

7.4 Appendix D – Chapter 5 Materials

Supplementary Table 5.1: Lake information, loss-on-ignition, Olsen-P, particle size analysis (PSA), ICP-MS results, and Arcellinida relative abundance results in lake surface-sediment samples ($n = 40$) from Frame Lake and Hambone Lake (H) in the central Northwest Territories, Canada.

Sample ID	Lake	Latitude	Longitude	Depth (m)	Mo	Cu	Pb	Zn
F1	Frame Lake	62.449778	-114.392722	1.4	2.52	41.26	27.38	99.9
F2	Frame Lake	62.450167	-114.394194	1.3	2.28	44.45	10.1	96.1
F3	Frame Lake	62.450778	-114.396611	3.2	6.18	92.92	34.64	284.1
F4	Frame Lake	62.451	-114.398194	2.9	6.87	73.94	37.56	140.7
F5	Frame Lake	62.451528	-114.398917	1.3	2.07	55.82	24.02	356.4
F6	Frame Lake	62.451833	-114.400028	1	2.01	79.35	30.29	759.1
F7	Frame Lake	62.452528	-114.398	1	2.03	47.02	17.52	135.9
F8	Frame Lake	62.453778	-114.397944	1	0.65	41.55	16.68	133.9
F9	Frame Lake	62.45275	-114.393528	1.5	3.14	57.45	26.19	194.6
F10	Frame Lake	62.452472	-114.391444	3	6.33	87.45	62.8	148.4
F11	Frame Lake	62.448694	-114.398333	1.3	3.9	54.46	22.39	154.8
F12	Frame Lake	62.447972	-114.395472	1.6	2.19	60.91	23.87	196.6
F13	Frame Lake	62.454833	-114.384833	1.8	1.63	186.33	22.07	87.8
F14	Frame Lake	62.455278	-114.381556	1.1	1.15	55.67	53.6	99
F15	Frame Lake	62.455389	-114.379306	0.9	2.83	66.42	42.67	139.4
F16	Frame Lake	62.458111	-114.383472	1	3.75	56.73	30.36	102.2
F17	Frame Lake	62.457472	-114.386278	2.4	3.35	51.79	20.84	131.8
F18	Frame Lake	62.457278	-114.386889	3.5	6.78	80.37	24.59	100.5
F19	Frame Lake	62.456806	-114.387556	4.6	2.52	52.92	32.95	148.2
F20	Frame Lake	62.45725	-114.387917	5.5	6.4	99.65	82	125.9
F21	Frame Lake	62.457056	-114.389375	6.4	8.12	114.37	45.86	99
F22	Frame Lake	62.45925	-114.388944	1.1	3.29	39.27	18.67	97.5
F23	Frame Lake	62.460528	-114.383861	0.7	1.77	56.8	18.06	86.2
F24	Frame Lake	62.46125	-114.385667	0.8	2.88	48.02	18.31	89.8
F25	Frame Lake	62.456556	-114.3935	1.5	3.7	51.43	4.07	91.2
H1	Hambone Lake	64.04792	-111.15071	1	2.77	46.78	6.06	106.6
H2	Hambone Lake	64.04719	-111.15357	1.7	3.84	48.86	4.62	98
H3	Hambone Lake	64.04663	-111.15646	1.8	2.38	64.5	4.25	81.2
H4	Hambone Lake	64.04637	-111.15738	1.4	3.3	97.08	8.01	124.9
H5	Hambone Lake	64.04689	-111.15747	1.9	1.17	33.09	3.67	52.8

Supplementary Table 5.1: Continued.

Sample ID	Lake	Latitude	Longitude	Depth (m)	Mo	Cu	Pb	Zn
H6	Hambone Lake	64.04736	-111.15346	0.9	3.41	76.88	6.79	91
H7	Hambone Lake	64.04746	-111.15643	1.5	2.71	72.3	4.97	90
H8	Hambone Lake	64.04711	-111.15881	1.5	3.31	90.96	7.42	117.1
H9	Hambone Lake	64.04562	-111.15719	1	1.33	35.55	3.38	88
H10	Hambone Lake	64.04674	-111.15509	1.5	1.18	30.73	2.98	71.8
H11	Hambone Lake	64.04791	-111.14983	0.9	3.86	62.34	7.29	107.1
H12	Hambone Lake	64.04781	-111.15061	1	4.31	86.8	7.87	137.2
H13	Hambone Lake	64.0474	-111.15478	1	1.8	73.76	5.41	90.3
H14	Hambone Lake	64.04722	-111.15753	1.8	4.72	97.1	10.94	121.2
H15	Hambone Lake	64.04704	-111.15794	1.8	1.6	64.29	4.97	84.8

Supplementary Table 5.1: Continued.

