0.015	< 0.010	< 0.0078	< 0.013	< 0.021	< 0.011	< 0.011
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	< 0.028	< 0.041	< 0.066	< 0.026	< 0.049	< 0.043	< 0.029	< 0.023	< 0.037	< 0.062	< 0.033	< 0.031
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	< 0.018	< 0.026	< 0.042	< 0.016	< 0.031	< 0.027	< 0.018	< 0.014	< 0.023	< 0.039	< 0.021	< 0.019
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	< 0.025	< 0.036	< 0.058	< 0.023	< 0.043	< 0.038	< 0.026	< 0.020	< 0.032	< 0.054	< 0.029	< 0.027
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	< 0.024	< 0.035	< 0.056	< 0.022	< 0.041	< 0.036	< 0.025	< 0.019	< 0.031	< 0.052	< 0.028	< 0.026
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	< 0.016	< 0.024	< 0.038	< 0.015	0.046 J	< 0.025	< 0.017	< 0.013	< 0.021	< 0.036	< 0.019	< 0.018
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	< 0.019	< 0.028	< 0.044	< 0.018	< 0.033	< 0.029	< 0.020	< 0.015	< 0.025	< 0.041	< 0.022	< 0.021
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	< 0.014	< 0.021	< 0.034	< 0.013	< 0.025	< 0.022	< 0.015	< 0.012	< 0.019	< 0.032	< 0.017	< 0.016
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	< 0.016	< 0.023	< 0.037	< 0.015	< 0.027	< 0.024	< 0.017	< 0.013	< 0.021	< 0.035	< 0.018	< 0.017
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	< 0.052	< 0.076	< 0.12	< 0.048	< 0.089	< 0.079	< 0.054	< 0.041	< 0.067	< 0.11	< 0.060	< 0.056
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	< 0.017	< 0.024	< 0.039	< 0.015	< 0.029	< 0.026	< 0.017	< 0.013	< 0.022	< 0.037	< 0.019	< 0.018
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	< 0.027	< 0.039	< 0.063	< 0.025	< 0.046	< 0.041	< 0.028	< 0.022	< 0.035	< 0.059	< 0.031	< 0.029
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	< 0.015	< 0.022	< 0.035	< 0.014	< 0.026	< 0.023	< 0.016	< 0.012	< 0.020	< 0.033	< 0.018	< 0.016
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	< 0.017	< 0.025	< 0.040	< 0.016	< 0.030	< 0.026	< 0.018	< 0.014	< 0.022	< 0.038	< 0.020	< 0.019
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	< 0.016	< 0.023	< 0.037	< 0.015	< 0.027	< 0.024	< 0.017	< 0.013	< 0.021	< 0.035	< 0.018	< 0.017

