

Table C-1: Rose Creek Drainage Water Quality
2010 - Surface Water - General Parameters

Station	Date	ALK	ALKPP	CaCO3	CaCO3-d	Chloride	CN(wad)	CNTHIO	CO3	Colour	COND	CONDf	DOC	HCO3	NH3	NO2	NO2/3	NO3	OH	pH	pHF	SO4-d	TDS	TEMP-F	TOC	TSS	TURB
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	TCU	µmho/cm	µmho/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	°C	mg/L	mg/L	NTU
RCSG#4	1/12/2010	140.00	<0.5	159	155	<0.5			<0.5	10.00	313.0	310.0	1.5	160.00	0.03				<0.5	7.9	7.2	28.0	180.00	0	1.40	<1.0	1.80
RCSG#4	3/10/2010	140.00	<0.5	158	164	4.10			<0.5		320.0	285.0	1.9	170.00	0.02				<0.5	8.0	7.8	31.0	210.00	1	1.50	<1.0	
RCSG#4	4/13/2010	150.00	<0.5	149	151	<0.5			<0.5		331.0	300.0	0.9	180.00	0.05				<0.5	7.8	7.4	28.0	170.00	4	1.10	<1.0	
RCSG#4	5/3/2010	59.00	<0.5	65	69	<0.5			<0.5		130.0	115.0	10.6	72.00	<0.005				<0.5	7.8	7.6	7.9	88.00	1	12.30	7	
RCSG#4	6/4/2010	40.00	<0.5	49	50	<0.5			<0.5		92.0	92.0	2.5	49.00	<0.05				<0.5	7.6	7.8	8.2	66.00	6	2.60	4	
RCSG#4	7/8/2010	58.00	<0.5	63	61	<0.5			<0.5		126.0	126.0	2.9	71.00	<0.05				<0.5	7.8	7.9	11.0	74.00	13	3.80	2	
RCSG#4	8/3/2010	88.00	<0.5	98	94	<0.5			<0.5		200.0	207.0	2.4	110.00	<0.05				<0.5	8.0	7.5	17.0	120.00	13	1.80	<1.0	
RCSG#4 Average		96.43	0	106	106	0.80			0.25	10.00	216.0	205.0	3.2	116.00	0.03				0	7.8	7.6	18.7	129.71	6	3.50	2	1.80
RCSG#4 Max		150.00	<0.5	159	164	4.10			<0.5	10.00	331.0	310.0	10.6	180.00	<0.05				<0.5	8.0	7.9	31.0	210.00	13	12.30	7	1.80
RCSG#4 Min		40.00	<0.5	49	50	<0.5			<0.5	10.00	92.0	92.0	0.9	49.00	<0.005				<0.5	7.6	7.2	7.9	66.00	0	1.10	<1.0	1.80
RCSG#4 N > DL		7	0	7	7	1	0	0	0	1	7	7	7	7	3	0	0	0	0	7	7	7	7	7	7	3	1
RCSG#4 Median		88.00	<0.5	98	94	<0.5			<0.5	10.00	200.0	207.0	2.4	110.00	<0.05				<0.5	7.8	7.6	17.0	120.00	4	1.80	<1.0	1.80
W10	5/3/2010	38.00	<0.5	39	37	<0.5			<0.5		77.0	109.0	12.1	46.00	0.04				<0.5	7.7	7.7	<0.5	50.00	1	11.20	<1.0	
W10	6/5/2010	38.00	<0.5	36	34	<0.5			<0.5		75.0	68.0	5.2	46.00	<0.05				<0.5	7.6	7.8	1.9	60.00	2	5.00	<1.0	
W10	7/10/2010	52.00	<0.5	45	52	<0.5			<0.5		103.0	101.0	4.1	64.00	<0.05				<0.5	7.7	8.1	1.0	40.00	6	4.00	<1.0	
W10 Average		42.67	0	40	41	0.25			0.25		85.0	92.7	7.1	52.00	0.03				0	7.7	7.9	1.1	50.00	3	6.73	1	
W10 Max		52.00	<0.5	45	52	<0.5			<0.5		103.0	109.0	12.1	64.00	<0.05				<0.5	7.7	8.1	1.9	60.00	6	11.20	<1.0	
W10 Min		38.00	<0.5	36	34	<0.5			<0.5		75.0	68.0	4.1	46.00	0.04				<0.5	7.6	7.7	<0.5	40.00	1	4.00	<1.0	
W10 N > DL		3	0	3	3	0	0	0	0	0	3	3	3	3	1	0	0	0	0	3	3	2	3	3	3	0	0
W10 Median		38.00	<0.5	39	37	<0.5			<0.5		77.0	101.0	5.2	46.00	<0.05				<0.5	7.7	7.8	1.0	50.00	2	5.00	<1.0	
W8	6/17/2010	55.00	<0.5	54	52	<0.5			<0.5		116.0	106.0	3.0	67.00	<0.1				<0.5	7.8	7.7	8.6	68.00	2	3.40	4	
X10	1/11/2010	140.00	<0.5	165	166	<0.5			<0.5		326.0	286.0	1.0	170.00	<0.01				<0.5	8.0	7.1	26.0	220.00	1	0.80	<1.0	0.80
X10	2/22/2010	150.00	<0.5	167	165	<0.5			<0.5		329.0	280.0	1.3	180.00	<0.01				<0.5	8.0	7.5	30.0	220.00	0	1.30	<1.0	0.50
X10	3/10/2010	150.00	<0.5	163	161	<0.5			<0.5		334.0	292.0	1.4	180.00	<0.01				<0.5	8.1	7.5	26.0	210.00	1	1.60	<1.0	
X10	4/13/2010	150.00	<0.5	162	157	<0.5			<0.5		340.0	310.0	1.0	180.00	<0.01				<0.5	7.9	7.6	30.0	200.00	1		<1.0	
X10	5/3/2010	59.00	<0.5	66	68	<0.5			<0.5		129.0	112.0	11.7	72.00	<0.01				<0.5	7.8	7.8	9.4	74.00	1	11.20	5	
X10	6/4/2010	45.00	<0.5	54	54	<0.5			<0.5		99.0	111.0	2.8	55.00	<0.05				<0.5	7.8	8.1	9.0	62.00	7	2.50	3	
X10	7/8/2010	62.00	<0.5	69	60	<0.5			<0.5		134.0	128.0	3.0	75.00	<0.05				<0.5	8.0	8.1	12.0	82.00	14	2.90	2	
X10	8/3/2010	95.00	<0.5	95	97	<0.5			<0.5		205.0	205.0	2.4	120.00	<0.05				<0.5	8.2	8.0	17.0	120.00	14	2.30	<1.0	
X10	9/2/2010	88.00	<0.5	100	101	<0.5			<0.5		196.0	194.0	2.7	110.00	0.12	<0.005	<0.02	<0.02	<0.5	8.0	7.4	17.0	120.00	5	3.00	<1.0	0.70
X10	10/21/2010	110.00	<0.5	123	122	<0.5			<0.5		257.0	244.0	2.0	140.00	0.06	<0.005	0.09	0.09	<0.5	8.2	7.9	24.0	150.00	0	1.70	10	1.70
X10	11/9/2010	120.00	<0.5	135	134	<0.5			<0.5		274.0	268.0	1.7	140.00	0.04	<0.005	0.16	0.16	<0.5	8.2	7.5	25.0	170.00	0	2.40	<4.0	1.40
X10	12/1/2010	120.00	<0.5	137	138	<0.5			<0.5		275.0	240.0	2.0	150.00	<0.05	<0.005	0.17	0.17	<0.5	8.0	7.9	27.0	140.00	0	1.90	<4.0	1.05
X10 Average		107.42	0	120	119	0.25			0.25		241.5	222.5	2.8	131.00	0.03	0.00	0.11	0.11	0	8.0	7.7	21.0	147.33	4	2.87	2	1.02
X10 Max		150.00	<0.5	167	166	<0.5			<0.5		340.0	310.0	11.7	180.00	0.12	<0.005	0.17	0.17	<0.5	8.2	8.1	30.0	220.00	14	11.20	10	1.70
X10 Min		45.00	<0.5	54	54	<0.5			<0.5		99.0	111.0	1.0	55.00	<0.01	<0.005	<0.02	<0.02	<0.5	7.8	7.1	9.0	62.00	0	0.80	<1.0	0.50
X10 N > DL		12	0	12	12	0	0	0	0	0	12	12	12	12	3	0	3	3	0	12	12	12	12	12	11	4	6
X10 Median		115.00	<0.5	129	128	<0.5			<0.5		265.5	242.0	2.0	140.00	<0.01	<0.005	0.13	0.13	<0.5	8.0	7.7	24.5	145.00	1	2.30	1	0.93

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		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	TCU	µmho/cm	µmho/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	°C	mg/L	mg/L	NTU
X22b	1/11/2010	91.00	<0.5	780	738	4.30			<0.5		1360.0	1146.0	110.00	0.86					<0.5	7.5	6.4	680.0	1200.00	<0.0		<1.0	
X22b	2/22/2010	88.00	<0.5	674	703	1.00			<0.5		1290.0	1210.0	110.00	0.82					<0.5	7.5	7.4	590.0	1100.00	1		<1.0	
X22b	3/10/2010	89.00	<0.5	644	667	1.10			<0.5		1270.0	1171.0	110.00	0.84					<0.5	7.6	7.0	630.0	1000.00	1		<1.0	
X22b	4/13/2010	110.00	<0.5	633	607	0.80			<0.5		1280.0	1230.0	130.00	1.10					<0.5	7.3	6.9	610.0	950.00	1	1.00	<1.0	
X22b	5/3/2010	20.00	<0.5	158	161	<0.5			<0.5		369.0	344.0	25.00	0.33					<0.5	7.4	7.2	150.0	230.00	1		<1.0	
X22b	6/4/2010	80.00	<0.5	699	688	0.90			<0.5		1200.0	1178.0	97.00	0.82					<0.5	7.5	7.1	580.0	1000.00	10		<1.0	
X22b	7/10/2010	77.00	<0.5	648	654	0.70			<0.5		1230.0	1163.0	94.00	0.78					<0.5	7.4	7.3	580.0	920.00	14		<1.0	
X22b	8/3/2010	73.00	<0.5	645	654	1.10			<0.5		1240.0	1215.0	89.00	0.86					<0.5	7.6	6.6	570.0	1000.00	15		<1.0	
X22b	9/1/2010	81.00	<0.5			1.00			<0.5		1270.0	1222.0	99.00	1.40	0.01	0.52	0.51		<0.5	7.6	7.3	690.0	1000.00	13		<1.0	
X22b	10/20/2010	79.00	<0.5	697	709	1.40			<0.5		1310.0	1328.0	97.00	1.20	0.01	0.52	0.51		<0.5	7.7	6.3	710.0	1000.00	3		<1.0	
X22b	11/8/2010	85.00	<0.5	687	677	3.50			<0.5		1340.0	1190.0	100.00	1.10	0.01	0.48	0.47		<0.5	7.7	7.5	710.0	1100.00	1		<4.0	
X22b	12/1/2010	86.00	<0.5	708		1.70			<0.5		1350.0	1340.0	110.00	1.20	0.01	0.48	0.47		<0.5	7.6	6.9	710.0	1000.00	0		<4.0	
X22b Average		79.92	0	634	626	1.48			0.25		1209.1	1144.8	97.58	0.94	0.01	0.50	0.49		0	7.5	7.0	600.8	958.33	5	1.00	1	
X22b Max		110.00	<0.5	780	738	4.30			<0.5		1360.0	1340.0	130.00	1.40	0.01	0.52	0.51		<0.5	7.7	7.5	710.0	1200.00	15	1.00	<4.0	
X22b Min		20.00	<0.5	158	161	<0.5			<0.5		369.0	344.0	25.00	0.33	0.01	0.48	0.47		<0.5	7.3	6.3	150.0	230.00	<0.0	1.00	<1.0	
X22b N > DL		12	0	11	10	11	0	0	0	0	12	12	0	12	12	4	4	4	0	12	12	12	12	11	1	0	0
X22b Median		83.00	<0.5	674	672	1.05			<0.5		1275.0	1200.0	99.50	0.86	0.01	0.50	0.49		<0.5	7.6	7.1	620.0	1000.00	1	1.00	<1.0	
X3	1/11/2010	130.00	<0.5	154	157	<0.5			<0.5		303.0	266.0	1.4	160.00	0.03				<0.5	7.6	6.9	28.0	190.00	<0.0	1.20	<1.0	
X3	2/22/2010	140.00	<0.5	164	163	1.70			<0.5		314.0	292.0	1.4	170.00	<0.01				<0.5	7.9	7.4	28.0	180.00	1	1.20	<1.0	
X3	3/9/2010	140.00	<0.5	162	161	<0.5			<0.5		316.0	260.0	1.3	170.00	<0.01				<0.5	7.9	7.4	30.0	200.00	1	0.90	<1.0	
X3	4/14/2010	150.00	<0.5	152	163	<0.5			<0.5		327.0	290.0	1.7	180.00	0.05				<0.5	8.2	7.0	30.0	170.00	1	1.80	<1.0	
X3	5/3/2010	52.00	<0.5	61	63	<0.5			<0.5		117.0	114.0	11.6	64.00	0.08				<0.5	7.4	7.7	5.4	72.00	1	11.90	8	
X3	6/4/2010	40.00	<0.5	45	45	<0.5			<0.5		84.0	86.0	2.3	48.00	0.77				<0.5	7.7	7.8	6.3	54.00	8	2.60	5	
X3	7/8/2010	54.00	<0.5	56	52	<0.5			<0.5		118.0	111.0	3.1	65.00	<0.05				<0.5	7.9	7.9	11.0	70.00	13	2.90	<1.0	
X3	8/3/2010	87.00	<0.5	111	85	<0.5			<0.5		189.0	183.0	2.0	110.00	<0.05				<0.5	8.2	7.9	14.0	120.00	14	2.50	<1.0	
X3	9/2/2010	83.00	<0.5	89	94	<0.5			<0.5		186.0	205.0	2.7	100.00	0.19	<0.005	0.03	0.03	<0.5	8.0	7.3	13.0	110.00	5	2.30	<1.0	0.70
X3	10/21/2010	98.00	<0.5	112	114	<0.5			<0.5		234.0	225.0	1.9	120.00	0.07	<0.005	0.08	0.08	<0.5	8.1	7.6	20.0	130.00	0	1.70	<1.0	0.80
X3	11/9/2010	110.00	<0.5	131	124	<0.5			<0.5		258.0	256.0	1.8	130.00	0.02	<0.005	0.16	0.16	<0.5	8.1	7.9	24.0	170.00	0	2.00	<4.0	1.00
X3	12/1/2010	110.00	<0.5	127	129	<0.5			<0.5		259.0	230.0	2.0	140.00	<0.05	<0.005	0.17	0.17	<0.5	8.0	7.6	27.0	130.00	1	2.00	<4.0	0.90
X3 Average		99.50	0	114	113	0.37			0.25		225.4	209.8	2.8	121.42	0.11	0.00	0.11	0.11	0	7.9	7.5	19.7	133.00	4	2.75	2	0.80
X3 Max		150.00	<0.5	164	163	1.70			<0.5		327.0	292.0	11.6	180.00	0.77	<0.005	0.17	0.17	<0.5	8.2	7.9	30.0	200.00	14	11.90	8	1.00
X3 Min		40.00	<0.5	45	45	<0.5			<0.5		84.0	86.0	1.3	48.00	<0.01	<0.005	0.03	0.03	<0.5	7.4	6.9	5.4	54.00	<0.0	0.90	<1.0	0.70
X3 N > DL		12	0	12	12	1	0	0	0	0	12	12	12	12	7	0	4	4	0	12	12	12	12	11	12	2	4
X3 Median		104.00	<0.5	120	119	<0.5			<0.5		246.0	227.5	2.0	125.00	<0.05	<0.005	0.12	0.12	<0.5	7.9	7.6	22.0	130.00	1	2.00	<1.0	0.85
X3A	9/2/2010	86.00	<0.5	93	95	<0.5			<0.5		206.0	192.0	2.7	110.00	0.17	<0.005	0.03	0.03	<0.5	8.0	7.5	14.0	110.00	5	2.50	<1.0	
X3A	10/21/2010	110.00	<0.5	117	119	<0.5			<0.5		244.0	268.0	1.9	130.00	0.08	<0.005	0.08	0.08	<0.5	8.1	7.8	20.0	140.00	0	1.90	<1.0	0.70
X3A	11/9/2010	110.00	<0.5	126	131	<0.5			<0.5		264.0	266.0	1.7	140.00	0.03	<0.005	0.15	0.15	<0.5	8.1	8.0	25.0	160.00	0	2.30	<4.0	3.30
X3A	12/1/2010	110.00	<0.5	133	130	<0.5			<0.5		263.0	240.0	2.0	140.00	<0.05	<0.005	0.17	0.17	<0.5	8.0	7.8	26.0	150.00	0	2.40	<4.0	0.94
X3A Average		104.00	0	117	119	0.25			0.25		244.3	241.5	2.1	130.00	0.08	0.00	0.11	0.11	0	8.1	7.8	21.3	140.00	1	2.28	1	1.57
X3A Max		110.00	<0.5	133	131	<0.5			<0.5		264.0	268.0	2.7	140.00	0.17	<0.005	0.17	0.17	<0.5	8.1	8.0	26.0	160.00	5	2.50	<4.0	3.30
X3A Min		86.00	<0.5	93	95	<0.5			<0.5		206.0	192.0	1.7	110.00	0.03	<0.005	0.03	0.03	<0.5	8.0	7.5	14.0	110.00	0	1.90	<1.0	0.70
X3A N > DL		4	0	4	4	0	0	0	0	0	4	4	4	4	3	0	4	4	0	4	4	4	4	4	4	0	3
X3A Median		110.00	<0.5	122	125	<0.5			<0.5		253.5	253.0	2.0	135.00	0.05	<0.005	0.12	0.12	<0.5	8.1	7.8	22.5	145.00	0	2.35	1	0.94

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		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	TCU	µmho/cm	µmho/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L	mg/L	°C	mg/L	mg/L	NTU		
X5P	1/11/2010	180.00	<0.5	1190	1170	1.70			<0.5		1860.0	1559.0	220.00	0.80					<0.5	7.6	6.6	1000.0	1600.00	<0.0		<1.0			
X5P	2/22/2010	250.00	<0.5	1080	1140	3.10			<0.5		1740.0	1569.0	300.00	0.71					<0.5	7.7	7.2	810.0	1600.00	2		2			
X5P	3/2/2010	250.00	<0.5	1090	1100	1.70			<0.5		1750.0	1420.0	310.00	0.70					<0.5	7.7	7.0	820.0	1500.00	0		2			
X5P	4/13/2010	150.00	<0.5	1020	973	1.30			<0.5		1780.0	1488.0	180.00	0.69					<0.5	7.5	7.8	940.0	1500.00	1		2			
X5P	5/3/2010	53.00	<0.5	468	490	<0.5			<0.5		877.0	744.0	64.00	0.24					<0.5	7.8	7.8	420.0	650.00	1		3			
X5P	6/4/2010	150.00	<0.5	1190	1170	1.00			<0.5		1740.0	1682.0	180.00	0.58					<0.5	7.7	7.1	920.0	1600.00	12		<1.0			
X5P	7/10/2010	110.00	<0.5	1090	1010	1.10			<0.5		1780.0	1680.0	130.00	0.69					<0.5	7.8	7.6	990.0	1500.00	16		4			
X5P	8/3/2010	110.00	<0.5	1060	990	1.30			<0.5		1800.0	1665.0	130.00	0.86					<0.5	8.0	7.2	950.0	1600.00	19		2			
X5P	9/2/2010	93.00	<0.5			0.80			<0.5		1760.0	1687.0	110.00	0.92	0.01	0.31	0.31		<0.5	7.8	7.5	1000.0	1500.00	5		2	5.10		
X5P	10/20/2010	190.00	<0.5	1130	1180	2.00			<0.5		2070.0	1955.0	240.00	0.80	<0.005	0.22	0.22		<0.5	8.1	7.4	1200.0	1900.00	1		2			
X5P	11/8/2010	210.00	<0.5	1360	1290	5.00			<0.5		2150.0	1918.0	250.00	0.77	<0.005	0.24	0.24		<0.5	7.9	7.8	1200.0	1900.00	0		<4.0			
X5P	12/1/2010	250.00	<0.5	1340		1.70			<0.5		2130.0	2204.0	300.00	0.90	0.01	0.21	0.21		<0.5	8.0	7.5	1200.0	1900.00	0		<4.0			
X5P Average		166.33	0	1093	1051	1.75			0.25		1786.4	1630.9	201.17	0.72	0.00	0.25	0.25		0	7.8	7.4	954.2	1562.50	5		2	5.10		
X5P Max		250.00	<0.5	1360	1290	5.00			<0.5		2150.0	2204.0	310.00	0.92	0.01	0.31	0.31		<0.5	8.1	7.8	1200.0	1900.00	19		<4.0	5.10		
X5P Min		53.00	<0.5	468	490	<0.5			<0.5		877.0	744.0	64.00	0.24	<0.005	0.21	0.21		<0.5	7.5	6.6	420.0	650.00	<0.0		<1.0	5.10		
X5P N > DL		12	0	11	10	11	0	0	0	0	12	12	0	12	12	2	4	4	0	12	12	12	12	11	0	8	1		
X5P Median		165.00	<0.5	1090	1120	1.50			<0.5		1780.0	1672.5	200.00	0.74	0.00	0.23	0.23		<0.5	7.8	7.4	970.0	1600.00	1		2	5.10		
X7	6/1/2010	38.00	<0.5	4770	4570	12.00			<0.5		8550.0	>3999.0	46.00	1.20					<0.5	5.4	5.6	9000.0	13000.00	3		89			
X7	10/6/2010	7.40	<0.5	4680	4480	9.20			<0.5		8490.0	>3999.0	9.10	4.20	<0.005	<0.02	<0.02		<0.5	5.2	5.4	9300.0	11000.00	4		100			
X7 Average		22.70	0	4725	4525	10.60			0.25		8520.0	>3999.0	27.55	2.70	0.00	0.01	0.01		0	5.3	5.5	9150.0	12000.00	4		95			
X7 N > DL		2	0	2	2	2	0	0	0	0	2	0	0	2	2	0	0	0	0	2	2	2	2	2	0	2	0	2	0

Table C-3: Rose Creek Drainage Water Quality 2010 - Surface Water - Total Metals

Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	mg/L	mg/L	μg/L	μg/L	mg/L	μg/L	μg/L	mg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
ETA Combined	9/2/2010	0.3000	2580.00	38.100	<1000.0	15.500	1.00	<0.1	472.00	71.10	1070.0000	<2.0	105.0000	588000.00	14.00	0.15	738.00	90100.0000	<1.0	66.00	1000.000	188.0000	2040.00	0.50	<0.8	14100.00	<0.2	3670.00	20.00	1.51	5.7700	<4.0	445000.000	<2.0		
ETA Combined	10/20/2010	<0.5	1400.00	26.000	<5000.0	16.000	<1.0	<0.5	386.00	33.90	978.0000	11.00	22.0000	1020000.00	12.00	0.14	641.00	90200.0000	<5.0	55.00	884.0000	52.6000	2340.00	<2.0	<4.0	15400.00	<1.0	3930.00	<50.0	0.40	4.8000	<20.0	462000.000	<10.0		
ETA Combined	11/8/2010	<0.5	1060.00	27.000	<5000.0	13.000	<1.0	<0.5	435.00	8.10	995.0000	<10.0	<5.0	1270000.00	12.00	0.13	678.00	90000.0000	<5.0	67.00	924.0000	21.7000	2380.00	4.00	8.0000	16700.00	<1.0	3730.00	<50.0	0.50	5.0000	<20.0	460000.000	<10.0		
ETA Combined	12/1/2010	0.2000	943.00	23.000	<1000.0	12.800	0.90	<0.1	419.00	7.70	930.0000	<2.0	2.0000	1180000.00	12.00	0.13	649.00	82200.0000	<1.0	66.00	799.0000	14.2000	2210.00	<0.4	<0.8	15300.00	<0.2	3670.00	<10.0	0.28	5.1300	<4.0	411000.000	<2.0		
ETA Combined Average		0.2500	1495.75	28.525	1500.00	14.325	0.73	0.15	428.00	30.20	993.2500	4.50	32.8750	1014500.00	12.50	0.14	676.50	88125.0000	1.50	63.50	901.7500	69.1250	2242.50	1.43	2.7000	15375.00	0.30	3750.00	18.75	0.67	5.1750	6.00	444500.000	3.00		
ETA Combined Max		<0.5	2580.00	38.100	<5000.0	16.000	1.00	<0.5	472.00	71.10	1070.0000	11.00	105.0000	1270000.00	14.00	0.15	738.00	90200.0000	<5.0	67.00	1000.0000	188.0000	2380.00	4.00	8.0000	16700.00	<1.0	3930.00	<50.0	1.51	5.7700	<20.0	462000.000	<10.0		
ETA Combined Min		0.2000	943.00	23.000	<1000.0	12.800	0.90	<0.1	386.00	7.70	930.0000	<2.0	2.0000	588000.00	12.00	0.13	641.00	82200.0000	<1.0	55.00	799.0000	14.2000	2040.00	<0.4	<0.8	14100.00	<0.2	3670.00	<10.0	0.28	4.8000	<4.0	411000.000	<2.0		
ETA Combined N > DL		2	4	4	0	4	2	0	4	4	4	1	3	4	0	4	4	4	4	4	0	4	4	4	4	2	1	4	0	4	1	4	4	0	4	0
ETA Combined Median		0.3250	1230.00	26.500	1500.00	14.250	0.75	0.15	427.00	21.00	986.5000	3.00	12.2500	1100000.00	12.00	0.13	663.50	90050.0000	1.50	66.00	904.0000	37.1500	2275.00	1.13	1.2000	15350.00	0.30	3700.00	22.50	0.45	5.0650	6.00	452500.000	3.00		
FAROCR	5/3/2010	0.0100	332.00	0.740	<50.0	28.700	0.07	0.01	7.40	0.13	0.2890	0.50	6.5200	383.00	0.71	0.00	1.67	10.800	0.26	1.46	3.790	15.2000	<10.0	0.14	0.1200	4880.00	0.11	37.20	9.80	0.02	0.5670	0.60	30.100	0.30		
FAROCR	6/5/2010	<0.005	113.00	0.240	<50.0	13.800	0.03	<0.005	3.86	0.03	0.0400	0.20	1.4600	58.00	0.25	0.00	0.95	1.180	0.14	1.53	0.790	2.9400	<10.0	0.05	0.0900	6370.00	<0.01	21.20	1.40	0.01	0.2630	<0.2	5.700	0.20		
FAROCR	7/8/2010	<0.005	63.30	0.350	<50.0	22.000	0.03	0.03	6.45	0.03	0.0390	<0.1	1.4300	60.00	0.28	0.00	1.44	1.200	0.26	1.81	0.860	2.9500	<10.0	0.07	0.1900	7760.00	<0.01	34.70	1.90	0.01	0.2940	<0.2	7.200	<0.1		
FAROCR	8/3/2010	<0.005	24.70	0.490	<50.0	32.000	<0.01	<0.005	9.76	0.04	0.0240	<0.1	1.2500	21.00	0.42	0.00	2.50	0.710	0.72	2.15	1.050	1.2300	<10.0	0.11	0.4300	6170.00	<0.01	52.70	<0.5	0.01	0.5400	<0.2	5.900	<0.1		
FAROCR	9/1/2010	<0.005	19.70	0.450	<50.0	27.000	<0.01	<0.005	9.06	0.02	0.0340	<0.1	0.9500	17.00	0.37	0.00	2.47	0.320	0.65	2.20	0.970	0.7340	<10.0	0.13	0.3800	6160.00	<0.01	50.50	<0.5	0.01	0.5470	<0.2	4.100	<0.1		
FAROCR	10/19/2010	<0.005	15.80	0.320	<50.0	24.400	<0.01	<0.005	9.30	0.03	0.0240	<0.1	0.7900	15.00	0.35	0.00	2.50	0.340	0.63	2.27	0.850	0.7770	<10.0	0.07	0.3800	6900.00	<0.01	47.80	<0.5	0.01	0.5460	<0.2	6.300	<0.1		
FAROCR Average		0.0038	94.75	0.432	25.00	24.650	0.02	0.01	7.64	0.05	0.0750	0.15	2.0667	92.33	0.40	0.00	1.92	2.425	0.44	1.90	1.385	3.9718	5.00	0.10	0.2650	6373.33	0.02	40.68	2.31	0.01	0.4595	0.18	9.883	0.12		
FAROCR Max		0.0100	332.00	0.740	<50.0	32.000	0.07	0.03	9.76	0.13	0.2890	0.50	6.5200	383.00	0.71	0.00	2.50	10.800	0.72	2.27	3.790	15.2000	<10.0	0.14	0.4300	7760.00	0.11	52.70	9.80	0.02	0.5670	0.60	30.100	0.30		
FAROCR Min		<0.005	15.80	0.240	<50.0	13.800	<0.01	<0.005	3.86	0.02	0.0240	<0.1	0.7900	15.00	0.25	0.00	0.95	0.320	0.14	1.46	0.790	0.7340	<10.0	0.05	0.0900	4880.00	<0.01	21.20	<0.5	0.01	0.2630	<0.2	4.100	<0.1		
FAROCR N > DL		1	6	6	0	6	3	2	6	6	6	2	6	6	0	6	6	6	6	6	6	6	6	6	0	6	6	6	1	6	3	6	6	1	6	2
FAROCR Median		<0.005	44.00	0.400	<50.0	25.700	0.02	0.00	8.23	0.03	0.0365	0.00	1.3400	39.50	0.36	0.00	2.07	0.945	0.45	1.98	0.915	2.0850	<10.0	0.09	0.2850	6270.00	<0.01	42.50	0.95	0.01	0.5430	<0.2	6.100	0.00		
FCO	6/16/2010	<0.005	176.00	0.110	<50.0	35.200	0.11	0.01	12.10	1.87	1.9900	0.20	33.7000	115.00	0.51	0.01	3.96	34.400	<0.05	2.61	7.260	1.4500	14.00	0.06	<0.04	7810.00	<0.01	63.10	<0.5	0.01	0.1700	<0.2	1150.000	<0.1		
FCO	10/7/2010	<0.005	635.00	0.080	<50.0	36.100	0.15	<0.005	12.40	1.79	2.4600	0.30	53.0000	254.00	0.46	0.00	3.91	41.500	0.21	2.98	7.120	0.4820	13.00	0.04	<0.04	7620.00	<0.01	64.80	<0.5	0.00	0.2830	<0.2	1210.000	<0.1		
FCO Average		0.0025	405.50	0.095	25.00	35.650	0.13	0.01	12.25	1.83	2.2250	0.25	43.3500	184.50	0.49	0.00	3.94	37.950	0.12	2.80	7.190	0.9660	13.50	0.05	0.0200	7715.00	0.01	63.95	0.25	0.01	0.2265	0.10	1180.000	0.05		
FCO N > DL		0	2	2	0	2	2	1	2	2	2	2	2	2	0	2	2	2	2	1	2	2	2	2	0	2	2	0	2	0	2	2	2	0	2	0
FCS-4	9/2/2010	<0.1	2120.00	16.400	<1000.0	13.900	0.30	<0.1	476.00	13.80	434.0000	<2.0	53.0000	283000.00	12.00	0.11	738.00	66800.0000	<1.0	68.00	441.000	327.0000	1690.00	0.80	<0.8	10600.00	<0.2	3510.00	37.00	1.02	6.9400	<4.0	157000.000	<2.0		
FCS-4	10/20/2010	<0.5	1420.00	21.000	<5000.0	16.000	<1.0	<0.5	458.00	26.70	963.0000	<10.0	28.0000	973000.00	14.00	0.15	800.00	95300.0000	<5.0	70.00	874.0000	83.7000	2480.00	<2.0	<4.0	14400.00	<1.0	4140.00	<50.0	0.50	7.2000	<20.0	435000.000	<10.0		
FCS-4	11/10/2010	<0.5	1090.00	17.000	<5000.0	19.000	<1.0	<0.5	465.00	10.10	828.0000	<10.0	10.0000	999000.00	13.00	0.14	787.00	87000.0000	10.00	75.00	780.0000	72.3000	2390.00	<2.0	<4.0	15800.00	<1.0	3900.00	<50.0	0.40	8.0000	<20.0	388000.000	<10.0		
FCS-4	12/2/2010	0.2000	749.00	15.600	<1000.0	12.000	0.60	0.20	438.00	9.20	798.0000	<2.0	7.0000	926000.00	12.00	0.12	702.00	80400.0000	<1.0	69.00	731.0000	39.5000	2190.00	<0.4	<0.8	13600.00	<0.2	3650.00	<10.0	0.32	7.4500	<4.0	350000.000	<2.0		
FCS-4 Average		0.1875	1344.75	17.500	1500.00	15.225	0.48	0.19	459.25	14.95	755.7500	3.00	24.5000	795250.00	12.75	0.13	756.75	82375.0000	3.38	70.50	706.500	130.6250	2187.50	0.75	1.2000	13600.00	0.30	3800.00	23.00	0.56	7.3975	6.00	332500.000	3.00		
FCS-4 Max		<0.5	2120.00	21.000	<5000.0	19.000	<1.0	<0.5	476.00	26.70	963.0000	<10.0	53.0000	999000.00	14.00	0.15	800.00	95300.0000	10.00	75.00	874.0000	327.0000	2480.00	<2.0	<4.0	15800.00	<1.0	4140.00	<50.0	1.02	8.0000	<20.0	435000.000	<10.0		
FCS-4 Min		<0.1	749.00	15.600	<1000.0	12.000	0.30	<0.1	438.00	9.20	434.0000	<2.0	7.0000	283000.00	12.00	0.11	702.00	66800.0000	<1.0	68.00	441.0000	39.5000	1690.00	<0.4	<0.8	10600.00	<0.2	3510.00	<10.0	0.32	6.9400	<4.0	157000.000	<2.0		
FCS-4 N > DL		1	4	4	0	4	2	1	4	4	4	0	4	4	0	4	4	4	4	1	4	4	4	4	0	4	4	4	1	4	4	4	0	4	0	
FCS-4 Median		1.5000	1255.00	16.700	1500.00	14.950	0.00	0.23	461.50	11.95	813.0000	3.00	19.0000	949500.00	12.50	0.13	762.50	83700.0000	6.25	69.50																

Table C-3: Rose Creek Drainage Water Quality 2010 - Surface Water - Total Metals



Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NF2	2/23/2010	<0.005	3.30	0.430	<50.0	77.400	<0.01	<0.005	46.90	0.02	0.0940	<0.1	0.4700	64.00	1.10	0.01	9.95	15.200	0.88	3.52	0.390	0.1470	7.00	0.07	0.4700	6180.00	<0.01	198.00	<0.5	<0.002	2.9000	<0.2	12.200	<0.1		
NF2	3/10/2010	<0.005	3.40	0.440	<50.0	70.000	<0.01	<0.005	43.80	0.01	0.1180	<0.1	0.2600	80.00	1.05	0.01	9.08	16.900	0.95	3.27	0.380	0.1750	<10.0	0.06	0.5300	6740.00	<0.01	185.00	<0.5	<0.002	2.9300	<0.2	12.800	<0.1		
NF2	4/14/2010	<0.005	5.00	0.390	<50.0	73.300	<0.01	<0.005	42.80	0.02	0.1420	<0.1	0.6700	69.00	1.04	0.01	8.43	19.400	0.94	3.12	0.500	0.3210	<10.0	0.07	0.4500	5860.00	<0.01	196.00	<0.5	<0.002	2.9900	<0.2	16.600	<0.1		
NF2	5/3/2010	<0.005	117.00	0.830	<50.0	38.000	0.02	<0.005	17.30	0.09	0.1990	<0.1	4.3900	378.00	1.37	0.00	3.35	32.000	0.38	3.07	1.470	3.8000	<10.0	0.09	0.1700	3810.00	0.03	75.80	1.80	0.01	0.6250	<0.2	41.200	0.20		
NF2	6/4/2010	<0.005	125.00	0.520	<50.0	28.800	<0.01	0.01	13.70	0.02	0.0880	0.30	1.1100	181.00	0.54	0.00	3.26	17.500	0.26	1.54	0.950	1.6900	<10.0	0.07	0.1300	4650.00	<0.01	55.80	2.20	0.00	0.4970	<0.2	6.500	<0.1		
NF2	7/8/2010	<0.005	38.80	0.570	<50.0	40.400	<0.01	0.01	18.80	0.02	0.0730	<0.1	0.7900	152.00	0.48	0.00	4.40	17.600	0.37	1.71	0.460	1.2900	<10.0	0.09	0.1700	4720.00	<0.01	86.00	1.00	0.00	0.7290	<0.2	5.800	<0.1		
NF2	8/3/2010	<0.005	36.10	0.790	<50.0	55.000	<0.01	<0.005	26.10	0.03	0.1580	<0.1	0.6800	275.00	0.65	0.00	5.80	43.700	0.57	2.10	0.570	4.7900	<10.0	0.07	0.2500	4180.00	<0.01	116.00	1.60	0.01	1.1900	<0.2	9.700	<0.1		
NF2	9/1/2010	<0.005	10.40	0.660	<50.0	48.200	<0.01	<0.005	28.00	0.01	0.0760	<0.1	0.4600	181.00	0.62	0.00	5.86	26.000	0.53	2.15	0.400	0.2920	<10.0	0.06	0.2200	4580.00	<0.01	121.00	<0.5	<0.002	1.1900	<0.2	7.700	<0.1		
NF2	10/18/2010	<0.005	12.50	0.550	<50.0	53.000	<0.01	<0.005	32.60	0.01	0.1160	<0.1	0.4100	209.00	0.75	0.00	7.10	43.400	0.53	2.50	0.440	0.7390	<10.0	0.06	0.3200	5660.00	0.03	135.00	<0.5	0.00	1.5200	<0.2	9.900	<0.1		
NF2	11/9/2010	<0.005	12.40	0.400	<50.0	64.900	<0.01	<0.005	36.30	0.04	0.2520	<0.1	0.4100	228.00	0.82	0.01	7.64	76.200	0.62	2.57	0.900	1.1800	<10.0	0.14	0.4600	5570.00	0.02	157.00	<0.5	0.00	1.9400	<0.2	51.000	<0.1		
NF2	12/1/2010	<0.005	7.90	0.390	<50.0	65.100	<0.01	<0.005	38.10	0.02	0.1390	<0.1	0.3700	143.00	0.91	0.01	8.31	37.400	0.59	2.83	0.470	0.3790	<10.0	0.06	0.3400	5780.00	<0.01	163.00	<0.5	<0.002	2.0100	<0.2	13.500	<0.1		
NF2 Average		0.0025	31.33	0.533	25.00	57.008	0.01	0.00	32.29	0.02	0.1273	0.07	0.8625	170.17	0.86	0.01	6.87	30.117	0.62	2.63	0.612	1.2558	5.42	0.08	0.3283	5335.00	0.01	138.80	0.72	0.00	1.7534	0.10	16.367	0.06		
NF2 Max		<0.005	125.00	0.830	<50.0	77.400	0.02	0.01	46.90	0.09	0.2520	0.30	4.3900	378.00	1.37	0.01	9.95	76.200	0.95	3.52	1.470	4.7900	<10.0	0.14	0.5300	6740.00	0.03	198.00	2.20	0.01	2.9900	<0.2	51.000	0.20		
NF2 Min		<0.005	3.30	0.390	<50.0	28.800	<0.01	<0.005	13.70	0.01	0.0730	<0.1	0.2600	64.00	0.48	0.00	3.26	15.200	0.26	1.54	0.380	0.1470	7.00	0.06	0.1300	3810.00	<0.01	55.80	<0.5	<0.002	0.4970	<0.2	5.800	<0.1		
NF2 N > DL		0	12	12	0	12	1	2	12	12	12	1	12	12	12	12	12	12	12	12	12	12	2	12	12	12	12	3	12	4	6	12	0	12	1	
NF2 Median		<0.005	11.40	0.480	<50.0	59.950	<0.01	<0.005	34.45	0.02	0.1170	<0.1	0.4650	166.50	0.87	0.01	7.37	22.700	0.58	2.70	0.465	0.5590	<10.0	0.07	0.3300	5615.00	<0.01	146.00	<0.5	0.00	1.7300	<0.2	11.050	<0.1		
NFRC SC-1	1/12/2010	<0.005	4.90	0.410	<50.0	69.400	<0.01	<0.005	43.70	0.01	0.0920	<0.1	0.3900	97.00	1.01	0.01	9.30	25.700	0.77	3.25	0.540	0.3080	7.00	0.07	0.4400	6320.00	<0.01	176.00	<0.5	<0.002	2.5000	<0.2	10.200	<0.1		
NFRC SC-1	2/23/2010	<0.005	3.80	0.450	<50.0	77.200	<0.01	<0.005	46.20	0.02	0.1050	<0.1	0.3400	90.00	1.11	0.01	9.93	30.300	0.81	3.53	0.450	0.2050	8.00	0.06	0.4500	6220.00	<0.01	195.00	<0.5	<0.002	2.9200	<0.2	12.700	<0.1		
NFRC SC-1	3/10/2010	<0.005	6.60	0.490	<50.0	71.600	<0.01	<0.005	45.80	0.01	0.1490	<0.1	0.3000	120.00	1.09	0.01	9.48	42.800	0.91	3.41	0.480	0.5090	<10.0	0.06	0.4500	5750.00	<0.01	194.00	<0.5	<0.002	3.0700	<0.2	14.000	<0.1		
NFRC SC-1	4/14/2010	<0.005	2.80	0.420	<50.0	71.800	<0.01	<0.005	43.10	0.02	0.1610	<0.1	0.2300	108.00	1.04	0.01	8.64	40.800	0.91	3.12	0.520	0.1970	<10.0	0.05	0.4500	5800.00	<0.01	197.00	<0.5	<0.002	2.9800	<0.2	16.700	<0.1		
NFRC SC-1	5/3/2010	<0.005	92.70	0.850	<50.0	36.100	0.02	0.01	16.50	0.05	0.1490	<0.1	2.2800	329.00	1.27	0.00	3.27	25.600	0.38	1.39	1.350	2.3300	<10.0	0.07	0.1700	3570.00	<0.01	74.00	1.20	0.01	0.6300	<0.2	14.700	0.20		
NFRC SC-1	6/4/2010	<0.005	77.30	0.540	<50.0	28.500	0.02	<0.005	13.80	0.02	0.0890	0.20	0.9800	178.00	0.54	0.00	3.28	19.100	0.26	1.53	0.530	1.8800	<10.0	0.07	0.1200	4440.00	<0.01	58.20	1.50	0.00	0.5300	<0.2	6.400	<0.1		
NFRC SC-1	7/8/2010	<0.005	33.20	0.580	<50.0	40.500	<0.01	0.01	18.80	0.02	0.0580	<0.1	0.8700	147.00	0.51	0.00	4.52	18.400	0.39	1.79	0.480	1.4100	<10.0	0.09	0.1600	4650.00	<0.01	87.00	1.30	0.00	0.7730	<0.2	7.800	<0.1		
NFRC SC-1	8/3/2010	<0.005	13.80	0.720	<50.0	54.900	<0.01	<0.005	28.30	0.02	0.0950	<0.1	0.6900	196.00	0.70	0.00	6.34	34.300	0.59	2.32	0.520	1.0200	<10.0	0.08	0.2200	4280.00	<0.01	124.00	<0.5	0.00	1.2600	<0.2	8.300	<0.1		
NFRC SC-1	10/18/2010	<0.005	12.40	0.610	<50.0	51.300	<0.01	<0.005	30.80	0.02	0.1070	<0.1	0.6500	199.00	0.74	0.00	6.82	39.200	0.60	2.44	0.520	0.9830	<10.0	0.06	0.3000	5340.00	0.02	133.00	<0.5	<0.002	1.5300	<0.2	9.800	<0.1		
NFRC SC-1 Average		0.0025	27.50	0.563	25.00	55.700	0.01	0.00	31.89	0.02	0.1117	0.07	0.7478	162.67	0.89	0.01	6.84	30.689	0.62	2.53	0.599	0.9824	5.56	0.07	0.3067	5152.22	0.01	137.58	0.61	0.00	1.7992	0.10	11.178	0.07		
NFRC SC-1 Max		<0.005	92.70	0.850	<50.0	77.200	0.02	0.01	46.20	0.05	0.1610	0.20	2.2800	329.00	1.27	0.01	9.93	42.800	0.91	3.53	1.350	2.3300	<10.0	0.09	0.4500	6320.00	0.02	197.00	1.50	0.01	3.0700	<0.2	16.700	0.20		
NFRC SC-1 Min		<0.005	2.80	0.410	<50.0	28.500	<0.01	<0.005	13.80	0.01	0.0580	<0.1	0.2300	90.00	0.51	0.00	3.27	18.400	0.26	1.39	0.450	0.1970	7.00	0.05	0.1200	3570.00	<0.01	58.20	<0.5	<0.002	0.5300	<0.2	6.400	<0.1		
NFRC SC-1 N > DL		0	9	9	0	9	2	2	9	9	9	1	9	9	9	9	9	9	9	9	9	9	2	9	9	9	9	1	9	3	4	9	0	9	1	
NFRC SC-1 Median		<0.005	12.40	0.540	<50.0	54.900	<0.01	<0.005	30.80	0.02	0.1050	<0.1	0.6500	147.00	1.01	0.00	6.82	30.300	0.60	2.44	0.520	0.9830	<10.0	0.07	0.3000	5340.00	<0.01	133.00	<0.5	<0.002	1.5300	<0.2	10.200	<0.1		
NFRC SC-2	1/12/2010	<0.005	4.10	0.380	<50.0	68.600	<0.01	<0.005	41.70	0.03	0.1080	<0.1	0.3400	139.00	0.99	0.01	8.88	30.700	0.78	3.12	0.490	0.3190	8.00	0.07	0.5000	6910.00	<0.01	171.00	<0.5	0.00	2.4900	<0.2	10.900	<0.1		
NFRC SC-2	2/23/2010	<0.005	3.90	0.390	<50.0	75.800	<0.01	<0.005	45.60	0.02	0.1190	<0.1	0.3100	118.00	1.09	0.01	9.94	32.900	0.85	3.49	0.400	0.2030	8.00	0.06	0.4300	6070.00	<0.01	194.00	<0.5	<0.002	2.8500	<0.2	12.900	<0.1		
NFRC SC-2	3/10/2010	<0.005	4.90	0.460	<50.0	70.900	<0.01	<0.005	44.00	0.01	0.1320	<0.1	0.2700	134.00	1.06	0.01	9.21	39																		

Table C-3: Rose Creek Drainage Water Quality
2010 - Surface Water - Total Metals

Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
NFRC SC-4	3/10/2010	<0.005	6.80	0.510	<50.0	62.800	<0.01	<0.005	47.10	0.02	0.2250	0.20	0.3400	197.00		1.13	0.01	9.99	70.100	0.81	3.56	0.690	0.5840	<10.0	0.05	0.4500	5960.00	<0.01	175.00	<0.5	<0.002	2.6600	<0.2	26.400	<0.1	
NFRC SC-4	4/14/2010	<0.005	3.20	0.380	<50.0	72.100	<0.01	<0.005	43.80	0.03	0.2130	<0.1	0.2400	135.00		1.08	0.01	8.81	64.100	0.92	3.17	0.620	0.2620	<10.0	0.06	0.4400	5770.00	<0.01	197.00	<0.5	<0.002	2.9900	<0.2	26.400	<0.1	
NFRC SC-4	5/3/2010	<0.005	90.60	0.840	<50.0	36.600	0.03	<0.005	16.80	0.04	0.1740	<0.1	2.3000	359.00		1.30	0.00	3.40	36.000	0.37	1.40	1.610	2.2300	<10.0	0.07	0.1700	3560.00	<0.01	75.30	1.90	0.01	0.6570	<0.2	15.900	0.20	
NFRC SC-4	6/4/2010	<0.005	72.30	0.510	<50.0	28.600	0.02	0.01	13.90	0.02	0.0880	0.20	0.9900	176.00		0.53	0.00	3.30	18.200	0.27	1.53	0.670	1.4900	<10.0	0.07	0.1300	4510.00	<0.01	57.60	1.70	0.00	0.5010	<0.2	10.600	<0.1	
NFRC SC-4	7/8/2010	<0.005	34.30	0.570	<50.0	39.300	<0.01	<0.005	19.20	0.02	0.0770	<0.1	0.7800	160.00		0.49	0.00	4.41	20.800	0.36	1.72	0.530	1.2100	<10.0	0.08	0.1700	4770.00	<0.01	84.30	1.20	0.00	0.7150	<0.2	7.000	<0.1	
NFRC SC-4	8/3/2010	<0.005	12.90	0.710	<50.0	53.100	<0.01	0.02	27.30	0.02	0.0980	<0.1	0.6400	194.00		0.67	0.00	6.02	31.800	0.56	2.26	0.630	1.0700	<10.0	0.08	0.2300	4460.00	<0.01	116.00	<0.5	0.00	1.1800	<0.2	11.800	<0.1	
NFRC SC-4	10/18/2010	<0.005	11.60	0.520	<50.0	49.500	<0.01	<0.005	30.80	0.02	0.1150	<0.1	0.3900	216.00		0.69	0.00	6.55	43.900	0.59	2.31	0.650	0.7230	<10.0	0.06	0.2900	5390.00	<0.01	129.00	<0.5	0.00	1.5000	<0.2	11.600	<0.1	
NFRC SC-4 Average		0.0025	26.79	0.532	25.00	54.167	0.01	0.01	32.23	0.02	0.1462	0.08	0.7156	190.67		0.90	0.01	6.93	44.311	0.61	2.52	0.740	0.9020	5.89	0.07	0.3100	5290.00	0.01	134.47	0.70	0.00	1.7337	0.10	17.289	0.07	
NFRC SC-4 Max		<0.005	90.60	0.840	<50.0	77.500	0.03	0.02	47.70	0.04	0.2250	0.20	2.3000	359.00		1.30	0.01	10.50	70.100	0.92	3.58	1.610	2.2300	<10.0	0.08	0.4700	7050.00	0.02	198.00	1.90	0.01	2.9900	<0.2	26.400	0.20	
NFRC SC-4 Min		<0.005	3.20	0.370	<50.0	28.600	<0.01	<0.005	13.90	0.02	0.0770	<0.1	0.2400	123.00		0.49	0.00	3.30	18.200	0.27	1.40	0.530	0.1700	8.00	0.05	0.1300	3560.00	<0.01	57.60	<0.5	<0.002	0.5010	<0.2	7.000	<0.1	
NFRC SC-4 N > DL		0	9	9	0	9	2	2	9	9	9	2	9	9	0	9	9	9	9	9	9	9	9	9	2	9	9	9	1	9	3	5	9	0	9	1
NFRC SC-4 Median		<0.005	11.60	0.510	<50.0	53.100	<0.01	<0.005	30.80	0.02	0.1550	<0.1	0.4400	176.00		1.03	0.00	6.55	43.900	0.59	2.31	0.650	0.7230	<10.0	0.07	0.2900	5390.00	<0.01	129.00	<0.5	0.00	1.5000	<0.2	15.900	<0.1	
NWID	2/22/2010	<0.005	2.50	0.190	<50.0	61.600	<0.01	<0.005	70.20	0.06	0.0110	<0.1	0.6900	3.00		1.90	0.01	9.12	0.460	0.25	3.43	0.640	0.1500	19.00	0.05	0.3400	6850.00	<0.01	258.00	<0.5	0.00	1.5700	<0.2	16.700	<0.1	
NWID	3/10/2010	<0.005	3.80	0.200	<50.0	57.700	<0.01	<0.005	70.50	0.07	0.0100	<0.1	0.6900	6.00		1.91	0.01	8.91	0.270	0.33	3.42	0.720	0.1700	20.00	0.05	0.3900	7260.00	<0.01	262.00	<0.5	0.00	1.6200	<0.2	19.000	<0.1	
NWID	4/15/2010	<0.005	3.20	0.200	<50.0	57.800	<0.01	<0.005	66.20	0.06	0.0150	<0.1	0.6500	4.00		1.84	0.01	8.15	0.270	0.30	3.16	0.710	0.3650	16.00	0.06	0.3600	6370.00	<0.01	261.00	<0.5	0.00	1.5700	<0.2	19.200	<0.1	
NWID	5/3/2010	0.0080	58.60	0.320	<50.0	31.800	<0.01	<0.005	26.20	0.06	0.0700	<0.1	2.6500	68.00		1.34	0.00	3.59	6.190	0.21	1.64	1.250	1.3600	<10.0	0.07	0.1400	5020.00	<0.01	96.90	0.90	0.00	0.4030	<0.2	28.300	0.20	
NWID	6/4/2010	<0.005	22.30	0.200	<50.0	36.100	<0.01	<0.005	35.30	0.06	0.0270	0.20	1.7000	15.00		1.24	0.00	5.17	0.530	0.30	2.59	0.890	0.3820	<10.0	0.06	0.1400	7570.00	<0.01	130.00	<0.5	0.00	0.5690	<0.2	17.000	<0.1	
NWID	7/10/2010	<0.005	6.70	0.200	<50.0	47.100	<0.01	<0.005	52.80	0.06	0.0160	<0.1	1.0800	9.00		1.47	0.01	6.44	1.100	0.30	2.75	0.530	0.2380	12.00	0.06	0.2100	7530.00	<0.01	187.00	<0.5	0.00	0.9290	<0.2	16.000	<0.1	
NWID	8/3/2010	<0.005	5.30	0.220	<50.0	53.300	<0.01	<0.005	52.70	0.06	0.0160	<0.1	0.8600	6.00		1.68	0.01	7.19	0.620	0.31	2.97	0.510	0.3000	14.00	0.05	0.2700	6280.00	<0.01	209.00	<0.5	0.00	1.1000	<0.2	13.200	<0.1	
NWID Average		0.0033	14.63	0.219	25.00	49.343	0.01	0.00	53.41	0.06	0.0236	0.07	1.1886	15.86		1.63	0.01	6.94	1.349	0.29	2.85	0.750	0.5007	13.00	0.06	0.2643	6697.14	0.01	200.56	0.34	0.00	1.1087	0.10	18.486	0.07	
NWID Max		0.0080	58.60	0.320	<50.0	61.600	<0.01	<0.005	70.50	0.07	0.0700	0.20	2.6500	68.00		1.91	0.01	9.12	6.190	0.33	3.43	1.250	1.3600	20.00	0.07	0.3900	7570.00	<0.01	262.00	0.90	0.00	1.6200	<0.2	28.300	0.20	
NWID Min		<0.005	2.50	0.190	<50.0	31.800	<0.01	<0.005	26.20	0.06	0.0100	<0.1	0.6500	3.00		1.24	0.00	3.59	0.270	0.21	1.64	0.510	0.1500	<10.0	0.05	0.1400	5020.00	<0.01	96.90	<0.5	0.00	0.4030	<0.2	13.200	<0.1	
NWID N > DL		1	7	7	0	7	0	0	7	7	7	1	7	7	0	7	7	7	7	7	7	7	7	7	5	7	7	7	0	7	1	7	7	0	7	1
NWID Median		<0.005	5.30	0.200	<50.0	53.300	<0.01	<0.005	52.80	0.06	0.0160	<0.1	0.8600	6.00		1.68	0.01	7.19	0.530	0.30	2.97	0.710	0.3650	14.00	0.06	0.2700	6850.00	<0.01	209.00	<0.5	0.00	1.1000	<0.2	17.000	<0.1	
R10	1/11/2010	<0.005	5.10	0.410	<50.0	69.700	<0.01	<0.005	43.10	0.01	0.0440	<0.1	0.6400	100.00		1.00	0.01	9.24	19.500	0.82	3.15	0.330	0.2270	9.00	0.06	0.4500	6460.00	<0.01	174.00	<0.5	<0.002	2.5100	<0.2	6.900	<0.1	
R10	2/23/2010	<0.005	3.60	0.470	<50.0	76.400	<0.01	<0.005	44.60	0.01	0.0420	<0.1	0.2400	78.00		1.05	0.01	9.55	14.700	0.87	3.39	0.270	0.0710	8.00	0.06	0.4600	6230.00	<0.01	187.00	<0.5	<0.002	2.8500	<0.2	7.400	<0.1	
R10	3/10/2010	<0.005	5.20	0.480	<50.0	71.600	<0.01	<0.005	43.90	0.01	0.0390	<0.1	0.3200	75.00		1.05	0.01	8.96	13.200	0.97	3.30	0.300	0.8370	<10.0	0.06	0.4700	6140.00	<0.01	190.00	<0.5	<0.002	3.0200	<0.2	12.200	<0.1	
R10	4/11/2010	<0.005	5.80	0.440	<50.0	68.700	<0.01	<0.005	39.30	0.03	0.3180	0.20	0.3900	99.00		1.00	0.01	7.85	36.900	0.94	2.99	0.530	0.4700	<10.0	0.06	0.4100	5430.00	0.02	187.00	<0.5	<0.002	2.9700	<0.2	19.800	<0.1	
R10	5/3/2010	<0.005	95.10	0.900	<50.0	39.400	0.02	0.01	17.90	0.04	0.1420	<0.1	2.5000	359.00		1.36	0.00	3.35	32.400	0.40	1.43	1.490	1.4700	<10.0	0.08	0.1900	3910.00	<0.01	77.30	1.60	0.00	0.6990	<0.2	11.400	0.20	
R10	6/5/2010	<0.005	57.10	0.490	<50.0	30.300	<0.01	0.01	15.00	0.02	0.0580	<0.1	1.0000	145.00		0.52	0.00	3.55	11.900	0.31	1.59	0.560	1.0100	<10.0	0.08	0.1400	4740.00	0.02	61.00	0.90	<0.002	0.5920	<0.2	6.600	<0.1	
R10	7/8/2010	<0.005	36.10	0.600	<50.0	38.000	<0.01	0.10	18.10	0.01	0.0480	<0.1	0.7100	147.00		0.45	0.00	4.19	14.600	0.36	1.65	0.380	0.3020	<10.0	0.08	0.1800	4630.00	<0.01	80.60	1.50	<0.002	0.7260	<0.2	3.500	<0.1	
R10	8/3/2010	<0.005	10.40	0.670	<50.0	51.600	<0.01	0.01	26.60	0.01	0.0420	<0.1	0.5500	152.00		0.61	0.00	5.83	13.900	0.55	2.09	0.980	0.3880	<10.0	0.07	0.2300	4240.00	<0.01	112.00	<0.5	<0.002	1.1500	<0.2	6.800	<0.1	
R10	9/1/2010	<0.005	11.20	0.660	<50.0	47.500	<0.01	<0.005	26.30	0.01	0.0430	<0.1	0.4300	182.00		0.58	0.00																			



Table C-3: Rose Creek Drainage Water Quality
2010 - Surface Water - Total Metals



Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr		
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
R8	4/11/2010	<0.005	4.00	0.460	<50.0	73.500	<0.01	<0.005	43.50	<0.005	0.0210	<0.1	0.2000	66.00	1.05	0.01	8.25	8.300	1.03	3.36	0.260	0.0260	<10.0	0.06	0.4300	5590.00	0.03	182.00	<0.5	<0.002	2.8300	<0.2	0.400	<0.1			
R8	5/3/2010	<0.005	105.00	0.970	<50.0	39.700	0.03	<0.005	16.10	0.04	0.1070	<0.1	2.1600	398.00	1.27	0.00	3.00	36.300	0.45	1.42	1.700	1.6800	<10.0	0.08	0.1800	3740.00	<0.01	69.40	1.90	0.00	0.7060	0.30	8.600	0.20			
R8	6/5/2010	<0.005	75.70	0.540	<50.0	30.100	<0.01	0.01	14.20	0.02	0.0610	0.20	0.9000	167.00	0.48	0.00	3.11	13.700	0.31	1.58	0.430	0.8320	<10.0	0.08	0.1400	4810.00	<0.01	56.70	1.20	<0.002	0.5700	<0.2	2.600	<0.1			
R8	7/8/2010	<0.005	33.30	0.610	<50.0	37.600	<0.01	<0.005	16.60	0.01	0.0400	<0.1	0.7100	137.00	0.40	0.00	3.72	15.300	0.37	1.60	0.370	0.4070	<10.0	0.08	0.1500	4600.00	<0.01	72.50	1.00	<0.002	0.6530	<0.2	1.500	<0.1			
R8	8/3/2010	<0.005	11.90	0.780	<50.0	51.100	<0.01	<0.005	25.00	0.01	0.0350	<0.1	0.4900	168.00	0.54	0.00	5.29	15.600	0.56	2.00	0.340	0.2720	<10.0	0.07	0.2100	4360.00	<0.01	103.00	<0.5	<0.002	1.0300	<0.2	2.600	<0.1			
R8	9/1/2010	<0.005	11.80	0.670	<50.0	47.400	<0.01	<0.005	25.30	0.01	0.0290	<0.1	0.4400	188.00	0.52	0.00	5.10	16.500	0.55	2.04	0.270	0.5250	<10.0	0.06	0.2200	4660.00	<0.01	106.00	<0.5	<0.002	1.0700	<0.2	2.900	<0.1			
R8	10/19/2010	<0.005	8.10	0.610	<50.0	52.600	<0.01	<0.005	29.30	0.01	0.0290	<0.1	0.3800	176.00	0.66	0.00	6.06	19.500	0.57	2.40	0.250	0.2730	<10.0	0.06	0.2800	5360.00	<0.01	121.00	<0.5	<0.002	1.3900	<0.2	1.500	<0.1			
R8	11/10/2010	<0.005	22.60	0.520	<50.0	67.300	<0.01	<0.005	36.10	0.01	0.0440	<0.1	0.5200	147.00	0.79	0.01	7.16	17.100	0.83	2.71	0.320	0.2510	<10.0	0.05	0.3000	6510.00	<0.01	145.00	0.80	<0.002	1.7500	<0.2	1.600	<0.1			
R8	12/1/2010	<0.005	4.90	0.470	<50.0	63.300	<0.01	<0.005	35.10	0.01	0.0270	<0.1	0.3400	128.00	0.80	0.01	7.00	15.400	0.62	2.65	0.220	0.0660	<10.0	0.05	0.3300	5800.00	<0.01	146.00	<0.5	<0.002	1.7600	<0.2	3.500	<0.1			
R8 Average		0.0025	23.82	0.586	25.00	56.450	0.01	0.00	30.25	0.01	0.0368	0.06	0.5683	151.33	0.78	0.01	6.05	15.968	0.66	2.43	0.393	0.3718	4.83	0.06	0.2950	5295.83	0.01	125.55	0.58	0.00	1.6116	0.12	2.233	0.06			
R8 Max		<0.005	105.00	0.970	<50.0	75.500	0.03	0.01	43.50	0.04	0.1070	0.20	2.1600	398.00	1.27	0.01	8.34	36.300	1.03	3.36	1.700	1.6800	<10.0	0.08	0.4500	6510.00	0.03	182.00	1.90	0.00	2.8300	0.30	8.600	0.20			
R8 Min		<0.005	2.60	0.450	<50.0	30.100	<0.01	<0.005	14.20	<0.005	0.0130	<0.1	0.2000	66.00	0.40	0.00	3.00	8.300	0.31	1.42	0.180	0.0170	4.00	0.05	0.1400	3740.00	<0.01	56.70	<0.5	<0.002	0.5700	<0.2	0.400	<0.1			
R8 N > DL		0	12	12	0	12	1	1	12	8	12	1	12	12	0	12	12	12	12	12	12	12	12	2	12	12	12	12	1	12	4	1	12	1	12	1	
R8 Median		<0.005	9.95	0.530	<50.0	57.950	<0.01	<0.005	32.20	0.01	0.0290	<0.1	0.4100	142.00	0.80	0.01	6.53	15.350	0.60	2.53	0.265	0.2615	<10.0	0.06	0.2900	5475.00	<0.01	133.00	<0.5	<0.002	1.5700	<0.2	1.550	<0.1			
R9	1/11/2010	<0.005	3.80	0.430	<50.0	69.200	<0.01	<0.005	43.50	0.02	0.0260	<0.1	0.3200	88.00	1.01	0.01	9.25	17.000	0.81	3.12	0.220	0.2500	7.00	0.06	0.4200	6320.00	<0.01	172.00	<0.5	<0.002	2.4900	<0.2	1.300	<0.1			
R9	2/23/2010	<0.005	3.80	0.480	<50.0	74.400	<0.01	<0.005	44.50	<0.005	0.0270	<0.1	0.2600	63.00	1.06	0.01	9.57	12.800	0.87	3.39	0.220	0.1190	8.00	0.06	0.3800	5030.00	<0.01	186.00	<0.5	<0.002	2.8200	<0.2	1.200	<0.1			
R9	3/10/2010	<0.005	3.80	0.460	<50.0	70.200	<0.01	<0.005	42.70	<0.005	0.0270	<0.1	0.2500	71.00	1.02	0.01	8.88	10.700	0.99	3.19	0.230	0.1930	<10.0	0.06	0.5100	6210.00	<0.01	180.00	<0.5	<0.002	2.9000	<0.2	4.100	<0.1			
R9	4/11/2010	<0.005	2.90	0.480	<50.0	70.500	<0.01	<0.005	46.80	0.01	0.0190	<0.1	0.2100	64.00	1.14	0.01	9.35	9.360	1.03	3.42	0.230	0.1300	<10.0	0.06	0.4600	6380.00	<0.01	193.00	<0.5	<0.002	3.0900	<0.2	1.100	<0.1			
R9	5/3/2010	<0.005	80.50	0.840	<50.0	33.800	0.02	<0.005	15.20	0.03	0.0810	<0.1	1.7800	290.00	1.13	0.00	3.01	20.900	0.37	1.27	0.980	0.9120	<10.0	0.07	0.1900	3770.00	<0.01	67.30	1.10	0.00	0.6190	<0.2	4.000	0.20			
R9	6/5/2010	<0.005	83.10	0.540	<50.0	30.900	0.03	0.01	15.10	0.02	0.0750	0.20	0.9000	183.00	0.52	0.00	3.60	16.700	0.31	1.60	0.500	1.0900	<10.0	0.08	0.1400	4770.00	<0.01	61.60	2.00	<0.002	0.6170	<0.2	3.200	<0.1			
R9	7/8/2010	<0.005	32.70	0.580	<50.0	37.900	<0.01	0.01	19.00	0.01	0.0470	<0.1	0.7000	153.00	0.44	0.00	4.08	14.500	0.36	1.62	0.400	0.5050	<10.0	0.08	0.1700	4910.00	<0.01	81.20	0.90	<0.002	0.7150	<0.2	1.700	<0.1			
R9	8/3/2010	<0.005	13.00	0.690	<50.0	52.000	<0.01	0.01	26.20	0.01	0.0410	<0.1	0.7000	152.00	0.63	0.00	5.81	13.800	0.58	2.11	0.450	1.6200	<10.0	0.08	0.2300	4120.00	<0.01	115.00	<0.5	<0.002	1.1700	<0.2	6.700	<0.1			
R9	9/1/2010	<0.005	12.00	0.730	<50.0	48.500	<0.01	<0.005	26.50	0.01	0.0340	<0.1	0.4600	184.00	0.62	0.00	5.98	16.800	0.50	2.16	0.280	0.1310	<10.0	0.07	0.2200	4250.00	<0.01	118.00	<0.5	<0.002	1.1600	<0.2	0.800	<0.1			
R9	10/19/2010	<0.005	8.50	0.580	<50.0	52.500	<0.01	<0.005	31.70	0.02	0.0310	<0.1	0.3900	172.00	0.73	0.00	7.00	19.600	0.60	2.42	0.300	0.1630	<10.0	0.06	0.3200	5620.00	<0.01	133.00	<0.5	<0.002	1.5600	<0.2	1.900	<0.1			
R9	11/10/2010	<0.005	9.20	0.450	<50.0	66.800	<0.01	<0.005	38.70	0.02	0.0460	<0.1	0.4800	113.00	0.91	0.01	8.35	17.100	0.75	2.84	0.340	0.5520	<10.0	0.06	0.3300	6510.00	<0.01	161.00	<0.5	<0.002	1.9900	<0.2	5.800	<0.1			
R9	12/1/2010	<0.005	10.60	0.490	<50.0	64.900	<0.01	<0.005	38.50	0.01	0.0430	<0.1	0.5100	156.00	0.87	0.01	8.07	22.700	0.63	2.75	0.260	0.1490	<10.0	0.06	0.3500	5900.00	<0.01	160.00	<0.5	<0.002	2.0400	<0.2	1.900	<0.1			
R9 Average		0.0025	21.99	0.563	25.00	55.967	0.01	0.00	32.37	0.01	0.0414	0.06	0.5800	140.75	0.84	0.01	6.91	15.997	0.65	2.49	0.368	0.4845	5.42	0.07	0.3100	5315.83	0.01	135.68	0.52	0.00	1.7643	0.10	2.808	0.06			
R9 Max		<0.005	83.10	0.840	<50.0	74.400	0.03	0.01	46.80	0.03	0.0810	0.20	1.7800	290.00	1.14	0.01	9.57	22.700	1.03	3.42	0.980	1.6200	<10.0	0.08	0.5100	6510.00	<0.01	193.00	2.00	0.00	3.0900	<0.2	6.700	0.20			
R9 Min		<0.005	2.90	0.430	<50.0	30.900	<0.01	<0.005	15.10	<0.005	0.0190	<0.1	0.2100	63.00	0.44	0.00	3.01	9.360	0.31	1.27	0.220	0.1190	7.00	0.06	0.1400	3770.00	<0.01	61.60	<0.5	<0.002	0.6170	<0.2	0.800	<0.1			
R9 N > DL		0	12	12	0	12	2	3	12	10	12	1	12	12	0	12	12	12	12	12	12	12	2	12	12	12	12	0	12	3	1	12	0	12	1		
R9 Median		<0.005	9.90	0.515	<50.0	58.700	<0.01	<0.005	35.10	0.01	0.0375	<0.1	0.4700	152.50	0.89	0.01	7.54	16.750	0.62	2.59	0.290	0.2215	<10.0	0.06	0.3250	5325.00	<0.01	146.50	<0.5	<0.002	1.7750	<0.2	1.900	<0.1			
RCSG#4	1/12/2010	<0.005	4.80	0.310	<50.0	66.800	<0.01	<0.005	46.60	0.12	0.1200	<0.1	0.8400	292.00	1.20	0.01	10.40	66.300	0.72	3.11	0.800	1.4200	12.00	0.07	0.4200	6150.00	0.03	183.00	<0.5	0.00	2.4700	<0.2	38.100	<0.1			
RCSG#4	3/10/2010	<0.005	3.30	0.310	<50.0	70.000	<0.01	<0.005	46.30	0.02	0.1220	<0.1	0.2900	165.00	1.17	0.01	10.20	67.700	0.79	3.21	0.610	0.3500	11.00	0.05	0.3900	5330.00	<0.01	201.00	<0.5	&							

Table C-3: Rose Creek Drainage Water Quality
2010 - Surface Water - Total Metals



Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
X2	6/4/2010	<0.005	103.00	0.600	<50.0	28.800	0.02	0.01	13.70	0.02	0.1610	0.20	0.9500	253.00	0.53	0.00	3.30	32.400	0.26	1.49	0.610	2.6300	<10.0	0.08	0.1300	4370.00	<0.01	56.70	2.30	0.00	0.4980	<0.2	8.200	<0.1		
X2	7/8/2010	<0.005	42.50	0.570	<50.0	38.500	<0.01	0.02	18.80	0.02	0.0970	<0.1	0.8500	175.00	0.50	0.00	4.47	25.300	0.36	1.72	0.550	1.3100	<10.0	0.09	0.1700	4720.00	<0.01	84.10	1.80	0.01	0.7120	<0.2	7.800	<0.1		
X2	8/3/2010	<0.005	13.50	0.680	<50.0	53.600	<0.01	0.01	28.10	0.02	0.0920	<0.1	0.5500	192.00	0.71	0.00	6.47	39.100	0.60	2.23	0.780	0.8560	<10.0	0.07	0.2500	4530.00	<0.01	121.00	0.60	0.00	1.1900	<0.2	9.700	<0.1		
X2	9/2/2010	<0.005	13.40	0.590	<50.0	48.800	<0.01	<0.005	27.00	0.01	0.1180	<0.1	0.4700	194.00	0.65	0.00	6.03	40.100	0.49	2.15	0.480	0.3880	<10.0	0.06	0.2100	4510.00	<0.01	120.00	<0.5	<0.002	1.1200	<0.2	14.400	<0.1		
X2	10/18/2010	<0.005	8.80	0.550	<50.0	53.100	<0.01	<0.005	33.20	0.02	0.1810	<0.1	0.4200	215.00	0.80	0.01	7.69	74.600	0.53	2.59	0.640	0.5240	<10.0	0.06	0.3900	5630.00	<0.01	141.00	<0.5	0.00	1.4600	<0.2	14.200	<0.1		
X2	11/9/2010	<0.005	8.50	0.360	<50.0	64.100	<0.01	<0.005	36.80	0.02	0.2190	<0.1	0.4500	149.00	0.87	0.01	8.38	86.400	1.03	2.72	0.800	0.8330	<10.0	1.56	2.6500	5520.00	<0.01	161.00	<0.5	0.00	1.9100	<0.2	21.800	<0.1		
X2	12/1/2010	<0.005	13.30	0.420	<50.0	65.000	<0.01	<0.005	40.50	0.04	0.1970	<0.1	0.4400	212.00	0.94	0.01	9.05	74.400	0.59	2.91	0.790	0.6050	<10.0	0.06	0.3500	5970.00	<0.01	169.00	<0.5	0.01	1.9200	<0.2	19.400	<0.1		
X2 Average		0.0025	27.41	0.513	25.00	56.250	0.01	0.01	33.45	0.02	0.1737	0.06	0.6475	192.58	0.89	0.01	7.58	61.242	0.63	2.59	0.787	0.9975	6.58	0.20	0.5025	5255.00	0.01	142.26	0.70	0.00	1.7328	0.10	18.058	0.06		
X2 Max		<0.005	103.00	0.820	<50.0	74.500	0.03	0.02	49.30	0.05	0.2560	0.20	2.2600	393.00	1.26	0.01	11.40	86.400	1.03	3.67	1.350	2.6300	12.00	1.56	2.6500	6570.00	<0.01	202.00	2.30	0.01	2.9600	<0.2	31.100	0.20		
X2 Min		<0.005	3.50	0.350	<50.0	28.800	<0.01	<0.005	13.70	0.01	0.0920	<0.1	0.2600	110.00	0.50	0.00	3.30	25.300	0.26	1.41	0.480	0.1450	<10.0	0.06	0.1300	3390.00	<0.01	56.70	<0.5	<0.002	0.4980	<0.2	7.800	<0.1		
X2 N > DL		0	12	12	0	12	2	4	12	12	12	1	12	12	0	12	12	12	12	12	12	12	12	3	12	12	12	0	12	4	7	12	0	12	1	
X2 Median		<0.005	13.35	0.490	<50.0	58.850	<0.01	<0.005	35.00	0.02	0.1855	<0.1	0.4500	183.50	0.91	0.01	8.04	73.250	0.60	2.66	0.715	0.7190	<10.0	0.07	0.3700	5425.00	<0.01	151.00	<0.5	0.00	1.6850	<0.2	17.800	<0.1		
X22b	1/11/2010	<0.03	13.00	0.200	<300.0	18.500	0.07	<0.03	169.00	18.30	59.6000	<0.5	8.5000	38.00	9.37	0.07	86.80	3570.000	0.70	23.10	152.000	1.0500	229.00	0.40	<0.2	4100.00	<0.05	681.00	<3.0	0.56	1.3700	<1.0	24400.000	<0.5		
X22b	2/22/2010	<0.03	13.00	0.200	<300.0	22.000	0.24	<0.03	143.00	28.20	47.1000	<0.5	20.7000	18.00	7.05	0.06	76.90	2700.000	0.60	16.40	138.000	2.1200	248.00	0.20	<0.2	7560.00	<0.05	557.00	<3.0	0.37	1.4900	<1.0	26900.000	<0.5		
X22b	3/10/2010	<0.03	12.00	0.200	<300.0	21.000	0.21	<0.03	138.00	25.50	44.6000	<0.5	21.9000	12.00	7.00	0.06	73.00	2640.000	0.60	16.30	130.000	0.9200	237.00	0.20	<0.2	6510.00	<0.05	528.00	<3.0	0.35	1.6500	<1.0	26300.000	<0.5		
X22b	4/13/2010	0.0500	10.00	0.200	<300.0	24.500	0.11	<0.03	139.00	12.30	41.2000	<0.5	5.6000	7.00	7.20	0.06	69.50	2390.000	0.70	15.90	111.000	1.0500	206.00	0.30	0.3000	6020.00	<0.05	583.00	<3.0	0.37	3.1700	<1.0	18900.000	<0.5		
X22b	5/3/2010	<0.005	7.20	0.050	<50.0	12.500	0.03	<0.005	37.40	4.27	8.9100	<0.1	4.3000	40.00	1.79	0.01	15.70	542.000	0.13	3.86	24.300	3.4800	57.00	0.06	0.0700	1410.00	<0.01	155.00	<0.5	0.10	0.2230	<0.2	3630.000	<0.1		
X22b	6/4/2010	0.0800	37.00	0.200	<300.0	17.800	0.12	<0.03	147.00	17.70	51.3000	<0.5	15.4000	176.00	8.10	0.06	80.90	2960.000	0.50	19.70	126.000	1.3400	227.00	0.30	<0.2	4320.00	<0.05	615.00	<3.0	0.43	1.2500	<1.0	21400.000	<0.5		
X22b	7/10/2010	0.0700	8.00	0.200	<300.0	15.700	0.09	<0.03	139.00	17.00	48.6000	<0.5	9.4000	135.00	7.40	0.06	73.00	2830.000	1.10	17.90	124.000	1.2400	227.00	0.30	<0.2	4230.00	<0.05	569.00	<3.0	0.42	1.1800	<1.0	20500.000	<0.5		
X22b	8/3/2010	0.0140	3.90	0.140	<50.0	16.300	0.03	<0.005	133.00	15.80	51.3000	<0.1	6.4700	30.00	7.65	0.06	76.10	2800.000	0.53	18.80	127.000	0.5360	271.00	0.25	0.1600	3620.00	<0.01	610.00	<0.5	0.41	1.2200	<0.2	18200.000	<0.1		
X22b	9/1/2010	<0.03	8.00	0.200	<300.0	16.100	0.06	<0.03	144.00	17.00	49.5000	<0.5	6.9000	74.00	7.40	0.06	73.00	2920.000	0.50	17.80	128.000	1.7600	213.00	0.30	<0.2	4060.00	0.07	609.00	<3.0	0.47	1.1900	<1.0	20700.000	<0.5		
X22b	10/20/2010	0.0180	11.70	0.150	<50.0	16.500	0.06	<0.005	149.00	16.90	53.7000	<0.1	5.7700	153.00	8.54	0.06	78.90	3120.000	0.52	19.80	136.000	0.8270	274.00	0.27	0.1500	3630.00	<0.01	669.00	<0.5	0.45	1.1900	<0.2	19100.000	<0.1		
X22b	11/8/2010	<0.03	10.00	<0.1	<300.0	15.600	<0.05	<0.03	156.00	15.30	50.5000	<0.5	4.8000	300.00	7.90	0.06	72.50	3220.000	0.60	18.50	134.000	0.7900	243.00	0.60	0.8000	4190.00	<0.05	612.00	<3.0	0.44	1.1300	<1.0	20700.000	<0.5		
X22b	12/1/2010	<0.03	14.00	<0.1	<300.0	15.300	0.06	<0.03	156.00	16.30	52.8000	<0.5	5.6000	108.00	8.30	0.06	77.70	3280.000	0.50	19.90	136.000	0.2900	247.00	0.20	<0.2	4100.00	<0.05	624.00	<3.0	0.45	1.1700	<1.0	20600.000	<0.5		
X22b Average		0.0270	12.32	0.153	118.75	17.650	0.09	0.01	137.53	17.05	46.5925	0.20	9.6117	90.92	7.31	0.06	71.17	2747.667	0.58	17.33	122.192	1.2836	223.25	0.28	0.1817	4479.17	0.02	567.67	1.19	0.40	1.3528	0.40	20110.833	0.20		
X22b Max		0.0800	37.00	0.200	<300.0	24.500	0.24	<0.03	169.00	28.20	59.6000	<0.5	21.9000	300.00	9.37	0.07	86.80	3570.000	1.10	23.10	152.000	3.4800	274.00	0.60	0.8000	7560.00	0.07	681.00	<3.0	0.56	3.1700	<1.0	26900.000	<0.5		
X22b Min		<0.005	3.90	0.050	<50.0	12.500	0.03	<0.005	37.40	4.27	8.9100	<0.1	4.3000	7.00	1.79	0.01	15.70	542.000	0.13	3.86	24.300	0.2900	57.00	0.06	0.0700	1410.00	<0.01	155.00	<0.5	0.10	0.2230	<0.2	3630.000	<0.1		
X22b N > DL		5	12	10	0	12	11	0	12	12	12	0	12	12	0	12	12	12	12	12	12	12	12	12	5	12	1	12	0	12	12	0	12	0	12	0
X22b Median		<0.03	10.85	0.200	<300.0	16.400	0.07	<0.03	143.50	16.95	50.0000	<0.5	6.6850	57.00	7.53	0.06	74.55	2875.000	0.57	18.20	129.000	1.0500	233.00	0.29	<0.2	4145.00	<0.05	609.50	<3.0	0.43	1.2050	<1.0	20650.000	<0.5		
X3	1/11/2010	<0.005	3.70	0.300	<50.0	67.600	<0.01	<0.005	45.00	0.02	0.1																									

Table C-4: Rose Creek Drainage Water Quality 2010 - Seepage Water - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3-d mg/L	Chloride mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	CONDf µmho/cm	HCO3 mg/L	NH3 mg/L	NO2 mg/L	NO2/3 mg/L	NO3 mg/L	OH mg/L	ORP mV	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L	TURB NTU
X12	3/4/2010	<0.5	22	260.00	<0.5	884	1.60	<0.5			1560.0	1460.0	310.00						<0.5	71	7.8	7.3	700.0	2	<1.0
X12	8/5/2010	<0.5	17	260.00	<0.5	844	1.50	<0.5			1490.0	1243.0	310.00						<0.5	93	7.7	7.3	640.0	11	<1.0
X12	11/4/2010											1333.0		<0.005	<0.005	0.35	0.35			5		7.1		5	
X12 Average		0	20	260.00	0	864	1.55	0.25			1525.0	1345.3	310.00	0.00	0.00	0.35	0.35	0	56	7.7	7.3	670.0	3	1	
X12 Max		<0.5	22	260.00	<0.5	884	1.60	<0.5			1560.0	1460.0	310.00	<0.005	<0.005	0.35	0.35	<0.5	93	7.8	7.6	700.0	11	<1.0	
X12 Min		<0.5	17	260.00	<0.5	844	1.50	<0.5			1490.0	1243.0	310.00	<0.005	<0.005	0.35	0.35	<0.5	5	7.7	6.6	640.0	<0.0	<1.0	
X12 N > DL		0	2	2	0	2	2	0	0	0	2	3	2	0	0	1	1	0	3	2	3	2	3	0	0
X12 Median		<0.5	20	260.00	<0.5	864	1.55	<0.5			1525.0	1333.0	310.00	<0.005	<0.005	0.35	0.35	<0.5	71	7.7	7.3	670.0	2	<1.0	
X13	1/11/2010	<0.5	23	300.00	<0.5	980	1.20	<0.0005	<0.5	10.00	1700.0	1430.0	370.00	0.55					<0.5	18	7.9	6.1	750.0	2	4 18.40
X13	2/17/2010	<0.5	22	330.00	<0.5	1330	2.20	<0.0005	<0.5	10.00	2220.0	2240.0	410.00	0.74					<0.5	58	7.8	7.2	1100.0	3	10 39.40
X13	3/2/2010	<0.5	17	330.00	<0.5	1400	2.40	<0.0005	<0.5	<5.0	2220.0	1780.0	400.00	0.71					<0.5	73	7.7	7.0	1100.0	3	11 44.70
X13	4/15/2010	<0.5	25	300.00	<0.5	1260	1.70	<0.0005	<0.5	15.00	2100.0	2220.0	370.00	0.62					<0.5		7.8	7.0	1100.0	4	7 30.80
X13	5/6/2010	<0.5	17	300.00	<0.5	1350	1.60	<0.0005	<0.5	<5.0	2240.0	2229.0	360.00	0.43					<0.5	112	7.6	7.1	1200.0	4	8 19.60
X13	6/10/2010	<0.5	27	260.00	<0.5	1440	2.30	0	<0.5	10.00	2030.0	1859.0	320.00	0.56					<0.5	103	8.0	7.0	1100.0	6	7 14.20
X13	7/11/2010	<0.5	26	300.00	<0.5	1330	1.50	<0.0005	<0.5	10.00	2160.0	1999.0	370.00	0.70					<0.5	94	7.5	7.4	1100.0	9	6 25.90
X13	8/5/2010	<0.5	33	320.00	<0.5	1270	1.50	<0.0005	<0.5	10.00	2110.0	1798.0	390.00	0.85					<0.5	54	7.5	7.1	1000.0	8	9 30.40
X13	9/2/2010	<0.5	44	340.00	<0.5	1420	1.40	<0.0005	<0.5	<5.0	2050.0	2164.0	410.00	2.10					<0.5	79	7.6	7.2	1000.0	5	9 34.20
X13	10/7/2010	<0.5	35	330.00	<0.5	1390	1.70	<0.0005	<0.5	30.00	2170.0	1270.0	410.00	1.20					<0.5	46	7.6	6.2	1100.0	5	10 41.40
X13	11/4/2010	<0.5	24	340.00	<0.5	1490	1.30	0	<0.5	20.00	2200.0	2165.0	410.00	0.89	<0.005	<0.02	<0.02		<0.5	2	7.8	7.2	1200.0	4	10 41.10
X13	12/2/2010	<0.5	27	330.00	<0.5	1430	2.40	<0.0005	<0.5	30.00	2310.0	2400.0	410.00	0.99					<0.5		7.6	7.1	1200.0	1	6 46.50
X13 Average		0	27	315.00	0	1341	1.77	0	0.25	12.71	2125.8	2005.8	385.83	0.86	0.00	0.01	0.01	0	63	7.7	7.1	1079.2	4	8 28.46	
X13 Max		<0.5	44	340.00	<0.5	1490	2.40	0	<0.5	30.00	2310.0	2400.0	410.00	2.10	<0.005	<0.02	<0.02	<0.5	112	8.0	8.5	1200.0	9	11 46.50	
X13 Min		<0.5	17	260.00	<0.5	980	1.20	<0.0005	<0.5	<5.0	1700.0	1270.0	320.00	0.43	<0.005	<0.02	<0.02	<0.5	2	7.5	6.1	750.0	1	4 14.20	
X13 N > DL		0	12	12	0	12	12	2	0	9	12	12	12	12	0	0	0	0	11	12	12	12	12	12	12
X13 Median		<0.5	25	325.00	<0.5	1370	1.65	<0.0005	<0.5	10.00	2165.0	2145.5	395.00	0.73	<0.005	<0.02	<0.02	<0.5	58	7.7	7.1	1100.0	4	9 32.50	
X23	1/12/2010	<0.5	1950	24.00	<0.5	5870	13.00	<0.5			8450.0	7990.0	29.00						<0.5	12	6.1	6.2	7600.0	0	130
X23	4/27/2010	597	2420	<0.5	<0.5	3470	5.40	<0.5			7030.0	>3999.0	<0.5						<0.5	478	2.9	3.0	6700.0	3	240
X23	5/6/2010	<0.5	1000	75.00	<0.5	5280	13.00	<0.5			7450.0	>3999.0	92.00						<0.5	66	6.3	6.6	7400.0	0	180
X23	6/10/2010	<0.5	1170	13.00	<0.5	5870	16.00	<0.5			7920.0	>3999.0	16.00						<0.5	59	5.9	7.0	7900.0	14	200
X23	7/10/2010	<0.5	1230	32.00	<0.5	5520	14.00	<0.5			8090.0	3999.0	39.00						<0.5	29	5.9	6.2	8000.0	15	190
X23	8/5/2010	<0.5	1130	56.00	<0.5	5610	15.00	<0.5			7900.0	7450.0	68.00						<0.5	69	6.3	7.1	7300.0	13	180
X23	9/2/2010	<0.5	1070	59.00	<0.5	5670	14.00	<0.5			7900.0	>3999.0	72.00						<0.5	66	6.3	6.2	7400.0	4	190
X23	10/7/2010	<0.5	1030	36.00	<0.5	5630	15.00	<0.5			7610.0	4300.0	44.00						<0.5	36	6.1	6.2	7400.0	2	210
X23	11/4/2010	<0.5	1030	90.00	<0.5	5770	14.00	<0.5			7740.0	>3999.0	110.00						<0.5	24	6.8	6.6	7600.0	3	170
X23 Average		67	1337	42.81	0	5410	13.27	0.25			7787.8	4859.3	52.25					0	93	5.8	6.4	7477.8	7	188	
X23 Max		597	2420	90.00	<0.5	5870	16.00	<0.5			8450.0	7990.0	110.00					<0.5	478	6.8	7.3	8000.0	19	240	
X23 Min		<0.5	1000	<0.5	<0.5	3470	5.40	<0.5			7030.0	>3999.0	<0.5					<0.5	12	2.9	3.0	6700.0	0	130	
X23 N > DL		1	9	8	0	9	9	0	0	0	9	4	8	0	0	0	0	0	9	9	9	9	9	9	0
X23 Median		<0.5	1130	36.00	<0.5	5630	14.00	<0.5			7900.0	>3999.0	44.00					<0.5	59	6.1	6.5	7400.0	5	190	

Table C-5: Rose Creek Drainage Water Quality
2010 - Seepage Water - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
X23	5/6/2010	0.2800	16.00	<0.4	17.000	<200.0	<0.4	<4.0	525.00	99.10	1280.0000	<4.0	1.8000	211000.00	17.80	0.202	964.00	96700.000	<4.0	63.50	1350.000	<0.8	<2.0	2350	<0.4	8200.00	<20.0	4090.00	<20.0	1.40	15.2000	<20.0	625000.000	<2.0	
X23	6/10/2010	0.4000	<30.0	<1.0	18.000	<500.0	<1.0	<10.0	493.00	105.00	1370.0000	<10.0	5.0000	187000.00	<0.2	18.50	0.201	1130.00	106000.000	<10.0	69.10	1450.000	<2.0	<5.0	2600	<1.0	8350.00	<50.0	4450.00	<50.0	1.80	11.0000	<50.0	642000.000	<5.0
X23	7/10/2010	0.6100	<10.0	<0.4	16.000	<200.0	<0.4	<4.0	494.00	100.00	1410.0000	<4.0	5.2000	180000.00		19.50	0.206	1040.00	113000.000	<4.0	67.90	1490.000	0.9000	<2.0	2690	<0.4	8260.00	<20.0	4310.00	<20.0	1.90	9.0000	<20.0	645000.000	<2.0
X23	8/5/2010	0.6000	<30.0	<1.0	16.000	<500.0	<1.0	<10.0	487.00	92.60	1350.0000	<10.0	5.0000	170000.00		18.00	0.195	1070.00	109000.000	<10.0	64.40	1480.000	<2.0	<5.0	2630	<1.0	7770.00	<50.0	3950.00	<50.0	1.60	12.0000	<50.0	693000.000	<5.0
X23	9/2/2010	0.4000	33.00	<1.0	18.000	<500.0	<1.0	<10.0	433.00	89.40	1410.0000	<10.0	9.0000	163000.00		19.20	0.215	1110.00	114000.000	<10.0	71.00	1530.000	6.0000	<5.0	2630	<1.0	7510.00	<50.0	4190.00	<50.0	1.80	12.0000	<50.0	711000.000	<5.0
X23	10/7/2010	0.4500	<6.0	0.30	15.000	<100.0	<0.2	<2.0	484.00	79.10	1500.0000	<2.0	3.5000	166000.00		18.10	0.201	1070.00	111000.000	3.00	66.00	1550.000	<0.4	<1.0	2360	<0.2	7190.00	<10.0	4320.00	<10.0	1.70	11.2000	<10.0	655000.000	<1.0
X23	11/4/2010	0.5000	<60.0	<2.0	<20.0	<1000.0	<2.0	<20.0	500.00	75.70	1310.0000	<20.0	6.0000	177000.00	<0.4	18.00	0.223	1100.00	105000.000	<20.0	71.00	1410.000	<4.0	<10.0	2470	<2.0	8340.00	<100.0	4140.00	<100.0	2.00	13.0000	<100.0	665000.000	<10.0
X23 Average		0.5189	3846.67	8.24	15.111	175.00	1.76	3.50	478.67	165.54	1394.4444	8.78	545.6667	205000.00	0.10	17.27	0.205	1023.67	105888.889	3.72	63.43	1496.667	100.1889	1.80	2482	0.4556	8344.44	17.50	3992.22	17.50	1.84	15.3778	17.50	702777.778	1.97
X23 Max		0.7700	34500.00	70.50	<20.0	<1,000.0	12.70	<20.0	525.00	685.00	1610.0000	48.00	4860.0000	346000.00	<0.4	19.50	0.223	1130.00	120000.000	<20.0	71.00	1710.000	890.0000	<10.0	2690	<2.0	12300.00	<100.0	4450.00	<100.0	2.56	46.6000	<100.0	850000.000	<10.0
X23 Min		0.2800	<6.0	0.30	11.000	<50.0	<0.2	<1.0	385.00	75.70	1280.0000	<2.0	1.8000	163000.00	<0.04	9.04	0.181	609.00	78300.000	<1.0	32.00	1350.000	<0.4	0.70	1970	<0.2	7180.00	<5.0	2420.00	<5.0	1.40	8.4000	<5.0	625000.000	<1.0
X23 N > DL		9	3	3	8	0	1	0	9	9	9	1	9	9	1	9	9	9	9	1	9	9	3	1	9	2	9	0	9	0	9	9	0	9	1
X23 Median		0.5000	<30.0	<1.0	16.000	<200.0	<1.0	<4.0	493.00	99.10	1370.0000	<10.0	5.2000	180000.00	0.10	18.00	0.202	1070.00	109000.000	<4.0	66.00	1490.000	<2.0	<2.0	2600	0.8000	8200.00	<20.0	4140.00	<20.0	1.80	12.0000	<20.0	665000.000	2.20

NB: Metals reported in mg/L are shaded in gray.