Sample ID	Ag	Ni	Co	Mn	Fe	As	U	Au	Th
F1	0.13	20	5.9	458	11900	151.1	4.5	0.1209	3.3
F2	0.104	20.4	6.9	319	10000	145.1	8	0.0374	2
F3	0.21	33.9	11.7	444	16700	304.7	10.9	0.1429	3.4
F4	0.167	42.9	14	684	29300	299.5	10.4	0.0689	9.6
F5	0.159	35.2	12.4	866	22800	235.9	3.9	0.0599	5.4
F6	0.18	48.4	17.7	778	28200	196.9	4.9	0.0561	7.8
F7	0.144	25.3	7.7	369	13200	168.8	5.1	0.0771	3.4
F8	0.132	25.3	7.6	1117	14300	346	2.2	0.0714	2.9
F9	0.158	26	7.7	646	12200	289.6	7.8	0.1047	1.9
F10	0.267	29.1	9.4	650	14600	492.3	9.2	0.1434	2.3
F11	0.176	25.3	8.2	472	13200	186	7.5	0.1851	2.6
F12	0.162	24.1	7.7	581	12200	351.3	4.8	0.1523	2.1
F13	0.146	23	7.2	456	11200	264.2	4.5	0.0754	1.8
F14	0.247	27.3	8.6	660	13800	299.3	2.6	0.0913	2.4
F15	0.152	26.6	8.5	406	15200	295.3	6.8	0.1162	2.5
F16	0.15	25.6	8	378	11700	270.8	7.5	0.089	1.7
F17	0.132	18	5.5	877	8900	337.1	5.4	0.128	0.8
F18	0.215	24.5	7.9	453	13800	674.4	12	0.1201	2.1
F19	0.199	25.9	8.2	397	10900	177.5	10.6	0.1648	1.4
F20	0.396	30.3	10.8	515	18500	695.1	9.8	0.2012	2.3
F21	0.332	24.7	8.9	464	18200	1336.6	12.2	0.2298	1.9
F22	0.15	20.7	5.6	959	8700	257.9	5.3	0.3255	1.1
F23	0.144	23.6	7.1	243	12600	234.9	4	0.0583	2.8
F24	0.158	22.1	6.6	211	10900	246.8	5.8	0.1082	2
F25	0.099	18.8	7.1	363	11500	161.6	9	0.004	1.2
H1	0.18	75.4	19.6	92	13000	350.5	1.1	2.6218	1.2
H2	0.178	76.6	28.9	148	16700	210.1	1.6	1.3873	2.3
H3	0.188	74.6	17.5	104	11600	192.4	1.6	1.086	0.9
H4	0.478	88.9	24.6	118	14100	327.9	1.9	3.7097	1.1
H5	0.091	52	19.8	142	14700	91.7	1.1	0.4682	2.6
H6	0.311	77.5	26.4	108	19900	488.3	2.1	2.4187	1.2
H7	0.238	82.2	25.2	103	11000	304.8	1.8	1.6213	1
H8	0.4	95.8	27.9	112	13000	278.2	2.1	2.8172	0.9
H9	0.071	59.9	22.7	153	12800	171.4	1.5	0.5053	2.7
H10	0.058	50.6	18.7	122	9100	66.9	1.5	0.4171	2.2
H11	0.264	76.7	21.2	84	15200	344.9	1.3	2.9965	1.3
H12	0.382	110.2	34	102	15400	422.8	1.5	3.1988	1
H13	0.258	85.5	25.4	145	13300	293.1	1.9	1.4406	0.9
H14	0.501	98.3	34.1	117	16800	428.4	2.1	4.0727	1.2
H15	0.214	75.8	23.6	126	13200	247.2	2	1.1118	0.9

Supplementary Table 5.1: Continued.

