

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth).

Site #	Eco-region	Slope Position	Depth (cm)	Chloride ¹ (mg/kg) (0.5) ⁵	Aluminum ² (mg/kg) (0.02) ⁵	Antimony ² (mg/kg) (0.01) ⁵	Arsenic ² (mg/kg) (0.02) ⁵	Barium ² (mg/kg) (0.0004) ⁵	Beryllium ² (mg/kg) (0.001) ⁵	Bismuth ² (mg/kg) (0.01) ⁵	Boron ² (mg/kg) (0.004) ⁵	Cadmium ² (mg/kg) (0.001) ⁵	Chromium ² (mg/kg) (0.002) ⁵	Cobalt ² (mg/kg) (0.001) ⁵	Copper ² (mg/kg) (0.002) ⁵
586	PL	U	15-30	18.30	0.03	0.02	0.10	2.81	0.002	0.03	0.213	0.015	0.011	0.045	2.670
586	PL	M	15-30	12.90	0.02	0.01	0.05	2.36	0.001	0.02	0.296	0.036	0.008	0.029	2.780
586	PL	L	15-30	16.60	0.28	0.01	0.07	1.85	0.001	0.03	0.200	0.093	0.007	0.059	2.210
588	PL	U	15-30	3.30	0.02	0.01	0.05	1.05	0.001	0.01	0.289	0.022	0.010	0.030	1.430
588	PL	M	15-30	3.90	0.15	0.01	0.06	1.33	0.001	0.02	0.193	0.099	0.008	0.100	1.970
588	PL	L	15-30	21.20	5.54	0.01	0.04	2.44	0.001	0.01	0.189	0.102	0.010	0.136	0.538
590	PL	U	15-30	7.20	0.33	0.01	0.05	2.73	0.001	0.01	0.230	0.004	0.007	0.169	0.495
590	PL	M	15-30	3.80	0.67	0.01	0.07	3.04	0.001	0.01	0.146	0.018	0.009	0.025	0.821
590	PL	L	15-30	2.80	0.98	0.01	0.09	3.34	0.001	0.02	0.146	0.017	0.008	0.023	1.060
591	PL	U	15-30	2.00	0.73	0.01	0.06	1.54	0.001	0.02	0.184	0.011	0.007	0.050	1.820
591	PL	M	15-30	18.10	0.02	0.01	0.06	3.32	0.001	0.02	0.287	0.049	0.006	0.063	2.150
591	PL	L	15-30	10.60	0.98	0.02	0.10	1.94	0.002	0.04	0.302	0.634	0.011	0.392	2.900
592	PL	U	15-30	26.80	0.02	0.01	0.02	3.80	0.001	0.02	0.141	0.065	0.007	0.019	3.200
592	PL	M	15-30	11.40	0.02	0.01	0.04	3.79	0.001	0.02	0.162	0.087	0.007	0.021	3.170
592	PL	L	15-30	13.40	0.03	0.02	0.06	3.42	0.002	0.04	0.235	0.491	0.011	0.051	1.160
593	PL	U	15-30	4.00	13.80	0.01	0.12	0.75	0.001	0.01	0.267	0.036	0.011	0.124	3.420
593	PL	M	15-30	5.20	0.84	0.01	0.15	1.73	0.001	0.01	0.214	0.038	0.007	0.071	4.220
593	PL	L	15-30	9.80	2.13	0.02	0.15	1.35	0.002	0.03	0.184	0.013	0.005	0.199	4.720
594	PL	U	15-30	14.20	48.20	0.01	0.08	0.96	0.001	0.01	0.708	0.024	0.008	0.136	2.250
594	PL	M	15-30	6.40	18.20	0.01	0.10	1.34	0.001	0.01	0.628	0.012	0.006	0.119	2.420
594	PL	L	15-30	9.00	5.16	0.01	0.06	1.49	0.001	0.01	0.818	0.030	0.006	0.096	2.310
595	PL	U	15-30	7.50	1.90	0.02	0.23	1.17	0.002	0.03	0.450	0.066	0.009	0.080	4.120
595	PL	M	15-30	7.20	21.40	0.01	0.13	0.59	0.001	0.01	1.300	0.052	0.010	0.128	2.260
595	PL	L	15-30	9.20	7.90	0.02	0.17	0.69	0.002	0.03	0.287	0.015	0.009	0.165	3.100
599	PL	U	15-30	8.30	5.34	0.02	0.20	1.14	0.002	0.03	1.870	0.118	0.009	0.090	3.000
599	PL	M	15-30	10.60	2.93	0.02	0.13	1.16	0.002	0.03	1.580	0.121	0.005	0.073	2.830