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
BH10A	9/16/2010	<0.5	170	230.00	<0.5	346	2.30	<0.5	795.0	826.3		280.00	<0.5	6.4	5.7	160.0	5	8
BH10B	9/16/2010	<0.5	289	380.00	<0.5	539	1.40	<0.5	1070.0	1010.0		460.00	<0.5	6.3	5.5	190.0	4	21
BH13B	9/21/2010			82.00	<0.5	745		<0.5	1290.0	984.0		100.00	<0.5	7.5	8.3	560.0		9
BH14A	6/11/2010	<0.5	75	440.00	<0.5	2970	12.00	<0.5	4000.0	3413.0		530.00	<0.5	7.8	6.8	2600.0	8	130
BH14A	9/21/2010	<0.5	75	430.00	<0.5	2760	11.00	<0.5	3880.0	2594.0		520.00	<0.5	7.6	7.0	2200.0	5	160
BH14A Average		0	75	435.00	0	2865	11.50	0.25	3940.0	3003.5		525.00	0	7.7	6.9	2400.0	7	145
BH14A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
BH14B	6/11/2010	<0.5	59	420.00	<0.5	3010	12.00	<0.5	4010.0	3508.0		510.00	<0.5	7.6	6.8	2600.0	5	1300
BH14B	9/21/2010	<0.5	62	450.00	<0.5	2960	11.00	<0.5	4020.0	2702.0		550.00	<0.5	7.6	7.3	2400.0	5	150
BH14B Average		0	60	435.00	0	2985	11.50	0.25	4015.0	3105.0		530.00	0	7.6	7.0	2500.0	5	725
BH14B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
BH5	9/16/2010	<0.5	243	230.00	<0.5	297	1.40	<0.5	667.0	710.2		280.00	<0.5	6.2	5.6	130.0	6	1800
BH6	9/16/2010	<0.5	31	110.00	<0.5	181	<0.5	<0.5	413.0	450.8		140.00	<0.5	7.2	6.1	95.0	4	290
BH8	9/18/2010	<0.5	1320	<0.5	<0.5	1560	<0.5	<0.5	3830.0	3828.0		<0.5	<0.5	4.1	4.4	3100.0	7	170
P01-01A	6/6/2010	<0.5	26	280.00	<0.5	1120	1.30	<0.5	1700.0	1019.0		340.00	<0.5	8.0	6.4	770.0	3	<1.0
P01-01A	9/8/2010	<0.5	26	290.00	<0.5	1100	1.50	<0.5	1960.0	1660.0		360.00	<0.5	7.5	8.2	880.0	8	2
P01-01A Average		0	26	285.00	0	1110	1.40	0.25	1830.0	1339.5		350.00	0	7.8	7.3	825.0	5	1
P01-01A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	1
P01-01B	6/6/2010	<0.5	15	240.00	<0.5	782	1.20	<0.5	1230.0	920.0		300.00	<0.5	8.1	6.4	480.0	5	10
P01-01B	9/8/2010	<0.5	15	260.00	<0.5	766	1.10	<0.5	1340.0	1131.0		310.00	<0.5	7.6	7.3	490.0	8	2
P01-01B Average		0	15	250.00	0	774	1.15	0.25	1285.0	1025.5		305.00	0	7.8	6.8	485.0	6	6
P01-01B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P01-02A	6/6/2010	<0.5	8	220.00	<0.5	432	<0.5	<0.5	697.0	817.0		270.00	<0.5	8.0	7.4	170.0	6	3
P01-02A	9/8/2010	<0.5	3	260.00	<0.5	423	<0.5	<0.5	794.0	830.0		310.00	<0.5	8.0	7.4	180.0	6	24
P01-02A Average		0	6	240.00	0	428	0.25	0.25	745.5	823.5		290.00	0	8.0	7.4	175.0	6	14
P01-02A N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
P01-02B	6/6/2010	<0.5	5	200.00	<0.5	312	<0.5	<0.5	512.0	530.0		240.00	<0.5	8.2	7.5	100.0	5	33
P01-02B	9/8/2010	<0.5	6	220.00	<0.5	285	<0.5	<0.5	562.0	610.0		270.00	<0.5	7.9	7.5	83.0	6	33
P01-02B Average		0	5	210.00	0	299	0.25	0.25	537.0	570.0		255.00	0	8.1	7.5	91.5	6	33
P01-02B N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
P01-03	6/7/2010	<0.5	86	370.00	<0.5	2490	3.20	<0.5	3620.0	3450.0		450.00	<0.5	7.4	6.4	2600.0	6	9
P01-03	9/9/2010	<0.5	90	370.00	<0.5	2380	3.30	<0.5	3680.0	3890.0		450.00	<0.5	6.7	6.2	1900.0	5	920
P01-03 Average		0	88	370.00	0	2435	3.25	0.25	3650.0	3670.0		450.00	0	7.1	6.3	2250.0	5	465
P01-03 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P01-04A	6/7/2010	<0.5	37	580.00	<0.5	495	6.30	<0.5	1050.0	1010.0		700.00	<0.5	7.8	6.8	40.0	7	2
P01-04A	9/9/2010	<0.5	40	590.00	<0.5	454	6.20	<0.5	1140.0	1230.0		720.00	<0.5	7.3	7.0	44.0	6	2
P01-04A Average		0	39	585.00	0	475	6.25	0.25	1095.0	1120.0		710.00	0	7.5	6.9	42.0	7	2
P01-04A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P01-04B	9/9/2010	<0.5	26	340.00	<0.5	1160	1.00	<0.5	2060.0	2200.0		420.00	<0.5	7.3	6.9	930.0	5	19
P01-11	6/6/2010	<0.5	54	330.00	<0.5	1910	2.60	<0.5	2760.0	3020.0		410.00	<0.5	7.6	6.9	1400.0	6	68
P01-11	9/8/2010	<0.5	53	350.00	<0.5	1750	2.70	<0.5	2880.0	3280.0		430.00	<0.5	7.2	6.7	1500.0	8	190
P01-11 Average		0	53	340.00	0	1830	2.65	0.25	2820.0	3150.0		420.00	0	7.4	6.8	1450.0	7	129
P01-11 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P03-01-2	9/21/2010	<0.5	2	210.00	3	214	<0.5	4.10	409.0	441.4		240.00	<0.5	8.4	7.3	22.0	5	2
P03-01-4	9/21/2010	<0.5	29	34.00	<0.5	55	<0.5	<0.5	167.0	175.7		41.00	<0.5	6.9	6.9	43.0	5	6
P03-01-6	9/21/2010	<0.5	370	4.80	<0.5	215	0.90	<0.5	1110.0	1157.0		5.80	<0.5	5.8	6.6	620.0	7	430
P03-01-8	9/21/2010	145	21700	<0.5	<0.5	3390	<5.0	<0.5	22100.0	15510.0		<0.5	<0.5	3.5	6.1	29000.0	6	480
P03-03-2	9/21/2010	6	1390	<0.5	<0.5	434	0.80	<0.5	2750.0	2595.0		<0.5	<0.5	4.2	5.4	1900.0	6	11
P03-03-4	9/21/2010	<0.5	431	23.00	<0.5	613	0.80	<0.5	1650.0	1664.0		28.00	<0.5	6.2	6.1	930.0	5	19

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
P03-03-6	9/21/2010	<0.5	3650	<0.5	<0.5	1500	<0.5	<0.5	6410.0	28.7		<0.5	<0.5	4.8	6.4	6500.0	6	160
P03-04-2	9/20/2010	<0.5	38	130.00	<0.5	821	1.30	<0.5	1510.0	1294.0		160.00	<0.5	7.2	6.8	750.0	6	83
P03-04-4	9/20/2010	<0.5	36	210.00	<0.5	544	1.20	<0.5	1300.0	1249.0		260.00	<0.5	7.4	7.4	480.0	6	210
P03-04-6	9/20/2010	<0.5	2900	<0.5	<0.5	1760	0.60	<0.5	5440.0	5926.0		<0.5	<0.5	6.2	7.0	5200.0	6	130
P03-04-8	9/20/2010	16	5660	<0.5	<0.5	1400	<0.5	<0.5	8100.0	8162.0		<0.5	<0.5	3.9	6.3	9000.0	5	2400
P03-05-2	9/22/2010	<0.5	91	90.00	<0.5	758	3.50	<0.5	1480.0	1563.0		110.00	<0.5	6.9	6.8	860.0	4	11
P03-05-4	9/22/2010	<0.5	52	120.00	<0.5	658	<0.5	<0.5	1250.0	1258.0		150.00	<0.5	7.3	7.0	620.0	4	7
P03-05-6	9/22/2010	<0.5	839	<0.5	<0.5	2140	1.60	<0.5	4790.0	4428.0		<0.5	<0.5	4.6	6.7	3500.0	4	74
P03-06-1	6/14/2010	<0.5	214	56.00	<0.5	2370	2.00	<0.5	3850.0	3875.0		69.00	<0.5	6.2	5.4	3100.0	10	320
P03-06-1	9/22/2010	<0.5	532	82.00	<0.5	2450	5.10	<0.5	3900.0	3352.0		100.00	<0.5	6.1	6.2	2900.0	4	69
P03-06-1 Average		0	373	69.00	0	2410	3.55	0.25	3875.0	3613.5		84.50	0	6.1	5.8	3000.0	7	195
P03-06-1 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P03-06-2	6/14/2010	71	700	<0.5	<0.5	1980	2.90	<0.5	4000.0	4105.0		<0.5	<0.5	4.2	5.3	3200.0	7	910
P03-06-2	9/22/2010	<0.5	835	46.00	<0.5	2280	1.80	<0.5	3910.0	3365.0		56.00	<0.5	5.8	6.1	3000.0	4	280
P03-06-2 Average		36	768	23.13	0	2130	2.35	0.25	3955.0	3858.3		28.13	0	5.0	5.6	3100.0	6	595
P03-06-2 N > DL		1	2	1	0	2	2	0	2	3	0	1	0	2	3	2	3	2
P03-06-3	6/14/2010	7	1600	<0.5	<0.5	1690	4.40	<0.5	4530.0	4611.0		<0.5	<0.5	4.3	5.4	4200.0	6	2400
P03-06-3	9/22/2010	<0.5	2050	31.00	<0.5	1740	4.20	<0.5	4640.0	3824.0		38.00	<0.5	5.5	6.2	4100.0	4	140
P03-06-3 Average		3	1825	15.63	0	1715	4.30	0.25	4585.0	4217.5		19.13	0	4.9	5.8	4150.0	5	1270
P03-06-3 N > DL		1	2	1	0	2	2	0	2	2	0	1	0	2	2	2	2	2
P03-06-4	6/14/2010	<0.5	269	23.00	<0.5	1160	3.50	<0.5	2210.0	2515.0		28.00	<0.5	5.6	6.2	1400.0	10	980
P03-06-4	9/22/2010	<0.5	642	91.00	<0.5	1300	3.60	<0.5	2600.0	2516.0		110.00	<0.5	6.2	6.7	1700.0	4	300
P03-06-4 Average		0	456	57.00	0	1230	3.55	0.25	2405.0	2515.5		69.00	0	5.9	6.4	1550.0	7	640
P03-06-4 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P03-06-5	6/14/2010	<0.5	313	2.60	<0.5	494	2.80	<0.5	1370.0	1761.0		3.10	<0.5	5.2	6.4	840.0	10	910
P03-06-5	9/22/2010	<0.5	827	43.00	<0.5	2700	5.60	<0.5	3570.0	2933.0		53.00	<0.5	6.0	6.9	2800.0	3	900
P03-06-5 Average		0	570	22.80	0	1597	4.20	0.25	2470.0	2347.0		28.05	0	5.6	6.7	1820.0	7	905
P03-06-5 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P03-08-2	9/20/2010	<0.5	23	250.00	<0.5	347	<0.5	<0.5	678.0	732.0		300.00	<0.5	7.7	8.2	110.0	5	8
P03-08-4	9/20/2010	<0.5	43	310.00	<0.5	633	1.10	<0.5	1260.0	1327.0		380.00	<0.5	7.4	7.1	390.0	7	1900
P03-08-6	9/20/2010	<0.5	3	25.00	<0.5	198	5.30	<0.5	948.0	924.0		30.00	<0.5	7.2	7.5	390.0	6	270
P03-08-7	9/20/2010	<0.5	2	77.00	<0.5	52	6.90	<0.5	612.0	569.0		94.00	<0.5	7.9	7.9	180.0	6	42
P03-09-2	9/13/2010	<0.5	26	320.00	<0.5	691	2.60	<0.5	1300.0	1430.0		390.00	<0.5	7.9	7.0	410.0	6	10
P03-09-4	9/13/2010	<0.5	21	280.00	<0.5	858	0.90	<0.5	1550.0	1670.0		340.00	<0.5	7.8	7.0	610.0	5	5
P03-09-6	9/13/2010	<0.5	23	290.00	<0.5	948	1.20	<0.5	1670.0	1822.0		350.00	<0.5	7.8	6.9	690.0	6	10
P03-09-8	9/13/2010	<0.5	23	290.00	<0.5	956	1.30	<0.5	1700.0	1748.0		350.00	<0.5	7.8	7.0	720.0	6	9
P03-09-9	9/13/2010	<0.5	22	280.00	<0.5	944	1.30	<0.5	1670.0	1811.0		350.00	<0.5	7.8	6.9	680.0	5	200
P05-01-1	9/9/2010	<0.5	52	370.00	<0.5	1720	2.30	<0.5	2790.0	2990.0		450.00	<0.5	7.0	6.6	1500.0	5	23
P05-01-2	9/9/2010	<0.5	56	350.00	<0.5	1780	2.20	<0.5	2820.0	3103.0		430.00	<0.5	7.0	6.7	1500.0	3	36
P05-01-3	9/9/2010	<0.5	57	360.00	<0.5	1770	2.10	<0.5	2790.0	3063.0		440.00	<0.5	7.0	6.6	1500.0	5	49
P05-01-4	9/9/2010	<0.5	43	340.00	<0.5	1690	2.00	<0.5	2770.0	2972.0		420.00	<0.5	7.0	6.6	1500.0	6	930
P05-01-5	9/9/2010	<0.5	34	290.00	<0.5	1410	1.60	<0.5	2400.0	2586.0		350.00	<0.5	7.1	6.7	1300.0	5	20
P05-01-6	9/9/2010	<0.5	38	300.00	<0.5	1550	1.70	<0.5	2510.0	2655.0		370.00	<0.5	7.1	6.6	1300.0	7	280
P05-02	6/6/2010	<0.5	53	370.00	<0.5	1780	2.30	<0.5	2720.0	2552.0		450.00	<0.5	7.5	6.5	1400.0	4	110
P05-02	9/8/2010	<0.5	36	360.00	<0.5	1550	1.90	<0.5	2630.0	2910.0		440.00	<0.5	7.1	6.6	1400.0	10	370
P05-02 Average		0	44	365.00	0	1665	2.10	0.25	2675.0	2731.0		445.00	0	7.3	6.5	1400.0	7	240
P05-02 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P05-03	6/8/2010	<0.5	30	300.00	<0.5	982	1.60	<0.5	1610.0	1598.0		360.00	<0.5	8.1	6.9	730.0	6	20
P05-03	9/8/2010	<0.5	18	290.00	<0.5	799	1.10	<0.5	1520.0	1640.0		350.00	<0.5	7.4	7.0	610.0	7	96

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
P05-03 Average		0	24	295.00	0	891	1.35	0.25	1565.0	1619.0		355.00	0	7.8	7.0	670.0	7	58
P05-03 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P05-04	9/16/2010	<0.5	32	140.00	<0.5	185	0.90	<0.5	383.0	366.9		170.00	<0.5	7.4	6.1	58.0	4	110
P09-C1	6/7/2010	<0.5	45	410.00	<0.5	1590	2.80	<0.5	2510.0	2609.0		500.00	<0.5	7.6	6.6	1200.0	6	64
P09-C1	9/15/2010	<0.5	38	410.00	<0.5	1350	2.80	<0.5	2630.0	2560.0		510.00	<0.5	7.8	6.6	1200.0	8	54
P09-C1 Average		0	42	410.00	0	1470	2.80	0.25	2570.0	2584.5		505.00	0	7.7	6.6	1200.0	7	59
P09-C1 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P09-C2	6/8/2010	<0.5	156	1700.00	<0.5	1040	25.00	<0.5	2670.0	2620.0		2100.00	<0.5	7.0	6.3	0.7	11	15
P09-C2	9/15/2010	<0.5	198	1700.00	<0.5	965	23.00	<0.5	2770.0	2726.0		2000.00	<0.5	7.1	6.1	13.0	6	29
P09-C2 Average		0	177	1700.00	0	1003	24.00	0.25	2720.0	2673.0		2050.00	0	7.1	6.2	6.9	8	22
P09-C2 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P09-C3	6/8/2010	<0.5	42	540.00	<0.5	498	5.40	<0.5	1070.0	1087.0		650.00	<0.5	7.8	6.5	94.0	6	5
P09-C3	9/15/2010	<0.5	42	520.00	<0.5	524	4.50	<0.5	1070.0	1070.0		630.00	<0.5	7.8	6.5	89.0	5	120
P09-C3 Average		0	42	530.00	0	511	4.95	0.25	1070.0	1078.5		640.00	0	7.8	6.5	91.5	6	63
P09-C3 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P09-ETA1	9/16/2010	<0.5	6	190.00	<0.5	188	0.50	<0.5	421.0	440.2		230.00	<0.5	7.9	7.6	31.0	4	250
P09-ETA2	9/15/2010	<0.5	333	140.00	<0.5	3710	15.00	<0.5	5190.0	5390.0		170.00	<0.5	6.7	6.3	4500.0	11	120
P09-SIS1	7/25/2010	<0.5	1090	170.00	<0.5	8020	5.70	<0.5	9670.0	9050.0		210.00	<0.5	6.7	6.2	11000.0	7	1500
P09-SIS1	11/2/2010	<0.5	462	300.00	<0.5	7950	5.30	<0.5	8110.0	>3999.0		360.00	<0.5	7.2	6.3	7800.0	4	3900
P09-SIS1 Average		0	776	235.00	0	7985	5.50	0.25	8890.0	6524.5		285.00	0	7.0	6.2	9400.0	6	2700
P09-SIS1 N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P09-SIS2	6/9/2010	<0.5	992	160.00	<0.5	9130	6.10	<0.5	9950.0	>3999.0		200.00	<0.5	6.9	5.8	11000.0	7	120
P09-SIS2	7/24/2010	<0.5	1070	180.00	<0.5	6990	<50.0	<0.5	8730.0	9180.0		220.00	<0.5	6.6	6.2	8400.0	7	3300
P09-SIS2	9/13/2010	<0.5	830	200.00	<0.5	7800	5.90	<0.5	9190.0	9480.0		240.00	<0.5	7.0	5.8	9700.0	10	1500
P09-SIS2	11/2/2010	<0.5	917	190.00	<0.5	7270	6.40	<0.5	9340.0	>3999.0		230.00	<0.5	6.9	6.1	8800.0	6	1500
P09-SIS2 Average		0	952	182.50	0	7798	10.85	0.25	9302.5	6664.5		222.50	0	6.9	6.0	9475.0	8	1605
P09-SIS2 Max		<0.5	1070	200.00	<0.5	9130	<50.0	<0.5	9950.0	9480.0		240.00	<0.5	7.0	6.2	11000.0	10	3300
P09-SIS2 Min		<0.5	830	160.00	<0.5	6990	5.90	<0.5	8730.0	3999.0		200.00	<0.5	6.6	5.8	8400.0	6	120
P09-SIS2 N > DL		0	4	4	0	4	3	0	4	4	0	4	0	4	4	4	4	4
P09-SIS2 Median		<0.5	955	185.00	<0.5	7535	6.25	<0.5	9265.0	6589.5		225.00	<0.5	6.9	6.0	9250.0	7	1500
P09-SIS3	6/9/2010	<0.5	1160	180.00	<0.5	8010	6.30	<0.5	10000.0	>3999.0		220.00	<0.5	6.9	6.0	11000.0	8	480
P09-SIS3	7/24/2010	<0.5	860	170.00	<0.5	5820	4.90	<0.5	7720.0	4160.0		210.00	<0.5	6.7	8.3	7200.0	5	1600
P09-SIS3	9/14/2010	<0.5	913	190.00	<0.5	7850	6.20	<0.5	9500.0	9580.0		230.00	<0.5	7.0	6.1	9500.0	8	1300
P09-SIS3	11/2/2010	<0.5	908	180.00	<0.5	7140	6.60	<0.5	9020.0	>3999.0		220.00	<0.5	7.0	6.2	9300.0	4	2600
P09-SIS3 Average		0	960	180.00	0	7205	6.00	0.25	9060.0	5434.5		220.00	0	6.9	6.7	9250.0	6	1495
P09-SIS3 Max		<0.5	1160	190.00	<0.5	8010	6.60	<0.5	10000.0	9580.0		230.00	<0.5	7.0	8.3	11000.0	8	2600
P09-SIS3 Min		<0.5	860	170.00	<0.5	5820	4.90	<0.5	7720.0	3999.0		210.00	<0.5	6.7	6.0	7200.0	4	480
P09-SIS3 N > DL		0	4	4	0	4	4	0	4	4	0	4	0	4	4	4	4	4
P09-SIS3 Median		<0.5	911	180.00	<0.5	7495	6.25	<0.5	9260.0	4079.5		220.00	<0.5	7.0	6.1	9400.0	7	1450
P96-6	6/15/2010	<0.5	44	320.00	<0.5	724	0.70	<0.5	1170.0	1140.0		390.00	<0.5	7.6	6.4	350.0	3	300
P96-6	9/21/2010	<0.5	55	290.00	<0.5	837	<0.5	<0.5	1350.0	1010.0		350.00	<0.5	7.3	7.1	480.0	8	180
P96-6 Average		0	49	305.00	0	781	0.48	0.25	1260.0	1096.7		370.00	0	7.4	6.6	415.0	5	240
P96-6 N > DL		0	2	2	0	2	1	0	2	3	0	2	0	2	3	2	3	2
P96-7	6/11/2010	<0.5	26	230.00	<0.5	2290	0.70	<0.5	3090.0	2644.0		280.00	<0.5	7.9	7.5	1900.0	16	1600
P96-7	9/14/2010	<0.5	24	210.00	<0.5	2480	<0.5	<0.5	3310.0	3570.0		250.00	<0.5	7.8	7.2	2400.0	5	420
P96-7 Average		0	25	220.00	0	2385	0.48	0.25	3200.0	3107.0		265.00	0	7.9	7.4	2150.0	11	1010
P96-7 N > DL		0	2	2	0	2	1	0	2	2	0	2	0	2	2	2	2	2

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
P96-8A	6/9/2010	<0.5	922	48.00	<0.5	6210	13.00	<0.5	7780.0	>3999.0		59.00	<0.5	5.9	5.1	7300.0	8	31
P96-8A	9/14/2010	<0.5	802	110.00	<0.5	6040	10.00	<0.5	7780.0	>3999.0		140.00	<0.5	6.3	5.1	6800.0	10	11
P96-8A Average		0	862	79.00	0	6125	11.50	0.25	7780.0	3999.0		99.50	0	6.1	5.1	7050.0	9	21
P96-8A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
P96-8B	6/9/2010	<0.5	1060	<0.5	<0.5	5490	13.00	<0.5	7380.0	>3999.0		<0.5	<0.5	4.8	4.3	6800.0	8	4
P96-8B	9/15/2010	<0.5	912	<0.5	<0.5	5420	13.00	<0.5	7540.0	7630.0		<0.5	<0.5	4.7	4.6	7300.0	11	20
P96-8B Average		0	986	0.25	0	5455	13.00	0.25	7460.0	5814.5		0.25	0	4.8	4.4	7050.0	10	12
P96-8B N > DL		0	2	0	0	2	2	0	2	2	0	0	0	2	2	2	2	2
S1A	6/9/2010	<0.5	21	62.00	<0.5	323	0.60	<0.5	656.0	561.0		75.00	<0.5	6.9	6.5	250.0	5	2
S1A	9/14/2010	<0.5	18	69.00	<0.5	138	<0.5	<0.5	332.0	302.0		84.00	<0.5	7.1	7.3	100.0	6	520
S1A Average		0	19	65.50	0	231	0.43	0.25	494.0	431.5		79.50	0	7.0	6.9	175.0	5	261
S1A N > DL		0	2	2	0	2	1	0	2	2	0	2	0	2	2	2	2	2
S2A	6/9/2010	<0.5	120	410.00	<0.5	854	1.70	<0.5	1470.0	1238.0		510.00	<0.5	7.0	5.8	520.0	4	1200
S2A	9/14/2010	<0.5	166	380.00	<0.5	793	1.90	<0.5	1370.0	1226.0		470.00	<0.5	6.7	6.1	380.0	6	320
S2A Average		0	143	395.00	0	824	1.80	0.25	1420.0	1232.0		490.00	0	6.9	5.9	450.0	5	760
S2A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
S2B	9/14/2010	<0.5	606	170.00	<0.5	6630	5.30	<0.5	8000.0	>3999.0		210.00	<0.5	6.9	6.1	7700.0	7	560
SRK04-3A	9/22/2010			54.00	<0.5	5140		<0.5	8130.0	8172.0		65.00	<0.5	5.7	5.2	8800.0	8	
SRK05-ETA-BR1	9/22/2010			78.00	<0.5	4120		<0.5	7370.0	7350.0		95.00	<0.5	5.8	5.2	7300.0	5	
SRK05-ETA-BR2	9/22/2010			100.00	<0.5	1590		<0.5	2660.0	2845.0		120.00	<0.5	6.8	6.5	1600.0	5	
SRK05-SP1A	9/14/2010			240.00	<0.5	903		<0.5	1700.0	1790.0		290.00	<0.5	6.3	5.5	770.0	5	
SRK05-SP1B	9/14/2010			340.00	<0.5	540		<0.5	996.0	1050.0		410.00	<0.5	7.4	6.3	170.0	7	
SRK05-SP2	9/14/2010			150.00	<0.5	185		<0.5	379.0	370.0		190.00	<0.5	7.2	6.4	42.0	4	
SRK05-SP3A	9/14/2010			290.00	<0.5	779		<0.5	1410.0	1430.0		360.00	<0.5	6.6	5.7	490.0	3	
SRK05-SP3B	9/14/2010			290.00	<0.5	616		<0.5	1190.0	1330.0		360.00	<0.5	6.5	6.0	320.0	3	
SRK05-SP4A	6/9/2010	<0.5	129	300.00	<0.5	527	1.70	<0.5	1040.0	872.0		370.00	<0.5	6.7	5.7	270.0	11	12
SRK05-SP4A	9/13/2010	<0.5	159	320.00	<0.5	544	2.70	<0.5	1080.0	119.0		390.00	<0.5	6.7	5.9	240.0	6	4
SRK05-SP4A Average		0	144	310.00	0	536	2.20	0.25	1060.0	495.5		380.00	0	6.7	5.8	255.0	9	8
SRK05-SP4A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
SRK05-SP5	9/14/2010	<0.5	542	260.00	<0.5	4470	4.10	<0.5	6260.0	6060.0		320.00	<0.5	6.8	5.9	5300.0	6	120
SRK08-P10A	6/9/2010	<0.5	84	530.00	<0.5	2250	130.00	<0.5	3630.0	3012.0		650.00	<0.5	7.4	6.3	1700.0	5	1300
SRK08-P11A	6/9/2010	<0.5	12	170.00	<0.5	427	<0.5	<0.5	764.0	623.0		210.00	<0.5	7.9	7.1	260.0	5	4
SRK08-P11A	9/15/2010	<0.5	7	170.00	<0.5	431	<0.5	<0.5	770.0	860.0		210.00	<0.5	7.9	6.8	240.0	4	110
SRK08-P11A Average		0	10	170.00	0	429	0.25	0.25	767.0	741.5		210.00	0	7.9	7.0	250.0	5	57
SRK08-P11A N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
SRK08-P11B	6/9/2010	<0.5	15	150.00	<0.5	523	<0.5	<0.5	928.0	767.0		180.00	<0.5	8.1	6.9	370.0	4	6
SRK08-P11B	9/15/2010	<0.5	14	170.00	<0.5	664	<0.5	<0.5	1180.0	1370.0		200.00	<0.5	7.8	6.5	480.0	6	30
SRK08-P11B Average		0	14	160.00	0	594	0.25	0.25	1054.0	1068.5		190.00	0	8.0	6.7	425.0	5	18
SRK08-P11B N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
SRK08-P12A	9/16/2010	<0.5	311	560.00	<0.5	635	0.90	<0.5	1240.0	1135.0		680.00	<0.5	6.5	5.7	130.0	4	41
SRK08-P12B	9/16/2010	<0.5	214	400.00	<0.5	466	<0.5	<0.5	889.0	965.7		480.00	<0.5	6.4	5.7	89.0	3	140
SRK08-SBR2	9/14/2010	<0.5	173	390.00	<0.5	840	1.60	<0.5	1440.0	1510.0		470.00	<0.5	6.8	5.9	440.0	4	1100
SRK08-SBR3	9/14/2010	<0.5	57	670.00	<0.5	1920	0.90	<0.5	2940.0	2407.0		820.00	<0.5	7.6	7.0	1200.0	8	160
SRK08-SBR4	9/14/2010	<0.5	87	170.00	<0.5	1700	1.40	<0.5	2440.0	2288.0		210.00	<0.5	7.2	6.4	1300.0	3	850

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
SRK08-SP7A	6/9/2010	<0.5	145	100.00	<0.5	1740	2.50	<0.5	2720.0	2755.0		130.00	<0.5	6.5	5.9	1800.0	4	16
SRK08-SP7A	7/25/2010	<0.5	148	120.00	<0.5	1490	4.80	<0.5	2390.0	2290.0		150.00	<0.5	6.5	6.5	1600.0	5	15
SRK08-SP7A	9/13/2010	<0.5	121	120.00	<0.5	1330	3.60	<0.5	2170.0	2380.0		150.00	<0.5	6.8	6.1	1200.0	6	9
SRK08-SP7A	11/2/2010	<0.5	99	110.00	<0.5	1320	0.80	<0.5	1900.0	1614.0		130.00	<0.5	6.9	6.4	1000.0	3	55
SRK08-SP7A Average		0	128	112.50	0	1470	2.93	0.25	2295.0	2259.8		140.00	0	6.7	6.2	1400.0	5	24
SRK08-SP7A Max		<0.5	148	120.00	<0.5	1740	4.80	<0.5	2720.0	2755.0		150.00	<0.5	6.9	6.5	1800.0	6	55
SRK08-SP7A Min		<0.5	99	100.00	<0.5	1320	0.80	<0.5	1900.0	1614.0		130.00	<0.5	6.5	5.9	1000.0	3	9
SRK08-SP7A N > DL		0	4	4	0	4	4	0	4	4	0	4	0	4	4	4	4	4
SRK08-SP7A Median		<0.5	133	115.00	<0.5	1410	3.05	<0.5	2280.0	2335.0		140.00	<0.5	6.7	6.3	1400.0	5	16
SRK08-SP7B	6/9/2010	<0.5	23	66.00	<0.5	162	<0.5	<0.5	367.0	356.0		80.00	<0.5	7.3	7.0	120.0	2	19
SRK08-SP7B	7/25/2010	<0.5	20	55.00	<0.5	78	<0.5	<0.5	196.0	170.0		67.00	<0.5	6.9	7.4	41.0	170	4
SRK08-SP7B	9/13/2010	<0.5	18	57.00	<0.5	107	<0.5	<0.5	211.0	250.0		70.00	<0.5	7.2	6.8	42.0	7	4
SRK08-SP7B	11/2/2010	<0.5	23	66.00	<0.5	128	<0.5	<0.5	249.0	246.0		80.00	<0.5	7.3	6.8	56.0	4	64
SRK08-SP7B Average		0	21	61.00	0	119	0.25	0.25	255.8	255.5		74.25	0	7.2	7.0	64.8	38	23
SRK08-SP7B Max		<0.5	23	66.00	<0.5	162	<0.5	<0.5	367.0	356.0		80.00	<0.5	7.3	7.4	120.0	170	64
SRK08-SP7B Min		<0.5	18	55.00	<0.5	78	<0.5	<0.5	196.0	170.0		67.00	<0.5	6.9	6.8	41.0	2	4
SRK08-SP7B N > DL		0	4	4	0	4	0	0	4	4	0	4	0	4	4	4	5	4
SRK08-SP7B Median		<0.5	21	61.50	<0.5	118	<0.5	<0.5	230.0	248.0		75.00	<0.5	7.2	6.9	49.0	6	12
SRK08-SP8A	9/13/2010	<0.5	114	320.00	<0.5	1180	3.30	<0.5	1950.0	2250.0		390.00	<0.5	7.0	6.2	860.0	6	21
SRK08-SP8B	9/13/2010	<0.5	96	270.00	<0.5	880	2.70	<0.5	1560.0	1770.0		330.00	<0.5	6.9	6.3	640.0	3	34
SRK08-SPW1	1/6/2010	<0.5	170	350.00	<0.5	704	2.20	<0.5	1240.0	1115.0		420.00	<0.5	6.6	5.8	360.0	2	5
SRK08-SPW1	2/17/2010	<0.5	101	330.00	<0.5	557	2.10	<0.5	1150.0	1070.0		400.00	<0.5	7.1	6.2	250.0	3	9
SRK08-SPW1	3/9/2010	<0.5	170	300.00	<0.5	651	1.80	<0.5	1050.0	1090.0		360.00	<0.5	7.3	6.0	230.0	3	9
SRK08-SPW1	4/13/2010	<0.5	167	310.00	<0.5	517	2.10	<0.5	1080.0	1040.0	0.89	370.00	<0.5	6.8	6.1	280.0	4	37
SRK08-SPW1	5/3/2010	<0.5	51	300.00	<0.5	566	1.40	<0.5	1040.0	945.0	0.51	370.00	<0.5	7.1	6.0	340.0	2	12
SRK08-SPW1	6/13/2010	<0.5	108	270.00	<0.5	577	2.90	<0.5	1070.0	1125.0	0.52	330.00	<0.5	6.5	7.6	280.0	3	17
SRK08-SPW1	7/10/2010	<0.5	148	300.00	<0.5	591	2.20	<0.5	1100.0	1220.0	1.13	370.00	<0.5	6.4	6.0	280.0	4	19
SRK08-SPW1	8/3/2010	<0.5		310.00	<0.5	579	1.20	<0.5	1080.0	1150.0		380.00	<0.5	6.4	6.4	300.0	3	12
SRK08-SPW1	9/1/2010	<0.5	154	300.00	<0.5	571	1.10	<0.5	1090.0	1360.0	1.12	370.00	<0.5	7.0	6.7	300.0	5	24
SRK08-SPW1	10/7/2010	<0.5	134	290.00	<0.5	589	2.20	<0.5	1060.0	760.0	1.13	360.00	<0.5	6.7	6.5	290.0	3	27
SRK08-SPW1	11/8/2010	<0.5	132	290.00	<0.5	576	1.80	<0.5	1050.0	986.0	1.13	350.00	<0.5	6.8	6.0	280.0	2	20
SRK08-SPW1 Average		0	134	304.55	0	589	1.91	0.25	1091.8	1078.3	0.92	370.91	0	6.8	6.3	290.0	3	17
SRK08-SPW1 Max		<0.5	170	350.00	<0.5	704	2.90	<0.5	1240.0	1360.0	1.13	420.00	<0.5	7.3	7.6	360.0	5	37
SRK08-SPW1 Min		<0.5	51	270.00	<0.5	517	1.10	<0.5	1040.0	760.0	0.51	330.00	<0.5	6.4	5.8	230.0	2	5
SRK08-SPW1 N > DL		0	10	11	0	11	11	0	11	11	7	11	0	11	11	11	11	11
SRK08-SPW1 Median		<0.5	141	300.00	<0.5	577	2.10	<0.5	1080.0	1090.0	1.12	370.00	<0.5	6.8	6.1	280.0	3	17
SRK08-SPW2	1/6/2010	<0.5	334	230.00	<0.5	3910	3.80	<0.5	5140.0	>3999.0		280.00	<0.5	6.7	5.8	4200.0	3	<1.0
SRK08-SPW2	2/17/2010	<0.5	287	220.00	<0.5	3430	6.70	<0.5	4840.0	4310.0		270.00	<0.5	7.2	6.0	3800.0	3	<1.0
SRK08-SPW2	3/9/2010	<0.5	384	220.00	<0.5	3410	3.20	<0.5	4370.0	3970.0		270.00	<0.5	7.3	6.1	3000.0	3	3
SRK08-SPW2	4/13/2010	<0.5	372	230.00	<0.5	2660	3.00	<0.5	4150.0	3960.0	1.28	280.00	<0.5	6.8	6.1	3700.0	4	4
SRK08-SPW2	5/3/2010	<0.5	230	230.00	<0.5	3060	2.90	<0.5	4340.0	3676.0	1.34	290.00	<0.5	7.0	6.3	3400.0	2	3
SRK08-SPW2	6/13/2010	<0.5	281	190.00	<0.5	2820	3.00	<0.5	3900.0	3794.0	1.44	230.00	<0.5	6.7	8.0	2800.0	3	<4.0
SRK08-SPW2	7/10/2010	<0.5	272	220.00	<0.5	2700	2.30	<0.5	3840.0	3587.0	1.42	270.00	<0.5	6.7	6.1	2800.0	3	4
SRK08-SPW2	8/3/2010	<0.5		220.00	<0.5	2550	2.40	<0.5	3910.0	4390.0		260.00	<0.5	7.0	6.3	2800.0	4	6
SRK08-SPW2	9/1/2010	<0.5	279	210.00	<0.5	2530	2.20	<0.5	3890.0	4160.0	1.41	260.00	<0.5	7.2	6.3	2700.0	3	4
SRK08-SPW2	10/7/2010	<0.5	260	200.00	<0.5	2730	2.50	<0.5	3830.0	2250.0	1.36	240.00	<0.5	6.9	6.3	2700.0	4	6
SRK08-SPW2	11/8/2010	<0.5	266	200.00	<0.5	2460	2.80	<0.5	4000.0	3304.0	1.36	250.00	<0.5	6.9	6.2	2800.0	3	7
SRK08-SPW2	12/1/2010	<0.5	279	210.00	<0.5	2760	3.00	<0.5	4130.0	>3999.0	1.36	250.00	<0.5	6.9	6.4	3000.0	2	2

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
SRK08-SPW2 Average		0	295	215.00	0	2918	3.15	0.25	4195.0	3783.3	1.37	262.50	0	6.9	6.3	3141.7	3	4
SRK08-SPW2 Max		<0.5	384	230.00	<0.5	3910	6.70	<0.5	5140.0	4390.0	1.44	290.00	<0.5	7.3	8.0	4200.0	4	7
SRK08-SPW2 Min		<0.5	230	190.00	<0.5	2460	2.20	<0.5	3830.0	2250.0	1.28	230.00	<0.5	6.7	5.8	2700.0	2	<1.0
SRK08-SPW2 N > DL		0	11	12	0	12	12	0	12	12	8	12	0	12	12	12	12	9
SRK08-SPW2 Median		<0.5	279	220.00	<0.5	2745	2.95	<0.5	4065.0	3965.0	1.36	265.00	<0.5	6.9	6.2	2900.0	3	3
SRK08-SPW3	1/6/2010	<0.5	489	250.00	<0.5	3970	4.40	<0.5	5390.0	>3999.0		300.00	<0.5	6.7	5.7	4300.0	3	12
SRK08-SPW3	2/17/2010	<0.5	619	210.00	<0.5	4860	5.10	<0.5	6620.0	5800.0		260.00	<0.5	7.2	5.9	5800.0	4	21
SRK08-SPW3	3/9/2010	<0.5	663	230.00	<0.5	4350	3.90	<0.5	5690.0	4820.0		280.00	<0.5	6.9	6.1	4400.0	4	9
SRK08-SPW3	4/13/2010	<0.5	759	210.00	<0.5	4240	4.30	<0.5	6210.0	5860.0	2.69	260.00	<0.5	6.9	6.2	6300.0	8	9
SRK08-SPW3	5/3/2010	<0.5	694	140.00	<0.5	5720	5.10	<0.5	3360.0	>3999.0	5.11	180.00	<0.5	7.3	6.2	7300.0	3	13
SRK08-SPW3	6/13/2010	<0.5	503	170.00	<0.5	4140	4.00	<0.5	5440.0	>3999.0	2.75	210.00	<0.5	6.8	7.8	5100.0	4	11
SRK08-SPW3	7/10/2010	<0.5	377	240.00	<0.5	3050	3.00	<0.5	4160.0	3890.0	2.70	290.00	<0.5	6.5	5.9	3000.0	5	17
SRK08-SPW3	8/3/2010			200.00	<0.5	3770	3.50	<0.5	5510.0	5830.0		240.00	<0.5	6.8	6.1	4700.0	6	14
SRK08-SPW3	9/1/2010	<0.5	403	230.00	<0.5	2840	2.50	<0.5	4220.0	4450.0	2.69	280.00	<0.5	7.0	6.2	3200.0	4	13
SRK08-SPW3	10/7/2010	<0.5	534	200.00	<0.5	4090	3.70	<0.5	5540.0	3360.0	2.55	240.00	<0.5	7.0	6.2	4600.0	5	30
SRK08-SPW3	11/8/2010	<0.5	489	210.00	<0.5	3390	4.00	<0.5	5520.0	>3999.0	2.49	250.00	<0.5	6.8	5.7	4600.0	4	13
SRK08-SPW3	12/1/2010	<0.5	560	200.00	<0.5	4480	4.30	<0.5	5440.0	>3999.0	2.65	250.00	<0.5	6.6	6.1	5100.0	4	8
SRK08-SPW3 Average		0	554	207.50	0	4075	3.98	0.25	5258.3	4500.4	2.95	253.33	0	6.9	6.2	4866.7	4	14
SRK08-SPW3 Max		<0.5	759	250.00	<0.5	5720	5.10	<0.5	6620.0	5860.0	5.11	300.00	<0.5	7.3	7.8	7300.0	8	30
SRK08-SPW3 Min		<0.5	377	140.00	<0.5	2840	2.50	<0.5	3360.0	3360.0	2.49	180.00	<0.5	6.5	5.7	3000.0	3	8
SRK08-SPW3 N > DL		0	11	12	0	12	12	0	12	12	8	12	0	12	12	12	12	12
SRK08-SPW3 Median		<0.5	534	210.00	<0.5	4115	4.00	<0.5	5475.0	>3999.0	2.69	255.00	<0.5	6.9	6.1	4650.0	4	13
TH86-17	9/9/2010			82.00	<0.5	89		<0.5	181.0	190.0		100.00	<0.5	7.6	7.1	14.0	11	
TH86-2	9/13/2010			120.00	<0.5	140		<0.5	289.0	187.0		150.00	<0.5	7.9	8.4	30.0	4	
TH86-5	9/9/2010			430.00	<0.5	416		<0.5	795.0	836.0		530.00	<0.5	7.3	6.9	27.0	7	
X16A	6/7/2010	<0.5	<0.5	170.00	2	202	<0.5	2.30	356.0	340.0		200.00	<0.5	8.3	7.6	32.0	6	<1.0
X16A	9/8/2010	<0.5	4	190.00	<0.5	180	<0.5	<0.5	365.0	337.0		230.00	<0.5	7.8	7.4	23.0	7	<1.0
X16A Average		0	2	180.00	1	191	0.25	1.28	360.5	339.0		215.00	0	8.0	7.5	27.5	6	1
X16A N > DL		0	1	2	1	2	0	1	2	3	0	2	0	2	3	2	3	0
X16B	6/7/2010	<0.5	3	190.00	<0.5	249	<0.5	<0.5	399.0	390.0		240.00	<0.5	8.2	7.8	29.0	6	2
X16B	9/8/2010	<0.5	3	200.00	<0.5	219	<0.5	<0.5	432.0	392.0		240.00	<0.5	7.9	7.5	27.0	6	2
X16B Average		0	3	195.00	0	234	0.25	0.25	415.5	391.0		240.00	0	8.1	7.7	28.0	6	2
X16B N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
X17A	6/8/2010	<0.5	8	280.00	<0.5	360	<0.5	<0.5	573.0	633.0		340.00	<0.5	8.1	7.4	54.0	5	2
X17A	9/8/2010	<0.5	7	230.00	<0.5	280	<0.5	<0.5	517.0	519.0		280.00	<0.5	7.8	7.5	39.0	7	32
X17A Average		0	7	255.00	0	320	0.25	0.25	545.0	576.0		310.00	0	8.0	7.4	46.5	6	17
X17A N > DL		0	2	2	0	2	0	0	2	2	0	2	0	2	2	2	2	2
X17B	6/8/2010	<0.5	23	400.00	<0.5	582	5.80	<0.5	1090.0	1110.0		490.00	<0.5	7.7	6.9	220.0	5	15
X17B	9/8/2010	<0.5	20	390.00	<0.5	440	4.60	<0.5	899.0	801.0		470.00	<0.5	7.5	6.9	89.0	6	14
X17B Average		0	22	395.00	0	511	5.20	0.25	994.5	955.5		480.00	0	7.6	6.9	154.5	6	15
X17B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
X18A	6/7/2010	<0.5	27	240.00	<0.5	1170	3.10	<0.5	1700.0	1807.0		300.00	<0.5	8.0	6.9	820.0	5	42
X18A	9/8/2010	<0.5	24	240.00	<0.5	943	1.00	<0.5	1500.0	1351.0		290.00	<0.5	7.2	6.9	650.0	5	13
X18A Average		0	25	240.00	0	1057	2.05	0.25	1600.0	1579.0		295.00	0	7.6	6.9	735.0	5	28
X18A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
X18B	6/7/2010	<0.5	27	270.00	<0.5	1200	1.00	<0.5	1730.0	1727.0		340.00	<0.5	8.1	6.9	810.0	5	<1.0
X18B	9/8/2010	<0.5	18	250.00	<0.5	1000	1.00	<0.5	1650.0	1399.0		300.00	<0.5	7.5	7.0	710.0	5	<1.0
X18B Average		0	22	260.00	0	1100	1.00	0.25	1690.0	1563.0		320.00	0	7.8	6.9	760.0	5	1
X18B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	0

Table C-6: Rose Creek Drainage Water Quality
2010 - Groundwater - General Parameters

Station	Date	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3-d mg/L	Chloride mg/L	CO3 mg/L	COND µmho/cm	CONDf µmho/cm	FLOW L/s	HCO3 mg/L	OH mg/L	pH	pHF	SO4-d mg/L	TEMP-F °C	TSS mg/L
X21-96A	6/11/2010	<0.5	22700	<0.5	<0.5	3220	<0.5	<0.5	17500.0	>3999.0		<0.5	<0.5	3.6	5.4	21000.0	6	370
X21-96A	9/22/2010	77	13900	<0.5	<0.5	3380	<0.5	<0.5	17900.0	17530.0		<0.5	<0.5	3.7	5.1	20000.0	5	150
X21-96A Average		39	18300	0.25	0	3300	0.25	0.25	17700.0	10764.5		0.25	0	3.6	5.2	20500.0	6	260
X21-96A N > DL		1	2	0	0	2	0	0	2	2	0	0	0	2	2	2	2	2
X21-96B	6/11/2010	<0.5	294	35.00	<0.5	1110	6.20	<0.5	2360.0	2274.0		43.00	<0.5	5.9	6.6	1500.0	6	54
X21-96B	9/22/2010	<0.5	783	110.00	<0.5	1220	3.20	<0.5	2810.0	3008.0		130.00	<0.5	6.3	6.3	1800.0	4	63
X21-96B Average		0	539	72.50	0	1165	4.70	0.25	2585.0	2641.0		86.50	0	6.1	6.4	1650.0	5	59
X21-96B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
X24-96D	6/7/2010	<0.5	93	440.00	<0.5	2840	3.00	<0.5	3910.0	3660.0		540.00	<0.5	7.4	6.4	2800.0	6	2
X24-96D	9/9/2010	<0.5	91	440.00	<0.5	2620	3.20	<0.5	3950.0	4370.0		540.00	<0.5	6.9	6.3	2700.0	4	32
X24-96D Average		0	92	440.00	0	2730	3.10	0.25	3930.0	4015.0		540.00	0	7.1	6.3	2750.0	5	17
X24-96D N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
X25-96A	6/7/2010	<0.5	23	280.00	<0.5	818	0.60	<0.5	1420.0	1390.0		350.00	<0.5	8.0	7.2	570.0	6	<1.0
X25-96A	9/9/2010	<0.5	18	290.00	<0.5	787	0.60	<0.5	1550.0	1710.0		350.00	<0.5	7.4	7.0	580.0	5	<1.0
X25-96A Average		0	21	285.00	0	803	0.60	0.25	1485.0	1550.0		350.00	0	7.7	7.1	575.0	5	1
X25-96A N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	0
X25-96B	6/7/2010	<0.5	11	250.00	<0.5	680	0.60	<0.5	1270.0	1270.0		310.00	<0.5	8.1	7.5	450.0	6	3
X25-96B	9/9/2010	<0.5	11	260.00	<0.5	633	0.70	<0.5	1370.0	1430.0		320.00	<0.5	7.8	7.4	480.0	6	2
X25-96B Average		0	11	255.00	0	657	0.65	0.25	1320.0	1350.0		315.00	0	8.0	7.5	465.0	6	3
X25-96B N > DL		0	2	2	0	2	2	0	2	2	0	2	0	2	2	2	2	2
X26	5/5/2010	<0.5	249	280.00	<0.5	3940	4.40	<0.5	5300.0	>3999.0	18.17	350.00	<0.5	6.5	6.3	4800.0	3	57
X26	6/13/2010	<0.5	288	340.00	<0.5	3040	4.00	<0.5	4190.0	>3999.0	15.28	410.00	<0.5	6.4	7.6	3000.0	4	21
X26	7/10/2010	<0.5	292	380.00	<0.5	2710	3.30	<0.5	4120.0	3999.0	23.00	470.00	<0.5	6.6	6.3	2700.0	4	47
X26	8/3/2010			340.00	<0.5	3120	3.30	<0.5	4620.0	>3999.0		410.00	<0.5	6.4	6.2	3700.0	7	57
X26	9/1/2010	<0.5	469	280.00	<0.5	3390	4.00	<0.5	5060.0	>3999.0	13.19	340.00	<0.5	6.7	6.1	4200.0	4	98
X26	10/19/2010	<0.5	417	370.00	<0.5	3180	3.70	<0.5	4540.0	>3999.0	26.67	450.00	<0.5	6.5	6.0	2900.0	3	34
X26 Average		0	343	331.67	0	3230	3.78	0.25	4638.3	3999.0	19.26	405.00	0	6.5	6.4	3550.0	4	52
X26 Max		<0.5	469	380.00	<0.5	3940	4.40	<0.5	5300.0	>3999.0	26.67	470.00	<0.5	6.7	7.6	4800.0	7	98
X26 Min		<0.5	249	280.00	<0.5	2710	3.30	<0.5	4120.0	>3999.0	13.19	340.00	<0.5	6.4	6.0	2700.0	3	21
X26 N > DL		0	5	6	0	6	6	0	6	6	5	6	0	6	6	6	6	6
X26 Median		<0.5	292	340.00	<0.5	3150	3.85	<0.5	4580.0	>3999.0	18.17	410.00	<0.5	6.5	6.3	3350.0	4	52

Table C-7: Rose Creek Drainage Water Quality
2010 - Groundwater - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
BH10A	9/16/2010	0.0060	38.10	4.50	11.800	<50.0	0.70	<0.005	89.70	0.01	20.9000	<0.1	<0.05	36600.00	3.85	0.062	29.60	970.000	<0.05	10.60	25.900	0.2660	<0.2	71	<0.04	14600.00	0.02	468.00	<0.5	<0.002	0.0730	<0.2	4820.000	<0.1		
BH10B	9/16/2010	<0.005	57.80	30.20	11.100	<50.0	1.46	<0.005	146.00	0.01	9.8900	<0.1	<0.05	39500.00	5.81	0.113	42.20	801.000	<0.05	17.50	22.900	0.1880	0.03	78	<0.04	18300.00	<0.01	747.00	<0.5	<0.002	0.0150	<0.2	3370.000	0.20		
BH13B	9/21/2010	0.0060	12.50	0.43	23.300	<50.0	<0.01	0.01	196.00	0.10	1.2500	<0.1	4.2700	36.00	3.29	0.013	62.20	12.700	6.02	7.55	8.400	0.5440	0.06	230	9.3600	4260.00	0.03	901.00	<0.5	0.02	1.6400	<0.2	12.100	<0.1		
BH14A	6/11/2010	<0.03	8.00	0.20	15.300	<300.0	<0.05	0.06	644.00	1.07	0.0500	<0.5	0.5000	38.00	3.90	0.076	330.00	3.700	1.40	17.30	85.900	4.4300	<0.1	736	0.5000	8850.00	<0.05	3050.00	<3.0	0.05	135.0000	<1.0	8640.000	<0.5		
BH14A	9/21/2010	<0.03	5.00	0.30	22.400	<300.0	<0.05	<0.03	589.00	2.87	0.2000	<0.5	2.3000	11.00	4.50	0.086	312.00	8.600	0.40	16.70	157.000	120.0000	<0.1	798	0.5000	9460.00	0.11	3010.00	<3.0	0.03	131.0000	<1.0	16400.000	<0.5		
BH14A Average		0.0150	6.50	0.25	18.850	150.00	0.03	0.04	616.50	1.97	0.1250	0.25	1.4000	24.50	4.20	0.081	321.00	6.150	0.90	17.00	121.450	62.2150	0.05	767	0.5000	9155.00	0.07	3030.00	1.50	0.04	133.0000	0.50	12520.000	0.25		
BH14A N > DL		0	2	2	2	0	0	1	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	2	0	2	0	2	2	2	0	
BH14B	6/11/2010	<0.03	15.00	0.20	22.900	<300.0	<0.05	<0.03	696.00	0.15	0.3500	<0.5	1.2000	58.00	4.60	0.066	309.00	10.800	0.60	17.10	4.700	34.2000	<0.1	762	0.5000	8330.00	0.06	3540.00	<3.0	0.03	199.0000	<1.0	306.000	<0.5		
BH14B	9/21/2010	<0.03	9.00	0.40	23.400	<300.0	<0.05	<0.03	711.00	0.13	0.2700	<0.5	2.0000	31.00	5.00	0.070	287.00	9.600	0.90	15.50	3.300	18.5000	<0.1	861	0.6000	9380.00	0.11	3360.00	<3.0	<0.01	189.0000	<1.0	212.000	<0.5		
BH14B Average		0.0150	12.00	0.30	23.150	150.00	0.03	0.02	703.50	0.14	0.3100	0.25	1.6000	44.50	4.80	0.068	298.00	10.200	0.75	16.30	4.000	26.3500	0.05	812	0.5500	8855.00	0.09	3450.00	1.50	0.02	194.0000	0.50	259.000	0.25		
BH14B N > DL		0	2	2	2	0	0	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	2	0	2	0	2	2	0	2	0
BH5	9/16/2010	0.0510	705.00	0.90	48.000	<50.0	0.48	0.12	76.00	0.77	16.2000	1.90	2.5200	23700.00	3.57	0.045	26.00	1300.000	0.11	13.20	22.300	5.0400	0.05	41	<0.04	12100.00	0.07	389.00	32.60	0.09	0.5440	1.40	2510.000	0.30		
BH6	9/16/2010	<0.005	40.60	0.10	34.400	<50.0	0.08	<0.005	50.50	1.32	28.6000	<0.1	0.3200	3950.00	1.75	0.024	13.30	1100.000	0.09	4.33	25.800	1.8600	<0.02	32	<0.04	7620.00	0.02	258.00	<0.5	0.04	1.1400	<0.2	3200.000	<0.1		
BH8	9/18/2010	<0.3	9160.00	6.00	14.000	<3000.0	10.40	<0.3	297.00	663.00	554.0000	<5.0	2040.0000	668000.00	7.00	0.095	198.00	12400.000	<3.0	35.00	468.000	610.0000	<1.0	1070	<2.0	6270.00	<0.5	1240.00	<30.0	6.90	22.7000	<10.0	211000.000	<5.0		
P01-01A	6/6/2010	<0.005	4.00	0.20	61.100	<50.0	<0.01	<0.005	327.00	0.70	1.5000	<0.1	0.4200	16.00	7.18	0.014	73.30	5850.000	1.38	25.40	7.750	0.3240	0.05	335	<0.04	7180.00	<0.01	1060.00	<0.5	0.02	9.6200	<0.2	7.500	<0.1		
P01-01A	9/8/2010	<0.03	17.00	<0.1	60.800	<300.0	<0.05	<0.03	314.00	0.79	1.7700	<0.5	<0.3	18.00	6.80	0.014	77.00	6960.000	1.10	24.70	9.400	0.1500	<0.1	311	<0.2	6060.00	<0.05	1090.00	<3.0	0.02	11.0000	<1.0	9.800	<0.5		
P01-01A Average		0.0088	10.50	0.13	60.950	87.50	0.02	0.01	320.50	0.75	1.6350	0.15	0.2850	17.00	6.99	0.014	75.15	6405.000	1.24	25.05	8.575	0.2370	0.05	323	0.0600	6620.00	0.02	1075.00	0.88	0.02	10.3100	0.30	8.650	0.15		
P01-01A N > DL		0	2	1	2	0	0	0	2	2	2	0	1	2	0	2	2	2	2	2	2	2	1	2	0	2	2	0	2	0	2	2	0	2	0	
P01-01B	6/6/2010	<0.005	6.20	2.54	62.900	<50.0	0.02	<0.005	233.00	0.01	0.1940	<0.1	0.0700	767.00	4.63	0.012	48.50	151.000	1.16	27.90	0.670	0.1890	0.04	203	<0.04	6030.00	<0.01	825.00	<0.5	<0.002	8.0700	<0.2	10.600	0.60		
P01-01B	9/8/2010	<0.005	3.80	2.56	60.900	<50.0	0.03	<0.005	230.00	<0.005	0.2010	<0.1	<0.05	828.00	4.52	0.013	46.90	187.000	0.98	26.60	0.790	0.1960	0.04	196	<0.04	5590.00	<0.01	800.00	<0.5	<0.002	8.2500	<0.2	3.000	0.60		
P01-01B Average		0.0025	5.00	2.55	61.900	25.00	0.03	0.00	231.50	0.01	0.1975	0.05	0.0475	797.50	4.58	0.013	47.70	169.000	1.07	27.25	0.730	0.1925	0.04	200	0.0200	5810.00	0.01	812.50	0.25	0.00	8.1600	0.10	6.800	0.60		
P01-01B N > DL		0	2	2	2	0	2	0	2	1	2	0	1	2	0	2	2	2	2	2	2	2	2	2	0	2	2	0	2	0	2	0	2	0	2	2
P01-02A	6/6/2010	<0.005	2.60	0.62	69.800	<50.0	<0.01	<0.005	121.00	0.09	0.6640	<0.1	0.3800	21.00	3.12	0.007	31.80	1370.000	1.65	10.60	2.710	0.2030	0.03	68	<0.04	5640.00	<0.01	351.00	<0.5	0.01	3.0700	<0.2	1.800	<0.1		
P01-02A	9/8/2010	<0.005	1.80	0.60	67.200	<50.0	<0.01	<0.005	117.00	0.09	0.7030	<0.1	0.4600	22.00	3.12	0.007	31.50	1300.000	1.48	9.07	2.560	0.0950	0.04	61	<0.04	4950.00	<0.01	345.00	<0.5	0.01	2.9600	<0.2	5.100	<0.1		
P01-02A Average		0.0025	2.20	0.61	68.500	25.00	0.01	0.00	119.00	0.09	0.6835	0.05	0.4200	21.50	3.12	0.007	31.65	1335.000	1.57	9.84	2.635	0.1490	0.04	65	0.0200	5295.00	0.01	348.00	0.25	0.01	3.0150	0.10	3.450	0.05		
P01-02A N > DL		0	2	2	2	0	0	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	2	0	2	2	0	2	0	2	0	2	0	2	0	
P01-02B	6/6/2010	<0.005	4.60	5.76	35.800	<50.0	<0.01	<0.005	75.60	<0.005	0.0930	<0.1	<0.05	949.00	2.25	0.006	30.00	122.000	0.80	8.72	0.470	0.3020	0.03	33	<0.04	5100.00	<0.01	263.00	<0.5	<0.002	2.7500	<0.2	2.600	<0.1		
P01-02B	9/8/2010	<0.005	40.20	5.69	37.400	<50.0	<0.01	<0.005	69.00	0.01	0.1640	<0.1	0.4200	1130.00	2.27	0.007	27.50	131.000	0.71	7.99	0.700	1.0400	0.03	32	<0.04	4310.00	<0.01	261.00	3.00	<0.002	2.8900	<0.2	7.000	<0.1		
P01-02B Average		0.0025	22.40	5.73	36.600	25.00	0.01	0.00	72.30	0.01	0.1285	0.05	0.2225	1039.50	2.26	0.007	28.75	126.500	0.76	8.36	0.585	0.6710	0.03	33	0.0200	4705.00	0.01	262.00	1.63	0.00	2.8200	0.10	4.800	0.05		
P01-02B N > DL		0	2	2	2	0	0	0	2	2	1	2	1	2	0	2	2	2	2	2	2	2	2	2	2	0	2	0	2	0	2	0	2	0	2	0
P01-03	6/7/2010	<0.02	8.00	0.20	14.000	<50.0	<0.1	<1.0	733.00	1.71	172.0000	<1.0	0.6000	1470.00	<0.02	7.44	0.026	160.00	79400.000	<1.0	35.90	123.000														

Table C-7: Rose Creek Drainage Water Quality 2010 - Groundwater - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
P03-06-4	6/14/2010	<0.02	7.00	1.00	23.000	<50.0	<0.1	<1.0	325.00	3.35	217.0000	<1.0	0.4000	211000.00	4.20	0.028	84.00	35800.000	2.00	18.50	214.000	1.3000	<0.5	530	<0.1	9680.00	<5.0	991.00	<5.0	0.09	22.4000	<5.0	3460.000	<0.5	
P03-06-4	9/22/2010	<0.02	<3.0	<0.1	26.000	61.00	<0.1	<1.0	372.00	4.46	251.0000	<1.0	<0.2	255000.00	4.26	0.036	88.70	41800.000	2.00	19.30	231.000	<0.2	<0.5	604	<0.1	7070.00	<5.0	1100.00	<5.0	0.11	3.8000	<5.0	4140.000	<0.5	
P03-06-4 Average		0.0100	4.25	0.53	24.500	43.00	0.05	0.50	348.50	3.91	234.0000	0.50	0.2500	233000.00	4.23	0.032	86.35	38800.000	2.00	18.90	222.500	0.7000	0.25	567	0.0500	8375.00	2.50	1045.50	2.50	0.10	13.1000	2.50	3800.000	0.25	
P03-06-4 N > DL		0	1	1	2	1	0	0	2	2	2	0	1	2	0	2	2	2	2	2	2	2	1	0	2	0	2	0	2	2	0	2	0	2	0
P03-06-5	6/14/2010	<0.02	<3.0	1.80	9.000	<50.0	<0.1	<1.0	122.00	0.03	15.1000	<1.0	<0.2	195000.00	3.29	0.013	46.10	12600.000	3.00	22.70	23.000	1.4000	<0.5	282	<0.1	5590.00	<5.0	374.00	<5.0	<0.05	7.9000	<5.0	14300.000	<0.5	
P03-06-5	9/22/2010	0.2700	16.00	<0.1	10.000	109.00	<0.1	<1.0	248.00	0.20	105.0000	<1.0	<0.2	287000.00	9.06	0.082	505.00	60400.000	3.00	52.60	208.000	65.2000	<0.5	1280	<0.1	5450.00	<5.0	539.00	<5.0	0.16	2.6000	<5.0	215000.000	<0.5	
P03-06-5 Average		0.1400	8.75	0.93	9.500	67.00	0.05	0.50	185.00	0.12	60.0500	0.50	0.1000	241000.00	6.18	0.048	275.55	36500.000	3.00	37.65	115.500	33.3000	0.25	781	0.0500	5520.00	2.50	456.50	2.50	0.09	5.2500	2.50	114650.000	0.25	
P03-06-5 N > DL		1	1	1	2	1	0	0	2	2	2	0	0	2	0	2	2	2	2	2	2	2	0	2	0	2	0	2	0	2	0	2	0	2	0
P03-08-2	9/20/2010	<0.02	8.00	0.30	184.000	<50.0	<0.1	<1.0	95.20	0.04	0.9000	<1.0	1.4000	15.00	1.23	<0.005	26.40	2950.000	<1.0	6.24	16.000	0.3000	<0.5	43	<0.1	4250.00	<5.0	319.00	<5.0	<0.05	3.0000	<5.0	<5.0	<0.5	
P03-08-4	9/20/2010	<0.02	11.00	4.90	34.000	<50.0	<0.1	<1.0	181.00	0.02	<0.5	<1.0	<0.2	38900.00	3.07	<0.005	44.20	3300.000	7.00	43.50	2.000	1.5000	2.30	156	<0.1	8830.00	<5.0	525.00	<5.0	<0.05	8.4000	<5.0	20.000	<0.5	
P03-08-6	9/20/2010	<0.02	21.00	1.40	11.000	<50.0	<0.1	<1.0	76.20	<0.01	1.7000	<1.0	<0.2	33.00	4.77	0.024	1.79	98.000	7.00	119.00	<1.0	2.1000	5.20	153	<0.1	1120.00	<5.0	51.00	<5.0	<0.05	<0.1	<5.0	<5.0	<0.5	
P03-08-7	9/20/2010	<0.02	6.00	0.60	16.000	<50.0	<0.1	<1.0	19.30	0.02	2.2000	<1.0	<0.2	23.00	3.23	0.009	0.85	63.000	27.00	95.50	<1.0	1.2000	<0.5	66	<0.1	1310.00	<5.0	55.00	<5.0	<0.05	<0.1	<5.0	<5.0	<0.5	
P03-09-2	9/13/2010	<0.02	<3.0	1.70	36.000	<50.0	<0.1	<1.0	188.00	<0.01	<0.5	<1.0	<0.2	7460.00	3.60	0.026	54.10	510.000	<1.0	41.80	<1.0	0.9000	<0.5	166	<0.1	7320.00	<5.0	953.00	<5.0	<0.05	1.9000	<5.0	<5.0	<0.5	
P03-09-4	9/13/2010	<0.02	<3.0	0.30	50.000	<50.0	<0.1	<1.0	259.00	0.38	4.5000	<1.0	0.8000	29.00	4.55	0.026	51.10	8890.000	<1.0	31.40	14.000	<0.2	<0.5	231	<0.1	7630.00	<5.0	675.00	<5.0	<0.05	8.1000	<5.0	<5.0	<0.5	
P03-09-6	9/13/2010	<0.02	5.00	0.20	54.000	<50.0	<0.1	<1.0	283.00	0.46	1.7000	<1.0	0.3000	44.00	4.79	0.026	58.50	12000.000	2.00	34.80	17.000	<0.2	<0.5	259	<0.1	7870.00	<5.0	755.00	<5.0	<0.05	7.4000	<5.0	<5.0	<0.5	
P03-09-8	9/13/2010	<0.02	<3.0	0.40	38.000	<50.0	<0.1	<1.0	287.00	0.53	4.2000	<1.0	<0.2	441.00	4.77	0.026	58.40	13000.000	<1.0	35.40	16.000	<0.2	<0.5	280	<0.1	7800.00	<5.0	715.00	<5.0	<0.05	7.7000	<5.0	<5.0	<0.5	
P03-09-9	9/13/2010	<0.02	39.00	0.40	43.000	<50.0	<0.1	<1.0	281.00	1.26	4.4000	<1.0	0.9000	105.00	4.84	0.026	58.80	12400.000	2.00	35.40	18.000	0.3000	<0.5	282	<0.1	7810.00	<5.0	713.00	<5.0	<0.05	7.2000	<5.0	<5.0	<0.5	
P05-01-1	9/9/2010	<0.05	8.00	<0.2	38.100	<500.0	<0.1	<0.05	507.00	<0.05	0.1000	<1.0	<0.5	12900.00	7.10	0.068	112.00	23200.000	<0.5	48.80	5.500	0.1400	<0.2	552	<0.4	9430.00	<0.1	1700.00	<5.0	<0.02	0.6700	<2.0	2.000	2.00	
P05-01-2	9/9/2010	<0.05	3.00	0.40	28.800	<500.0	<0.1	<0.05	533.00	<0.05	0.0700	<1.0	<0.5	22200.00	7.50	0.027	110.00	25700.000	<0.5	41.20	3.800	<0.05	<0.2	581	<0.4	9950.00	<0.1	1270.00	8.00	<0.02	1.4600	<2.0	3.000	<1.0	
P05-01-3	9/9/2010	<0.05	3.00	0.70	27.300	<500.0	<0.1	<0.05	537.00	<0.05	0.0600	<1.0	<0.5	26000.00	7.10	0.029	104.00	23400.000	<0.5	38.20	3.000	<0.05	<0.2	573	<0.4	9710.00	<0.1	1250.00	13.00	<0.02	1.4000	<2.0	2.000	<1.0	
P05-01-4	9/9/2010	<0.05	4.00	4.10	20.300	<500.0	<0.1	<0.05	502.00	<0.05	0.4500	<1.0	<0.5	31000.00	7.00	0.026	107.00	25800.000	1.00	38.30	3.200	0.1200	<0.2	537	<0.4	9650.00	<0.1	1230.00	9.00	<0.02	1.7000	<2.0	<1.0	<1.0	
P05-01-5	9/9/2010	<0.05	4.00	1.70	20.200	<500.0	<0.1	<0.05	414.00	0.45	14.5000	<1.0	<0.5	6730.00	6.70	0.019	91.80	23400.000	0.70	28.10	20.600	0.2000	<0.2	462	<0.4	7910.00	<0.1	1080.00	7.00	<0.02	4.2400	<2.0	4.000	<1.0	
P05-01-6	9/9/2010	<0.05	4.00	1.40	25.400	<500.0	<0.1	<0.05	463.00	0.10	18.8000	<1.0	<0.5	5890.00	6.80	0.017	95.30	25500.000	0.70	29.40	23.800	0.2400	<0.2	493	<0.4	8380.00	<0.1	1150.00	<5.0	0.03	4.7300	<2.0	5.000	<1.0	
P05-02	6/6/2010	0.0500	7.00	6.60	44.400	<300.0	<0.05	<0.03	533.00	0.11	12.8000	<0.5	<0.3	8570.00	7.60	0.024	108.00	22600.000	0.60	47.80	14.100	0.5600	<0.1	566	<0.2	9490.00	<0.05	1250.00	<3.0	0.03	5.4600	<1.0	44.400	<0.5	
P05-02	9/8/2010	<0.05	6.00	4.20	37.200	<500.0	<0.1	<0.05	475.00	0.50	9.9500	<1.0	0.6000	6770.00	7.30	0.021	89.20	19800.000	<0.5	36.80	13.800	0.4500	<0.2	493	<0.4	8800.00	<0.1	1190.00	8.00	0.04	5.4900	<2.0	52.000	<1.0	
P05-02 Average		0.0375	6.50	5.40	40.800	200.00	0.04	0.02	504.00	0.31	11.3750	0.38	0.3750	7670.00	7.45	0.023	98.60	21200.000	0.43	42.30	13.950	0.5050	0.08	530	0.1500	9145.00	0.04	1220.00	4.75	0.04	5.4750	0.75	48.200	0.38	
P05-02 N > DL		1	2	2	2	0	0	0	2	2	2	0	1	2	0	2	2	2	2	2	2	2	0	2	0	2	0	2	1	2	0	2	0	2	0
P05-03	6/8/2010	<0.03	7.00	2.40	213.000	<300.0	<0.05	<0.03	295.00	0.21	2.4400	<0.5	<0.3	5040.00	4.70	0.008	59.60	11400.000	2.90	29.90	4.700	0.5600	<0.1	230	<0.2	6970.00	<0.05	750.00	<3.0	0.02	9.5100	<1.0	15.600	<0.5	
P05-03	9/8/2010	<0.05	7.00	2.60	190.000	<500.0	<0.1	<0.05	239.00	0.20	2.3300	<1.0	0.9000	3940.00	4.10	0.007	48.90	8970.000	3.00	24.00	6.100	0.8200	<0.2	222	<0.4	6450.00	<0.1	659.00	8.00	<0.02	6.8400	<2.0	15.000	<1.0	
P05-03 Average		0.0200	7.00	2.50	201.500	200.00	0.04	0.02	267.00	0.21	2.3850	0.38																							

Table C-7: Rose Creek Drainage Water Quality
2010 - Groundwater - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
P96-6	6/15/2010	<0.005	2.60	0.11	18.700	<50.0	0.07	<0.005	188.00	0.22	0.0230	<0.1	0.6500	7.00	4.55	0.037	61.50	2.240	<0.05	7.62	13.900	0.1320	<0.02	153	2.8900	10600.00	<0.01	619.00	<0.5	0.00	26.1000	<0.2	419.000	<0.1		
P96-6	9/21/2010	0.0100	20.80	0.32	23.700	<50.0	0.05	0.01	227.00	0.25	0.1430	<0.1	1.7600	42.00	4.66	0.037	65.40	5.820	0.23	6.04	10.700	3.3300	0.09	196	4.8100	9180.00	0.09	685.00	<0.5	0.01	35.1000	<0.2	340.000	<0.1		
P96-6 Average		0.0063	11.70	0.22	21.200	25.00	0.06	0.01	207.50	0.23	0.0830	0.05	1.2050	24.50	4.61	0.037	63.45	4.030	0.13	6.83	12.300	1.7310	0.05	175	3.8500	9890.00	0.05	652.00	0.25	0.01	30.6000	0.10	379.500	0.05		
P96-6 N > DL		1	2	2	2	0	2	1	2	2	2	0	2	2	0	2	2	2	2	1	2	2	2	2	2	2	2	1	2	0	2	2	0	2	0	
P96-7	6/11/2010	<0.03	24.00	<0.1	9.300	<300.0	<0.05	<0.03	614.00	0.06	0.3600	<0.5	1.3000	317.00	6.20	0.035	184.00	164.000	1.00	17.70	4.700	0.3700	<0.1	770	0.7000	5340.00	<0.05	779.00	<3.0	<0.01	27.3000	<1.0	155.000	<0.5		
P96-7	9/14/2010	<0.03	18.00	<0.1	12.500	<300.0	<0.05	<0.03	613.00	0.06	0.0700	<0.5	1.1000	53.00	6.00	0.029	232.00	2.300	0.80	18.10	1.100	0.2200	<0.1	802	0.4000	6110.00	<0.05	635.00	<3.0	<0.01	23.7000	<1.0	5.000	<0.5		
P96-7 Average		0.0150	21.00	0.05	10.900	150.00	0.03	0.02	613.50	0.06	0.2150	0.25	1.2000	185.00	6.10	0.032	208.00	83.150	0.90	17.90	2.900	0.2950	0.05	786	0.5500	5725.00	0.03	707.00	1.50	0.01	25.5000	0.50	80.000	0.25		
P96-7 N > DL		0	2	0	2	0	0	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	0	2	0	2	0	2	0	2	0
P96-8A	6/9/2010	<0.5	861.00	<2.0	20.000	<5000.0	3.00	<0.5	460.00	144.00	1330.0000	<10.0	15.0000	93900.00	17.00	0.197	1230.00	104000.000	<5.0	63.00	1210.000	38.7000	<2.0	2520	<4.0	13700.00	<1.0	3990.00	<50.0	<0.2	2.3000	<20.0	576000.000	<10.0		
P96-8A	9/14/2010	<0.3	340.00	<1.0	19.000	<3000.0	1.20	<0.3	445.00	103.00	1160.0000	<5.0	10.0000	84200.00	20.00	0.214	1200.00	104000.000	<3.0	56.00	1090.000	29.9000	<1.0	2470	<2.0	12800.00	<0.5	4230.00	<30.0	0.20	2.0000	<10.0	449000.000	<5.0		
P96-8A Average		0.2000	600.50	0.75	19.500	2000.00	2.10	0.20	452.50	123.50	1245.0000	3.75	12.5000	89050.00	18.50	0.206	1215.00	104000.000	2.00	59.50	1150.000	34.3000	0.75	2495	1.5000	13250.00	0.38	4110.00	20.00	0.15	2.1500	7.50	512500.000	3.75		
P96-8A N > DL		0	2	0	2	0	2	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	0	2	0	2	0	2	0	2	0
P96-8B	6/9/2010	<0.5	4770.00	<2.0	13.000	<5000.0	5.00	<0.5	393.00	220.00	1910.0000	<10.0	152.0000	41000.00	17.00	0.217	1090.00	114000.000	19.00	71.00	1690.000	20.7000	<2.0	2280	<4.0	12700.00	<1.0	3660.00	<50.0	0.30	2.4000	<20.0	791000.000	<10.0		
P96-8B	9/15/2010	0.7000	3750.00	3.00	14.000	<5000.0	5.00	<0.5	416.00	155.00	1800.0000	<10.0	185.0000	10600.00	19.00	0.221	1070.00	118000.000	<5.0	68.00	1710.000	31.6000	<2.0	2560	<4.0	15600.00	<1.0	3910.00	87.00	0.60	3.4000	<20.0	706000.000	<10.0		
P96-8B Average		0.4750	4260.00	2.00	13.500	2500.00	5.00	0.25	404.50	187.50	1855.0000	5.00	168.5000	25800.00	18.00	0.219	1080.00	116000.000	10.75	69.50	1700.000	26.1500	1.00	2420	2.0000	14150.00	0.50	3785.00	56.00	0.45	2.9000	10.00	748500.000	5.00		
P96-8B N > DL		1	2	1	2	0	2	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	0	2	1	2	0	2	0	2	0
S1A	6/9/2010	<0.005	10.00	0.04	17.800	<50.0	0.04	0.01	34.90	0.76	3.6100	<0.1	0.4200	1550.00	2.94	0.046	57.40	4300.000	<0.05	5.04	12.000	0.1810	<0.02	103	<0.04	6940.00	<0.01	217.00	<0.5	0.00	0.0850	<0.2	3090.000	<0.1		
S1A	9/14/2010	<0.005	3.40	0.04	28.300	<50.0	0.02	<0.005	15.10	0.34	1.3100	<0.1	0.4300	529.00	2.19	0.032	24.40	1920.000	<0.05	3.12	4.740	0.2100	<0.02	34	<0.04	7040.00	<0.01	119.00	<0.5	0.00	0.0690	<0.2	1120.000	<0.1		
S1A Average		0.0025	6.70	0.04	23.050	25.00	0.03	0.00	25.00	0.55	2.4600	0.05	0.4250	1039.50	2.57	0.039	40.90	3110.000	0.03	4.08	8.370	0.1955	0.01	69	0.0200	6990.00	0.01	168.00	0.25	0.00	0.0770	0.10	2105.000	0.05		
S1A N > DL		0	2	2	2	0	2	1	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2	2	2	2	0	2	0	2	0	2	0	2	0
S2A	6/9/2010	0.0120	39.10	0.15	17.300	<50.0	0.08	<0.005	210.00	0.95	14.6000	0.30	0.4000	13000.00	5.43	0.050	80.20	3840.000	0.06	11.00	42.000	0.2310	0.03	185	<0.04	14300.00	0.03	729.00	1.30	0.01	5.3300	<0.2	4910.000	2.40		
S2A	9/14/2010	<0.005	14.60	0.14	18.400	<50.0	0.11	0.03	187.00	0.91	12.6000	<0.1	0.5900	14900.00	5.82	0.054	79.10	3090.000	0.07	10.10	34.500	0.3150	0.03	169	<0.04	16200.00	<0.01	664.00	<0.5	0.01	3.7100	<0.2	2790.000	<0.1		
S2A Average		0.0073	26.85	0.15	17.850	25.00	0.10	0.02	198.50	0.93	13.6000	0.18	0.4950	13950.00	5.63	0.052	79.65	3465.000	0.07	10.55	38.250	0.2730	0.03	177	0.0200	15250.00	0.02	696.50	0.78	0.01	4.5200	0.10	3850.000	1.23		
S2A N > DL		1	2	2	2	0	2	1	2	2	2	1	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	0	2	1	2	0	2	0	2	1
S2B	9/14/2010	<0.3	51.00	<1.0	21.000	<3000.0	<0.5	<0.3	518.00	17.00	378.0000	<5.0	4.0000	38500.00	14.00	0.183	1300.00	120000.000	<3.0	40.00	1560.000	0.5000	<1.0	2580	<2.0	12200.00	<0.5	2450.00	<30.0	<0.1	0.7000	<10.0	393000.000	<5.0		
SRK04-3A	9/22/2010	0.5000	1730.00	46.00	13.000	<3000.0	1.90	<0.3	413.00	51.60	1430.0000	<5.0	<3.0	745000.00	15.00	0.171	997.00	106000.000	<3.0	57.00	1220.000	49.4000	<1.0	2500	<2.0	18200.00	<0.5	3940.00	<30.0	0.20	6.1000	<10.0	490000.000	<5.0		
SRK05-ETA-BR1	9/22/2010	0.5000	893.00	8.00	12.000	<3000.0	1.10	<0.3	410.00	41.80	1360.0000	<5.0	<3.0	775000.00	12.00	0.135	752.00	99600.000	<3.0	52.00	1210.000	46.4000	<1.0	2180	<2.0	17000.00	<0.5	4330.00	<30.0	0.40	4.9000	<10.0	523000.000	<5.0		
SRK05-ETA-BR2	9/22/2010	<0.03	9.00	0.50	44.900	<300.0	0.12	<0.03	463.00	0.29	56.7000	2.30	0.4000	46000.00	3.70	0.015	107.00	6000.000	<0.3	26.00	53.300	3.9300	<0.1	630	<0.2	8540.00	<0.05	6110.00	<3.0	<0.01	0.9100	<1.0	21100.000	0.70		
SRK05-SP1A	9/14/2010	<0.02	112.00	4.00	20.000	<50.0	2.60	<1.0	220.00	0.09	7.7000	2.00	0.9000	62400.00	5.58	86.10	2050.000	<1.0	17.30	27.000	3.3000	<0.5	289	<0.1	14700.00	<5.0	1050.00	<5.0	<0.05	0.3000	<5.0	2140.000	<0.5			
SRK05-SP1B	9/14/2010	<0.02	12.00	14.80	57.000	<50.0	<0.1	<1.0	128.00	0.11	2.4000	<1.0	0.7000	17200.00	4.90	53.60	659.000	<1.0	10.20	7.000	0.8000	<0.5	93	2.7000	12400.00	<5.0	643.00	<5.0	<0.05	2.4000	<5.0	342.000	<0.5			
SRK05-SP2	9/14/2010	<0.02	12.00	<0.1																																

Table C-7: Rose Creek Drainage Water Quality
2010 - Groundwater - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SRK08-SP8B	9/13/2010	<0.02	20.00	2.00	21.000	<50.0	<0.1	<1.0	202.00	0.08	6.6000	<1.0	0.3000	20000.00	3.91	91.30	1740.000	<1.0	14.80	14.000	<0.2	<0.5	241	<0.1	12500.00	<5.0	882.00	<5.0	<0.05	1.7000	<5.0	413.000	<0.5		
SRK08-SPW1	1/6/2010	<0.005	33.60	5.43	17.200	<50.0	0.94	<0.005	174.00	0.27	10.2000	<0.1	0.3700	22700.00	5.30	0.063	65.40	1650.000	0.14	11.50	31.900	0.5300	0.03	152	<0.4	16400.00	<0.01	686.00	<0.5	<0.002	1.0300	<0.2	2290.000	<0.1	
SRK08-SPW1	2/17/2010	<0.02	31.00	4.50	17.000	<50.0	1.10	<1.0	136.00	0.14	9.4000	<1.0	0.9000	21700.00	0.03	4.21	0.063	52.60	1320.000	<1.0	10.10	30.000	0.6000	<0.5	101	<0.1	14200.00	<5.0	644.00	<0.5	<0.05	1.0000	<5.0	1570.000	<0.5
SRK08-SPW1	3/9/2010	<0.005	33.60	5.03	16.400	<50.0	1.09	<0.005	163.00	0.11	9.8700	<0.1	1.4600	24800.00	5.27	0.063	59.50	1370.000	0.10	12.10	25.000	0.4730	0.08	131	0.0600	16600.00	<0.01	682.00	<0.5	<0.002	0.9600	<0.2	1510.000	<0.1	
SRK08-SPW1	4/13/2010	<0.005	30.60	3.75	15.600	<50.0	1.10	<0.005	131.00	0.12	8.1700	<0.1	1.7900	21900.00	4.28	0.061	46.20	1070.000	0.14	9.23	20.800	0.3490	0.11	97	<0.04	14100.00	<0.01	622.00	<0.5	<0.002	0.8600	<0.2	1290.000	<0.1	
SRK08-SPW1	5/3/2010	<0.005	32.60	4.13	16.000	<50.0	1.04	<0.005	141.00	0.12	9.4200	<0.1	1.1600	22200.00	4.62	0.062	51.90	1250.000	0.12	10.30	24.400	0.2520	0.07	107	<0.04	12700.00	<0.01	625.00	<0.5	0.01	0.8420	<0.2	1400.000	<0.1	
SRK08-SPW1	6/13/2010	<0.02	38.00	4.10	17.000	<50.0	1.30	<1.0	143.00	0.19	9.0000	<1.0	1.6000	24100.00	5.02	0.065	53.70	1270.000	<1.0	10.60	26.000	0.4600	<0.5	113	<0.1	16400.00	<5.0	672.00	<5.0	<0.05	0.8000	<5.0	1720.000	<0.5	
SRK08-SPW1	7/10/2010	<0.005	34.00	4.52	16.500	<50.0	0.93	<0.005	147.00	0.15	9.6700	<0.1	1.0400	25100.00	4.97	0.059	54.20	1350.000	0.11	10.90	25.600	0.8070	0.08	121	<0.04	16500.00	<0.01	665.00	<0.5	<0.002	0.7930	<0.2	1520.000	<0.1	
SRK08-SPW1	8/3/2010	<0.005	36.10	4.79	17.700	<50.0	1.10	<0.005	140.00	0.17	10.0000	0.20	17.3000	24700.00	5.13	0.064	55.70	1360.000	0.10	11.30	28.200	1.5600	0.09	121	<0.04	14400.00	<0.01	654.00	<0.5	<0.002	0.8500	<0.2	1630.000	<0.1	
SRK08-SPW1	9/1/2010	<0.02	33.00	4.00	17.000	<50.0	1.00	<1.0	138.00	0.14	9.1000	<1.0	0.9000	23800.00	4.96	0.062	55.00	1310.000	<1.0	10.70	26.000	1.5000	<0.5	114	<0.1	17000.00	<5.0	632.00	<0.5	<0.05	0.7000	<5.0	1560.000	<0.5	
SRK08-SPW1	10/7/2010	<0.02	31.00	4.50	17.000	<50.0	1.10	<1.0	143.00	0.12	10.0000	<1.0	0.8000	25400.00	5.17	0.065	56.00	1400.000	<1.0	12.10	26.000	0.3000	<0.5	124	<0.1	16900.00	<5.0	694.00	<0.5	<0.05	0.8000	<5.0	1470.000	<0.5	
SRK08-SPW1	11/8/2010	<0.02	30.00	4.10	15.000	<50.0	0.80	<1.0	140.00	0.28	9.8000	<1.0	1.0000	25300.00	4.98	0.049	55.00	1410.000	<1.0	11.70	25.000	0.3000	<0.5	122	<0.1	16300.00	<5.0	692.00	<0.5	<0.05	0.8000	<5.0	1850.000	<0.5	
SRK08-SPW1 Average		0.0059	33.05	4.44	16.582	25.00	1.05	0.23	145.09	0.16	9.5118	0.27	2.5745	23790.91	0.03	4.90	0.061	55.02	1341.818	0.29	10.96	26.264	1.0246	0.16	118	0.0373	15590.91	1.14	660.73	1.27	0.01	0.8577	1.19	1619.091	0.14
SRK08-SPW1 Max		<0.02	38.00	5.43	17.700	<50.0	1.30	<1.0	174.00	0.28	10.2000	<1.0	17.3000	25400.00	0.03	5.30	0.065	65.40	1650.000	<1.0	12.10	31.900	4.6000	<0.5	152	<0.1	17000.00	<5.0	694.00	<0.5	<0.05	1.0300	<5.0	2290.000	<0.5
SRK08-SPW1 Min		<0.005	30.00	3.75	15.000	<50.0	0.80	<0.005	131.00	0.11	8.1700	<0.1	0.3700	21700.00	0.03	4.21	0.049	46.20	1070.000	0.10	9.23	20.800	0.2520	0.03	97	<0.04	12700.00	<0.01	622.00	<0.5	<0.002	0.7000	<0.2	1290.000	<0.1
SRK08-SPW1 N > DL		0	11	11	11	0	11	0	11	11	11	1	11	11	1	11	11	11	11	6	11	11	6	11	11	1	11	0	11	0	11	0	11	0	
SRK08-SPW1 Median		<0.005	33.00	4.50	17.000	<50.0	1.09	<0.005	141.00	0.14	9.6700	0.20	1.0400	24100.00	0.03	4.98	0.063	55.00	1350.000	0.14	10.90	26.000	0.5300	0.11	121	0.0600	16400.00	<0.01	665.00	<0.5	0.01	0.8420	<0.2	1560.000	<0.1
SRK08-SPW2	1/6/2010	<0.1	11.00	<0.4	15.700	<1000.0	<0.2	<0.1	426.00	36.80	122.0000	<2.0	3.0000	1410.00	11.00	0.135	690.00	50500.000	<1.0	34.10	1090.000	0.4000	<0.4	1510	<0.8	13200.00	<0.2	1530.00	<10.0	<0.4	6.3000	<4.0	185000.000	<2.0	
SRK08-SPW2	2/17/2010	0.1600	19.00	<0.4	15.000	<200.0	<0.4	<4.0	344.00	35.60	132.0000	<4.0	3.8000	1520.00	<0.08	9.00	0.128	624.00	50400.000	<4.0	30.30	1130.000	1.1000	<2.0	1230	<0.4	10900.00	<20.0	1430.00	<20.0	<0.2	5.5000	<20.0	193000.000	<2.0
SRK08-SPW2	3/9/2010	0.0800	9.00	<0.2	14.100	<500.0	<0.1	<0.05	361.00	31.20	135.0000	<1.0	2.4000	1790.00	9.90	0.124	610.00	45400.000	<0.5	29.70	1030.000	0.2300	<0.2	1300	<0.4	11400.00	<0.1	1410.00	<5.0	<0.02	5.5800	<2.0	176000.000	<1.0	
SRK08-SPW2	4/13/2010	<0.1	8.00	<0.4	13.700	<1000.0	<0.2	<0.1	285.00	27.20	129.0000	<2.0	3.0000	1620.00	8.00	0.116	474.00	36700.000	<1.0	22.00	855.000	0.4000	<0.4	845	<0.8	9490.00	<0.2	1200.00	<10.0	0.06	5.3700	<4.0	144000.000	<2.0	
SRK08-SPW2	5/3/2010	0.3000	11.00	<0.4	16.300	<1000.0	<0.2	<0.1	317.00	29.70	166.0000	<2.0	2.0000	1810.00	9.00	0.118	550.00	45600.000	<1.0	25.00	1060.000	0.4000	<0.4	966	<0.8	9330.00	<0.2	1290.00	<10.0	0.13	5.6300	<4.0	177000.000	<2.0	
SRK08-SPW2	6/13/2010	0.1100	8.00	<0.2	13.000	<50.0	<0.1	<1.0	299.00	27.70	152.0000	<1.0	2.4000	2000.00	8.77	0.110	503.00	39500.000	<1.0	22.90	876.000	0.7000	<0.5	1020	<0.1	12000.00	<5.0	1210.00	<5.0	<0.05	4.5000	<5.0	148000.000	<0.5	
SRK08-SPW2	7/10/2010	<0.1	11.00	<0.4	15.400	<1000.0	<0.2	<0.1	263.00	28.50	172.0000	<2.0	4.0000	2140.00	9.00	0.098	497.00	40100.000	<1.0	24.00	934.000	1.4000	<0.4	890	<0.8	10700.00	<0.2	1140.00	<10.0	<0.04	3.9600	<4.0	163000.000	<2.0	
SRK08-SPW2	8/3/2010	<0.1	14.00	0.50	15.200	<1000.0	<0.2	<0.1	251.00	29.10	178.0000	<2.0	3.0000	1990.00	8.00	0.105	467.00	37500.000	<1.0	22.00	904.000	1.3000	<0.4	973	<0.8	9230.00	<0.2	1040.00	<10.0	<0.04	4.1300	<4.0	153000.000	<2.0	
SRK08-SPW2	9/1/2010	0.0900	10.00	0.40	14.000	<100.0	<0.2	<2.0	250.00	28.40	190.0000	<2.0	1.9000	2100.00	7.80	0.104	463.00	38100.000	<2.0	21.90	823.000	0.6000	<1.0	954	<0.2	12000.00	<10.0	1020.00	<10.0	<0.1	3.5000	<10.0	141000.000	<1.0	
SRK08-SPW2	10/7/2010	0.1200	11.00	0.40	16.000	<100.0	<0.2	<2.0	284.00	31.00	248.0000	<2.0	2.0000	2560.00	8.50	0.102	490.00	40800.000	<2.0	23.90	908.000	<0.4	<1.0	974	<0.2	10400.00	<10.0	1110.00	<10.0	<0.1	3.7000	<10.0	159000.000	<1.0	
SRK08-SPW2	11/8/2010	<0.02	9.00	<0.1	14.000	<50.0	<0.1	<1.0	238.00	29.00	202.0000	<1.0	2.5000	2900.00	7.47	0.065	453.00	35100.000	<1.0	21.80	760.000	0.6000	<0.5	917	<0.1	10200.00	<5.0	1020.00	<5.0	&					

Table C-7: Rose Creek Drainage Water Quality
2010 - Groundwater - Dissolved Metals

Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
X18A Average		0.0025	5.50	9.75	176.500	25.00	0.01	0.00	303.00	0.01	1.3915	0.13	0.2250	4095.00	7.16	0.012	72.95	3980.000	0.81	23.05	4.525	0.4650	0.05	310	0.0200	6275.00	0.03	1021.50	0.25	0.00	9.3050	0.10	9.450	0.25		
X18A N > DL		0	2	2	2	0	0	0	2	1	2	1	2	2	0	2	2	2	2	2	2	2	2	2	2	0	2	1	2	0	0	2	0	2	2	
X18B	6/7/2010	<0.005	2.90	0.20	91.000	<50.0	<0.01	<0.005	341.00	0.38	0.6700	<0.1	0.5700	25.00	7.51	0.012	84.60	1640.000	0.71	24.90	16.800	0.2080	0.06	349	0.0700	7400.00	<0.01	1110.00	<0.5	0.01	13.9000	<0.2	4.000	<0.1		
X18B	9/8/2010	<0.005	3.20	0.19	77.200	<50.0	<0.01	<0.005	288.00	0.32	0.6050	<0.1	0.4700	43.00	6.70	0.013	69.10	1280.000	0.58	21.30	13.800	0.1290	0.05	287	0.0500	6030.00	<0.01	960.00	<0.5	0.01	11.9000	<0.2	7.000	<0.1		
X18B Average		0.0025	3.05	0.20	84.100	25.00	0.01	0.00	314.50	0.35	0.6375	0.05	0.5200	34.00	7.11	0.012	76.85	1460.000	0.65	23.10	15.300	0.1685	0.06	318	0.0600	6715.00	0.01	1035.00	0.25	0.01	12.9000	0.10	5.500	0.05		
X18B N > DL		0	2	2	2	0	0	0	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	0	2	0	2	0	2	
X21-96A	6/11/2010	0.2200	1240.00	20.10	5.000	157.00	9.60	<1.0	384.00	1.05	9.0000	7.00	0.3000	9960000.00	11.80	0.152	549.00	408000.000	7.00	52.30	21.000	44.6000	<0.5	6480	0.9000	21100.00	<5.0	776.00	<5.0	0.39	2.1000	<5.0	290000.000	<0.5		
X21-96A	9/22/2010	<0.02	1120.00	<0.1	7.000	833.00	8.10	<1.0	390.00	0.38	20.3000	<1.0	1.1000	9760000.00	11.50	0.147	584.00	456000.000	23.00	47.00	29.000	63.7000	<0.5	7010	<0.1	20000.00	<5.0	649.00	<5.0	<0.05	1.9000	<5.0	265000.000	<0.5		
X21-96A Average		0.1150	1180.00	10.08	6.000	495.00	8.85	0.50	387.00	0.72	14.6500	3.75	0.7000	9860000.00	11.65	0.150	566.50	432000.000	15.00	49.65	25.000	54.1500	0.25	6745	0.4750	20550.00	2.50	712.50	2.50	0.21	2.0000	2.50	277500.000	0.25		
X21-96A N > DL		1	2	1	2	2	2	0	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	0	2	0	2	0	2	0	
X21-96B	6/11/2010	0.1400	8.00	6.10	22.000	<50.0	<0.1	<1.0	329.00	0.13	32.6000	<1.0	0.3000	222000.00	5.00	0.017	71.00	36400.000	3.00	57.80	29.000	9.1000	<0.5	510	<0.1	9920.00	<5.0	919.00	<5.0	<0.05	3.9000	<5.0	2290.000	<0.5		
X21-96B	9/22/2010	<0.02	<3.0	<0.1	14.000	<50.0	<0.1	<1.0	353.00	0.10	64.7000	<1.0	<0.2	332000.00	5.54	0.022	83.60	45400.000	2.00	64.80	50.000	<0.2	<0.5	659	<0.1	8650.00	<5.0	948.00	<5.0	<0.05	0.6000	<5.0	13300.000	<0.5		
X21-96B Average		0.0750	4.75	3.08	18.000	25.00	0.05	0.50	341.00	0.12	48.6500	0.50	0.2000	277000.00	5.27	0.020	77.30	40900.000	2.50	61.30	39.500	4.6000	0.25	585	0.0500	9285.00	2.50	933.50	2.50	0.03	2.2500	2.50	7795.000	0.25		
X21-96B N > DL		1	1	1	2	0	0	0	2	2	2	0	1	2	2	2	2	2	2	2	2	2	1	0	2	0	2	0	2	0	2	0	2	0	2	
X24-96D	6/7/2010	<0.02	4.00	0.30	22.000	<50.0	<0.1	<1.0	855.00	3.84	135.0000	<1.0	3.0000	108.00	<0.02	8.42	0.033	171.00	87900.000	<1.0	44.60	334.000	<0.2	<0.5	923	<0.1	11800.00	<5.0	2500.00	<5.0	0.24	6.9000	<5.0	120.000	<0.5	
X24-96D	9/9/2010	<0.02	<3.0	0.30	20.000	<50.0	<0.1	<1.0	782.00	3.59	152.0000	<1.0	2.9000	94.00	7.82	0.032	163.00	87000.000	<1.0	41.70	339.000	0.3000	<0.5	867	<0.1	11100.00	<5.0	2220.00	<5.0	0.24	6.1000	<5.0	132.000	1.00		
X24-96D Average		0.0100	2.75	0.30	21.000	25.00	0.05	0.50	818.50	3.72	143.5000	0.50	2.9500	101.00	0.01	8.12	0.033	167.00	87450.000	0.50	43.15	336.500	0.2000	0.25	895	0.0500	11450.00	2.50	2360.00	2.50	0.24	6.5000	2.50	126.000	0.63	
X24-96D N > DL		0	1	2	2	0	0	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	1	0	2	0	2	0	2	0	2	0	2	0	2	
X25-96A	6/7/2010	<0.02	5.00	0.20	54.000	<50.0	<0.1	<1.0	240.00	0.20	4.1000	<1.0	1.7000	147.00	<0.02	4.86	<0.005	53.50	9070.000	2.00	22.70	4.000	0.4000	<0.5	218	<0.1	7750.00	<5.0	629.00	<5.0	<0.05	12.4000	<5.0	<5.0	<0.5	
X25-96A	9/9/2010	<0.02	<3.0	0.20	58.000	<50.0	<0.1	<1.0	228.00	0.21	7.3000	<1.0	1.8000	21.00	228.00	4.55	<0.005	52.80	8150.000	<1.0	21.40	9.000	<0.2	<0.5	203	<0.1	6790.00	<5.0	648.00	<5.0	<0.05	13.5000	<5.0	<5.0	0.60	
X25-96A Average		0.0100	3.25	0.20	56.000	25.00	0.05	0.50	234.00	0.21	5.7000	0.50	1.7500	84.00	0.01	4.71	0.003	53.15	8610.000	1.25	22.05	6.500	0.2500	0.25	211	0.0500	7270.00	2.50	638.50	2.50	0.03	12.9500	2.50	2.500	0.43	
X25-96A N > DL		0	1	2	2	0	0	0	2	2	2	0	2	2	0	2	0	2	2	2	2	1	0	2	0	2	0	2	0	2	0	2	0	2	0	
X25-96B	6/7/2010	<0.02	<3.0	0.50	30.000	<50.0	<0.1	<1.0	217.00	0.09	<0.5	<1.0	1.6000	824.00	<0.02	3.53	0.010	33.70	211.000	<1.0	44.70	<1.0	0.8000	<0.5	183	<0.1	5820.00	<5.0	505.00	<5.0	<0.05	6.7000	<5.0	<5.0	<0.5	
X25-96B	9/9/2010	<0.02	4.00	0.60	29.000	<50.0	<0.1	<1.0	199.00	0.06	<0.5	<1.0	<0.2	844.00	3.31	0.009	32.80	212.000	<1.0	42.80	<1.0	<0.2	<0.5	172	<0.1	4890.00	<5.0	486.00	<5.0	<0.05	6.3000	<5.0	<5.0	<0.5		
X25-96B Average		0.0100	2.75	0.55	29.500	25.00	0.05	0.50	208.00	0.08	0.2500	0.50	0.8500	834.00	0.01	3.42	0.010	33.25	211.500	0.50	43.75	0.500	0.4500	0.25	178	0.0500	5355.00	2.50	495.50	2.50	0.03	6.5000	2.50	2.500	0.25	
X25-96B N > DL		0	1	2	2	0	0	0	2	2	2	0	1	2	2	2	2	2	2	2	2	0	1	0	2	0	2	0	2	0	2	0	2	0	2	
X26	5/5/2010	<0.08	13.00	3.40	7.000	<200.0	<0.4	<4.0	576.00	36.30	769.0000	<4.0	<0.8	155000.00	<0.08	18.20	0.316	608.00	22700.000	6.00	93.40	1960.000	4.2000	<2.0	1550	<0.4	7190.00	<20.0	3660.00	<20.0	1.60	16.6000	<20.0	146000.000	<2.0	
X26	6/13/2010	0.0800	13.00	3.40	7.000	<100.0	0.30	<2.0	563.00	27.00	504.0000	<2.0	0.9000	85700.00	16.20	0.274	397.00	14600.000	<2.0	63.90	1380.000	59.0000	<1.0	1030	<0.2	7050.00	<10.0	3410.00	<10.0	1.50	14.8000	<10.0	92900.000	<1.0		
X26	7/10/2010	0.0400	11.00	4.30	7.000	<50.0	0.20	<1.0	500.00	23.50	484.0000	<1.0	0.7000	77900.00	15.00	0.213	355.00	13600.000	<1.0	60.70	1250.000	63.8000	<1.0	973	0.5000	7130.00	<5.0	3050.00	<5.0	1.35	15.0000	<5.0	75100.000	<0.5		
X26	8/3/2010	0.1100	15.00	4.20	7.000	<100.0	0.30	<2.0	480.00	32.00	616.0000	<2.0	1.0000	133000.00	16.70	0.266	467.00	18400.000	<2.0	66.60	1520.000	79.2000	<1.0	1220	<0.2	6790.00	<10.0	2950.00	<10.0	1.90	12.4000	<10.0	123000.000	<1.0		
X26	9/1/2010	0.0800	10.00	3.40	8.000	<50.0	0.40	<1.0	474.00	35.60	731.0000	<1.0	0.4000	167000.00	17.20	0.291	537.00	21200.000	<1.0	82.90	1640.000	89.8000	0.60	1340	<0.1	7030.00	<5.0	3250.00	<5.0	1.96	12.3000	<5.0	137000.000	<0.5		
X26	10/19/2010	0.1100	11.00	4.50	8.000	<50.0	0.30	<1.0	500.00	32.20	626.0000	<1.0	0.3000	126000.00	17.90	0.295	469.00	18300.000	<1.0	78.20	1470.000	84.4000	0.80	1290	0.2000	7220.00	<5.0	3350.00	<5.0	1.74	14.0000	<5.0	105000.000	<0.5		
X26 Average		0.0767	12.17	3.87	7.333	45.83	0.28	0.92	515.50	31.10	621.6667	0.92	0.6167	124100.00	0.04	16.87	0.276	472.17	18133.333	1.58	74.28	1536.667	63.4000	0.73	1234	0.1917	7068.33	4.58	3278.33	4.58	1.68	14.1833	4.58	113166.667	0.46	
X26 Max		0.1100	15.00	4.50	8.000	<200.0	<0.4	<4.0	576.00	36.30	769.0000	<4.0	1.00																							



Table C-8: Rose Creek Drainage Water Quality Cross Valley Pond Seepage and Discharge 2010 - Bioassay Results Summary



Station	Date	Percent Mortality				Temp. (°C)		pH		D.O. (mg/L)		Conductivity	LC ₅₀ Final Result
		24 hr	48 hr	72 hr	96 hr	Initial	Final	Initial	Final	Initial	Final	(µS/cm)	(%v/v)
X13	3/2/2010	0	0	0	0	14.7	14.6	7.2	8.1	9.3	9.3	2260	Pass: 100%
X13	6/13/2010	0	0	0	0	14.9	15.2	7.0	7.9	8.7	9.9	2211	Pass: 100%
X13	9/7/2010	0	0	0	0	14.0	15.1	7.0	8.1	9.0	9.9	2342	Pass: 100%
X13	12/2/2010	0	0	0	0	14.3	15.1	7.1	8.0	10.3	9.7	2414	Pass: 100%
X5P	3/2/2010	0	0	0	0	14.9	14.7	7.5	8.3	9.7	9.7	1760	Pass: 100%
X5	6/15/2010	0	0	0	0	15.8	14.8	7.5	8.0	9.6	9.9	1836	Pass: 100%
X5	9/7/2010	0	0	0	0	14.3	15.1	7.6	7.8	9.5	9.8	1884	Pass: 100%
X5	12/2/2010	0	0	0	0	14.3	15.2	6.9	8.0	10.6	9.8	2656	Pass: 100%

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
22-Mar-10	5:51 PM	0.9	7.11	1580	0.317	0.325	0.321	0.334	0.338	0.336	ICP	
23-Mar-10	1:21 PM	1.2	7.30	1740	0.314	0.325	0.320	0.316	0.320	0.318	ICP	
24-Mar-10	9:11 AM	2.2	7.05	1820	0.358	0.375	0.367	0.375	0.382	0.379	ICP	
25-Mar-10	7:04 AM	1.5	7.22	1690	0.299	0.302	0.301	0.296	0.298	0.297	ICP	
25-Mar-10	2:46 PM	2.5	7.10	1730	0.319	0.319	0.319	0.315	0.317	0.316	ICP	
26-Mar-10	8:00 AM	2.0	7.05	1700	0.311	0.321	0.316	0.311	0.312	0.312	ICP	
27-Mar-10	7:20 AM	2.5	7.03	1710	0.285	0.286	0.286	0.276	0.279	0.278	ICP	
28-Mar-10	7:25 AM	2.6	7.00	2600	0.310	0.312	0.311	0.303	0.307	0.305	ICP	
29-Mar-10	8:42 AM	1.1	7.17	1680	0.291	0.303	0.297	0.292	0.295	0.294	ICP	
30-Mar-10	8:13 AM	1.6	7.11	1480	0.286	0.294	0.290	0.287	0.288	0.288	ICP	
30-Mar-10	10:41 AM	1.7	7.02	1030	0.291	-	0.291	-	-		ICP	
31-Mar-10	9:10 AM	1.2	7.29	1424	0.275	0.271	0.273	0.274	0.279	0.277	ICP	
1-Apr-10	7:51 AM	2.3	7.35	1410	0.286	0.284	0.285	0.279	0.281	0.280	ICP	Siphon shut down at 6:30 PM.
5-Apr-10	10:54 AM	1.0	7.13	1640	0.268	0.272	0.270	0.272	-	0.272	ICP	Siphon opened at 10:10 AM (1/2 open).
6-Apr-10	8:36 AM	0.8	7.00	1100	0.297	0.315	0.306	0.295	0.296	0.296	ICP	
7-Apr-10	8:57 AM	0.8	6.88	1514	0.286	0.284	0.285	0.284	0.284	0.284	ICP	
8-Apr-10	10:34 AM	2.4	7.33	1776	0.290	0.279	0.285	0.288	0.297	0.293	ICP	
9-Apr-10	8:07 AM	1.6	7.41	1750	0.291	0.293	0.292	0.286	0.289	0.288	ICP	
9-Apr-10	2:16 PM	3.9	7.14	1760	0.280	0.286	0.283	0.280	0.287	0.284	ICP	Began discharging from mill to CVP at 11 am.
10-Apr-10	7:40 AM	2.2	7.11	1504	0.285	0.278	0.282	0.288	-	0.288	ICP	
11-Apr-10	7:40 AM	2.7	7.31	1770	0.195	0.193	0.194	0.201	-	0.201	ICP	
12-Apr-10	8:30 AM	0.6	7.32	1830	0.181	0.190	0.186	0.174	0.177	0.176	ICP	
13-Apr-10	9:10 AM	1.6	7.41	1561	0.247	0.226	0.237	0.233	-	0.233	ICP	sample 1 may be slightly high due to evaporative concentration.
14-Apr-10	8:26 AM	1.6	7.41	1578	0.192	0.184	0.188	0.177	-	0.177	ICP	
15-Apr-10	8:12 AM	1.8	6.98	1900	0.202	0.212	0.207	0.193	0.190	0.192	ICP	
16-Apr-10	7:40 AM	1.2	7.43	1890	0.177	0.172	0.175	0.165	0.164	0.165	ICP	
17-Apr-10	7:40 AM	3.4	6.82	1870	0.154	0.154	0.154	0.151	-	0.151	ICP	pH retested at 1pm: 7.07
18-Apr-10	8:20 AM	3.5	6.88	1870	0.136	0.137	0.137	0.123	-	0.123	ICP	
19-Apr-10	8:21 AM	3.4	7.22	1880	0.174	0.199	0.187	0.153	-	0.153	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	2:36 PM	4.3	6.85	1947	0.256	0.290	0.273	0.199	-	0.199	ICP	
21-Apr-10	8:52 AM	4.0	6.74	1908	0.262	0.277	0.270	0.266	-	0.266	ICP	
22-Apr-10	8:30 AM	2.4		1774	0.239	0.248	0.244	-	-		ICP	pH meter malfunctioning, no pH reading obtained.