Sample ID	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg
F1	30.9	0.32	9.35	0.33	22	8200	600	11.4	26.6	4800
F2	44.3	0.35	6.76	0.22	17	10600	700	11.3	22.4	4300
F3	101.4	0.64	21.26	0.43	35	57900	930	15.5	37.5	7400
F4	71.2	0.35	14.24	0.51	56	32000	600	25.6	57.6	11100
F5	60.4	0.33	10.01	0.44	40	33100	980	18	50.1	9000
F6	30.7	0.54	5.85	0.59	54	9700	750	22.3	67.2	11300
F7	38.5	0.42	7.22	0.29	22	9200	710	14.5	30.2	5200
F8	45.8	0.35	4.19	0.26	22	13900	810	14.3	29.7	5400
F9	87.3	0.45	10.41	0.36	24	49400	1180	11.3	25.9	6100
F10	138.6	0.69	17.04	0.41	31	95400	730	11.8	28.4	6900
F11	47	0.37	11.23	0.34	25	12900	790	13.5	30	5500
F12	161.8	0.42	8.04	0.34	22	111800	800	10.1	23.9	6300
F13	46.3	0.39	6.95	153.11	17	12400	750	11.8	22.7	4900
F14	44.9	0.47	3.68	0.4	20	11300	790	12.8	28.3	5300
F15	45.4	0.39	13.9	1.47	25	14600	1100	12.2	28.9	5500
F16	42.5	0.44	8.16	0.31	22	11000	800	11.5	23.7	4900
F17	169	0.34	10.93	0.58	17	118500	1320	6.7	15	5700
F18	42.8	0.46	23.09	0.33	30	9800	650	14.9	28	5000
F19	50.9	0.46	17.71	0.71	27	16000	1230	10.8	27.8	5500
F20	42.1	0.74	35.76	0.51	35	10500	790	14.9	31.6	6200
F21	42.6	0.61	47	0.51	33	11300	740	13.5	26.9	5400
F22	153.2	0.35	8.84	0.22	16	109200	930	6.9	22.5	5500
F23	45.4	0.4	5.64	0.31	19	11100	580	13.6	22.7	4600
F24	41	0.48	8.15	0.22	17	10800	720	11.3	20.7	4400
F25	46.5	0.41	2.58	0.24	18	11600	620	12	20.6	4300
H1	37.4	0.34	1.06	0.25	16	11300	810	39	21.5	2200
H2	22.6	0.29	1	0.3	32	8200	580	37.9	58.5	4300
H3	20.5	0.26	0.81	0.26	20	7700	640	39.9	30.7	3000
H4	23	0.34	1.22	0.29	20	9100	650	43.3	29.7	3100
H5	8.9	0.13	0.36	0.24	28	2700	420	19.7	43.5	5500
H6	23.8	0.29	1.55	0.29	24	9900	670	44.2	29	2700
H7	20.1	0.31	0.97	0.28	23	7600	570	40.5	29.4	2900
H8	22.6	0.39	1.3	0.31	21	7800	640	46.2	30.7	3000
H9	14.9	0.17	0.49	0.15	28	4600	620	32.8	36.2	4100
H10	13.9	0.16	0.42	0.13	23	4000	560	30.5	30.4	3500
H11	32.6	0.34	1.39	0.66	18	11000	750	41.3	21.8	2200
H12	30.4	0.42	1.41	0.3	19	10100	620	45.4	25.1	2400
H13	19.9	0.35	0.64	0.29	24	7500	620	42.5	31.9	3200
H14	24.6	0.37	1.67	0.32	21	8600	660	45.9	29.3	2900
H15	22.9	0.27	0.71	0.26	23	8700	640	42.7	29.5	2800

Supplementary Table 5.1: Continued.

Sample ID	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg
F1	106	270	10	7600	600	1500	1.2	2.3	0.1	5600	0.061
F2	102.7	210	22	6900	570	1200	0.3	1.7	0.09	10000	0.037
F3	165.3	340	24	10800	630	2400	0.8	2.8	0.2	10100	0.11
F4	253.9	840	25	21200	750	4900	0.4	5.7	0.27	9000	0.067
F5	170.8	520	28	15000	780	3200	1.1	4.3	0.2	7200	0.052
F6	163.2	770	10	18400	600	3600	1.2	5.3	0.25	5200	0.035
F7	97	310	29	9200	480	1700	0.6	2.4	0.1	8700	0.043
F8	117.8	290	31	9100	480	1800	0.4	2.5	0.1	7900	0.055
F9	136.9	230	46	8300	890	2100	0.8	1.9	0.1	11100	0.066
F10	169.2	270	26	9100	720	2100	0.7	2.3	0.14	11300	0.11
F11	132.6	280	37	9200	710	1800	0.7	2.1	0.1	9700	0.063
F12	161.3	210	28	7100	670	1600	0.5	2	0.1	10300	0.056
F13	81.7	190	35	7100	560	1200	0.5	1.6	0.07	11800	0.068
F14	88.5	230	33	8000	490	1500	0.9	2.3	0.07	11000	0.091
F15	87.9	250	48	7400	550	1700	1.1	2.2	0.08	11500	0.043
F16	88.1	200	30	7400	690	1300	0.6	1.7	0.08	13500	0.101
F17	162.1	120	43	4300	890	2300	0.5	1.2	0.07	10100	0.056
F18	110.3	270	27	9500	910	1900	0.5	2.2	0.16	11800	0.184
F19	109.7	200	43	8100	920	1800	0.9	1.7	0.1	9500	0.119
F20	108.3	270	40	10700	1030	2100	0.8	2.4	0.12	15700	0.263
F21	101.7	230	38	9400	1080	1900	0.7	2.1	0.13	16900	0.216
F22	155.7	140	43	4900	800	1700	0.5	1.3	0.06	9700	0.058
F23	78.8	210	38	7000	460	1100	0.4	2.2	0.08	14400	0.071
F24	79.9	190	41	6700	460	1100	0.5	1.9	0.07	13600	0.068
F25	85.9	160	29	6800	1040	1200	0.3	1.3	0.1	14000	0.052
H1	48.7	210	5200	440	1100	7.9	1.4	0.21	14400	0.045	1.2
H2	63.8	410	9100	260	2300	2.7	3.1	0.24	9500	0.052	0.9
H3	40.2	310	8600	200	1100	1.8	1.5	0.16	7800	0.062	0.8
H4	39.8	310	8600	300	1200	4.2	1.7	0.21	11100	0.114	0.7
H5	54.4	470	9800	140	2500	0.9	2.6	0.22	3700	0.022	0.4
H6	46	280	8100	350	1100	4.9	1.6	0.22	14900	0.08	0.9
H7	38	290	8900	190	1100	1.6	1.5	0.18	6300	0.09	0.7
H8	45.4	300	9000	250	1200	3.5	1.5	0.23	10000	0.104	0.7
H9	50	420	9200	190	1400	2.3	1.9	0.16	3200	0.029	0.4
H10	44.4	370	8100	160	1200	1.1	1.6	0.15	1900	0.013	0.3
H11	42.1	220	5800	440	900	7.8	1.4	0.21	14600	0.07	0.8
H12	43	240	7100	320	1000	5	1.6	0.24	14300	0.096	0.8
H13	45.7	330	9600	190	1200	2	1.6	0.2	7800	0.065	0.6
H14	41.8	290	8500	300	1100	6.5	1.7	0.24	13600	0.11	0.9
H15	46.7	280	9000	250	1000	2.6	1.6	0.18	10100	0.072	0.7