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC
								Chemical Name	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**679**	**906**	**1.83**	**113**	**43**	**4.03**	**761**	**2120**	**1.98**	**669**	**2340**	**1210**
								Non-Industrial Direct Contact RCLs	342	216	0.418	25.4	9.6	0.916	370	2120	0.454	159	156	1210
								Groundwater Pathway RCLs	*NE*	*NE*	*0.0003255*	*0.002332*	*0.00506*	*0.00388*	*0.1358*	*0.227*	*0.00333*	*0.0155*	*0.0412*	*NE*
								20X TCLP Threshold	NE	NE	NE	NE	NE	10	2000	NE	120	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**													
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.043	< 0.036	< 0.041	< 0.069	< 0.13	< 0.030	0.054 J	< 0.034	< 0.066	< 0.057	< 0.030	< 0.037
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.20	< 0.17	< 0.19	< 0.32 ^c	< 0.60	< 0.14	< 0.14	< 0.16	< 0.31	< 0.26	< 0.14	< 0.17
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	< 0.018	< 0.030	< 0.017	< 0.042	< 0.019	< 0.022	< 0.011	< 0.018	< 0.058	< 0.020	< 0.023	< 0.020
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	< 0.032	< 0.053	< 0.029	< 0.073	< 0.032	< 0.037	< 0.019	< 0.030	< 0.10	< 0.035	< 0.040	< 0.035
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	< 0.026	< 0.043	< 0.024	< 0.059	< 0.026	< 0.030	< 0.016	< 0.025	< 0.081	< 0.028	< 0.033	< 0.028
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	< 0.023	< 0.038	< 0.021	< 0.052	< 0.023	< 0.027	< 0.014	< 0.022	< 0.072	< 0.025	< 0.029	< 0.025
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	< 0.036	< 0.059	< 0.033	< 0.082	< 0.036	< 0.042	< 0.022	< 0.034	< 0.11	< 0.039	< 0.045	< 0.039
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	< 0.012	< 0.020	< 0.011	< 0.028	< 0.012	< 0.014	< 0.0073	< 0.012	< 0.038	< 0.013	< 0.015	< 0.013
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	< 0.035	< 0.058	< 0.032	< 0.080	< 0.035	< 0.041	< 0.021	< 0.033	< 0.11	< 0.038	< 0.044	< 0.038
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	< 0.022	< 0.037	< 0.020	< 0.051	< 0.022	< 0.026	< 0.013	< 0.021	< 0.070	< 0.024	< 0.028	< 0.024
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	< 0.031	< 0.051	< 0.028	< 0.071	< 0.031	< 0.036	< 0.019	< 0.029	< 0.097	< 0.034	< 0.039	< 0.034
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	< 0.030	< 0.049	< 0.027	< 0.068	< 0.030	< 0.035	< 0.018	< 0.028	< 0.093	< 0.032	< 0.038	< 0.033
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	< 0.021	< 0.034	< 0.019	< 0.047	< 0.021	< 0.024	< 0.012	< 0.020	< 0.065	< 0.022	< 0.026	< 0.022
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	< 0.024	< 0.039	< 0.022	< 0.054	< 0.024	< 0.028	< 0.014	< 0.022	< 0.074	< 0.026	< 0.030	< 0.026
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	< 0.018	< 0.030	< 0.016	< 0.041	< 0.018	< 0.021	< 0.011	< 0.017	< 0.056	< 0.020	< 0.023	< 0.020
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	< 0.020	< 0.033	< 0.018	< 0.045	< 0.020	< 0.023	< 0.012	< 0.019	< 0.062	< 0.022	< 0.025	< 0.022
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	< 0.065	< 0.11	< 0.059	< 0.15	< 0.065	< 0.076	< 0.039	< 0.062	< 0.20	< 0.070	< 0.082	< 0.071
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	< 0.021	< 0.034	< 0.019	< 0.048	< 0.021	< 0.024	< 0.013	< 0.020	< 0.066	< 0.023	< 0.026	< 0.023
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	< 0.034	< 0.056	< 0.031	< 0.077	< 0.034	< 0.039	< 0.020	< 0.032	< 0.11	< 0.037	< 0.042	< 0.037
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	< 0.019	< 0.031	< 0.017	< 0.043	< 0.019	< 0.022	< 0.011	< 0.018	< 0.059	< 0.021	< 0.024	< 0.021
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	< 0.022	< 0.035	< 0.020	< 0.049	< 0.022	< 0.025	< 0.013	< 0.020	< 0.067	< 0.023	< 0.027	< 0.023
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	< 0.020	< 0.033	< 0.018	< 0.045	< 0.020	< 0.023	< 0.012	< 0.019	< 0.062	< 0.022	< 0.025	< 0.022