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
22-Apr-10	12:15 PM	3.8	6.9	1750	0.366	-	0.366	0.235	-	0.235	ICP	10" siphon shut down @ 9am. Water collected following installation of 16" siphon (started ~11:30am). pH measured using litmus paper b/c pH meter malfunctioning.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.701		0.701	0.120		0.120	ICP	Siphon turned on at 13:05 PM.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.143	0.190	0.167	0.125	0.119	0.122	ICP	Rerun of X5 13:55 PM sample to verify results.
23-Apr-10	16:52 PM	2.9	7.51	1420	0.126	0.131	0.129	0.113	0.115	0.114	ICP	Siphon closed at 16:54 PM due to 1st run of 13:55 PM sample.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.132	0.141	0.137	-	-		ICP	Rerun of X5 13:55 PM sample by KR and JL on Apr 24.
25-Apr-10	7:54 AM	2.1	7.47	1639	0.164	0.149	0.157	0.118	0.112	0.115	ICP	Siphon turned on at 7:10 AM.
26-Apr-10	8:32 AM	2.5	8.08	1430	0.105	0.107	0.106	0.095	0.095	0.095	ICP	
27-Apr-10	1:56 PM	2.7	7.19	1399	0.195	0.196	0.196	0.176	-	0.176	ICP	
28-Apr-10	9:00 AM	3.0	8.39	1320	0.137	0.139	0.138	0.126	-	0.126	ICP	
29-Apr-10	3:36 PM	3.7	7.12	1280	0.161	0.161	0.161	0.139	-	0.139	ICP	
30-Apr-10	8:00 AM	4.7	7.71	1370	0.181	0.181	0.181	0.160	-	0.160	ICP	
1-May-10	9:00 AM	4.9	7.76	1410	0.250	0.260	0.255	0.208	-	0.208	ICP	
2-May-10	7:50 AM	5.3	6.99	1380	0.201	0.190	0.196	0.164	-	0.164	ICP	
3-May-10	8:35 AM	4.2	7.69	1400	0.221	0.224	0.223	0.222	-	0.222	ICP	
4-May-10	8:49 AM	3.6	7.06	1490	0.290	0.286	0.288	0.269	-	0.269	ICP	
5-May-10	8:48 AM	4.7	7.29	1384	0.249	0.242	0.246	0.240	-	0.240	ICP	
6-May-10	8:56 AM	5.1	7.15	1380	0.264	0.290	0.277	0.239	-	0.239	ICP	
7-May-10	6:43 AM	3.8	7.33	1362	0.223	0.216	0.220	0.201	-	0.201	ICP	
8-May-10	7:55 AM	4.9	7.22	1409	0.254	0.256	0.255	0.251	-	0.251	ICP	
9-May-10	8:07 AM	5.4	7.21	1392	0.245	0.245	0.245	0.224	-	0.224	ICP	
10-May-10	8:25 AM	5.7	7.33	1542	0.280	0.285	0.283	0.280	-	0.280	ICP	
11-May-10	8:05 AM	5.0	7.45	1390	0.197	0.190	0.194	0.177	-	0.177	ICP	
12-May-10	8:31 AM	5.9	7.43	1425	0.241	0.241	0.241	0.238	-	0.238	ICP	
13-May-10	7:32 AM	6.5	7.12	1424	0.237	0.238	0.238	0.219	0.217	0.218	ICP	
14-May-10	7:37 AM	5.7	7.09	1374	0.251	0.259	0.255	0.235	0.232	0.234	ICP	
15-May-10	7:34 AM	5.5	7.39	1365	0.210	0.210	0.210	0.196	0.188	0.192	ICP	
16-May-10	7:55 AM	6.3	7.26	1388	0.235	0.244	0.240	0.217	0.218	0.218	ICP	
17-May-10	8:23 AM	6.1	7.26	1494	0.217	0.217	0.217	0.213	0.210	0.212	ICP	
18-May-10	8:29 AM	6.9	7.06	1404	0.237	0.241	0.239	0.230	0.225	0.228	ICP	
19-May-10	8:22 AM	7.5	7.25	1303	0.178	0.184	0.181	0.179	0.177	0.178	ICP	
20-May-10	8:14 AM	6.6	7.55	1462	0.239	0.248	0.244	0.235	-	0.235	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
21-May-10	8:25 AM	6.1	7.13	1338	0.180	0.178	0.179	0.174	-	0.174	ICP	
22-May-10	7:59 AM	6.1	7.64	1395	0.193	0.187	0.190	0.186	-	0.186	ICP	
23-May-10	8:10 AM	7.4	7.80	1339	0.176	0.177	0.177	0.158	-	0.158	ICP	
24-May-10	7:27 AM	7.9	6.99	1509	0.232	0.232	0.232	0.234	-	0.234	ICP	
25-May-10	8:30 AM	9.0	7.51	1441	0.181	0.182	0.182	0.174	-	0.174	ICP	
26-May-10	8:15 AM	10.2	6.88	1429	0.255	0.254	0.255	0.250	-	0.250	ICP	
27-May-10	9:03 AM	10.5	7.60	1472	0.219	0.209	0.214	0.199	-	0.199	ICP	
28-May-10	7:48 AM	10.7	8.11	1501	0.222	0.219	0.221	0.214	-	0.214	ICP	
29-May-10	7:44 AM	11.5	8.11	1540	0.237	0.233	0.235	0.223	-	0.223	ICP	
30-May-10	7:50 AM	11.9	8.02	1588	0.218	0.223	0.221	0.215	-	0.215	ICP	
31-May-10	8:15 AM	11.9	7.65	1573	0.226	0.227	0.227	0.216	-	0.216	ICP	
1-Jun-10	8:25 AM	12.6	7.51	1740	0.259	0.249	0.254	0.239	-	0.239	ICP	
2-Jun-10	8:37 AM	12.1	8.03	1660	0.214	0.216	0.215	0.223	-	0.223	ICP	
3-Jun-10	8:24 AM	12.4	7.47	1824	0.310	0.296	0.303	0.312	-	0.312	ICP	
4-Jun-10	7:50 AM	12.0	7.31	1712	0.300	0.302	0.301	0.288	-	0.288	ICP	
5-Jun-10	6:55 AM	11.4	7.25	1705	0.296	0.290	0.293	0.294	-	0.294	ICP	
6-Jun-10	6:51 AM	11.0	7.42	1811	0.287	0.285	0.286	0.288	-	0.288	ICP	
7-Jun-10	8:10 AM	11.2	7.43	1534	0.293	0.293	0.293	0.288	-	0.288	ICP	
8-Jun-10	8:26 AM	11.6	7.49	1664	0.284	0.281	0.283	0.270	-	0.270	ICP	
9-Jun-10	8:25 AM	11.6	7.65	1345	0.282	0.282	0.282	0.270	-	0.270	ICP	
10-Jun-10	8:12 AM	12.1	7.21	1644	0.312	0.314	0.313	0.304	-	0.304	ICP	
11-Jun-10	7:55 AM	11.6	7.89	1636	0.256	0.265	0.261	0.254	-	0.254	ICP	
12-Jun-10	7:45 AM	12.1	8.21	1646	0.261	0.260	0.261	0.240	-	0.240	ICP	
13-Jun-10	8:10 AM	11.1	7.75	1737	0.336	0.326	0.331	0.256	0.259	0.258	AA	
14-Jun-10	8:21 AM	11.0	7.70	1749	0.334	0.329	0.332	0.275	-	0.275	AA	10" Siphon brought online at 10:35 AM.
15-Jun-10	8:28 AM	11.1	7.48	1670	0.278	0.281	0.280	0.266	-	0.266	ICP	
16-Jun-10	8:17 AM	12.0	8.00	1565	0.268	0.270	0.269	0.261	-	0.261	ICP	
17-Jun-10	8:10 AM	11.9	8.11	1557	0.341	0.316	0.329	0.273	-	0.273	AA	
18-Jun-10	7:24 AM	12.3	7.67	1675	0.326	0.331	0.329	0.282	-	0.282	AA	
19-Jun-10	7:57 AM	12.3	7.77	1610	0.283	0.304	0.294	0.247	-	0.247	AA	
20-Jun-10	7:30 AM	12.6	7.73	1620	0.289	0.284	0.287	0.248	-	0.248	AA	
21-Jun-10	8:07 AM	13.6	7.93	1520	0.322	0.340	0.331	0.254	-	0.254	AA	
22-Jun-10	9:43 AM	13.8	7.63	1605	0.329	0.310	0.320	0.278	-	0.278	AA	
23-Jun-10	9:05 AM	14.3	7.97	1633	0.316	0.343	0.330	0.229	-	0.229	AA	
24-Jun-10	9:07 AM	13.6	7.24	1659	0.269	0.271	0.270	0.270	-	0.270	ICP	
25-Jun-10	8:17 AM	13.5	8.03	1577	0.217	0.206	0.212	0.197	-	0.197	ICP	
26-Jun-10	9:28 AM	14.4	7.68	1251	0.215	0.218	0.217	0.217	-	0.217	ICP	
27-Jun-10	8:27 AM	14.5	7.56	1828	0.235	0.235	0.235	0.224	-	0.224	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
28-Jun-10	8:20 AM	14.1	7.78	1594	0.212	0.201	0.207	0.191	-	0.191	ICP	
29-Jun-10	9:42 AM	14.9	6.80	1725	0.230	0.229	0.230	0.226	-	0.226	ICP	
30-Jun-10	9:25 AM	14.8	7.94	1693	0.221	0.216	0.219	0.211	-	0.211	ICP	
1-Jul-10	8:10 AM	13.6	7.69	1689	0.247	-	0.247	0.245	-	0.245	ICP	
2-Jul-10	8:28 AM	14.1	7.70	1579	0.218	-	0.218	0.175	-	0.175	ICP	
3-Jul-10	8:30 AM	14.6	7.57	1593	0.188	0.196	0.192	0.183	-	0.183	ICP	
4-Jul-10	8:29 AM	14.2	7.96	1810	0.161	0.155	0.158	0.151	-	0.151	ICP	
5-Jul-10	8:11 AM	13.9	7.65	1840	0.155	0.160	0.158	0.120	-	0.120	ICP	
6-Jul-10	9:43 AM	13.9	7.57	1705	0.223	0.231	0.227	0.165	-	0.165	ICP	
7-Jul-10	8:15 AM	14.0	8.06	1591	0.174	0.172	0.173	0.147	-	0.147	ICP	
8-Jul-10	8:24 AM	14.6	8.56	1651	0.148	-	0.148	0.135	-	0.135	ICP	
9-Jul-10	7:40 AM	14.8	7.62	1725	0.159	0.163	0.161	0.130	-	0.130	ICP	
10-Jul-10	7:38 AM	15.6	7.82	1702	0.145	0.144	0.145	0.131	-	0.131	ICP	
11-Jul-10	7:51 AM	14.1	7.68	1697	0.192	-	0.192	0.168	-	0.168	ICP	
12-Jul-10	8:52 AM	13.9	7.13	1903	0.244	0.250	0.247	0.243	-	0.243	ICP	
13-Jul-10	8:32 AM	14.6	7.85	1567	0.179	0.178	0.179	0.167	-	0.167	ICP	
14-Jul-10	8:35 AM	14.3	7.63	1674	0.193	-	0.193	0.180	-	0.180	ICP	
15-Jul-10	8:33 AM	14.4	7.96	1591	0.207	0.208	0.208	0.197	-	0.197	ICP	
16-Jul-10	7:43 AM	13.7	7.58	1890	0.199	0.198	0.199	0.188	-	0.188	ICP	
17-Jul-10	7:30 AM	13.1	7.98	1671	0.211	0.210	0.211	0.197	-	0.197	ICP	
18-Jul-10	7:24 AM	13.2	7.62	1950	0.234	-	0.234	0.231	-	0.231	ICP	
19-Jul-10	8:30 AM	14.2	7.79	1899	0.243	0.241	0.242	0.239	-	0.239	ICP	
20-Jul-10	9:51 AM	15.8	7.69	1674	0.219	0.215	0.217	0.204	-	0.204	ICP	
21-Jul-10	8:36 AM	15.0	7.74	1880	0.219	0.219	0.219	0.214	-	0.214	ICP	
22-Jul-10	9:03 AM	14.9	7.59	1553	0.244	0.230	0.237	0.232	-	0.232	ICP	
23-Jul-10	8:03 AM	14.4	7.92	1635	0.215	0.218	0.217	0.208	-	0.208	ICP	
24-Jul-10	8:01 AM	13.9	7.82	1842	0.211	0.212	0.212	0.202	-	0.202	ICP	
25-Jul-10	7:58 AM	13.7	7.78	1860	0.235	0.231	0.233	0.216	-	0.216	ICP	
26-Jul-10	8:10 AM	13.9	7.60	1632	0.253	0.254	0.254	0.233	-	0.233	ICP	
27-Jul-10	8:35 AM	15.0	7.83	1589	0.240	0.242	0.241	0.228	-	0.228	ICP	
28-Jul-10	8:38 AM	14.7	7.88	1535	0.253	0.255	0.254	0.241	-	0.241	ICP	
29-Jul-10	8:32 AM	15.6	7.76	1653	0.287	-	0.287	0.274	-	0.274	AA	
30-Jul-10	8:12 AM	15.5	7.72	1621	0.311	0.319	0.315	0.276	-	0.276	AA	
31-Jul-10	8:05 AM	16.0	7.95	1565	0.354	0.347	0.351	0.258	-	0.258	AA	
1-Aug-10	8:09 AM	15.7	7.15	1566	0.425	0.443	0.434	0.382	-	0.382	AA	Siphon shut down at 10:30am.
1-Aug-10	8:09 AM	15.7	7.15	1566	0.410	0.410	0.410	-	-		AA	Reanalysis of morning sample to verify previous result.
9-Aug-10	10:22 AM	15.4	7.55	1880	0.234	0.235	0.235	0.195	-	0.195	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
9-Aug-10					0.244	0.263	0.254	0.235	-	0.235	AA	Duplicate analysis on AA.
10-Aug-10	8:32 AM	15.0	8.02	1806	0.208	0.209	0.209	0.139	-	0.139	ICP	
11-Aug-10	8:10 AM	14.8	8.09	1570	0.196	0.203	0.200	0.180	-	0.180	ICP	
12-Aug-10	8:14 AM	14.60	8.13	1650	0.201	0.205	0.203	0.187	-	0.187	ICP	
13-Aug-10	8:00 AM	15.1	7.63	1706	0.193	0.190	0.192	0.162	-	0.162	ICP	
14-Aug-10	8:27 AM	15.6	7.83	1568	0.199	0.199	0.199	0.147	-	0.147	ICP	
15-Aug-10	7:45 AM	15.0	7.46	1530	0.194	0.191	0.193	0.169	-	0.169	ICP	
16-Aug-10	7:58 AM	16.3	8.24	1710	0.177	0.175	0.176	0.129	-	0.129	ICP	
17-Aug-10	8:40 AM	16.5	7.74	1594	0.175	0.182	0.179	0.140	-	0.140	ICP	
18-Aug-10	9:00 AM	15.7	7.58	1491	0.176	0.179	0.178	0.152	-	0.152	ICP	
19-Aug-10	9:45 AM	15.4	7.84	1625	0.167	0.165	0.166	0.148	-	0.148	ICP	
20-Aug-10	8:00 AM	13.6	7.69	1750	0.170	0.163	0.167	0.168	-	0.168	ICP	
21-Aug-10	6:15 AM	13.2	7.63	1594	0.167	0.164	0.166	0.150	-	0.150	ICP	
22-Aug-10	7:35 AM	12.5	7.81	1601	0.201	0.203	0.202	0.153	-	0.153	ICP	
23-Aug-10	8:30 AM	12.2	8.23	1603	0.174	0.172	0.173	0.143	-	0.143	ICP	
24-Aug-10	9:00 AM	11.9	7.98	1266	0.169	0.169	0.169	0.147	-	0.147	ICP	
25-Aug-10	8:12 AM	11.7	7.91	1511	0.153	0.152	0.153	0.141	-	0.141	ICP	
26-Aug-10	8:22 AM	11.7	8.30	1740	0.224	0.225	0.225	0.188	-	0.188	AA	
27-Aug-10	7:58 AM	11.0	8.04	1570	0.222	0.225	0.224	0.196	-	0.196	AA	
28-Aug-10	8:12 AM	10.9	7.77	1661	0.204	0.207	0.206	0.169	-	0.169	AA	
29-Aug-10	8:00 AM	11.8	8.07	1625	0.238	-	0.238	0.197	-	0.197	AA	
30-Aug-10	8:23 AM	11.5	7.42	1673	0.251	0.233	0.242	0.170	-	0.170	AA	
30-Aug-10	8:23 AM	11.5	7.69	1717	0.277	-	0.277	0.169	-	0.169	AA	Reanalysis of morning sample to verify previous results. pH and conductivity measured on lab meter.
30-Aug-10	2:30 PM	13.6	7.57	1900	0.258	0.269	0.264	0.160	-	0.160	AA	Afternoon sample. Siphon shutdown at ~5 pm.
30-Aug-10	2:30 PM	13.6	7.81	1710								pH and conductivity measured on lab meter.
31-Aug-10	2:45 PM	13.4	7.64	1860	0.236	-	0.236				AA	
1-Sep-10	7:57 AM	11.8	7.33	1595	0.242	0.241	0.242	0.191	-	0.191	AA	
2-Sep-10	8:18 AM	10.2	7.68	1623	0.210	0.206	0.208	0.187	-	0.187	AA	
3-Sep-10	7:35 AM	10.7	7.22	1672	0.251	0.245	0.248	0.208	-	0.208	AA	
4-Sep-10	8:16 AM	10.8	7.38	1744	0.192	0.206	0.199	0.177	-	0.177	AA	
5-Sep-10	9:33 AM	11.0	7.68	1860	0.237	0.218	0.228	0.200	-	0.200	AA	
6-Sep-10	9:58 AM	10.7	7.00	1730	0.223	0.248	0.236	0.208	-	0.208	AA	
7-Sep-10	9:45 AM	8.0	7.65	1708	0.254	0.257	0.256	0.219	-	0.219	AA	
8-Sep-10	8:20 AM	10.2	7.50	1512	0.222	0.231	0.227	0.191	-	0.191	AA	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
9-Sep-10	8:05 AM	11.0	8.34	1575	0.236	0.253	0.245	0.186	-	0.186	AA	
9-Sep-10	8:05 AM		7.51									Lab result for pH.
17-Nov-10	12:22 PM	1.1	7.35	1190	0.296	0.298	0.297	0.293	-	0.293	ICP	
18-Nov-10	10:40 AM	1.6	7.30	2219	0.304	0.306	0.305	0.283	-	0.283	ICP	
19-Nov-10	11:15 AM	1.4	6.94	2347	0.323	0.328	0.326	0.272	-	0.272	ICP	
20-Nov-10	10:05 AM	1.9	7.00	2371	0.311	0.314	0.313	0.306	-	0.306	ICP	
21-Nov-10	10:10 AM	2.0	6.76	2350	0.307	0.306	0.307	0.306	-	0.306	ICP	
22-Nov-10	10:03 AM	1.7	7.34	2335	0.312	0.311	0.312	0.318	-	0.318	ICP	
23-Nov-10	10:17 AM	2.0	7.20	2408	0.307	0.301	0.304	0.296	-	0.296	ICP	
24-Nov-10	9:26 AM	2.6	7.24	2347	0.313	0.310	0.312	0.307	-	0.307	ICP	
24-Nov-10	5:08 PM	4.7	7.18	2462	0.309	0.309	0.309	0.301	-	0.301	ICP	
25-Nov-10	10:13 AM	3.0	7.43	2293	0.307	0.305	0.306	0.301	-	0.301	ICP	
25-Nov-10	4:37 PM	3.4	7.57	2414	0.297	0.300	0.299	0.297	-	0.297	ICP	
26-Nov-10	10:15 AM	2.9	6.75	2317	0.287	0.285	0.286	0.301	-	0.301	ICP	
26-Nov-10	5:15 PM	2.5	6.99	2386	0.310	0.318	0.314	0.299	-	0.299	ICP	
27-Nov-10	8:42 AM	2.5	6.90	2440	0.291	0.292	0.292	0.286	-	0.286	ICP	
27-Nov-10	6:02 PM	3.2	6.97	2382	0.294	0.293	0.294	0.299	-	0.299	ICP	
28-Nov-10	8:22 AM	2.5	7.02	2415	0.299	0.299	0.299	0.303	-	0.303	ICP	
28-Nov-10	4:10 PM	2.2	6.80	2436	0.300	0.307	0.304	0.308	-	0.308	ICP	
29-Nov-10	10:00 AM	2.9	6.91	2322	0.306	0.306	0.306	0.295	-	0.295	ICP	
29-Nov-10	3:18 PM	3.2	6.91	2322	0.312	0.312	0.312	0.312	-	0.312	ICP	
30-Nov-10	12:02 PM	2.6	7.31	2520	0.303	0.307	0.305	0.303	-	0.303	ICP	
30-Nov-10	3:30 PM	2.8	7.13	2536	0.304	0.304	0.304	0.306	-	0.306	ICP	
1-Dec-10	8:42 AM	2.4	7.12	2493	0.300	0.304	0.302	0.304	-	0.304	ICP	
1-Dec-10	3:32 PM	2.9	6.88	2500	0.285	0.293	0.289	0.295	-	0.295	ICP	Checked calibration on pH meter & was good.
2-Dec-10	9:09 AM	2.7	6.88	2590	0.298	0.301	0.300	0.301	-	0.301	ICP	

**Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments
22-Mar-10	5:46 PM	0.8	7.49	790	0.032	0.032	0.027	0.028	ICP	
23-Mar-10	1:10 PM	1.6	7.64	970	0.055	0.055	0.046	0.048	ICP	
24-Mar-10	9:23 AM	0.2	7.39	1190	0.143	0.147	0.141	0.142	ICP	
25-Mar-10	7:14 AM	0.4	7.48	1010	0.085	0.087	0.069	0.070	ICP	
25-Mar-10	2:49 PM	1.3	7.46	1020	0.081	0.082	0.076	0.076	ICP	
26-Mar-10	8:06 AM	0.4	7.34	1030	0.097	0.099	0.086	0.088	ICP	
27-Mar-10	7:30 AM	0.7	7.46	1040	0.082	0.082	0.080	0.082	ICP	
28-Mar-10	7:35 AM	1.2	7.48	1200	0.090	0.093	0.073	0.085	ICP	
29-Mar-10	8:32 AM	1.4	7.51	1030	0.091	0.091	0.078	0.079	ICP	
30-Mar-10	8:06 AM	1.5	7.59	913	0.086	0.088	0.079	0.079	ICP	
30-Mar-10	10:50 AM	1.0	7.37	1030	0.090	0.090	-	-	ICP	
31-Mar-10	9:03 AM	1.3	7.73	916	0.080	0.079	0.072	0.072	ICP	
1-Apr-10	7:57 AM	1.5	7.57	920	0.081	0.080	0.073	0.072	ICP	X5 Siphon shut down at 6:30 PM.
5-Apr-10	8:09 AM	1.5	7.53	820	0.027	0.028	0.023	-	ICP	X5 siphon opened at 10:10 AM (1/2 open).
5-Apr-10	11:09 AM	0.3	7.38	980	0.058	0.060	0.047	-	ICP	
6-Apr-10	8:24 AM	0.8	7.40	1100	0.091	0.092	0.084	0.085	ICP	
7-Apr-10	8:48 AM	0.2	7.14	1240	0.090	0.087	0.082	0.081	ICP	
8-Apr-10	10:43 AM	1.7	7.70	1129	0.087	0.090	0.083	0.085	ICP	
9-Apr-10	7:55 AM	1.6	7.74	1120	0.094	0.095	0.078	0.081	ICP	Began discharging from mill to CVP at 11am.
10-Apr-10	7:30 AM	1.0	7.70	994	0.089	0.089	0.090	-	ICP	
11-Apr-10	7:50 AM	1.3	7.67	1100	0.064	0.063	0.057	-	ICP	
12-Apr-10	8:14 AM	0.8	7.71	1100	0.063	0.066	0.051	0.052	ICP	
13-Apr-10	9:04 AM	0.9	7.85	1027	0.074	0.073	0.073	-	ICP	
14-Apr-10	8:20 AM	1.6	7.84	1038	0.059	0.059	0.056	-	ICP	
15-Apr-10	8:05 AM	1.9	7.14	1150	0.064	0.062	0.057	0.057	ICP	
20-Apr-10	2:43 PM	2.7	7.44	1914	0.093	-	0.043	-	ICP	
23-Apr-10	7:34 AM	0.8	7.57	696	0.056	-	-	-	ICP	
25-Apr-10	7:44 AM	1.4	7.81	604	0.058	0.070	0.025	0.024	ICP	
26-Apr-10	8:43 AM	0.9	7.93	487	0.035	0.035	0.026	0.025	ICP	
27-Apr-10	1:50 AM	2.2	7.30	357	0.034	-	0.023	-	ICP	
29-Apr-10	3:35 PM	3.2	7.36	260	0.036	-	0.018	-	ICP	
2-May-10	9:05 AM	1.3	7.20	320	0.051	-	0.028	-	ICP	
3-May-10	8:29 AM	2.6	8.65	370	0.047	0.046	0.053	-	ICP	
4-May-10	8:37 AM	0.8	7.53	560	0.066	-	0.056	-	ICP	
5-May-10	8:41 AM	1.0	7.99	544	0.064	-	0.057	-	ICP	
6-May-10	8:50 AM	1.6	7.70	566	0.085	-	0.062	-	ICP	
7-May-10	6:35 AM	1.4	7.90	530	0.058	-	0.047	-	ICP	

**Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments		
8-May-10	8:04 AM	1.5	7.80	568	0.060	-	0.060	0.052	-	0.052	ICP	
9-May-10	8:13 AM	1.6	7.79	477	0.065	-	0.065	0.041	-	0.041	ICP	
10-May-10	8:19 AM	1.4	8.31	526	0.059	-	0.059	0.049	-	0.049	ICP	
11-May-10	8:20 AM	1.0	7.65	471	0.046	0.046	0.046	0.053	-	0.053	ICP	
12-May-10	8:39 AM	2.6	8.32	462	0.059	-	0.059	0.044	-	0.044	ICP	
13-May-10	7:37 AM	2.9	7.65	535	0.051	-	0.051	0.040	-	0.040	ICP	
14-May-10	7:46 AM	1.8	7.98	508	0.052	0.052	0.052	0.042	-	0.042	ICP	
15-May-10	7:24 AM	2.7	8.27	475	0.054	-	0.054	0.034	-	0.034	ICP	
16-May-10	8:03 AM	2.6	7.84	366	0.043	-	0.043	0.033	-	0.033	ICP	
17-May-10	8:27 AM	2.7	7.88	456	0.040	-	0.040	0.029	-	0.029	ICP	
18-May-10	8:34 AM	3.2	7.73	372	0.034	-	0.034	0.027	-	0.027	ICP	
19-May-10	8:25 AM	3.9	7.82	275	0.033	-	0.033	0.019	-	0.019	ICP	
20-May-10	8:18 AM	2.5	8.22	210	0.038	-	0.038	0.013	-	0.013	ICP	pH reading on same sample by lab personnel gave 7.78.
21-May-10	8:36 AM	2.3	7.75	233	0.026	-	0.026	0.016	-	0.016	ICP	
22-May-10	8:05 AM	2.4	8.32	269	0.022	-	0.022	0.019	-	0.019	ICP	
23-May-10	8:16 AM	4.3	8.47	275	0.026	-	0.026	0.016	-	0.016	ICP	
24-May-10	7:33 AM	3.8	7.79	277	0.024	-	0.024	0.018	-	0.018	ICP	
25-May-10	8:40 AM	5.0	8.01	243	0.022	-	0.022	0.015	-	0.015	ICP	
26-May-10	8:19 AM	4.6	7.66	246	0.024	-	0.024	0.018	-	0.018	ICP	
27-May-10	9:07 AM	5.7	8.20	265	0.028	-	0.028	0.015	-	0.015	ICP	
8-Jun-10	8:36 AM	7.0	7.93	380	0.040	-	0.040	0.032	-	0.032	ICP	
15-Jun-10	9:01 AM	7.2	7.87	420	0.046	-	0.046	0.041	-	0.041	ICP	
22-Jun-10	9:56 AM	9.6	7.75	438	0.114	-	0.114	0.046	-	0.046	ICP	
24-Jun-10	9:13 AM	9.3	7.81	457	0.044	-	0.044	0.065	-	0.065	ICP	
29-Jun-10	9:50 AM	9.4	7.35	501	0.047	-	0.047	0.044	-	0.044	ICP	
6-Jul-10	9:56 AM	9.9	8.01	395	0.048	-	0.048	0.022	-	0.022	ICP	
13-Jul-10	8:45 AM	9.4	8.19	456	0.040	-	0.040	0.031	-	0.031	ICP	
20-Jul-10	10:08 AM	11.8	8.04	563	0.046	-	0.046	0.042	-	0.042	ICP	
27-Jul-10	9:01 AM	10.2	8.11	606	0.063	-	0.063	0.054	-	0.054	ICP	
10-Aug-10	8:56 AM	9.8	7.92	658	0.054	-	0.054	0.037	-	0.037	ICP	
17-Aug-10	8:50 AM	11.5	7.92	614	0.051	-	0.051	0.043	-	0.043	ICP	
24-Aug-10	8:40 AM	8.0	8.67	423	0.037	-	0.037	0.026	-	0.026	ICP	
31-Aug-10	2:10 PM	10.9	7.96	650	0.046	-	0.046	-	-	-	AA	
7-Sep-10	9:30 AM	4.5	8.27	532	0.101	-	0.101	0.032	-	0.032	AA	
17-Nov-10	12:20 PM	0.1	7.61	510	0.113	-	0.113	0.103	-	0.103	ICP	
17-Nov-10	3:16 PM	0.1	7.66	530	0.117	-	0.117	0.101	-	0.101	ICP	
17-Nov-10	4:40 PM				0.118	-	0.118	0.100	-	0.100	ICP	Sample taken from surface at X14.

Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments		
17-Nov-10	4:40 PM				0.119	-	0.119	0.107	-	0.107	ICP	Sample taken from depth (~0.5 m) at X14.
18-Nov-10	10:30 AM	1.5	7.75	1010	0.110	-	0.110	0.094	-	0.094	ICP	
19-Nov-10	11:25 AM	0.1	7.40	1088	0.109	0.109	0.109	0.107	-	0.107	ICP	
20-Nov-10	10:00 AM	1.0	7.31	1110	0.109	-	0.109	0.105	-	0.105	ICP	
21-Nov-10	10:00 AM	0.3	7.10	1060	0.104	-	0.104	0.105	-	0.105	ICP	
22-Nov-10	9:55 AM	<0.0	7.80	1051	0.104	-	0.104	0.089	-	0.089	ICP	
23-Nov-10	10:08 AM	0.8	7.48	1097	0.101	-	0.101	0.096	-	0.096	ICP	
24-Nov-10	9:19 AM	0.9	7.48	1046	0.099	-	0.099	0.098	-	0.098	ICP	
24-Nov-10	5:02 PM	1.0	7.55	1077	0.100	-	0.100	0.092	-	0.092	ICP	
25-Nov-10	10:06 AM	1.1	8.14	997	0.101	-	0.101	0.095	-	0.095	ICP	
25-Nov-10	4:20 PM	0.9	8.21	1008	0.092	-	0.092	0.091	-	0.091	ICP	
26-Nov-10	10:05 AM	1.0	6.98	1008	0.088	-	0.088	0.088	-	0.088	ICP	
26-Nov-10	5:10 PM	1.4	7.33	994	0.093	-	0.093	0.091	-	0.091	ICP	
27-Nov-10	8:55 AM	0.4	7.47	1022	0.087	-	0.087	0.078	-	0.078	ICP	
27-Nov-10	5:55 PM	0.9	7.39	971	0.089	-	0.089	0.086	-	0.086	ICP	
28-Nov-10	8:32 AM	0.1	7.47	982	0.088	-	0.088	0.086	-	0.086	ICP	
28-Nov-10	4:00 PM	0.8	7.49	949	0.086	-	0.086	0.081	-	0.081	ICP	
29-Nov-10	9:51 AM	0.9	7.57	995	0.091	-	0.091	0.086	-	0.086	ICP	
29-Nov-10	3:09 PM	0.7	7.39	971	0.089	-	0.089	0.085	-	0.085	ICP	
30-Nov-10	12:02 PM	0.5	7.71	988	0.089	-	0.089	0.083	-	0.083	ICP	
30-Nov-10	3:23 PM	1.1	7.61	988	0.090	-	0.090	0.080	-	0.080	ICP	
1-Dec-10	8:37 AM	<0.1	7.67	1000	0.085	-	0.085	0.084	-	0.084	ICP	
1-Dec-10	3:25 PM	0.5	7.62	970	0.083	-	0.083	0.082	-	0.082	ICP	
2-Dec-10	8:42 AM	0.1	7.70	1000	0.087	-	0.087	0.096	-	0.096	ICP	

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
10-Apr-10	8:00 AM	1.3	10.59	1501	0.785	-	0.785	<0.01	-	<0.01	S	ICP	
11-Apr-10	8:00 AM	1.7	10.23	1640	0.094	-	0.094	<0.01	-	<0.01	S	ICP	
12-Apr-10	7:20 AM	2.2	10.72	1620	0.059	0.060	0.060	<0.01	-	<0.01	S	ICP	
13-Apr-10	8:40 AM	1.3	10.79	1497	0.087	-	0.087	<0.01	-	<0.01	S	ICP	
14-Apr-10	8:40 AM	1.0	10.93	1520	0.030	-	0.030	<0.01	-	<0.01	S	ICP	
15-Apr-10	8:26 AM	1.8	11.04	1730	0.069	0.074	0.072	<0.01	<0.01	<0.01	S	ICP	
16-Apr-10	6:59 AM	1.1	11.14	1730	0.052	0.059	0.056	<0.01	<0.01	<0.01	S	ICP	
17-Apr-10	8:00 AM	1.3	11.02	1700	0.026	-	0.026	<0.01	-	<0.01	S	ICP	
18-Apr-10	8:40 AM	1.0	10.82	1760	0.059	-	0.059	<0.01	-	<0.01	S	ICP	
19-Apr-10	8:27 AM	2.0	11.14	1720	0.043	-	0.043	<0.01	-	<0.01	S	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	12:16 PM	3.1	10.73	1609	0.063	-	0.063	<0.01	-	<0.01	S	ICP	
21-Apr-10	9:15 AM	1.5	10.95	1512	0.475	-	0.475	<0.01	-	<0.01	S	ICP	
22-Apr-10	8:15 AM	2.3		1453	0.086	-	0.086	<0.01	-	<0.01	S	ICP	pH meter malfunctioning, no pH reading obtained.
23-Apr-10	7:14 AM	1.7	10.77	1433	0.039	-	0.039	<0.01	-	<0.01	S	ICP	
24-Apr-10	7:50 AM	1.9	10.64	1482	0.127	-	0.127	<0.01	-	<0.01	S	ICP	
25-Apr-10	8:05 AM	1.9	10.82	1529	0.120	-	0.120	<0.01	-	<0.01	S	ICP	
26-Apr-10	7:57 AM	2.4	10.74	1411	0.093	-	0.093	<0.01	-	<0.01	S	ICP	
27-Apr-10	8:19 AM	1.9	10.51	1354	0.143	-	0.143	<0.01	-	<0.01	S	ICP	
28-Apr-10	8:04 AM	2.5	10.87	1280	0.132	-	0.132	<0.01	-	<0.01	S	ICP	
29-Apr-10	8:52 AM	2.8	10.15	1170	0.146	-	0.146	<0.01	-	<0.01	S	ICP	
30-Apr-10	7:30 AM	3.0	10.81	1220	0.181	-	0.181	<0.01	-	<0.01	S	ICP	
1-May-10		3.4	11.11	1250	0.094	-	0.094	<0.01	-	<0.01	S	ICP	
2-May-10	8:30 AM	3.7	11.07	1250	0.171	-	0.171	<0.01	-	<0.01	S	ICP	
3-May-10	8:08 AM	4.4	10.92	1230	0.208	-	0.208	<0.01	-	<0.01	S	ICP	
4-May-10	8:00 AM	4.0	10.35	1270	0.260	-	0.260	<0.01	-	<0.01	S	ICP	
4-May-10	1:15 PM	4.6	10.76	1190	0.115	-	0.115	<0.01	-	<0.01	S	ICP	
5-May-10	8:30 AM	3.7	10.79	1204	0.141	-	0.141	<0.01	-	<0.01	S	ICP	
6-May-10	7:56 AM	3.9	10.84	1204	0.222	-	0.222	<0.01	-	<0.01	S	ICP	
7-May-10	6:17 AM	3.8	10.39	1234	0.153	-	0.153	<0.01	-	<0.01	S	ICP	
8-May-10	7:40 AM	4.0	10.59	1221	0.294	-	0.294	<0.01	-	<0.01	S	ICP	
9-May-10	7:53 AM	3.8	10.59	1202	0.175	-	0.175	<0.01	-	<0.01	S	ICP	
10-May-10	7:56 AM	4.1	10.56	1284	0.298	-	0.298	<0.01	-	<0.01	S	ICP	Switched to parallel config. At 2:45 PM.
11-May-10	7:50 AM	3.5	10.47	1260	0.230	-	0.230	<0.01	-	<0.01	P	ICP	
11-May-10	2:58 PM	4.5	10.30	1180	0.153	-	0.153	<0.01	-	<0.01	P	ICP	
12-May-10	8:10 AM	4.3	10.84	1249	0.234	-	0.234	<0.01	-	<0.01	P	ICP	
13-May-10	7:20 AM	5.0	10.26	1300	0.394	-	0.394	<0.01	-	<0.01	P	ICP	

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments
13-May-10	1:56 PM	4.3	9.22	1170	0.912	-	0.076	-	P	ICP	Analyzed for Zn T and Diss. May 14, 10.
14-May-10	7:12 AM	4.2	10.44	1178	0.189	-	<0.01	-	P	ICP	Sampled by Env. Crew.
15-May-10	6:00 AM	6.8	10.57	1240	0.136	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
15-May-10	7:02 AM	5.2	10.94	1311	0.171	-	<0.01	-	P	ICP	Sampled by Env. Crew.
16-May-10	6:00 AM	4.7	10.72	1241	0.201	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
16-May-10	7:42 AM	4.6	10.62	1143	0.229	-	<0.01	-	P	ICP	Sampled by Env. Crew.
17-May-10	6:00 AM	5.3	10.73	1207	0.160	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
17-May-10	8:10 AM	5.8	10.59	1468	0.156	-	<0.01	-	P	ICP	Sampled by Env. Crew.
18-May-10	6:00 AM	5.2	10.81	1210	0.271	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
18-May-10	8:06 AM	5.3	10.60	1303	0.253	-	<0.01	-	P	ICP	Sampled by Env. Crew.
19-May-10	6:00 AM	6.6	10.72	1255	0.089	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
19-May-10	8:05 AM	5.2	10.73	1406	0.117	-	<0.01	-	P	ICP	Sampled by Env. Crew.
20-May-10	8:00 AM	6.7	10.90	1670	0.146	-	<0.01	-	P	ICP	Sampled by Env. Crew.
21-May-10	8:53 AM	5.7	10.91	1501	0.118	-	<0.01	-	P	ICP	Sampled by Env. Crew.
22-May-10	7:41 AM	5.6	10.98	1503	0.094	-	<0.01	-	P	ICP	Sampled by Env. Crew.
23-May-10	7:50 AM	6.9	10.50	1534	0.103	-	<0.01	-	P	ICP	Sampled by Env. Crew.
24-May-10	7:07 AM	6.2	10.48	1481	0.185	-	<0.01	-	P	ICP	
25-May-10	8:01 AM	6.8	10.48	1534	0.184	-	<0.01	-	P	ICP	
26-May-10	7:58 AM	7.2	10.44	1290	0.191	-	<0.01	-	P	ICP	
27-May-10	8:50 AM	7.5	10.50	1473	0.124	-	<0.01	-	P	ICP	
28-May-10	7:37 AM	7.5	10.88	1449	0.183	-	0.017	-	P	ICP	New sampling point: thickener port.
29-May-10	7:30 AM	8.7	10.62	1420	0.243	-	<0.01	-	P	ICP	
30-May-10	7:35 AM	8.7	10.25	1472	0.144	-	<0.01	-	P	ICP	
31-May-10	7:56 AM	9.3	10.22	1444	0.173	-	<0.01	-	P	ICP	
1-Jun-10	8:05 AM	9.2	10.55	1558	0.104	-	<0.01	-	P	ICP	
2-Jun-10	8:23 AM	9.4	10.28	1515	0.103	-	<0.01	-	P	ICP	Taken from old sampling location.
3-Jun-10	8:10 AM	9.4	10.47	1465	0.197	-	<0.01	-	P	ICP	
4-Jun-10	7:38 AM	8.4	10.49	1441	0.174	-	<0.01	-	P	ICP	
5-Jun-10	6:40 AM	8.5	10.46	1424	0.176	-	<0.01	-	P	ICP	Port not working. Taken from old sampling location.
6-Jun-10	6:30 AM	8.7	10.49	1526	0.190	-	<0.01	-	P	ICP	Port not working. Taken from old sampling location.

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
7-Jun-10	8:00 AM	8.6	10.46	1449	0.172	-	0.172	<0.01	-	<0.01	P	ICP	Port not working. Taken from old sampling location.
8-Jun-10	8:10 AM	8.4	10.61	1427	0.215	-	0.215	<0.01	-	<0.01	P	ICP	
9-Jun-10	8:11 AM	9.0	10.65	1130	0.185	-	0.185	<0.01	-	<0.01	P	ICP	
10-Jun-10	8:00 AM	9.6	10.53	1331	0.186	-	0.186	0.015	-	0.015	P	ICP	
11-Jun-10	7:45 AM	9.0	10.51	1393	0.154	-	0.154	<0.01	-	<0.01	P	ICP	
12-Jun-10	7:35 AM	9.2	10.75	1426	0.182	-	0.182	<0.01	-	<0.01	P	ICP	
13-Jun-10	7:52 AM	9.3	10.63	1493	0.246	-	0.246	<0.01	-	<0.01	P	AA	
14-Jun-10	8:09 AM	8.7	10.52	1492	0.264	-	0.264	<0.01	-	<0.01	P	AA	
15-Jun-10	9:22 AM	9.7	10.54	1360	0.432	0.436	0.434	<0.01	-	<0.01	P	ICP	
16-Jun-10	8:03 AM	10.6	10.30	1360	0.194	-	0.194	<0.01	-	<0.01	P	ICP	includes ETA water starting 4:40 PM.
17-Jun-10	7:56 AM	10.4	10.08	1450	0.155	-	0.155	<0.01	-	<0.01	P	AA	
18-Jun-10	7:18 AM	10.3	10.19	1513	0.094	-	0.094	<0.01	-	<0.01	P	AA	
19-Jun-10	8:55 AM	10.4	10.42	1460	0.131	-	0.131	<0.01	-	<0.01	P	AA	
20-Jun-10	7:21 AM	11.0	10.35	1460	0.149	-	0.149	0.015	-	0.015	P	AA	New port.
21-Jun-10	7:49 AM	10.8	10.27	1422	0.165	-	0.165	0.015	-	0.015	P	AA	
22-Jun-10	9:20 AM										P		not sampled. Pumping sludge.
23-Jun-10	7:55 AM	12.3	10.33	1304	0.154	-	0.154	<0.01	-	<0.01	P	AA	old sample site.
24-Jun-10	8:51 AM	11.3	10.26	1497	0.140	-	0.140	<0.01	-	<0.01	P	ICP	
25-Jun-10	8:02 AM	11.7	10.15	1464	0.098	-	0.098	0.072	-	0.072	P	ICP	
26-Jun-10	8:16 AM	12.8	9.78	1127	0.057	-	0.057	0.020	-	0.020	P	ICP	
27-Jun-10	8:10 AM	11.8	10.17	1644	0.146	-	0.146	<0.01	-	<0.01	P	ICP	
28-Jun-10	8:05 AM	11.5	10.19	1497	0.123	-	0.123	<0.01	-	<0.01	P	ICP	
29-Jun-10	8:25 AM	11.6	9.96	1511	0.124	-	0.124	<0.01	-	<0.01	P	ICP	
30-Jun-10	9:00 AM	11.5	9.91	1515	0.187	-	0.187	0.018	-	0.018	P	ICP	
1-Jul-10	8:40 AM	11.4	9.89	1532	0.327	-	0.327	0.015	-	0.015	P	ICP	
1-Jul-10	5:15 PM	12.2	10.18	1619	0.248	-	0.248	0.018	-	0.018	P	ICP	
2-Jul-10	7:40 AM	12.1	9.81	1640	0.134	-	0.134	0.022	-	0.022	P	ICP	
2-Jul-10	5:36 PM	12.5	9.82	1510	0.094	-	0.094					ICP	
3-Jul-10	8:05 AM	11.9	10.03	1620	0.143	-	0.143	0.035	-	0.035	P	ICP	
4-Jul-10	9:05 AM	11.4	10.00	1640	0.216	-	0.216	0.011	-	0.011	P	ICP	
5-Jul-10	8:30 AM	11.2	9.76	1660	0.219	-	0.219	0.023	-	0.023	P	ICP	
6-Jul-10	8:30 AM	11.3	9.86	1485	0.201	-	0.201	<0.01	-	<0.01	P	ICP	
7-Jul-10	8:32 AM	11.6	9.30	1427	0.209	-	0.209	0.078	-	0.078	P	ICP	
8-Jul-10	8:35 AM	12.9	9.75	1475	0.211	-	0.211	0.011	-	0.011	P	ICP	
9-Jul-10	7:40 AM	13.2	9.97	1425	0.096	0.110	0.103	0.010	-	0.010	P	ICP	
10-Jul-10	7:35 AM	13.2	10.20	1620	0.109	-	0.109	<0.01	-	<0.01	P	ICP	

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
11-Jul-10	8:10 AM	11.6	10.37	1368	0.099	-	0.099	<0.01	-	<0.01	P	ICP	
12-Jul-10	8:16 AM	12.3	10.24	1585	0.062	-	0.062	<0.01	-	<0.01	P	ICP	
13-Jul-10	8:15 AM	13.5	10.23	1303	0.090	-	0.090	<0.01	-	<0.01	P	ICP	
14-Jul-10	8:25 AM	12.4	10.02	1395	0.059	-	0.059	<0.01	-	<0.01	P	ICP	
15-Jul-10	8:13 AM	12.8	10.02	1322	0.109	-	0.109	<0.01	-	<0.01	P	ICP	
16-Jul-10	7:15 AM	13.7	10.18	1600	0.102	-	0.102	<0.01	-	<0.01	P	ICP	
17-Jul-10	7:05 AM	13.4	10.01	1394	0.096	-	0.096	0.013	-	0.013	P	ICP	
18-Jul-10	7:03 AM	13.4	10.00	1620	0.112	-	0.112	0.010	-	0.010	P	ICP	
19-Jul-10	8:10 AM	13.6	10.17	1567	0.153	-	0.153	<0.01	-	<0.01	P	ICP	
20-Jul-10	10:20 AM	13.9	10.22	1438	0.118	-	0.118	<0.01	-	<0.01	P	ICP	
21-Jul-10	8:03 AM	13.8	10.04	1630	0.113	-	0.113	<0.01	-	<0.01	P	ICP	
22-Jul-10	8:38 AM	14.1	10.04	1310	0.182	0.187	0.185	<0.01	-	<0.01	P	ICP	
22-Jul-10	-	-	9.96	1360	0.127	0.127	0.127				P	ICP	
23-Jul-10	7:55 AM	13.1	10.12	1449	0.079	-	0.079	<0.01	-	<0.01	P	ICP	
24-Jul-10	7:42 AM	13.3	10.12	1598	0.099	-	0.099	0.010	-	0.010	P	ICP	
25-Jul-10	7:44 AM	13.6	10.25	1587	0.119	0.125	0.122				P	ICP	dup run to check value.
25-Jul-10	12:10 PM	13.7	10.24	1564	0.195	0.193	0.194				P	ICP	no diss... Samples acidified.
26-Jul-10	7:45 AM	13.8	10.37	1414	0.172	-	0.172	0.011	-	0.011	P	ICP	
27-Jul-10	8:09 AM	13.9	10.27	1372	0.155	-	0.155	<0.01	-	<0.01	P	ICP	
28-Jul-10	8:05 AM	12.4	9.85	1327	0.040	-	0.040	<0.01	-	<0.01	P	ICP	
29-Jul-10	7:59 AM	14.1	10.26	1367	0.554	-	0.554	0.014	0.015	0.015	P	AA	
30-Jul-10	7:47 AM	15.1	10.27	1687	0.032	-	0.032	<0.01	<0.01	<0.01	P	AA	
31-Jul-10	7:47 AM	14.4	10.30	1375	0.198	-	0.198	<0.01	-	<0.01	P	AA	
1-Aug-10	7:45 AM	14.6	10.13	1279	0.174	-	0.174	0.010	-	0.010	P	AA	
2-Aug-10	8:07 AM	14.9	10.18	1580	0.111	-	0.111	0.013	-	0.013	P	AA	
3-Aug-10	7:56 AM	14.9	10.21	1578	0.146	-	0.146	0.025	-	0.025	P	AA	
4-Aug-10	8:00 AM	15.0	10.30	1312	0.171	-	0.171	0.021	-	0.021	P	AA	
5-Aug-10	8:01 AM	15.4	10.11	1443	0.203	-	0.203	0.010	-	0.010	P	AA	Faro pump shutdown 8:11-10:02AM.
6-Aug-10	7:46 AM	15.1	9.89	1358	0.125	-	0.125	0.014	-	0.014	P	AA	
7-Aug-10	7:50 AM	15.2	10.23	1427	0.131	-	0.131	<0.01	-	<0.01	P	AA	
8-Aug-10	8:30 AM	15.0	10.08	1600	0.132	-	0.132	0.011	-	0.011	P	AA	
9-Aug-10	8:05 AM	15.1	9.72	1569	0.148	-	0.148	<0.01	-	<0.01	P	ICP	
9-Aug-10	8:05 AM				0.119	-	0.119	0.013	-	0.013	P	AA	Duplicate analysis on AA.
10-Aug-10	8:05 AM	14.5	10.21	1572	0.164	-	0.164	<0.01	-	<0.01	P	ICP	
11-Aug-10	7:57 AM	14.7	10.01	1380	0.173	-	0.173	<0.01	-	<0.01	P	ICP	
12-Aug-10	7:57 AM	15.2	9.93	1440	0.069	-	0.069	0.011	-	0.011	P	ICP	
13-Aug-10	7:40 AM	14.3	10.33	1060	0.054	-	0.054	<0.01	-	<0.01	P	ICP	

Table C-11:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
14-Aug-10	8:07 AM	14.9	10.37	1399	0.084	-	0.084	<0.01	-	<0.01	P	ICP	
15-Aug-10	7:55 AM	14.5	9.51	1318	0.080	-	0.080	<0.01	-	<0.01	P	ICP	
16-Aug-10	7:43 AM	15.0	10.05	1560	0.228	0.275	0.252	<0.01	-	<0.01	P	ICP	
17-Aug-10	8:10 AM	15.4	9.86	1401	0.085	-	0.085	<0.01	-	<0.01	P	ICP	
18-Aug-10	8:10 AM	14.8	10.04	1500	0.078	-	0.078	<0.01	-	<0.01	P	ICP	
19-Aug-10	9:30 AM	14.2	10.20	1689	0.128	-	0.128	<0.01	-	<0.01	P	ICP	
20-Aug-10	7:44 AM	13.7	9.90	1590	0.074	-	0.074	<0.01	-	<0.01	P	ICP	
21-Aug-10	6:05 AM	13.6	10.34	1570	0.069	-	0.069	<0.01	-	<0.01	P	ICP	
22-Aug-10	7:14 AM	13.3	10.10	1430	0.177	-	0.177	<0.01	-	<0.01	P	ICP	
23-Aug-10	8:02 AM	12.5	10.08	1463	0.141	-	0.141	<0.01	-	<0.01	P	ICP	
24-Aug-10	8:09 AM	13.1	10.05	1183	0.104	-	0.104	<0.01	-	<0.01	P	ICP	
25-Aug-10	7:46 AM	12.4	10.11	1381	0.110	-	0.110	<0.01	-	<0.01	P	ICP	
26-Aug-10	7:50 AM	11.9	9.95	1630	0.145	-	0.145	<0.01	-	<0.01	P	AA	
27-Aug-10	7:35 AM	11.2	10.20	1458	0.234	-	0.234	<0.01	-	<0.01	P	AA	
28-Aug-10	8:58 AM	11.3	9.69	2063	0.091	-	0.091	<0.01	-	<0.01	P	AA	
29-Aug-10	8:30 AM	10.8	10.17	1993	0.111	-	0.111	<0.01	-	<0.01	P	AA	
30-Aug-10	7:56 AM	11.2	9.86	2047	0.099	-	0.099	0.016	-	0.016	P	AA	
30-Aug-10	7:56 AM	11.2	9.67	2133	0.119	-	0.119	<0.01	-	<0.01		AA	Reanalysis of morning sample to verify result. pH and conductivity measured on lab meter.
30-Aug-10	2:48 PM	11.1	10.00	2330	0.129	-	0.129	<0.01	-	<0.01		AA	Sample collected from thickener tank (no discharge from tank now).
30-Aug-10	2:48 PM	11.1	9.80	2145									pH and conductivity measured on lab meter.

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments
10-Apr-10	8:00 AM	1.4	10.49	1485	0.463	-	<0.01	<0.01	S	ICP	
11-Apr-10	8:00 AM	1.5	10.40	1650	0.079	-	<0.01	<0.01	S	ICP	
12-Apr-10	7:25 AM	1.0	10.47	1680	0.120	0.122	<0.01	<0.01	S	ICP	
13-Apr-10	8:36 AM	2.7	10.50	1502	0.077	-	<0.01	<0.01	S	ICP	
14-Apr-10	8:42 AM	1.1	10.83	1518	0.033	-	<0.01	<0.01	S	ICP	
15-Apr-10	8:28 AM	1.5	11.14	1760	0.067	0.068	<0.01	<0.01	S	ICP	
16-Apr-10	7:08 AM	0.9	10.93	1730	0.050	0.048	<0.01	<0.01	S	ICP	
17-Apr-10	8:05 AM	1.2	11.01	1750	0.034	-	<0.01	<0.01	S	ICP	
18-Apr-10	8:40 AM	1.0	10.78	1750	0.055	-	<0.01	<0.01	S	ICP	
19-Apr-10	8:30 AM	1.1	11.12	1710	0.049	-	<0.01	<0.01	S	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	12:19 PM	2.7	10.76	1612	0.069	-	<0.01	<0.01	S	ICP	
21-Apr-10	9:10 AM	2.3	10.90	1492	0.246	-	<0.01	<0.01	S	ICP	
22-Apr-10	8:10 AM	3.9		1440	0.091	-	<0.01	<0.01	S	ICP	pH meter malfunctioning, no pH reading obtained.
23-Apr-10	7:16 AM	1.7	10.41	1479	0.063	-	<0.01	<0.01	S	ICP	
24-Apr-10	7:52 AM	1.8	10.74	1513	0.080	-	<0.01	<0.01	S	ICP	
25-Apr-10	8:07 AM	2.0	10.66	1555	0.109	-	<0.01	<0.01	S	ICP	
26-Apr-10	7:55 AM	3.6	10.37	1374	0.135	-	<0.01	<0.01	S	ICP	
27-Apr-10	8:20 AM	2.8	10.51	1354	0.146	-	<0.01	<0.01	S	ICP	
28-Apr-10	8:02 AM	3.0	10.55	1250	0.147	-	<0.01	<0.01	S	ICP	
29-Apr-10	8:50 AM	2.8	10.23	1180	0.153	-	<0.01	<0.01	S	ICP	
30-Apr-10	7:30 AM	3.2	10.86	1230	0.135	-	<0.01	<0.01	S	ICP	
1-May-10		3.6	11.41	1270	0.142	-	<0.01	<0.01	S	ICP	
2-May-10	8:30 AM	4.0	10.73	1240	0.133	-	<0.01	<0.01	S	ICP	
3-May-10	8:09 AM	4.1	10.86	1220	0.096	-	<0.01	<0.01	S	ICP	
4-May-10	7:59 AM	4.2	10.28	1270	0.296	-	<0.01	<0.01	S	ICP	
4-May-10	1:20 PM	4.4	10.86	1190	0.141	-	<0.01	<0.01	S	ICP	
5-May-10	8:29 AM	4.6	10.64	1300	0.250	-	0.011	0.011	S	ICP	
6-May-10	7:52 AM	3.9	10.61	1221	0.270	-	<0.01	<0.01	S	ICP	
7-May-10	6:20 AM	3.7	10.56	1207	0.155	-	<0.01	<0.01	S	ICP	
8-May-10	7:38 AM	4.6	10.48	1253	0.332	-	<0.01	<0.01	S	ICP	
9-May-10	7:50 AM	5.3	10.48	1271	0.315	-	<0.01	<0.01	S	ICP	
10-May-10	7:55 AM	4.1	10.45	1288	0.278	-	<0.01	<0.01	S	ICP	Switched to parallel discharge from thickener and clarifier at 2:45 PM.
11-May-10	7:50 AM	4.5	10.33	1280	0.429	-	<0.01	<0.01	P	ICP	
11-May-10	3:00 PM	4.2	10.21	1180	0.363	-	<0.01	<0.01	P	ICP	

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments		
12-May-10	8:11 AM	4.4	10.27	1304	0.407	-	0.407	<0.01	-	<0.01	P	ICP	
13-May-10	7:20 AM	4.1	10.20	1260	0.683	-	0.683	<0.01	<0.01	<0.01	P	ICP	
13-May-10	2:01 PM	4.2	9.18	1070	2.415	-	2.415	0.023	-	0.023	P	ICP	Analyzed for Zn T and Diss. May 14, 10.
14-May-10	6:00 AM	8.2	10.55	1255	0.287	-	0.287	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Staff.
14-May-10	7:15 AM	4.1	10.49	1230	0.274	-	0.274	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
15-May-10	6:00 AM	6.9	10.50	1234	0.246	-	0.246	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
15-May-10	7:07 AM	5.0	10.86	1263	0.282	-	0.282	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
16-May-10	6:00 AM	5.6	10.61	1255	0.260	-	0.260	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
16-May-10	7:46 AM	4.7	10.46	1240	0.331	-	0.331	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
17-May-10	6:00 AM	5.1	10.66	1247	0.243	-	0.243	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
17-May-10	8:11 AM	4.8	10.63	1435	0.248	-	0.248	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
18-May-10	6:00 AM	5.6	10.68	1226	0.209	-	0.209	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
18-May-10	8:04 AM	6.3	10.58	1318	0.246	-	0.246	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
19-May-10	6:00 AM	6.1	10.82	1288	0.203	-	0.203	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
19-May-10	8:08 AM	5.1	10.75	1402	0.206	-	0.206	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
20-May-10	8:03 AM	5.1	10.99	1585	0.286	-	0.286	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
21-May-10	8:55 AM	5.6	10.97	1500	0.289	-	0.289	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
22-May-10	7:41 AM	5.7	10.97	1539	0.168	-	0.168	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
23-May-10	7:53 AM	6.8	10.82	1483	0.529	-	0.529	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
24-May-10	7:10 AM	6.1	10.50	1486	0.396	-	0.396	<0.01	-	<0.01	P	ICP	
25-May-10	8:04 AM	6.5	10.53	1500	0.362	-	0.362	<0.01	-	<0.01	P	ICP	
26-May-10	8:00 AM	7.0	10.48	1272	0.349	-	0.349	<0.01	-	<0.01	P	ICP	
27-May-10	8:45 AM	8.2	10.34	1506	0.261	-	0.261	<0.01	-	<0.01	P	ICP	
28-May-10	7:28 AM	7.9	10.53	1482	0.223	-	0.223	0.012	-	0.012	P	ICP	old clarifier.
28-May-10	7:34 AM	7.7	10.85	1465	0.335	-	0.335	0.011	-	0.011	P	ICP	new sampling port clarifier.
29-May-10	7:30 AM	8.8	10.23	1486	0.416	-	0.416	<0.01	-	<0.01	P	ICP	old clarifier.
29-May-10	7:30 AM	8.8	10.23	1486	0.388	-	0.388	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
30-May-10	7:40 AM	9.9	10.06	1485	0.274	-	0.274	<0.01	-	<0.01	P	ICP	old clarifier.
30-May-10	7:40 AM	9.9	10.06	1485	0.412	-	0.412	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
31-May-10	7:53 AM	10.8	10.10	1483	0.235	-	0.235	<0.01	-	<0.01	P	ICP	old clarifier.
31-May-10	7:55 AM	9.4	10.15	1455	0.238	-	0.238	<0.01	-	<0.01	P	ICP	new sampling port clarifier.

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments	
1-Jun-10	8:04 AM	10.8	10.48	1614	0.216	-	<0.01	-	<0.01	P	ICP	old clarifier.
1-Jun-10	8:08 AM	10.0	10.49	1585	0.277	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
2-Jun-10	8:25 AM	9.3	10.43	1510	0.129	-	<0.01	-	<0.01	P	ICP	old clarifier.
2-Jun-10	8:11 AM	11.0	10.00	1543	0.445	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
3-Jun-10	8:13 AM	9.6	10.45	1449	0.140	-	<0.01	-	<0.01	P	ICP	old clarifier.
3-Jun-10	8:09 AM	10.6	10.27	1475	0.453	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
4-Jun-10	7:34 AM	9.5	10.40	1456	0.347	-	<0.01	-	<0.01	P	ICP	old clarifier.
4-Jun-10	7:35 AM	8.9	10.46	1455	0.387	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
5-Jun-10	6:29 AM	8.7	10.42	1438	0.196	-	<0.01	-	<0.01	P	ICP	old clarifier.
5-Jun-10	6:36 AM	8.2	10.44	1420	0.593	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
6-Jun-10	6:25 AM	8.5	10.47	1514	0.198	-	<0.01	-	<0.01	P	ICP	old clarifier.
6-Jun-10	6:36 AM	8.1	10.51	1518	1.053	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
7-Jun-10	7:55 AM	8.9	10.51	1460	0.468	-	<0.01	-	<0.01	P	ICP	old clarifier.
7-Jun-10	7:56 AM	10.1	10.52	1322	0.740	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
8-Jun-10	8:13 AM	8.3	10.66	1413	0.232	-	<0.01	-	<0.01	P	ICP	old clarifier.
8-Jun-10	8:07 AM	9.8	10.48	1443	0.446	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
9-Jun-10	8:15 AM	8.9	10.68	1130	0.316	-	<0.01	-	<0.01	P	ICP	old clarifier.
9-Jun-10	8:09 AM	10.2	10.58	1145	0.349	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
10-Jun-10	8:03 AM	8.7	10.58	1343	0.272	-	0.015	-	0.015	P	ICP	old clarifier.
10-Jun-10	7:58 AM	9.7	10.50	1361	0.428	-	0.014	-	0.014	P	ICP	new sampling port clarifier.
11-Jun-10	7:45 AM	8.5	10.70	1386	0.346	-	<0.01	-	<0.01	P	ICP	old clarifier - New sampling port discontinued.
12-Jun-10	7:35 AM	9.2	10.61	1488	0.222	-	<0.01	-	<0.01	P	ICP	old clarifier - New sampling port discontinued.
13-Jun-10	7:56 AM	8.9	10.68	1479	0.290	-	<0.01	-	<0.01	P	AA	
14-Jun-10	8:02 AM	8.9	10.46	1538	0.423	-	<0.01	-	<0.01	P	AA	
15-Jun-10	9:19 AM	9.6	10.56	1350	0.272	-	<0.01	-	<0.01	P	ICP	
16-Jun-10	8:06 AM	10.0	10.43	1335	0.273	-	0.015	-	0.015	P	ICP	includes ETA water starting 4:40 PM.
17-Jun-10	8:00 AM	10.0	10.19	1439	0.161	-	<0.01	-	<0.01	P	AA	
18-Jun-10	7:13 AM	10.6	10.06	1539	0.065	-	0.011	-	0.011	P	AA	
19-Jun-10	8:50 AM	10.4	10.40	1450	0.633	-	<0.01	-	<0.01	P	AA	
20-Jun-10	7:15 AM	11.2	10.27	1480	0.170	-	0.016	-	0.016	P	AA	Old sampling point.
21-Jun-10	7:46 AM	11.8	10.22	1430	0.273	-	0.012	-	0.012	P	AA	
22-Jun-10	9:20 AM	11.2	10.14	1440	0.196	-	0.013	-	0.013	P	AA	
23-Jun-10	7:58 AM	11.3	10.39	1482	0.148	-	0.010	-	0.010	P	AA	
24-Jun-10	8:52 AM	11.0	10.32	1485	0.161	-	<0.01	-	<0.01	P	ICP	
25-Jun-10	8:05 AM	12.1	10.13	1522	0.079	-	0.100	-	0.100	P	ICP	

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
26-Jun-10	8:20 AM	12.2	9.90	1130	0.062	-	0.062	<0.01	-	<0.01	P	ICP	
27-Jun-10	8:13 AM	11.8	10.31	1653	0.103	-	0.103	<0.01	-	<0.01	P	ICP	
28-Jun-10	8:10 AM	11.4	10.24	1489	0.143	-	0.143	<0.01	-	<0.01	P	ICP	
29-Jun-10	8:22 AM	12.3	8.89	1550	0.162	-	0.162	<0.01	-	<0.01	P	ICP	
30-Jun-10	8:55 AM	11.3	9.90	1484	0.318	-	0.318	0.015	-	0.015	P	ICP	
1-Jul-10	8:43 AM	11.5	10.10	1633	0.382	-	0.382	0.025	-	0.025	P	ICP	
1-Jul-10	5:19 PM	12.0	10.07	1448	0.319	-	0.319	0.017	-	0.017	P	ICP	
2-Jul-10	7:40 AM	11.8	9.91	1490	0.270	-	0.270	0.010	-	0.010	P	ICP	
3-Jul-10	7:55 AM	12.0	9.99	1630	0.406	-	0.406	0.013	-	0.013	P	ICP	
4-Jul-10	9:05 AM	11.6	9.94	1640	0.413	-	0.413	0.020	-	0.020	P	ICP	
5-Jul-10	8:25 AM	11.3	9.75	1650	0.504	-	0.504	0.015	-	0.015	P	ICP	
6-Jul-10	8:40 AM	11.2	9.84	1483	0.655	-	0.655	0.030	-	0.030	P	ICP	
7-Jul-10	8:43 AM	11.5	9.33	1423	0.392	-	0.392	0.038	-	0.038	P	ICP	
8-Jul-10	8:43 AM	12.7	9.76	1447	0.272	-	0.272	<0.01	-	<0.01	P	ICP	
9-Jul-10	7:37 AM	13.8	9.89	1438	0.075	0.065	0.070	<0.01	-	<0.01	P	ICP	
10-Jul-10	7:38 AM	13.1	10.26	1660	0.107	-	0.107	<0.01	-	<0.01	P	ICP	
11-Jul-10	8:03 AM	11.8	10.38	1371	0.182	-	0.182	<0.01	-	<0.01	P	ICP	
12-Jul-10	8:18 AM	12.0	10.33	1571	0.049	-	0.049	<0.01	-	<0.01	P	ICP	
13-Jul-10	8:13 AM	13.7	10.05	1330	0.152	-	0.152	<0.01	-	<0.01	P	ICP	
14-Jul-10	8:20 AM	13.1	9.95	1395	0.055	-	0.055	<0.01	-	<0.01	P	ICP	
15-Jul-10	8:09 AM	13.0	9.94	1343	0.114	-	0.114	<0.01	-	<0.01	P	ICP	
16-Jul-10	7:16 AM	13.5	10.24	1580	0.174	-	0.174	<0.01	-	<0.01	P	ICP	
17-Jul-10	7:07 AM	13.1	10.17	1386	0.085	-	0.085	<0.01	-	<0.01	P	ICP	
18-Jul-10	7:04 AM	12.9	10.31	1590	0.235	-	0.235	<0.01	-	<0.01	P	ICP	
19-Jul-10	8:07 AM	13.8	9.89	1591	0.244	-	0.244	<0.01	-	<0.01	P	ICP	
20-Jul-10	10:15 AM	14.3	10.14	1424	0.061	-	0.061	<0.01	-	<0.01	P	ICP	
21-Jul-10	8:04 AM	13.7	10.30	1630	0.213	-	0.213	<0.01	-	<0.01	P	ICP	
22-Jul-10	8:41 AM	13.6	10.21	1298	0.037	0.035	0.036	<0.01	-	<0.01	P	ICP	
22-Jul-10	-	-	9.98	1371	0.176	0.175	0.176	-	-	-	P	ICP	
23-Jul-10	7:50 AM	13.6	10.00	1455	0.064	-	0.064	0.010	-	0.010	P	ICP	
24-Jul-10	7:46 AM	13.1	10.28	1577	0.307	0.286	0.297	<0.01	-	<0.01	P	ICP	Sample reanalyzed due to high Zn conc.
24-Jul-10	11:16 AM	13.4	10.22	1588	0.156	0.160	0.158				P	ICP	New sample collected to verify previous result.
25-Jul-10	7:47 AM	13.4	10.31	1577	0.763	0.794	0.779				P	ICP	dup run to check value.
25-Jul-10	12:15 PM	13.6	10.30	1570	0.310	-	0.310				P	ICP	no diss... Samples acidified.
26-Jul-10	7:45 AM	13.7	10.34	1401	0.409	0.403	0.406	0.014	-	0.014	P	ICP	Flow reduced to clarifier at 12:00 PM.

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
27-Jul-10	8:10 AM	14.1	10.16	1382	0.098	-	0.098	<0.01	-	<0.01	P	ICP	
28-Jul-10	8:07 AM	13.9	10.11	1296	0.335	-	0.335	0.010	-	0.010	P	ICP	
29-Jul-10	7:58 AM	14.9	10.38	1402	0.183	-	0.183	0.015	-	0.015	P	AA	
30-Jul-10	7:43 AM	15.6	10.00	1650	0.039	-	0.039	<0.01	<0.01	<0.01	P	AA	
31-Jul-10	7:43 AM	15.2	10.23	1387	0.145	-	0.145	0.017	-	0.017	P	AA	
1-Aug-10	7:44 AM	14.7	10.29	1268	0.140	-	0.140	0.030	-	0.030	P	AA	
2-Aug-10	8:10 AM	14.9	10.20	1570	0.138	-	0.138	0.031	-	0.031	P	AA	
3-Aug-10	7:58 AM	14.9	10.21	1558	0.229	-	0.229	0.031	-	0.031	P	AA	
4-Aug-10	8:03 AM	15.1	10.40	1280	0.089	-	0.089	0.018	-	0.018	P	AA	
5-Aug-10	8:02 AM	15.2	10.10	1432	0.164	-	0.164	0.015	-	0.015	P	AA	Faro pump shutdown 8:11-10:02AM.
6-Aug-10	7:42 AM	15.4	9.59	1316	0.132	-	0.132	<0.01	-	<0.01	P	AA	
7-Aug-10	7:50 AM	15.0	10.25	1434	0.107	-	0.107	<0.01	-	<0.01	P	AA	
8-Aug-10	8:32 AM	15.0	10.15	1610	0.074	-	0.074	<0.01	-	<0.01	P	AA	
9-Aug-10	8:07 AM	14.6	10.28	1582	0.175	-	0.175	0.029	-	0.029	P	ICP	
9-Aug-10					0.178	-	0.178	0.022	-	0.022	P	AA	Duplicate analysis by AA.
10-Aug-10	8:07 AM	14.7	10.28	1561	0.109	-	0.109	0.024	-	0.024	P	ICP	
11-Aug-10	7:50 AM	14.7	10.22	1370	0.115	-	0.115	<0.01	-	<0.01	P	ICP	
12-Aug-10	7:59 AM	14.7	10.15	1440	0.115	-	0.115	0.016	-	0.016	P	ICP	
13-Aug-10	7:40 AM	14.6	10.33	1077	0.027	-	0.027	0.013	-	0.013	P	ICP	
14-Aug-10	8:05 AM	15.1	10.30	1410	0.047	-	0.047	0.012	-	0.012	P	ICP	
15-Aug-10	8:00 AM	14.7	10.14	1316	0.038	-	0.038	<0.01	-	<0.01	P	ICP	
16-Aug-10	7:46 AM	15.2	10.12	1540	0.072	0.069	0.071	<0.01	-	<0.01	P	ICP	
17-Aug-10	8:13 AM	15.4	10.09	1387	0.088	-	0.088	0.021	-	0.021	P	ICP	
18-Aug-10	8:12 AM	14.6	10.16	1486	0.080	-	0.080	0.027	-	0.027	P	ICP	
19-Aug-10	9:32 AM	14.2	10.33	1631	0.044	-	0.044	<0.01	-	<0.01	P	ICP	
20-Aug-10	7:42 AM	13.8	9.83	1620	0.047	-	0.047	<0.01	-	<0.01	P	ICP	
21-Aug-10	6:10 AM	13.6	10.41	1630	0.073	-	0.073	<0.01	-	<0.01	P	ICP	
22-Aug-10	7:15 AM	12.9	10.09	1426	0.066	-	0.066	<0.01	-	<0.01	P	ICP	
23-Aug-10	8:00 AM	12.8	10.11	1476	0.073	-	0.073	0.017	-	0.017	P	ICP	
24-Aug-10	8:11 AM	12.5	10.18	1163	0.092	-	0.092	<0.01	-	<0.01	P	ICP	
25-Aug-10	7:50 AM	12.2	10.11	1376	0.088	-	0.088	<0.01	-	<0.01	P	ICP	
26-Aug-10	7:55 AM	12.0	10.10	1580	0.166	-	0.166	0.018	-	0.018	P	AA	
27-Aug-10	7:40 AM	11.5	10.28	1418	0.164	-	0.164	0.022	-	0.022	P	AA	
28-Aug-10	8:55 AM	11.3	9.72	2093	0.073	-	0.073	<0.01	-	<0.01	P	AA	
29-Aug-10	8:30 AM	11.0	10.15	1988	0.074	-	0.074	<0.01	-	<0.01	P	AA	
30-Aug-10	7:58 AM	10.7	7.65	2060	4.011	-	4.011	2.290	-	2.290	P	AA	Discharge from mill shut down before results available.

Table C-12:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Clarifier

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
30-Aug-10	7:58 AM	10.7	7.40	2141	4.180	-	4.180	2.210	-	2.210		AA	Reanalysis of morning sample to verify previous result. pH and conductivity measured on lab meter.
30-Aug-10	2:45 PM	11.1	9.24	2430	0.770	-	0.770	0.050	-	0.050		AA	Sample collected from clarifier tank (no discharge from tank now).
30-Aug-10	2:45 PM	11.1	9.14	2165									pH and conductivity measured on lab meter.

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
13-May-10	6:00 PM	6.7	10.00	1244	0.144	-	0.144	0.012	-	0.012						ICP	Mill Spill taken at sample port 6 PM	
14-May-10	12:00 AM	5.3	10.21	1245	0.120	-	0.120	<0.01	-	<0.01						ICP	Mill Spill taken at sample port 12 AM	
14-May-10	6:00 AM	8.2	10.25	1341	0.174	-	0.174	<0.01	-	<0.01						ICP	Mill Spill taken at sample port 6 AM	
14-May-10	8:30 AM	16.6	9.60	1160							0.123	0.333	0.228	<0.01	<0.01	<0.01	ICP	Combined Mill Spill, 8:30 AM; Rerun - 0.347 - ZnT dup
14-May-10	12:00 PM	6.7	10.26	1333	0.387	0.380	0.384	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
14-May-10	6:00 PM	6.6	10.05	1334	0.300	0.286	0.293	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	12:00 AM	7.1	10.60	1256	0.056	0.053	0.055	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	6:00 AM	5.3	10.63	1254	0.317	0.305	0.311	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	8:00 AM	19.4	9.48	1135							0.050	0.066	0.058	<0.01	<0.01	<0.01	ICP	Combined Mill Effluent
15-May-10	11:50 AM	8.5	10.52	1252	0.183	-	0.183	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
15-May-10	6:00 PM	6.6	10.61	1272	0.114	-	0.114	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	12:00 AM	6.1	10.61	1278	0.066	-	0.066	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	6:00 AM	6.3	10.60	1259	0.097	-	0.097	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	9:21 AM	6.3	10.60	1259							0.143	-	0.143	<0.01	-	<0.01	ICP	Combined Mill Effluent
16-May-10	12:00 PM	7.5	10.58	1251	0.201	-	0.201	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	6:00 PM	7.9	10.56	1281	0.210	-	0.210	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	12:00 AM	-6.8	10.61	1262	0.208	-	0.208	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	6:00 AM	5.3	10.62	1224	0.205	-	0.205	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	8:00 AM	19.1	9.81	1274							0.182	0.221	0.202	<0.01	<0.01	<0.01	ICP	Combined Mill Effluent; pH, EC and Temp were measured at 10:07 AM
17-May-10	12:00 PM	8.5	10.55	1254	0.364	-	0.364	<0.01	-	<0.01						ICP		
17-May-10	6:00 PM	7.2	10.61	1256	0.307	-	0.307	<0.01	-	<0.01						ICP		

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
18-May-10	12:00 AM	6.0	10.69	1219	0.908	-	0.908	<0.01	-	<0.01						ICP	thickener tank being flushed	
18-May-10	6:00 AM	5.7	10.72	1231	0.346	-	0.346	<0.01	-	<0.01						ICP		
18-May-10	7:51 AM	20.4	9.89	1242							0.366	0.361	0.364	<0.01	<0.01	<0.01	ICP	
18-May-10	12:00 PM	8.0	10.60	1236	0.387	-	0.387	<0.01	-	<0.01						ICP	thickener tank being flushed 10:30am to 12:30 pm	
18-May-10	6:00 PM	8.6	10.60	1261	0.315	-	0.315	<0.01	-	<0.01						ICP		
19-May-10	12:00 AM	7.1	10.62	1344	0.209	-	0.209	<0.01	-	<0.01						ICP		
19-May-10	6:00 AM	6.9	10.71	1327	0.202	-	0.202	<0.01	-	<0.01						ICP		
19-May-10	8:00 AM	21.6	9.58	1257							0.278	0.262	0.270	<0.01	<0.01	<0.01	ICP	pH, EC and temp measured at 1:16 PM
19-May-10	12:00 PM	7.7	10.58	1362	0.216	-	0.216	<0.01	-	<0.01						ICP		
19-May-10	6:00 PM	7.5	10.35	1388	0.305	-	0.305	<0.01	-	<0.01						ICP		
20-May-10	12:00 AM	6.7	10.67	1371	0.292	-	0.292	<0.01	-	<0.01						ICP		
20-May-10	6:15 AM	6.9	10.70	1405	0.293	-	0.293	<0.01	-	<0.01						ICP		
20-May-10	8:20 AM	17.4	10.09	1373							0.244	0.241	0.243	<0.01	-	<0.01	ICP	
20-May-10	12:00 PM	7.6	10.62	1455	0.210	-	0.210	<0.01	-	<0.01						ICP		
20-May-10	6:00 PM	8.0	10.48	1417	0.179	-	0.179	<0.01	-	<0.01						ICP		
21-May-10	12:00 AM	7.1	10.58	1375	0.177	-	0.177	<0.01	-	<0.01						ICP		
21-May-10	6:00 AM	7.4	10.62	1367	0.207	-	0.207	<0.01	-	<0.01						ICP		
21-May-10	9:15 AM	19.3	9.98	1388							0.178	0.178	0.178	<0.01	-	<0.01	ICP	
21-May-10	12:00 PM	9.1	10.56	1458	0.191	-	0.191	<0.01	-	<0.01						ICP		
21-May-10	6:00 PM	9.1	10.63	1439	0.258	-	0.258	<0.01	-	<0.01						ICP		
22-May-10	12:00 AM	8.2	10.70	1458	0.167	-	0.167	<0.01	-	<0.01						ICP		
22-May-10	6:00 AM	8.4	10.70	1458	0.200	-	0.200	<0.01	-	<0.01						ICP		
22-May-10	8:30 AM	20.3	9.87	1383							0.138	0.142	0.140	<0.01	-	<0.01	ICP	pH, EC and temp measured at 12pm
22-May-10	12:00 PM	10.1	10.61	1456	0.111	-	0.111	<0.01	-	<0.01						ICP		
22-May-10	6:00 PM	10.1	10.63	1388	0.178	-	0.178	<0.01	-	<0.01						ICP		
23-May-10	12:00 AM	7.7	10.67	1357	0.193	-	0.193	<0.01	-	<0.01						ICP		
23-May-10	6:00 AM	7.7	10.67	1375	0.304	-	0.304	<0.01	-	<0.01						ICP		
23-May-10	8:45 AM	20.4	9.98	1398							0.162	0.152	0.157	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 12pm
23-May-10	12:00 PM	9.1	10.54	1327	0.142	-	0.142	<0.01	-	<0.01						ICP		
23-May-10	6:00 PM	8.2	10.62	1332	0.394	-	0.394	<0.01	-	<0.01						ICP		
24-May-10	12:00 AM	7.4	10.47	1340	0.308	-	0.308	<0.01	-	<0.01						ICP		

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
24-May-10	6:00 AM	6.9	10.51	1351	0.347	-	0.347	<0.01	-	<0.01					ICP			
24-May-10	8:10 AM	15.4	10.23	1367							0.202	0.210	0.206	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 8:15am
24-May-10	12:00 PM	9.1	10.57	1320	0.233	-	0.233	<0.01	-	<0.01							ICP	
24-May-10	6:00 PM	9.0	10.59	1326	0.189	-	0.189	<0.01	-	<0.01							ICP	
25-May-10	12:00 AM	8.3	10.56	1343	0.288	-	0.288	<0.01	-	<0.01							ICP	
25-May-10	6:00 AM	7.6	10.41	1351	0.326	-	0.326	<0.01	-	<0.01							ICP	
25-May-10	8:35 AM	20.2	9.94	1363							0.255	0.239	0.247	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 10:40am
25-May-10	12:00 PM	9.6	10.50	1321	0.289	-	0.289	<0.01	-	<0.01							ICP	
25-May-10	6:00 PM	9.9	10.52	1289	0.342	-	0.342	<0.01	-	<0.01							ICP	
26-May-10	12:00 AM	8.8	10.56	1351	0.269	-	0.269	<0.01	-	<0.01							ICP	
26-May-10	6:00 AM	7.8	10.56	1359	0.274	-	0.274	<0.01	-	<0.01							ICP	
26-May-10	8:10 AM	16.1	10.13	1367							0.198	0.189	0.194	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 8:10am
26-May-10	12:00 PM	10.1	10.41	1349	0.259	-	0.259	<0.01	-	<0.01							ICP	
26-May-10	6:00 PM	9.2	10.54	1314	0.317	-	0.317	<0.01	-	<0.01							ICP	
27-May-10	12:00 AM	9.3	10.44	1358	0.299	-	0.299	<0.01	-	<0.01							ICP	
27-May-10	6:00 AM	8.6	10.43	1336	0.279	-	0.279	<0.01	-	<0.01							ICP	
27-May-10		-	-	-	-	-					0.293	-	0.293	<0.01	-	<0.01	ICP	Combined sample pH, EC, and temp. not measured
27-May-10	12:00 PM	10.0	10.36	1425	0.398	-	0.398	<0.01	-	<0.01							ICP	
27-May-10	6:00 PM	10.4	10.43	1427	0.227	-	0.227	<0.01	-	<0.01							ICP	
28-May-10	12:00 AM	10.0	10.36	1486	0.205	-	0.205	<0.01	-	<0.01							ICP	
28-May-10	6:00 AM	-	-	-	-	-											ICP	
28-May-10	7:53 AM	19.9	9.71	1337							0.238	0.246	0.242	<0.01	-	<0.01	ICP	pH, EC and temp measured at 9:25 AM
28-May-10	12:00 PM	10.6	10.40	1550														
28-May-10	6:00 PM	10.8	10.40	1554														
29-May-10	12:00 AM	9.5	10.30	1500														
29-May-10	6:00 AM	8.7	10.42	1492														
29-May-10	7:40 AM	20.5	9.91	1380							0.219	0.213	0.216	0.011	-	0.011	ICP	
29-May-10	12:00 PM	10.0	10.60	1440														
29-May-10	6:00 PM	10.0	10.60	1520														
30-May-10	12:00 AM	9.6	10.27	1499														
30-May-10	6:00 AM	9.3	10.26	1488														
30-May-10	7:39 AM	20.6	9.86	1346							0.222	0.219	0.221	<0.01	-	<0.01	ICP	
30-May-10	12:00 PM	10.6	10.40	1470														

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
30-May-10	6:00 PM	10.6	10.40	1500											
31-May-10	12:00 AM	10.0	10.30	1503											
31-May-10	6:00 AM	9.8	10.23	1410											
31-May-10	7:50 AM	-	-	-					0.189	0.187	0.188	<0.01	-	<0.01	ICP
31-May-10	12:00 PM	10.2	10.26	1468											
31-May-10	6:00 PM	11.3	10.36	1496											
1-Jun-10	12:00 AM	10.3	10.33	1448											
1-Jun-10	6:00 AM	10.5	10.27	1504											
1-Jun-10	7:50 AM	-	-	-					0.151	0.144	0.148	<0.01	-	<0.01	ICP
1-Jun-10	12:00 PM	10.9	10.20	1467											
1-Jun-10	6:00 PM	11.7	10.32	1472											
2-Jun-10	12:00 AM	11.0	10.24	1505											
2-Jun-10	6:00 AM	10.0	10.33	1450											
2-Jun-10	8:15 AM	-	-	-					0.112	-	0.112	<0.01	-	<0.01	ICP
2-Jun-10	12:00 PM	11.1	10.27	1454											Tanks being flushed.
2-Jun-10	6:00 PM	10.9	10.47	1452											
3-Jun-10	12:00 AM	10.5	10.20	1511											
3-Jun-10	6:00 AM	10.4	10.10	1483											
3-Jun-10	8:21 AM	-	-	-					0.169	-	0.169	<0.01	-	<0.01	ICP
3-Jun-10	12:00 PM	10.9	10.22	1497											
3-Jun-10	6:00 PM	10.4	10.66	1492											
4-Jun-10	12:00 AM	10.0	10.20	1453											
4-Jun-10	6:00 AM	10.2	10.24	1445											
4-Jun-10	7:40 AM	-	-	-					0.184	0.196	0.190	<0.01	-	<0.01	ICP
4-Jun-10	12:00 PM	9.7	10.80	1455	0.815	-	0.815								
4-Jun-10	6:00 PM	9.8	10.37	1501	0.320	-	0.320								
5-Jun-10	12:00 AM	9.8	10.40	1404	0.248	-	0.248								
5-Jun-10	6:00 AM	9.8	10.40	1498	0.349	-	0.349								
5-Jun-10	7:50 AM	-	-	-					0.411	-	0.411	<0.01	-	<0.01	ICP
5-Jun-10	12:00 PM	9.3	10.47	1476											
5-Jun-10	6:00 PM	9.8	10.40	1484											
6-Jun-10	12:00 AM	9.5	10.44	1467											
6-Jun-10	6:00 AM	9.8	10.46	1470											
6-Jun-10	7:55 AM	-	-	-					0.305	0.314	0.310	<0.01	-	<0.01	ICP
6-Jun-10	12:00 PM	9.6	10.35	1478	0.422		0.422								
6-Jun-10	6:00 PM	9.8	10.41	1509	0.300		0.300								
7-Jun-10	12:00 AM	9.8	10.45	1460	0.303		0.303								
7-Jun-10	6:00 AM	9.8	10.50	1450	0.308		0.308								

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments		
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg				
7-Jun-10	7:55 AM								0.337	0.340	0.339	<0.01	-	<0.01	ICP	
7-Jun-10	12:00 PM	10.2	10.18	1478												
7-Jun-10	6:00 PM	10.4	10.41	1512												
8-Jun-10	12:00 AM	9.8	10.50	1470												
8-Jun-10	6:00 AM	8.8	10.50	1450												
8-Jun-10	7:55 AM								0.212	0.216	0.214	0.010	-	0.010	ICP	
8-Jun-10	12:00 PM	10.5	10.45	1428												sludge being pumped out at time of the sample
8-Jun-10	6:00 PM	9.9	10.42	1430												
9-Jun-10	12:00 AM	9.6	10.35	1441												
9-Jun-10	6:00 AM	8.6	10.41	1415												
9-Jun-10	8:20 AM								0.268	0.271	0.270	<0.01	-	<0.01	ICP	
9-Jun-10	12:00 PM	10.8	10.36	1408												
9-Jun-10	6:00 PM	10.5	10.40	1416												
10-Jun-10	12:00 AM	9.2	10.26	1464												
10-Jun-10	6:00 AM	9.8	10.21	1448												
10-Jun-10	8:03 AM								0.245	0.243	0.244	0.010	-	0.010	ICP	
10-Jun-10	12:00 PM	10.8	10.32	1513												
10-Jun-10	6:00 PM	10.5	10.29	1495												
11-Jun-10	12:00 AM	10.1	10.46	1448												
11-Jun-10	6:00 AM	9.3	10.57	1442												
11-Jun-10	7:55 AM								0.213	0.272	0.243	<0.01	-	<0.01	ICP	
11-Jun-10	12:00 PM	10.6	10.40	1390												
11-Jun-10	6:00 PM	10.0	10.40	1410												
12-Jun-10	12:00 AM	10.1	10.26	1514												
12-Jun-10	6:00 AM	9.5	10.31	1451												
12-Jun-10	8:05 AM								0.187	0.189	0.188	<0.01	-	<0.01	ICP	
12-Jun-10	12:00 PM	10.6	10.40	1437												
12-Jun-10	6:00 PM	10.2	10.40	1440												
13-Jun-10	12:00 AM	9.5	10.13	1419												
13-Jun-10	6:00 AM	10.1	10.05	1489												
13-Jun-10	7:45 AM								0.388	0.386	0.387	<0.01	-	<0.01	AA	
13-Jun-10	12:00 PM	10.6	10.40	1450												
13-Jun-10	6:00 PM	10.6	10.30	1451												
14-Jun-10	12:00 AM	9.5	9.91	1469												
14-Jun-10	6:00 AM	8.4	10.05	1408												
14-Jun-10	7:54 AM								0.311	0.298	0.305	<0.01	-	<0.01	AA	
14-Jun-10	2:00 PM	10.1	10.60	1350												

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
14-Jun-10	6:00 PM	9.6	10.30	1430											
15-Jun-10	12:00 AM	10.1	10.12	1468											
15-Jun-10	6:00 AM	10.1	0.14	1458											
15-Jun-10	7:50 AM								0.329	0.309	0.319	0.014	-	0.014	ICP
15-Jun-10	12:00 PM	11.6	10.40	1440											
15-Jun-10	6:00 PM	12.1	10.40	1480											
16-Jun-10	12:00 AM	11.2	10.10	1477											
16-Jun-10	6:00 AM	10.2	10.15	1440											
16-Jun-10	8:15 AM								0.243	0.243	0.243	<0.01	-	<0.01	ICP
16-Jun-10	12:00 PM	12.2	10.36	1370											
16-Jun-10	6:00 PM	11.0	10.17	1477											
17-Jun-10	12:00 AM	10.2	10.33	1526											
17-Jun-10	6:00 AM	9.9	10.35	1527											
17-Jun-10	8:20 AM								0.219	0.211	0.215	<0.01	-	<0.01	AA
17-Jun-10	12:00 PM	12.6	10.01	1442											
17-Jun-10	6:00 PM	11.7	10.38	1554											
18-Jun-10	12:00 AM	10.5	10.26	1549											
18-Jun-10	6:00 AM	10.1	10.32	1550											
18-Jun-10	7:55 AM								0.089	0.114	0.102	<0.01	-	<0.01	AA
18-Jun-10	12:00 PM	10.9	9.85	1542											
18-Jun-10	6:00 PM	10.4	9.95	1534											
19-Jun-10	12:00 AM	10.0	10.26	1555											
19-Jun-10	6:00 AM	9.9	10.32	1497											
19-Jun-10	9:15 AM								0.368	0.374	0.371	<0.01	-	<0.01	AA
19-Jun-10	12:00 PM	11.1	9.89	1501											
19-Jun-10	6:00 PM	11.5	10.00	1532											
20-Jun-10	12:00 AM	10.7	10.31	1525											
20-Jun-10	6:00 AM	10.3	10.40	1494											
20-Jun-10	8:00 AM								0.271	0.269	0.270	0.016	-	0.016	AA
20-Jun-10	12:00 PM	11.9	9.88	1500											
20-Jun-10	6:00 PM	11.7	10.06	1522											
21-Jun-10	12:00 AM	11.9	10.10	1530											
21-Jun-10	6:00 AM	11.8	10.30	1515											
21-Jun-10	7:50 AM								0.158	0.165	0.162	0.015	-	0.015	AA
21-Jun-10	12:00 PM	12.3	9.93	1576											
21-Jun-10	6:00 PM	12.3	9.98	1545											
22-Jun-10	12:00 AM	12.0	10.06	1540											
22-Jun-10	6:00 AM	11.7	10.16	1562											

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments		
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg				
22-Jun-10	9:00 AM								0.181	0.182	0.182	<0.01		0.005	AA	
22-Jun-10	12:00 PM	11.7	9.88	1511												
22-Jun-10	6:00 PM	11.9	10.11	1443												
23-Jun-10	12:00 AM	11.8	10.10	1520												
23-Jun-10	6:00 AM	11.9	10.40	1540												
23-Jun-10	10:30 AM								0.173	0.189	0.181	<0.01		0.005	AA	
23-Jun-10	12:00 PM	11.6	9.85	1525												
23-Jun-10	6:00 PM	11.7	9.92	1551												
24-Jun-10	12:00 AM	11.8	10.10	1540												
24-Jun-10	6:00 AM	11.8	10.10	1548												
24-Jun-10	11:45 AM								0.138	0.142	0.140	<0.01		0.005	ICP	
24-Jun-10	12:00 PM	12.7	10.32	1556												
24-Jun-10	6:00 PM	12.6	10.29	1512												
25-Jun-10	12:00 AM	12.0	10.80	1555												
25-Jun-10	6:00 AM	11.2	10.13	1522												
25-Jun-10	10:30 AM								0.110	0.160	0.135	<0.01	-	<0.01	ICP	
25-Jun-10	12:00 PM	12.8	10.10	1483												
25-Jun-10	6:00 PM	13.5	10.13	1469												
25-Jun-10	12:00 AM	12.2	9.98	1490												
26-Jun-10	6:00 AM	11.3	9.97	1503												
26-Jun-10	10:00 AM								0.077	-	0.077	<0.01	-	<0.01	ICP	
26-Jun-10	12:00 PM	13.5	9.97	1515												
26-Jun-10	6:00 PM	13.5	10.14	1474												
27-Jun-10	12:00 AM	13.3	10.13	1485												
27-Jun-10	6:00 AM	12.2	10.15	1478												
27-Jun-10	8:50 AM								0.130	-	0.130	<0.01	-	<0.01	ICP	
27-Jun-10	12:00 PM	12.4	10.10	1490												
27-Jun-10	6:00 PM															No field parameters recorded
28-Jun-10	12:00 AM	12.1	10.16	1416												
28-Jun-10	6:00 AM	11.2	10.13	1522												
28-Jun-10	9:30 AM								0.157	-	0.157	0.012	-	0.012	ICP	
28-Jun-10	12:00 PM	11.6	9.84	1350												
28-Jun-10	6:00 PM	12.0	10.00	1350												
29-Jun-10	12:00 AM	12.4	9.63	1433												
29-Jun-10	6:00 AM	11.4	9.37	1371												
29-Jun-10	8:05 AM								0.262	-	0.262	0.011	-	0.011	ICP	
29-Jun-10	12:00 PM	13.6	10.00	1390												

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
29-Jun-10	6:00 PM	13.6	11.48	1440											
30-Jun-10	12:00 AM	12.3	9.32	1453											
30-Jun-10	6:00 AM	11.9	11.33	1557											
30-Jun-10	8:05 AM								0.191	0.194	0.193	<0.01	-	<0.01	ICP
30-Jun-10	12:00 PM		9.78	1403											
30-Jun-10	6:00 PM	13.6	10.00	1408											
1-Jul-10	12:00 AM	12.0	9.60	1397											
1-Jul-10	6:00 AM	11.8	11.95	2066											
1-Jul-10	10:15 AM								0.210	-	0.210	<0.01	-	<0.01	ICP
1-Jul-10	12:00 PM	12.6	10.00	1440											
1-Jul-10	6:00 PM	12.6	10.10	1430											
2-Jul-10	12:00 AM	12.5	9.42	1408											
2-Jul-10	6:00 AM	11.9	9.62	1413											
2-Jul-10	11:00 AM								0.262	-	0.262	<0.01	-	<0.01	ICP
2-Jul-10	12:00 PM														Tanks being flushed, no sample.
2-Jul-10	6:00 PM	13.5	10.98	1482											
3-Jul-10	12:00 AM	12.9	9.90	1398											
3-Jul-10	6:00 AM	12.0	9.96	1389											
3-Jul-10	9:00 AM								0.306	0.309	0.308				ICP No dissolved sample analyzed.
3-Jul-10	12:00 PM	13.0	9.90	1393											
3-Jul-10	6:00 PM	13.2	10.22	1390											
4-Jul-10	12:00 AM	13.5	9.91	1369											
4-Jul-10	6:00 AM	12.3	9.95	1404											
4-Jul-10	9:45 AM								0.183	-	0.183				ICP
4-Jul-10	12:00 PM	12.9	11.21	1548											
4-Jul-10	6:00 PM	13.3	9.92	1400											
5-Jul-10	12:00 AM	12.0	9.90	1387											
5-Jul-10	6:00 AM	11.6	12.22	2412											Lime line plugged up so was flushed previous to this sample.
5-Jul-10	9:50 AM								0.244	-	0.244	<0.01	-	<0.01	ICP
5-Jul-10	12:00 PM	13.6	9.63	1410											
5-Jul-10	6:00 PM	12.9	9.73	1384											
6-Jul-10	12:00 AM	12.4	9.75	1410											
6-Jul-10	6:00 AM	11.6	9.95	1414											
6-Jul-10	8:30 AM								0.341	0.336	0.339				ICP

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
6-Jul-10	12:00 PM	12.9	10.95	1554											
6-Jul-10	6:00 PM	15.5	9.37	1644											
7-Jul-10	12:00 AM	13.0	10.80	1554											
7-Jul-10	6:00 AM	14.0	11.00	1560											
7-Jul-10	8:45 AM								0.460	-	0.460			ICP	
7-Jul-10	12:00 PM	13.3	10.85	1588											
7-Jul-10	6:00 PM	14.5	11.60	2635											
8-Jul-10	12:00 AM	14.6	11.60	1245											
8-Jul-10	6:00 AM	14.0	11.20	2206											
8-Jul-10	9:00 AM								0.285	-	0.285	<0.01	-	<0.01	ICP
8-Jul-10	12:00 PM	14.1	9.57	-											
8-Jul-10	6:00 PM	15.3	9.42	-											
9-Jul-10	12:00 AM	14.1	10.10	-											
9-Jul-10	6:00 AM	13.4	10.10	-											
9-Jul-10	8:08 AM								0.116	-	0.116	<0.01	-	<0.01	ICP
9-Jul-10	12:00 PM	14.7	9.76	1447											
9-Jul-10	6:00 PM	16.6	9.60	1498											
10-Jul-10	12:00 AM	14.0	9.80	1440											
10-Jul-10	6:00 AM	13.6	9.80	1404											
10-Jul-10	7:46 AM								0.125	-	0.125	<0.01	-	<0.01	ICP
10-Jul-10	12:00 PM	13.2	10.09	1408											
10-Jul-10	6:00 PM	13.5	10.13	1417											
11-Jul-10	12:00 AM	12.8	10.11	1415											
11-Jul-10	6:00 AM	11.7	10.17	1410											
11-Jul-10	8:13 AM								0.183	-	0.183			ICP	
11-Jul-10	12:00 PM	12.6	10.20	1580											
11-Jul-10	6:00 PM	13.5	10.23	1570											
12-Jul-10	12:00 AM	12.0	10.27	1570											
12-Jul-10	6:00 AM	11.8	10.20	1570											
12-Jul-10	8:26 AM								0.132	0.132	0.132			ICP	
12-Jul-10	12:00 PM	13.3	10.15	1580											
12-Jul-10	6:00 PM	14.4	10.22	1560											
13-Jul-10	12:00 AM	13.5	10.21	1570											
13-Jul-10	6:00 AM	12.9	10.18	1560											
13-Jul-10	11:30 AM								0.166	0.167	0.167			ICP	
13-Jul-10	12:00 PM	15.6	10.02	1367											
13-Jul-10	6:00 PM	14.8	10.00	1395											
14-Jul-10	12:00 AM	13.5	10.09	1411											

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
14-Jul-10	6:00 AM	12.6	10.18	1400											
14-Jul-10	8:25 AM								0.117	-	0.117			ICP	
14-Jul-10	12:00 PM	14.6	9.70	1347											
14-Jul-10	6:00 PM	15.0	9.90	1420											
15-Jul-10	12:00 AM	13.9	9.35	1443											
15-Jul-10	6:00 AM	13.4	9.16	1417											
15-Jul-10	8:30 AM								0.187	-	0.187			ICP	
15-Jul-10	12:00 PM	14.4	9.90	1440											
15-Jul-10	6:00 PM	14.4	9.40	1440											
16-Jul-10	12:00 AM	13.8	9.48	1435											
16-Jul-10	6:00 AM	13.7	9.53	1406											
16-Jul-10	8:45 AM								0.184	0.182	0.183			ICP	
16-Jul-10	12:00 PM	14.4	10.00	1450											
16-Jul-10	6:00 PM	14.4	10.00	1450											
17-Jul-10	12:00 AM	13.5	9.64	1424											
17-Jul-10	6:00 AM	13.5	9.34	1411											
17-Jul-10	7:40 AM								0.301	0.303	0.302			ICP	
17-Jul-10	12:00 PM	14.4	10.00	1480											
17-Jul-10	6:00 PM	14.4	9.80	1440											
18-Jul-10	12:00 AM	13.8	9.26	1458											
18-Jul-10	6:00 AM	13.1	9.55	1445											
18-Jul-10	8:15 AM								0.166	-	0.166			ICP	
18-Jul-10	12:00 PM	14.6	10.59	1351											Tanks were being flushed
18-Jul-10	6:00 PM	14.8	10.44	1386											Tanks were being flushed
19-Jul-10	12:00 AM	14.0	10.29	1424											Tanks were being flushed
19-Jul-10	6:00 AM	13.2	10.33	1385											Tanks were being flushed
19-Jul-10	9:05 AM								0.155	0.154	0.155			ICP	
19-Jul-10	12:00 PM	14.9	10.42	1337											Faro and ETA water only
19-Jul-10	6:00 PM	14.8	10.43	1315											Faro and ETA water only
20-Jul-10	12:00 AM	14.3	10.29	1398											
20-Jul-10	6:00 AM	13.7	10.37	1404											
20-Jul-10	10:00 AM								0.154	-	0.154			ICP	
20-Jul-10	12:00 PM	15.1	10.31	1408											Tanks were being Flushed

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
20-Jul-10	6:00 PM	15.3	10.36	1414											
21-Jul-10	12:00 AM	14.1	10.22	1468											
21-Jul-10	6:00 AM	13.9	10.41	1430											
21-Jul-10	9:15 AM								0.142	0.143	0.143		ICP		
21-Jul-10	12:00 PM	14.4	10.40	1442											
21-Jul-10	6:00 PM	-	-	-											no measurments were taken
22-Jul-10	12:00 AM	14.1	10.36	1410											
22-Jul-10	6:00 AM	13.9	10.35	1408											
22-Jul-10	10:11 AM								0.085	0.085	0.085		ICP		
22-Jul-10	12:00 PM	14.7	9.70	1435											
22-Jul-10	6:00 PM	15.6	9.81	1427											
23-Jul-10	12:00 AM	14.6	10.30	1407											
23-Jul-10	6:00 AM	13.7	10.15	1420											
23-Jul-10	8:00 AM								0.257	0.258	0.258		ICP		
23-Jul-10	12:00 PM	14.6	9.61	1438											
23-Jul-10	6:00 PM	15.0	9.58	1443											
24-Jul-10	12:00 AM	14.4	10.00	1440											
24-Jul-10	6:00 AM	13.7	9.90	1440											
24-Jul-10	8:15 AM								0.205	0.204	0.205		ICP		
24-Jul-10	12:00 PM	13.9	9.82	1419	3.490	-	3.490						ICP		
24-Jul-10	6:00 PM	15.0	9.62	1447	0.444	-	0.444						ICP		
25-Jul-10	12:00 AM	14.8	9.90	1440	0.213	-	0.213						ICP		
25-Jul-10	6:00 AM	14.0	9.90	1440	0.241	-	0.241						ICP		
25-Jul-10									1.094	-	1.094		ICP	individuals run to identify source	
25-Jul-10	12:30 PM	14.5	10.20	1557	0.271	-	0.271						ICP		
25-Jul-10	12:00 PM	15.0	9.40	1473											
25-Jul-10	6:00 PM	15.4	9.65	1440											
26-Jul-10	12:00 AM	14.4	10.00	1380											
26-Jul-10	6:00 AM	14.4	10.00	1397											
26-Jul-10	8:30 AM								0.265	0.261	0.263		ICP		
26-Jul-10	12:00 PM	-	-	-											
26-Jul-10	6:00 PM	16.0	9.82	1569											
27-Jul-10	12:00 AM	14.6	10.06	1559											
27-Jul-10	6:00 AM	14.3	10.12	1561											
27-Jul-10									0.243	-	0.243		ICP		
27-Jul-10	12:00 PM	16.5	9.14	1498											no sample collected

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg		
27-Jul-10	6:00 PM	17.2	9.40	1417										
28-Jul-10	12:00 AM	15.2	9.78	1402										
28-Jul-10	6:00 AM	-	-	-										
28-Jul-10	8:15 AM								0.289	0.288	0.289		ICP	
28-Jul-10	12:00 PM	-	-	-										sample not collected
28-Jul-10	6:00 PM	16.6	9.35	1464										
29-Jul-10	12:00 AM	14.6	10.05	1400										
29-Jul-10	6:00 AM	14.0	10.12	1380										
29-Jul-10	8:30 AM								0.229	-	0.229		AA	
29-Jul-10	12:00 PM	16.1	9.51	1425										
29-Jul-10	6:00 PM	16.6	10.81	1392										
30-Jul-10	12:00 AM	15.4	10.28	1418										
30-Jul-10	6:00 AM	14.5	10.36	1462										ETA and IP water only
30-Jul-10	8:20 AM								0.289	0.292	0.291		AA	
30-Jul-10	12:00 PM	16.0	10.10	1440										
30-Jul-10	6:00 PM	16.5	9.95	1455										
31-Jul-10	12:00 AM	12.0	10.10	1484										
31-Jul-10	6:00 AM	15.4	9.72	1439										
31-Jul-10	7:50 AM								0.247	0.237	0.242		AA	
31-Jul-10	12:00 PM	18.0	9.97	1480										
31-Jul-10	6:00 PM	17.1	9.80	1426										
1-Aug-10	12:00 AM	15.9	9.53	1467										
1-Aug-10	6:00 AM	15.2	9.60	1422										
1-Aug-10	8:10 AM								0.148	-	0.148		AA	
1-Aug-10	12:00 PM	17.6	9.90	1480										
1-Aug-10	6:00 PM	17.8	9.89	1482										
2-Aug-10	12:00 AM	15.9	9.47	1449										
2-Aug-10	6:00 AM	15.1	9.63	1423										
2-Aug-10	8:00 AM								0.141	0.178	0.160		AA	
2-Aug-10	12:00 PM	17.1	9.90	1450										
2-Aug-10	6:00 PM	16.8	9.86	1466										
3-Aug-10	12:00 AM	16.0	9.50	1455										
3-Aug-10	6:00 AM	14.7	9.80	1422										
3-Aug-10	8:45 AM								0.291	-	0.291		AA	
3-Aug-10	12:00 PM	17.1	9.97	1451										
3-Aug-10	6:00 PM	18.2	10.00	1359										
4-Aug-10	12:00 AM	15.8	9.68	1444										
4-Aug-10	6:00 AM	16.5	9.87	1432										

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
4-Aug-10	8:05 AM								0.277	-	0.277			AA	
4-Aug-10	12:00 PM	17.8	9.94	1390											
4-Aug-10	6:00 PM	18.4	9.99	1390											
5-Aug-10	12:00 AM	16.5	9.97	1440											
5-Aug-10	6:00 AM	16.3	9.50	1420											
5-Aug-10	8:10 AM								0.217	-	0.217			AA	Faro pump shutdown 8:11-10:02AM.
5-Aug-10	12:00 PM	16.8	9.98	1690											
5-Aug-10	6:00 PM	17.7	9.74	1650											
6-Aug-10	12:00 AM	16.0	9.96	1600											
6-Aug-10	6:00 AM	1560.0	9.53	1630											
6-Aug-10	8:10 AM								0.149	-	0.149			AA	
6-Aug-10	12:00 PM	16.9	9.86	1471											
6-Aug-10	6:00 PM	17.1	9.93	1470											
7-Aug-10	12:00 AM	13.0	9.52	1472											
7-Aug-10	6:00 AM	13.2	9.34	1474											
7-Aug-10	8:00 AM								0.165	-	0.180			AA	
7-Aug-10	12:00 PM	17.1	9.37	1438											
7-Aug-10	6:00 PM	17.0	9.25	1478											
8-Aug-10	12:00 AM	15.6	9.80	1503											
8-Aug-10	6:00 AM	16.0	9.60	1508											
8-Aug-10	8:30 AM								0.362	-	0.362			AA	
8-Aug-10	12:00 PM	15.5	9.21	1434											
8-Aug-10	6:00 PM	15.7	9.34	1437											
9-Aug-10	12:00 AM	15.5	9.80	1480											
9-Aug-10	6:00 AM	15.5	9.80	1478											
9-Aug-10	9:00 AM								0.273	-	0.273			ICP	
9-Aug-10	9:00 AM								0.212	-	0.212			AA	Duplicate analysis by AA
9-Aug-10	12:00 PM	16.5	9.20	1438											
9-Aug-10	6:00 PM	17.4	9.14	1460											
10-Aug-10	12:00 AM	16.0	9.80	1470											
10-Aug-10	6:00 AM	15.1	9.80	1480											
10-Aug-10	8:45 AM								0.146	-	0.146			ICP	
10-Aug-10	12:00 PM	17.7	9.65	1492											
10-Aug-10	6:00 PM	17.1	9.26	1470											
11-Aug-10	12:00 AM	16.4	9.80	1480											
11-Aug-10	6:00 AM	15.0	9.80	1470											
11-Aug-10	7:45 AM								0.202	-	0.202			ICP	

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
11-Aug-10	12:00 PM	15.8	9.20	1455											
11-Aug-10	6:00 PM	16.6	9.31	1467											
12-Aug-10	12:00 AM	14.8	9.84	1452											
12-Aug-10	6:00 AM	14.1	10.28	1454											
12-Aug-10	9:00 AM								0.319	-	0.319			ICP	
12-Aug-10	12:00 PM	17.1	8.80	1482											
12-Aug-10	6:00 PM	17.6	9.50	1478											
13-Aug-10	12:00 AM	16.0	10.05	1468											
13-Aug-10	6:00 AM	14.7	10.02	1478											
13-Aug-10	9:10 AM								0.154	-	0.154			ICP	
13-Aug-10	12:00 PM	16.4	9.91	1109											
13-Aug-10	6:00 PM	17.7	9.86	1084											
14-Aug-10	12:00 AM	15.9	10.18	1085											
14-Aug-10	6:00 AM	15.1	10.15	1055											
14-Aug-10	9:30 AM								0.124	0.125	0.125			ICP	
14-Aug-10	12:00 PM	17.2	10.05	1219											
14-Aug-10	6:00 PM	17.2	10.09	1234											
15-Aug-10	12:00 AM	15.6	10.04	1181											
15-Aug-10	6:00 AM	14.8	10.23	1171											
15-Aug-10	8:15 AM								0.085	-	0.085			ICP	
15-Aug-10	12:00 PM	16.6	9.80	1170											
15-Aug-10	6:00 PM	17.6	9.59	1178											
16-Aug-10	12:00 AM	16.4	9.41	1181											
16-Aug-10	6:00 AM	15.3	9.33	1169											
16-Aug-10	7:50 AM								0.216	0.214	0.215			ICP	
16-Aug-10	12:00 PM	17.6	9.80	1420											
16-Aug-10	6:00 PM	18.6	9.80	1155											
17-Aug-10	12:00 AM	16.6	9.30	1170											
17-Aug-10	6:00 AM	15.4	9.23	1158											
17-Aug-10	9:00 AM								0.194	-	0.194			ICP	
17-Aug-10	12:00 PM														Field parameters misplaced
17-Aug-10	6:00 PM														
18-Aug-10	12:00 AM														
18-Aug-10	6:00 AM														
18-Aug-10	9:30 AM								0.170	-	0.170			ICP	
18-Aug-10	12:00 PM	16.0	9.80	1180											
18-Aug-10	6:00 PM	16.0	10.30	130											

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
19-Aug-10	12:00 AM	14.9	9.28	1167											
19-Aug-10	6:00 AM	14.9	9.24	1188											
19-Aug-10	10:30 AM								0.107	-	0.107			ICP	
19-Aug-10	12:00 PM	14.5	9.70	1224											
19-Aug-10	6:00 PM	14.2	9.69	1169											
20-Aug-10	12:00 AM	14.1	10.11	1202											
20-Aug-10	6:00 AM	13.2	9.50	1172											
20-Aug-10									0.109	-	0.109			ICP	
20-Aug-10	12:00 PM	14.4	9.48	1467											
20-Aug-10	6:00 PM	13.7	9.84	1432											
21-Aug-10	12:00 AM	14.4	9.87	1434											
21-Aug-10	6:00 AM	12.9	9.99	1428											
21-Aug-10	6:45 AM								0.118	-	0.118			ICP	
21-Aug-10	12:00 PM	13.9	10.18	1640											
21-Aug-10	6:00 PM	13.8	10.29	1640											
22-Aug-10	12:00 AM	12.6	9.92	1630											
22-Aug-10	6:00 AM	12.5	10.18	1610											
22-Aug-10	8:15 AM								0.162	-	0.162			ICP	
22-Aug-10	12:00 PM	13.3	9.80	1442											
22-Aug-10	6:00 PM	13.8	9.95	1422											
23-Aug-10	12:00 AM	13.2	9.96	1454											
23-Aug-10	6:00 AM	12.6	9.86	1433											
23-Aug-10	8:10 AM								0.139	-	0.139			ICP	
23-Aug-10	12:00 PM	13.0	9.22	1151											
23-Aug-10	6:00 PM	15.1	9.25	1208											
24-Aug-10	12:00 AM	13.6	9.80	1150											
24-Aug-10	6:00 AM	13.6	9.80	1163											
24-Aug-10	7:50 AM								0.184	-	0.184			ICP	
24-Aug-10	12:00 PM	13.1	9.40	1468											
24-Aug-10	6:00 PM	14.0	9.22	1475											
25-Aug-10	12:00 AM	13.6	9.80	1480											
25-Aug-10	6:00 AM	13.2	9.80	1488											
25-Aug-10	8:50 AM														
25-Aug-10	12:00 PM	14.5	8.91	1499					0.134	-	0.134			ICP	
25-Aug-10	6:00 PM	13.8	8.95	1475											
26-Aug-10	12:00 AM	11.6	9.70	1392											
26-Aug-10	6:00 AM	11.3	9.80	1380											
26-Aug-10	9:00 AM								0.360	-	0.360			AA	

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
26-Aug-10	12:00 PM	13.3	8.97	1481											
26-Aug-10	6:00 PM	13.8	8.81	1463											
27-Aug-10	12:00 AM	13.4	9.40	1420											
27-Aug-10	6:00 AM	10.5	9.40	1410											
27-Aug-10	8:00 AM								0.227	-	0.227			AA	
27-Aug-10	12:00 PM	13.4	9.06	1463	0.798									AA	
27-Aug-10	6:00 PM														
28-Aug-10	12:00 AM														lower flow through treatment system; no water from sampling port; could not collect sample
28-Aug-10	6:00 AM														
28-Aug-10															
28-Aug-10															
28-Aug-10															

Table C-14 and Figure C-42

Cross Valley Pond Water Quality Profile

January 13, 2010

Note: Not discharging
Method of Analysis:

Table C-14

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	
-0.5	10:30 AM	0.0	7.66	0.15			-0.5	12:30 PM	0.0	7.04	1.81			-0.5	2:40 PM	0.7	6.71	1.67			
-2.0	10:33 AM	0.0	6.79	0.20			-2.0	12:25 PM	2.1	6.63	1.85			-2.0	2:38 PM	2.5	6.58	1.85			
-3.0	10:37 AM	1.1	6.47	2.16			-3.0	12:20 PM	3.2	6.56	2.07			-3.0	2:37 PM	4.1	6.32	2.23			
-4.0	10:40 AM	3.4	6.34	2.26			-4.0	12:15 PM	4.2	6.25	2.27			-4.0	2:35 PM	5.1	6.36	2.40			
-5.0	10:45 AM	2.9	6.27	2.32			-5.0	12:15 PM	4.4	6.24	2.36			-5.0							
-6.0	10:46 AM	3.4	6.22	2.43			-6.0	12:10 PM	4.0	6.20	2.43			-6.0							
-7.0	10:50 AM	2.0	6.20	2.51			-7.0	12:05 PM	3.7	6.18	2.44			-7.0							
-8.0							-8.0	12:00 PM	3.7	6.16	2.55			-8.0							
-9.0							-9.0	11:55 AM	2.5	6.19	2.64			-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	
-0.5	10:59 AM	0.0	7.06	1.84			-0.5	2:13 PM	0.0	7.39	1.82			-0.5	2:05 PM	0.2	6.78	1.80			
-2.0	11:05 AM	0.0	6.67	1.86			-2.0	2:16 PM	0.9	6.93	1.86			-2.0	2:04 PM	0.5	6.71	1.99			
-3.0	11:10 AM	1.7	6.42	2.10			-3.0	2:17 PM	2.1	6.50	2.11			-3.0	2:03 PM	1.5	6.35	2.17			
-4.0	11:15 AM	3.3	6.31	2.26			-4.0	2:20 PM	3.8	6.31	2.30			-4.0	1:58 PM	1.4	6.38	2.30			
-5.0	11:15 AM	3.7	6.27	2.36			-5.0	2:22 PM	3.6	6.26	2.38			-5.0							
-6.0	11:20 AM	3.7	6.26	2.49			-6.0	2:23 PM	4.0	6.23	2.39			-6.0							
-7.0	11:25 AM	3.9	6.16	2.49			-7.0	2:25 PM	3.6	6.23	2.42			-7.0							
-8.0	11:30 AM	4.1	6.21	2.59			-8.0	2:27 PM	3.8	6.20	2.48			-8.0							
-9.0	11:35 AM	4.2	6.20	2.61			-9.0	2:29 PM	4.0	6.78	2.50			-9.0							
-10.0							-10.0							-10.0							

Figure C-42

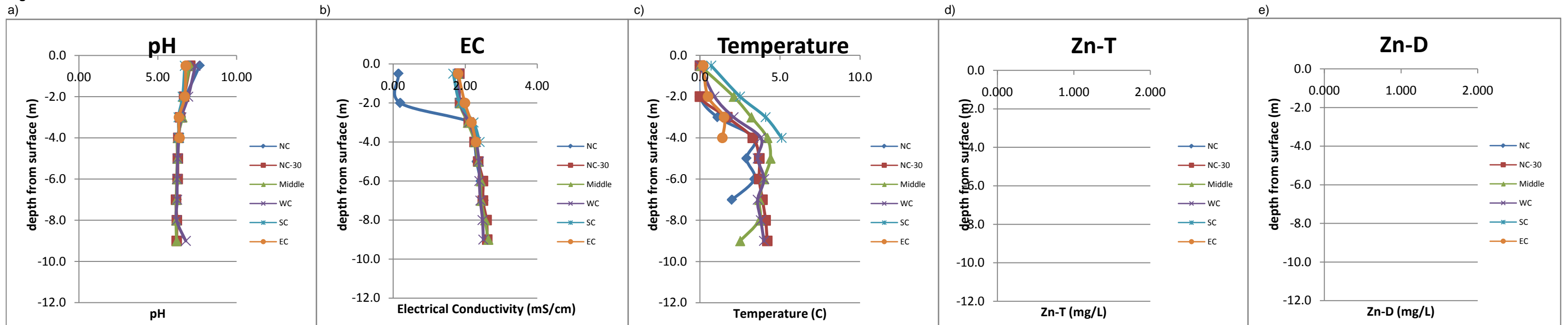


Table C-15 and Figure C-43 Cross Valley Pond Water Quality Profile February 9, 2010

Note: Not discharging
Method of Analysis: AAS

Table C-15

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5							-0.5	12:30 PM	0.4	7.19	1.76	0.34		-0.5	2:40 PM	0.7	7.22	1.76	0.28	
-2.0							-2.0	12:25 PM	1.6	6.94	1.84	0.38		-2.0	2:38 PM	0.7	6.64	1.83	0.37	
-3.0							-3.0	12:20 PM	1.4	6.76	2.04			-3.0	2:37 PM	1.6	6.62	2.14		
-4.0							-4.0	12:15 PM	1.3	6.75	2.06	0.66		-4.0	2:35 PM	2.3	6.61	2.21		
-5.0							-5.0	12:15 PM	3.8	6.62	2.25			-5.0						
-6.0							-6.0	12:10 PM	3.8	6.56	2.42	0.56		-6.0						
-7.0							-7.0	12:05 PM	4.1	6.54	2.46			-7.0						
-8.0							-8.0	12:00 PM	3.7	6.59	2.34	0.63		-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5	10:59 AM	0.9	7.32	1.75	0.35		-0.5	2:13 PM	0.0	7.29	1.73	0.31		-0.5	2:05 PM	0.3	7.10	1.59	0.55	
-2.0	11:05 AM	1.3	7.10	1.79	0.32		-2.0	2:16 PM	0.7	6.98	1.82	0.38		-2.0	2:04 PM	0.8	8.92	1.75	0.40	
-3.0	11:10 AM	2.5	6.93	1.99			-3.0	2:17 PM	2.0	6.65	2.12			-3.0	2:03 PM	1.1	6.70	2.04		
-4.0	11:15 AM	2.5	6.77	2.16	0.63		-4.0	2:20 PM	2.4	6.61	2.27	0.63		-4.0	1:58 PM	2.9	6.55	2.30	0.82	
-5.0	11:15 AM	3.4	6.67	2.30			-5.0	2:22 PM	3.5	6.55	2.30			-5.0	1:57 PM	2.8	6.64	2.21		
-6.0	11:20 AM	4.1	6.61	2.39	0.55		-6.0	2:23 PM	3.9	6.50	2.40	0.52		-6.0						
-7.0	11:25 AM	3.6	6.62	2.41			-7.0	2:25 PM	3.6	6.51	2.48			-7.0						
-8.0	11:30 AM	3.8	6.65	2.50	0.70		-8.0	2:27 PM	4.0	6.64	2.45	0.53		-8.0						
-9.0	11:35 AM	4.2	6.53	2.55	0.82		-9.0	2:29 PM	3.9	6.49	2.51			-9.0						
-10.0							-10.0	2:30 PM	3.7	6.50	2.51			-10.0						