Supplementary Table 5.1: Continued.

Sample ID	Se	Ga	Cs	Hf	Nb	Rb	Sn	Zr	Y	Ce	Re	Be
F1	0.6	2.7	0.98	0.04	0.68	11.8	0.4	1.1	4.01	22	0.005	0.4
F2	1.3	2.1	0.86	0.04	0.57	9.7	0.05	1.4	4.65	23.4	0.004	0.2
F3	1.2	3.8	1.41	0.03	0.92	18.9	0.8	2.3	5.93	28.7	0.006	0.5
F4	0.8	7.5	2.34	0.2	1.91	41.6	1.2	9.5	8.49	50	0.004	0.8
F5	1.1	5	1.69	0.08	1.24	26.3	1	3.9	5.75	35.3	0.002	0.6
F6	1	6.4	2.04	0.09	1.41	29.4	1.3	5.8	7.3	43.2	0.002	0.5
F7	1	3.2	1.12	0.06	0.91	15.2	0.5	3.2	5.29	28.1	0.006	0.4
F8	1.2	2.9	1.12	0.06	0.79	15.3	0.5	2.4	5.54	27.6	0.005	0.4
F9	1.6	2.8	0.88	0.05	0.62	12.7	0.6	1.8	4.05	21.4	0.002	0.1
F10	1.3	2.8	0.95	0.03	0.78	13.3	0.5	1.8	4.42	21.1	0.009	0.3
F11	1.3	3.1	0.99	0.06	0.79	13.3	0.6	2.3	5.01	26.8	0.006	0.2
F12	0.9	2.3	0.72	0.05	0.55	9.6	0.5	1.8	3.76	17.9	0.0005	0.2
F13	1.5	2.2	0.72	0.06	0.48	8.3	0.4	1.9	4.83	23.1	0.003	0.2
F14	2.1	2.3	0.86	0.08	0.66	10.2	0.6	2.5	5.04	24.7	0.004	0.5
F15	1.1	2.6	0.85	0.06	0.62	10	0.7	2.7	4.71	24.2	0.002	0.2
F16	1.4	2.4	0.74	0.05	0.63	9.5	0.5	2.3	4.69	21.8	0.003	0.05
F17	1.2	1.2	0.4	0.03	0.35	5.8	0.4	0.7	2.85	12.3	0.003	0.1
F18	1.2	3.2	1.01	0.06	0.87	14	0.7	2.2	5.32	27.7	0.015	0.4
F19	1.8	2.6	0.79	0.03	0.62	10.4	0.6	1.6	4.17	21.1	0.002	0.2
F20	1.8	3.6	1.01	0.05	0.84	14.8	0.7	2.1	5.03	28.6	0.017	0.3
F21	1.6	2.8	0.92	0.03	0.72	12.5	0.6	2.1	4.92	25.5	0.011	0.6
F22	0.9	1.6	0.48	0.03	0.41	6.7	0.2	1.1	2.89	12.9	0.009	0.2
F23	1.1	2	0.75	0.08	0.7	9.8	0.3	3.3	5.91	26	0.011	0.3
F24	1.6	2.1	0.68	0.05	0.56	8.9	0.4	2.5	4.71	21.5	0.005	0.2
F25	1.8	2	0.73	0.03	0.58	8.6	0.4	1.3	4.99	22.2	0.004	0.3
H1	0.04	1.6	0.7	0.07	0.57	4.6	0.2	2.4	12.02	76.5	0.0005	0.2
H2	0.05	3.3	1.51	0.06	0.99	12.2	0.3	3	11.66	75.1	0.001	0.05
H3	0.03	2.7	1.21	0.04	0.57	7.5	0.2	1.7	11.96	76.5	0.001	0.3
H4	0.06	2.6	1.26	0.04	0.63	7.3	0.2	1.8	12.71	84.9	0.002	0.5
H5	0.02	3.6	1.83	0.04	0.67	15.8	0.2	2.1	5.94	40.8	0.001	0.7
H6	0.12	2.5	1.11	0.02	0.62	6.8	0.3	1.8	13.87	88.5	0.001	0.5
H7	0.05	2.5	1.21	0.04	0.6	7	0.2	1.5	12.09	79.5	0.003	0.2
H8	0.05	2.5	1.31	0.02	0.62	7.8	0.3	1.5	14.18	90.4	0.002	0.2
H9	0.01	3.1	1.38	0.04	0.7	9.5	0.2	2.6	9.62	66.4	0.0005	0.2
H10	0.01	2.7	1.26	0.03	0.58	8.2	0.2	2.1	8.65	62.8	0.0005	0.4
H11	0.06	1.6	0.72	0.03	0.54	4.4	0.2	2.2	12.69	79.6	0.001	0.6
H12	0.08	2	0.96	0.02	0.56	5.6	0.2	1.4	14.72	85.8	0.001	0.05
H13	0.04	2.6	1.31	0.01	0.62	7.8	0.2	1.4	12.75	82.5	0.002	0.6
H14	0.02	2.4	1.2	0.04	0.58	6.9	0.9	1.7	14.19	89.6	0.003	0.1
H15	0.03	2.3	1.12	0.04	0.61	6.6	0.3	1.5	12.54	83.3	0.003	0.3

