

CHEMICAL DATA - Analytes tested for in a lab, 2016 - MVTL, New Ulm

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

STORET CODE - S001-918

2016 Wateryear (Oct 1, 2015 to Sept. 30, 2016)

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft ³ /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	TURBIDITY NTU
Base	Grab	1/29/2016	12:30		16-A3218	15	4	1.3	11.80	0.036	0.058	12
Snowmelt	Grab	2/26/2016	12:20		16-A5958	67		1.3	14.30	0.107	0.205	
Snowmelt	Grab	3/1/2016	13:50		16-A6172	104		1.3	11.90	0.067	0.170	
Snowmelt	Grab	3/7/2016	13:20		16-A6880	348		1.8	12.00	0.049	0.309	
Snowmelt	Grab	3/11/2016	14:40		16-A7825	132		2.5	11.50	0.050	0.194	
Base	Grab	3/22/2016	14:50		16-A9272	28		1.1	12.6	0.019	0.071	
Storm Event	Grab	3/28/2016	13:50		16-A10273	214		1.7	16.7	0.040	0.221	
Storm Event	Grab	3/31/2016	13:30		16-A10973	150		1.7	16.30	0.027	0.204	
Storm Event	Grab	4/4/2016	13:35		16-A11369	91		1.1	16.00	0.027	0.128	
Base	Grab	4/13/2016	15:20		16-A13429	3		1.4	15.70	0.010	0.050	
Storm Event	Grab	4/25/2016	13:10		16-A15676	200		1.8	12.5	0.030	0.244	
Storm Event	Grab	4/27/2016	12:45		16-A16189	84		1.4	15.50	0.021	0.132	
Storm Event	Grab	4/29/2016	13:15		16-A16798	224		1.8	17.40	0.037	0.255	
Storm Event	Grab	5/2/2016	14:40		16-A16995	120		1.4	18.50	0.053	0.202	
Storm Event	Grab	5/12/2016	14:10		16-A19539	103		1.6	18.5^	0.066	0.194	
Base	Grab	5/24/2016	15:30		16-A21572	46		1.4	16.60	0.030	0.103	
Base	Duplicate	5/24/2016	15:35		16-A21574	60		1.1	16.50	0.032	0.106	
Storm Event	Grab	5/29/2016	11:34		16-A22604	270		2.2	18.90	0.114*	0.500^	
Storm Event	Grab	5/30/2016	6:20		16-A22605	417		3.0	21.3^	0.113	0.610^	
Storm Event	Grab	6/2/2016	14:20		16-A23368	240		2.3	18.90	0.103	0.377	
Storm Event	Grab	6/7/2016	16:05		16-A24849	128		1.4	19.30	0.054	0.197	
Storm Event	Grab	6/18/2016	10:26		16-A27692	1020		4.7	9.35	0.151*	1.08^	
Storm Event	Grab	6/21/2016	13:40		16-A28122	166		2.0	17.00	0.129	0.350	
Storm Event	Duplicate	6/21/2016	13:45		16-A28124	156		1.7	17.10	0.121	0.346	
Storm Event	Grab	7/12/2016	16:00		16-A33140	117		1.6	16.60	0.100	0.245	
Storm Event	Grab	7/17/2016	18:40		16-A34587	652		2.4	11.60	0.123	0.595^	
Storm Event	Grab	7/18/2016	9:25		16-A35222	547		1.6	9.70	0.171	0.642^	
Storm Event	Grab	7/19/2016	13:45		16-A35434	660		1.7	7.41	0.137	0.648^	
Storm Event	Grab	7/20/2016	14:45		16-A35874	375		1.8	7.69	0.132	0.356	
Storm Event	Grab	7/28/2016	14:00		16-A37680	105		1.8	8.62	0.108	0.260	
Base	Grab	8/18/2016	13:30		16-A41898	52		1.5	9.74	0.014	0.129	
Base	Grab	9/1/2016	15:45		16-A44770	59		1.4	13.90	0.066	0.132	
Storm Event	Grab	9/8/2016	9:00		16-A45961	114		1.7	15.50	0.110	0.249	
Storm Event	Grab	9/16/2016	13:40		16-A48147	101		1.9	13.60	0.102	0.2180	
Storm Event	Grab	9/23/2016	13:55		16-A50329	216		2.6	11.30	0.099	0.393	
Storm Event	Grab	9/26/2016	15:00		16-A51101	266		2.0	13.10	0.121	0.362	
Storm Event	Grab	10/6/2016	14:00		16-A53828	158		1.8	13.60	0.095	0.249	
Storm Event	Grab	10/10/2016	15:25		16-A54295	91		1.4	14.90	0.087	0.173	
Base	Grab	11/14/2016	12:45		16-A61672	16		0.9	13.10	0.014	0.028	
Storm Event	Grab	11/30/2016	15:30		16-A63906	96		1.4	14.80	0.046	0.143	
Storm Event	Grab	12/5/2016	14:40		16-A64417	38		1.0	14.50	0.041	0.086	

^ Sample Diluted due to result above calibration of linear range

* Sample Exceeded Holding Time

Reporting timeframe has changed from the USGS Wateryear (Oct. 1 to Sept. 30)

To a calendar year system.

