

## **Appendix A: Hardness Data.**

<b>Creek</b>	<b>Station</b>	<b>River Mile</b>	<b>Result</b>	<b>Date</b>	<b>Unit</b>
Deep	DC1	148.3	105	08/31/98	mg/L
Deep	DC1	148.3	121	10/05/98	mg/L
Deep	DC1	148.3	69.4	11/16/98	mg/L
Deep	DC1	148.3	48.1	01/18/99	mg/L
Deep	DC1	148.3	116	02/22/99	mg/L
Deep	DC1	148.3	70.8	03/15/99	mg/L
Deep	DC1	148.3	39.3	04/12/99	mg/L
Deep	DC1	148.3	23.1	05/10/99	mg/L
Deep	DC1	148.3	12.5	06/14/99	mg/L
Deep	DC1	148.3	103	10/18/99	mg/L
Deep	DC1	148.3	65.9	12/6/99	mg/L
Deep	DC1	148.3	86.9	1/24/00	mg/L
Deep	DC1	148.3	121	2/7/00	mg/L
Deep	DC2		94.5	08/31/98	mg/L
Deep	DC2		115	10/05/98	mg/L
Deep	DC2		73.4	01/18/99	mg/L
Deep	DC2		71.3	02/22/99	mg/L
Deep	DC2		49.9	03/15/99	mg/L
Deep	DC2		34.4	04/12/99	mg/L
Deep	DC2		22.8	05/10/99	mg/L
Deep	DC2		14.8	06/14/99	mg/L
Deep	DC2		107	10/18/99	mg/L
Deep	DC2		78.8	12/6/99	mg/L
Deep	DC2		94	1/24/00	mg/L
Deep	DC2		84	2/7/00	mg/L
Myrtle	M1	144.8	33.7	08/31/98	mg/L
Myrtle	M1	144.8	61.3	10/05/98	mg/L
Myrtle	M1	144.8	16.6	11/16/98	mg/L
Myrtle	M1	144.8	27.5	01/18/99	mg/L
Myrtle	M1	144.8	52.9	02/22/99	mg/L
Myrtle	M1	144.8	43.4	03/15/99	mg/L
Myrtle	M1	144.8	21	04/12/99	mg/L
Myrtle	M1	144.8	9.66	05/10/99	mg/L
Myrtle	M1	144.8	3.67	06/14/99	mg/L
Myrtle	M1	144.8	13.1	10/18/99	mg/L
Myrtle	M1	144.8	8.76	12/6/99	mg/L
Myrtle	M1	144.8	11.7	1/24/00	mg/L
Myrtle	M1		65.3	2/7/00	mg/L
Myrtle	M2		9.6	08/31/98	mg/L
Myrtle	M2		10.1	10/05/98	mg/L
Myrtle	M2		8	11/16/98	mg/L
Myrtle	M2		26.1	01/18/99	mg/L
Myrtle	M2		12.3	02/22/99	mg/L
Myrtle	M2		12.3	03/15/99	mg/L
Myrtle	M2		10.8	04/12/99	mg/L
Myrtle	M2		6.99	05/10/99	mg/L
Myrtle	M2		3.07	06/14/99	mg/L
Myrtle	M2		6.83	10/18/99	mg/L
Myrtle	M2		5.25	12/6/99	mg/L
Myrtle	M2		8.08	1/24/00	mg/L

