Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

Analyte	Units	January 2013 Result BDC	Dup. Result BDC-2	% Difference	Result RM-118.8	Dup. Result RM-118.8-2	% Difference	February 2013 Result FMC-2	Dup. Result FMC-2-2	% Difference	Result RM-129.1	Dup. Result RM-129.1-2	% Difference
Dissolved Oxygen	mg/L	NF	Field measurements not duplicated	N/A	8.38	Field measurements not duplicated	N/A	8.75	Field measurements not duplicated	N/A	9.80	Field measurements not duplicated	N/A
pH	SU	NF		N/A	6.53		N/A	5.40		N/A	7.30		N/A
Temperature	° C	NF		N/A	16.2		N/A	13.0		N/A	12.9		N/A
Hardness (total)	mg/L	NF	NF	♦	52	46	12.2	10	<10	♦	18	22	20.0
Nitrate-Nitrogen	mg/L	NF	NF	♦	0.320	0.310	3.2	0.079	0.081	2.5	0.310	0.320	3.2
Nitrite-Nitrogen	mg/L	NF	NF	♦	<0.020	0.021	♦	<0.020	<0.020	♦	<0.020	<0.020	♦
Phosphorus	mg/L	NF	NF	♦	0.110	0.110	0.0	0.027	0.029	7.1	0.120	0.120	0.0
Total Organic Carbon	mg/L	NF	NF	♦	3.7	3.7	0.0	7.2	7.2	0.0	5.3	5.5	3.7
Aluminum	mg/L	NF	NF	♦	0.2295	0.2514	9.1	0.3569	0.3321	7.2	0.5939	0.4015	38.7
Beryllium	mg/L	NF	NF	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Cadmium	mg/L	NF	NF	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Chromium	mg/L	NF	NF	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Copper	mg/L	NF	NF	♦	< 0.0010	< 0.0010	♦	0.0020	0.0013	42.4	< 0.0010	< 0.0010	♦
Iron	mg/L	NF	NF	♦	0.4847	0.4857	0.2	1.1811	1.1355	3.9	0.8585	0.8100	5.8
Mercury	µg/L	NF	NF	♦	<0.02000	<0.02000	♦	0.05871	0.03022	64.1	<0.02000	0.04583	♦
Manganese	mg/L	NF	NF	♦	0.0737	0.0699	5.3	0.0575	0.0564	1.9	0.0910	0.0963	5.7
Nickel	mg/L	NF	NF	♦	0.0016	0.0011	37.0	< 0.0010	0.0018	♦	< 0.0010	< 0.0010	♦
Lead	mg/L	NF	NF	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦
Thallium	mg/L	NF	NF	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦
Zinc	mg/L	NF	NF	♦	0.0080	0.0042	62.3	0.0158	0.0134	16.4	0.0039	0.0045	14.3
Total Suspended Solids	mg/L	NF	NF	♦	6	6	0.0	11	12	8.7	9	9	0.0
Pesticides/Herbicides		**1st Quarter**						**1st Quarter**					
Aldrin	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1016	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1221	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1232	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1242	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1248	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1254	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1260	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Chlordane	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	µg/L	NF	NF	♦	<0.029	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	µg/L	NF	NF	♦	<0.29	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
2,4-D	µg/L	NF	NF	♦	<2.2	<2.2	♦	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-TP (Silvex)	µg/L	NF	NF	♦	<0.56	<0.56	♦	N/A	N/A	N/A	N/A	N/A	N/A

Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

		March 2013						April 2013					
					estimated: matrix spike failure								
Analyte	Units	Result FM-2B	Dup. Result FM-2B-2	% Difference	Result RM-141.5	Dup. Result RM-141.5-2	% Difference	Result FM-6	Dup. Result FM-6-2	% Difference	Result RM-150.4	Dup. Result RM-150.4-2	% Difference
Dissolved Oxygen	mg/L	7.89	Field measurements not duplicated	N/A	9.78	Field measurements not duplicated	N/A	8.91	Field measurements not duplicated	N/A	8.72	Field measurements not duplicated	N/A
pH	SU	2.70		N/A	7.08		N/A	6.76		N/A	7.12		N/A
Temperature	° C	11.3		N/A	12.5		N/A	23.6		N/A	16.1		N/A
Hardness (total)	mg/L	14	12	15.4	20	20	0.0	14	21	40.0	22	24	8.7
Nitrate-Nitrogen	mg/L	0.190	0.200	5.1	0.290	0.290	0.0	1.000	1.000	0.0	0.260	0.260	0.0
Nitrite-Nitrogen	mg/L	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦
Phosphorus	mg/L	<0.100	<0.100	♦	0.016	0.034	72.0	0.089	0.015	142.3	0.180	0.067	91.5
Total Organic Carbon	mg/L	5.6	5.4	3.6	4.4	4.4	0.0	5.3	5.3	0.0	4.7	4.6	2.2
Aluminum	mg/L	0.2077	0.2166	4.2	0.3880	0.3200	19.2	0.2015	0.2136	5.8	0.4403	0.4045	8.5
Beryllium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Cadmium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Chromium	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Copper	mg/L	0.0024	0.0030	22.2	0.0025	0.0013	63.2	< 0.0010	0.0013	♦	< 0.0010	< 0.0010	♦
Iron	mg/L	0.5910	0.6034	2.1	0.5962	0.5676	4.9	0.7455	0.8089	8.2	0.7193	0.7099	1.3
Mercury	µg/L	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦
Manganese	mg/L	0.0222	0.0228	2.7	0.0886	0.0865	2.4	0.0484	0.0571	16.5	0.1067	0.1065	0.2
Nickel	mg/L	0.0018	0.0019	5.4	< 0.0010	< 0.0010	♦	0.0014	< 0.0010	♦	< 0.0010	< 0.0010	♦
Lead	mg/L	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦
Thallium	mg/L	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦
Zinc	mg/L	0.0328	0.0474	36.4	0.0099	0.0062	46.0	0.0082	0.0106	25.5	0.0048	0.0052	8.0
Total Suspended Solids	mg/L	1	1	0.0	7	7	0.0	3	2	40.0	7	8	13.3
Pesticides/Herbicides		**1st Quarter**						**2nd Quarter**					
Aldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Aroclor 1016	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1221	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1232	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1242	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1248	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1254	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
Aroclor 1260	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
alpha-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
beta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
delta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
gamma-BHC (Lindane)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Chlordane	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
4,4'-DDD	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
4,4'-DDE	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
4,4'-DDT	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Dieldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Endosulfan I	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Endosulfan II	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Endosulfan sulfate	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Endrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Endrin aldehyde	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Heptachlor	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Heptachlor epoxide	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.025	♦	<0.027	<0.026	♦
Toxaphene	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.25	♦	<0.27	<0.26	♦
2,4-D	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<2.1	<2.1	♦	<2.1	<2.0	♦
2,4,5-TP (Silvex)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.52	<0.52	♦	<0.52	<0.51	♦

Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

Analyte	Units	May 2013 Result L3R-2	May 2013 Dup. Result L3R-2-2	May 2013 % Difference	May 2013 Result RM-160	May 2013 Dup. Result RM-160-2	May 2013 % Difference	June 2013 Result PB-3	June 2013 Dup. Result PB-3-2	June 2013 % Difference	June 2013 Result RM-118.8	June 2013 Dup. Result RM-118.8-2	June 2013 % Difference
												estimated: matrix spike failure	
Dissolved Oxygen	mg/L	8.80	Field measurements not duplicated	N/A	7.79	Field measurements not duplicated	N/A	8.00	Field measurements not duplicated	N/A	6.83	Field measurements not duplicated	N/A
pH	SU	7.20		N/A	6.12		N/A	6.35		N/A	6.95		N/A
Temperature	° C	22.0		N/A	16.0		N/A	23.3		N/A	23.1		N/A
Hardness (total)	mg/L	23	45	64.7	20	20	0.0	<10	12	♦	<10	<10	♦
Nitrate-Nitrogen	mg/L	0.170	0.180	5.7	0.300	0.300	0.0	0.086	0.100	15.1	0.27	0.27	0.0
Nitrite-Nitrogen	mg/L	<0.020	<0.020	♦	<0.020	0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦
Phosphorus	mg/L	0.041	0.029	34.3	<0.010	<0.010	♦	0.040	0.014	96.3	0.088	0.088	0.0
Total Organic Carbon	mg/L	3.6	3.7	2.7	4.9	5.0	2.0	13.0	13.0	0.0	5.3	5.6	5.5
Aluminum	mg/L	0.0642	0.1198	60.4	0.2458	0.2580	4.8	0.3450	0.3506	1.6	0.5505	0.5552	0.9
Beryllium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Cadmium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	0.0006	< 0.0005	♦	0.0006	0.0005	18.2
Chromium	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Copper	mg/L	< 0.0010	< 0.0010	♦	0.0012	0.0012	0.0	0.0040	< 0.0010	♦	0.0015	< 0.0010	♦
Iron	mg/L	0.5601	0.6301	11.8	0.6689	0.6926	3.5	1.2437	1.2943	4.0	1.0797	1.0660	1.3
Mercury	µg/L	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦
Manganese	mg/L	0.0651	0.0651	0.0	0.1011	0.1060	4.7	0.0716	0.0777	8.2	0.2204	0.1736	23.8
Nickel	mg/L	0.0014	0.0016	13.3	0.0010	0.0016	46.2	0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Lead	mg/L	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦
Thallium	mg/L	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	0.0106	♦
Zinc	mg/L	0.0067	0.0106	45.1	0.0036	0.0028	25.0	0.0081	0.0067	18.9	0.0031	0.0025	21.4
Total Suspended Solids	mg/L	7	6	15.4	6	5	18.2	10	11	9.5	21	21	0.0
Pesticides/Herbicides		**2nd Quarter**						**2nd Quarter**					
Aldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1016	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1221	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1232	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1242	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1248	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1254	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1260	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlordane	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-D	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-TP (Silvex)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

Analyte	Units	July 2013 Result SC-4	July 2013 Dup. Result SC-4-2	July 2013 % Difference	July 2013 Result RM-129.1	July 2013 Dup. Result RM-129.1-2	July 2013 % Difference	August 2013 Result TB-5	August 2013 Dup. Result TB-5-2	August 2013 % Difference	August 2013 Result RM-141.5	August 2013 Dup. Result RM-141.5-2	August 2013 % Difference
Dissolved Oxygen	mg/L	6.65	Field measurements not duplicated	N/A	6.54	Field measurements not duplicated	N/A	6.16	Field measurements not duplicated	N/A	6.91	Field measurements not duplicated	N/A
pH	SU	5.67		N/A	6.72		N/A	6.23		N/A	6.80		N/A
Temperature	° C	25.0		N/A	23.0		N/A	25.2		N/A	24.8		N/A
Hardness (total)	mg/L	<10	25	♦	<10	<10	♦	<10	<10	♦	16	<10	♦
Nitrate-Nitrogen	mg/L	0.13	1.20	160.9	0.25	0.24	4.1	0.029	0.034	15.9	0.170	0.170	0.0
Nitrite-Nitrogen	mg/L	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦
Phosphorus	mg/L	0.020	0.190	161.9	<0.010	<0.010	♦	0.068	0.064	6.1	0.058	0.054	7.1
Total Organic Carbon	mg/L	14.0	13.0	7.4	5.8	5.7	1.7	8.0	8.1	1.2	4.6	4.6	0.0
Aluminum	mg/L	0.3156	0.3569	12.3	0.9575	0.8601	10.7	0.1263	0.1046	18.8	0.2431	0.2317	4.8
Beryllium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Cadmium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Chromium	mg/L	< 0.0010	0.0012	♦	< 0.0010	< 0.0010	♦	0.0011	< 0.0010	♦	< 0.0010	< 0.0010	♦
Copper	mg/L	< 0.0010	0.0013	♦	0.0014	0.0012	15.4	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Iron	mg/L	1.0741	1.1465	6.5	1.4565	1.4247	2.2	5.7658	5.7168	0.9	1.1909	1.1922	0.1
Mercury	µg/L	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦
Manganese	mg/L	0.1090	0.1149	5.3	0.2335	0.2406	3.0	0.2909	0.2887	0.8	0.2752	0.2786	1.2
Nickel	mg/L	< 0.0010	0.0017	♦	< 0.0010	< 0.0010	♦	0.0079	0.0076	3.9	< 0.0010	< 0.0010	♦
Lead	mg/L	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦
Thallium	mg/L	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦
Zinc	mg/L	0.0190	0.0142	28.9	0.0048	0.0048	0.0	0.0028	0.0059	71.3	0.0051	0.0034	40.0
Total Suspended Solids	mg/L	6	6	0.0	23	23	0.0	11	12	8.7	8	8	0.0
Pesticides/Herbicides		**3rd Quarter**						**3rd Quarter**					
Aldrin	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1016	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1221	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1232	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1242	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1248	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1254	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1260	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Chlordane	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	µg/L	<0.027	<0.028	♦	<0.028	<0.028	♦	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	µg/L	<0.27	<0.28	♦	<0.28	<0.28	♦	N/A	N/A	N/A	N/A	N/A	N/A
2,4-D	µg/L	<2.2	<2.2	♦	<2.2	<2.2	♦	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-TP (Silvex)	µg/L	<0.56	<0.55	♦	<0.56	<0.56	♦	N/A	N/A	N/A	N/A	N/A	N/A

Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

Analyte	Units	September 2013 Result TC-1	Dup. Result TC-1-2	% Difference	Result RM-150.4	Dup. Result RM-150.4-2	% Difference	October 2013 Result U3R-1A	Dup. Result U3R-1A-2	% Difference	Result RM-160	Dup. Result RM-160-2	% Difference
Dissolved Oxygen	mg/L	7.88	Field measurements not duplicated	N/A	7.15	Field measurements not duplicated	N/A	8.37	Field measurements not duplicated	N/A	7.29	Field measurements not duplicated	N/A
pH	SU	6.53		N/A	6.45		N/A	6.62		N/A	5.98		N/A
Temperature	° C	25.6		N/A	24.5		N/A	18.2		N/A	20.0		N/A
Hardness (total)	mg/L	<10	14	♦	18	18	0.0	<10	<10	♦	17	18	5.7
Nitrate-Nitrogen	mg/L	0.130	0.110	16.7	0.250	0.240	4.1	0.230	0.210	9.1	0.210	0.210	0.0
Nitrite-Nitrogen	mg/L	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦	<0.020	<0.020	♦
Phosphorus	mg/L	0.084	0.100	17.4	0.060	0.060	0.0	0.030	0.019	44.9	0.110	0.110	0.0
Total Organic Carbon	mg/L	5.2	5.2	0.0	3.5	3.5	0.0	2.2	2.0	9.5	3.9	4.0	2.5
Aluminum	mg/L	0.1361	0.1302	4.4	0.2586	0.2451	5.4	0.1042	0.0898	14.8	0.1988	0.2198	10.0
Beryllium	mg/L	< 0.0005	0.0006	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Cadmium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦
Chromium	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Copper	mg/L	0.0025	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Iron	mg/L	1.0258	0.9581	6.8	0.6051	0.5763	4.9	0.4674	0.4549	2.7	0.5124	0.5103	0.4
Mercury	µg/L	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦
Manganese	mg/L	0.0525	0.0495	5.9	0.1255	0.1236	1.5	0.0095	0.0092	3.2	0.0889	0.0882	0.8
Nickel	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦
Lead	mg/L	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	< 0.0050	0.0059	♦	0.0058	0.0061	5.0
Thallium	mg/L	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦	< 0.0100	< 0.0100	♦
Zinc	mg/L	0.0148	0.0108	31.3	0.0062	0.0085	31.3	0.0083	0.0072	14.2	0.0065	0.0050	26.1
Total Suspended Solids	mg/L	11	11	0.0	14	14	0.0	5	6	18.2	8	8	0.0
Pesticides/Herbicides		**3rd Quarter**						**4th Quarter**					
Aldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Aroclor 1016	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1221	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1232	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1242	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1248	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1254	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
Aroclor 1260	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
alpha-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
beta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
delta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
gamma-BHC (Lindane)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Chlordane	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
4,4'-DDD	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
4,4'-DDE	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
4,4'-DDT	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Dieldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Endosulfan I	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Endosulfan II	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Endosulfan sulfate	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Endrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Endrin aldehyde	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Heptachlor	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Heptachlor epoxide	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.026	<0.026	♦	<0.027	<0.028	♦
Toxaphene	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.26	<0.26	♦	<0.27	<0.28	♦
2,4-D	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<2.2	<2.2	♦	<2.2	<2.2	♦
2,4,5-TP (Silvex)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	<0.55	<0.55	♦	<0.56	<0.56	♦