CHEMICAL DATA - Analytes tested for in a lab, 2016- MVTL, New Ulm

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

STORET CODE - S001-919

2016 Wateryear (Oct 1, 2015 to Sept. 30, 2016)

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft ³ /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	TURB. NTU
Snowmelt	Grab	3/7/2016	12:25		16-A6879	8		0.7	17.60	0.042	0.073	
Snowmelt	Grab	3/11/2016	13:45		16-A7824	5		2.9	19.00	0.037	0.052	
Base	Grab	3/22/2016	13:50		16-A9271	<2		1.1	21.5^	0.011	0.021	
Storm Event	Grab	3/28/2016	12:50		16-A10272	18		1.4	24.5^	0.032	0.078	
Storm Event	Grab	3/31/2016	12:35		16-A10972	15		1.1	24.5^	0.027	0.076	
Base	Grab	4/13/2016	14:20		16-A13428	20		1.1	23.5^	0.009	0.017	
Storm Event	Grab	4/25/2016	12:05		16-A15675	2		1.2	21.2^	0.017	0.054	
Storm Event	Duplicate	4/25/2016	12:10		16-A15677	7		1.0	21.2^	0.017	0.056	
Storm Event	Grab	4/26/2016	15:10		16-A16191	17		1.5	23.50	0.019	0.067	
Storm Event	Grab	4/29/2016	12:20		16-A16797	51		1.2	25.90	0.069	0.146	
Storm Event	Grab	5/2/2016	13:20		16-A16994	8		1.1	27.8^	0.031	0.060	
Storm Event	Grab	5/12/2016	13:10		16-A19538	22		1.4	28.6^	0.042	0.074	
Storm Event	Grab	5/16/2016	12:00		16-A19889	9		1.0	28.4^	0.030	0.055	
Base	Grab	5/24/2016	14:35		16-A21571	11		1.1	25.7^	0.032	0.058	
Storm Event	Grab	5/26/2016	13:10		16-A22044	25		1.4	24.0^	0.076	0.086	
Storm Event	Grab	5/28/2016	14:17		16-A22599	127		2.1	21.9^	0.157*	0.377	
Storm Event	Grab	5/29/2016	10:35		16-A22603	87		2.1	28.4^	0.222*	0.415	
Storm Event	Grab	6/7/2016	14:45		16-A24848	22		1.4	30.4^	0.051	0.108	
Storm Event	Grab	6/21/2016	11:35		16-A28121	42		1.3	26.4^	0.108	0.207	
Storm Event	Grab	7/12/2016	14:35		16-A33139	32		1.3	23.4^	0.103	0.159	
Storm Event	Grab	7/17/2016	17:35		16-A34586	170		2.2	10.20	0.199	0.417	
Storm Event	Grab	7/18/2016	11:15		16-A35221	46		1.6	12.90	0.213	0.328	
Storm Event	Grab	7/20/2016	13:20		16-A35873	39		1.3	16.30	0.176	0.219	
Storm Event	Grab	7/28/2016	13:05		16-A37679	18		1.3	19.30	0.089	0.126	
Base	Grab	8/18/2016	12:30		16-A41897	14		1.2	15.60	0.091	0.159	
Storm Event	Grab	8/24/2016	15:25		16-A42997	186		0.8	14.10	0.162	0.345	
Storm Event	Grab	9/1/2016	14:30		16-A44769	30		1.4	19.60	0.072	0.104	
Storm Event	Grab	9/7/2016	15:30		16-A45960	53		1.7	19.00	0.122	0.208	
Storm Event	Grab	9/16/2016	12:45		16-A48146	50		1.5	20.9^	0.101	0.164	
Storm Event	Grab	9/26/2016	14:05		16-A51100	45		1.4	21.2^	0.101	0.156	
Storm Event	Grab	10/5/2016	14:00		16-A53824	70		1.7	18.10	0.083	0.180	
Storm Event	Grab	10/6/2016	13:05		16-A53827	35		1.5	19.30	0.094	0.157	
Storm Event	Grab	10/7/2016	16:00		16-A54287	52		1.7	19.30	0.130*	0.214	
Storm Event	Grab	10/10/2016	14:05		16-A54294	19		1.4	20.1^	0.073	0.086	
Base	Grab	10/31/2016	12:50		16-A59260	9		1.1	19.00	0.048	0.056	

