APPENDIX A

WATER QUALITY DATA
AT STREAM GAGES
WATER YEARS 2007 AND 2008

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000110	39.0094	-122.83835	KCK	2/9/2007 10:00	503	TMMHg	0.1250		ng/L
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	TMMHg	0.0748		ng/L
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	TMMHg	0.0159	U	ng/L
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	TMMHg	0.0345		ng/L
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	TMMHg	0.0227		ng/L
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	TMMHg	0.1154		ng/L
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	TMMHg	0.1078		ng/L
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	TMMHg	0.0879		ng/L
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	MeHg	0.0239	J	ng/L
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	MeHg	0.0406	J	ng/L
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	MeHg	0.0526		ng/L
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	MeHg	0.0520		ng/L
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	MeHg	0.0572		ng/L
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	MeHg	0.1294		ng/L
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	MeHg	0.0604		ng/L
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	MeHg	0.1303		ng/L
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	MeHg	0.1428		ng/L
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	MeHg	0.1235		ng/L
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	MeHg	0.0588		ng/L
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	MeHg	0.0685		ng/L
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	MeHg	0.0753		ng/L
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	MeHg	0.0539		ng/L
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	MeHg	0.0788		ng/L
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	MeHg	0.0854		ng/L
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	MeHg	0.0724		ng/L
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	MeHg	0.0976		ng/L
W-513-000002	39.1825	-122.91184	MCU	7/13/2006 0:00		TMMHg	0.0400	J	ng/L
W-513-000005	39.1825	-122.91184	MCU	7/13/2006 0:00		TMMHg	0.0210	J	ng/L
W-513-000005	39.1825	-122.91184	MCU	7/13/2006 0:00		TMMHg	0.0192	U	ng/L
W-513-000007	39.1825	-122.91184	MCU	7/13/2006 0:00		TMMHg	0.0532		ng/L
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	TMMHg	0.0946		ng/L
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	TMMHg	0.0879		ng/L
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	TMMHg	0.0159	U	ng/L
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	TMMHg	0.0159	U	ng/L
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	TMMHg	0.0731		ng/L
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	TMMHg	0.0504		ng/L
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	TMMHg	0.0396		ng/L
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	MeHg	0.0485	J	ng/L
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	MeHg	0.0427	J	ng/L
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	MeHg	0.0462	J	ng/L
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	MeHg	0.0949		ng/L
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	MeHg	0.1019		ng/L
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	MeHg	0.1002		ng/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	MeHg	0.2280		ng/L
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	MeHg	0.3086		ng/L
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	MeHg	0.0787		ng/L
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	MeHg	0.1105		ng/L
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	MeHg	0.0447		ng/L
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	MeHg	0.2150		ng/L
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	MeHg	0.1501		ng/L
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	MeHg	0.1920		ng/L
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	MeHg	0.2051		ng/L
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	MeHg	0.1057		ng/L
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	MeHg	0.0687		ng/L
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	MeHg	0.1960		ng/L
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	MeHg	0.1860		ng/L
W-513-000102	39.09552	-122.96102	SCS	2/9/2007 8:15	441	TMMHg	0.0695		ng/L
W-513-000113	39.09552	-122.96102	SCS	2/9/2007 11:30	340	TMMHg	0.0906		ng/L
W-513-000114	39.09552	-122.96102	SCS	2/9/2007 11:30	340	TMMHg	0.0775		ng/L
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	TMMHg	0.0408		ng/L
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	TMMHg	0.0223		ng/L
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	TMMHg	0.1308		ng/L
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	TMMHg	0.0877		ng/L
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	MeHg	0.0471	J	ng/L
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	MeHg	0.0713		ng/L
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	MeHg	0.0377	J	ng/L
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	MeHg	0.0714		ng/L
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	MeHg	0.0825		ng/L
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	MeHg	0.0698		ng/L
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	MeHg	0.0333	J	ng/L
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	MeHg	0.1386		ng/L
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	MeHg	0.1402		ng/L
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	MeHg	0.1675		ng/L
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	MeHg	0.1462		ng/L
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	MeHg	0.1647		ng/L
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	MeHg	0.0812		ng/L
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	MeHg	0.0691		ng/L
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	MeHg	0.1060		ng/L
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	MeHg	0.0963		ng/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000110	39.0094	-122.83835	KCK	2/9/2007 10:00	503	THg	17.7		ng/L
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	THg	28.2		ng/L
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	THg	4.1		ng/L
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	THg	4.0		ng/L
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	THg	0.8		ng/L
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	THg	16.9		ng/L
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	THg	17.4		ng/L
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	THg	15.5		ng/L
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	THg	5.6		ng/L
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	THg	6.9		ng/L
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	THg	13.8		ng/L
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	THg	11.7		ng/L
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	THg	41.2		ng/L
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	THg	68.5		ng/L
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	THg	13.2		ng/L
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	THg	41.4		ng/L
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	THg	24.8		ng/L
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	THg	20.8		ng/L
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	THg	4.8		ng/L
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	THg	8.3		ng/L
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	THg	8.4		ng/L
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	THg	8.3		ng/L
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	THg	3.2		ng/L
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	THg	10.6		ng/L
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	THg	9.4		ng/L
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	THg	9.7		ng/L
W-513-000002	39.1825	-122.91184	MCU	7/13/2006 0:00		THg	2.2		ng/L
W-513-000005	39.1825	-122.91184	MCU	7/13/2006 0:00		THg	0.3	J	ng/L
W-513-000005	39.1825	-122.91184	MCU	7/13/2006 0:00		THg	0.3	J	ng/L
W-513-000007	39.1825	-122.91184	MCU	7/13/2006 0:00		THg	1.3		ng/L
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	THg	18.6		ng/L
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	THg	23.4		ng/L
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	THg	5.4		ng/L
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	THg	0.9		ng/L
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	THg	15.8		ng/L
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	THg	10.8		ng/L
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	THg	11.0		ng/L
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	THg	8.9		ng/L
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	THg	0.7		ng/L
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	THg	26.5		ng/L
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	THg	26.6		ng/L
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	THg	16.9		ng/L
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	THg	263.5		ng/L
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	THg	178.6		ng/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	THg	23.1		ng/L
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	THg	26.4		ng/L
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	THg	0.9		ng/L
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	THg	53.6		ng/L
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	THg	38.7		ng/L
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	THg	62.3		ng/L
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	THg	59.3		ng/L
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	THg	26.2		ng/L
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	THg	15.0		ng/L
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	THg	48.1		ng/L
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	THg	43.0		ng/L
W-513-000102	39.09552	-122.96102	SCS	2/9/2007 8:15	441	THg	21.9		ng/L
W-513-000113	39.09552	-122.96102	SCS	2/9/2007 11:30	340	THg	18.1		ng/L
W-513-000114	39.09552	-122.96102	SCS	2/9/2007 11:30	340	THg	18.8		ng/L
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	THg	9.0		ng/L
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	THg	0.9		ng/L
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	THg	18.4		ng/L
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	THg	14.8		ng/L
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	THg	9.9		ng/L
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	THg	9.7		ng/L
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	THg	18.0		ng/L
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	THg	18.6		ng/L
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	THg	13.9		ng/L
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	THg	102.8		ng/L
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	THg	65.9		ng/L
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	THg	14.6		ng/L
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	THg	37.7		ng/L
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	THg	43.5		ng/L
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	THg	44.3		ng/L
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	THg	37.1		ng/L
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	THg	18.5		ng/L
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	THg	19.3		ng/L
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	THg	13.7		ng/L
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	THg	32.8		ng/L
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	THg	24.4		ng/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Chloride	1.8	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Chloride	2	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Chloride	2	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Chloride	2.6	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Chloride	4.6	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Chloride	1.8	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Chloride	1.7	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Chloride	10	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Chloride	5.9	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Chloride	3.2	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Chloride	4	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Chloride	6.1	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Chloride	1.7	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Chloride	4.1	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Chloride	3.6	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Chloride	1.2	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Chloride	1.4	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Chloride	3.3	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Chloride	2.2	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Chloride	2.2	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Chloride	2.7	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Chloride	1.8	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Chloride	1.8	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Chloride	1.9	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Chloride	2	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Chloride	2	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Chloride	2.2	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Chloride	3.5	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Chloride	1.8	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Chloride	1.9	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Chloride	1.9	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Chloride	2.6	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Chloride	3.8	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Chloride	2.2	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Chloride	2.7	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Chloride	1.5	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Chloride	1.8	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Chloride	2.9	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Chloride	3.2	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Chloride	3.2	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Chloride	1.4	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Chloride	1.4	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Chloride	1.9	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Chloride	1.7	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Chloride	1.7	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Chloride	2.1	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Chloride	1.5	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Chloride	1.7	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Chloride	2.1	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Chloride	2.2	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Chloride	2.6	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Chloride	4	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Chloride	2	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Chloride	2	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Chloride	2.3	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Chloride	2.1	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Chloride	2	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Chloride	2.3	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Chloride	3.4	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Chloride	1.9	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Chloride	3.6	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Chloride	2.9	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Chloride	1.4	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Chloride	1.6	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Chloride	2.3	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Chloride	2	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Chloride	2.4	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Chloride	1.8	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Chloride	1.9	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Sulfate as SO4	2.9	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Sulfate as SO4	2.9	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Sulfate as SO4	8.1	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Sulfate as SO4	3.5	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Sulfate as SO4	5.4	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Sulfate as SO4	4.3	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Sulfate as SO4	4.1	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Sulfate as SO4	3.4	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Sulfate as SO4	6.1	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Sulfate as SO4	3.9	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Sulfate as SO4	4.5	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Sulfate as SO4	4.6	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Sulfate as SO4	2.1	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Sulfate as SO4	3.5	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Sulfate as SO4	4	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Sulfate as SO4	1.2	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Sulfate as SO4	1.5	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Sulfate as SO4	4.5	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Sulfate as SO4	2.6	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Sulfate as SO4	2.7	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Sulfate as SO4	3.8	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Sulfate as SO4	2.1	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Sulfate as SO4	2.2	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Sulfate as SO4	2.3	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Sulfate as SO4	8.1	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Sulfate as SO4	2.9	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Sulfate as SO4	7.3	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Sulfate as SO4	12	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Sulfate as SO4	7.4	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Sulfate as SO4	7.6	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Sulfate as SO4	7.5	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Sulfate as SO4	6.9	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Sulfate as SO4	23	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Sulfate as SO4	7	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Sulfate as SO4	8.5	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Sulfate as SO4	4.4	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Sulfate as SO4	5	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Sulfate as SO4	5.9	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Sulfate as SO4	6.9	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Sulfate as SO4	12	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Sulfate as SO4	4.2	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Sulfate as SO4	4.6	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Sulfate as SO4	5.5	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Sulfate as SO4	5.4	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Sulfate as SO4	4.8	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Sulfate as SO4	6.4	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Sulfate as SO4	3.5	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Sulfate as SO4	3.7	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Sulfate as SO4	4	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Sulfate as SO4	3.7	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Sulfate as SO4	4.9	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Sulfate as SO4	9.2	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Sulfate as SO4	3.9	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Sulfate as SO4	4	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Sulfate as SO4	3.5	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Sulfate as SO4	4.4	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Sulfate as SO4	4.4	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Sulfate as SO4	5.1	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Sulfate as SO4	3.2	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Sulfate as SO4	2.4	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Sulfate as SO4	3.5	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Sulfate as SO4	5.2	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Sulfate as SO4	1.3	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Sulfate as SO4	1.5	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Sulfate as SO4	3.9	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Sulfate as SO4	2.8	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Sulfate as SO4	3.7	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Sulfate as SO4	1.7	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Sulfate as SO4	2	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Ammonia as NH3	0.11	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Ammonia as NH3	0.15	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Ammonia as NH3	ND	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Ammonia as NH3	0.26	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Ammonia as NH3	ND	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Ammonia as NH3	0.07	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Ammonia as NH3	ND	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Ammonia as NH3	0.08	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Ammonia as NH3	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Ammonia as NH3	ND	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Ammonia as NH3	ND	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Ammonia as NH3	ND	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Ammonia as NH3	ND	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Ammonia as NH3	ND	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Ammonia as NH3	0.23	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Ammonia as NH3	ND	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Ammonia as NH3	0.63	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Ammonia as NH3	< 0.063	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Ammonia as NH3	< 0.063	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Ammonia as NH3	< 0.063	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Ammonia as NH3	ND	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Ammonia as NH3	ND	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Ammonia as NH3	ND	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Ammonia as NH3	ND	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Ammonia as NH3	ND	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Ammonia as NH3	0.12	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Ammonia as NH3	0.24	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Ammonia as NH3	ND	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Ammonia as NH3	ND	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Ammonia as NH3	0.07	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Ammonia as NH3	0.2	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Ammonia as NH3	ND	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Ammonia as NH3	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Ammonia as NH3	ND	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Ammonia as NH3	ND	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Ammonia as NH3	ND	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Ammonia as NH3	ND	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Ammonia as NH3	ND	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Ammonia as NH3	ND	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Ammonia as NH3	ND	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Ammonia as NH3	ND	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Ammonia as NH3	ND	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Ammonia as NH3	< 0.063	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Ammonia as NH3	< 0.063	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Ammonia as NH3	< 0.063	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Ammonia as NH3	ND	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Ammonia as NH3	ND	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Ammonia as NH3	ND	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Ammonia as NH3	0.21	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Ammonia as NH3	ND	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Ammonia as NH3	0.09	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Ammonia as NH3	ND	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Ammonia as NH3	0.11	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Ammonia as NH3	0.1	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Ammonia as NH3	0.1	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Ammonia as NH3	ND	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Ammonia as NH3	ND	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Ammonia as NH3	ND	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Ammonia as NH3	ND	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Ammonia as NH3	ND	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Ammonia as NH3	ND	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Ammonia as NH3	ND	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Ammonia as NH3	ND	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Ammonia as NH3	ND	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Ammonia as NH3	< 0.063	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Ammonia as NH3	< 0.063	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Ammonia as NH3	ND	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Ammonia as NH3	ND	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Ammonia as NH3	ND	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Nitrite as NO2		mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Nitrite as NO2		mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Nitrite as NO2		mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Nitrite as NO2	ND	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Nitrite as NO2	ND	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Nitrite as NO2	ND	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Nitrite as NO2	ND	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Nitrite as NO2	ND	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Nitrite as N	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Nitrite as N	ND	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Nitrite as NO2		mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Nitrite as NO2		mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Nitrite as NO2	ND	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Nitrite as NO2	ND	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Nitrite as NO2	ND	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Nitrite as NO2	ND	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Nitrite as NO2	ND	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Nitrite as NO2	ND	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Nitrite as N	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Nitrite as N	ND	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Nitrite as NO2		mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Nitrite as NO2		mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Nitrite as NO2	ND	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Nitrite as NO2	ND	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Nitrite as NO2	ND	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Nitrite as NO2	ND	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Nitrite as NO2	ND	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrite as N	ND	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrite as N	ND	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Nitrate as NO3	1	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Nitrate as NO3	1	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Nitrate as NO3	0.33	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Nitrate as NO3	0.76	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Nitrate as NO3	0.54	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Nitrate as NO3	0.74	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Nitrate as NO3	0.65	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Nitrate as NO3	0.48	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Nitrate as N	ND	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Nitrate as NO3	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Nitrate as N	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Nitrate as NO3	ND	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Nitrate as NO3	ND	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Nitrate as NO3	ND	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Nitrate as NO3	1.1	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Nitrate as NO3	1.4	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Nitrate as NO3	0.54	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Nitrate as NO3	0.45	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Nitrate as NO3	0.5	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Nitrate as NO3	0.94	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Nitrate as NO3	0.76	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Nitrate as NO3	0.62	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Nitrate as NO3	0.58	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Nitrate as NO3	0.37	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Nitrate as NO3	0.37	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Nitrate as NO3	0.38	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Nitrate as NO3	0.37	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Nitrate as NO3	1	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Nitrate as NO3	0.39	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Nitrate as NO3	0.94	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Nitrate as NO3	0.36	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Nitrate as NO3	0.36	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Nitrate as NO3	0.27	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Nitrate as NO3	0.43	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Nitrate as N	ND	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Nitrate as NO3	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Nitrate as N	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Nitrate as NO3	ND	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Nitrate as NO3	ND	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Nitrate as NO3	ND	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Nitrate as NO3	ND	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Nitrate as NO3	ND	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Nitrate as NO3	ND	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Nitrate as NO3	0.63	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Nitrate as NO3	0.24	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Nitrate as NO3	0.24	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Nitrate as NO3	0.38	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Nitrate as NO3	0.32	mg/l
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Nitrate as NO3	0.28	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Nitrate as NO3	0.33	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Nitrate as NO3	0.26	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Nitrate as NO3	0.26	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Nitrate as NO3	1	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Nitrate as NO3	0.97	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Nitrate as NO3	0.84	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Nitrate as NO3	1.9	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Nitrate as NO3	0.56	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Nitrate as NO3	0.58	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Nitrate as NO3	0.47	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrate as N	ND	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrate as N	ND	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrate as NO3	ND	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Nitrate as NO3	ND	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Nitrate as NO3	ND	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Nitrate as NO3	ND	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Nitrate as NO3	1.1	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Nitrate as NO3	ND	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Nitrate as NO3	0.4	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Nitrate as NO3	0.4	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Nitrate as NO3	0.4	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Nitrate as NO3	0.5	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Nitrate as NO3	0.43	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Nitrate as NO3	0.48	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Nitrate as NO3	0.28	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Nitrate as NO3	0.32	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Total Kjeldahl Nitrogen	0.61	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Total Kjeldahl Nitrogen	2.2	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Total Kjeldahl Nitrogen	0.44	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Total Kjeldahl Nitrogen	1.1	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Total Kjeldahl Nitrogen	0.14	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Total Kjeldahl Nitrogen	0.35	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Total Kjeldahl Nitrogen	0.21	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Total Kjeldahl Nitrogen	0.69	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Total Kjeldahl Nitrogen	4.1	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Total Kjeldahl Nitrogen	2.1	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Total Kjeldahl Nitrogen	0.76	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Total Kjeldahl Nitrogen	1.1	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Total Kjeldahl Nitrogen	0.45	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Total Kjeldahl Nitrogen	< 0.10	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Total Kjeldahl Nitrogen	0.21	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Total Kjeldahl Nitrogen	0.7	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Total Kjeldahl Nitrogen	0.42	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Total Kjeldahl Nitrogen	0.1	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Total Kjeldahl Nitrogen	0.96	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Total Kjeldahl Nitrogen	0.21	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Total Kjeldahl Nitrogen	0.66	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Total Kjeldahl Nitrogen	2.7	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Total Kjeldahl Nitrogen	2.7	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Total Kjeldahl Nitrogen	0.59	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Total Kjeldahl Nitrogen	0.41	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Total Kjeldahl Nitrogen	0.52	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Total Kjeldahl Nitrogen	0.49	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Total Kjeldahl Nitrogen	0.29	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Total Kjeldahl Nitrogen	0.1	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Total Kjeldahl Nitrogen	0.14	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Total Kjeldahl Nitrogen	0.32	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Total Kjeldahl Nitrogen	0.44	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Total Kjeldahl Nitrogen	0.26	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Total Kjeldahl Nitrogen	0.74	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Total Kjeldahl Nitrogen	0.42	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Total Kjeldahl Nitrogen	0.46	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Total Kjeldahl Nitrogen	0.35	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Total Kjeldahl Nitrogen	0.83	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Total Kjeldahl Nitrogen	3	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Total Kjeldahl Nitrogen	2.1	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Total Kjeldahl Nitrogen	ND	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Total Kjeldahl Nitrogen	0.83	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Total Kjeldahl Nitrogen	1.1	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Total Kjeldahl Nitrogen	0.97	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Total Kjeldahl Nitrogen	0.24	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Total Kjeldahl Nitrogen	0.36	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Total Kjeldahl Nitrogen	0.18	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Total Kjeldahl Nitrogen	0.38	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Total Kjeldahl Nitrogen	0.13	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Orthophosphate as P	ND	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Orthophosphate as P	ND	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Orthophosphate as P	ND	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Orthophosphate as P	ND	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Orthophosphate as P	ND	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Orthophosphate as P	ND	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Orthophosphate as P	ND	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Orthophosphate as P	0.54	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Orthophosphate as P	0.045	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Orthophosphate as P	0.04	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Orthophosphate as P	0.036	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Orthophosphate as P	0.11	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Orthophosphate as P	0.061	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Orthophosphate as P	0.18	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Orthophosphate as P	0.15	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Orthophosphate as P	0.015	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Orthophosphate as P	0.012	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Orthophosphate as P	0.015	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Orthophosphate as P	0.011	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Orthophosphate as P	0.015	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Orthophosphate as P	0.015	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Orthophosphate as P	0.014	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Orthophosphate as P	0.3	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Orthophosphate as P	ND	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Orthophosphate as P	ND	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Orthophosphate as P	ND	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Orthophosphate as P	ND	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Orthophosphate as P	ND	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Orthophosphate as P	ND	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Orthophosphate as P	ND	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Orthophosphate as P	0.049	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Orthophosphate as P	0.024	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Orthophosphate as P	0.02	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Orthophosphate as P	0.087	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Orthophosphate as P	0.085	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Orthophosphate as P	0.014	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Orthophosphate as P	0.29	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Orthophosphate as P	0.22	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Orthophosphate as P	0.01	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Orthophosphate as P	0.014	mg/l
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Orthophosphate as P	0.011	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Orthophosphate as P	0.014	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Orthophosphate as P	0.008	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Orthophosphate as P	0.018	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Orthophosphate as P	ND	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Orthophosphate as P	0.39	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Orthophosphate as P	ND	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Orthophosphate as P	ND	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Orthophosphate as P	ND	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Orthophosphate as P	ND	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Orthophosphate as P	ND	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Orthophosphate as P	0.053	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Orthophosphate as P	0.029	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Orthophosphate as P	0.027	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Orthophosphate as P	0.063	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Orthophosphate as P	0.02	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Orthophosphate as P	0.27	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Orthophosphate as P	0.37	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Orthophosphate as P	0.015	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Orthophosphate as P	0.015	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Orthophosphate as P	0.01	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Orthophosphate as P	0.01	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Orthophosphate as P	0.01	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Phosphorus, Total	0.15	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Phosphorus, Total	0.1	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Phosphorus, Total	0.11	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Phosphorus, Total	0.028	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Phosphorus, Total	ND	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Phosphorus, Total	0.14	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Phosphorus, Total	0.072	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Phosphorus, Total	0.036	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Phosphorus, Total	ND	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Phosphorus, Total	0.1	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Phosphorus, Total	ND	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Phosphorus, Total	0.72	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Phosphorus, Total	0.53	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Phosphorus, Total	0.17	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Phosphorus, Total	0.28	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Phosphorus, Total	0.25	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Phosphorus, Total	0.2	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Phosphorus, Total	0.035	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Phosphorus, Total	0.06	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Phosphorus, Total	0.06	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Phosphorus, Total	0.033	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Phosphorus, Total	0.063	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Phosphorus, Total	0.053	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Phosphorus, Total	0.05	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Phosphorus, Total	0.12	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Phosphorus, Total	0.12	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Phosphorus, Total	0.067	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Phosphorus, Total	0.015	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Phosphorus, Total	0.099	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Phosphorus, Total	0.064	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Phosphorus, Total	0.061	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Phosphorus, Total	0.06	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Phosphorus, Total	ND	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Phosphorus, Total	0.11	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Phosphorus, Total	ND	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Phosphorus, Total	1.3	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Phosphorus, Total	1.2	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Phosphorus, Total	0.15	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Phosphorus, Total	0.15	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Phosphorus, Total	0.012	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Phosphorus, Total	0.36	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Phosphorus, Total	0.3	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Phosphorus, Total	0.44	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Phosphorus, Total	0.37	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Phosphorus, Total	0.22	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Phosphorus, Total	0.085	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Phosphorus, Total	0.41	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Phosphorus, Total	0.33	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Phosphorus, Total	0.18	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Phosphorus, Total	0.14	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Phosphorus, Total	0.062	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Phosphorus, Total	0.009	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Phosphorus, Total	0.12	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Phosphorus, Total	0.11	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Phosphorus, Total	0.077	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Phosphorus, Total	0.11	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Phosphorus, Total	0.11	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Phosphorus, Total	ND	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Phosphorus, Total	0.95	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Phosphorus, Total	0.71	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Phosphorus, Total	0.13	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Phosphorus, Total	0.37	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Phosphorus, Total	0.47	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Phosphorus, Total	2.5	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Phosphorus, Total	0.2	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Phosphorus, Total	0.23	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Phosphorus, Total	0.15	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Phosphorus, Total	0.26	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Phosphorus, Total	0.23	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000110	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Fe	6140		µg/L
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Fe	4005		µg/L
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Fe	765		µg/L
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Fe	55		µg/L
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Fe	52		µg/L
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Fe	4710		µg/L
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Fe	4082		µg/L
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Fe	1349		µg/L
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Fe	1436		µg/L
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Fe	1408		µg/L
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Fe	4205		µg/L
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Fe	2946		µg/L
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Fe	16153		µg/L
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Fe	31782		µg/L
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Fe	4945		µg/L
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Fe	15283		µg/L
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Fe	13800		µg/L
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Fe	12280		µg/L
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Fe	12258		µg/L
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Fe	1503		µg/L
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Fe	2364		µg/L
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Fe	2364		µg/L
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Fe	660		µg/L
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Fe	3495		µg/L
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Fe	2953		µg/L
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Fe	2817		µg/L
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Fe	4858		µg/L
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Fe	5540		µg/L
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Fe	1954		µg/L
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Fe	44		µg/L
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Fe	3781		µg/L
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Fe	2492		µg/L
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Fe	2573		µg/L
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Fe	2365		µg/L
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Fe	3162		µg/L
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Fe	15		µg/L
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Fe	5704		µg/L
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Fe	2929		µg/L
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Fe	85372		µg/L
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Fe	66265		µg/L
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Fe	6094		µg/L
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Fe	8286		µg/L
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Fe	169		µg/L
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Fe	20046		µg/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	Test	Value	Flag	Units
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Fe	15591		µg/L
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Fe	21493		µg/L
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Fe	21407		µg/L
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Fe	11155		µg/L
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Fe	5301		µg/L
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Fe	22252		µg/L
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Fe	18506		µg/L
W-513-000102	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Fe	6232		µg/L
W-513-000113	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Fe	4941		µg/L
W-513-000114	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Fe	4924		µg/L
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Fe	1797		µg/L
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Fe	50		µg/L
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Fe	4950		µg/L
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Fe	3916		µg/L
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Fe	4978		µg/L
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Fe	4837		µg/L
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Fe	4763		µg/L
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Fe	2272		µg/L
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Fe	46188		µg/L
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Fe	26119		µg/L
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Fe	4364		µg/L
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Fe	20735		µg/L
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Fe	22458		µg/L
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Fe	18007		µg/L
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Fe	13259		µg/L
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Fe	12766		µg/L
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Fe	7731		µg/L
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Fe	7721		µg/L
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Fe	19454		µg/L
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Fe	15905		µg/L

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000111	39.0094	-122.83835	KCK	2/9/2007 10:00	503	Total Dissolved Solids	110	mg/l
W-513-000202	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Total Dissolved Solids	110	mg/l
W-513-000203	39.0094	-122.83835	KCK	2/9/2007 13:30	363	Total Dissolved Solids	110	mg/l
W-513-000207	39.0094	-122.83835	KCK	2/12/2007 13:00	185	Total Dissolved Solids	110	mg/l
W-513-000210	39.0094	-122.83835	KCK	2/21/2007 10:00	67	Total Dissolved Solids	140	mg/l
W-513-000215	39.0094	-122.83835	KCK	2/22/2007 11:00	590	Total Dissolved Solids	100	mg/l
W-513-000216	39.0094	-122.83835	KCK	2/22/2007 13:30	490	Total Dissolved Solids	100	mg/l
W-513-000222	39.0094	-122.83835	KCK	2/27/2007 10:30	306	Total Dissolved Solids	99	mg/l
W-513-000402	39.0094	-122.83835	KCK	12/19/2007 11:15	44	Total Dissolved Solids	140	mg/l
W-513-000405	39.0094	-122.83835	KCK	12/20/2007 9:45	193	Total Dissolved Solids	140	mg/l
W-513-000407	39.0094	-122.83835	KCK	12/20/2007 13:45	127	Total Dissolved Solids	140	mg/l
W-513-000410	39.0094	-122.83835	KCK	1/4/2008 8:00	1733	Total Dissolved Solids	100	mg/l
W-513-000413	39.0094	-122.83835	KCK	1/4/2008 12:30	6494	Total Dissolved Solids	66	mg/l
W-513-000419	39.0094	-122.83835	KCK	1/5/2008 10:00	342	Total Dissolved Solids	110	mg/l
W-513-000501	39.0094	-122.83835	KCK	1/25/2008 14:30	412	Total Dissolved Solids	130	mg/l
W-513-000504	39.0094	-122.83835	KCK	1/26/2008 8:28	2087	Total Dissolved Solids	66	mg/l
W-513-000507	39.0094	-122.83835	KCK	1/26/2008 11:15	1161	Total Dissolved Solids	92	mg/l
W-513-000513	39.0094	-122.83835	KCK	1/31/2008 15:45	333	Total Dissolved Solids	100	mg/l
W-513-000516	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Total Dissolved Solids	68	mg/l
W-513-000517	39.0094	-122.83835	KCK	2/1/2008 8:30	336	Total Dissolved Solids	58	mg/l
W-513-000520	39.0094	-122.83835	KCK	2/2/2008 15:45	183	Total Dissolved Solids	100	mg/l
W-513-000525	39.0094	-122.83835	KCK	2/3/2008 9:15	369	Total Dissolved Solids	72	mg/l
W-513-000527	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Total Dissolved Solids	80	mg/l
W-513-000528	39.0094	-122.83835	KCK	2/3/2008 11:15	466	Total Dissolved Solids	68	mg/l
W-513-000201	39.1825	-122.91184	MCU	2/9/2007 9:30	290	Total Dissolved Solids	100	mg/l
W-513-000204	39.1825	-122.91184	MCU	2/9/2007 14:15	383	Total Dissolved Solids	100	mg/l
W-513-000205	39.1825	-122.91184	MCU	2/12/2007 11:45	242	Total Dissolved Solids	92	mg/l
W-513-000208	39.1825	-122.91184	MCU	2/21/2007 8:30	42	Total Dissolved Solids	99	mg/l
W-513-000213	39.1825	-122.91184	MCU	2/22/2007 10:00	282	Total Dissolved Solids	88	mg/l
W-513-000218	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Total Dissolved Solids	90	mg/l
W-513-000219	39.1825	-122.91184	MCU	2/22/2007 14:30	249	Total Dissolved Solids	87	mg/l
W-513-000220	39.1825	-122.91184	MCU	2/27/2007 9:00	360	Total Dissolved Solids	87	mg/l
W-513-000401	39.1825	-122.91184	MCU	12/19/2007 9:30	0	Total Dissolved Solids	180	mg/l
W-513-000406	39.1825	-122.91184	MCU	12/20/2007 10:45	162	Total Dissolved Solids	130	mg/l
W-513-000409	39.1825	-122.91184	MCU	12/20/2007 15:15	103	Total Dissolved Solids	100	mg/l
W-513-000411	39.1825	-122.91184	MCU	1/4/2008 9:15	3308	Total Dissolved Solids	90	mg/l
W-513-000414	39.1825	-122.91184	MCU	1/4/2008 13:30	4510	Total Dissolved Solids	68	mg/l
W-513-000416	39.1825	-122.91184	MCU	1/5/2008 8:30	427	Total Dissolved Solids	110	mg/l
W-513-000417	39.1825	-122.91184	MCU	1/5/2008 8:45	427	Total Dissolved Solids	110	mg/l
W-513-000503	39.1825	-122.91184	MCU	1/25/2008 15:45	37	Total Dissolved Solids	100	mg/l
W-513-000506	39.1825	-122.91184	MCU	1/26/2008 9:55	1205	Total Dissolved Solids	95	mg/l
W-513-000509	39.1825	-122.91184	MCU	1/26/2008 12:30	840	Total Dissolved Solids	110	mg/l
W-513-000510	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Total Dissolved Solids	50	mg/l
W-513-000511	39.1825	-122.91184	MCU	1/31/2008 14:30	993	Total Dissolved Solids	< 4.2	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	Result	Units
W-513-000514	39.1825	-122.91184	MCU	2/1/2008 7:30	871	Total Dissolved Solids	62	mg/l
W-513-000522	39.1825	-122.91184	MCU	2/2/2008 16:45	412	Total Dissolved Solids	74	mg/l
W-513-000523	39.1825	-122.91184	MCU	2/3/2008 8:00	1926	Total Dissolved Solids	75	mg/l
W-513-000526	39.1825	-122.91184	MCU	2/3/2008 10:30	1574	Total Dissolved Solids	94	mg/l
W-513-000101	39.09552	-122.96102	SCS	2/9/2007 8:15	441	Total Dissolved Solids	110	mg/l
W-513-000112	39.09552	-122.96102	SCS	2/9/2007 11:30	340	Total Dissolved Solids	100	mg/l
W-513-000206	39.09552	-122.96102	SCS	2/12/2007 12:15	229	Total Dissolved Solids	100	mg/l
W-513-000209	39.09552	-122.96102	SCS	2/21/2007 9:15	37	Total Dissolved Solids	120	mg/l
W-513-000214	39.09552	-122.96102	SCS	2/22/2007 10:15	342	Total Dissolved Solids	97	mg/l
W-513-000217	39.09552	-122.96102	SCS	2/22/2007 14:00	298	Total Dissolved Solids	95	mg/l
W-513-000221	39.09552	-122.96102	SCS	2/27/2007 10:00	377	Total Dissolved Solids	88	mg/l
W-513-000403	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Total Dissolved Solids	110	mg/l
W-513-000404	39.09552	-122.96102	SCS	12/20/2007 9:00	178	Total Dissolved Solids	170	mg/l
W-513-000408	39.09552	-122.96102	SCS	12/20/2007 14:45	102	Total Dissolved Solids	150	mg/l
W-513-000412	39.09552	-122.96102	SCS	1/4/2008 10:30	2886	Total Dissolved Solids	98	mg/l
W-513-000415	39.09552	-122.96102	SCS	1/4/2008 14:00	3415	Total Dissolved Solids	82	mg/l
W-513-000418	39.09552	-122.96102	SCS	1/5/2008 9:30	453	Total Dissolved Solids	95	mg/l
W-513-000502	39.09552	-122.96102	SCS	1/25/2008 15:15	613	Total Dissolved Solids	120	mg/l
W-513-000505	39.09552	-122.96102	SCS	1/26/2008 9:15	3509	Total Dissolved Solids	79	mg/l
W-513-000508	39.09552	-122.96102	SCS	1/26/2008 11:55	2506	Total Dissolved Solids	95	mg/l
W-513-000512	39.09552	-122.96102	SCS	1/31/2008 15:00	478	Total Dissolved Solids	72	mg/l
W-513-000515	39.09552	-122.96102	SCS	2/1/2008 8:00	784	Total Dissolved Solids	63	mg/l
W-513-000521	39.09552	-122.96102	SCS	2/2/2008 16:15	369	Total Dissolved Solids	99	mg/l
W-513-000524	39.09552	-122.96102	SCS	2/3/2008 8:30	1745	Total Dissolved Solids	80	mg/l
W-513-000529	39.09552	-122.96102	SCS	2/3/2008 12:00	1454	Total Dissolved Solids	93	mg/l

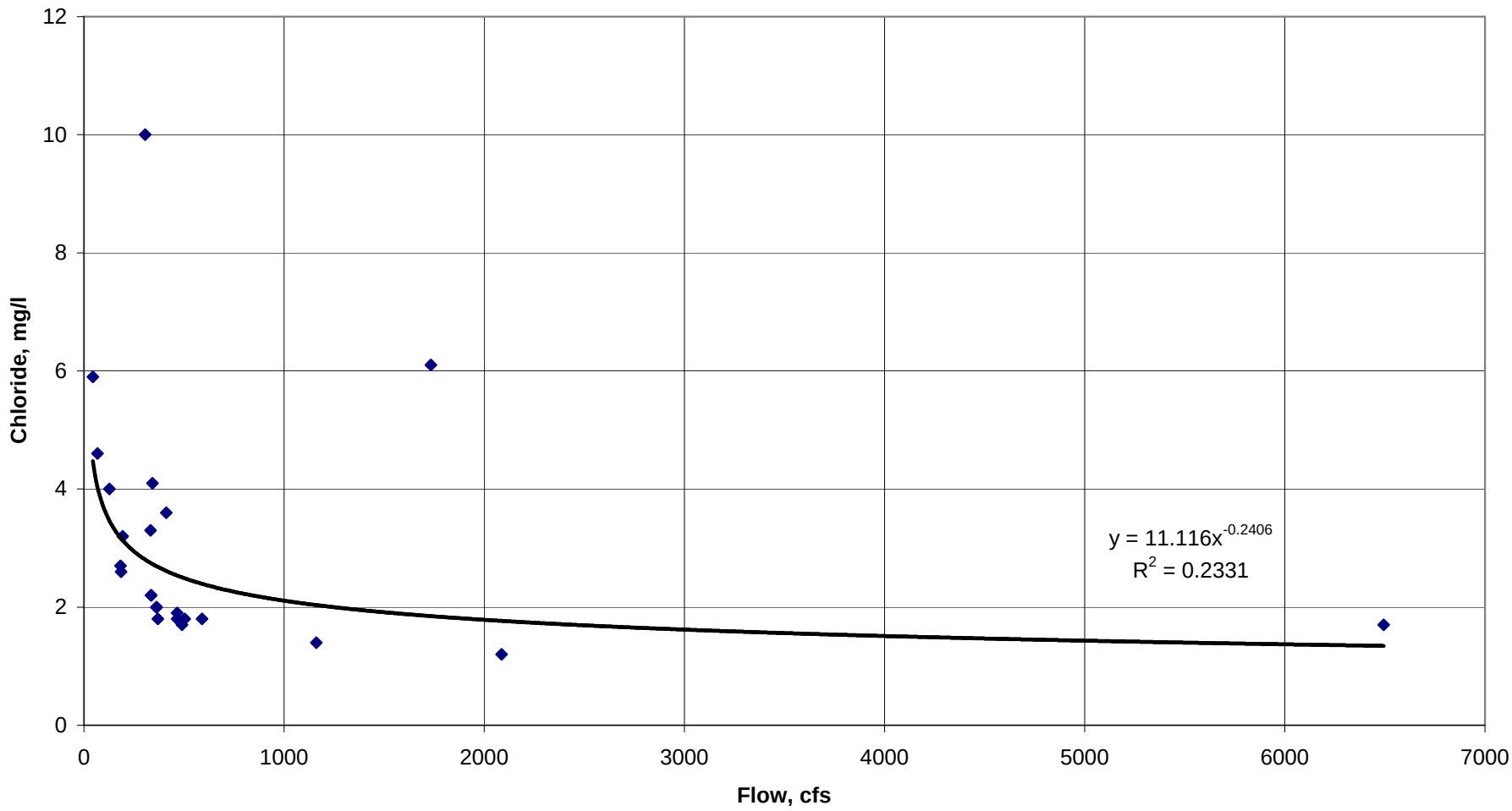
Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	RESULT	UNITS
W-513-000111	39.009403	-122.83835	KCK	2/9/2007 10:00	503	Total Suspended Solids	100	mg/l
W-513-000202	39.009403	-122.83835	KCK	2/9/2007 13:30	363	Total Suspended Solids	58	mg/l
W-513-000203	39.009403	-122.83835	KCK	2/9/2007 13:30	363	Total Suspended Solids	57	mg/l
W-513-000207	39.009403	-122.83835	KCK	2/12/2007 13:00	185	Total Suspended Solids	4.1	mg/l
W-513-000210	39.009403	-122.83835	KCK	2/21/2007 10:00	67	Total Suspended Solids	2.6	mg/l
W-513-000215	39.009403	-122.83835	KCK	2/22/2007 11:00	590	Total Suspended Solids	66	mg/l
W-513-000216	39.009403	-122.83835	KCK	2/22/2007 13:30	490	Total Suspended Solids	39	mg/l
W-513-000222	39.009403	-122.83835	KCK	2/27/2007 10:30	306	Total Suspended Solids	11	mg/l
W-513-000402	39.009403	-122.83835	KCK	12/19/2007 11:15	44	Total Suspended Solids	5.6	mg/l
W-513-000405	39.009403	-122.83835	KCK	12/20/2007 9:45	193	Total Suspended Solids	42	mg/l
W-513-000407	39.009403	-122.83835	KCK	12/20/2007 13:45	127	Total Suspended Solids	21	mg/l
W-513-000410	39.009403	-122.83835	KCK	1/4/2008 8:00	1733	Total Suspended Solids	1100	mg/l
W-513-000413	39.009403	-122.83835	KCK	1/4/2008 12:30	6494	Total Suspended Solids	550	mg/l
W-513-000419	39.009403	-122.83835	KCK	1/5/2008 10:00	342	Total Suspended Solids	79	mg/l
W-513-000501	39.009403	-122.83835	KCK	1/25/2008 14:30	412	Total Suspended Solids	180	mg/l
W-513-000504	39.009403	-122.83835	KCK	1/26/2008 8:28	2087	Total Suspended Solids	220	mg/l
W-513-000507	39.009403	-122.83835	KCK	1/26/2008 11:15	1161	Total Suspended Solids	180	mg/l
W-513-000513	39.009403	-122.83835	KCK	1/31/2008 15:45	333	Total Suspended Solids	5.1	mg/l
W-513-000516	39.009403	-122.83835	KCK	2/1/2008 8:30	336	Total Suspended Solids	16	mg/l
W-513-000517	39.009403	-122.83835	KCK	2/1/2008 8:30	336	Total Suspended Solids	13	mg/l
W-513-000520	39.009403	-122.83835	KCK	2/2/2008 15:45	183	Total Suspended Solids	18	mg/l
W-513-000525	39.009403	-122.83835	KCK	2/3/2008 9:15	369	Total Suspended Solids	160	mg/l
W-513-000527	39.009403	-122.83835	KCK	2/3/2008 11:15	466	Total Suspended Solids	38	mg/l
W-513-000528	39.009403	-122.83835	KCK	2/3/2008 11:15	466	Total Suspended Solids	30	mg/l
W-513-000201	39.182501	-122.911838	MCU	2/9/2007 9:30	290	Total Suspended Solids	67	mg/l
W-513-000204	39.182501	-122.911838	MCU	2/9/2007 14:15	383	Total Suspended Solids	71	mg/l
W-513-000205	39.182501	-122.911838	MCU	2/12/2007 11:45	242	Total Suspended Solids	26	mg/l
W-513-000208	39.182501	-122.911838	MCU	2/21/2007 8:30	42	Total Suspended Solids	2.1	mg/l
W-513-000213	39.182501	-122.911838	MCU	2/22/2007 10:00	282	Total Suspended Solids	54	mg/l
W-513-000218	39.182501	-122.911838	MCU	2/22/2007 14:30	249	Total Suspended Solids	27	mg/l
W-513-000219	39.182501	-122.911838	MCU	2/22/2007 14:30	249	Total Suspended Solids	27	mg/l
W-513-000220	39.182501	-122.911838	MCU	2/27/2007 9:00	360	Total Suspended Solids	42	mg/l
W-513-000401	39.182501	-122.911838	MCU	12/19/2007 9:30	0	Total Suspended Solids	ND	mg/l
W-513-000406	39.182501	-122.911838	MCU	12/20/2007 10:45	162	Total Suspended Solids	50	mg/l
W-513-000409	39.182501	-122.911838	MCU	12/20/2007 15:15	103	Total Suspended Solids	22	mg/l
W-513-000411	39.182501	-122.911838	MCU	1/4/2008 9:15	3308	Total Suspended Solids	1300	mg/l
W-513-000414	39.182501	-122.911838	MCU	1/4/2008 13:30	4510	Total Suspended Solids	1500	mg/l
W-513-000416	39.182501	-122.911838	MCU	1/5/2008 8:30	427	Total Suspended Solids	100	mg/l
W-513-000417	39.182501	-122.911838	MCU	1/5/2008 8:45	427	Total Suspended Solids	110	mg/l
W-513-000503	39.182501	-122.911838	MCU	1/25/2008 15:45	37	Total Suspended Solids	2	mg/l
W-513-000506	39.182501	-122.911838	MCU	1/26/2008 9:55	1205	Total Suspended Solids	320	mg/l
W-513-000509	39.182501	-122.911838	MCU	1/26/2008 12:30	840	Total Suspended Solids	260	mg/l
W-513-000510	39.182501	-122.911838	MCU	1/31/2008 14:30	993	Total Suspended Solids	290	mg/l
W-513-000511	39.182501	-122.911838	MCU	1/31/2008 14:30	993	Total Suspended Solids	410	mg/l
W-513-000514	39.182501	-122.911838	MCU	2/1/2008 7:30	871	Total Suspended Solids	170	mg/l