599	PL	L	15-30	9.40	2.03	0.02	0.15	1.26	0.002	0.03	2.130	0.147	0.008	0.054	2.200
			Mean	10.11	5.17	0.01	0.10	1.94	0.001	0.02	0.51	0.09	0.01	0.09	2.42
			Max	26.80	48.20	0.02	0.23	3.80	0.002	0.04	2.13	0.63	0.01	0.39	4.72
			Min	2.00	0.02	0.01	0.02	0.59	0.001	0.01	0.14	0.00	0.01	0.02	0.50
			SD	6.08	10.29	0.005	0.05	1.01	0.0005	0.01	0.56	0.14	0.002	0.08	1.07
			CV (%)	60.10	198.97	36.03	55.03	51.87	36.03	48.08	110.10	160.35	22.50	82.37	44.46

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Chloride ¹ (mg/kg) (0.5) ⁵	Aluminum ² (mg/kg) (0.02) ⁵	Antimony ² (mg/kg) (0.01) ⁵	Arsenic ² (mg/kg) (0.02) ⁵	Barium ² (mg/kg) (0.0004) ⁵	Beryllium ² (mg/kg) (0.001) ⁵	Bismuth ² (mg/kg) (0.01) ⁵	Boron ² (mg/kg) (0.004) ⁵	Cadmium ² (mg/kg) (0.001) ⁵	Chromium ² (mg/kg) (0.002) ⁵	Cobalt ² (mg/kg) (0.001) ⁵	Copper ² (mg/kg) (0.002) ⁵
615	MB	U	15-30	7.80	1.46	0.01	0.03	2.07	0.001	0.01	1.590	0.129	0.012	0.044	0.803
615	MB	M	15-30	4.50	5.02	0.01	0.04	1.93	0.001	0.01	1.310	0.103	0.009	0.086	0.677
615	MB	L	15-30	6.30	0.42	0.01	0.04	2.13	0.001	0.01	1.550	0.225	0.006	0.153	1.500
			Mean	6.20	2.30	0.01	0.04	2.04	0.001	0.01	1.48	0.15	0.01	0.09	0.99
			Max	7.80	5.02	0.01	0.04	2.13	0.001	0.01	1.59	0.23	0.01	0.15	1.50
			Min	4.50	0.42	0.01	0.03	1.93	0.001	0.01	1.31	0.10	0.01	0.04	0.68
			SD	1.65	2.41	0.00	0.01	0.10	0.000	0.00	0.15	0.06	0.003	0.05	0.44
			CV (%)	26.65	104.88	0.00	15.75	5.02	0.00	0.00	10.21	42.18	33.33	58.28	44.63
678	BT	U	15-30	8.9	16.40	0.01	0.10	1.00	0.001	0.01	1.540	0.032	0.008	0.107	1.05
678	BT	M	15-30	12.9	27.70	0.01	0.06	1.21	0.001	0.01	1.420	0.083	0.010	0.121	1.04
678	BT	L	15-30	8.7	1.13	0.01	0.07	1.34	0.001	0.01	1.550	0.092	0.007	0.066	1.09
680	BT	U	15-30	8.0	2.41	0.01	0.09	1.01	0.001	0.01	1.610	0.007	0.007	0.057	0.45
680	BT	M	15-30	3.6	11.20	0.01	0.11	1.20	0.001	0.01	1.690	0.042	0.008	0.046	0.73
680	BT	L	15-30	7.0	3.14	0.01	0.05	1.33	0.001	0.02	1.460	0.048	0.007	0.050	0.68
681	BT	U	15-30	4.7	1.46	0.01	0.07	1.27	0.001	0.01	1.230	0.036	0.007	0.059	0.49
681	BT	M	15-30	3.0	2.30	0.01	0.07	1.23	0.001	0.01	1.600	0.025	0.007	0.066	0.44
681	BT	L	15-30	2.30	1.07	0.01	0.07	1.05	0.001	0.02	0.734	0.055	0.007	0.067	0.527
684	BT	U	15-30	8.20	0.38	0.01	0.11	3.32	0.001	0.01	1.340	0.013	0.006	0.049	1.050
684	BT	M	15-30	6.20	2.21	0.01	0.07	3.31	0.001	0.01	1.240	0.030	0.008	0.068	0.693
684	BT	L	15-30	12.20	9.21	0.01	0.04	4.65	0.001	0.01	1.150	0.198	0.006	0.105	0.655
687	BT	U	15-30	19.50	2.85	0.01	0.07	1.74	0.001	0.01	1.020	0.014	0.007	0.058	0.467
687	BT	M	15-30	10.30	3.26	0.01	0.03	1.69	0.001	0.01	0.878	0.025	0.008	0.052	0.334
687	BT	L	15-30	19.10	0.09	0.01	0.06	1.99	0.001	0.01	1.090	0.063	0.009	0.066	0.674