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC	VOC
								Chemical Name	Cumene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl ether	Ethyl Benzene	Hexachlorobutadiene	Methyl tert-butyl ether	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**268**	**38.9**	**143**	**530**	**2260**	**35.4**	**7.19**	**282**	**1150**	**10.2**	**108**	**264**
								Non-Industrial Direct Contact RCLs	268	8.28	34	126	2260	8.02	1.63	63.8	61.8	2.4	108	264
								Groundwater Pathway RCLs	*NE*	*0.03195*	*NE*	*3.09*	*NE*	*1.57*	*NE*	*0.027*	*0.00256*	*0.66*	*NE*	*NE*
								20X TCLP Threshold	NE	NE	NE	NE	NE	NE	10	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**													
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.021	< 0.060	< 0.042	< 0.13 *	< 0.028	0.013 J	< 0.039 ^c	< 0.031	*0.37*	*1.9*	< 0.024 ^c	< 0.023
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.097	< 0.28	< 0.19	< 0.59	< 0.13	< 0.057	< 0.18	< 0.14	*1.3 JB*	0.54 ^c	< 0.11	< 0.11
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	< 0.013	< 0.041	< 0.027	< 0.037	< 0.045	< 0.025	< 0.033	< 0.032	*0.071 JB*	0.15	< 0.025	< 0.022
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	< 0.022	< 0.071	< 0.047	< 0.064	< 0.077	< 0.042	< 0.058	< 0.055	*0.13 JB*	0.079 J	< 0.043	< 0.038
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	< 0.018	< 0.057	< 0.038	< 0.052	< 0.063	< 0.034	< 0.047	< 0.045	*0.11 JB*	0.23	< 0.035	< 0.031
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	< 0.016	< 0.050	< 0.034	< 0.045	< 0.055	< 0.030	< 0.041	< 0.039	*0.098 JB*	0.087 J	< 0.030	< 0.027
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	< 0.025	< 0.080	< 0.053	< 0.072	< 0.087	< 0.048	< 0.065	< 0.062	*0.16 B*	< 0.055	< 0.048	< 0.043
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	< 0.0083	< 0.027	< 0.018	< 0.024	< 0.029	< 0.016	< 0.022	< 0.021	*0.053 JB*	< 0.019	< 0.016	< 0.015
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	< 0.024	< 0.078	< 0.052	< 0.070	< 0.085	< 0.047	< 0.064	< 0.061	*0.21 B*	0.092 J	< 0.047	< 0.042
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	0.032 J	< 0.049	< 0.033	< 0.044	< 0.054	0.040 J	< 0.040	< 0.038	*0.094 JB*	0.16	< 0.030	0.037 J
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	< 0.021	< 0.069	< 0.046	< 0.062	< 0.075	< 0.041	< 0.056	< 0.054	*0.14 B*	< 0.048	< 0.041	< 0.037
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	< 0.020	< 0.066	< 0.044	< 0.059	< 0.072	< 0.040	< 0.054	< 0.051	*0.13 JB*	< 0.046	< 0.040	< 0.036
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	0.025 J	< 0.046	< 0.031	< 0.041	< 0.050	0.040 J	< 0.037	< 0.036	*0.093 JB*	0.25	< 0.027	0.031 J
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	< 0.016	< 0.052	< 0.035	< 0.047	< 0.057	< 0.031	< 0.043	< 0.041	*0.090 JB*	< 0.036	< 0.032	< 0.028
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	0.017 J	< 0.040	< 0.027	< 0.036	< 0.044	< 0.024	< 0.033	< 0.031	*0.074 JB*	0.13	< 0.024	< 0.022
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	< 0.014	< 0.044	< 0.030	< 0.040	< 0.048	< 0.026	< 0.036	< 0.034	*0.093 B*	0.091	< 0.027	< 0.024
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	< 0.044	< 0.14	< 0.096	< 0.13	< 0.16	< 0.086	< 0.12	< 0.11	*0.24 JB*	< 0.10	< 0.086	< 0.078
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	< 0.014	< 0.046	< 0.031	< 0.042	< 0.051	< 0.028	< 0.038	< 0.036	*0.088 JB*	< 0.032	< 0.028	< 0.025
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	< 0.023	< 0.074	< 0.050	< 0.067	< 0.081	< 0.045	< 0.061	< 0.058	*0.13 JB*	0.13 J	< 0.045	< 0.040
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	< 0.013	< 0.042	< 0.028	< 0.038	< 0.046	< 0.025	< 0.034	< 0.033	*0.083 JB*	< 0.029	< 0.025	< 0.023
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	< 0.015	< 0.048	< 0.032	< 0.043	< 0.052	< 0.029	< 0.039	< 0.037	*0.073 JB*	0.13	< 0.029	< 0.026
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	< 0.014	< 0.044	< 0.030	< 0.040	< 0.048	< 0.026	< 0.036	< 0.034	*0.082 JB*	< 0.031	< 0.027	< 0.024

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

| | | |

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC
								Chemical Name	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1-Methylnaphthalene	2,2'-oxybis(1-Chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**113**	**376**	**297**	**16.4**	**1.11**	**1020**	**82100**	**209**	**2460**	**16400**	**1640**	**7.37**
								Non-Industrial Direct Contact RCLs	24	376	297	3.74	0.265	1020	6320	49.3	190	1260	126	1.74
								Groundwater Pathway RCLs	*0.408*	*1.168*	*1.15*	*0.144*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.000135*
								20X TCLP Threshold	NE	NE	NE	150	NE	NE	8000	40	NE	NE	NE	2.6
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.029	< 0.017	< 0.018	< 0.019	--	< 0.029	< 0.015	< 0.014	< 0.014	< 0.091	< 0.24	< 0.023
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.064	< 0.037	< 0.041	< 0.043	--	< 0.065	< 0.034	< 0.031	< 0.032	< 0.20	< 0.52	< 0.051
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	--	--	--	--	0.083	--	--	--	--	--	--	--
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	--	--	--	--	0.048 J	--	--	--	--	--	--	--
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	--	--	--	--	0.065 J	--	--	--	--	--	--	--
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	--	--	--	--	0.017 J	--	--	--	--	--	--	--
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	--	--	--	--	0.040 J	--	--	--	--	--	--	--
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	--	--	--	--	0.033 J	--	--	--	--	--	--	--
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	--	--	--	--	0.039 J	--	--	--	--	--	--	--
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	--	--	--	--	0.083 J	--	--	--	--	--	--	--
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	0.043 J	--	--	--	--	--	--	--
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	0.046 J	--	--	--	--	--	--	--
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.083	--	--	--	--	--	--	--
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.052 J	--	--	--	--	--	--	--
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.085 J	--	--	--	--	--	--	--
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.085 J	--	--	--	--	--	--	--
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	--	--	--	--	0.025 J	--	--	--	--	--	--	--
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	--	--	--	--	0.024 J	--	--	--	--	--	--	--
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	--	--	--	--	0.035 J	--	--	--	--	--	--	--
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	--	--	--	--	< 0.0066	--	--	--	--	--	--	--
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	--	--	--	--	0.069 J	--	--	--	--	--	--	--
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	--	--	--	--	< 0.0069	--	--	--	--	--	--	--