Sample ID	Latitude	Longitude	Gage ID	SAMPDATE	Flow (cfs)	ANALYTE	RESULT	UNITS
W-513-000523	39.182501	-122.911838	MCU	2/3/2008 8:00	1926	Total Suspended Solids	380	mg/l
W-513-000526	39.182501	-122.911838	MCU	2/3/2008 10:30	1574	Total Suspended Solids	380	mg/l
W-513-000101	39.095515	-122.961016	SCS	2/9/2007 8:15	441	Total Suspended Solids	110	mg/l
W-513-000112	39.095515	-122.961016	SCS	2/9/2007 11:30	340	Total Suspended Solids	84	mg/l
W-513-000206	39.095515	-122.961016	SCS	2/12/2007 12:15	229	Total Suspended Solids	17	mg/l
W-513-000209	39.095515	-122.961016	SCS	2/21/2007 9:15	37	Total Suspended Solids	0.84	mg/l
W-513-000214	39.095515	-122.961016	SCS	2/22/2007 10:15	342	Total Suspended Solids	58	mg/l
W-513-000217	39.095515	-122.961016	SCS	2/22/2007 14:00	298	Total Suspended Solids	45	mg/l
W-513-000221	39.095515	-122.961016	SCS	2/27/2007 10:00	377	Total Suspended Solids	46	mg/l
W-513-000403	39.095515	-122.961016	SCS	12/20/2007 9:00	178	Total Suspended Solids	40	mg/l
W-513-000404	39.095515	-122.961016	SCS	12/20/2007 9:00	178	Total Suspended Solids	45	mg/l
W-513-000408	39.095515	-122.961016	SCS	12/20/2007 14:45	102	Total Suspended Solids	21	mg/l
W-513-000412	39.095515	-122.961016	SCS	1/4/2008 10:30	2886	Total Suspended Solids	920	mg/l
W-513-000415	39.095515	-122.961016	SCS	1/4/2008 14:00	3415	Total Suspended Solids	490	mg/l
W-513-000418	39.095515	-122.961016	SCS	1/5/2008 9:30	453	Total Suspended Solids	78	mg/l
W-513-000502	39.095515	-122.961016	SCS	1/25/2008 15:15	613	Total Suspended Solids	320	mg/l
W-513-000505	39.095515	-122.961016	SCS	1/26/2008 9:15	3509	Total Suspended Solids	350	mg/l
W-513-000508	39.095515	-122.961016	SCS	1/26/2008 11:55	2506	Total Suspended Solids	510	mg/l
W-513-000512	39.095515	-122.961016	SCS	1/31/2008 15:00	478	Total Suspended Solids	160	mg/l
W-513-000515	39.095515	-122.961016	SCS	2/1/2008 8:00	784	Total Suspended Solids	200	mg/l
W-513-000521	39.095515	-122.961016	SCS	2/2/2008 16:15	369	Total Suspended Solids	120	mg/l
W-513-000524	39.095515	-122.961016	SCS	2/3/2008 8:30	1745	Total Suspended Solids	440	mg/l
W-513-000529	39.095515	-122.961016	SCS	2/3/2008 12:00	1454	Total Suspended Solids	290	mg/l

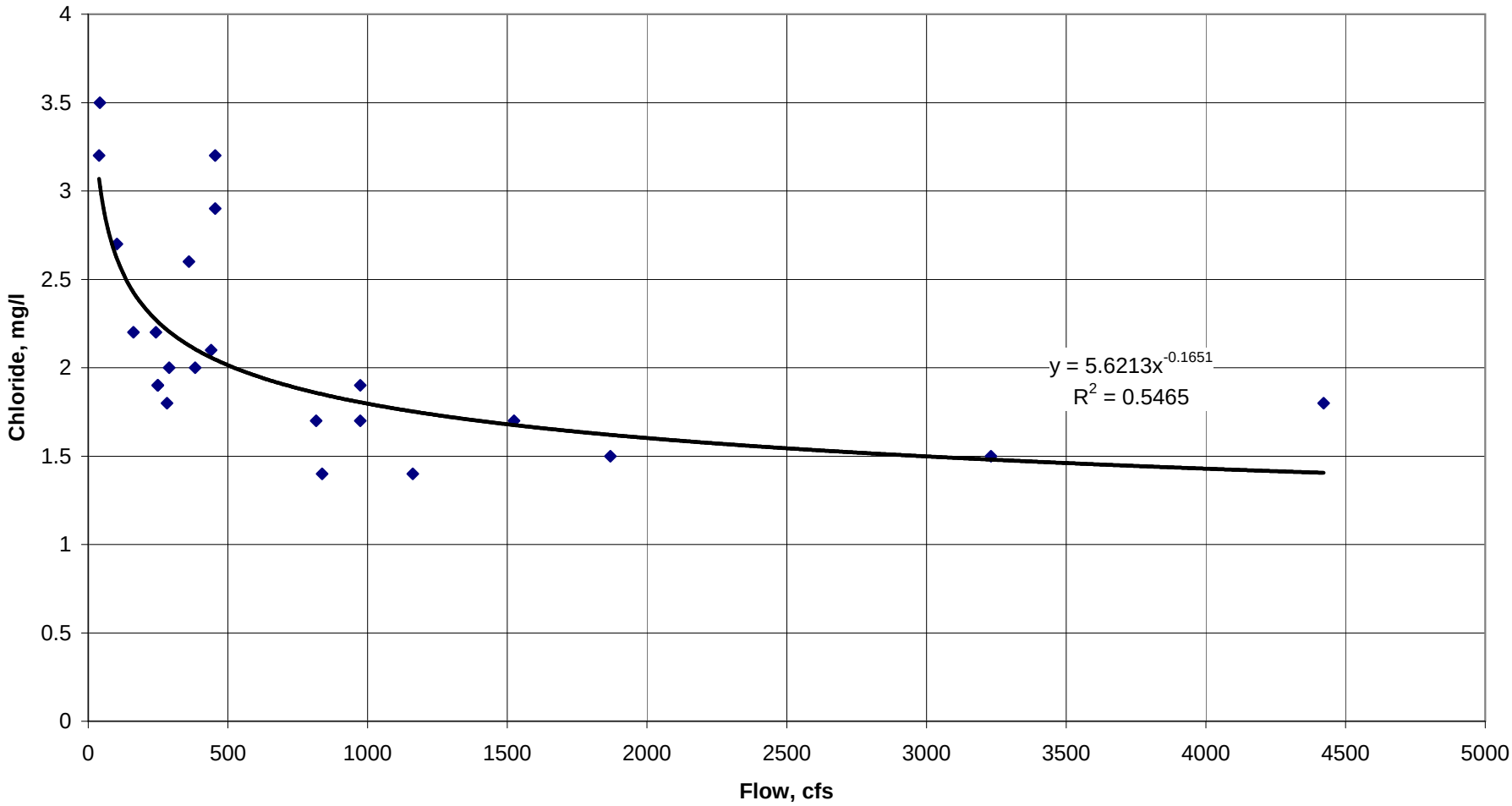
APPENDIX B

FLOW CONCENTRATION REGRESSION CHARTS
WATER YEARS 2007 - 2008

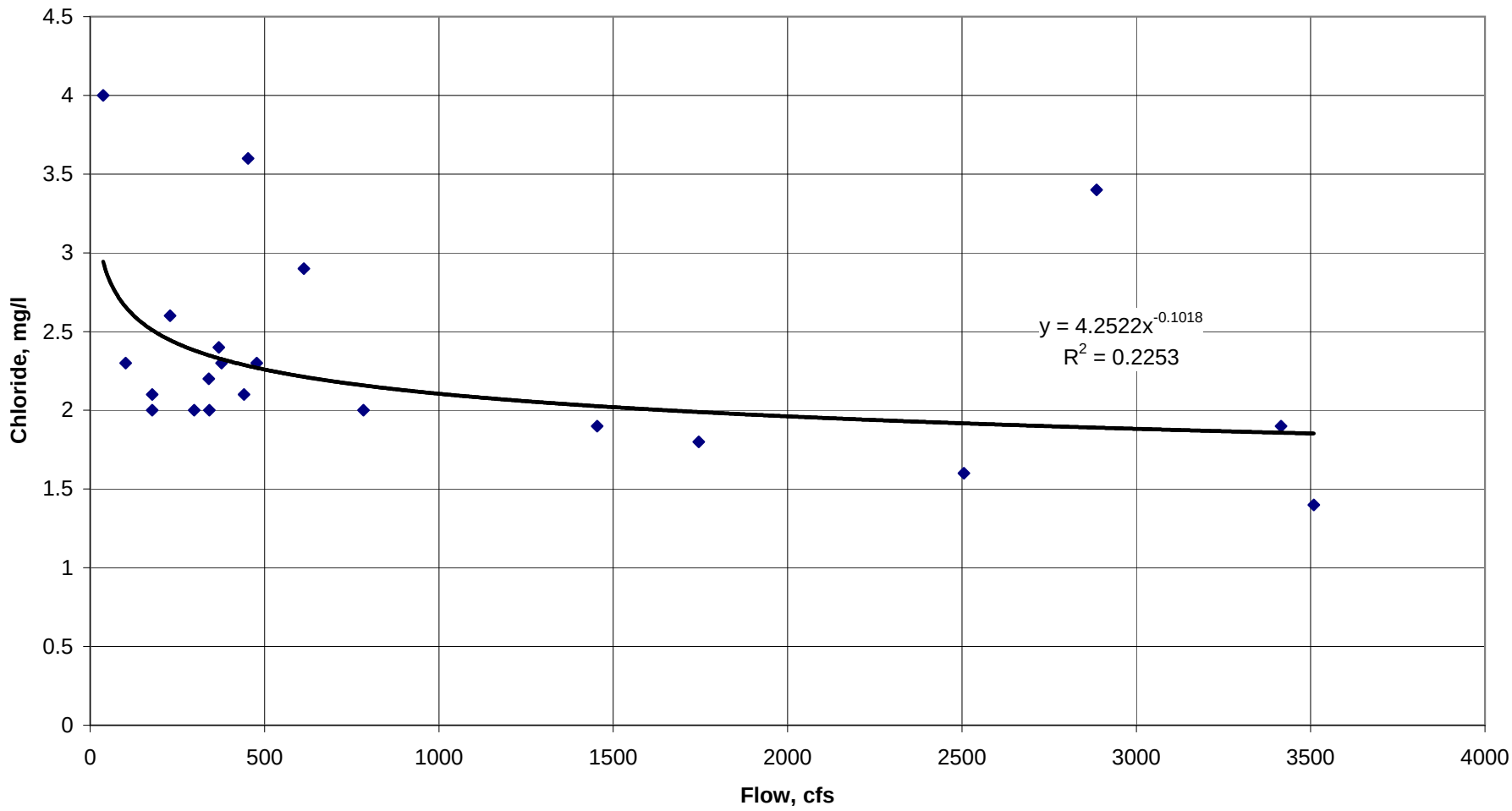
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - CHLORIDE
February 2007 - February 2008



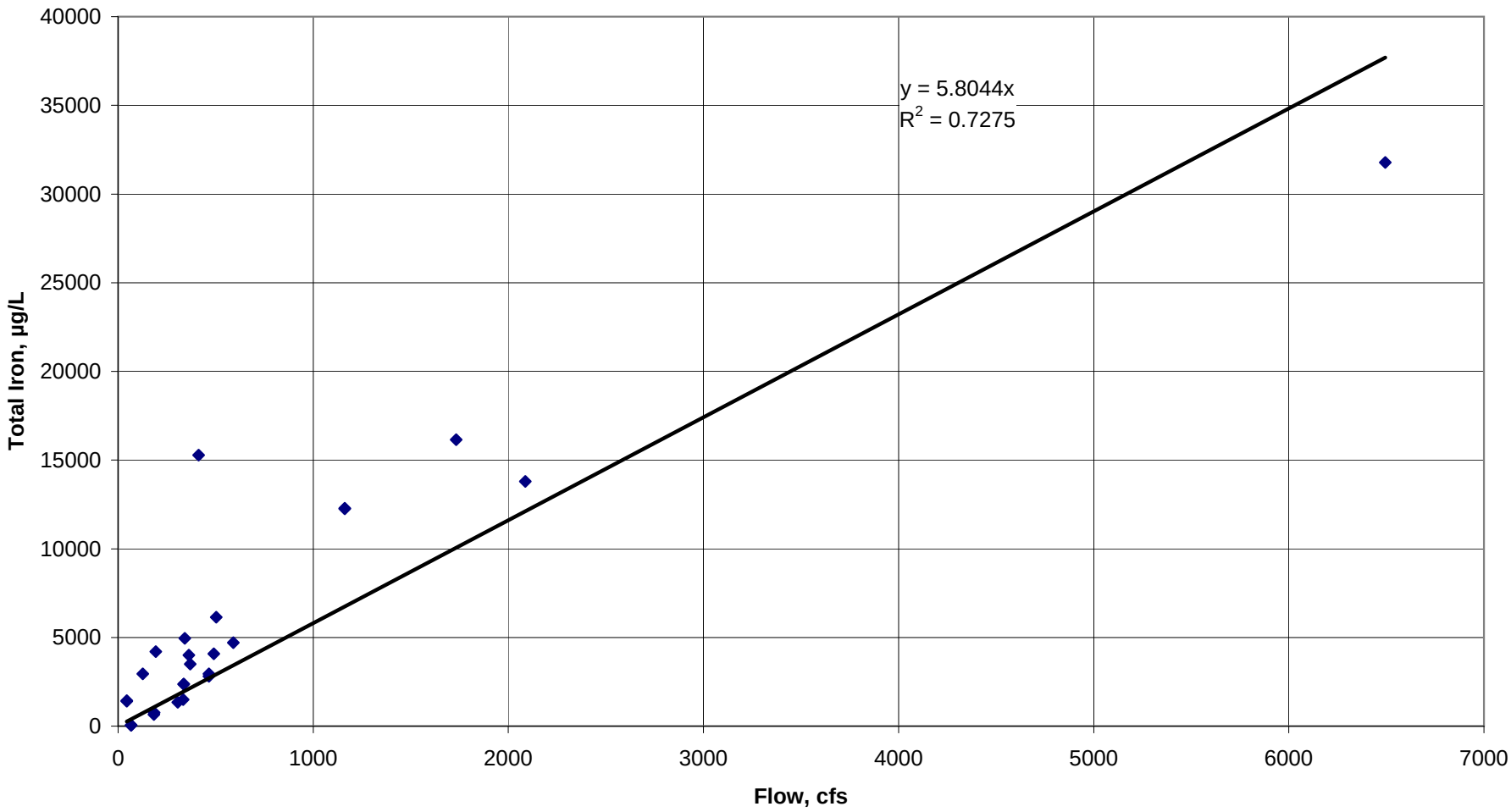
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - CHLORIDE
February 2007 - February 2008



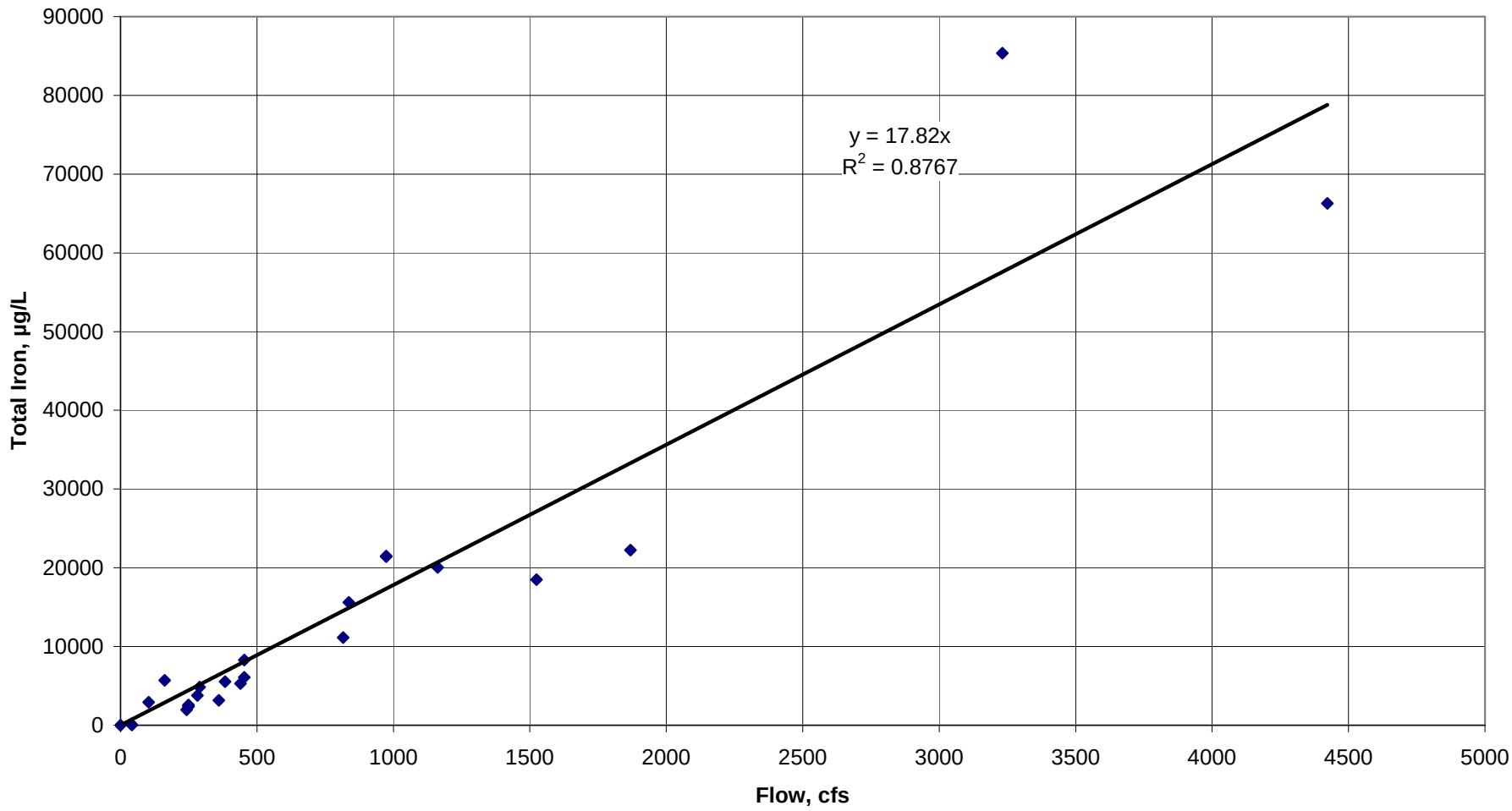
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - CHLORIDE
February 2007 - February 2008



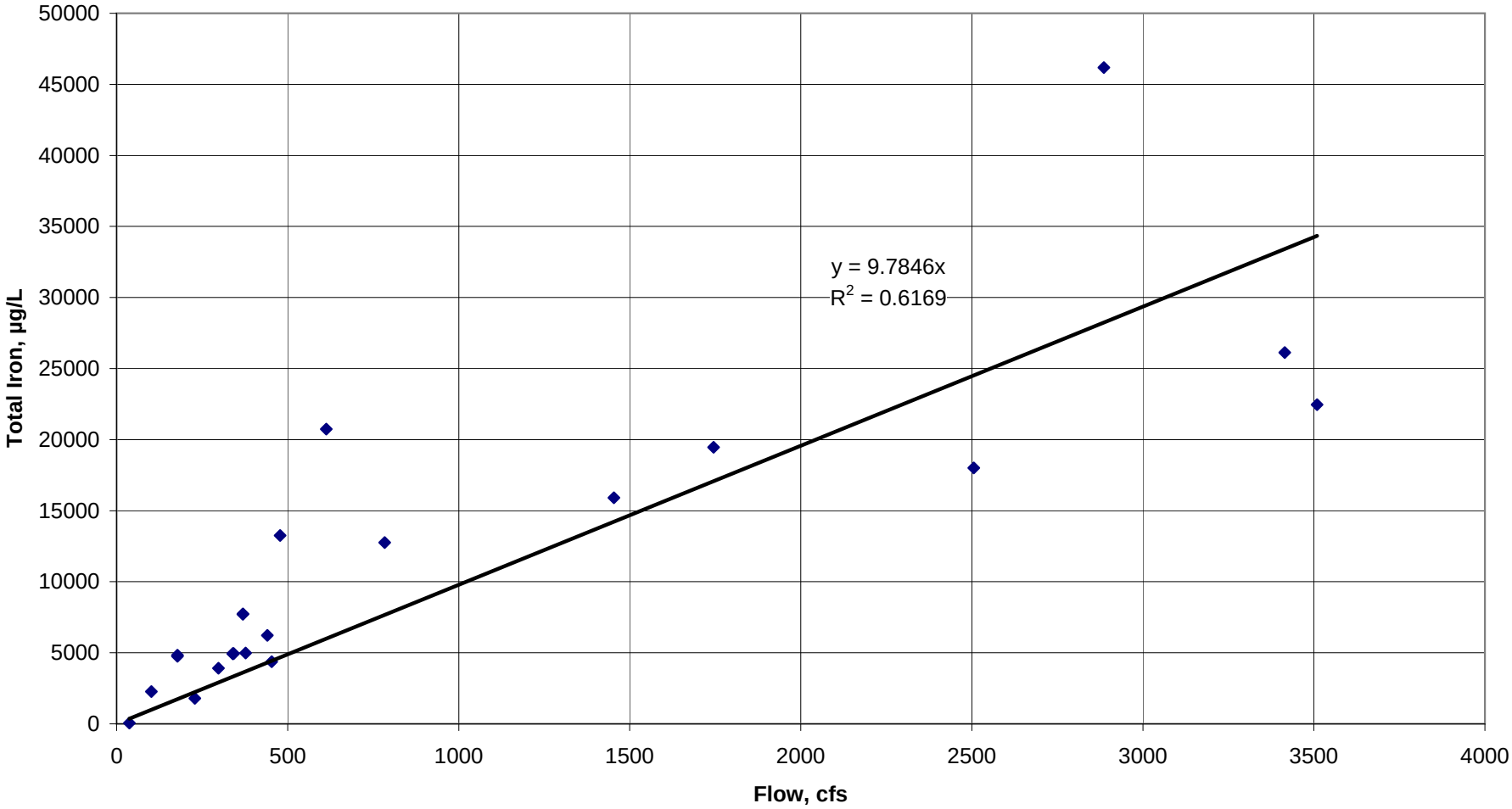
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL IRON
February 2007 - February 2008



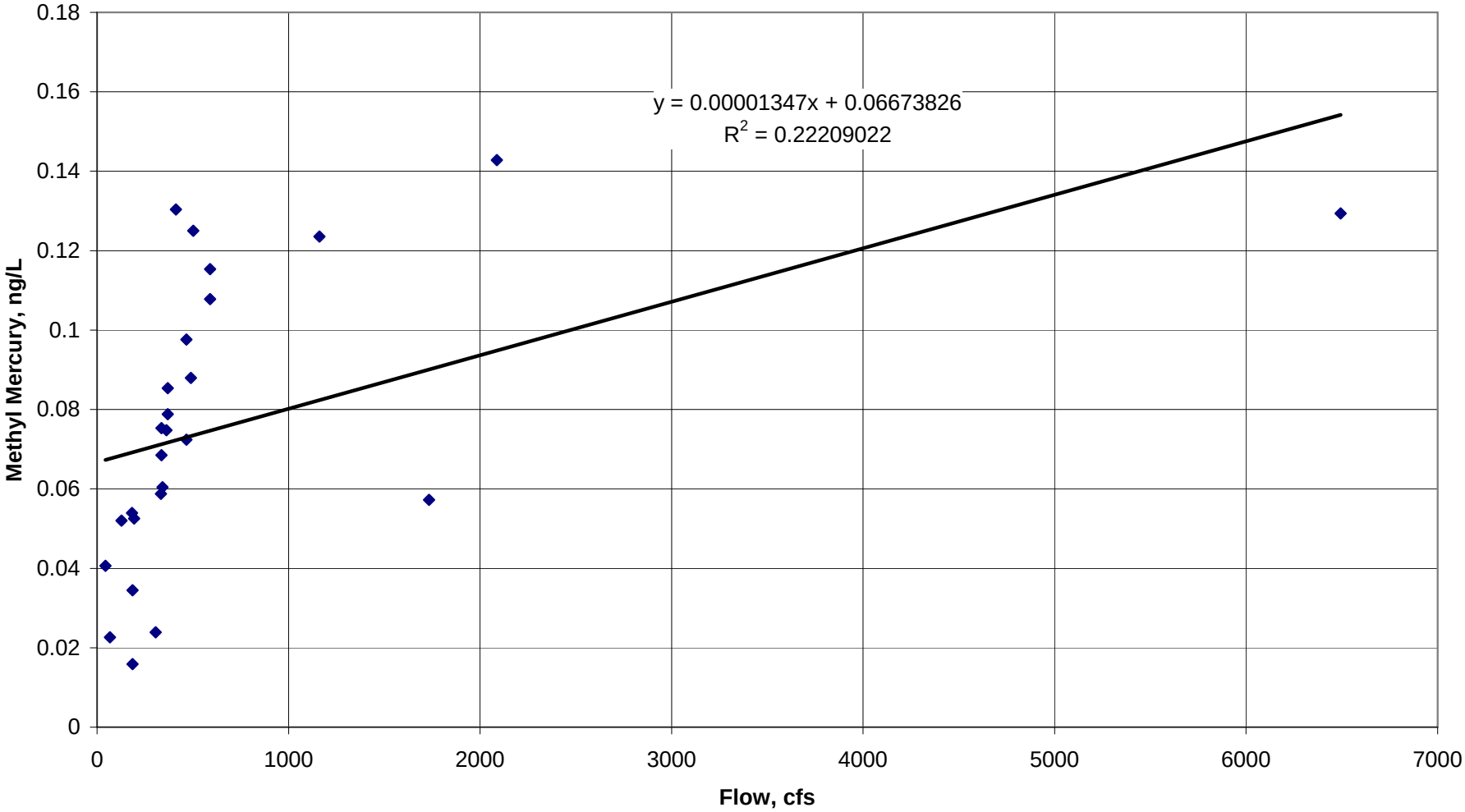
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL IRON
February 2007 - February 2008



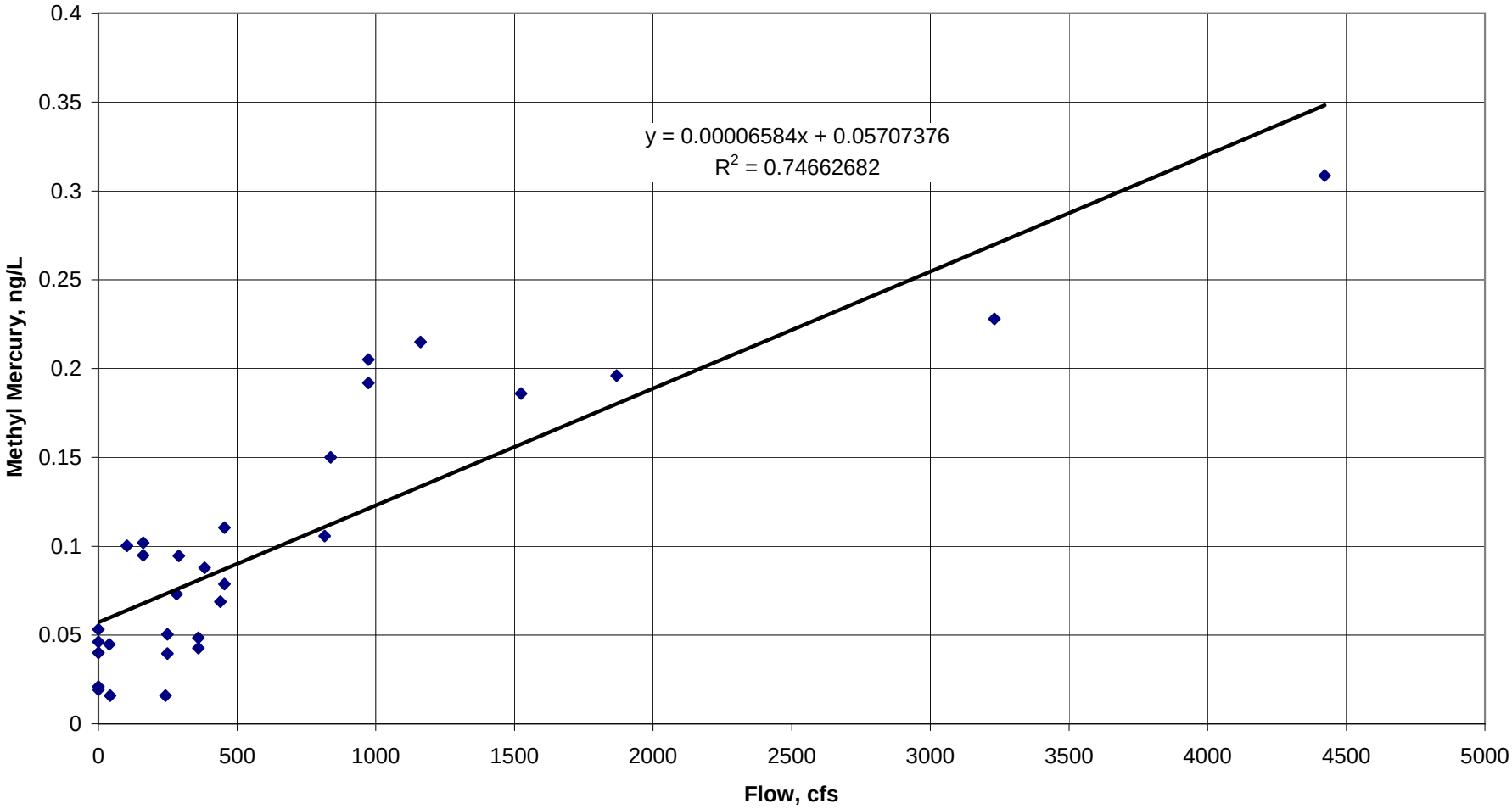
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL IRON
February 2007 - February 2008



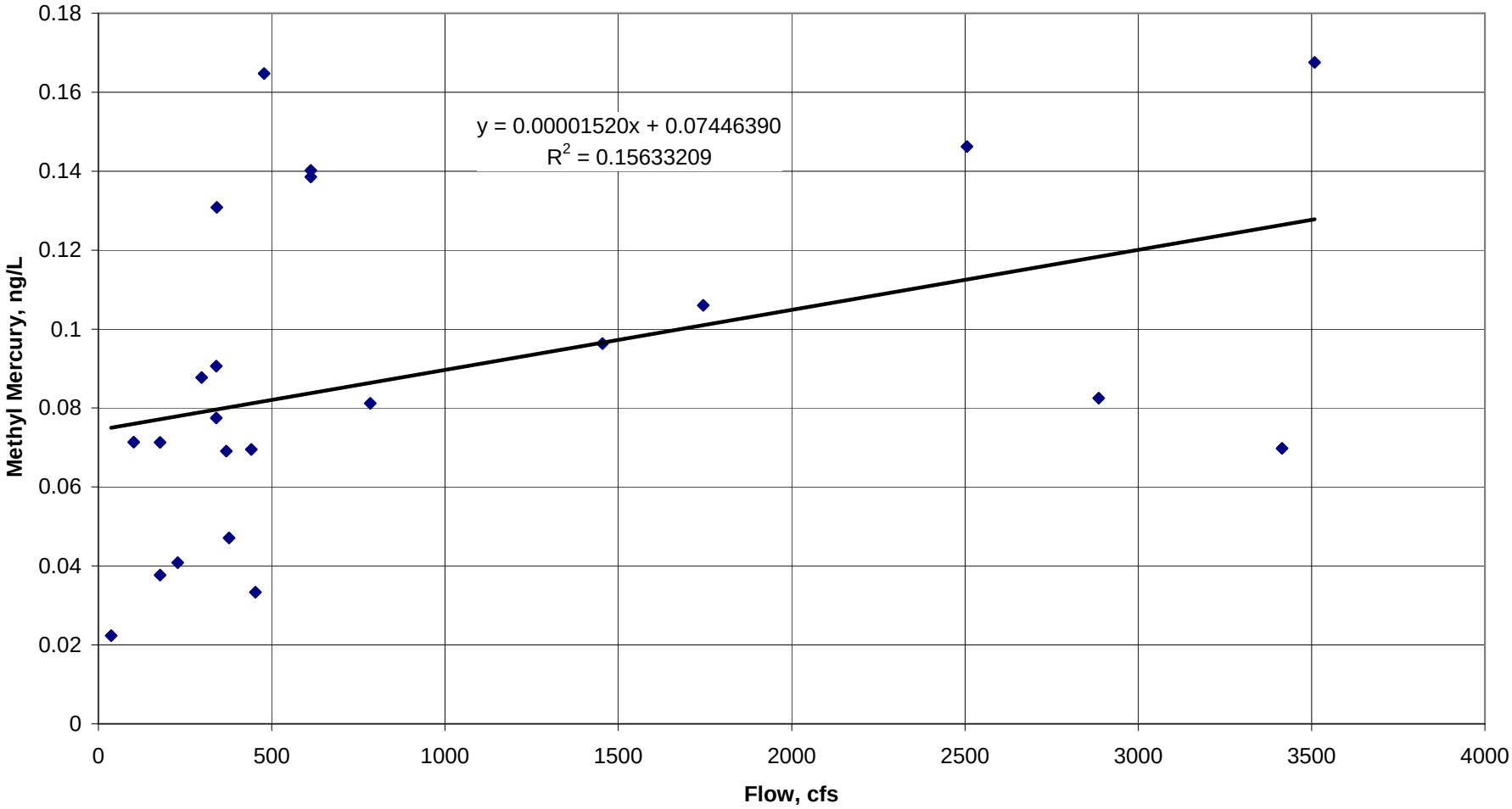
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - METHYL MERCURY
February 2007 - February 2008



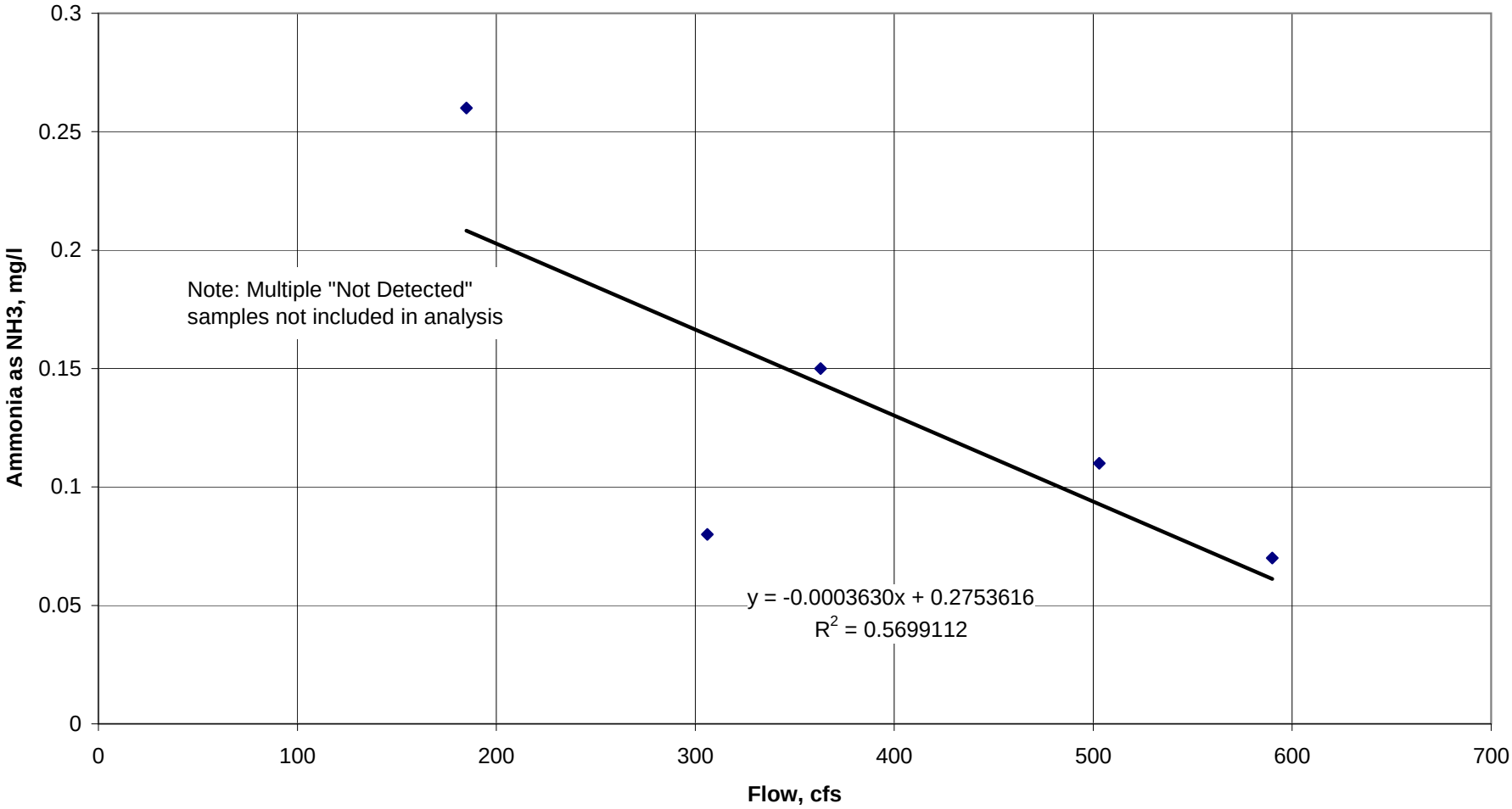
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - METHYL MERCURY
February 2007 - February 2008