Ball	B1		52.1	08/31/98	mg/L
Ball	B1		15.5	10/05/98	mg/L
Ball	B1		12.9	11/16/98	mg/L
Ball	B1		10.5	01/18/99	mg/L
Ball	B1		18.8	02/22/99	mg/L
Ball	B1		19.2	03/15/99	mg/L
Ball	B1		13.7	04/12/99	mg/L
Ball	B1		8.22	05/10/99	mg/L
Ball	B1		4.51	06/14/99	mg/L
Ball	B1		2.36	10/18/99	mg/L
Ball	B1		7.97	12/6/99	mg/L
Ball	B1		36.8	1/24/00	mg/L
Ball	B1		15.8	2/7/00	mg/L
Ball	B2		10.9	08/31/98	mg/L
Ball	B2		11.6	10/05/98	mg/L
Ball	B2		10.6	11/16/98	mg/L
Ball	B2		12.8	02/22/99	mg/L
Ball	B2		11.4	03/15/99	mg/L
Ball	B2		9.73	04/12/99	mg/L
Ball	B2		7.24	05/10/99	mg/L
Ball	B2		3.7	06/14/99	mg/L
Fleming	F1	138.9	309	08/31/98	mg/L
Fleming	F1	138.9	117	10/05/98	mg/L
Fleming	F1	138.9	316	11/16/98	mg/L
Fleming	F1	138.9	652	02/22/99	mg/L
Fleming	F1	138.9	228	03/15/99	mg/L
Fleming	F1	138.9	163	04/12/99	mg/L
Fleming	F1	138.9	222	05/10/99	mg/L
Fleming	F1	138.9	210	06/14/99	mg/L
Fleming	F1	138.9	101	10/18/99	mg/L
Fleming	F1	138.9	136	12/6/99	mg/L
Fleming	F1	138.9	139	1/24/00	mg/L
Fleming	F1	138.9	163	2/7/00	mg/L
Rock	R1	133.1	145	08/31/98	mg/L
Rock	R1	133.1	114	10/05/98	mg/L
Rock	R1	133.1	138	11/16/98	mg/L
Rock	R1	133.1	199	02/22/99	mg/L
Rock	R1	133.1	197	03/15/99	mg/L
Rock	R1	133.1	58.2	04/12/99	mg/L
Rock	R1	133.1	50.3	05/10/99	mg/L
Rock	R1	133.1	79.6	06/14/99	mg/L
Rock	R1	133.1	96.6	10/18/99	mg/L
Rock	R1	133.1	110	12/6/99	mg/L
Rock	R1	133.1	125	1/24/00	mg/L
Rock	R1	133.1	123	2/7/00	mg/L
Trout	T1(NB)	131.7	84	08/31/98	mg/L
Trout	T1(NB)	131.7	91.5	10/05/98	mg/L
Trout	T1(NB)	131.7	19.1	11/16/98	mg/L
Trout	T1(NB)	131.7	11.3	01/18/99	mg/L
Trout	T1(NB)	131.7	61.4	02/22/99	mg/L
Trout	T1(NB)	131.7	32.1	03/15/99	mg/L
Trout	T1(NB)	131.7	18.8	04/12/99	mg/L

Trout	T1(NB)	131.7	13.5	05/10/99	mg/L
Trout	T1(NB)	131.7	6.32	06/14/99	mg/L
Trout	T1(NB)	131.7	27.6	10/18/99	mg/L
Trout	T1(NB)	131.7	13.5	12/6/99	mg/L
Trout	T1(NB)	131.7	44.9	1/24/00	mg/L
Trout	T1(NB)	131.7	70.3	2/7/00	mg/L
Trout	T2(NB)		11.7	08/31/98	mg/L
Trout	T2(NB)		11.2	10/05/98	mg/L
Trout	T2(NB)		11.4	11/16/98	mg/L
Trout	T2(NB)		24.8	01/18/99	mg/L
Trout	T2(NB)		13	02/22/99	mg/L
Trout	T2(NB)		12.7	03/15/99	mg/L
Trout	T2(NB)		11.5	04/12/99	mg/L
Trout	T2(NB)		9.01	05/10/99	mg/L
Trout	T2(NB)		4.54	06/14/99	mg/L
Trout	T2(NB)		10	10/18/99	mg/L
Trout	T2(NB)		8.07	12/6/99	mg/L
Trout	T2(NB)		10.4	1/24/00	mg/L
Trout	T2(NB)		10.4	2/7/00	mg/L
Trout	T3(SB)		29.4	08/31/98	mg/L
Trout	T3(SB)		35.4	10/05/98	mg/L
Trout	T3(SB)		13.9	11/16/98	mg/L
Trout	T3(SB)		0.922	01/18/99	mg/L
Trout	T3(SB)		23	02/22/99	mg/L
Trout	T3(SB)		29.4	03/15/99	mg/L
Trout	T3(SB)		15.2	04/12/99	mg/L
Trout	T3(SB)		12.5	05/10/99	mg/L
Trout	T3(SB)		7.21	06/14/99	mg/L
Trout	T3(SB)		13.7	10/18/99	mg/L
Trout	T3(SB)		8.6	12/6/99	mg/L
Trout	T3(SB)		15	1/24/00	mg/L
Trout	T3(SB)		13.8	2/7/00	mg/L
Trout	T4(SB)		11.9	08/31/98	mg/L
Trout	T4(SB)		12	10/05/98	mg/L
Trout	T4(SB)		11.7	11/16/98	mg/L
Trout	T4(SB)		16	01/18/99	mg/L
Trout	T4(SB)		14.1	02/22/99	mg/L
Trout	T4(SB)		11.1	03/15/99	mg/L
Trout	T4(SB)		11.1	04/12/99	mg/L
Trout	T4(SB)		9.14	05/10/99	mg/L
Trout	T4(SB)		4.77	06/14/99	mg/L
Trout	T4(SB)		10.6	10/18/99	mg/L
Trout	T4(SB)		7.75	12/6/99	mg/L
Trout	T4(SB)		10.6	2/7/00	mg/L
Fisher	FS1	127.3	19.5	08/31/98	mg/L
Fisher	FS1	127.3	35.6	10/05/98	mg/L
Fisher	FS1	127.3	16.7	11/16/98	mg/L
Fisher	FS1	127.3	27.2	02/22/99	mg/L
Fisher	FS1	127.3	20.7	04/12/99	mg/L
Fisher	FS1	127.3	13.2	05/10/99	mg/L
Fisher	FS1	127.3	6.77	06/14/99	mg/L
Fisher	FS1	127.3	40.4	10/18/99	mg/L