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC
								Chemical Name	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3&4-Methylphenol	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenyl ether
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**1.54**	**60300**	**5840**	**3010**	**41000**	**8010**	**NE**	**NE**	**5.11**	**NE**	**65.7**	**26.9**
								Non-Industrial Direct Contact RCLs	0.363	4780	391	239	3160	627	NE	NE	1.21	NE	5.06	26.9
								Groundwater Pathway RCLs	*0.000137*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*
								20X TCLP Threshold	NE	NE	NE	NE	4000	NE	NE	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.014	< 0.015	< 0.013	0.12	< 0.022	< 0.022	< 0.028	< 0.030	< 0.033 ^c	< 0.019	< 0.23	< 0.028
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.031	< 0.034	< 0.029	0.18	< 0.047	< 0.048	< 0.061	< 0.066	< 0.073 ^c	< 0.041	< 0.51	< 0.062
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	--	--	--	0.093	--	--	--	--	--	--	--	--
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	--	--	--	0.056 J	--	--	--	--	--	--	--	--
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	--	--	--	0.085	--	--	--	--	--	--	--	--
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	--	--	--	0.022 J	--	--	--	--	--	--	--	--
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	--	--	--	0.048 J	--	--	--	--	--	--	--	--
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	--	--	--	0.039 J	--	--	--	--	--	--	--	--
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	--	--	--	0.052 J	--	--	--	--	--	--	--	--
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	--	--	--	0.099 J	--	--	--	--	--	--	--	--
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	0.054 J	--	--	--	--	--	--	--	--
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	0.060 J	--	--	--	--	--	--	--	--
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	--	--	--	0.11	--	--	--	--	--	--	--	--
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	--	--	--	0.068 J	--	--	--	--	--	--	--	--
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	--	--	--	0.10 J	--	--	--	--	--	--	--	--
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	--	--	--	0.11 J	--	--	--	--	--	--	--	--
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	--	--	--	0.031 J	--	--	--	--	--	--	--	--
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	--	--	--	0.031 J	--	--	--	--	--	--	--	--
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	--	--	--	0.039 J	--	--	--	--	--	--	--	--
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	--	--	--	< 0.0074	--	--	--	--	--	--	--	--
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	--	--	--	0.081	--	--	--	--	--	--	--	--
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	--	--	--	< 0.0077	--	--	--	--	--	--	--	--

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC
								Chemical Name	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl-phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**82100**	**11.5**	**NE**	**115**	**NE**	**45200**	**NE**	**100000**	**20.8**	**2.11**	**21.1**	**NE**
								Non-Industrial Direct Contact RCLs	6320	2.71	NE	27.1	NE	3590	NE	17900	1.14	0.115	1.15	NE
								Groundwater Pathway RCLs	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*196.9*	*NE*	*0.47*	*0.478*	*NE*
								20X TCLP Threshold	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.016	< 0.43	< 0.054	< 0.030	< 0.15	0.13	< 0.0069	0.045	0.035 J	< 0.039	0.045	0.018 J
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.035	< 0.94	< 0.12	< 0.066	< 0.33	0.37	< 0.015	0.064 J	0.074 J	< 0.087	< 0.086	0.040 J
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	--	--	--	--	--	0.16	0.035	0.32	0.78	*0.71*	*0.94*	0.33
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	--	--	--	--	--	0.051	0.019 J	0.13	0.36	0.33	*0.50*	0.17
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	--	--	--	--	--	0.073	0.055	0.25	0.80	*0.85*	*1.1*	0.51
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	--	--	--	--	--	0.018 J	0.0087 J	0.051	0.16	0.18	0.22	0.12
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	--	--	--	--	--	0.081	0.048 J	0.17	0.41	0.4	*0.56*	0.26
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	--	--	--	--	--	0.016 J	0.0089 J	0.053	0.14	0.14	0.18	0.085
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	--	--	--	--	--	0.047 J	0.085	0.15	0.41	0.35	*0.65*	0.26
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	--	--	--	--	--	0.070	0.096	0.28	1.0	*0.91*	*1.3*	0.55
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	--	0.056	0.041 J	0.10	0.20	0.13	0.23	0.086
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	--	0.054	0.045	0.14	0.33	0.25	0.44	0.14
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	--	0.068	0.054	0.21	0.90	*0.95*	*1.9*	1.1
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	--	0.014 J	0.015 J	0.053	0.23	0.23	0.31	0.16
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	--	0.056 J	0.026 J	0.16	0.59	*0.62*	*0.81*	0.44
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	--	0.20	0.12	0.51	1.2	*1.3*	*1.7*	0.90
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	--	--	--	--	--	0.033 J	0.014 J	0.097	0.31	0.3	0.38	0.19
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	--	--	--	--	--	0.027 J	0.011 J	0.083	0.28	0.28	0.35	0.18
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	--	--	--	--	--	0.084	< 0.0087	0.097	0.31	0.31	0.37	0.20
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	--	--	--	--	--	< 0.0075	< 0.0062	0.023 J	0.079	0.077	0.10	0.053
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	--	--	--	--	--	0.081	0.069	0.23	0.82	*0.91*	*1.2*	0.49
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	--	--	--	--	--	0.013 J	< 0.0065	0.18	0.18	0.2	0.25	0.13