Supplementary Table 5.1: Continued.

Sample ID	Li	Olsen P	TOC (%)	Carbonates (%)	Minerogenic (%)	%Sand	%Silt	%Clay
F1	19.5	11	INS	INS	INS	0.0%	15.4%	2.3%
F2	17.2	24	52.92	2.49	44.59	15.9%	74.4%	9.7%
F3	23.8	70	35.66	5.25	59.09	4.7%	81.6%	13.7%
F4	42.1	21	20.05	6.38	73.57	3.8%	79.1%	17.1%
F5	31.6	81	43.42	5.78	50.79	1.1%	85.8%	13.1%
F6	36.1	51	16.89	1.61	81.49	5.8%	84.3%	9.9%
F7	19.1	41	INS	INS	INS	22.1%	70.3%	7.6%
F8	18.6	56	43.55	2.10	54.35	11.1%	76.9%	12.1%
F9	16.8	75	46.85	3.47	49.68	1.7%	80.2%	18.2%
F10	18.8	36	33.15	1.25	68.10	5.8%	78.2%	16.0%
F11	21	36	42.30	2.02	55.68	13.8%	73.2%	12.9%
F12	13.5	44	36.03	10.50	53.47	4.7%	79.8%	15.6%
F13	14.6	177	61.31	0.04	38.73	13.8%	76.2%	10.0%
F14	17.3	55	52.89	1.90	45.20	26.3%	65.1%	8.6%
F15	15.4	71	54.63	2.40	42.97	17.3%	72.4%	10.3%
F16	15.7	44	57.42	2.72	39.86	6.3%	78.8%	15.0%
F17	7.9	60	38.85	13.71	47.44	5.2%	79.2%	15.6%
F18	21.8	18	52.12	1.90	45.98	6.6%	77.6%	15.7%
F19	15.5	64	54.37	3.77	41.87	7.4%	79.7%	12.8%
F20	24.2	37	59.11	0.81	41.70	4.2%	82.8%	13.0%
F21	19.6	27	53.47	2.53	44.00	8.4%	78.6%	13.1%
F22	10.2	43	51.20	1.60	47.20	7.7%	78.7%	13.7%
F23	13.8	71	57.59	3.67	38.74	7.9%	80.9%	11.2%
F24	13.4	38	59.43	2.41	38.16	6.5%	79.6%	13.8%
F25	12.9	18	56.94	3.50	39.57	17.1%	71.9%	11.0%
H1	8.2	NA	52.79	3.76	43.44	6.4%	85.0%	8.5%
H2	16.8	NA	33.28	1.31	65.41	1.2%	87.2%	11.5%
H3	15.5	NA	26.66	0.93	72.41	1.5%	89.9%	8.6%
H4	15.8	NA	26.01	1.50	72.49	7.3%	86.8%	5.9%
H5	24.1	NA	12.71	0.67	86.62	2.3%	86.0%	11.7%
H6	14	NA	31.94	1.34	66.72	1.6%	89.3%	9.1%
H7	15.9	NA	25.06	1.10	73.84	3.1%	87.9%	9.0%
H8	16	NA	28.48	0.84	70.68	1.4%	88.4%	10.2%
H9	21.6	NA	13.62	0.75	85.63	4.1%	87.5%	8.4%
H10	18	NA	11.31	0.78	87.91	10.3%	83.0%	6.8%
H11	8.9	NA	52.18	10.37	37.45	8.1%	83.0%	8.8%
H12	12.8	NA	42.20	1.06	56.74	9.1%	85.3%	5.6%
H13	16.1	NA	25.94	1.06	73.00	6.7%	85.7%	7.6%
H14	14.8	NA	30.11	1.60	68.29	4.8%	87.5%	7.7%
H15	14	NA	30.03	1.68	68.30	4.5%	87.2%	8.3%

Supplementary Table 5.1: Continued.