688	BT	U	15-30	2.40	12.20	0.01	0.15	2.23	0.001	0.01	1.310	0.057	0.009	0.073	1.070
688	BT	M	15-30	1.40	20.00	0.01	0.16	3.47	0.001	0.01	0.857	0.100	0.009	0.134	1.310
688	BT	L	15-30	2.50	10.70	0.01	0.12	3.43	0.001	0.01	1.060	0.126	0.009	0.205	1.130
692	BT	U	15-30	8.30	18.40	0.05	0.25	3.38	0.005	0.07	2.060	0.016	0.011	0.186	3.280
692	BT	M	15-30	6.80	10.80	0.02	0.11	1.65	0.002	0.03	2.330	0.036	0.010	0.155	2.800
692	BT	L	15-30	4.50	0.43	0.02	0.14	3.73	0.002	0.03	2.210	0.050	0.007	0.277	0.519
703	BT	U	15-30	7.80	2.65	0.02	0.14	2.94	0.002	0.03	1.110	0.015	0.014	0.092	0.586
703	BT	M	15-30	5.50	6.31	0.02	0.13	2.73	0.002	0.03	1.270	0.016	0.011	0.076	0.528
703	BT	L	15-30	2.10	0.02	0.01	0.08	3.97	0.001	0.01	1.030	0.048	0.007	0.215	3.060
			Mean	7.33	6.93	0.01	0.10	2.29	0.001	0.02	1.37	0.05	0.01	0.10	1.03
			Max	19.50	27.70	0.05	0.25	4.65	0.005	0.07	2.33	0.20	0.01	0.28	3.28
			Min	1.40	0.02	0.01	0.03	1.00	0.001	0.01	0.73	0.01	0.01	0.05	0.33
			SD	4.87	7.54	0.01	0.05	1.13	0.001	0.01	0.41	0.04	0.002	0.06	0.83
			CV (%)	66.42	108.85	65.11	49.21	49.46	65.11	82.36	30.05	85.29	22.63	61.32	80.55

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Chloride ¹ (mg/kg) (0.5) ⁵	Aluminum ² (mg/kg) (0.02) ⁵	Antimony ² (mg/kg) (0.01) ⁵	Arsenic ² (mg/kg) (0.02) ⁵	Barium ² (mg/kg) (0.0004) ⁵	Beryllium ² (mg/kg) (0.001) ⁵	Bismuth ² (mg/kg) (0.01) ⁵	Boron ² (mg/kg) (0.004) ⁵	Cadmium ² (mg/kg) (0.001) ⁵	Chromium ² (mg/kg) (0.002) ⁵	Cobalt ² (mg/kg) (0.001) ⁵	Copper ² (mg/kg) (0.002) ⁵
727	AP	U	15-30	32.00	2.32	0.05	0.26	6.11	0.005	0.07	1.930	0.210	0.017	0.253	1.550
727	AP	M	15-30	9.30	30.20	0.02	0.17	3.63	0.002	0.03	1.400	0.168	0.013	0.235	1.350
727	AP	L	15-30	5.00	19.50	0.02	0.19	3.16	0.002	0.03	1.730	0.195	0.015	0.419	1.540
728	AP	U	15-30	5.80	8.41	0.05	0.10	0.76	0.005	0.07	0.816	0.038	0.009	0.053	0.305
728	AP	M	15-30	13.00	1.42	0.02	0.11	1.78	0.002	0.03	0.875	0.074	0.013	0.072	0.457
728	AP	L	15-30	16.20	4.13	0.05	0.10	2.35	0.005	0.07	1.330	0.160	0.008	0.075	1.040
730	AP	U	15-30	5.10	0.29	0.02	0.07	1.68	0.002	0.03	1.330	0.028	0.008	0.040	1.310
730	AP	M	15-30	5.00	9.19	0.05	0.10	1.76	0.005	0.07	1.300	0.031	0.009	0.064	0.846
730	AP	L	15-30	5.00	0.64	0.01	0.06	1.19	0.001	0.01	0.783	0.080	0.008	0.068	0.816
738	AP	U	15-30	14.80	4.64	0.02	0.09	3.51	0.002	0.03	0.707	0.120	0.008	0.211	1.230
738	AP	M	15-30	10.10	47.60	0.02	0.24	1.36	0.002	0.03	0.657	0.108	0.009	0.204	0.586
738	AP	L	15-30	10.60	42.80	0.05	0.23	1.32	0.005	0.07	0.908	0.180	0.008	0.238	0.433
739	AP	U	15-30	2.40	0.03	0.02	0.09	4.63	0.002	0.03	0.692	0.057	0.007	0.066	0.544