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC
								Chemical Name	Benzo(k)fluoranthene	Benzoic Acid	Benzyl Alcohol	bis(2-Chloroethoxy)methane	bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethylphthalate
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**211**	**100000**	**82100**	**2460**	**1.29**	**164**	**1210**	**NE**	**2110**	**2.11**	**1040**	**100000**
								Non-Industrial Direct Contact RCLs	11.5	100000	6320	190	0.286	38.8	286	NE	115	0.115	73	50600
								Groundwater Pathway RCLs	*NE*	*NE*	*NE*	*NE*	*NE*	*2.88*	*NE*	*NE*	*0.144*	*NE*	*NE*	*NE*
								20X TCLP Threshold	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.016	< 0.25 ^c	< 0.099	< 0.015	< 0.019	< 0.16	< 0.020	0.069 J	0.037 J	< 0.041	0.16 J	< 0.019
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.034	0.75 J^c	< 0.22	< 0.034	< 0.041	< 0.35	< 0.045	0.053 J	0.068 J	< 0.089	0.079 J	< 0.041
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	0.36	--	--	--	--	--	--	--	*0.75*	0.10	--	--
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	0.16	--	--	--	--	--	--	--	*0.36*	0.069	--	--
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	0.44	--	--	--	--	--	--	--	*0.84*	0.14	--	--
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	0.077	--	--	--	--	--	--	--	*0.17*	0.054	--	--
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	0.18	--	--	--	--	--	--	--	*0.45*	0.082	--	--
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	0.063	--	--	--	--	--	--	--	0.13	0.047	--	--
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	0.18	--	--	--	--	--	--	--	*0.48*	0.10	--	--
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	0.47	--	--	--	--	--	--	--	*0.99*	0.16	--	--
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	0.088	--	--	--	--	--	--	--	*0.21*	0.059	--	--
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	0.17	--	--	--	--	--	--	--	*0.35*	0.070	--	--
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	0.59	--	--	--	--	--	--	--	*1.1*	0.29	--	--
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	0.12	--	--	--	--	--	--	--	*0.26*	0.057	--	--
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	0.31	--	--	--	--	--	--	--	*0.63*	0.13	--	--
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	0.68	--	--	--	--	--	--	--	*1.3*	0.22	--	--
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	0.13	--	--	--	--	--	--	--	*0.31*	0.067	--	--
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	0.13	--	--	--	--	--	--	--	*0.27*	0.055	--	--
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	0.16	--	--	--	--	--	--	--	*0.31*	0.071	--	--
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	0.035 J	--	--	--	--	--	--	--	0.077	< 0.037	--	--
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	0.43	--	--	--	--	--	--	--	*0.86*	0.14	--	--
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	0.10	--	--	--	--	--	--	--	*0.21*	0.048	--	--

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

									Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC
									Chemical Name	Dimethylphthalate	Di-n-butylphthalate	Di-n-octylphthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Naphthalene
									Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
									Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
									Industrial Direct Contact RCLs	**NE**	**82100**	**8210**	**30100**	**30100**	**1.15**	**7.19**	**10.8**	**11.1**	**21.1**	**2420**	**10.2**
									Non-Industrial Direct Contact RCLs	NE	6320	632	2390	2390	0.252	1.63	2.55	2.52	1.15	571	2.4
									Groundwater Pathway RCLs	*NE*	*5.03*	*NE*	*88.9*	*14.8*	*0.0252*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.66*
									20X TCLP Threshold	NE	NE	NE	NE	NE	2.6	10	NE	60	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**													
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)		< 0.0089	< 0.013	< 0.29 ^c	0.12	0.14	< 0.0078	< 0.023	< 0.43	< 0.020	< 0.040	< 0.021	*0.68*
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)		< 0.020	< 0.028	< 0.63 ^c	0.16	0.19	< 0.017	< 0.051	< 0.95	< 0.045	< 0.088	< 0.046	*0.87*
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)		--	--	--	1.7	0.13	--	--	--	--	0.41	--	0.091
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)		--	--	--	0.72	0.042	--	--	--	--	0.21	--	0.048
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)		--	--	--	1.6	0.069	--	--	--	--	0.58	--	0.11
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)		--	--	--	0.32	0.016 J	--	--	--	--	0.14	--	0.023 J
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)		--	--	--	0.95	0.076	--	--	--	--	0.30	--	0.064
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)		--	--	--	0.30	0.018 J	--	--	--	--	0.10	--	0.033 J
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)		--	--	--	1.1	0.048 J	--	--	--	--	0.32	--	0.075
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)		--	--	--	2.3	0.079	--	--	--	--	0.65	--	0.10
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)		--	--	--	0.57	0.049 J	--	--	--	--	0.11	--	0.062
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)		--	--	--	0.75	0.051	--	--	--	--	0.17	--	0.088
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)		--	--	--	1.6	0.067	--	--	--	--	1.0	--	0.098
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)		--	--	--	0.44	0.015 J	--	--	--	--	0.18	--	0.055
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)		--	--	--	1.3	0.065 J	--	--	--	--	0.49	--	0.085
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)		--	--	--	2.8	0.24	--	--	--	--	1.1	--	0.15
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)		--	--	--	0.69	0.034 J	--	--	--	--	0.21	--	0.038
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)		--	--	--	0.62	0.028 J	--	--	--	--	0.20	--	0.031 J
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)		--	--	--	0.73	0.061	--	--	--	--	0.22	--	0.052
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)		--	--	--	0.15	< 0.011	--	--	--	--	0.059	--	0.013 J
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)		--	--	--	1.7 F1	0.073	--	--	--	--	0.57	--	0.081
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)		--	--	--	0.40	< 0.011	--	--	--	--	0.14	--	< 0.0070

