

Appendix A. Data Tables

Table A-1. Laboratory results for radionuclide samples

SAMPLE ID	SAMPLE DEPTH INTERVAL (cm)	TOC (% dw)	TOTAL SOLIDS (% ww)	MOISTURE ^a (% ww)	²¹⁰ Pb (pCi/g dw)	¹³⁷ Cs (pCi/g dw)	BULK DENSITY ^b (g/cm ³)
LDW-Sg1a-0-1	0-1	1.85	55.00	45.00	0.94 ^c	0.140 ^c	1.52
LDW-Sg1a-5-7	5-7	1.82 ^d	54.55 ^d	45.45	0.65 ^d	0.168 ^d	1.51
LDW-Sg1a-10-11	10-11	1.76	54.40	45.60	0.75	0.272	1.51
LDW-Sg1a-15-16	15-16	2.08	51.10	48.90	0.63	0.201	1.47
LDW-Sg1a-20-21	20-21	1.42	47.00	53.00	0.55	0.191	1.41
LDW-Sg1a-25-26	25-26	2.18	49.20	50.80	0.73	0.300	1.44
LDW-Sg1a-30-31	30-31	2.06	54.60	45.40	0.41	0.262	1.52
LDW-Sg1a-35-37	35-37	2.28 ^c	50.73 ^c	49.27	0.61	0.209	1.46
LDW-Sg1a-40-41	40-41	2.44	48.90	51.10	0.43	0.431	1.44
LDW-Sg1a-45-46	45-46	2.21	48.30	51.70	0.38	0.265	1.43
LDW-Sg1a-50-51	50-51	1.46	51.60	48.40	0.49	0.093	1.47
LDW-Sg1a-55-56	55-56	2.16	48.70	51.30	0.37	0.098	1.44
LDW-Sg1a-60-61	60-61	2.28	50.80	49.20	0.40	0.098	1.46
LDW-Sg1a-65-66	65-66	2.38	51.10	48.90	0.38	<0.078 U	1.47
LDW-Sg1a-70-71	70-71	2.29	51.30	48.70	0.27	<0.055 U	1.47
LDW-Sg1a-75-76	75-76	2.69	49.20	50.80	0.45	<0.093 U	1.44
LDW-Sg1a-80-81	80-81	3.12	50.00	50.00	0.39	<0.065 U	1.45
LDW-Sg2-0-1	0-1	1.61	60.70	39.30	0.59	0.071	1.61
LDW-Sg2-5-6	5-6	1.70	59.40	40.60	0.48	0.088	1.59
LDW-Sg2-10-11	10-11	2.32	56.10	43.90	0.45	0.153	1.54
LDW-Sg2-15-16	15-16	1.65	59.60	40.40	0.40	0.165	1.59
LDW-Sg2-20-21	20-21	1.26	66.00	34.00	0.14	0.169	1.70
LDW-Sg2-25-26	25-26	0.740	70.90	29.10	0.14	0.124	1.79
LDW-Sg2-30-31	30-31	0.878	68.80	31.20	0.18 ^c	<0.068 U ^c	1.75
LDW-Sg2-35-36	35-36	0.890	66.90	33.10	0.20	<0.055 U	1.71
LDW-Sg2-40-41	40-41	0.962	69.10	30.90	0.20	<0.045 U	1.76
LDW-Sg2-45-46	45-46	1.65	58.40	41.60	0.27	<0.069 U	1.57
LDW-Sg2-50-52	50-52	2.17 ^d	50.55 ^d	49.45	0.37 ^d	<0.072 U ^d	1.46
LDW-Sg2-55-56	55-56	2.27	52.10	47.90	0.15	<0.054 U	1.48
LDW-Sg2-60-62	60-62	2.49 ^c	54.37 ^c	45.63	0.38	<0.054 U	1.51
LDW-Sg2-65-66	65-66	3.48	51.00	49.00	0.32	<0.033 U	1.47
LDW-Sg2-70-71	70-71	2.62	54.70	45.30	0.18	<0.032 U	1.52
LDW-Sg2-75-76	75-76	1.56	62.40	37.60	0.31	<0.054 U	1.64
LDW-Sg2-80-81	80-81	1.34	66.10	33.90	0.19	<0.040 U	1.70
LDW-Sg3-0-1	0-1	2.14	46.80	53.20	0.90	0.170	1.41
LDW-Sg3-5-6	5-6	2.20	50.00	50.00	1.00	0.160	1.45
LDW-Sg3-10-11	10-11	2.27	54.00	46.00	0.64	0.198	1.51

SAMPLE ID	SAMPLE DEPTH INTERVAL (cm)	TOC (% dw)	TOTAL SOLIDS (% ww)	MOISTURE ^a (% ww)	²¹⁰ Pb (pCi/g dw)	¹³⁷ Cs (pCi/g dw)	BULK DENSITY ^b (g/cm ³)
LDW-Sg3-15-17	15-17	2.18 ^d	55.05 ^d	44.95	0.77 ^d	0.140 ^d	1.52
LDW-Sg3-20-21	20-21	2.58	51.70	48.30	0.90	0.147	1.47
LDW-Sg3-25-27	25-27	2.16 ^c	52.40 ^c	47.60	0.78	0.301	1.48
LDW-Sg3-30-31	30-31	2.48	52.30	47.70	0.80	0.140	1.48
LDW-Sg3-35-36	35-36	2.04	51.70	48.30	0.70	0.149	1.47
LDW-Sg3-40-41	40-41	1.43	51.00	49.00	0.50	<0.089 U	1.47
LDW-Sg3-45-46	45-46	1.51	53.40	46.60	0.69	0.100	1.50
LDW-Sg3-50-51	50-51	2.35	53.80	46.20	0.79 ^c	0.212 ^c	1.50
LDW-Sg3-55-56	55-56	2.60	51.40	48.60	0.80	0.190	1.47
LDW-Sg3-60-61	60-61	1.91	53.30	46.70	0.69	0.167	1.50
LDW-Sg3-65-66	65-66	2.06	53.00	47.00	0.77	<0.081 U	1.49
LDW-Sg3-70-71	70-71	2.54	52.40	47.60	0.75	0.125	1.48
LDW-Sg3-75-76	75-76	2.38	52.90	47.10	0.67	0.331	1.49
LDW-Sg3-80-81	80-81	2.11	54.30	45.70	0.67	0.357	1.51
LDW-Sg4-0-1	0-1	1.94	64.30	35.70	0.42	0.085	1.67
LDW-Sg4-5-6	5-6	2.25	56.30	43.70	0.75	0.171	1.54
LDW-Sg4-10-12	10-12	2.07 ^d	63.70 ^d	36.30	0.48 ^d	0.103 ^d	1.66
LDW-Sg4-15-16	15-16	1.65	56.60	43.40	0.58	0.122	1.54
LDW-Sg4-20-21	20-21	1.81	57.20	42.80	0.54	0.165	1.55
LDW-Sg4-25-26	25-26	1.81	56.40	43.60	0.49	0.158	1.54
LDW-Sg4-30-31	30-31	1.74	54.20	45.80	0.53	0.185	1.51
LDW-Sg4-35-37	35-37	1.10 ^c	45.93 ^c	54.07	0.60	0.231	1.40
LDW-Sg4-40-41	40-41	0.885	45.20	54.80	0.58	0.254	1.39
LDW-Sg4-45-46	45-46	1.71	55.50	44.50	0.44	0.162	1.53
LDW-Sg4-50-51	50-51	1.47	48.50	51.50	0.40	0.338	1.43
LDW-Sg4-55-56	55-56	1.86	54.50	45.50	0.42	0.219	1.51
LDW-Sg4-60-61	60-61	2.19	52.90	47.10	0.53	0.250	1.49
LDW-Sg4-65-66	65-66	2.05	54.90	45.10	0.52	0.203	1.52
LDW-Sg4-70-71	70-71	1.93	58.30	41.70	0.43	0.145	1.57
LDW-Sg4-75-76	75-76	2.04	58.10	41.90	0.38 ^c	0.455 ^c	1.57
LDW-Sg4-80-81	80-81	2.73	51.70	48.30	0.26	0.265	1.47
LDW-Sg5a-0-1	0-1	2.36	50.60	49.40	1.00 ^c	0.140 ^c	1.46
LDW-Sg5a-5-6	5-6	2.65	47.50	52.50	1.08	0.125	1.42
LDW-Sg5a-10-11	10-11	2.68	48.90	51.10	1.07	0.132	1.44
LDW-Sg5a-15-16	15-16	2.14	51.70	48.30	0.89	0.203	1.47
LDW-Sg5a-20-21	20-21	1.94	53.50	46.50	1.02	0.160	1.50
LDW-Sg5a-25-26	25-26	2.13	53.40	46.60	0.75	0.140	1.50
LDW-Sg5a-30-32	30-32	1.78 ^d	54.45 ^d	45.55	0.69 ^d	0.112 ^d	1.51
LDW-Sg5a-35-36	35-36	2.10	53.20	46.80	0.96	0.125	1.50
LDW-Sg5a-40-42	40-42	1.90 ^c	54.47 ^c	45.53	0.75	0.128	1.51