Figure C-43

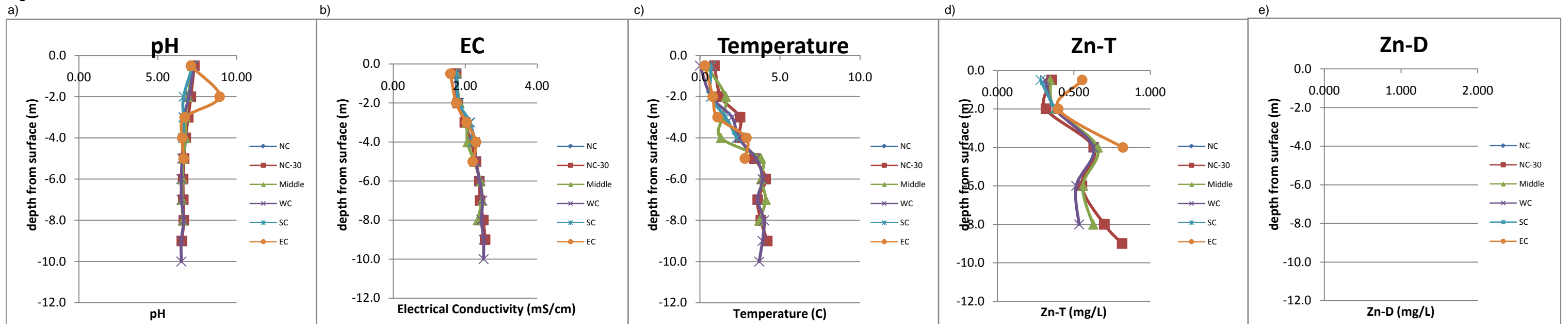


Table C-16 and Figure C-44 Cross Valley Pond Water Quality Profile March 2, 2010

Note: Not discharging
Method of Analysis: ICP-OES

Table C-16

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5	11:07 AM	0.3	7.03	1.42	0.287	0.277	-0.5	10:35 AM	0.4	7.03	1.42	0.248	0.225	-0.5	9:45 AM	1.0	7.21	1.36	0.266	0.251
-2.0	11:11 AM	1.2	6.90	1.52	0.314	0.317	-2.0	10:37 AM	1.8	6.75	1.56	0.340	0.274	-2.0	9:48 AM	0.7	7.07	1.51	0.297	0.287
-3.0	11:13 AM	2.0	6.63	1.70			-3.0	10:40 AM	1.7	6.71	1.58			-3.0	9:50 AM	1.7	6.86	1.61		
-4.0	11:16 AM	3.4	6.47	1.88	0.502	0.515	-4.0	10:43 AM	2.3	6.59	1.69	0.519	0.514	-4.0	9:52 AM	1.8	6.68	1.84	0.459	0.427
-5.0	11:19 AM	3.3	6.45	1.83			-5.0	10:47 AM	3.0	6.50	1.81			-5.0						
-6.0	11:21 AM	3.2	6.44	1.86	0.543	0.549	-6.0	10:49 AM	3.4	6.44	1.88	0.420	0.430	-6.0						
-7.0	11:23 AM	3.4	6.39	1.92			-7.0	10:51 AM	2.9	6.44	1.85			-7.0						
-8.0	11:26 AM	3.9	6.38	2.00	0.865	0.866	-8.0	10:53 AM	2.5	6.45	1.82	0.391	0.394	-8.0						
-9.0							-9.0	10:55 AM	3.0	6.40	1.94			-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5							-0.5	10:05 AM	0.2	7.06	1.46	0.281	0.257	-0.5	10:45 AM	0.5	6.93	1.34	0.327	0.297
-2.0							-2.0	10:07 AM	0.1	7.06	1.41	0.328	0.324	-2.0	10:48 AM	1.4	6.80	1.53	0.319	0.317
-3.0							-3.0	10:09 AM	2.0	6.66	1.68			-3.0	10:51 AM	1.7	6.60	1.70		
-4.0							-4.0	10:11 AM	3.7	6.53	1.85	0.503	0.519	-4.0	10:54 AM	2.4	6.52	1.85	0.516	0.520
-5.0							-5.0	10:14 AM	3.3	6.47	1.86			-5.0	10:56 AM	2.4	6.46	1.85		
-6.0							-6.0	10:16 AM	4.0	6.41	1.85	0.422	0.436	-6.0						
-7.0							-7.0	10:18 AM	3.5	6.43	1.85			-7.0						
-8.0							-8.0	10:20 AM	4.0	6.36	1.99	0.398	0.404	-8.0						
-9.0							-9.0	10:23 AM	3.5	6.40	1.91			-9.0						
-10.0							-10.0	10:26 AM	4.0	6.38	1.96	0.424	0.436	-10.0						

Figure C-44

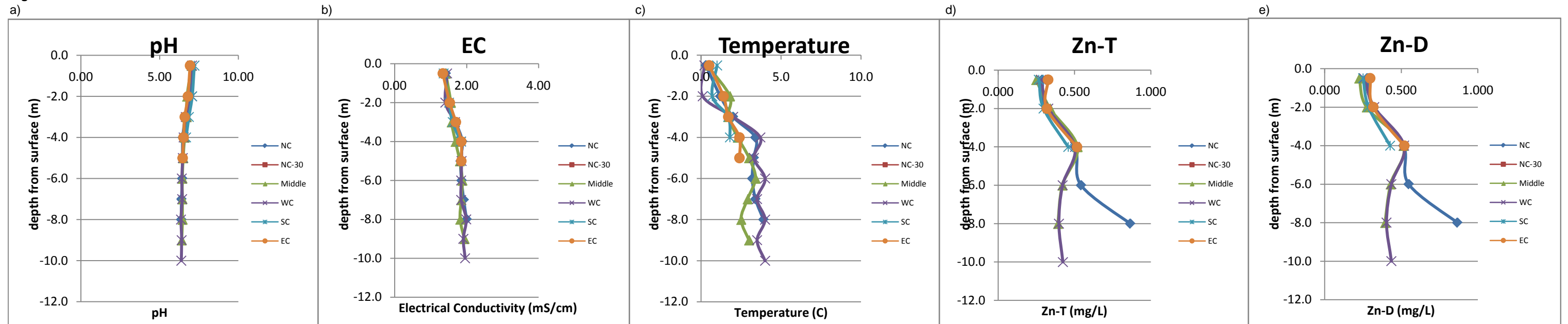


Table C-17 and Figure C-45 Cross Valley Pond Water Quality Profile March 31, 2010

Note: Discharging began March 22, 2010
Method of Analysis: ICP-OES

Table C-17

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5	9:49 AM	0.1	7.09	1.86	0.306		-0.5	10:32 AM	0.6	7.22	1.72	0.208		-0.5	11:30 AM	1.2	7.15	1.75	0.226	
-2.0	9:59 AM	1.0	7.16	2.07	0.343		-2.0	10:34 AM	2.6	7.02	1.53	0.343		-2.0	11:31 AM	3.1	6.80	1.60	0.320	
-3.0	10:01 AM	2.6	6.88	2.37			-3.0	10:36 AM	2.3	6.84	2.37			-3.0	11:32 AM	3.9	6.63	1.80		
-4.0	10:04 AM	3.5	6.75	2.52	0.488		-4.0	10:38 AM	4.4	6.66	1.86	0.476		-4.0	11:33 AM	3.7	6.72	2.44	0.449	
-5.0	10:06 AM	3.5	6.68	2.58			-5.0	10:39 AM	3.7	6.65	2.56			-5.0						
-6.0	10:08 AM	3.6	6.61	2.65	0.510		-6.0	10:41 AM	4.3	6.55	1.94	0.377		-6.0						
-7.0	10:11 AM	3.2	6.59	2.66			-7.0	10:42 AM	3.9	6.57	2.68			-7.0						
-8.0	10:14 AM	3.7	6.51	2.82	0.651		-8.0	10:44 AM	4.0	6.55	2.74	0.600		-8.0						
-9.0							-9.0	10:45 AM	4.4	6.47	2.06			-9.0						
-10.0							-10.0	10:46 AM	4.0	6.61	2.83	0.454		-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (mS/cm)	Zn-T	Zn-D
-0.5							-0.5	11:03 AM	0.8	7.24	1.97	0.095		-0.5	11:46 AM	1.8	7.03	1.32	0.219	
-2.0							-2.0	11:04 AM	3.6	6.96	2.06	0.330		-2.0	11:50 AM	2.6	6.86	2.05	0.332	
-3.0							-3.0	11:05 AM	4.1	6.63	1.79			-3.0	11:53 AM	3.0	6.62	1.75		
-4.0							-4.0	11:07 AM	4.8	6.69	2.50	0.482		-4.0						
-5.0							-5.0	11:08 AM	4.6	6.55	1.92			-5.0						
-6.0							-6.0	11:09 AM	4.7	6.60	2.65	0.434		-6.0						
-7.0							-7.0	11:10 AM	4.2	6.49	1.99			-7.0						
-8.0							-8.0	11:11 AM	4.5	6.57	2.66	0.427		-8.0						
-9.0							-9.0	11:12 AM	4.4	6.47	2.01			-9.0						
-10.0							-10.0							-10.0						

Figure C-45

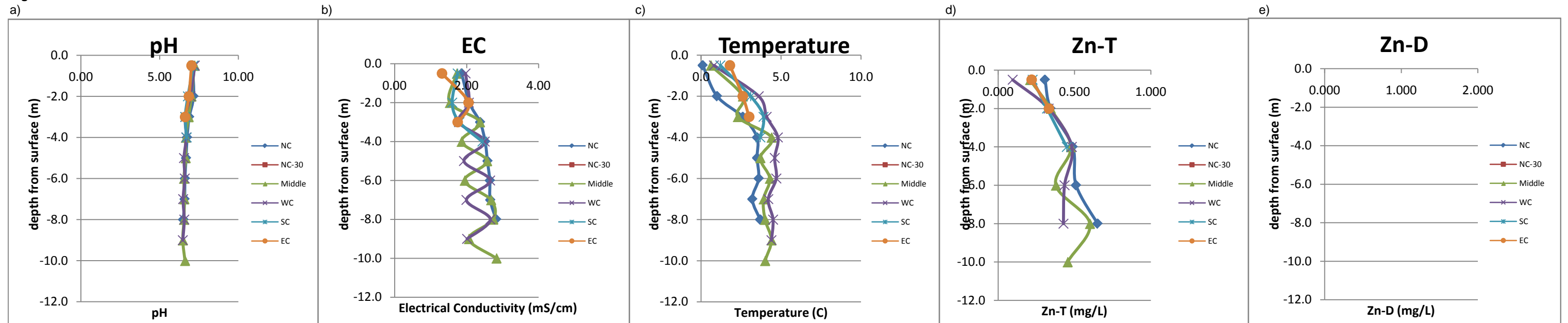


Table C-18 and Figure C-46 Cross Valley Pond Water Quality Profile April 20, 2010

Note:
Method of Analysis: ICP-OES

Table C-18

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:58 AM	1.6	7.19	1477	0.065		-0.5							-0.5						
-1.5	9:11 AM	2.6	6.80	1955	0.273		-1.5							-1.5						
-2.0	2:19 PM	4.3	6.89	1819	0.332		-2.0							-2.0						
-2.5	2:21 PM	3.0	6.72	1905	0.505		-2.5							-2.5						
-3.0	9:13 AM	4.7	6.37	2625			-3.0							-3.0						
-4.0	9:15 AM	4.8	6.37	2697	0.571		-4.0							-4.0						
-5.0	9:17 AM	4.7	6.34	2777			-5.0							-5.0						
-6.0	9:20 AM	4.8	6.46	2766	0.638		-6.0							-6.0						
-7.0	9:22 AM	4.6	6.38	2855			-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	10:00 AM	3.0	7.56	1808	0.120		-0.5							-0.5						
-1.5	10:05 AM	2.7	7.33	1918	0.258		-1.5							-1.5						
-2.0	2:25 PM	3.0	6.65	2074	0.117		-2.0							-2.0						
-2.5	2:28 PM	3.7	6.62	2211	0.366		-2.5							-2.5						
-3.0	10:07 AM	3.9	6.59	2501			-3.0							-3.0						
-4.0	10:10 AM	4.4	6.54	2666	0.499		-4.0							-4.0						
-5.0	10:13 AM	4.3	6.47	2696			-5.0							-5.0						
-6.0	10:15 AM	4.3	6.44	2798	0.454		-6.0							-6.0						
-7.0	10:17 AM	4.4	6.41	2827			-7.0							-7.0						
-8.0	10:20 AM	4.6	6.42	2938	0.682		-8.0							-8.0						
-9.0	10:22 AM	4.6	6.37	2993			-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-46

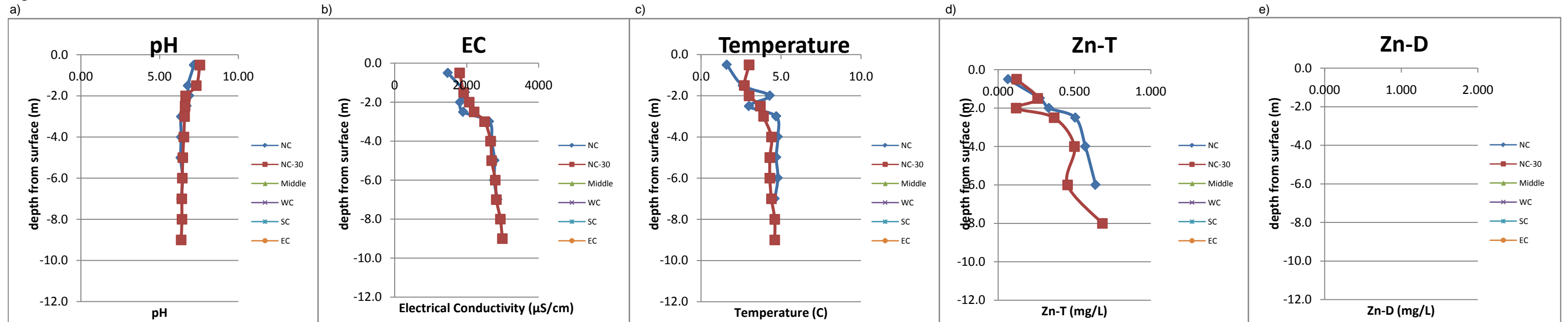


Table C-19 and Figure C-47 Cross Valley Pond Water Quality Profile April 22, 2010

Note:
Method of Analysis: ICP-OES

Table C-19

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:58 AM	1.8	7.13	1178			-0.5							-0.5						
-1.5	9:11 AM	1.7	6.95	1734			-1.5							-1.5						
-2.0	2:19 PM	3.4	6.72	2328			-2.0							-2.0						
-2.5	2:21 PM	3.3	6.43	2421			-2.5							-2.5						
-3.0	9:13 AM	4.0	6.41	2507			-3.0							-3.0						
-4.0	9:15 AM	4.5	6.35	2654			-4.0							-4.0						
-5.0	9:17 AM	4.5	6.35	2728			-5.0							-5.0						
-6.0	9:20 AM	4.3	6.34	2782			-6.0							-6.0						
-7.0	9:22 AM	4.2	6.34	2811			-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	10:00 AM	0.7	8.73	849			-0.5							-0.5							
-1.5	10:05 AM	2.4	7.05	1932			-1.5							-1.5							
-2.0	2:25 PM	2.7	6.59	2162			-2.0							-2.0							
-2.5	2:28 PM	3.7	6.49	2423			-2.5							-2.5							
-3.0	10:07 AM	4.0	6.44	2504			-3.0							-3.0							
-4.0	10:10 AM	4.4	6.38	2642			-4.0							-4.0							
-5.0	10:13 AM	4.2	6.37	2689			-5.0							-5.0							
-6.0	10:15 AM	4.2	6.36	2736			-6.0							-6.0							
-7.0	10:17 AM	4.3	6.34	2834			-7.0							-7.0							
-8.0	10:20 AM	4.4	6.34	2908			-8.0							-8.0							
-9.0	10:22 AM	4.6	6.33	2980			-9.0							-9.0							
-10.0							-10.0							-10.0							

Figure C-47

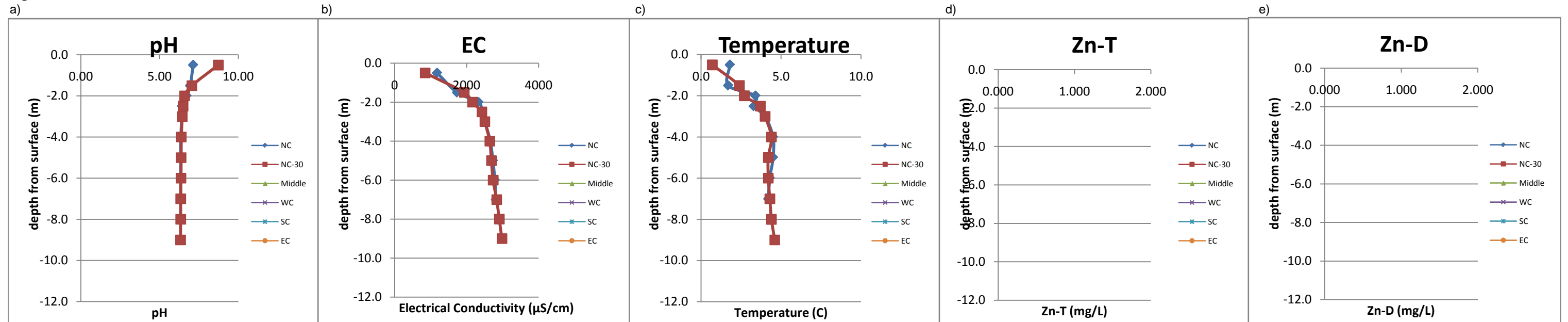


Table C-20 and Figure C-48 Cross Valley Pond Water Quality Profile April 23, 2010 - Morning

Note: Siphon closed at 8:14 AM
Method of Analysis: ICP-OES

Table C-20

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:26 AM	0.6	7.88	1357	0.151		-0.5							-0.5						
-1.5							-1.5							-1.5						
-2.0	8:28 AM	1.8	6.81	1640	0.300		-2.0							-2.0						
-2.5							-2.5							-2.5						
-3.0	8:29 AM	2.8	6.49	2510	0.601		-3.0							-3.0						
-4.0	8:31 AM	3.9	6.44	2640	0.581		-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:33 AM	0.6	9.29	1060	0.014		-0.5							-0.5						
-1.5							-1.5							-1.5						
-2.0	8:34 AM	2.7	6.80	1660	0.425		-2.0							-2.0						
-2.5							-2.5							-2.5						
-3.0	8:36 AM	3.6	6.50	1980	0.533		-3.0							-3.0						
-4.0	8:38 AM	4.1	6.51	2040	0.558		-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-48

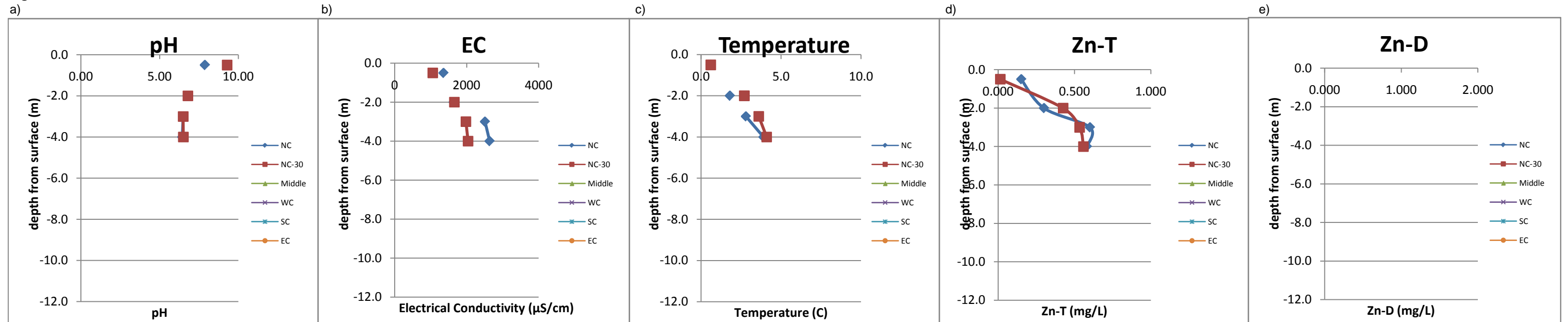


Table C-21 and Figure C-49 Cross Valley Pond Water Quality Profile April 23, 2010 - Afternoon

Note: Siphon opened at 1:05 PM - 1 turn
Method of Analysis: ICP-OES

Table C-21

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5							-0.5							-0.5						
-1.5	1:35 PM	2.5	6.56	1520		0.177	-1.5							-1.5						
-2.0							-2.0							-2.0						
-2.5	1:37 PM	2.6	6.58	1740		0.389	-2.5							-2.5						
-3.0							-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5							-0.5							-0.5						
-1.5	1:42 PM	2.4	6.80	1560		0.131	-1.5							-1.5						
-2.0							-2.0							-2.0						
-2.5	1:45 PM	2.9	6.66	1850		0.422	-2.5							-2.5						
-3.0							-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-49

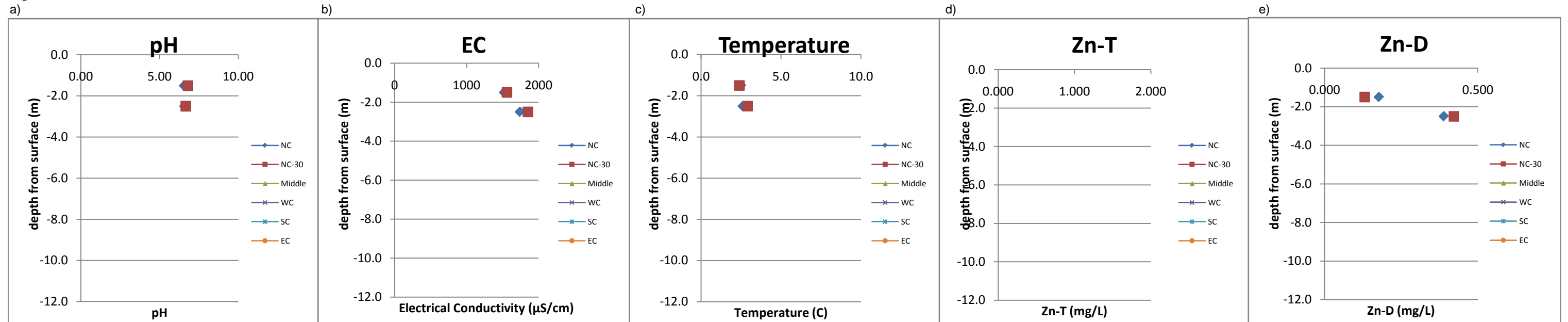


Table C-22 and Figure C-50 Cross Valley Pond Water Quality Profile April 24, 2010

Note: Siphon remains closed from April 23, 2010 at 16:54. Samples not collected at 5.0 m or 7.0 m, just profiles
Method of Analysis: ICP-OES; digested with hot plate

Table C-22

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:12 AM	1.0	8.75	1468	0.073	0.055	-0.5							-0.5						
-1.5	8:15 AM	1.5	7.92	1692	0.162	0.145	-1.5							-1.5						
-2.0	8:23 AM	2.0	7.54	1928	0.306	0.241	-2.0							-2.0						
-2.5	8:25 AM	2.9	7.05	2256	0.473	0.477	-2.5							-2.5						
-3.0	8:27 AM	3.0	6.96	2220	0.52	0.540	-3.0							-3.0						
-4.0	8:31 AM	4.0	6.82	2553	0.485	0.529	-4.0							-4.0						
-5.0	8:34 AM	4.1	6.76	2629			-5.0							-5.0						
-6.0	8:36 AM	4.2	6.67	2695	0.494	0.535	-6.0							-6.0						
-7.0	8:39 AM	4.0	6.61	2721			-7.0							-7.0						
-8.0	8:41 AM	4.1	6.56	2793	0.593	0.631	-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:03 AM	0.8	9.24	1253	0.026	0.004	-0.5							-0.5						
-1.5	9:05 AM	2.4	7.54	1674	0.193	0.173	-1.5							-1.5						
-2.0	9:07 AM	2.5	7.38	1833	0.245	0.254	-2.0							-2.0						
-2.5	9:14 AM	3.5	6.92	2255	0.453	0.490	-2.5							-2.5						
-3.0	9:17 AM	3.9	6.82	2407	0.479	0.467	-3.0							-3.0						
-4.0	9:25 AM	5.1	6.78	2438	0.487	0.522	-4.0							-4.0						
-5.0	9:27 AM	4.9	6.65	2645			-5.0							-5.0						
-6.0	9:28 AM	4.3	6.70	2523	0.488	0.506	-6.0							-6.0						
-7.0	9:31 AM	4.4	6.62	2535			-7.0							-7.0						
-8.0	9:33 AM	4.8	6.56	2776	0.484	0.534	-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-50

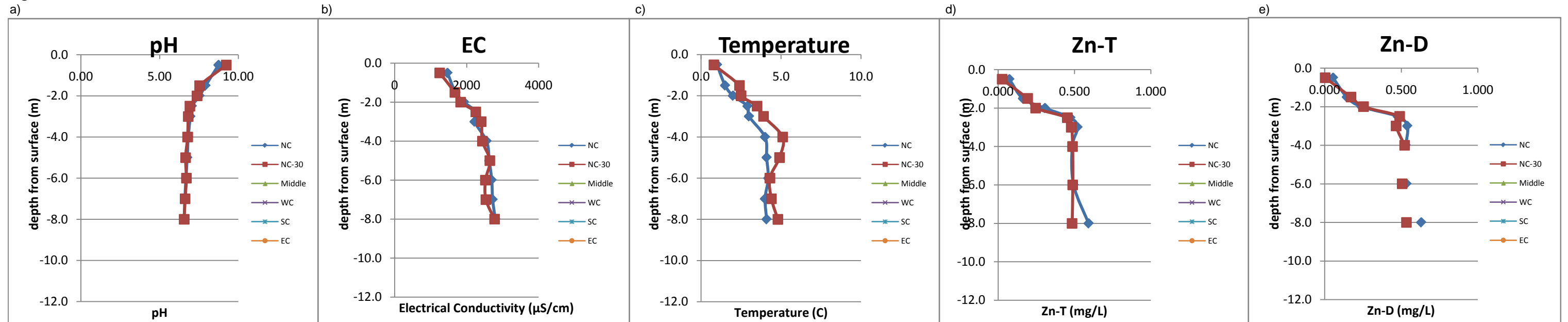


Table C-23 and Figure C-51 Cross Valley Pond Water Quality Profile April 25, 2010

Note:
Method of Analysis: ICP-OES

Table C-23

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:35 AM	1.7	8.08	1476	0.088	0.080	-0.5							-0.5						
-1.5	9:37 AM	2.4	7.06	1770	0.193	0.182	-1.5							-1.5						
-2.0	9:39 AM	3.9	6.78	2345	0.478	0.490	-2.0							-2.0						
-2.5	9:41 AM	3.5	6.68	2187	0.486	0.499	-2.5							-2.5						
-3.0	9:42 AM	3.9	6.57	2390	0.489	0.507	-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0	9:43 AM	4.5	6.43	2673	0.494	0.517	-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	10:05 AM	1.2	8.03	755	0.020	0.011	-0.5							-0.5						
-1.5	10:07 AM	2.7	6.97	1645	0.178	0.169	-1.5							-1.5						
-2.0	10:09 AM	2.8	6.83	1858	0.279	0.256	-2.0							-2.0						
-2.5	10:10 AM	3.1	6.64	2056	0.424	0.420	-2.5							-2.5						
-3.0	10:12 AM	3.9	6.49	2383	0.57	0.570	-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0	10:13 AM	4.7	6.39	2692	0.576	0.505	-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-51

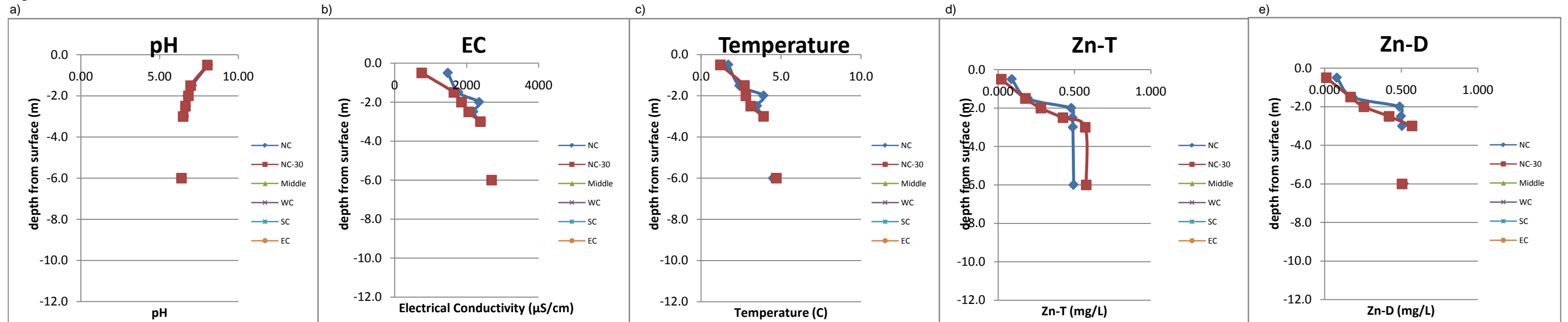


Table C-24 and Figure C-52

Cross Valley Pond Water Quality Profile

April 27, 2010

Note:
Method of Analysis: ICP-OES

Table C-24

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:24 AM	1.6	8.50	1055	0.095	0.055	-0.5							-0.5						
-1.5	9:26 AM	2.7	7.97	1379	0.132		-1.5							-1.5						
-2.0							-2.0							-2.0						
-2.5	9:28 AM	3.5	6.99	1946	0.452	0.415	-2.5							-2.5						
-3.0	9:30 AM	3.9	6.83	2163	0.538		-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:32 AM	1.2	7.96	120	0.030	0.004	-0.5							-0.5						
-1.5	9:34 AM	3.4	7.34	1387	0.160		-1.5							-1.5						
-2.0							-2.0							-2.0						
-2.5	9:36 AM	3.5	6.96	1824	0.404	0.367	-2.5							-2.5						
-3.0	9:40 AM	3.9	6.79	2116	0.602		-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-52

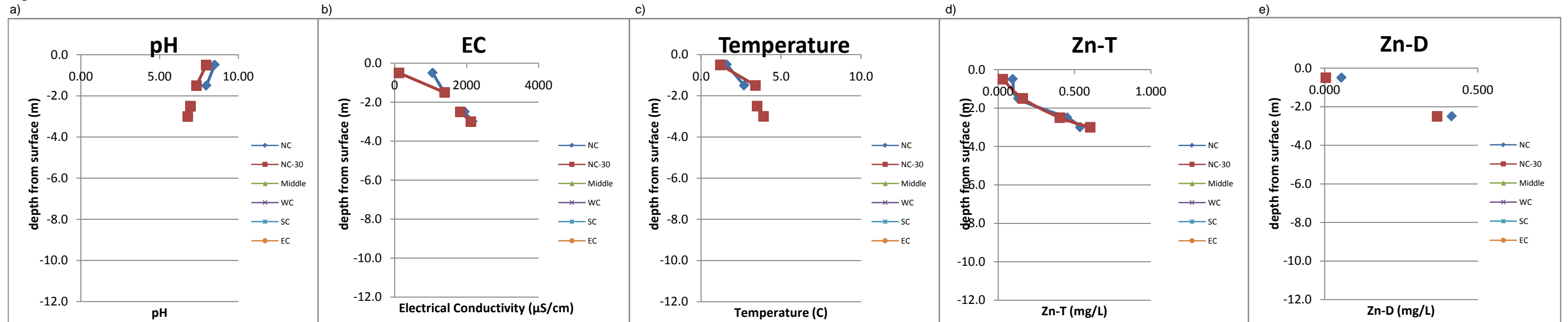


Table C-25 and Figure C-53 Cross Valley Pond Water Quality Profile April 29, 2010

Note:
Method of Analysis: ICP-OES

Table C-25

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:20 AM	2.5	8.58	970	0.081		-0.5							-0.5						
-1.5	9:22 AM	3.8	8.37	1160	0.087		-1.5							-1.5						
-2.0	9:24 AM	3.8	7.78	1180	0.110		-2.0							-2.0						
-2.5	9:26 AM	4.2	7.36	1500	0.305		-2.5							-2.5						
-3.0	9:28 AM	4.6	7.06	1770	0.437		-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:32 AM	2.7	8.36	500	0.029		-0.5							-0.5						
-1.5	9:34 AM	4.0	7.91	1170	0.072		-1.5							-1.5						
-2.0	9:36 AM	3.5	8.68	950	0.039		-2.0							-2.0						
-2.5	9:38 AM	4.4	8.29	1080	0.078		-2.5							-2.5						
-3.0	9:40 AM	4.9	7.29	1670	0.416		-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-53

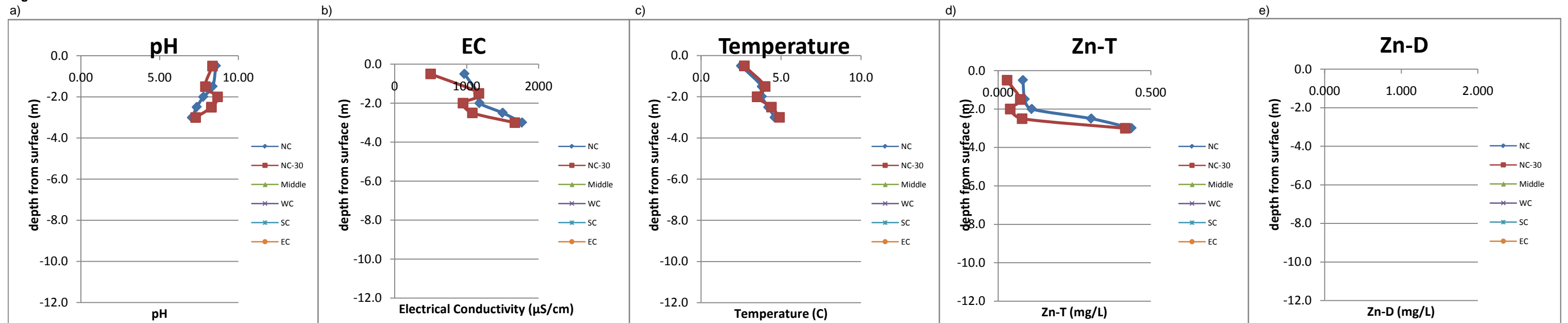


Table C-26 and Figure C-54 Cross Valley Pond Water Quality Profile May 22, 2010

Note:
Method of Analysis: ICP-OES

Table C-26

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5	3:56 PM	9.0	7.59	1381	0.180	164	-0.5	3:05 PM	7.3	7.65	1340	0.157	170	-0.5	1:55 PM	6.8	7.69	1353	0.179	155
-1.5	3:57 PM	7.4	7.63	1332	0.173	167	-1.5							-1.5						
-2.0	3:59 PM	9.2	6.97	2135	0.452	182	-2.0	3:10 PM	8.0	7.10	1732	0.397	181	-2.0	1:59 PM	9.2	7.10	1926	0.398	152
-2.5	4:02 PM	10.0	7.00	2353		185	-2.5							-2.5						
-3.0	4:04 PM	9.5	6.89	2426		185	-3.0	3:15 PM	8.6	6.93	2442		165	-3.0	2:05 PM	9.5	6.93	2406		153
-4.0	4:07 PM	8.1	6.92	2510	0.533	184	-4.0	3:20 PM	9.1	6.98	2190	0.425	166	-4.0	2:10 PM	8.1	6.96	2385	0.424	162
-5.0	4:09 AM	7.3	6.88	2540		182	-5.0	3:25 PM	7.7	6.89	2547		163	-5.0						
-6.0		7.3	6.87	2574	0.523	180	-6.0	3:30 PM	6.1	6.88	2632	0.383	163	-6.0						
-7.0							-7.0	3:30 PM	6.3	6.88	2632		163	-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5							-0.5	2:20 PM	8.3	7.63	1345	0.168	164	-0.5	3:42 PM	7.5	7.71	1310	0.160	170
-1.5							-1.5							-1.5						
-2.0							-2.0	2:25 PM	9.8	7.03	2155	0.411	168	-2.0	3:42 PM	8.3	7.30	1631	0.360	180
-2.5							-2.5							-2.5						
-3.0							-3.0	2:30 PM	9.8	6.92	2346		166	-3.0	3:45 PM	9.5	6.93	2359		149
-4.0							-4.0	2:35 PM	8.5	6.91	2528	0.403	156	-4.0	3:50 PM	9.3	6.95	2353	0.512	150
-5.0							-5.0	2:40 PM	7.3	6.91	2623		148	-5.0						
-6.0							-6.0	2:45 PM	7.1	6.91	2611	0.371	152	-6.0						
-7.0							-7.0	2:50 PM	6.1	6.90	2650		165	-7.0						
-8.0							-8.0	2:55 PM	6.6	6.89	2619	0.382	158	-8.0						
-9.0							-9.0	3:00 PM	7.5	6.92	2518		160	-9.0						
-10.0							-10.0							-10.0						

Figure C-54

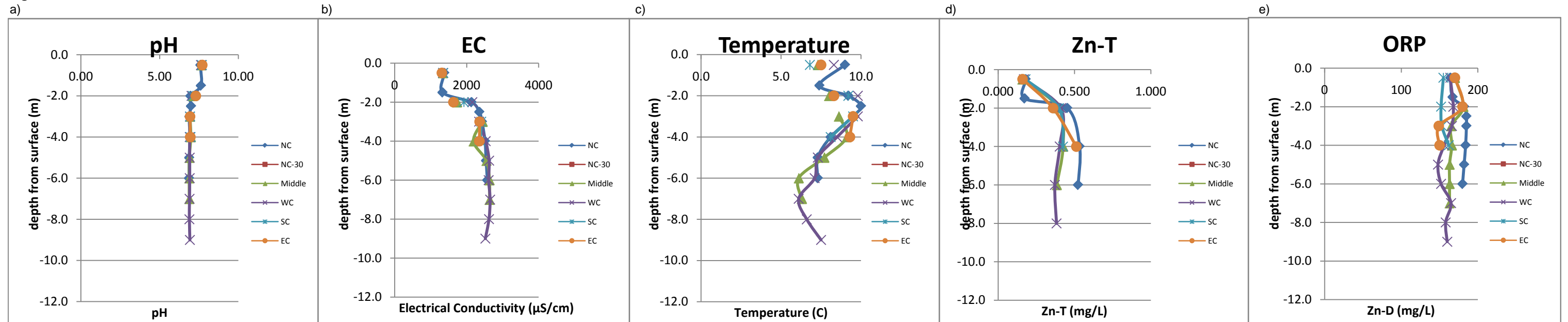


Table C-27 and Figure C-55 Cross Valley Pond Water Quality Profile June 5, 2010

Note:
Method of Analysis: ICP-OES

Table C-27

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	10:40 AM	11.3	7.16	1706	0.294		-0.5	10:25 AM	11.7	7.15	1706	0.281		-0.5							
-1.0	10:42 AM	11.2	7.11	1703	0.294		-1.0	10:27 AM	11.1	7.20	1668	0.277		-1.0							
-1.5	10:44 AM	11.3	7.09	1701	0.295		-1.5	10:29 AM	10.3	7.33	1618	0.273		-1.5							
-2.0	10:46 AM	11.2	7.12	1705	0.293		-2.0	10:31 AM	10.5	7.35	1603	0.272		-2.0							
-2.5	10:48 AM	11.3	7.11	1701	0.294		-2.5	10:33 AM	10.8	7.06	1679	0.282		-2.5							
-3.0	10:50 AM	11.5	6.69	1918	0.301		-3.0	10:35 AM	11.2	6.66	1947	0.281		-3.0							
-4.0	10:52 AM	10.8	6.45	2280	0.366		-4.0	10:37 AM	11.1	6.41	2348	0.496		-4.0							
-5.0							-5.0							-5.0							
-6.0							-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5							-0.5							
-1.0							-1.0							-1.0							
-1.5							-1.5							-1.5							
-2.0							-2.0							-2.0							
-2.5							-2.5							-2.5							
-3.0							-3.0							-3.0							
-4.0							-4.0							-4.0							
-5.0							-5.0							-5.0							
-6.0							-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Figure C-55

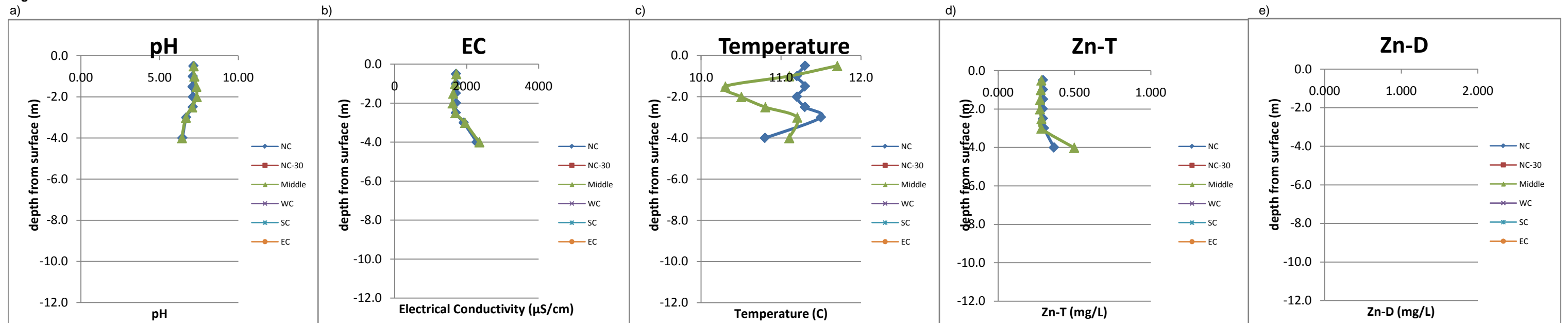


Table C-28 and Figure C-56 Cross Valley Pond Water Quality Profile June 13, 2010 - AAS

Note:
Method of Analysis: AAS

Table C-28

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5	11:42 AM	11.1	7.61	1792	0.32	149	-0.5	10:11 AM	10.9	7.68	1729	0.31	171	-0.5	10:38 AM	10.9	7.62	1757	0.32	128
-1.0	11:44 AM	11.2	7.58	1765	0.32	144	-1.0	10:13 AM	10.9	7.66	1721	0.31	161	-1.0	10:40 AM	11.3	7.60	1750	0.31	125
-2.0	11:46 AM	11.2	7.58	1769	0.34	143	-2.0	10:17 AM	10.6	7.75	1683	0.29	136	-2.0	10:42 AM	11.3	7.70	1708	0.27	117
-2.5							-2.5							-2.5						
-3.0	11:48 AM	11.5	6.72	2161		159	-3.0	10:19 AM	10.8	6.99	1952		149	-3.0	10:45 AM	12.0	6.76	2137		141
-4.0	11:49 AM	10.5	6.70	2397	0.35	164	-4.0	10:24 AM	10.7	6.72	2149	0.53	158	-4.0	10:50 AM	11.8	6.60	2475	0.57	139
-5.0	11:51 AM	9.8	6.56	2511		166	-5.0	10:25 AM	10.5	6.62	2375		161	-5.0						
-6.0							-6.0	10:28 AM	9.2	6.55	2639	0.46	165	-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5							-0.5	11:00 AM	11.3	7.58	1775	0.31	134	-0.5	12:03 PM	11.1	7.46	1792	0.32	158
-1.0							-1.0	11:02 AM	11.0	7.61	1727	0.30	129	-1.0	12:04 PM	11.2	7.39	1788	0.33	161
-2.0							-2.0	11:04 AM	11.0	7.33	1766	0.40	132	-2.0	12:09 PM	10.8	7.42	1792	0.32	157
-2.5							-2.5							-2.5						
-3.0							-3.0	11:07 AM	12.1	6.67	2255		143	-3.0	12:11 PM	10.5	7.41	1760		157
-4.0							-4.0	11:11 AM	12.3	6.79	2049	0.52	144	-4.0						
-5.0							-5.0	11:14 AM	10.3	6.57	2577		143	-5.0						
-6.0							-6.0	11:16 AM	10.0	6.60	2494	0.52	143	-6.0						
-7.0							-7.0	11:19 AM	8.1	6.52	2749		142	-7.0						
-8.0							-8.0	11:23 AM	7.9	6.55	2769	0.55	136	-8.0						
-9.0							-9.0	11:27 AM	7.7	6.52	2788		137	-9.0						
-10.0							-10.0	11:28 AM	6.7	6.52	2853	0.50	140	-10.0						

Figure C-56

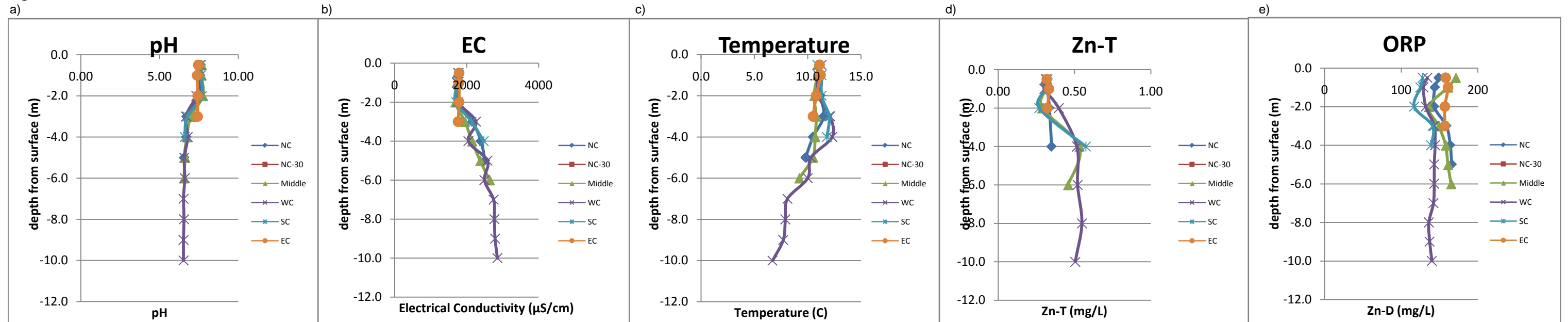


Table C-29 and Figure C-57 Cross Valley Pond Water Quality Profile June 13, 2010 - ICP-OES

Note:
Method of Analysis: ICP-OES

Table C-29

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5	11:42 AM	11.1	7.61	1792	0.284	149	-0.5	10:11 AM	10.9	7.68	1729	0.265	171	-0.5	10:38 AM	10.9	7.62	1757	0.280	128
-1.0	11:44 AM	11.2	7.58	1765	0.299	144	-1.0	10:13 AM	10.9	7.66	1721	0.264	161	-1.0	10:40 AM	11.3	7.60	1750	0.282	125
-2.0	11:46 AM	11.2	7.58	1769	0.297	143	-2.0	10:17 AM	10.6	7.75	1683	0.253	136	-2.0	10:42 AM	11.3	7.70	1708	0.243	117
-2.5							-2.5							-2.5						
-3.0	11:48 AM	11.5	6.72	2161		159	-3.0	10:19 AM	10.8	6.99	1952		149	-3.0	10:45 AM	12.0	6.76	2137		141
-4.0	11:49 AM	10.5	6.70	2397	0.335	164	-4.0	10:24 AM	10.7	6.72	2149	0.452	158	-4.0	10:50 AM	11.8	6.60	2475	0.486	139
-5.0	11:51 AM	9.8	6.56	2511		166	-5.0	10:25 AM	10.5	6.62	2375		161	-5.0						
-6.0							-6.0	10:28 AM	9.2	6.55	2639	0.395	165	-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP	Δh	t	T	pH	EC (μS/cm)	Zn-T	ORP
-0.5							-0.5	11:00 AM	11.3	7.58	1775	0.276	134	-0.5	12:03 PM	11.1	7.46	1792	0.294	158
-1.0							-1.0	11:02 AM	11.0	7.61	1727	0.261	129	-1.0	12:04 PM	11.2	7.39	1788	0.297	161
-2.0							-2.0	11:04 AM	11.0	7.33	1766	0.357	132	-2.0	12:09 PM	10.8	7.42	1792	0.293	157
-2.5							-2.5							-2.5						
-3.0							-3.0	11:07 AM	12.1	6.67	2255		143	-3.0	12:11 PM	10.5	7.41	1760		157
-4.0							-4.0	11:11 AM	12.3	6.79	2049	0.460	144	-4.0						
-5.0							-5.0	11:14 AM	10.3	6.57	2577		143	-5.0						
-6.0							-6.0	11:16 AM	10.0	6.60	2494	0.443	143	-6.0						
-7.0							-7.0	11:19 AM	8.1	6.52	2749		142	-7.0						
-8.0							-8.0	11:23 AM	7.9	6.55	2769	0.467	136	-8.0						
-9.0							-9.0	11:27 AM	7.7	6.52	2788		137	-9.0						
-10.0							-10.0	11:28 AM	6.7	6.52	2853	0.442	140	-10.0						

Figure C-57

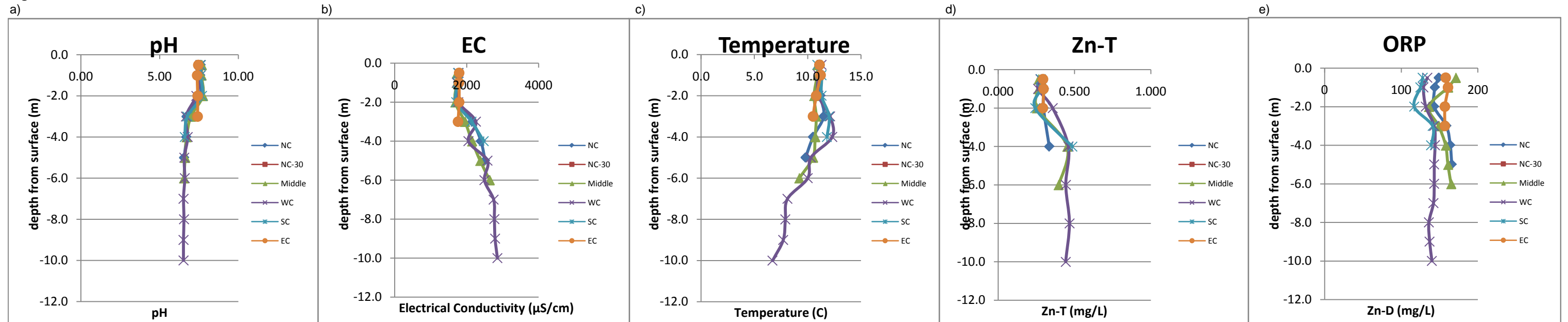


Table C-30 and Figure C-58 Cross Valley Pond Water Quality Profile June 25, 2010

Note:
Method of Analysis: ICP-OES

Table C-30

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	2:10 PM	15.6	8.25	1625	0.186		-0.5	2:53 PM	14.4	7.79	1629	0.220		-0.5							
-1.0	2:12 PM	14.7	8.18	1614	0.201		-1.0	2:55 PM	14.5	7.79	1629	0.218		-1.0							
-2.0	2:14 PM	14.5	8.18	1611	0.199		-2.0	2:57 PM	14.2	7.25	1785	0.302		-2.0							
-3.0	2:16 PM	13.1	7.19	2423			-3.0	2:59 PM	13.0	6.83	2326			-3.0							
-4.0	2:18 PM	11.4	7.10	2503	0.487		-4.0	3:01 PM	11.1	6.84	2544	0.475		-4.0							
-5.0	2:20 PM	10.4	7.10	2536			-5.0	3:03 PM	10.0	6.89	2542			-5.0							
-6.0							-6.0	3:05 PM	8.9	6.94	2633	0.435		-6.0							
-7.0							-7.0	3:07 PM	8.6	6.91	2631			-7.0							
-8.0							-7.8	3:09 PM	8.2	6.94	2614	0.422		-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Bottom @ 7.8 m

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	2:31 PM	14.2	8.02	1627	0.220		-0.5							-0.5							
-1.0	2:33 PM	14.2	8.03	1609	0.199		-1.0							-1.0							
-2.0	2:35 PM	14.1	8.03	1602	0.205		-2.0							-2.0							
-2.5	2:37 PM	13.4	6.97	2258			-2.5							-2.5							
-3.0	2:39 PM	12.0	6.97	2393	0.472		-3.0							-3.0							
-4.0	2:41 PM	9.5	7.04	2574			-4.0							-4.0							
-5.0	2:43 PM	8.4	6.99	2657	0.453		-5.0							-5.0							
-6.0	2:45 PM	8.8	7.00	2581			-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Bottom @ 7.5 m

Figure C-58

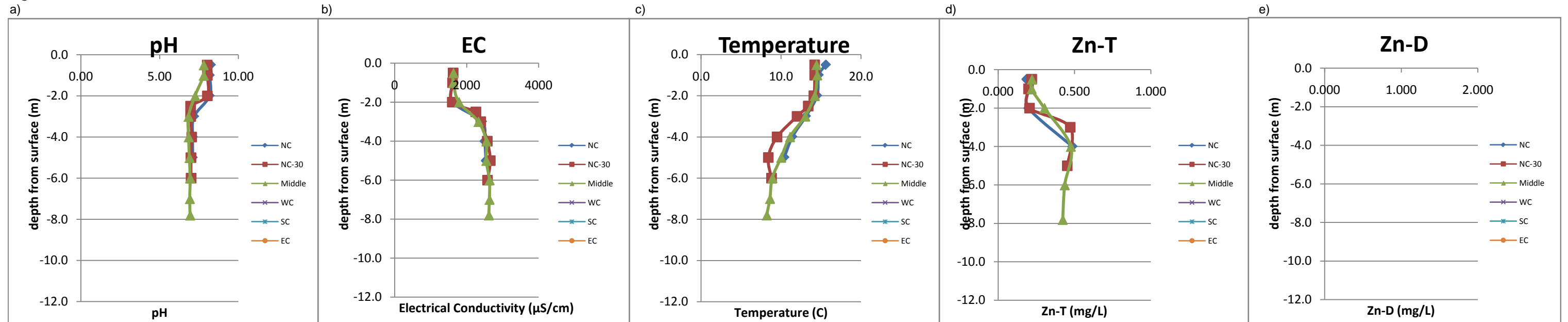


Table C-31 and Figure C-59 Cross Valley Pond Water Quality Profile July 11, 2010

Note:
Method of Analysis: ICP-OES

Table C-31

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:40 AM	14.3	7.60	1669	0.184		-0.5	10:09 AM	13.7	7.57	1684	0.182		-0.5	10:32 AM	13.8	7.57	1699	0.179	
-2.0	9:43 AM	14.3	7.57	1665	0.184		-2.0	10:12 AM	13.8	7.26	1765	0.234		-2.0	10:33 AM	14.0	7.47	1707	0.241	
-2.5	9:45 AM	13.8	6.69	2338	0.467		-2.5	10:13 AM	13.5	6.75	2322	0.388		-2.5	10:34 AM	14.5	6.76	2185	0.472	
-3.0	9:44 AM	13.0	6.73	2393	0.496		-3.0	10:15 AM	12.8	6.73	2406	0.429		-3.0	10:36 AM	11.7	6.79	2336	0.425	
-4.0	9:47 AM	11.5	6.77	2403	0.518		-4.0	10:17 AM	11.4	6.84	2338	0.439		-4.0						
-4.9	9:48 AM	9.8	6.85	2443			-5.0	10:18 AM	10.5	6.87	2483			-5.0						
-6.0							-6.0	10:19 AM	8.8	6.95	2540	0.350		-6.0						
-7.0							-7.0	10:21 AM	7.6	6.95	2634			-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:53 AM	13.9	7.44	1676	0.182		-0.5	10:44 AM	14.1	7.59	1706	0.177		-0.5	10:59 AM	13.8	7.64	1685	0.180	
-2.0	9:54 AM	14.2	7.41	1676	0.184		-2.0	10:45 AM	14.9	6.76	2196	0.437		-2.0	11:00 AM	13.8	7.67	1678	0.178	
-2.5	9:57 AM	13.6	6.67	2312	0.531		-2.5	10:47 AM	14.0	6.72	2351	0.496		-2.5	11:02 AM	13.3	6.97	1984	0.306	
-3.0	9:55 AM	12.9	6.76	2258	0.528		-3.0	10:48 AM	13.3	6.74	2371	0.477		-3.0	11:04 AM	12.8	6.78	2420	0.629	
-4.0	9:59 AM	10.6	6.76	2487	0.373		-4.0	10:49 AM	10.7	6.81	2533	0.443		-4.0						
-5.0	10:00 AM	9.3	6.78	2513			-5.0	10:50 AM	9.3	6.88	2535			-5.0						
-6.0	10:02 AM	9.2	6.81	2469	0.427		-6.0	10:51 AM	8.6	6.91	2502	0.404		-6.0						
-7.0	10:03 AM	8.1	6.87	2564			-7.0	10:52 AM	8.3	6.91	2497			-7.0						
-8.0							-8.0	10:53 AM	7.7	6.93	2573	0.417		-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-59

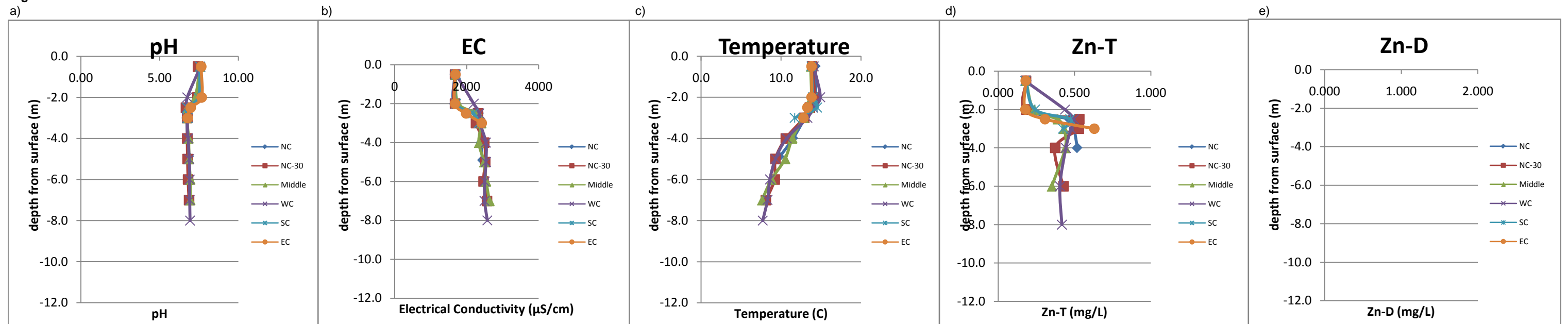


Table C-32 and Figure C-60 Cross Valley Pond Water Quality Profile August 1, 2010

Note:
Method of Analysis: AAS

Table C-32

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	11:05 AM	17.9	7.72	1580	0.32	0.25	-0.5	11:57 AM	17.6	7.58	1613	0.31	0.24	-0.5	12:25 PM	17.3	7.39	1625	0.30	0.25	
-1.0	11:13 AM	17.6	7.68	1577	0.32	0.25	-1.0	12:01 PM	16.6	7.58	1604	0.30	0.24	-1.5							
-2.0	11:16 AM	16.6	7.60	1601	0.34	0.27	-2.0	12:02 PM	16.3	6.62	2090	0.50	0.40	-2.0	12:28 PM	17.4	7.39	1632	0.32	0.25	
-2.5	11:24 AM	15.1	6.55	2240	0.81	0.67	-2.5							-2.5	12:32 PM	17.0	6.70	1880	0.42	0.32	
-3.0	11:19 AM	14.7	6.60	2301	0.74	0.61	-3.0							-3.0	12:35 PM	15.7	6.51	2147	0.36	0.30	
-3.5	11:22 AM	13.5	6.53	2356	0.86	0.69	-3.5							-3.5							
-4.0							-4.0	12:04 PM	12.9	6.47	2385	0.57	0.45	-4.0							
-5.0							-5.0							-5.0							
-6.0							-6.0	12:05 PM	11.8	6.45	2435	0.43	0.35	-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC								
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D		
-0.5	11:30 AM	17.0	7.55	1592	0.34	0.26	-0.5	12:13 PM	17.2	7.62	1625	0.31	0.26	-0.5	12:42 PM	17.7	7.56	1616	0.35	0.25		
-1.0	11:34 AM	16.9	7.52	1588	0.35	0.28	-1.0	12:15 PM	17.1	7.48	1631	0.34	0.26	-1.0								
-1.5	11:41 AM	16.7	7.16	1602	0.35	0.26	-1.5							-1.5								
-2.0	11:35 AM	16.6	6.57	2178	0.44	0.34	-2.0	12:16 PM	16.7	6.58	2135	0.55	0.45	-2.0	12:44 PM	17.2	7.56	1611	0.32	0.25		
-2.5	11:43 AM	15.4	6.47	2336	0.65	0.54	-2.5							-2.5	12:45 PM	16.6	7.44	1625	0.31	0.25		
-3.0	11:38 AM	14.6	6.50	2350	0.71	0.58	-3.0							-3.0	12:47 PM	15.0	6.52	2241	0.72	0.60		
-4.0	11:40 AM	13.3	6.47	2430	0.64	0.54	-4.0	12:17 PM	14.5	6.52	2298	0.58	0.48	-4.0								
-5.0	11:47 AM	12.4	6.45	2360	0.59	0.49	-5.0							-5.0								
-6.0	11:45 AM	11.5	6.45	2475	0.57	0.47	-6.0	12:19 PM	12.8	6.50	2315	0.52	0.44	-6.0								
-7.0							-7.0							-7.0								
-8.0							-8.0	12:20 PM	12.2	6.45	2420	0.54	0.44	-8.0								
-9.0							-9.0							-9.0								
-10.0							-10.0							-10.0								

Figure C-60

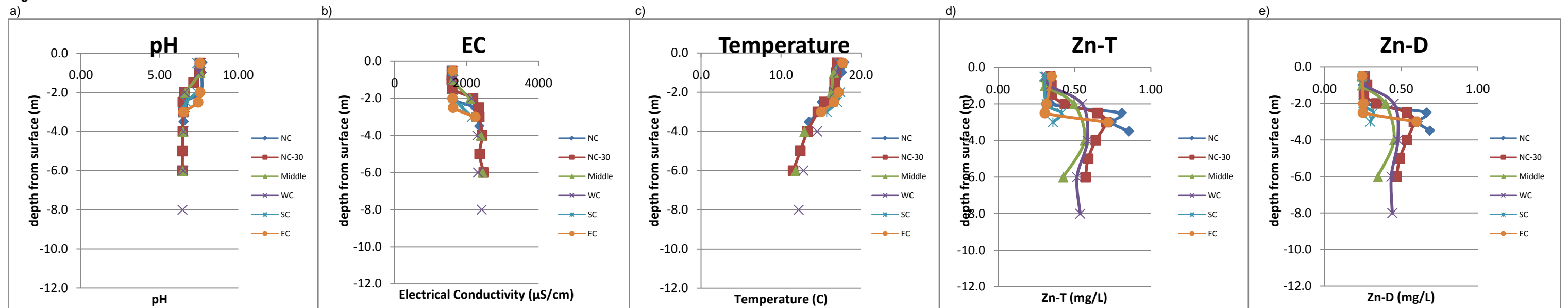


Table C-33 and Figure C-61 Cross Valley Pond Water Quality Profile August 8, 2010

Note:
Method of Analysis: AAS

Table C-33

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	9:58 AM	15.5	7.80	1880	0.28		-0.5	11:15 AM	15.5	7.38	1830	0.27		-0.5							
-1.0	10:03 AM	15.4	7.68	1850	0.27		-1.0	11:16 AM	15.6	7.14	1830	0.28		-1.0							
-1.5	10:05 AM	15.4	7.64	1950	0.28		-1.5	11:17 AM	15.7	7.42	1840	0.27		-1.5							
-2.0	10:07 AM	15.5	7.62	1850	0.27		-2.0	11:18 AM	15.7	7.44	1840	0.27		-2.0							
-2.5	10:10 AM	15.5	7.56	1850	0.30		-2.5	11:20 AM	15.7	7.45	1840	0.28		-2.5							
-3.0	10:12 AM	15.6	7.12	2060	0.55		-3.0	11:21 AM	15.8	6.60	2390	0.66		-3.0							
-3.5	10:13 AM	15.2	6.62	2640	0.70		-3.5	11:22 AM	15.3	6.49	2580	0.62		-3.5							
-4.0	10:14 AM	14.5	6.52	2580	0.60		-4.0	11:24 AM	15.4	6.56	2300	0.59		-4.0							
-5.0	10:15 AM	11.8	6.44	2800	0.66		-5.0	11:25 AM	11.6	6.42	2800			-5.0							
-6.0							-6.0	11:26 AM	10.4	6.37	2910	0.55		-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Bottom @ 5.7 m							Bottom @ 6.6 m							Bottom @ 8.2 m								
d) Site: NC-30							e) Site: WC							f) Site: EC								
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D		
-0.5	10:16 AM	15.3	7.35	1820	0.27		-0.5							-0.5								
-1.0	10:17 AM	15.4	7.42	1830	0.28		-1.0							-1.0								
-1.5	10:18 AM	15.5	7.44	1830	0.28		-1.5							-1.5								
-2.0	10:20 AM	15.5	7.46	1830	0.29		-2.0							-2.0								
-2.5	10:50 AM	15.5	7.44	1860	0.27		-2.5							-2.5								
-3.0	10:52 AM	15.7	6.74	2240	0.34		-3.0							-3.0								
-3.5	10:55 AM	15.2	6.56	2540	0.64		-3.5							-3.5								
-4.0	10:57 AM	14.4	6.50	2510	0.65		-4.0							-4.0								
-5.0	10:59 AM	11.6	6.45	2840	0.62		-5.0							-5.0								
-6.0	11:00 AM	10.2	6.40	2880	0.56		-6.0							-6.0								
-7.0	11:02 AM	9.0	6.36	2960			-7.0							-7.0								
-8.0	11:05 AM	9.0	6.41	2940	0.61		-8.0							-8.0								
-9.0							-9.0							-9.0								
-10.0							-10.0							-10.0								

Figure C-61

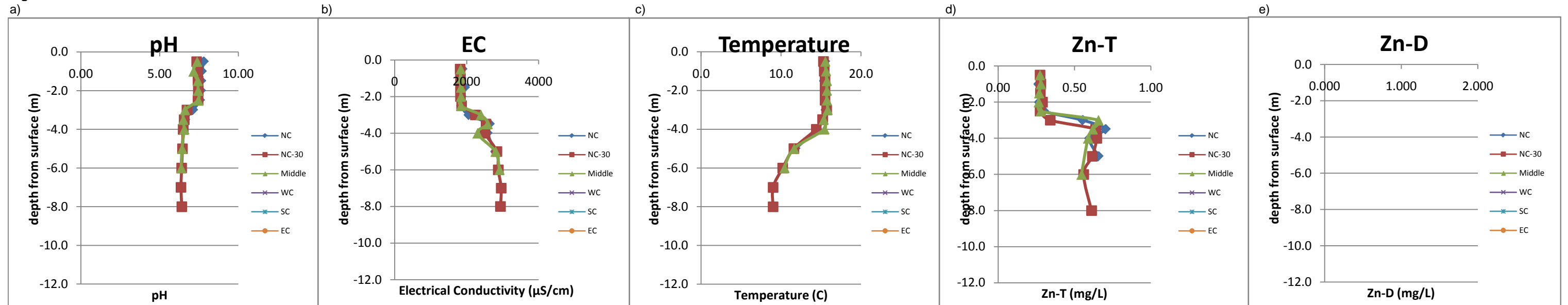


Table C-34 and Figure C-62 Cross Valley Pond Water Quality Profile August 10, 2010

Note:
Method of Analysis: ICP-OES

Table C-34

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5							-0.5	10:15 AM	15.8	7.35	1584	0.218		
-1.0							-1.0							-1.0	10:20 AM	15.3	7.37	1574	0.213		
-2.0							-2.0							-2.0	10:20 AM	15.2	6.99	1595	0.444		
-3.0							-3.0							-3.0	10:25 AM	15.9	6.39	2284	0.179		
-4.0							-4.0							-4.0	10:30 AM	12.1	6.40	2349	0.191		
-5.0							-5.0							-5.0							
-6.0							-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5	10:45 AM	16.2	7.22	1594	0.191		-0.5	9:55 AM	16.2	7.49	1564	0.183		
-1.0							-1.0	10:50 AM	17.8	7.37	1593	0.199		-1.0	10:00 AM	15.2	7.47	1576	0.195		
-2.0							-2.0	10:55 AM	16.2	7.34	1595	0.193		-2.0	10:05 AM	15.4	7.44	1578	0.224		
-3.0							-3.0	11:00 AM	17.1	6.31	2293	0.448		-3.0	10:05 AM	14.3	6.85	1797	0.381		
-4.0							-4.0	11:05 AM	14.1	6.31	2466	0.402		-4.0							
-5.0							-5.0	11:10 AM	15.3	6.27	2406			-5.0							
-6.0							-6.0	11:10 AM	11.5	6.23	2426	0.346		-6.0							
-7.0							-7.0	11:15 AM	11.4	6.26	2408			-7.0							
-8.0							-8.0	11:20 AM	9.8	6.28	2496	0.355		-8.0							
-9.0							-9.0	11:30 AM	9.8	6.23	2489			-9.0							
-10.0							-10.0							-10.0							

Bottom @ 4.2 m

Bottom @ 9.3 m

Sludge @ 4 m

Figure C-62

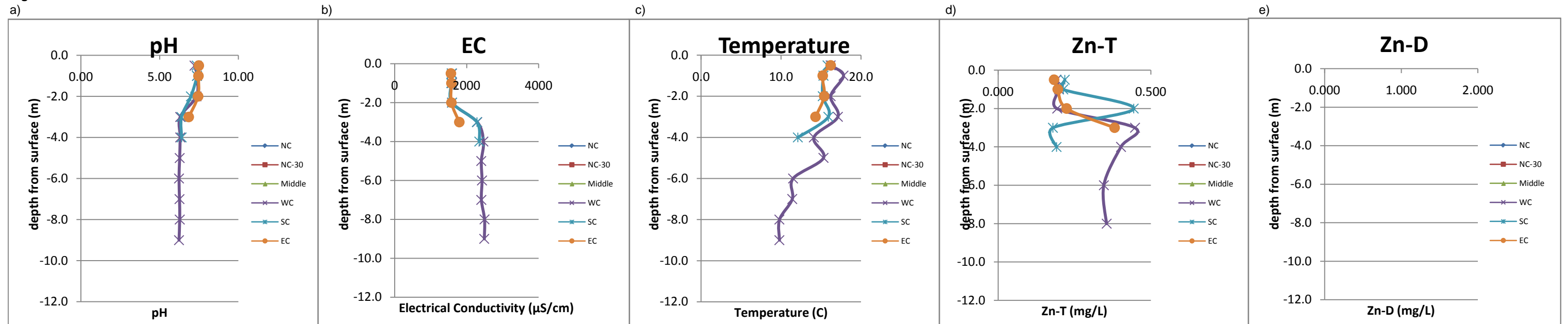


Table C-35 and Figure C-63 Cross Valley Pond Water Quality Profile August 31, 2010

Note:
Method of Analysis: AAS

Table C-35

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	8:40 AM	10.6	7.13	1568	0.26		-0.5	9:00 AM	10.3	7.14	1576	0.24		-0.5							
-1.0	8:42 AM	10.7	7.23	1560	0.25		-1.0	9:02 AM	10.5	7.23	1583	0.25		-1.0							
-2.0	8:44 AM	10.8	7.33	1556	0.24		-2.0	9:04 AM	10.7	7.24	1572	0.24		-2.0							
-2.5	8:46 AM	11.5	6.63	2034	0.53		-2.5	9:06 AM	11.5	6.63	1948	0.46		-2.5							
-3.0	8:48 AM	11.6	6.51	2197	0.69		-3.0	9:08 AM	11.8	6.47	2207	0.62		-3.0							
-4.0	8:50 AM	11.4	6.39	2307	0.70		-4.0	9:10 AM	11.4	6.39	2276	0.58		-4.0							
-5.0	8:52 AM	10.1	6.41	2340	0.63		-5.0	9:12 AM	10.2	6.38	2237			-5.0							
-6.0							-6.0	9:14 AM	8.0	6.36	2385	0.52		-6.0							
-7.0							-7.0	9:16 AM	7.9	6.38	2490			-7.0							
-8.0							-8.0	9:18 AM	7.4	6.37	2505	0.55		-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5							-0.5	8:25 AM	10.5	7.15	1608	0.23		
-1.0							-1.0							-1.0	8:27 AM	10.6	7.18	1574	0.23		
-2.0							-2.0							-2.0	8:29 AM	10.5	7.20	1581	0.21		
-2.5							-2.5							-2.5	8:31 AM	10.3	6.90	1749	0.22		
-3.0							-3.0							-3.0	8:33 AM	11.2	6.48	2114	0.59		
-4.0							-4.0							-4.0	8:35 AM	10.6	6.46	2237	0.57		
-5.0							-5.0							-5.0							
-6.0							-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Bottom @ 5.9 m

Bottom @ 8.9 m

Figure C-63

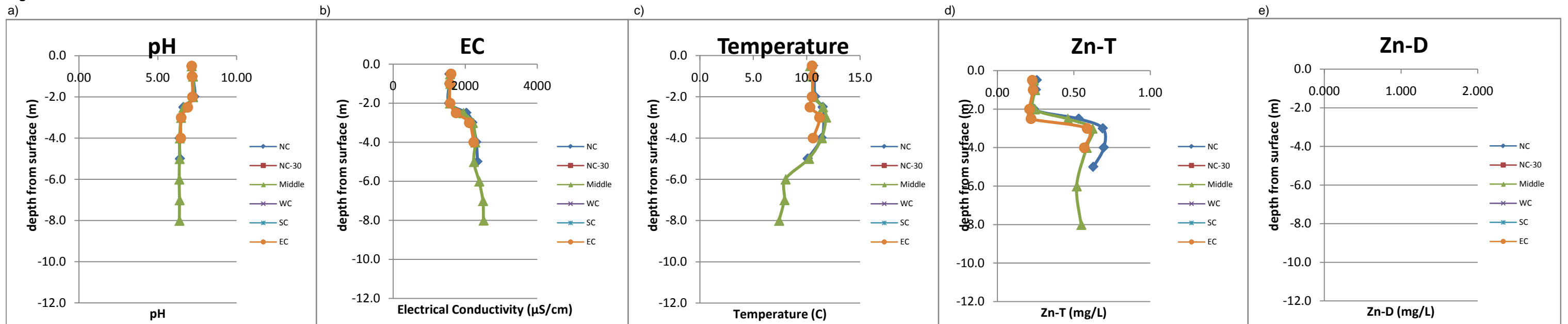


Table C-36 and Figure C-64 Cross Valley Pond Water Quality Profile September 2, 2010

Note:
Method of Analysis: AAS

Table C-36

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	8:35 AM	9.8	7.53	1616	0.22		-0.5	8:54 AM	9.1	7.39	1636	0.20		-0.5	9:42 AM	9.7	7.45	1710	0.21		
-1.5	8:37 AM	9.6	7.54	1678	0.20		-1.5	8:56 AM	9.6	7.43	1688	0.23		-1.5							
-2.0	8:40 AM	10.0	7.52	1614	0.20		-2.0	8:58 AM	9.3	7.48	1688	0.23		-2.0	9:40 AM	9.8	7.34	1717	0.21		
-2.5	8:42 AM	10.7	6.66	2149	0.57		-2.5	9:02 AM	11.2	6.51	2299	0.62		-2.5							
-3.0	8:45 AM	11.3	6.50	2381	0.59		-3.0	9:00 AM	10.9	6.60	2247	0.62		-3.0	9:38 AM	11.1	6.44	2289	0.59		
-4.0	8:47 AM	9.6	6.55	2380	0.55		-4.0	9:04 AM	10.3	6.48	2392	0.62		-4.0							
-5.0	8:49 AM	9.0	6.44	2488			-5.0	9:06 AM	9.3	6.40	2524			-5.0							
-6.0							-6.0	9:08 AM	7.8	6.46	2547	0.51		-6.0							
-7.0							-7.0	9:10 AM	7.2	6.40	2564			-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Bottom @ 5.6 m

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5	9:16 AM	9.2	7.49	1717	0.23		-0.5	9:47 AM	9.7	7.52	1732	0.22		
-2.0							-2.0	9:18 AM	9.1	7.37	1657	0.23		-2.0	9:49 AM	9.5	7.26	1673	0.23		
-3.0							-3.0	9:20 AM	10.8	6.49	2442			-3.0	9:51 AM	10.6	6.50	2403			
-4.0							-4.0	9:23 AM	10.4	6.53	2391	0.57		-4.0	9:54 AM	9.5	6.59	2361	0.50		
-5.0							-5.0	9:25 AM	9.2	6.41	2550			-5.0							
-6.0							-6.0	9:27 AM	8.0	6.39	2639	0.50		-6.0							
-7.0							-7.0	9:29 AM	8.0	6.43	2452			-7.0							
-8.0							-8.0	9:31 AM	7.7	6.51	2487	0.51		-8.0							
-9.0							-9.0	9:33 AM	6.9	6.41	2679			-9.0							
-10.0							-10.0							-10.0							

Bottom @ 7.7 m

Bottom @ 3.7 m

Bottom @ 9.3 m

Bottom @ 4.6 m

Figure C-64

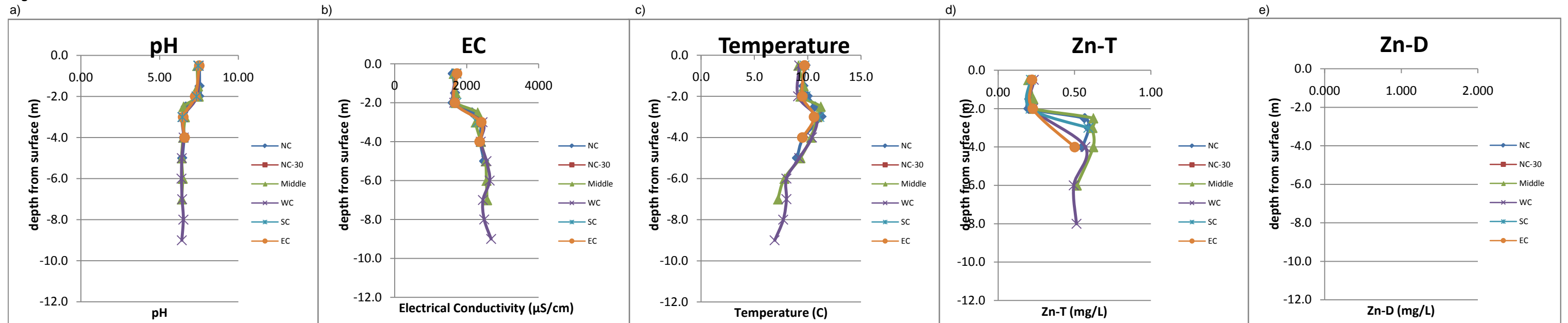


Table C-37 and Figure C-65 Cross Valley Pond Water Quality Profile September 13, 2010

Note:
Method of Analysis: AAS

Table C-37

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	9:05 AM	8.4	7.47	1665	0.28															
-1.0	9:13 AM	8.7	7.31	1667	0.29															
-1.5	9:10 AM	8.2	7.28	1672	0.31															
-2.0	9:08 AM	10.2	6.61	2241	0.67															
-3.0	9:15 AM	10.3	6.50	2425	0.71															
-4.0	9:17 AM	9.5	6.41	2448	0.67															
-5.0																				
-6.0																				
-7.0																				
-8.0																				
-9.0																				
-10.0																				

Bottom @ 5.6 m

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5																				
-1.5																				
-2.0																				
-2.5																				
-3.0																				
-4.0																				
-5.0																				
-6.0																				
-7.0																				
-8.0																				
-9.0																				
-10.0																				

Figure C-65

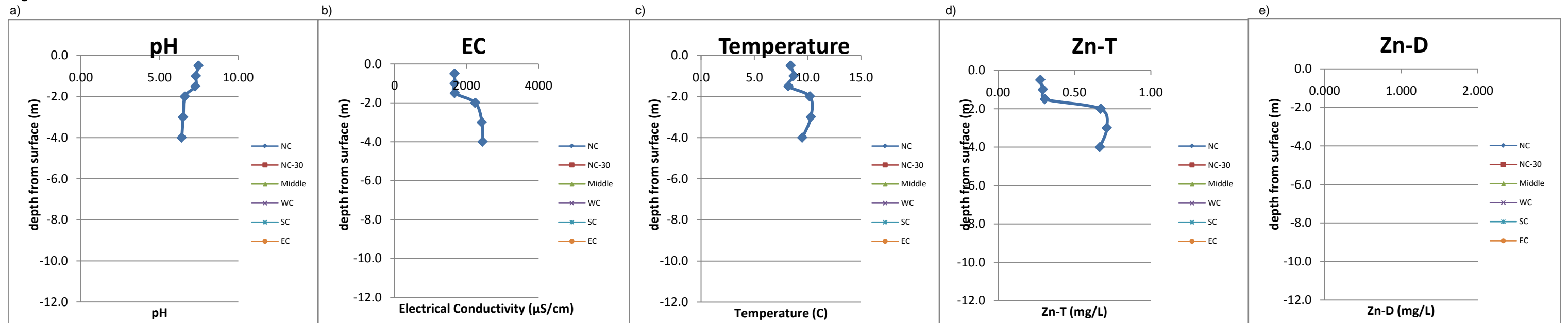


Table C-38 and Figure C-66 Cross Valley Pond Water Quality Profile October 4, 2010

Note:
Method of Analysis: AAS

Table C-38

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	8:40 AM	3.3	7.23	1940	0.42		-0.5	9:00 AM	2.9	7.11	1973	0.42		-0.5	9:26 AM	3.2	7.21	1993	0.38	
-2.0	8:42 AM	2.9	7.21	1941	0.40		-2.0	9:02 AM	3.1	7.10	1967	0.44		-2.0	9:28 AM	3.2	7.20	1999	0.39	
-2.5	8:48 AM	5.0	6.48	2442	0.61		-2.5							-2.5						
-3.0	8:46 AM	4.7	6.56	2442			-3.0	9:04 AM	5.5	6.49	2490			-3.0	9:30 AM	5.3	6.54	2539		
-4.0	8:51 AM	5.9	6.42	2496	0.60		-4.0	9:07 AM	6.1	6.41	2531	0.64		-4.0						
-5.0	8:54 AM	6.8	6.37	2518	0.59		-5.0	9:09 AM	6.6	6.37	2552			-5.0						
-6.0							-6.0	9:10 AM	6.7	6.34	2584	0.60		-6.0						
-7.0							-7.0	9:12 AM	6.3	6.33	2645			-7.0						
-8.0							-8.0	9:14 AM	6.1	6.30	2684	0.62		-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5							-0.5	9:38 AM	3.0	7.25	2002	0.37		-0.5	9:42 AM	2.8	7.21	2008	0.38	
-2.0							-2.0	9:36 AM	3.0	7.22	2008	0.37		-2.0	9:40 AM	2.8	7.20	2011	0.40	
-3.0							-3.0	9:34 AM	5.8	6.39	2504			-3.0						
-4.0							-4.0	9:31 AM	6.2	6.37	2512	0.60		-4.0						
-5.0							-5.0	9:29 AM	7.0	6.35	2578			-5.0						
-6.0							-6.0	9:27 AM	6.7	6.36	2581	0.60		-6.0						
-7.0							-7.0	9:25 AM	6.4	6.38	2630			-7.0						
-8.0							-8.0	9:21 AM	6.1	6.40	2649	0.62		-8.0						
-9.0							-9.0	9:19 AM	5.8	6.42	2674			-9.0						
-10.0							-10.0							-10.0						

Figure C-66

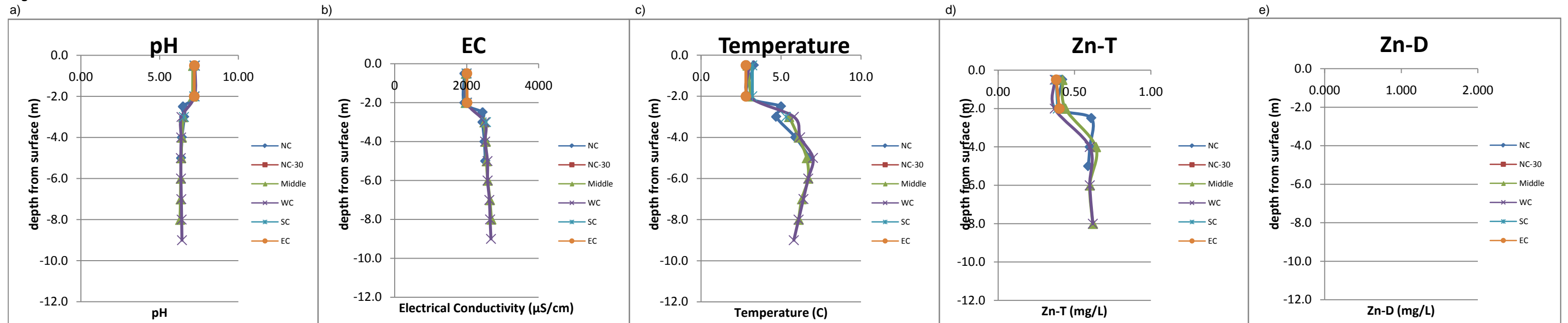


Table C-39 and Figure C-67 Cross Valley Pond Water Quality Profile October 21, 2010

Note:
Method of Analysis: ICP-OES

Table C-39

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	3:27 PM	1.6	7.54		0.306		-0.5							-0.5						
-1.5	3:30 PM	1.6	7.56		0.314		-1.5							-1.5						
-2.0	3:33 PM	1.9	7.61		0.305		-2.0							-2.0						
-2.5	3:36 PM	2.6	7.22		0.312		-2.5							-2.5						
-3.0	3:39 PM	5.6	6.68		0.481		-3.0							-3.0						
-4.0	3:42 PM	5.5	6.70		0.484		-4.0							-4.0						
-5.0	3:45 PM	5.6	6.57		0.484		-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5							-0.5							-0.5						
-1.5							-1.5							-1.5						
-2.0							-2.0							-2.0						
-2.5							-2.5							-2.5						
-3.0							-3.0							-3.0						
-4.0							-4.0							-4.0						
-5.0							-5.0							-5.0						
-6.0							-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Bottom @ 6.0 m

Figure C-67

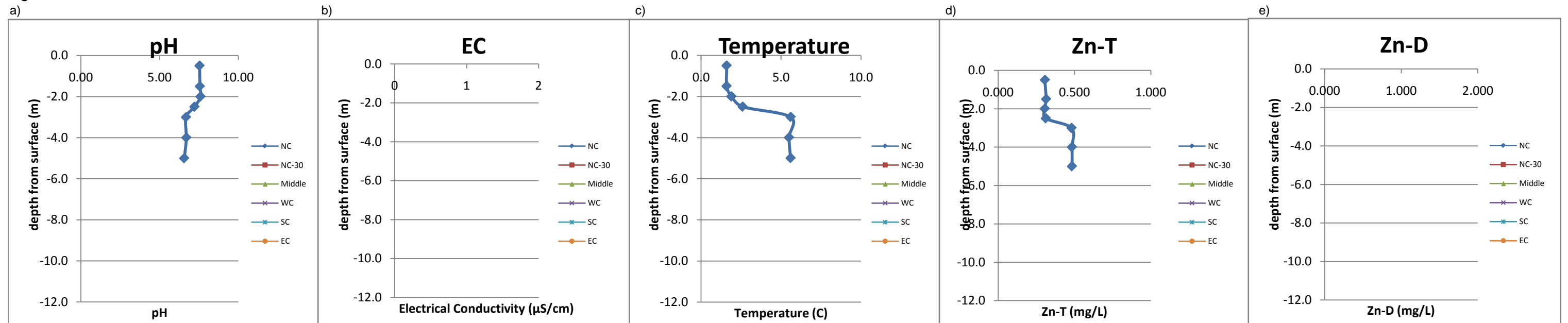


Table C-40 and Figure C-68 Cross Valley Pond Water Quality Profile November 15, 2010

Note:
Method of Analysis: ICP-OES

Table C-40

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	8:45 AM	0.0	7.81	2123	0.267		-0.5	10:35 AM	0.0	7.90	2189	0.287		-0.5	11:03 AM	0.1	7.65	2078	0.255		
-2.0	8:47 AM	0.2	7.67	2122	0.273		-2.0	10:40 AM	0.2	7.67	2129	0.261		-2.0	11:05 AM	0.9	7.49	2077	0.263		
-2.5	8:52 AM	1.7	7.10	2249	0.288		-2.5	10:42 AM	1.6	7.54	2175	0.271		-2.5							
-3.0	8:49 AM	2.8	7.20	2433	0.3379		-3.0	10:44 AM	2.8	7.18	2318	0.332		-3.0	11:06 AM	3.0	7.20	2366			
-4.0	8:50 AM	3.2	7.14	2493	0.387		-4.0	10:45 AM	3.8	6.95	2508	0.370		-4.0	11:08 AM	3.9	6.75	2551	0.275		
-5.0	8:55 AM	3.4	6.94	2552	0.327		-5.0	10:46 AM	4.0	6.75	2520			-5.0	11:10 AM	4.0	6.71	2486			
-6.0	9:00 AM	4.2	6.73	2595	0.313		-6.0	10:48 AM	4.5	6.63	2575	0.335		-6.0							
-7.0							-7.0	10:50 AM	4.4	6.48	2609			-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5	9:20 AM	0.0	7.36	2115	0.262		-0.5	10:00 AM	0.0	7.62	2137	0.287		
-2.0							-2.0	9:25 AM	1.1	7.36	2095	0.262		-2.0	10:03 AM	0.8	7.54	2117	0.264		
-3.0							-3.0	9:27 AM	2.9	6.91	2448	0.327		-3.0	10:05 AM	2.1	7.27	2389			
-4.0							-4.0	9:30 AM	4.1	6.73	2578	0.314		-4.0	10:07 AM	2.9	7.00	2508	0.345		
-5.0							-5.0	9:31 AM	4.9	6.51	2584			-5.0							
-6.0							-6.0	9:32 AM	4.4	6.46	2627	0.303		-6.0							
-7.0							-7.0	9:33 AM	4.9	6.38	2645			-7.0							
-8.0							-8.0	9:34 AM	4.6	6.36	2709	0.301		-8.0							
-9.0							-9.0	9:35 AM	4.8	6.31	2710			-9.0							
-10.0							-10.0							-10.0							

Figure C-68

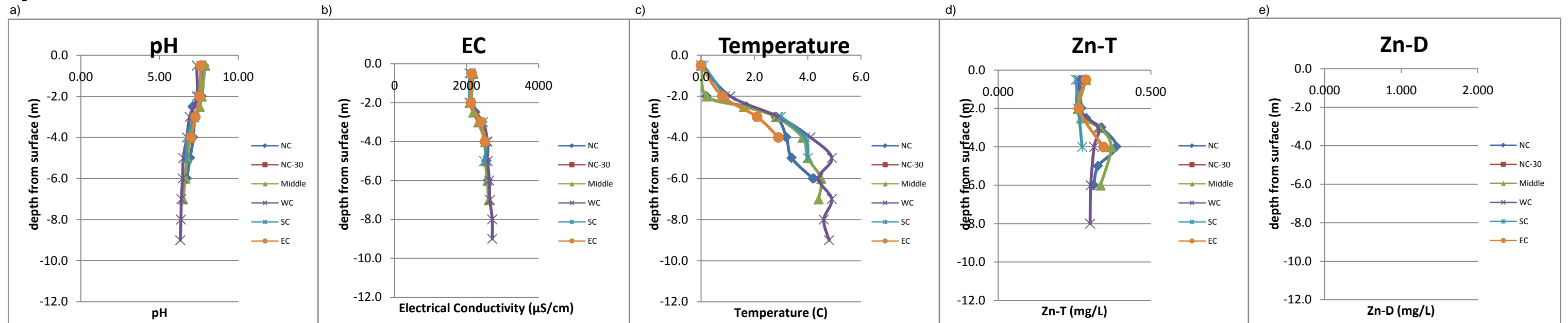


Table C-41 and Figure C-69 Cross Valley Pond Water Quality Profile November 18, 2010

Note:
Method of Analysis: ICP-OES

Table C-41

a) Site: NC							b) Site: Middle							c) Site: SC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5	10:10 AM	0.0			0.294		-0.5	10:15 AM	0.0			0.272		-0.5							
-2.0	10:11 AM	0.3			0.278		-2.0	10:16 AM	1.3			0.270		-2.0							
-3.0							-3.0							-3.0							
-4.0							-4.0							-4.0							
-5.0							-5.0							-5.0							
-6.0	10:12 AM	3.7			0.312		-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0	10:18 AM	3.4			0.372		-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

d) Site: NC-30							e) Site: WC							f) Site: EC							
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	
-0.5							-0.5							-0.5							
-1.5							-1.5							-1.5							
-2.0							-2.0							-2.0							
-2.5							-2.5							-2.5							
-3.0							-3.0							-3.0							
-4.0							-4.0							-4.0							
-5.0							-5.0							-5.0							
-6.0							-6.0							-6.0							
-7.0							-7.0							-7.0							
-8.0							-8.0							-8.0							
-9.0							-9.0							-9.0							
-10.0							-10.0							-10.0							

Figure C-69

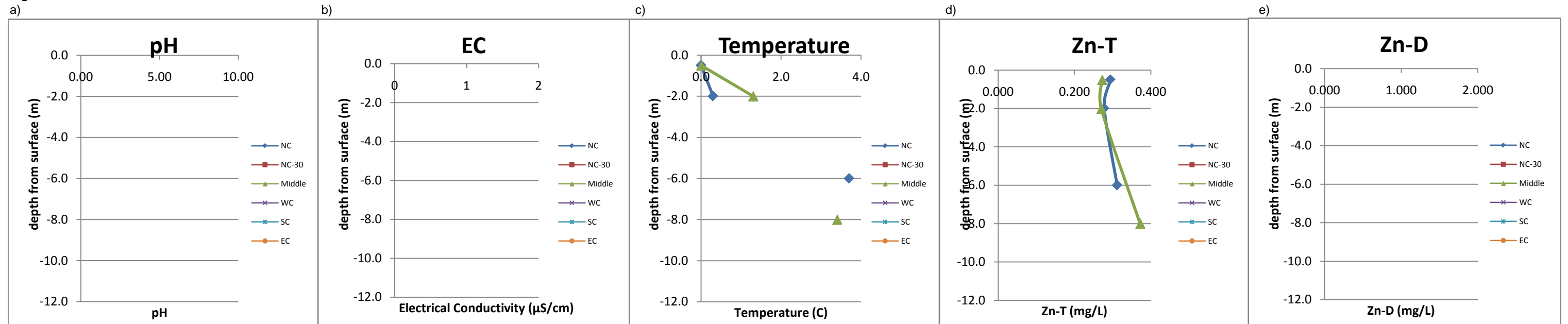


Table C-42 and Figure C-70 Cross Valley Pond Water Quality Profile November 30, 2010

Note:
Method of Analysis: ICP-OES

Table C-42

a) Site: NC							b) Site: Middle							c) Site: SC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5	11:39 AM	<0.0	7.53	2255	0.274		-0.5	11:11 AM	<0.0	7.37	2115	0.236		-0.5	12:33 PM	<0.0	7.30	1940	0.243	
-1.0	11:41 AM	<0.0	7.57	2240			-1.0							-1.0						
-1.5	11:43 AM	<0.0	7.68	2262			-1.5							-1.5						
-2.0	11:45 AM	0.2	7.61	2252	0.271		-2.0	11:13 AM	0.1	7.50	2249	0.268		-2.0	12:37 PM	0.3	7.28	2220	0.277	
-2.5	11:47 AM	0.4	7.32	2379	0.273		-2.5	11:15 AM	1.2	7.25	2291			-2.5	12:40 PM	1.3	6.86	2350		
-3.0	11:49 AM	2.1	6.93	2654	0.334		-3.0	11:17 AM	2.9	6.76	2628			-3.0	12:42 PM	2.3	6.75	2510		
-4.0	11:51 AM	3.1	6.76	2692	0.333		-4.0	11:20 AM	3.8	6.67	2696	0.342		-4.0	12:43 PM	2.2	6.63	2700	0.273	
-5.0	11:53 AM	3.8	6.64	2784			-5.0	11:22 AM	4.0	6.63	2751			-5.0	12:46 PM	4.3	6.63	2739		
-6.0	11:55 AM	3.7	6.66	2766	0.338		-6.0							-6.0						
-7.0							-7.0							-7.0						
-8.0							-8.0							-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

d) Site: NC-30							e) Site: WC							f) Site: EC						
Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D	Δh	t	T	pH	EC (μS/cm)	Zn-T	Zn-D
-0.5							-0.5	10:48 AM	<0.0	7.50	2118	0.233		-0.5	12:17 PM	<0.0	7.25	1904	0.092	
-2.0							-2.0	10:50 AM	1.4	7.41	2244	0.267		-2.0	12:19 PM	<0.0	7.38	2242	0.258	
-2.5							-2.5	10:52 AM	2.1	7.00	2416			-2.5	12:20 PM	1.0	6.93	2530		
-3.0							-3.0	10:54 AM	2.9	6.79	2558			-3.0	12:22 PM	1.1	6.82	2616		
-4.0							-4.0	10:56 AM	3.5	6.75	2712	0.292		-4.0						
-5.0							-5.0	10:57 AM	3.8	6.71	2695			-5.0						
-6.0							-6.0	10:59 AM	3.5	6.75	2734	0.296		-6.0						
-7.0							-7.0	11:00 AM	4.2	6.67	2764			-7.0						
-8.0							-8.0	11:02 AM	3.8	6.68	2730	0.295		-8.0						
-9.0							-9.0							-9.0						
-10.0							-10.0							-10.0						

Figure C-70

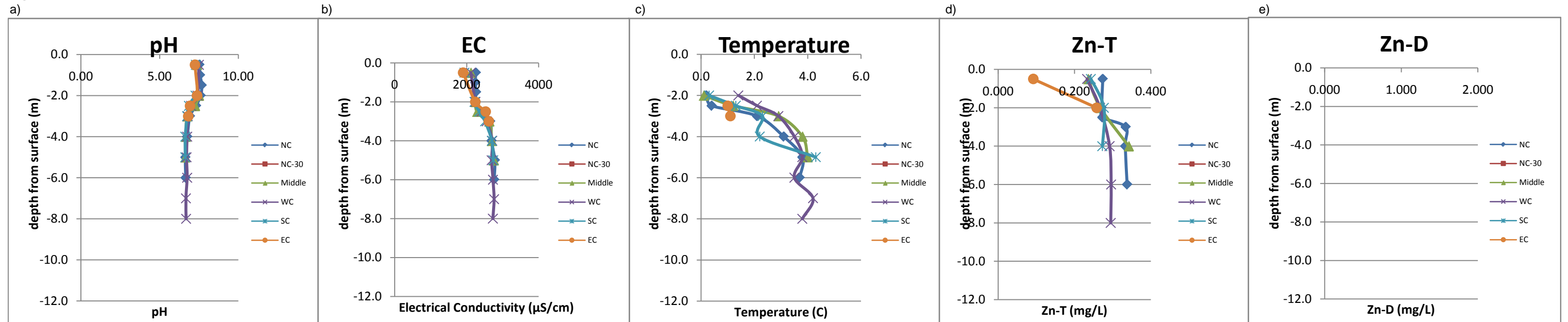


Table C-43: Rose Creek Drainage Water Quality 2010 - Pit Lakes - General Parameters

Station	Date	Acid(pH4.5)	Acid(pH8.3)	ALK	ALKPP	CaCO3	CaCO3-d	Chloride	Chlorophyll a	CO3	COND	CONDf	DO	DO-%	HCO3	NH3	NO2	NO2/3	NO3	OH	oPO4	ORP	pH	pHF	SO4-d	TDS	TEMP-F	TSS
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	µmho/cm	µmho/cm	mg/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mV			mg/L	mg/L	°C	mg/L
FL-1	4/30/2010	<0.5	30	69.00	<0.5	512	519	0.60	<5.0	<0.5	1090.0	1357.0	6.1	58	84.00	0.64	0.01	0.41	0.40	<0.5	<0.005	442	7.6	7.8	540.0	850.00	2	<1.0
	6/16/2010	<0.5	39	66.00	<0.5	672	666	1.10	<5.0	<0.5	1230.0	1237.0			81.00	0.99	<0.005	0.47	0.47	<0.5	<0.005	333	7.7	6.0	610.0	620.00	11	<4.0
	7/14/2010	<0.5	42	74.00	<0.5	612	674	1.40	<5.0	<0.5	1250.0	1245.0	9.8		90.00	0.91	0.01	0.51	0.50	<0.5	<0.005	303	7.6	7.7	600.0	970.00	14	<1.0
	8/12/2010	<0.5	29	77.00	<0.5	695	590	1.60	6	<0.5	1250.0		6.1	58	94.00	1.10	<0.005	0.50	0.50	<0.5	<0.005	348	7.6		610.0	1000.00		<1.0
	9/8/2010	<0.5	36	82.00	<0.5	614	623	1.50	8	<0.5	1310.0	1258.0	6.1	64	100.00	1.20	0.01	0.50	0.49	<0.5	<0.005	349	7.8	7.6	650.0	1100.00	11	<1.0
FL-1 Average		0	35	73.60	0	621	614	1.24	4	0.25	1226.0	1274.3	7.3	61	89.80	0.97	0.01	0.48	0.47	0	0.00	355	7.6	7.3	602.0	908.00	10	1
FL-1 Max		<0.5	42	82.00	<0.5	695	674	1.60	8	<0.5	1310.0	1357.0	9.8	64	100.00	1.20	0.01	0.51	0.50	<0.5	<0.005	442	7.8	7.8	650.0	1100.00	14	<4.0
FL-1 Min		<0.5	29	66.00	<0.5	512	519	0.60	<5.0	<0.5	1090.0	1237.0	6.1	58	81.00	0.64	<0.005	0.41	0.40	<0.5	<0.005	303	7.6	6.0	540.0	620.00	2	<1.0
FL-1 N > DL		0	5	5	0	5	5	5	2	0	5	4	3	2	5	5	3	5	5	0	0	5	5	4	5	5	4	0
FL-1 Median		<0.5	36	74.00	<0.5	614	623	1.40	<5.0	<0.5	1250.0	1251.5	6.1	61	90.00	0.99	0.01	0.50	0.49	<0.5	<0.005	348	7.6	7.7	610.0	970.00	11	<1.0
FL-15	4/30/2010	<0.5	30	89.00	<0.5	668	670	1.30	<0.5	<0.5	1360.0	1372.0	5.3	46	110.00	1.10	0.01	0.44	0.43	<0.5	<0.005	426	7.6	7.9	710.0	1100.00	3	<1.0
	6/16/2010	<0.5	38	74.00	<0.5	744	737	1.50	<0.5	<0.5	1350.0	1232.0			90.00	1.20	<0.005	0.47	0.47	<0.5	<0.005	485	7.6	6.6	710.0	760.00	8	<4.0
	7/14/2010	<0.5	42	94.00	<0.5	699	748	1.70	<0.5	<0.5	1390.0	1533.0	10.0		120.00	1.20	0.01	0.47	0.47	<0.5	<0.005	314	7.6	7.6	650.0	1200.00	5	<1.0
	8/12/2010	<0.5	34	88.00	<0.5	764	677	1.90	<0.5	<0.5	1370.0		10.0		110.00	1.30	<0.005	0.47	0.47	<0.5	<0.005	347	7.7		710.0	1100.00		<1.0
	9/8/2010	<0.5	35	86.00	<0.5	702	710	2.10	<0.5	<0.5	1410.0	1350.0	10.9	102	110.00	1.50	<0.005	0.45	0.45	<0.5	<0.005	348	7.6	7.4	730.0	1100.00	6	<1.0
FL-15 Average		0	36	86.20	0	715	708	1.70	0.25	0.25	1376.0	1371.8	8.7	74	108.00	1.26	0.00	0.46	0.46	0	0.00	384	7.6	7.4	702.0	1052.00	5	1
FL-15 Max		<0.5	42	94.00	<0.5	764	748	2.10	<0.5	<0.5	1410.0	1533.0	10.9	102	120.00	1.50	0.01	0.47	0.47	<0.5	<0.005	485	7.7	7.9	730.0	1200.00	8	<4.0
FL-15 Min		<0.5	30	74.00	<0.5	668	670	1.30	<0.5	<0.5	1350.0	1232.0	5.3	46	90.00	1.10	<0.005	0.44	0.43	<0.5	<0.005	314	7.6	6.6	650.0	760.00	3	<1.0
FL-15 N > DL		0	5	5	0	5	5	5	0	0	5	4	3	2	5	5	2	5	5	0	0	5	5	4	5	5	4	0
FL-15 Median		<0.5	35	88.00	<0.5	702	710	1.70	<0.5	<0.5	1370.0	1361.0	10.0	74	110.00	1.20	<0.005	0.47	0.47	<0.5	<0.005	348	7.6	7.5	710.0	1100.00	5	<1.0
FL-3	4/30/2010	<0.5	26	89.00	<0.5	660	667	1.30	<5.0	<0.5	1350.0	1357.0	7.2	59	110.00	1.00	0.01	0.45	0.45	<0.5	<0.005	432	7.7	8.1	690.0	1100.00	2	<1.0
	6/16/2010	<0.5	37	63.00	<0.5	656	661	1.10	<5.0	<0.5	1220.0	1238.0			76.00	1.00	<0.005	0.47	0.47	<0.5	<0.005	330	7.7	6.0	630.0	610.00	11	<4.0
	7/14/2010	<0.5	40	81.00	<0.5	609	680	1.10	<5.0	<0.5	1260.0	1245.0	9.9		99.00	0.89	0.01	0.50	0.49	<0.5	<0.005	303	7.6	7.6	600.0	990.00	14	<1.0
	8/12/2010	<0.5	26	78.00	<0.5	703	601	1.50	11	<0.5	1240.0		11		96.00	1.20	0.01	0.51	0.51	<0.5	<0.005	337	7.7		570.0	1000.00		<1.0
	9/8/2010	<0.5	35	81.00	<0.5	641	681	1.50	<0.5	<0.5	1320.0	1257.0	5.7	60	99.00	1.10	0.01	0.51	0.50	<0.5	<0.005	347	7.7	7.8	690.0	1100.00	11	<1.0
FL-3 Average		0	33	78.40	0	654	658	1.30	4	0.25	1278.0	1274.3	7.6	60	96.00	1.04	0.01	0.49	0.48	0	0.00	350	7.7	7.4	636.0	960.00	9	1
FL-3 Max		<0.5	40	89.00	<0.5	703	681	1.50	11	<0.5	1350.0	1357.0	9.9	60	110.00	1.20	0.01	0.51	0.51	<0.5	<0.005	432	7.7	8.1	690.0	1100.00	14	<4.0
FL-3 Min		<0.5	26	63.00	<0.5	609	601	1.10	<0.5	<0.5	1220.0	1238.0	5.7	59	76.00	0.89	<0.005	0.45	0.45	<0.5	<0.005	303	7.6	6.0	570.0	610.00	2	<1.0
FL-3 N > DL		0	5	5	0	5	5	5	1	0	5	4	3	2	5	5	4	5	5	0	0	5	5	4	5	5	4	0
FL-3 Median		<0.5	35	81.00	<0.5	656	667	1.30	<5.0	<0.5	1260.0	1251.0	7.2	60	99.00	1.00	0.01	0.50	0.49	<0.5	<0.005	337	7.7	7.7	630.0	1000.00	11	<1.0
FL-30	4/30/2010	<0.5	13	93.00	<0.5	725	756	6.50	<0.5	<0.5	1460.0	1544.0	1.4	13	110.00	1.40	<0.005	<0.02	<0.02	<0.5	<0.005	4	7.3	7.4	760.0	1200.00	4	33
	6/16/2010	<0.5	25	93.00	<0.5	691	705	6.30	<0.5	<0.5	1480.0	1233.0			110.00	1.60	<0.005	<0.02	<0.02	<0.5	<0.005	195	8.0	6.6	780.0	930.00	5	39
	7/14/2010	<0.5	20	100.00	<0.5	754	770	6.80	<0.5	<0.5	1510.0	1564.0	1.6		130.00	1.70	<0.005	<0.02	<0.02	<0.5	<0.005	112	7.1	7.0	730.0	1200.00	5	25
	8/12/2010	<0.5	19	95.00	<0.5	750	726	6.40	<0.5	<0.5	1490.0		1.4		120.00	2.10	<0.005	<0.02	<0.02	<0.5	<0.005	141	7.3		810.0	1200.00		37
	9/8/2010	<0.5	20	93.00	<0.5	761	821	6.70	<0.5	<0.5	1530.0	1513.0	1.5	14	110.00	2.00	<0.005	<0.02	<0.02	<0.5	<0.005	159	7.4	7.2	800.0	1300.00	5	35
FL-30 Average		0	19	94.80	0	736	756	6.54	0.25	0.25	1494.0	1463.5	1.5	13	116.00	1.76	0.00	0.01	0.01	0	0.00	122	7.4	7.0	776.0	1166.00	5	34
FL-30 Max		<0.5	25	100.00	<0.5	761	821	6.80	<0.5	<0.5	1530.0	1564.0	1.6	14	130.00	2.10	<0.005	<0.02	<0.02	<0.5	<0.005	195	8.0	7.4	810.0	1300.00	5	39
FL-30 Min		<0.5	13	93.00	<0.5	691	705	6.30	<0.5	<0.5	1460.0	1233.0	1.4	13	110.00	1.40	<0.005	<0.02	<0.02	<0.5	<0.005	4	7.1	6.6	730.0	930.00	4	25
FL-30 N > DL		0	5	5	0	5	5	5	0	0	5	4	3	2	5	5	0	0	0	0	0	5	5	4	5	5	4	5
FL-30 Median		<0.5	20	93.00	<0.5	750	756	6.50	<0.5	<0.5	1490.0	1528.5	1.5	13	110.00	1.70	<0.005	<0.02	<0.02	<0.5	<0.005	141	7.3	7.1	780.0	1200.00	5	35
FL-5	4/30/2010	<0.5	29	85.00	<0.5	656	677	1.40	<5.0	<0.5	1360.0	1366.0	6.2	53	100.00	1.00	0.01	0.45	0.44	<0.5	<0.005	428	7.6	8.1	700.0	1100.00	2	<1.0
	6/16/2010	<0.5	34	61.00	<0.5	671	643	1.20	11	<0.5	1230.0	1238.0			75.00	0.94	<0.005	0.47	0.47	<0.5	<0.005	490	7.7	6.3	620.0	610.00	11	<4.0
	7/14/2010	<0.5	38	71.00	<0.5	631	685	1.20	<5.0	<0.5	1240.0	1247.0	11.1		86.00	0.92	0.01	0.49	0.48	<0.5	<0.005	300	7.5	7.4	610.0	1000.00	13	<1.0
	8/12/2010	<0.5	26	79.00	<0.5	699	596	1.50	17	<0.5	1250.0		9.8		96.00	1.10	0.01	0.51	0.50	<0.5	<0.005	337	7.7		600.0	1000.00		<1.0
	9/8/2010	<0.5	32	76.00	<0.5	653	667	1.60	2	<0.5	1300.0	1261.0	9.8	101	93.00	1.30	0.01	0.51	0.50	<0.5	<0.005	346	7.7	7.7	660.0	1100.00	11	<1.0
FL-5 Average		0	32																									

