

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																								Turbidity not run on main sample. Accidentally requested for duplicate sample.	
Action																									Let Value Stand
Result																									No turbidity value for main sample.
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																								TOC not run on main sample because appropriate sample accidentally not sent in.	
Action																									Let Value Stand
Result																									No TOC value for main sample.
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%