Fisher	FS1	127.3	12.5	12/6/99	mg/L
Fisher	FS1	127.3	17.9	1/24/00	mg/L
Fisher	FS1	127.3	25	2/7/00	mg/L
Fisher	FS2		14.9	08/31/98	mg/L
Fisher	FS2		15.9	10/05/98	mg/L
Fisher	FS2		16.2	11/16/98	mg/L
Fisher	FS2		20.8	01/18/99	mg/L
Fisher	FS2		19.9	03/15/99	mg/L
Fisher	FS2		17.8	04/12/99	mg/L
Fisher	FS2		13	05/10/99	mg/L
Fisher	FS2		5.05	06/14/99	mg/L
Fisher	FS2		16.4	10/18/99	mg/L
Fisher	FS2		11.7	12/6/99	mg/L
Fisher	FS2		16.1	1/24/00	mg/L
Fisher	FS2		16.9	2/7/00	mg/L
Mission	MS1	124.1	54.7	08/31/98	mg/L
Mission	MS1	124.1	113	10/05/98	mg/L
Mission	MS1	124.1	16	11/16/98	mg/L
Mission	MS1	124.1	9.8	01/18/99	mg/L
Mission	MS1	124.1	134	02/22/99	mg/L
Mission	MS1	124.1	45.3	03/15/99	mg/L
Mission	MS1	124.1	29.7	04/12/99	mg/L
Mission	MS1	124.1	13.7	05/10/99	mg/L
Mission	MS1	124.1	10.6	06/14/99	mg/L
Mission	MS1	124.1	71.2	10/18/99	mg/L
Mission	MS1	124.1	43.1	12/6/99	mg/L
Mission	MS1	124.1	32.2	1/24/00	mg/L
Mission	MS1	124.1	39	2/7/00	mg/L
Mission	MS2		37.1	08/31/98	mg/L
Mission	MS2		31.5	10/05/98	mg/L
Mission	MS2		19.18	11/16/98	mg/L
Mission	MS2		47	01/18/99	mg/L
Mission	MS2		134	02/22/99	mg/L
Mission	MS2		34.9	03/15/99	mg/L
Mission	MS2		22.6	04/12/99	mg/L
Mission	MS2		11	05/10/99	mg/L
Mission	MS2		10.2	06/14/99	mg/L
Mission	MS2		31.2	10/18/99	mg/L
Mission	MS2		23.7	12/6/99	mg/L
Mission	MS2		27.6	1/24/00	mg/L
Mission	MS2		25.7	2/7/00	mg/L
Parker	P1	118	105	08/31/98	mg/L
Parker	P1	118	108	10/05/98	mg/L
Parker	P1	118	13	11/16/98	mg/L
Parker	P1	118	11.4	01/18/99	mg/L
Parker	P1	118	72.4	02/22/99	mg/L
Parker	P1	118	140	03/15/99	mg/L
Parker	P1	118	22.7	04/12/99	mg/L
Parker	P1	118	10.8	05/10/99	mg/L
Parker	P1	118	6.32	06/14/99	mg/L
Parker	P1	118	11.7	10/18/99	mg/L
Parker	P1	118	11	12/6/99	mg/L