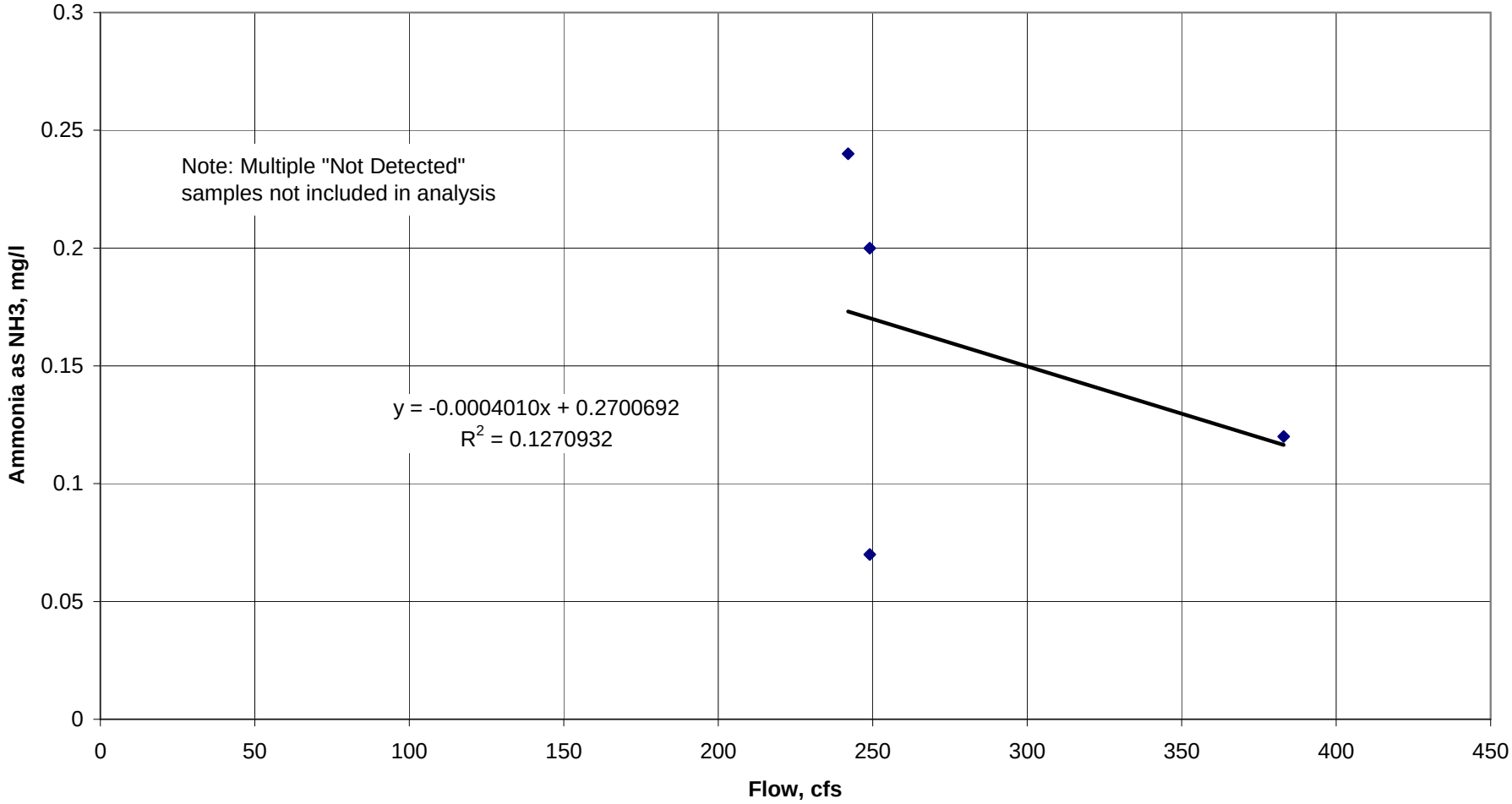
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - METHYL MERCURY
February 2007 - February 2008



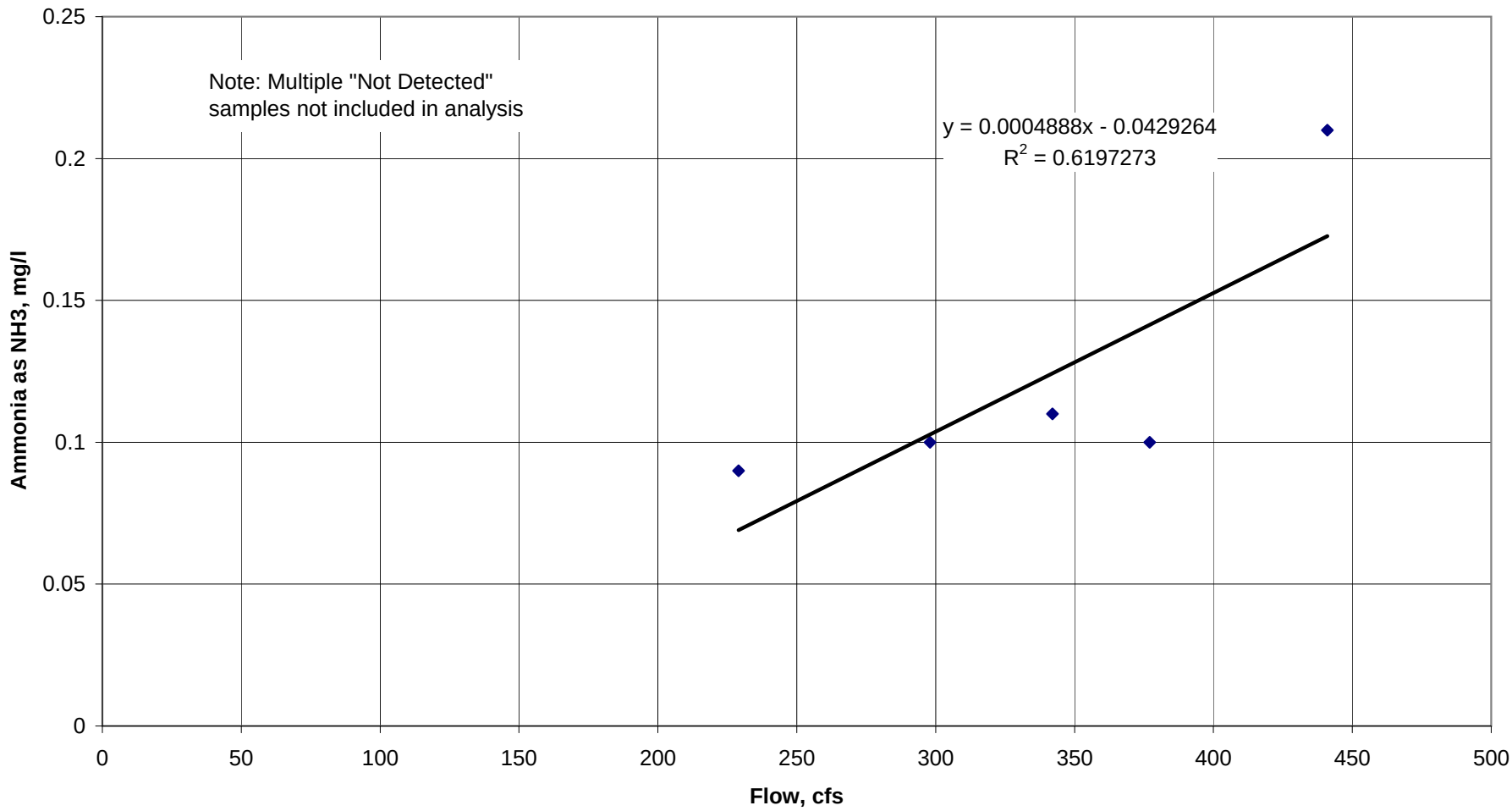
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - AMMONIA AS NH3
February 2007 - February 2008



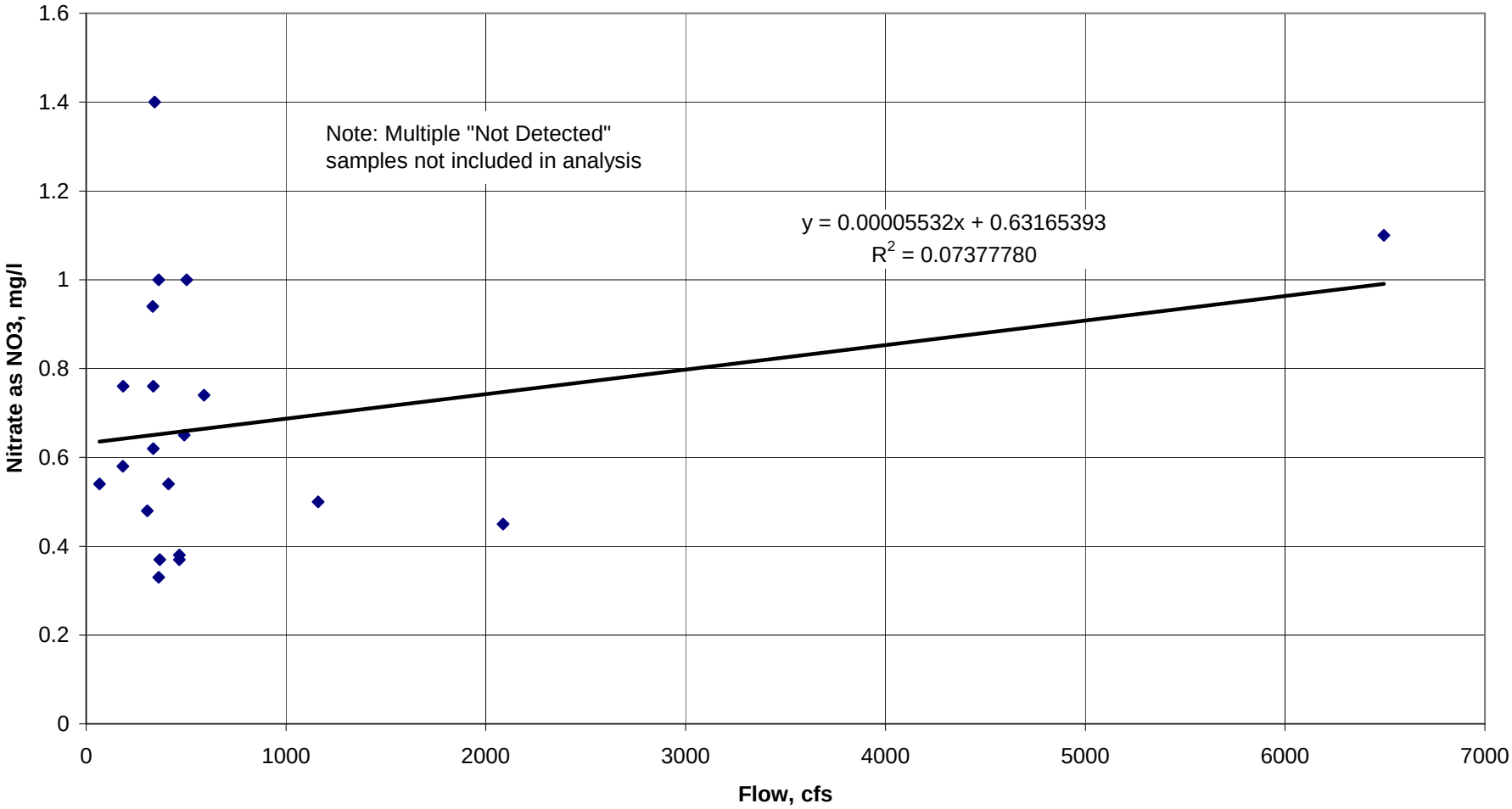
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - AMMONIA AS NH3
February 2007 - February 2008



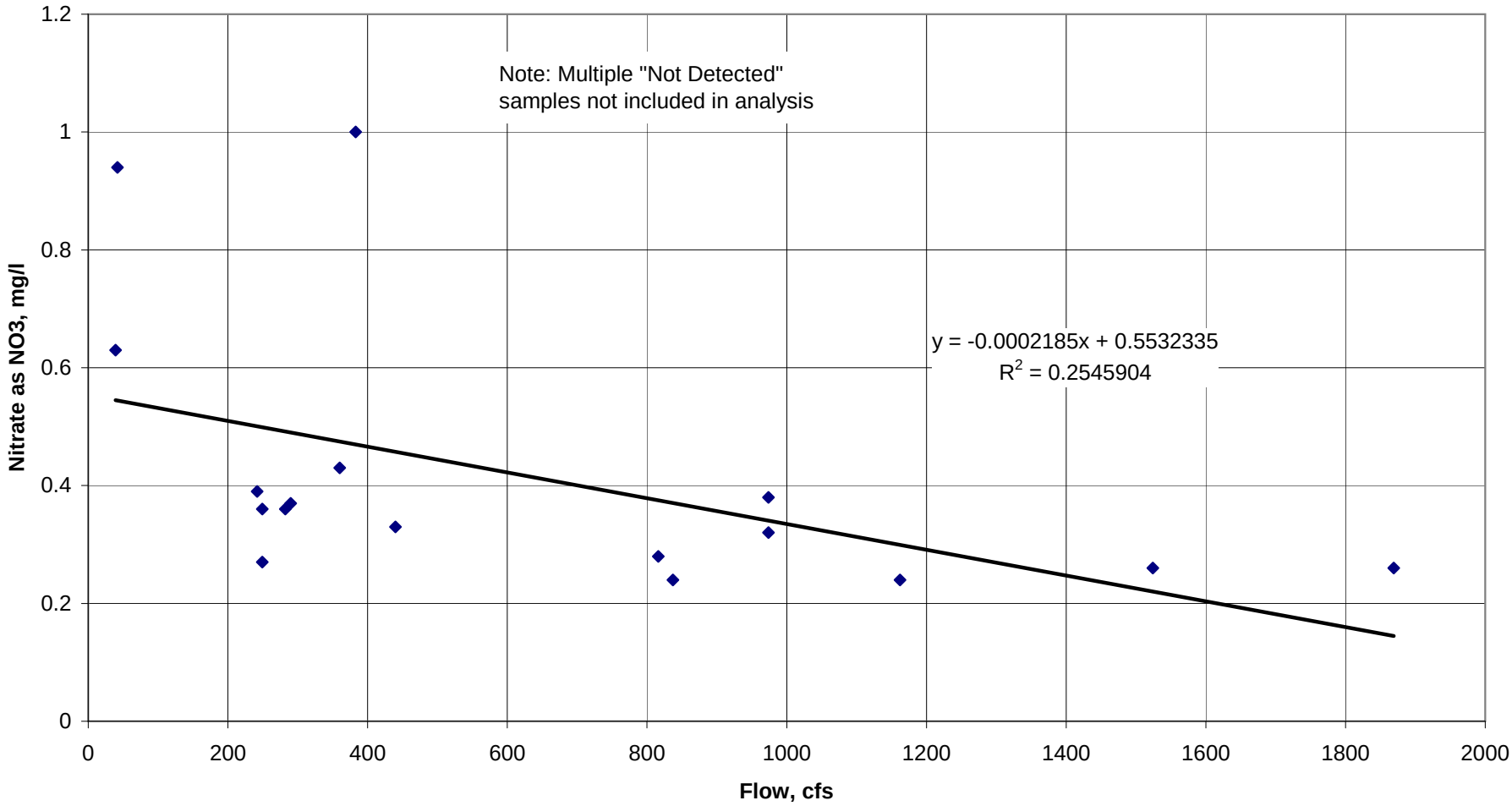
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - AMMONIA AS NH3
February 2007 - February 2008



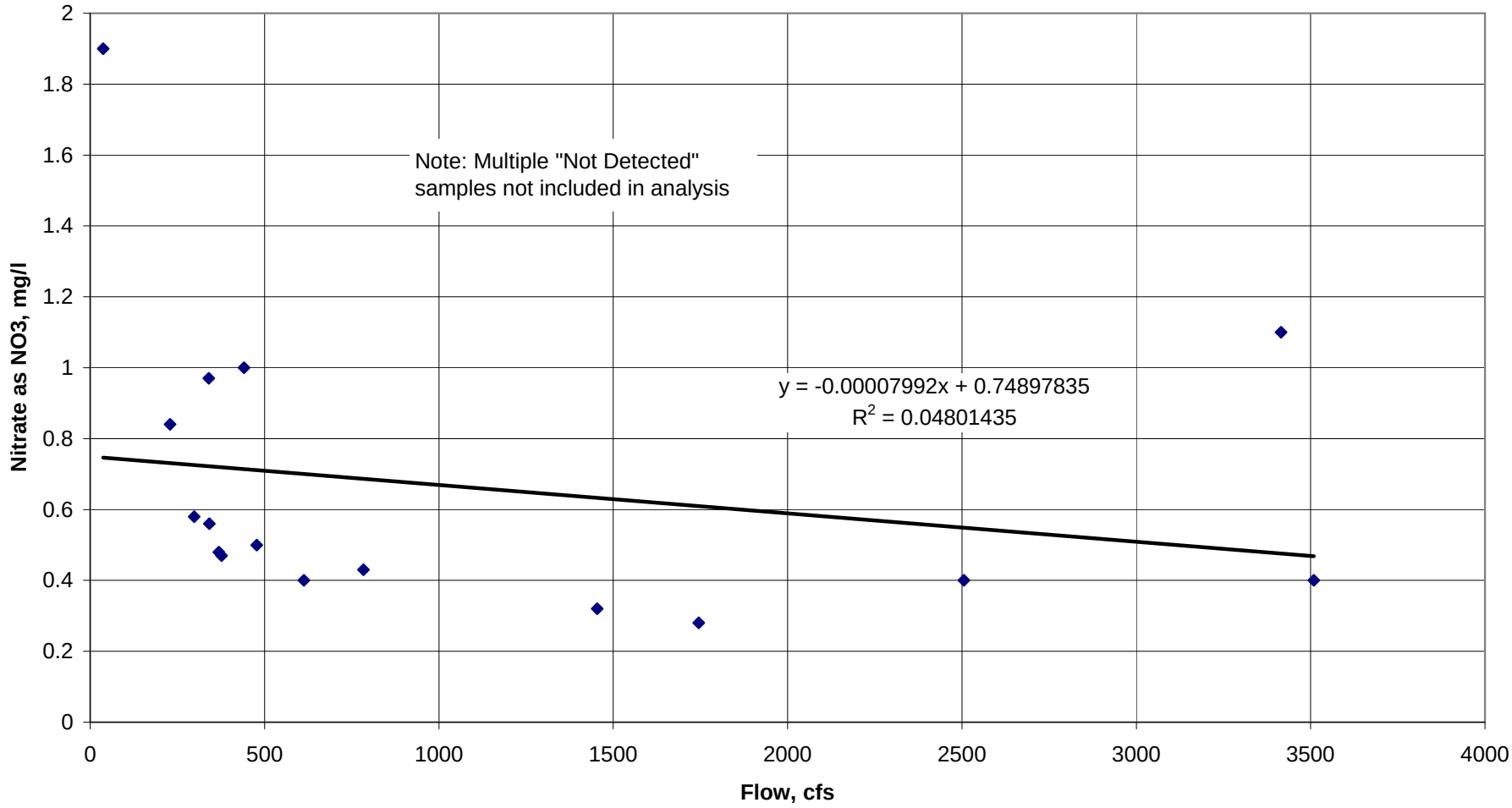
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - NITRATE AS NO3
February 2007 - February 2008



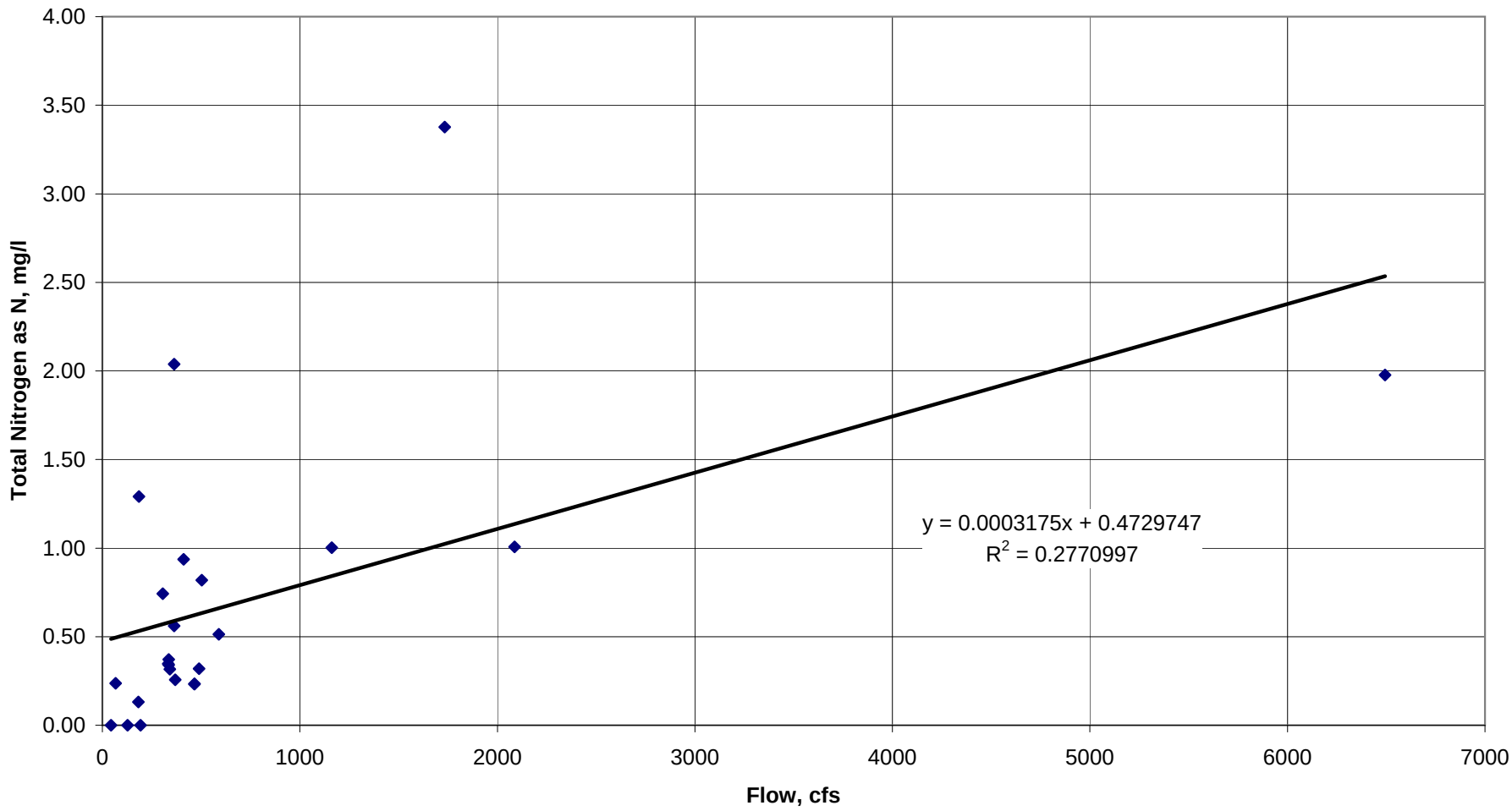
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - NITRATE AS NO3
February 2007 - February 2008



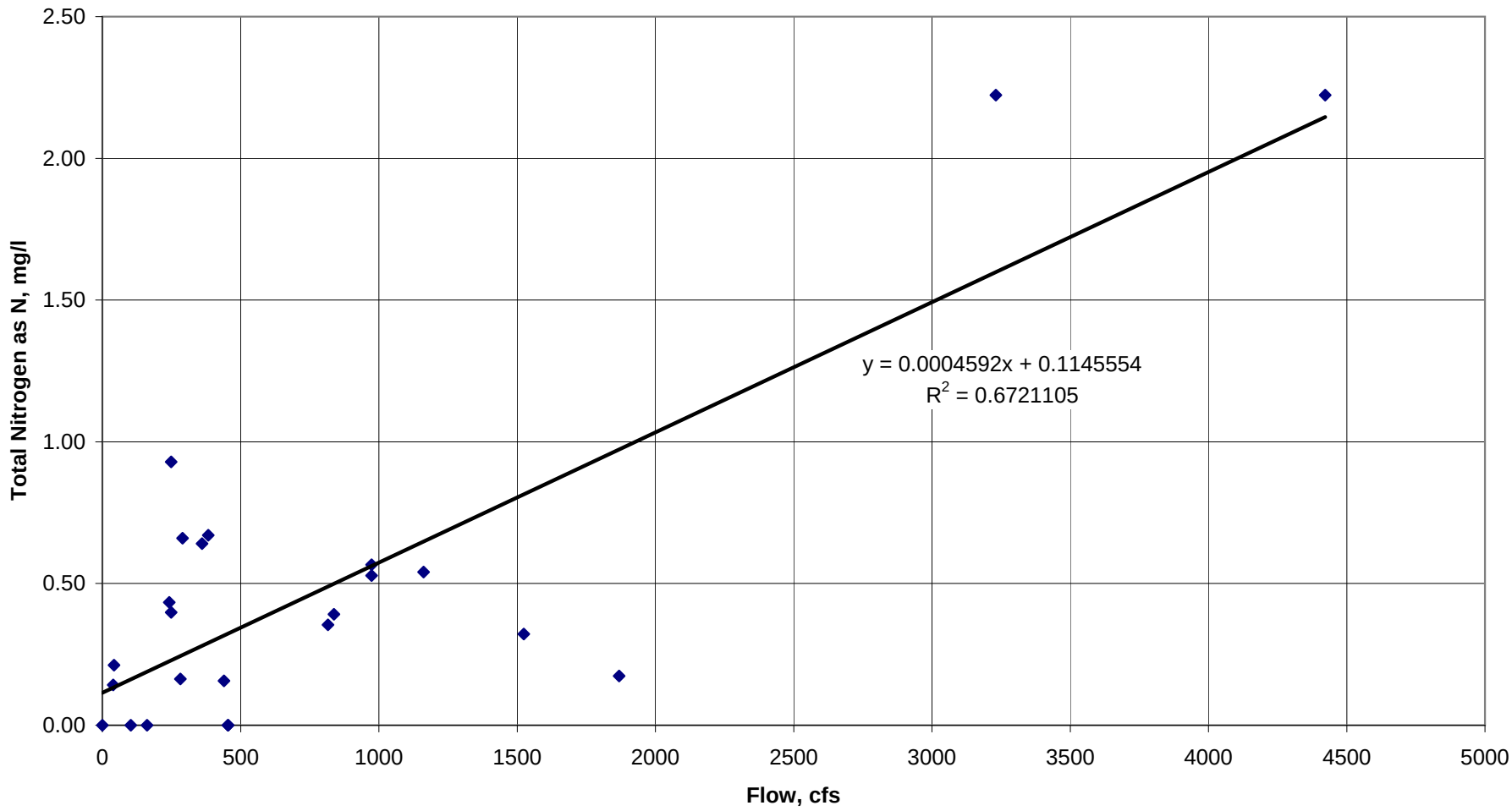
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - NITRATE AS NO3
February 2007 - February 2008



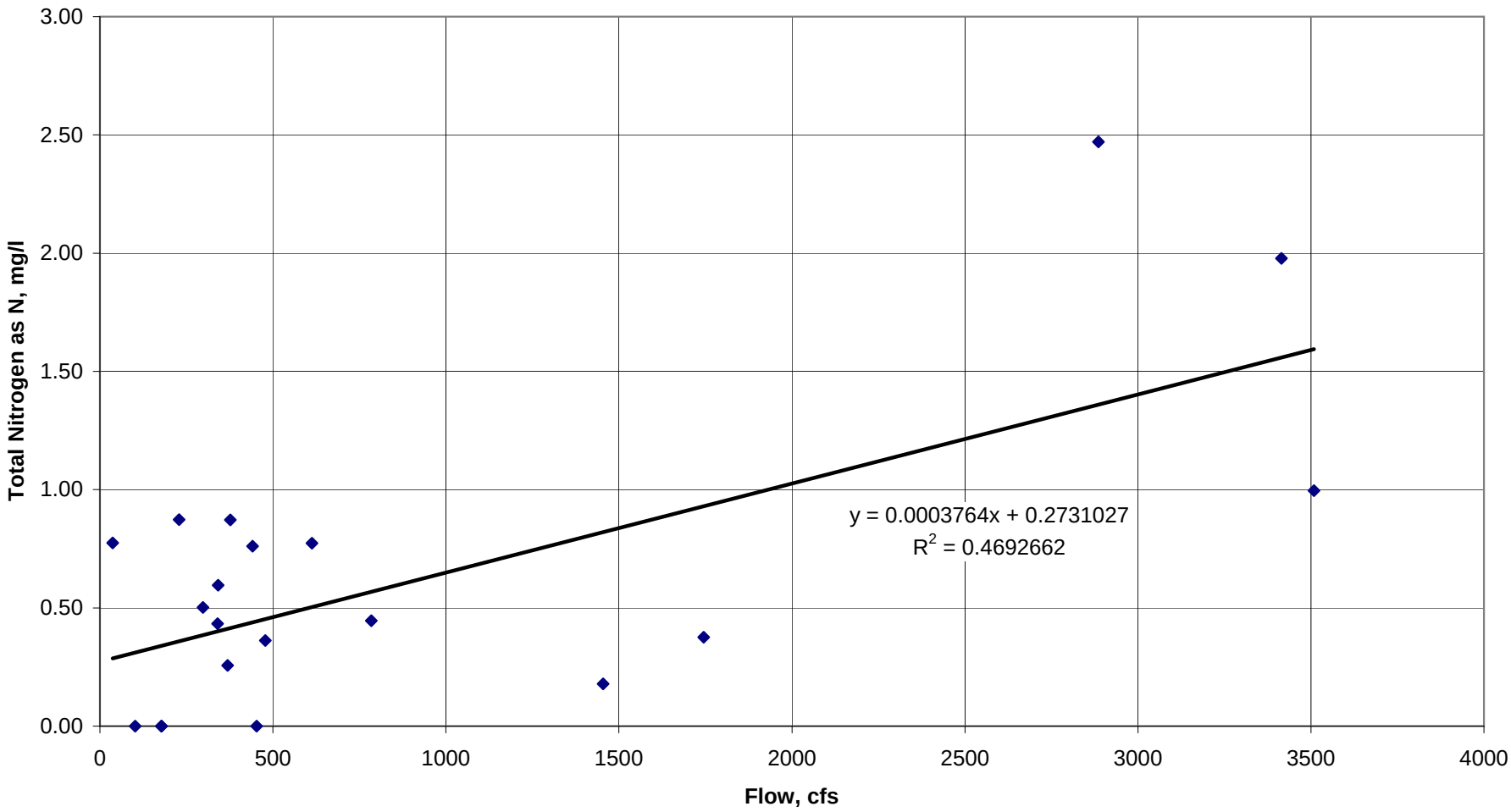
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL NITROGEN
February 2007 - February 2008



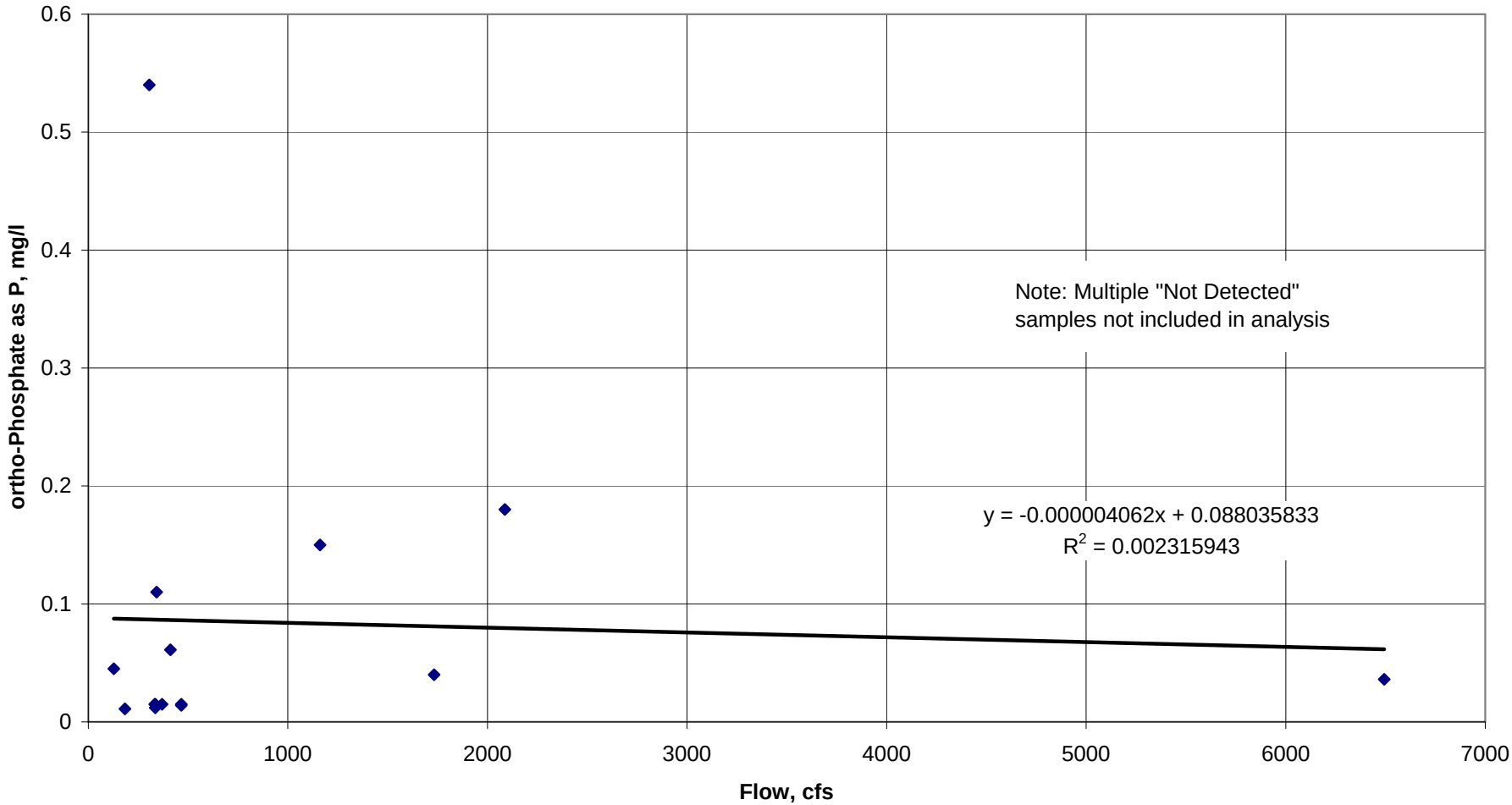
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL NITROGEN
February 2007 - February 2008



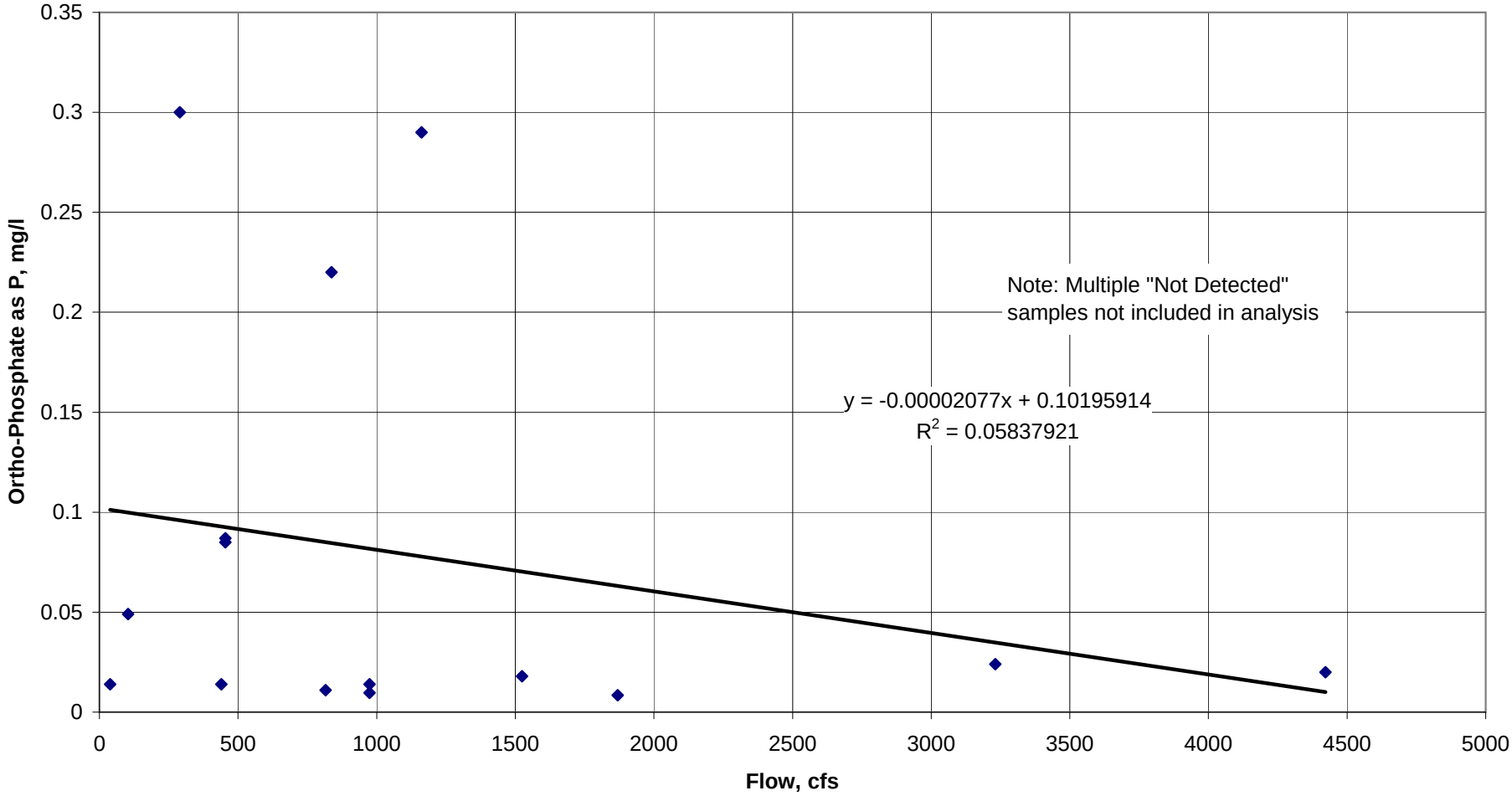
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL NITROGEN
February 2007 - February 2008



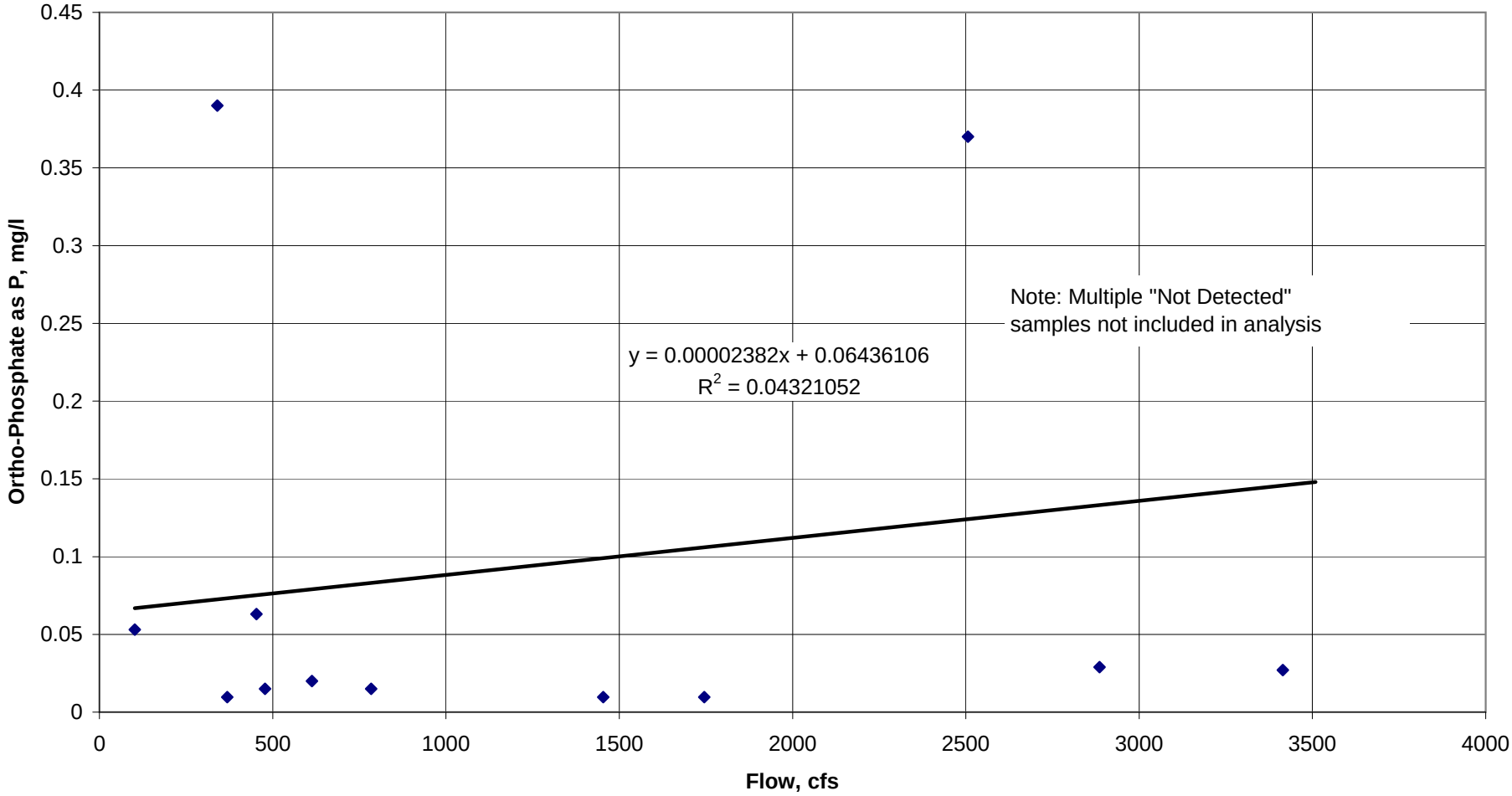
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - ORTHO_PHOSPHATE AS P
February 2007 - February 2008