Table C-44: Rose Creek Drainage Water Quality
2010 - Pit Lakes - Dissolved Metals



Station	Date	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Ti-d	U-d	V-d	Zn-d	Zr-d
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FL-1	4/30/2010	<0.03	21.00	<0.1	18.400	<300.0	0.18	<0.03	112.00	18.70	39.4000	<0.5	18.3000	7.00	5.40	0.046	58.10	2190.000	0.40	12.20	104.000	0.8000	0.20	179	<0.2	5030.00	<0.05	441.00	<3.0	0.20	1.0500	<1.0	18800.000	<0.5
	6/16/2010	<0.03	4.00	<0.1	16.400	<300.0	0.06	<0.03	143.00	17.40	51.3000	<0.5	9.1000	<5.0	8.00	0.057	75.00	2990.000	0.50	19.00	129.000	0.1400	0.30	210	<0.2	4000.00	<0.05	591.00	<3.0	0.45	1.2700	<1.0	21400.000	<0.5
	7/14/2010	0.0160	3.80	0.20	16.300	<50.0	0.04	<0.005	146.00	16.00	53.4000	<0.1	6.5400	35.00	8.01	0.054	75.40	2990.000	0.56	19.00	129.000	3.9400	0.26	249	0.1300	3960.00	<0.01	620.00	<0.5	0.43	1.2200	<0.2	18000.000	<0.1
	8/12/2010	<0.03	3.00	0.20	16.300	<300.0	<0.05	<0.03	127.00	16.60	50.8000	<0.5	5.6000	10.00	7.10	0.058	66.30	2940.000	0.50	16.20	131.000	0.4100	0.30	212	<0.2	2880.00	<0.05	570.00	<3.0	0.45	1.1000	<1.0	20600.000	<0.5
	9/8/2010	<0.03	4.00	0.20	15.600	<300.0	0.06	<0.03	128.00	15.90	50.5000	<0.5	5.1000	18.00	7.30	0.058	73.60	2930.000	0.60	17.50	128.000	0.2600	0.20	226	<0.2	3550.00	<0.05	605.00	4.00	0.49	1.0400	<1.0	21400.000	<0.5
FL-1 Average		0.0152	7.16	0.14	16.600	125.00	0.07	0.01	131.20	16.92	49.0800	0.21	8.9280	14.50	7.16	0.055	69.68	2808.000	0.51	16.78	124.200	1.1100	0.25	215	0.1060	3884.00	0.02	565.40	1.75	0.40	1.1360	0.42	20400.000	0.21
FL-1 Max		<0.03	21.00	0.20	18.400	<300.0	0.18	<0.03	146.00	18.70	53.4000	<0.5	18.3000	35.00	8.01	0.058	75.40	2990.000	0.60	19.00	131.000	3.9400	0.30	249	<0.2	5030.00	<0.05	620.00	4.00	0.49	1.2700	<1.0	21400.000	<0.5
FL-1 Min		0.0160	3.00	<0.1	15.600	<50.0	0.04	<0.005	112.00	15.90	39.4000	<0.1	5.1000	<5.0	5.40	0.046	58.10	2190.000	0.40	12.20	104.000	0.1400	0.20	179	0.1300	2880.00	<0.01	441.00	<0.5	0.20	1.0400	<0.2	18000.000	<0.1
FL-1 N > DL		1	5	3	5	0	4	0	5	5	5	0	5	4	5	5	5	5	5	5	5	5	5	5	1	5	5	0	5	1	5	0	5	0
FL-1 Median		<0.03	4.00	0.20	16.300	<300.0	0.06	<0.03	128.00	16.60	50.8000	<0.5	6.5400	10.00	7.30	0.057	73.60	2940.000	0.50	17.50	129.000	0.4100	0.26	212	<0.2	3960.00	<0.05	591.00	<3.0	0.45	1.1000	<1.0	20600.000	<0.5
FL-15	4/30/2010	<0.03	18.00	0.20	16.200	<300.0	<0.05	<0.03	148.00	15.30	52.8000	<0.5	5.3000	6.00	8.40	0.059	72.80	3210.000	0.60	18.70	131.000	0.2900	0.30	240	<0.2	3710.00	<0.05	614.00	<3.0	0.39	1.1300	<1.0	19800.000	<0.5
	6/16/2010	<0.03	9.00	0.20	16.600	<300.0	<0.05	<0.03	153.00	16.90	57.8000	<0.5	8.1000	<5.0	9.80	0.065	86.20	3650.000	0.60	23.00	146.000	0.0900	0.30	240	<0.2	3300.00	<0.05	667.00	<3.0	0.48	1.0600	<1.0	23700.000	<0.5
	7/14/2010	0.0180	3.50	0.18	16.000	<50.0	0.06	<0.005	155.00	14.70	64.8000	<0.1	0.1500	16.00	9.49	0.064	87.80	3590.000	0.59	23.20	158.000	0.1140	0.28	293	0.1200	3440.00	<0.01	693.00	<0.5	0.46	1.2200	<0.2	19900.000	<0.1
	8/12/2010	<0.03	6.00	0.20	16.700	<300.0	0.09	<0.03	150.00	15.90	59.3000	<0.5	<0.3	7.00	8.60	0.065	73.60	3560.000	0.50	19.50	150.000	0.1800	0.30	232	<0.2	2710.00	<0.05	625.00	<3.0	0.45	1.1600	<1.0	22400.000	<0.5
	9/8/2010	<0.03	7.00	0.20	14.800	<300.0	0.06	<0.03	153.00	16.80	58.9000	<0.5	4.0000	8.00	8.90	0.061	79.90	3610.000	0.40	20.90	147.000	0.1100	0.30	277	<0.2	3700.00	<0.05	620.00	<3.0	0.45	0.9100	<1.0	23000.000	<0.5
FL-15 Average		0.0156	8.70	0.20	16.060	125.00	0.05	0.01	151.80	15.92	58.7200	0.21	3.5400	7.90	9.04	0.063	80.06	3524.000	0.54	21.06	146.400	0.1568	0.30	256	0.1040	3372.00	0.02	643.80	1.25	0.45	1.0960	0.42	21760.000	0.21
FL-15 Max		<0.03	18.00	0.20	16.700	<300.0	0.09	<0.03	155.00	16.90	64.8000	<0.5	8.1000	16.00	9.80	0.065	87.80	3650.000	0.60	23.20	158.000	0.2900	0.30	293	<0.2	3710.00	<0.05	693.00	<3.0	0.48	1.2200	<1.0	23700.000	<0.5
FL-15 Min		0.0180	3.50	0.18	14.800	<50.0	<0.05	<0.005	148.00	14.70	52.8000	<0.1	0.1500	<5.0	8.40	0.059	72.80	3210.000	0.40	18.70	131.000	0.0900	0.28	232	0.1200	2710.00	<0.01	614.00	<0.5	0.39	0.9100	<0.2	19800.000	<0.1
FL-15 N > DL		1	5	5	5	0	3	0	5	5	5	0	4	4	5	5	5	5	5	5	5	5	5	5	1	5	0	5	0	5	0	5	0	
FL-15 Median		<0.03	7.00	0.20	16.200	<300.0	0.06	<0.03	153.00	15.90	58.9000	<0.5	4.0000	7.00	8.90	0.064	79.90	3590.000	0.59	20.90	147.000	0.1140	0.30	240	<0.2	3440.00	<0.05	625.00	<3.0	0.45	1.1300	<1.0	22400.000	<0.5
FL-3	4/30/2010	<0.03	22.00	<0.1	17.000	<300.0	0.09	<0.03	148.00	17.20	53.0000	<0.5	2.0000	8.00	8.10	0.059	72.40	3090.000	0.60	18.30	131.000	0.5300	0.30	239	<0.2	4020.00	<0.05	609.00	<3.0	0.35	1.1900	<1.0	20600.000	1.30
	6/16/2010	<0.03	3.00	0.20	16.300	<300.0	0.06	<0.03	136.00	17.30	52.9000	<0.5	8.9000	65.00	8.20	0.057	78.40	3100.000	0.50	19.70	131.000	0.0700	0.30	211	<0.2	3660.00	<0.05	602.00	<3.0	0.44	1.2500	<1.0	22100.000	<0.5
	7/14/2010	0.0140	2.00	0.19	16.100	<50.0	0.04	<0.005	143.00	16.30	56.5000	<0.1	6.8500	16.00	8.04	0.055	78.40	3050.000	0.57	20.00	136.000	0.3100	0.24	265	0.1500	3770.00	<0.01	622.00	<0.5	0.43	1.2400	<0.2	18400.000	<0.1
	8/12/2010	<0.03	8.00	0.20	16.200	<300.0	0.06	<0.03	128.00	16.30	51.6000	<0.5	6.1000	19.00	7.30	0.057	68.10	3010.000	0.50	17.00	133.000	0.5900	0.20	227	<0.2	2770.00	<0.05	561.00	<3.0	0.45	1.0600	<1.0	21000.000	<0.5
	9/8/2010	<0.03	4.00	<0.1	14.900	<300.0	0.07	<0.03	143.00	15.70	51.6000	<0.5	5.4000	15.00	7.80	0.055	78.60	3060.000	0.60	18.70	136.000	0.2800	0.20	238	<0.2	4050.00	<0.05	584.00	<3.0	0.41	0.9700	<1.0	22200.000	<0.5
FL-3 Average		0.0148	7.80	0.14	16.100	125.00	0.06	0.01	139.60	16.56	53.1200	0.21	5.8500	24.60	7.89	0.057	75.18	3062.000	0.55	18.74	133.400	0.3560	0.25	236	0.1100	3654.00	0.02	595.60	1.25	0.42	1.1420	0.42	20860.000	0.42
FL-3 Max		<0.03	22.00	0.20	17.000	<300.0	0.09	<0.03	148.00	17.30	56.5000	<0.5	8.9000	65.00	8.20	0.059	78.60	3100.000	0.60	20.00	136.000	0.5900	0.30	265	<0.2	4050.00	<0.05	622.00	<3.0	0.45	1.2500	<1.0	22200.000	1.30
FL-3 Min		0.0140	2.00	<0.1	14.900	<50.0	0.04	<0.005	128.00	15.70	51.6000	<0.1	2.0000	8.00	7.30	0.055	68.10	3010.000	0.50	17.00	131.000	0.0700	0.20	211	0.1500	2770.00	<0.01	561.00	<0.5	0.35	0.9700	<0.2	18400.000	<0.1
FL-3 N > DL		1	5	3	5	0	5	0	5	5	5	0	5	5	5	5	5	5	5	5	5	5	5	5	1	5	0	5	0	5	0	5	0	
FL-3 Median		<0.03	4.00	0.19	16.200	<300.0	0.06	<0.03	143.00	16.30	52.9000	<0.5	6.1000	16.00	8.04	0.057	78.40	3060.000	0.57	18.70	133.000	0.3100	0.24	238	<0.2	3770.00	<0.05	602.00	<3.0	0.43	1.1900	<1.0	21000.000	<0.5
FL-30																																		

**Table C-45: Rose Creek Drainage Water Quality
2010 - Pit Lakes - Total Metals**

Station	Date	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr		
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FL-1	4/30/2010	0.1500	24.00	0.200	<300.0	18.800	0.18	<0.03	109.00	18.70	39.8000	<0.5	21.3000	96.00	5.10	0.04	58.60	2150.000	0.60	12.50	110.000	<0.005	1.8100	169.00	0.20	<0.2	4650.00	<0.05	432.00	<3.0	0.21	1.0900	<1.0	19300.000	<0.5		
	6/16/2010	<0.03	17.00	0.200	<300.0	17.200	0.09	<0.03	142.00	17.30	52.0000	<0.5	12.3000	116.00	8.30	0.06	76.80	3060.000	0.60	19.20	132.000	<0.005	1.3600	218.00	0.30	<0.2	3880.00	<0.05	600.00	<3.0	0.45	1.1800	<1.0	21800.000	<0.5		
	7/14/2010	0.0140	11.60	0.220	<50.0	16.600	0.06	<0.005	121.00	16.30	52.2000	<0.1	12.7000	155.00	7.71	0.06	75.50	2920.000	0.48	18.30	129.000	<0.005	1.6700	239.00	0.25	0.1200	3460.00	<0.05	592.00	<0.5	0.42	1.2600	<0.2	18200.000	<0.1		
	8/12/2010	<0.03	10.00	<0.1	<300.0	17.400	<0.05	<0.03	148.00	18.20	53.1000	<0.5	7.4000	47.00	8.20	0.06	79.10	3150.000	0.50	19.10	138.000	<0.005	0.8500	260.00	0.20	<0.2	4530.00	<0.05	631.00	<3.0	0.47	0.9200	<1.0	21900.000	<0.5		
	9/8/2010	<0.03	12.00	0.200	<300.0	16.300	0.07	<0.03	126.00	18.00	50.9000	0.60	6.4000	174.00	7.80	0.06	72.60	3020.000	0.60	17.90	128.000	<0.005	2.1300	244.00	0.90	<0.2	3460.00	<0.05	604.00	8.00	0.48	1.1300	<1.0	20300.000	<0.5		
FL-1 Average		0.0418	14.92	0.174	125.00	17.260	0.09	0.01	129.20	17.70	49.6000	0.28	12.0200	117.60	7.42	0.05	72.52	2860.000	0.56	17.40	127.400	0.00	1.5640	226.00	0.37	0.1040	3996.00	0.02	571.80	2.55	0.41	1.1160	0.42	20300.000	0.21		
FL-1 Max		0.1500	24.00	0.220	<300.0	18.800	0.18	<0.03	148.00	18.70	53.1000	0.60	21.3000	174.00	8.30	0.06	79.10	3150.000	0.60	19.20	138.000	<0.005	2.1300	260.00	0.90	<0.2	4650.00	<0.05	631.00	8.00	0.48	1.2600	<1.0	21900.000	<0.5		
FL-1 Min		0.0140	10.00	<0.1	<50.0	16.300	<0.05	<0.005	109.00	16.30	39.8000	<0.1	6.4000	47.00	5.10	0.04	58.60	2150.000	0.48	12.50	110.000	<0.005	0.8500	169.00	0.20	0.1200	3460.00	0.02	432.00	<0.5	0.21	0.9200	<0.2	18200.000	<0.1		
FL-1 N > DL		2	5	4	0	5	4	0	5	5	5	1	5	5	5	5	5	5	5	5	5	0	5	5	5	1	5	1	5	1	5	1	5	0	5	0	
FL-1 Median		<0.03	12.00	0.200	<300.0	17.200	0.07	<0.03	126.00	18.00	52.0000	<0.5	12.3000	116.00	7.80	0.06	75.50	3020.000	0.60	18.30	129.000	<0.005	1.6700	239.00	0.25	<0.2	3880.00	<0.05	600.00	<3.0	0.45	1.1300	<1.0	20300.000	<0.5		
FL-15	4/30/2010	0.0900	17.00	0.200	<300.0	15.800	0.07	<0.03	145.00	15.10	53.1000	<0.5	7.4000	23.00	8.10	0.06	74.20	3190.000	0.60	19.20	134.000	<0.005	0.3000	235.00	0.30	<0.2	3400.00	<0.05	608.00	<3.0	0.42	1.1400	<1.0	20300.000	<0.5		
	6/16/2010	<0.03	16.00	<0.1	<300.0	16.900	0.07	<0.03	160.00	17.10	55.8000	<0.5	9.3000	62.00	9.50	0.06	83.80	3570.000	0.50	22.10	142.000	<0.005	0.5200	244.00	0.30	<0.2	3800.00	<0.05	655.00	<3.0	0.50	1.0600	<1.0	22900.000	<0.5		
	7/14/2010	0.0130	10.30	0.180	<50.0	16.000	0.07	<0.005	141.00	16.20	61.4000	<0.1	3.9000	110.00	9.09	0.06	84.50	3460.000	0.54	21.80	152.000	<0.005	0.8520	272.00	0.29	0.1200	3540.00	<0.01	666.00	<0.5	0.45	1.2100	<0.2	19600.000	<0.1		
	8/12/2010	<0.03	10.00	<0.1	<300.0	17.300	0.07	<0.03	165.00	17.20	61.8000	<0.5	2.4000	64.00	9.60	0.07	85.50	3720.000	0.50	21.90	156.000	<0.005	0.7300	288.00	0.30	<0.2	4310.00	<0.05	678.00	<3.0	0.49	0.9700	<1.0	22900.000	<0.5		
	9/8/2010	<0.03	11.00	0.200	<300.0	15.700	<0.05	<0.03	152.00	17.60	56.7000	<0.5	5.5000	62.00	8.90	0.06	78.50	3430.000	0.50	20.50	141.000	<0.005	0.6600	262.00	0.30	<0.2	3470.00	<0.05	634.00	9.00	0.45	1.0700	2.00	20800.000	<0.5		
FL-15 Average		0.0296	12.86	0.136	125.00	16.340	0.06	0.01	152.60	16.64	57.7600	0.21	5.7000	64.20	9.04	0.06	81.30	3474.000	0.53	21.10	145.000	0.00	0.6124	260.20	0.30	0.1040	3704.00	0.02	648.20	2.75	0.46	1.0900	0.72	21300.000	0.21		
FL-15 Max		0.0900	17.00	0.200	<300.0	17.300	0.07	<0.03	165.00	17.60	61.8000	<0.5	9.3000	110.00	9.60	0.07	85.50	3720.000	0.60	22.10	156.000	<0.005	0.8520	288.00	0.30	<0.2	4310.00	<0.05	678.00	9.00	0.50	1.2100	2.00	22900.000	<0.5		
FL-15 Min		0.0130	10.00	<0.1	<50.0	15.700	<0.05	<0.005	141.00	15.10	53.1000	<0.1	2.4000	23.00	8.10	0.06	74.20	3190.000	0.50	19.20	134.000	<0.005	0.3000	235.00	0.29	0.1200	3400.00	<0.01	608.00	<0.5	0.42	0.9700	<0.2	19600.000	<0.1		
FL-15 N > DL		2	5	3	0	5	4	0	5	5	5	0	5	5	5	5	5	5	5	5	5	0	5	5	5	1	5	0	5	1	5	1	5	0	5	0	
FL-15 Median		<0.03	11.00	0.180	<300.0	16.000	0.07	<0.03	152.00	17.10	56.7000	<0.5	5.5000	62.00	9.09	0.06	83.80	3460.000	0.50	21.80	142.000	<0.005	0.6600	262.00	0.30	<0.2	3540.00	<0.05	655.00	<3.0	0.45	1.0700	<1.0	20800.000	<0.5		
FL-3	4/30/2010	0.1100	21.00	<0.1	<300.0	16.600	0.08	<0.03	144.00	17.10	53.9000	<0.5	6.6000	48.00	7.80	0.05	73.20	3020.000	0.60	18.50	134.000	<0.005	0.8900	235.00	0.30	<0.2	4160.00	<0.05	596.00	<3.0	0.36	1.2000	<1.0	21100.000	<0.5		
	6/16/2010	<0.03	17.00	0.200	<300.0	16.200	0.09	<0.03	140.00	17.30	49.7000	<0.5	11.6000	108.00	7.80	0.06	74.30	2930.000	0.50	18.60	123.000	<0.005	1.0200	218.00	0.30	<0.2	3930.00	<0.05	587.00	<3.0	0.45	1.1600	<1.0	20800.000	<0.5		
	7/14/2010	0.0130	7.60	0.140	<50.0	15.700	0.06	<0.005	121.00	15.80	52.1000	<0.1	8.7000	116.00	7.52	0.05	74.30	2840.000	0.52	18.20	130.000	<0.005	0.8530	231.00	0.24	0.1200	3510.00	<0.01	589.00	<0.5	0.42	1.2500	<0.2	17900.000	<0.1		
	8/12/2010	<0.03	9.00	<0.1	<300.0	17.400	<0.05	<0.03	147.00	17.80	54.0000	<0.5	7.4000	42.00	8.40	0.06	81.40	3160.000	0.40	19.70	142.000	<0.005	0.7500	262.00	0.20	<0.2	4440.00	<0.05	621.00	<3.0	0.47	0.9200	<1.0	22300.000	<0.5		
	9/8/2010	<0.03	11.00	0.200	<300.0	15.600	<0.05	<0.03	139.00	17.10	48.2000	<0.5	6.6000	172.00	7.50	0.06	71.20	2850.000	0.60	17.50	121.000	<0.005	1.7000	221.00	0.90	<0.2	3640.00	<0.05	585.00	8.00	0.43	1.1200	<1.0	19700.000	<0.5		
FL-3 Average		0.0336	13.12	0.128	125.00	16.300	0.06	0.01	138.20	17.02	51.5800	0.21	8.1800	97.20	7.80	0.06	74.88	2960.000	0.52	18.50	130.000	0.00	1.0426	233.40	0.39	0.1040	3936.00	0.02	595.60	2.55	0.43	1.1300	0.42	20360.000	0.21		
FL-3 Max		0.1100	21.00	0.200	<300.0	17.400	0.09	<0.03	147.00	17.80	54.0000	<0.5	11.6000	172.00	8.40	0.06	81.40	3160.000	0.60	19.70	142.000	<0.005	1.7000	262.00	0.90	<0.2	4440.00	<0.05	621.00	8.00	0.47	1.2500	<1.0	22300.000	<0.5		
FL-3 Min		0.0130	7.60	<0.1	<50.0	15.600	<0.05	<0.005	121.00	15.80	48.2000	<0.1	6.6000	42.00	7.50	0.05	71.20	2840.000	0.40	17.50	121.000	<0.005	0.7500	218.00	0.20	0.1200	3510.00	<0.01	585.00	<0.5	0.36	0.9200	<0.2	17900.000	<0.1		
FL-3 N > DL		2	5	3	0	5	3	0	5	5	5	0	5	5	5	5	5	5	5	5	5	0	5	5	5	1	5	0	5	1	5	1	5	0	5	0	
FL-3 Median		<0.03	11.00	0.140	<300.0	16.200	0.06	<0.03	140.00	17.10	52.1000	<0.5	7.4000	108.00	7.80	0.06	74.30	2930.000	0.52	18.50	130.000	<0.005	0.8900	231.00	0.30	<0.2	3930.00	<0.05	589.00	<3.0	0.43	1.1600	<1.0	20800.000	<0.5		
FL-30	4/30/2010	0.0070	9.10	0.430	<50.0	13.100	0.07	<0.005	184.00	0.29	37.7000	<0.1	1.3400	23400.00	12.90	0.06	64.50	3460.000	2.01	27.80	76.800	<0.005	0.4100	269.00	0.05	0.1800	2710.00	<0.01	669.00	<0.5	0.20	3.3600	<0.2	4220.000	<0.1		
	6/16/2010	<0.005	13.70	0.390	<50.0	12.800	0.09	<0.005	162.00	0.30	37.9000	<0.1	1.6500	23600.00																							

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X14	1/11/2010	FIELD BLANK			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<1.0	<0.5	<0.5	<0.01	<0.5	5.70	<0.5	<10.0	<0.5	<1.0	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	1	1	1	1	1	1	0	1	1	1	2	1	0.25	1	1	1	0.25	1
		Comments																				
		Action																				
		Result																				
X2	2/22/2010	FIELD BLANK			0.90	<0.5	<0.5	<0.5	1	<0.5		<1.0	<0.5	1.00	0.02	<0.5	5.90	<0.5	<10.0	<0.5	<1.0	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	1.8	1	1	1	1.8	1	0	1	1	2	4	1	0.05	1	1	1	0.25	1
		Comments																				
		Action																				
		Result																				
SC2	4/14/2010	FIELD BLANK			1.20	<0.5	<0.5	<0.5	<0.5	<0.5		<1.0	<0.5	1.50	<0.01	<0.5	6.10	<0.5	<10.0	<0.5	<1.0	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	2.4	1	1	1	1	1	0	1	1	3	2	1	0.15	1	1	1	0.25	0
		Comments																				
		Action																				
		Result																				
X4	5/3/2010	FIELD BLANK			1.60	<0.5	<0.5	<0.5	<0.5	<0.5		2.0		1.90	<0.01	<0.5	6.20	<0.5	<10.0		<1.0	
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	3.2	1	1	1	1	1	0	2	0	3.8	2	1	0.25	1	1	0	0.25	0
		Comments																				
		Action																				
		Result																				
NF2	6/4/2010	FIELD BLANK			1.10	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.5	1.30	<0.05	<0.5	5.50	<0.5	<10	<0.5	<1	<1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	2.2	1	1	1	0	1	0	1	1	2.6	10	1	0.45	1	1	1	0.25	0
		Comments													Blank value not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.							
		Action													Let Value Stand							
		Result																				
X5	22/06/2010 9:3	FIELD BLANK			<0.5	<0.5	<0.5	<0.5	<0.0005	<0.5	<5	<1		<0.5	<0.05	<0.5	5.40	<0.5	<10		<1	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	1	1	1	1	0.001	1	10	1	0	1	10	1	0.55	1	1	0	0.25	1
		Comments									Blank value not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.				Blank value not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.							
		Action									Let Value Stand				Let Value Stand							
		Result																				
A30	7/7/2010	FIELD BLANK	<0.5	<0.5	1.90	<0.5		<0.5	<0.5	<0.5		2.0		2.30		<0.5	6.10	1.7			<1	
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	1	1	3.8	1	0	1	1	1	0	2	0	4.6	0	1	0.15	3.4	0	0	0.25	0
		Comments																				
		Action																				
		Result																				

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit, or >1 pH unit difference from DI Water)

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X14	7/20/2010	FIELD BLANK			1.50	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.5	1.80	<0.005	<0.5	5.74	<0.5	<10	<0.5	<1	
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	3	1	1	1	1	1	0	1	1	3.6	1	1	0.21	1	1	1	0.25	0
		Comments																				
		Action																				
		Result																				
RCSG#4	8/3/2010	FIELD BLANK			2.20	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.5	2.60	0.28	<0.5	6.15	<0.5	<10	<0.5	<1	
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	4.4	1	1	1	1	1	0	1	1	5.2	56	1	0.20	1	1	1	0.25	0
		Comments											Blank concentration > PQL and correctly entered into emLine.	Blank concentration > PQL and correctly entered into emLine. Lab noted that "RDL raised due to sample matrix interference."								
		Action											Let Value Stand	Request Retest								
		Result											High blank value remains.	Retest not possible. Remainder of sample had been discarded.								
X5	8/10/2010	FIELD BLANK			1.30	<0.5	<0.5	<0.5	<0.5	<0.5	<5	3.0		1.60	0.27	<0.5	5.80	<0.5	<10		<4	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	2.6	1	1	1	1	1	10	3	0	3.2	54	1	0.15	1	1	0	1	1
		Comments									Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.											
		Action									Let Value Stand											
		Result																				
X5 Retest	8/10/2010	FIELD BLANK													0.01	-						
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	2.4	0	#VALUE!	0	0	0	0	0
		Comments																				
		Action																				
		Result																				
X5	8/17/2010	FIELD BLANK			2.20	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1		2.60	0.16	<0.5	5.59	<0.5	<10		<1	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
		Times greater than DI water	0	0	4.4	1	1	1	1	1	10	1	0	5.2	32	1	0.36	1	1	0	0.25	1
		Comments									Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration > PQL and correctly entered into emLine.								
		Action									Let Value Stand			Let Value Stand								
		Result												High blank value remains.								

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit, or >1 pH unit difference from DI Water)

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU	
X5	9/7/2010	FIELD BLANK			0.60	<0.5			<0.5	<0.5	<5		2.0		0.70	0.25	<0.5	5.75	2.6	<10		<1	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	1.2	1	0	0	1	1	10	2	0	1.4	50	1	0.20	5.2	1	0	0.25	1	
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.										Blank concentration equal to PQL and correctly entered into emLine. Lab noted "RDL raised due to sample matrix interference."					Blank concentration > PQL and correctly entered into emLine.					
		Action	Let Value Stand										Request Retest					Let Value Stand					
		Result											Retest performed, see results below.					High blank value remains.					
X5 Retest	9/7/2010	FIELD BLANK													<0.005		-						
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	1	0	#VALUE!	0	0	0	0	0	
		Comments											Retest for September 7 X5 blank.										
		Action											Let Value Stand										
		Result											New blank value entered into emLine.										
GDHSECK	10/6/2010	FIELD BLANK			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<1		<0.5	0.04	<0.5	5.25	<0.5	<10		<1		
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	1	1	1	1	1	1	0	1	0	1	7.2	1	0.70	1	1	0	0.25	0	
		Comments											Blank concentration > PQL and correctly entered into emLine.										
		Action											Let Value Stand										
		Result											High blank value remains.										
X4	10/20/2010	FIELD BLANK			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		7.0		<0.5	0.01	<0.5	5.23	<0.5	<10		<1		
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	1	1	1	1	1	1	0	7	0	1	2	1	0.72	1	1	0	0.25	0	
		Comments											Blank concentration > PQL and correctly entered into emLine.										
		Action											Let Value Stand										
		Result											High blank value remains.										
X14	11/9/2010	FIELD BLANK			1.10	<0.5	<0.5	<0.5	<0.5	<0.5		<1	2.3	1.30	0.06	<0.5	5.86	<0.5	<10	<0.5	<4	<0.1	
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	2.2	1	1	1	1	1	0	1	4.6	2.6	11.4	1	0.09	1	1	1	1	1	
		Comments											Blank concentration > PQL and correctly entered into emLine.										
		Action											Let Value Stand										
		Result											High blank value remains.										
X5	11/18/2010	FIELD BLANK			1.40	<0.5			<0.5	<0.5	<5		2.0		1.70	<0.005	<0.5	5.81	<0.5	<10		<4	<0.1
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1	
		Times greater than DI water	0	0	2.8	1	0	0	1	1	10	2	0	3.4	1	1	0.14	1	1	0	1	1	
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.																				
		Action	Let Value Stand																				
		Result																					

- Blank value < PQL
- Blank value is a detection limit higher than that of DI water
- Blank value > PQL and < retest limit
- Blank value > retest limit (20X DI Water Detection Limit, or >1 pH unit difference from DI Water)

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU		
X14	11/25/2010	FIELD BLANK			1.40	<0.5	<0.5	<0.5	<0.5	<0.5		2.0	<0.5	1.70	0.04	<0.5	5.88	4.8	<10	<0.5	<4			
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1		
		Times greater than DI water	0	0	2.8	1	1	1	1	1	0	2	1	3.4	7	1	0.07	9.6	1	1	1	0		
		Comments																					Blank concentration > PQL and correctly entered into emLine.	
		Action																						Blank concentration > PQL and correctly entered into emLine.
		Result																						Let Value Stand
																								High blank value remains.
X2	12/1/2010	FIELD BLANK			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.5	<0.5	<0.05	<0.5	5.35	0.8	<10	<0.5	<4			
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1		
		Times greater than DI water	0	0	1	1	1	1	1	1	0	1	1	1	10	1	0.60	1.6	1	1	1	0		
		Comments																					Blank concentration not > PQL (detection limit for field blank higher than that used for DI water, lab noted "RDL raised due to sample matrix interference). Therefore, comparison not valid in this case.	
		Action																						Let Value Stand
		Result																						
X14	12/2/2010	FIELD BLANK			0.60	<0.5	<0.5	<0.5	<0.5	<0.5		2.0	<0.5	0.70	<0.05	<0.5	5.49	<0.5	<10	<0.5	<1	0.00		
		Deionized Water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1		
		Times greater than DI water	0	0	1.2	1	1	1	1	1	0	2	1	1.4	10	1	0.46	1	1	1	0.25	0		
		Comments																					Blank concentration not > PQL (detection limit for field blank higher than that used for DI water, lab noted "RDL raised due to sample matrix interference). Therefore, comparison not valid in this case.	
		Action																						Let Value Stand
		Result																						

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit, or >1 pH unit difference from DI Water)



Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	
X14	1/11/2010	FIELD BLANK	<0.005	0.80	<0.02	<0.02	0.120	<50.0	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	0.1600	2.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	4	1	6	1	1	1	1	1	1	1	1	3.2	2	1	0.001	1
		Comments					Blank concentration > PQL and correctly entered into emLine.												
		Action					Let Value Stand												
		Result					High blank value remains.												
X2	2/22/2010	FIELD BLANK	<0.005	0.90	<0.02	<0.02	<0.02	<50.0	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1.0	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.005	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	4.5	1	1	1	1	1	1	1	1	1	1	1	1	1	0.001	1
		Comments																	
		Action																	
		Result																	
SC2	4/14/2010	FIELD BLANK	<0.005	0.70	<0.02	<0.02	0.260	<50.0	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1.0	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	3.5	1	13	1	1	1	1	1	1	1	1	1	1	1	0.001	1
		Comments					Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved metals greater than total metals for some parameters; analysis from separate field prepared sample bottles."												
		Action					Let Value Stand												
		Result					High blank value remains.												
X4	5/3/2010	FIELD BLANK	<0.005	2.70	<0.02	<0.02	0.360	<50.0	<0.01	<0.005	<0.05	0.01	<0.005	<0.1	0.1000	5.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	13.5	1	18	1	1	1	1	1	1.6	1	1	2	5	1	0.001	1
		Comments					Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved metals greater than total metals for some parameters; analysis from separate field prepared sample bottles."									Blank concentration equal to PQL and correctly entered into emLine.			
		Action					Let Value Stand									Let Value Stand			
		Result					High blank value remains.									Blank value remains.			
NF2	6/4/2010	FIELD BLANK	<0.005	1.10	<0.02	<0.02	0.060	<50	<0.01	0.02	<0.05	<0.005	<0.005	<0.1	0.0600	<1	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	5.5	1	3	3	1	1	3.4	1	1	1	1	1.2	1	1	0.001	1
		Comments					Blank concentration > PQL and correctly entered into emLine.												
		Action					Let Value Stand												
		Result					High blank value remains.												
X5	22/06/2010	FIELD BLANK	<0.005	0.90	<0.02	<0.02	0.080	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	0.1600	<1	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	4.5	1	4	4	1	1	1	1	1	1	1	3.2	1	1	0.001	1
		Comments																	
		Action																	
		Result																	
A30	7/7/2010	FIELD BLANK	<0.02	<3	<0.1	<1	<1	<50	<0.1	<1	<0.05	<0.01	<0.5	<1	<0.2	<5	<0.05	<0.005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	4	15	5	50	1	1	10	200	1	2	100	10	4	5	1	0.01	1
		Comments					Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.												
		Action					Let Value Stand												
		Result					Let Value Stand												
X14	7/20/2010	FIELD BLANK	<0.005	1.20	<0.02	<0.02	0.540	<50	<0.01	<0.005	<0.05	<0.005	0.0070	<0.1	0.1000	3.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	6	1	27	1	1	1	1	1	1	1.4	1	2	3	1	0.001	1
		Comments					Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."												
		Action					Let Value Stand												
		Result					High blank value remains.												
RCG#4	8/3/2010	FIELD BLANK	<0.005	0.90	<0.02	<0.02	0.080	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	2.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	4.5	1	4	4	1	1	1	1	1	1	1	1	2	1	0.001	1
		Comments																	
		Action																	
		Result																	

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	
X5	8/10/2010	FIELD BLANK	<0.005	1.90	<0.02	0.250	<0.02	<0.01	0.03	<0.05	<0.005	<0.005	<0.1	0.0900	3.00	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	9.6	1	12.5	1	1	5.4	1	1	1	1	1.8	3	1	0.001	1	
		Comments	Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."										
	Action	Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand											
	Result	High blank value remains.		High blank value remains.		High blank value remains.		High blank value remains.											
X5 Retest	8/17/2010	FIELD BLANK	<0.005	0.70	<0.02	0.250	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	0.1900	<1	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	3.5	1	12.5	1	1	1	1	1	1	1	3.8	1	1	0.001	1	
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."										
	Action	Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand											
	Result	High blank value remains.		High blank value remains.		High blank value remains.		High blank value remains.											
X5 Retest	8/17/2010	FIELD BLANK	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Comments																	
	Action																		
	Result																		
X5	9/7/2010	FIELD BLANK	<0.005	1.40	<0.02	0.110	<0.02	<0.01	<0.005	0.22	<0.005	0.0100	0.20	<0.05	<1	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	7	1	5.5	1	1	1	4.4	1	2	2	1	1	1	0.001	1	
		Comments	Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.										
	Action	Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand											
	Result	High blank value remains.		High blank value remains.		High blank value remains.		High blank value remains.											
X5 Retest	9/7/2010	FIELD BLANK	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Comments																	
	Action																		
	Result																		
GDHSECK	10/6/2010	FIELD BLANK	<0.005	1.60	<0.02	0.490	<0.02	<0.01	<0.005	<0.05	0.01	0.0230	<0.1	0.1500	3.00	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	8	1	24.5	1	1	1	1	2.4	4.6	1	3	3	1	0.001	1	
		Comments	Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.										
	Action	Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand											
	Result	High blank value remains.		High blank value remains.		High blank value remains. Retest not requested because lab already reanalyzed full suite because dissolved > total for some metals.		High blank value remains.											
X4	10/20/2010	FIELD BLANK	<0.005	3.60	<0.02	0.460	<0.02	<0.01	<0.005	0.07	<0.005	0.0380	<0.1	0.1100	25.00	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	18	1	23	1	1	1	1.4	1	7.6	1	2.2	25	1	0.001	1	
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Duplicate RPD for Co exceeds acceptance criteria. 10% of analytes failure in multi-element scan is allowed."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				
	Action	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	
	Result	Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.		Retest performed, see results below.			
X4 Retest	10/20/2010	FIELD BLANK	<0.005	3.50	<0.02	0.460	<0.02	<0.01	<0.005	0.07	<0.005	0.0350	<0.1	0.1400	27.00	<0.05	<0.0005	<0.05	
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.01	<0.005	<0.05	<0.005	<0.05	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
		Times greater than DI water	1	17.5	1	23	1	1	1	1.4	1	7	1	2.8	27	1	0.001	1	
		Comments	Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.		
	Action	Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand		Let Value Stand			
	Result	New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.		New blank value entered into emLine.			

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	
X14	11/9/2010	FIELD BLANK	0.0060	0.70	<0.02	<0.02	0.080	<50	<0.01	<0.005	<0.05	<0.005	0.0060	<0.1	0.1700	3.00	0.14	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Comments																			
Action																			
Result																			
X5	11/18/2010	FIELD BLANK	<0.005	1.20	<0.02	<0.02	0.030	<50	<0.01	<0.005	<0.05	<0.005	0.0060	<0.1	0.0600	2.00	0.09	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	6	1	1	1.5	1	1	1	1	1	1.2	1	1.2	2	1.8	0.01	<0.05
Comments Blank concentration > PQL and correctly entered into emLine.																			
Action Let Value Stand																			
Result High blank value remains.																			
X14	11/25/2010	FIELD BLANK	<0.005	0.50	<0.02	<0.02	0.070	<50	<0.01	<0.005	<0.05	0.01	<0.005	<0.1	0.0900	<1	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	2.5	1	1	3.5	1	1	1	1	1	1.4	1	1	1.8	1	1	0.001
Comments																			
Action																			
Result																			
X2	12/1/2010	FIELD BLANK	<0.005	0.60	<0.02	<0.02	0.050	<50	<0.01	0.01	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	3	1	1	2.5	1	1	1	1.6	1	1	1	1	1	1	1	0.001
Comments																			
Action																			
Result																			
X14	12/2/2010	FIELD BLANK	<0.005	0.30	<0.02	<0.02	0.030	<50	<0.01	0.04	<0.05	<0.005	0.0070	<0.1	0.1500	2.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	1.5	1	1	1.5	1	1	1	7.4	1	1	1.4	1	3	2	1	0.001
Comments Blank concentration > PQL and correctly entered into emLine.																			
Action Let Value Stand																			
Result High blank value remains.																			

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Mn-d µg/L	Mo-d µg/L	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Tl-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L	
X14	1/11/2010	FIELD BLANK	0.220	<0.05	<0.05	<0.05	0.200	0.2970	<0.02	<0.04	<100.0	<0.01	0.07	<0.5	<0.002	0.0030	<0.2	1.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	4.4	1	1	1	10	59.4	1	1	1	1	1.4	1	1	1.5	1	17	1
		Comments				Blank concentration > PQL and correctly entered into emLine.	Blank concentration > PQL and correctly entered into emLine.											Blank concentration > PQL and correctly entered into emLine.	
		Action				Let Value Stand	Let Value Stand											Let Value Stand	
		Result				High blank value remains.	High blank value remains.											High blank value remains.	
X2	2/22/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.05	<0.02	0.0340	<0.02	<0.04	<100.0	<0.01	<0.05	<0.5	<0.002	0.0060	<0.2	0.200	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	1	1	1	1	6.8	1	1	1	1	1	1	1	3	1	2	1
		Comments						Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."											
		Action						Let Value Stand											
		Result						High blank value remains.											
SC2	4/14/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.05	<0.02	0.0820	<0.02	<0.04	<100.0	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	0.500	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	1	1	1	1	16.4	1	1	1	1	1	1	1	1	1	5	1
		Comments						Blank concentration > PQL and correctly entered into emLine.											Blank concentration > PQL and correctly entered into emLine.
		Action						Let Value Stand											Let Value Stand
		Result						High blank value remains.											High blank value remains.
X4	5/3/2010	FIELD BLANK	0.510	<0.05	<0.05	<0.05	0.050	0.7010	<0.02	<0.04	<100.0	0.02	0.12	<0.5	<0.002	0.0050	<0.2	3.500	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	10.2	1	1	1	2.5	140.2	1	1	1	2	2.4	1	1	2.5	1	35	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved metals greater than total metals for some parameters; analysis from separate field prepared sample bottles."					Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved metals greater than total metals for some parameters; analysis from separate field prepared sample bottles."										Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved metals greater than total metals for some parameters; analysis from separate field prepared sample bottles."	
		Action	Let Value Stand					Let Value Stand										Let Value Stand	
		Result	High blank value remains.					High blank value remains.										High blank value remains.	
NF2	6/4/2010	FIELD BLANK	0.080	<0.05	<0.05	<0.05	0.030	0.0670	<0.02	<0.04	<100	<0.01	0.06	<0.5	<0.002	<0.002	<0.2	0.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1.6	1	1	1	1.5	13.4	1	1	1	1	1.2	1	1	1	1	7	1
		Comments						Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."											Blank concentration > PQL and correctly entered into emLine.
		Action						Let Value Stand											Let Value Stand
		Result						High blank value remains.											High blank value remains.
X5	22/06/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.05	<0.02	0.0340	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	0.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	1	1	1	1	18.8	1	1	1	1	1	1	1	1	1	7	1
		Comments						Blank concentration > PQL and correctly entered into emLine.											Blank concentration > PQL and correctly entered into emLine.
		Action						Let Value Stand											Let Value Stand
		Result						High blank value remains.											High blank value remains.
A30	7/7/2010	FIELD BLANK	<1	<1	<0.05	<0.05	<1	0.6900	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	<5	<0.5
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	20	20	1	1	50	120	25	2.5	1	500	20	10	25	60	25	50	5
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.		Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	
		Action	Let Value Stand	Let Value Stand		Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand
		Result																	
X14	7/20/2010	FIELD BLANK	1.020	<0.05	<0.05	<0.05	<0.02	0.7400	<0.02	<0.04	<100	<0.01	0.13	<0.5	<0.002	<0.002	<0.2	1.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	20.4	1	1	1	1	148	1	1	1	1	2.6	1	1	1	1	18	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."					Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."											Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."
		Action	Let Value Stand					Let Value Stand											Let Value Stand
		Result						High blank value remains.											High blank value remains.
RCSG#4	8/3/2010	FIELD BLANK	0.330	<0.05	<0.05	<0.05	<0.02	0.1450	<0.02	<0.04	<100	<0.01	0.15	<0.5	<0.002	0.0040	<0.2	1.100	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	6.8	1	1	1	1	29	1	1	1	1	3	1	1	2	1	11	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."					Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."											Blank value > PQL and correctly entered into emline. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."
		Action	Let Value Stand					Let Value Stand											Let Value Stand
		Result						High blank value remains.											High blank value remains.

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Station	Date	Sample Type	Mn-d µg/L	Mo-d µg/L	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Ti-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L	
X5	8/10/2010	FIELD BLANK	0.980	<0.05	<0.05	<0.05	<0.02	0.7440	<0.02	<0.04	<100	<0.01	0.09	<0.5	<0.002	0.0050	<0.2	1.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	19.6	1	1	1	1	146.8	1	1	1	1	1.8	1	1	2.5	1	18	1
		Comments	Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank value > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."								Blank concentration > PQL and correctly entered into emLine.				
		Action	Let Value Stand				Let Value Stand								Let Value Stand				
		Result	High blank value remains.				High blank value remains. Retest not requested because lab already reanalyzed.								High blank value remains.				
X5	8/17/2010	FIELD BLANK	0.200	<0.05	<0.05	<0.05	0.030	0.2480	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	0.0030	<0.2	0.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	4	1	1	1	1.5	49.6	1	1	1	1	1	1	1	1.5	1	7	1
		Comments					Blank concentration > PQL and correctly entered into emLine.								Blank concentration > PQL and correctly entered into emLine.				
		Action					Request Retest								Let Value Stand				
		Result					Retest performed, see results below.								High blank value remains.				
X5 Retest	8/17/2010	FIELD BLANK						0.2720											
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	0	0	0	14.4	0	0	0	0	0	0	0	0	0	0	0
		Comments					Retest for August 10 X5 blank. Blank concentration > PQL and correctly entered into emLine.												
		Action					Let Value Stand												
		Result					New blank value entered into emLine.												
X5	9/7/2010	FIELD BLANK	6.910	<0.05	<0.05	<0.05	<0.02	0.1340	<0.02	<0.04	<100	<0.01	0.76	<0.5	<0.002	0.0060	<0.2	0.600	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	138.2	1	1	1	1	26.8	1	1	1	15.2	1	1	3	1	6	1	1
		Comments	Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine.				
		Action	Request Retest				Request Retest				Let Value Stand				Let Value Stand				
		Result	Retest performed, see results below.				Retest performed, see results below.				High blank value remains.				High blank value remains.				
X5 Retest	9/7/2010	FIELD BLANK	7.600					0.1510											
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	152	0	0	0	0	30.2	0	0	0	0	0	0	0	0	0	0	0
		Comments	Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.				Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.												
		Action	Let Value Stand				Let Value Stand												
		Result	New blank value entered into emLine.				New blank value entered into emLine.												
GDHSECK	10/6/2010	FIELD BLANK	0.740	<0.05	<0.05	<0.05	0.250	0.2880	<0.02	<0.04	<100	<0.01	0.07	<0.5	<0.002	<0.002	<0.2	3.600	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	14.8	1	1	1	12.5	57.6	1	1	1	1	1.4	1	1	1	1	36	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				
		Action	Let Value Stand				Let Value Stand				Let Value Stand				Let Value Stand				
		Result	High blank value remains.				High blank value remains.				High blank value remains. Retest not requested because lab already reanalyzed.				High blank value remains. Retest not requested because lab already reanalyzed.				
X4	10/20/2010	FIELD BLANK	4.930	<0.05	<0.05	<0.05	0.100	0.5370	<0.02	<0.04	<100	<0.01	0.26	<0.5	<0.002	<0.002	<0.2	14.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	98.6	1	1	1	5	107.4	1	1	1	5.2	1	1	1	1	1	148	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Duplicate RPD for Ni exceeds acceptance criteria. 10% of analytes failure in multielement scan is allowed."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				
		Action	Request Retest				Request Retest				Request Retest				Request Retest				
		Result	Retest performed, see results below.				Retest performed, see results below.				Retest performed, see results below.				Retest performed, see results below.				
X4 Retest	10/20/2010	FIELD BLANK	5.280	<0.05	<0.05	<0.05	0.120	0.6410	<0.02	<0.04	<100	<0.02	0.29	<0.5	<0.002	<0.009	<0.2	16.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	105.6	1	1	1	6	128.2	1	1	1	2	5.8	1	1	4.5	1	168	1
		Comments	Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.				Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.				Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.				Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.				
		Action	Let Value Stand				Let Value Stand				Let Value Stand				Let Value Stand				
		Result	New blank value entered into emLine.				New blank value entered into emLine.				New blank value entered into emLine.				New blank value entered into emLine.				

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Mn-d µg/L	Mo-d µg/L	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Ti-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L	
X14	11/9/2010	FIELD BLANK	0.910	<0.05	<0.05	<0.05	0.050	0.1090	<0.02	<0.04	<100	<0.01	0.18	<0.5	<0.002	<0.002	<0.2	2.900	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	18.2	1	1	1	2.5	21.8	1	1	1	1	3.6	1	1	1	1	29	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine.								Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				
		Action	Let Value Stand				Let Value Stand								Let Value Stand				
		Result	High blank value remains.				High blank value remains. Retest not requested because lab already reanalyzed full suite because dissolved > total for some metals.								High blank value remains. Retest not requested because lab already reanalyzed.				
X5	11/18/2010	FIELD BLANK	1.040	<0.05	<0.05	0.37	0.040	0.0870	<0.02	<0.04	<100	<0.01	0.07	<0.5	<0.002	0.0250	<0.2	2.500	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	20.8	1	1	7.4	2	17.4	1	1	1	1	1.4	1	1	12.5	1	25	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."						Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		
		Action	Let Value Stand		Let Value Stand		Let Value Stand						Let Value Stand				Let Value Stand		
		Result	High blank value remains. Retest not requested because lab already reanalyzed.		High blank value remains.		High blank value remains.						High blank value remains.				High blank value remains. Retest not requested because lab already reanalyzed.		
X14	11/25/2010	FIELD BLANK	1.910	<0.05	<0.05	<0.05	<0.02	0.2850	<0.02	<0.04	<100	<0.01	0.10	<0.5	<0.002	<0.002	<0.2	0.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	38.2	1	1	1	57	1	1	1	1	1	2	1	1	1	1	7	1
		Comments	Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."								Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."				
		Action	Let Value Stand				Let Value Stand								Let Value Stand				
		Result	High blank value remains. Retest not requested because lab already reanalyzed.				High blank value remains. Retest not requested because lab already reanalyzed.								High blank value remains.				
X2	12/1/2010	FIELD BLANK	0.080	<0.05	<0.05	<0.05	0.050	0.0200	<0.02	<0.04	<100	<0.01	0.12	<0.5	<0.002	0.0100	<0.2	0.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1.6	1	1	2.5	4	1	1	1	1	1	2.4	1	1	5	1	8	1
		Comments													Blank concentration equal to PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine. Lab noted that "Dissolved greater than total. Reanalysis yields similar results."		
		Action													Let Value Stand		Let Value Stand		
		Result													High blank value remains.		High blank value remains.		
X14	12/2/2010	FIELD BLANK	0.410	<0.05	<0.05	<0.05	0.070	0.0420	<0.02	<0.04	<100	<0.01	0.15	<0.5	<0.002	0.0120	<0.2	0.300	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	8.2	1	1	3.5	8.4	1	1	1	1	1	3	1	1	6	1	3	1
		Comments	Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine.								Blank concentration > PQL and correctly entered into emLine.				
		Action	Let Value Stand				Let Value Stand								Let Value Stand				
		Result	High blank value remains.				High blank value remains.								High blank value remains.				

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-48: Rose Creek Drainage Water Quality 2010 QA/QC Field Blanks - Total Metals



Station	Date	Sample Type	Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L	Co µg/L	Cr µg/L	Cu µg/L	Fe µg/L	K mg/L	Li mg/L	Mg mg/L	
X5 Retest	8/17/2010	FIELD BLANK																	
Deionized Water			<0.005	<0.2	<0.02	<50	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05
Times greater than DI water			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Comments																			
Action																			
Result																			
X5	9/7/2010	FIELD BLANK																	
Deionized Water			<0.005	2.90	<0.02	<50	0.630	<0.01	<0.005	0.40	<0.005	0.0220	<0.1	0.0600	6.00	<0.05	<0.0005	<0.05	0.06
Times greater than DI water			1	14.5	1	1	31.5	1	1	8	1	4.4	1	1.2	6	1	0.001	1.2	
Comments				Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.					Blank concentration > PQL and correctly entered into emLine.				
Action			Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	Request Retest	
Result			Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	Retest performed, see results below.	
X5 Retest	9/7/2010	FIELD BLANK																	
Deionized Water			<0.005	6.00	<0.02	<50	0.670	<0.01	<0.005	0.35	<0.005	0.0210	<0.1	0.0700	7.00	<0.05	<0.0005	<0.05	<0.05
Times greater than DI water			1	30	1	1	33.8	1	1	7	1	4.2	1	1.4	7	1	0.001	1	
Comments			Retest for September 7 X5 blank.	Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	Retest for September 7 X5 blank.	
Action			Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	
Result			New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	New blank value entered into emLine.	
GDHSECK	10/6/2010	FIELD BLANK																	
Deionized Water			<0.005	6.10	<0.02	<50	0.550	<0.01	<0.005	<0.05	<0.005	0.0060	<0.1	<0.05	5.00	<0.05	<0.0005	<0.05	<0.05
Times greater than DI water			1	30.5	1	1	27.5	1	1	1	1	1.2	1	1	5	1	0.001	1	
Comments				Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.								Blank concentration equal to PQL and correctly entered into emLine.				
Action				Request Retest			Request Retest								Let Value Stand				
Result				Retest performed, see results below.			Retest performed, see results below.								High blank value remains.				
GDHSECK Retest	10/6/2010	FIELD BLANK																	
Deionized Water			<0.005	2.10	<0.02	<50	0.48	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
Times greater than DI water			0	10.5	0	0	24.8	0	0	0	0	0	0	0	0	0	0	0	
Comments				Retest for October 6 GDHSECK blank. Blank concentration > PQL and correctly entered into emLine.			Retest for October 6 GDHSECK blank. Blank concentration > PQL and correctly entered into emLine.												
Action				Let Value Stand			Let Value Stand												
Result				New blank value entered into emLine.			New blank value entered into emLine.												
X4	10/20/2010	FIELD BLANK																	
Deionized Water			<0.005	0.80	<0.02	<50	0.080	<0.01	<0.005	<0.05	<0.005	0.0260	<0.1	0.0600	14.00	<0.05	<0.0005	<0.05	<0.05
Times greater than DI water			1	4	1	1	4	1	1	1	5.2	1	1.2	14	1	0.001	1		
Comments											Blank concentration > PQL and correctly entered into emLine.				Blank concentration > PQL and correctly entered into emLine.				
Action											Let Value Stand				Let Value Stand				
Result											High blank value remains.				High blank value remains.				
X4 Retest	10/20/2010	FIELD BLANK																	
Deionized Water			<0.005	<0.2	<0.02	<50	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	
Times greater than DI water			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Comments																			
Action																			
Result																			
X14	11/9/2010	FIELD BLANK																	
Deionized Water			<0.005	0.90	<0.02	<50	0.100	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	0.0600	<1	<0.05	<0.5	<0.05	
Times greater than DI water			1	4.5	1	1	5	1	1	1	1	1	1.2	1	1	1	1	1	
Comments							Blank concentration equal to PQL and correctly entered into emLine.												
Action							Let Value Stand												
Result							High blank value remains.												
X5	11/18/2010	FIELD BLANK																	
Deionized Water			<0.005	2.20	<0.02	<50	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	2.00	<0.05	<0.0005	<0.05	
Times greater than DI water			1	11	1	1	1	1	1	1	1	1	1	1	2	1	0.001	1	
Comments				Blank concentration > PQL and correctly entered into emLine.															
Action				Let Value Stand															
Result				High blank value remains.															
X14	11/25/2010	FIELD BLANK																	
Deionized Water			<0.005	0.80	<0.02	<50	<0.02	<0.01	0.01	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.0005	<0.05	
Times greater than DI water			1	4	1	1	1	1	1.2	1	1	1	1	1	1	1	0.001	1	
Comments																			
Action																			
Result																			
X2	12/1/2010	FIELD BLANK																	
Deionized Water			<0.005	0.60	<0.02	<50	0.030	<0.01	0.02	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.0005	<0.05	
Times greater than DI water			1	3	1	1	1.5	1	3.2	1	1	1	1	1	1	1	0.001	1	
Comments																			
Action																			
Result																			

Blank value < PQL
Blank value is a detection limit higher than that of DI water
Blank value > PQL and < retest limit
Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L	Co µg/L	Cr µg/L	Cu µg/L	Fe µg/L	K mg/L	Li mg/L	Mg mg/L
X14	12/2/2010	FIELD BLANK	<0.005	0.90	<0.02	<50	0.040	<0.01	0.04	<0.05	<0.005	<0.005	<0.1	0.0800	2.00	<0.05	<0.0005	<0.05
		Deionized Water	<0.005	<0.2	<0.02	<50	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	1	4.5	1	1	2	1	7.6	1	1	1	1	1.6	2	1	0.001	1
		Comments							Blank concentration > PQL and correctly entered into emLine.									
		Action							Let Value Stand									
		Result							High blank value remains.									
X14 Retest	12/2/2010	FIELD BLANK																
		Deionized Water	<0.005	<0.2	<0.02	<50	<0.02	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Comments																
		Action																
		Result																

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)



Station	Date	Sample Type	Mn µg/L	Mo µg/L	Na mg/L	Ni µg/L	Pb µg/L	Sb µg/L	Se µg/L	Si µg/L	Sn µg/L	Sr µg/L	Ti µg/L	Tl µg/L	U µg/L	V µg/L	Zn µg/L	Zr µg/L
X14	1/11/2010	FIELD BLANK	0.390	<0.05	0.06	0.230	0.2620	<0.02	<0.04	<100.0	<0.01	0.13	<0.5	<0.002	<0.002	<0.2	2.500	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	7.8	1	1.2	11.5	32.4	1	1	1	1	2.6	1	1	1	1	29	1
		Comments	Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.											Blank concentration > PQL and correctly entered into emLine.	
		Action	Let Value Stand			Let Value Stand											Let Value Stand	
		Result	High blank value remains.			High blank value remains.											High blank value remains.	
		Result	Investigation of Maxxam and lab blank water planned.			Investigation of Maxxam and lab blank water planned.											Investigation of Maxxam and lab blank water planned.	
X2	2/22/2010	FIELD BLANK	0.110	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100.0	<0.01	<0.05	<0.5	<0.002	0.0070	<0.2	<0.1	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	2.2	1	1	1	1	1	1	1	1	1	1	1	3.5	1	1	1
SC2	4/14/2010	FIELD BLANK	<0.05	<0.05	<0.05	0.030	0.0810	<0.02	<0.04	<100.0	<0.01	0.08	<0.5	<0.002	0.0030	<0.2	0.700	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	1	1	1.5	16.2	1	1	1	1	1.6	1	1	1.5	1	7	1
X4	5/3/2010	FIELD BLANK	0.150	<0.05	<0.05	0.030	0.1660	<0.02	<0.04	<100.0	<0.01	0.08	<0.5	<0.002	0.0040	<0.2	0.600	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	3	1	1	1.5	33.2	1	1	1	1	1.6	1	1	2	1	6	1
NF2	6/4/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.02	0.0250	<0.02	<0.04	<100.0	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	0.200	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	1	1	1	5	1	1	1	1	1	1	1	1	2	1	1
X5	6/22/2010	FIELD BLANK	2.160	<0.05	0.08	0.490	0.3560	<0.02	<0.04	<100.0	0.03	0.16	<0.5	<0.002	<0.002	<0.2	10.200	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	43.2	1	1.6	24.5	71.2	1	1	1	3	3.2	1	1	1	1	102	1
X5 Retest	6/22/2010	FIELD BLANK	0.120	<0.05	<0.05	0.020	0.1010	<0.02	<0.04	<100.0	<0.01	<0.05	<0.5	<0.002	<0.007	<0.2	0.800	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	2.4	1	1	1	20.9	1	1	1	1	1	1	3.5	1	1	8	1
RCSG#4	8/3/2010	FIELD BLANK	0.070	<0.05	<0.05	<0.02	0.0460	<0.02	<0.04	<100.0	<0.01	0.06	<0.5	<0.002	0.0050	<0.2	0.300	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1.4	1	1	1	9.2	1	1	1	1	1.2	1	1	2.5	1	3	1
X5	8/10/2010	FIELD BLANK	0.550	<0.05	<0.05	0.350	0.2350	<0.02	<0.04	<100.0	<0.01	0.10	<0.5	<0.002	0.0060	<0.2	2.100	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	11	1	1	17.5	47	1	1	1	1	2	1	3	1	1	21	1
X5	8/17/2010	FIELD BLANK	0.420	<0.05	<0.05	0.070	0.3440	<0.02	<0.04	<100.0	<0.01	0.09	<0.5	<0.002	<0.002	<0.2	1.600	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	8.4	1	1	3.5	68.8	1	1	1	1	1.8	1	1	1	1	16	1

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-48: Rose Creek Drainage Water Quality
2010 QA/QC Field Blanks - Total Metals



Station	Date	Sample Type	Mn µg/L	Mo µg/L	Na mg/L	Ni µg/L	Pb µg/L	Sb µg/L	Se µg/L	Si µg/L	Sn µg/L	Sr µg/L	Ti µg/L	Tl µg/L	U µg/L	V µg/L	Zn µg/L	Zr µg/L
X5 Retest	8/17/2010	FIELD BLANK					0.2230											
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			0	0	0	0	44.4	0	0	0	0	0	0	0	0	0	0	0
Comments			Retest for August 10 X5 blank. Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			New blank value entered into emLine.															
X5	9/7/2010	FIELD BLANK	16.400	<0.05	0.06	0.060	0.4610	0.62	<0.04	<100	0.02	1.14	<0.5	0.00	0.0080	<0.2	2.400	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			326	1	1.2	3	92.2	31	1	1	2	22.8	1	1.5	4	1	24	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Request Retest															
Result			Retest performed, see results below.															
X5 Retest	9/7/2010	FIELD BLANK	16.300	<0.05	<0.05	0.050	0.5580	0.74	<0.04	<100	<0.01	1.15	<0.5	<0.002	<0.002	<0.2	2.200	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			326	1	1	2.5	111.8	37	1	1	1	23	1	1	1	1	22	1
Comments			Retest for September 7 X5 blank. Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			New blank value entered into emLine.															
GDHSECK	10/6/2010	FIELD BLANK	0.510	<0.05	<0.05	0.030	0.1990	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	2.100	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			10.2	1	1	1.5	39.8	1	1	1	1	1	1	1	1	1	21	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			High blank value remains.															
GDHSECK Retest	10/6/2010	FIELD BLANK					0.12										1.40	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			0	0	0	0	23	0	0	0	0	0	0	0	0	0	14	0
Comments			Retest for October 6 GDHSECK blank. Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			New blank value entered into emLine.															
X4	10/20/2010	FIELD BLANK	3.170	<0.05	<0.05	0.030	0.1030	<0.02	<0.04	<100	<0.01	0.17	<0.5	<0.002	0.0120	<0.2	8.200	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			63.4	1	1	1.5	20.6	1	1	1	1	3.4	1	1	6	1	82	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Request Retest															
Result			Retest performed, see results below.															
X4 Retest	10/20/2010	FIELD BLANK	2.860	<0.05	<0.05	<0.02	0.1320	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	6.800	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			57.2	0	0	0	26.4	0	0	0	0	0	0	0	0	0	68	0
Comments			Retest for October 20 X4 blank. Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			New blank value entered into emLine.															
X14	11/9/2010	FIELD BLANK	0.130	<0.05	<0.05	<0.02	0.1560	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	0.700	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			2.6	1	1	1	31.2	1	1	1	1	1	1	1	1	1	7	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			High blank value remains.															
X5	11/18/2010	FIELD BLANK	0.610	<0.05	<0.05	0.070	0.0210	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	0.0250	<0.2	0.200	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			12.2	1	1	3.5	4.2	1	1	1	1	1	1	1	12.5	1	2	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			High blank value remains.															
X14	11/25/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.02	0.0210	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	0.0050	<0.2	0.300	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			1	1	1	1	4.2	1	1	1	1	1	1	1	2.5	1	3	1
Comments																		
Action																		
Result																		
X2	12/1/2010	FIELD BLANK	<0.05	<0.05	<0.05	<0.02	0.0150	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	0.0110	<0.2	0.400	<0.1
Deionized Water			<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
Times greater than DI water			1	1	1	1	3	1	1	1	1	1	1	1	5.5	1	4	1
Comments			Blank concentration > PQL and correctly entered into emLine.															
Action			Let Value Stand															
Result			High blank value remains.															

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Station	Date	Sample Type	Mn µg/L	Mo µg/L	Na mg/L	Ni µg/L	Pb µg/L	Sb µg/L	Se µg/L	Si µg/L	Sn µg/L	Sr µg/L	Ti µg/L	Tl µg/L	U µg/L	V µg/L	Zn µg/L	Zr µg/L
X14	12/2/2010	FIELD BLANK	1.790	<0.05	<0.05	0.050	0.0680	<0.02	<0.04	<100	<0.01	0.09	<0.5	<0.002	0.0160	<0.2	1.100	<0.1
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	35.8	1	1	2.5	13.6	1	1	1	1	1.8	1	1	8	1	11	1
		Comments	Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			
		Action	Request Retest			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			
		Result	Retest performed, see results below.			High blank value remains.			High blank value remains.			High blank value remains.			High blank value remains.			
X14 Retest	12/2/2010	FIELD BLANK	0.410															
		Deionized Water	<0.05	<0.05	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	8.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Comments	Retest for December 2 X14 blank. Blank concentration > PQL and correctly entered into emLine.			Retest for December 2 X14 blank. Blank concentration > PQL and correctly entered into emLine.			Retest for December 2 X14 blank. Blank concentration > PQL and correctly entered into emLine.			Retest for December 2 X14 blank. Blank concentration > PQL and correctly entered into emLine.			Retest for December 2 X14 blank. Blank concentration > PQL and correctly entered into emLine.			
		Action	Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			
		Result	New blank value entered into emLine.			New blank value entered into emLine.			New blank value entered into emLine.			New blank value entered into emLine.			New blank value entered into emLine.			

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-49: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X10	1/11/2010	M			140.00	<0.5	165.00	166.00	<0.5			<0.5		326.0000	1.00	170.00	<0.01	<0.5	8.00	26.000	220.00	0.80	<1.0	0.8000
X10	1/11/2010	DUPLICATE			140.00	<0.5	166.00	164.00	0.60			<0.5		315.0000	0.90	170.00	0.08	<0.5	8.10	30.000	190.00	0.90	<1.0	0.7000
RPD (%)			N/A	N/A	0.00	N/A	0.60	1.21	N/A	N/A	N/A	N/A	N/A	3.43	10.53	0.00	N/A	N/A	0.10	14.29	14.63	11.76	N/A	13.33
Comments																								
Action																								
Result																								
X3	2/22/2010	M			140.00	<0.5	164.00	163.00	1.70			<0.5		314.00	1.40	170.00	<0.01	<0.5	7.90	28.00	180.00	1.20	<1.0	
X3	2/22/2010	DUPLICATE			140.00	<0.5	164.00	160.00	<0.5			<0.5		318.00	1.70	170.00	<0.01	<0.5	7.90	29.00	230.00	1.50	<1.0	0.60
RPD (%)			N/A	N/A	0.00	N/A	0.00	1.86	N/A	N/A	N/A	N/A	N/A	1.27	19.35	0.00	N/A	N/A	0.00	3.51	24.39	22.22	N/A	200.00
Comments																								
Action																								
Result																								
X11	3/4/2010	M	<0.5	37.30	330.00	<0.5		1720.00	2.60			<0.5		2650.00		400.00		<0.5	7.60	1500.00			12.00	
X11	3/4/2010	DUPLICATE	<0.5	34.60	330.00	<0.5		1660.00	2.50			<0.5		2670.00		400.00		<0.5	7.70	1500.00			12.00	
RPD (%)			N/A	7.51	0.00	N/A	N/A	3.55	3.92	N/A	N/A	N/A	N/A	0.75	N/A	0.00	N/A	N/A	0.10	0.00	N/A	N/A	0.00	N/A
Comments																								
Action																								
Result																								
A30	3/28/2010	M	<0.5	6.30	28.00	<0.5		77.30	<0.5			<0.5		201.00		34.00		<0.5	7.30	56.00			<1.0	
A30	3/28/2010	DUPLICATE	<0.5	7.20	29.00	<0.5		83.90	<0.5			<0.5		204.00		36.00		<0.5	7.40	64.00			2.00	
RPD (%)			N/A	13.33	3.51	N/A	N/A	8.19	N/A	N/A	N/A	N/A	N/A	1.48	N/A	5.71	N/A	N/A	0.10	13.33	N/A	N/A	N/A	N/A
Comments																								
Action																								
Result																								
X14	4/6/2010	M			210.00	<0.5	652.00	657.00	0.80			<0.5		1170.00	1.30	260.00		0.29	<0.5	8.00	490.00	880.00	1.00	<1
X14	4/6/2010	DUPLICATE			210.00	<0.5	634.00	645.00	0.60			<0.5		1170.00	1.30	250.00		0.30	<0.5	7.90	470.00	840.00	1.30	<1
RPD (%)			N/A	N/A	0.00	N/A	2.80	1.84	28.57	N/A	N/A	N/A	N/A	0.00	0.00	3.92	3.39	N/A	0.10	4.17	4.65	26.09	N/A	N/A
Comments																								
Action																								
Result																								
X10	4/13/2010	M			150.00	<0.5	162.00	157.00	<0.5			<0.5		340.00	1.00	180.00		<0.01	<0.5	7.90	30.00	200.00		<1
X10	4/13/2010	DUPLICATE			150.00	<0.5	159.00	155.00	<0.5			<0.5		331.00	1.00	180.00		0.07	<0.5	7.80	31.00	180.00	1.00	<1
RPD (%)			N/A	N/A	0.00	N/A	1.87	1.28	N/A	N/A	N/A	N/A	N/A	2.68	0.00	0.00	N/A	N/A	0.10	3.28	10.53	200.00	N/A	N/A
Comments																								
Action																								
Result																								
X5P	5/3/2010	M			53.00	<0.5	468.00	490.00	<0.5			<0.5		877.00		64.00		0.24	<0.5	7.80	420.00	650.00		3.00
X5P	5/3/2010	DUPLICATE			58.00	<0.5	463.00	433.00	<0.5			<0.5		859.00		71.00		0.24	<0.5	7.80	420.00	640.00		2.00
RPD (%)			N/A	N/A	9.01	N/A	1.07	12.35	N/A	N/A	N/A	N/A	N/A	2.07	N/A	10.37	0.00	N/A	0.00	0.00	1.55	N/A	40.00	N/A
Comments																								
Action																								
Result																								
X5	5/25/2010	M			110.00	<0.5	860.00	812.00			0.02	<0.5		1430.00		130.00		0.56	<0.5	7.90	720.00	1300.00		<1
X5	5/25/2010	DUPLICATE			110.00	<0.5	882.00	841.00			0.02	<0.5		1440.00		130.00		0.54	<0.5	7.70	750.00	1200.00		<1
RPD (%)			N/A	N/A	0.00	N/A	2.53	3.51	N/A	N/A	8.79	N/A	N/A	0.70	N/A	0.00	3.64	N/A	0.20	4.08	8.00	N/A	N/A	N/A
Comments																								
Action																								
Result																								

RPD > 50%

Table C-49: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X14	6/1/2010	M			55	<0.5	141	132	<0.5			<0.5		309	2.4	67	<0.005	<0.5	7.3	99	230	2.7	2	
X14	6/1/2010	DUPLICATE			63	<0.5	143	132	<0.5			<0.5		304	2.7	76	0.018	<0.5	7.7	90	200	2.3	2	
RPD (%)			N/A	N/A	13.56	N/A	1.41	0.00	N/A	N/A	N/A	N/A	N/A	1.63	11.76	12.59	N/A	N/A	0.40	9.52	13.95	16.00	0.00	N/A
Comments																								
Action																								
Result																								
X3	6/4/2010	M			40	<0.5	44.6	44.8	<0.5			<0.5		84	2.3	48	0.77	<0.5	7.7	6.3	54	2.6	5	
X3	6/4/2010	DUPLICATE			38	<0.5	45.5	43.5	<0.5			<0.5		85	2.9	47	<0.05	<0.5	7.6	6.4	50	2.6	4	
RPD (%)			N/A	N/A	5.13	N/A	2.00	2.94	N/A	N/A	N/A	N/A	N/A	1.18	23.08	2.11	N/A	N/A	0.10	1.57	7.69	0.00	22.22	N/A
Comments																								
Action																								
Result																								
A30	6/15/2010	M	<0.5	28	6.2	<0.5		122	<0.5			<0.5		320		7.5		<0.5	6.7	140			2	
A30	6/15/2010	DUPLICATE	<0.5	21.4	5.9	<0.5		120	<0.5			<0.5		320		7.2		<0.5	6.7	150			2	
RPD (%)			N/A	26.72	4.96	N/A	N/A	1.65	N/A	N/A	N/A	N/A	N/A	0.00	N/A	4.08	N/A	N/A	0.00	6.90	N/A	N/A	0.00	N/A
Comments																								
Action																								
Result																								
X14	6/15/2010	M			82	<0.5	209	211	<0.5			<0.5	15	446	3.1	100	0.06	<0.5	8.1	160	330	2.7	<1	
X14	6/15/2010	DUPLICATE			82	<0.5	203	210	<0.5			<0.5	15	445	2.8	100	0.06	<0.5	8.1	150	320	2.8	<1	
RPD (%)			N/A	N/A	0.00	N/A	2.91	0.48	N/A	N/A	N/A	N/A	0.00	0.22	10.17	0.00	0.00	N/A	0.00	6.45	3.08	3.64	N/A	0.00
Comments																								
Action																								
Result																								
R7	7/8/2010	M			64.00	<0.5	58.40	59.10	<0.5			<0.5		128.00		78.00	<0.05	<0.5	7.89	6.40	76.00		2.00	
R7	7/8/2010	DUPLICATE			64.00	<0.5	60.90	57.60	<0.5			<0.5		130.00		79.00	<0.05	<0.5	7.97	7.20	80.00		3.00	
RPD (%)			N/A	N/A	0.00	N/A	4.19	2.57	N/A	N/A	N/A	N/A	N/A	1.55	N/A	1.27	N/A	N/A	0.08	11.76	5.13	N/A	40.00	N/A
Comments																								
Action																								
Result																								
NWID	7/10/2010	M			120.00	<0.5	158.00	149.00	<0.5			<0.5		293.0000	2.90	150.00	<0.05	<0.5	8.05	31.000	140.00		3.00	<1
NWID	7/10/2010	DUPLICATE			130.00	<0.5	148.00	145.00	<0.5			<0.5		295.0000	2.80	160.00	<0.05	<0.5	8.06	30.000	170.00		2.80	<1
RPD (%)			N/A	N/A	8.00	N/A	6.54	2.72	N/A	N/A	N/A	N/A	N/A	0.68	3.51	6.45	N/A	N/A	0.01	3.28	19.35	6.90	N/A	N/A
Comments																								
Action																								
Result																								
X14	7/27/2010	M			97.00	<0.5	322.00	317.00	<0.5			<0.5	<5	637.00	3.00	120.00	0.16	<0.5	7.99	250.00	430.00	1.90	2.00	
X14	7/27/2010	DUPLICATE			97.00	<0.5	329.00	322.00	<0.5			<0.5	10.00	631.00	2.90	120.00	0.16	<0.5	8.00	200.00	440.00	1.60	<1	
RPD (%)			N/A	N/A	0.00	N/A	2.15	1.56	N/A	N/A	N/A	N/A	N/A	0.95	3.39	0.00	0.00	N/A	0.01	22.22	2.30	17.14	N/A	7.41
Comments																								
Action																								
Result																								
X11	8/5/2010	M	<0.5	33.70	300.00	<0.5		1640.00	2.50			<0.5		2540.00		370.00		<0.5	7.37	1400.00			8.00	
X11	8/5/2010	DUPLICATE	<0.5	33.90	310.00	<0.5		1570.00	2.10			<0.5		2540.00		370.00		<0.5	7.37	1400.00			7.00	
RPD (%)			N/A	0.59	3.28	N/A	N/A	4.36	17.39	N/A	N/A	N/A	N/A	0.00	N/A	0.00	N/A	N/A	0.00	0.00	N/A	N/A	13.33	N/A
Comments																								
Action																								
Result																								
A30	8/5/2010	M	<0.5	21.00	13.00	<0.5		116.00	<0.5			<0.5		312.00		15.00		<0.5	6.75	130.00			<1	
A30	8/5/2010	DUPLICATE	<0.5	19.20	14.00	<0.5		120.00	<0.5			<0.5		314.00		17.00		<0.5	6.83	130.00			2.00	
RPD (%)			N/A	8.96	7.41	N/A	N/A	3.39	N/A	N/A	N/A	N/A	N/A	0.64	N/A	12.50	N/A	N/A	0.08	0.00	N/A	N/A	N/A	N/A
Comments																								
Action																								
Result																								

RPD > 50%

Table C-49: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X14	8/24/2010	M			94.00	<0.5	249.00	247.00	1.80			<0.5		496.00	2.50	110.00	0.07	<0.5	8.09	160.00	320.00	2.50	<1	
X14	8/24/2010	DUPLICATE			94.00	<0.5	256.00	242.00	1.10			<0.5		496.00	3.00	110.00	0.08	<0.5	8.11	180.00	330.00	3.50	<1	
RPD (%)			N/A	N/A	0.00	N/A	2.77	2.04	48.28	N/A	N/A	N/A	N/A	0.00	18.18	0.00	13.33	N/A	0.02	11.76	3.08	33.33	N/A	N/A
Comments																								
Action																								
Result																								
X5	8/31/2010	M			87.00	<0.5	1020.00	1020.00	1.30		0.04	<0.5	<5	1770.00		110.00	1.00	<0.5	7.84	1100.00	1500.00		2.00	4.80
X5	8/31/2010	DUPLICATE			87.00	<0.5	1020.00	1070.00	1.20		0.04	<0.5	<5	1770.00		110.00	0.87	<0.5	7.87	1000.00	1600.00		2.00	4.70
RPD (%)			N/A	N/A	0.00	N/A	0.00	4.78	8.00	N/A	5.77	N/A	N/A	0.00	N/A	0.00	13.90	N/A	0.03	9.52	6.45	N/A	0.00	2.11
Comments																								
Action																								
Result																								
X2	10/18/2010	M			99.00	<0.5	115.00	109.00	<0.5			<0.5		226.00	1.20	120.00	0.04	<0.5	7.96	19.00	130.00	2.00	<1	1.10
X2	10/18/2010	DUPLICATE			99.00	<0.5	112.00	115.00	<0.5			<0.5		226.00	1.20	120.00	0.02	<0.5	7.94	19.00	120.00	1.30	<1	1.30
RPD (%)			N/A	N/A	0.00	N/A	2.64	5.36	N/A	N/A	N/A	N/A	N/A	0.00	0.00	0.00	78.57	N/A	0.02	0.00	8.00	42.42	N/A	16.67
Comments																	Both values correctly entered into emLine; however, duplicate value not > PQL. Therefore, RPD analysis not valid in this case.							
Action																	Let Value Stand							
Result																	Discrepancy between values remains.							

RPD > 50%

Table C-50: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - Dissolved Metals

Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Ti-d	U-d	V-d	Zn-d	Zr-d	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
X10	1/11/2010	M	<0.005	1.70	0.14	69.800	<50.0	<0.01	<0.005	47.30	0.02	0.0540	<0.1	0.4100	34.00		1.14	0.007	11.50	25.500	0.67	3.06	0.790	0.2020	0.07	11	0.4200	6080.00	<0.01	192.00	<0.5	<0.002	2.5400	<0.2	43.600	<0.1	
X10	1/11/2010	DUPLICATE	<0.005	1.10	0.16	69.400	<50.0	<0.01	<0.005	47.20	0.01	0.0490	<0.1	0.3700	32.00		1.12	0.007	11.30	24.200	0.69	3.02	0.750	0.0770	0.08	10	0.4200	5670.00	<0.01	187.00	<0.5	<0.002	2.5700	<0.2	42.800	<0.1	
		RPD (%)	N/A	42.86	13.33	0.57	N/A	N/A	N/A	0.21	22.22	9.71	N/A	10.26	6.06	N/A	1.77	2.99	1.75	5.23	2.94	1.32	5.19	89.61	13.33	9.52	0.00	6.98	N/A	2.64	N/A	N/A	1.17	N/A	1.85	N/A	
		Comments	Both values > PQL and correctly entered into emLine. Lab noted on main sample that "Dissolved greater than total. Reanalysis yields similar results."																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X3	2/22/2010	M	<0.005	1.70	0.20	69.10	<50.0	<0.01	<0.005	47.80	0.01	0.11	<0.1	0.29	28.00		1.19	0.01	10.60	48.80	0.75	3.38	0.58	0.04	0.05	11.00	0.39	6170.00	<0.01	199.0	<0.5	<0.002	2.68	<0.2	20.00	<0.1	
X3	2/22/2010	DUPLICATE	<0.005	2.10	0.22	69.60	<50.0	<0.01	<0.005	46.60	0.01	0.10	<0.1	0.28	29.00		1.15	0.01	10.60	48.30	0.79	3.40	0.58	0.09	0.05	10.00	0.41	5740.00	<0.01	200.0	<0.5	<0.002	2.72	<0.2	20.20	<0.1	
		RPD (%)	N/A	21.05	9.52	0.72	N/A	N/A	N/A	2.54	0.00	3.88	N/A	3.51	3.51	N/A	3.42	2.50	0.00	1.03	5.19	0.59	0.00	72.87	0.00	9.52	5.00	7.22	N/A	0.50	N/A	N/A	1.48	N/A	1.00	N/A	
		Comments	Both values > PQL and correctly entered into emLine.																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X11	3/4/2010	M	<0.03	4.00	3.30	51.40	<300.0	<0.05	<0.03	519.00	0.11	33.40	<0.5	<0.3	5800.00		7.90	0.02	104.00	28200.00	0.50	36.80	38.50	2.41	<0.1	526.00	<0.2	7840.00	<0.05	1380.0	<3.0	0.050	5.88	<1.0	13.50	<0.5	
X11	3/4/2010	DUPLICATE	<0.03	3.00	3.20	51.50	<300.0	<0.05	<0.03	496.00	0.14	32.40	<0.5	<0.3	5700.00		7.70	0.02	102.00	27200.00	0.40	35.80	38.00	13.40	<0.1	483.00	<0.2	7190.00	<0.05	1370.0	<3.0	0.050	6.05	<1.0	54.00	<0.5	
		RPD (%)	N/A	28.57	3.08	0.19	N/A	N/A	N/A	4.53	24.00	3.04	N/A	N/A	1.74	N/A	2.56	4.44	1.94	3.61	22.22	2.75	1.31	139.03	N/A	8.52	N/A	8.65	N/A	0.73	N/A	0.00	2.85	N/A	120.00	N/A	
		Comments	Both values > PQL and correctly entered into emLine.																																		
		Action	Request Retest																																		
		Result	Retest performed, see results below.																																		
X11 Retest	4/23/2010	M																					2.65												13.50		
X11 Retest	4/23/2010	DUPLICATE																					14.80													68.90	
		RPD (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	139.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	134.47	N/A
		Comments	Retest for April 23 X11 sample and duplicate. Both values > PQL and correctly entered into emLine. Duplicate will be performed at X11 at next sampling event.																																		
		Action	Let Value Stand																																		
		Result	New values entered into emLine.																																		
A30	3/28/2010	M	<0.02	28.00	<0.1	21.00	<50.0	<0.1	<1.0	17.60	2.69	0.60	<1.0	11.80	<5.0	<0.02	0.67	0.01	8.10	29.00	<1.0	2.20	10.00	2.70	<0.5	20.00	0.30	6120.00	<5.0	79.0	<5.0	<0.05	0.50	<5.0	2960.00	<0.5	
A30	3/28/2010	DUPLICATE	<0.02	28.00	<0.1	21.00	<50.0	<0.1	<1.0	19.10	2.99	0.60	<1.0	12.50	<5.0	<0.02	0.70	0.01	8.81	31.00	<1.0	2.35	11.00	2.40	<0.5	22.00	0.30	5280.00	<5.0	79.0	<5.0	<0.05	0.50	<5.0	3200.00	<0.5	
		RPD (%)	N/A	0.00	N/A	0.00	N/A	N/A	N/A	8.17	10.56	0.00	N/A	5.76	N/A	N/A	4.38	0.00	8.40	6.67	N/A	6.59	9.52	11.76	N/A	9.52	0.00	14.74	N/A	0.00	N/A	N/A	0.00	N/A	7.79	N/A	
		Comments																																			
		Action																																			
		Result																																			
X14	4/6/2010	M	<0.005	1.20	0.33	60.50	<50	<0.01	<0.005	196.00	0.10	8.93	<0.1	0.30	165.00		3.59	0.01	40.60	7300.00	0.92	14.90	14.90	0.08	0.09	173.00	0.34	5800.00	<0.01	590.0	0.60	0.052	4.57	<0.2	108.00	<0.1	
X14	4/6/2010	DUPLICATE	<0.005	1.00	0.34	61.60	<50	<0.01	<0.005	192.00	0.09	8.94	<0.1	0.27	206.00		3.52	0.01	40.30	7200.00	1.00	14.90	15.10	0.05	0.09	174.00	0.35	5630.00	<0.01	593.0	<0.5	0.058	4.56	<0.2	109.00	<0.1	
		RPD (%)	N/A	18.18	2.99	1.80	N/A	N/A	N/A	2.06	14.74	0.11	N/A	10.53	22.10	N/A	1.97	1.49	0.74	1.38	8.33	0.00	1.33	41.94	0.00	0.58	2.90	2.97	N/A	0.51	N/A	10.91	0.22	N/A	0.92	N/A	
		Comments																																			
		Action																																			
		Result																																			
X10	4/13/2010	M	<0.005	2.10	0.12	69.60	<50	<0.01	<0.005	45.10	0.01	0.04	<0.1	0.35	35.00		1.10	8.40	10.70	14.90	0.80	3.15	0.76	0.41	0.07	11.00	0.46	4940.00	0.02	208.0	<0.5	0.003	3.01	<0.2	43.40	<0.1	
X10	4/13/2010	DUPLICATE	<0.005	1.60	0.11	67.60	<50	<0.01	<0.005	44.80	0.01	0.04	<0.1	0.26	28.00		1.07	8.00	10.50	14.10	0.81	3.06	0.65	0.23	0.07	<10	0.44	4990.00	<0.01	203.0	<0.5	<0.002	2.99	<0.2	40.90	<0.1	
		RPD (%)	N/A	27.03	8.70	2.92	N/A	N/A	N/A	0.67	15.38	5.56	N/A	29.51	22.22	N/A	2.76	4.88	1.89	5.52	1.24	2.90	15.60	55.50	0.00	N/A	4.44	1.01	N/A	2.43	N/A	N/A	0.67	N/A	5.93	N/A	
		Comments	Both values > PQL and correctly entered into emLine.																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X5P	5/3/2010	M	<0.005	2.00	0.09	20.10	<50	<0.01	0.02	169.00	0.06	1.76	<0.1	0.29	7.00		2.81	0.01	16.70	1100.00	0.49	7.75	3.18	0.20	0.15	166.00	0.15	1460.00	<0.01	484.0	<3	0.330	1.80	<1	216.00	<0.5	
X5P	5/3/2010	DUPLICATE	<0.005	3.30	0.10	21.20	<50	<0.01	<0.005	147.00	0.06	2.01	<0.1	0.41	10.00		2.47	0.01	16.20	1230.00	0.49	7.18	3.52	0.40	0.15	145.00	0.14	1380.00	<0.01	446.0	<3	0.360	1.83	<1	223.00	<0.5	
		RPD (%)	N/A	49.06	10.53	5.33	N/A	N/A	N/A	13.92	1.77	13.26	N/A	34.29	35.29	N/A	12.88	6.84	3.04	11.16	0.00	7.64	10.15	67.79	0.00	13.50	6.90	5.63	N/A	8.17	N/A	8.70	1.65	N/A	3.19	N/A	
		Comments	Both values > PQL and correctly entered into emLine.																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X5	5/25/2010	M	<0.03	4.00	<0.1	18.30	<300	<0.05	<0.03	238.00	0.16	11.20	<0.5	<0.3	27.00		4.80	0.03	53.10	6270.00	0.40	16.60	17.00	0.66	<0.1	273.00	<0.2	2740.00	<0.05	669.0	<3	0.330	1.80	<1	216.00	<0.5	
X5	5/25/2010	DUPLICATE	<0.03	7.00	0.20	18.70	<300	<0.05	<0.03	245.00	0.14	11.10	<0.5	0.50	35.00		4.80	0.03	55.40	6330.00	<0.3	17.00	16.60	0.57	<0.1	269.00	<0.2	2780.00	<0.05	684.0	<3	0.360	1.83	<1	223.00	<0.5	
		RPD (%)	N/A	54.55	N/A	2.16	N/A	N/A	N/A	2.90	13.33	0.90	N/A	N/A	25.81	N/A	4.26	3.92	4.24	0.95	N/A	2.38	2.38	14.63	N/A	1.48	N/A	1.45	N/A	2.22	N/A	8.70	1.65	N/A	3.19	N/A	
		Comments	Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		

RPD > 50%
RPD > 100%

Table C-50: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - Dissolved Metals



Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d		
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
A30	8/5/2010	M	0.05	226.00	<0.1	16.00	<50	0.20	<1	20.70	11.90	4.70	<1	68.80	<5	0.86	0.01	15.70	201.00	<1	2.23	31.00	13.10	<0.5	44.00	<0.1	7050.00	<5	86.0	<5	<0.05	0.60	<5	9930.00	<0.5			
A30	8/5/2010	DUPLICATE	0.05	238.00	<0.1	17.00	<50	0.30	<1	20.90	12.40	5.10	<1	75.00	7.00	0.94	0.01	16.40	215.00	<1	2.67	33.00	14.40	<0.5	46.00	0.20	6710.00	<5	95.0	<5	<0.05	0.60	<5	9870.00	<0.5			
RPD (%)			0.00	5.17	N/A	6.06	N/A	40.00	N/A	0.96	4.12	8.16	N/A	8.62	N/A	N/A	8.89	0.00	4.36	6.73	N/A	17.96	6.25	9.45	N/A	4.44	N/A	4.94	N/A	9.94	N/A	N/A	0.00	N/A	0.61	N/A		
Comments																																						
Action																																						
Result																																						
X14	8/24/2010	M	<0.005	3.60	0.38	42.10	<50	<0.01	<0.005	72.80	0.04	2.04	<0.1	0.50	258.00	<0.01	1.63	0.01	15.90	1340.00	0.49	5.25	3.52	0.29	0.09	60.00	0.18	3520.00	<0.01	249.0	<0.5	0.083	1.38	<0.2	39.90	<0.1		
X14	8/24/2010	DUPLICATE	<0.005	3.70	0.39	42.60	<50	<0.01	<0.005	70.60	0.04	2.06	<0.1	0.47	260.00	<0.01	1.62	0.01	15.90	1320.00	0.49	5.21	3.47	0.24	0.09	58.00	0.19	3310.00	<0.01	245.0	<0.5	0.080	1.40	<0.2	38.60	<0.1		
RPD (%)			N/A	2.74	2.60	1.18	N/A	N/A	N/A	3.07	2.74	0.98	N/A	6.19	0.77	N/A	0.62	0.00	0.00	1.50	0.00	0.76	1.43	19.77	0.00	3.39	5.41	6.15	N/A	1.62	N/A	3.68	1.44	N/A	3.31	N/A		
Comments																																						
Action																																						
Result																																						
X5	8/31/2010	M	<0.03	5.00	0.30	14.50	<300	<0.05	<0.03	295.00	0.15	14.40	<0.5	1.20	48.00	<0.05	6.50	0.04	67.70	7580.00	0.50	20.90	19.10	1.18	0.30	347.00	<0.2	2400.00	<0.05	964.0	<3	0.720	1.51	<1	194.00	<0.5		
X5	8/31/2010	DUPLICATE	<0.03	2.00	0.20	15.20	<300	<0.05	<0.03	312.00	0.19	15.80	<0.5	<0.3	39.00	<0.05	7.00	0.04	71.10	8160.00	0.60	22.00	20.30	0.27	0.30	356.00	<0.2	2440.00	<0.05	995.0	<3	0.730	1.54	<1	208.00	<0.5		
RPD (%)			N/A	85.71	40.00	4.71	N/A	N/A	N/A	5.60	23.53	9.27	N/A	N/A	20.69	N/A	7.41	2.53	4.90	7.37	18.18	5.13	6.09	125.52	0.00	2.56	N/A	1.65	N/A	3.16	N/A	1.38	1.97	N/A	6.97	N/A		
Comments			Both values correctly entered into emLine; however, duplicate value not > PQL. Therefore, RPD analysis not valid in this case.																																			
Action			Let Value Stand																																			
Result			Discrepancy between values remains.																																			
X5 Retest	8/31/2010	M																																				
X5 Retest	8/31/2010	DUPLICATE																																				
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	109.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments			Retest for August 31 X5 sample and duplicate. Both values > PQL and correctly entered into emLine.																																			
Action			Let Value Stand																																			
Result			New values entered into emLine.																																			
X2	10/18/2010	M	<0.005	4.50	0.42	51.60	<50	<0.01	<0.005	31.50	0.02	0.14	<0.1	0.50	116.00		0.75	0.00	7.36	68.60	0.62	2.46	0.55	0.87	0.07	<10	0.34	5360.00	0.07	135.0	<0.5	0.003	1.51	<0.2	14.40	<0.1		
X2	10/18/2010	DUPLICATE	<0.005	3.50	0.37	53.60	<50	<0.01	<0.005	33.90	0.01	0.15	<0.1	0.40	126.00		0.73	0.01	7.33	66.10	0.57	2.44	0.55	0.24	0.08	<10	0.30	5410.00	<0.01	142.0	<0.5	0.003	1.60	<0.2	13.60	<0.1		
RPD (%)			N/A	25.00	12.66	3.80	N/A	N/A	N/A	7.34	30.30	2.78	N/A	22.22	8.26	N/A	2.70	8.16	0.41	3.71	8.40	0.82	0.00	114.42	13.33	N/A	12.50	0.93	N/A	5.05	N/A	0.00	5.79	N/A	5.71	N/A		
Comments			Both values > PQL and correctly entered into emLine. Lab noted on main sample that "Dissolved greater than total. Reanalysis yields similar results."																																			
Action			Let Value Stand																																			
Result			Discrepancy between values remains. Retest not requested because lab already reanalyzed.																																			
X2 Retest	10/18/2010	M																																				
X2 Retest	10/18/2010	DUPLICATE																																				
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	83.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments			Retest for October 18 X2 sample and duplicate. Both values > PQL and correctly entered into emLine.																																			
Action			Let Value Stand																																			
Result			New values entered into emLine.																																			