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LDW-Sg5a-45-46	45-46	2.04	53.30	46.70	0.62	0.118	1.50
LDW-Sg5a-50-51	50-51	2.04	50.80	49.20	0.56	0.132	1.46
LDW-Sg5a-55-56	55-56	2.32	45.20	54.80	0.38	0.141	1.39
LDW-Sg5a-60-61	60-61	3.27	40.70	59.30	0.87	0.302	1.34
LDW-Sg5a-65-66	65-66	1.89	50.30	49.70	0.58	0.110	1.46
LDW-Sg5a-70-71	70-71	1.86	46.70	53.30	0.58	<0.071 U	1.41
LDW-Sg5a-75-76	75-76	1.87	53.30	46.70	0.79	0.115	1.50
LDW-Sg5a-80-81	80-81	2.18	53.10	46.90	0.61	0.158	1.49
LDW-Sg6-0-1	0-1	2.01	61.30	38.70	1.02	0.083	1.62
LDW-Sg6-5-7	5-7	1.41 ^d	64.80 ^d	35.20	0.68 ^d	0.084 ^d	1.68
LDW-Sg6-10-11	10-11	1.74	63.60	36.40	0.79	0.201	1.66
LDW-Sg6-15-16	15-16	1.16	66.10	33.90	0.69	0.072	1.70
LDW-Sg6-20-21	20-21	1.40	63.50	36.50	0.33	0.114	1.65
LDW-Sg6-25-27	25-27	2.23 ^c	54.10 ^c	45.90	0.58	0.196	1.51
LDW-Sg6-30-31	30-31	2.32	51.10	48.90	0.78	0.224	1.47
LDW-Sg6-35-36	35-36	1.36	54.40	45.60	0.50	0.133	1.51
LDW-Sg6-40-41	40-41	2.20	59.50	40.50	0.66	0.188	1.59
LDW-Sg6-45-46	45-46	2.06	59.30	40.70	0.85	0.160	1.59
LDW-Sg6-50-51	50-51	2.04	61.90	38.10	0.62	0.159	1.63
LDW-Sg6-55-56	55-56	1.47	59.90	40.10	0.36	0.160	1.59
LDW-Sg6-60-61	60-61	2.06	61.10	38.90	0.22	0.113	1.61
LDW-Sg6-65-66	65-66	2.01	63.70	36.30	0.48	0.119	1.66
LDW-Sg6-70-71	70-71	1.76	72.60	27.40	0.30	0.083	1.82
LDW-Sg6-75-76	75-76	2.24	60.80	39.20	0.50	0.174	1.61
LDW-Sg6-80-81	80-81	2.12	64.40	35.60	0.43 ^c	0.145 ^c	1.67
LDW-Sg7-0-1	0-1	2.34	50.30	49.70	0.80	0.115	1.46
LDW-Sg7-5-6	5-6	1.89	58.00	42.00	0.53	0.134	1.57
LDW-Sg7-10-11	10-11	2.12	55.80	44.20	0.56	0.119	1.53
LDW-Sg7-15-16	15-16	1.92	57.50	42.50	0.60	0.198	1.56
LDW-Sg7-20-21	20-21	1.48	60.10	39.90	0.45	0.096	1.60
LDW-Sg7-25-26	25-26	1.30	63.10	36.90	0.42	0.085	1.65
LDW-Sg7-30-31	30-31	1.78	60.50	39.50	0.39	0.125	1.60
LDW-Sg7-35-37	35-37	1.70 ^d	64.50 ^d	35.50	0.39 ^d	0.119 ^d	1.67
LDW-Sg7-40-41	40-41	2.19	60.60	39.40	0.40	0.155	1.61
LDW-Sg7-45-46	45-46	1.93	65.50	34.50	0.32	0.110	1.69
LDW-Sg7-50-51	50-51	1.73	63.80	36.20	0.26	0.099	1.66
LDW-Sg7-55-57	55-57	1.44 ^c	66.80 ^c	33.20	0.25	0.080	1.71
LDW-Sg7-60-61	60-61	1.76	68.60	31.40	0.28	0.105	1.75
LDW-Sg7-65-66	65-66	2.51	61.00	39.00	0.39 ^c	0.261 ^c	1.61
LDW-Sg7-70-71	70-71	2.34	61.50	38.50	0.29	0.326	1.62

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LDW-Sg7-75-76	75-76	1.64	61.50	38.50	0.24	0.307	1.62
LDW-Sg7-80-81	80-81	2.20	56.70	43.30	0.33	0.382	1.55
LDW-Sg8-0-1	0-1	2.44	59.60	40.40	0.51	<0.050 U	1.59
LDW-Sg8-5-6	5-6	2.35	56.40	43.60	0.31	<0.044 U	1.54
LDW-Sg8-10-11	10-11	1.96	71.60	28.40	0.22	<0.048 U	1.80
LDW-Sg8-15-17	15-17	2.00 ^d	60.50 ^d	39.50	0.26 ^d	<0.044 U ^d	1.60
LDW-Sg8-20-21	20-21	2.07	54.60	45.40	0.30	<0.041 U	1.52
LDW-Sg8-25-26	25-26	1.27	62.10	37.90	0.31	<0.047 U	1.63
LDW-Sg8-30-31	30-31	2.42	55.00	45.00	0.23	<0.036 U	1.52
LDW-Sg8-35-36	35-36	2.22	55.60	44.40	0.50	<0.048 U	1.53
LDW-Sg8-40-42	40-42	1.89 ^c	58.53 ^c	41.47	0.35	<0.065 U	1.57
LDW-Sg8-45-46	45-46	1.90	57.60	42.40	0.32	<0.043 U	1.56
LDW-Sg8-50-51	50-51	1.61	59.10	40.90	0.25	<0.038 U	1.58
LDW-Sg8-55-56	55-56	1.12	63.00	37.00	0.36	<0.049 U	1.65
LDW-Sg8-60-61	60-61	2.03	58.60	41.40	0.29 ^c	<0.045 U ^c	1.57
LDW-Sg8-65-66	65-66	1.52	64.30	35.70	0.40	<0.042 U	1.67
LDW-Sg8-70-71	70-71	1.36	68.20	31.80	0.23	<0.044 U	1.74
LDW-Sg8-75-76	75-76	2.73	56.20	43.80	0.50	<0.028 U	1.54
LDW-Sg8-80-81	80-81	1.11	70.40	29.60	0.28	<0.036 U	1.78
LDW-Sg9-0-1	0-1	1.38	63.40	36.60	0.65	<0.048 U	1.65
LDW-Sg9-5-6	5-6	1.05	73.50	26.50	0.29	<0.046 U	1.84
LDW-Sg9-10-11	10-11	1.59	64.30	35.70	0.39	0.201	1.67
LDW-Sg9-15-16	15-16	1.13	63.60	36.40	0.33	0.355	1.66
LDW-Sg9-20-22	20-22	1.22 ^d	58.35 ^d	41.65	0.29 ^d	0.160 ^d	1.57
LDW-Sg9-25-26	25-26	0.922	63.00	37.00	0.31	0.091	1.65
LDW-Sg9-30-31	30-31	1.45	57.10	42.90	0.37	0.083	1.55
LDW-Sg9-35-36	35-36	1.07	66.30	33.70	<0.24 U	0.089	1.70
LDW-Sg9-40-41	40-41	1.32	61.80	38.20	<0.21 U	0.141	1.63
LDW-Sg9-45-46	45-46	0.651	69.60	30.40	0.20	<0.048 U	1.76
LDW-Sg9-50-51	50-51	1.21	59.50	40.50	0.32	<0.064 U	1.59
LDW-Sg9-55-56	55-56	2.07	52.20	47.80	0.29	<0.111 U	1.48
LDW-Sg9-60-62	60-62	1.33 ^c	64.03 ^c	35.97	0.26	<0.066 U	1.66
LDW-Sg9-65-66	65-66	1.58	60.90	39.10	0.32	<0.061 U	1.61
LDW-Sg9-70-71	70-71	2.99	67.30	32.70	0.35	<0.041 U	1.72
LDW-Sg9-75-76	75-76	1.38	69.80	30.20	0.29	<0.040 U	1.77
LDW-Sg9-80-81	80-81	1.25	70.40	29.60	0.21	<0.036 U	1.78
LDW-Sg10-0-1	0-1	2.08	48.30	51.70	1.04	0.107	1.43
LDW-Sg10-5-6	5-6	1.78	50.50	49.50	0.93	0.125	1.46
LDW-Sg10-10-12	10-12	1.56 ^d	52.25 ^d	47.75	0.68 ^d	0.102 ^d	1.48
LDW-Sg10-15-16	15-16	1.23	56.00	44.00	0.54	0.116	1.54

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LDW-Sg10-20-21	20-21	1.36	55.60	44.40	0.38	0.154	1.53
LDW-Sg10-25-26	25-26	1.85	56.60	43.40	0.55	0.168	1.54
LDW-Sg10-30-31	30-31	1.57	52.40	47.60	0.47	0.212	1.48
LDW-Sg10-35-36	35-36	1.89	50.30	49.70	0.59	0.194	1.46
LDW-Sg10-40-41	40-41	1.64	61.60	38.40	0.35	0.203	1.62
LDW-Sg10-45-46	45-46	1.76	60.70	39.30	0.57	0.223	1.61
LDW-Sg10-50-51	50-51	1.76	55.60	44.40	0.21	0.184	1.53
LDW-Sg10-55-56	55-56	1.72	57.00	43.00	0.47	0.145	1.55
LDW-Sg10-60-61	60-61	2.22	58.70	41.30	0.49 ^c	0.176 ^c	1.58
LDW-Sg10-65-66	65-66	1.96	55.60	44.40	0.39	0.167	1.53
LDW-Sg10-70-71	70-71	2.23	50.70	49.30	0.61	0.290	1.46
LDW-Sg10-75-77	75-77	1.83 ^c	53.17 ^c	46.83	0.51	0.213	1.49
LDW-Sg10-80-81	80-81	2.21	54.30	45.70	0.51	0.206	1.51
LDW-Sg11b-0-2	0-2	0.847 ^d	83.90 ^d	16.10	0.23 ^d	<0.032 U ^d	2.09
LDW-Sg11b-5-6	5-6	0.954	72.40	27.60	0.26	0.138	1.82
LDW-Sg11b-10-11	10-11	1.75	63.70	36.30	0.29	0.152	1.66
LDW-Sg11b-15-16	15-16	1.82	63.90	36.10	0.28	0.137	1.66
LDW-Sg11b-20-21	20-21	1.83	64.50	35.50	0.43	0.128	1.67
LDW-Sg11b-25-27	25-27	1.64 ^c	64.83 ^c	35.17	0.26	0.161	1.68
LDW-Sg11b-30-31	30-31	2.10	61.30	38.70	0.36	0.096	1.62
LDW-Sg11b-35-36	35-36	2.58	57.50	42.50	0.37	<0.054 U	1.56
LDW-Sg11b-40-41	40-41	2.85	60.70	39.30	0.18	<0.057 U	1.61
LDW-Sg11c-0-1	0-1	0.581	74.30	25.70	0.32	<0.034 U	1.86
LDW-Sg11c-5-6	5-6	0.932	77.60	22.40	0.19	<0.050 U	1.93
LDW-Sg11c-10-12	10-12	1.44 ^d	67.75 ^d	32.25	0.27 ^d	0.106 ^d	1.73
LDW-Sg11c-15-16	15-16	1.96	60.90	39.10	0.31	0.206	1.61
LDW-Sg11c-20-21	20-21	1.83	61.10	38.90	0.36	0.188	1.61
LDW-Sg11c-25-26	25-26	1.55	70.00	30.00	0.24	0.097	1.77
LDW-Sg11c-30-32	30-32	1.71 ^c	59.93 ^c	40.07	0.33	0.241	1.60
LDW-Sg12-0-1	0-1	3.80	41.50	58.50	1.07	0.131	1.35
LDW-Sg12-5-6	5-6	2.77	58.30	41.70	0.50	0.074	1.57
LDW-Sg12-10-11	10-11	3.01	50.50	49.50	0.77	<0.091 U	1.46
LDW-Sg12-15-16	15-16	2.51	49.60	50.40	0.76	0.079	1.45
LDW-Sg12-20-21	20-21	3.11	45.50	54.50	0.98	<0.072 U	1.40
LDW-Sg12-25-26	25-26	3.17	42.10	57.90	1.11	<0.094 U	1.36
LDW-Sg12-30-32	30-32	3.86 ^d	44.60 ^d	55.40	0.89 ^d	0.191 ^d	1.38
LDW-Sg12-35-36	35-36	1.63	66.20	33.80	0.43	<0.052 U	1.70
LDW-Sg12-40-41	40-41	3.35	46.50	53.50	0.87	0.121	1.41
LDW-Sg12-45-46	45-46	3.11	45.50	54.50	1.04	<0.106 U	1.40
LDW-Sg12-50-51	50-51	4.00	40.70	59.30	1.03	<0.102 U	1.34