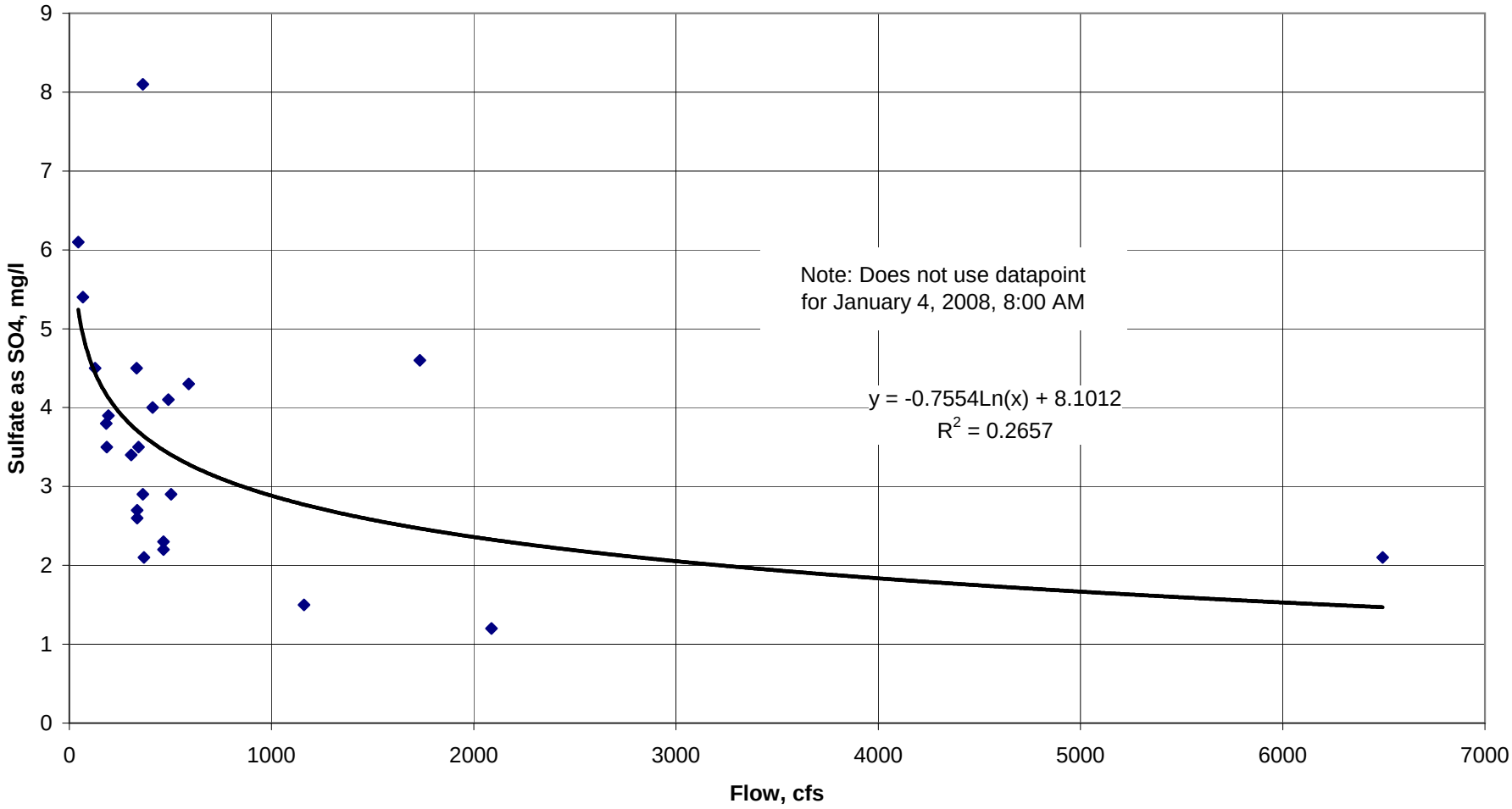
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - ORTHO-PHOSPHATE AS P
February 2007 - February 2008



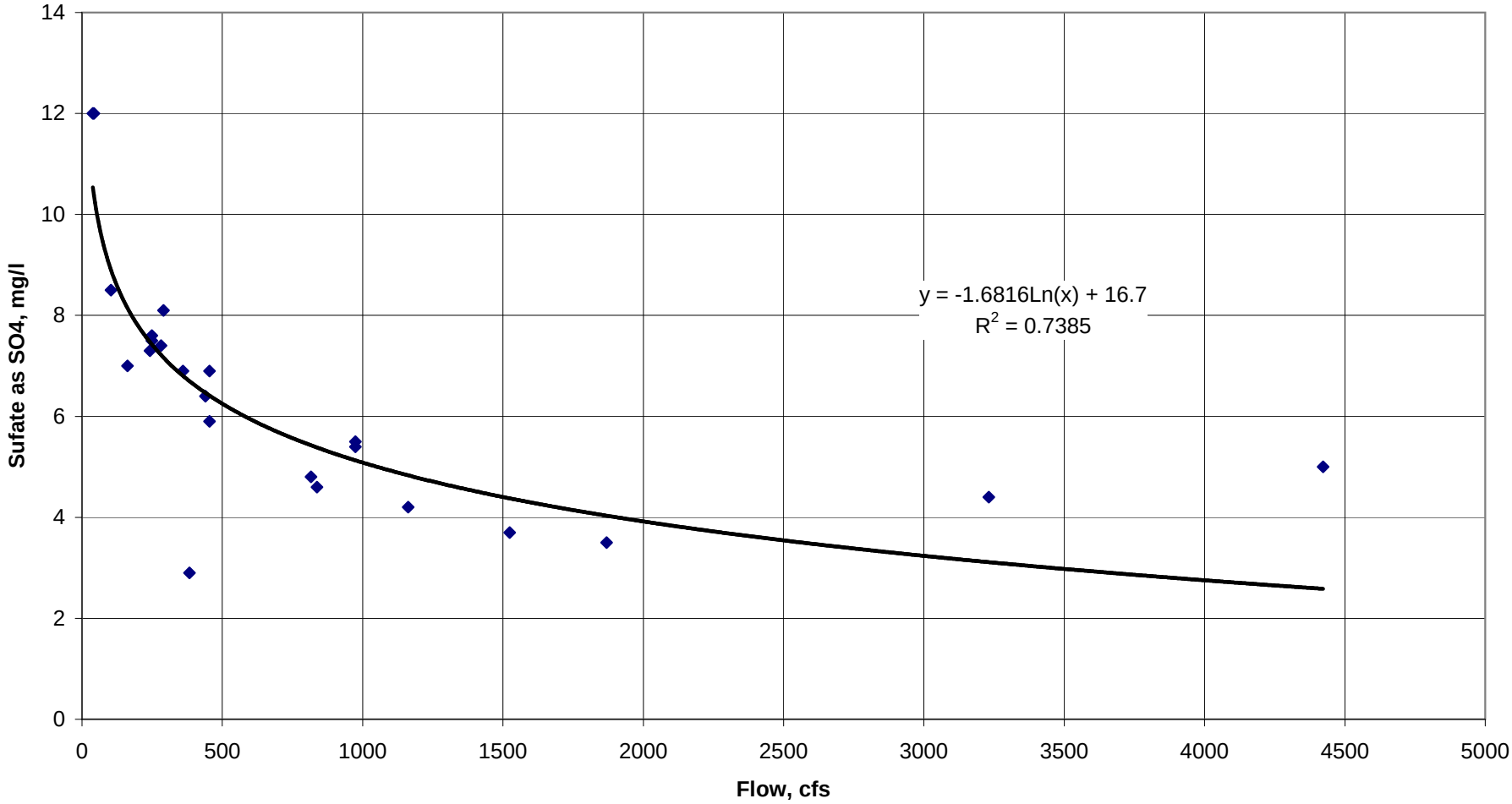
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - ORTHO-PHOSPHATE AS P
February 2007 - February 2008



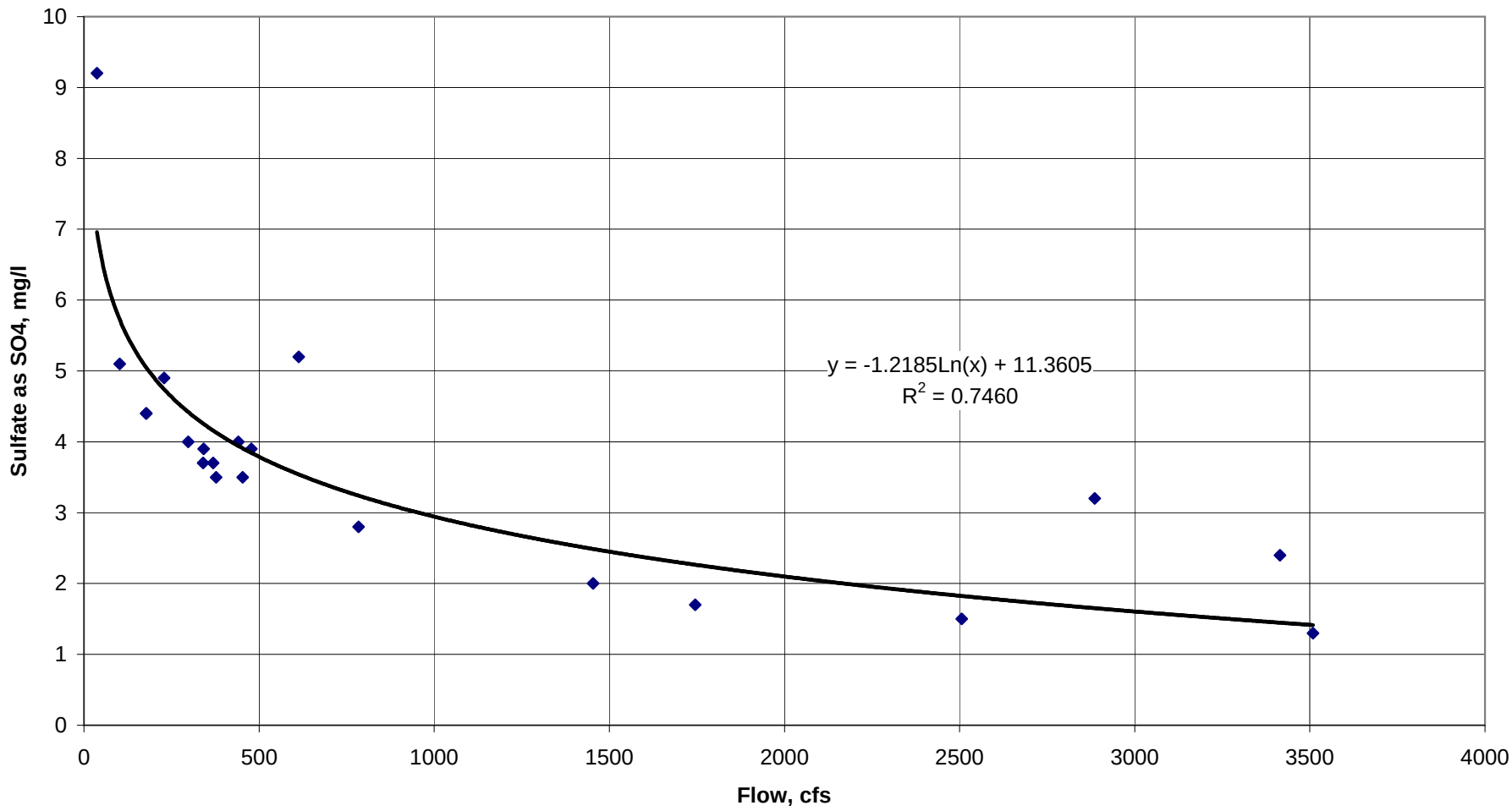
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - SULFATE AS SO4
February 2007 - February 2008



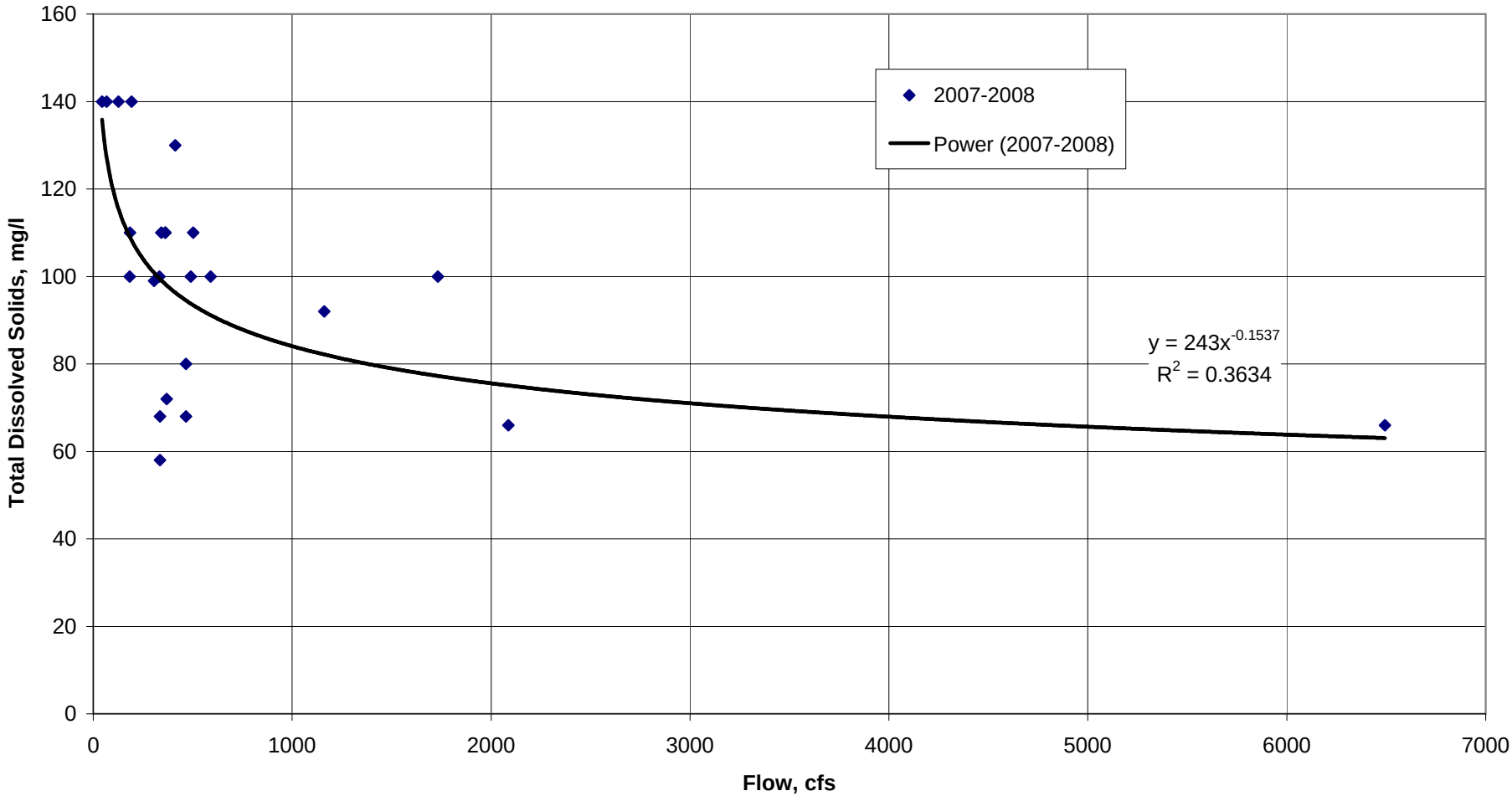
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - SULFATE AS SO4
February 2007 - February 2008



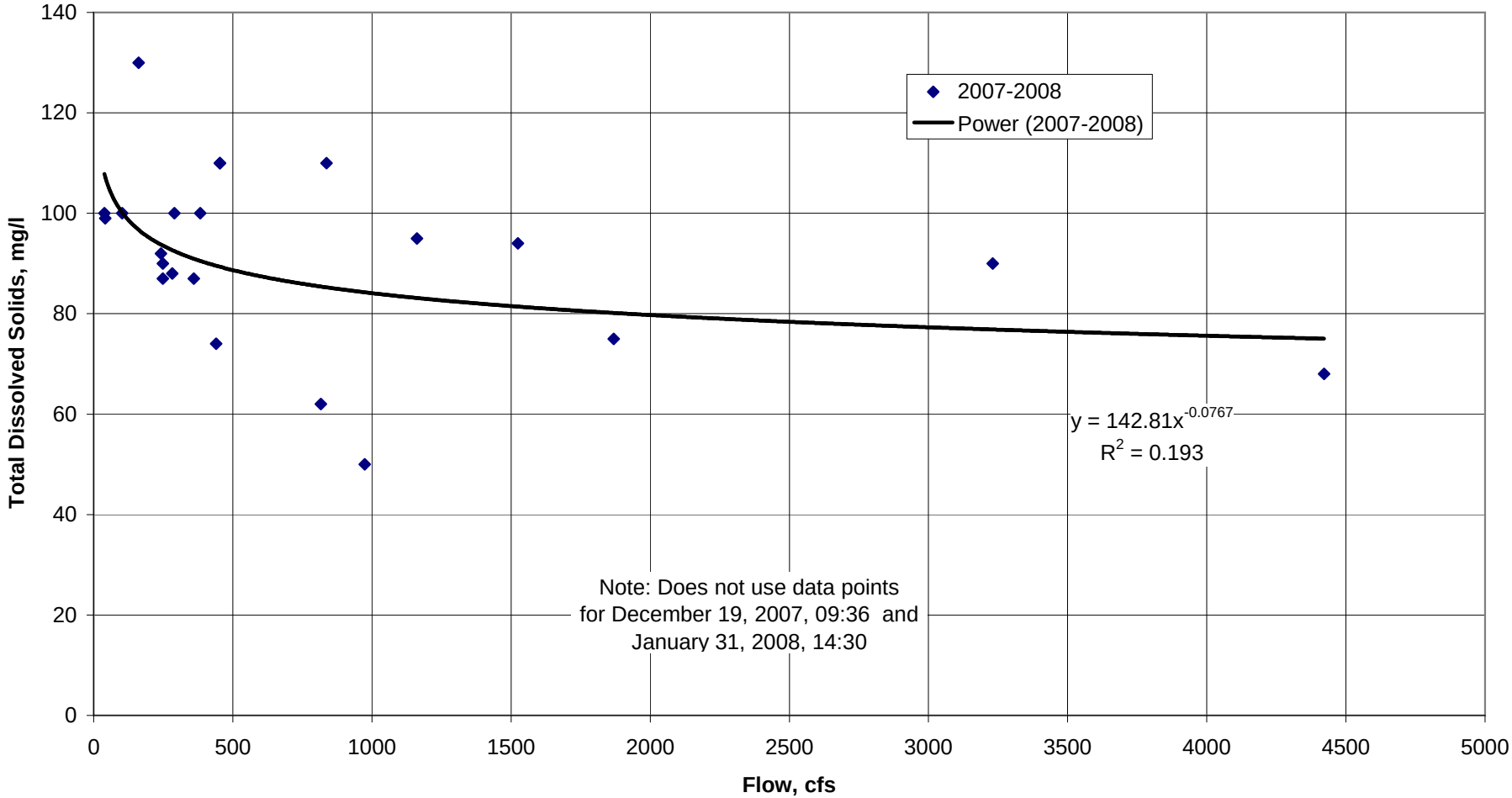
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - SULFATE AS SO4
February 2007 - February 2008



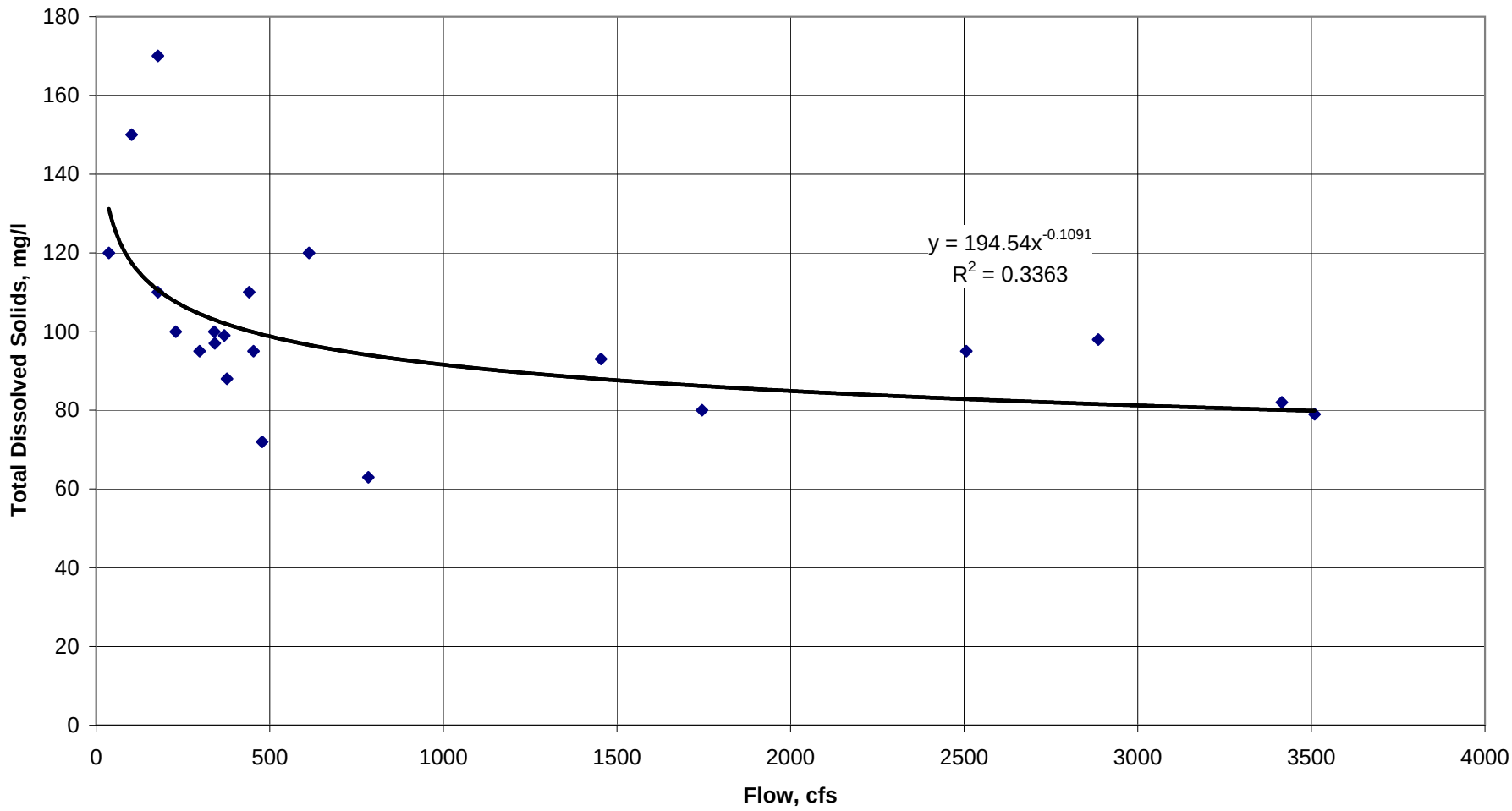
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL DISSOLVED SOLIDS
February 2007 - February 2008



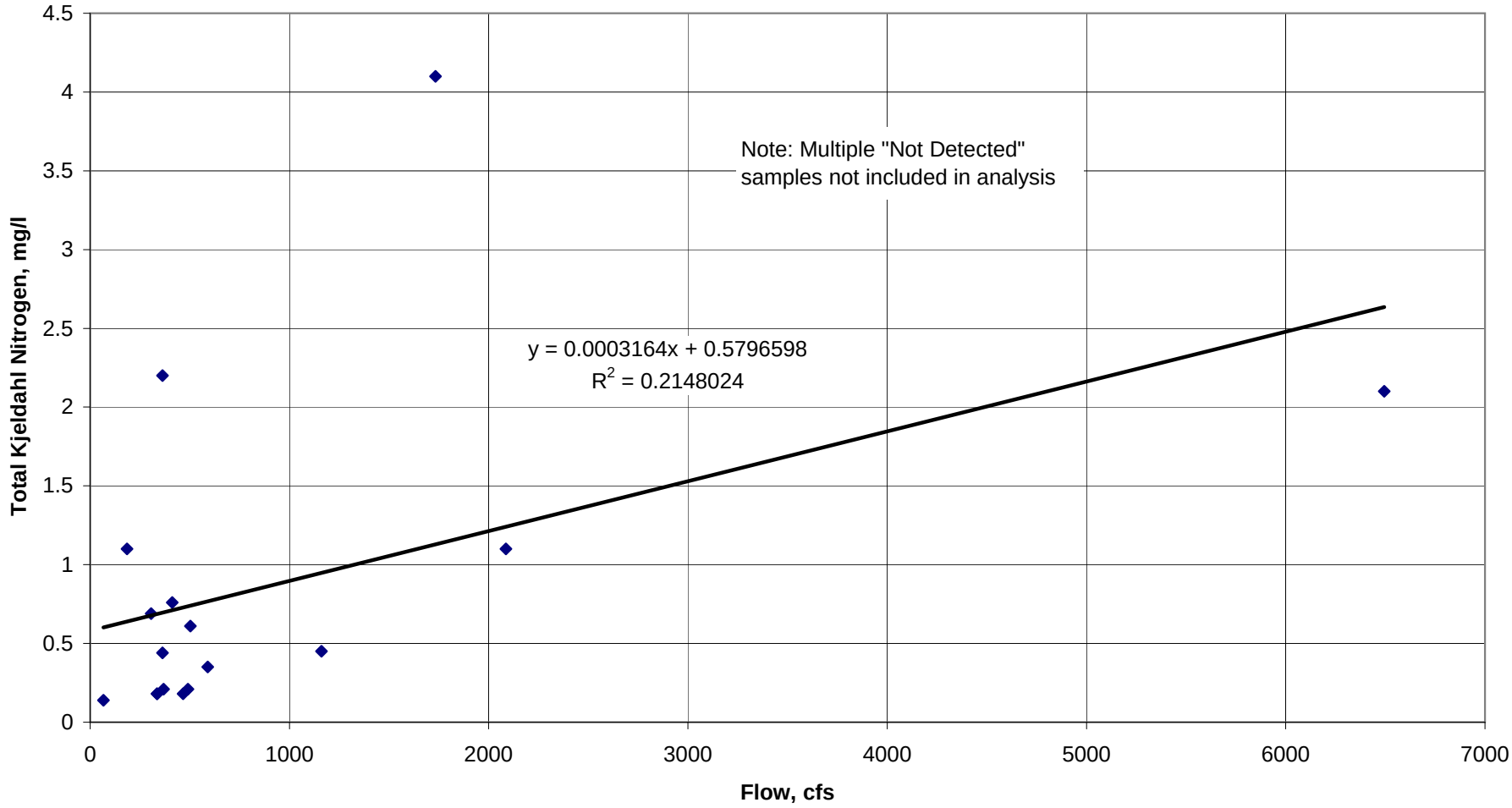
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL DISSOLVED SOLIDS
February 2007 - February 2008



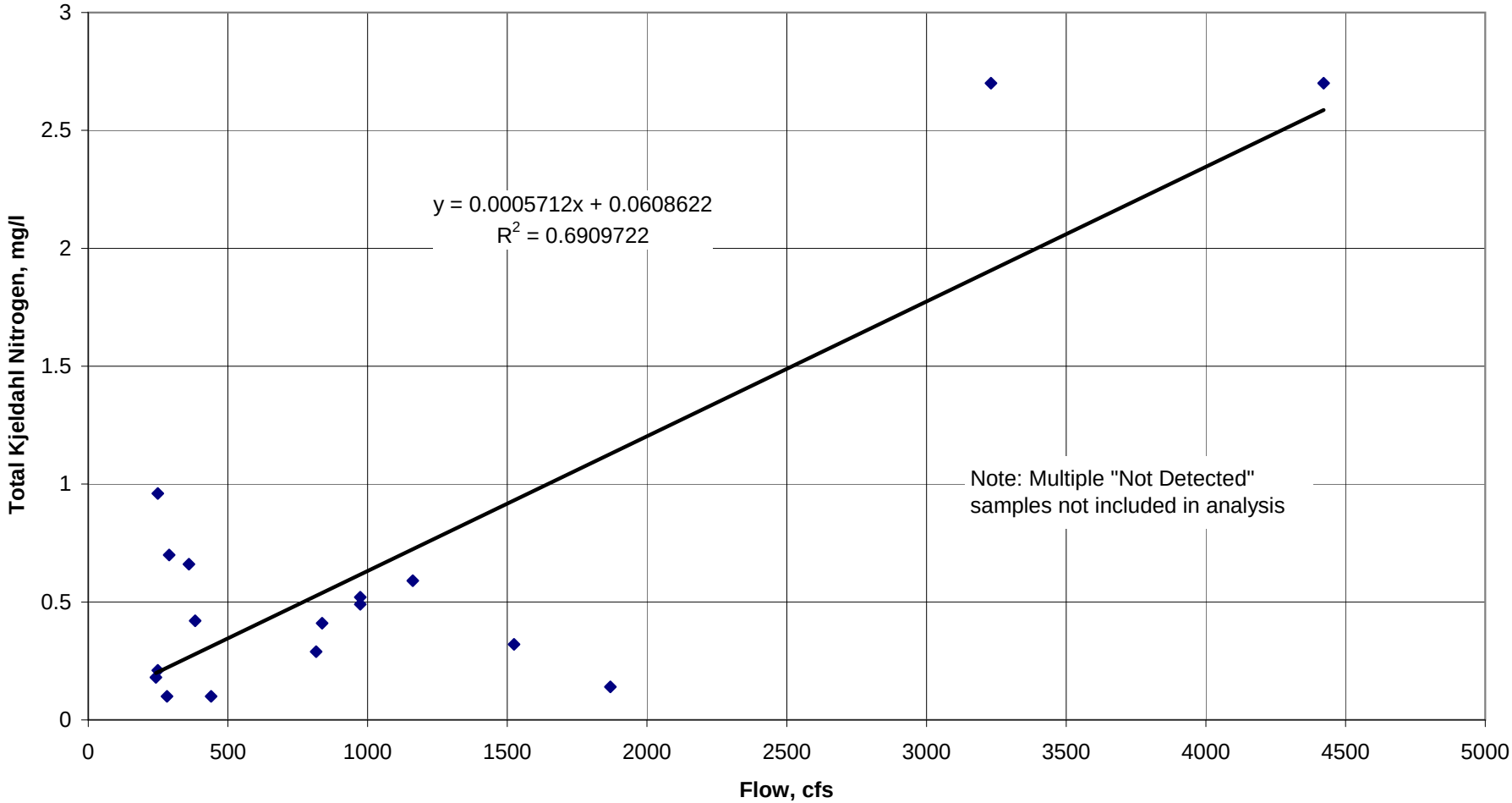
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL DISSOLVED SOLIDS
February 2007 - February 2008



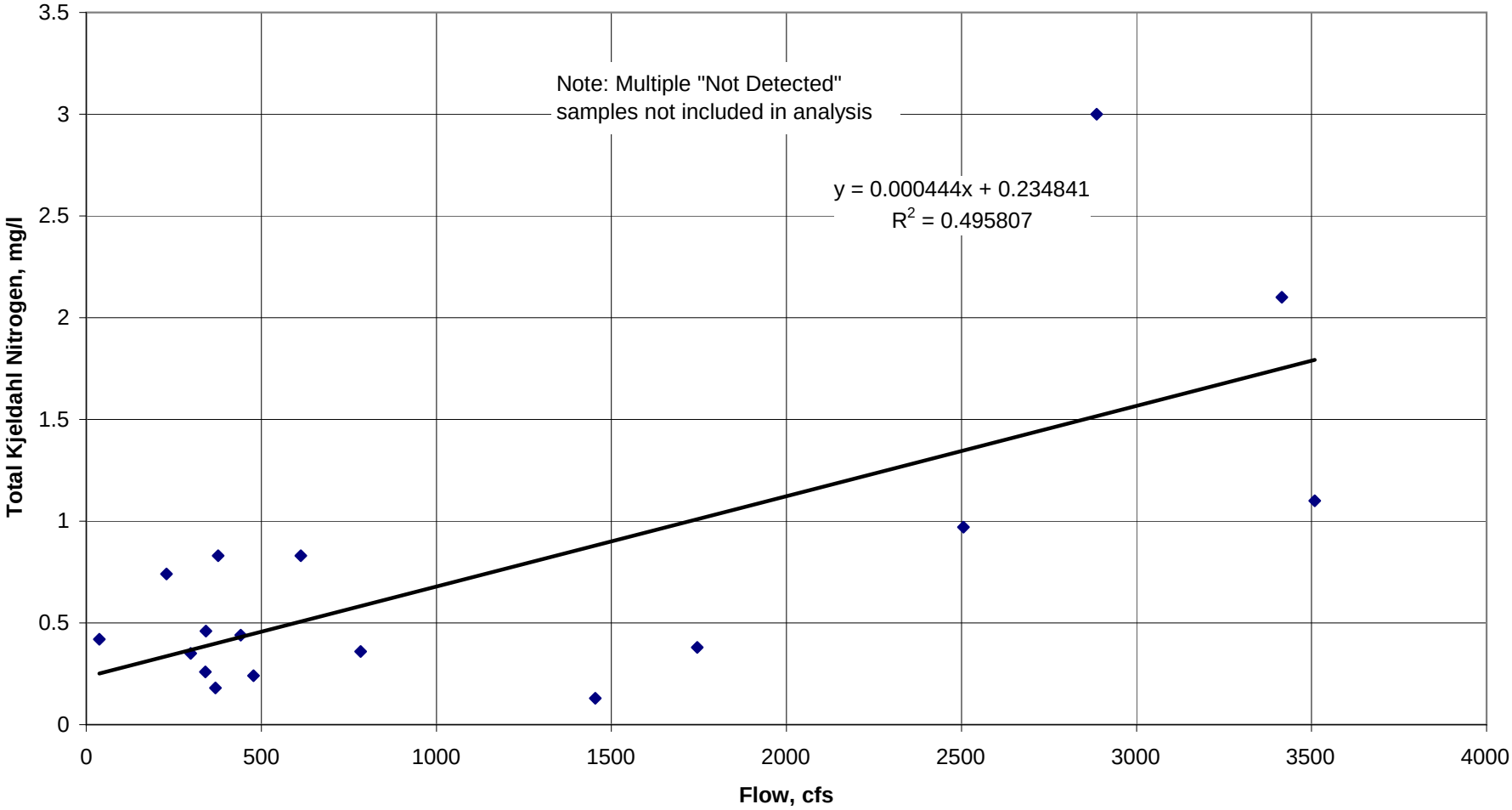
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL KJELDAHL NITROGEN
February 2007 - February 2008



FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL KJELDAHL NITROGEN
February 2007 - February 2008

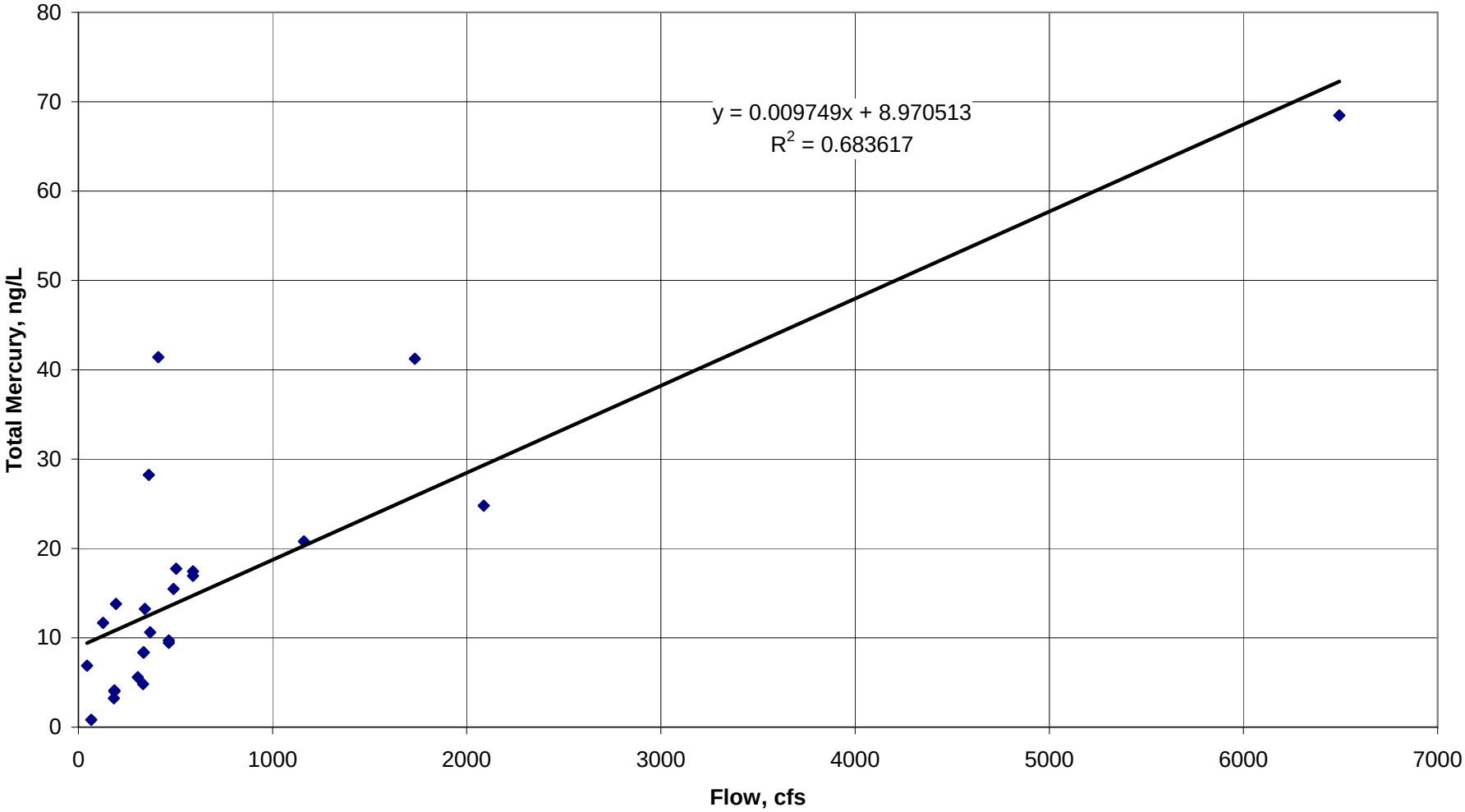


FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL KJELDAHL NITROGEN
February 2007 - February 2008

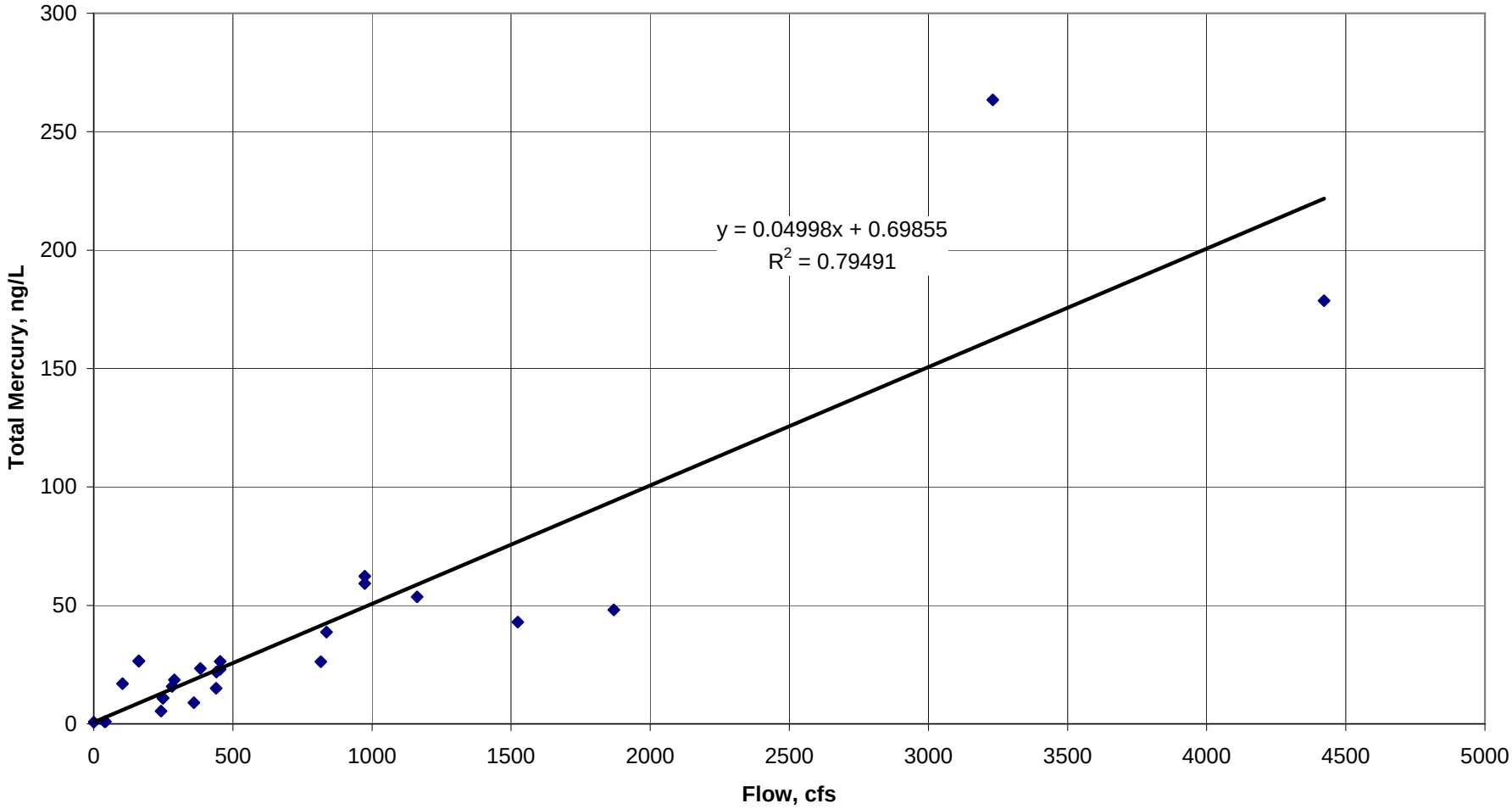


Page updated 03132013: Previous page was plot of Flow:TDS, not Flow:TKN, also corrected Table 11.