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	SVOC	PCB	PCB	PCB	PCB	PCB
								Chemical Name	Nitrobenzene	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
								Industrial Direct Contact RCLs	**32.4**	**0.328**	**469**	**3.97**	NE	**100000**	**22600**	**28**	**0.883**	**0.792**	**0.972**	**0.975**
								Non-Industrial Direct Contact RCLs	7.42	0.0775	111	1.02	NE	19000	1790	4.11	0.213	0.19	0.235	0.236
								Groundwater Pathway RCLs	*NE*	*NE*	*0.0764*	*0.00276*	*NE*	*2.294*	*54.54*	*NE*	*NE*	*NE*	*NE*	*NE*
								20X TCLP Threshold	40	NE	NE	2000	NE	NE	NE	NE	NE	NE	NE	NE
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	< 0.013	< 0.0081	< 0.024	< 0.10	0.22	< 0.018	0.094	--	--	--	--	--
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	< 0.028	< 0.018	< 0.053	< 0.22	0.23	< 0.039	0.17	--	--	--	--	--
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	--	--	--	--	1.2	--	1.3	--	--	--	--	--
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	--	--	--	--	0.49	--	0.59	--	--	--	--	--
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	--	--	--	--	1.0	--	1.5	--	--	--	--	--
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	--	--	--	--	0.21	--	0.29	--	--	--	--	--
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	--	--	--	--	0.77	--	0.87	< 0.010	< 0.010	< 0.0070	< 0.010	< 0.012
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	--	--	--	--	0.20	--	0.25	< 0.0085	< 0.0085	< 0.0059	< 0.0084	< 0.010
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	--	--	--	--	0.57	--	0.95	< 0.0080	< 0.0080	< 0.0055	< 0.0079	< 0.0096
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	--	--	--	--	1.2	--	2.1	< 0.0071	< 0.0071	< 0.0049	< 0.0071	< 0.0086
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	0.47	--	0.49	< 0.0077	< 0.0077	< 0.0053	< 0.0076	< 0.0093
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	--	--	--	--	0.55	--	0.61	< 0.0083	< 0.0083	< 0.0057	< 0.0082	< 0.010
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.91	--	1.5	< 0.0071	< 0.0071	< 0.0049	< 0.0070	< 0.0086
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.22	--	0.41	< 0.0074	< 0.0074	< 0.0051	< 0.0073	< 0.0090
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	0.83	--	1.1	< 0.0069	< 0.0069	< 0.0048	< 0.0069	< 0.0084
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	--	--	--	--	2.0	--	2.3	< 0.0070	< 0.0070	< 0.0049	< 0.0070	< 0.0085
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	--	--	--	--	0.45	--	0.65	< 0.0072	< 0.0072	< 0.0050	< 0.0071	< 0.0087
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	--	--	--	--	0.39	--	0.59	< 0.0074	< 0.0074	< 0.0051	< 0.0073	< 0.0090
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	--	--	--	--	0.60	--	0.71	--	--	--	--	--
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	--	--	--	--	0.10	--	0.15	--	--	--	--	--
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	--	--	--	--	0.99	--	1.5	--	--	--	--	--
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	--	--	--	--	0.21	--	0.36	--	--	--	--	--

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined

TABLE 2
Soil Analytical Results - Test Pits
WI Approach, 2024 Phase II Investigation
John A. Blatnik Bridge
Duluth, Minnesota to Superior, Wisconsin
MnDOT SP 6981-26
WisDOT Project ID 1199-00-08