739	AP	M	15-30	3.20	0.75	0.01	0.09	2.64	0.001	0.01	0.470	0.047	0.007	0.058	0.354
739	AP	L	15-30	2.00	2.26	0.02	0.05	2.35	0.002	0.03	0.872	0.048	0.004	0.079	0.309
740	AP	U	15-30	8.10	3.77	0.02	0.16	3.74	0.002	0.03	0.936	0.044	0.007	0.117	1.070
740	AP	M	15-30	8.60	5.55	0.02	0.12	3.13	0.002	0.03	0.799	0.097	0.008	0.129	0.493
740	AP	L	15-30	5.10	0.03	0.02	0.08	0.26	0.002	0.03	1.190	0.133	0.006	0.092	1.360
743	AP	U	15-30	1.20	0.06	0.02	0.04	4.10	0.002	0.03	0.819	0.027	0.006	0.069	1.790
743	AP	M	15-30	3.40	0.03	0.02	0.19	3.64	0.002	0.03	0.959	0.115	0.008	0.114	2.490
743	AP	L	15-30	3.70	37.10	0.02	0.19	2.50	0.002	0.03	0.448	0.146	0.008	0.234	0.891
744	AP	U	15-30	31.30	7.08	0.02	0.11	3.39	0.002	0.03	1.010	0.061	0.008	0.108	0.671
744	AP	M	15-30	15.30	5.42	0.01	0.12	3.01	0.001	0.01	0.577	0.074	0.007	0.102	0.723
744	AP	L	15-30	14.30	5.91	0.02	0.11	3.65	0.002	0.03	0.478	0.160	0.007	0.127	1.290
746	AP	U	15-30	3.10	0.05	0.02	0.08	3.32	0.002	0.03	0.777	0.152	0.007	0.081	0.805
746	AP	M	15-30	2.80	3.51	0.02	0.12	3.03	0.002	0.03	0.593	0.116	0.007	0.085	0.701
746	AP	L	15-30	2.10	27.00	0.02	0.14	3.21	0.002	0.03	0.637	0.149	0.008	0.182	0.815
			Mean	8.83	9.99	0.02	0.13	2.79	0.002	0.04	0.93	0.10	0.01	0.13	0.95
			Max	32.00	47.60	0.05	0.26	6.11	0.005	0.07	1.93	0.21	0.02	0.42	2.49
			Min	1.20	0.03	0.01	0.04	0.26	0.001	0.01	0.45	0.03	0.004	0.04	0.31
			SD	7.98	14.12	0.01	0.06	1.27	0.001	0.02	0.37	0.06	0.003	0.09	0.52
			CV (%)	90.34	141.32	52.41	46.33	45.62	52.41	51.31	40.37	53.47	33.10	66.00	54.06

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Chloride ¹ (mg/kg) (0.5) ⁵	Aluminum ² (mg/kg) (0.02) ⁵	Antimony ² (mg/kg) (0.01) ⁵	Arsenic ² (mg/kg) (0.02) ⁵	Barium ² (mg/kg) (0.0004) ⁵	Beryllium ² (mg/kg) (0.001) ⁵	Bismuth ² (mg/kg) (0.01) ⁵	Boron ² (mg/kg) (0.004) ⁵	Cadmium ² (mg/kg) (0.001) ⁵	Chromium ² (mg/kg) (0.002) ⁵	Cobalt ² (mg/kg) (0.001) ⁵	Copper ² (mg/kg) (0.002) ⁵
769	MM	U	15-30	3.40	13.80	0.01	0.11	2.12	0.001	0.01	0.750	0.072	0.008	0.147	0.656
769	MM	M	15-30	4.30	46.30	0.01	0.10	2.22	0.001	0.16	0.374	0.223	0.009	0.152	0.677
769	MM	L	15-30	10.30	80.50	0.05	0.10	2.05	0.005	0.12	0.004	0.131	0.008	0.246	0.539
781	MM	U	15-30	8.20	48.60	0.04	0.08	3.33	0.004	0.06	0.004	0.125	0.008	0.231	1.230
781	MM	M	15-30	9.80	37.90	0.05	0.10	3.43	0.005	0.07	0.004	0.161	0.015	0.226	1.200
781	MM	L	15-30	11.80	50.70	0.02	0.11	1.67	0.002	0.03	0.655	0.133	0.014	0.382	1.540
786	MM	U	15-30	2.50	0.02	0.01	0.06	4.50	0.001	0.01	1.010	0.047	0.008	0.039	0.768
786	MM	M	15-30	2.40	0.17	0.01	0.04	4.84	0.001	0.01	0.717	0.065	0.008	0.044	0.421
786	MM	L	15-30	1.70	33.10	0.05	0.10	2.12	0.005	0.07	0.354	0.065	0.010	0.140	0.336