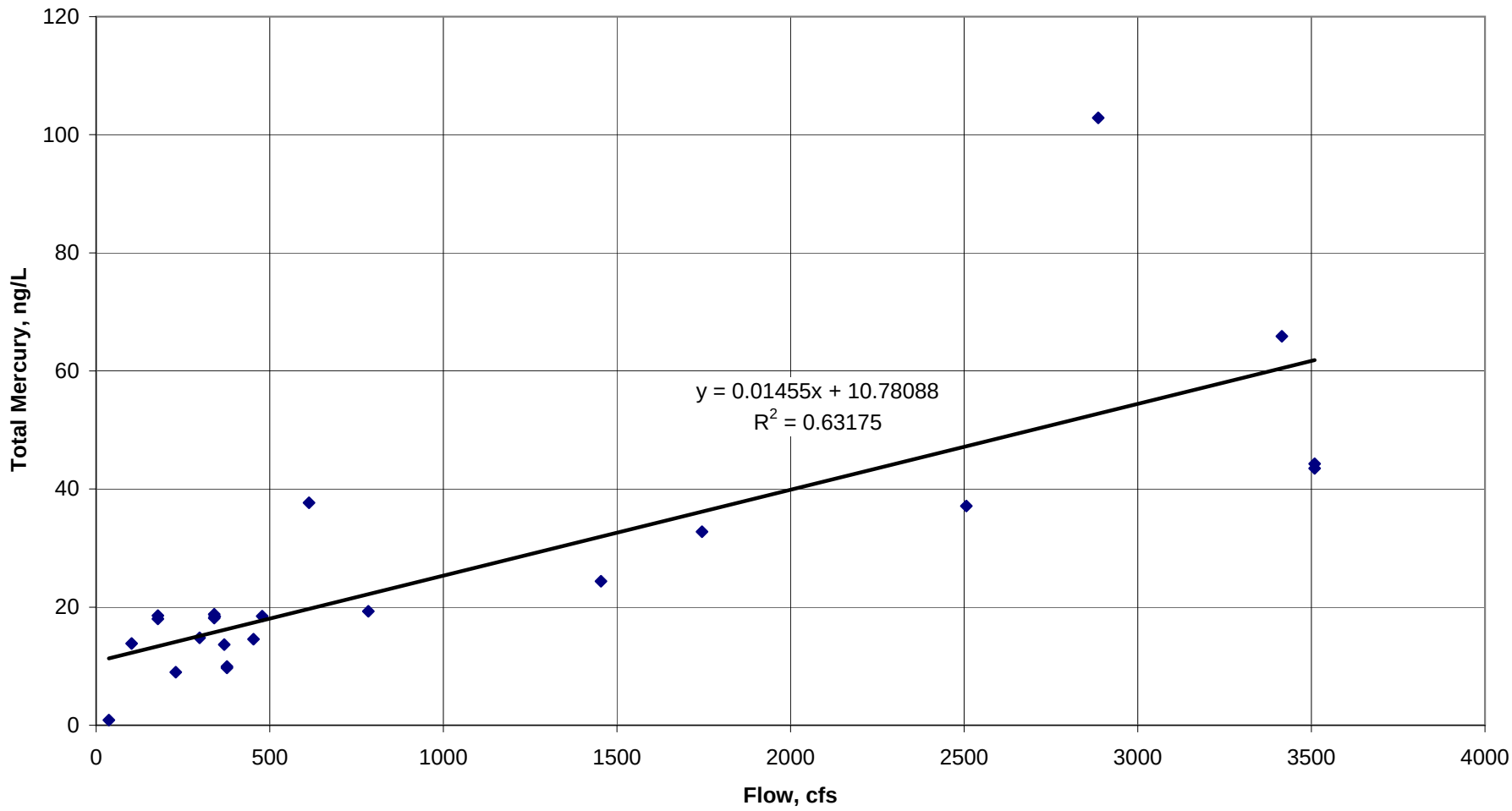
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL MERCURY
February 2007 - February 2008



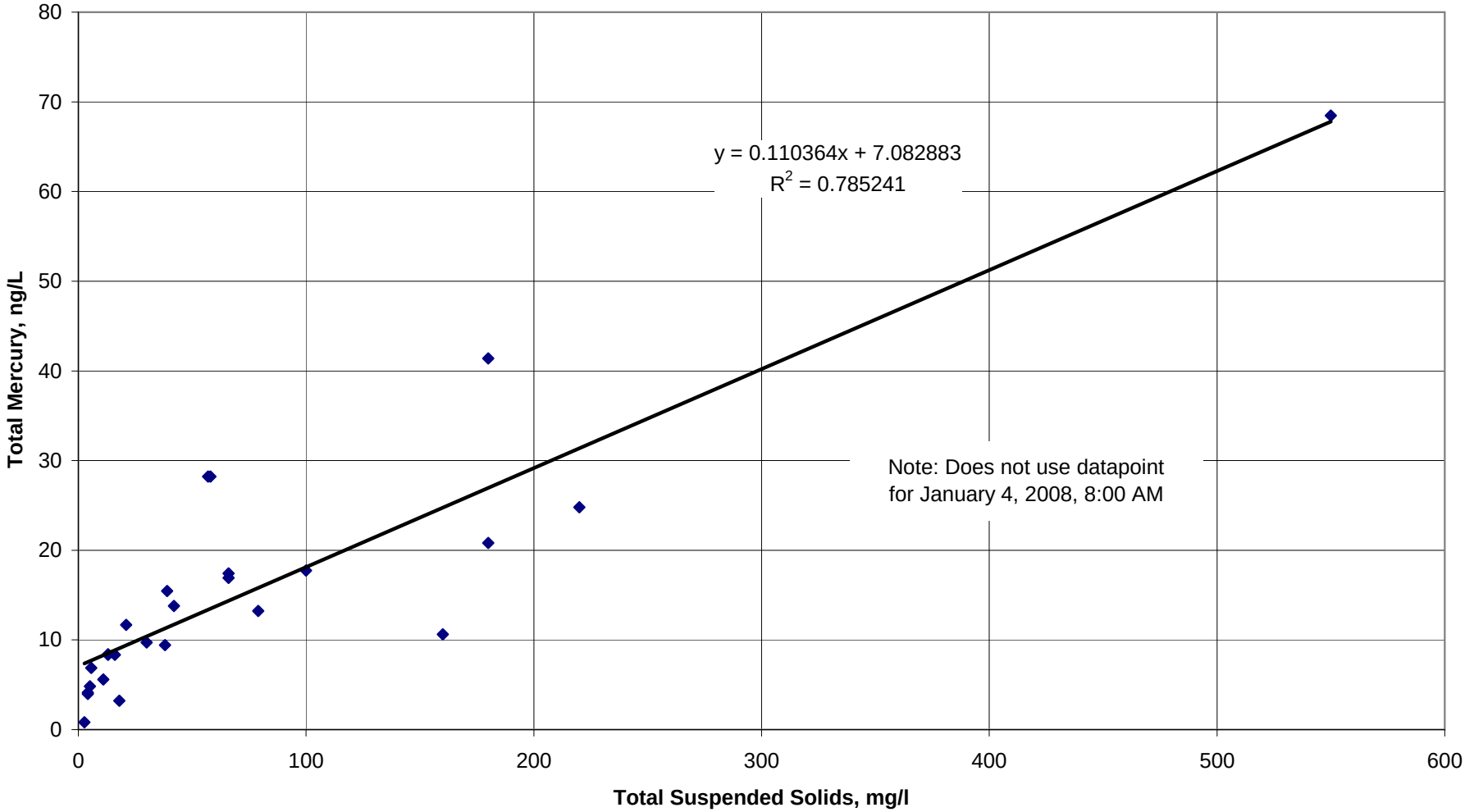
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL MERCURY
February 2007 - February 2008



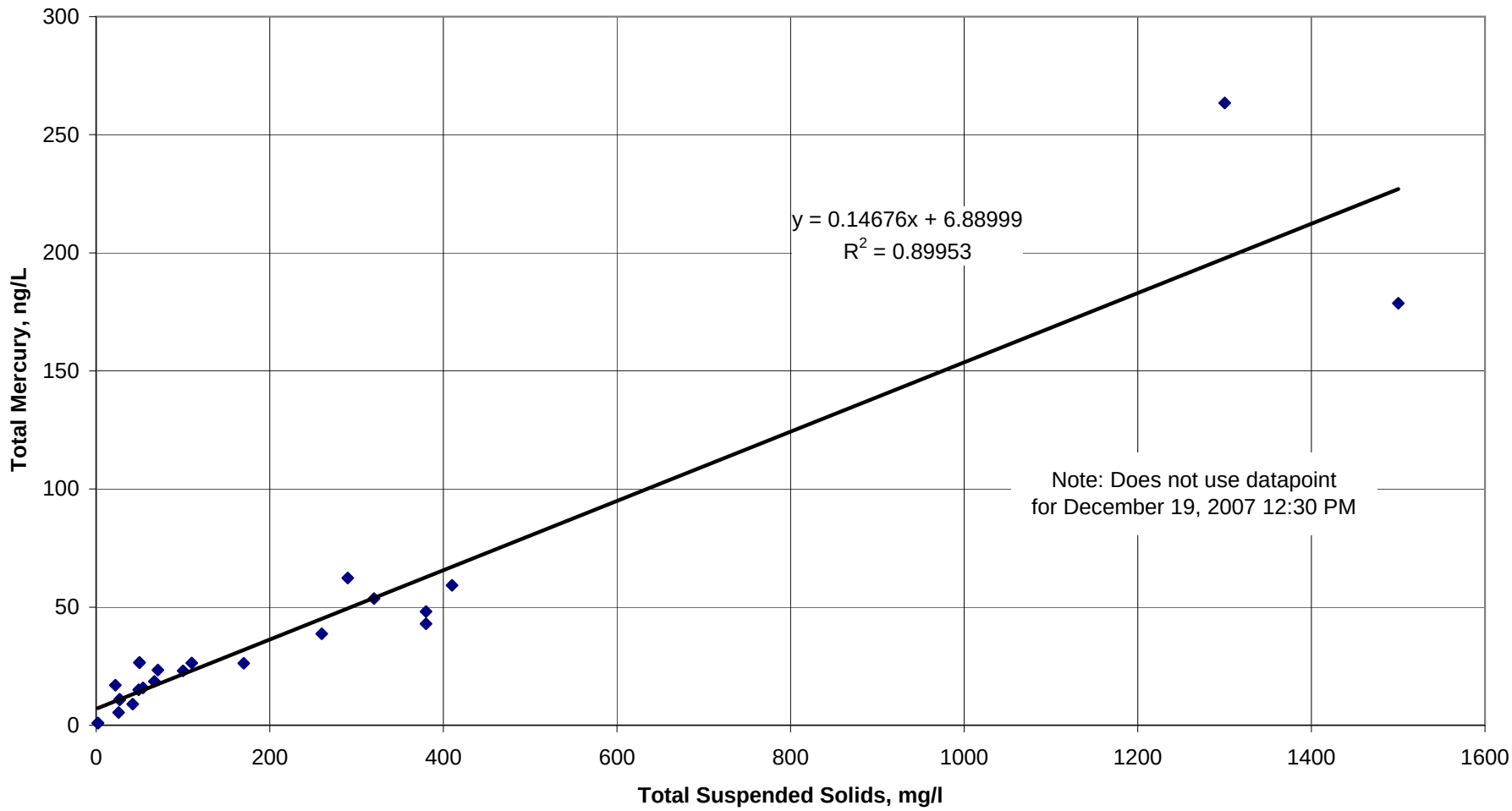
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL MERCURY
February 2007 - February 2008



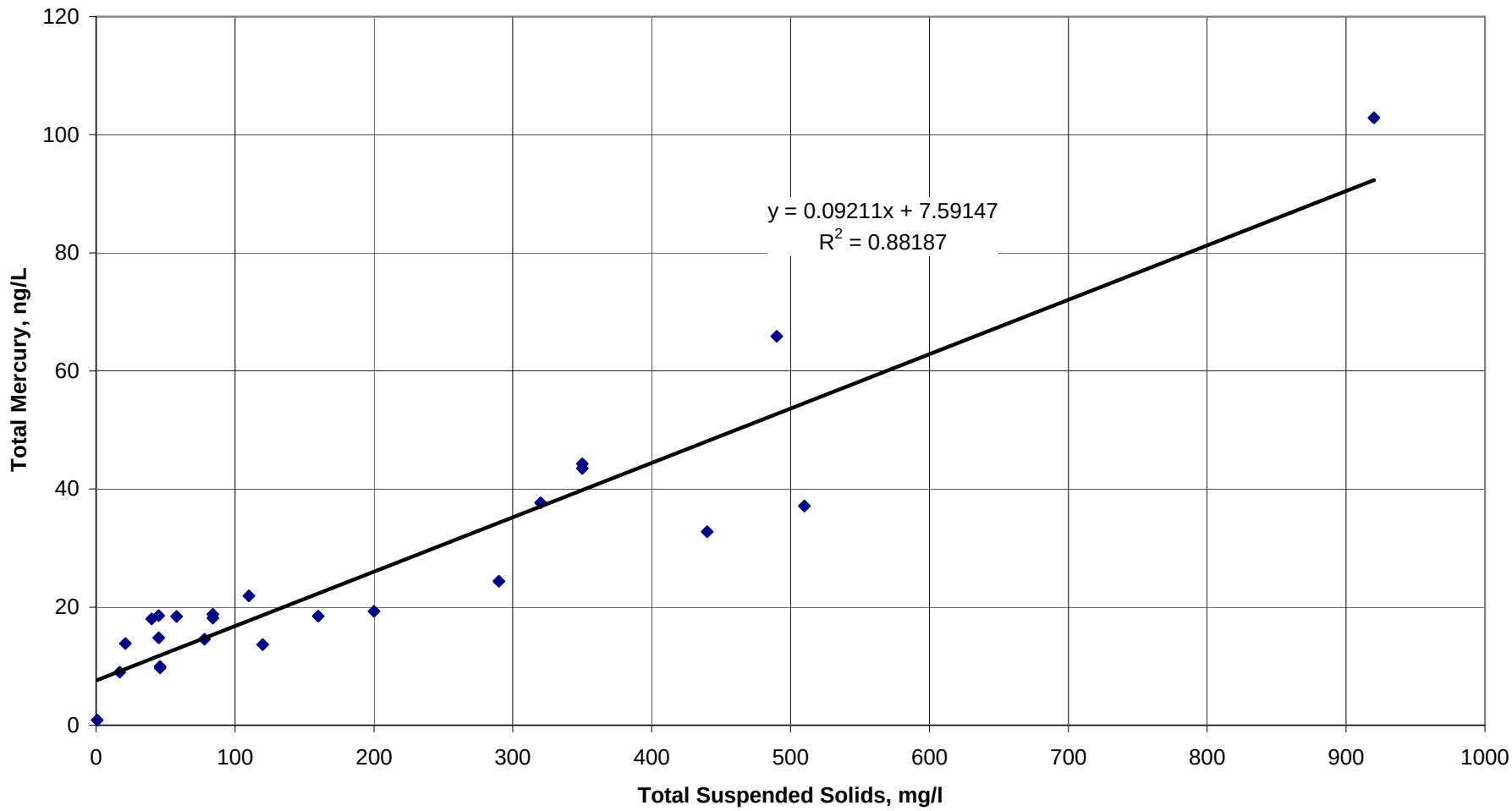
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL MERCURY v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



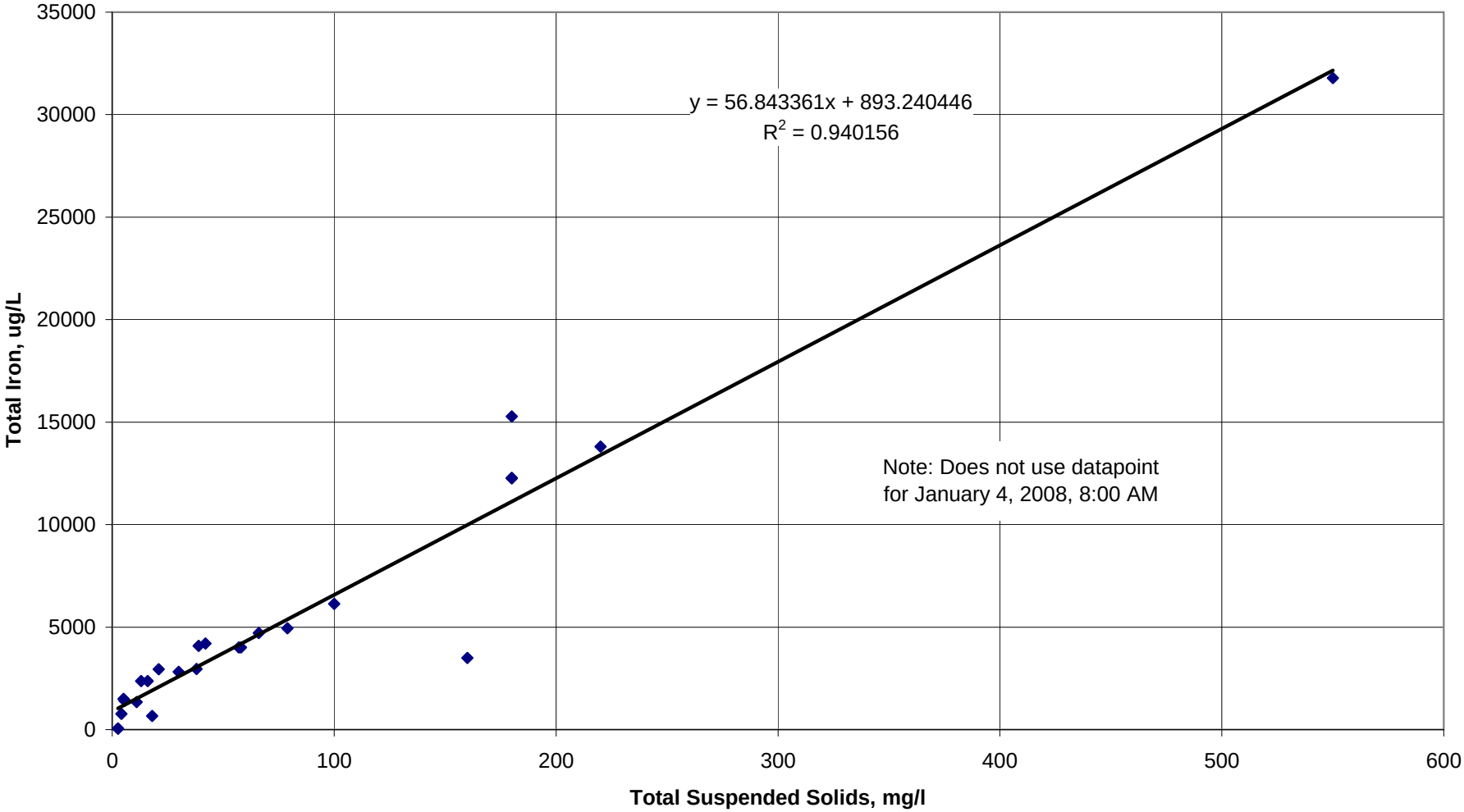
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL MERCURY v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



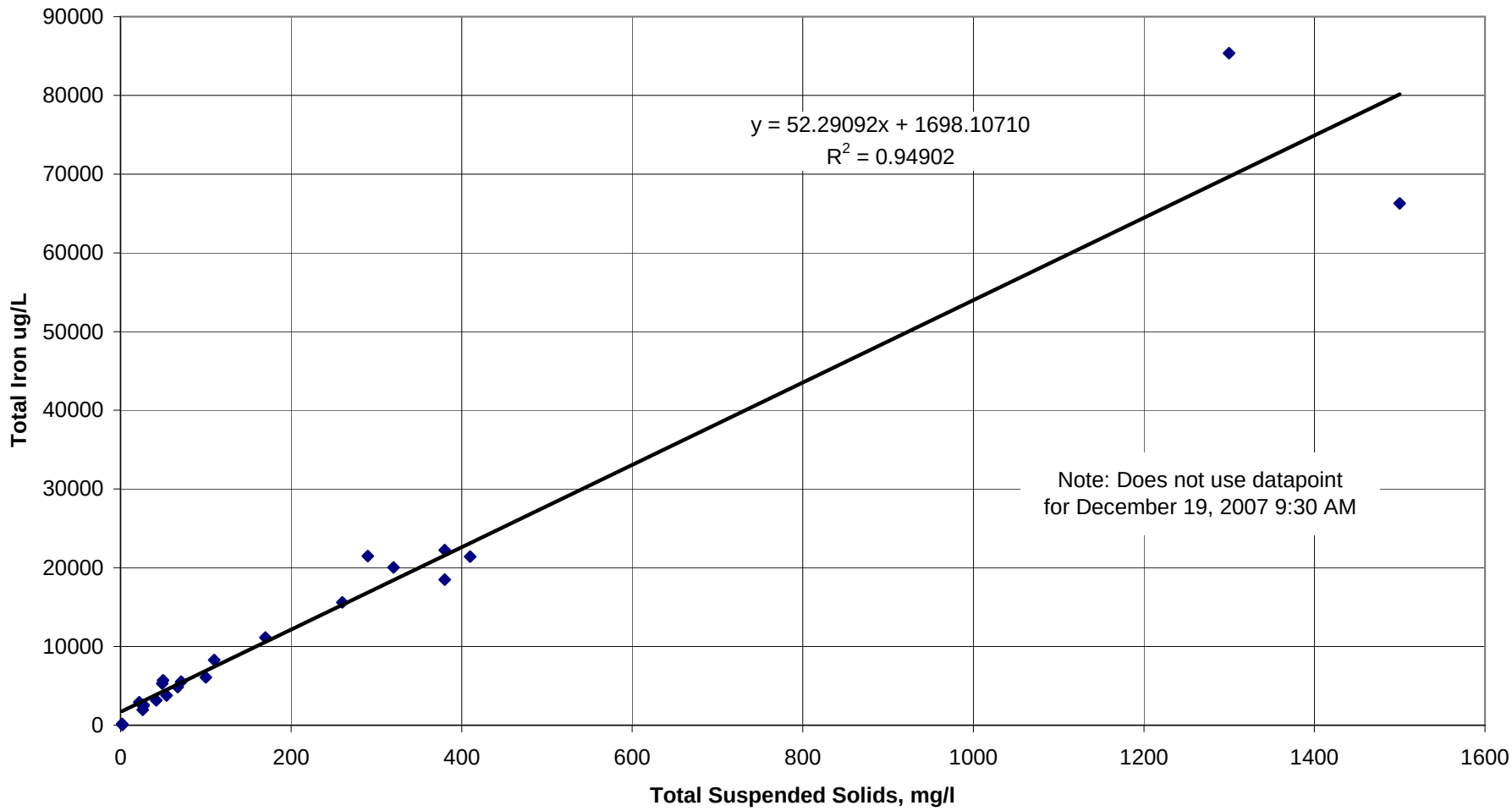
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL MERCURY v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



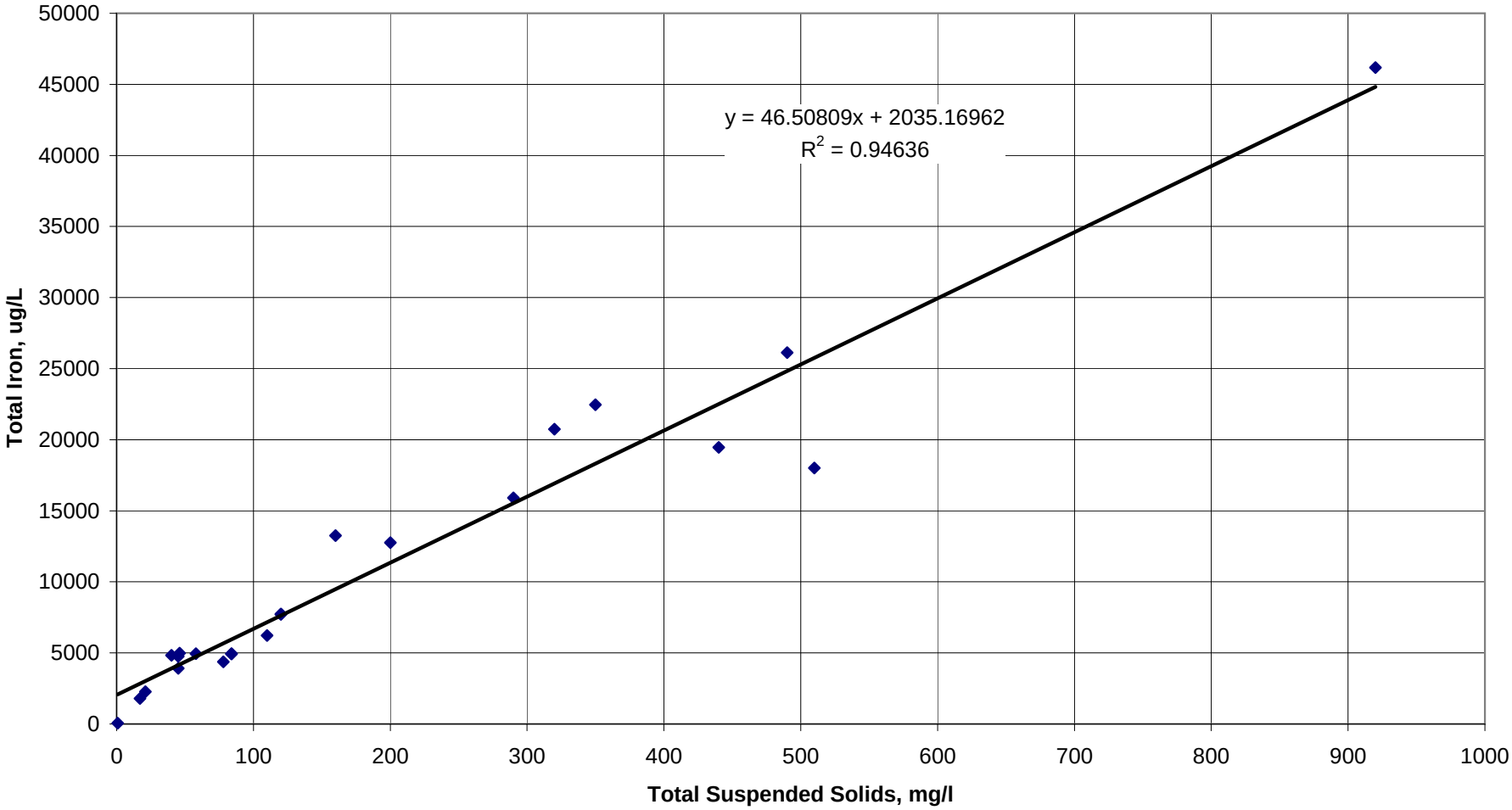
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL IRON v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



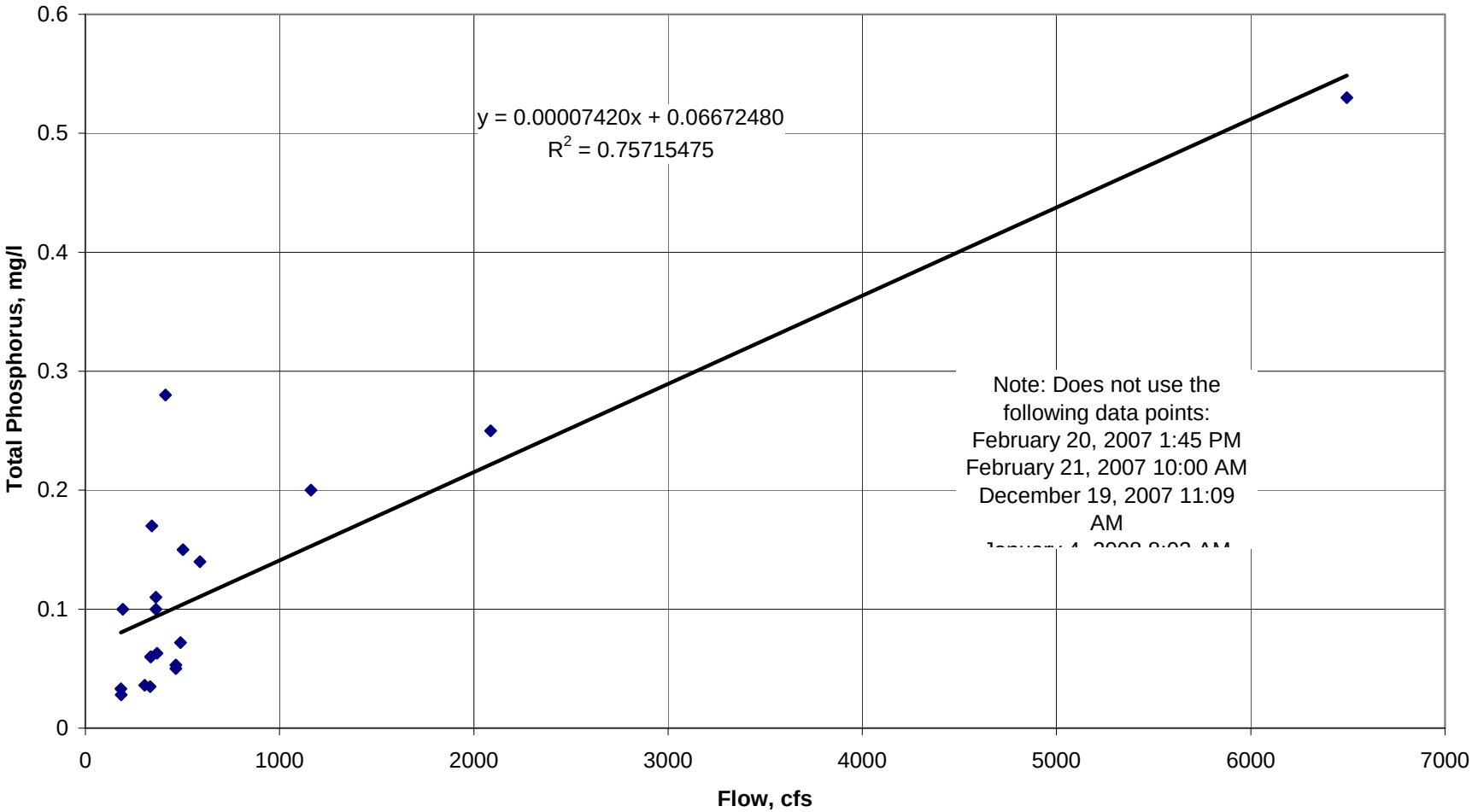
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL IRON v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



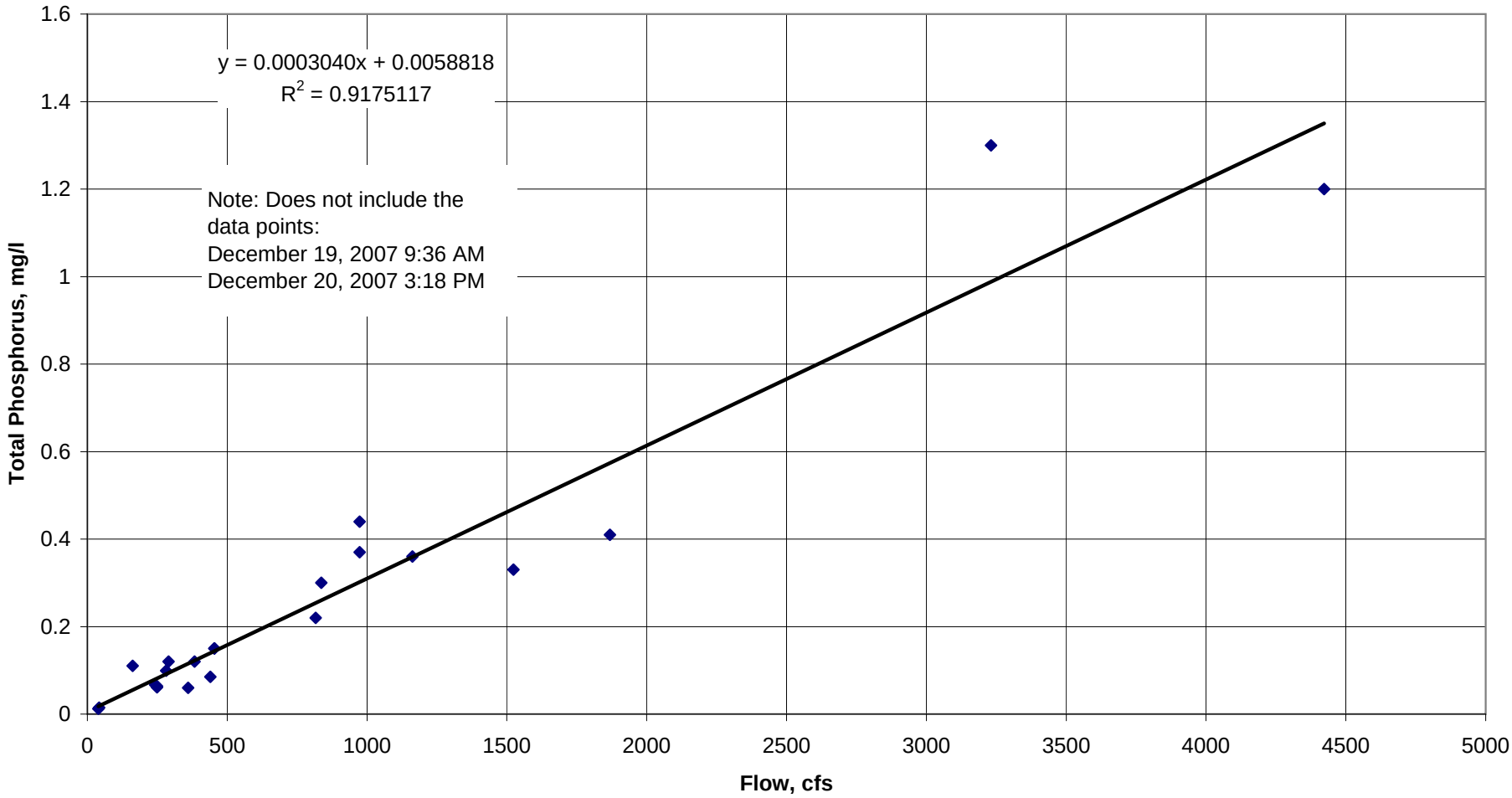
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL IRON v. TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



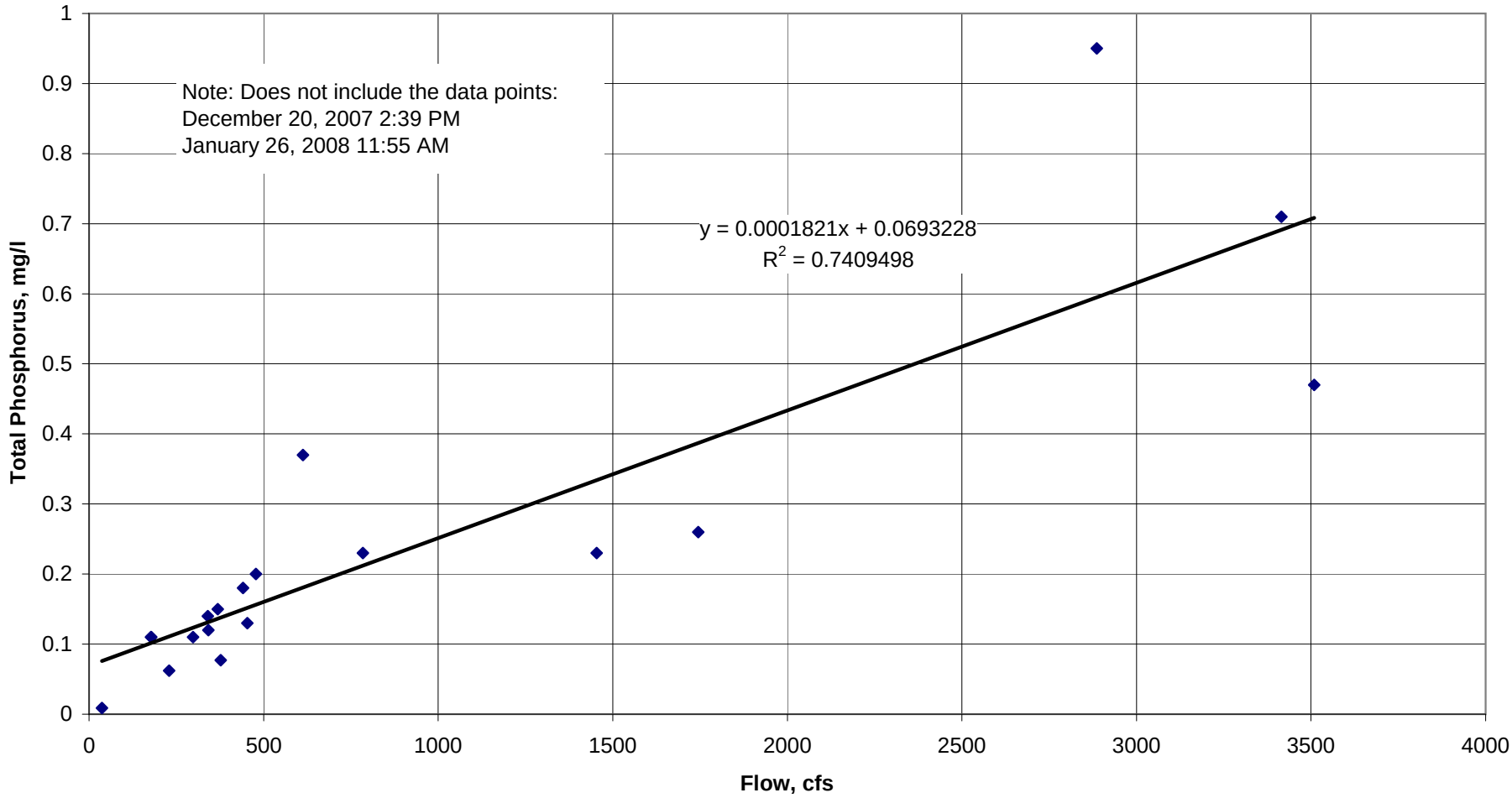
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL PHOSPHORUS
February 2007 - February 2008



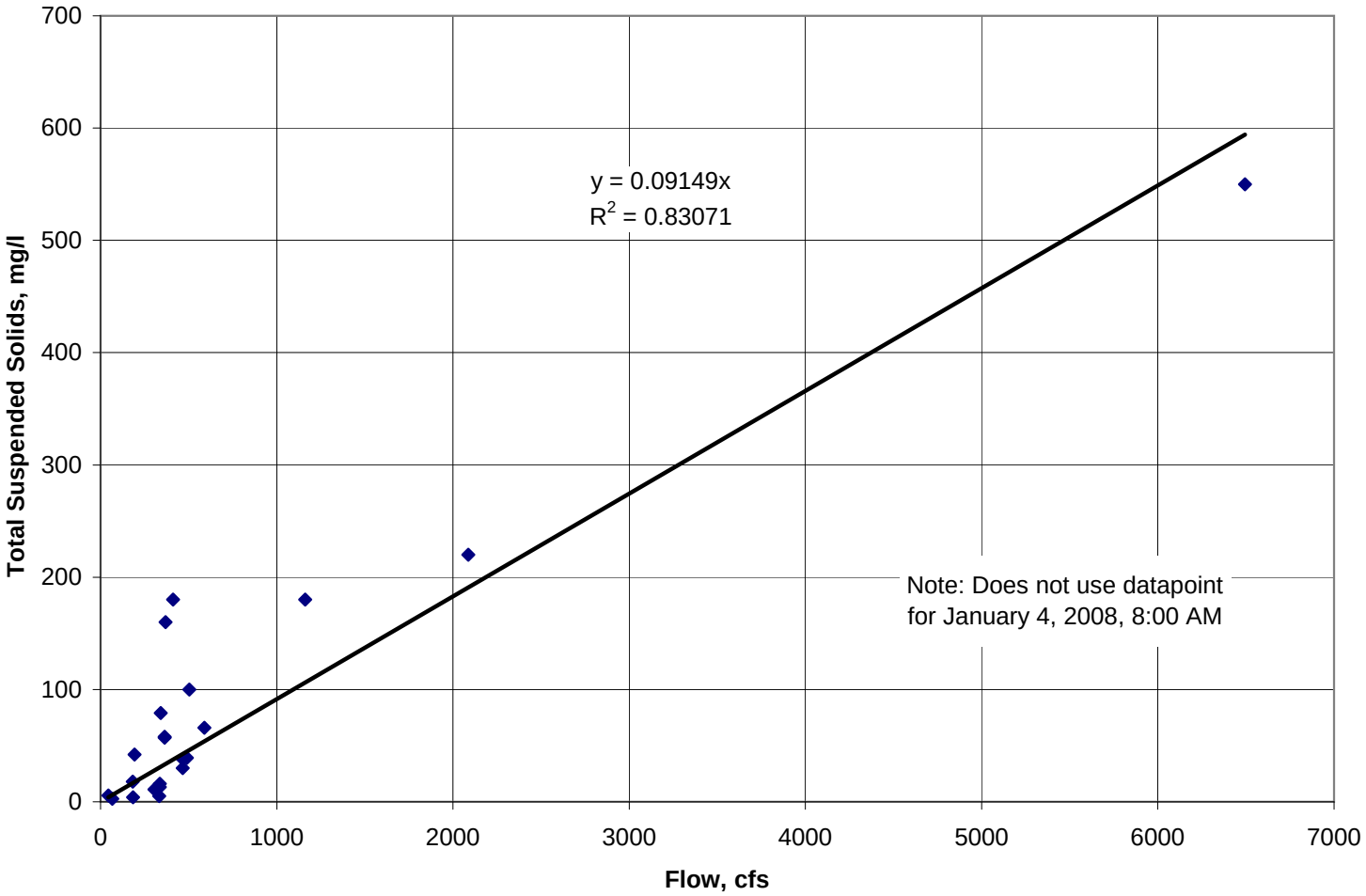
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL PHOSPHORUS
February 2007 - February 2008