SAMPLE ID	SAMPLE DEPTH INTERVAL (cm)	TOC (% dw)	TOTAL SOLIDS (% ww)	MOISTURE ^a (% ww)	²¹⁰ Pb (pCi/g dw)	¹³⁷ Cs (pCi/g dw)	BULK DENSITY ^b (g/cm ³)
LDW-Sg12-55-56	55-56	4.68	39.20	60.80	1.40	<0.096 U	1.32
LDW-Sg12-60-62	60-62	3.80 ^c	43.10 ^c	56.90	1.22	0.120	1.37
LDW-Sg12-65-66	65-66	3.28	46.50	53.50	1.13	0.145	1.41
LDW-Sg12-70-71	70-71	2.71	48.80	51.20	0.85	0.113	1.44
LDW-Sg12-75-76	75-76	3.82	42.30	57.70	0.96	0.105	1.36
LDW-Sg12-80-81	80-81	3.62	42.70	57.30	1.00	0.156	1.36
LDW-Sg13-0-1	0-1	2.97 ^c	49.23 ^c	50.77	0.87	0.111	1.44
LDW-Sg13-5-6	5-6	2.70	50.50	49.50	0.94	<0.083 U	1.46
LDW-Sg13-10-11	10-11	2.66	51.10	48.90	0.69	0.098	1.47
LDW-Sg13-15-17	15-17	2.79 ^d	45.90 ^d	54.10	1.04 ^d	<0.067 U ^d	1.40
LDW-Sg13-20-21	20-21	2.51	49.40	50.60	0.82	<0.068 U	1.44
LDW-Sg13-25-26	25-26	1.82	58.20	41.80	0.55	<0.053 U	1.57
LDW-Sg13-30-31	30-31	2.50	44.70	55.30	0.64	<0.122 U	1.39
LDW-Sg13-35-36	35-36	1.64	57.90	42.10	0.78	0.129	1.56
LDW-Sg13-40-41	40-41	2.38	52.10	47.90	0.72	0.093	1.48
LDW-Sg13-45-46	45-46	1.82	56.10	43.90	0.46	0.113	1.54
LDW-Sg13-50-52	50-52	1.66	60.90	39.10	0.51	0.082	1.61
LDW-Sg13-55-56	55-56	1.43	61.70	38.30	0.37	<0.049 U	1.62
LDW-Sg13-60-61	60-61	1.84	59.50	40.50	0.52 ^c	<0.071 U ^c	1.59
LDW-Sg13-65-66	65-66	2.07	53.90	46.10	0.54	0.116	1.51
LDW-Sg13-70-71	70-71	2.07	57.60	42.40	0.57	0.070	1.56
LDW-Sg13-75-76	75-76	1.86	56.90	43.10	0.56	0.107	1.55
LDW-Sg13-80-81	80-81	1.67	57.40	42.60	0.46	0.119	1.56

^a calculated as the difference between 100 and total solids

^b total (bulk) sample density calculated from QAPP (Windward and QEA 2004) Equation 3-2

^c result averaged with laboratory replicate(s)

^d result averaged with field duplicate

dw – dry weight, ww – wet weight

pCi/g – picocuries/gram

U – undetected

Attachment A-2. Sedflume field test results

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf1	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf1	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf1	1	0.4	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf1	1	0.8	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf1	1	1.6	1.0	11.0	10.00	0.60	1.67E-03
LDW-Sf1	1	3.2	11.0	29.0	1.90	2.00	1.58E-02

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf1	1	6.4	29.0	52.0	0.53	4.05	7.19E-02
LDW-Sf1	2	0.2	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf1	2	0.4	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf1	2	0.8	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf1	2	1.6	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf1	2	3.2	52.0	61.0	10.00	5.65	1.50E-03
LDW-Sf1	2	6.4	61.0	80.0	1.13	7.05	2.79E-02
LDW-Sf1	2	10.0	80.0	100.0	0.43	9.00	7.70E-02
LDW-Sf1	3	0.4	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf1	3	0.8	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf1	3	1.6	100.0	105.0	10.00	10.25	8.33E-04
LDW-Sf1	3	3.2	105.0	110.0	10.00	10.75	8.33E-04
LDW-Sf1	3	6.4	110.0	117.0	10.00	11.35	1.17E-03
LDW-Sf1	3	10.0	117.0	136.0	10.00	12.65	3.17E-03
LDW-Sf1	4	0.8	136.0	136.0	10.00	13.60	0.00E+00
LDW-Sf1	4	1.6	136.0	136.0	10.00	13.60	0.00E+00
LDW-Sf1	4	3.2	136.0	136.0	10.00	13.60	0.00E+00
LDW-Sf1	4	6.4	136.0	137.0	10.00	13.65	1.67E-04
LDW-Sf1	5	0.2	207.0	207.0	10.00	20.70	0.00E+00
LDW-Sf1	5	0.4	213.0	213.0	10.00	21.30	0.00E+00
LDW-Sf1	5	0.8	213.0	213.0	10.00	21.30	0.00E+00
LDW-Sf1	5	1.6	213.0	213.0	10.00	21.30	0.00E+00
LDW-Sf1	5	3.2	213.0	213.0	10.00	21.30	0.00E+00
LDW-Sf1	5	6.4	213.0	225.0	10.00	21.90	2.00E-03
LDW-Sf1	5	10.0	225.0	265.0	10.00	24.50	6.67E-03
LDW-Sf2	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf2	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf2	1	0.4	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf2	1	0.8	0.0	5.0	10.00	0.25	8.33E-04
LDW-Sf2	1	1.6	5.0	10.0	10.00	0.75	8.33E-04
LDW-Sf2	1	3.2	10.0	30.0	2.30	2.00	1.45E-02
LDW-Sf2	1	6.4	30.0	50.0	1.83	4.00	1.82E-02
LDW-Sf2	2	0.2	50.0	50.0	10.00	5.00	0.00E+00
LDW-Sf2	2	0.4	50.0	50.0	10.00	5.00	0.00E+00
LDW-Sf2	2	0.8	50.0	51.0	10.00	5.05	1.67E-04
LDW-Sf2	2	1.6	51.0	54.0	10.00	5.25	5.00E-04
LDW-Sf2	2	3.2	52.0	59.0	10.00	5.55	1.17E-03
LDW-Sf2	2	6.4	59.0	79.0	10.00	6.90	3.33E-03
LDW-Sf2	2	10.0	79.0	107.0	1.00	9.30	4.67E-02

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf2	3	0.2	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf2	3	0.4	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf2	3	0.8	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf2	3	1.6	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf2	3	3.2	107.0	110.0	10.00	10.85	5.00E-04
LDW-Sf2	3	6.4	110.0	130.0	5.00	12.00	6.67E-03
LDW-Sf2	3	10.0	130.0	150.0	2.58	14.00	1.29E-02
LDW-Sf2	4	0.4	160.0	160.0	10.00	16.00	0.00E+00
LDW-Sf2	4	0.8	160.0	160.0	10.00	16.00	0.00E+00
LDW-Sf2	4	1.6	160.0	160.0	10.00	16.00	0.00E+00
LDW-Sf2	4	3.2	160.0	170.0	4.00	16.50	4.17E-03
LDW-Sf2	4	6.4	170.0	182.0	2.00	17.60	1.00E-02
LDW-Sf2	4	10.0	182.0	202.0	1.83	19.20	1.82E-02
LDW-Sf2	5	0.4	202.0	202.0	10.00	20.20	0.00E+00
LDW-Sf2	5	0.8	202.0	202.0	10.00	20.20	0.00E+00
LDW-Sf2	5	1.6	202.0	202.0	10.00	20.20	0.00E+00
LDW-Sf2	5	3.2	202.0	206.0	5.00	20.40	1.33E-03
LDW-Sf2	5	6.4	206.0	225.0	0.63	21.55	5.00E-02
LDW-Sf2	5	10.0	225.0	250.0	1.08	23.75	3.85E-02
LDW-Sf3	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf3	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf3	1	0.4	0.0	4.0	10.00	0.20	6.67E-04
LDW-Sf3	1	0.8	4.0	19.0	1.60	1.15	1.56E-02
LDW-Sf3	1	1.6	19.0	35.0	1.72	2.70	1.55E-02
LDW-Sf3	1	3.2	35.0	58.0	0.33	4.65	1.15E-01
LDW-Sf3	2	0.2	58.0	58.0	10.00	5.80	0.00E+00
LDW-Sf3	2	0.4	58.0	58.0	10.00	5.80	0.00E+00
LDW-Sf3	2	0.8	58.0	62.0	10.00	6.00	6.67E-04
LDW-Sf3	2	1.6	62.0	72.0	0.50	6.70	3.33E-02
LDW-Sf3	2	3.2	72.0	100.0	0.77	8.60	6.08E-02
LDW-Sf3	3	0.2	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf3	3	0.4	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf3	3	0.8	100.0	103.0	10.00	10.15	5.00E-04
LDW-Sf3	3	1.6	103.0	114.0	4.07	10.85	4.51E-03
LDW-Sf3	3	3.2	114.0	123.0	0.27	11.85	5.62E-02
LDW-Sf3	3	6.4	123.0	152.0	0.40	13.75	1.21E-01
LDW-Sf3	4	0.2	152.0	152.0	10.00	15.20	0.00E+00
LDW-Sf3	4	0.4	152.0	152.0	10.00	15.20	0.00E+00
LDW-Sf3	4	0.8	152.0	158.0	10.00	15.50	1.00E-03