791	MM	U	15-30	2.20	0.02	0.01	0.09	5.00	0.001	0.01	0.458	0.092	0.007	0.108	1.280
791	MM	M	15-30	2.80	0.06	0.01	0.03	6.49	0.001	0.01	0.783	0.072	0.008	0.042	1.840
791	MM	L	15-30	3.20	2.54	0.01	0.10	5.78	0.001	0.01	0.232	0.345	0.006	0.175	2.520
793	MM	U	15-30	3.20	0.02	0.01	0.05	4.54	0.001	0.01	0.423	0.135	0.007	0.053	0.855
793	MM	M	15-30	3.70	0.05	0.01	0.04	3.74	0.001	0.01	0.566	0.088	0.008	0.034	1.050
793	MM	L	15-30	3.20	0.49	0.01	0.08	3.43	0.001	0.01	0.477	0.116	0.007	0.066	1.080
			Mean	4.85	20.95	0.02	0.08	3.68	0.002	0.04	0.45	0.12	0.01	0.14	1.07
			Max	11.80	80.50	0.05	0.11	6.49	0.005	0.16	1.01	0.35	0.02	0.38	2.52
			Min	1.70	0.02	0.01	0.03	1.67	0.001	0.01	0.004	0.05	0.01	0.03	0.34
			SD	3.36	26.32	0.02	0.03	1.48	0.002	0.05	0.30	0.08	0.003	0.10	0.58
			CV (%)	69.38	125.64	82.74	35.16	40.23	82.74	118.02	67.16	60.99	28.86	72.25	54.40
798	FG	U	15-30	14.00	2.30	0.01	0.11	3.23	0.001	0.01	0.659	0.171	0.008	0.090	0.720
798	FG	M	15-30	22.40	0.81	0.01	0.08	3.00	0.001	0.01	0.401	0.149	0.006	0.074	0.671
798	FG	L	15-30	15.30	11.30	0.05	0.10	3.18	0.005	0.07	0.506	0.142	0.009	0.118	0.931
800	FG	U	15-30	5.00	2.13	0.05	0.13	4.93	0.005	0.07	0.933	0.250	0.009	0.244	2.560
800	FG	M	15-30	4.20	4.08	0.05	0.10	4.92	0.005	0.07	0.442	0.245	0.010	0.280	2.710
800	FG	L	15-30	8.70	0.96	0.05	0.10	4.83	0.005	0.07	0.958	0.269	0.008	0.215	2.610
			Mean	11.60	3.60	0.04	0.10	4.02	0.004	0.05	0.65	0.20	0.01	0.17	1.70
			Max	22.40	11.30	0.05	0.13	4.93	0.005	0.07	0.96	0.27	0.01	0.28	2.71
			Min	4.20	0.81	0.01	0.08	3.00	0.001	0.01	0.40	0.14	0.01	0.07	0.67
			SD	6.97	3.95	0.02	0.02	0.97	0.002	0.03	0.25	0.06	0.001	0.09	1.02
			CV (%)	60.08	109.90	56.33	15.80	24.06	56.33	61.97	37.76	27.67	16.40	51.18	59.97

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Chloride ¹ (mg/kg) (0.5) ⁵	Aluminum ² (mg/kg) (0.02) ⁵	Antimony ² (mg/kg) (0.01) ⁵	Arsenic ² (mg/kg) (0.02) ⁵	Barium ² (mg/kg) (0.0004) ⁵	Beryllium ² (mg/kg) (0.001) ⁵	Bismuth ² (mg/kg) (0.01) ⁵	Boron ² (mg/kg) (0.004) ⁵	Cadmium ² (mg/kg) (0.001) ⁵	Chromium ² (mg/kg) (0.002) ⁵	Cobalt ² (mg/kg) (0.001) ⁵	Copper ² (mg/kg) (0.002) ⁵
804	MG	U	15-30	2.60	0.76	0.01	0.06	3.21	0.001	0.01	0.628	0.055	0.007	0.097	0.690
804	MG	M	15-30	3.80	0.08	0.01	0.06	2.97	0.001	0.01	0.277	0.052	0.007	0.082	0.711
804	MG	L	15-30	4.20	1.16	0.01	0.08	2.69	0.001	0.01	0.326	0.099	0.007	0.105	1.050
806	MG	U	15-30	10.40	0.16	0.01	0.04	2.85	0.001	0.01	0.363	0.042	0.008	0.075	0.986
806	MG	M	15-30	6.50	0.70	0.01	0.06	2.06	0.001	0.01	0.201	0.068	0.007	0.128	0.817
806	MG	L	15-30	8.20	6.22	0.01	0.15	2.58	0.001	0.01	0.386	0.096	0.006	0.138	1.050