Data Table 8-4, SRS Stream and Savannah River Water Quality Duplicate Sample Results

♦ not calculated due to less than value

NF: No Flow (creek dry)

Analyte	Units	November 2013 Result U3R-4	Dup. Result U3R-4-2	% Difference	Result RM-118.8	Dup. Result RM-118.8-2	% Difference	December 2013 Result BDC	Dup. Result BDC-2	% Difference	Result RM-129.1	Dup. Result RM-129.1-2	% Difference
Dissolved Oxygen	mg/L	9.93	Field measurements not duplicated	N/A	8.30	Field measurements not duplicated	N/A	NF	Field measurements not duplicated	N/A	8.54	Field measurements not duplicated	N/A
pH	SU	6.54		N/A	6.80		N/A	NF		N/A	6.84		N/A
Temperature	° C	12.4		N/A	16.9		N/A	NF		N/A	16.2		N/A
Hardness (total)	mg/L	<10	<10	♦	15	18	18.2	NF	NF	N/A	13	<10	♦
Nitrate-Nitrogen	mg/L	0.140	0.150	6.9	0.200	0.200	0.0	NF	NF	N/A	0.270	0.260	3.8
Nitrite-Nitrogen	mg/L	<0.020	<0.020	♦	<0.020	<0.020	♦	NF	NF	N/A	<0.020	<0.020	♦
Phosphorus	mg/L	0.031	0.028	10.2	0.090	0.110	20.0	NF	NF	N/A	0.170	0.170	0.0
Total Organic Carbon	mg/L	2.8	3.1	10.2	4.4	4.1	7.1	NF	NF	N/A	6.1	5.5	10.3
Aluminum	mg/L	0.1167	0.1168	0.1	0.1807	0.2071	13.6	NF	NF	N/A	0.1514	0.1389	8.6
Beryllium	mg/L	< 0.0005	< 0.0005	♦	< 0.0005	< 0.0005	♦	NF	NF	N/A	< 0.0005	< 0.0005	♦
Cadmium	mg/L	< 0.0005	0.0007	♦	0.0006	0.0005	18.2	NF	NF	N/A	< 0.0005	< 0.0005	♦
Chromium	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	NF	NF	N/A	< 0.0010	< 0.0010	♦
Copper	mg/L	< 0.0010	< 0.0010	♦	0.0011	0.0012	8.7	NF	NF	N/A	< 0.0010	< 0.0010	♦
Iron	mg/L	0.4053	0.4043	0.2	0.4156	0.4197	1.0	NF	NF	N/A	0.5805	0.5710	1.7
Mercury	µg/L	<0.02000	<0.02000	♦	<0.02000	<0.02000	♦	NF	NF	N/A	<0.02000	<0.02000	♦
Manganese	mg/L	0.0142	0.0139	2.1	0.0791	0.0795	0.5	NF	NF	N/A	0.0795	0.0808	1.6
Nickel	mg/L	< 0.0010	< 0.0010	♦	< 0.0010	< 0.0010	♦	NF	NF	N/A	< 0.0010	< 0.0010	♦
Lead	mg/L	< 0.0050	< 0.0050	♦	< 0.0050	< 0.0050	♦	NF	NF	N/A	< 0.0050	< 0.0050	♦
Thallium	mg/L	< 0.0100	< 0.0100	♦	0.0102	< 0.0100	♦	NF	NF	N/A	< 0.0100	< 0.0100	♦
Zinc	mg/L	0.0043	0.0047	8.9	0.0016	0.0093	**141.3**	NF	NF	N/A	0.0087	0.0182	**70.6**
Total Suspended Solids	mg/L	3	3	0.0	4	6	**40.0**	NF	NF	N/A	5	4	**22.2**
Pesticides/Herbicides		**4th Quarter**						**4th Quarter**					
Aldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1016	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1221	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1232	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1242	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1248	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1254	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aroclor 1260	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlordane	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-D	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-TP (Silvex)	µg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A