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf3	4	1.6	158.0	172.0	5.00	16.50	4.67E-03
LDW-Sf3	4	3.2	172.0	200.0	2.07	18.60	2.26E-02
LDW-Sf3	5	0.2	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf3	5	0.4	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf3	5	0.8	200.0	205.0	10.00	20.25	8.33E-04
LDW-Sf3	5	1.6	205.0	215.0	0.70	21.00	2.38E-02
LDW-Sf3	5	3.2	215.0	240.0	1.70	22.75	2.45E-02
LDW-Sf3	5	6.4	240.0	250.0	0.28	24.50	5.89E-02
LDW-Sf4	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf4	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf4	1	0.4	0.0	3.0	10.00	0.15	5.00E-04
LDW-Sf4	1	0.8	3.0	8.0	10.00	0.55	8.33E-04
LDW-Sf4	1	1.6	8.0	20.0	3.58	1.40	5.58E-03
LDW-Sf4	1	3.2	20.0	34.0	0.65	2.70	3.59E-02
LDW-Sf4	1	6.4	34.0	63.0	0.42	4.85	1.16E-01
LDW-Sf4	2	0.2	63.0	63.0	10.00	6.30	0.00E+00
LDW-Sf4	2	0.4	63.0	63.0	10.00	6.30	0.00E+00
LDW-Sf4	2	0.8	63.0	63.0	10.00	6.30	0.00E+00
LDW-Sf4	2	1.6	63.0	74.0	4.88	6.85	3.75E-03
LDW-Sf4	2	3.2	74.0	86.0	2.77	8.00	7.23E-03
LDW-Sf4	2	6.4	86.0	111.0	1.35	9.85	3.09E-02
LDW-Sf4	3	0.4	111.0	111.0	10.00	11.10	0.00E+00
LDW-Sf4	3	0.8	111.0	111.0	10.00	11.10	0.00E+00
LDW-Sf4	3	1.6	111.0	111.0	10.00	11.10	0.00E+00
LDW-Sf4	3	3.2	150.0	161.0	10.00	15.55	1.83E-03
LDW-Sf4	3	6.4	161.0	178.0	1.22	16.95	2.33E-02
LDW-Sf4	3	10.0	178.0	196.0	0.50	18.70	6.00E-02
LDW-Sf4	4	0.4	196.0	196.0	10.00	19.60	0.00E+00
LDW-Sf4	4	0.8	196.0	196.0	10.00	19.60	0.00E+00
LDW-Sf4	4	1.6	196.0	196.0	10.00	19.60	0.00E+00
LDW-Sf4	4	3.2	196.0	206.0	6.00	20.10	2.78E-03
LDW-Sf4	4	6.4	206.0	217.0	0.50	21.15	3.67E-02
LDW-Sf4	5	0.4	217.0	217.0	10.00	21.70	0.00E+00
LDW-Sf4	5	0.8	217.0	217.0	10.00	21.70	0.00E+00
LDW-Sf4	5	1.6	217.0	217.0	10.00	21.70	0.00E+00
LDW-Sf4	5	3.2	217.0	219.0	10.00	21.80	3.33E-04
LDW-Sf4	5	6.4	219.0	247.0	1.92	23.30	2.43E-02
LDW-Sf4	5	10.0	247.0	265.0	1.02	25.60	2.95E-02
LDW-Sf5	1	0.1	0.0	0.0	10.00	0.00	0.00E+00

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf5	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf5	1	0.4	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf5	1	0.8	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf5	1	1.6	0.0	11.0	1.17	0.55	1.57E-02
LDW-Sf5	1	3.2	13.0	45.0	1.25	2.90	4.27E-02
LDW-Sf5	2	0.4	45.0	46.0	10.00	4.55	1.67E-04
LDW-Sf5	2	0.8	46.0	54.0	10.00	5.00	1.33E-03
LDW-Sf5	2	1.6	54.0	64.0	1.08	5.90	1.54E-02
LDW-Sf5	2	3.2	64.0	100.0	0.75	8.20	8.00E-02
LDW-Sf5	3	0.4	100.0	102.0	10.00	10.10	3.33E-04
LDW-Sf5	3	0.8	102.0	114.0	10.00	10.80	2.00E-03
LDW-Sf5	3	1.6	114.0	129.0	1.25	12.15	2.00E-02
LDW-Sf5	3	3.2	124.0	154.0	0.95	13.90	5.26E-02
LDW-Sf5	4	0.4	154.0	155.0	10.00	15.45	1.67E-04
LDW-Sf5	4	0.8	155.0	166.0	10.00	16.05	1.83E-03
LDW-Sf5	4	1.6	166.0	180.0	1.50	17.30	1.56E-02
LDW-Sf5	4	3.2	180.0	205.0	1.02	19.25	4.10E-02
LDW-Sf5	5	0.4	205.0	207.0	10.00	20.60	3.33E-04
LDW-Sf5	5	0.8	207.0	216.0	10.00	21.15	1.50E-03
LDW-Sf5	5	1.6	216.0	226.0	1.55	22.10	1.08E-02
LDW-Sf5	5	3.2	226.0	250.0	0.75	23.80	5.33E-02
LDW-Sf6	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf6	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf6	1	0.4	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf6	1	0.8	1.0	9.0	10.00	0.50	1.33E-03
LDW-Sf6	1	1.6	9.0	19.0	1.50	1.40	1.11E-02
LDW-Sf6	1	3.2	19.0	42.0	0.75	3.05	5.11E-02
LDW-Sf6	2	0.2	46.0	46.0	10.00	4.60	0.00E+00
LDW-Sf6	2	0.4	46.0	46.0	10.00	4.60	0.00E+00
LDW-Sf6	2	0.8	46.0	47.0	10.00	4.65	1.67E-04
LDW-Sf6	2	1.6	47.0	56.0	10.00	5.15	1.50E-03
LDW-Sf6	2	3.2	56.0	70.0	1.00	6.30	2.33E-02
LDW-Sf6	2	6.4	70.0	105.0	0.75	8.75	7.78E-02
LDW-Sf6	3	0.4	105.0	105.0	10.00	10.50	0.00E+00
LDW-Sf6	3	0.8	105.0	105.0	10.00	10.50	0.00E+00
LDW-Sf6	3	1.6	105.0	107.0	10.00	10.60	3.33E-04
LDW-Sf6	3	3.2	107.0	129.0	10.00	11.80	3.67E-03
LDW-Sf6	3	6.4	129.0	148.0	1.00	13.85	3.17E-02
LDW-Sf6	4	0.8	148.0	148.0	10.00	14.80	0.00E+00

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf6	4	1.6	148.0	153.0	10.00	15.05	8.33E-04
LDW-Sf6	4	3.2	153.0	170.0	10.00	16.15	2.83E-03
LDW-Sf6	4	6.4	170.0	188.0	2.00	17.90	1.50E-02
LDW-Sf6	4	10.0	188.0	220.0	1.00	20.40	5.33E-02
LDW-Sf6	5	0.8	228.0	228.0	10.00	22.80	0.00E+00
LDW-Sf6	5	1.6	228.0	231.0	10.00	22.95	5.00E-04
LDW-Sf6	5	3.2	231.0	246.0	10.00	23.85	2.50E-03
LDW-Sf6	5	6.4	246.0	258.0	2.00	25.20	1.00E-02
LDW-Sf6	5	10.0	258.0	285.0	1.50	27.15	3.00E-02
LDW-Sf6-DUP	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf6-DUP	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf6-DUP	1	0.4	0.0	3.0	10.00	0.15	5.00E-04
LDW-Sf6-DUP	1	0.8	3.0	12.0	10.00	0.75	1.50E-03
LDW-Sf6-DUP	1	1.6	12.0	23.0	1.25	1.75	1.47E-02
LDW-Sf6-DUP	1	3.2	23.0	48.0	1.00	3.55	4.17E-02
LDW-Sf6-DUP	2	0.2	50.0	50.0	10.00	5.00	0.00E+00
LDW-Sf6-DUP	2	0.4	50.0	50.0	10.00	5.00	0.00E+00
LDW-Sf6-DUP	2	0.8	50.0	52.0	10.00	5.10	3.33E-04
LDW-Sf6-DUP	2	1.6	52.0	63.0	10.00	5.75	1.83E-03
LDW-Sf6-DUP	2	3.2	63.0	79.0	1.25	7.10	2.13E-02
LDW-Sf6-DUP	2	6.4	79.0	102.0	0.67	9.05	5.75E-02
LDW-Sf6-DUP	3	0.4	106.0	106.0	10.00	10.60	0.00E+00
LDW-Sf6-DUP	3	0.8	106.0	106.0	10.00	10.60	0.00E+00
LDW-Sf6-DUP	3	1.6	106.0	108.0	10.00	10.70	3.33E-04
LDW-Sf6-DUP	3	3.2	108.0	122.0	10.00	11.50	2.33E-03
LDW-Sf6-DUP	3	6.4	122.0	154.0	2.00	13.80	2.67E-02
LDW-Sf6-DUP	4	0.8	154.0	154.0	10.00	15.40	0.00E+00
LDW-Sf6-DUP	4	1.6	154.0	154.0	10.00	15.40	0.00E+00
LDW-Sf6-DUP	4	3.2	154.0	166.0	10.00	16.00	2.00E-03
LDW-Sf6-DUP	4	6.4	166.0	197.0	2.00	18.15	2.58E-02
LDW-Sf6-DUP	4	10.0	197.0	227.0	1.00	21.20	5.00E-02
LDW-Sf6-DUP	5	1.6	228.0	229.0	10.00	22.85	1.67E-04
LDW-Sf6-DUP	5	3.2	229.0	255.0	10.00	24.20	4.33E-03
LDW-Sf6-DUP	5	6.4	255.0	268.0	1.00	26.15	2.17E-02
LDW-Sf6-DUP	5	10.0	268.0	300.0	0.75	28.40	7.11E-02
LDW-Sf7	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf7	1	0.2	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf7	1	0.4	1.0	4.0	10.00	0.25	5.00E-04
LDW-Sf7	1	0.8	4.0	10.0	10.00	0.70	1.00E-03

