

**CHEMICAL DATA - Analytes tested for in a lab, 2019 - MVT, New Ulm**

**PLC001 - Primary Lower Cottonwood River near New Ulm - Non-impacted stream/Western Corn Belt Plains**

**STORET CODE - S001-918**

**2019 Wateryear (Oct 1, 2018 to Sept. 30, 2019)**

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft <sup>3</sup> /sec)	LAB SAMPLE ID #	TSS MG/L	TSVS MG/L	TKN MG/L	N-NO2+NO3 MG/L	P-PO4 MG/L	TP MG/L
Winter/Base	Grab	1/7/2019	12:55		19-A613	21		1.0	7.97	0.052	0.075
Winter/Base	Grab	3/14/2019	12:40		19-A9562	138		1.7	2.35	0.139	0.316
Snowmelt	Grab	3/17/2019	15:40		19-A10012	147		2.3	1.42	0.468	0.790^
Snowmelt	Grab	3/18/2019	12:05		19-A10013	98		2.1	1.35	0.499	0.800^
Snowmelt	Grab	3/20/2019	14:00		19-A10496	420		3.1	1.32	0.651^	1.220^
Snowmelt	Grab	3/22/2019	13:30		19-A10987	648		3.1	1.32	0.365	1.280^
Snowmelt	Grab	3/25/2019	13:35		19-A11164	577		2.6	1.84	0.421	1.010^
Snowmelt	Grab	3/28/2019	13:15		19-A11973	448		3.1	2.93	0.325	0.770^
Snowmelt	Grab	4/1/2019	12:45		19-A12431	262		2.1	3.71	0.248	0.550^
Storm Event	Grab	4/8/2019	12:45		19-A13687	448		2.3	6.76	0.202^	0.628^
Storm Event	Grab	4/15/2019	14:00		19-A14992	227		1.6	7.49	0.118	0.348
Storm Event	Grab	4/18/2019	13:30		19-A16119	544		3.1	6.73~	0.162	0.782^
Storm Event	Grab	4/26/2019	12:10		19-A18521	134		1.4	7.36	0.046	0.194
Storm Event	Grab	5/9/2019	14:15		19-A21373	180		1.6	7.50	0.068	0.229
Storm Event	Grab	5/11/2019	14:20		19-A21679	169		1.4	9.82	0.053	0.217
Storm Event	Grab	5/14/2019	12:20		19-A22004	87		1.5	8.56	0.026	0.121
Storm Event	Grab	5/28/2019	15:35		19-A24806	260		3.2	10.00	0.106	0.403
Storm Event	Grab	5/31/2019	12:15		19-A25637	134		1.7	9.59	0.053	0.183
Base	Grab	6/10/2019	14:05		19-A27647	79		1.9	8.00	0.045	0.145
Storm Event	Grab	6/17/2019	12:30		19-A28890	194		2.3	9.90	0.107	0.299
Storm Event	Grab	6/21/2019	11:00		19-A30177	1350		7.6	7.78	0.153	1.320^
Storm Event	Grab	7/1/2019	13:20		19-A32246	952		4.3	8.30	0.118	0.648^
Storm Event	Grab	7/3/2019	13:45		19-A32945	322		3.1	9.19	0.167	0.429
Storm Event	Grab	7/12/2019	13:50		19-A34719	141		1.8	7.34	0.150	0.216
Storm Event	Grab	7/21/2019	13:45		19-A36312	276		2.3	6.96	0.134*	0.410
Storm Event	Grab	7/22/2019	14:30		19-A36313	262		2.3	7.42	0.128	0.365
Storm Event	Grab	7/26/2019	11:45		19-A37615	112		1.9	7.46	0.105	0.192
Base	Grab	8/6/2019	15:25		19-A39252	60		1.5	4.98	0.046	0.113
Base	Grab	8/15/2019	13:30		19-A41485	51		1.6	3.27	0.023	0.079
Storm Event	Grab	8/19/2019	14:45		19-A41918	294		2.2	4.44	0.083	0.363
Storm Event	Grab	8/22/2019	14:40		19-A42795	124		2.0	6.59	0.096	0.196
Base	Grab	9/6/2019	12:45		19-A45188	43		2.0	1.88	0.014	0.080
Storm Event	Grab	9/12/2019	13:25		19-A46288	468		2.5	4.64	0.126	0.540^
Storm Event	Grab	9/13/2019	12:15		19-A46538	541		2.6	4.02	0.156	0.467
Storm Event	Grab	9/14/2019	16:00		19-A46757	390		2.3	4.24	0.163*	0.405
Storm Event	Dup	9/14/2019	16:05		19-A46758	358		2.9	4.22	0.170*	0.395
Storm Event	Grab	9/20/2019	10:00		19-A47743	129		1.6	4.69	0.123	0.299
Base	Grab	10/17/2019	14:50		19-A53284	30		1.1	8.60	0.064	0.088
Storm Event	Grab	10/23/2019	14:00		19-A54465	175		2.0	8.98	0.186	0.372
Base	Grab	10/31/2019	13:10		19-A56150	43		1.0	7.82	0.064	0.108
Base	Grab	11/20/2019	13:20		19-A59513	20		1.0	7.29	0.027	0.059
Base	Grab	12/5/2019	14:30		19-A61976	24		0.9	7.41	0.024	0.053