Sample ID	Species Richness (NO)	Shannon Diversity Index (SDI)	Total Tests	Tests/cc	D/C	CAA	CAD	CCA
F1	17	2.142	375	748	1.433	12.032%	10.428%	5.348%
F2	13	1.962	167	334	1.319	12.575%	6.587%	7.784%
F3	17	1.822	245	245	0.598	22.041%	1.633%	3.673%
F4	19	2.001	488	976	0.683	39.959%	7.787%	2.869%
F5	12	1.542	225	450	3.094	8.000%	2.222%	8.889%
F6	17	1.934	301	602	3.492	7.641%	6.312%	3.987%
F7	14	2.086	190	380	1.750	16.842%	7.368%	3.158%
F8	16	2.019	263	526	2.529	11.787%	8.745%	5.323%
F9	13	2.144	172	172	1.074	22.093%	6.977%	4.651%
F10	15	2.059	181	362	0.649	33.149%	8.840%	6.077%
F11	16	2.118	367	734	1.313	14.714%	10.082%	9.264%
F12	20	2.388	185	123	1.646	19.459%	7.027%	4.865%
F13	14	1.838	317	634	2.000	17.035%	10.410%	3.155%
F14	15	1.975	161	322	0.949	29.814%	11.180%	3.727%
F15	12	1.911	162	81	1.066	14.198%	10.494%	14.198%
F16	13	1.983	193	386	0.625	18.653%	18.135%	10.881%
F17	17	1.874	252	252	0.794	36.508%	10.317%	3.175%
F18	11	1.697	300	600	0.183	29.333%	25.667%	21.333%
F19	16	1.990	208	416	2.769	9.135%	9.615%	4.808%
F20	14	1.735	165	110	0.238	32.121%	33.939%	10.303%
F21	13	1.616	380	760	0.179	35.526%	34.737%	7.105%
F22	13	1.901	185	370	0.920	19.459%	20.541%	5.946%
F23	13	1.826	186	372	0.914	17.204%	23.656%	5.376%
F24	14	1.806	179	358	0.453	20.670%	34.637%	8.380%
F25	12	1.746	153	306	0.838	19.608%	11.111%	13.072%
H1	12	1.844	253	506	0.273	19.368%	40.711%	9.091%
H2	16	2.172	291	582	0.840	9.622%	29.210%	5.498%
H3	24	2.182	867	1734	5.303	2.653%	10.381%	0.807%
H4	20	2.236	535	1070	3.382	3.178%	13.271%	3.364%
H5	20	2.151	478	956	2.513	1.883%	19.874%	2.301%
H6	26	2.305	853	1706	2.401	3.169%	19.718%	1.995%
H7	21	2.134	658	2632	4.606	1.672%	12.918%	0.456%
H8	23	2.199	752	1504	2.307	2.660%	21.809%	0.931%
H9	16	2.036	575	1150	1.090	1.565%	31.826%	1.391%
H10	17	1.971	734	2936	1.021	0.683%	30.874%	0.956%
H11	12	1.680	229	458	0.347	5.677%	55.459%	3.930%
H12	17	2.129	292	584	0.873	5.822%	33.562%	3.425%
H13	20	2.274	478	956	3.347	1.674%	16.527%	1.674%
H14	23	2.247	512	1024	13.821	2.344%	0.000%	2.148%
H15	20	2.138	693	1386	2.993	0.866%	19.048%	0.433%

Supplementary Table 5.1: Continued.