809	MG	U	15-30	2.80	0.02	0.01	0.08	2.88	0.001	0.01	0.603	0.086	0.009	0.060	1.630
809	MG	M	15-30	3.00	0.02	0.01	0.11	3.11	0.001	0.01	0.386	0.082	0.007	0.085	1.900
809	MG	L	15-30	3.50	0.15	0.01	0.17	3.02	0.001	0.01	0.451	0.073	0.007	0.078	0.818
812	MG	U	15-30	7.90	0.02	0.01	0.02	2.01	0.001	0.01	0.457	0.036	0.007	0.109	1.440
812	MG	M	15-30	9.50	0.02	0.01	0.02	1.26	0.001	0.01	0.669	0.030	0.007	0.091	1.320
812	MG	L	15-30	12.10	0.02	0.01	0.03	1.87	0.001	0.01	0.609	0.047	0.009	0.097	1.730
815	MG	U	15-30	4.40	0.11	0.01	0.03	4.56	0.001	0.01	0.738	0.037	0.008	0.041	1.170
815	MG	M	15-30	3.80	0.02	0.01	0.05	4.31	0.001	0.01	0.753	0.051	0.009	0.062	1.390
815	MG	L	15-30	2.70	0.02	0.01	0.19	3.01	0.001	0.01	0.563	0.157	0.006	0.118	2.400
823	MG	U	15-30	24.70	0.15	0.01	0.03	1.86	0.001	0.01	0.137	0.076	0.009	0.113	1.070
823	MG	M	15-30	17.10	0.02	0.01	0.11	2.14	0.001	0.01	2.320	0.131	0.009	0.125	0.836
823	MG	L	15-30	31.10	0.02	0.01	0.11	1.70	0.001	0.01	1.560	0.171	0.009	0.133	0.818
1828	MG	U	15-30	1.40	0.15	0.01	0.02	3.89	0.001	0.01	1.550	0.026	0.008	0.042	0.889
1828	MG	M	15-30	6.20	0.12	0.02	0.10	4.01	0.002	0.03	4.100	0.057	0.008	0.110	1.610
1828	MG	L	15-30	1.60	0.02	0.01	0.13	4.54	0.001	0.01	1.710	0.077	0.008	0.136	1.150
2828	MG	U	15-30	3.10	0.02	0.01	0.10	4.27	0.001	0.01	1.740	0.069	0.007	0.088	1.980
2828	MG	M	15-30	5.00	0.06	0.01	0.13	4.01	0.001	0.01	1.450	0.094	0.008	0.178	1.780
2828	MG	L	15-30	5.70	0.02	0.01	0.12	4.19	0.001	0.01	1.970	0.083	0.008	0.165	2.130
			Mean	7.55	0.42	0.01	0.08	3.04	0.001	0.01	1.00	0.07	0.01	0.10	1.31
			Max	31.10	6.22	0.02	0.19	4.56	0.002	0.03	4.10	0.17	0.01	0.18	2.40
			Min	1.40	0.02	0.01	0.02	1.26	0.001	0.01	0.14	0.03	0.01	0.04	0.69
			SD	7.33	1.27	0.002	0.05	0.99	0.0002	0.004	0.91	0.04	0.001	0.03	0.49
			CV (%)	97.04	302.67	19.60	59.70	32.59	19.60	37.68	91.47	49.77	12.38	34.04	37.37

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Iron ² (mg/kg) (0.006) ⁵	Lead ² (mg/kg) (0.004) ⁵	Lithium ² (mg/kg) (0.002) ⁵	Magnesium ² (mg/kg) (0.1) ⁵	Manganese ² (mg/kg) (0.0004) ⁵	Molybdenum ² (mg/kg) (0.002) ⁵	Nickel ² (mg/kg) (0.002) ⁵	Phosphorus ² (mg/kg) (0.06) ⁵	Selenium ² (mg/kg) (0.008) ⁵	Silicon ² (mg/kg) (0.008) ⁵	Silver ² (mg/kg) (0.002) ⁵	Strontium ² (mg/kg) (0.0002) ⁵
586	PL	U	15-30	100.0	0.738	0.107	279.0	2.36	0.008	1.25	0.58	0.060	2.96	0.004	5.29
586	PL	M	15-30	113.0	0.849	0.225	467.0	2.71	0.003	2.44	0.63	0.064	4.84	0.002	6.59
586	PL	L	15-30	156.0	0.754	0.174	388.0	3.82	0.002	1.50	1.10	0.064	5.38	0.002	4.89
588	PL	U	15-30	26.0	0.887	0.236	708.0	4.47	0.002	0.37	0.52	0.041	8.46	0.002	10.00
588	PL	M	15-30	137.0	1.620	0.081	364.0	5.11	0.003	1.37	0.98	0.067	6.13	0.002	5.45