^ Sample Diluted due to result above calibration of linear range

\* Sample Exceeded Holding Time

~ Reporting limit elevated due to instrument performance at the RL

**CHEMICAL DATA - Analytes tested for in a lab, 2019- MVTL, New Ulm**

**PLS005 - Primary Lower Sleepy Eye Creek near Cobden - Non-impacted stream/Western Corn Belt Plains**

**STORET CODE - S001-919**

**2019 Wateryear (Oct 1, 2018 to Sept. 30, 2019)**

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft <sup>3</sup> /sec)	LAB SAMPLE ID #	TSS MG/L	TSVS MG/L	TKN MG/L	N-NO2+NO3 MG/L	P-PO4 MG/L	TP MG/L
Snowmelt	Grab	3/20/2019	13:15		19-A10495	107		3.4	1.24		1.250^
Snowmelt	Grab	3/22/2019	12:35		19-A10986	100		2.4	1.33		1.110^
Snowmelt	Grab	3/25/2019	12:50		19-A11163	137		2.4	2.08		0.940^
Snowmelt	Grab	3/28/2019	12:30		19-A11972	188		2.8	3.46		0.973^
Snowmelt	Grab	4/1/2019	11:55		19-A12430	94		1.8	5.32		0.640^
Storm Event	Grab	4/8/2019	11:45		19-A13686	114		1.8	10.30		0.382
Storm Event	Grab	4/15/2019	13:10		19-A14991	176		2.4	11.10		0.430
Storm Event	Grab	4/18/2019	12:45		19-A16118	188		2.9	8.57~		0.694^
Storm Event	Grab	4/26/2019	11:20		19-A18520	60		1.4	12.20		0.180
Storm Event	Grab	5/9/2019	13:25		19-A21372	203		2.3	12.50		0.318
Storm Event	Grab	5/14/2019	11:30		19-A22003	25		1.4	14.40		0.067
Storm Event	Grab	5/28/2019	14:05		19-A24805	128		2.2	14.60		0.318
Storm Event	Grab	5/31/2019	11:15		19-A25636	40		1.4	15.20		0.102
Base	Grab	6/10/2019	13:10		19-A27646	18		1.6	13.40		0.051
Storm Event	Grab	6/17/2019	11:20		19-A28889	144		2.3	14.80		0.281
Storm Event	Grab	6/21/2019	10:00		19-A30176	382		3.9	11.50		0.660^
Storm Event	Grab	7/1/2019	12:05		19-A32245	775		5.3	7.72		0.734^
Storm Event	Grab	7/3/2019	12:50		19-A32944	91		1.9	10.70		0.326
Storm Event	Grab	7/12/2019	12:35		19-A34718	67		1.6	13.30		0.145
Base	Grab	7/26/2019	10:40		19-A37614	28		1.2	12.10		0.089
Base	Grab	8/6/2019	14:10		19-A39245	16		1.7	8.15		0.067
Storm Event	Grab	8/18/2019	15:50		19-A41914	358		3.5	4.78		0.421
Storm Event	Grab	8/19/2019	14:00		19-A41917	159		1.8	9.02		0.305
Storm Event	Grab	8/22/2019	13:40		19-A42794	56		3.4	11.20		0.271
Base	Grab	9/6/2019	11:55		19-A45187	12		2.0	3.88		0.054
Storm Event	Grab	9/12/2019	12:00		19-A46287	300		2.5	4.73		0.475
Storm Event	Dup	9/12/2019	12:05		19-A46290	313		2.4	4.70		0.482
Storm Event	Grab	9/13/2019	11:30		19-A46537	60		1.7	6.18		0.298
Storm Event	Grab	9/16/2019	13:45		19-A46762	66		1.8	9.54		0.227
Base	Grab	10/17/2019	13:35		19-A53283	14		1.1	13.40		0.067
Storm Event	Grab	10/23/2019	13:10		19-A54464	70		1.4	12.50		0.222
Base	Grab	10/31/2019	12:25		19-A56149	17		0.9	12.10		0.296