								Category	PCB	PCB	PCB	ORGANOTINS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS	RCRA METALS
								Chemical Name	Aroclor-1254	Aroclor-1260	PCBs (total)	Tributyltin	Arsenic	Barium	Cadmium	Chromium (total)	Lead	Mercury	Selenium	Silver
								Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
								Soil Background Threshold Values	NE	NE	NE	NE	8.3	364	1.07	43.5	51.6	NE	NE	NE
								Industrial Direct Contact RCLs	**0.988**	**1**	**0.967**	**350**	**3**	**100000**	**985**	**100000****	**800**	**3.13**	**5840**	**5840**
								Non-Industrial Direct Contact RCLs	0.239	0.243	0.234	23.5	0.677	15300	71.1	100000**	400	3.13	391	391
								Groundwater Pathway RCLs	*NE*	*NE*	*0.009384*	*NE*	*0.584*	*164.8*	*0.752*	*360000*	*27*	*0.208*	*0.52*	*0.849*
								20X TCLP Threshold	NE	NE	NE	NE	100	2000	20	100	100	4	20	100
Test Pit ID	**Sample ID**	**Sample Date**	**Start Depth (ft bTOB)**	**End Depth (ft bTOB)**	**Debris**	**Odor**	**Staining**	**Soil Type**												
WTP-01	WTP01-2'	11/15/2024	2	2	wood timbers	slight creosote odor	None	SILTY SAND (FILL)	--	--	--	--	***1.7***	19.3	0.21	10	23.3	0.026 F1	< 0.63	< 0.14
WTP-01	WTP01-5'	11/15/2024	5	5	sawdust/wood	None	sheen on water	ORGANIC SILT (FILL)	--	--	--	--	***2.7***	46.9	0.29 J	20.8	*43.2*	0.068	< 1.6	< 0.35
WTP-02	WTP02-2-3	10/24/2024	2	3	10% plastic, paper, brick, insulation, slag, concrete, and wood Debris	None	None	SILT (FILL)	--	--	--	0.027	***10.1***	*237*	0.49	43.8	*299*	0.16	*1.1*	< 0.12
WTP-02	WTP02-5-6	10/24/2024	5	6	<5% metal wire and wood Debris	None	None	SILT (FILL)	--	--	--	0.012	***4.9***	*252*	0.46	42.9	*356*	0.11	< 0.59	< 0.13
WTP-03	WTP03-0-1	10/24/2024	0	1	15% plastic, wood, metal, slag, and brick Debris	None	None	SILT (FILL)	--	--	--	--	***9.5***	110	*0.90*	25.3	***8830***	*0.45*	< 0.64	0.15 JB
WTP-03	WTP03-6-7	10/24/2024	6	7	15% brick, concrete, slag, and wood Debris	None	None	CLAY (FILL)	--	--	--	--	***4.8***	*188*	0.28	42.4	*167*	0.068	< 0.76	< 0.17
WTP-04	WTP04-1-2	10/24/2024	1	2	10% tire, concrete chunks, plastic, wood, ceramic, glass, and metal Debris	None	None	SILT (FILL)	< 0.0088	0.021 J	*0.021 J*	--	***19.3***	*362*	0.54	108	*367*	0.19	*6.2*	< 0.20
WTP-04	WTP04-6-7	10/24/2024	6	7	30% wood, concrete chunks, glass, and brick Debris	None	None	CLAY (FILL)	< 0.0073	< 0.0082	< 0.0085	--	***3.7***	*165*	0.27	34.6	*32.7*	0.090	< 0.71	< 0.16
WTP-05	WTP05-0-1	10/24/2024	0	1	10% wood, metal, ceramic, brick, and plastic Debris	None	None	SILT (FILL)	0.082	< 0.0077	*0.082*	< 0.0017	***21.6***	*263*	0.59	31.3	*167*	*0.40*	< 0.68	< 0.15
WTP-05	WTP05-5-6	10/24/2024	5	6	20% wood, metal, glass, slag, plastic, and brick Debris	None	None	SILT (FILL)	< 0.0062	< 0.0068	< 0.0086	< 0.0015	***10.4***	163	0.51	30.0	*114*	0.16	< 0.63	< 0.14
WTP-06	WTP06-1-2	10/24/2024	1	2	<5% plastic and wood Debris	slight petroleum odor	None	SILT (FILL)	< 0.0066	< 0.0074	< 0.0093	--	***18.5***	*226*	0.59	28.7	*595*	*0.21 F1*	*1.2*	< 0.14
WTP-06	WTP06-6-7	10/24/2024	6	7	15% plastic, wood, and brick Debris	slight petroleum odor	None	SILT (FILL)	0.090	< 0.0080	*0.090*	--	***13.1***	*189*	*0.83*	27.1	***1100***	*0.33*	*4.0*	0.25 JB
WTP-07	WTP07-2-3	10/24/2024	2	3	10% plastic, concrete, slag, brick, nails, slag, and glass Debris	None	None	SILTY CLAY (FILL)	0.051	< 0.0068	*0.051*	< 0.0015	***8.8***	148	*0.92*	46.4	***901***	*0.43*	< 0.58	< 0.13
WTP-07	WTP07-6-7	10/24/2024	6	7	20% plastic, ceramic, wood, slag, concrete, and nails Debris	None	None	SILTY CLAY (FILL)	< 0.0064	< 0.0071	< 0.0090	< 0.0016	***6.8***	*220*	0.51	37.6	*643*	*0.71*	*2.8*	< 0.14
WTP-08	WTP08-2-3	10/24/2024	2	3	15% plastic, pipe, concrete, brick, coal, and slag Debris	None	None	SILTY CLAY (FILL)	< 0.0060	< 0.0067	< 0.0084	--	***3***	69.1	0.20	29.9	*36.7*	0.045	< 0.57	< 0.12
WTP-08	WTP08-5-6	10/24/2024	5	6	20% wood, slag, plastic, and concrete Debris	None	None	SILTY CLAY (FILL)	< 0.0061	0.031	*0.031*	--	***8.3***	119	0.46	30.3	***1750***	*0.31*	< 0.58	< 0.13
WTP-09	WTP09-0-1	10/24/2024	0	1	10% slag, concrete, pipes, and animal bone Debris	None	None	SILT (FILL)	< 0.0062	< 0.0069	< 0.0087	--	***3.9***	88.9	0.18 J	26.9	*49.5*	*0.22*	< 0.56	< 0.12
WTP-09	WTP09-4-5	10/24/2024	4	5	10% coal, slag, and animal bone Debris	None	None	CLAY (FILL)	< 0.0064	< 0.0071	< 0.0090	--	***4.6***	*169*	0.24	49.2	*102*	0.20	< 0.60	< 0.13
WTP-10	WTP10-1-2	10/24/2024	1	2	10% coal, concrete, glass, slag, clay pipe, plastic, wood, and brick Debris	None	None	SILT (FILL)	--	--	--	< 0.0021	***5.3***	*192*	0.26	39.8	*60.2*	0.10	< 0.77	< 0.17
WTP-10	WTP10-3-4	10/24/2024	3	4	10% ceramic and brick Debris	None	None	CLAY (FILL)	--	--	--	< 0.0016	***5.2***	124	0.22	36.0	13.4	0.030	< 0.62	< 0.14
WTP-11	WTP11-0-1	10/24/2024	0	1	10% slag, concrete, glass Debris	None	None	SILT (FILL)	--	--	--	--	***6.9***	111 F3	0.46	30.0 F3	*417*	0.16	< 0.68 F2	0.22 JB
WTP-11	WTP11-4-5	10/24/2024	4	5	10% concrete, metal, wire, and household Debris	None	None	SILT (FILL)	--	--	--	--	***3.4***	103	0.18 J	61.8	11.8	0.013 J	< 0.67	< 0.15