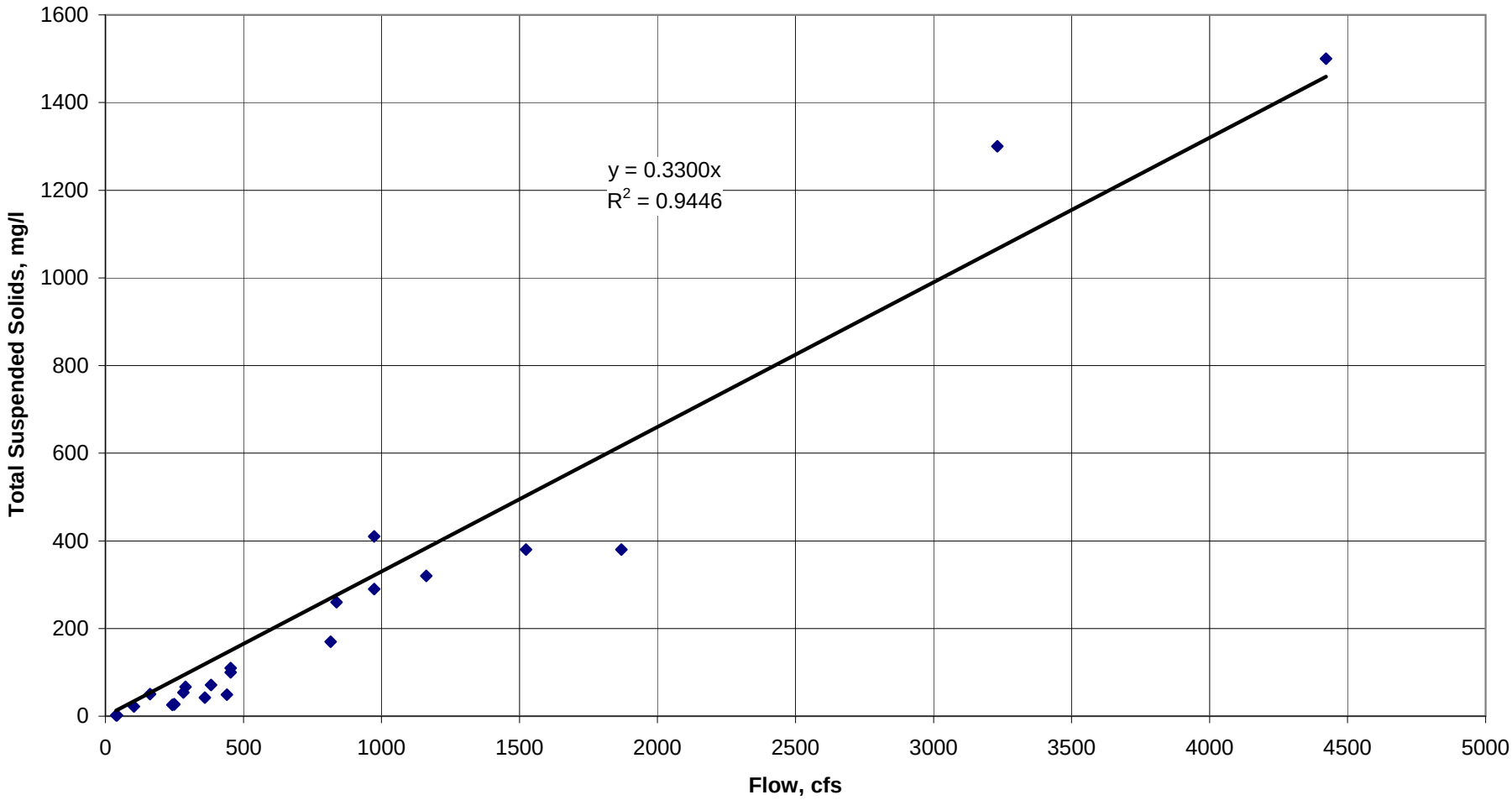
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL PHOSPHORUS
February 2007 - February 2008



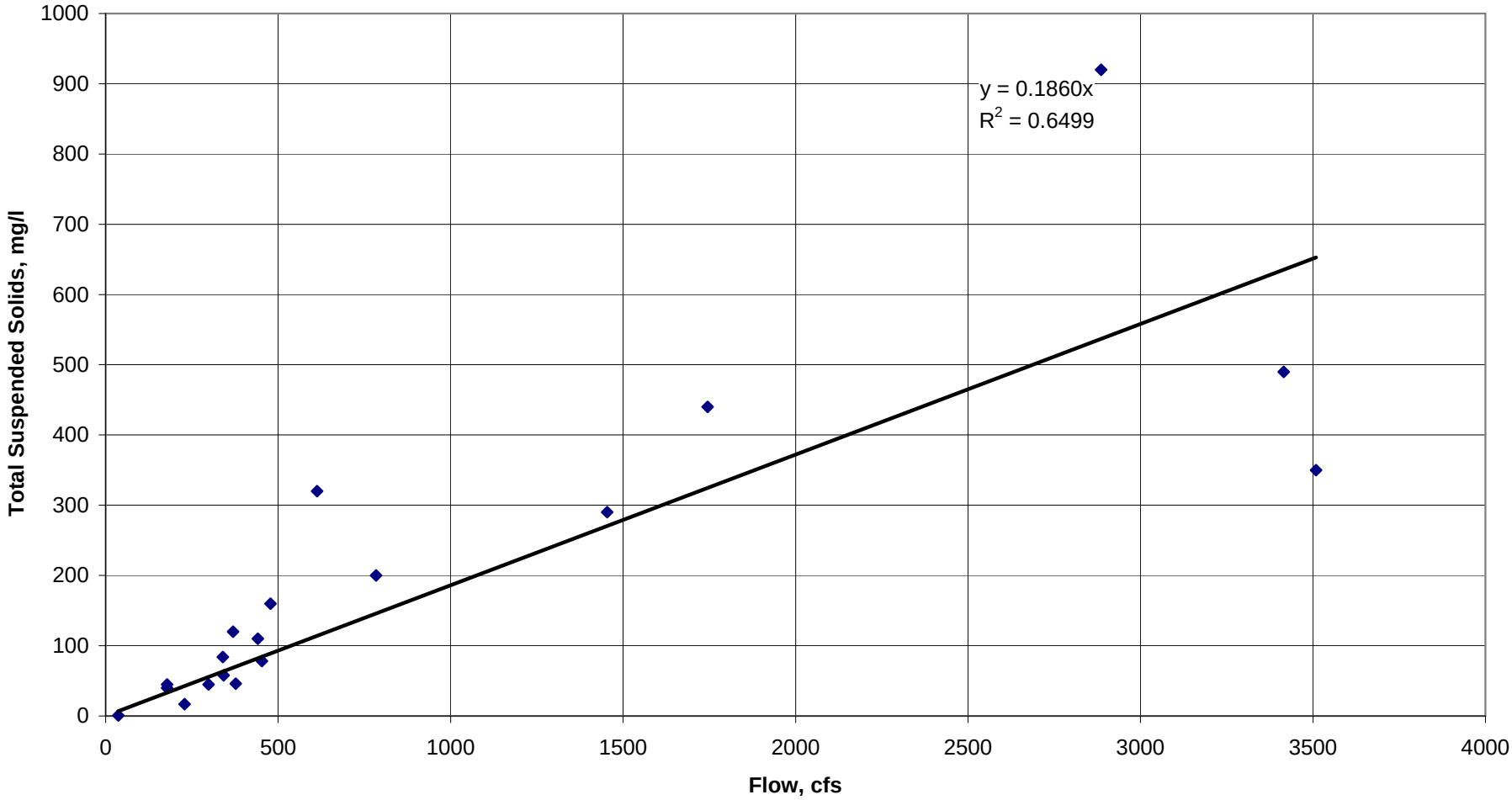
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



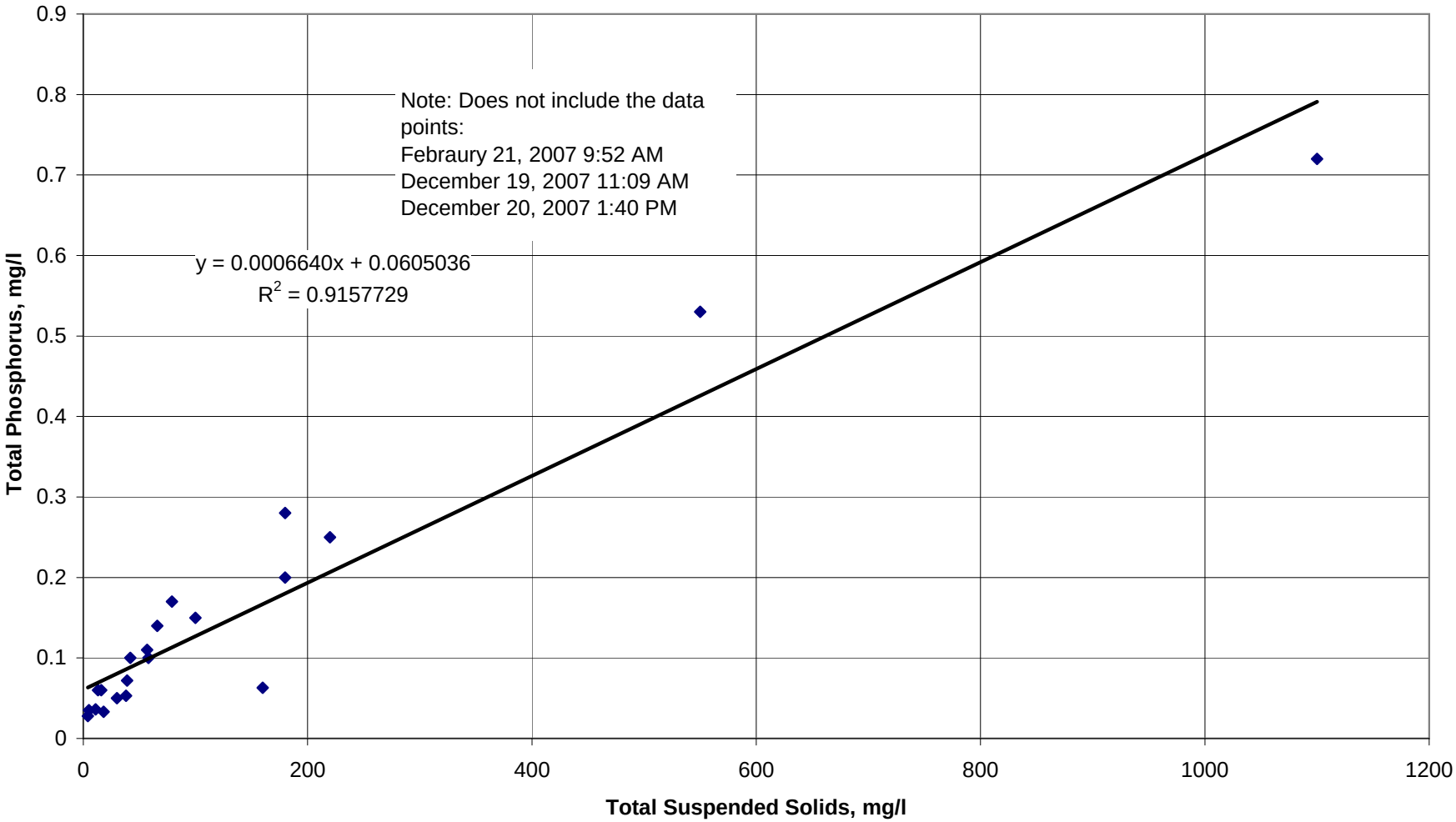
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



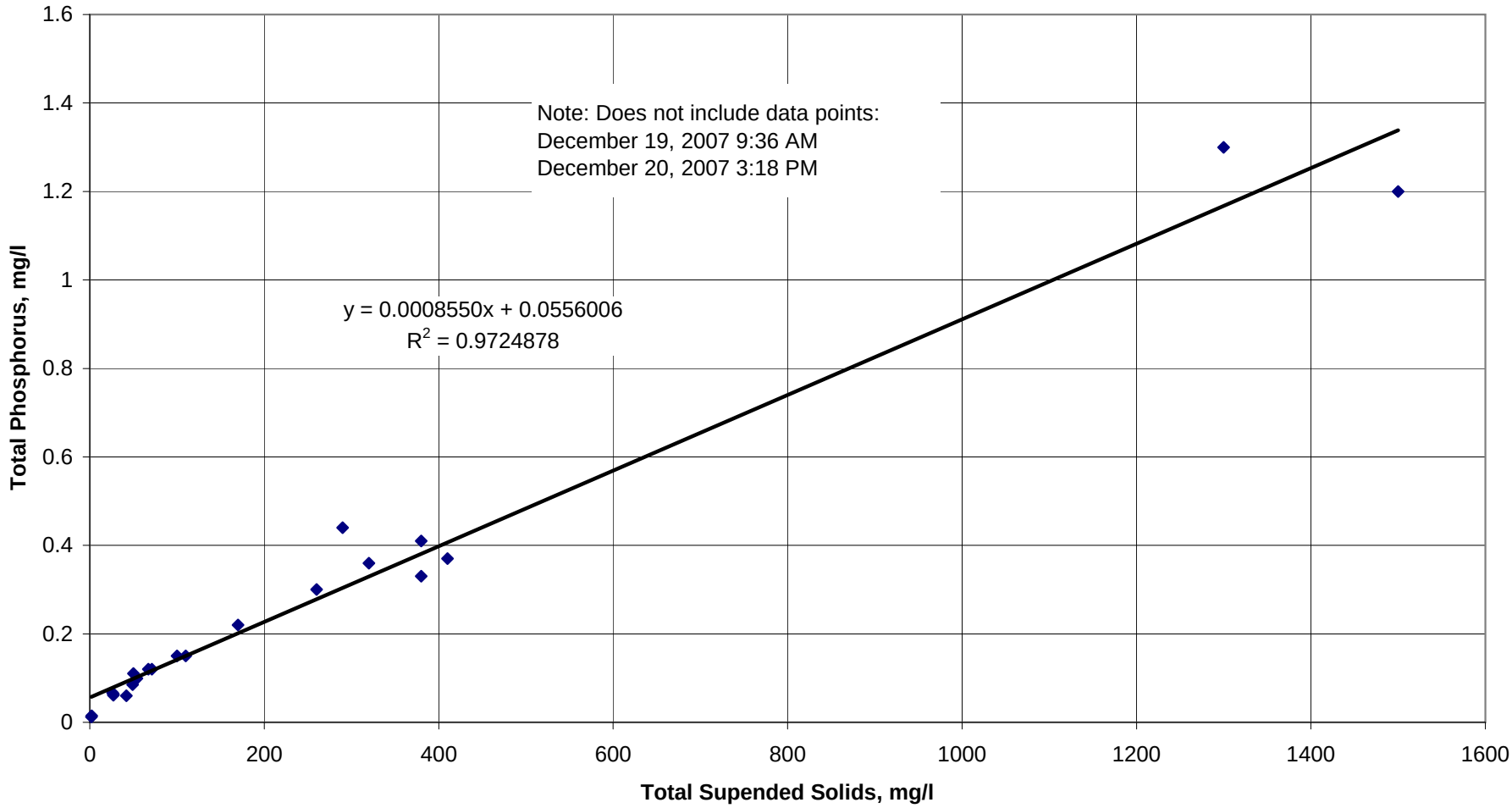
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



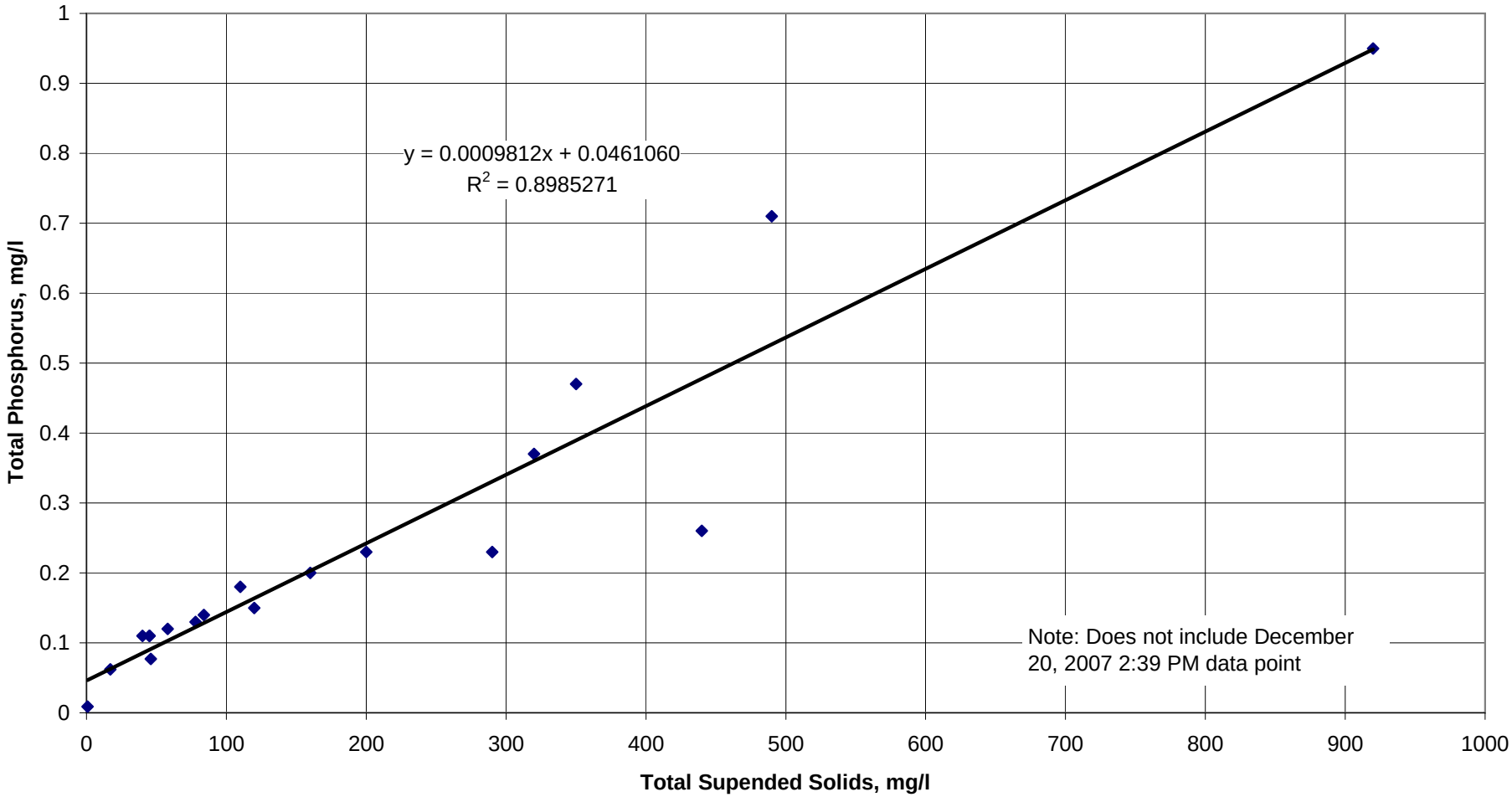
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL PHOSPHORUS - TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



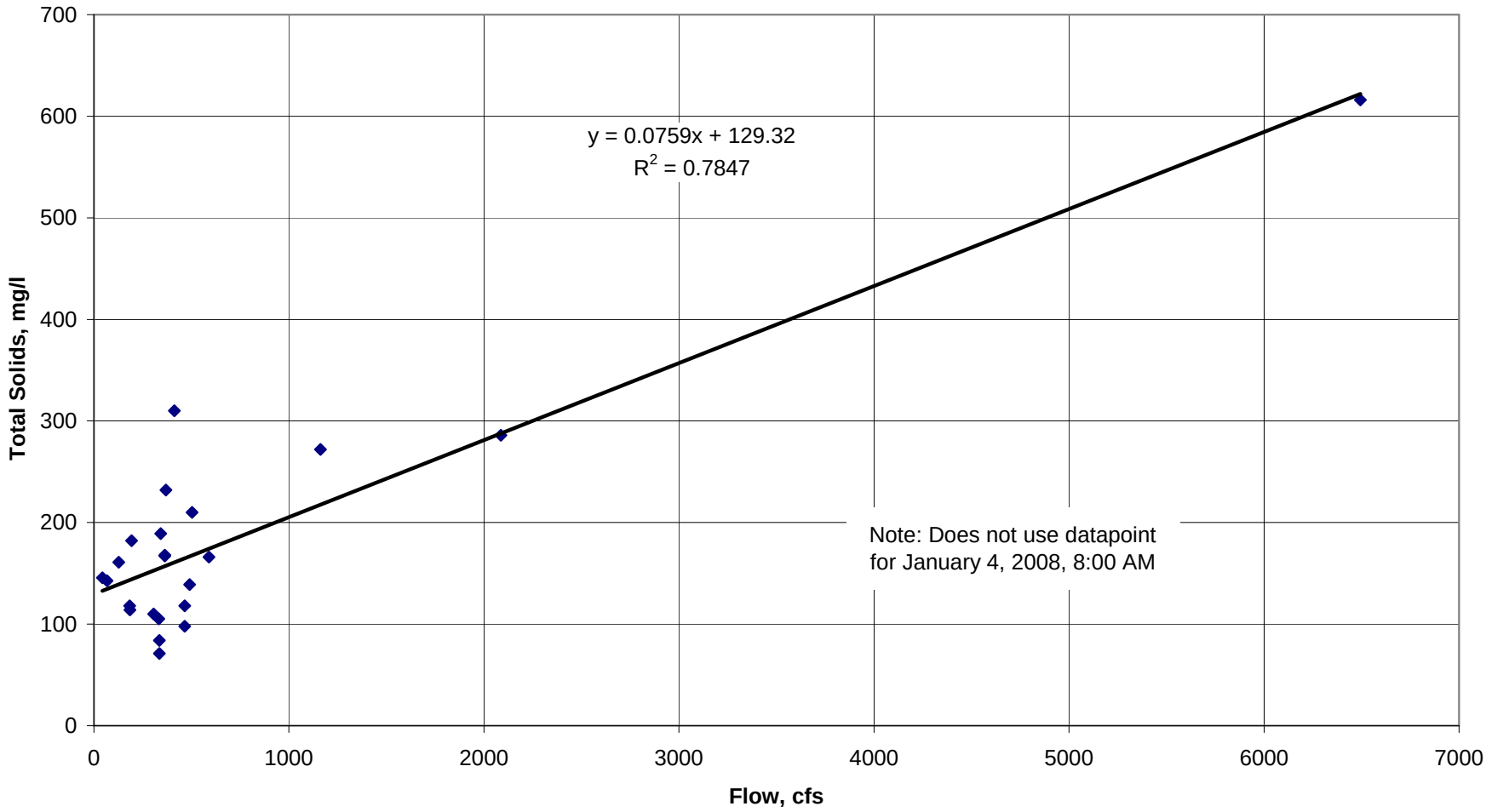
FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL PHOSPHORUS - TOTAL SUSPENDED SOLIDS
February 2007 - February 2008



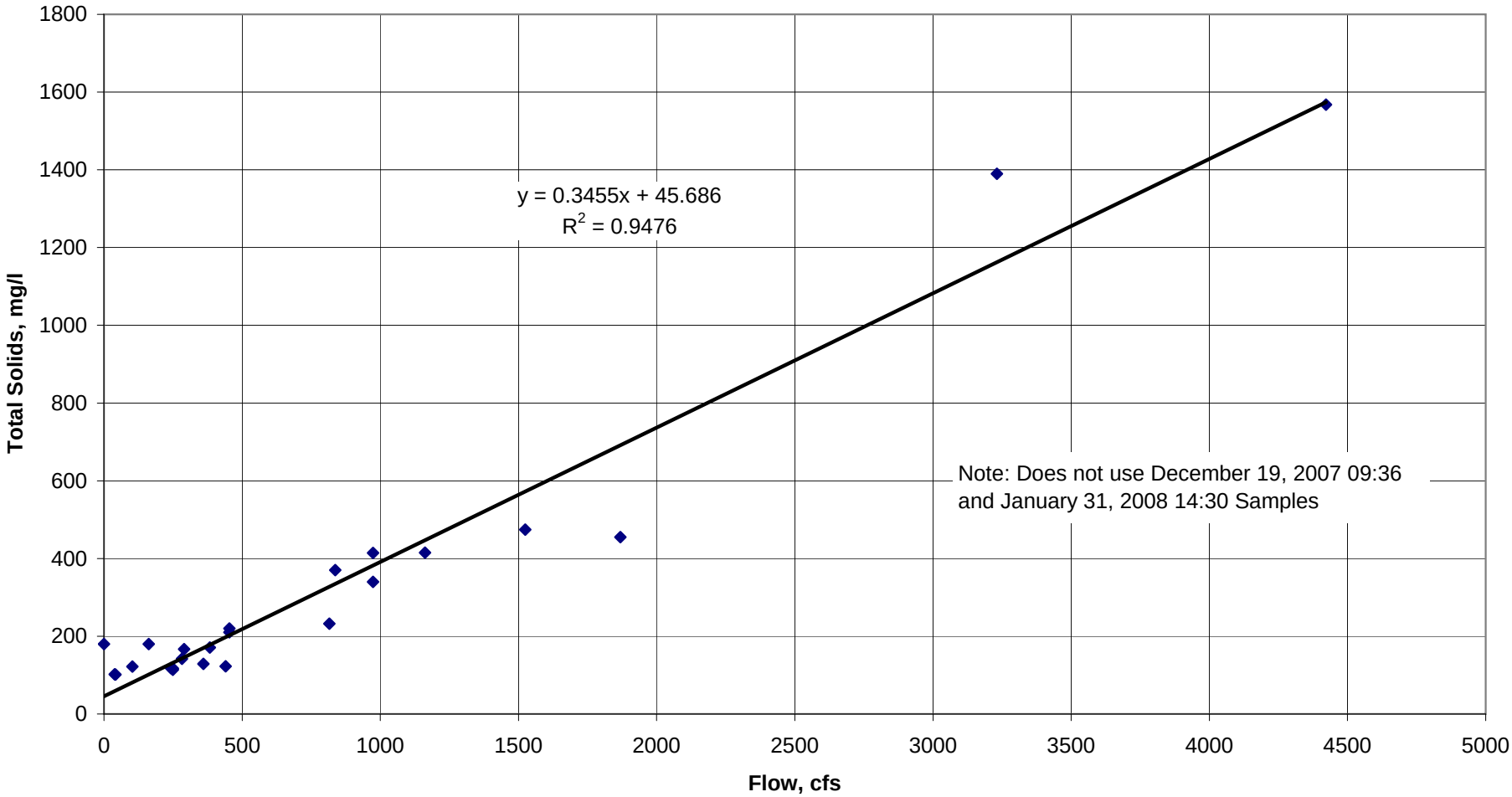
FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL PHOSPHORUS
February 2007 - February 2008



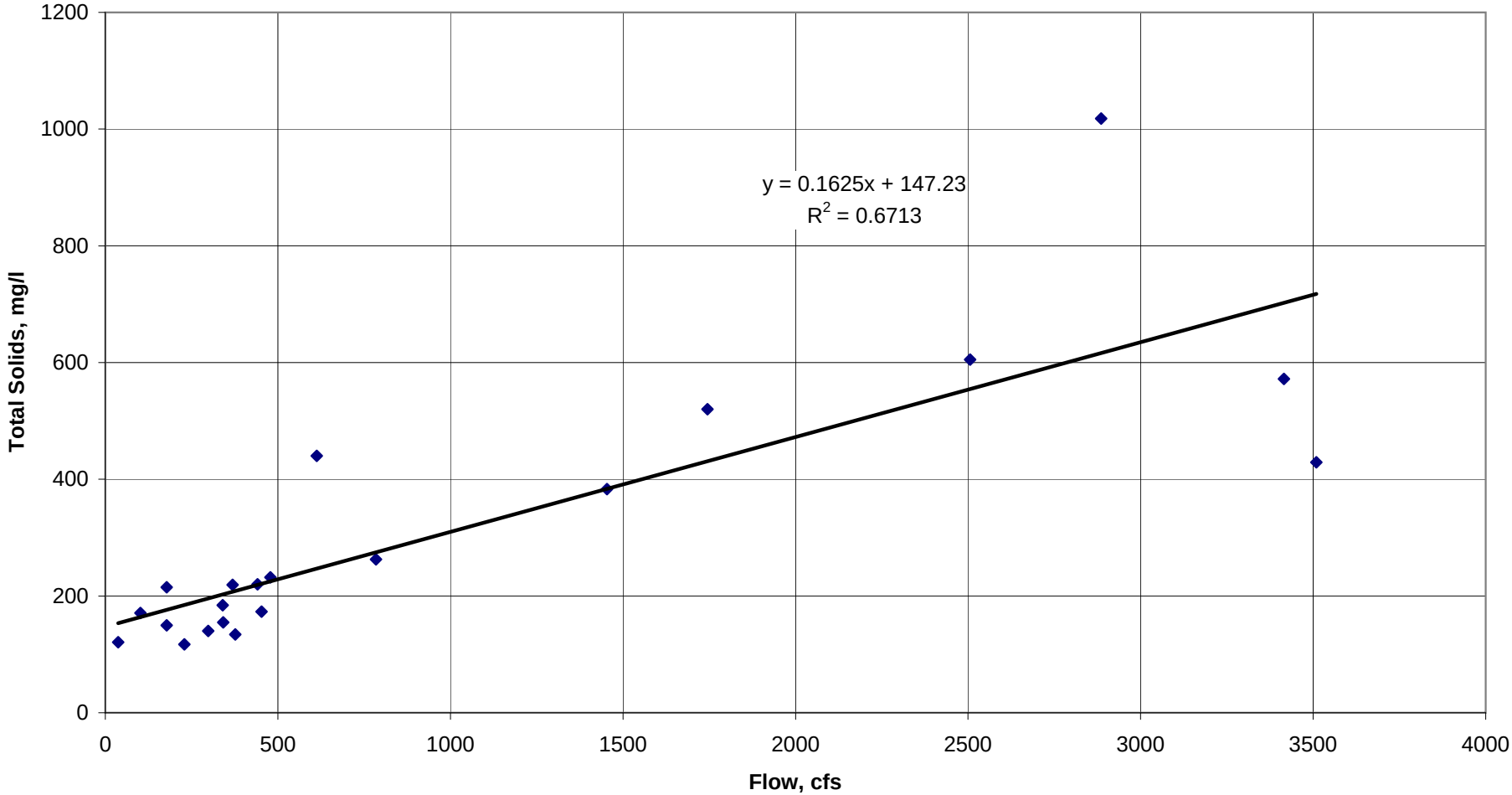
FLOW CONCENTRATION RELATIONSHIPS
KELSEY CREEK BELOW KELSEYVILLE - TOTAL SOLIDS
February 2007 - February 2008



FLOW CONCENTRATION RELATIONSHIPS
MIDDLE CREEK NEAR UPPER LAKE - TOTAL SOLIDS
February 2007 - February 2008



FLOW CONCENTRATION RELATIONSHIPS
SCOTTS CREEK AT EICKHOFF ROAD - TOTAL SOLIDS
February 2007 - February 2008



FLOW CONCENTRATION RELATIONSHIPS
SUMMARY
December 31, 2008

Statistical Test
Student T-Distribution, DF = n-2
p calculated using http://www.stat.tamu.edu/~west/applets/tdemo.html

Relationship	Relationship	R^2	Comments	R	n	sqrt(n-2)	sqrt(1-R^2)	t	p
Kelsey Creek Below Kelseyville									
Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.00001347 * Flow + 0.06674	0.2221	No relationship	0.4713	26	4.899	0.882	2.618	<0.0072
Total Mercury, ng/l - Flow, cfs	THg = 0.009749 * Flow + 8.970	0.6836	Good relationship	0.8268	24	4.690	0.562	6.894	<0.00001
Total Mercury, ng/l - Total Suspended Solids, mg/l	THg = 0.1104 * TSS +7.083	0.7852	Good relationship	0.8861	26	4.899	0.463	9.367	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 11.12 * Flow^{-0.2406}$	0.2331	No relationship	0.4828	24	4.690	0.876	2.586	<0.0084
Sulfate as SO4, mg/l - Flow, cfs	SO4 = -0.7554 * Ln(Flow) + 8.101	0.2657	No relationship	0.5155	24	4.690	0.857	2.821	<0.005
Middle Creek near Upper Lake									
Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.00006584 * Flow + 0.05707	0.7466	Good relationship	0.8641	26	4.899	0.503	8.409	<0.00001
Total Mercury, ng/l - Flow, cfs	THg = 0.04998 * Flow + 0.6986	0.7949	Good relationship	0.8916	23	4.583	0.453	9.022	<0.00001
Total Mercury, ng/l - Total Suspended Solids, mg/l	THg = 0.1468 * TSS + 6.890	0.8995	Strong relationship	0.9484	24	4.690	0.317	14.032	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 5.621 * Flow^{-0.1651}$	0.5465	Good relationship	0.7393	23	4.583	0.673	5.031	<0.00003
Sulfate as SO4, mg/l - Flow, cfs	SO4 = -1.682 * Ln(Flow) + 16.70	0.7385	Good relationship	0.8594	23	4.583	0.511	7.701	<0.00001
Scotts Creek at Eickhoff Road									
Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.00001520 * Flow + 0.07446	0.1563	No relationship	0.3953	23	4.583	0.919	1.972	<0.0311
Total Mercury, ng/l - Flow, cfs	THg = 0.01455 * Flow + 10.78	0.6318	Good relationship	0.7948	21	4.359	0.607	5.709	<0.00001
Total Mercury, ng/l - Total Suspended Solids, mg/l	THg = 0.09211 * TSS + 7.591	0.8819	Strong relationship	0.9391	24	4.690	0.344	12.817	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 4.252 * Flow^{-0.1018}$	0.2253	No relationship	0.4747	21	4.359	0.880	2.351	<0.0149
Sulfate as SO4, mg/l - Flow, cfs	So4 = -1.218 * Ln(Flow) + 11.36	0.7460	Good relationship	0.8637	21	4.359	0.504	7.470	<0.00001

FLOW CONCENTRATION RELATIONSHIPS
SUMMARY
December 31, 2008

Statistical Tests
Student T-Distribution, DF = n-2
p calculated using http://www.stat.tamu.edu/~west/applets/tdemo.html

Relationship	Relationship	R^2	Comments	R	n	sqrt(n-2)	sqrt(1-R^2)	t	p
Kelsey Creek Below Kelseyville									
Ammonia, mg/l - Flow, cfs	NH3 = -0.0003630* Flow + 0.2754	0.5699	Weak relationship	0.7549	7	2.236	0.656	2.574	<0.025
Nitrate as NO3, mg/l - Flow, cfs	NO3 = 0.00005532 * Flow + 0.6317	0.0738	No relationship	0.2717	19	4.123	0.962	1.164	<0.131
Total Kjeldahl Nitrogen, mg/l - Flow, cfs	TKN = 0.0003164 * Flow + 0.5797	0.2148	No relationship	0.4635	17	3.873	0.886	2.026	<0.0302
Total Nitrogen as N, mg/l - Flow, cfs	TN = 0.0003175 * Flow + 0.4730	0.2771	No relationship	0.5264	25	4.796	0.850	2.969	<0.0034
Ortho-Phosphate as P, mg/l - Flow, cfs	oP = -0.000004062 * Flow + 0.08804	0.0023	No relationship	0.0480	15	3.606	0.999	0.173	<0.4338
Total Phosphorus, mg/l - Flow, cfs	TP = .00007420 * Flow + 0.06672	0.7572	Good relationship	0.8702	20	4.243	0.493	7.492	<0.00001
Total Phosphorus, mg/l - Total Suspended Solids, mg/l	TP = 0.0006640 * TSS + 0.06050	0.9158	Strong relationship	0.9570	19	4.123	0.290	13.598	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 11.12 * Flow^{-0.2406}$	0.2331	No relationship	0.4828	24	4.690	0.876	2.586	<0.0084
Total Iron, ug/l - Flow, cfs	Fe = 5.804 * Flow	0.7275	Good relationship	0.8529	26	4.899	0.522	8.005	<0.00001
Total Iron, ug/l - Total Suspended Solids, mg/l	Fe = 56.84 * TSS + 893.2	0.9402	Strong relationship	0.9696	26	4.899	0.245	19.425	<0.00001
Sulfate as SO4, mg/l - Flow, cfs	SO4 = -0.7554 * Ln(Flow) + 8.101	0.2657	No relationship	0.5155	24	4.690	0.857	2.821	<0.005
Total Dissolved Solids, mg/l - Flow, cfs	$TDS = 243 * Flow^{-0.1537}$	0.3634	No relationship	0.6028	24	4.690	0.798	3.544	<0.0009
Total Suspended Solids, mg/l - Flow, cfs	TSS = 0.09149 * Flow	0.8307	Strong relationship	0.9114	22	4.472	0.411	9.906	<0.00001
Total Solids, mg/l - Flow, cfs	TS = 0.0759 * Flow + 129.3	0.7847	Good relationship	0.8858	23	4.583	0.464	8.749	<0.00001
Middle Creek near Upper Lake									
Ammonia, mg/l - Flow, cfs	NH3 = -0.0004010 * Flow + 0.2701	0.1271	No relationship	0.3565	4	1.414	0.934	0.540	<0.3216
Nitrate as NO3, mg/l - Flow, cfs	NO3 = -0.0002185 * Flow + 0.5532	0.2546	No relationship	0.5046	17	3.873	0.863	2.263	<0.0196
Total Kjeldahl Nitrogen, mg/l - Flow, cfs	TKN = 0.0005712 * Flow + 0.06086	0.6910	Good relationship	0.8313	17	3.873	0.556	5.792	<0.00002
Total Nitrogen as N, mg/l - Flow, cfs	TN = 0.0004592 * Flow + 0.1146	0.6721	Good relationship	0.8198	24	4.690	0.573	6.715	<0.00001
Ortho-Phosphate as P, mg/l - Flow, cfs	oP = -0.00002077 * Flow + 0.1020	0.0584	No relationship	0.2417	15	3.606	0.970	0.898	<0.192
Total Phosphorus, mg/l - Flow, cfs	TP = 0.0003040 * Flow + 0.005882	0.9175	Strong relationship	0.9579	22	4.472	0.287	14.914	<0.00001
Total Phosphorus, mg/l - Total Suspended Solids, mg/l	TP = 0.0008550 * TSS + 0.05560	0.9725	Strong relationship	0.9862	22	4.472	0.166	26.595	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 6.612 * Flow^{-0.1651}$	0.5465	Weak relationship	0.7393	23	4.583	0.673	5.031	<0.00003
Total Iron, ug/l - Flow, cfs	Fe = 17.82 * Flow	0.8767	Strong relationship	0.9363	25	4.796	0.351	12.788	<0.00001
Total Iron, ug/l - Total Suspended Solids, mg/l	Fe = 52.29 * TSS + 1698	0.9490	Strong relationship	0.9742	23	4.583	0.226	19.768	<0.00001
Sulfate as SO4, mg/l - Flow, cfs	SO4 = -1.682 * Ln(Flow) + 16.70	0.7385	Good relationship	0.8594	23	4.583	0.511	7.701	<0.00001
Total Dissolved Solids, mg/l - Flow, cfs	$TDS = 142.8 * Flow^{-0.0767}$	0.1930	No relationship	0.4393	22	4.472	0.898	2.187	<0.0203
Total Suspended Solids, mg/l - Flow, cfs	TSS = 0.3300* Flow	0.9446	Strong relationship	0.9719	23	4.583	0.235	18.923	<0.00001
Total Solids, mg/l - Flow, cfs	TS = 0.3455 * Flow + 45.69	0.9476	Strong relationship	0.9734	24	4.690	0.229	19.946	<0.00001
Scotts Creek at Eickhoff Road									
Ammonia, mg/l - Flow, cfs	y = -0.0004888 * Flow - 0.4293	0.6197	Good relationship	0.7872	5	1.732	0.617	2.211	<0.0571
Nitrate as NO3, mg/l - Flow, cfs	NO3 = -0.00007992 * Flow + 0.7490	0.0480	No relationship	0.2191	16	3.742	0.976	0.840	<0.2075
Total Kjeldahl Nitrogen, mg/l - Flow, cfs	TKN = -0.008965 * Flow + 109.6	0.1717	No relationship	0.4144	17	3.873	0.910	1.763	<0.0494
Total Nitrogen as N, mg/l - Flow, cfs	TN = 0.0003764 * Flow + 0.2731	0.4693	Weak relationship	0.6851	21	4.359	0.728	4.099	<0.0003
Ortho-Phosphate as P, mg/l - Flow, cfs	oP = 0.00002382 * Flow + 0.06436	0.0432	No relationship	0.2078	13	3.317	0.978	0.705	<0.2477
Total Phosphorus, mg/l - Flow, cfs	TP = 0.0001821 * Flow + 0.06932	0.7409	Good relationship	0.8608	19	4.123	0.509	6.972	<0.00001
Total Phosphorus, mg/l - Total Suspended Solids, mg/l	TP = 0.0009812 * TSS + 0.04611	0.8985	Strong relationship	0.9479	20	4.243	0.319	12.623	<0.00001
Chloride, mg/l - Flow, cfs	$Cl = 4.252 * Flow^{-0.1018}$	0.2253	No relationship	0.4747	21	4.359	0.880	2.351	<0.0149
Total Iron, ug/l - Flow, cfs	Fe = 9.785 * Flow	0.6169	Good relationship	0.7854	23	4.583	0.619	5.815	<0.00001
Total Iron, ug/l - Total Suspended Solids, mg/l	Fe = 46.51 * TSS + 2035	0.9464	Strong relationship	0.9728	23	4.583	0.232	19.256	<0.00001
Sulfate as SO4, mg/l - Flow, cfs	SO4 = -1.218 * Ln(Flow) + 11.36	0.7460	Good relationship	0.8637	21	4.359	0.504	7.470	<0.00001
Total Dissolved Solids, mg/l - Flow, cfs	$TDS = 194.5 * Flow^{-0.1091}$	0.3363	No relationship	0.5799	21	4.359	0.815	3.103	<0.0029
Total Suspended Solids, mg/l - Flow, cfs	TSS = 0.1860 * Flow	0.6499	Good relationship	0.8062	19	4.123	0.592	5.618	<0.00002
Total Solids, mg/l - Flow, cfs	TS = 0.1625 * Flow + 147.2	0.6713	Good relationship	0.8193	21	4.359	0.573	6.229	<0.00001