RPD > 50%
RPD > 100%

Station	Date	Sample Type	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
X10	1/1/2010	M	<0.005	3.10	0.19	<50	70.60	<0.01	<0.005	47.10	0.02	0.0490	<0.1	0.3700	104.00	1.12	0.007	11.50	26.400	0.67	3.03	0.790		0.1450	11.00	0	0.4200	5850.00	<0.01	192.00	<0.5	<0.002	2.5300	<0.2	44.700	<0.1	
X10	1/1/2010	DUPLICATE	<0.005	2.70	0.18	<50	70.80	<0.01	<0.005	47.80	0.01	0.0530	<0.1	0.3800	104.00	1.14	0.007	11.30	26.100	0.69	3.01	0.770		0.2230	11.00	0	0.4300	5870.00	<0.01	192.00	<0.5	<0.002	2.5100	<0.2	45.200	<0.1	
		RPD (%)	N/A	13.79	5.41	N/A	0.28	N/A	N/A	1.48	56.00	7.84	N/A	2.67	0.00	N/A	1.77	1.50	1.75	1.14	2.94	0.66	2.56		0.00	0.00	2.35	0.34	N/A	0.00	N/A	N/A	<0.002	2.5100	<0.2	45.200	<0.1
		Comments	Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																																		
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X3	2/22/2010	M	<0.005	2.80	0.29	<50	69.60	<0.01	<0.005	47.60	0.01	0.12	<0.1	0.40	72.00	1.19	0.01	10.90	50.40	0.73	3.47	0.62		0.11	12.00	0.06	0.41	6350.00	<0.01	199.0	<0.5	<0.002	2.78	<0.2	20.00	<0.1	
X3	2/22/2010	DUPLICATE	<0.005	3.10	0.31	<50	71.40	<0.01	<0.005	47.70	0.01	0.11	<0.1	0.29	74.00	1.18	0.01	10.90	50.30	0.75	3.43	0.64		0.13	11.00	0.06	0.41	6390.00	<0.01	199.0	<0.5	<0.002	2.82	<0.2	20.30	<0.1	
		RPD (%)	N/A	10.17	6.67	N/A	2.55	N/A	N/A	0.21	0.00	11.66	N/A	31.88	2.74	N/A	0.84	0.00	0.20	2.70	1.16	3.17		13.56	8.70	0.00	0.00	0.63	N/A	0.00	N/A	N/A	<0.002	2.82	<0.2	20.30	<0.1
		Comments																																			
		Action																																			
		Result																																			
X14	4/6/2010	M	<0.005	2.60	0.42	<50	58.80	<0.01	<0.005	193.00	0.10	8.96	0.20	0.32	442.00	3.49	0.01	41.20	7240.00	0.95	15.10	15.20		0.13	184.00	0.09	0.36	6070.00	<0.01	585.0	<0.5	0.054	4.46	<0.2	110.00	<0.1	
X14	4/6/2010	DUPLICATE	<0.005	2.90	0.39	<50	58.60	<0.01	<0.005	187.00	0.09	8.76	<0.1	0.30	399.00	3.33	0.01	40.20	6990.00	0.91	14.60	15.20		0.14	177.00	0.09	0.35	5780.00	<0.01	568.0	<0.5	0.052	4.39	<0.2	110.00	<0.1	
		RPD (%)	N/A	10.91	7.41	N/A	0.34	N/A	N/A	3.16	9.94	2.26	N/A	6.45	10.23	N/A	4.69	0.75	2.46	3.51	4.30	3.37	0.00		3.88	0.00	2.82	4.89	N/A	2.95	N/A	N/A	1.58	N/A	0.00	N/A	
		Comments																																			
		Action																																			
		Result																																			
X10	4/13/2010	M	<0.005	3.80	0.18	<50	71.30	<0.01	<0.005	47.60	0.02	0.04	<0.1	0.32	91.00	1.16	0.01	10.50	16.00	0.79	2.99	0.66		0.57	11.00	0.07	0.40	5480.00	<0.01	204.0	<0.5	<0.002	2.92	<0.2	45.70	<0.1	
X10	4/13/2010	DUPLICATE	<0.005	4.10	0.17	<50	70.50	<0.01	<0.005	46.50	0.01	0.04	<0.1	0.23	92.00	1.13	0.01	10.40	15.60	0.83	2.97	0.64		0.37	<10	0.06	0.45	5480.00	<0.01	202.0	<0.5	<0.002	2.92	<0.2	43.00	<0.1	
		RPD (%)	N/A	7.59	5.71	N/A	1.13	N/A	N/A	2.34	35.29	2.47	N/A	32.73	1.09	N/A	2.62	0.00	0.96	2.53	4.94	0.67	3.08		41.86	N/A	15.38	11.76	0.00	N/A	0.99	N/A	N/A	6.09	N/A		
		Comments																																			
		Action																																			
		Result																																			
X5P	5/3/2010	M	<0.005	16.70	0.18	<50	19.20	<0.01	<0.005	161.00	0.06	1.80	<0.1	0.57	172.00	2.61	0.01	16.40	1100.00	0.47	7.44	3.24		2.96	165.00	0.14	0.14	1600.00	<0.01	464.0	<0.5	0.165	1.06	<0.2	62.80	<0.1	
X5P	5/3/2010	DUPLICATE	<0.005	10.90	0.14	<50	21.30	<0.01	<0.005	158.00	0.06	1.99	<0.1	0.39	45.00	2.64	0.01	16.60	1280.00	0.49	7.44	3.52		1.70	163.00	0.14	0.13	1600.00	<0.01	455.0	0.70	0.151	1.16	<0.2	61.80	<0.1	
		RPD (%)	N/A	42.03	25.00	N/A	10.37	N/A	N/A	1.88	8.13	10.03	N/A	37.50	117.05	N/A	1.14	5.58	1.21	15.13	4.17	0.00	8.28		54.08	1.22	0.00	7.41	0.00	N/A	1.96	N/A	N/A	9.01	N/A	1.61	N/A
		Comments	Both values > PQL and correctly entered into emLine.														Both values > PQL and correctly entered into emLine.																				
		Action	Request Retest																																		
		Result	Retest performed, see results below.																																		
X5P Retest	5/3/2010	M	234.00																																		
X5P Retest	5/3/2010	DUPLICATE	71.00																																		
		RPD (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	106.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Comments	Retest for May 3 X5P sample and duplicate. Both values > PQL and correctly entered into emLine.														Let Value Stand																				
		Action	New values entered into emLine.																																		
		Result																																			
X5	5/25/2010	M	<0.005	5.20	0.21	<50	18.70	<0.01	<0.005	251.00	0.12	11.50	<0.1	0.53	151.00	<0.01	5.14	0.03	56.60	6410.00	0.51	17.90	16.60		1.12	299.00	0.12	0.14	2640.00	<0.01	763.0	<0.5	0.375	2.04	<0.2	191.00	<0.1
X5	5/25/2010	DUPLICATE	<0.005	5.70	0.19	<50	19.60	<0.01	<0.005	256.00	0.14	12.10	<0.1	0.58	159.00	<0.01	5.24	0.03	59.10	6560.00	0.58	18.70	17.40		1.16	301.00	0.13	0.13	2740.00	<0.01	782.0	<0.5	0.394	2.13	<0.2	200.00	<0.1
		RPD (%)	N/A	9.17	10.00	N/A	4.70	N/A	N/A	1.97	19.01	5.08	N/A	9.01	5.16	N/A	1.93	0.38	4.32	2.31	12.84	4.37	4.71		3.51	0.67	8.00	7.41	3.72	N/A	2.46	N/A	4.94	4.32	N/A	4.60	N/A
		Comments																																			
		Action																																			
		Result																																			
X14	6/1/2010	M	<0.005	34.3	0.38	<50	27.3	<0.01	0.01	41.1	0.038	1.57	<0.1	1.14	233	1.03	0.004	9.29	1030	0.3	3.81	3.05		1.06	34	0.07	0.13	3720	<0.01	133	<0.5	0.031	0.765	<0.2	42.6	<0.1	
X14	6/1/2010	DUPLICATE	<0.005	35.1	0.39	<50	27.8	<0.01	0.029	41.8	0.03	1.62	<0.1	1.05	233	1.04	0.0041	9.3	1050	0.32	3.29	3.19		0.908	33	0.07	0.13	3760	<0.01	139	1.1	0.031	0.8	<0.2	43.1	<0.1	
		RPD (%)	N/A	2.31	2.60	N/A	1.81	N/A	97.44	1.69	23.53	3.13	N/A	8.22	0.00	N/A	0.97	2.47	0.11	1.92	6.45	14.65	4.49		15.45	2.99	0.00	0.00	1.07	N/A	4.41	N/A	0.00	4.47	N/A	1.17	N/A
		Comments	Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.														Let Value Stand																				
		Action	Discrepancy between values remains.																																		
		Result																																			
X3	6/4/2010	M	<0.005	62.9	0.38	<50	25.1	0.02	0.01	13	0.018	0.09	<0.1	0.76	183	0.55	0.0016	2.95	20	0.2	1.47	0.48		0.747	<10	0.05	0.08	3900	<0.01	60.7	1.5	0.003	0.534	<0.2	11.2	<0.1	
X3	6/4/2010	DUPLICATE	<0.005	66.7	0.4	<50	25.3	<0.01	0.021	13.3	0.012	0.06	<0.1	0.74	186	0.55	0.0015	3	15.7	0.21	1.5	0.44		0.587	<10	0.05	0.09	3870	<0.01	60.8	1.4	<0.002	0.544	<0.2	3.9	<0.1	
		RPD (%)	N/A	5.86	5.13	N/A	0.79	N/A	70.97	2.28	40.00	37.33	N/A	2.67	1.63	N/A	0.00	6.45	1.68	24.09	4.88	2.02	8.70		23.99	N/A	0.00	11.76	0.77	N/A	0.16	6.90	N/A	1.86	N/A	96.69	N/A
		Comments	Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.														Both values > PQL and correctly entered into emLine.																				
		Action	Let Value Stand																																		
		Result	Discrepancy between values remains.																																		
X14	6/15/2010	M	<0.005	16.2	0.4	<50	33.6	<0.01	<0.005	59.7	0.038	2.76	<0.1	0.71	245	<0.01	1.39	0.0058	14.6	1740	0.4	4.56	4.41		0.532	55	0.08	0.18	4000	<0.01	207	<0.5	0.051	1.12	<0.2	48.4	<0.1
X14	6/15/2010	DUPLICATE	<0.005	19	0.41	<50	33.4	<0.01	0.008	57.3	0.042	2.69	<0.1	0.79	259	<0.01	1.41	0.006	14.5	1750	0.39	4.56	4.44		0.579	55	0.08	0.18	3680	<0.01	211	<0.5	0.051	1.13	<0.2	48.2	<0.1
		RPD (%)	N/A	15.91	2.47</																																

Table C-51: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - Total Metals



Station	Date	Sample Type	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NWID	7/10/2010	M	<0.005	6.70	0.20	<50	47.10	<0.01	<0.005	52.80	0.06	0.02	<0.1	1.08	9.00	1.47	0.01	6.44	1.10	0.30	2.75	0.53	0.24	12.00	0.06	0.21	7530.00	<0.01	187.0	<0.5	0.003	0.93	<0.2	16.00	<0.1	
NWID	7/10/2010	DUPLICATE	<0.005	6.80	0.20	<50	47.90	<0.01	<0.005	48.30	0.07	0.02	<0.1	1.19	7.00	1.48	0.01	6.66	1.05	0.28	2.90	0.58	0.24	13.00	0.06	0.19	6750.00	<0.01	192.0	<0.5	0.009	0.89	<0.2	17.60	<0.1	
		RPD (%)	N/A	1.48	0.00	N/A	1.68	N/A	N/A	8.90	17.89	0.00	N/A	9.69	25.00	N/A	0.68	0.00	3.36	4.65	6.90	5.31	9.01	1.25	8.00	0.00	10.00	10.92	N/A	2.64	N/A	100.00	4.85	N/A	9.52	N/A
		Comments	Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																																	
		Action	Let Value Stand																																	
		Result	Discrepancy between values remains.																																	
X14	7/27/2010	M	<0.005	11.10	0.45	<50	43.30	<0.01	<0.005	94.10	0.05	4.07	<0.1	0.58	382.00	<0.01	2.04	0.01	21.00	2330.00	0.53	6.59	6.29	0.89	89.00	0.12	0.19	4430.00	<0.01	316.0	<0.5	0.123	1.35	<0.2	72.60	<0.1
X14	7/27/2010	DUPLICATE	<0.005	10.60	0.47	<50	44.10	<0.01	<0.005	94.90	0.05	4.34	<0.1	0.62	383.00	<0.01	2.12	0.01	22.30	2430.00	0.49	6.91	6.31	0.74	93.00	0.12	0.21	4520.00	<0.01	320.0	<0.5	0.124	1.33	<0.2	74.80	<0.1
		RPD (%)	N/A	4.61	4.35	N/A	1.83	N/A	N/A	0.85	1.87	6.42	N/A	6.67	0.26	N/A	3.85	1.72	6.00	4.20	7.84	4.74	0.32	18.83	4.40	0.00	10.00	2.01	N/A	1.26	N/A	0.81	1.49	N/A	2.99	N/A
		Comments																																		
		Action																																		
		Result																																		
X14	8/24/2010	M	<0.005	21.10	0.52	<50	43.20	<0.01	<0.005	73.10	0.04	2.1100	<0.1	0.5800	400.00	1.63	0.008	16.20	1380.000	0.48	5.53	3.440	0.5400	61.00	0	0.1800	4180.00	<0.01	253.00	<0.5	0.08	1.2500	<0.2	42.400	<0.1	
X14	8/24/2010	DUPLICATE	<0.005	8.60	0.50	<50	44.50	<0.01	<0.005	75.40	0.04	2.1700	<0.1	0.8000	431.00	1.61	0.008	16.40	1390.000	0.49	5.43	3.590	1.4100	61.00	0	0.2100	4100.00	<0.01	251.00	<0.5	0.08	1.3100	<0.2	44.800	<0.1	
		RPD (%)	N/A	84.18	3.92	N/A	2.96	N/A	N/A	3.10	2.53	2.80	N/A	31.88	7.46	N/A	1.23	1.24	1.23	0.72	2.06	1.82	4.27	89.23	0.00	11.76	15.38	1.93	N/A	0.79	N/A	0.00	4.69	N/A	5.50	N/A
		Comments	Both values > PQL and correctly entered into emLine.																																	
		Action	Let Value Stand																																	
		Result	Discrepancy between values remains.																																	
X5	8/31/2010	M	<0.03	6.00	0.30	<300	14.80	<0.05	<0.03	298.00	0.17	14.30	<0.5	0.50	516.00	<0.05	7.00	0.04	67.90	7780.00	0.50	20.00	18.20	1.99	376.00	0.30	<0.2	2500.00	<0.05	933.0	<3	0.690	1.13	<1	206.00	<0.5
X5	8/31/2010	DUPLICATE	<0.03	5.00	0.30	<300	16.10	<0.05	<0.03	297.00	0.16	14.20	<0.5	0.60	520.00	<0.05	6.90	0.04	66.80	7590.00	0.50	19.60	19.10	2.16	361.00	0.30	<0.2	2410.00	<0.05	1010.0	<3	0.750	1.22	<1	206.00	<0.5
		RPD (%)	N/A	18.18	0.00	N/A	8.41	N/A	N/A	0.34	6.06	0.70	N/A	18.18	0.77	N/A	1.44	4.76	1.63	2.47	0.00	2.02	4.83	8.19	4.07	0.00	N/A	3.67	N/A	7.93	N/A	8.33	7.66	N/A	0.00	N/A
		Comments																																		
		Action																																		
		Result																																		
X2	10/18/2010	M	<0.005	8.80	0.55	<50	53.10	<0.01	<0.005	33.20	0.02	0.18	<0.1	0.42	215.00	0.80	0.01	7.69	74.60	0.53	2.59	0.64	0.52	<10	0.06	0.39	5630.00	<0.01	141.0	<0.5	0.004	1.46	<0.2	14.20	<0.1	
X2	10/18/2010	DUPLICATE	<0.005	10.50	0.56	<50	53.70	<0.01	<0.005	32.70	0.02	0.16	<0.1	0.42	216.00	0.75	0.01	7.34	74.30	0.54	2.40	0.59	0.72	<10	0.06	0.31	5540.00	<0.01	139.0	<0.5	0.004	1.51	<0.2	15.40	<0.1	
		RPD (%)	N/A	17.62	1.80	N/A	1.12	N/A	N/A	1.52	10.53	15.48	N/A	0.00	0.46	N/A	6.45	0.00	4.66	0.40	1.87	7.62	8.13	31.10	N/A	0.00	22.86	1.61	N/A	1.43	N/A	0.00	3.37	N/A	8.11	N/A
		Comments																																		
		Action																																		
		Result																																		

RPD > 50%
RPD > 100%

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU		
X14	6/29/2010	M			84	<0.5	248	258	<0.5			<0.5	<5	511		2.3			7.95	180	370		1.5	<1	0.9	
X14	6/29/2010	SPLIT			84	<0.5	255	256	<0.5			<0.5	10	510		2.5			7.93	180	350		2.7	<1	0.9	
RPD (%)			N/A	N/A	0.00	N/A	2.78	0.78	N/A	N/A	N/A	N/A	N/A	0.20	8.33		0.00		33.33	N/A	0.02	0.00	5.56	57.14	N/A	0.00
Comments			Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.																							
Action			Let Value Stand																							
Result			Discrepancy between values remains.																							
X5P	7/10/2010	M			110.00	<0.5	1090.00	1010.00	1.10			<0.5		1780.00					7.79	990.00	1500.00			4.00		
X5P	7/10/2010	SPLIT			110.00	<0.5	1100.00	1040.00	1.00			<0.5		1780.00					7.73	950.00	1500.00			5.00		
RPD (%)			N/A	N/A	0.00	N/A	0.91	2.93	9.52	N/A	N/A	N/A	N/A	0.00	N/A		0.00		5.97	N/A	0.06	4.12	0.00	N/A	22.22	N/A
Comments																										
Action																										
Result																										
X5	7/20/2010	M			120.00	<0.5	1050.00	1020.00	1.70		0.03	<0.5	<5	1830.00					7.85	980.00	1600.00			2.00	1.70	
X5	7/20/2010	SPLIT			120.00	<0.5	1050.00	1010.00	1.70		0.03	<0.5	<5	1830.00					7.87	990.00	1600.00			2.00	1.50	
RPD (%)			N/A	N/A	0.00	N/A	0.00	0.99	0.00	N/A	4.85	N/A	N/A	0.00	N/A		0.00		0.02	1.02	0.00	N/A	0.00	0.00	12.50	
Comments																										
Action																										
Result																										
X5	7/27/2010	M			110.00	<0.5	1060.00	1030.00	1.10		0.03	<0.5	<5	1780.00					7.92	960.00	1600.00			2.00	2.50	
X5	7/27/2010	SPLIT			110.00	<0.5	1080.00	1100.00	1.30		0.03	<0.5	<5	1810.00					7.86	930.00	1600.00			2.00	2.70	
RPD (%)			N/A	N/A	0.00	N/A	1.87	6.57	16.67	N/A	6.48	N/A	N/A	1.67	N/A		0.00		0.06	3.17	0.00	N/A	0.00	0.00	7.69	
Comments																										
Action																										
Result																										
X3	8/3/2010	M			87.00	<0.5	111.00	85.00	<0.5			<0.5		189.00		2.00			8.16	14.00	120.00			2.50	<1	
X3	8/3/2010	SPLIT			87.00	<0.5	84.30	87.00	<0.5			<0.5		187.00		2.20			8.10	14.00	130.00			2.10	<1	
RPD (%)			N/A	N/A	0.00	N/A	27.34	2.33	N/A	N/A	N/A	N/A	N/A	1.06	9.52		0.00		0.06	0.00	8.00			17.39	N/A	N/A
Comments																										
Action																										
Result																										
X11	8/5/2010	M	<0.5	33.70	300.00	<0.5		1640.00	2.50			<0.5		2540.00					7.37	1400.00				8.00		
X11	8/5/2010	SPLIT	<0.5	33.70	310.00	<0.5		1670.00	2.60			<0.5		2540.00					7.42	1400.00				7.00		
RPD (%)			N/A	0.00	3.28	N/A	N/A	1.81	3.92	N/A	N/A	N/A	N/A	0.00	N/A		2.67		0.05	0.00	N/A	N/A	13.33	N/A		
Comments																										
Action																										
Result																										
X14	8/10/2010	M			100.00	<0.5	329.00	318.00	0.70			<0.5	10.00	638.00		2.20			7.78	220.00	440.00			2.30	<4	1.40
X14	8/10/2010	SPLIT			100.00	<0.5	332.00	317.00	0.60			<0.5	15.00	648.00		2.10			7.97	210.00	440.00			2.30	<4	1.50
RPD (%)			N/A	N/A	0.00	N/A	0.91	0.31	15.38	N/A	N/A	N/A	40.00	1.56	4.65		0.00		0.19	0.19	4.65	0.00		0.00	0.00	6.90
Comments																										
Action																										
Result																										
X5	8/24/2010	M			88.00	<0.5	1010.00	1150.00	2.20		0.05	<0.5	<5	1740.00					8.01	1100.00	1500.00			<1	3.80	
X5	8/24/2010	SPLIT			88.00	<0.5	1030.00	1140.00	1.90		0.05	<0.5	<5	1750.00					8.04	1100.00	1500.00			<1	3.90	
RPD (%)			N/A	N/A	0.00	N/A	1.96	0.87	14.63	N/A	5.60	N/A	N/A	0.57	N/A		0.00		0.03	0.00	0.00	N/A	N/A	2.60		
Comments																										
Action																										
Result																										
X14	8/31/2010	M			100.00	<0.5	296.00	314.00	<0.5			<0.5		610.00		3.70			8.17	220.00	420.00			3.70	<1	
X14	8/31/2010	SPLIT			99.00	<0.5	300.00	301.00	<0.5			<0.5		613.00		3.10			8.11	220.00	410.00			2.90	<1	
RPD (%)			N/A	N/A	1.01	N/A	1.34	4.23	N/A	N/A	N/A	N/A	N/A	0.49	17.65		0.00		0.06	0.00	2.41			24.24	N/A	N/A
Comments																										
Action																										
Result																										

RPD > 50%

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X3	9/2/2010	M			83.00	<0.5	89.40	94.30	<0.5			<0.5		186.00	2.70	100.00	0.19	<0.5	7.99	13.00	110.00	2.30	<1	0.70
X3	9/2/2010	SPLIT			82.00	<0.5	89.70	91.70	<0.5			<0.5		193.00	1.20	100.00	0.19	<0.5	7.90	15.00	110.00	1.40	<1	0.50
RPD (%)			N/A	N/A	1.21	N/A	0.34	2.80	N/A	N/A	N/A	N/A	N/A	3.69	76.92	0.00	0.00	N/A	0.09	14.29	0.00	48.65	N/A	33.33
Comments			Both values correctly entered into emLine; however, split value not > PQL. Therefore, RPD analysis not valid in this case.																					
Action			Let Value Stand																					
Result			Discrepancy between values remains.																					
X7	10/6/2010	M			7.40	<0.5	4680.00	4480.00	9.20			<0.5		8490.00		9.10	4.20	<0.5	5.18	9300.00	11000.00		100.00	
X7	10/6/2010	SPLIT			4.40	<0.5	4740.00	4310.00	9.10			<0.5		8510.00		5.30	2.70	<0.5	5.12	9400.00	10000.00		99.00	
RPD (%)			N/A	N/A	50.85	N/A	1.27	3.87	1.09	N/A	N/A	N/A	N/A	0.24	N/A	52.78	43.48	N/A	0.06	1.07	9.52	N/A	1.01	N/A
Comments			Both values > PQL and correctly entered into emLine.																					
Action			Let Value Stand																					
Result			Retest request would be filed past hold time. Discrepancy between values remains.																					
FCO	10/7/2010	M			17.00	<0.5	47.10	47.10	<0.5			<0.5		123.00		21.00	0.04	<0.5	7.20	37.00	80.00		3.00	
FCO	10/7/2010	SPLIT			22.00	<0.5	46.60	48.60	<0.5			<0.5		122.00		27.00	0.01	<0.5	7.27	40.00	80.00		3.00	
RPD (%)			N/A	N/A	25.64	N/A	1.07	3.13	N/A	N/A	N/A	N/A	N/A	0.82	N/A	25.00	140.43	N/A	0.07	7.79	0.00	N/A	0.00	N/A
Comments			Both values correctly entered into emLine; however, split value not > PQL. Therefore, RPD analysis not valid in this case.																					
Action			Let Value Stand																					
Result			Discrepancy between values remains.																					
R9	10/19/2010	M			96.00	<0.5	108.00	113.00	<0.5			<0.5		213.00	1.70	120.00	0.03	<0.5	7.99	14.00	110.00	1.40	<1	1.00
R9	10/19/2010	SPLIT			96.00	<0.5	107.00	112.00	0.60			<0.5		211.00	2.50	120.00	0.07	<0.5	7.90	15.00	130.00	1.80	<1	1.00
RPD (%)			N/A	N/A	0.00	N/A	0.93	0.89	N/A	N/A	N/A	N/A	N/A	0.94	38.10	0.00	85.71	N/A	0.09	6.90	16.67	25.00	N/A	0.00
Comments			Both values > PQL and correctly entered into emLine.																					
Action			Request Retest																					
Result			Retest performed, see results below.																					
R9 Retest	10/19/2010	M															0.02							
R9 Retest	10/19/2010	SPLIT															0.02							
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.50	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Comments			Retest for October 19 R9 sample and split. Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																					
Action			Let Value Stand																					
Result			Discrepancy between values resolved.																					
X23	11/4/2010	M	<0.5	1030.00	90.00	<0.5		5770.00	14.00			<0.5		7740.00		110.00		<0.5	6.81	7600.00		170.00		
X23	11/4/2010	SPLIT	<0.5	1080.00	90.00	<0.5		5820.00	15.00			<0.5		7710.00		110.00		<0.5	6.75	7100.00		190.00		
RPD (%)			N/A	4.74	0.00	N/A	N/A	0.86	6.90	N/A	N/A	N/A	N/A	0.39	N/A	0.00	N/A	N/A	0.06	6.80	N/A	N/A	11.11	N/A
Comments																								
Action																								
Result																								
X14	11/18/2010	M			170.00	<0.5	598.00	641.00	0.80			<0.5		1080.00	1.70	210.00	0.20	<0.5	8.05	420.00	800.00	1.30	6.00	3.18
X14	11/18/2010	SPLIT			170.00	<0.5	638.00	601.00	1.10			<0.5		1070.00	1.40	210.00	0.20	<0.5	7.98	420.00	790.00	1.30	5.00	3.87
RPD (%)			N/A	N/A	0.00	N/A	6.47	6.44	31.58	N/A	N/A	N/A	N/A	0.93	19.35	0.00	0.00	N/A	0.07	0.00	1.26	0.00	18.18	19.57
Comments																								
Action																								
Result																								

RPD > 50%

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X5	11/25/2010	M			260.00	<0.5	1430.00	1610.00	2.80	0.01		<0.5	<5	2500.0000		320.00	0.96	<0.5	7.43	1400.000	2300.00		<4	4.8000
X5	11/25/2010	SPLIT			260.00	<0.5	1530.00	1660.00	3.20	0.01		<0.5	<5	2500.0000		320.00	0.96	<0.5	7.47	1400.000	2400.00		<4	4.9000
		RPD (%)	N/A	N/A	0.00	N/A	6.76	3.06	13.33	4.58	N/A	N/A	N/A	0.00	N/A	0.00	0.00	N/A	0.04	0.00	4.26	N/A	N/A	2.06
		Comments																						
		Action																						
		Result																						
X5	12/2/2010	M			270.00	<0.5	1560.00	1590.00	2.30	0.01		<0.5	<5	2470.00		330.00	0.97	<0.5	7.73	1400.00	2300.00		2.00	5.00
X5	12/2/2010	SPLIT			270.00	<0.5	1580.00	1580.00	1.90	0.01		<0.5	<5	2470.00		330.00	0.98	<0.5	7.66	1400.00	2200.00		2.00	5.10
		RPD (%)	N/A	N/A	0.00	N/A	1.27	0.63	19.05	0.00	N/A	N/A	N/A	0.00	N/A	0.00	1.03	N/A	0.07	0.00	4.44	N/A	0.00	1.98
		Comments																						
		Action																						
		Result																						

RPD > 50%

**Table C-53: Rose Creek Drainage Water Quality
2010 QA/QC Splits - Dissolved Metals**

Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	Hg-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	Mn-d µg/L	Mo-d µg/L	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	S-d mg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L	
X14	6/29/2010	M	<0.005	6.6	0.36	36.8	<50	<0.01	<0.005	75	0.032	3.22	<0.1	0.64	165	<0.01	1.5	0.0061	17.1	1840	0.44	5.36	5.13	0.362	0.1	61	0.19	4490	<0.01	232	<0.5	0.08	1.07	<0.2	45.9	<0.1	
X14	6/29/2010	SPLIT	<0.005	6.2	0.34	36.5	<50	<0.01	<0.005	74.8	0.039	3.08	<0.1	0.57	160	<0.01	1.47	0.0061	16.8	1820	0.46	5.23	4.81	0.203	0.15	60	0.17	4500	<0.01	233	<0.5	0.079	1.09	<0.2	45.7	<0.1	
RPD (%)			N/A	6.25	5.71	0.82	N/A	N/A	N/A	0.27	19.72	4.44	N/A	11.57	3.08	N/A	2.02	0.00	1.77	1.09	4.44	2.46	6.44	56.28	40.00	1.65	11.11	0.22	N/A	0.43	N/A	1.26	1.85	N/A	0.44	N/A	
Comments																											Both values > PQL and correctly entered into emLine.										
Action																											Let Value Stand										
Result																											Discrepancy between values remains.										
X5P	7/10/2010	M	<0.005	4.40	0.26	14.90	<50	<0.01	0.02	287.00	0.09	17.30	<0.1	0.38	25.00	7.13	0.04	72.20	9320.00	0.63	21.90	23.00	0.96	0.23	398.00	0.12	2660.00	<0.01	1030.0	<0.5	0.582	1.55	<0.2	151.00	<0.1		
X5P	7/10/2010	SPLIT	<0.005	3.90	0.23	14.60	<50	<0.01	0.06	304.00	0.12	16.00	<0.1	0.38	28.00	6.61	0.04	68.90	8620.00	0.60	20.70	22.10	1.12	0.24	369.00	0.12	2830.00	<0.01	1000.0	<0.5	0.587	1.55	<0.2	141.00	<0.1		
RPD (%)			N/A	12.05	12.24	2.03	N/A	N/A	90.48	5.75	23.30	7.81	N/A	0.00	11.32	N/A	4.79	4.68	7.80	4.88	5.63	3.99	15.70	4.26	7.56	0.00	6.19	N/A	2.96	N/A	0.86	0.00	N/A	6.85	N/A		
Comments																											Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.										
Action																											Let Value Stand										
Result																											Discrepancy between values remains.										
X5	7/20/2010	M	<0.03	5.00	0.70	15.10	<300	<0.05	<0.03	296.00	0.14	22.80	<0.5	0.50	26.00	<0.05	6.20	0.04	67.00	11500.00	0.60	20.50	33.00	1.40	0.30	341.00	0.30	3100.00	<0.05	959.0	<3	0.540	1.96	<1	270.00	<0.5	
X5	7/20/2010	SPLIT	<0.03	7.00	0.70	15.30	<300	<0.05	<0.03	294.00	0.14	22.70	<0.5	0.50	32.00	<0.05	6.10	0.04	67.60	11500.00	0.50	20.30	33.80	1.37	0.30	336.00	0.30	3010.00	<0.05	951.0	<3	0.510	1.96	<1	270.00	<0.5	
RPD (%)			N/A	33.33	0.00	1.32	N/A	N/A	N/A	0.68	0.00	0.44	N/A	0.00	20.69	N/A	1.63	0.00	0.89	0.00	18.18	0.98	2.40	2.17	0.00	1.48	0.00	2.95	N/A	0.84	N/A	5.71	0.00	N/A	0.00	N/A	
Comments																																					
Action																																					
Result																																					
X5	7/27/2010	M	<0.03	3.00	0.20	15.60	<300	<0.05	<0.03	295.00	0.23	18.70	<0.5	1.20	26.00	<0.05	6.90	0.04	71.70	9790.00	0.90	20.70	25.30	0.38	0.30	379.00	<0.2	2920.00	<0.05	946.0	<3	0.610	1.58	<1	283.00	<0.5	
X5	7/27/2010	SPLIT	<0.03	4.00	0.20	16.40	<300	<0.05	<0.03	313.00	0.25	20.20	<0.5	1.40	32.00	<0.05	7.20	0.04	76.50	10100.00	0.60	22.20	27.10	0.91	0.30	389.00	<0.2	3150.00	0.06	1000.0	<3	0.640	1.68	<1	304.00	<0.5	
RPD (%)			N/A	28.57	0.00	5.00	N/A	N/A	N/A	5.92	8.33	7.71	N/A	15.38	20.69	N/A	4.26	4.88	6.48	3.12	40.00	6.99	6.87	82.17	0.00	2.60	N/A	7.58	N/A	5.55	N/A	4.80	6.13	N/A	7.16	N/A	
Comments																											Both values > PQL and correctly entered into emLine.										
Action																											Let Value Stand										
Result																											Discrepancy between values remains.										
X3	8/3/2010	M	<0.005	11.20	0.51	45.80	<50	<0.01	<0.005	25.20	0.01	0.06	<0.1	0.68	139.00	0.69	0.00	5.34	26.20	0.46	2.04	0.46	1.90	0.06	<10	0.19	4030.00	<0.01	116.0	<0.5	0.003	1.13	<0.2	6.80	<0.1		
X3	8/3/2010	SPLIT	<0.005	7.60	0.55	44.60	<50	<0.01	<0.005	25.70	0.01	0.06	<0.1	0.61	132.00	0.66	0.00	5.56	24.90	0.49	2.13	0.43	1.01	0.06	<10	0.19	3650.00	<0.01	117.0	<0.5	0.003	1.14	<0.2	4.70	<0.1		
RPD (%)			N/A	38.30	7.55	2.65	N/A	N/A	N/A	1.96	18.18	5.31	N/A	10.85	5.17	N/A	4.44	2.90	4.04	5.09	6.32	4.32	6.74	61.17	0.00	N/A	0.00	9.90	N/A	0.86	N/A	0.00	0.88	N/A	36.52	N/A	
Comments																											Both values > PQL and correctly entered into emLine. Lab noted on both samples that "Dissolved greater than total. Reanalysis yields similar results."										
Action																											Let Value Stand										
Result																											Discrepancy between values remains.										
X11	8/5/2010	M	<0.03	3.00	1.60	34.30	<300	<0.05	<0.03	491.00	0.12	24.00	<0.5	<0.3	3530.00	<0.05	7.10	0.02	99.40	23700.00	0.40	34.60	32.00	0.20	<0.1	505.00	<0.2	8960.00	<0.05	1170.0	<3	0.040	4.99	<1	11.10	<0.5	
X11	8/5/2010	SPLIT	<0.03	3.00	1.70	34.90	<300	<0.05	<0.03	502.00	0.12	25.80	<0.5	<0.3	3660.00	<0.05	7.30	0.02	102.00	24900.00	0.50	35.40	33.60	0.77	<0.1	527.00	<0.2	9120.00	<0.05	1170.0	<3	0.040	5.10	<1	11.80	<0.5	
RPD (%)			N/A	0.00	6.06	1.73	N/A	N/A	N/A	2.22	0.00	7.23	N/A	N/A	3.62	N/A	2.78	0.00	2.58	4.94	22.22	2.29	4.88	117.53	N/A	4.26	N/A	1.77	N/A	0.00	N/A	0.00	2.18	N/A	6.11	N/A	
Comments																											Both values > PQL and correctly entered into emLine.										
Action																											Request Retest										
Result																											Retest performed, see results below.										
X11 Retest	8/5/2010	M													0.35																						
X11 Retest	8/5/2010	SPLIT													2.07																						
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	142.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments																											Retest for August 5 X11 sample and split. Both values > PQL and correctly entered into emLine.										
Action																											Let Value Stand										
Result																											New values entered into emLine.										
X14	8/10/2010	M	<0.005	6.90	0.39	45.50	<50	<0.01	<0.005	91.90	0.05	3.42	<0.1	0.55	184.00	<0.01	2.11	0.01	21.40	2150.00	0.57	6.99	5.22	0.84	0.13	86.00	0.19	3940.00	<0.01	330.0	<0.5	0.122	1.44	<0.2	57.60	<0.1	
X14	8/10/2010	SPLIT	<0.005	6.30	0.45	47.70	<50	<0.01	<0.005	92.00	0.05	3.42	<0.1	0.54	213.00	<0.01	2.10	0.01	21.20	2150.00	0.57	6.83	5.16	1.46	0.13	83.00	0.19	3930.00	<0.01	332.0	<0.5	0.127	1.44	<0.2	57.90	<0.1	
RPD (%)			N/A	9.09	14.29	4.72	N/A	N/A	N/A	0.11	0.00	0.00	N/A	1.83	14.61	N/A	0.48	4.65	0.94	0.00	0.00	2.32	1.16	53.47	0.00	3.55	0.00	0.25	N/A	0.60	N/A	4.02	0.00	N/A	0.52	N/A	
Comments																											Both values > PQL and correctly entered into emLine.										
Action																											Let Value Stand										
Result																											Discrepancy between values remains.										
X5	8/24/2010	M	<0.005	2.90	0.17	14.80	<50	<0.01	0.02	340.00	0.15	16.00	<0.1	0.46	29.00	<0.01	7.78	0.04	73.60	8010.00	0.57	22.80	20.10	0.58	0.30	429.00	0.16	2570.00	<0.01	1050.0	<0.5	0.687	1.53	<0.2	179.00	<0.1	
X5	8/24/2010	SPLIT	<0.005	2.20	0.18	14.60	<50	<0.01	0.01	333.00	0.14	16.20	<0.1	0.42	25.00	<0.01	7.56	0.04	74.10	8000.00	0.57	22.90	20.40	0.46	0.29	416.00	0.16	2180.00	<0.01	1050.0	<0.5	0.676	1.52	<0.2	184.00	<0.1	
RPD (%)			N/A	27.45	5.71	1.36	N/A	N/A	40.00	2.08	4.14	1.24	N/A	9.09	14.81	N/A	2.87	0.00	0.68	0.12	0.00	0.44	1.48	23.42	3.39	3.08	0.00	16.42	N/A	0.00	N/A	1.61	0.66	N/A	2.75	N/A	
Comments																																					
Action																																					
Result																																					

Table C-53: Rose Creek Drainage Water Quality
2010 QA/QC Splits - Dissolved Metals

Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	Hg-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	Mn-d µg/L	Mo-d µg/L	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	S-d mg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L	
			<div style="display: flex; justify-content: space-between;"> RPD > 50% RPD > 100% </div>																																		
X14	8/31/2010	M	<0.005	3.90	0.35	45.00	<50	<0.01	<0.005	93.70	0.03	2.72	<0.1	0.39	166.00		1.90	0.01	19.60	1790.00	0.51	6.33	4.08		0.49	0.11	81.00	0.22	4090.00	<0.01	309.0	<0.5	0.121	1.57	<0.2	42.00	<0.1
X14	8/31/2010	SPLIT	<0.005	3.10	0.35	44.90	<50	<0.01	<0.005	88.70	0.05	2.69	<0.1	0.47	166.00		1.90	0.01	19.30	1780.00	0.54	6.24	4.42		0.25	0.09	83.00	0.20	3800.00	<0.01	314.0	<0.5	0.125	1.60	<0.2	41.50	<0.1
		RPD (%)	N/A	22.86	0.00	0.22	N/A	N/A	N/A	5.48	49.35	1.11	N/A	18.60	0.00	N/A	0.00	0.00	1.54	0.56	5.71	1.43	8.00	66.67	20.00	2.44	9.52	7.35	N/A	1.61	N/A	3.25	1.89	N/A	1.20	N/A	
		Comments																								Both values > PQL and correctly entered into emLine.											
		Action																																			
		Result	Let Value Stand Discrepancy between values remains.																																		
X3	9/2/2010	M	<0.005	6.20	0.47	44.50	<50	<0.01	<0.005	28.10	0.02	0.20	<0.1	0.60	137.00		0.90	0.00	5.88	34.30	0.46	2.36	0.67		0.69	0.06	<10	0.16	4940.00	<0.01	122.0	<0.5	0.003	1.12	<0.2	42.80	<0.1
X3	9/2/2010	SPLIT	<0.005	6.10	0.46	45.30	<50	<0.01	<0.005	27.20	0.02	0.13	<0.1	0.82	133.00		0.80	0.00	5.78	27.60	0.42	2.24	0.57		0.79	0.05	<10	0.17	4330.00	<0.01	127.0	<0.5	0.003	1.18	<0.2	28.10	<0.1
		RPD (%)	N/A	1.63	2.15	1.78	N/A	N/A	N/A	3.25	17.14	45.68	N/A	30.99	2.96	N/A	11.76	0.00	1.72	21.65	9.09	5.22	16.13	14.18	18.18	N/A	6.06	13.16	N/A	4.02	N/A	0.00	5.22	N/A	41.47	N/A	
		Comments																																			
		Action																																			
		Result																																			
X7	10/6/2010	M	<0.5	1890.00	26.00	14.00	<5000	<1	<0.5	405.00	20.10	1370.00	<10	<5	1610000.00		12.00	0.15	842.00	103000.00	<5	55.00	1210.00		20.40	<2	3040.00	<4	18200.00	<1	4040.0	59.00	0.300	8.70	<20	574000.00	<10
X7	10/6/2010	SPLIT	<0.5	2040.00	29.00	15.00	<5000	<1	<0.5	381.00	19.40	1340.00	<10	<5	1530000.00		12.00	0.14	816.00	101000.00	<5	54.00	1140.00		20.70	<2	2830.00	<4	16900.00	<1	4050.0	<50	0.300	5.70	<20	565000.00	<10
		RPD (%)	N/A	7.63	10.91	6.90	N/A	N/A	N/A	6.11	3.54	2.21	N/A	N/A	5.10	N/A	0.00	3.44	3.14	1.96	N/A	1.83	5.96	1.46	N/A	7.16	N/A	7.41	N/A	0.25	N/A	0.00	41.67	N/A	1.58	N/A	
		Comments																																			
		Action																																			
		Result																																			
FCO	10/7/2010	M	<0.005	81.70	0.07	34.50	<50	0.05	<0.005	12.30	1.78	2.57	<0.1	28.50	30.00		0.45	0.00	3.98	43.20	0.10	2.95	7.21		0.15	0.04	13.00	<0.04	7550.00	<0.01	64.5	<0.5	0.004	0.14	<0.2	1290.00	<0.1
FCO	10/7/2010	SPLIT	<0.005	73.30	0.05	34.50	<50	0.05	<0.005	12.90	1.81	2.55	<0.1	28.60	29.00		0.46	0.00	4.01	43.30	0.08	2.95	7.37		0.10	0.04	14.00	<0.04	7870.00	<0.01	64.4	<0.5	0.005	0.12	<0.2	1290.00	<0.1
		RPD (%)	N/A	10.84	33.33	0.00	N/A	0.00	N/A	4.76	1.67	0.78	N/A	0.35	3.39	N/A	2.20	0.00	0.75	0.23	22.22	0.00	2.19	42.28	0.00	7.41	N/A	4.15	N/A	0.16	N/A	22.22	11.76	N/A	0.00	N/A	
		Comments																																			
		Action																																			
		Result																																			
R9	10/19/2010	M	0.0060	5.40	0.56	52.300	<50	<0.01	<0.005	34.00	0.02	0.0310	<0.1	0.5300	109.00		0.85	0.005	6.84	17.100	0.61	2.50	0.380		0.7130	0.07	<10	0.3100	5700.00	0.02	135.00	<0.5	<0.002	1.6100	<0.2	4.400	<0.1
R9	10/19/2010	SPLIT	<0.005	5.50	0.56	52.400	<50	<0.01	<0.005	33.30	0.01	0.0370	<0.1	0.4800	112.00		0.81	0.005	6.99	17.900	0.62	2.51	0.360		0.6380	0.07	<10	0.3000	5570.00	<0.01	138.00	<0.5	<0.002	1.6300	<0.2	4.000	<0.1
		RPD (%)	N/A	1.83	0.00	0.19	N/A	N/A	N/A	2.08	22.22	17.65	N/A	9.90	2.71	N/A	4.82	2.11	2.17	4.57	1.63	0.40	5.41	11.10	0.00	N/A	3.28	2.31	N/A	2.20	N/A	N/A	1.23	N/A	9.52	N/A	
		Comments																																			
		Action																																			
		Result																																			
X23	11/4/2010	M	0.50	<60	<2	<20	<1000	<2	<20	500.00	75.70	1310.00	<20	6.00	177000.00	<0.4	18.00	0.22	1100.00	105000.00	<20	71.00	1410.00		<4	<10	2470.00	<2	8340.00	<100	4140.0	<100	2.000	13.00	<100	665000.00	<10
X23	11/4/2010	SPLIT	0.50	<60	<2	<20	<1000	<2	<20	486.00	77.20	1340.00	<20	5.00	173000.00	<0.4	18.00	0.21	1120.00	108000.00	<20	73.00	1440.00		<4	<10	2510.00	<2	7930.00	<100	4200.0	<100	2.000	13.00	<100	688000.00	<10
		RPD (%)	0.00	N/A	N/A	N/A	N/A	N/A	N/A	2.84	1.96	2.26	N/A	18.18	2.29	N/A	0.00	4.12	1.80	2.82	N/A	2.78	2.11	N/A	N/A	1.61	N/A	5.04	N/A	1.44	N/A	0.00	0.00	N/A	3.40	N/A	
		Comments																																			
		Action																																			
		Result																																			
X14	11/18/2010	M	<0.005	1.40	0.25	57.50	<50	<0.01	<0.005	194.00	0.09	13.00	<0.1	0.30	194.00		3.18	0.01	38.20	8710.00	0.56	12.10	18.10		0.07	0.08	175.00	0.21	6880.00	<0.01	539.0	<0.5	0.071	3.13	<0.2	123.00	<0.1
X14	11/18/2010	SPLIT	<0.005	1.40	0.26	55.80	<50	<0.01	<0.005	176.00	0.11	13.30	<0.1	0.45	173.00		3.29	0.01	39.40	8940.00	0.54	12.50	19.10		0.03	0.08	180.00	0.19	6320.00	<0.01	527.0	<0.5	0.069	3.07	<0.2	127.00	<0.1
		RPD (%)	N/A	0.00	3.92	3.00	N/A	N/A	N/A	9.73	17.26	2.28	N/A	40.00	11.44	N/A	3.40	1.71	3.09	2.61	3.64	3.25	5.38	88.66	0.00	2.82	10.00	8.48	N/A	2.25	N/A	2.86	1.94	N/A	3.20	N/A	
		Comments																								Both values > PQL and correctly entered into emLine.											
		Action																																			
		Result	Let Value Stand Discrepancy between values remains.																																		
X5	11/25/2010	M	<0.03	2.00	0.20	22.40	<300	<0.05	<0.03	474.00	0.18	64.90	<0.5	<0.3	69.00	<0.05	6.70	0.03	103.00	34500.00	0.40	32.30	82.00		0.05	<0.1	527.00	<0.2	7690.00	<0.05	1230.0	<3	0.230	4.58	<1	393.00	<0.5
X5	11/25/2010	SPLIT	<0.03	2.00	0.20	23.60	<300	<0.05	<0.03	505.00	0.15	63.00	<0.5	<0.3	83.00	<0.05	6.60	0.03	97.90	34300.00	0.40	31.00	77.90		0.05	<0.1	522.00	<0.2	8320.00	<0.05	1260.0	<3	0.220	4.66	<1	387.00	<0.5
		RPD (%)	N/A	0.00	0.00	5.22	N/A	N/A	N/A	6.33	18.18	2.97	N/A	N/A	18.42	N/A	1.50	3.92	5.08	0.58	0.00	4.11	5.13	0.00	N/A	0.95	N/A	7.87	N/A	2.41	N/A	4.44	1.73	N/A	1.54	N/A	
		Comments																																			
		Action																																			
		Result																																			
X5	12/2/2010	M	<0.03	3.00	<0.1	22.40	<300	<0.05	<0.03	470.00	0.15	66.20	<0.5	1.00	16.00	<0.05	6.60	0.03	101.00	35700.00	0.40	31.60	88.10		0.53	<0.1	521.00	<0.2	7830.00	<0.05	1240.0	<3	0.210	4.88	<1	408.00	<0.5
X5	12/2/2010	SPLIT	<0.03	3.00	<0.1	22.90	<300	<0.05	<0.03	469.00	0.15	65.60	<0.5	0.40	100.00	<0.05	6.50	0.03	99.50	35300.00	0.40	31.20	81.90		0.06	<0.1	510.00	<0.2	7790.00	<0.05	1250.0	<3	0.220	4.99	<1	390.00	<0.5
		RPD (%)	N/A	0.00	N/A	2.21	N/A	N/A	N/A	0.21	0.00	0.91	N/A	85.71	144.83	N/A	1.53	0.00	1.50	1.13	0.00	1.27	7.29	159.32	N/A	2.13	N/A	0.51	N/A	0.80	N/A	4.65	2.23	N/A	4.51	N/A	
		Comments													Both values > PQL and correctly entered into emLine.			Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.			Both values correctly entered into emLine; however, split value not > PQL. Therefore, RPD analysis not valid in this case.																
		Action																																			
		Result	Let Value Stand Discrepancy between values remains.																																		

Station	Date	Sample Type	Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L	Co µg/L	Cr µg/L	Cu µg/L	Fe µg/L	Hg µg/L	K mg/L	Li mg/L	Mg mg/L	Mn µg/L	Mo µg/L	Na mg/L	Ni µg/L	Pb µg/L	S mg/L	Sb µg/L	Se µg/L	Si µg/L	Sn µg/L	Sr µg/L	Ti µg/L	Tl µg/L	U µg/L	V µg/L	Zn µg/L	Zr µg/L
X14	6/29/2010	M	<0.005	17.4	0.41	<50	38.8	<0.01	0.007	71.2	0.036	3.2200	0.3	0.65	274	<0.01	1.46	0.0079	17.1	1860	0.49	5.1	5.06	0.369	67	0.1	0.2	4330	<0.01	236	<0.5	0.078	1.24	<0.2	49.3	<0.1
X14	6/29/2010	SPLIT	<0.005	12.7	0.43	<50	38.1	<0.01	<0.005	73.1	0.046	3.2700	<0.1	0.63	276	<0.01	1.53	0.0073	17.5	1890	0.41	5.26	5.11	0.362	69	0.1	0.2	4470	<0.01	242	<0.5	0.077	1.23	<0.2	50.4	<0.1
RPD (%)			N/A	31.23	4.76	N/A	1.82	N/A	N/A	2.63	24.39	1.54	N/A	3.13	0.73	N/A	4.68	7.89	2.31	1.60	17.78	3.09	0.98	1.92	2.94	0.00	0.00	3.18	N/A	2.51	N/A	1.29	0.81	N/A	2.21	N/A
Comments																																				
Action																																				
Result																																				
X5P	7/10/2010	M	<0.005	31.80	0.38	<50	17.20	<0.01	0.09	318.00	0.13	16.90	<0.1	1.01	272.00		6.84	0.04	72.70	8980.00	0.63	22.10	22.70	3.10	387.00	0.28	0.12	2930.00	<0.01	1020.0	1.30	0.566	1.56	0.30	173.00	<0.1
X5P	7/10/2010	SPLIT	<0.005	30.80	0.35	<50	17.40	<0.01	0.05	318.00	0.14	17.20	<0.1	0.93	279.00		6.90	0.04	73.60	8940.00	0.63	22.30	23.30	2.88	379.00	0.28	0.13	2970.00	<0.01	1020.0	0.80	0.589	1.56	0.30	171.00	<0.1
RPD (%)			N/A	3.19	8.22	N/A	1.16	N/A	55.07	0.00	7.41	1.76	N/A	8.25	2.54	N/A	0.87	7.88	1.23	0.45	0.00	0.90	2.61	7.36	2.09	0.00	8.00	1.36	N/A	0.00	47.62	3.98	0.00	0.00	1.16	N/A
Comments			Both values > PQL and correctly entered into emLine.																																	
Action																																				
Result			Let Value Stand Discrepancy between values remains.																																	
X5	7/20/2010	M	<0.03	5.00	0.50	<300	15.20	<0.05	<0.03	303.00	0.16	21.90	<0.5	0.40	379.00	<0.05	6.20	0.04	71.50	11300.00	0.60	21.80	29.20	1.89	383.00	0.30	<0.2	3490.00	<0.05	905.0	<3	0.530	1.83	<1	267.00	<0.5
X5	7/20/2010	SPLIT	<0.03	5.00	0.50	<300	15.80	<0.05	<0.03	304.00	0.16	22.10	<0.5	0.70	373.00	<0.05	6.30	0.04	71.00	11200.00	0.60	20.60	29.40	1.91	378.00	0.30	0.60	3270.00	<0.05	948.0	<3	0.530	1.80	<1	274.00	<0.5
RPD (%)			N/A	0.00	0.00	N/A	3.87	N/A	N/A	0.33	0.00	0.91	N/A	54.55	1.60	N/A	1.60	7.79	0.70	0.89	0.00	5.66	0.68	1.05	1.31	0.00	N/A	6.51	N/A	4.64	N/A	0.00	1.65	N/A	2.59	N/A
Comments			Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																																	
Action																																				
Result			Let Value Stand Discrepancy between values remains.																																	
X5	7/27/2010	M	<0.03	10.00	0.90	<300	15.80	<0.05	<0.03	307.00	0.15	20.10	<0.5	0.90	412.00	<0.05	6.50	0.04	71.40	9930.00	13.30	20.70	26.60	3.46	378.00	0.40	0.30	3090.00	<0.05	950.0	5.00	0.640	1.51	3.00	299.00	<0.5
X5	7/27/2010	SPLIT	<0.03	9.00	0.70	<300	16.50	<0.05	<0.03	306.00	0.16	21.00	<0.5	1.20	413.00	<0.05	6.80	0.04	76.90	10400.00	0.60	22.30	34.10	3.12	394.00	0.30	<0.2	3020.00	<0.05	970.0	<3	0.650	1.61	2.00	321.00	<0.5
RPD (%)			N/A	10.53	25.00	N/A	4.33	N/A	N/A	0.33	6.45	4.38	N/A	28.57	0.24	N/A	4.51	2.35	7.42	4.62	182.73	7.44	24.71	10.33	4.15	28.57	N/A	2.29	N/A	2.08	N/A	1.55	6.41	40.00	7.10	N/A
Comments			Both values correctly entered into emLine; however, split value not > PQL. Therefore, RPD analysis not valid in this case.																																	
Action																																				
Result			Let Value Stand Discrepancy between values remains.																																	
X3	8/3/2010	M	<0.005	9.30	0.51	<50	48.30	<0.01	<0.005	35.30	0.01	0.05	<0.1	0.53	227.00		0.70	0.00	5.56	28.00	0.46	2.09	0.45	0.67	<10	0.06	0.25	5690.00	<0.01	122.0	<0.5	0.003	1.19	<0.2	5.60	<0.1
X3	8/3/2010	SPLIT	<0.005	9.60	0.57	<50	47.80	<0.01	<0.005	25.10	<0.005	0.05	<0.1	0.46	168.00		0.70	0.00	5.25	28.00	0.53	1.96	0.33	0.46	<10	0.06	0.16	3880.00	<0.01	128.0	<0.5	0.003	1.04	<0.2	4.90	<0.1
RPD (%)			N/A	3.17	11.11	N/A	1.04	N/A	N/A	33.77	N/A	8.16	N/A	14.14	29.87	N/A	0.00	2.90	5.74	0.00	14.14	6.42	30.77	N/A	37.74	N/A	0.00	43.90	37.83	N/A	4.80	N/A	0.00	13.45	N/A	13.33
Comments																																				
Action																																				
Result																																				
X14	8/10/2010	M	<0.005	9.40	0.47	<50	43.40	<0.01	<0.005	96.70	0.06	3.45	<0.1	0.63	428.00	<0.01	2.15	0.01	21.30	2120.00	0.54	6.97	5.52	1.23	91.00	0.11	0.20	4050.00	<0.01	329.0	<0.5	0.126	1.52	<0.2	61.40	<0.1
X14	8/10/2010	SPLIT	<0.005	10.70	0.48	<50	45.70	<0.01	0.01	97.50	0.06	3.48	<0.1	0.65	418.00	<0.01	2.21	0.01	21.60	2150.00	0.56	7.11	5.46	1.63	95.00	0.11	0.18	4230.00	<0.01	328.0	<0.5	0.121	1.50	<0.2	61.70	<0.1
RPD (%)			N/A	12.94	2.11	N/A	5.16	N/A	N/A	0.82	13.33	0.87	N/A	3.13	2.36	N/A	2.75	4.52	1.40	1.41	3.64	1.99	1.09	N/A	27.97	4.30	0.00	10.53	4.35	N/A	0.30	N/A	4.05	1.32	N/A	0.49
Comments																																				
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X5	8/24/2010	M	<0.03	7.00	0.40	<300	14.70	<0.05	<0.03	295.00	0.19	14.70	<0.5	0.90	513.00	<0.05	6.50	0.04	66.60	7650.00	0.70	20.20	19.40	2.72	361.00	0.30	<0.2	2380.00	<0.05	942.0	<3	0.690	1.32	<1	212.00	<0.5
X5	8/24/2010	SPLIT	<0.03	5.00	0.30	<300	14.60	<0.05	<0.03	297.00	0.15	15.30	<0.5	0.70	518.00	<0.05	6.60	0.04	68.90	7790.00	0.60	21.00	19.80	2.30	370.00	0.30	<0.2	2250.00	<0.05	936.0	<3	0.680	1.34	<1	218.00	<0.5
RPD (%)			N/A	33.33	28.57	N/A	0.68	N/A	N/A	0.68	23.53	4.00	N/A	25.00	0.97	N/A	1.53	2.41	3.39	1.81	15.38	3.88	2.04	N/A	16.73	2.46	0.00	N/A	5.62	N/A	0.64	N/A	1.46	1.50	N/A	2.79
Comments																																				
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Result																																				
X14	8/31/2010	M	<0.005	6.90	0.48	<50	44.00	<0.01	<0.005	86.00	0.06	2.76	<0.1	0.46	441.00		2.06	0.01	19.70	1840.00	0.53	6.08	4.23	0.57	87.00	0.11	0.20	3870.00	<0.01	314.0	<0.5	0.119	1.19	<0.2	49.60	<0.1
X14	8/31/2010	SPLIT	<0.005	7.50	0.46	<50	45.10	<0.01	<0.005	88.40	0.05	2.71	<0.1	0.60	449.00		1.99	0.01	19.30	1790.00	0.55	5.98	4.26	0.58	85.00	0.11	0.21	3820.00	<0.01	323.0	<0.5	0.119	1.24	<0.2	48.60	<0.1
RPD (%)			N/A	8.33	4.26	N/A	2.47	N/A	N/A	2.75	9.52	1.83	N/A	26.42	1.80	N/A	3.46	0.91	2.05	2.75	3.70	1.66	0.71	N/A	0.87	2.33	0.00	4.88	1.30	N/A	2.83	N/A	0.00	4.12	N/A	2.04
Comments																																				
Action																																				
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X3	9/2/2010	M	<0.005	8.50	0.50	<50	44.60	<0.01	<0.005	26.70	0.01	0.06	<0.1	0.46	171.00		0.68	0.00	5.52	24.00	0.57	2.11	0.45	0.41	<10	0.04	0.16	4410.00	<0.01	124.0	<0.5	<0.002	1.11	<0.2	8.70	<0.1
X3	9/2/2010	SPLIT	<0.005	7.60	0.48	<50	45.00	<0.01	<0.005	26.60	0.01	0.06	<0.1	0.43	170.00		0.68	0.00	5.63	24.20	0.42	2.17	0.42	0.23	<10	0.05	0.17	4410.00	<0.01	125.0	<0.5	<0.002	1.20	<0.2	6.90	<0.1
RPD (%)			N/A	11.18	4.08	N/A	0.89	N/A	N/A	0.38	9.52	5.31	N/A	6.74	0.59	N/A	0.00	6.06	1.97	0.83	30.30	2.80	6.90	55.05	N/A	22.22	6.06	0.00	N/A	0.80	N/A	N/A	7.79	N/A	23.08	N/A
Comments			Both values > PQL and correctly entered into emLine.																																	
Action																																				
Result			Let Value Stand Discrepancy between values remains.																																	
X7	10/6/2010	M	<0.5	2050.00	27.00	<5000	13.00	<1	<0.5	445.00	20.10	1340.00	<10	<5	1700000.00		13.00	0.14	867.00	101000.00	<5	57.00	1210.00	24.80	2930.00	<2	<4	19800.00	<1	4020.0	<50	0.300	5.00	<20	541000.00	<10
X7	10/6/2010	SPLIT	<0.5	2050.00	27.00	<5000	13.00	<1	<0.5	434.00	20.80	1360.00	<10	<5	1670000.00		14.00	0.14	889.00	102000.00	<5	58.00	122													

Table C-54: Rose Creek Drainage Water Quality
2010 QA/QC Splits - Total Metals

Station	Date	Sample Type	Ag µg/L	Al µg/L	As µg/L	B µg/L	Ba µg/L	Be µg/L	Bi µg/L	Ca mg/L	Cd µg/L	Co µg/L	Cr µg/L	Cu µg/L	Fe µg/L	Hg µg/L	K mg/L	Li mg/L	Mg mg/L	Mn µg/L	Mo µg/L	Na mg/L	Ni µg/L	Pb µg/L	S mg/L	Sb µg/L	Se µg/L	Si µg/L	Sn µg/L	Sr µg/L	Ti µg/L	Ti µg/L	U µg/L	V µg/L	Zn µg/L	Zr µg/L				
FCO	10/7/2010	M	<0.005	635.00	0.08	<50	36.10	0.15	<0.005	12.40	1.79	2.46	0.30	53.00	254.00	0.46	0.00	3.91	41.50		0.21	2.98	7.12		0.48	13.00	0.04	<0.04	7620.00	<0.01	64.8	<0.5	0.004	0.28	<0.2	1210.00	<0.1			
FCO	10/7/2010	SPLIT	<0.005	637.00	0.08	<50	35.70	0.14	<0.005	12.20	1.73	2.45	0.30	54.70	255.00	0.45	0.00	3.90	40.50		0.08	2.99	7.23		0.53	13.00	0.04	<0.04	7510.00	<0.01	62.8	<0.5	0.005	0.29	<0.2	1240.00	<0.1			
		RPD (%)	N/A	0.31	0.00	N/A	1.11	6.90	N/A	1.63	3.41	0.41	0.00	3.16	0.39	N/A	2.20	2.25	0.26	2.44	89.66	0.34	1.53		8.73	0.00	0.00	N/A	1.45	N/A	3.13	N/A	22.22	1.75	N/A	2.45	N/A			
		Comments																																						
		Action																																						
		Result																																						
R9	10/19/2010	M	<0.005	8.50	0.58	<50	52.50	<0.01	<0.005	31.70	0.02	0.03	<0.1	0.39	172.00		0.73	0.00	7.00	19.60		0.60	2.42	0.30		0.22	<10	0.06	0.32	5620.00	<0.01	133.0	<0.5	<0.002	1.56	<0.2	1.90	<0.1		
R9	10/19/2010	SPLIT	<0.005	8.40	0.62	<50	52.10	<0.01	<0.005	31.80	0.02	0.03	<0.1	0.46	171.00		0.72	0.00	6.71	19.50		0.59	2.35	0.34		0.82	<10	0.07	0.30	5600.00	<0.01	131.0	<0.5	<0.002	1.54	<0.2	2.80	<0.1		
		RPD (%)	N/A	1.18	6.67	N/A	0.76	N/A	N/A	0.31	6.45	6.25	N/A	16.47	0.58	N/A	1.38	0.00	4.23	0.51		1.68	12.50		116.54	N/A	15.38	6.45	0.36	N/A	1.52	N/A	N/A	1.29	N/A	38.30	N/A			
		Comments																																						
		Action																																						
		Result																																						
R9 Retest	10/19/2010	M																																						
R9 Retest	10/19/2010	SPLIT																																						
		RPD (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Comments																																						
		Action																																						
		Result																																						
X14	11/18/2010	M	<0.005	49.40	0.64	<50	57.30	<0.01	<0.005	174.00	0.12	13.4000	<0.1	0.6900	1020.00		3.18	0.012	39.80	8780.000		0.60	12.70	19.500		0.9780	173.00	0	0.2300	6210.00	<0.01	516.00	1.60	0.07	3.1500	<0.2	135.000	<0.1		
X14	11/18/2010	SPLIT	<0.005	51.40	0.69	<50	57.90	<0.01	<0.005	188.00	0.11	14.0000	<0.1	0.7000	1190.00		3.20	0.012	40.70	8950.000		0.57	13.00	20.200		1.0100	175.00	0	0.2700	6790.00	<0.01	529.00	2.00	0.07	3.1500	<0.2	137.000	<0.1		
		RPD (%)	N/A	3.97	7.52	N/A	1.04	N/A	N/A	7.73	2.64	4.38	N/A	1.44	15.38	N/A	0.63	0.00	2.24	1.92		5.13	2.33	3.53		3.22	1.15	0.00	16.00	8.92	N/A	2.49	22.22	1.38	0.00	N/A	1.47	N/A		
		Comments																																						
		Action																																						
		Result																																						
X5	11/25/2010	M	<0.03	4.00	0.20	<300	22.40	<0.05	<0.03	418.00	0.18	60.30	<0.5	1.00	497.00	<0.05	6.50	0.03	93.70	33400.00		0.40	28.90	83.90		0.90	503.00	<0.1	<0.2	7080.00	<0.05	1220.0	<3	0.220	4.62	<1	390.00	<0.5		
X5	11/25/2010	SPLIT	<0.03	3.00	0.20	<300	23.60	<0.05	<0.03	453.00	0.22	62.60	<0.5	0.40	543.00	<0.05	6.70	0.03	97.10	34500.00		0.50	29.80	79.60		0.73	523.00	<0.1	<0.2	7430.00	<0.05	1270.0	<3	0.230	4.86	<1	399.00	<0.5		
		RPD (%)	N/A	28.57	0.00	N/A	5.22	N/A	N/A	8.04	20.00	3.74	N/A	85.71	8.85	N/A	3.03	3.92	3.56	3.24		22.22	3.07	5.26		20.86	3.90	N/A	N/A	4.82	N/A	4.02	N/A	4.44	5.06	N/A	2.28	N/A		
		Comments																																						
		Action																																						
		Result																																						
X5	12/2/2010	M	<0.03	4.00	0.30	<300	23.80	<0.05	<0.03	458.00	0.15	65.80	<0.5	0.60	547.00	<0.05	6.90	0.02	101.00	35800.00		0.50	30.80	83.50		0.56	511.00	<0.1	<0.2	7770.00	<0.05	1260.0	<3	0.210	4.74	<1	395.00	<0.5		
X5	12/2/2010	SPLIT	<0.03	3.00	0.20	<300	23.20	<0.05	<0.03	466.00	0.18	66.10	<0.5	0.50	558.00	<0.05	6.80	0.02	101.00	35900.00		<0.3	30.90	81.40		0.53	520.00	<0.1	<0.2	7920.00	<0.05	1240.0	4.00	0.220	4.72	<1	399.00	<0.5		
		RPD (%)	N/A	28.57	40.00	N/A	2.55	N/A	N/A	1.73	18.18	0.45	N/A	18.18	1.99	N/A	1.46	0.00	0.00	0.28		N/A	0.32	2.55		5.50	1.75	N/A	N/A	1.91	N/A	1.60	N/A	4.65	0.42	N/A	1.01	N/A		
		Comments																																						
		Action																																						
		Result																																						

RPD > 50%
 RPD > 100%

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
A30	2/4/2010	275	250	9.52				6.9	6.2	0.7			
A30	2/24/2010	224	188	17.48				7	6.6	0.4			
A30	3/2/2010	213	209	1.90				7.1	6.82	0.28			
A30	3/28/2010	201	160	22.71	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.3	6.87	0.43			
A30	4/10/2010	202	160	23.20	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on April 11, 2010 suggests calibration on field meter may have been off.	7.3	6.76	0.54			
A30	4/19/2010	187	150	21.96	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.3	6.98	0.32			
A30	5/1/2010	1670	1610	3.66				3.6	3.77	0.17			
A30	5/18/2010	752	132	140.27	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	4.9	5.22	0.32			
A30	6/2/2010	484	549	12.58				5	5.65	0.65			
A30	6/15/2010	320	296	7.79				6.7	6.16	0.54			
A30	7/7/2010	753	810	7.29				5.82	6.09	0.27			
A30	7/22/2010	410	371	9.99				6.53	7	0.47			
A30	8/5/2010	312	339	8.29				6.75	6.85	0.1			
A30	8/18/2010	238	260	8.84				6.8	7.68	0.88			
A30	9/1/2010	224	227	1.33				6.99	6.69	0.3			
A30	10/20/2010	223	208	6.96				7.36	6.56	0.8			
A30	11/4/2010	221	223	0.90				7.4	7.33	0.07			
A30	12/1/2010	197	80	84.48	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	7.17	6.86	0.31			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
ETA Combined	9/2/2010	7060	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			4.85	5.98	1.13	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
ETA Combined	10/20/2010	7510	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			4.89	6.3	1.41	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
ETA Combined	11/8/2010	7450	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.05	6.05	1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
ETA Combined	12/1/2010	7360	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.29	6.24	0.95			
FAROCCR	5/3/2010	50	78	43.75	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.3	7.54	0.24			
FAROCCR	6/5/2010	29	21	32.00	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.2	7.84	0.64			
FAROCCR	7/8/2010	48	42	13.33				7.5	8.16	0.66			
FAROCCR	8/3/2010	81	79	2.50				7.79	7.33	0.46			
FAROCCR	9/1/2010	85	80	6.06				7.69	7.75	0.06			
FAROCCR	10/19/2010	77	244	104.05	Field and lab values correctly entered into emLine.	Request Retest	Retest performed, see results below.	7.67	7.26	0.41			
FAROCCR Retest	10/19/2010	74	244	106.92	Retest for October 19 FAROCCR EC. Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.67	7.26	0.41			
FCO	6/16/2010	118	122	3.33				7.1	7.85	0.75			
FCO	10/7/2010	123	70	54.92	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains.	7.2	7.52	0.32			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
FCS-4	9/2/2010	6080	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.28	6.34	1.06	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
FCS-4	10/20/2010	7180	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			4.61	6.5	1.89	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains.
FCS-4	11/10/2010	7160	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.06	6.63	1.57	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.
FCS-4	12/2/2010	6890	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			4.73	6.67	1.94	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.
GDHSECK	3/4/2010	1230	1110	10.26				8.1	7.56	0.54			
GDHSECK	6/16/2010	1230	1238	0.65				8.1	8.19	0.09			
GDHSECK	10/6/2010	1110	1234	10.58				8.07	7.05	1.02	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
NE1	6/1/2010	480	627	26.56	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.8	7.46	0.34			
NF1	2/23/2010	297	240	21.23	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on February 23, 2010 suggests calibration on field meter may have been off.	7.9	7.77	0.13			
NF1	3/10/2010	298	269	10.23				8	7.84	0.16			
NF1	4/11/2010	325	260	22.22	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on April 11, 2010 suggests calibration on field meter may have been off.	7.9	7.37	0.53			
NF1	5/3/2010	103	90	13.47				7.6	7.43	0.17			
NF1	6/5/2010	97	99	2.04				7.6	7.84	0.24			
NF1	7/8/2010	134	129	3.80				7.91	7.71	0.2			
NF1	8/3/2010	355	421	17.01				7.26	6.68	0.58			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
NF2	1/12/2010	286	266	7.25				7.7	6.86	0.84			
NF2	2/23/2010	295	230	24.76	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on February 23, 2010 suggests calibration on field meter may have been off.	8	7.71	0.29			
NF2	3/10/2010	298	267	10.97				8	7.62	0.38			
NF2	4/14/2010	308	270	13.15				8.2	7.48	0.72			
NF2	5/3/2010	107	97	9.80				7.6	7.29	0.31			
NF2	6/4/2010	87	81	7.14				7.6	7.86	0.26			
NF2	7/8/2010	136	154	12.41				7.91	8.18	0.27			
NF2	8/3/2010	196	193	1.54				8.01	7.5	0.51			
NF2	9/1/2010	203	222	8.94				7.92	8.1	0.18			
NF2	10/18/2010	215	200	7.23				7.9	7.46	0.44			
NF2	11/9/2010	258	252	2.35				8.06	8.08	0.02			
NF2	12/1/2010	262	120	74.35	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	7.93	7.41	0.52			
NFRC SC-1	1/12/2010	288	252	13.33				7.6	6.84	0.76			
NFRC SC-1	2/23/2010	298	250	17.52				8	7.75	0.25			
NFRC SC-1	3/10/2010	304	269	12.22				8	7.83	0.17			
NFRC SC-1	4/14/2010	304	260	15.60				8.1	7.19	0.91			
NFRC SC-1	5/3/2010	108	96	11.76				7.6	7.57	0.03			
NFRC SC-1	6/4/2010	88	84	4.65				7.6	7.65	0.05			
NFRC SC-1	7/8/2010	137	129	6.02				7.89	8.05	0.16			
NFRC SC-1	8/3/2010	197	192	2.57				8.04	7.64	0.4			
NFRC SC-1	10/18/2010	217	197	9.66				8.03	7.47	0.56			
NFRC SC-2	1/12/2010	287	250	13.78				7.6	6.95	0.65			
NFRC SC-2	2/23/2010	300	240	22.22	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.9	7.77	0.13			
NFRC SC-2	3/10/2010	301	269	11.23				8	7.61	0.39			
NFRC SC-2	4/14/2010	309	270	13.47				8.1	7.24	0.86			
NFRC SC-2	5/3/2010	109	99	9.62				7.6	7.72	0.12			
NFRC SC-2	6/4/2010	89	86	3.43				7.6	7.68	0.08			
NFRC SC-2	7/8/2010	135	129	4.55				7.82	7.97	0.15			
NFRC SC-2	8/3/2010	196	186	5.24				8.04	7.54	0.5			
NFRC SC-2	10/18/2010	219	198	10.07				8.03	7.47	0.56			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
NFRC SC-3	1/12/2010	288	257	11.38				7.8	7	0.8			
NFRC SC-3	2/23/2010	297	260	13.29				8	7.66	0.34			
NFRC SC-3	3/10/2010	304	270	11.85				8	7.68	0.32			
NFRC SC-3	4/14/2010	308	270	13.15				8.1	7.31	0.79			
NFRC SC-3	5/3/2010	109	96	12.68				7.6	7.46	0.14			
NFRC SC-3	6/4/2010	89	84	5.78				7.6	7.69	0.09			
NFRC SC-3	7/8/2010	136	130	4.51				7.9	7.97	0.07			
NFRC SC-3	8/3/2010	195	191	2.07				8.03	7.69	0.34			
NFRC SC-3	10/18/2010	218	197	10.12				8.04	7.56	0.48			
NFRC SC-4	1/11/2010	294	255	14.21				7.8	6.95	0.85			
NFRC SC-4	2/23/2010	303	260	15.28				7.9	7.49	0.41			
NFRC SC-4	3/10/2010	305	271	11.81				8	7.82	0.18			
NFRC SC-4	4/14/2010	316	270	15.70				8.1	7.47	0.63			
NFRC SC-4	5/3/2010	112	95	16.43				7.7	7.54	0.16			
NFRC SC-4	6/4/2010	89	86	3.43				7.6	7.71	0.11			
NFRC SC-4	7/8/2010	136	128	6.06				7.83	7.87	0.04			
NFRC SC-4	8/3/2010	196	203	3.51				8.06	7.88	0.18			
NFRC SC-4	10/18/2010	220	195	12.05				8.13	7.58	0.55			
NWID	2/22/2010	399	340	15.97				8.1	8.01	0.09			
NWID	3/10/2010	405	362	11.21				8.1	7.87	0.23			
NWID	4/15/2010	411	420	2.17				8.3	7.74	0.56			
NWID	5/3/2010	155	137	12.33				7.7	7.77	0.07			
NWID	6/4/2010	202	208	2.93				8	8.03	0.03			
NWID	7/10/2010	293	307	4.67				8.05	8.15	0.1			
NWID	8/3/2010	336	340	1.18				8.19	7.79	0.4			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
R10	1/11/2010	283	241	16.03				7.7	7.06	0.64			
R10	2/23/2010	292	235	21.63	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on February 23, 2010 suggests calibration on field meter may have been off.	8.1	7.87	0.23			
R10	3/10/2010	292	259	11.98				8	7.79	0.21			
R10	4/11/2010	298	240	21.56	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on April 11, 2010 suggests calibration on field meter may have been off.	7.9	7.43	0.47			
R10	5/3/2010	111	95	15.53				7.7	7.7	0			
R10	6/5/2010	98	103	4.98				7.7	7.93	0.23			
R10	7/8/2010	132	125	5.45				7.84	7.94	0.1			
R10	8/3/2010	190	188	1.06				8.11	7.46	0.65			
R10	9/1/2010	193	187	3.16				7.99	7.79	0.2			
R10	10/19/2010	213	207	2.86				7.95	7.65	0.3			
R10	11/10/2010	256	234	8.98				7.94	7.86	0.08			
R10	12/1/2010	258	350	30.26	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	8.03	7.58	0.45			
R7	1/11/2010	254	235	7.77				7.9	7.21	0.69			
R7	2/23/2010	266	260	2.28				8	7.95	0.05			
R7	3/10/2010	268	239	11.44				8.1	7.78	0.32			
R7	4/11/2010	275	240	13.59				8.1	7.78	0.32			
R7	5/3/2010	106	91	15.23				7.8	7.66	0.14			
R7	6/5/2010	101	97	4.04				7.7	7.85	0.15			
R7	7/8/2010	128	122	4.80				7.89	8.04	0.15			
R7	8/3/2010	180	183	1.65				8.13	7.37	0.76			
R7	9/1/2010	180	186	3.28				8.03	7.84	0.19			
R7	10/19/2010	198	198	0.00				7.98	7.2	0.78			
R7	11/10/2010	229	215	6.31				8.02	7.9	0.12			
R7	12/1/2010	239	100	82.01	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	8.04	7.12	0.92			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
R8	1/11/2010	256	221	14.68				7.9	6.91	0.99			
R8	2/23/2010	252	220	13.56				8.2	7.94	0.26			
R8	3/10/2010	271	244	10.49				8.1	7.84	0.26			
R8	4/11/2010	274	230	17.46				8.1	7.73	0.37			
R8	5/3/2010	101	87	14.89				7.7	7.51	0.19			
R8	6/5/2010	89	89	0.00				7.7	7.92	0.22			
R8	7/8/2010	123	121	1.64				7.99	8.09	0.1			
R8	8/3/2010	176	177	0.57				8.13	7.26	0.87			
R8	9/1/2010	172	172	0.00				8	7.66	0.34			
R8	10/19/2010	191	193	1.04				7.98	7.8	0.18			
R8	11/10/2010	229	195	16.04				8.03	7.76	0.27			
R8	12/1/2010	233	100	79.88	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	8.05	7.28	0.77			
R9	1/11/2010	279	272	2.54				7.8	7.11	0.69			
R9	2/23/2010	289	250	14.47				8.1	7.73	0.37			
R9	3/10/2010	293	262	11.17				8.1	7.88	0.22			
R9	4/11/2010	292	230	23.75	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains. Multiple flagged conductivity values on April 11, 2010 suggests calibration on field meter may have been off.	8.1	7.81	0.29			
R9	5/3/2010	108	95	12.81				7.7	7.78	0.08			
R9	6/5/2010	97	101	4.04				7.7	8.05	0.35			
R9	7/8/2010	1	127	196.88	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	7.91	8.01	0.1			
R9	8/3/2010	190	194	2.08				8.15	7.47	0.68			
R9	9/1/2010	197	187	5.21				7.88	7.81	0.07			
R9	10/19/2010	213	211	0.94				7.99	7.6	0.39			
R9	11/10/2010	254	254	0.00				8.01	7.87	0.14			
R9	12/1/2010	260	120	73.68	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	7.86	7.46	0.4			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
RCSG#4	1/12/2010	313	310	0.96				7.9	7.23	0.67			
RCSG#4	3/10/2010	320	285	11.57				8	7.75	0.25			
RCSG#4	4/13/2010	331	300	9.83				7.8	7.35	0.45			
RCSG#4	5/3/2010	130	115	12.24				7.8	7.64	0.16			
RCSG#4	6/4/2010	92	92	0.00				7.6	7.84	0.24			
RCSG#4	7/8/2010	126	126	0.00				7.78	7.94	0.16			
RCSG#4	8/3/2010	200	207	3.44				8	7.5	0.5			
SP5-6	6/1/2010	1050	1172	10.98				8	7.45	0.55			
SP5-6	7/10/2010	1080	1049	2.91				7.65	7.5	0.15			
SP5-6	8/5/2010	1280	1216	5.13				7.87	7.49	0.38			
SP5-6	9/1/2010	1450	1439	0.76				7.91	7.63	0.28			
SP5-6	10/6/2010	1590	1786	11.61				8.02	6.84	1.18	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
W10	5/3/2010	77	109	34.41	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.7	7.71	0.01			
W10	6/5/2010	75	68	9.79				7.6	7.76	0.16			
W10	7/10/2010	103	101	1.96				7.67	8.08	0.41			
W5	6/1/2010	752	1680	76.32	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	8.1	7.63	0.47			
W8	6/17/2010	116	106	9.01				7.8	7.72	0.08			
Weir 3	3/4/2010	1780	1730	2.85				7.8	6.97	0.83			
Weir 3	8/5/2010	1840	1870	1.62				7.61	6.96	0.65			
X10	1/11/2010	326	286	13.07				8	7.13	0.87			
X10	2/22/2010	329	280	16.09				8	7.46	0.54			
X10	3/10/2010	334	292	13.42				8.1	7.51	0.59			
X10	4/13/2010	340	310	9.23				7.9	7.55	0.35			
X10	5/3/2010	129	112	14.11				7.8	7.79	0.01			
X10	6/4/2010	99	111	11.43				7.8	8.05	0.25			
X10	7/8/2010	134	128	4.58				7.95	8.09	0.14			
X10	8/3/2010	205	205	0.00				8.18	8.01	0.17			
X10	9/2/2010	196	194	1.03				8.01	7.42	0.59			
X10	10/21/2010	257	244	5.19				8.16	7.93	0.23			
X10	11/9/2010	274	268	2.21				8.18	7.52	0.66			
X10	12/1/2010	275	240	13.59				8.03	7.87	0.16			
X11	3/4/2010	2650	2460	7.44				7.6	7.05	0.55			
X11	8/5/2010	2540	2289	10.40				7.37	6.91	0.46			
X12	3/4/2010	1560	1460	6.62				7.8	7.27	0.53			
X12	8/5/2010	1490	1243	18.08				7.65	7.3	0.35			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
 2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X13	1/11/2010	1700	1430	17.25				7.9	6.08	1.82	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.
X13	2/17/2010	2220	2240	0.90				7.8	7.17	0.63			
X13	3/2/2010	2220	1780	22.00	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.7	7	0.7			
X13	4/15/2010	2100	2220	5.56				7.8	6.96	0.84			
X13	5/6/2010	2240	2229	0.49				7.6	7.13	0.47			
X13	6/10/2010	2030	1859	8.79				8.0	7.00	1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X13	7/11/2010	2160	1999	7.74				7.49	7.38	0.11			
X13	8/5/2010	2110	1798	15.97				7.51	7.12	0.39			
X13	9/2/2010	2050	2164	5.41				7.6	7.2	0.4			
X13	10/7/2010	2170	1270	52.33	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains.	7.55	6.19	1.36	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X13	11/4/2010	2200	2165	1.60				7.8	7.17	0.63			
X13	12/2/2010	2310	2400	3.82				7.57	7.07	0.5			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X14	1/11/2010	741	624	17.14				8	6.76	1.24	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X14	2/22/2010	765	720	6.06				8	6.91	1.09	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X14	3/10/2010	837	757	10.04				7.9	7.71	0.19			
X14	3/22/2010	894	749	17.65				8.2	7.49	0.71			
X14	3/30/2010	1130	1030	9.26				8	7.37	0.63			
X14	4/6/2010	1170	1100	6.17				8	7.4	0.6			
X14	4/13/2010	1160	1027	12.16				8	7.85	0.15			
X14	4/20/2010	873	1914	74.70	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	8	7.44	0.56			
X14	4/27/2010	362	357	1.39				8	7.3	0.7			
X14	5/4/2010	563	506	10.66				8	7.53	0.47			
X14	5/11/2010	501	471	6.17				8	7.65	0.35			
X14	5/18/2010	382	360	5.93				7.8	8.02	0.22			
X14	5/25/2010	229	243	5.93				7.8	8.01	0.21			
X14	6/1/2010	309	345	11.01				7.3	8.14	0.84			
X14	6/8/2010	376	380	1.06				7.9	7.93	0.03			
X14	6/15/2010	446	420	6.00				8.1	7.87	0.23			
X14	6/22/2010	454	438	3.59				8.1	7.75	0.35			
X14	6/29/2010	511	501	1.98				7.95	7.35	0.6			
X14	7/6/2010	383	395	3.08				7.8	8.01	0.21			
X14	7/13/2010	500	456	9.21				7.78	8.19	0.41			
X14	7/20/2010	594	1693	96.11	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	7.99	7.76	0.23			
X14	7/20/2010	594	563	5.36	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	7.99	7.76	0.23			
X14	7/27/2010	637	606	4.99				7.99	8.11	0.12			
X14	8/3/2010	311	338	8.32				8.08	7.99	0.09			
X14	8/10/2010	638	658	3.09				7.78	7.92	0.14			
X14	8/17/2010	660	614	7.22				8.11	7.92	0.19			
X14	8/24/2010	496	423	15.89				8.09	8.67	0.58			
X14	8/31/2010	610	650	6.35				8.17	7.96	0.21			
X14	9/7/2010	503	532	5.60				7.93	8.27	0.34			
X14	10/21/2010	471	426	10.03				8.14	7.8	0.34			
X14	11/9/2010	491	500	1.82				8.19	7.89	0.3			
X14	11/18/2010	1080	1010	6.70				8.05	7.75	0.3			
X14	11/25/2010	1020	1008	1.18				7.73	8.21	0.48			
X14	12/2/2010	984	1000	1.61				7.95	7.7	0.25			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDf µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X2	1/11/2010	305	266	13.66				7.5	6.94	0.56			
X2	2/22/2010	322	288	11.15				7.8	7.31	0.49			
X2	3/10/2010	318	132	82.67	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of sample had been discarded.	7.8	7.27	0.53			
X2	4/14/2010	352	290	19.31				8.2	7.03	1.17	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X2	5/3/2010	113	188	49.83	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.7	7.46	0.24			
X2	6/4/2010	92	94	2.15				7.6	7.81	0.21			
X2	7/8/2010	139	131	5.93				7.91	7.82	0.09			
X2	8/3/2010	201	197	2.01				8.16	7.68	0.48			
X2	9/2/2010	208	189	9.57				7.96	7.37	0.59			
X2	10/18/2010	226	220	2.69				7.96	7.6	0.36			
X2	11/9/2010	268	258	3.80				8.05	7.98	0.07			
X2	12/1/2010	271	130	70.32	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains. Multiple flagged conductivity values on December 1, 2010 suggests calibration on field meter may have been off.	7.92	7.2	0.72			
X22b	1/11/2010	1360	1146	17.08				7.5	6.4	1.1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X22b	2/22/2010	1290	1210	6.40				7.5	7.44	0.06			
X22b	3/10/2010	1270	1171	8.11				7.6	7.04	0.56			
X22b	4/13/2010	1280	1230	3.98				7.3	6.89	0.41			
X22b	5/3/2010	369	344	7.01				7.4	7.23	0.17			
X22b	6/4/2010	1200	1178	1.85				7.5	7.14	0.36			
X22b	7/10/2010	1230	1163	5.60				7.43	7.33	0.1			
X22b	8/3/2010	1240	1215	2.04				7.63	6.55	1.08	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X22b	9/1/2010	1270	1222	3.85				7.64	7.25	0.39			
X22b	10/20/2010	1310	1328	1.36				7.67	6.25	1.42	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X22b	11/8/2010	1340	1190	11.86				7.69	7.46	0.23			
X22b	12/1/2010	1350	1340	0.74				7.63	6.9	0.73			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X23	1/12/2010	8450	7990	5.60				6.1	6.23	0.13			
X23	4/27/2010	7030	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			2.9	2.96	0.06			
X23	5/6/2010	7450	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.3	6.55	0.25			
X23	6/10/2010	7920	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.9	6.99	1.09	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X23	7/10/2010	8090	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.9	6.16	0.26			
X23	8/5/2010	7900	7450	5.86				6.28	7.12	0.84			
X23	9/2/2010	7900	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.32	6.18	0.14			
X23	10/7/2010	7610	4300	55.58	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains.	6.05	6.19	0.14			
X23	11/4/2010	7740	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.81	6.61	0.2			
X3	1/11/2010	303	266	13.01				7.6	6.92	0.68			
X3	2/22/2010	314	292	7.26				7.9	7.35	0.55			
X3	3/9/2010	316	260	19.44				7.9	7.39	0.51			
X3	4/14/2010	327	290	11.99				8.2	7.02	1.18	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X3	5/3/2010	117	114	2.60				7.4	7.74	0.34			
X3	6/4/2010	84	86	2.35				7.7	7.83	0.13			
X3	7/8/2010	118	111	6.11				7.85	7.91	0.06			
X3	8/3/2010	189	183	3.23				8.16	7.86	0.3			
X3	9/2/2010	186	205	9.72				7.99	7.34	0.65			
X3	10/21/2010	234	225	3.92				8.05	7.57	0.48			
X3	11/9/2010	258	256	0.78				8.1	7.92	0.18			
X3	12/1/2010	259	230	11.86				7.95	7.62	0.33			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X3A	9/2/2010	206	192	7.04				7.99	7.5	0.49			
X3A	10/21/2010	244	268	9.38				8.11	7.84	0.27			
X3A	11/9/2010	264	266	0.75				8.14	7.97	0.17			
X3A	12/1/2010	263	240	9.15				7.99	7.75	0.24			
X4	1/11/2010	2210	1791	20.94	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	3.4	3.02	0.38			
X4	2/22/2010	1970	1820	7.92				4	4.82	0.82			
X4	3/9/2010	1390	1350	2.92				6.5	6.35	0.15			
X4	4/13/2010	1340	1350	0.74				6.1	6.36	0.26			
X4	5/3/2010	1010	877	14.10				4.7	4.51	0.19			
X4	6/4/2010	1940	1868	3.78				3.2	3.12	0.08			
X4	7/10/2010	1930	1871	3.10				3.32	3.12	0.2			
X4	8/3/2010	1950	2020	3.53				3.39	460	456.61	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).
X4	8/3/2010	1950	2020	3.53				3.39	4.6	1.21	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Large discrepancy between lab and field values resolved, but small discrepancy between values still remains.
X4	9/2/2010	1880	1752	7.05				3.48	4.69	1.21	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X4	10/20/2010	1590	1511	5.10				5.61	6.65	1.04	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X4	11/8/2010	1860	1632	13.06				3.73	4.49	0.76			
X4	12/1/2010	1310	1429	8.69				6.32	6.36	0.04			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X5	3/22/2010	1810	1580	13.57				8.1	7.11	0.99			
X5	3/30/2010	1800	1700	5.71				7.9	7.02	0.88			
X5	4/6/2010	1880	1720	8.89				7.8	7	0.8			
X5	4/13/2010	1840	1561	16.41				7.6	7.41	0.19			
X5	4/20/2010	1820	1947	6.74				7.7	6.85	0.85			
X5	4/27/2010	1450	1399	3.58				7.9	7.19	0.71			
X5	5/4/2010	1620	1433	12.25				7.9	7.06	0.84			
X5	5/11/2010	1490	1390	6.94				7.9	7.45	0.45			
X5	5/18/2010	1350	1310	3.01				8	7.37	0.63			
X5	5/25/2010	1430	1441	0.77				7.9	7.51	0.39			
X5	6/1/2010	1670	1740	4.11				8.1	7.51	0.59			
X5	6/8/2010	1740	1664	4.47				7.9	7.49	0.41			
X5	6/15/2010	1760	1670	5.25				8.2	7.48	0.72			
X5	6/22/2010	1710	1605	6.33				8.2	7.63	0.57			
X5	6/29/2010	1770	1725	2.58				7.82	6.80	1.02	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X5	7/6/2010	2280	1705	28.86	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.89	7.57	0.32			
X5	7/13/2010	1810	1567	14.39				7.97	7.85	0.12			
X5	7/20/2010	1830	1674	8.90				7.85	7.69	0.16			
X5	7/27/2010	1780	1589	11.34				7.92	7.83	0.09			
X5	8/10/2010	1780	1806	1.45				7.76	8.02	0.26			
X5	8/17/2010	1750	1594	9.33				7.99	7.74	0.25			
X5	8/24/2010	1740	1266	31.54	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	8.01	7.98	0.03			
X5	8/31/2010	1770	1860	4.96				7.84	7.64	0.2			
X5	9/7/2010	1840	1708	7.44				7.84	7.65	0.19			
X5	11/18/2010	2360	2219	6.16				7.94	7.3	0.64			
X5	11/25/2010	2500	2414	3.50				7.43	7.57	0.14			
X5	12/2/2010	2470	2590	4.74				7.73	6.88	0.85			
X5P	1/11/2010	1860	1559	17.61				7.6	6.63	0.97			
X5P	2/22/2010	1740	1569	10.34				7.7	7.21	0.49			
X5P	3/2/2010	1750	1420	20.82	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.7	7.03	0.67			
X5P	4/13/2010	1780	1488	17.87				7.5	7.84	0.34			
X5P	5/3/2010	877	744	16.41				7.8	7.75	0.05			
X5P	6/4/2010	1740	1682	3.39				7.7	7.13	0.57			
X5P	7/10/2010	1780	1680	5.78				7.79	7.64	0.15			
X5P	8/3/2010	1800	1665	7.79				8	7.17	0.83			
X5P	9/2/2010	1760	1687	4.24				7.75	7.53	0.22			
X5P	10/20/2010	2070	1955	5.71				8.06	7.38	0.68			
X5P	11/8/2010	2150	1918	11.41				7.92	7.84	0.08			
X5P	12/1/2010	2130	2204	3.41				7.95	7.45	0.5			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-55: Rose Creek Drainage Water Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X7	6/1/2010	8550	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.4	5.59	0.19			
X7	10/6/2010	8490	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.18	5.42	0.24			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-56: Rose Creek Drainage Groundwater Quality
2010 QA/QC Field Blanks - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
P03-06-3	6/14/2010	FIELD BLANK	<0.5	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.0	0.60		<0.5	5.10	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	8.4	1	1	0	1	0	1	0	6	0	1.2	0	1	0.85	1	0	0	0.25	0
Comments			Blank concentration > PQL and correctly entered into emLine.									Blank concentration > PQL and correctly entered into emLine.										
Action			Let Value Stand									Let Value Stand										
Result			High blank value remains.									High blank value remains.										
SRK08-SP7B	7/25/2010	FIELD BLANK	<0.5	1	1.10	<0.5		1	<0.5	<0.5		<1	1.40		<0.5	5.67	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	2	2.2	1	0	1.8	1	1	0	1	0	2.8	0	1	0.28	1	0	0	0.25	0
Comments																						
Action																						
Result																						
X26	9/1/2010	FIELD BLANK	<0.5	<0.5	1.00	<0.5		1	<0.5	<0.5		4.0	1.30		<0.5	5.42	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	1	2	1	0	1.8	1	1	0	4	0	2.6	0	1	0.53	1	0	0	0.25	0
Comments																						
Action																						
Result																						
P01-01A	9/8/2010	FIELD BLANK	<0.5	1	1.50	<0.5		1	<0.5	<0.5		2.0	1.80		<0.5	6.07	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	2.2	3	1	0	2.4	1	1	0	2	0	3.6	0	1	0.12	1	0	0	0.25	0
Comments																						
Action																						
Result																						
X16B	9/8/2010	FIELD BLANK	<0.5	1	<0.5	<0.5		1	<0.5	<0.5		2.0	<0.5		<0.5	5.72	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	1.6	1	1	0	2.2	1	1	0	2	0	1	0	1	0.23	1	0	0	0.25	0
Comments																						
Action																						
Result																						
X24-96D	9/9/2010	FIELD BLANK	<0.5	1	1.50	<0.5		<0.5	<0.5	<0.5		2.0	1.80		<0.5	5.97	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	2.4	3	1	0	1	1	1	0	2	0	3.6	0	1	0.02	1	0	0	0.25	0
Comments																						
Action																						
Result																						
SRK08-SP7A	11/2/2010	FIELD BLANK	<0.5	<0.5	0.90	<0.5		<0.5	<0.5	<0.5		2.0	1.00		<0.5	5.65	<0.5			<1		
Deionized Water			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.005	<0.5	5.95	<0.5	<10.0	<0.5	<4.0	<0.1
Times greater than DI water			1	1	1.8	1	0	1	1	1	0	2	0	2	0	1	0.30	1	0	0	0.25	0
Comments																						
Action																						
Result																						

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit, or >1 pH unit difference from DI Water)

Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	Mn-d µg/L	Mo-d µg/L						
P03-06-3	6/14/2010	FIELD BLANK	<0.02	<3	<0.1	2.000	<50	<0.1	<1	<0.05	<0.01	<0.5	<1	<0.2	31.00	<0.05	<0.005	<0.05	3.000	<1						
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05						
		Times greater than DI water	4	15	5	100	1	10	200	1	2	100	10	4	31	1	0.01	1	60	20						
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.					
		Action	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Request Retest	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand						
		Result				High blank value remains.									Retest performed, see results below.				High blank value remains.							
P03-06-3 Retest	6/14/2010	FIELD BLANK													152.00											
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05						
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	152	0	0	0	0	0						
		Comments													Retest for June 14 P03-06-3 blank. Blank concentration > PQL and correctly entered into emLine.											
		Action													Let Value Stand											
		Result													New blank value entered into emLine.											
SRK08-SP7B	7/25/2010	FIELD BLANK	<0.02	4.00	<0.1	<1	<50	<0.1	<1	0.10	0.05	<0.5	<1	<0.2	9.00	<0.05	<0.005	0.16	12.000	<1						
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05						
		Times greater than DI water	4	20	5	50	1	10	200	2	10	100	10	4	9	1	0.01	3.2	240	20						
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration equal to PQL (detection limit for field blank higher than that used for DI water) and correctly entered into emLine.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.					
		Action	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Request Retest	Let Value Stand						
		Result				High blank value remains.					Blank value remains.				Blank value remains.				Retest performed, see results below.							
SRK08-SP7B Retest	7/25/2010	FIELD BLANK																		<1						
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05						
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0						
		Comments													Retest for July 25 SRK08-SP7B blank. Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.											
		Action																	Let Value Stand							
		Result													New blank value entered into emLine.											
X26	9/1/2010	FIELD BLANK	<0.02	<3	<0.1	<1	<50	<0.1	<1	0.14	<0.01	<0.5	<1	0.5000	22.00	<0.05	<0.005	0.12	6.000	<1						
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05						
		Times greater than DI water	4	15	5	50	1	10	200	2.8	2	100	10	10	22	1	0.01	2.4	120	20						
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank value correctly entered into emLine. However, blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank value correctly entered into emLine. However, blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.		
		Action	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Request Retest	Let Value Stand						
		Result													Blank value remains.				Retest performed, see results below.							

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-57: Rose Creek Drainage Groundwater Quality 2010 QA/QC Field Blanks - Dissolved Metals

Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	Mn-d µg/L	Mo-d µg/L			
X26 Retest	9/1/2010	FIELD BLANK	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	4.000	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0			
Comments			Retest for September 1 X26 field blank. Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.																				
Action			Let Value Stand																				
Result			New blank value entered into emLine.																				
P01-01A	9/8/2010	FIELD BLANK	<0.005	2.00	<0.02	0.810	<50	<0.01	<0.005	0.35	<0.005	0.0160	<0.1	0.1600	4.00	0.17	<0.0005	0.07	2.430	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	1	10	1	40.5	1	1	1	7	1	3.2	1	3.2	4	3.4	0.001	1.4	48.6	1			
Comments			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.					
Action			Let Value Stand			Request Retest			Let Value Stand			Request Retest			Request Retest								
Result			High blank value remains.			Retest performed, see results below.			High blank value remains.			Retest performed, see results below.			Retest performed, see results below.								
P01-01A Retest	9/8/2010	FIELD BLANK	<0.005	<0.2	<0.02	0.810	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	2.250	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	0	0	0	40.5	0	0	0	0	0	0	0	0	0	0	0	0	45	0			
Comments			Retest for September 8 P01-01A blank. Blank concentration > PQL and correctly entered into emLine.																				
Action			Let Value Stand																				
Result			New blank value entered into emLine.																				
X16B	9/8/2010	FIELD BLANK	<0.005	1.40	<0.02	0.330	<50	<0.01	<0.005	0.32	<0.005	0.0060	<0.1	0.1400	2.00	0.09	<0.0005	0.06	1.760	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	1	7	1	16.5	1	1	1	6.4	1	1.2	1	2.8	2	1.8	0.001	1.2	35.2	1			
Comments			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.					
Action			Let Value Stand			Let Value Stand			Let Value Stand			Request Retest			Request Retest								
Result			High blank value remains.			High blank value remains.			High blank value remains.			Retest performed, see results below.			Retest performed, see results below.								
X16B Retest	9/8/2010	FIELD BLANK	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	1.610	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.2	0			
Comments			Retest for September 8 X16B blank. Blank concentration > PQL and correctly entered into emLine.																				
Action			Let Value Stand																				
Result			New blank value entered into emLine.																				
X24-96D	9/9/2010	FIELD BLANK	<0.02	<3	<0.1	<1	<50	<0.1	<1	0.14	<0.01	<0.5	<1	<0.2	<5	0.22	<0.005	<0.05	<1	<1			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	4	15	5	50	1	200	2	2.8	2	100	10	4	5	4.4	0.01	1	20	20			
Comments			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.																				
Action			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand		
Result			Let Value Stand																				
X24-96D Retest	9/9/2010	FIELD BLANK	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.005	<0.1	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Comments																							
Action																							
Result																							

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-57: Rose Creek Drainage Groundwater Quality
2010 QA/QC Field Blanks - Dissolved Metals

Station	Date	Sample Type	Ag-d µg/L	Al-d µg/L	As-d µg/L	Ba-d µg/L	B-d µg/L	Be-d µg/L	Bi-d µg/L	Ca-d mg/L	Cd-d µg/L	Co-d µg/L	Cr-d µg/L	Cu-d µg/L	Fe-d µg/L	K-d mg/L	Li-d mg/L	Mg-d mg/L	Mn-d µg/L	Mo-d µg/L			
SRK08-SP7A	11/2/2010	FIELD BLANK	<0.02	<3	<0.1	<1	<50	<0.1	<1	0.07	<0.01	<0.5	<1	<0.2	18.00	<0.05	<0.005	<0.05	3.000	<1			
		Deionized Water	<0.005	<0.2	<0.02	<0.02	<50	<0.01	<0.005	<0.05	<0.005	<0.1	<0.05	<0.05	<1	<0.05	<0.5	<0.05	<0.05	<0.05			
		Times greater than DI water	4	15	5	50	1	10	200	1.4	2	100	10	4	18	1	0.01	1	60	20			
		Comments	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.		
		Action	Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand		
		Result													High blank value remains.						High blank value remains.		

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Station	Date	Sample Type	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L
P03-06-3	6/14/2010	FIELD BLANK	<0.05	<1	2.4000	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	<5	<0.5
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	50	480	25	2.5	1	500	20	10	25	50	25	50	5
		Comments		Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration > PQL and correctly entered into emLine.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.
		Action		Let Value Stand	Request Retest	Let Value Stand			Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand
		Result			Retest performed, see results below.											
P03-06-3 Retest	6/14/2010	FIELD BLANK			12.6000											
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	2520	0	0	0	0	0	0	0	0	0	0	0
		Comments			Retest for June 14 P03-06-3 blank. Blank concentration > PQL and correctly entered into emLine.											
		Action			Let Value Stand											
		Result			New blank value entered into emLine.											
SRK08-SP7B	7/25/2010	FIELD BLANK	<0.05	<1	0.4000	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	68.000	<0.5
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	50	80	25	2.5	1	500	20	10	25	50	25	680	5
		Comments		Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration > PQL and correctly entered into emLine.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.
		Action		Let Value Stand	Let Value Stand	Let Value Stand			Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Request Retest	Let Value Stand
		Result			High blank value remains.											
SRK08-SP7B Retest	7/25/2010	FIELD BLANK													<5	
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	50	0
		Comments													Retest for July 25 SRK08-SP7B blank. Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	
		Action													Let Value Stand	
		Result													New blank value entered into emLine.	
X26	9/1/2010	FIELD BLANK	<0.05	<1	0.3000	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	27.000	<0.5
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	50	80	25	2.5	1	500	20	10	25	50	25	270	5
		Comments		Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank value correctly entered into emLine. However, blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration > PQL and correctly entered into emLine.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.
		Action		Let Value Stand	Let Value Stand	Let Value Stand			Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Request Retest	Let Value Stand
		Result			Blank value remains.										Retest performed, see results below.	

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Station	Date	Sample Type	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L
X26 Retest	9/1/2010	FIELD BLANK													17.000	
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	0	0	0	0	0	0	0	0	0	0	170	0
		Comments													Retest for September 1 X26 field blank. Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	
		Action													Let Value Stand	
		Result													New blank value entered into emLine.	
P01-01A	9/8/2010	FIELD BLANK	0.08	0.070	0.5150	<0.02	<0.04	<100	<0.01	0.92	<0.5	<0.002	0.0350	<0.2	2.400	<0.1
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1.6	3.5	103	1	1	1	1	18.4	1	1	17.5	1	24	1
		Comments			Blank concentration > PQL and correctly entered into emLine.					Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.	
		Action			Request Retest					Let Value Stand			Let Value Stand		Request Retest	
		Result			Retest performed, see results below.					High blank value remains.			High blank value remains.		Retest performed, see results below.	
P01-01A Retest	9/8/2010	FIELD BLANK			0.5720										2.400	
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	114.4	0	0	0	0	0	0	0	0	0	24	0
		Comments			Retest for September 8 P01-01A blank. Blank concentration > PQL and correctly entered into emLine.										Retest for September 8 P01-01A blank. Blank concentration > PQL and correctly entered into emLine.	
		Action			Let Value Stand										Let Value Stand	
		Result			New blank value entered into emLine.										New blank value entered into emLine.	
X16B	9/8/2010	FIELD BLANK	0.09	0.040	0.3280	<0.02	<0.04	<100	<0.01	0.82	<0.5	<0.002	0.0190	<0.2	5.400	<0.1
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1.8	2	65.6	1	1	1	1	16.4	1	1	9.5	1	54	1
		Comments			Blank concentration > PQL and correctly entered into emLine.					Blank concentration > PQL and correctly entered into emLine.			Blank concentration > PQL and correctly entered into emLine.		Blank concentration > PQL and correctly entered into emLine.	
		Action			Request Retest					Let Value Stand			Let Value Stand		Request Retest	
		Result			Retest performed, see results below.					High blank value remains.			High blank value remains.		Retest performed, see results below.	
X16B Retest	9/8/2010	FIELD BLANK			0.3340										5.400	
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	0	0	66.8	0	0	0	0	0	0	0	0	0	54	0
		Comments			Retest for September 8 X16B blank. Blank concentration > PQL and correctly entered into emLine.										Retest for September 8 X16B blank. Blank concentration > PQL and correctly entered into emLine.	
		Action			Let Value Stand										Let Value Stand	
		Result			New blank value entered into emLine.										New blank value entered into emLine.	
X24-96D	9/9/2010	FIELD BLANK	1.26	<1	<0.2	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	<5	<0.5
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	25.2	50	40	25	2.5	1	500	20	10	25	50	25	50	5
		Comments	Blank concentration > PQL and correctly entered into emLine.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.
		Action	Request Retest	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand
		Result	Retest performed, see results below.													
X24-96D Retest	9/9/2010	FIELD BLANK	1.31													
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.5	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	26.2	0	0	0	0	0	0	0	0	0	0	0	0	0
		Comments	Retest for September X24-96D blank. Blank concentration > PQL and correctly entered into emLine.													
		Action	Let Value Stand													
		Result	New blank value entered into emLine.													

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-57: Rose Creek Drainage Groundwater Quality
2010 QA/QC Field Blanks - Dissolved Metals

Station	Date	Sample Type	Na-d mg/L	Ni-d µg/L	Pb-d µg/L	Sb-d µg/L	Se-d µg/L	Si-d µg/L	Sn-d µg/L	Sr-d µg/L	Ti-d µg/L	Tl-d µg/L	U-d µg/L	V-d µg/L	Zn-d µg/L	Zr-d µg/L
SRK08-SP7A	11/2/2010	FIELD BLANK	<0.05	<1	<0.2	<0.5	<0.1	<100	<5	<1	<5	<0.05	<0.1	<5	9.000	<0.5
		Deionized Water	<0.05	<0.02	<0.005	<0.02	<0.04	<100	<0.01	<0.05	<0.02	<0.002	<0.002	<0.2	<0.1	<0.1
		Times greater than DI water	1	50	40	25	2.5	1	500	20	10	25	50	25	90	5
		Comments		Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.			Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank value correctly entered into emLine. However concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.	Blank concentration not > PQL (detection limit for field blank higher than that used for DI water). Therefore, comparison not valid in this case.
		Action		Let Value Stand	Let Value Stand	Let Value Stand			Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand	Let Value Stand
		Result													High blank value remains.	