^ 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, 2015 - MVTL, New Ulm

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

STORET CODE - S001-920

2015 Wateryear (Oct 1, 2014 to Sept. 30, 2015)

FLOW TYPE	SAMP TYPE	DATE	TIME	FLOW (ft ³ /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	TURBIDITY NTU
Snowmelt	Grab	3/1/2016	12:50		16-A6171	94		1.4	10.00	0.061	0.179	
Snowmelt	Grab	3/7/2016	12:00		16-A6878	77		1.0	10.80	0.044	0.146	
Snowmelt	Grab	3/11/2016	13:20		16-A7823	83		2.1	10.00	0.049	0.153	
Base	Grab	3/22/2016	13:20		16-A9270	27		0.8	10.30	0.017	0.065	
Storm Event	Grab	3/28/2016	12:25		16-A10271	89		1.5	12.10	0.019	0.151	
Storm Event	Grab	3/31/2016	12:10		16-A10971	130		1.6	13.40	0.028	0.169	
Storm Event	Grab	4/4/2016	12:40		16-A11368	61		1.2	13.10	0.020	0.108	
Base	Grab	4/13/2016	13:55		16-A13427	26		1.4	13.00	0.009	0.048	
Storm Event	Grab	4/22/2016	13:35		16-A15580	39		1.4	9.73	0.012	0.064	
Storm Event	Grab	4/25/2016	11:40		16-A15674	40		1.4	11.50	0.016	0.080	
Storm Event	Grab	4/26/2016	14:45		16-A16190	65		1.2	12.10	0.019	0.108	
Storm Event	Grab	4/29/2016	11:55		16-A16796	154		2.0	13.80	0.045	0.228	
Storm Event	Grab	5/2/2016	12:55		16-A16993	83		1.5	15.60	0.039	0.165	
Storm Event	Grab	5/12/2016	12:40		16-A19537	67		1.3	15.10	0.043	0.134	
Base	Grab	5/24/2016	14:05		16-A21569	49		1.1	13.30	0.025	0.104	
Base	Duplicate	5/24/2016	14:10		16-A21573	53		1.1	13.30	0.024	0.097	
Storm Event	Grab	5/28/2016	13:42		16-A22598	90		1.4	12.80	0.054*	0.176	
Storm Event	Grab	5/29/2016	18:15		16-A22602	367		3.4	16.30	0.115	0.500^	
Storm Event	Grab	6/1/2016	16:35		16-A23365	230		2.5	15.00	0.113	0.375	
Storm Event	Grab	6/7/2016	14:15		16-A24847	108		1.9	16.50	0.042	0.177	
Storm Event	Grab	6/18/2016	8:55		16-A27691	232		2.7	13.60	0.139*	0.419	
Storm Event	Grab	7/12/2016	14:10		16-A33138	97		1.6	11.70	0.087	0.215	
Storm Event	Grab	7/17/2016	17:10		16-A34585	240		0.9	7.72	0.132	0.422	
Storm Event	Grab	7/18/2016	10:45		16-A35220	424		2.8	3.60	0.135	0.687^	
Storm Event	Grab	7/19/2016	12:45		16-A35433	83		1.8	5.27	0.151	0.299	
Storm Event	Grab	7/20/2016	12:50		16-A35872	60		1.9	6.45	0.142	0.224	
Storm Event	Grab	7/28/2016	12:40		16-A37678	153		1.9	6.34	0.113	0.274	
Base	Grab	8/18/2016	12:05		16-A41896	22		1.4	4.26	0.032	0.113	
Storm Event	Grab	8/24/2016	15:05		16-A42996	48		1.4	6.93	0.081	0.1520	
Storm Event	Grab	9/7/2016	15:05		16-A45959	57		1.4	7.50	0.077	0.1830	
Storm Event	Grab	9/16/2016	12:20		16-A48145	72		1.8	9.53	0.099	0.2000	
Storm Event	Grab	9/22/2016	13:45		16-A50330	176		2.3	8.43	0.121	0.3760	
Storm Event	Grab	9/23/2016	13:00		16-A50328	218		2.2	7.35	0.187	0.4590	
Storm Event	Grab	9/26/2016	13:40		16-A51099	208		2.1	9.21	0.125	0.3530	
Storm Event	Grab	10/6/2016	12:40		16-A53826	138		2.3	10.10	0.089	0.2470	
Storm Event	Grab	10/10/2016	13:40		16-A54293	67		1.3	12.30	0.078	0.1470	
Base	Grab	10/31/2016	12:25		16-A59259	15		1.1	10.50	0.044	0.064	

^ Sample Diluted due to result above calibration of linear range

* Sample Exceeded Holding Time