

Name and description	SSC ^a mg L ⁻¹	SiO ₂ ^b wt %	Al ₂ O ₃ wt %	Fe ₂ O ₃ wt %	TiO ₂ wt %	MgO wt %	CaO wt %	Na ₂ O wt %	K ₂ O wt %	P ₂ O ₅ wt %	LOI wt %	Mn mg kg ⁻¹	Ba mg kg ⁻¹	Sr mg kg ⁻¹	Rb mg kg ⁻¹	Nd mg kg ⁻¹	Sm mg kg ⁻¹	⁸⁷ Sr/ ⁸⁶ Sr	2SD ^d	εNd	2SD ^d
Sedimentary rock samples																					
R01 = shale (pieces)		63.2	15.7	7.07	0.79	1.36	0.36	1.13	2.38	0.21	7.9	497	438	98	103	32	6	0.724490	17	-11.9	0.0
G = shale (pieces)		61.5	16.0	7.70	0.78	1.39	0.33	1.05	2.39	0.24	8.6	613	425	100	103	32	6	0.725796	28	-12.1	1.0
R04 = shale (rock)		58.3	18.5	3.50	0.88	1.34	0.17	0.74	3.16	0.09	13.3	190	542	107	147	39	7	0.743564	32	-19.8	0.7
R02 = wacke		64.7	12.6	7.99	0.56	1.44	0.63	0.78	2.09	0.26	8.9	1056	371	83	89	26	5	0.729241	22	-14.0	0.6
R03 = litharenite		70.0	8.6	3.26	0.56	0.93	6.14	1.13	1.52	0.11	7.7	480	366	139	54	25	5	0.732295	14	-24.2	0.2
Sediment sample																					
D = sediment (surface of glacier)		54.2	18.3	6.71	0.75	1.47	0.53	0.93	3.28	0.11	13.8	735	706	99	135	36	6	0.752425	36	-23.3	0.2
Stream sediment samples																					
L = stream sediment (Fardalen)		62.7	15.3	7.68	0.74	1.35	0.32	0.99	2.42	0.21	8.2	692	448	99	104	32	6	0.728400	77	-14.0	0.6
O = stream sediment (Dryadreen)		69.3	11.2	5.09	0.69	1.03	0.44	1.11	1.94	0.18	9.0	568	448	78	76	33	6	0.739930	17	-20.8	0.6
<2 μm fraction of bulk rock and sediment samples																					
R01 –clay		49.6	20.7	9.26	0.65	1.70	0.48	2.08	3.14	1.99	9.6	452	451	82	142	38	8	0.725590	25	-9.8	0.5
G-clay		52.0	19.1	8.82	0.60	1.68	0.47	4.04	3.03	4.13	10.1	650	427	93	132	33	6	0.724766	27	-10.0	0.2
R04-clay		53.6	24.7	3.63	0.72	1.56	0.38	3.45	4.37	2.80	11.9	163	664	132	200	32	6	0.741518	18	-16.5	0.4
D-clay		57.6	24.4	6.30	0.64	1.49	0.43	4.45	4.37	3.81	11.8	526	828	120	186	26	5	0.750395	25	-20.4	0.2
L-clay		54.5	20.5	9.72	0.56	1.77	0.49	3.22	3.23	2.99	12.0	705	431	89	140	29	6	0.726819	28	-10.8	0.4
Stream suspended sediments (bulk)																					
20120801SG ^c		47.7	16.4	5.72	0.74	1.35	0.34	0.90	3.00	0.14	19.1	482	687	98	123	34	6	0.747044	11	-20.6	0.5
20120617D ^c	62	43.8	19.2	6.51	0.75	1.54	0.45	1.02	3.45	0.17	10.7	660	1031	105	142	34	6	0.745052	51	-19.6	0.1
20120618F ^c	32	40.9	17.8	6.94	0.77	1.48	0.39	1.05	2.94	0.20	9.4	1227	738	108	128	40	8	0.734528	31	-15.0	0.2
20120726F ^c	19	43.2	18.0	7.04	0.76	1.55	0.42	1.04	3.07	0.22	11.1	769	595	115	130	42	9	0.734207	4	-13.4	0.4
20120729D ^c	404	47.1	21.0	7.37	0.82	1.77	0.49	0.89	3.68	0.21	10.9	660	756	114	162	37	7	0.745309	22	-20.2	0.5
Stream suspended sediments (acid-treated)																					
20120617D(HCl)		43.9	20.2	6.44	0.73	1.45	0.06	1.04	3.56	0.07	10.3	366	1019	96	153	29	4	0.749536	3	-21.8	0.3
20120618F(HCl)		39.5	18.1	6.40	0.81	1.38	0.20	1.03	3.08	0.10	8.4	331	576	98	131	28	4	0.738594	20	-18.2	0.6
20120726F(HCl)		42.7	19.2	6.79	0.83	1.49	0.04	0.89	3.28	0.13	10.1	318	554	110	142	31	5	0.737735	14	-18.0	0.4
20120729D(HCl)		46.3	21.4	6.75	0.85	1.61	0.03	0.89	3.76	0.10	10.9	383	675	100	166	32	5	0.750142	30	-21.2	0.2

^a Suspended sediment concentration. ^b SiO₂ concentrations calculated assuming 100 % recovery. For a comparison of XRF and ICP-OES concentrations see Table A1. ^c Samples names are YYYYMMDD and the subsequent letters are D is Dryadreen (glaciated), F is Fardalen (unglaciated) and SG is supraglacial. ^d n = 3.