Blank value < PQL
 Blank value is a detection limit higher than that of DI water
 Blank value > PQL and < retest limit
 Blank value > retest limit (20X DI Water Detection Limit)

Table C-58: Rose Creek Drainage Groundwater Quality
2010 QA/QC Duplicates - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH (blank)	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X26	6/13/2010	M	<0.5	288	340	<0.5		3040	4			<0.5		4190		410	<0.5	<0.5	6.4	3000				21
X26	6/13/2010	DUPLICATE	<0.5	276	350	<0.5		3020	4.2			<0.5		4200		420	<0.5	<0.5	6.5	3000				34
RPD (%)			N/A	4.26	2.90	N/A	N/A	0.66	4.88	N/A	N/A	N/A	N/A	0.24	N/A	2.41	N/A	N/A	0.10	0.00	N/A	N/A	47.27	N/A
Comments																								
Action																								
Result																								
P03-06-2	6/14/2010	M	71.2	731	<0.5	<0.5		1980	2.9			<0.5		4000		<0.5	<0.5	4.2	3200					910
P03-06-2	6/14/2010	DUPLICATE	<0.5	2140	<0.5	<0.5		1650	4.5			<0.5		4500		<0.5	<0.5	4.4	3900					2300
RPD (%)			N/A	98.15	N/A	N/A	N/A	18.18	43.24	N/A	N/A	N/A	N/A	11.76	N/A	N/A	N/A	N/A	0.20	19.72	N/A	N/A	86.60	N/A
Comments			Both values > PQL and correctly entered into emLine.																					
Action			Request Retest																					
Result			Retest performed, see results below.																					
Discrepancy between values remains. Retest not carried out because remainder of samples had been discarded.																								
P03-06-2 Retest	6/14/2010	M		700.00																				
P03-06-2 Retest	6/14/2010	DUPLICATE		2140.00																				
RPD (%)			N/A	101.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Comments			Main sample retested but request for retest on duplicate sample submitted too late. Remainder of sample had been discarded.																					
Action			Let Value Stand																					
Result			New value entered into emLine.																					
P96-6	6/15/2010	M	<0.5	43.5	320	<0.5		724	0.7			<0.5		1170		390	<0.5	7.6	350					300
P96-6	6/15/2010	DUPLICATE	<0.5	37.4	320	<0.5		703	0.7			<0.5		1190		390	<0.5	7.5	350					410
RPD (%)			N/A	15.08	0.00	N/A	N/A	2.94	0.00	N/A	N/A	N/A	N/A	1.69	N/A	0.00	N/A	N/A	0.10	0.00	N/A	N/A	30.99	N/A
Comments																								
Action																								
Result																								
P09-SIS3	7/24/2010	M	<0.5	860.00	170.00	<0.5		5820.00	4.90			<0.5		7720.00		210.00	<0.5	6.65	7200.00					1600.00
P09-SIS3	7/24/2010	DUPLICATE	<0.5	862.00	170.00	<0.5		5930.00	4.80			<0.5		7760.00		210.00	<0.5	6.60	7700.00					840.00
RPD (%)			N/A	0.23	0.00	N/A	N/A	1.87	2.06	N/A	N/A	N/A	N/A	0.52	N/A	0.00	N/A	N/A	0.05	6.71	N/A	N/A	62.30	N/A
Comments			Both values > PQL and correctly entered into emLine.																					
Action			Let Value Stand																					
Result			Discrepancy between values remains. Retest not carried out because remainder of samples had been discarded.																					
P01-02A	9/8/2010	M	<0.5	14.80	260.00	<0.5		423.00	<0.5			<0.5		794.00		310.00	<0.5	7.95	180.00					24.00
P01-02A	9/8/2010	DUPLICATE	<0.5	8.10	260.00	<0.5		418.00	<0.5			<0.5		803.00		310.00	<0.5	7.81	160.00					39.00
RPD (%)			N/A	58.52	0.00	N/A	N/A	1.19	N/A	N/A	N/A	N/A	N/A	1.13	N/A	0.00	N/A	N/A	0.14	11.76	N/A	N/A	47.62	N/A
Comments			Both values > PQL and correctly entered into emLine.																					
Action			Request Retest																					
Result			Retest performed, see results below.																					
RPD > 50%																								

Table C-58: Rose Creek Drainage Groundwater Quality
2010 QA/QC Duplicates - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH (blank)	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
P01-02A Retest	9/8/2010	M		3.20																				
P01-02A Retest	9/8/2010	DUPLICATE		3.40																				
RPD (%)			N/A	6.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Comments			Retest for September 8 P01-02A sample and duplicate. Both values > PQL and correctly entered into emLine.																					
Action			Let Value Stand																					
Result			New values entered into emLine.																					
P03-04-6	9/20/2010	M	<0.5	2900.00	85.00	<0.5		1760.00	0.60			<0.5		5440.00		100.00		<0.5	6.22	5200.00				130.00
P03-04-6	9/20/2010	DUPLICATE	<0.5	2850.00	31.00	<0.5		1730.00	0.90			<0.5		5370.00		38.00		<0.5	5.89	5100.00				110.00
RPD (%)			N/A	1.74	93.10	N/A	N/A	1.72	40.00	N/A	N/A	N/A	N/A	1.30	N/A	89.86	N/A	N/A	0.33	1.94	N/A	N/A	16.67	N/A
Comments					Both values > PQL and correctly entered into emLine.										Both values > PQL and correctly entered into emLine.									
Action					Request Retest										Request Retest									
Result					Retest performed, see results below.										Retest performed, see results below.									
P03-04-6 Retest	9/20/2010	M			<0.5											<0.5								
P03-04-6 Retest	9/20/2010	DUPLICATE			<0.5											<0.5								
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Comments					Retest for September 20 P03-04-6 sample and duplicate. Both values > PQL and correctly entered into emLine.										Retest for September 20 P03-04-6 sample and duplicate. Both values > PQL and correctly entered into emLine.									
Action					Let Value Stand										Let Value Stand									
Result					New values entered into emLine.										New values entered into emLine.									
P09-SIS2	11/2/2010	M	<0.5	917.00	190.00	<0.5		7270.00	6.40			<0.5		9340.00		230.00		<0.5	6.93	8800.00				1500.00
P09-SIS2	11/2/2010	DUPLICATE	<0.5	936.00	190.00	<0.5		7280.00	6.20			<0.5		9300.00		240.00		<0.5	6.92	9500.00				1300.00
RPD (%)			N/A	2.05	0.00	N/A	N/A	0.14	3.17	N/A	N/A	N/A	N/A	0.43	N/A	4.26	N/A	N/A	0.01	7.65	N/A	N/A	14.29	N/A
Comments																								
Action																								
Result																								

RPD > 50%

Table C-59: Rose Creek Drainage Groundwater Quality 2010 QA/QC Duplicates - Dissolved Metals

Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
X26	6/13/2010	M	0.08		13	3.4	7	<100	0.3	<2	563	27	504	<2	0.9	85700	16.2	0.274	397	14600	<2	63.9	1380	59	<1	1030	<0.2	7050	<10	3410	<10	1.5	14.8	<10	92900	<1	
X26	6/13/2010	DUPLICATE	0.05		7	3.4	7	<50	0.3	<1	551	25.8	516	<1	1.1	84000	17.1	0.267	399	14600	<1	64.7	1360	55.8	0.9	1040	<0.1	6740	<5	3420	<5	1.57	14.8	<5	85500	<0.5	
	RPD (%)		46.15	60.00	0.00	0.00	N/A	0.00	N/A	2.15	4.55	2.35	N/A	20.00	2.00	N/A	5.41	2.59	0.50	0.00	N/A	1.24	1.46	5.57	N/A	0.97	N/A	4.50	N/A	0.29	N/A	4.56	0.00	N/A	8.30	N/A	
	Comments		Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																																		
	Action		Let Value Stand																																		
	Result		Discrepancy between values remains.																																		
P03-06-2	6/14/2010	M	<0.04		128	0.4	14	<100	0.3	<2	529	20.2	863	<2	0.7	444000	5.7	0.049	161	105000	3	33.2	1000	2.8	<1	1090	<0.2	19700	<10	1760	<10	<0.1	1.6	<10	8010	<1	
P03-06-2	6/14/2010	DUPLICATE	<0.08		451	<0.4	11	<200	1	<4	412	47.6	838	<4	<0.8	986000	6.5	0.079	152	87800	<4	19.7	861	1.7	<2	1270	<0.4	21600	<20	1520	<20	<0.2	2.3	<20	13900	<2	
	RPD (%)		N/A	111.57	N/A	24.00	N/A	107.69	N/A	24.87	80.83	2.94	N/A	N/A	75.80	N/A	13.11	46.88	5.75	17.84	N/A	51.04	14.94	48.89	N/A	15.25	N/A	9.20	N/A	14.63	N/A	N/A	35.90	N/A	53.77	N/A	
	Comments		Both values > PQL and correctly entered into emLine.			Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.			Both values > PQL and correctly entered into emLine.			Both values > PQL and correctly entered into emLine.			Both values > PQL and correctly entered into emLine.			Both values > PQL and correctly entered into emLine.																			
	Action		Request Retest			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand			Let Value Stand																			
	Result		Retest performed, see results below.			Discrepancy between values remains.			Discrepancy between values remains.			Discrepancy between values remains.			Discrepancy between values remains.			Discrepancy between values remains.																			
P03-06-2 Retest	6/14/2010	M			201.00																																
P03-06-2 Retest	6/14/2010	DUPLICATE			483.00																																
	RPD (%)		N/A	82.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Comments		Retest for June 14 P03-06-2 sample and duplicate. Both values > PQL and correctly entered into emLine.																																		
	Action		Let Value Stand																																		
	Result		New values entered into emLine.																																		
P96-6	6/15/2010	M	<0.005		2.6	0.11	18.7	<50	0.07	<0.005	188	0.219	0.023	<0.1	0.65	7	4.55	0.0374	61.5	2.24	<0.05	7.62	13.9	0.132	<0.02	153	2.89	10600	<0.01	619	<0.5	0.003	26.1	<0.2	419	<0.1	
P96-6	6/15/2010	DUPLICATE	<0.005		2.8	0.09	18.2	<50	0.07	<0.005	185	0.228	0.017	<0.1	0.6	8	4.42	0.0364	58.9	2.04	<0.05	7.26	13	0.204	<0.02	147	2.84	10100	<0.01	610	<0.5	0.003	25.5	<0.2	400	<0.1	
	RPD (%)		N/A	7.41	20.00	2.71	N/A	0.00	N/A	1.61	4.03	30.00	N/A	8.00	13.33	N/A	2.90	2.71	4.32	9.35	N/A	4.84	6.69	42.86	N/A	4.00	1.75	4.83	N/A	1.46	N/A	0.00	2.33	N/A	4.64	N/A	
	Comments																																				
	Action																																				
	Result																																				
P09-SIS3	7/24/2010	M	0.40		205.00	2.00	24.00	<500	<1	<10	341.00	141.00	305.00	<10	17.00	266.00	15.00	0.20	1210.00	101000.00	<10	41.40	2900.00	<2	<5	2350.00	<1	12100.00	<50	1980.0	<50	<0.5	3.00	<50	493000.00	<5	
P09-SIS3	7/24/2010	DUPLICATE	0.40		348.00	<1	24.00	<500	<1	<10	384.00	139.00	292.00	<10	18.00	480.00	15.10	0.20	1210.00	99100.00	<10	41.60	2920.00	3.00	<5	2370.00	<1	13700.00	<50	1930.0	<50	<0.5	3.00	<50	494000.00	<5	
	RPD (%)		0.00	51.72	N/A	0.00	N/A	N/A	N/A	11.86	1.43	4.36	N/A	5.71	57.37	N/A	0.66	1.50	0.00	1.90	N/A	0.48	0.69	N/A	N/A	0.85	N/A	12.40	N/A	2.56	N/A	N/A	0.00	N/A	0.20	N/A	
	Comments		Both values > PQL and correctly entered into emLine.													Both values > PQL and correctly entered into emLine.																					
	Action		Let Value Stand																																		
	Result		Discrepancy between values remains.																																		
P01-02A	9/8/2010	M	<0.005		1.80	0.60	67.20	<50	<0.01	<0.005	117.00	0.09	0.70	<0.1	0.46	22.00	3.12	0.01	31.50	1300.00	1.48	9.07	2.56	0.10	0.04	61.00	<0.04	4950.00	<0.01	345.0	<0.5	0.012	2.96	<0.2	5.10	<0.1	
P01-02A	9/8/2010	DUPLICATE	<0.005		1.90	0.64	68.70	<50	<0.01	<0.005	118.00	0.10	0.70	<0.1	0.44	23.00	3.13	0.01	30.10	1340.00	1.55	8.86	2.53	0.09	0.04	65.00	<0.04	4990.00	<0.01	347.0	<0.5	0.012	2.97	<0.2	4.80	<0.1	
	RPD (%)		N/A	5.41	6.45	2.21	N/A	N/A	N/A	0.85	8.42	0.00	N/A	4.44	4.44	N/A	0.32	1.36	4.55	3.03	4.62	2.34	1.18	5.41	0.00	6.35	N/A	0.80	N/A	0.58	N/A	0.00	0.34	N/A	6.06	N/A	
	Comments																																				
	Action																																				
	Result																																				
P03-04-6	9/20/2010	M	<0.2		<30.0	15.00	<10.0	<500.0	<1.0	<10.0	500.00	<0.1	53.00	12.00	<2.0	1650000.00	10.60	<0.05	124.00	14900.00	<10.0	87.60	133.00	<2.0	<5.0	1630.00	<1.0	12000.00	<50.0	3060.0	<50.0	<0.5	3.00	<50.0	1970.00	<5.0	
P03-04-6	9/20/2010	DUPLICATE	<0.2		<30.0	16.00	<10.0	<500.0	<1.0	<10.0	491.00	<0.1	52.00	<10.0	<2.0	1620000.00	10.40	<0.05	123.00	14700.00	<10.0	89.40	122.00	<2.0	<5.0	1600.00	<1.0	11700.00	<50.0	3070.0	<50.0	<0.5	3.00	<50.0	1840.00	<5.0	
	RPD (%)		N/A	N/A	6.45	N/A	N/A	N/A	N/A	1.82	N/A	1.90	N/A	N/A	1.83	N/A	1.90	N/A	0.81	1.35	N/A	2.03	8.63	N/A	N/A	1.86	N/A	2.53	N/A	0.33	N/A	N/A	0.00	N/A	6.82	N/A	
	Comments																																				
	Action																																				
	Result																																				
P09-SIS2	11/2/2010	M	0.60		<60	<2	28.00	<1000	<2	<20	459.00	249.00	1180.00	<20	7.00	1130.00	15.00	0.18	1490.00	149000.00	<20	44.00	3560.00	<4	<10	3190.00	<2	12900.00	<100	2110.0	<100	<1	6.00	<100	667000.00	<10	
P09-SIS2	11/2/2010	DUPLICATE	0.50		<60	<2	21.00	<1000	<2	<20	441.00	244.00	1170.00	<20	5.00	1030.00	15.00	0.18	1500.00	150000.00	<20	44.00	3570.00	<4	<10	2980.00	<2	12300.00	<100	2070.0	<100	<1	6.00	<100	666000.00	<10	
	RPD (%)		18.18	N/A	N/A	28.57	N/A	N/A	N/A	4.00	2.03	0.85	N/A	33.33	9.26	N/A	0.00	2.75	0.67	0.67	N/A	0.00	0.28	N/A	N/A	6.81	N/A	4.76	N/A	1.91	N/A	N/A	0.00	N/A	0.15	N/A	
	Comments																																				
	Action																																				
	Result																																				

RPD > 50%
RPD > 100%

Table C-60: Rose Creek Drainage Groundwater Quality
2010 QA/QC Splits - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH (blank)	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
X17A	9/8/2010	M	<0.5	6.60	230.00	<0.5		280.00	<0.5			<0.5		517.0000		280.00		<0.5	7.80	39.000			32.000	
X17A	9/8/2010	SPLIT	<0.5	5.50	230.00	<0.5		263.00	<0.5			<0.5		519.0000		280.00		<0.5	7.81	36.000			35.000	
RPD (%)			N/A	18.18	0.00	N/A	N/A	6.26	N/A	N/A	N/A	N/A	N/A	0.39	N/A	0.00	N/A	N/A	0.01	8.00	N/A	N/A	8.96	N/A
Comments																								
Action																								
Result																								
X18B	9/8/2010	M	<0.5	17.90	250.00	<0.5		1000.00	1.00			<0.5		1650.00		300.00		<0.5	7.45	710.00			<1	
X18B	9/8/2010	SPLIT	<0.5	17.70	250.00	<0.5		980.00	1.00			<0.5		1630.00		300.00		<0.5	7.50	690.00			<1	
RPD (%)			N/A	1.12	0.00	N/A	N/A	2.02	0.00	N/A	N/A	N/A	N/A	1.22	N/A	0.00	N/A	N/A	0.05	2.86	N/A	N/A	N/A	N/A
Comments																								
Action																								
Result																								
P01-11	9/8/2010	M	<0.5	52.60	350.00	<0.5		1750.00	2.70			<0.5		2880.00		430.00		<0.5	7.24	1500.00			190.00	
P01-11	9/8/2010	SPLIT	<0.5	55.80	350.00	<0.5		1760.00	2.60			<0.5		2900.00		430.00		<0.5	7.15	1500.00			200.00	
RPD (%)			N/A	5.90	0.00	N/A	N/A	0.57	3.77	N/A	N/A	N/A	N/A	0.69	N/A	0.00	N/A	N/A	0.09	0.00	N/A	N/A	5.13	N/A
Comments																								
Action																								
Result																								
BH6	9/16/2010	M	<0.5	31.40	110.00	<0.5		181.00	<0.5			<0.5		413.00		140.00		<0.5	7.15	95.00			290.00	
BH6	9/16/2010	SPLIT	<0.5	30.00	110.00	<0.5		185.00	<0.5			<0.5		413.00		140.00		<0.5	7.16	94.00			220.00	
RPD (%)			N/A	4.56	0.00	N/A	N/A	2.19	N/A	N/A	N/A	N/A	N/A	0.00	N/A	0.00	N/A	N/A	0.01	1.06	N/A	N/A	27.45	N/A
Comments																								
Action																								
Result																								
P03-08-2	9/20/2010		<0.5	22.80	250.00	<0.5		347.00	<0.5			<0.5		678.00		300.00		<0.5	7.70	110.00			8.00	
P03-08-2	9/20/2010		<0.5	31.70	250.00	<0.5		338.00	<0.5			<0.5		669.00		300.00		<0.5	7.72	130.00			11.00	
RPD (%)			N/A	32.66	0.00	N/A	N/A	2.63	N/A	N/A	N/A	N/A	N/A	1.34	N/A	0.00	N/A	N/A	0.02	16.67	N/A	N/A	31.58	N/A
Comments																								
Action																								
Result																								
P03-01-2	9/21/2010	M	<0.5	3.30	210.00	3.40		214.00	<0.5			4.10		409.00		240.00		<0.5	8.36	22.00			2.00	
P03-01-2	9/21/2010	SPLIT	<0.5	24.80	210.00	<0.5		207.00	<0.5			<0.5		423.00		260.00		<0.5	8.08	23.00			2.00	
RPD (%)			N/A	153.02	0.00	N/A	N/A	3.33	N/A	N/A	N/A	N/A	N/A	3.37	N/A	8.00	N/A	N/A	0.28	4.44	N/A	N/A	0.00	N/A
Comments				Both values > PQL and correctly entered into emLine.																				
Action				Request Retest																				
Result				Retest performed, see results below.																				
				RPD > 50%																				

Table C-60: Rose Creek Drainage Groundwater Quality
2010 QA/QC Splits - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Chloride mg/L	CN(wad) mg/L	CNTHIO mg/L	CO3 mg/L	Colour TCU	COND µmho/cm	DOC mg/L	HCO3 mg/L	NH3 mg/L	OH mg/L	pH (blank)	SO4-d mg/L	TDS mg/L	TOC mg/L	TSS mg/L	TURB NTU
P03-01-2 Retest	9/21/2010	M		1.50																				
P03-01-2 Retest	9/21/2010	SPLIT		1.70																				
RPD (%)			N/A	12.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Comments			Retest for September 21 P03-01-2 sample and split. Both values correctly entered into emLine; however, neither value > PQL. Therefore, RPD analysis not valid in this case.																					
Action			Let Value Stand																					
Result			New values entered into emLine.																					
P03-05-2	9/22/2010	M	<0.5	90.80	90.00	<0.5		758.00	3.50			<0.5		1480.00		110.00		<0.5	6.89	860.00			11.00	
P03-05-2	9/22/2010	SPLIT	<0.5	96.90	89.00	<0.5		771.00	3.10			<0.5		1480.00		110.00		<0.5	6.92	800.00			13.00	
RPD (%)			N/A	6.50	1.12	N/A	N/A	1.70	12.12	N/A	N/A	N/A	N/A	0.00	N/A	0.00	N/A	N/A	0.03	7.23	N/A	N/A	16.67	N/A
Comments																								
Action																								
Result																								
SRK08-SPW2	12/1/2010	M	<0.5	279.00	210.00	<0.5		2760.00	3.00			<0.5		4130.00		250.00		<0.5	6.91	3000.00			2.00	
SRK08-SPW2	12/1/2010	SPLIT	<0.5	279.00	210.00	<0.5		2730.00	3.00			<0.5		4130.00		250.00		<0.5	6.87	3200.00			<1	
RPD (%)			N/A	0.00	0.00	N/A	N/A	1.09	0.00	N/A	N/A	N/A	N/A	0.00	N/A	0.00	N/A	N/A	0.04	6.45	N/A	N/A	N/A	N/A
Comments																								
Action																								
Result																								

RPD > 50%

Table C-61: Rose Creek Drainage Groundwater Quality 2010 QA/QC Splits - Dissolved Metals



Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	Hg-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d								
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L								
X17A	9/8/2010	M	<0.005	3.30		0.45	156.000	<50	<0.01	<0.005	75.80	0.04		0.0470	<0.1																					8.100	<0.1							
X17A	9/8/2010	SPLIT	<0.005	3.80		0.47	153.000	<50	<0.01	<0.005	71.40	0.04		0.0930	<0.1																						18.800	0.20						
		RPD (%)	N/A	14.08		4.35	1.94	N/A	N/A	N/A	5.98	7.79		65.71	N/A																						80.00	N/A						
		Comments												Both values > PQL and correctly entered into emLine.				Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.				Both values > PQL and correctly entered into emLine.				Both values > PQL and correctly entered into emLine.																		
		Action												Let Value Stand				Let Value Stand				Let Value Stand				Let Value Stand																		
		Result												Discrepancy between values remains.				Discrepancy between values remains.				Discrepancy between values remains.				Discrepancy between values remains.																		
X18B	9/8/2010	M	<0.005	3.20		0.19	77.20	<50	<0.01	<0.005	288.00	0.32		0.61	<0.1																						7.00	<0.1						
X18B	9/8/2010	SPLIT	<0.005	3.00		0.18	76.60	<50	<0.01	<0.005	281.00	0.32		0.61	<0.1																							6.30	<0.1					
		RPD (%)	N/A	6.45		5.41	0.78	N/A	N/A	N/A	2.46	0.31		1.48	N/A																						4.17	N/A						
		Comments																																										
		Action																																										
		Result																																										
P01-11	9/8/2010	M	<0.05	3.00		36.50	34.50	<500	<0.1	<0.05	505.00	<0.05		5.82	<1																						15.00	<1						
P01-11	9/8/2010	SPLIT	<0.05	3.00		35.00	33.90	<500	<0.1	<0.05	518.00	<0.05		5.45	<1																							15.00	<1					
		RPD (%)	N/A	0.00		4.20	1.75	N/A	N/A	N/A	2.54	N/A		6.57	N/A																							N/A	N/A					
		Comments																																										
		Action																																										
		Result																																										
BH6	9/16/2010	M	<0.005	40.60		0.10	34.40	<50	0.08	<0.005	50.50	1.32		28.60	<0.1																							3200.00	<0.1					
BH6	9/16/2010	SPLIT	<0.005	40.20		0.09	34.30	<50	0.07	0.01	52.90	1.27		27.60	<0.1																								3130.00	<0.1				
		RPD (%)	N/A	0.99		10.53	0.29	N/A	13.33	N/A	4.64	3.86		3.56	N/A																							16.95	N/A					
		Comments																																										
		Action																																										
		Result																																										
P03-08-2	9/20/2010	M	<0.02	8.00		0.30	184.00	<50	<0.1	<1	95.20	0.04		0.90	<1																							<5	<0.5					
P03-08-2	9/20/2010	SPLIT	<0.02	8.00		0.50	174.00	<50	<0.1	<1	91.10	0.04		0.90	<1																								<5	<0.5				
		RPD (%)	N/A	0.00		50.00	5.59	N/A	N/A	N/A	4.40	0.00		0.00	N/A																								15.38	N/A				
		Comments												Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.																														
		Action												Let Value Stand																														
		Result												Discrepancy between values remains.																														
P03-01-2	9/21/2010	M	<0.02	4.00		0.80	102.00	<50	<0.1	<1	66.60	<0.01		0.90	<1																								<5	<0.5				
P03-01-2	9/21/2010	SPLIT	<0.02	<3		0.80	107.00	<50	<0.1	<1	64.50	<0.01		0.80	<1																										6.00	<0.5		
		RPD (%)	N/A	N/A		0.00	4.78	N/A	N/A	N/A	3.20	N/A		11.76	N/A																								N/A	N/A				
		Comments																																										
		Action																																										
		Result																																										
P03-05-2	9/22/2010	M	<0.03	6.00		7.10	84.00	<300	<0.05	<0.03	233.00	<0.03		211.00	<0.5																									1510.00	<0.5			
P03-05-2	9/22/2010	SPLIT	<0.03	6.00		6.70	81.10	<300	<0.05	<0.03	239.00	<0.03		208.00	<0.5																										1470.00	<0.5		
		RPD (%)	N/A	0.00		5.80	3.51	N/A	N/A	N/A	2.54	N/A		1.43	N/A																										71.30	N/A		
		Comments												Both values > PQL and correctly entered into emLine.																														
		Action												Let Value Stand																														
		Result												Discrepancy between values remains.																														
SRK08-SPW2	12/1/2010	M	0.13	18.00		<0.4	18.00	<200	<0.4	<4	268.00	32.10		242.00	<4																										153000.00	<2		
SRK08-SPW2	12/1/2010	SPLIT	0.10	15.00		0.80	20.00	<200	<0.4	<4	269.00	32.30		241.00	<4																												152000.00	<2
		RPD (%)	26.09	18.18		N/A	10.53	N/A	N/A	N/A	0.37	0.62		0.41	N/A																											40.00	N/A	
		Comments																																										
		Action																																										
		Result																																										

RPD > 50%
 RPD > 100%

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
BH10A	9/16/2010	795	826.3	3.86				6.42	5.74	0.68			
BH10B	9/16/2010	1070	1010	5.77				6.31	5.53	0.78			
BH13B	9/21/2010	1290	984	26.91	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.47	8.26	0.79			
BH14A	6/11/2010	4000	3413	15.84				7.8	6.78	1.02	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
BH14A	9/21/2010	3880	2594	39.73	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.58	7.04	0.54			
BH14B	6/11/2010	4010	3508	13.35				7.6	6.81	0.79			
BH14B	9/21/2010	4020	2702	39.21	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.61	7.25	0.36			
BH5	9/16/2010	667	710.2	6.27				6.23	5.63	0.6			
BH6	9/16/2010	413	450.8	8.75				7.15	6.12	1.03	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
BH8	9/18/2010	3830	3828	0.05				4.14	4.43	0.29			
P01-01A	6/6/2010	1700	1019	50.09	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	8.0	6.41	1.59	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.
P01-01A	9/8/2010	1960	1660	16.57				7.52	8.16	0.64			
P01-01B	6/6/2010	1230	920	28.84	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	8.1	6.38	1.72	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.
P01-01B	9/8/2010	1340	1131	16.92				7.58	7.3	0.28			
P01-02A	6/6/2010	697	817	15.85				8	7.42	0.58			
P01-02A	9/8/2010	794	830	4.43				7.95	7.37	0.58			
P01-02B	6/6/2010	512	530	3.45				8.2	7.5	0.7			
P01-02B	9/8/2010	562	610	8.19				7.9	7.53	0.37			
P01-03	6/7/2010	3620	3450	4.81				7.4	6.35	1.05	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P01-03	9/9/2010	3680	622	142.17	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see correct result below).	6.7	6.22	0.48			
P01-03	9/9/2010	3680	3890	5.55	Lab value correctly entered into emLine, and incorrect field value emended (see above)	Let Value Stand	Correct value entered into emLine.	6.7	6.22	0.48			
P01-04A	6/7/2010	1050	1010	3.88				7.8	6.77	1.03	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P01-04A	9/9/2010	1140	1230	7.59				7.26	7.03	0.23			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P01-04B	9/9/2010	2060	2200	6.57				7.29	6.88	0.41			
P01-11	6/6/2010	2760	3020	9.00				7.6	6.89	0.71			
P01-11	9/8/2010	2880	3280	12.99				7.24	6.72	0.52			
P03-01-2	9/21/2010	409	441.4	7.62				8.36	7.34	1.02	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-01-4	9/21/2010	167	175.7	5.08				6.92	6.93	0.01			
P03-01-6	9/21/2010	1110	1157	4.15				5.76	6.6	0.84			
P03-01-8	9/21/2010	22100	15510	35.04	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	3.46	6.11	2.65	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.
P03-03-2	9/21/2010	2750	2595	5.80				4.17	5.36	1.19	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-03-4	9/21/2010	1650	1664	0.84				6.2	6.11	0.09			
P03-03-6	9/21/2010	6410	28.71	198.22	Lab value correctly entered into emLine. Field value undergoing investigation.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.	4.82	6.4	1.58	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.
P03-04-2	9/20/2010	1510	1294	15.41				7.15	6.82	0.33			
P03-04-4	9/20/2010	1300	1249	4.00				7.44	7.4	0.04			
P03-04-6	9/20/2010	5440	5926	8.55				6.22	7	0.78			
P03-04-8	9/20/2010	8100	8162	0.76				3.9	6.32	2.42	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.
P03-05-2	9/22/2010	1480	1563	5.46				6.89	6.75	0.14			
P03-05-4	9/22/2010	1250	1258	0.64				7.26	7.02	0.24			
P03-05-6	9/22/2010	4790	4428	7.85				4.59	6.73	2.14	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P03-06-1	6/14/2010	3850	38750	163.85	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	6.2	5.35	0.85			
P03-06-1	6/14/2010	3850	3875	0.65	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	6.2	5.35	0.85			
P03-06-1	9/22/2010	3900	3352	15.11				6.06	6.17	0.11			
P03-06-2	6/14/2010	4000	41050	164.48	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	4.2	5.3	1.1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-2	6/14/2010	4000	4105	2.59	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	4.2	5.3	1.1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-2	9/22/2010	3910	3365	14.98				5.77	6.11	0.34			
P03-06-3	6/14/2010	4530	46110	164.22	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	4.3	5.35	1.05	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-3	6/14/2010	4530	4611	1.77	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	4.3	5.35	1.05	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-3	9/22/2010	4640	3824	19.28				5.49	6.24	0.75			
P03-06-4	6/14/2010	2210	25150	167.69	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	5.6	6.18	0.58			
P03-06-4	6/14/2010	2210	2515	12.91	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	5.6	6.18	0.58			
P03-06-4	9/22/2010	2600	2516	3.28				6.2	6.65	0.45			
P03-06-5	6/14/2010	1370	17610	171.13	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	5.2	6.42	1.22	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-5	6/14/2010	1370	1761	24.98	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Large discrepancy between lab and field values resolved, but small discrepancy between values still remains.	5.2	6.42	1.22	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P03-06-5	9/22/2010	3570	2933	19.59				6.01	6.89	0.88			
P03-08-2	9/20/2010	678	732	7.66				7.7	8.17	0.47			
P03-08-4	9/20/2010	1260	1327	5.18				7.36	7.1	0.26			
P03-08-6	9/20/2010	948	924	2.56				7.23	7.45	0.22			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P03-08-7	9/20/2010	612	569	7.28				7.92	7.85	0.07			
P03-08-8	9/20/2010			#DIV/0!						0			
P03-09-2	9/13/2010	1300	1430	9.52				7.85	7.01	0.84			
P03-09-4	9/13/2010	1550	1670	7.45				7.83	7	0.83			
P03-09-6	9/13/2010	1670	1822	8.71				7.83	6.91	0.92			
P03-09-8	9/13/2010	1700	1748	2.78				7.81	6.95	0.86			
P03-09-9	9/13/2010	1670	1811	8.10				7.82	6.91	0.91			
P05-01-1	9/9/2010	2790	2990	6.92				7	6.6	0.4			
P05-01-2	9/9/2010	2820	3103	9.56				7.04	6.65	0.39			
P05-01-3	9/9/2010	2790	3063	9.33				7.03	6.64	0.39			
P05-01-4	9/9/2010	2770	2972	7.04				7.02	6.64	0.38			
P05-01-5	9/9/2010	2400	2586	7.46				7.09	6.66	0.43			
P05-01-6	9/9/2010	2510	2655	5.61				7.14	6.58	0.56			
P05-02	6/6/2010	2720	2552	6.37				7.5	6.49	1.01	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P05-02	9/8/2010	2630	2910	10.11				7.05	6.6	0.45			
P05-03	6/8/2010	1610	1598	0.75				8.1	6.92	1.18	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P05-03	9/8/2010	1520	1640	7.59				7.41	7.04	0.37			
P05-04	9/16/2010	383	366.9	4.29				7.36	6.12	1.24	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-C1	6/7/2010	2510	2609	3.87				7.6	6.62	0.98			
P09-C1	9/15/2010	2630	2560	2.70				7.77	6.57	1.2	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-C2	6/8/2010	2670	2620	1.89				7	6.28	0.72			
P09-C2	9/15/2010	2770	2726	1.60				7.12	6.06	1.06	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-C3	6/8/2010	1070	1087	1.58				7.8	6.49	1.31	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-C3	9/15/2010	1070	1070	0.00				7.81	6.52	1.29	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-ETA1	9/16/2010	421	440.2	4.46				7.9	7.56	0.34			
P09-ETA2	9/15/2010	5190	5390	3.78				6.7	6.34	0.36			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P09-SIS1	7/25/2010	9670	9050	6.62				6.69	6.16	0.53			
P09-SIS1	11/2/2010	8110	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			7.23	6.33	0.9			
P09-SIS1	11/2/2010	8110	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			7.23	6.33	0.9			
P09-SIS2	6/9/2010	9950	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.9	5.8	1.1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-SIS2	7/24/2010	8730	9180	5.03				6.64	6.19	0.45			
P09-SIS2	9/13/2010	9190	9480	3.11				6.97	5.83	1.14	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P09-SIS2	11/2/2010	9340	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.93	6.1	0.83			
P09-SIS2	11/2/2010	9340	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.93	6.1	0.83			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P09-SIS3	6/9/2010	10000	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.9	6.04	0.86			
P09-SIS3	7/24/2010	7720	4160	59.93	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.	6.65	8.34	1.69	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.
P09-SIS3	9/14/2010	9500	9580	0.84				7	6.05	0.95			
P09-SIS3	11/2/2010	9020	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			7	6.21	0.79			
P09-SIS3	11/2/2010	9020	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			7	6.21	0.79			
P96-6	6/15/2010	1170	1140	2.60				7.6	6.35	1.25	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P96-6	9/21/2010	1350	1010	28.81	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.27	7.08	0.19			
P96-7	6/11/2010	3090	2644	15.56				7.9	7.47	0.43			
P96-7	9/14/2010	3310	3570	7.56				7.82	7.24	0.58			
P96-8A	6/9/2010	7780	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			5.9	5.14	0.76			
P96-8A	9/14/2010	7780	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.29	5.14	1.15			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
P96-8B	6/9/2010	7380	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			4.8	4.31	0.49			
P96-8B	9/15/2010	7540	7630	1.19				4.71	4.55	0.16			
P96-9A	6/12/2010	3550	3066	14.63				7.8	6.77	1.03	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
P96-9A	9/20/2010	3840	3943	2.65				7.61	6.78	0.83			
S1A	6/9/2010	656	561	15.61				6.9	6.46	0.44			
S1A	9/14/2010	332		200.00	Lab value correctly entered into emLine, but field value not entered.	Change Value	Field value entered; now correctly entered into emLine (see correct result below).	7.12		7.12	Lab value correctly entered into emLine, but field value not entered.	Change Value	Field value entered; now correctly entered into emLine (see correct result below).
S1A	9/14/2010	332	302	9.46	Lab value correctly entered into emLine, but field value not entered.	Let Value Stand	Correct value entered into emLine.	7.12	7.29	0.17	Lab value correctly entered into emLine, but field value not entered.	Let Value Stand	Correct value entered into emLine.
S1B	9/14/2010			#DIV/0!	Sample not collected. Samplers noted "Well completely dry."					0	Sample not collected. Samplers noted "Well completely dry."		
S2A	6/9/2010	1470	1238	17.13				7	5.78	1.22	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
S2A	9/14/2010	1370	1226	11.09				6.73	6.05	0.68			
S2B	9/14/2010	8000	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.94	6.07	0.87			
SRK04-3A	9/22/2010	8130	8172	0.52				5.68	5.21	0.47			
SRK05-ETA-BR1	9/22/2010	7370	7350	0.27				5.76	5.17	0.59			
SRK05-ETA-BR2	9/22/2010	2660	2845	6.72				6.78	6.5	0.28			
SRK05-SP1A	9/14/2010	1700	1790	5.16				6.34	5.54	0.8			
SRK05-SP1B	9/14/2010	996	1050	5.28				7.37	6.31	1.06	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK05-SP2	9/14/2010	379	370	2.40				7.19	6.4	0.79			
SRK05-SP3A	9/14/2010	1410	1430	1.41				6.62	5.7	0.92			
SRK05-SP3B	9/14/2010	1190	1330	11.11				6.45	5.99	0.46			
SRK05-SP4A	6/9/2010	1040	872	17.57				6.7	5.66	1.04	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK05-SP4A	9/13/2010	1080	119	160.30	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past sample hold time. Discrepancy between values remains.	6.65	5.91	0.74			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
SRK05-SP5	9/14/2010	6260	6060	3.25				6.75	5.89	0.86			
SRK05-SP6	9/14/2010			#DIV/0!	Sample not collected. Samplers noted "not enough water for purge volume. Well too deep to get water out."					0	Sample not collected. Samplers noted "not enough water for purge volume. Well too deep to get water out."		
SRK08-P10A	6/9/2010	3630	3012	18.61				7.4	6.34	1.06	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-P10A	9/16/2010			#DIV/0!	Sample not collected. Samplers noted "Dry @ 12L."					0	Sample not collected. Samplers noted "Dry @ 12L."		
SRK08-P11A	6/9/2010	764	623	20.33	Field and lab values correctly entered into emLine.	Let Value Stand		7.9	7.14	0.76			
SRK08-P11A	9/15/2010	770	860	11.04				7.91	6.83	1.08	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-P11B	6/9/2010	928	767	19.00				8.1	6.87	1.23	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-P11B	9/15/2010	1180	1370	14.90				7.81	6.52	1.29	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-P12A	9/16/2010	1240	1135	8.84				6.47	5.69	0.78			
SRK08-P12B	9/16/2010	889	965.7	8.27				6.43	5.69	0.74			
SRK08-P14	9/16/2010	1990	2080	4.42				7.9	7.38	0.52			
SRK08-P15	9/16/2010	1930	2030	5.05				7.88	7.66	0.22			
SRK08-SBR2	9/14/2010	1440	1510	4.75				6.75	5.9	0.85			
SRK08-SBR3	9/14/2010	2940	2407	19.94				7.63	6.96	0.67			
SRK08-SBR4	9/14/2010	2440	2288	6.43				7.16	6.44	0.72			
SRK08-SP7A	6/9/2010	2720	2755	1.28				6.5	5.86	0.64			
SRK08-SP7A	7/25/2010	2390	2290	4.27				6.53	6.48	0.05			
SRK08-SP7A	9/13/2010	2170	2380	9.23				6.83	6.11	0.72			
SRK08-SP7A	11/2/2010	1900	1614	16.28				6.86	6.39	0.47			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
SRK08-SP7B	6/9/2010	367	356	3.04				7.3	7.04	0.26			
SRK08-SP7B	7/25/2010	196	5.9	188.31	Lab value correctly entered into emLine, but field value incorrectly entered.	Change Value	Field value changed; now correctly entered into emLine (see below).	6.94	7.36	0.42			
SRK08-SP7B	7/25/2010	196	170	14.21	Lab value correctly entered into emLine, and incorrect field value amended (see above).	Let Value Stand	Discrepancy between lab and field values resolved.	6.94	7.36	0.42			
SRK08-SP7B	9/13/2010	211	250	16.92				7.23	6.79	0.44			
SRK08-SP7B	11/2/2010	249	246	1.21				7.26	6.83	0.43			
SRK08-SP8A	9/13/2010	1950	2250	14.29				6.97	6.17	0.8			
SRK08-SP8B	9/13/2010	1560	1770	12.61				6.92	6.25	0.67			
SRK08-SPW1	1/6/2010	1240	1115	10.62				6.6	5.82	0.78			
SRK08-SPW1	2/17/2010	1150	1070	7.21				7.1	6.15	0.95			
SRK08-SPW1	3/9/2010	1050	1090	3.74				7.3	5.98	1.32	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW1	4/13/2010	1080	1040	3.77				6.8	6.08	0.72			
SRK08-SPW1	5/3/2010	1040	945	9.57				7.1	6	1.1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW1	6/13/2010	1070	1125	5.01				6.5	7.62	1.12	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW1	7/10/2010	1100	1220	10.34				6.43	5.95	0.48			
SRK08-SPW1	8/3/2010	1080	1150	6.28				6.43	6.36	0.07			
SRK08-SPW1	9/1/2010	1090	1360	22.04	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	6.96	6.66	0.3			
SRK08-SPW1	10/7/2010	1060	760	32.97	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	6.72	6.54	0.18			
SRK08-SPW1	11/8/2010	1050	986	6.29				6.84	5.96	0.88			

RPD > 50% or pH difference > 1.5 pH unit

RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
SRK08-SPW2	1/6/2010	5140	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.7	5.8	0.9			
SRK08-SPW2	2/17/2010	4840	4310	11.58				7.2	5.97	1.23	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW2	3/9/2010	4370	3970	9.59				7.3	6.07	1.23	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW2	4/13/2010	4150	3960	4.69				6.8	6.1	0.7			
SRK08-SPW2	5/3/2010	4340	3676	16.57				7	6.26	0.74			
SRK08-SPW2	6/13/2010	3900	3794	2.76				6.7	8.01	1.31	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW2	7/10/2010	3840	3587	6.81				6.66	6.11	0.55			
SRK08-SPW2	8/3/2010	3910	4390	11.57				7.01	6.34	0.67			
SRK08-SPW2	9/1/2010	3890	4160	6.71				7.15	6.28	0.87			
SRK08-SPW2	10/7/2010	3830	2250	51.97	Field and lab values correctly entered into emLine.	Let Value Stand	Retest request would be filed past hold time. Discrepancy between values remains.	6.85	6.3	0.55			
SRK08-SPW2	11/8/2010	4000	3304	19.06				6.87	6.16	0.71			
SRK08-SPW2	12/1/2010	4130	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.91	6.35	0.56			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
SRK08-SPW3	1/6/2010	5390	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.7	5.69	1.01	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW3	2/17/2010	6620	5800	13.20				7.2	5.93	1.27	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW3	3/9/2010	5690	4820	16.56				6.9	6.1	0.8			
SRK08-SPW3	4/13/2010	6210	5860	5.80				6.9	6.17	0.73			
SRK08-SPW3	5/3/2010	3360	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			7.3	6.24	1.06	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW3	6/13/2010	5440	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.8	7.77	0.97			
SRK08-SPW3	7/10/2010	4160	3890	6.71				6.45	5.93	0.52			
SRK08-SPW3	8/3/2010	5510	5830	5.64				6.83	6.05	0.78			
SRK08-SPW3	9/1/2010	4220	4450	5.31				7.02	6.16	0.86			
SRK08-SPW3	10/7/2010	5540	3360	48.99	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	6.97	6.19	0.78			
SRK08-SPW3	11/8/2010	5520	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.75	5.74	1.01	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
SRK08-SPW3	12/1/2010	5440	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.6	6.12	0.48			
TH86-17	9/9/2010	181	190	4.85				7.55	7.1	0.45			
TH86-2	9/13/2010	289	187	42.86	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.	7.94	8.39	0.45			
TH86-5	9/9/2010	795	836	5.03				7.26	6.94	0.32			
X16A	6/7/2010	356	340	4.60				8.3	7.61	0.69			
X16A	9/8/2010	365	337	7.98				7.78	7.36	0.42			
X16B	6/7/2010	399	390	2.28				8.2	7.84	0.36			
X16B	9/8/2010	432	392	9.71				7.9	7.52	0.38			
X17A	6/8/2010	573	633	9.95				8.1	7.36	0.74			
X17A	9/8/2010	517	519	0.39				7.8	7.5	0.3			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X17B	6/8/2010	1090	1110	1.82				7.7	6.94	0.76			
X17B	9/8/2010	899	801	11.53				7.47	6.9	0.57			
X18A	6/7/2010	1700	1807	6.10				8.0	6.93	1.07	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X18A	9/8/2010	1500	1351	10.45				7.22	6.92	0.3			
X18B	6/7/2010	1730	1727	0.17				8.1	6.85	1.25	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X18B	9/8/2010	1650	1399	16.46				7.45	6.98	0.47			
X21-96A	6/11/2010	17500	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			3.6	5.38	1.78	Field and lab values correctly entered into emLine.	Request Retest	Retest not possible because was requested too late. Remainder of samples had been discarded. Discrepancy between values remains.
X21-96A	9/22/2010	17900	17530	2.09				3.67	5.05	1.38	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X21-96B	6/11/2010	2360	2274	3.71				5.9	6.61	0.71			
X21-96B	9/22/2010	2810	3008	6.81				6.31	6.26	0.05			
X24-96D	6/7/2010	3910	3660	6.61				7.4	6.4	1	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X24-96D	9/9/2010	3950	4370	10.10				6.85	6.27	0.58			
X25-96A	6/7/2010	1420	1390	2.14				8	7.18	0.82			
X25-96A	9/9/2010	1550	1710	9.82				7.43	7.01	0.42			
X25-96B	6/7/2010	1270	1270	0.00				8.1	7.52	0.58			
X25-96B	9/9/2010	1370	1430	4.29				7.83	7.38	0.45			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-62: Rose Creek Drainage Groundwater Quality
2010 QA/QC Lab vs. Field Comparison

Station	Date	COND µmho/cm	CONDF µmho/cm	RPD %	Comments	Action	Result	pH	pHF	Difference	Comments	Action	Result
X26	5/5/2010	5300	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.5	6.28	0.22			
X26	6/13/2010	4190	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.4	7.61	1.21	Field and lab values correctly entered into emLine.	Let Value Stand	Discrepancy between lab and field values remains.
X26	7/10/2010	4120	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.55	6.33	0.22			
X26	8/3/2010	4620	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.4	6.22	0.18			
X26	9/1/2010	5060	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.71	6.06	0.65			
X26	10/19/2010	4540	>3999	#VALUE!	Field and lab values not comparable because conductivity greater than maximum measurable level for field meter used.			6.52	5.97	0.55			

RPD > 50% or pH difference > 1.5 pH unit
 RPD > 20% or pH difference > 1 pH unit

Table C-63: Rose Creek Drainage Water Quality 2010 - Ion Charge Balance

Station	Date	Surface	Station	Date	Surface	Station	Date	Surface
ETA Combined	9/2/2010	0.95	R7	1/11/2010		X2	1/11/2010	
ETA Combined	10/20/2010	0.99	R7	2/23/2010		X2	2/22/2010	
ETA Combined	11/8/2010	0.95	R7	3/10/2010		X2	3/10/2010	
ETA Combined	12/1/2010		R7	4/11/2010		X2	4/14/2010	
FAROCR	5/3/2010		R7	5/3/2010		X2	5/3/2010	
FAROCR	6/5/2010	1.00	R7	6/5/2010	1.00	X2	6/4/2010	1.00
FAROCR	7/8/2010		R7	7/8/2010		X2	7/8/2010	
FAROCR	8/3/2010	1.00	R7	8/3/2010	1.00	X2	8/3/2010	1.00
FAROCR	9/1/2010	1.00	R7	9/1/2010	1.00	X2	9/2/2010	1.00
FAROCR	10/19/2010	1.00	R7	10/19/2010	1.00	X2	10/18/2010	1.00
FCO	6/16/2010	1.00	R7	11/10/2010		X2	11/9/2010	1.00
FCO	9/1/2010		R7	12/1/2010		X2	12/1/2010	
FCO	10/7/2010	1.00	R8	3/10/2010		X22b	1/11/2010	
FCO	11/4/2010		R8	4/11/2010		X22b	2/22/2010	
FCS-4	9/2/2010	0.89	R8	5/3/2010		X22b	3/10/2010	
FCS-4	10/20/2010	0.89	R8	6/5/2010	1.00	X22b	4/13/2010	
FCS-4	11/10/2010		R8	7/8/2010		X22b	5/3/2010	
FCS-4	12/2/2010		R8	8/3/2010	1.00	X22b	6/4/2010	1.10
GDHSECK	3/4/2010		R8	9/1/2010	1.00	X22b	7/10/2010	1.00
GDHSECK	6/16/2010	0.99	R8	10/19/2010	1.00	X22b	8/3/2010	1.10
GDHSECK	10/6/2010	1.00	R8	11/10/2010		X22b	9/1/2010	0.90
NF1	2/23/2010		R8	12/1/2010		X22b	10/20/2010	0.98
NF1	3/10/2010		R9	1/11/2010		X22b	11/8/2010	0.94
NF1	4/11/2010		R9	2/23/2010		X22b	12/1/2010	
NF1	5/3/2010		R9	3/10/2010		X3	1/11/2010	
NF1	6/5/2010	1.00	R9	4/11/2010		X3	2/22/2010	
NF1	7/8/2010		R9	5/3/2010		X3	3/9/2010	
NF1	8/3/2010	0.99	R9	6/5/2010	1.00	X3	4/14/2010	
NF2	1/12/2010		R9	7/8/2010		X3	5/3/2010	
NF2	2/23/2010		R9	8/3/2010	1.00	X3	6/4/2010	1.00
NF2	3/10/2010		R9	9/1/2010	1.00	X3	7/8/2010	
NF2	4/14/2010		R9	10/19/2010	1.00	X3	8/3/2010	1.00
NF2	5/3/2010		R9	11/10/2010		X3	9/2/2010	1.00
NF2	6/4/2010	1.00	R9	12/1/2010		X3	10/21/2010	1.00
NF2	7/8/2010		RCSG#4	1/12/2010		X3	11/9/2010	1.00
NF2	8/3/2010	1.00	RCSG#4	3/10/2010		X3	12/1/2010	
NF2	9/1/2010	1.00	RCSG#4	4/13/2010		X3A	9/2/2010	1.00
NF2	10/18/2010	1.00	RCSG#4	5/3/2010		X3A	10/21/2010	1.00
NF2	11/9/2010	1.00	RCSG#4	6/4/2010	1.00	X3A	11/9/2010	1.00
NF2	12/1/2010		RCSG#4	7/8/2010		X3A	12/1/2010	
NFRC SC-1	1/12/2010		RCSG#4	8/3/2010	1.00	X4	1/11/2010	
NFRC SC-1	2/23/2010		W10	5/3/2010		X4	2/22/2010	
NFRC SC-1	3/10/2010		W10	6/5/2010	1	X4	3/9/2010	
NFRC SC-1	4/14/2010		W10	7/10/2010	1.00	X4	4/13/2010	
NFRC SC-1	5/3/2010		W8	6/17/2010	1.00	X4	5/3/2010	
NFRC SC-1	6/4/2010	1.00	X10	1/11/2010		X4	6/4/2010	1.00
NFRC SC-1	7/8/2010		X10	2/22/2010		X4	7/10/2010	1.00
NFRC SC-1	8/3/2010	1.00	X10	3/10/2010		X4	8/3/2010	0.90
NFRC SC-1	10/18/2010	1.00	X10	4/13/2010		X4	9/2/2010	0.94
NFRC SC-2	1/12/2010		X10	5/3/2010		X4	10/20/2010	0.93
NFRC SC-2	2/23/2010		X10	6/4/2010	1.00	X4	11/8/2010	1
NFRC SC-2	3/10/2010		X10	7/8/2010		X4	12/1/2010	
NFRC SC-2	4/14/2010		X10	8/3/2010	1.00	X5	3/22/2010	
NFRC SC-2	5/3/2010		X10	9/2/2010	1.00	X5	3/30/2010	
NFRC SC-2	6/4/2010	1.00	X10	10/21/2010	1.00	X5	4/6/2010	
NFRC SC-2	7/8/2010		X10	11/9/2010	1.00	X5	4/13/2010	
NFRC SC-2	8/3/2010	1.00	X10	12/1/2010		X5	4/20/2010	
NFRC SC-2	10/18/2010	1	X14	1/11/2010		X5	4/27/2010	
NFRC SC-3	1/12/2010		X14	2/22/2010		X5	5/4/2010	
NFRC SC-3	2/23/2010		X14	3/10/2010		X5	5/11/2010	
NFRC SC-3	3/10/2010		X14	3/22/2010		X5	5/18/2010	
NFRC SC-3	4/14/2010		X14	3/30/2010		X5	5/25/2010	
NFRC SC-3	5/3/2010		X14	4/6/2010		X5	6/1/2010	
NFRC SC-3	6/4/2010	1	X14	4/13/2010		X5	6/8/2010	1
NFRC SC-3	7/8/2010		X14	4/20/2010		X5	6/15/2010	0.96
NFRC SC-3	8/3/2010	1.00	X14	4/27/2010		X5	6/15/2010	
NFRC SC-3	10/18/2010	1.00	X14	5/4/2010		X5	6/22/2010	0.90
NFRC SC-4	1/11/2010		X14	5/11/2010		X5	6/29/2010	0.99
NFRC SC-4	2/23/2010		X14	5/18/2010		X5	7/6/2010	0.86
NFRC SC-4	3/10/2010		X14	5/25/2010		X5	7/13/2010	1.10
NFRC SC-4	4/14/2010		X14	6/1/2010		X5	7/20/2010	0.96
NFRC SC-4	5/3/2010		X14	6/8/2010	0.94	X5	7/27/2010	
NFRC SC-4	6/4/2010	1.00	X14	6/15/2010	0.93	X5	8/10/2010	
NFRC SC-4	7/8/2010		X14	6/22/2010	0.90	X5	8/17/2010	0.99
NFRC SC-4	8/3/2010	1.00	X14	6/29/2010	1.00	X5	8/24/2010	1.00
NFRC SC-4	10/18/2010	1.00	X14	6/29/2010	1.00	X5	8/31/2010	0.91
NWID	2/22/2010		X14	7/6/2010	1	X5	9/7/2010	0.89
NWID	3/10/2010		X14	7/13/2010	1.00	X5	9/7/2010	
NWID	4/15/2010		X14	7/20/2010	1.00	X5	11/18/2010	1.00
NWID	5/3/2010		X14	7/27/2010		X5	11/25/2010	
NWID	6/4/2010	1.00	X14	8/3/2010	0.98	X5	12/2/2010	
NWID	7/10/2010	1.00	X14	8/10/2010		X5	12/2/2010	0.98
NWID	8/3/2010	0.90	X14	8/17/2010	0.94	X5P	1/11/2010	
R10	1/11/2010		X14	8/24/2010	0.99	X5P	2/22/2010	
R10	2/23/2010		X14	8/31/2010	1.00	X5P	3/2/2010	
R10	3/10/2010		X14	9/7/2010	1	X5P	4/13/2010	
R10	4/11/2010		X14	10/21/2010	0.97	X5P	5/3/2010	
R10	5/3/2010		X14	11/9/2010	0.97	X5P	6/4/2010	1.10
R10	6/5/2010	1.00	X14	11/18/2010	1.10	X5P	7/10/2010	0.96
R10	7/8/2010		X14	11/25/2010		X5P	8/3/2010	0.97
R10	8/3/2010	1.00	X14	12/2/2010	1.00	X5P	9/2/2010	0.97
R10	9/1/2010					X5P	10/20/2010	0.92
R10	10/19/2010	1.00				X5P	11/8/2010	0.95
R10	11/10/2010					X5P	12/1/2010	
R10	12/1/2010							

Table C-63: Rose Creek Drainage Water Quality 2010 - Ion Charge Balance

Station	Date	Surface
X7	6/1/2010	
X7	10/6/2010	0.90

Station	Date	Seepage
A25	5/31/2010	
A30	2/4/2010	
A30	2/24/2010	
A30	3/2/2010	
A30	3/28/2010	
A30	4/10/2010	
A30	4/19/2010	
A30	5/1/2010	
A30	5/18/2010	
A30	6/2/2010	
A30	6/15/2010	0.84
A30	7/7/2010	0.86
A30	7/22/2010	0.93
A30	8/5/2010	1.00
A30	8/18/2010	1.00
A30	9/1/2010	1.00
A30	10/20/2010	1.00
A30	11/4/2010	1.00
A30	12/1/2010	
NE1	6/1/2010	
SP5-6	6/1/2010	
SP5-6	7/10/2010	1.00
SP5-6	8/5/2010	1.10
SP5-6	9/1/2010	1.00
SP5-6	10/6/2010	1.00
W5	6/1/2010	
Weir 3	3/4/2010	
Weir 3	8/5/2010	0.96
Weir 3	11/4/2010	
X11	3/4/2010	
X11	8/5/2010	1.00
X11	11/4/2010	
X12	3/4/2010	
X12	8/5/2010	0.98
X12	11/4/2010	
X13	1/11/2010	
X13	2/17/2010	
X13	3/2/2010	
X13	4/15/2010	
X13	5/6/2010	
X13	6/10/2010	1.10
X13	7/11/2010	0.99
X13	8/5/2010	1.00
X13	9/2/2010	1.10
X13	10/7/2010	1.00
X13	11/4/2010	1.00
X13	12/2/2010	
X23	1/12/2010	
X23	4/27/2010	
X23	5/6/2010	
X23	6/10/2010	0.80
X23	7/10/2010	0.86
X23	8/5/2010	0.95
X23	9/2/2010	0.95
X23	10/7/2010	0.94
X23	11/4/2010	0.94

Station	Date	Groundwater
BH10A	9/16/2010	1.10
BH10B	9/16/2010	1.10
BH13B	9/21/2010	1.10
BH14A	6/11/2010	0.96
BH14A	9/21/2010	1.00
BH14B	6/11/2010	0.97
BH14B	9/21/2010	1.00
BH5	9/16/2010	1.00
BH6	9/16/2010	0.95
BH8	9/18/2010	0.90
P01-01A	6/6/2010	1.10
P01-01A	9/8/2010	0.97
P01-01B	6/6/2010	1.10
P01-01B	9/8/2010	1.10
P01-02A	6/6/2010	1.20
P01-02A	9/8/2010	1.00
P01-02B	6/6/2010	1.10
P01-02B	9/8/2010	1.00
P01-03	6/7/2010	0.89
P01-03	9/9/2010	1.10
P01-04A	6/7/2010	1.00
P01-04A	9/9/2010	0.93
P01-04B	9/9/2010	0.98
P01-11	6/6/2010	1.20
P01-11	9/8/2010	1.10
P03-01-2	9/21/2010	1.00
P03-01-4	9/21/2010	1.00
P03-01-6	9/21/2010	1.00
P03-01-8	9/21/2010	0.84
P03-03-2	9/21/2010	1.00
P03-03-4	9/21/2010	1.10
P03-03-6	9/21/2010	0.78
P03-04-2	9/20/2010	1.00
P03-04-4	9/20/2010	1.10
P03-04-6	9/20/2010	0.90
P03-04-8	9/20/2010	0.88
P03-05-2	9/22/2010	0.92
P03-05-4	9/22/2010	0.92
P03-05-6	9/22/2010	0.96
P03-06-1	6/14/2010	0.87
P03-06-1	9/22/2010	1.00
P03-06-2	6/14/2010	0.91
P03-06-2	9/22/2010	0.99
P03-06-3	6/14/2010	0.85
P03-06-3	9/22/2010	0.95
P03-06-4	6/14/2010	1.10
P03-06-4	9/22/2010	1.00
P03-06-5	6/14/2010	1.00
P03-06-5	9/22/2010	1.20
P03-08-2	9/20/2010	1.00
P03-08-4	9/20/2010	1.10
P03-08-6	9/20/2010	1.10
P03-08-7	9/20/2010	0.96
P03-09-2	9/13/2010	
P03-09-4	9/13/2010	
P03-09-6	9/13/2010	
P03-09-8	9/13/2010	
P03-09-9	9/13/2010	
P05-01-1	9/9/2010	1.00
P05-01-2	9/9/2010	1.00
P05-01-3	9/9/2010	1.00
P05-01-4	9/9/2010	1.00
P05-01-5	9/9/2010	0.95
P05-01-6	9/9/2010	0.99
P05-02	6/6/2010	
P05-02	9/8/2010	0.94
P05-03	6/8/2010	1.00
P05-03	9/8/2010	0.95
P05-04	9/16/2010	0.99
P09-C1	6/7/2010	1.10
P09-C1	9/15/2010	0.95
P09-C2	6/8/2010	1.00
P09-C2	9/15/2010	0.98
P09-C3	6/8/2010	0.99
P09-C3	9/15/2010	1.10
P09-ETA1	9/16/2010	1.00
P09-ETA2	9/15/2010	0.89
P09-SIS1	7/25/2010	0.87
P09-SIS1	11/2/2010	
P09-SIS2	6/9/2010	0.85
P09-SIS2	7/24/2010	0.93
P09-SIS2	9/13/2010	0.90
P09-SIS2	11/2/2010	
P09-SIS3	6/9/2010	0.76
P09-SIS3	7/24/2010	0.89
P09-SIS3	9/14/2010	0.93
P09-SIS3	11/2/2010	
P96-6	6/15/2010	1.10
P96-6	9/21/2010	1.10
P96-7	6/11/2010	1.10
P96-7	9/14/2010	0.95
P96-8A	6/9/2010	0.88
P96-8A	9/14/2010	0.91
P96-8B	6/9/2010	0.84
P96-8B	9/15/2010	0.92
S1A	6/9/2010	1.10
S1A	9/14/2010	0.85

Station	Date	Groundwater
S2A	6/9/2010	0.95
S2A	9/14/2010	1.10
S2B	9/14/2010	0.85
SRK04-3A	9/22/2010	0.82
SRK05-ETA-BR1	9/22/2010	0.87
SRK05-ETA-BR2	9/22/2010	0.97
SRK05-SP1A	9/14/2010	
SRK05-SP1B	9/14/2010	
SRK05-SP2	9/14/2010	
SRK05-SP3A	9/14/2010	
SRK05-SP3B	9/14/2010	
SRK05-SP4A	6/9/2010	1.00
SRK05-SP4A	9/13/2010	1.10
SRK05-SP5	9/14/2010	0.92
SRK08-P10A	6/9/2010	1.00
SRK08-P11A	6/9/2010	0.99
SRK08-P11A	9/15/2010	1.10
SRK08-P11B	6/9/2010	1.00
SRK08-P11B	9/15/2010	1.00
SRK08-P12A	9/16/2010	1.00
SRK08-P12B	9/16/2010	1.10
SRK08-SBR2	9/14/2010	
SRK08-SBR3	9/14/2010	
SRK08-SBR4	9/14/2010	
SRK08-SP7A	6/9/2010	0.96
SRK08-SP7A	7/25/2010	0.92
SRK08-SP7A	9/13/2010	1.10
SRK08-SP7A	11/2/2010	
SRK08-SP7B	6/9/2010	0.96
SRK08-SP7B	7/25/2010	1.00
SRK08-SP7B	9/13/2010	1.00
SRK08-SP7B	11/2/2010	
SRK08-SP8A	9/13/2010	1.10
SRK08-SP8B	9/13/2010	1.00
SRK08-SPW1	1/6/2010	
SRK08-SPW1	2/17/2010	
SRK08-SPW1	3/9/2010	
SRK08-SPW1	4/13/2010	
SRK08-SPW1	5/3/2010	
SRK08-SPW1	6/13/2010	1.20
SRK08-SPW1	7/10/2010	1.10
SRK08-SPW1	8/3/2010	1.00
SRK08-SPW1	9/1/2010	1.00
SRK08-SPW1	10/7/2010	1.10
SRK08-SPW1	11/8/2010	1.10
SRK08-SPW2	1/6/2010	
SRK08-SPW2	2/17/2010	
SRK08-SPW2	3/9/2010	
SRK08-SPW2	4/13/2010	
SRK08-SPW2	5/3/2010	
SRK08-SPW2	6/13/2010	0.95
SRK08-SPW2	7/10/2010	0.92
SRK08-SPW2	8/3/2010	0.85
SRK08-SPW2	9/1/2010	0.94
SRK08-SPW2	10/7/2010	1.00
SRK08-SPW2	11/8/2010	0.91
SRK08-SPW2	12/1/2010	0.93
SRK08-SPW3	1/6/2010	
SRK08-SPW3	2/17/2010	
SRK08-SPW3	3/9/2010	
SRK08-SPW3	4/13/2010	
SRK08-SPW3	5/3/2010	
SRK08-SPW3	6/13/2010	0.80
SRK08-SPW3	7/10/2010	0.95
SRK08-SPW3	8/3/2010	0.87
SRK08-SPW3	9/1/2010	0.93
SRK08-SPW3	10/7/2010	0.96
SRK08-SPW3	11/8/2010	0.80
SRK08-SPW3	12/1/2010	0.95
TH86-17	9/9/2010	1.00
TH86-2	9/13/2010	
TH86-5	9/9/2010	1.00
X16A	6/7/2010	1.00
X16A	9/8/2010	0.89
X16B	6/7/2010	1.10
X16B	9/8/2010	1.00
X17A	6/8/2010	1.10
X17A	9/8/2010	1.10
X17B	6/8/2010	1.00
X17B	9/8/2010	1.00
X18A	6/7/2010	1.10
X18A	9/8/2010	1.10
X18B	6/7/2010	1.10
X18B	9/8/2010	1.10
X21-96A	6/11/2010	1.00
X21-96A	9/22/2010	1.10
X21-96B	6/11/2010	1.10
X21-96B	9/22/2010	1.00
X24-96D	6/7/2010	0.93
X24-96D	9/9/2010	0.87
X25-96A	6/7/2010	1.00
X25-96A	9/9/2010	0.96
X25-96B	6/7/2010	1.10
X25-96B	9/9/2010	0.96

Table C-63: Rose Creek Drainage Water Quality 2010 - Ion Charge Balance

Station	Date	Groundwater
X26	5/5/2010	
X26	6/13/2010	0.98
X26	7/10/2010	0.95
X26	8/3/2010	0.85
X26	9/1/2010	0.89
X26	10/19/2010	1.10

Station	Date	Pit Lakes
FL-1	4/30/2010	
	6/16/2010	
	7/14/2010	1.00
	8/12/2010	
	9/8/2010	0.90
FL-15	4/30/2010	
	6/16/2010	
	7/14/2010	
	8/12/2010	
	9/8/2010	0.92
FL-3	4/30/2010	
	6/16/2010	
	7/14/2010	1.10
	8/12/2010	
	9/8/2010	0.92
FL-30	4/30/2010	
	6/16/2010	
	7/14/2010	1.00
	8/12/2010	
	9/8/2010	1.00
FL-5	4/30/2010	
	6/16/2010	
	7/14/2010	1.00
	8/12/2010	
	9/8/2010	0.95
FL-60	4/30/2010	
	6/16/2010	
	7/14/2010	0.99
	8/12/2010	
	9/8/2010	1.10
FL-80	4/30/2010	
	6/16/2010	
	7/14/2010	1.10
	8/12/2010	
	9/8/2010	1.00

Table C-64: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - Pit Lakes - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	COND µmho/cm	HCO3 mg/L	NH3 mg/L	NO2 mg/L	NO2/3 mg/L	NO3 mg/L	OH mg/L	oPO4 mg/L	P mg/L	pH	SO4-d mg/L	TDS mg/L	TSS mg/L
FL-1	7/14/2010	M	<0.5	41.80	74.00	<0.5	612.00	674.00	1.40	<0.5	1250.00	90.00	0.91	0.01	0.51	0.50	<0.5	<0.005	<0.005	7.57	600.00	970.00	<1
FL-1	7/14/2010	DUP	<0.5	34.30	80.00	<0.5	619.00	680.00	1.20	<0.5	1260.00	97.00	1.00	0.01	0.49	0.48	<0.5	<0.005	<0.005	7.64	620.00	1000.00	2.00
RPD (%)			N/A	19.71	7.79	N/A	1.14	0.89	15.38	N/A	0.80	7.49	9.42	10.53	4.00	4.08	N/A	N/A	N/A	0.07	3.28	3.05	N/A
Comments																							
Action																							
Result																							
FL-3	9/8/2010	M	<0.5	34.70	81.00	<0.5	641.00	681.00	1.50	<0.5	1320.00	99.00	1.10	0.01	0.51	0.50	<0.5	<0.005	<0.005	7.72	690.00	1100.00	<1
FL-3	9/8/2010	DUP	<0.5	31.20	78.00	<0.5	652.00	667.00	1.40	<0.5	1310.00	95.00	1.30	0.01	0.50	0.49	<0.5	<0.005	<0.005	7.74	660.00	1100.00	<1
RPD (%)			N/A	10.62	3.77	N/A	1.70	2.08	6.90	N/A	0.76	4.12	16.67	9.52	1.98	2.02	N/A	N/A	N/A	0.02	4.44	0.00	N/A
Comments																							
Action																							
Result																							

RPD > 50%

Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
FL-1	7/14/2010	M	0.02	3.80	0.20	16.30	<50	0.04	<0.005	146.00	16.00	53.40	<0.1	6.54	35.00	8.01	0.05	75.40	2990.00	0.56	19.00	129.00	2.75	0.26	249.00	0.13	3960.00	<0.01	620.00	<0.5	0.43	1.220	<0.2	18000.00	<0.1	
FL-1	7/14/2010	DUP	0.02	1.90	0.16	15.80	<50	0.04	<0.005	146.00	15.80	55.70	<0.1	6.71	23.00	7.69	0.05	76.40	2950.00	0.54	19.20	136.00	0.29	0.26	252.00	0.14	4000.00	<0.01	603.00	<0.5	0.44	1.210	<0.2	18400.00	<0.1	
RPD (%)			6.06	66.67	22.22	3.12	N/A	0.00	N/A	0.00	1.26	4.22	N/A	2.57	41.38	4.08	0.18	1.32	1.35	3.64	1.05	5.28	162.44	0.00	1.20	7.41	1.01	N/A	2.78	N/A	2.07	0.82	N/A	2.20	N/A	
Comments			Both values > PQL and correctly entered into emLine.											Both values > PQL and correctly entered into emLine.																						
Action			Let Value Stand											Request Retest																						
Result			Discrepancy between values remains.											Retest performed, see results below.																						
FL-1 Retest	7/14/2010	M																					3.94													
FL-1 Retest	7/14/2010	DUP																					0.33													
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	169.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments														Retest for July 14 FL-1 sample and duplicate. Both values > PQL and correctly entered into emLine.																						
Action														Let Value Stand																						
Result														New values entered into emLine.																						
FL-3	9/8/2010	M	<0.03	4.00	<0.1	14.90	<300	0.07	<0.03	143.00	15.70	51.60	<0.5	5.40	15.00	7.80	0.06	78.60	3060.00	0.60	18.70	136.00	0.22	0.20	238.00	<0.2	4050.00	<0.05	584.00	<3	0.41	0.970	<1	22200.00	<0.5	
FL-3	9/8/2010	DUP	<0.03	9.00	0.20	17.20	<300	<0.05	<0.03	142.00	16.40	51.60	<0.5	6.50	29.00	7.60	0.06	75.90	3040.00	0.50	18.20	131.00	1.23	0.30	233.00	<0.2	4010.00	<0.05	583.00	<3	0.44	0.910	<1	21800.00	<0.5	
RPD (%)			N/A	76.92	N/A	14.33	N/A	N/A	N/A	0.70	4.36	0.00	N/A	18.49	63.64	2.60	5.31	3.50	0.66	18.18	2.71	3.75	139.31	40.00	2.12	N/A	0.99	N/A	0.17	N/A	7.06	6.38	N/A	1.82	N/A	
Comments			Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.											Both values correctly entered into emLine; however, main sample value not > PQL. Therefore, RPD analysis not valid in this case.											Both values > PQL and correctly entered into emLine.											
Action			Let Value Stand											Let Value Stand											Request Retest											
Result			Discrepancy between values remains.											Discrepancy between values remains.											Retest performed, see results below.											
FL-3 Retest	9/8/2010	M																					0.28													
FL-3 Retest	9/8/2010	DUP																					1.43													
RPD (%)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	134.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments														Retest for September 8 FL-3 sample and duplicate. Both values > PQL and correctly entered into emLine.																						
Action														Let Value Stand																						
Result														New values entered into emLine.																						

RPD > 50%
 RPD > 100%

Table C-66: Rose Creek Drainage Water Quality
2010 QA/QC Duplicates - Pit Lakes - Total Metals

Station	Date	Sample Type	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	ug/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
FL-1	7/14/2010	M	0.01	11.60	0.22	<50	16.60	0.06	<0.005	121.00	16.30	52.20	<0.1	12.70	155.00	7.71	0.06	75.50	2920.00	0.48	18.30	129.00	1.67	239.00	0.25	0.12	3460.00	0.02	592.00	<0.5	0.42	1.260	<0.2	18200.00	<0.1	
FL-1	7/14/2010	DUP	0.02	12.10	0.22	<50	16.90	0.06	<0.005	123.00	16.20	53.50	<0.1	9.16	149.00	7.74	0.06	75.80	2920.00	0.52	18.50	132.00	1.65	240.00	0.26	0.14	3630.00	<0.01	597.00	<0.5	0.44	1.260	<0.2	18400.00	<0.1	
		RPD (%)	6.90	4.22	0.00	N/A	1.79	0.00	N/A	1.64	0.62	2.46	N/A	32.39	3.95	0.39	0.72	0.40	0.00	8.00	1.09	2.30	1.20	0.42	3.92	15.38	4.80	N/A	0.84	N/A	4.41	0.00	N/A	1.09	N/A	
		Comments																																		
		Action																																		
		Result																																		
FL-3	9/8/2010	M	<0.03	11.00	0.20	<300	15.60	<0.05	<0.03	139.00	17.10	48.20	<0.5	6.60	172.00	7.50	0.06	71.20	2850.00	0.60	17.50	121.00	1.70	221.00	0.90	<0.2	3640.00	<0.05	585.00	8.0	0.43	1.120	<1	19700.00	<0.5	
FL-3	9/8/2010	DUP	<0.03	12.00	0.20	<300	16.30	<0.05	<0.03	137.00	17.30	50.80	<0.5	6.80	169.00	7.90	0.06	75.40	2970.00	0.60	18.60	130.00	1.84	254.00	0.30	<0.2	3830.00	<0.05	597.00	10.0	0.47	1.090	2.00	20300.00	<0.5	
		RPD (%)	N/A	8.70	0.00	N/A	4.39	N/A	N/A	1.45	1.16	5.25	N/A	2.99	1.76	5.19	3.57	5.73	4.12	0.00	6.09	7.17	7.91	13.89	100.00	N/A	5.09	N/A	2.03	22.22	8.89	2.71	N/A	3.00	N/A	
		Comments																							Both values > PQL and correctly entered into emLine.											
		Action																								Let Value Stand										
		Result																								Discrepancy between values remains.										

RPD > 50%
 RPD > 100%

Table C-67: Rose Creek Drainage Water Quality
2010 QA/QC Splits - Pit Lakes - General Parameters

Station	Date	Sample Type	Acid(pH4.5) mg/L	Acid(pH8.3) mg/L	ALK mg/L	ALKPP mg/L	CaCO3 mg/L	CaCO3-d mg/L	Cl-d mg/L	CO3 mg/L	COND µmho/cm	HCO3 mg/L	NH3 mg/L	NO2 mg/L	NO2/3 mg/L	NO3 mg/L	OH mg/L	oPO4 mg/L	P mg/L	pH	SO4-d mg/L	TDS mg/L	TSS mg/L
FL-1	8/12/2010	M	<0.5	28.80	77.00	<0.5	695.00	590.00	1.60	<0.5	1250.00	94.00	1.10	0.01	0.50	0.50	<0.5	<0.005	<0.005	7.60	610.00	1000.00	<1
FL-1	8/12/2010	SPLIT	<0.5	20.60	76.00	<0.5	690.00	598.00	1.10	<0.5	1190.00	93.00	1.00	0.01	0.51	0.50	<0.5	<0.005	<0.005	7.63	650.00	1000.00	<1
RPD (%)			N/A	33.20	1.31	N/A	0.72	1.35	37.04	N/A	4.92	1.07	9.52	75.00	1.98	0.00	N/A	N/A	N/A	0.03	6.35	0.00	N/A
Comments			Both values correctly entered into emLine; however, neither value > PQL. Therefore RPD analysis not valid in this case. In addition, lab noted that "Samples arrived to laboratory past recommended hold time."																				
Action			Let Value Stand																				
Result			Discrepancy between values remains.																				

RPD > 50%

Table C-68: Rose Creek Drainage Water Quality
 2010 QA/QC Splits - Pit Lakes - Dissolved Metals

Station	Date	Sample Type	Ag-d	Al-d	As-d	Ba-d	B-d	Be-d	Bi-d	Ca-d	Cd-d	Co-d	Cr-d	Cu-d	Fe-d	K-d	Li-d	Mg-d	Mn-d	Mo-d	Na-d	Ni-d	Pb-d	Sb-d	S-d	Se-d	Si-d	Sn-d	Sr-d	Ti-d	Tl-d	U-d	V-d	Zn-d	Zr-d			
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
FL-1	8/12/2010	M	<0.03	3.00	0.20	16.30	<300	<0.05	<0.03	127.00	16.60	50.80	<0.5	5.60	10.00	7.10	0.06	66.30	2940.00	0.50	16.20	131.00	0.41	0.30	212.00	<0.2	2880.00	<0.05	570.00	<3	0.45	1.100	<1	20600.00	<0.5			
FL-1	8/12/2010	SPLIT	<0.03	3.00	0.30	16.20	<300	<0.05	<0.03	129.00	15.90	50.50	<0.5	5.50	13.00	7.10	0.06	67.40	2950.00	0.50	16.60	129.00	0.53	0.20	226.00	<0.2	2750.00	<0.05	557.00	<3	0.47	1.100	<1	20700.00	<0.5			
RPD (%)			N/A	0.00	40.00	0.62	N/A	N/A	N/A	1.56	4.31	0.59	N/A	1.80	26.09	0.00	1.71	1.65	0.34	0.00	2.44	1.54	25.53	40.00	6.39	N/A	4.62	N/A	2.31	N/A	4.35	0.00	N/A	0.48	N/A			
Comments																																						
Action																																						
Result																																						

RPD > 50%
 RPD > 100%

Table C-69: Rose Creek Drainage Water Quality
 2010 QA/QC Splits - Pit Lakes - Total Metals

Station	Date	Sample Type	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr			
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	ug/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
FL-1	8/12/2010	M	<0.03	10.00	<0.1	<300	17.40	<0.05	<0.03	148.00	18.20	53.10	<0.5	7.40	47.00	8.20	0.06	79.10	3150.00	0.50	19.10	138.00	0.85	260.00	0.20	<0.2	4530.00	<0.05	631.00	<3	0.47	0.920	<1	21900.00	<0.5			
FL-1	8/12/2010	SPLIT	<0.03	8.00	<0.1	<300	17.30	0.06	<0.03	148.00	17.50	52.60	<0.5	7.30	51.00	8.10	0.06	77.70	3050.00	0.50	18.70	135.00	0.80	252.00	0.20	<0.2	4580.00	<0.05	627.00	<3	0.50	0.950	<1	21700.00	<0.5			
RPD (%)			N/A	22.22	N/A	N/A	0.58	N/A	N/A	0.00	3.92	0.95	N/A	1.36	8.16	1.23	1.57	1.79	3.23	0.00	2.12	2.20	6.06	3.13	0.00	N/A	1.10	N/A	0.64	N/A	6.19	3.21	N/A	0.92	N/A			
Comments																																						
Action																																						
Result																																						

RPD > 50%
 RPD > 100%

Figure C-1: Sulphate at FCO, FAROCR, W10 and R7

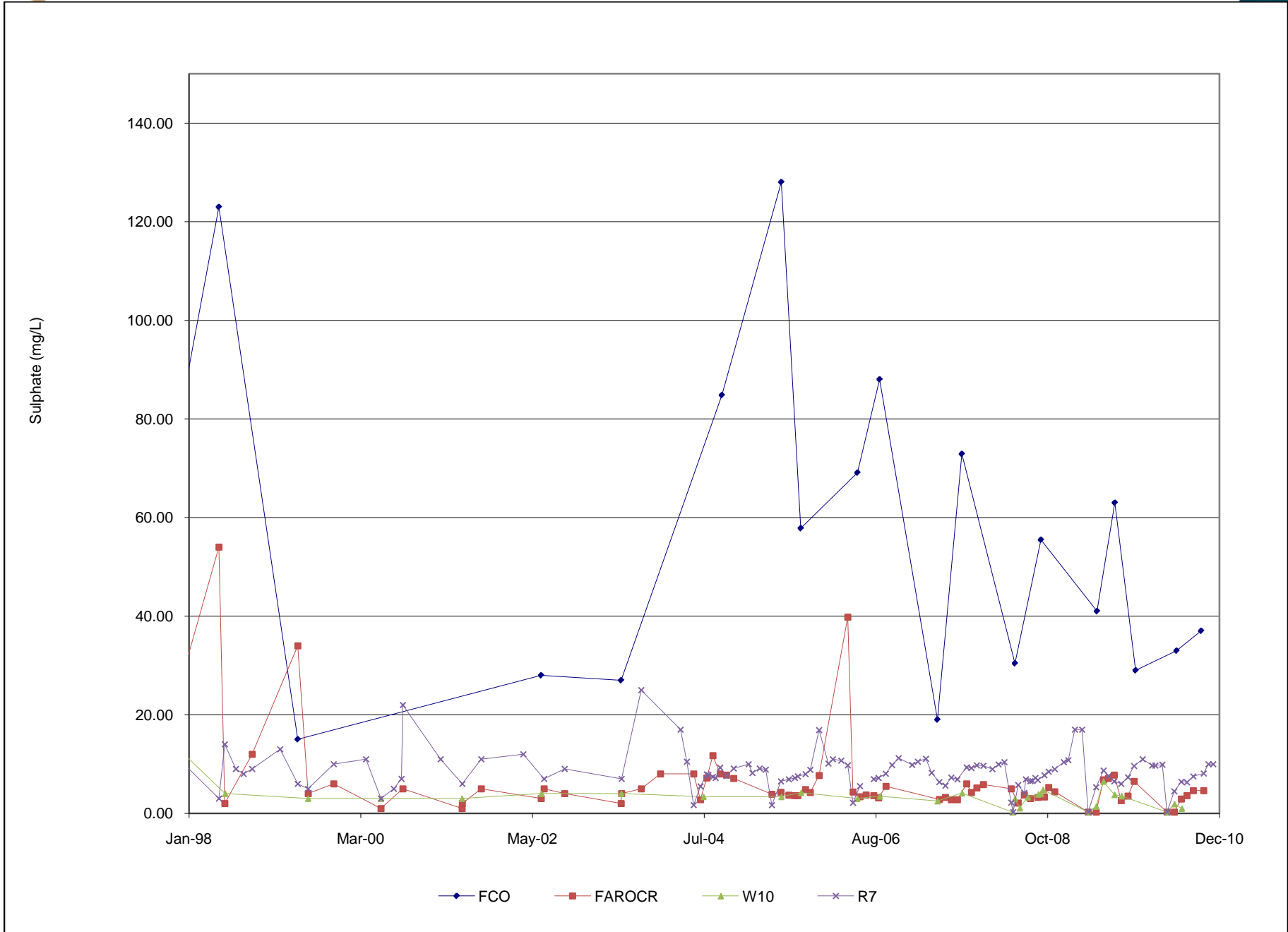


Figure C-2: Total Zinc at FCO, FAROCR, W10 and R7

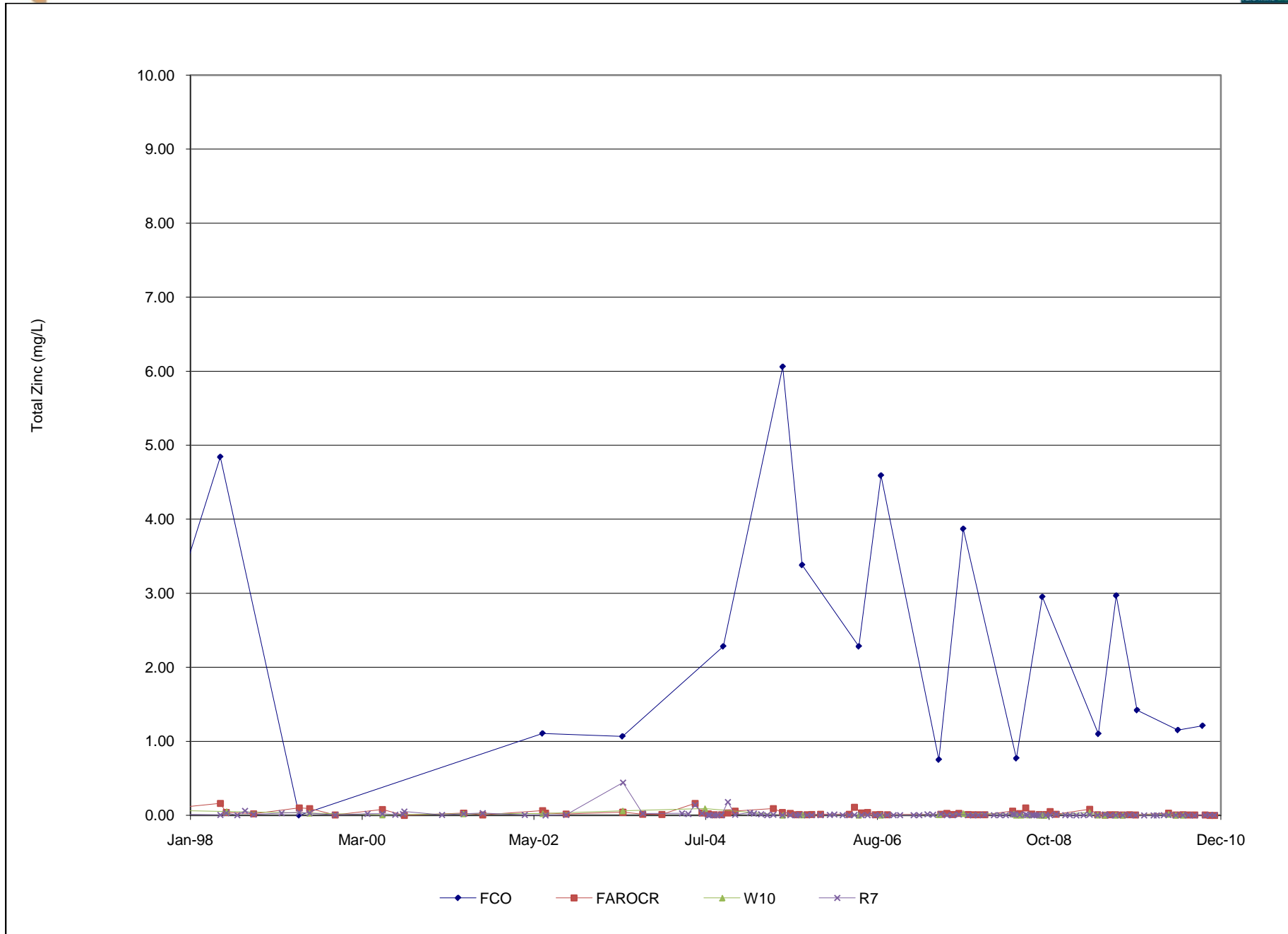


Figure C-3: Total Copper at FCO, FAROCR, W10 and R7

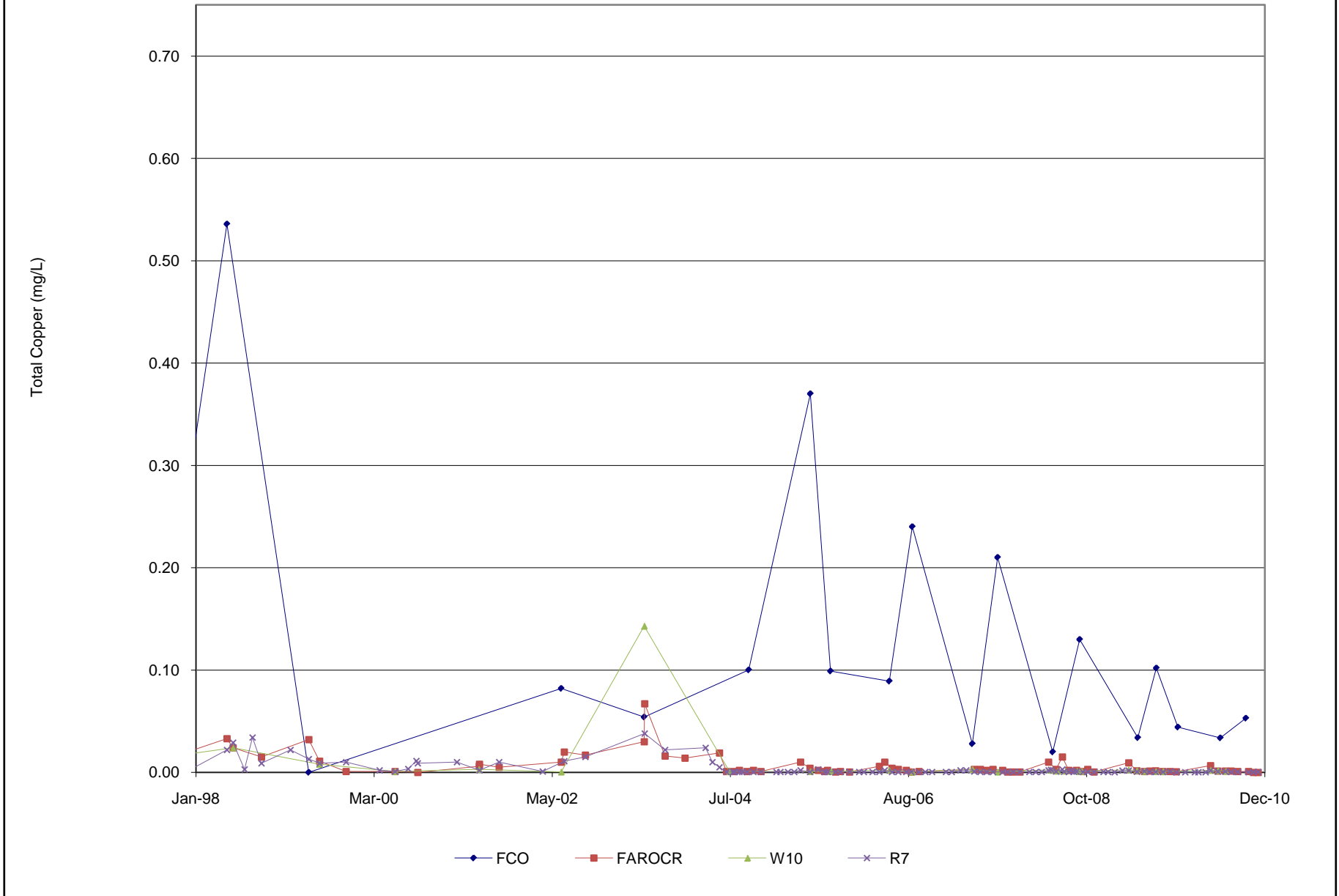


Figure C-4: Total Cadmium at FCO, FAROCR, W10 and R7

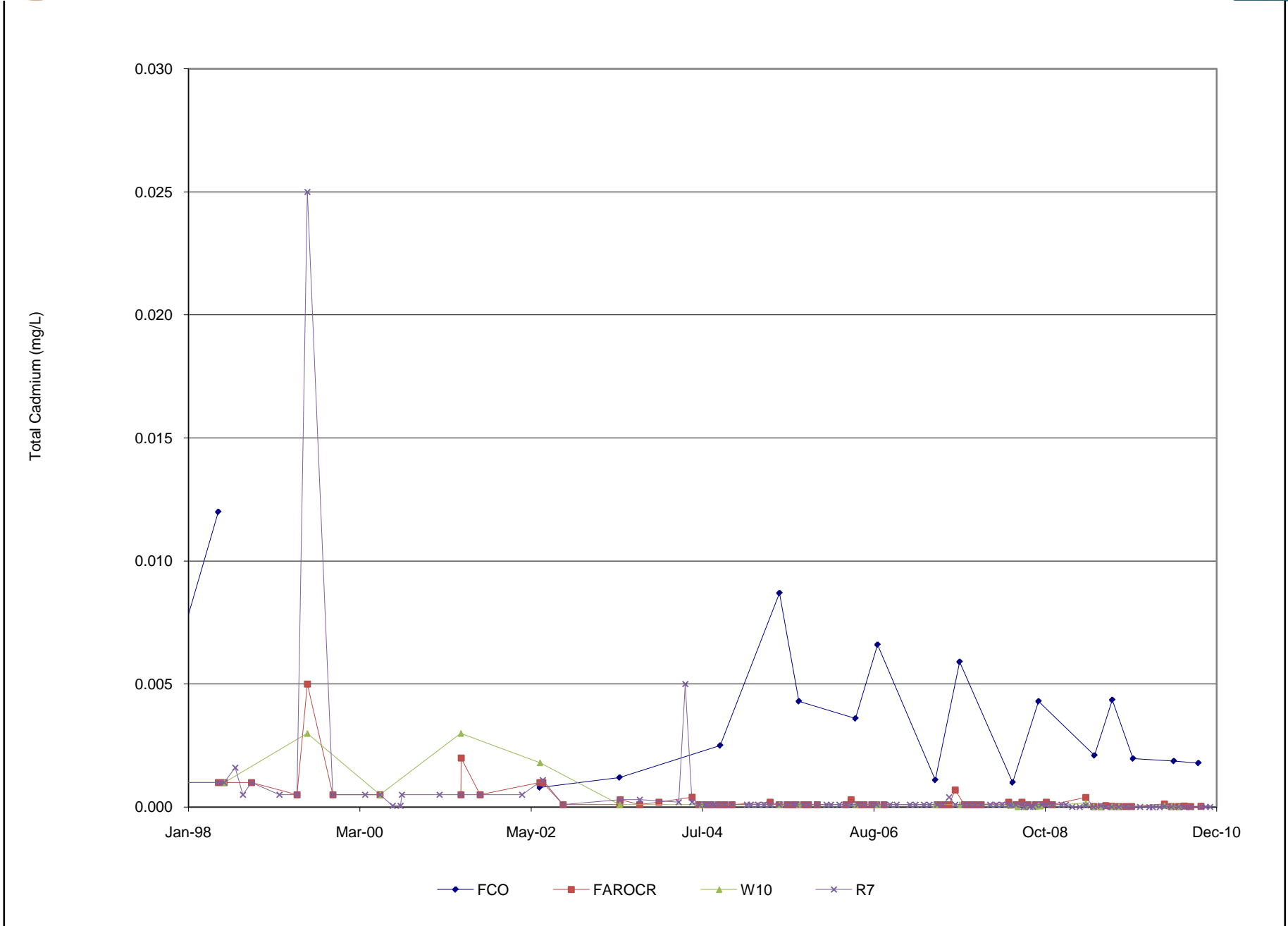


Figure C-5: Faro Pit Zinc (Total and Dissolved)

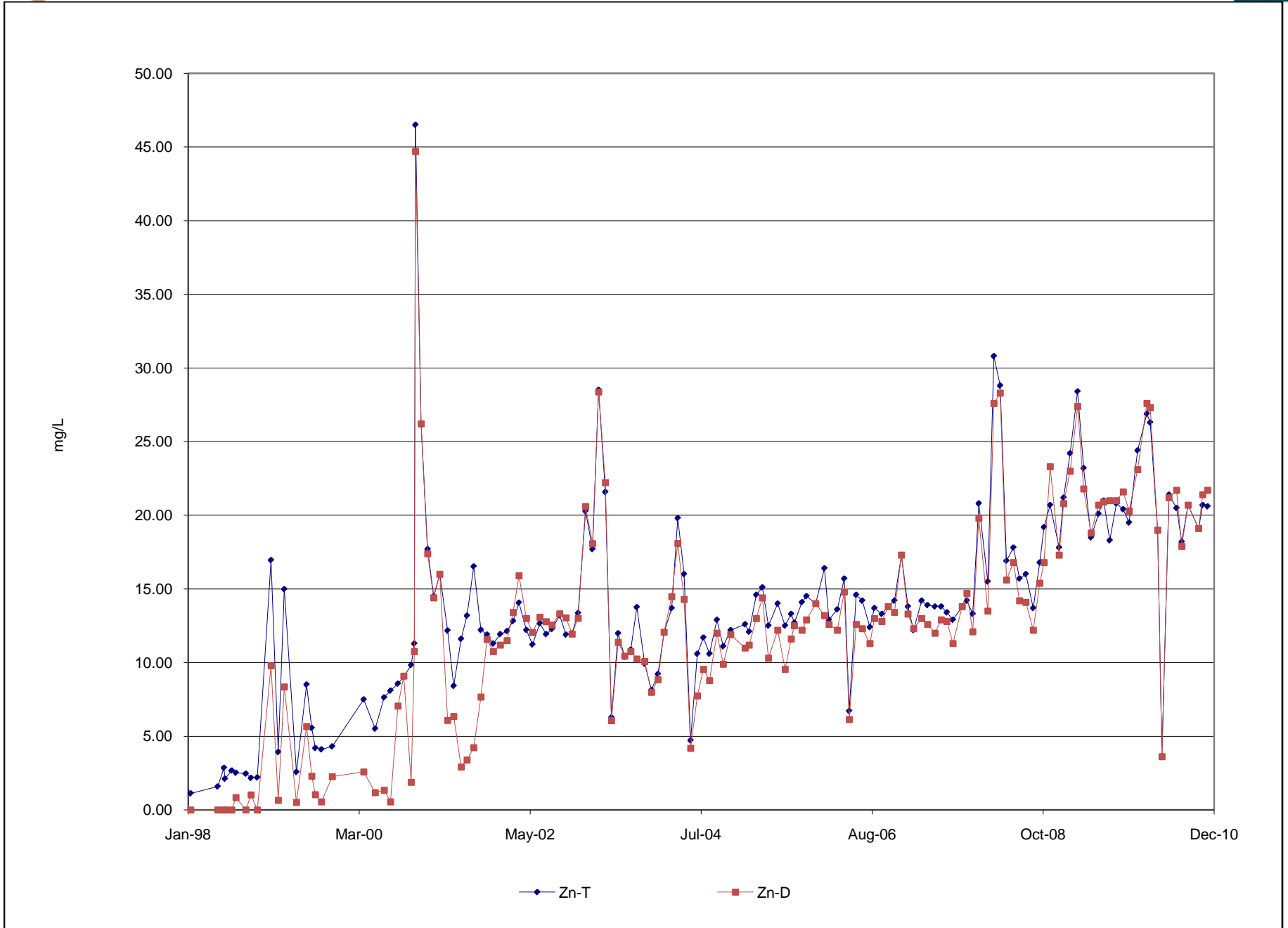


Figure C-6: Sulphate at the Faro Pit, Faro Pit Seeps, Zone II Pit and S-Wells Trench Interception

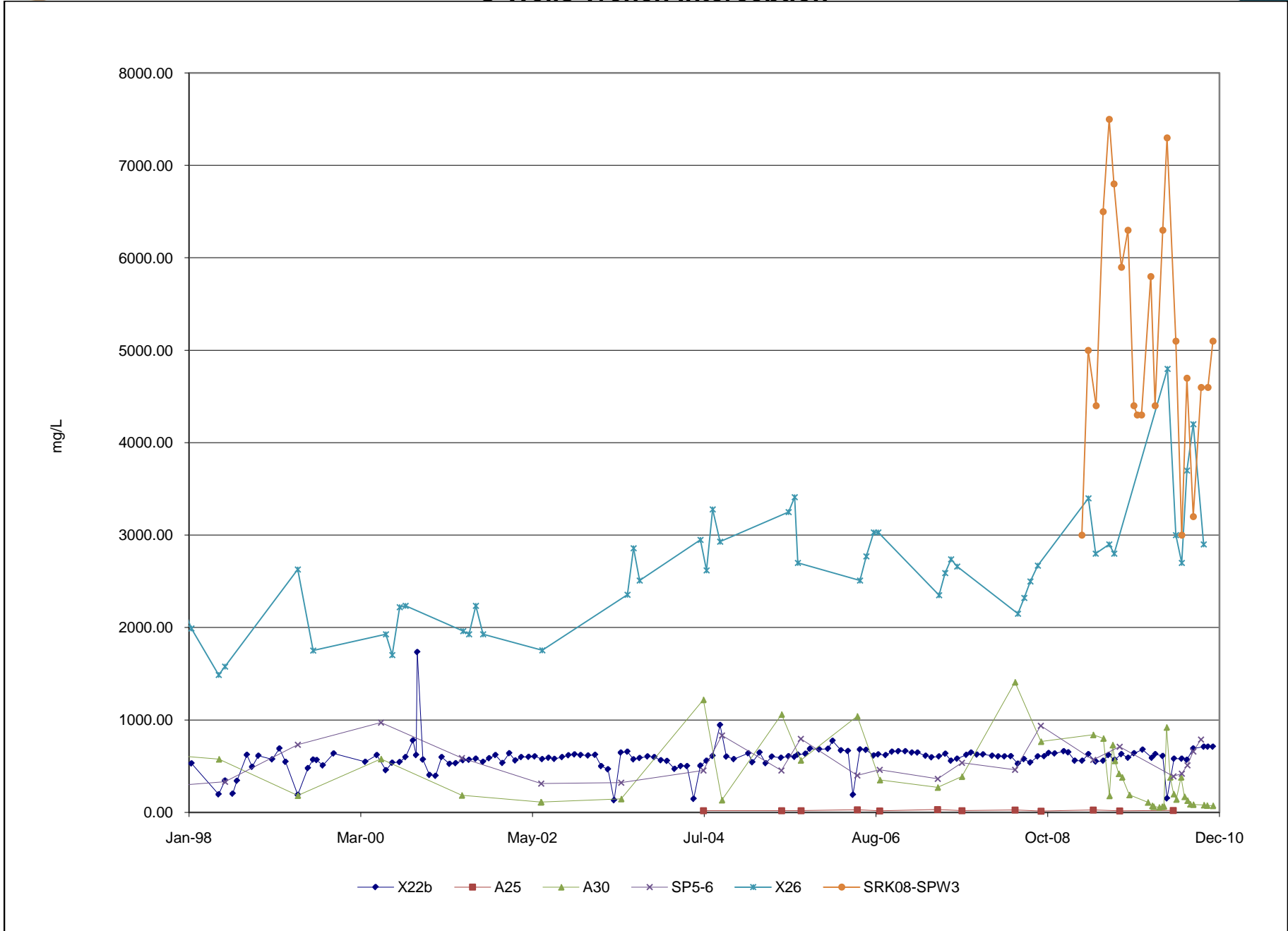


Figure C-7: Faro Pit Lead (Total and Dissolved)

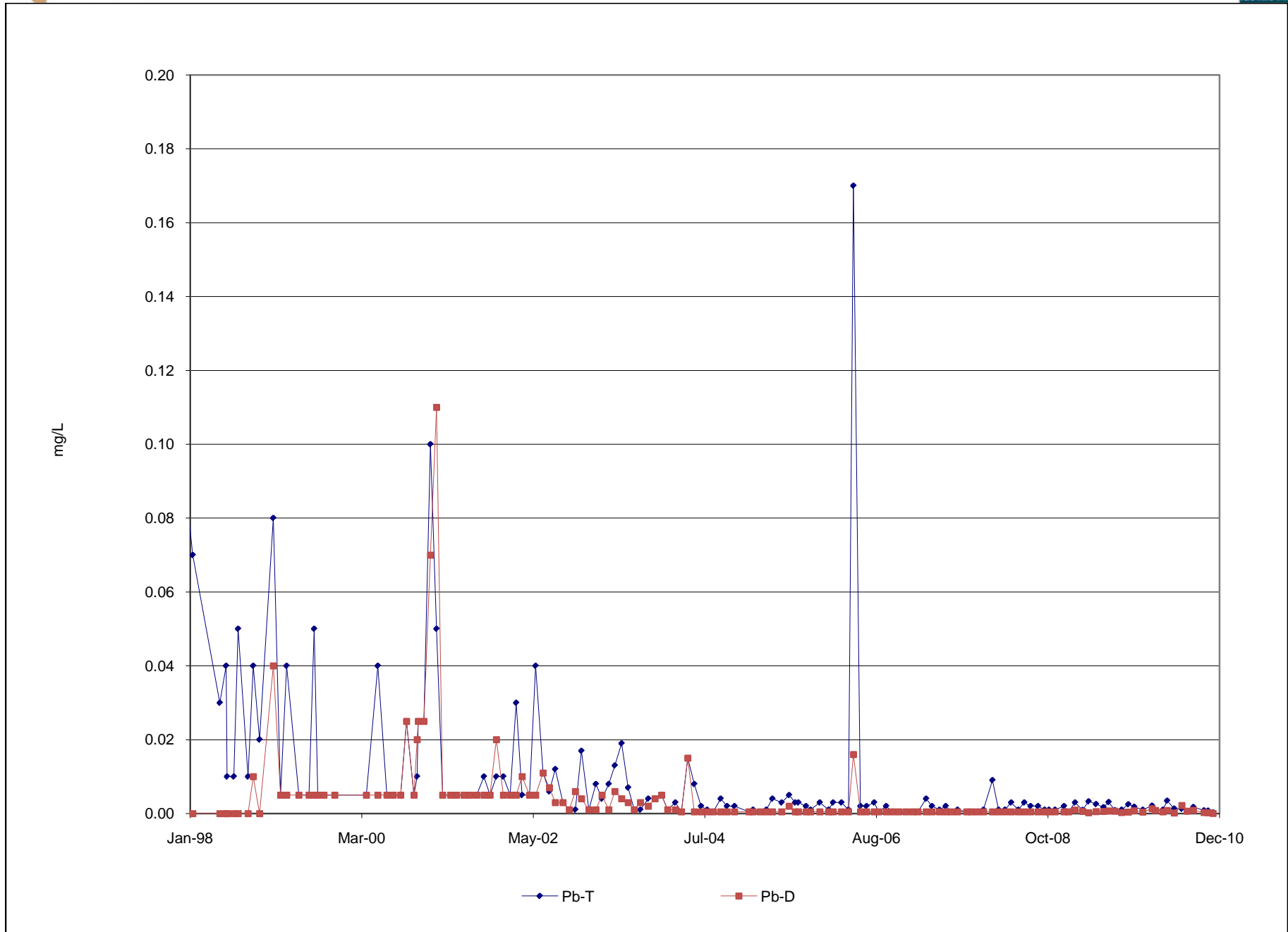


Figure C-8: Faro Pit Cadmium (Total and Dissolved)

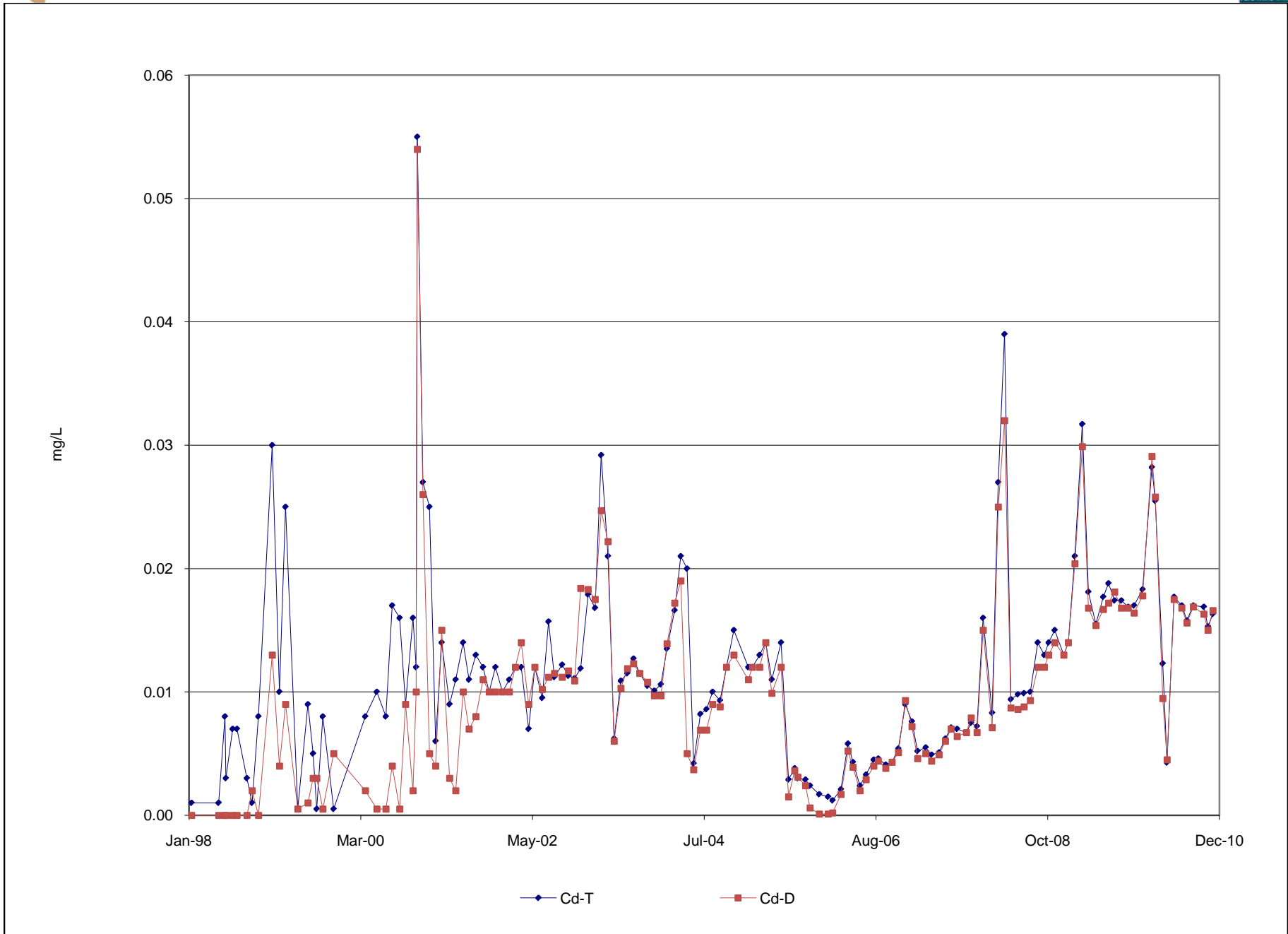


Figure C-9: Zinc (Dissolved) at the Faro Pit, Faro Pit Seeps, Zone II Pit and S-Wells Trench Interception

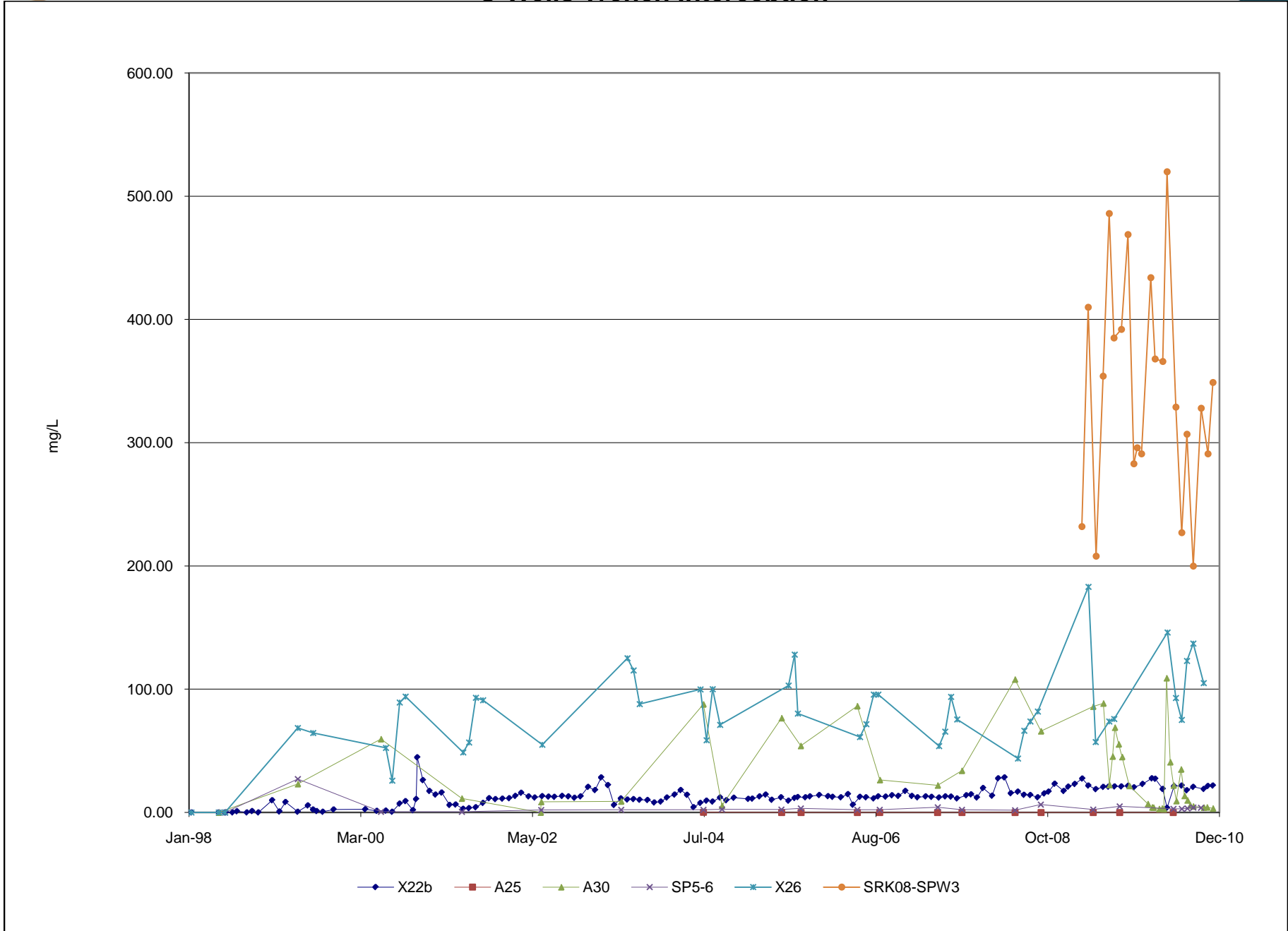




Figure C-10: Lead (Dissolved) at the Faro Pit, Faro Pit Seeps, Zone II Pit and S-Wells Trench Interception

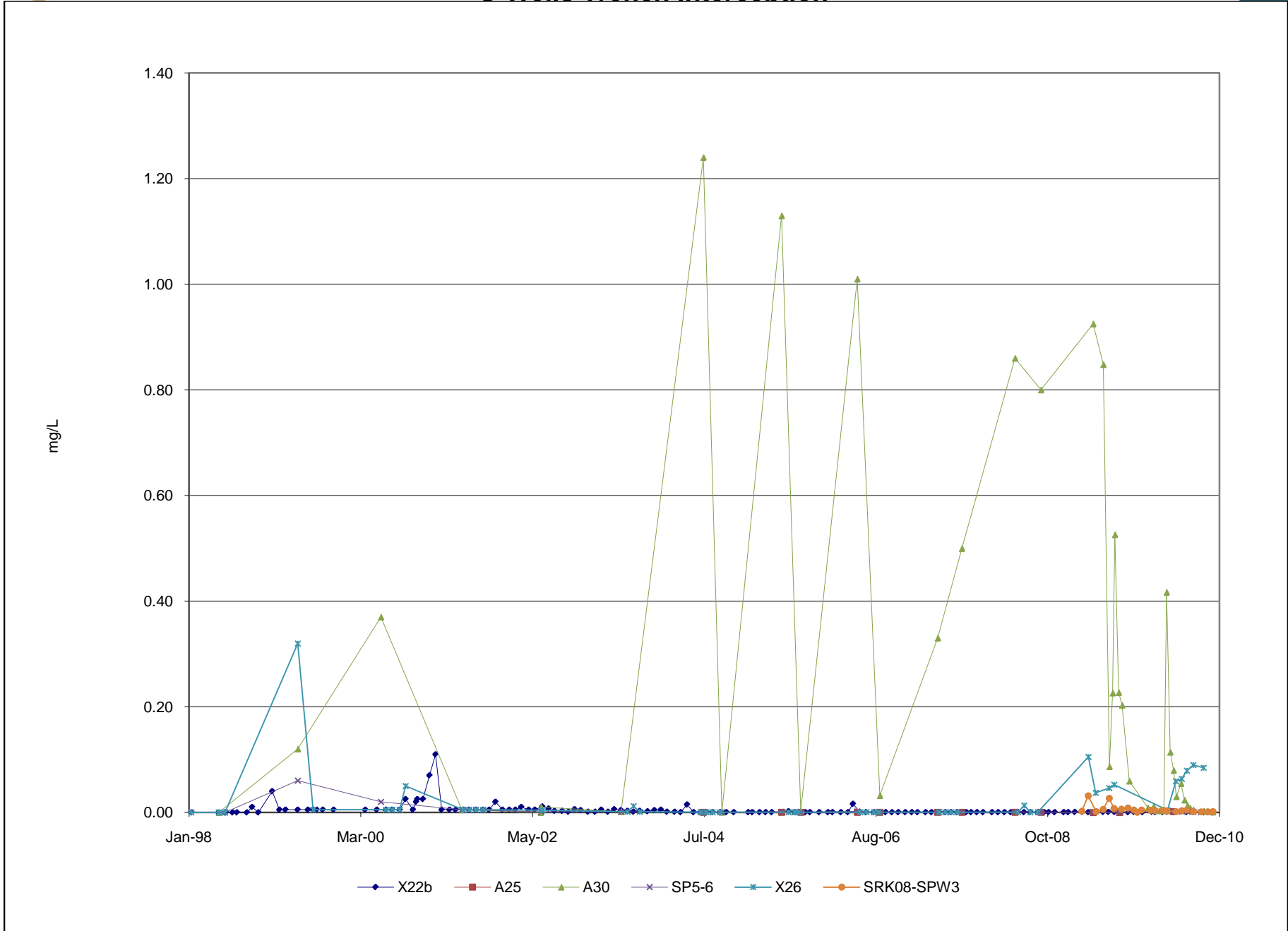


Figure C-11: Cadmium (Dissolved) at the Faro Pit, Faro Pit Seeps, Zone II Pit and S-Wells Trench Interception