Parker	P1	118	20.9	1/24/00	mg/L
Parker	P1	118	21.3	2/7/00	mg/L
Parker	P2		11.6	08/31/98	mg/L
Parker	P2		11.7	10/05/98	mg/L
Parker	P2		11.6	11/16/98	mg/L
Parker	P2		27.6	01/18/99	mg/L
Parker	P2		12.7	02/22/99	mg/L
Parker	P2		11	03/15/99	mg/L
Parker	P2		10.4	04/12/99	mg/L
Parker	P2		7.79	05/10/99	mg/L
Parker	P2		5.13	06/14/99	mg/L
Parker	P2		10.5	10/18/99	mg/L
Parker	P2		8.14	12/6/99	mg/L
Parker	P2		10.2	1/24/00	mg/L
Parker	P2		10.1	2/7/00	mg/L
Parker	P3		23.6	10/18/99	mg/L
Long Canyon	LC1	110.7	11.7	08/31/98	mg/L
Long Canyon	LC1	110.7	11.5	10/05/98	mg/L
Long Canyon	LC1	110.7	9.8	11/16/98	mg/L
Long Canyon	LC1	110.7	10.2	01/18/99	mg/L
Long Canyon	LC1	110.7	13.6	02/22/99	mg/L
Long Canyon	LC1	110.7	17.7	03/15/99	mg/L
Long Canyon	LC1	110.7	11.4	04/12/99	mg/L
Long Canyon	LC1	110.7	7.43	05/10/99	mg/L
Long Canyon	LC1	110.7	4.2	06/14/99	mg/L
Long Canyon	LC1	110.7	9.1	10/18/99	mg/L
Long Canyon	LC1	110.7	6.42	12/6/99	mg/L
Long Canyon	LC1	110.7	9.22	1/24/00	mg/L
Long Canyon	LC1	110.7	9.77	2/7/00	mg/L
Long Canyon	LC2		10.9	08/31/98	mg/L
Long Canyon	LC2		10.9	10/05/98	mg/L
Long Canyon	LC2		9.3	11/16/98	mg/L
Long Canyon	LC2		10	01/18/99	mg/L
Long Canyon	LC2		10.5	03/15/99	mg/L
Long Canyon	LC2		9.75	04/12/99	mg/L
Long Canyon	LC2		6.66	05/10/99	mg/L
Long Canyon	LC2		3.41	06/14/99	mg/L
Long Canyon	LC2		8.87	10/18/99	mg/L
Long Canyon	LC2		6.36	12/6/99	mg/L
Long Canyon	LC2		8.86	1/24/00	mg/L
Smith	S1		21.5	08/31/98	mg/L
Smith	S1		69	10/05/98	mg/L
Smith	S1		5.2	11/16/98	mg/L
Smith	S1		6.31	01/18/99	mg/L
Smith	S1		15.9	02/22/99	mg/L
Smith	S1		21.4	03/15/99	mg/L
Smith	S1		11.7	04/12/99	mg/L
Smith	S1		5.55	05/10/99	mg/L
Smith	S1		3.14	06/14/99	mg/L
Smith	S1		7.55	10/18/99	mg/L
Smith	S1		5.19	12/6/99	mg/L
Smith	S1		45.1	1/24/00	mg/L

Smith	S1		9.42	2/7/00	mg/L
Smith	S2		10.2	08/31/98	mg/L
Smith	S2		9.83	10/05/98	mg/L
Smith	S2		6.5	11/16/98	mg/L
Smith	S2		7.8	01/18/99	mg/L
Smith	S2		8.3	02/22/99	mg/L
Smith	S2		6.28	03/15/99	mg/L
Smith	S2		6.29	04/12/99	mg/L
Smith	S2		4.45	05/10/99	mg/L
Smith	S2		2.32	06/14/99	mg/L
Smith	S2		6.52	10/18/99	mg/L
Smith	S2		4.76	12/6/99	mg/L
Smith	S2		6.87	1/24/00	mg/L
Smith	S2		7.18	2/7/00	mg/L
Boundary	B2		9.51	10/18/99	mg/L
Boundary	B2		15.3	12/6/99	mg/L
Boundary	B2		9.9	2/7/00	mg/L
Boundary	BD1	105.7	34.1	08/31/98	mg/L
Boundary	BD1	105.7	37.5	10/05/98	mg/L
Boundary	BD1	105.7	9.8	11/16/98	mg/L
Boundary	BD1	105.7	15.4	01/18/99	mg/L
Boundary	BD1	105.7	142	02/22/99	mg/L
Boundary	BD1	105.7	26.4	03/15/99	mg/L
Boundary	BD1	105.7	27.7	04/12/99	mg/L
Boundary	BD1	105.7	12.7	05/10/99	mg/L
Boundary	BD1	105.7	6.22	06/14/99	mg/L
Boundary	BD1	105.7	17.3	10/18/99	mg/L
Boundary	BD1	105.7	11	12/6/99	mg/L
Boundary	BD1	105.7	20.5	1/24/00	mg/L
Boundary	BD1	105.7	21	2/7/00	mg/L
Boundary	BD2		21.5	08/31/98	mg/L
Boundary	BD2		19.9	10/05/98	mg/L
Boundary	BD2		11	11/16/98	mg/L
Boundary	BD2		48.2	01/18/99	mg/L
Boundary	BD2		19.2	02/22/99	mg/L
Boundary	BD2		14.8	03/15/99	mg/L
Boundary	BD2		12.8	04/12/99	mg/L
Boundary	BD2		8.4	05/10/99	mg/L
Boundary	BD2		5.79	06/14/99	mg/L
Boundary	BD2		17.5	10/18/99	mg/L
Boundary	BD2		11	12/6/99	mg/L
Boundary	BD2		16	1/24/00	mg/L
Boundary	BD2		15.8	2/7/00	mg/L