588	PL	L	15-30	58.1	0.471	0.013	71.9	72.40	0.002	1.26	1.86	0.077	4.38	0.002	2.19
590	PL	U	15-30	24.0	0.333	0.012	173.0	2.62	0.002	0.81	0.46	0.033	3.41	0.002	3.50
590	PL	M	15-30	31.4	0.402	0.020	164.0	4.42	0.002	0.75	0.50	0.035	2.62	0.002	3.33
590	PL	L	15-30	49.7	0.473	0.014	202.0	3.70	0.002	0.97	0.49	0.044	2.23	0.002	3.58
591	PL	U	15-30	62.7	1.230	0.062	319.0	2.53	0.002	0.89	0.60	0.046	2.82	0.002	5.67
591	PL	M	15-30	37.8	1.300	0.213	350.0	1.92	0.002	1.59	0.45	0.040	7.12	0.002	7.27
591	PL	L	15-30	265.0	1.180	0.078	335.0	12.50	0.004	7.33	1.96	0.100	10.00	0.004	7.74
592	PL	U	15-30	67.1	1.130	0.236	465.0	3.44	0.004	1.20	0.81	0.035	20.80	0.002	6.51
592	PL	M	15-30	67.3	1.000	0.258	456.0	3.88	0.002	1.55	0.98	0.046	19.40	0.002	6.42
592	PL	L	15-30	91.2	1.290	0.191	383.0	8.95	0.016	2.12	2.15	0.083	23.40	0.004	6.74
593	PL	U	15-30	156.0	1.430	0.015	627.0	1.93	0.005	1.82	1.04	0.046	2.35	0.002	4.91
593	PL	M	15-30	118.0	0.820	0.147	427.0	4.65	0.002	3.51	0.90	0.057	2.69	0.002	5.68
593	PL	L	15-30	204.0	1.410	0.114	545.0	5.03	0.004	1.51	0.61	0.091	2.70	0.004	5.55
594	PL	U	15-30	151.0	1.490	0.029	304.0	10.30	0.002	1.22	0.72	0.060	6.25	0.002	3.40
594	PL	M	15-30	221.0	1.190	0.035	300.0	3.58	0.002	1.03	0.76	0.080	4.85	0.002	3.87
594	PL	L	15-30	204.0	1.150	0.061	341.0	5.26	0.002	1.05	0.61	0.080	3.78	0.002	3.92
595	PL	U	15-30	167.0	1.600	0.184	760.0	2.31	0.004	3.89	0.81	0.070	4.98	0.004	7.72
595	PL	M	15-30	223.0	1.740	0.049	527.0	4.39	0.003	1.69	0.71	0.056	8.04	0.002	4.85
595	PL	L	15-30	268.0	1.390	0.139	623.0	5.12	0.004	1.04	0.85	0.098	6.02	0.004	4.93
599	PL	U	15-30	173.0	1.290	0.112	616.0	4.96	0.004	4.53	0.79	0.081	4.77	0.004	8.56
599	PL	M	15-30	152.0	1.320	0.120	677.0	4.58	0.004	3.70	0.72	0.056	4.76	0.004	8.61
599	PL	L	15-30	138.0	1.070	0.126	687.0	3.84	0.004	4.39	1.20	0.091	5.38	0.004	8.57
			Mean	128.20	1.09	0.11	428.11	7.07	0.004	2.03	0.88	0.06	6.69	0.0027	5.77
			Max	268.00	1.74	0.26	760.00	72.40	0.016	7.33	2.15	0.10	23.40	0.0040	10.00
			Min	24.00	0.33	0.01	71.90	1.92	0.002	0.37	0.45	0.03	2.23	0.0020	2.19
			SD	72.81	0.39	0.08	182.54	13.29	0.003	1.57	0.45	0.02	5.61	0.0010	1.95
			CV (%)	56.79	35.28	70.24	42.64	188.02	80.06	77.26	50.82	32.03	83.90	36.03	33.82

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Iron ² (mg/kg) (0.006) ⁵	Lead ² (mg/kg) (0.004) ⁵	Lithium ² (mg/kg) (0.002) ⁵	Magnesium ² (mg/kg) (0.1) ⁵	Manganese ² (mg/kg) (0.0004) ⁵	Molybdenum ² (mg/kg) (0.002) ⁵	Nickel ² (mg/kg) (0.002) ⁵	Phosphorus ² (mg/kg) (0.06) ⁵	Selenium ² (mg/kg) (0.008) ⁵	Silicon ² (mg/kg) (0.008) ⁵	Silver ² (mg/kg) (0.002) ⁵	Strontium ² (mg/kg) (0.0002) ⁵