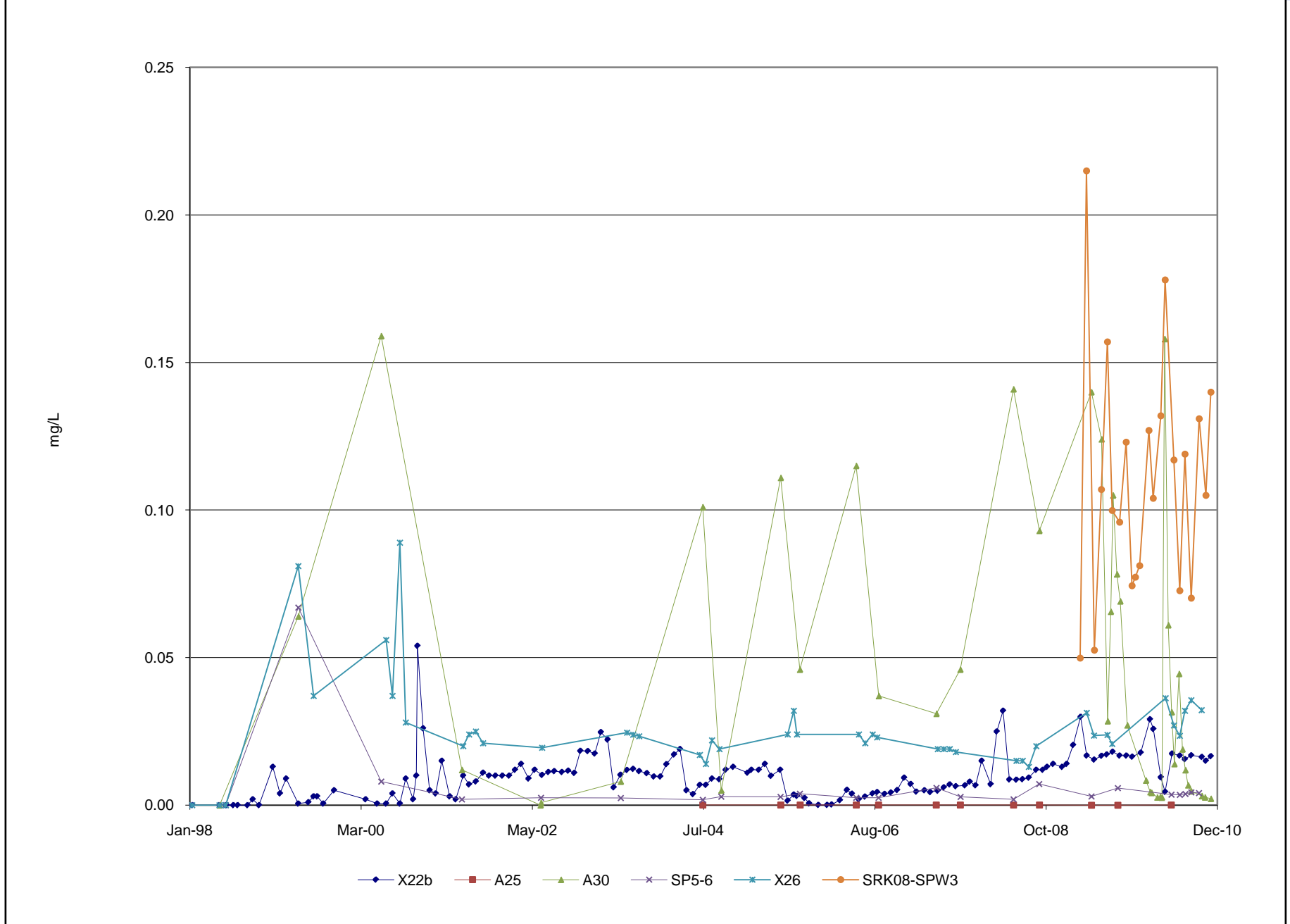


Figure C-12: Sulphate at NE1, NE2, NE3 and W5

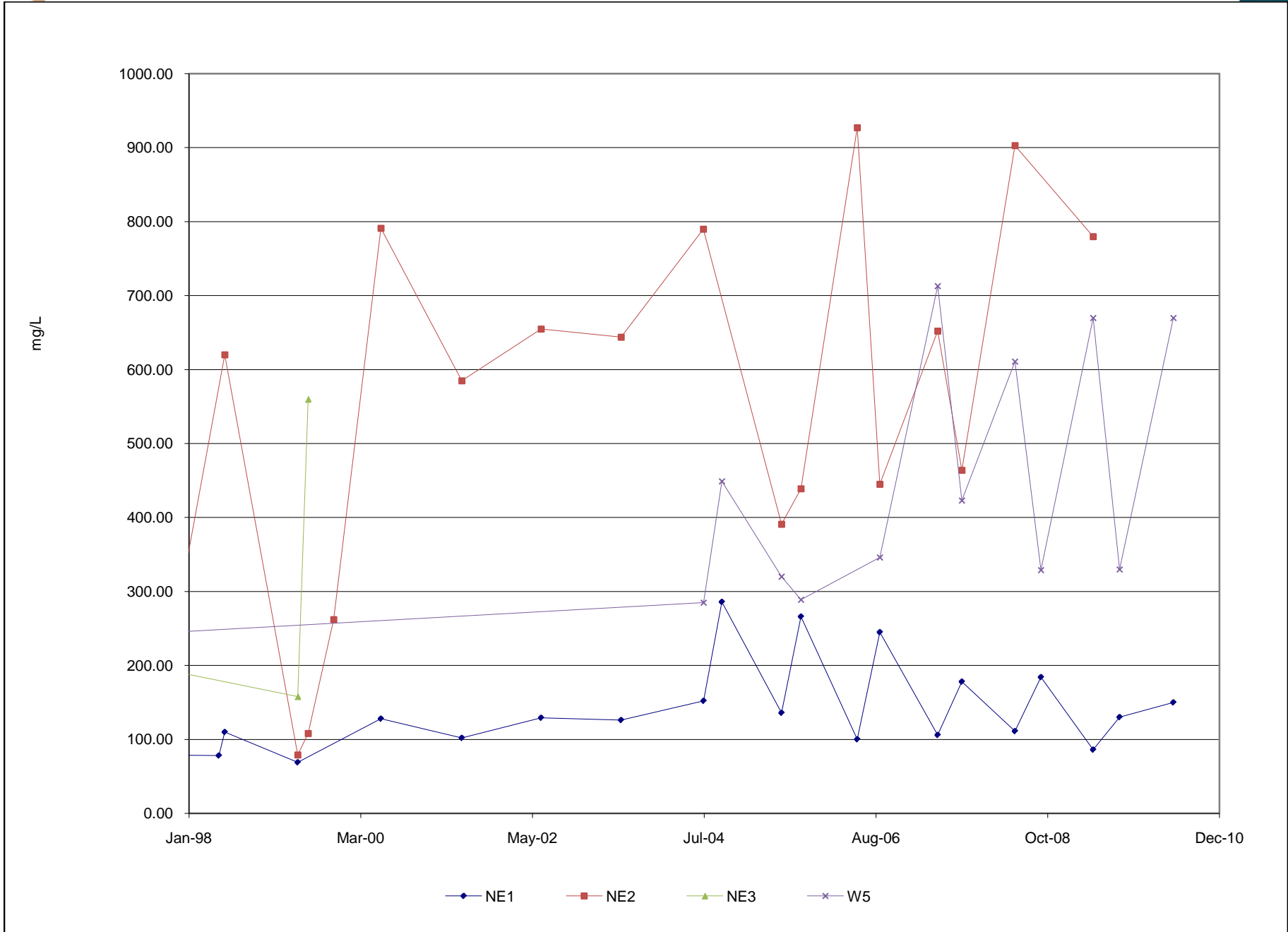


Figure C-13: Zinc (Dissolved) at NE1, NE2, NE3 and W5

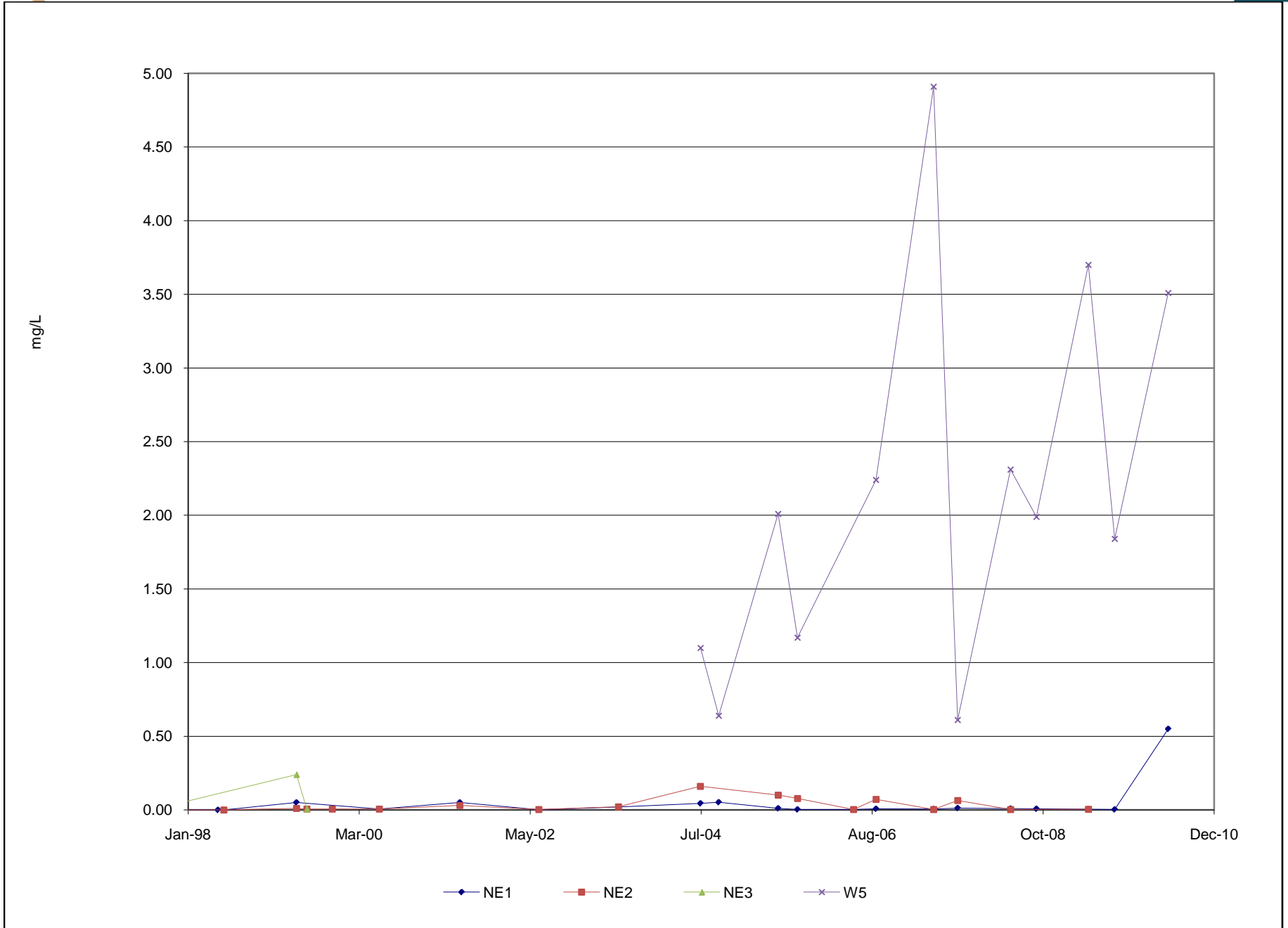


Figure C-14: Iron (Dissolved) at NE1, NE2, NE3 and W5

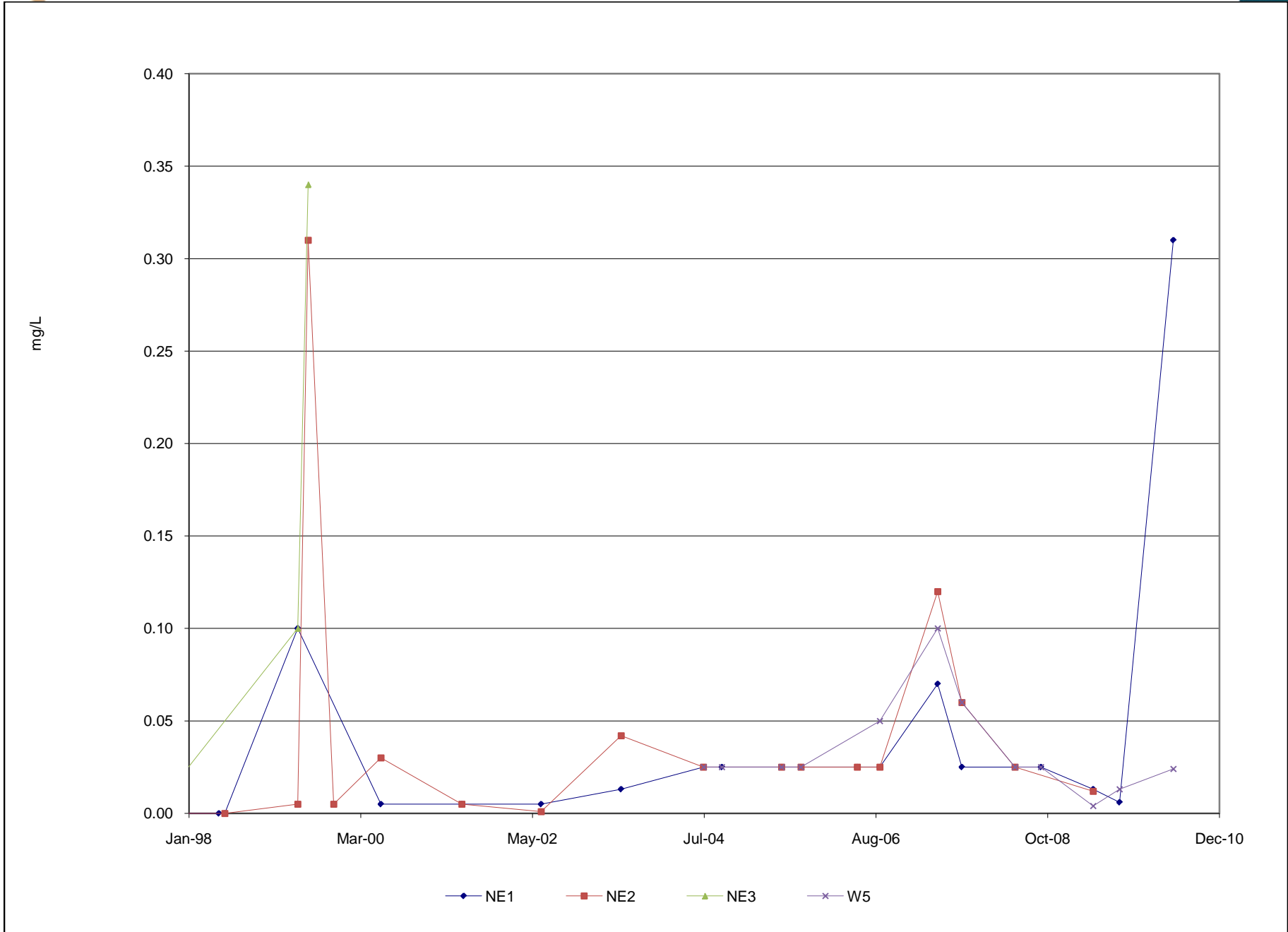


Figure C-15: Lead (Dissolved) at NE1, NE2, NE3 and W5

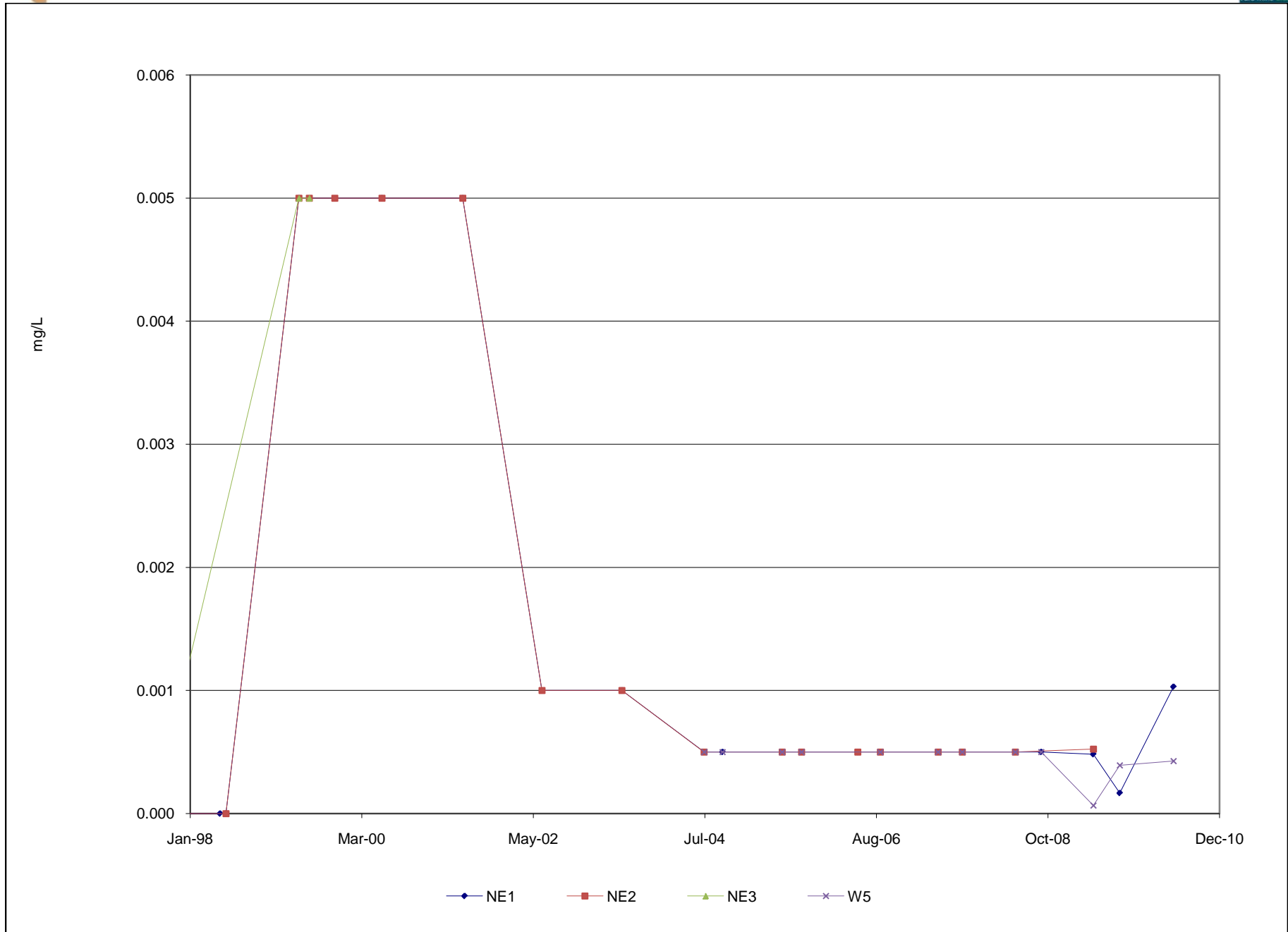


Figure C-16: Sulphate in the North Fork of Rose Creek,
Upstream of the Rock Drain

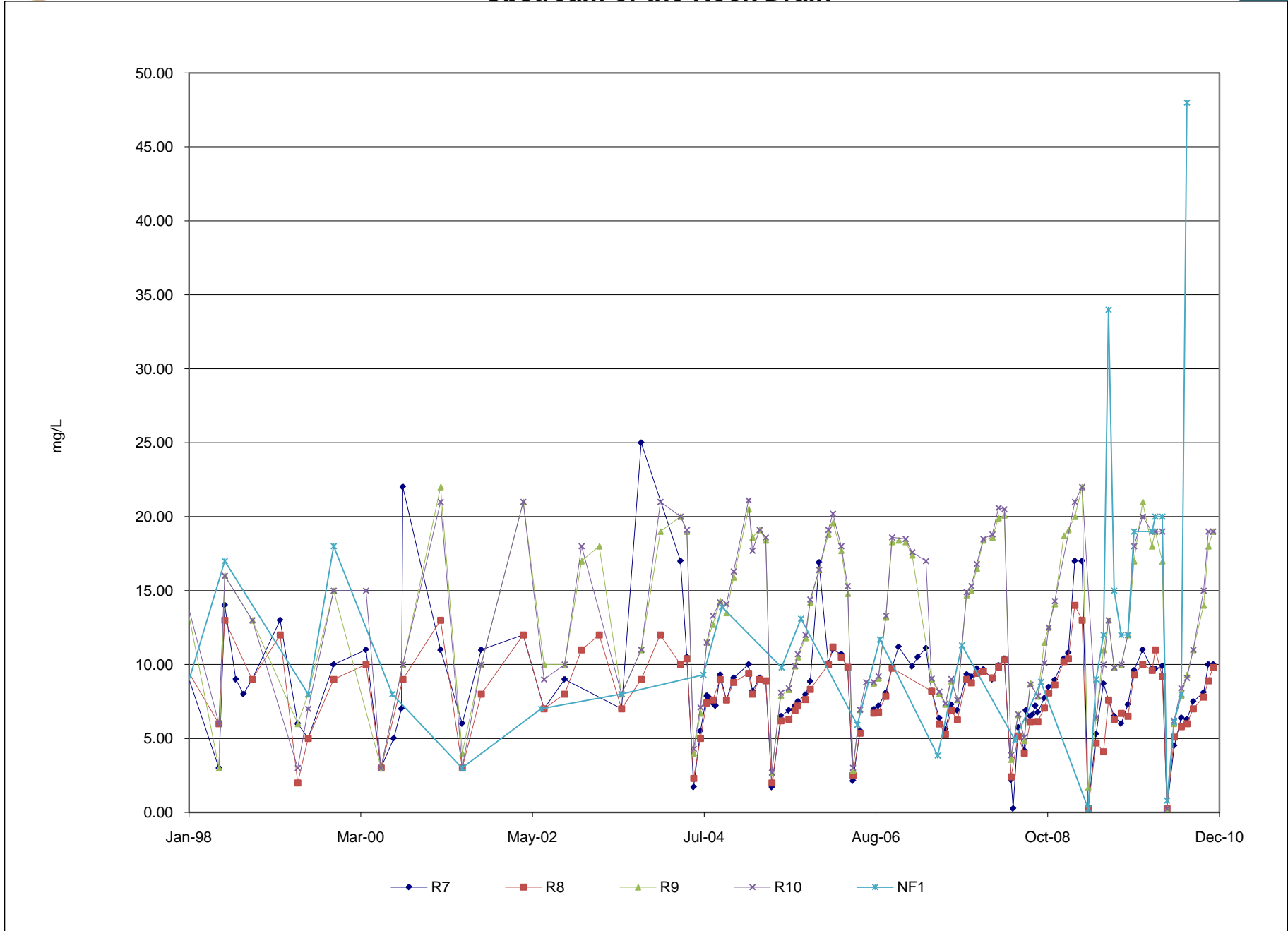


Figure C-17: Zinc (Total) in the North Fork of Rose Creek,
Upstream of the Rock Drain

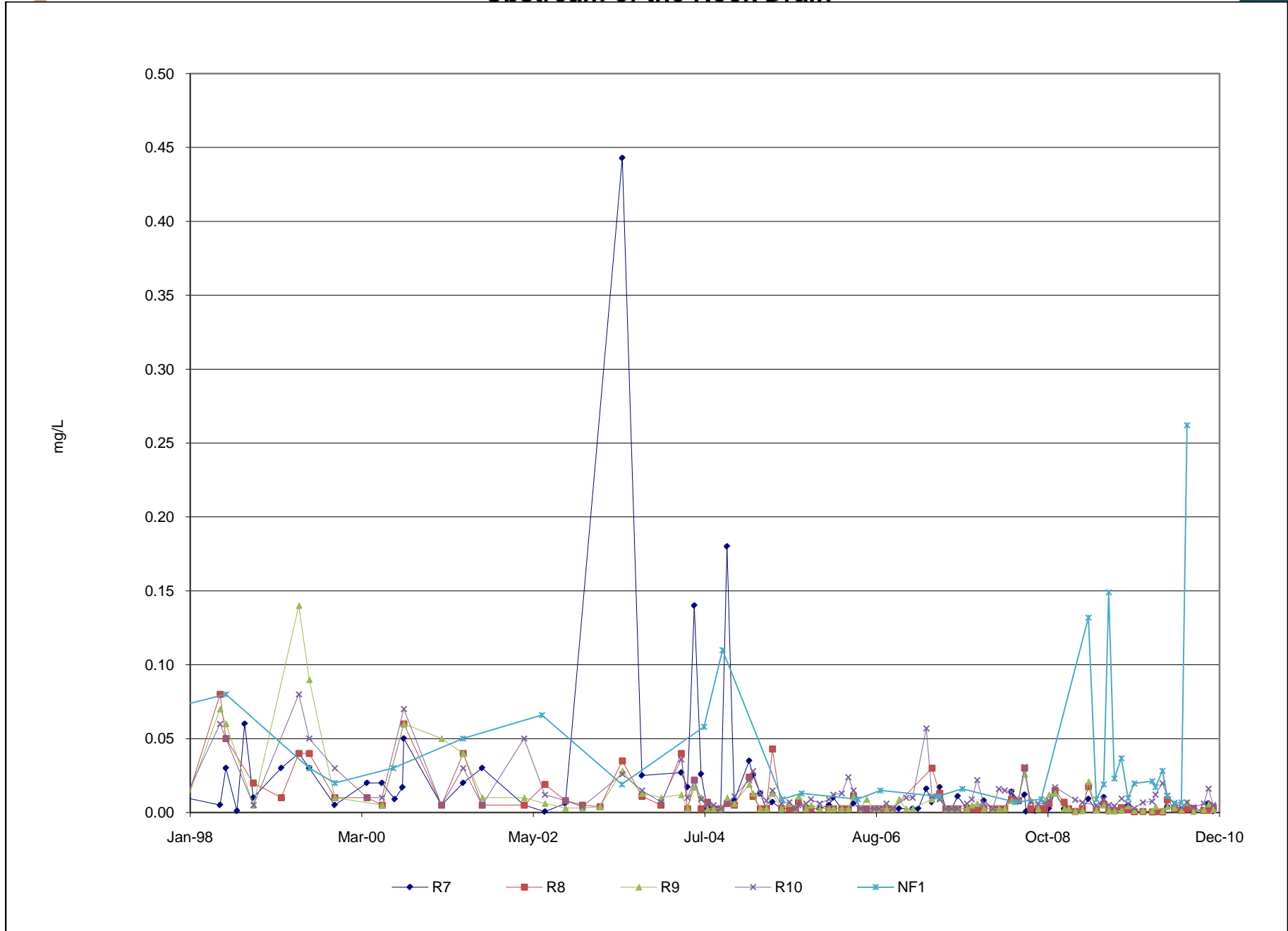


Figure C-18: Iron (Total) in the North Fork of Rose Creek,
Upstream of the Rock Drain

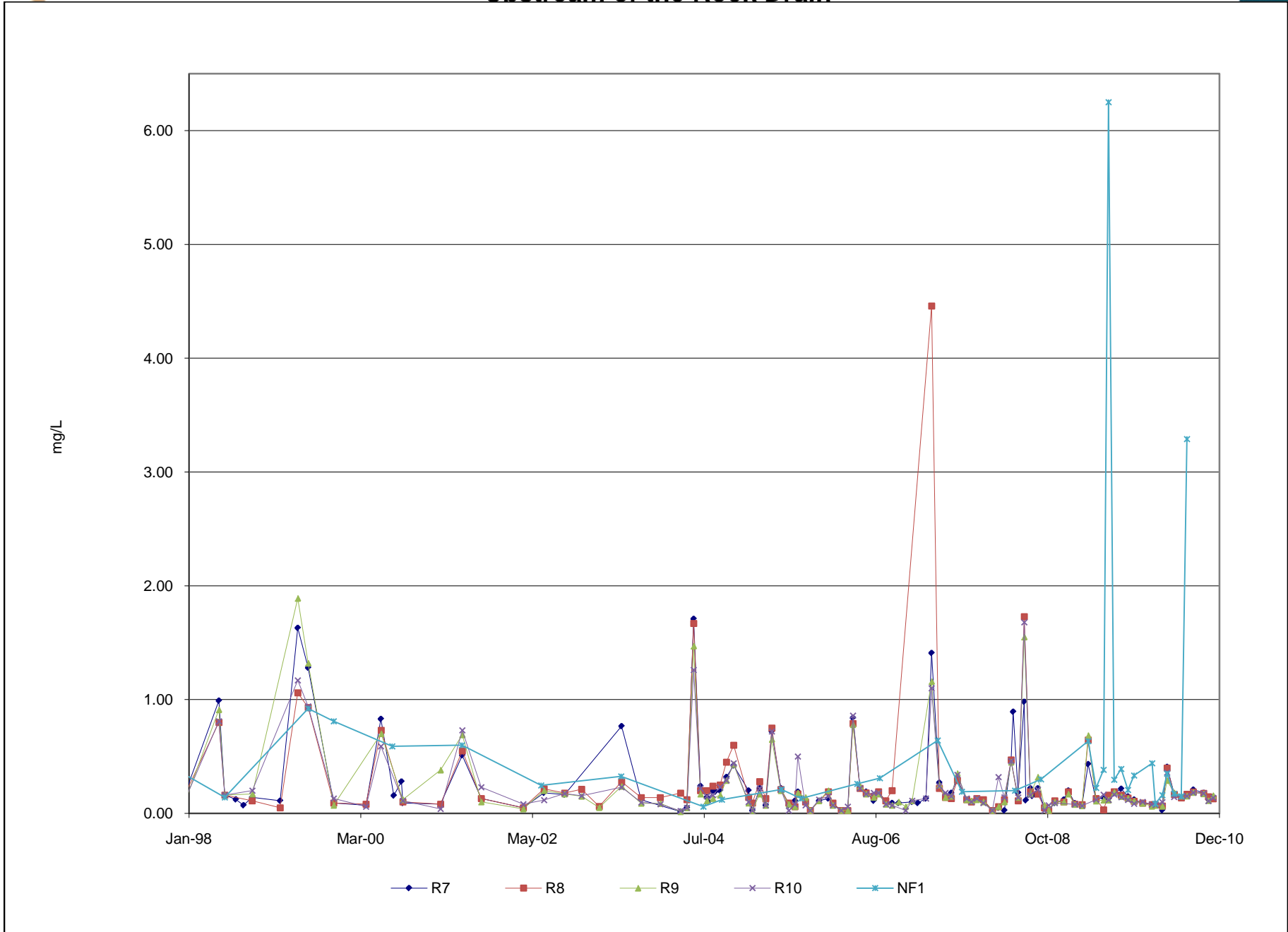


Figure C-19: Lead (Total) in the North Fork of Rose Creek,
Upstream of the Rock Drain

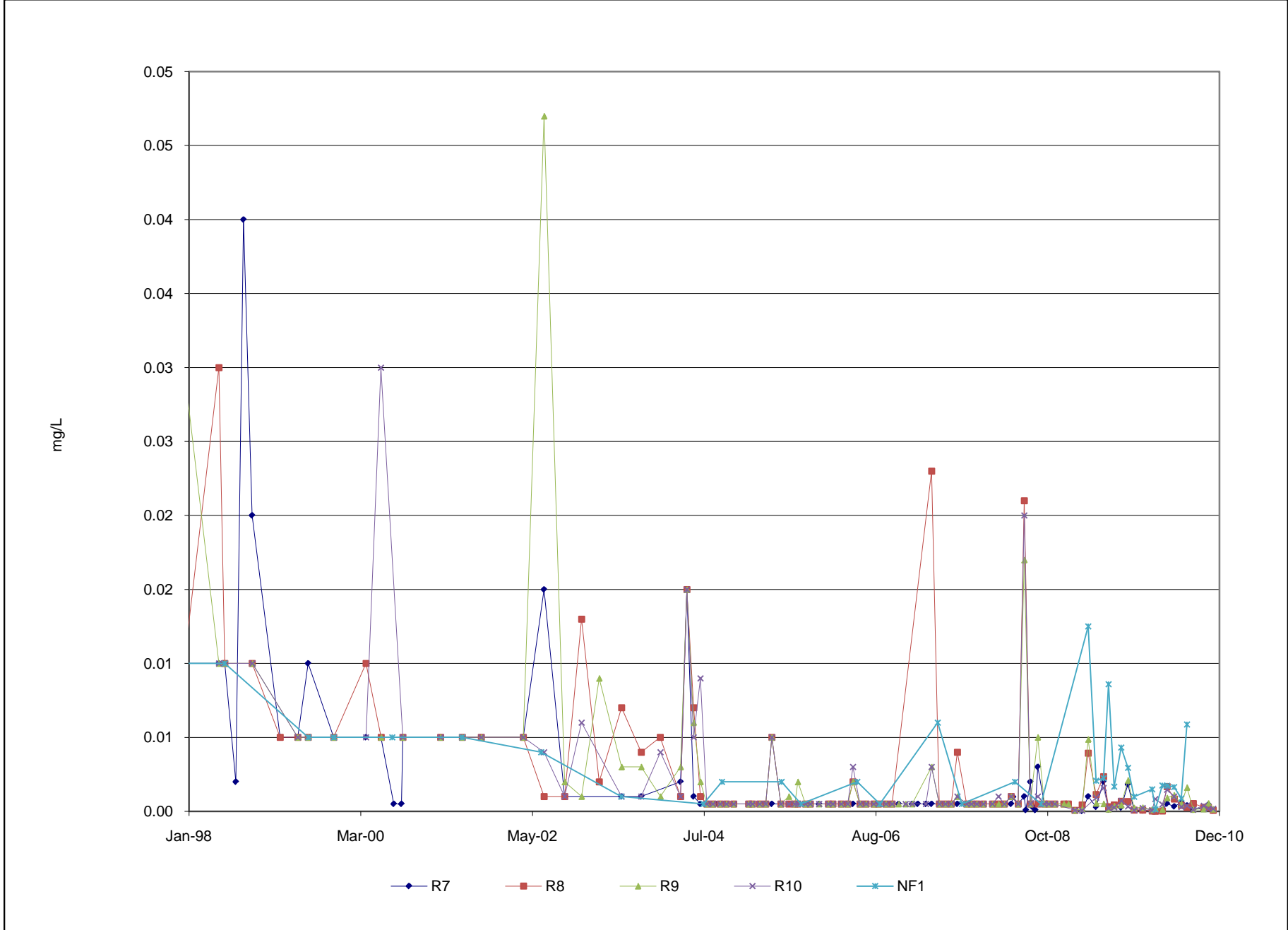


Figure C-20: Sulphate in the North Fork of Rose Creek,
Upstream and Downstream of the Rock Drain

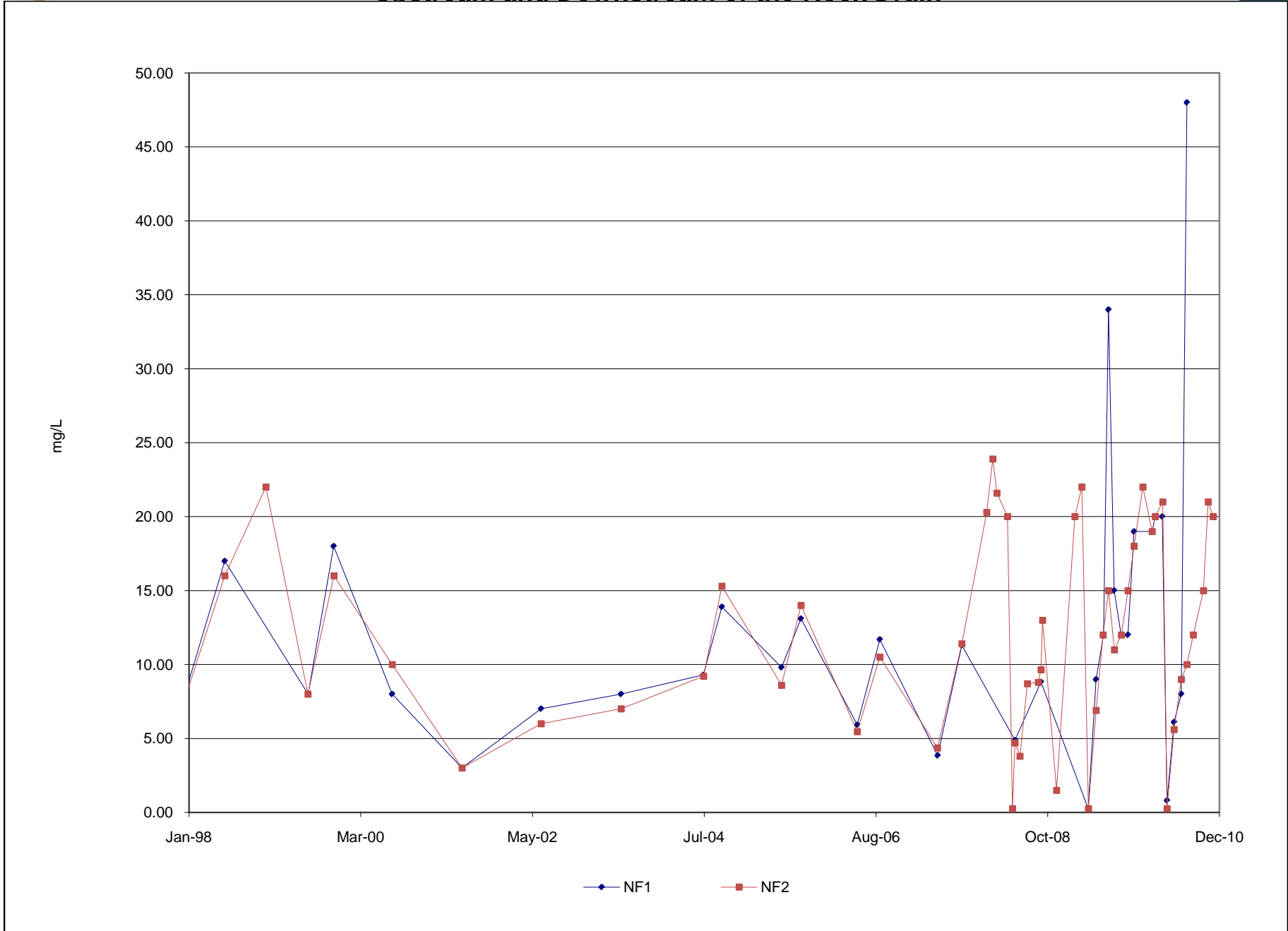


Figure C-21: Zinc (Total) in the North Fork of Rose Creek,
Upstream and Downstream of the Rock Drain

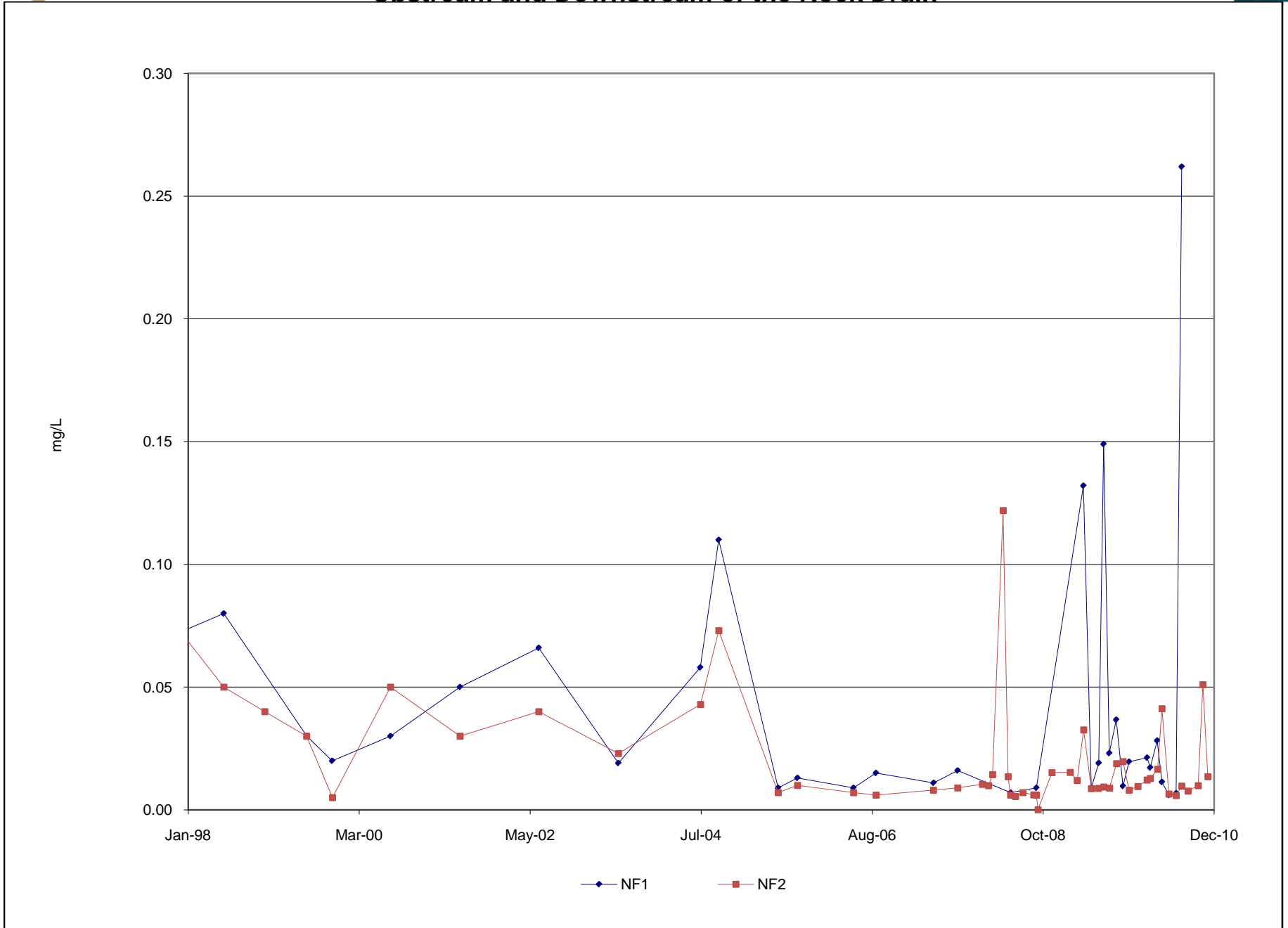


Figure C-22: Sulphate in the North Fork of Rose Creek,
Downstream of the Rock Drain and Along the S-Wells Reach

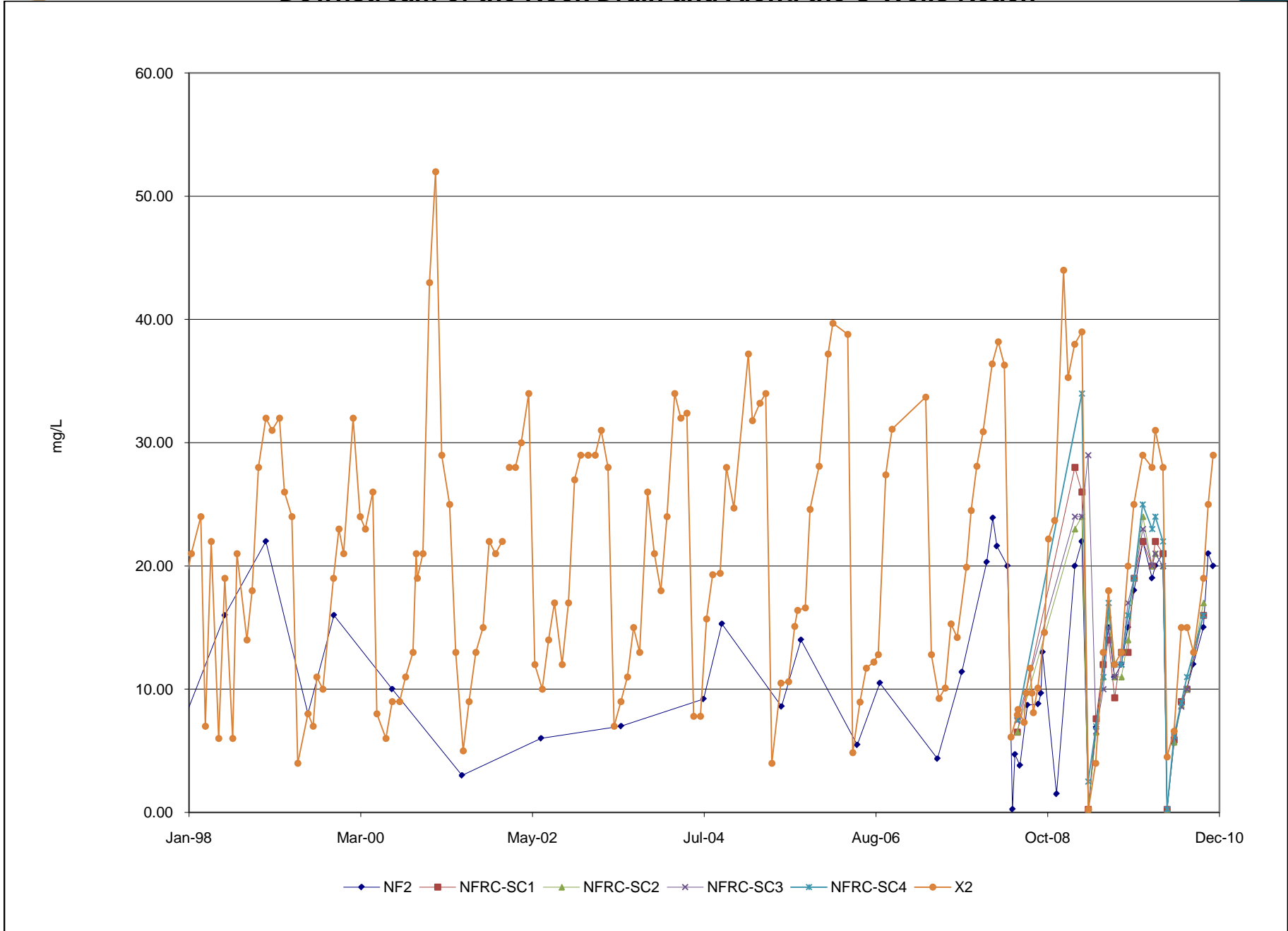


Figure C-23: Zinc (Total) in the North Fork of Rose Creek,
Downstream of the Rock Drain and Along the S-Wells Reach

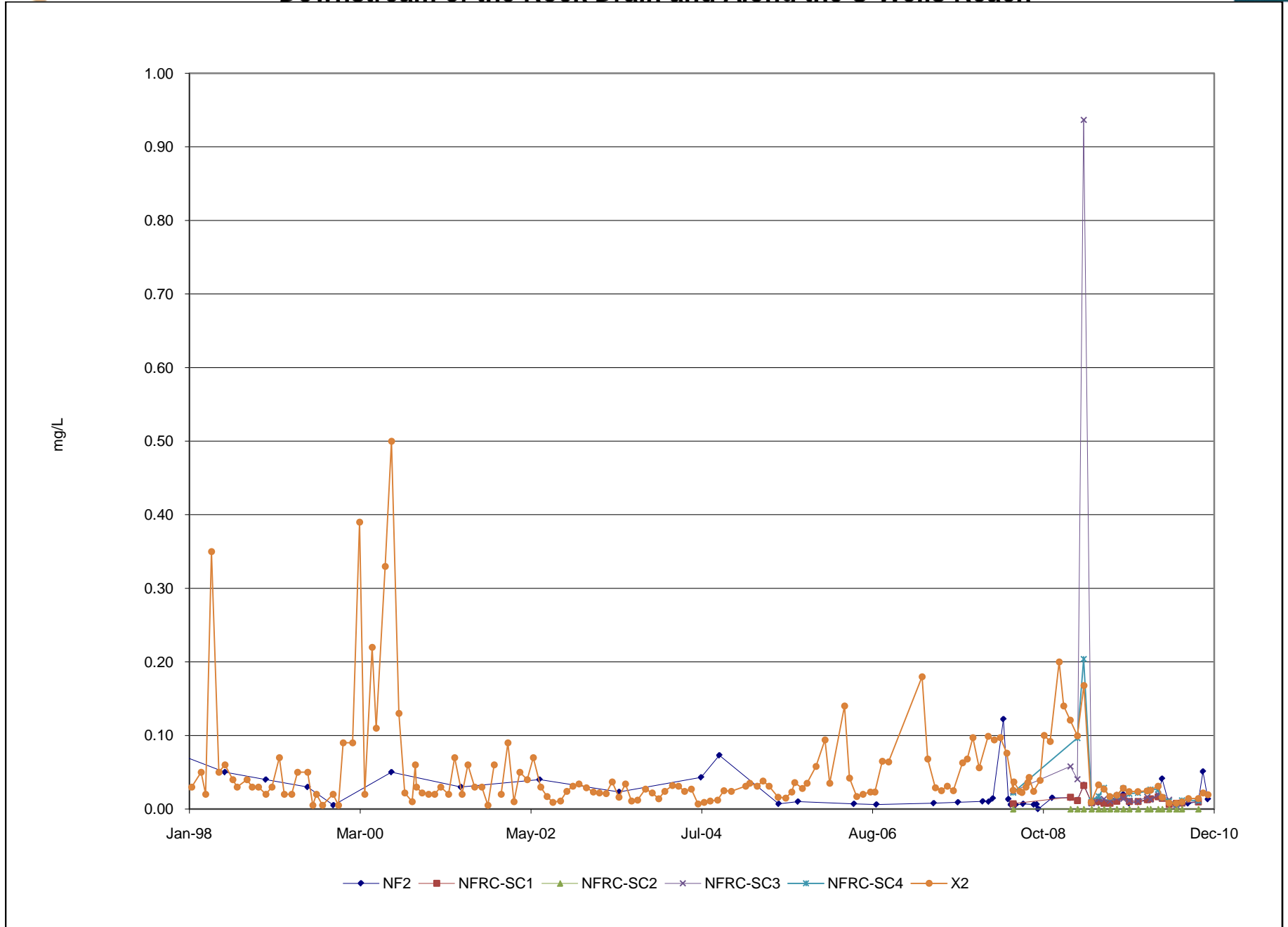


Figure C-24: Lead (Total) in the North Fork of Rose Creek,
Downstream of the Rock Drain and Along the S-Wells Reach

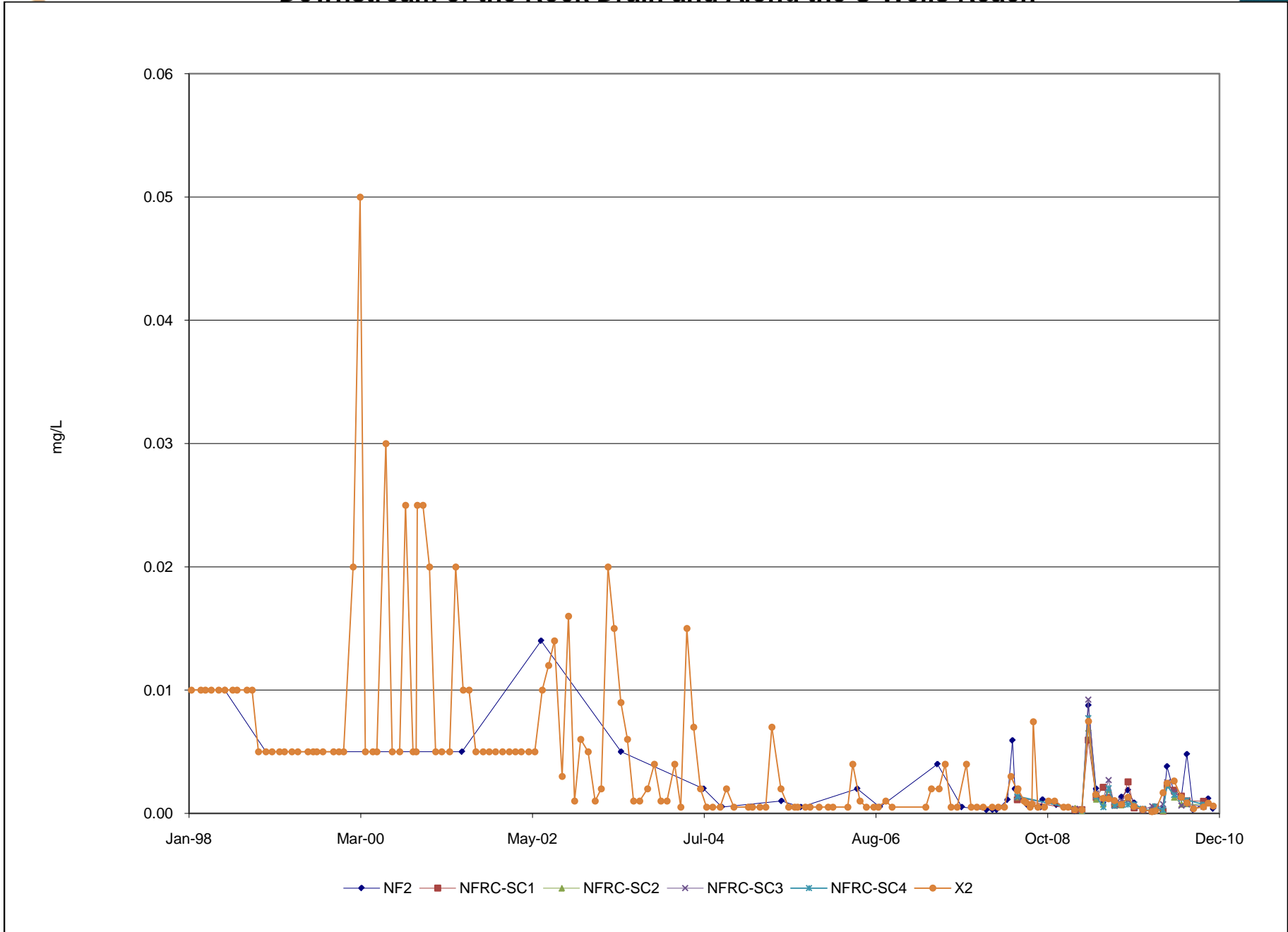


Figure C-25: Sulphate at Faro Dump Toe and ETA

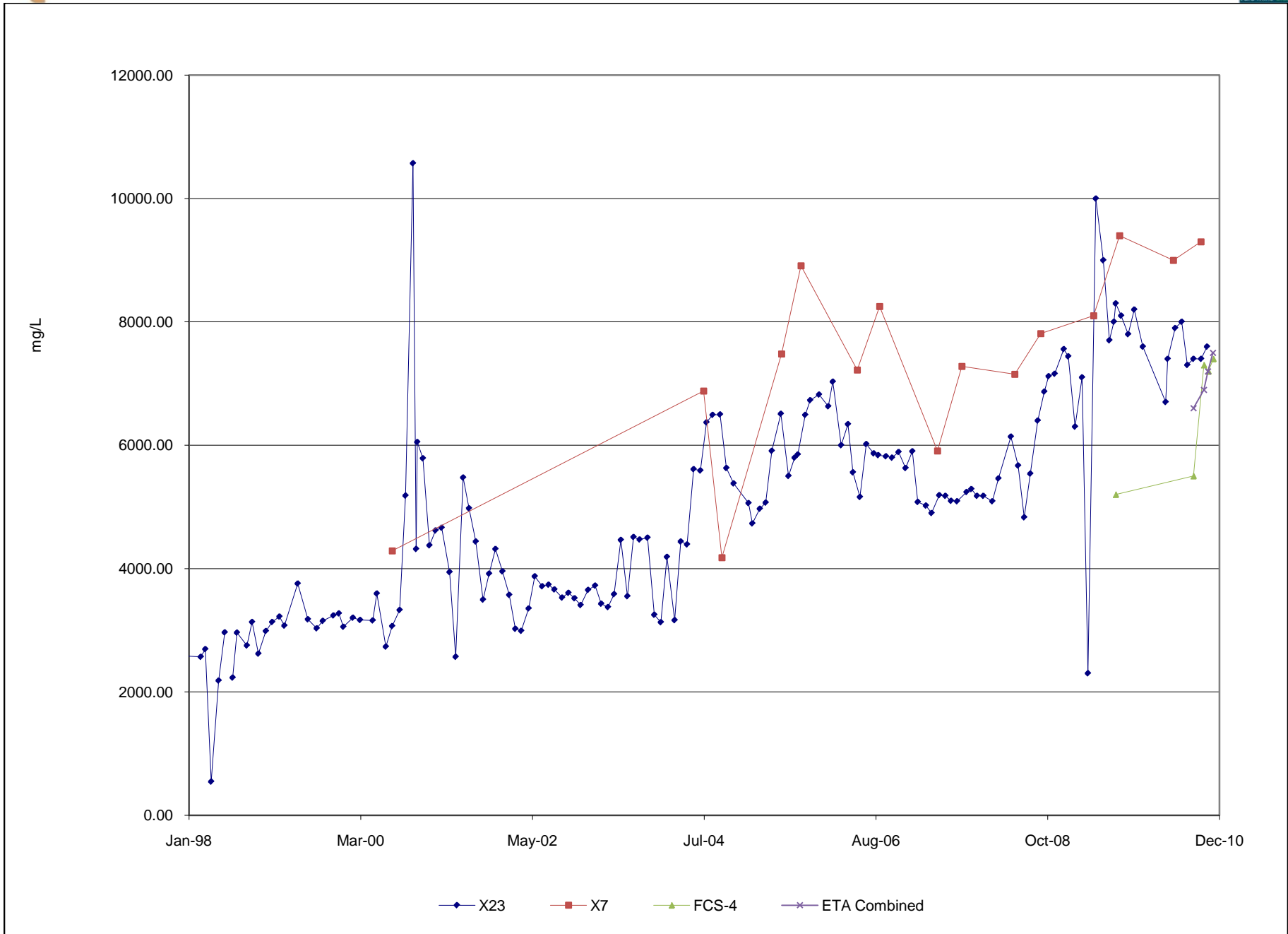


Figure C-26: Zinc at Faro Dump Toe and ETA

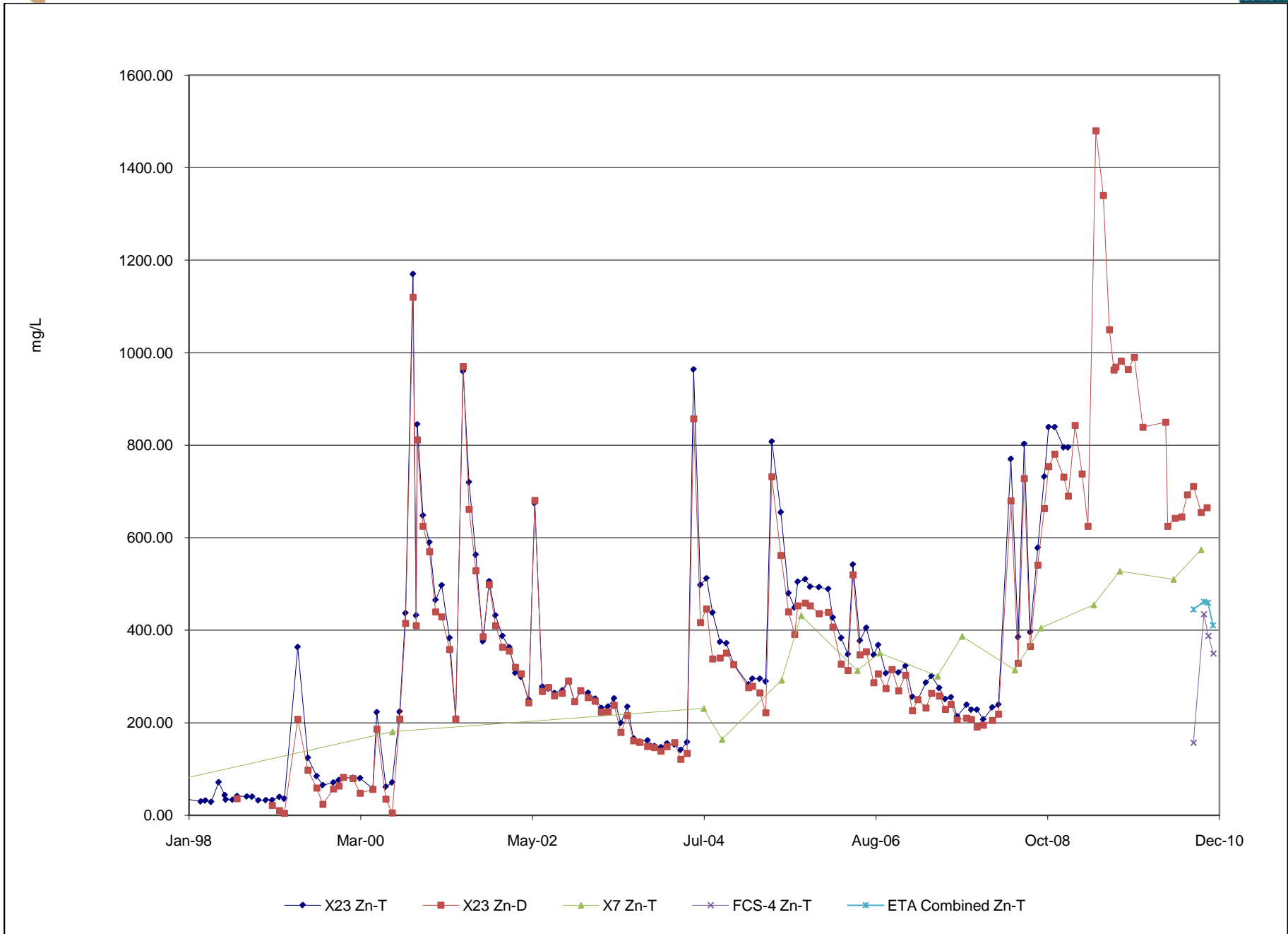


Figure C-27: Intermediate Pond pH

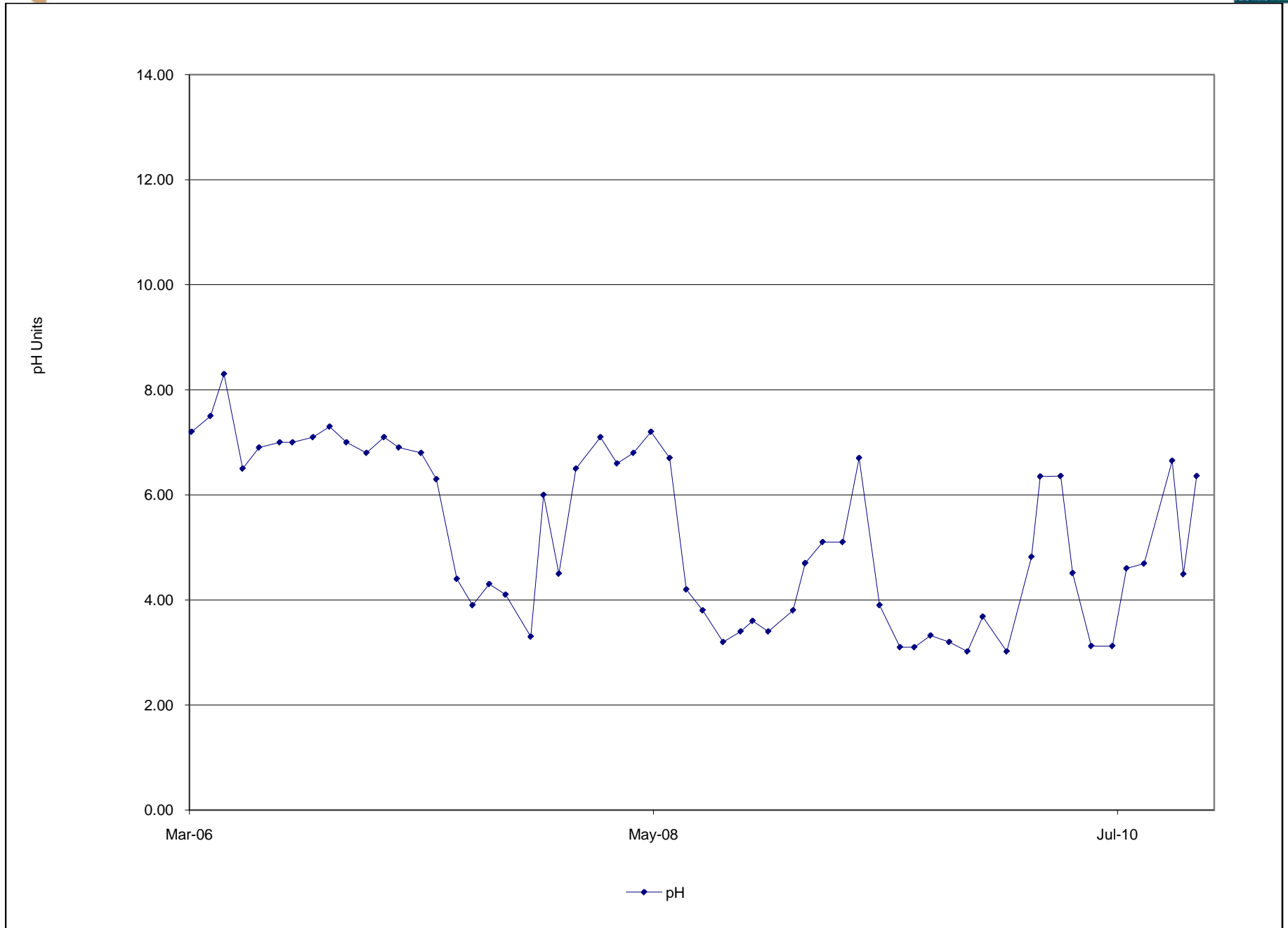


Figure C-28: Zinc (Total and Dissolved) in the Intermediate Pond

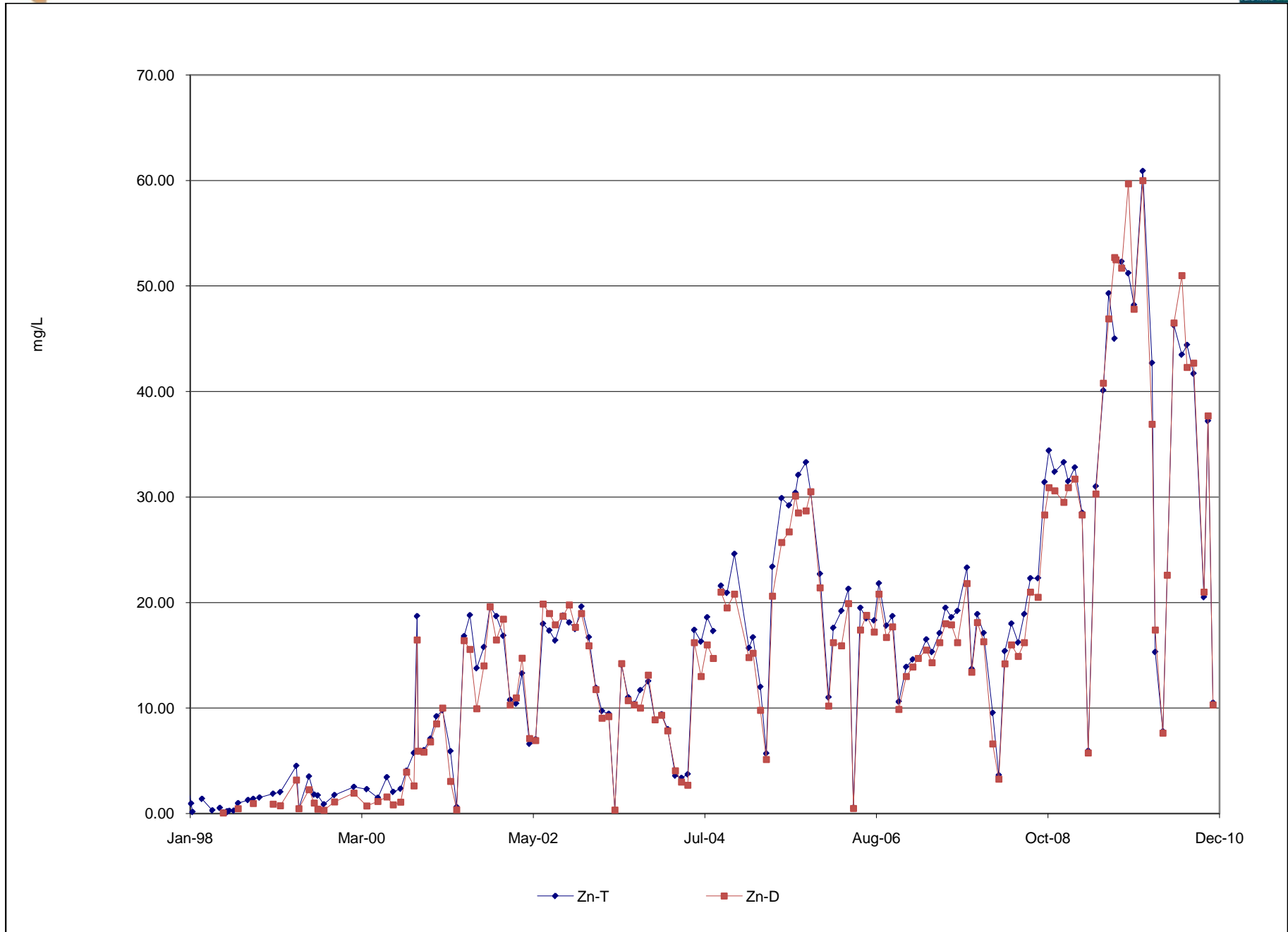


Figure C-29: Sulphate in the Intermediate Pond

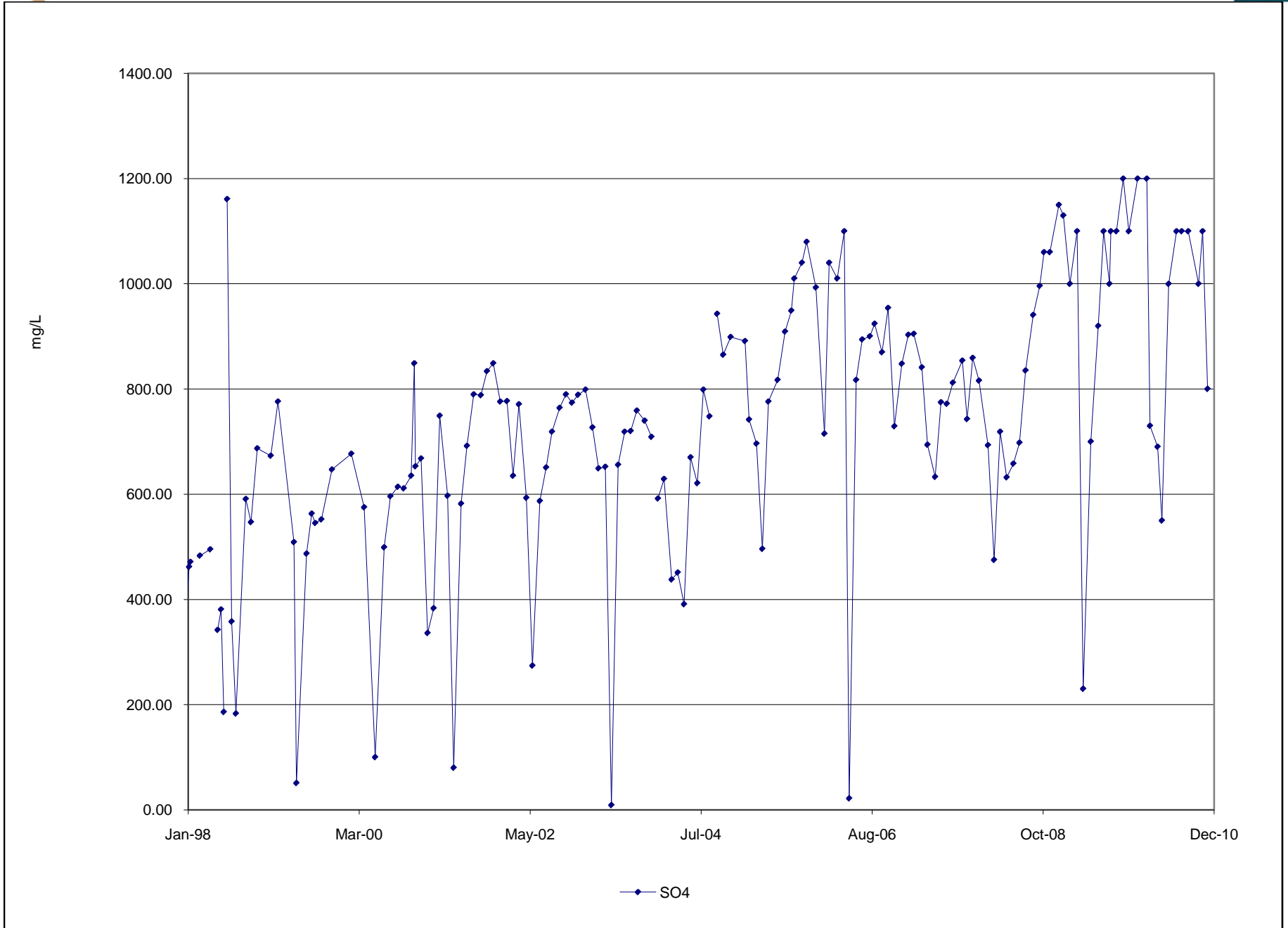


Figure C-30: Iron (Total and Dissolved) in the Intermediate Pond

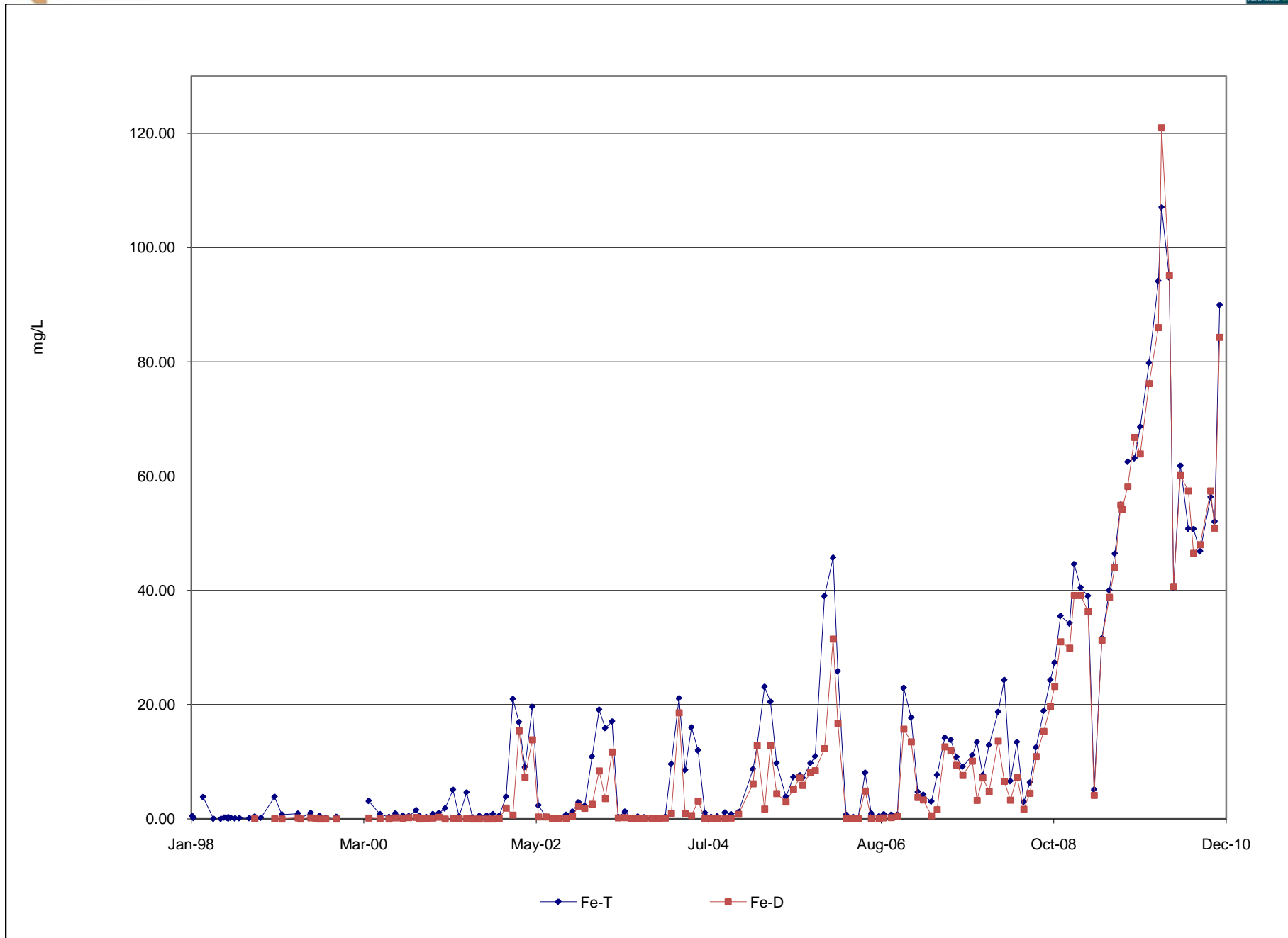


Figure C-31: Intermediate Pond Elevation and Zinc Levels (Total and Dissolved)

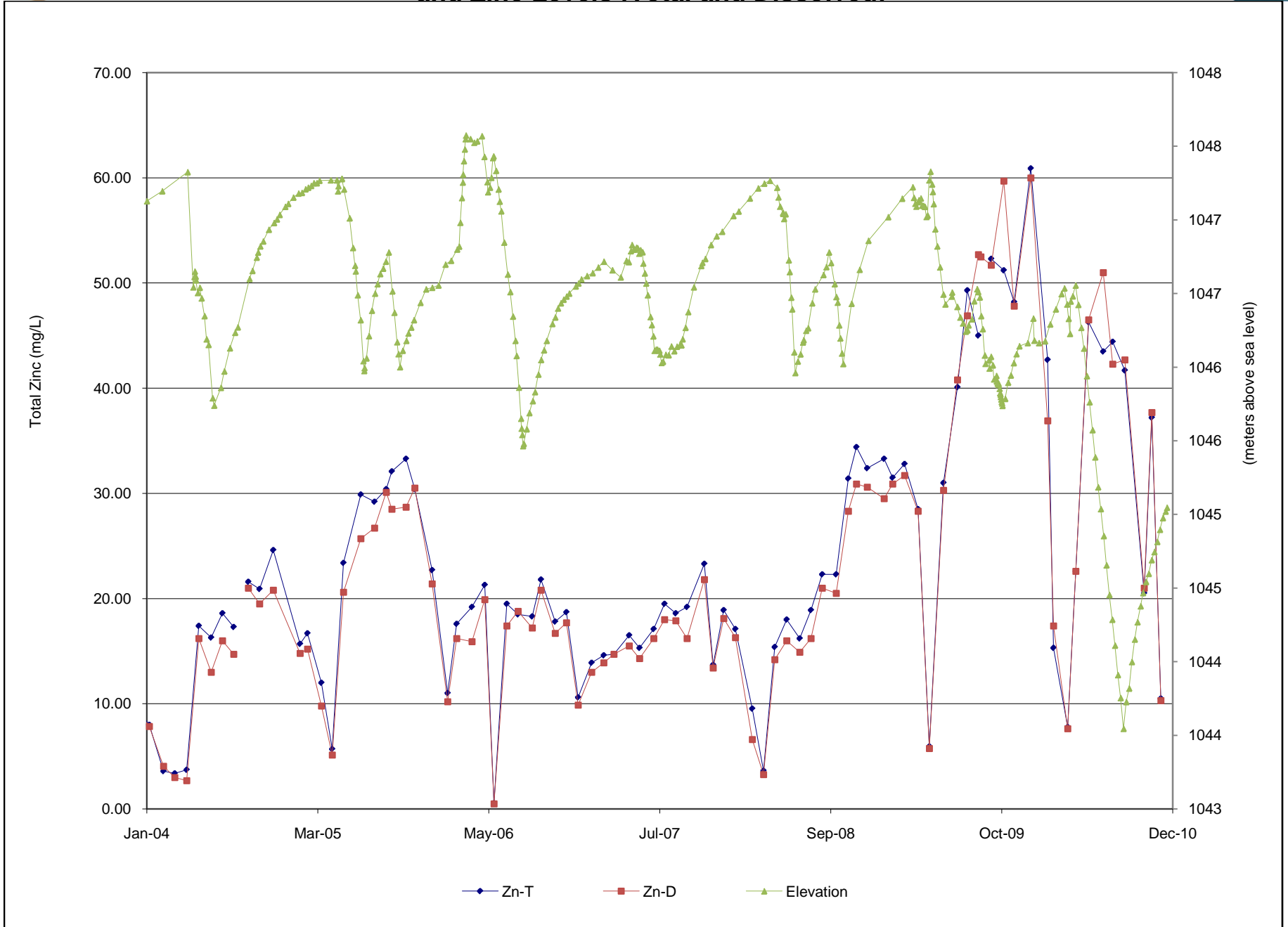


Figure C-32: Sulphate at X2, X3, X3A and X10

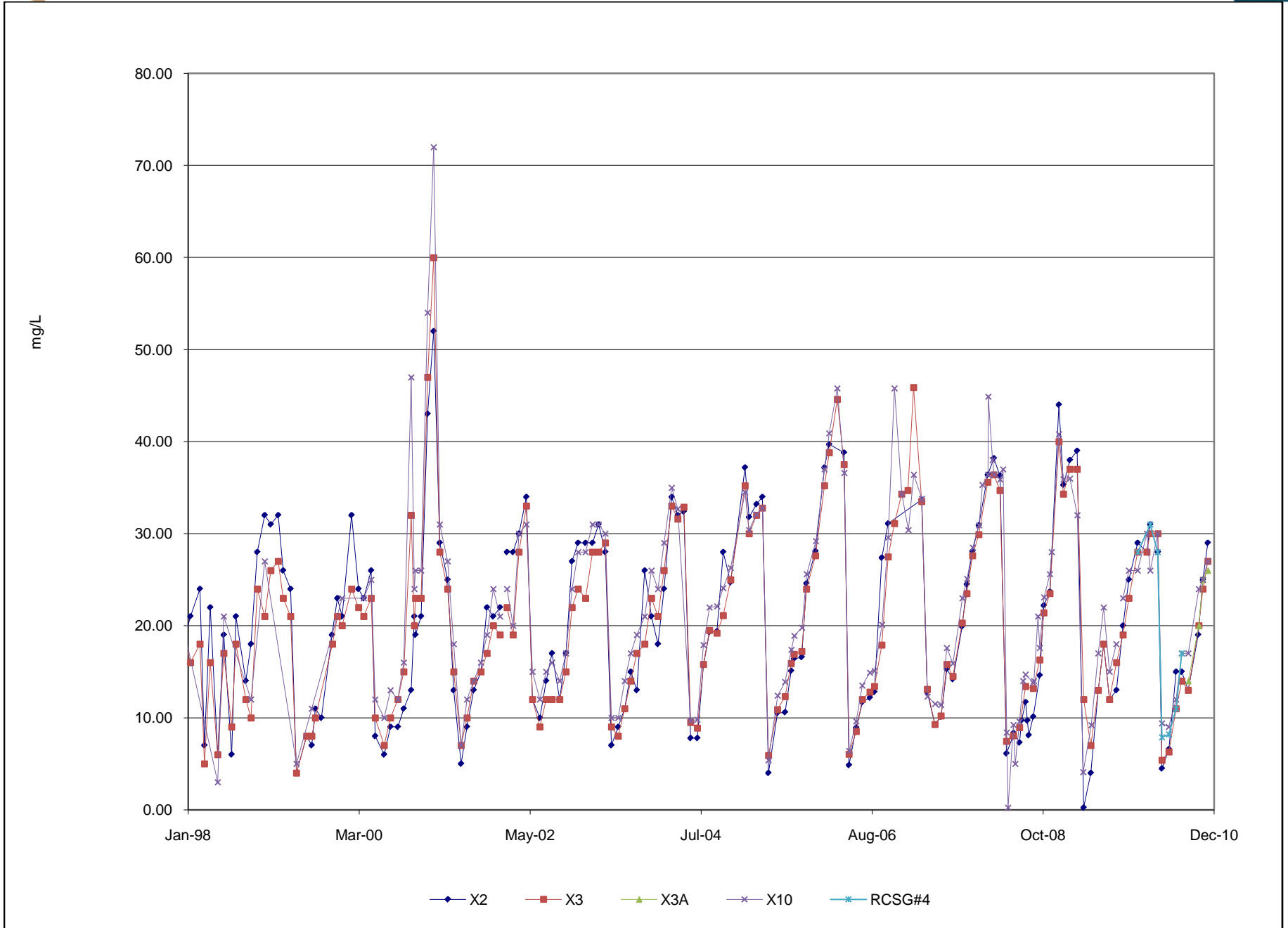


Figure C-33: Zinc (Total) at X2, X3, X3A and X10

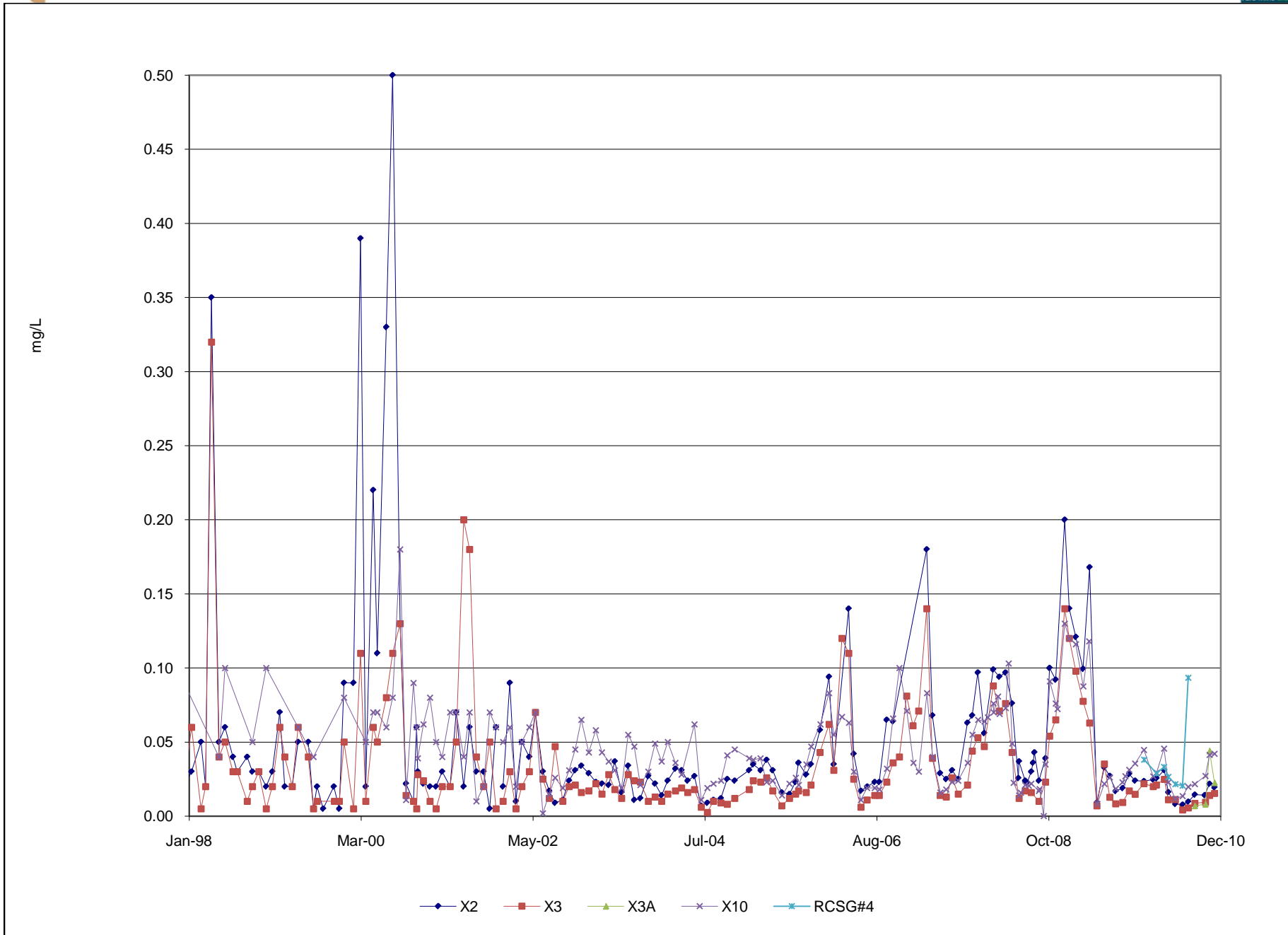


Figure C-34: Cadmium (Total) at X2, X3, X3A and X10

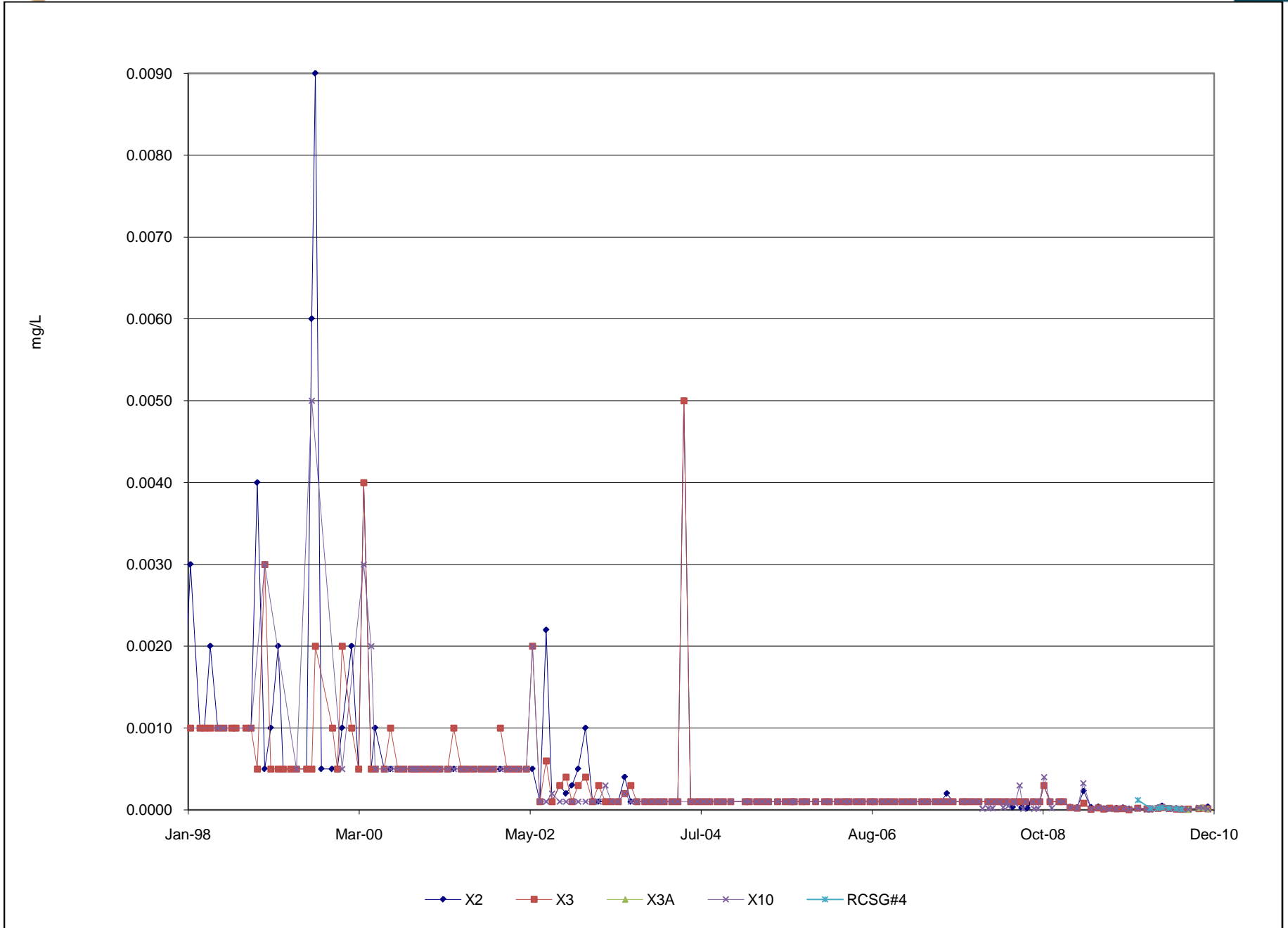


Figure C-35: Lead (Total) at X2, X3, X3A and X10

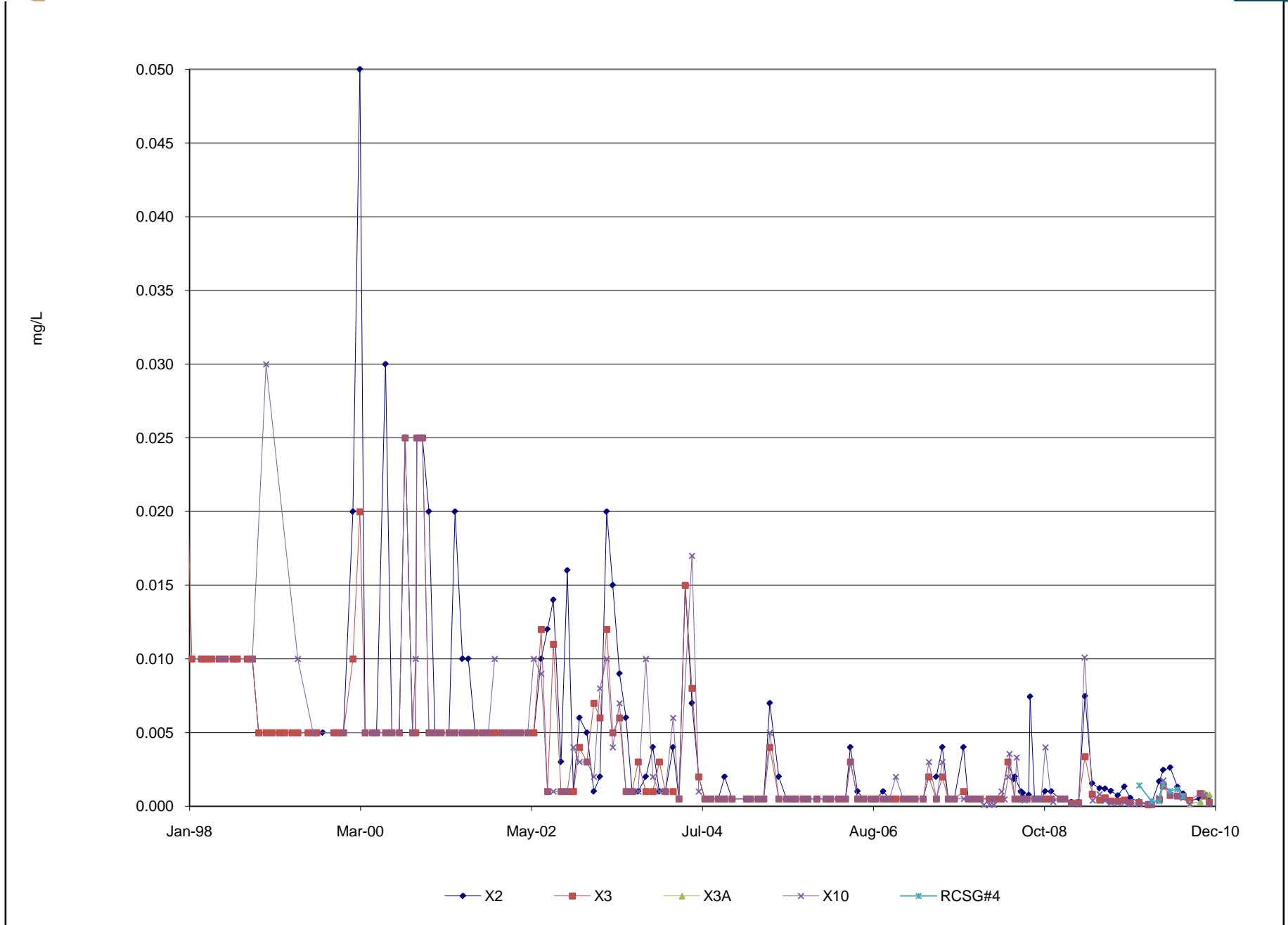


Figure C-36: Iron (Total) at X2, X3, X3A and X10

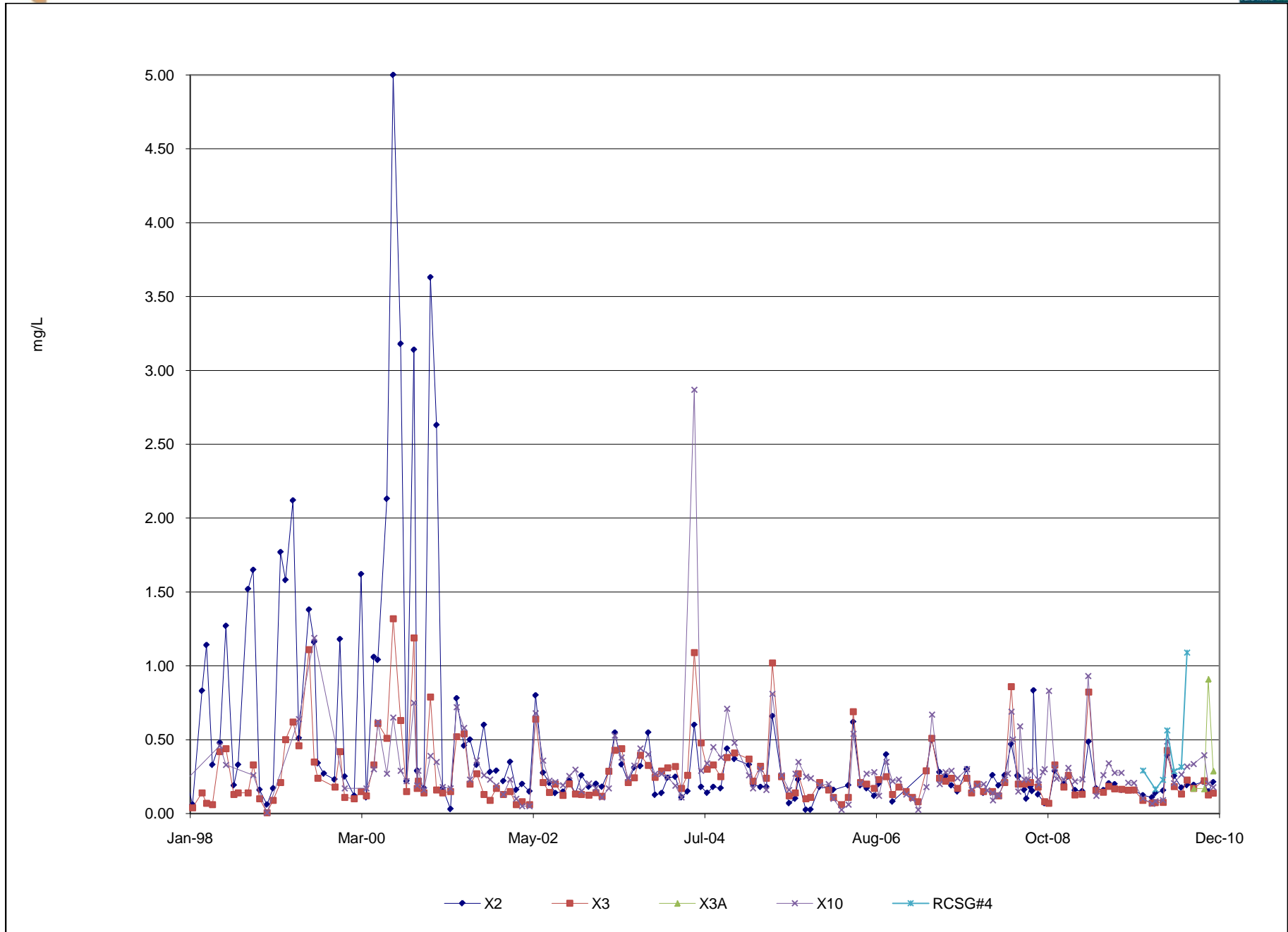


Figure C-37: 2010 FMC Lab Analysis - pH and Zinc
(Total and Dissolved) at X5

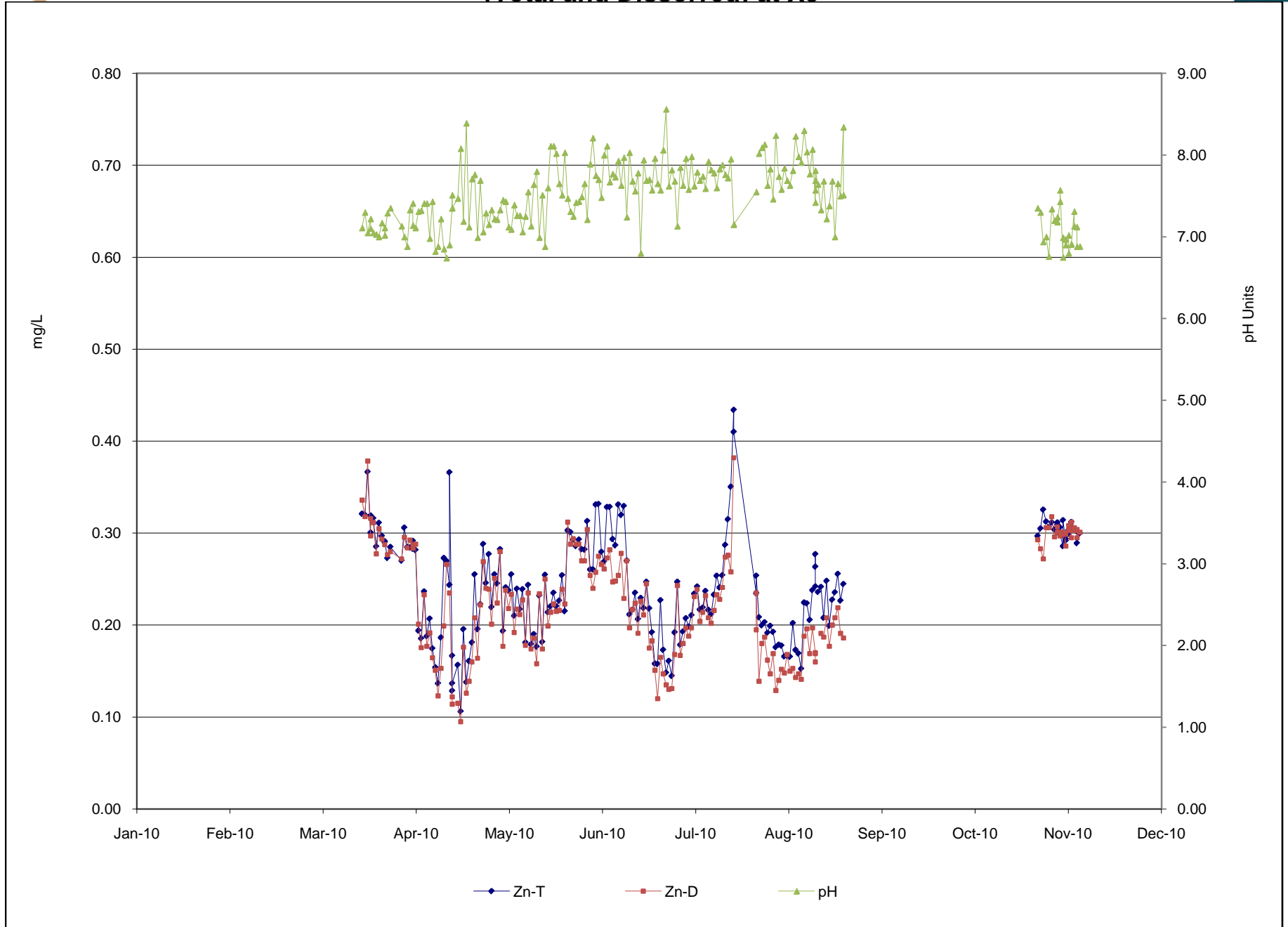


Figure C-38: 2010 FMC Lab Analysis - Zinc
(Total and Dissolved) at X14

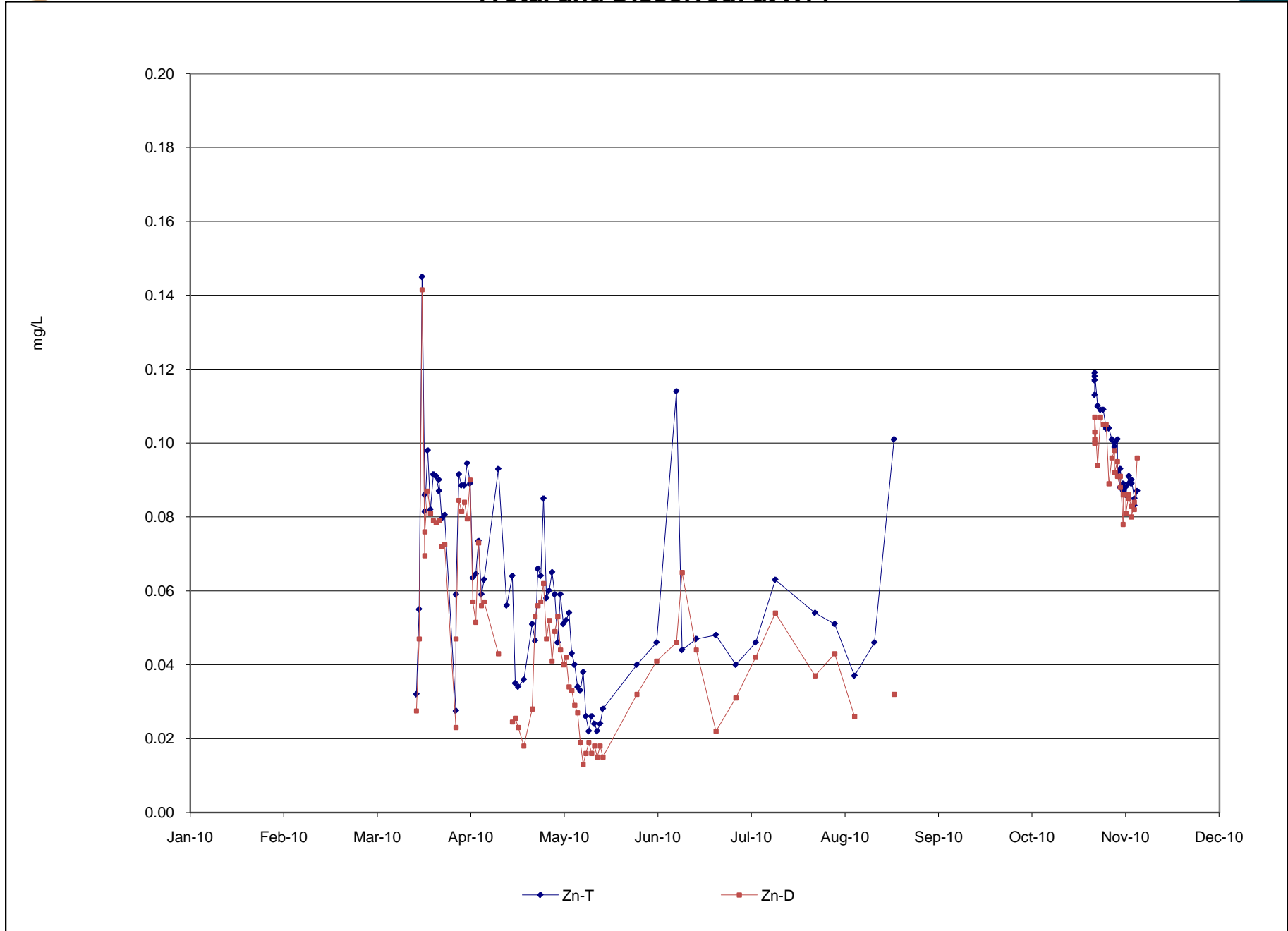


Figure C-39: 2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

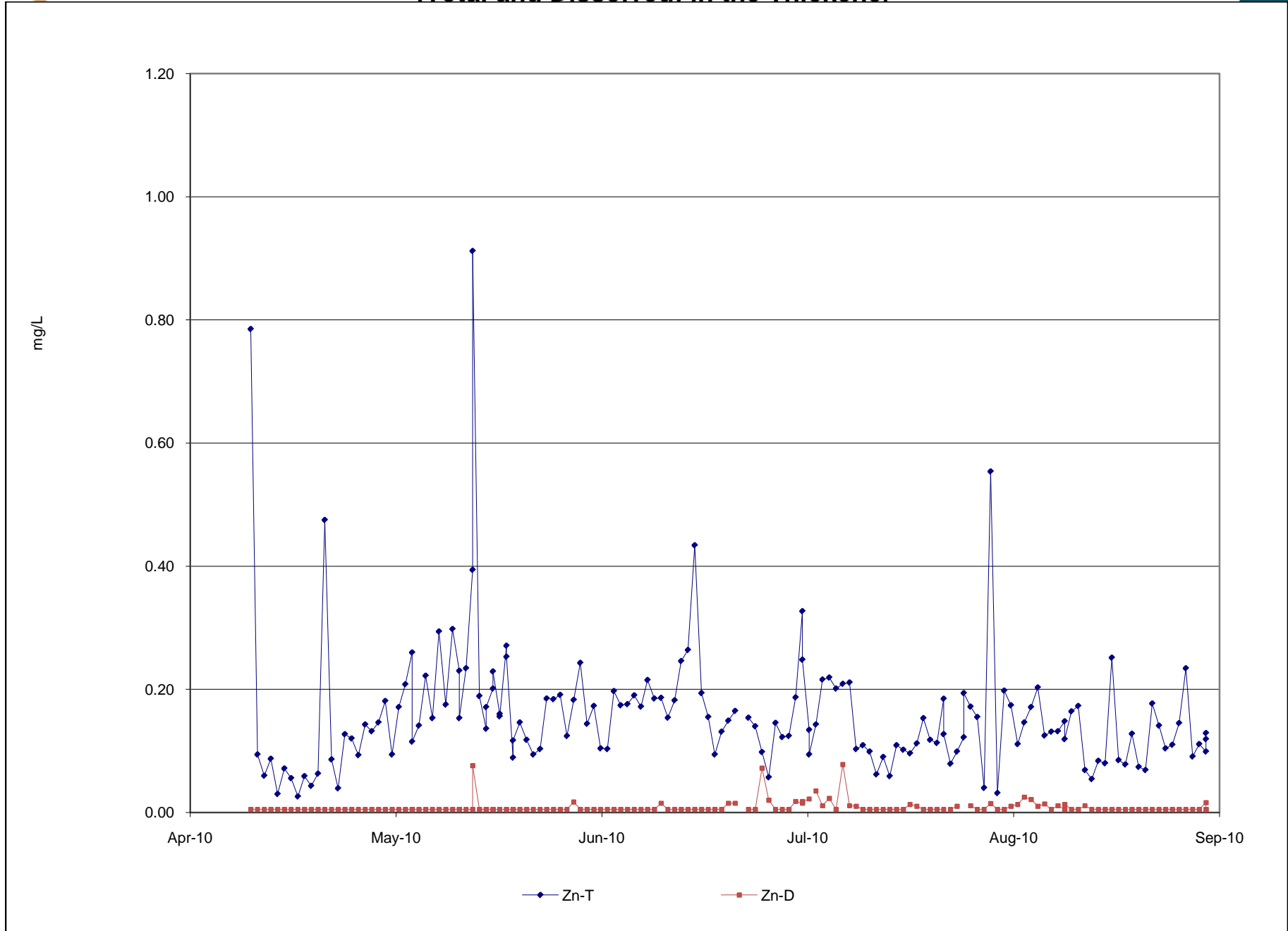


Figure C-40: 2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Clarifier

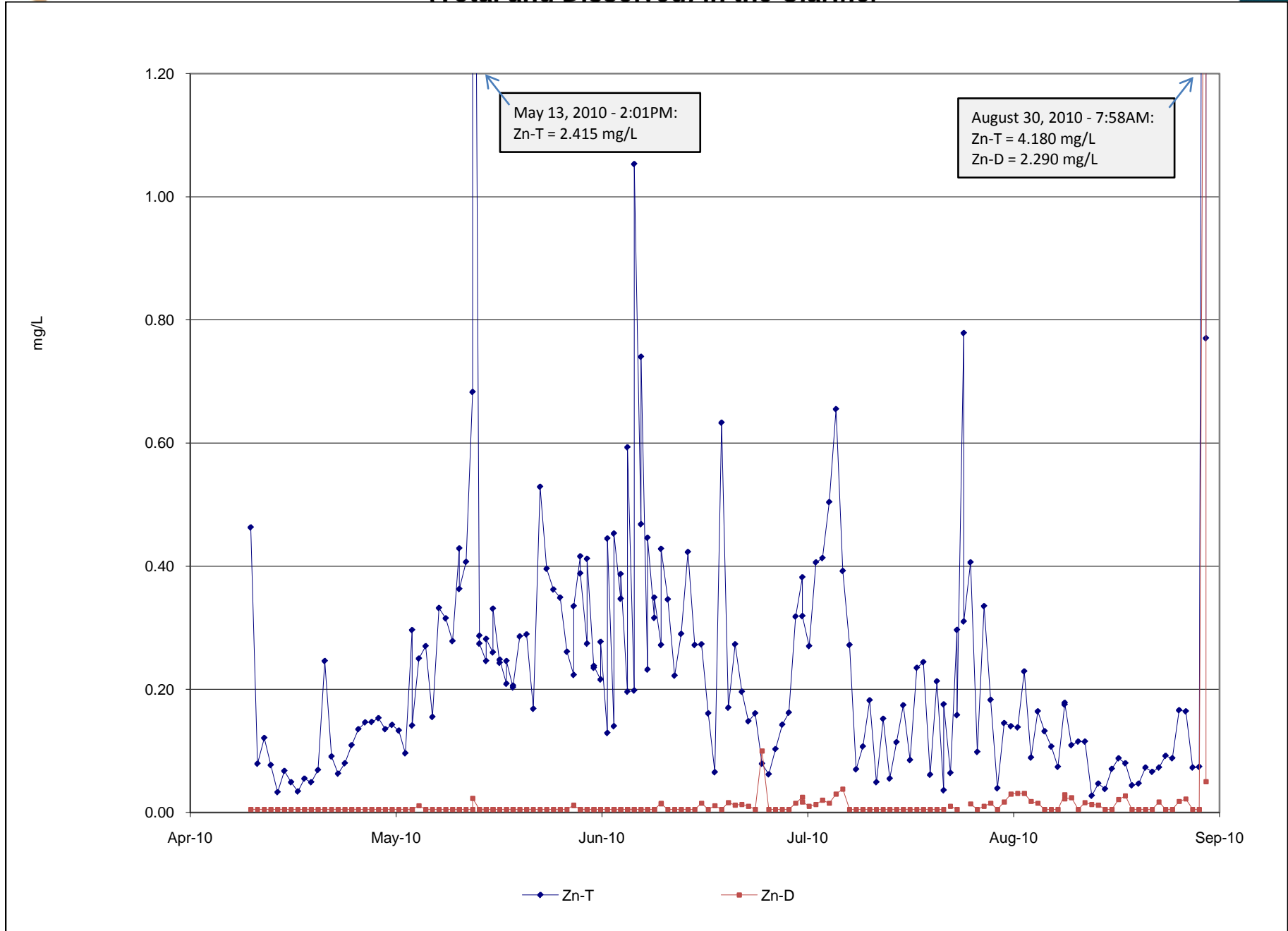


Figure C-41: 2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Faro Mill Effluent