AVERAGE MEASURED CONCENTRATIONS

Analyte	Kelsey Creek near Kelseyville	Middle Creek near Upper Lake	Scotts Creek at Eickhoff Road
Methyl Mercury, ng/l	0.0764	0.1011	0.0888
Total Mercury, ng/l	16	34.8	26.1
Chloride, mg/l	3.1	2.2	2.3
Sulfate as SO4, mg/l	3.6	7.1	3.7

Analyte	Kelsey Creek near Kelseyville	Middle Creek near Upper Lake	Scotts Creek at Eickhoff Road	Comments
Ammonia as NH3, mg/l	Mostly "Not Detected", cannot get meaningful number			Multiple ND's not included
Nitrite	ND	ND	ND	
Nitrate as NO3, mg/l	0.68	0.42	0.66	Multiple ND's not included
Total Kjeldahl Nitrogen, mg/l	0.84	0.68	0.75	Multiple ND's not included
Total Nitrogen as N, mg/l	0.71	0.49	0.64	
OrthoPhosphate, mg/l	0.084	0.078	0.099	Multiple ND's not included
Total Phosphorus as P, mg/l	0.154	0.275	0.356	
Total Iron, ug/l	5916	13494	11233	
Sulfate as SO4, mg/l	3.6	7.1	3.7	
Total Dissolved Solids, mg/l	100	95	101	
Total Suspended Solids, mg/l	125	246	207	
Total Solids, mg/l	225	327	308	

APPENDIX C

ANNUAL LOAD ESTIMATES

KELSEY CREEK BELOW KELSEYVILLE
ANNUAL LOAD ESTIMATES
April 14, 2009

Water Yr	SumOfDischarge (ac-ft)	SumOfoP Load (kg/d)	SumOfP Load (kg/d)	SumOfSS Load (kg/d)	SumOfSO4 Load (kg/d)	SumOfTotal N Load (kg/d)	SumOfFe Load (kg/d)	MeHg Load (kg/d)	SumOfTHg Load (kg/d)
1981	26538	2751	3818	2013384	126518	22478	127726	0.002505	0.508
1982	104464	10829	17135	10522202	441304	97492	667514	0.009861	2.278
1983	132355	13720	24693	17009528	523512	136285	1079061	0.012494	3.278
1984	62347	6463	9096	4885362	284213	53346	309921	0.005885	1.211
1985	20340	2108	2202	650388	113419	14130	41260	0.001920	0.294
1986	86577	8975	25873	23112114	307189	130742	1466201	0.008172	3.421
1987	19144	1984	2299	890823	98611	14266	56513	0.001807	0.307
1988	27131	2812	3076	1038154	138920	19439	65859	0.002561	0.411
1989	68670	7118	8731	3793761	337575	53249	240671	0.006482	1.164
1990	11881	1232	1183	252911	69565	7813	16044	0.001121	0.158
1992	19061	1976	2290	888623	93006	14210	56373	0.001799	0.306
1993	72016	7465	11826	7271056	307137	67269	461266	0.006798	1.572
1994	11999	1244	1219	284986	67452	7993	18079	0.001133	0.163
1995	129315	13405	37258	32810997	449320	189347	2081485	0.012207	4.928
1997	72243	7489	17087	13734599	275553	89832	871304	0.006819	2.263
1998	104644	10847	16552	9784801	441386	95038	620734	0.009878	2.201
1999	55196	5722	7273	3363754	259991	43892	213392	0.005210	0.969
2000	36989	3834	4418	1692694	181404	27465	107382	0.003492	0.590
2001	25086	2600	3069	1237106	120344	18936	78480	0.002368	0.410
2003	68671	7119	11146	6771271	301274	63582	429560	0.006482	1.482
2004	60441	6265	10219	6464586	263091	57714	410104	0.005705	1.358
2005	35784	3709	3955	1243177	180633	25201	78865	0.003378	0.529
2007	19414	2012	2126	650676	103554	13590	41278	0.001833	0.284
2008	27443	2845	4372	2604164	123071	25056	165205	0.002590	0.581
Averages	54073	5605	9621	6373796	233668	53682	404345	0.005104	1.278
Incomplete years are deleted and include:			1991, 1996, 2002						

MIDDLE CREEK NEAR UPPER LAKE
ANNUAL LOAD ESTIMATES
April 14, 2009

Water Yr	SumOfDischarge (ac-ft)	SumOfoP Load (kg/d)	SumOfP Load (kg/d)	SumOfSS Load (kg/d)	SumOfSO4 Load (kg/d)	SumOfTotal N Load (kg/d)	SumOfFe Load (kg/d)	MeHg Load (kg/d)	SumOfTHg Load (kg/d)
1967	85383	8219	24714	26155022	680364	48470	1412571	0.010655	4.03
1968	40564	3904	6516	6753874	368501	15135	364761	0.005062	1.06
1969	97398	9375	31556	33487403	730607	60373	1808575	0.012154	5.16
1970	78534	7559	33687	35949170	561423	61130	1941529	0.009800	5.51
1971	67751	6521	21386	22681277	553970	41143	1224962	0.008454	3.49
1972	26242	2526	1877	1830676	282683	6259	98870	0.003275	0.30
1973	69092	6651	15519	16301796	578234	32455	880421	0.008622	2.53
1974	110979	10682	38422	40833898	851417	72516	2205342	0.013849	6.28
1975	65460	6301	18675	19756131	514175	36748	1066982	0.008169	3.05
1976	9668	931	516	483969	115118	2041	26138	0.001206	0.08
1978	94997	9144	31060	32967581	719000	59310	1780501	0.011854	5.07
1979	28031	2698	3021	3058682	275862	8220	165192	0.003498	0.49
1980	71329	6866	23648	25108756	567195	45027	1356064	0.008901	3.86
1981	21875	2106	2412	2445979	224510	6497	132102	0.002730	0.39
1982	112399	10819	31270	33058285	875715	61897	1785399	0.014026	5.10
1985	21953	2113	1505	1460936	241378	5138	78902	0.002739	0.24
1987	15925	1533	1734	1756354	163618	4696	94857	0.001987	0.28
1988	25833	2487	3570	3671253	248690	8762	198276	0.003224	0.58
1989	33655	3239	4865	5016408	320632	11740	270924	0.004200	0.79
1990	13250	1275	669	621486	155051	2739	33565	0.001653	0.11
1991	13988	1346	1669	1701211	136746	4345	91878	0.001746	0.27
1992	20890	2011	2674	2737605	201691	6764	147852	0.002607	0.43
1994	12364	1190	641	597881	144552	2581	32290	0.001543	0.10
1998	199125	19167	76792	81790505	1358002	141973	4417311	0.024848	12.56
1999	59816	5758	11600	12120938	508911	25326	654623	0.007464	1.89
2000	47772	4598	9020	9414780	416993	19857	508470	0.005961	1.47
2001	19184	1847	2322	2369871	189107	6011	127991	0.002394	0.38
2003	66295	6381	14486	15202228	567575	30530	821036	0.008273	2.36
2004	60604	5834	22034	23441495	480022	41190	1266019	0.007563	3.60
2005	47686	4590	4934	4979913	470769	13673	268953	0.005951	0.80
2007	22607	2176	3407	3520599	222104	8096	190139	0.002821	0.55
2008	37804	3639	10489	11088286	313594	20776	598852	0.004717	1.71
Average	**53077**	**5109**	**14272**	**15073883**	**438694**	**28482**	**814105**	**0.00662**	**2.33**

Incomplete years are deleted and include: 1983, 1984, 1986, 1993, 1995, 1996, 1997, 2002

SCOTTS CREEK AT EICKHOFF ROAD
ANNUAL LOAD ESTIMATES
April 14, 2009

Water Yr	mOfDischarge (ac	umOfoP Load (kg/	umOfP Load (kg/	umOfSS Load (kg/	mOfSO4 Load (k	OfTotal N Load (k	SumOfFe Load (kg/d)	MeHg Load (kg/d	umOfTHg Load (kg/d)
1961	35170	4297	6499	3565388	202628	19068	187566	0.003859	0.75
1962	37299	4557	9464	6408103	186094	25538	337114	0.004092	1.00
1963	63103	7709	16957	11806254	308652	45159	621098	0.006923	1.76
1964	19791	2418	4105	2464110	118820	11656	129631	0.002171	0.46
1965	92302	11277	53358	46435498	336942	125077	2442857	0.010127	4.86
1966	49320	6025	16214	12251714	243227	41415	644532	0.005411	1.61
1967	70126	8567	16521	10747379	353549	45383	565393	0.007694	1.77
1968	41485	5068	11146	7760063	212732	29685	408238	0.004551	1.16
1969	98933	12087	30363	22368625	418712	78609	1176758	0.010854	3.07
1970	86391	10555	36343	29572379	331938	88960	1555730	0.009478	3.46
1971	56765	6935	16730	12128009	277200	43674	638025	0.006228	1.70
1972	16768	2049	1828	401844	124529	6464	21140	0.001840	0.25
1973	80632	9851	20662	14059125	380991	55625	739616	0.008846	2.17
1974	112634	13761	38711	29698070	487125	98059	1562342	0.012358	3.82
1975	66576	8134	17372	11926824	305535	46573	627441	0.007304	1.82
1976	4118	503	427	75958	32977	1542	3996	0.000452	0.06
1977	74	9	7	196	799	25	10	0.000008	0.00
1978	101098	12351	35449	27374392	424230	89468	1440099	0.011092	3.49
1979	27867	3405	4550	2212878	163755	13870	116414	0.003057	0.54
1980	83804	10238	32281	25649732	348287	80150	1349369	0.009195	3.12
1981	24395	2980	4556	2522249	143999	13326	132689	0.002676	0.52
1982	115954	14166	33778	24369570	525944	88394	1282023	0.012722	3.45
1983	143629	17547	44735	33143657	618862	115477	1743606	0.015758	4.50
1984	82630	10095	26764	20117429	375849	68559	1058328	0.009066	2.67
1985	24976	3051	3564	1457948	164943	11368	76699	0.002740	0.45
1986	105110	12841	69071	61366390	340591	159609	3228334	0.011532	6.20
1987	17289	2112	2786	1335206	106123	8529	70242	0.001897	0.33
1988	33458	4088	9395	6672594	171922	24779	351029	0.003671	0.97
1989	29906	3654	6389	3912533	160782	17997	205829	0.003281	0.70
1990	9628	1176	1156	339340	71573	3932	17852	0.001056	0.15
1991	16946	2070	2973	1555943	93931	8860	81854	0.001859	0.35
1992	20365	2488	3428	1721932	117076	10348	90587	0.002234	0.41
1993	78538	9595	27097	20815260	347138	68592	1095039	0.008617	2.67
1994	12592	1538	1865	805103	82235	5873	42354	0.001382	0.23
1996	66776	8158	15848	10352612	325843	43455	544625	0.007326	1.70
1997	80241	9803	57275	51490531	258983	131242	2708790	0.008804	5.10
1998	156966	19177	66586	54296599	602968	162778	2856410	0.017221	6.34
1999	63888	7805	14267	8990446	325991	39725	472965	0.007009	1.55
2000	54523	6661	13535	9061247	264957	36712	476690	0.005982	1.43
2001	25175	3076	5744	3667715	130242	15907	192949	0.002762	0.62
2002	38833	4744	8599	5390346	215374	23996	283573	0.004261	0.94
2003	76176	9307	22970	16805938	353014	59682	884119	0.008358	2.33
2004	69401	8479	30023	24601835	290155	73175	1294242	0.007614	2.85
2005	56866	6947	9606	4843111	322262	28966	254784	0.006239	1.14
2007	19031	2325	3436	1846395	114322	10150	97134	0.002088	0.40
2008	36819	4498	10316	7319447	174820	27221	385058	0.004040	1.06
Average	**56617**	**6917**	**18799**	**14254520**	**259970**	**47927**	**749895**	**0.00621**	**1.87**

1995 is not included as levee failure upstream of gage resulted in underestimation of high flows.

Average Annual Load Estimates - Mercury
April 14, 2009

Without Flow Weighting

Location	Methyl Mercury,kg/yr		Total Mercury, kg/yr	Sulfate as SO4, kg/yr	
	Average			Regression	Average
Kelsey Creek below Kelseyville	0.00510	0.00510	1.278	233668	240496
Middle Creek near Upper Lake	0.00662	0.00662	2.329	438694	465628
Scotts Creek at Eickhoff Road	0.00621	0.00621	1.868	259970	258834

With flow Weighting

Location	Weighting Factor	Methyl Mercury, kg/yr	Total Mercury, kg/yr	Sulfate as SO4, kg/yr	
		Average		Regression	Average
Kelsey Creek below Kelseyville	0.947786695	0.00484	1.211	221468	227939
Middle Creek near Upper Lake	1.007969686	0.00668	2.347	442190	469339
Scotts Creek at Eickhoff Road	1	0.00621	1.868	259970	258834

Indirect Calculation

Location	TSS, kg/yr	THg/TSS	THg, kg/yr
Kelsey Creek below Kelseyville	6373796	0.000000110	0.704
Middle Creek near Upper Lake	15073883	0.000000147	2.21
Scotts Creek at Eickhoff Road	14254520	0.000000092	1.31

Use direct correlation

Utilize Flow Weighted Annual Loads

Table _: Watershed Loading, Estimate based on Drainage Areas

Gaged watersheds	Kelsey Creek	27948 ac
	Middle Creek	31926 ac
	Scotts Creek	35701 ac
	Total	95575 ac
Clear Lake Watershed		289023 ac
Multiplier		3.024

Location	Discharge (ac-ft/yr)	Methyl Mercury, kg/yr	Total Mercury, kg/yr	Sulfate as SO4, kg/yr	
		Regression		Regression	Average
Kelsey Creek below Kelseyville	51250	0.00484	1.211	221468	227939
Middle Creek near Upper Lake	53500	0.00668	2.347	442190	469339
Scotts Creek at Eickhoff Road	56617	0.00621	1.868	259970	258834
Subtotal	161366	0.01773	5.427	923628	956112
Clear Lake Watershed	487977	0.05360	16.410	2793092	2891325

Drainage Areas are based on GIS shape files created by Lake County for the Clear Lake Watershed

Table _: Watershed Loading, Estimate Based on Flows

Gaged Watersheds	161366 AF	Average Lake Level = 3.85 ft R
Cache Creek near Lower Lake	298014 AF	Surface Area @ 3.85 ft R = 41,592
Evaporation Loss	145572 AF	Average Annual Evaporation = 42 in.
Outflow = Inflow	443586 AF	
Direct Precipitation	-91849 AF	Average Annual Precipitation = 26.5 in.
Watershed Inflow	351737 AF	
Multiplier	2.180	

Location	Discharge (ac-ft/yr)	Methyl Mercury, lb/yr	Total Mercury, lb/yr	Sulfate as SO4, kg/yr	
		Average		Regression	Average
Kelsey Creek below Kelseyville	51250	0.00484	1.211	221468	227939
Middle Creek near Upper Lake	53500	0.00668	2.347	442190	469339
Scotts Creek at Eickhoff Road	56617	0.00621	1.868	259970	258834
Subtotal	161366	0.01773	5.427	923628	956112
Clear Lake Watershed	351737	0.03864	11.829	2013277	2084084

Average Annual Load Estimates - Nutrients
April 10, 2009

Without Flow Weighting

Location	Discharge (ac-ft/yr)	oP Load (kg/yr)	P Load (kg/yr)	TSS Load (kg/yr)	Fe Load (kg/yr)	SO4 Load (kg/yr)		Tot N Load (kg/yr)
						Regression	Average	
Kelsey Creek below Kelseyville	54073	5605.2	9621	6373796	404345	233668	240496	53682
Middle Creek near Upper Lake	53077	5109.0	14272	15073883	814105	438694	465628	28482
Scotts Creek at Eickhoff Road	56617	6916.9	18799	14254520	749895	259970	258834	47927

Location	TSS, kg/yr	P/TSS	P, kg/yr
Kelsey Creek below Kelseyville	6373796	0.0006050	3856.1
Middle Creek near Upper Lake	15073883	0.0008550	12888.2
Scotts Creek at Eickhoff Road	14254520	0.0009812	13986.5

Use direct correlation

Location	TSS, kg/yr	Fe/TSS*10^3	Fe, kg/yr
Kelsey Creek below Kelseyville	6373796	56.84	362287
Middle Creek near Upper Lake	15073883	52.29	788213
Scotts Creek at Eickhoff Road	14254520	46.51	662978

Use direct correlation

With Flow Weighting

Location	Weighting Factor	Discharge (ac-ft/yr)	oP Load (kg/yr)	P Load (kg/yr)	TSS Load (kg/yr)	Fe Load (kg/yr)	SO4 Load (kg/yr)		Tot N Load (kg/yr)
							Regression	Average	
Kelsey Creek below Kelseyville	0.9477867	51250	5313.2	9120	6041722	383279	221494	227967	50885
Middle Creek near Upper Lake	1.0079697	53500	4775.3	13340	14089558	760944	410047	435222	26622
Scotts Creek at Eickhoff Road	1	56617	6916.9	18799	14254520	749895	259970	258834	47927

Location	TSS, kg/yr	P/TSS	P, kg/yr
Kelsey Creek below Kelseyville	6041722	0.0006050	3655.2
Middle Creek near Upper Lake	14089558	0.0008550	12046.6
Scotts Creek at Eickhoff Road	14254520	0.0009812	13986.5

Location	TSS, kg/yr	Fe/TSS*10^3	Fe, kg/yr
Kelsey Creek below Kelseyville	6041722	56.84	343411
Middle Creek near Upper Lake	14089558	52.29	736743
Scotts Creek at Eickhoff Road	14254520	46.51	662978

Watershed Loading

Utilize Flow Weighted Annual Loads

Estimate based on Drainage Areas

Gaged watersheds	KCK	27948	Ac
	MCU	31926	Ac
	SCS	35701	Ac
	Total	95575	Ac
Clear Lake Watershed		289023	Ac
Multiplier		3.024	

Location	Discharge (ac-ft/yr)	oP Load (kg/yr)	P Load (kg/yr)	SS Load (kg/yr)	Fe Load (kg/yr)	SO4 Load (kg/yr)		Tot N Load (kg/yr)
						Regression	Average	
Kelsey Creek below Kelseyville	51250	5313.2	9120	6041722	383279	221494	227967	50885
Middle Creek near Upper Lake	53500	4775.3	13340	14089558	760944	410047	435222	26622
Scotts Creek at Eickhoff Road	56617	6916.9	18799	14254520	749895	259970	258834	47927
Subtotal	161366	17005	41259	34385800	1894117	891512	922023	125434
Clear Lake Watershed	487977	51425	124768	103984170	5727893	2695970	2788238	379319

Drainage Areas are based on GIS shape files created by Lake County for the Clear Lake Watershed

Estimate Based on Flows

Gaged Watersheds	161366 AF	Average Lake Level = 3.85 ft R
Cache Creek near Lower Lake	298014 AF	Surface Area @ 3.85 = 41,592 ac
Evaporation Loss	145572 AF	Average Annual Evaportation = 42 in/yr
Outfllow = Inflow	443586	
Direct Precipitation	-91849	Average Annual Precipitation = 26.5 in.
Inflow	351737 AF	
Multiplier	2.180	

Location	Discharge (ac-ft/yr)	oP Load (ton/yr)	P Load (ton/yr)	SS Load (ton/yr)	Fe Load (ton/yr)	SO4 Load regr (ton/yr)		Tot N Load (kg/yr)
						Regression	Average	
Kelsey Creek below Kelseyville	51250	5313	9120	6041722	383279	221494	227967	50885
Middle Creek near Upper Lake	53500	4775	13340	14089558	760944	410047	435222	26622
Scotts Creek at Eickhoff Road	56617	6917	18799	14254520	749895	259970	258834	47927
Subtotal	161366	17005	41259	34385800	1894117	891512	922023	125434
Clear Lake Watershed	351737	37068	89933	74952399	4128699	1943271	2009778	273415

Flow Weighting Calculations

Kelsey Creek below Kelseyville		Middle Creek near Upper Lake		Scotts Creek at Eickhoff Road							Cache Creek		
				1961	35170						1961	104999	104999
				1962	37299						1962	175292	175292
				1963	63103						1963	285464	285464
				1964	19791						1964	113383	113383
				1965	92302			Coincident Data			1965	382772	382772
				1966	49320			Scotts	Middle		1966	239810	239810
		1967	85383	1967	70126			70126	85383		1967	339600	339600
		1968	40564	1968	41485			41485	40564		1968	243398	243398
		1969	97398	1969	98933			98933	97398		1969	519916	519916
		1970	78534	1970	86391			86391	78534		1970	493971	493971
		1971	67751	1971	56765			56765	67751		1971	293428	293428
		1972	26242	1972	16768			16768	26242		1972	61813	61813
		1973	69092	1973	80632			80632	69092		1973	391468	391468
		1974	110979	1974	112634			112634	110979		1974	625688	625688
		1975	65460	1975	66576			66576	65460		1975	311020	311020
		1976	9668	1976	4118			4118	9668		1976	3059	3059
				1977	74						1977	510	510
		1978	94997	1978	101098			101098	94997		1978	338055	338055
		1979	28031	1979	27867	Coincident Data		27867	28031		1979	114278	114278
		1980	71329	1980	83804	Scotts	Kelsey	83804	71329		1980	400537	400537
1981	26538	1981	21875	1981	24395	24395	26538	24395	21875		1981	121229	121229
1982	104464	1982	112399	1982	115954	115954	104464	115954	112399		1982	573636	573636
1983	132355	1983		1983	143629	143629	132355				1983	971432	971432
1984	62347	1984		1984	82630	82630	62347				1984	496099	496099
1985	20340	1985	21953	1985	24976	24976	20340	24976	21953		1985	79403	79403
1986	86577	1986		1986	105110	105110	86577				1986	526549	526549
1987	19144	1987	15925	1987	17289	17289	19144	17289	15925		1987	41919	41919
1988	27131	1988	25833	1988	33458	33458	27131	33458	25833		1988	75202	75202
1989	68670	1989	33655	1989	29906	29906	68670	29906	33655		1989	50536	50536
1990	11881	1990	13250	1990	9628						1990	488	488
1991		1991	13988	1991	16946						1991	18822	18822
1992	19061	1992	20890	1992	20365	20365	19061	20365	20890		1992	37254	37254
1993	72016	1993		1993	78538	78538	72016				1993	368067	368067
1994	11999	1994	12364	1994	12592	12592	11999	12592	12364		1994	37984	37984
1995	129315	1995		1995							1995	700266	
1996		1996		1996	66776	66776	0				1996	476706	476706
1997	72243	1997		1997	80241	80241	72243				1997	481774	481774
1998	104644	1998	199125	1998	156966	156966	104644	156966	199125		1998	818704	818704
1999	55196	1999	59816	1999	63888	63888	55196	63888	59816		1999	357697	357697
2000	36989	2000	47772	2000	54523	54523	36989	54523	47772		2000	229484	229484
2001	25086	2001	19184	2001	25175	25175	25086	25175	19184		2001	57398	57398
2002				2002	38833	38833	0				2002	157127	157127
2003	68671	2003	66295	2003	76176	76176	68671	76176	66295		2003	343879	343879
2004	60441	2004	60604	2004	69401	69401	60441	69401	60604		2004	386100	386100
2005	35784	2005	47686	2005	56866	56866	35784	56866	47686		2005	189685	189685
				2006							2006	713665	
2007	19414	2007	22607	2007	19031	19031	19414	19031	22607		2007	91034	91034
2008	27443	2008	37804	2008	37085	37085	27443	37085	37804		2008	126202	126202
Average	54073		53077		56622	59742	48190	56175	55707			290975	272888
											LT Avg	275224	
Weighted Average	51250		53500			Weighting Factor		Weighting Factor				Weighting Factor	
						56622	0.9478	56622	1.0080				
						59742		56175					
		Deleted multiple records due to incomplete records											

APPENDIX D

MERCURY TMDL DATA
COMPARISION CALCULATIONS

Clear Lake Mercury TMDL

Clear Lake Watershed Stream Data

Clear Lake Environmental Research Center

Note: Flow data from Kelsey, Middle and Scotts creeks are daily mean values from DWR gage stations.

DWR flows based on final published data. May be revised from flow in original calculations

Flow data from all other streams are assumed to be measured using the "orange float method".

Compiled by Lake Co DPW 9/22/08

		Creek	Q (cfs)	Raw Hg (ng/L)	Filt Hg (ng/L)	Rw meHg (ng/L)	Filt meHg (ng/L)	TSS** (mg/L)	Sulfate** (mg/L)
2/19/1998		Adobe	2501	20.90	2.35	0.245		170	5.4
2/19/1998		Cole	449	36.60	3.58	0.285		187	8.0
2/19/1998	KCK	Kelsey	1360	29.50	2.00	0.184		383	4.0
2/19/1998	MCU	Middle	1500	108.00	3.56	0.384		920	7.4
2/19/1998		Schindler	na	109.00	4.13	0.428		383	5.3
2/19/1998	SCS	Scotts	2420	17.90	1.52	0.103		290	4.3
2/19/1998		Seigler	na	na	na	na		na	na
3/11/1998		Adobe	78.9					1.9	14.0
3/11/1998		Cole	93.7					11	7.7
3/11/1998	KCK	Kelsey	89					1.3	3.0
3/11/1998	MCU	Middle	124					1.7	12.0
3/11/1998		Schindler	15.6					3.5	14.0
3/11/1998	SCS	Scotts	86					1.8	9.7
3/11/1998		Seigler	25.3					2.5	4.4
5/21/1998		Adobe	15.7	0.938	0.558	0.0318	0.0318	1.1	16
5/21/1998		Cole	39.4	4.74	1.74	0.167	0.0527	56	4.3
5/21/1998	KCK	Kelsey	37	0.829	0.377	0.0318	0.0318	1.1	6.1
5/21/1998	MCU	Middle	37	0.650	0.456	0.0706	0.0318	1.1	15
5/21/1998		Schindler	3.3	2.70	2.06	0.225	0.174	1.1	21
5/21/1998	SCS	Scotts	29	0.962	0.449	0.0318	0.0318	25	9.7
5/21/1998		Seigler	na	na	na	na	na	na	na
11/30/1998		Adobe	1125.5	34.1	6.18	0.208	0.0637	400	7.0
11/30/1998		Cole	529.7	49.9	12.9	0.415	0.0948	140	19
11/30/1998	KCK	Kelsey	1330	57.4	7.53	0.300	0.0469	380	6.7
11/30/1998	MCU	Middle	361	82.4	6.94	0.502	0.0473	310	11
11/30/1998		Schindler	12	26.0	6.33	0.202	0.118	20	33
11/30/1998		Schindler	12	37.3	5.44	0.210	0.101	16	33
11/30/1998	SCS	Scotts	464	16.4	4.90	0.145	0.0428	62	9.5
5/23/2000		Adobe	19	5.00	1.520	0.75	1.6900	0.0	12.6
5/23/2000		Cole	na	na	na	na	na	na	na
5/23/2000	KCK	Kelsey	15	5.00	1.240	0.05	1.240	0.0	5.3
5/23/2000	MCU	Middle	15	5.00	1.41	0.093	0.933	0.03	12.9
5/23/2000		Schindler	6	16.00	2.56	0.15	1.300	0.1	14.4
5/23/2000		Schindler	6	5.00	10.500	0.322	0.4110	0.02	42.1
5/23/2000	SCS	Scotts	8	12.0	2.83	0.649	1.2	0.4	14.5
1/26/2001		Adobe	118.0	7.35	3.57	0.0691	0.0137	17	6.6
1/26/2001		Cole	17.1	37.2	7.83	0.0990	0.0861	19.0	3.8
1/26/2001	KCK	Kelsey	192.0	8.20	4.98	0.0554	0.0504	11	3.6
1/26/2001	MCU	Middle	84.0	3.51	2.62	0.0323	0.0135	2	14.1
1/26/2001	MCU	Middle	84.0	3.58	2.57	0.0479	0.0250	2	14.0
1/26/2001		Schindler	5.0	20.3	11.6	0.158	0.123	6	18.1
1/26/2001	SCS	Scotts	149.0	13.5	4.33	0.0859	0.0377	48	5.4

***TSS and SO4 values are average of three measurements taken at each site, variation was small.*

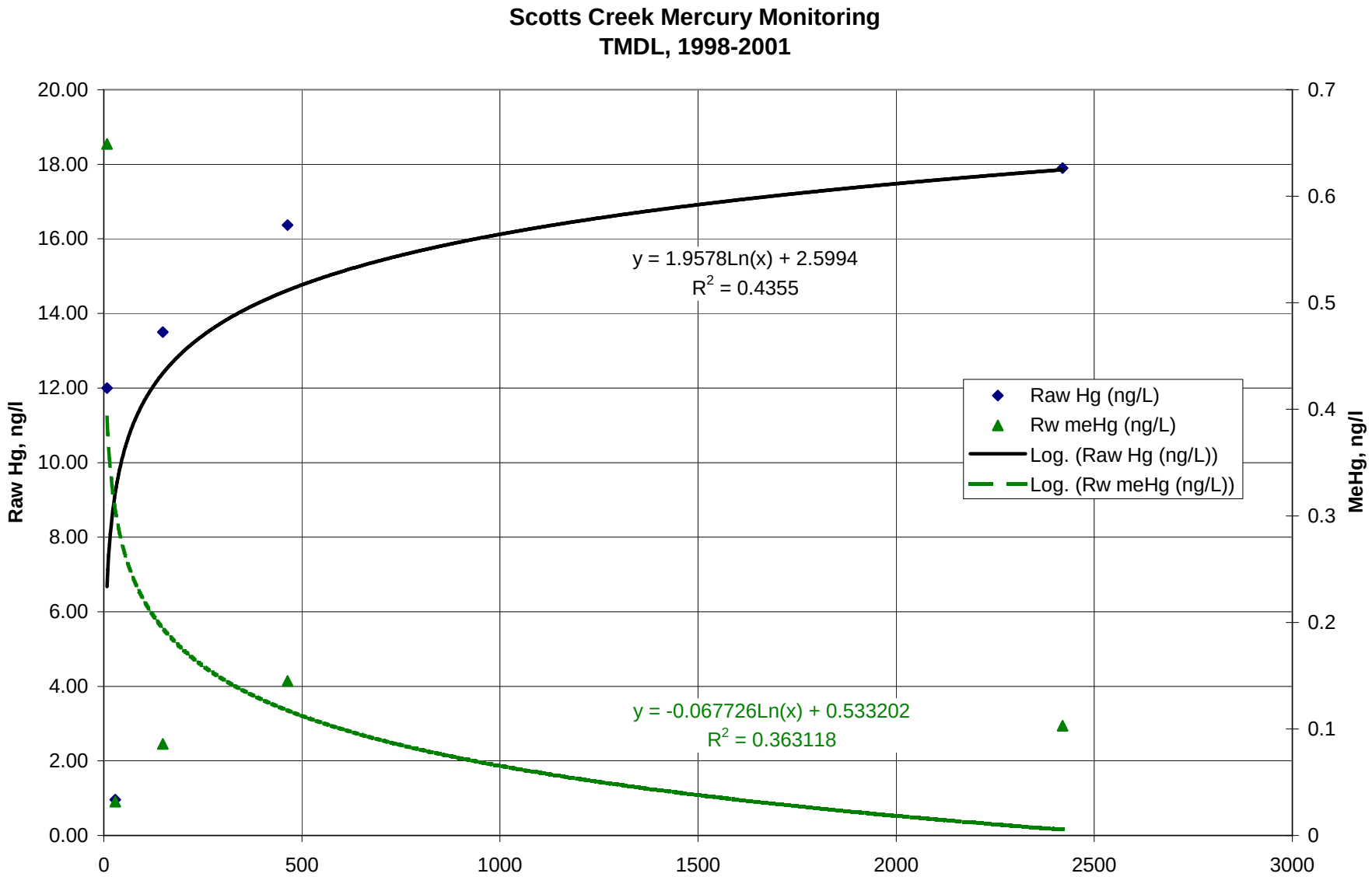
FLOW CONCENTRATION RELATIONSHIPS, TMDL DATA
SUMMARY
January 13, 2009

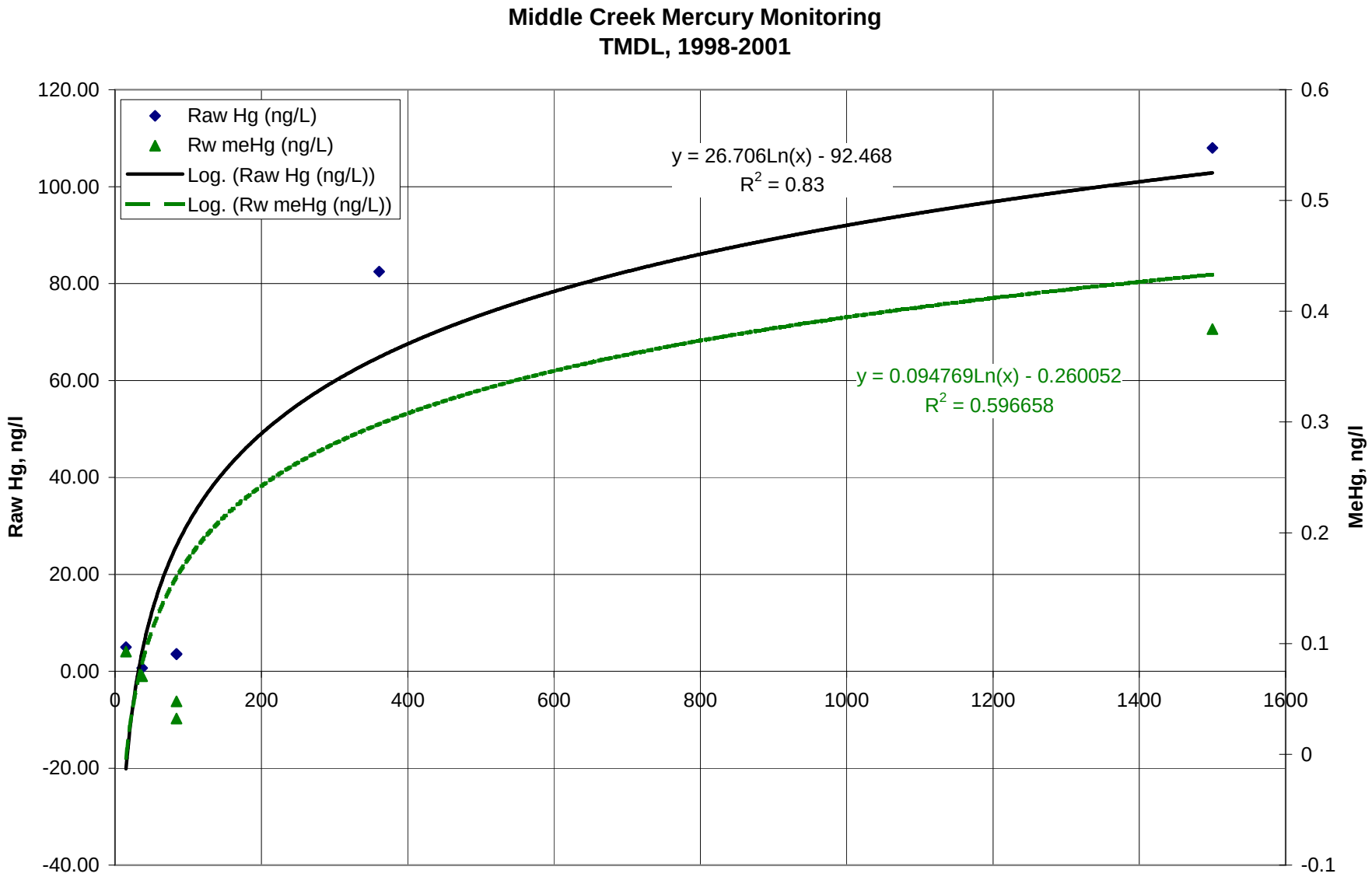
Statistical Test
Student T-Distribution, DF = n-2
p calculated using http://www.stat.tamu.edu/~west/applets/tdemo.html

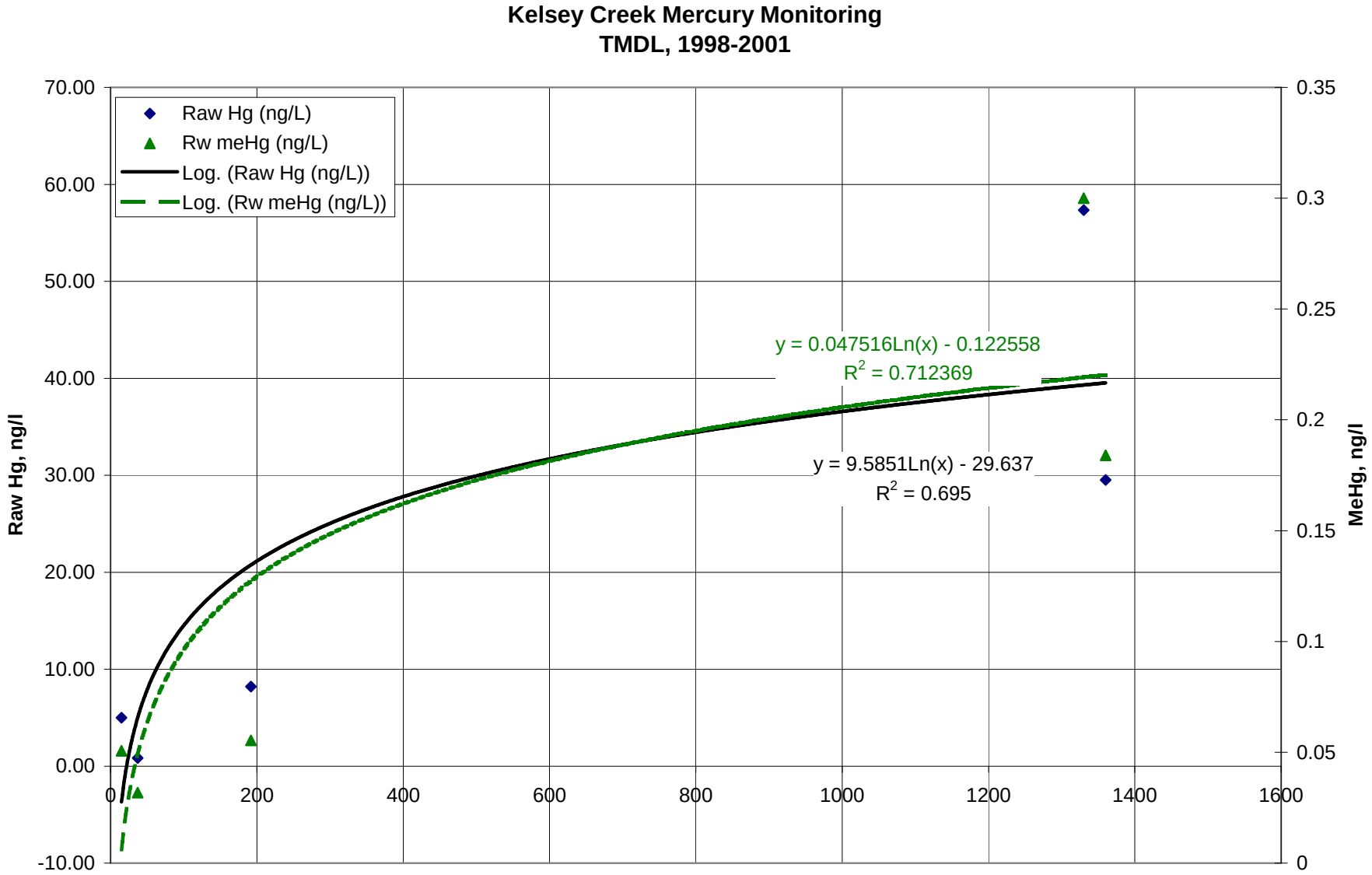
Analyte	**Relationship**	**R^2**	**R**	**n**	**sqrt(n-2)**	**sqrt(1-R^2)**	**t**	**p**
Kelsey Creek Below Kelseyville								
Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.04752 * ln(Flow) - 0.1226	0.7124	0.8440	5	1.732	0.536	2.726	<0.0121
Total Mercury, ng/l - Flow, cfs	THg = 9.585 * ln(Flow) - 29.64	0.6950	0.8337	5	1.732	0.552	2.615	<0.019
Middle Creek near Upper Lake								
Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.09477 * ln(Flow) - 0.2601	0.5967	0.7725	6	2.000	0.635	2.433	<0.0836
Total Mercury, ng/l - Flow, cfs	THg = 26.71* ln(Flow) - 92.47	0.8300	0.9110	6	2.000	0.412	4.419	<0.0114
Scotts Creek at Eickhoff Road								
Methyl Mercury, ng/l - Flow, cfs	MeHg = -0.06773 * ln(Flow) + 0.533	0.3631	0.0769	5	1.732	0.798	0.167	<0.449
Total Mercury, ng/l - Flow, cfs	THg = 1.958 * ln(Flow) + 2.600	0.4355	0.3320	5	1.732	0.751	0.765	<0.206