Notes
1 -- All concentrations are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
2 -- Concentration exceeds the Soil Background Threshold Value (BTV)
3 -- **Concentration exceeds the WI Soil Industrial Direct Contact RCL**
4 -- Concentration exceeds the WI Soil Non-Industrial Direct Contact RCL
5 -- *Concentration exceeds the WI Groundwater Pathway RCL*
6 -- Observation does not meet WI criteria for exempt soil
7 -- Concentration exceeds the 20X TCLP Threshold

Abbreviations
bTOB -- below top of berm
CCV -- Continuing Calibration Verification
LCS or LCSD -- Laboratory Control Sample or Laboratory Control Sample Duplicate
MS/MSD -- Matrix Spike/Matrix Spike Duplicate
NE -- Standard Not Established
PCB -- Polychlorinated biphenyls
RCL -- residual contaminant level
RPD -- Relative Percent Difference, a measure of the relative difference between two points
TCLP -- Toxicity Characteristic Leaching Procedure
VOC -- Volatile Organic Compounds
SVOC -- Semivolatile Organic Compounds

Qualifiers
J -- Reported value was between the limit of detection and the limit of quantitation.
B -- Compound was found in the blank and sample.
^c -- CCV Recovery is outside acceptance limits.
F1 -- MS and/or MSD recovery exceeds control limits.
F2 -- MS/MSD RPD exceeds control limits.
F3 -- Duplicate RPD exceeds the control limit
NE -- No Established Criterion
< -- Not Detected, Value is Reportable Limit
-- -- Not Analyzed
* -- LCS or LCSD is outside acceptance limits.
** -- The Industrial and Non-Industrial RCLs shown are for Chromium (III).
*** -- Value shown is for 1,2,4- and 1,3,5-Trimethylbenzenes combined