Sample ID	CCC	CP	CT	Dglob	DGG	DGD	DOLan	DOO
F1	9.893%	0.535%	2.139%	2.139%	0.802%	0.535%	0.000%	25.134%
F2	14.371%	0.000%	0.000%	2.395%	2.994%	1.796%	0.000%	2.994%
F3	6.122%	0.816%	43.265%	2.449%	2.857%	0.000%	0.000%	0.000%
F4	4.303%	0.205%	5.123%	12.295%	2.664%	0.615%	0.000%	1.639%
F5	4.444%	0.000%	0.000%	9.333%	5.333%	0.444%	0.000%	0.444%
F6	2.990%	0.000%	0.000%	12.957%	11.296%	1.329%	0.000%	0.332%
F7	6.316%	0.000%	1.053%	12.105%	4.211%	2.632%	0.000%	4.737%
F8	0.760%	0.760%	1.141%	18.631%	28.137%	0.000%	0.000%	0.380%
F9	5.814%	0.000%	14.535%	7.558%	4.070%	0.000%	0.000%	5.233%
F10	3.867%	1.657%	8.287%	3.867%	3.315%	1.657%	0.000%	0.000%
F11	5.995%	0.817%	0.000%	2.997%	6.540%	2.180%	0.000%	1.907%
F12	3.784%	0.000%	3.784%	2.703%	2.162%	1.081%	9.730%	2.703%
F13	1.577%	0.631%	0.631%	3.155%	41.640%	4.416%	0.000%	2.208%
F14	3.727%	1.242%	0.621%	4.969%	8.696%	0.621%	0.621%	1.242%
F15	8.025%	1.852%	0.000%	3.086%	9.259%	1.235%	0.000%	0.617%
F16	10.363%	1.036%	0.000%	3.627%	2.591%	1.036%	0.000%	0.000%
F17	1.984%	1.190%	1.984%	8.730%	0.794%	0.000%	0.794%	2.381%
F18	5.667%	1.667%	0.000%	1.333%	0.667%	0.000%	0.000%	0.000%
F19	1.442%	1.923%	0.481%	5.769%	17.788%	1.442%	0.000%	2.885%
F20	2.424%	1.212%	0.606%	1.818%	1.818%	1.212%	0.000%	0.606%
F21	3.421%	2.895%	0.000%	2.368%	0.263%	0.000%	0.000%	0.263%
F22	1.622%	3.784%	0.000%	3.243%	2.162%	1.622%	0.000%	1.081%
F23	3.763%	1.613%	1.075%	1.613%	2.688%	3.226%	0.000%	0.000%
F24	1.676%	1.676%	0.000%	1.117%	2.235%	1.676%	0.000%	0.559%
F25	8.497%	0.000%	0.000%	0.000%	1.307%	0.654%	0.000%	0.654%
H1	3.162%	4.348%	0.000%	11.067%	4.743%	0.000%	0.000%	1.581%
H2	0.687%	9.278%	0.000%	14.089%	9.622%	0.344%	0.000%	10.653%
H3	0.231%	1.845%	0.346%	21.569%	24.106%	6.228%	0.115%	15.340%
H4	0.748%	2.430%	0.000%	18.879%	26.355%	5.047%	0.187%	9.907%
H5	0.000%	4.603%	0.000%	17.364%	25.523%	1.674%	0.209%	11.088%
H6	0.587%	3.873%	0.117%	11.385%	22.535%	5.986%	0.235%	11.737%
H7	0.000%	2.128%	0.000%	19.453%	24.924%	3.191%	0.152%	14.894%
H8	0.133%	3.989%	0.133%	13.830%	23.271%	2.261%	0.266%	12.899%
H9	0.000%	7.304%	0.000%	13.739%	9.565%	1.391%	0.000%	10.261%
H10	0.273%	7.240%	0.000%	9.426%	9.836%	0.410%	0.000%	11.885%
H11	0.437%	6.987%	0.000%	7.424%	6.550%	0.000%	0.000%	3.057%
H12	0.342%	7.534%	0.000%	15.411%	8.219%	0.000%	0.000%	11.301%
H13	0.000%	2.510%	0.000%	15.063%	26.151%	4.393%	0.000%	11.506%
H14	0.977%	3.320%	0.195%	14.258%	27.539%	3.711%	0.000%	17.383%
H15	0.289%	1.443%	0.577%	13.276%	22.222%	3.319%	0.000%	17.605%

Supplementary Table 5.1: Continued.

Sample ID	DOT	Dac	DCI	DUU	Dcur	DE	Dbi	HP
F1	1.872%	0.000%	0.000%	0.000%	0.000%	22.995%	0.000%	0.000%
F2	4.192%	0.000%	0.000%	0.000%	0.000%	40.120%	0.000%	0.000%
F3	0.408%	0.000%	0.000%	0.000%	0.000%	11.020%	0.816%	0.000%
F4	0.205%	0.000%	0.000%	0.410%	2.869%	15.984%	0.000%	0.000%
F5	0.000%	0.000%	0.000%	0.000%	0.000%	57.333%	0.000%	0.000%
F6	0.000%	0.000%	0.000%	0.332%	0.000%	43.854%	0.997%	0.000%
F7	0.000%	0.000%	0.000%	0.526%	0.000%	34.737%	0.000%	0.000%
F8	0.380%	0.000%	0.000%	1.141%	0.000%	18.251%	0.000%	0.000%
F9	0.000%	0.000%	1.163%	0.000%	0.000%	23.837%	0.581%	0.000%
F10	0.000%	0.000%	1.105%	0.000%	0.000%	23.204%	0.552%	0.000%
F11	0.817%	0.000%	0.000%	0.000%	0.000%	36.512%	1.090%	0.000%
F12	0.541%	0.000%	2.162%	1.622%	2.162%	28.108%	1.081%	0.000%
F13	0.000%	0.000%	0.000%	0.000%	0.000%	12.934%	0.000%	0.000%
F14	1.242%	0.000%	0.000%	0.000%	0.000%	28.571%	0.000%	0.000%
F15	0.000%	0.000%	0.000%	0.000%	0.000%	35.802%	0.000%	0.000%
F16	0.000%	0.000%	0.000%	0.000%	0.518%	28.497%	0.000%	0.000%
F17	0.000%	0.000%	0.000%	0.000%	0.794%	27.381%	0.397%	0.000%
F18	0.000%	0.000%	0.000%	0.000%	0.000%	13.000%	0.000%	0.000%
F19	0.962%	0.000%	0.000%	0.000%	0.000%	39.423%	0.962%	0.000%
F20	0.000%	0.000%	0.000%	0.000%	0.000%	11.515%	0.606%	0.000%
F21	0.000%	0.000%	0.000%	0.000%	0.000%	11.316%	0.263%	0.000%
F22	1.081%	0.000%	0.000%	0.000%	0.000%	34.595%	0.000%	0.000%
F23	1.075%	0.000%	0.000%	0.000%	0.000%	36.559%	0.538%	0.000%
F24	1.117%	0.000%	0.000%	0.000%	0.000%	22.905%	0.000%	0.000%
F25	0.654%	0.000%	0.000%	0.000%	0.654%	39.869%	0.000%	0.000%
H1	0.000%	0.000%	0.000%	0.000%	0.000%	1.976%	0.395%	0.000%
H2	0.000%	0.000%	0.000%	0.687%	0.000%	2.405%	0.000%	0.344%
H3	0.115%	0.461%	0.115%	0.577%	0.231%	5.652%	0.115%	0.000%
H4	1.121%	0.561%	0.561%	0.000%	0.187%	6.542%	0.187%	0.000%
H5	0.628%	0.628%	0.418%	0.000%	0.000%	2.929%	0.000%	0.209%
H6	0.235%	1.056%	0.352%	0.235%	0.352%	6.690%	0.235%	0.235%
H7	1.520%	0.912%	0.760%	0.152%	0.152%	3.191%	0.000%	0.152%
H8	0.931%	0.665%	0.399%	0.266%	0.399%	3.723%	0.000%	0.266%
H9	1.739%	0.000%	0.000%	0.174%	0.000%	1.043%	0.000%	0.174%
H10	1.503%	0.000%	0.000%	0.000%	0.000%	0.410%	0.000%	0.956%
H11	1.747%	0.000%	0.000%	0.000%	0.000%	3.930%	0.000%	0.000%
H12	0.685%	0.000%	0.000%	0.342%	0.000%	1.712%	0.000%	0.342%
H13	2.092%	3.138%	0.209%	0.418%	1.255%	2.301%	0.000%	0.209%
H14	1.953%	1.367%	0.391%	0.195%	0.586%	8.203%	0.000%	0.195%
H15	1.154%	1.587%	0.433%	0.000%	0.000%	2.165%	0.000%	0.000%