^ Sample Diluted due to result above calibration of linear range

\* Sample Exceeded Holding Time

~ Reporting limit elevated due to instrument performance at the RL

**CHEMICAL DATA - Analytes tested for in a lab, 2019 - MVTL, New Ulm**

**PLC010 - Primary Lower Cottonwood River near Leavenworth - Non-impacted stream/Western Corn Belt Plains**

**STORET CODE - S001-920**

**2019 Wateryear (Oct 1, 2018 to Sept. 30, 2019)**

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft <sup>3</sup> /sec)	LAB SAMPLE ID #	TSS MG/L	TSVS MG/L	TKN MG/L	N-NO2+NO3 MG/L	P-PO4 MG/L	TP MG/L
Snowmelt	Grab	3/20/2019	12:55		19-A10494	82		2.6	1.32		0.830^
Snowmelt	Grab	3/22/2019	12:10		19-A10985	180		2.5	1.38		0.870^
Snowmelt	Grab	3/25/2019	12:30		19-A11162	186		2.3	1.88		0.690^
Snowmelt	Grab	3/28/2019	12:15		19-A11971	124		1.9	2.84		0.510^
Snowmelt	Grab	4/1/2019	11:35		19-A12429	148		1.6	3.59		0.407
Storm Event	Grab	4/8/2019	11:25		19-A13685	164		2.0	5.76		0.397
Storm Event	Grab	4/15/2019	12:50		19-A14990	87		1.7	5.88		0.231
Storm Event	Grab	4/18/2019	12:20		19-A16117	198		2.2	5.72		0.369
Storm Event	Grab	4/26/2019	11:05		19-A18519	57		1.7	5.96		0.134
Storm Event	Grab	5/9/2019	13:05		19-A21371	81		1.7	5.99		0.154
Storm Event	Grab	5/10/2019	16:45		19-A21678	129		2.0	7.82		0.210
Storm Event	Grab	5/14/2019	11:10		19-A21992	48		1.4	7.15		0.094
Storm Event	Grab	5/28/2019	13:45		19-A24804	132		2.5	7.50		0.320
Storm Event	Grab	5/31/2019	10:50		19-A25635	64		1.5	8.09		0.131
Base	Grab	6/10/2019	12:50		19-A27645	61		2.1	6.72		0.148
Storm Event	Grab	7/1/2019	11:45		19-A32244	199		2.5	7.23		0.258
Storm Event	Grab	7/3/2019	12:30		19-A32943	205		2.9	7.90		0.332
Storm Event	Grab	7/12/2019	12:15		19-A34717	112		1.8	6.08		0.184
Storm Event	Grab	7/21/2019	12:35		19-A36311	291		3.0	5.42		0.490
Storm Event	Grab	7/26/2019	10:20		19-A37613	108		1.9	6.53		0.172
Base	Grab	8/6/2019	13:45		19-A39244	59		1.7	4.03		0.143
Storm Event	Grab	8/22/2019	13:20		19-A42793	87		1.4	4.38		0.177
Base	Grab	9/6/2019	11:30		19-A45186	27		1.7	1.04		0.082
Storm Event	Grab	9/12/2019	11:40		19-A46283	338		2.3	2.81		0.476
Storm Event	Grab	9/13/2019	11:05		19-A46536	280		2.4	2.30		0.385
Storm Event	Dup	9/13/2019	11:10		19-A46539	288		2.2	2.28		0.379
Storm Event	Grab	9/14/2019	15:10		19-A46756	108		1.6	3.13		0.282
Storm Event	Grab	9/20/2019	9:05		19-A47742	93		1.5	3.35		0.268
Base	Grab	10/17/2019	13:15		19-A53282	26		1.2	7.13		0.081
Storm Event	Grab	10/23/2017	12:45		19-A54463	136		2.1	6.69		0.346
Base	Grab	10/31/2019	12:00		19-A56148	29		1.0	6.70		0.097

^ Sample Diluted due to result above calibration of linear range

\* Sample Exceeded Holding Time

~ Reporting limit elevated due to instrument performance at the RL