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf7	1	1.6	10.0	30.0	7.75	2.00	4.30E-03
LDW-Sf7	1	3.2	30.0	38.0	1.50	3.40	8.89E-03
LDW-Sf7	1	6.4	38.0	50.0	0.50	4.40	4.00E-02
LDW-Sf7	2	0.2	51.0	51.0	10.00	5.10	0.00E+00
LDW-Sf7	2	0.4	51.0	51.0	10.00	5.10	0.00E+00
LDW-Sf7	2	0.8	51.0	54.0	10.00	5.25	5.00E-04
LDW-Sf7	2	1.6	54.0	61.0	10.00	5.75	1.17E-03
LDW-Sf7	2	3.2	61.0	75.0	2.75	6.80	8.48E-03
LDW-Sf7	2	6.4	75.0	83.0	1.08	7.90	1.23E-02
LDW-Sf7	3	0.2	87.0	87.0	10.00	8.70	0.00E+00
LDW-Sf7	3	0.4	87.0	87.0	10.00	8.70	0.00E+00
LDW-Sf7	3	0.8	87.0	89.0	10.00	8.80	3.33E-04
LDW-Sf7	3	1.6	89.0	96.0	10.00	9.25	1.17E-03
LDW-Sf7	3	3.2	96.0	121.0	1.50	10.85	2.78E-02
LDW-Sf7	3	6.4	121.0	143.0	0.58	13.20	6.29E-02
LDW-Sf7	4	0.2	143.0	143.0	10.00	14.30	0.00E+00
LDW-Sf7	4	0.4	143.0	143.0	10.00	14.30	0.00E+00
LDW-Sf7	4	0.8	143.0	144.0	10.00	14.35	1.67E-04
LDW-Sf7	4	1.6	144.0	155.0	10.00	14.95	1.83E-03
LDW-Sf7	4	3.2	155.0	162.0	2.17	15.85	5.38E-03
LDW-Sf7	4	6.4	162.0	175.0	0.63	16.85	3.42E-02
LDW-Sf7	5	0.2	175.0	175.0	10.00	17.50	0.00E+00
LDW-Sf7	5	0.4	175.0	175.0	10.00	17.50	0.00E+00
LDW-Sf7	5	0.8	175.0	175.0	10.00	17.50	0.00E+00
LDW-Sf7	5	1.6	175.0	178.0	10.00	17.65	5.00E-04
LDW-Sf7	5	3.2	178.0	196.0	1.67	18.70	1.80E-02
LDW-Sf7	5	6.4	196.0	205.0	0.58	20.05	2.57E-02
LDW-Sf7	6	0.8	205.0	205.0	10.00	20.50	0.00E+00
LDW-Sf7	6	1.6	205.0	206.0	10.00	20.55	1.67E-04
LDW-Sf7	6	3.2	206.0	222.0	10.00	21.40	2.67E-03
LDW-Sf7	6	6.4	222.0	241.0	1.00	23.15	3.17E-02
LDW-Sf7	6	10.0	241.0	265.0	0.33	25.30	1.20E-01
LDW-Sf8	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf8	1	0.2	0.0	2.0	10.00	0.10	3.33E-04
LDW-Sf8	1	0.4	2.0	5.0	10.00	0.35	5.00E-04
LDW-Sf8	1	0.8	5.0	11.0	10.00	0.80	1.00E-03
LDW-Sf8	1	1.6	11.0	21.0	10.00	1.60	1.67E-03
LDW-Sf8	1	3.2	21.0	33.0	1.42	2.70	1.41E-02
LDW-Sf8	1	6.4	33.0	53.0	0.50	4.30	6.67E-02

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf8	2	0.2	57.0	57.0	10.00	5.70	0.00E+00
LDW-Sf8	2	0.4	57.0	57.0	10.00	5.70	0.00E+00
LDW-Sf8	2	0.8	57.0	59.0	10.00	5.80	3.33E-04
LDW-Sf8	2	1.6	59.0	71.0	10.00	6.50	2.00E-03
LDW-Sf8	2	3.2	71.0	90.0	2.08	8.05	1.52E-02
LDW-Sf8	2	6.4	90.0	111.0	1.07	10.05	3.28E-02
LDW-Sf8	3	0.4	113.0	113.0	10.00	11.30	0.00E+00
LDW-Sf8	3	0.8	113.0	113.0	10.00	11.30	0.00E+00
LDW-Sf8	3	1.6	113.0	128.0	10.00	12.05	2.50E-03
LDW-Sf8	3	3.2	128.0	140.0	1.58	13.40	1.26E-02
LDW-Sf8	3	6.4	140.0	161.0	0.72	15.05	4.88E-02
LDW-Sf8	4	0.4	161.0	161.0	10.00	16.10	0.00E+00
LDW-Sf8	4	0.8	161.0	161.0	10.00	16.10	0.00E+00
LDW-Sf8	4	1.6	161.0	161.0	10.00	16.10	0.00E+00
LDW-Sf8	4	3.2	161.0	164.0	10.00	16.25	5.00E-04
LDW-Sf8	4	6.4	164.0	168.0	5.00	16.60	1.33E-03
LDW-Sf8	4	10.0	168.0	187.0	1.52	17.75	2.09E-02
LDW-Sf8	5	1.6	187.0	187.0	10.00	18.70	0.00E+00
LDW-Sf8	5	3.2	187.0	190.0	10.00	18.85	5.00E-04
LDW-Sf8	5	6.4	190.0	222.0	10.00	20.60	5.33E-03
LDW-Sf8	5	10.0	222.0	253.0	1.50	23.75	3.44E-02
LDW-Sf9	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf9	1	0.2	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf9	1	0.4	1.0	5.0	7.00	0.30	9.52E-04
LDW-Sf9	1	0.8	5.0	9.0	4.00	0.70	1.67E-03
LDW-Sf9	1	1.6	9.0	16.0	3.50	1.25	3.33E-03
LDW-Sf9	1	3.2	16.0	19.0	2.00	1.75	2.50E-03
LDW-Sf9	2	0.2	23.0	23.0	10.00	2.30	0.00E+00
LDW-Sf9	2	0.4	23.0	23.0	10.00	2.30	0.00E+00
LDW-Sf9	2	0.8	23.0	23.0	10.00	2.30	0.00E+00
LDW-Sf9	2	1.6	23.0	25.0	10.00	2.40	3.33E-04
LDW-Sf9	2	3.2	25.0	30.0	5.00	2.75	1.67E-03
LDW-Sf9	2	6.4	30.0	40.0	1.50	3.50	1.11E-02
LDW-Sf9	2	10.0	40.0	53.0	0.75	4.65	2.89E-02
LDW-Sf9	3	0.8	53.0	53.0	10.00	5.30	0.00E+00
LDW-Sf9	3	1.6	53.0	53.0	10.00	5.30	0.00E+00
LDW-Sf9	3	3.2	53.0	54.0	10.00	5.35	1.67E-04
LDW-Sf9	3	6.4	54.0	59.0	5.00	5.65	1.67E-03
LDW-Sf9	4	1.6	88.0	88.0	10.00	8.80	0.00E+00

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf9	4	3.2	88.0	91.0	10.00	8.95	5.00E-04
LDW-Sf9	4	6.4	91.0	108.0	5.00	9.95	5.67E-03
LDW-Sf9	4	10.0	130.0	150.0	2.00	14.00	1.67E-02
LDW-Sf9	5	1.6	150.0	150.0	10.00	15.00	0.00E+00
LDW-Sf9	5	3.2	150.0	150.0	10.00	15.00	0.00E+00
LDW-Sf9	5	6.4	150.0	153.0	10.00	15.15	5.00E-04
LDW-Sf9	5	10.0	153.0	176.0	5.00	16.45	7.67E-03
LDW-Sf9	6	3.2	184.0	185.0	10.00	18.45	1.67E-04
LDW-Sf9	6	6.4	185.0	191.0	10.00	18.80	1.00E-03
LDW-Sf9	6	10.0	191.0	229.0	5.00	21.00	1.27E-02
LDW-Sf9	7	3.2	229.0	229.0	10.00	22.90	0.00E+00
LDW-Sf9	7	6.4	231.0	234.0	10.00	23.25	5.00E-04
LDW-Sf9	7	10.0	234.0	258.0	5.00	24.60	8.00E-03
LDW-Sf10	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf10	1	0.2	0.0	2.0	10.00	0.10	3.33E-04
LDW-Sf10	1	0.4	2.0	6.0	10.00	0.40	6.67E-04
LDW-Sf10	1	0.8	6.0	11.0	10.00	0.85	8.33E-04
LDW-Sf10	1	1.6	11.0	21.0	10.00	1.60	1.67E-03
LDW-Sf10	1	3.2	21.0	35.0	1.50	2.80	1.56E-02
LDW-Sf10	1	6.4	35.0	55.0	0.50	4.50	6.67E-02
LDW-Sf10	2	0.2	59.0	59.0	10.00	5.90	0.00E+00
LDW-Sf10	2	0.4	59.0	59.0	10.00	5.90	0.00E+00
LDW-Sf10	2	0.8	59.0	61.0	10.00	6.00	3.33E-04
LDW-Sf10	2	1.6	61.0	73.0	10.00	6.70	2.00E-03
LDW-Sf10	2	3.2	73.0	93.0	2.00	8.30	1.67E-02
LDW-Sf10	2	6.4	93.0	115.0	1.00	10.40	3.67E-02
LDW-Sf10	3	0.4	117.0	117.0	10.00	11.70	0.00E+00
LDW-Sf10	3	0.8	117.0	120.0	10.00	11.85	5.00E-04
LDW-Sf10	3	1.6	120.0	132.0	10.00	12.60	2.00E-03
LDW-Sf10	3	3.2	132.0	144.0	1.50	13.80	1.33E-02
LDW-Sf10	3	6.4	144.0	164.0	0.75	15.40	4.44E-02
LDW-Sf10	4	0.4	164.0	164.0	10.00	16.40	0.00E+00
LDW-Sf10	4	0.8	164.0	164.0	10.00	16.40	0.00E+00
LDW-Sf10	4	1.6	165.0	165.0	10.00	16.50	0.00E+00
LDW-Sf10	4	3.2	165.0	167.0	10.00	16.60	3.33E-04
LDW-Sf10	4	6.4	167.0	171.0	5.00	16.90	1.33E-03
LDW-Sf10	4	10.0	171.0	185.0	1.50	17.80	1.56E-02
LDW-Sf10	5	1.6	190.0	190.0	10.00	19.00	0.00E+00
LDW-Sf10	5	3.2	190.0	193.0	10.00	19.15	5.00E-04