Supplementary Table 5.1: Continued.

Sample ID	HS	LV	LS	PhN	PC	TA
F1	0.000%	3.209%	0.802%	0.000%	1.604%	0.000%
F2	0.000%	2.395%	1.198%	0.000%	0.599%	0.000%
F3	0.000%	1.633%	0.000%	0.000%	0.816%	0.000%
F4	0.000%	0.205%	1.025%	0.000%	1.025%	0.000%
F5	0.000%	1.333%	0.889%	0.000%	1.333%	0.000%
F6	0.332%	1.993%	0.332%	0.000%	3.322%	0.000%
F7	0.000%	1.053%	2.105%	0.000%	3.158%	0.000%
F8	0.000%	1.141%	1.141%	0.000%	1.901%	0.000%
F9	0.000%	0.000%	0.581%	0.000%	2.907%	0.000%
F10	0.000%	1.105%	1.105%	0.000%	2.210%	0.000%
F11	0.000%	1.635%	2.180%	0.000%	2.725%	0.000%
F12	0.000%	1.081%	0.000%	0.000%	1.622%	0.000%
F13	0.000%	1.577%	0.315%	0.000%	0.315%	0.000%
F14	0.000%	1.242%	0.000%	0.000%	2.484%	0.000%
F15	0.000%	0.617%	0.000%	0.000%	0.617%	0.000%
F16	0.000%	1.036%	1.036%	0.000%	2.591%	0.000%
F17	0.000%	0.397%	0.794%	0.000%	1.984%	0.000%
F18	0.000%	0.333%	0.333%	0.000%	0.667%	0.000%
F19	0.000%	0.481%	1.923%	0.000%	0.962%	0.000%
F20	0.000%	0.000%	0.000%	0.000%	0.606%	0.000%
F21	0.000%	0.526%	0.789%	0.000%	0.526%	0.000%
F22	0.000%	0.000%	1.081%	0.000%	3.784%	0.000%
F23	0.000%	0.000%	0.000%	0.000%	1.613%	0.000%
F24	0.000%	1.676%	0.559%	0.000%	1.117%	0.000%
F25	0.000%	0.000%	1.307%	0.000%	2.614%	0.000%
H1	0.000%	1.976%	0.000%	0.000%	1.581%	0.000%
H2	0.344%	0.344%	0.000%	0.000%	3.780%	0.000%
H3	0.461%	0.923%	0.346%	0.346%	6.690%	0.000%
H4	0.187%	0.935%	0.000%	0.561%	5.794%	0.000%
H5	0.628%	0.628%	0.209%	1.464%	7.531%	0.000%
H6	0.352%	0.587%	0.117%	0.352%	7.629%	0.000%
H7	0.000%	0.760%	0.152%	0.152%	11.550%	0.000%
H8	0.399%	0.931%	0.000%	0.399%	9.043%	0.000%
H9	0.522%	1.043%	0.000%	1.043%	17.217%	0.000%
H10	0.137%	1.230%	0.000%	0.956%	22.814%	0.410%
H11	0.000%	1.747%	0.000%	0.000%	3.057%	0.000%
H12	0.342%	3.767%	0.000%	1.712%	5.137%	0.342%
H13	0.209%	1.464%	0.628%	0.000%	7.741%	0.000%
H14	0.391%	1.953%	0.586%	0.586%	11.328%	0.000%
H15	0.289%	0.577%	0.866%	0.433%	12.843%	0.000%