Three Streams

Methyl Mercury, ng/l - Flow, cfs	MeHg = 0.0000456 * Flow + 0.150	0.0316	0.1778	16	3.742	0.984	0.676	<0.255
Total Mercury, ng/l - Flow, cfs	THg = 0.0222 * Flow + 11.6	0.2590	0.5089	16	3.742	0.861	2.212	<0.0221


Scotts Creek Mercury Monitoring
TMDL, 1998-2001
Raw Hg, ng/l
MeHg, ng/l
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
500
1000
1500
2000
2500
3000
y = 1.9578Ln(x) + 2.5994
R2 = 0.4355
y = -0.067726Ln(x) + 0.533202
R2 = 0.363118
Raw Hg (ng/L)
Rw meHg (ng/L)
Log. (Raw Hg (ng/L))
Log. (Rw meHg (ng/L))


Middle Creek Mercury Monitoring
TMDL, 1998-2001
Raw Hg (ng/L)
Rw meHg (ng/L)
Log. (Raw Hg (ng/L))
Log. (Rw meHg (ng/L))
y = 26.706Ln(x) - 92.468
R2 = 0.83
y = 0.094769Ln(x) - 0.260052
R2 = 0.596658
Raw Hg, ng/l
MeHg, ng/l
120.00
100.00
80.00
60.00
40.00
20.00
0.00
-20.00
-40.00
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
0
200
400
600
800
1000
1200
1400
1600


Kelsey Creek Mercury Monitoring
TMDL, 1998-2001
Raw Hg (ng/L)
Rw meHg (ng/L)
Log. (Raw Hg (ng/L))
Log. (Rw meHg (ng/L))
y = 0.047516Ln(x) - 0.122558
R2 = 0.712369
y = 9.5851Ln(x) - 29.637
R2 = 0.695
Raw Hg, ng/l
MeHg, ng/l
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
200
400
600
800
1000
1200
1400
1600

Comparision of Estimates from Mercury TMDL with Estimates by Lake County Watershed Protection District (2009)

TMDL: UC Davis/CVRWQCB Estimates

Total Raw Mercury

Mass Loading Hg Kg/Yr	Water Year 1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	TMDL 10 yr avg	District 10 yr avg
Kelsey Creek	0.228	0.726	0.423	1.970	0.178	5.307	1.477	2.336	3.593	1.597	1.78	1.51
Scott's Creek	0.134	0.331	0.335	1.450	0.192	2.830	1.408	1.629	3.035	1.107	1.24	2.58
Middle Creek	0.225	0.747	1.205	5.750	0.212	9.824	5.021	2.835	17.749	4.955	4.85	3.20
Total Gauged Streams 43.4%	0.586	1.803	1.963	9.169	0.582	17.960	7.906	6.799	24.377	7.659		7.293
Total Ungauged Streams 56.6%	0.765	2.351	2.560	11.958	0.759	23.423	10.311	8.867	31.791	9.988		9.511
Total	1.351	4.154	4.522	21.128	1.342	41.383	18.218	15.667	56.168	17.647	18.2	16.803
Cache Creek Outflow	0.003	0.158	0.313	3.313	0.319	6.452	4.316	4.389	7.572	3.207	3.0	
Change in Concentration	1.347	3.996	4.209	17.814	1.023	34.931	13.902	11.278	48.596	14.439		

Methyl Mercury

Mass Loading mHg Kg/Yr	Water Year 1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	10 yr avg	
Kelsey Creek	0.002	0.005	0.003	0.012	0.002	0.030	0.009	0.014	0.021	0.010	0.01067	0.00559
Scott's Creek	0.016	0.034	0.035	0.141	0.021	0.263	0.139	0.150	0.288	0.112	0.11984	0.00966
Middle Creek	0.002	0.004	0.006	0.026	0.002	0.043	0.024	0.013	0.077	0.023	0.02208	0.00812
Total Gauged Streams 43.4%	0.020	0.042	0.044	0.179	0.025	0.336	0.172	0.177	0.386	0.145		0.023
Total Ungauged Streams 56.6%	0.026	0.055	0.058	0.234	0.032	0.438	0.224	0.231	0.503	0.189		0.030
Total	0.046	0.097	0.102	0.413	0.057	0.774	0.396	0.408	0.889	0.334	0.352	0.054
Cache Creek Outflow	0.000	0.007	0.015	0.163	0.015	0.322	0.213	0.218	0.379	0.158	0.149	
Change in Concentration	0.045	0.090	0.087	0.250	0.042	0.451	0.183	0.190	0.510	0.176		

Lake County Watershed Protection District Estimates 12-Jan-09

Annual Loads calculated based on WY 2007-2008 Monitoring Data

	Kelsey		Middle		Scotts	
Year	THg	MeHg	THg	MeHg	THg	MeHg
1990	0.158467	0.001121	0.11	0.001653	0.15	0.001056
1991			0.27	0.001746	0.35	0.001859
1992	0.305683	0.001799	0.43	0.002607	0.41	0.002234
1993	1.571967	0.006798	3.23	0.008834	2.67	0.008617
1994	0.16319	0.001133	0.10	0.001543	0.23	0.001382
1995	4.927724	0.012207	5.70	0.013977	7.30	0.041078
1996	1.071182	0.005305	1.97	0.006918	1.70	0.007326
1997	2.263222	0.006819	5.74	0.01161	5.10	0.008804
1998	2.201005	0.009878	12.56	0.024848	6.34	0.017221
1999	0.969428	0.00521	1.89	0.007464	1.55	0.007009
Averages	1.514652	0.005585	3.198496	0.00812	2.579465	0.009659

Incomplete flow records and associated loadings are included in the analysis above.

Kelsey Creek: 1991 & 1992

Middle Creek: 1993, 1995-1997

Scotts Creek: 1995

APPENDIX E

MERCURY HOT SPOT MONITORING DATA

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000007	39.04092	-122.98327	10/19/2006	sediment	98.20	THg	0.0441	ug/g
S-513-000008	39.04424	-122.98298	10/19/2006	sediment	98.70	THg	0.0396	ug/g
S-513-000009	39.09548	-122.96099	10/19/2006	sediment	98.90	THg	0.0264	ug/g
S-513-000009	39.09548	-122.96099	10/19/2006	sediment	98.90	THg	0.0291	ug/g
S-513-000010	39.09471	-122.96490	10/19/2006	sediment	98.10	THg	0.0149	ug/g
S-513-000011	39.15777	-122.99340	10/19/2006	sediment	53.40	THg	0.0704	ug/g
S-513-000012	39.17623	-122.90215	10/19/2006	sediment	79.80	THg	0.0417	ug/g
S-513-000013	39.18318	-122.91180	10/19/2006	sediment	79.40	THg	0.0451	ug/g
S-513-000014	39.17175	-122.87776	10/19/2006	sediment	98.40	THg	0.0565	ug/g
S-513-000015	39.17176	-122.87773	10/19/2006	sediment	98.80	THg	0.0651	ug/g
S-513-000016	39.25243	-122.94963	10/20/2006	sediment	99.00	THg	0.0517	ug/g
S-513-000017	39.24721	-122.94972	10/20/2006	sediment	98.50	THg	0.0529	ug/g
S-513-000018	39.00729	-122.81952	10/25/2006	sediment	97.00	THg	0.0330	ug/g
S-513-000019	39.01063	-122.83602	10/25/2006	sediment	96.20	THg	0.0152	ug/g
S-513-000020	39.01520	-122.86210	10/25/2006	sediment	88.00	THg	0.0188	ug/g
S-513-000021	39.01112	-122.90011	10/25/2006	sediment	97.40	THg	0.0181	ug/g
S-513-000022	38.99880	-122.91376	10/25/2006	sediment	98.10	THg	0.0125	ug/g
S-513-000023	38.95599	-122.89134	10/25/2006	sediment	97.70	THg	0.0302	ug/g
S-513-000024	39.15630	-122.99265	10/26/2006	sediment	95.40	THg	0.0259	ug/g
S-513-000025	38.93214	-122.91539	10/26/2006	sediment	94.70	THg	0.0229	ug/g
S-513-000026	38.93745	-122.88562	10/26/2006	sediment	98.40	THg	0.0306	ug/g
S-513-000027	38.91730	-122.85239	10/26/2006	sediment	95.60	THg	0.0279	ug/g
S-513-000027	38.91730	-122.85239	10/26/2006	sediment	95.60	THg	0.0292	ug/g
S-513-000028	38.94127	-122.82041	10/26/2006	sediment	98.00	THg	0.0121	ug/g
S-513-000029	38.94256	-122.81535	10/26/2006	sediment	71.40	THg	0.0632	ug/g
S-513-000030	38.85403	-122.75881	10/26/2006	sediment	96.20	THg	0.0274	ug/g
S-513-000031	38.85407	-122.75891	10/26/2006	sediment	96.20	THg	0.0245	ug/g
S-513-000032	38.90739	-122.76211	10/26/2006	sediment	56.60	THg	0.2065	ug/g
S-513-000033	39.01451	-122.87042	10/26/2006	sediment	97.80	THg	0.0223	ug/g
S-513-000034	39.04870	-122.69743	10/27/2006	sediment	98.40	THg	0.0538	ug/g
S-513-000035	39.04137	-122.68112	10/27/2006	sediment	99.50	THg	0.1459	ug/g
S-513-000036	39.02719	-122.66542	10/27/2006	sediment	98.80	THg	0.0846	ug/g
S-513-000037	38.97506	-122.61730	10/27/2006	sediment	98.10	THg	0.0811	ug/g
S-513-000038	38.97213	-122.61669	10/27/2006	sediment	97.70	THg	0.0617	ug/g
S-513-000039	38.96280	-122.64911	10/27/2006	sediment	95.70	THg	0.1080	ug/g
S-513-000040	38.91353	-122.61013	10/27/2006	sediment	96.70	THg	0.0394	ug/g
S-513-000041	38.91387	-122.59337	10/27/2006	sediment	98.10	THg	0.0473	ug/g
S-513-000042	38.91733	-122.58990	10/27/2006	sediment	98.80	THg	0.0240	ug/g
S-513-000043	38.88807	-122.59741	10/27/2006	sediment	96.80	THg	0.0694	ug/g
S-513-000044	38.85861	-122.62774	10/27/2006	sediment	96.70	THg	0.0626	ug/g
S-513-000045	38.90277	-122.63993	10/27/2006	sediment	65.30	THg	0.0406	ug/g
S-513-000046	38.90296	-122.63898	10/27/2006	sediment	92.80	THg	0.0285	ug/g
S-513-000047	38.90298	-122.63883	10/27/2006	sediment	92.50	THg	0.0287	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000048	38.87597	-122.67742	10/27/2006	sediment	61.90	THg	0.0714	ug/g
S-513-000049	38.94243	-122.81627	10/27/2006	sediment	96.40	THg	0.0141	ug/g
S-513-000050	39.10039	-122.80719	10/31/2006	sediment	50.30	THg	12.7600	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	17.0700	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	2.6800	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	2.8100	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	2.7800	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	5.1600	ug/g
S-513-000051	39.10070	-122.80744	10/31/2006	sediment	67.60	THg	5.0500	ug/g
S-513-000052	39.10115	-122.80795	10/31/2006	sediment	66.30	THg	5.7000	ug/g
S-513-000052	39.10115	-122.80795	10/31/2006	sediment	66.30	THg	3.0700	ug/g
S-513-000052	39.10115	-122.80795	10/31/2006	sediment	66.30	THg	3.0200	ug/g
S-513-000052	39.10115	-122.80795	10/31/2006	sediment	66.30	THg	1.4900	ug/g
S-513-000052	39.10115	-122.80795	10/31/2006	sediment	66.30	THg	1.4200	ug/g
S-513-000053	39.10160	-122.80832	10/31/2006	sediment	70.70	THg	1.8300	ug/g
S-513-000054	39.10131	-122.80875	10/31/2006	sediment	33.50	THg	0.9160	ug/g
S-513-000055	39.10089	-122.80832	10/31/2006	sediment	30.00	THg	1.5500	ug/g
S-513-000055	39.10089	-122.80832	10/31/2006	sediment	30.00	THg	1.9300	ug/g
S-513-000055	39.10089	-122.80832	10/31/2006	sediment	30.00	THg	1.9400	ug/g
S-513-000055	39.10089	-122.80832	10/31/2006	sediment	30.00	THg	6.0700	ug/g
S-513-000055	39.10089	-122.80832	10/31/2006	sediment	30.00	THg	5.9700	ug/g
S-513-000056	39.10043	-122.80784	10/31/2006	sediment	31.00	THg	1.0800	ug/g
S-513-000057	39.10041	-122.80784	10/31/2006	sediment	30.60	THg	1.2200	ug/g
S-513-000058	39.10012	-122.80754	10/31/2006	sediment	29.00	THg	0.7860	ug/g
S-513-000059	39.09165	-122.82207	10/31/2006	sediment	19.10	THg	1.6300	ug/g
S-513-0000AC	39.103902	-122.814937	8/1/2007	sediment	39.3	THg	0.405993	ug/g
S-513-0000AC	39.103902	-122.814937	8/1/2007	sediment	39.3	THg	0.362189	ug/g
S-513-0000AD	39.102994	-122.813114	8/1/2007	sediment	58.1	THg	0.106545	ug/g
S-513-0000AD	39.102994	-122.813114	8/1/2007	sediment	58.1	THg	0.106456	ug/g
S-513-0000AB	39.103603	-122.811759	8/1/2007	sediment	58.7	THg	0.155096	ug/g
S-513-0000AB	39.103603	-122.811759	8/1/2007	sediment	58.7	THg	0.157643	ug/g
S-513-0000Z	39.102956	-122.810050	8/1/2007	sediment	65.2	THg	0.165571	ug/g
S-513-0000Z	39.102956	-122.810050	8/1/2007	sediment	65.2	THg	0.419785	ug/g
S-513-0000Z	39.102956	-122.810050	8/1/2007	sediment	65.2	THg	0.133484	ug/g
S-513-0000	39.101993	-122.809047	8/1/2007	sediment	52.9	THg	0.252848	ug/g
S-513-0000	39.101993	-122.809047	8/1/2007	sediment	52.9	THg	0.276144	ug/g
S-513-0000A	39.100832	-122.807775	8/1/2007	sediment	54.7	THg	0.384233	ug/g
S-513-0000A	39.100832	-122.807775	8/1/2007	sediment	54.7	THg	0.324123	ug/g
S-513-0000M	39.099739	-122.806577	8/1/2007	sediment	69.2	THg	4.641445	ug/g
S-513-0000M	39.099739	-122.806577	8/1/2007	sediment	69.2	THg	0.468161	ug/g
S-513-0000M	39.099739	-122.806577	8/1/2007	sediment	69.2	THg	0.505516	ug/g
S-513-0000D	39.100965	-122.807558	8/1/2007	sediment	71.3	THg	0.193898	ug/g
S-513-0000D	39.100965	-122.807558	8/1/2007	sediment	71.3	THg	0.359900	ug/g
S-513-0000D	39.100965	-122.807558	8/1/2007	sediment	71.3	THg	2.425896	ug/g
S-513-0000D	39.100965	-122.807558	8/1/2007	sediment	71.3	THg	0.264101	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-0000I	39.098796	-122.805488	8/1/2007	sediment	49.5	THg	0.664585	ug/g
S-513-0000I	39.098796	-122.805488	8/1/2007	sediment	49.5	THg	1.863574	ug/g
S-513-0000I	39.098796	-122.805488	8/1/2007	sediment	49.5	THg	1.069275	ug/g
S-513-0000I	39.098796	-122.805488	8/1/2007	sediment	49.5	THg	1.883120	ug/g
S-513-0000X	39.095915	-122.804322	8/2/2007	sediment	46.6	THg	0.186542	ug/g
S-513-0000X	39.095915	-122.804322	8/2/2007	sediment	46.6	THg	0.171255	ug/g
S-513-0000B	39.097523	-122.804803	8/2/2007	sediment	67.4	THg	0.159686	ug/g
S-513-0000B	39.097523	-122.804803	8/2/2007	sediment	67.4	THg	0.228741	ug/g
S-513-0000B	39.097523	-122.804803	8/2/2007	sediment	67.4	THg	0.649961	ug/g
S-513-0000B	39.097523	-122.804803	8/2/2007	sediment	67.4	THg	0.201950	ug/g
S-513-0000Y	39.094535	-122.803099	8/2/2007	sediment	55.9	THg	0.198532	ug/g
S-513-0000Y	39.094535	-122.803099	8/2/2007	sediment	55.9	THg	0.190923	ug/g
S-513-0000Y	39.094535	-122.803099	8/2/2007	sediment	55.9	THg	0.193951	ug/g
S-513-0000IL	39.086209	-122.818898	8/2/2007	sediment	34.1	THg	1.687371	ug/g
S-513-0000IL	39.086209	-122.818898	8/2/2007	sediment	34.1	THg	1.510104	ug/g
S-513-000101	39.250500	-122.952840	9\04\2007	sediment	n/a	THg	0.076638	ug/g
S-513-000101	39.250500	-122.952840	9\04\2007	sediment	n/a	THg	0.062138	ug/g
S-513-000102	39.250420	-122.952200	9\04\2007	sediment	n/a	THg	0.057992	ug/g
S-513-000102	39.250420	-122.952200	9\04\2007	sediment	n/a	THg	0.055973	ug/g
S-513-000103	39.250460	-122.952150	9\04\2007	sediment	n/a	THg	0.044754	ug/g
S-513-000103	39.250460	-122.952150	9\04\2007	sediment	n/a	THg	0.035234	ug/g
S-513-000104	39.251460	-122.949520	9\04\2007	sediment	n/a	THg	0.058742	ug/g
S-513-000104	39.251460	-122.949520	9\04\2007	sediment	n/a	THg	0.059588	ug/g
S-513-000105	39.252180	-122.949510	9\04\2007	sediment	n/a	THg	0.052137	ug/g
S-513-000105	39.252180	-122.949510	9\04\2007	sediment	n/a	THg	0.062902	ug/g
S-513-000106	39.254850	-122.949730	9\04\2007	sediment	n/a	THg	0.059701	ug/g
S-513-000106	39.254850	-122.949730	9\04\2007	sediment	n/a	THg	0.071749	ug/g
S-513-000204	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	77.800000	ug/g
S-513-000204	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	145.000000	ug/g
S-513-000204	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	117.000000	ug/g
S-513-000209	39.103400	-122.806170	9/13/2007	sediment	n/a	THg	0.047675	ug/g
S-513-000209	39.103400	-122.806170	9/13/2007	sediment	n/a	THg	0.034741	ug/g
S-513-000215	39.105610	-122.808850	9/13/2007	sediment	n/a	THg	0.065155	ug/g
S-513-000215	39.105610	-122.808850	9/13/2007	sediment	n/a	THg	0.067900	ug/g
S-513-000216	39.106270	-122.812380	9/13/2007	sediment	n/a	THg	0.171234	ug/g
S-513-000216	39.106270	-122.812380	9/13/2007	sediment	n/a	THg	0.091397	ug/g
S-513-000216	39.106270	-122.812380	9/13/2007	sediment	n/a	THg	0.080611	ug/g
S-513-000217	39.113070	-122.808540	9/13/2007	sediment	n/a	THg	0.069644	ug/g
S-513-000217	39.113070	-122.808540	9/13/2007	sediment	n/a	THg	0.073058	ug/g
S-513-000218	39.113210	-122.809510	9/13/2007	sediment	n/a	THg	0.040771	ug/g
S-513-000218	39.113210	-122.809510	9/13/2007	sediment	n/a	THg	0.038362	ug/g
S-513-000218	39.113210	-122.809510	9/13/2007	sediment	n/a	THg	0.040335	ug/g
S-513-000218	39.113210	-122.809510	9/13/2007	sediment	n/a	THg	0.032793	ug/g
S-513-000219	39.110500	-122.812000	9/13/2007	sediment	n/a	THg	0.100309	ug/g
S-513-000219	39.110500	-122.812000	9/13/2007	sediment	n/a	THg	0.077152	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000232	39.103600	-122.809090	9/13/2007	sediment	n/a	THg	0.113114	ug/g
S-513-000232	39.103600	-122.809090	9/13/2007	sediment	n/a	THg	0.128311	ug/g
S-513-000233	39.104880	-122.808580	9/13/2007	sediment	n/a	THg	0.215923	ug/g
S-513-000233	39.104880	-122.808580	9/13/2007	sediment	n/a	THg	0.198265	ug/g
S-513-000234	39.104820	-122.809690	9/13/2007	sediment	n/a	THg	0.071429	ug/g
S-513-000234	39.104820	-122.809690	9/13/2007	sediment	n/a	THg	0.075215	ug/g
S-513-000235	39.100620	-122.803510	9/13/2007	sediment	n/a	THg	0.058446	ug/g
S-513-000235	39.100620	-122.803510	9/13/2007	sediment	n/a	THg	0.059387	ug/g
S-513-000237	39.103340	-122.808910	9/13/2007	sediment	n/a	THg	0.170207	ug/g
S-513-000237	39.103340	-122.808910	9/13/2007	sediment	n/a	THg	0.166390	ug/g
S-513-000238	39.102640	-122.808440	9/13/2007	sediment	n/a	THg	0.181217	ug/g
S-513-000238	39.102640	-122.808440	9/13/2007	sediment	n/a	THg	0.147354	ug/g
S-513-000239	39.102180	-122.807970	9/13/2007	sediment	n/a	THg	0.364314	ug/g
S-513-000239	39.102180	-122.807970	9/13/2007	sediment	n/a	THg	0.723627	ug/g
S-513-000239	39.102180	-122.807970	9/13/2007	sediment	n/a	THg	0.278420	ug/g
S-513-000240	39.105610	-122.808850	9/13/2007	sediment	n/a	THg	0.066511	ug/g
S-513-000240	39.105610	-122.808850	9/13/2007	sediment	n/a	THg	0.065192	ug/g
S-513-000241	39.102210	-122.808240	9/13/2007	sediment	n/a	THg	0.064326	ug/g
S-513-000241	39.102210	-122.808240	9/13/2007	sediment	n/a	THg	0.080235	ug/g
S-513-000242	39.101220	-122.807300	9/13/2007	sediment	n/a	THg	0.261405	ug/g
S-513-000242	39.101220	-122.807300	9/13/2007	sediment	n/a	THg	0.058987	ug/g
S-513-000242	39.101220	-122.807300	9/13/2007	sediment	n/a	THg	0.083434	ug/g
S-513-000243	39.113550	-122.808780	9/13/2007	sediment	n/a	THg	0.086424	ug/g
S-513-000243	39.113550	-122.808780	9/13/2007	sediment	n/a	THg	0.079998	ug/g
S-513-000243	39.113550	-122.808780	9/13/2007	sediment	n/a	THg	0.094320	ug/g
S-513-000243	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	52.500000	ug/g
S-513-000243	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	32.500000	ug/g
S-513-000243	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	26.000000	ug/g
S-513-000243	39.101120	-122.806710	9/13/2007	sediment	n/a	THg	39.500000	ug/g
S-513-000244	39.100050	-122.805780	9/13/2007	sediment	n/a	THg	0.065376	ug/g
S-513-000244	39.100050	-122.805780	9/13/2007	sediment	n/a	THg	0.137891	ug/g
S-513-000244	39.100050	-122.805780	9/13/2007	sediment	n/a	THg	0.067141	ug/g
S-513-000285*	39.099290	-122.802360	9/25/2007	sediment	n/a	THg	0.121999	ug/g
S-513-000285*	39.099290	-122.802360	9/25/2007	sediment	n/a	THg	0.145581	ug/g
S-513-000206	39.099400	-122.804500	9/25/2007	sediment	n/a	THg	0.412305	ug/g
S-513-000206	39.099400	-122.804500	9/25/2007	sediment	n/a	THg	0.778734	ug/g
S-513-000206	39.099400	-122.804500	9/25/2007	sediment	n/a	THg	0.369451	ug/g
S-513-000212	39.099200	-122.804000	9/25/2007	sediment	n/a	THg	1.119989	ug/g
S-513-000212	39.099200	-122.804000	9/25/2007	sediment	n/a	THg	1.011372	ug/g
S-513-000213	39.099000	-122.804100	9/25/2007	sediment	n/a	THg	1.467778	ug/g
S-513-000213	39.099000	-122.804100	9/25/2007	sediment	n/a	THg	0.574726	ug/g
S-513-000213	39.099000	-122.804100	9/25/2007	sediment	n/a	THg	0.790633	ug/g
S-513-000221	39.095980	-122.801050	9/25/2007	sediment	n/a	THg	0.070737	ug/g
S-513-000221	39.095980	-122.801050	9/25/2007	sediment	n/a	THg	0.071284	ug/g
S-513-000223	39.098890	-122.795990	9/25/2007	sediment	n/a	THg	0.081245	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000223	39.098890	-122.795990	9/25/2007	sediment	n/a	THg	0.075000	ug/g
S-513-000224	39.099290	-122.802360	9/25/2007	sediment	n/a	THg	0.159842	ug/g
S-513-000224	39.099290	-122.802360	9/25/2007	sediment	n/a	THg	0.111312	ug/g
S-513-000224	39.099290	-122.802360	9/25/2007	sediment	n/a	THg	0.107337	ug/g
S-513-000228	39.098560	-122.803660	9/25/2007	sediment	n/a	THg	1.006071	ug/g
S-513-000228	39.098560	-122.803660	9/25/2007	sediment	n/a	THg	1.280762	ug/g
S-513-000228	39.098560	-122.803660	9/25/2007	sediment	n/a	THg	0.806915	ug/g
S-513-000301	38.942600	-122.815280	10/17/2007	sediment	70.15	THg	0.029346	ug/g
S-513-000301	38.942600	-122.815280	10/17/2007	sediment	70.15	THg	0.029025	ug/g
S-513-000302	38.927310	-122.779660	10/17/2007	sediment	80.48	THg	0.103017	ug/g
S-513-000302	38.927310	-122.779660	10/17/2007	sediment	80.48	THg	0.101420	ug/g
S-513-000303	38.907670	-122.762510	10/17/2007	sediment	48.94	THg	0.883154	ug/g
S-513-000303	38.907670	-122.762510	10/17/2007	sediment	48.94	THg	0.861158	ug/g
S-513-000304	38.888980	-122.729210	10/17/2007	sediment	82.39	THg	0.096940	ug/g
S-513-000304	38.888980	-122.729210	10/17/2007	sediment	82.39	THg	0.098381	ug/g
S-513-000305	38.871280	-122.722700	10/17/2007	sediment	77.48	THg	0.236947	ug/g
S-513-000305	38.871280	-122.722700	10/17/2007	sediment	77.48	THg	0.075368	ug/g
S-513-000306	39.048590	-122.697530	10/17/2007	sediment	82.07	THg	0.057570	ug/g
S-513-000306	39.048590	-122.697530	10/17/2007	sediment	82.07	THg	0.052666	ug/g
S-513-000307	39.045830	-122.707570	10/17/2007	sediment	88.83	THg	0.243792	ug/g
S-513-000307	39.045830	-122.707570	10/17/2007	sediment	88.83	THg	0.274082	ug/g
S-513-000308	39.045520	-122.709800	10/17/2007	sediment	87.60	THg	0.103287	ug/g
S-513-000308	39.045520	-122.709800	10/17/2007	sediment	87.60	THg	0.097799	ug/g
S-513-000309	39.041360	-122.681270	10/17/2007	sediment	72.68	THg	0.066460	ug/g
S-513-000309	39.041360	-122.681270	10/17/2007	sediment	72.68	THg	0.080607	ug/g
S-513-000310	39.038170	-122.677610	10/17/2007	sediment	93.23	THg	0.217186	ug/g
S-513-000310	39.038170	-122.677610	10/17/2007	sediment	93.23	THg	0.207867	ug/g
S-513-000311	39.033840	-122.678680	10/17/2007	sediment	83.54	THg	0.384466	ug/g
S-513-000311	39.033840	-122.678680	10/17/2007	sediment	83.54	THg	0.443596	ug/g
S-513-000312	39.027780	-122.665120	10/17/2007	sediment	90.77	THg	0.485481	ug/g
S-513-000312	39.027780	-122.665120	10/17/2007	sediment	90.77	THg	0.478452	ug/g
S-513-000314	38.982800	-122.602080	10/17/2007	sediment	92.09	THg	0.100848	ug/g
S-513-000314	38.982800	-122.602080	10/17/2007	sediment	92.09	THg	0.052547	ug/g
S-513-000314	38.982800	-122.602080	10/17/2007	sediment	92.09	THg	0.049576	ug/g
S-513-000315	38.975200	-122.616860	10/17/2007	sediment	92.78	THg	0.078906	ug/g
S-513-000315	38.975200	-122.616860	10/17/2007	sediment	92.78	THg	0.066270	ug/g
S-513-000313	39.027810	-122.665110	10/18/2007	sediment	93.50	THg	0.197619	ug/g
S-513-000313	39.027810	-122.665110	10/18/2007	sediment	93.50	THg	0.183963	ug/g
S-513-000313D	39.027810	-122.665110	10/18/2007	sediment	94.09	THg	0.146651	ug/g
S-513-000313D	39.027810	-122.665110	10/18/2007	sediment	94.09	THg	0.137872	ug/g
S-513-000316	38.972040	-122.616800	10/18/2007	sediment	92.41	THg	0.089517	ug/g
S-513-000316	38.972040	-122.616800	10/18/2007	sediment	92.41	THg	0.076295	ug/g
S-513-000317	38.968030	-122.631330	10/18/2007	sediment	95.73	THg	0.070414	ug/g
S-513-000317	38.968030	-122.631330	10/18/2007	sediment	95.73	THg	0.051739	ug/g
S-513-000317	38.968030	-122.631330	10/18/2007	sediment	95.73	THg	0.055105	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000318	38.961900	-122.650040	10/18/2007	sediment	93.64	THg	0.073917	ug/g
S-513-000318	38.961900	-122.650040	10/18/2007	sediment	93.64	THg	0.046875	ug/g
S-513-000318	38.961900	-122.650040	10/18/2007	sediment	93.64	THg	0.048112	ug/g
S-513-000319*	38.961900	-122.650040	10/18/2007	sediment	94.22	THg	0.047791	ug/g
S-513-000319*	38.961900	-122.650040	10/18/2007	sediment	94.22	THg	0.069720	ug/g
S-513-000319*	38.961900	-122.650040	10/18/2007	sediment	94.22	THg	0.042071	ug/g
S-513-000319D	38.961900	-122.650040	10/18/2007	sediment	94.06	THg	0.049466	ug/g
S-513-000319D	38.961900	-122.650040	10/18/2007	sediment	94.06	THg	0.068245	ug/g
S-513-000319D	38.961900	-122.650040	10/18/2007	sediment	94.06	THg	0.057785	ug/g
S-513-000 330	39.037720	-122.677913	2/7/2008	sediment	78.2	THg	0.0572	ug/g
S-513-000 330	39.037720	-122.677913	2/7/2008	sediment	78.2	THg	0.0688	ug/g
S-513-000 330	39.037720	-122.677913	2/7/2008	sediment	78.2	THg	0.0601	ug/g
S-513-000 331	39.039604	-122.678191	2/7/2008	sediment	73.4	THg	0.1080	ug/g
S-513-000 331	39.039604	-122.678191	2/7/2008	sediment	73.4	THg	0.1370	ug/g
S-513-000 600	38.905467	-122.761081	2/25/2008	sediment	64.3	THg	0.0717	ug/g
S-513-000 600	38.905467	-122.761081	2/25/2008	sediment	64.3	THg	0.1910	ug/g
S-513-000 600	38.905467	-122.761081	2/25/2008	sediment	64.3	THg	0.1380	ug/g
S-513-000 600	38.905467	-122.761081	2/25/2008	sediment	64.3	THg	0.0795	ug/g
S-513-000 601	38.905225	-122.760651	2/25/2008	sediment	76.7	THg	0.1078	ug/g
S-513-000 601	38.905225	-122.760651	2/25/2008	sediment	76.7	THg	0.1989	ug/g
S-513-000 601	38.905225	-122.760651	2/25/2008	sediment	76.7	THg	0.1079	ug/g
S-513-000 602	38.904337	-122.759707	2/25/2008	sediment	83.8	THg	0.0165	ug/g
S-513-000 602	38.904337	-122.759707	2/25/2008	sediment	83.8	THg	0.0135	ug/g
S-513-000 603	38.901063	-122.759560	2/25/2008	sediment	72.2	THg	0.0735	ug/g
S-513-000 603	38.901063	-122.759560	2/25/2008	sediment	72.2	THg	0.0976	ug/g
S-513-000 603	38.901063	-122.759560	2/25/2008	sediment	72.2	THg	0.0770	ug/g

Sample ID	Latitude	Longitude	Date Collected	Matrix	% Solids	Test	Value	Units
S-513-000050	39.10039	-122.80719	10/31/06	Sediment	50.30	MeHg	0.514	ng/g
S-513-000051	39.10070	-122.80744	10/31/06	Sediment	67.60	MeHg	0.349	ng/g
S-513-000051	39.10070	-122.80744	10/31/06	Sediment	67.60	MeHg	0.357	ng/g
S-513-000052	39.10115	-122.80795	10/31/06	Sediment	66.30	MeHg	0.234	ng/g
S-513-000053	39.10160	-122.80832	10/31/06	Sediment	70.70	MeHg	0.345	ng/g
S-513-000054	39.10131	-122.80875	10/31/06	Sediment	33.50	MeHg	1.450	ng/g
S-513-000055	39.10089	-122.80832	10/31/06	Sediment	30.00	MeHg	1.420	ng/g
S-513-000056	39.10043	-122.80784	10/31/06	Sediment	31.00	MeHg	1.390	ng/g
S-513-000057	39.10041	-122.80784	10/31/06	Sediment	30.60	MeHg	1.430	ng/g
S-513-000058	39.10012	-122.80754	10/31/06	Sediment	29.00	MeHg	1.430	ng/g
S-513-000059	39.09165	-122.82207	10/31/06	Sediment	19.10	MeHg	1.660	ng/g
S-513-0000AC	39.10390	-122.81494	8/1/07	Sediment	39.26	MeHg	1.122	ng/g
S-513-0000AC	39.10390	-122.81494	8/1/07	Sediment	39.26	MeHg	1.096	ng/g
S-513-0000AD	39.10299	-122.81311	8/1/07	Sediment	58.13	MeHg	0.846	ng/g
S-513-0000AB	39.10360	-122.81176	8/1/07	Sediment	58.75	MeHg	0.486	ng/g
S-513-0000Z	39.10296	-122.81005	8/1/07	Sediment	65.24	MeHg	0.180	ng/g
S-513-0000	39.10199	-122.80905	8/1/07	Sediment	52.86	MeHg	1.076	ng/g
S-513-0000A	39.10083	-122.80778	8/1/07	Sediment	54.70	MeHg	0.359	ng/g
S-513-0000M	39.09974	-122.80658	8/1/07	Sediment	69.17	MeHg	0.210	ng/g
S-513-0000D	39.10097	-122.80756	8/1/07	Sediment	71.28	MeHg	0.097	ng/g
S-513-0000I	39.09880	-122.80549	8/1/07	Sediment	49.48	MeHg	0.259	ng/g
S-513-0000X	39.09592	-122.80432	8/2/07	Sediment	46.64	MeHg	2.158	ng/g
S-513-0000B	39.09752	-122.80480	8/2/07	Sediment	67.44	MeHg	0.422	ng/g
S-513-0000Y	39.09454	-122.80310	8/2/07	Sediment	55.90	MeHg	0.737	ng/g
S-513-0000IL	39.08621	-122.81890	8/2/07	Sediment	34.08	MeHg	0.867	ng/g

APPENDIX F

MERCURY HOT SPOT MONITORING MAPS

APPENDIX G

DATA AND CALCULATION PROCEDURES

Clear Lake Watershed TMDL Monitoring Program
PROPOSITION 13 WATERSHED PROTECTION GRANT PROGRAM
Data and Calculation Procedure

The DVD includes the following folders/files:

Report
- Cole Creek Hot Spot Hg Map.pdf
- Final Report 04142009.pdf
- Final Report Appendices.pdf
- Hot Spot Hg Map.pdf
- Schindler Creek Hot Spot Hg Map.pdf
- Utopia MeHg Map.pdf
- Utopia THg Map.pdf

Data (see content description below)
- Average Annual Load Estimates.xls
- CLERC-TMDL 1998-2001.xls
- Field Data Sheet Sediment.mdb
- Field Data Sheet Water.mdb
- Master Water Data.mdb
- Master Water Data.mdb.xls
- SO4 Conc Calc.xls

Sampling by Date (see content description below)

The following procedures were utilized in calculating watershed loads for Clear Lake. This description supplements the description in the Report.

Stream Flow Data

1. Data from the laboratories and field were compiled in the databases
   a. *Master Water Data.mdb*: Laboratory results compiled with Global Positioning System (GPS) coordinates and instantaneous flow data from California Department of Water Resources (DWR)
   b. *Field Data Sheet Water.mdb*: Data from the Surface Water Ambient Monitoring Program (SWAMP) field data sheet was entered into the database.

2. Data from *Master Water Data.mdb* was exported into the spreadsheet *Master Water Data.mdb.xls* for analysis. Worksheets for the data were created for each analyte. Charts for each gage location were developed and regression equations developed. Based on engineering judgment, some data was rejected as it appeared to be erroneous. Regression equations and averages were summarized in worksheets. Student t-tests were run on the regressions, where $t = R \times (n - 2)^{1/2} / (1 - R^2)^{1/2}$, and the probability of the regression not being significant (p) was calculated.

3. Daily streamflow data from DWR is compiled in the database *Water History.mdb*. Daily loads are calculated at each gage in the database using gage specific queries, i.e. *Kelsey Creek: Daily Loads*, which uses the regressions or averages from Step 2 (see Report discussion). Because the sulfate regression is a natural logarithmic function, which is not an available calculation in MSAccess, the daily loads were calculated in the worksheet *SO4 Conc Calc.xls* and imported into tables in the database. Annual loads are then calculated using gage specific queries, i.e. *Kelsey Creek: Annual Loads,* which sums the results from the daily load queries.

4. The annual loads are exported to the spreadsheet *Average Annual Load Estimates.xls*, and the average annual load is calculated.

   Flow weighting ratios are calculated in this spreadsheet using common flow data years. The Scotts Creek gage has a complete record from WY 1961 through 2008, with the exception of 1995[1] and 2006. We have compared average annual flows for the Scotts Creek gage for the entire period of record and the common record years for the other two gages. A weighting factor is calculated by dividing the Scotts Creek average annual flow for the complete record by the Scotts Creek average annual flow for the common record years. This weighting factor is then multiplied by the calculated loads for the respective gage.

   The flow weighted loads for each gage are then extrapolated to the entire Clear Lake watershed based on average annual flows and drainage areas.

5. Regressions and probabilities for the data utilized in the Mercury TMDL for Clear Lake were calculated in the spreadsheet *CLERC-TMDL 1998-2001.xls*. The 10-year average load calculations are included. The TMDL calculations are from the Mercury TMDL. The District annual load estimates are from the spreadsheet *Average Annual Load Estimates.xls*.

Sediment Data

1. Sediment total mercury and methyl mercury data from Battelle were compiled with GPS data in MSExcel and imported into ArcView for analysis. Data is organized the folder *Sampling by Date* and subfolders based on the month samples were collected, i.e. *Feb_07_Samples*. Photographs are stored in subfolders of the month folder by date of sample, i.e. *Photos_2007-02-09,* are hyperlinked from the attribute table in ArcView.

2. Data from the SWAMP field data sheet was entered into the database *Field Data Sheet Sediment.mdb*.

Sampling by Date

ArcView maps and base data are stored in the folder *Sampling by Date\Maps*. All data is kept in subfolders. If this file structure is maintained, ArcView 9.3 will open all the maps as included in the Final Report. Photographs of sample sites are included in the folder that contains the GIS data. Photographs are hyperlinked in ArcView (hyperlinks must be enabled), and the path to the subfolder is included in the database (*.dbf) files.

[1] Data from 1995 is not used as a levee failure upstream of the Scotts Creek at Eickhoff Road gage resulted in underestimation of flows in excess of 3,000 cfs after January 9, 1995. The levee was repaired before flows resumed in Fall 1995.