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf10	5	6.4	193.0	226.0	10.00	20.95	5.50E-03
LDW-Sf10	5	10.0	226.0	267.0	1.50	24.65	4.56E-02
LDW-Sf11	1	0.1	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf11	1	0.2	1.0	1.0	10.00	0.10	0.00E+00
LDW-Sf11	1	0.4	1.0	4.0	10.00	0.25	5.00E-04
LDW-Sf11	1	0.8	4.0	9.0	10.00	0.65	8.33E-04
LDW-Sf11	1	1.6	9.0	14.0	10.00	1.15	8.33E-04
LDW-Sf11	1	3.2	14.0	28.0	2.83	2.10	8.24E-03
LDW-Sf11	1	6.4	28.0	57.0	0.48	4.25	1.00E-01
LDW-Sf11	2	0.2	57.0	57.0	10.00	5.70	0.00E+00
LDW-Sf11	2	0.4	57.0	57.0	10.00	5.70	0.00E+00
LDW-Sf11	2	0.8	57.0	59.0	10.00	5.80	3.33E-04
LDW-Sf11	2	1.6	61.0	64.0	10.00	6.25	5.00E-04
LDW-Sf11	2	3.2	64.0	80.0	0.82	7.20	3.26E-02
LDW-Sf11	2	6.4	80.0	106.0	0.37	9.30	1.18E-01
LDW-Sf11	3	0.2	106.0	106.0	10.00	10.60	0.00E+00
LDW-Sf11	3	0.4	106.0	107.0	10.00	10.65	1.67E-04
LDW-Sf11	3	0.8	107.0	112.0	5.00	10.95	1.67E-03
LDW-Sf11	3	1.6	112.0	119.0	1.00	11.55	1.17E-02
LDW-Sf11	3	3.2	119.0	133.0	0.30	12.60	7.78E-02
LDW-Sf11	3	6.4	133.0	153.0	0.42	14.30	7.99E-02
LDW-Sf11	4	0.4	153.0	153.0	10.00	15.30	0.00E+00
LDW-Sf11	4	0.8	153.0	158.0	10.00	15.55	8.33E-04
LDW-Sf11	4	1.6	160.0	164.0	5.00	16.20	1.33E-03
LDW-Sf11	4	3.2	164.0	178.0	4.75	17.10	4.91E-03
LDW-Sf11	4	6.4	178.0	208.0	3.88	19.30	1.29E-02
LDW-Sf11	5	1.6	208.0	208.0	10.00	20.80	0.00E+00
LDW-Sf11	5	3.2	208.0	210.0	10.00	20.90	3.33E-04
LDW-Sf11	5	6.4	210.0	240.0	10.00	22.50	5.00E-03
LDW-Sf11	5	10.0	240.0	274.0	5.00	25.70	1.13E-02
LDW-Sf12	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf12	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf12	1	0.4	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf12	1	0.8	0.0	2.0	10.00	0.10	3.33E-04
LDW-Sf12	1	1.6	2.0	10.0	5.00	0.60	2.67E-03
LDW-Sf12	1	3.2	10.0	52.0	1.00	3.10	7.00E-02
LDW-Sf12	2	0.2	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf12	2	0.4	52.0	52.0	10.00	5.20	0.00E+00
LDW-Sf12	2	0.8	52.0	54.5	10.00	5.33	4.17E-04

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf12	2	1.6	54.5	65.0	5.00	5.98	3.50E-03
LDW-Sf12	2	3.2	65.0	95.0	1.75	8.00	2.86E-02
LDW-Sf12	3	0.4	103.0	103.0	10.00	10.30	0.00E+00
LDW-Sf12	3	0.8	103.0	105.0	10.00	10.40	3.33E-04
LDW-Sf12	3	1.6	105.0	122.0	5.00	11.35	5.67E-03
LDW-Sf12	3	3.2	127.0	162.0	1.00	14.45	5.83E-02
LDW-Sf12	4	0.4	165.0	165.0	10.00	16.50	0.00E+00
LDW-Sf12	4	0.8	165.0	167.0	10.00	16.60	3.33E-04
LDW-Sf12	4	1.6	167.0	177.0	4.00	17.20	4.17E-03
LDW-Sf12	4	3.2	177.0	198.0	1.00	18.75	3.50E-02
LDW-Sf12	5	0.4	205.0	205.0	10.00	20.50	0.00E+00
LDW-Sf12	5	0.8	206.0	208.0	10.00	20.70	3.33E-04
LDW-Sf12	5	1.6	209.0	224.0	5.00	21.65	5.00E-03
LDW-Sf12	5	3.2	224.0	255.0	1.50	23.95	3.44E-02
LDW-Sf13	1	0.1	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf13	1	0.2	1.0	5.0	10.00	0.30	6.67E-04
LDW-Sf13	1	0.4	5.0	7.0	10.00	0.60	3.33E-04
LDW-Sf13	1	0.8	7.0	11.0	10.00	0.90	6.67E-04
LDW-Sf13	1	1.6	11.0	19.0	5.00	1.50	2.67E-03
LDW-Sf13	1	3.2	19.0	30.0	5.00	2.45	3.67E-03
LDW-Sf13	1	6.4	30.0	51.0	3.00	4.05	1.17E-02
LDW-Sf13	2	0.2	60.0	60.0	10.00	6.00	0.00E+00
LDW-Sf13	2	0.4	60.0	60.0	10.00	6.00	0.00E+00
LDW-Sf13	2	0.8	61.0	61.0	10.00	6.10	0.00E+00
LDW-Sf13	2	1.6	61.0	63.0	10.00	6.20	3.33E-04
LDW-Sf13	2	3.2	63.0	71.0	10.00	6.70	1.33E-03
LDW-Sf13	2	6.4	71.0	87.0	1.00	7.90	2.67E-02
LDW-Sf13	2	10.0	87.0	105.0	0.58	9.60	5.15E-02
LDW-Sf13	3	0.4	108.0	108.0	10.00	10.80	0.00E+00
LDW-Sf13	3	0.8	108.0	108.0	10.00	10.80	0.00E+00
LDW-Sf13	3	1.6	108.0	109.0	10.00	10.85	1.67E-04
LDW-Sf13	3	3.2	109.0	130.0	5.00	11.95	7.00E-03
LDW-Sf13	3	6.4	130.0	154.0	2.00	14.20	2.00E-02
LDW-Sf13	4	0.8	164.0	164.0	10.00	16.40	0.00E+00
LDW-Sf13	4	1.6	164.0	164.0	10.00	16.40	0.00E+00
LDW-Sf13	4	3.2	166.0	171.0	10.00	16.85	8.33E-04
LDW-Sf13	4	6.4	171.0	192.0	5.00	18.15	7.00E-03
LDW-Sf13	4	10.0	192.0	211.0	0.50	20.15	6.33E-02
LDW-Sf13	5	1.6	214.0	214.0	10.00	21.40	0.00E+00

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf13	5	3.2	214.0	216.0	10.00	21.50	3.33E-04
LDW-Sf13	5	6.4	216.0	237.0	10.00	22.65	3.50E-03
LDW-Sf13	5	10.0	237.0	270.0	5.00	25.35	1.10E-02
LDW-Sf14	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf14	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf14	1	0.4	0.0	7.0	10.00	0.35	1.17E-03
LDW-Sf14	1	0.8	7.0	25.0	10.00	1.60	3.00E-03
LDW-Sf14	1	1.6	25.0	55.0	1.65	4.00	3.03E-02
LDW-Sf14	2	0.2	55.0	55.0	10.00	5.50	0.00E+00
LDW-Sf14	2	0.4	55.0	56.0	10.00	5.55	1.67E-04
LDW-Sf14	2	0.8	56.0	59.0	10.00	5.75	5.00E-04
LDW-Sf14	2	1.6	59.0	67.0	10.00	6.30	1.33E-03
LDW-Sf14	2	3.2	67.0	80.0	5.23	7.35	4.14E-03
LDW-Sf14	2	6.4	80.0	100.0	2.25	9.00	1.48E-02
LDW-Sf14	3	0.2	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf14	3	0.4	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf14	3	0.8	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf14	3	1.6	100.0	100.0	10.00	10.00	0.00E+00
LDW-Sf14	3	3.2	100.0	125.0	5.62	11.25	7.42E-03
LDW-Sf14	3	6.4	125.0	145.0	1.02	13.50	3.28E-02
LDW-Sf14	4	0.4	145.0	145.0	10.00	14.50	0.00E+00
LDW-Sf14	4	0.8	145.0	145.0	10.00	14.50	0.00E+00
LDW-Sf14	4	1.6	145.0	145.0	10.00	14.50	0.00E+00
LDW-Sf14	4	3.2	145.0	155.0	10.00	15.00	1.67E-03
LDW-Sf14	4	6.4	155.0	185.0	4.00	17.00	1.25E-02
LDW-Sf14	4	10.0	185.0	200.0	1.40	19.25	1.79E-02
LDW-Sf14	5	0.4	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf14	5	0.4	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf14	5	0.8	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf14	5	1.6	200.0	200.0	10.00	20.00	0.00E+00
LDW-Sf14	5	3.2	200.0	213.0	10.00	20.65	2.17E-03
LDW-Sf14	5	6.4	213.0	235.0	5.00	22.40	7.33E-03
LDW-Sf14	5	10.0	235.0	251.0	1.52	24.30	1.76E-02
LDW-Sf15	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf15	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf15	1	0.4	0.0	2.0	10.00	0.10	3.33E-04
LDW-Sf15	1	0.8	2.0	4.0	10.00	0.30	3.33E-04
LDW-Sf15	1	1.6	4.0	12.0	10.00	0.80	1.33E-03
LDW-Sf15	1	3.2	12.0	34.0	2.68	2.30	1.37E-02

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf15	1	6.4	34.0	54.0	1.50	4.40	2.22E-02
LDW-Sf15	2	0.2	55.0	55.0	10.00	5.50	0.00E+00
LDW-Sf15	2	0.4	55.0	55.0	10.00	5.50	0.00E+00
LDW-Sf15	2	0.8	55.0	57.0	10.00	5.60	3.33E-04
LDW-Sf15	2	1.6	57.0	65.0	10.00	6.10	1.33E-03
LDW-Sf15	2	3.2	65.0	75.0	0.63	7.00	2.63E-02
LDW-Sf15	2	6.4	75.0	105.0	1.13	9.00	4.41E-02
LDW-Sf15	3	0.2	129.0	129.0	10.00	12.90	0.00E+00
LDW-Sf15	3	0.4	129.0	129.0	10.00	12.90	0.00E+00
LDW-Sf15	3	0.8	129.0	129.0	10.00	12.90	0.00E+00
LDW-Sf15	3	1.6	129.0	132.0	10.00	13.05	5.00E-04
LDW-Sf15	3	3.2	132.0	150.0	1.62	14.10	1.86E-02
LDW-Sf15	3	6.4	150.0	178.0	1.53	16.40	3.04E-02
LDW-Sf15	4	0.4	195.0	195.0	10.00	19.50	0.00E+00
LDW-Sf15	4	0.8	195.0	205.0	1.25	20.00	1.33E-02
LDW-Sf15	4	1.6	205.0	215.0	0.33	21.00	5.01E-02
LDW-Sf15	4	3.2	215.0	240.0	2.45	22.75	1.70E-02
LDW-Sf15	4	6.4	240.0	257.0	5.00	24.85	5.67E-03
LDW-Sf15	5	0.4	257.0	257.0	10.00	25.70	0.00E+00
LDW-Sf15	5	0.8	257.0	257.0	10.00	25.70	0.00E+00
LDW-Sf15	5	1.6	257.0	264.0	10.00	26.05	1.17E-03
LDW-Sf15	5	3.2	264.0	282.0	3.83	27.30	7.83E-03
LDW-Sf15	5	6.4	282.0	310.0	1.00	29.60	4.67E-02
LDW-Sf16	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf16	1	0.2	0.0	0.5	10.00	0.02	8.33E-05
LDW-Sf16	1	0.4	0.5	3.0	10.00	0.17	4.17E-04
LDW-Sf16	1	0.8	3.0	8.5	10.00	0.58	9.17E-04
LDW-Sf16	1	1.6	8.5	22.0	2.00	1.53	1.13E-02
LDW-Sf16	1	3.2	22.0	51.0	0.25	3.65	1.93E-01
LDW-Sf16	2	0.2	51.0	51.0	10.00	5.10	0.00E+00
LDW-Sf16	2	0.4	51.0	51.0	10.00	5.10	0.00E+00
LDW-Sf16	2	0.8	51.0	52.0	10.00	5.15	1.67E-04
LDW-Sf16	2	1.6	52.0	56.0	6.00	5.40	1.11E-03
LDW-Sf16	2	3.2	56.0	72.0	2.00	6.40	1.33E-02
LDW-Sf16	2	6.4	72.0	107.0	1.00	8.95	5.83E-02
LDW-Sf16	3	0.4	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf16	3	0.8	107.0	107.0	10.00	10.70	0.00E+00
LDW-Sf16	3	1.6	107.0	108.0	10.00	10.75	1.67E-04
LDW-Sf16	3	3.2	108.0	112.0	10.00	11.00	6.67E-04

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m2)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf16	3	6.4	112.0	128.0	4.00	12.00	6.67E-03
LDW-Sf16	3	10.0	128.0	162.0	2.00	14.50	2.83E-02
LDW-Sf16	4	0.8	187.0	187.0	10.00	18.70	0.00E+00
LDW-Sf16	4	1.6	187.0	187.0	10.00	18.70	0.00E+00
LDW-Sf16	4	3.2	187.0	191.0	10.00	18.90	6.67E-04
LDW-Sf16	4	6.4	191.0	211.0	5.00	20.10	6.67E-03
LDW-Sf16	4	10.0	211.0	235.0	3.00	22.30	1.33E-02
LDW-Sf16	5	0.8	252.0	252.0	10.00	25.20	0.00E+00
LDW-Sf16	5	1.6	252.0	252.0	10.00	25.20	0.00E+00
LDW-Sf16	5	3.2	252.0	252.0	10.00	25.20	0.00E+00
LDW-Sf16	5	6.4	252.0	256.0	5.00	25.40	1.33E-03
LDW-Sf16	5	10.0	256.0	275.0	4.00	26.55	7.92E-03
LDW-Sf16-DUP	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf16-DUP	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf16-DUP	1	0.4	0.0	2.0	10.00	0.10	3.33E-04
LDW-Sf16-DUP	1	0.8	2.0	10.0	10.00	0.60	1.33E-03
LDW-Sf16-DUP	1	1.6	10.0	21.0	2.50	1.55	7.33E-03
LDW-Sf16-DUP	1	3.2	21.0	45.0	0.50	3.30	8.00E-02
LDW-Sf16-DUP	2	0.2	53.0	53.0	10.00	5.30	0.00E+00
LDW-Sf16-DUP	2	0.4	53.0	53.0	10.00	5.30	0.00E+00
LDW-Sf16-DUP	2	0.8	53.0	55.0	10.00	5.40	3.33E-04
LDW-Sf16-DUP	2	1.6	55.0	61.0	10.00	5.80	1.00E-03
LDW-Sf16-DUP	2	3.2	61.0	71.0	1.50	6.60	1.11E-02
LDW-Sf16-DUP	2	6.4	71.0	97.0	0.75	8.40	5.78E-02
LDW-Sf16-DUP	3	0.8	98.0	98.0	10.00	9.80	0.00E+00
LDW-Sf16-DUP	3	1.6	98.0	98.0	10.00	9.80	0.00E+00
LDW-Sf16-DUP	3	3.2	98.0	101.0	10.00	9.95	5.00E-04
LDW-Sf16-DUP	3	6.4	101.0	132.0	5.00	11.65	1.03E-02
LDW-Sf16-DUP	3	10.0	132.0	155.0	1.50	14.35	2.56E-02
LDW-Sf16-DUP	4	0.8	157.0	157.0	10.00	15.70	0.00E+00
LDW-Sf16-DUP	4	1.6	157.0	157.0	10.00	15.70	0.00E+00
LDW-Sf16-DUP	4	3.2	157.0	163.0	10.00	16.00	1.00E-03
LDW-Sf16-DUP	4	6.4	163.0	178.0	5.00	17.05	5.00E-03
LDW-Sf16-DUP	4	10.0	178.0	211.0	5.00	19.45	1.10E-02
LDW-Sf16-DUP	5	0.8	216.0	216.0	10.00	21.60	0.00E+00
LDW-Sf16-DUP	5	1.6	216.0	216.0	10.00	21.60	0.00E+00
LDW-Sf16-DUP	5	3.2	216.0	217.0	10.00	21.65	1.67E-04
LDW-Sf16-DUP	5	6.4	217.0	226.0	5.00	22.15	3.00E-03
LDW-Sf16-DUP	5	10.0	226.0	250.0	2.50	23.80	1.60E-02

LOCATION ID	SHEAR STRESS CYCLE	APPLIED SHEAR STRESS (Pa; N/m ²)	STARTING HEIGHT (mm)	ENDING HEIGHT (mm)	TEST DURATION (min)	AVERAGE SECTION DEPTH (cm)	EROSION RATE (cm/s)
LDW-Sf17	1	0.1	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf17	1	0.2	0.0	0.0	10.00	0.00	0.00E+00
LDW-Sf17	1	0.4	0.0	1.0	10.00	0.05	1.67E-04
LDW-Sf17	1	0.8	1.0	7.0	5.00	0.40	2.00E-03
LDW-Sf17	1	1.6	7.0	17.0	1.50	1.20	1.11E-02
LDW-Sf17	1	3.2	17.0	44.0	0.83	3.05	5.40E-02
LDW-Sf17	2	0.2	47.0	47.0	10.00	4.70	0.00E+00
LDW-Sf17	2	0.4	47.0	47.5	10.00	4.73	8.33E-05
LDW-Sf17	2	0.8	47.5	52.0	10.00	4.98	7.50E-04
LDW-Sf17	2	1.6	52.0	67.0	3.00	5.95	8.33E-03
LDW-Sf17	2	3.2	57.0	110.0	1.75	8.35	5.05E-02
LDW-Sf17	3	0.4	134.0	135.0	10.00	13.45	1.67E-04
LDW-Sf17	3	0.8	135.0	139.0	10.00	13.70	6.67E-04
LDW-Sf17	3	1.6	139.0	155.0	4.50	14.70	5.93E-03
LDW-Sf17	3	3.2	156.0	177.0	0.83	16.65	4.20E-02
LDW-Sf17	4	0.4	178.5	178.5	10.00	17.85	0.00E+00
LDW-Sf17	4	0.8	178.5	180.0	10.00	17.93	2.50E-04
LDW-Sf17	4	1.6	180.0	187.0	5.00	18.35	2.33E-03
LDW-Sf17	4	3.2	190.0	205.0	1.00	19.75	2.50E-02
LDW-Sf17	5	0.8	210.0	211.0	10.00	21.05	1.67E-04
LDW-Sf17	5	1.6	211.0	216.0	10.00	21.35	8.33E-04

Attachment A-3. Bulk density and particle size results

LOCATION ID	SAMPLE DEPTH (cm)	WET WEIGHT (g)	DRY WEIGHT (g)	WATER CONTENT ^a (%)	BULK DENSITY ^b (g/cm ³)	PARTICLE SIZE (µm)		
						D ₁₀	D ₅₀	D ₉₀
LDW-Sf1	0.0	18.325	9.723	50.2	1.45	2	12	60
LDW-Sf1	5.2	16.634	8.568	52.3	1.42	2	10	40
LDW-Sf1	10.0	14.602	8.754	43.6	1.54	2	13	104
LDW-Sf1	13.6	14.223	7.943	48.2	1.48	2	12	48
LDW-Sf1	20.7	16.328	8.584	51.2	1.44	2	12	70
LDW-Sf2	0.0	20.230	9.670	55.5	1.38	3	24	115
LDW-Sf2	5.0	15.924	10.416	37.4	1.64	3	31	162
LDW-Sf2	10.7	na	na	na	na	3	39	233
LDW-Sf2	16.0	14.106	9.438	36.2	1.66	3	40	266
LDW-Sf2	20.2	22.136	14.654	35.7	1.67	3	33	117
LDW-Sf3	0.0	15.190	7.543	54.7	1.39	3	19	111
LDW-Sf3	5.8	19.085	10.615	47.4	1.49	3	21	262
LDW-Sf3	10.0	17.898	9.400	50.9	1.44	3	19	125

LOCATION ID	SAMPLE DEPTH (cm)	WET WEIGHT (g)	DRY WEIGHT (g)	WATER CONTENT ^a (%)	BULK DENSITY ^b (g/cm ³)	PARTICLE SIZE (μm)		
						D ₁₀	D ₅₀	D ₉₀
LDW-Sf3	15.2	11.797	6.422	50.7	1.44	3	20	131
LDW-Sf3	20.0	19.005	9.703	52.2	1.42	3	18	91
LDW-Sf4	0.0	13.854	7.827	47.6	1.48	3	19	223
LDW-Sf4	6.3	19.359	12.654	36.9	1.65	3	22	413
LDW-Sf4	11.1	18.175	12.031	36.2	1.66	2	16	295
LDW-Sf4	19.6	22.013	12.082	47.7	1.48	3	19	230
LDW-Sf4	21.7	16.788	9.517	46.6	1.50	3	17	133
LDW-Sf5	0.0	20.968	15.919	25.5	1.86	11	329	739
LDW-Sf5	4.5	22.620	17.020	26.1	1.85	41	398	750
LDW-Sf5	10.1	20.871	16.047	24.5	1.89	15	325	641
LDW-Sf5	15.5	22.925	17.752	23.8	1.90	15	372	786
LDW-Sf5	20.6	20.942	16.206	24.0	1.90	6	232	557
LDW-Sf6	0.0	14.879	6.986	57.7	1.36	3	21	122
LDW-Sf6	4.6	17.478	8.537	54.9	1.39	4	29	179
LDW-Sf6	10.5	19.931	9.985	53.1	1.41	4	24	117
LDW-Sf6	14.8	10.160	5.535	51.6	1.43	4	29	136
LDW-Sf6	22.8	13.046	7.770	44.5	1.53	4	30	166
LDW-Sf6-DUP	0.0	10.168	4.796	59.9	1.33	4	39	184
LDW-Sf6-DUP	5.0	14.302	6.702	58.0	1.35	3	24	176
LDW-Sf6-DUP	10.6	8.994	5.362	46.6	1.50	3	19	84
LDW-Sf6-DUP	15.4	13.885	7.830	47.7	1.48	4	29	155
LDW-Sf6-DUP	22.9	10.689	6.029	49.1	1.46	2	14	65
LDW-Sf7	0.0	13.599	6.811	54.7	1.39	3	24	147
LDW-Sf7	5.1	11.860	6.446	50.8	1.44	3	24	117
LDW-Sf7	8.7	14.473	7.658	51.3	1.43	3	24	105
LDW-Sf7	14.3	17.304	10.659	41.3	1.58	3	33	297
LDW-Sf7	17.5	13.549	7.860	46.1	1.51	3	22	106
LDW-Sf8	0.0	24.739	12.323	52.7	1.42	3	28	235
LDW-Sf8	5.7	25.495	14.000	47.3	1.49	2	21	85
LDW-Sf8	11.3	17.631	10.698	42.2	1.56	4	23	100
LDW-Sf8	16.1	26.236	18.768	29.8	1.78	3	24	133
LDW-Sf8	18.7	25.757	16.129	39.2	1.61	3	25	104
LDW-Sf9	0.0	8.766	5.668	40.9	1.58	5	79	402
LDW-Sf9	2.3	11.379	6.750	45.5	1.51	4	44	323
LDW-Sf9	5.3	16.893	11.222	36.1	1.66	4	46	291
LDW-Sf9	8.8	17.005	11.468	35.0	1.68	6	94	429
LDW-Sf9	18.5	10.674	6.122	48.0	1.48	3	19	69
LDW-Sf10	0.0	12.130	5.460	61.0	1.32	3	23	89
LDW-Sf10	5.9	15.076	8.128	50.1	1.45	6	35	133

LOCATION ID	SAMPLE DEPTH (cm)	WET WEIGHT (g)	DRY WEIGHT (g)	WATER CONTENT ^a (%)	BULK DENSITY ^b (g/cm ³)	PARTICLE SIZE (µm)		
						D ₁₀	D ₅₀	D ₉₀
LDW-Sf10	11.7	7.565	4.346	50.6	1.44	4	27	106
LDW-Sf10	16.4	17.374	9.382	49.4	1.46	3	25	104
LDW-Sf10	19.0	14.401	7.738	50.5	1.45	3	20	83
LDW-Sf11	0.0	12.859	8.846	34.4	1.69	4	94	653
LDW-Sf11	5.7	15.586	9.320	43.6	1.54	3	24	299
LDW-Sf11	10.6	13.098	8.309	40.3	1.59	3	26	266
LDW-Sf11	15.3	20.771	12.128	44.2	1.53	3	25	236
LDW-Sf11	20.8	16.425	9.592	44.9	1.52	3	26	112
LDW-Sf12	0.0	9.036	3.506	70.6	1.22	4	24	134
LDW-Sf12	5.2	9.745	4.104	66.0	1.27	5	28	138
LDW-Sf12	10.3	19.639	8.960	57.9	1.36	4	36	212
LDW-Sf12	16.5	10.319	4.551	63.3	1.30	3	25	145
LDW-Sf12	20.5	8.690	4.607	54.5	1.40	3	21	124
LDW-Sf13	0.0	13.569	5.786	62.9	1.30	3	21	97
LDW-Sf13	6.0	9.664	5.107	53.8	1.40	3	23	110
LDW-Sf13	10.8	7.660	4.969	41.7	1.57	4	53	188
LDW-Sf13	16.4	13.227	6.189	58.5	1.35	3	23	85
LDW-Sf13	21.4	13.761	8.369	42.9	1.55	3	24	145
LDW-Sf14	0.0	21.371	11.329	49.8	1.45	3	22	161
LDW-Sf14	5.5	17.931	10.026	47.2	1.49	2	20	110
LDW-Sf14	10.0	13.873	7.806	47.9	1.48	3	20	109
LDW-Sf14	14.5	14.010	8.236	45.1	1.52	3	27	298
LDW-Sf14	20.0	14.623	9.243	40.1	1.60	2	17	101
LDW-Sf15	0.0	18.481	8.630	57.0	1.37	2	16	73
LDW-Sf15	4.4	17.018	9.625	46.7	1.50	3	21	120
LDW-Sf15	12.9	17.840	9.634	49.3	1.46	3	27	200
LDW-Sf15	19.5	20.033	12.353	40.8	1.58	4	50	247
LDW-Sf15	24.9	18.699	11.647	40.3	1.59	4	27	116
LDW-Sf16	0.0	11.575	5.177	61.7	1.31	3	20	93
LDW-Sf16	5.1	11.339	5.875	53.9	1.40	3	21	99
LDW-Sf16	10.7	15.657	7.726	54.9	1.39	3	20	101
LDW-Sf16	18.7	10.485	5.935	49.0	1.47	3	23	119
LDW-Sf16	25.2	15.567	8.423	49.7	1.46	3	25	116
LDW-Sf16-DUP	0.0	13.829	6.070	61.4	1.32	2	18	82
LDW-Sf16-DUP	5.3	17.898	8.890	53.9	1.40	2	18	75
LDW-Sf16-DUP	9.8	10.323	5.609	51.7	1.43	3	20	96
LDW-Sf16-DUP	15.7	5.734	3.244	54.9	1.39	3	21	93
LDW-Sf16-DUP	21.6	10.628	5.582	53.5	1.41	3	23	110
LDW-Sf17	0.0	12.243	4.230	72.6	1.21	3	19	88

LOCATION ID	SAMPLE DEPTH (cm)	WET WEIGHT (g)	DRY WEIGHT (g)	WATER CONTENT ^a (%)	BULK DENSITY ^b (g/cm ³)	PARTICLE SIZE (µm)		
						D ₁₀	D ₅₀	D ₉₀
LDW-Sf17	4.7	8.966	3.546	69.8	1.23	3	17	70
LDW-Sf17	13.5	13.383	5.341	66.0	1.27	2	16	67
LDW-Sf17	17.8	10.810	4.723	63.3	1.30	3	19	91
LDW-Sf17	21.1	15.807	6.375	64.6	1.28	3	20	95

^a water content was calculated by subtracting the average pan weight (1.2 g) from the wet and dry weights and then using equation: (adjusted ww - adjusted dw)/adjusted ww x 100

^b total (bulk) sample density calculated from QAPP (Windward and QEA 2004) Equation 3-2

na – not available

dw – dry weight

ww – wet weight

Appendix B. Data Management

B.1 FIELD DUPLICATES AND LABORATORY REPLICATES

Chemical concentrations obtained from the analysis of field duplicates or laboratory replicates (two or more analyses on the same sample) were averaged for a closer representation of the “true” concentration compared to the results of a single analysis. Averaging rules were dependent on whether the individual results were “detects” or “non-detects.” If all concentrations were detects for a given parameter, the values were simply averaged arithmetically. If all concentrations were undetected for a given parameter, the minimum detection limit was reported. If the concentrations are a mixture of detects and non-detects, any two or more detected concentrations were averaged arithmetically and any detection limits were ignored. If there was a single detected concentration and one or more non-detects, the detected concentration was reported and the detection limit(s) ignored. The latter two rules were applied regardless of whether the detection limit was higher or lower than the detected concentration.

B.2 SIGNIFICANT FIGURES AND ROUNDING

The laboratories reported results with various numbers of significant figures depending on the instrument, parameter, and the concentration relative to the reporting limit. The reported (or assessed) precision of each observation is explicitly stored in the project database by recording the number of significant figures assigned by the laboratory. Tracking of significant figures becomes important when calculating averages and performing other data summaries.

When a calculation involves addition, the calculation can only be as precise as the least precise number that went into the calculation. Example (assuming 2 significant figures):

210+19=229, reported as 230 because the trailing zero in the number 210 is not significant.

When a calculation involves multiplication or division, all significant figures are carried through the calculation. The total result is then rounded at the end of the calculation to reflect the value used in the calculation with the fewest significant figures. Example:

59.9 x 1.2 = 71.88, reported as 72 because there are 2 significant figures in the number 1.2

When rounding, if the number following the last significant figure is less than 5, the digit is left unchanged. If the number following the last significant figure is equal to or greater than 5, the digit is increased by 1.