615	MB	U	15-30	109.0	0.928	0.004	194.0	11.40	0.015	0.39	1.52	0.060	6.95	0.002	4.10
615	MB	M	15-30	156.0	0.791	0.044	161.0	19.90	0.002	0.90	1.34	0.069	5.05	0.002	3.84
615	MB	L	15-30	221.0	1.500	0.100	255.0	6.15	0.007	1.82	1.18	0.083	7.30	0.002	7.18
			Mean	162.00	1.07	0.05	203.33	12.48	0.0080	1.04	1.35	0.07	6.43	0.0020	5.04
			Max	221.00	1.50	0.10	255.00	19.90	0.0150	1.82	1.52	0.08	7.30	0.0020	7.18
			Min	109.00	0.79	0.004	161.00	6.15	0.0020	0.39	1.18	0.06	5.05	0.0020	3.84
			SD	56.24	0.38	0.05	47.69	6.94	0.0066	0.72	0.17	0.01	1.21	0.00	1.86
			CV (%)	34.72	35.05	97.75	23.45	55.58	81.97	69.78	12.63	16.40	18.82	0.00	36.86
678	BT	U	15-30	108.0	1.18	0.021	352.0	12.30	0.002	0.83	0.54	0.054	3.44	0.002	11.10
678	BT	M	15-30	142.0	1.19	0.032	252.0	15.60	0.002	1.08	1.30	0.075	5.26	0.002	9.77
678	BT	L	15-30	120.0	1.01	0.224	458.0	10.00	0.002	1.62	0.86	0.071	8.74	0.002	13.50
680	BT	U	15-30	44.7	0.61	0.035	354.0	5.24	0.002	0.52	0.39	0.038	3.10	0.002	2.27
680	BT	M	15-30	70.5	0.46	0.013	309.0	8.51	0.002	1.66	0.74	0.039	3.55	0.002	2.65
680	BT	L	15-30	86.3	0.48	0.025	262.0	6.86	0.002	1.21	1.03	0.042	5.99	0.002	2.49
681	BT	U	15-30	61.0	0.43	0.021	89.0	7.44	0.002	0.82	0.65	0.033	6.15	0.002	3.64
681	BT	M	15-30	57.6	0.41	0.010	99.9	6.18	0.002	0.73	0.57	0.045	4.58	0.002	3.21
681	BT	L	15-30	75.5	0.558	0.070	138.0	9.96	0.002	1.20	0.75	0.047	6.07	0.002	4.15
684	BT	U	15-30	41.2	0.641	0.025	252.0	5.47	0.002	0.84	0.35	0.024	3.87	0.002	5.32
684	BT	M	15-30	53.5	0.650	0.019	188.0	7.60	0.002	1.03	0.40	0.028	3.06	0.002	5.02
684	BT	L	15-30	139.0	0.824	0.008	69.3	22.20	0.002	1.47	1.78	0.075	4.53	0.002	3.66
687	BT	U	15-30	29.0	0.344	0.010	71.6	7.35	0.002	0.58	0.66	0.045	3.43	0.002	2.80
687	BT	M	15-30	29.7	0.383	0.004	69.2	6.38	0.002	0.36	0.56	0.030	3.98	0.002	3.10
687	BT	L	15-30	60.9	0.675	0.119	227.0	10.20	0.002	1.28	0.52	0.057	10.20	0.002	7.64
688	BT	U	15-30	50.9	0.209	0.018	417.0	20.90	0.002	1.99	0.62	0.027	2.96	0.002	8.79
688	BT	M	15-30	86.2	0.308	0.031	372.0	15.70	0.004	4.14	0.79	0.038	4.54	0.002	9.04
688	BT	L	15-30	195.0	0.403	0.025	191.0	29.90	0.005	2.78	0.95	0.072	7.38	0.002	7.43
692	BT	U	15-30	150.0	2.170	0.062	590.0	10.10	0.012	1.98	0.84	0.040	6.89	0.010	10.30
692	BT	M	15-30	254.0	1.860	0.143	736.0	16.90	0.005	1.07	0.80	0.074	7.82	0.004	10.60
692	BT	L	15-30	329.0	0.270	0.114	470.0	10.90	0.013	1.55	1.20	0.043	21.20	0.004	9.07
703	BT	U	15-30	42.3	0.441	0.008	146.0	11.80	0.004	0.63	0.58	0.023	2.62	0.004	4.41
703	BT	M	15-30	47.3	0.581	0.004	115.0	10.00	0.004	0.46	0.50	0.020	1.79	0.004	3.34
703	BT	L	15-30	146.0	1.460	0.093	292.0	8.35	0.007	3.02	0.67	0.081	8.05	0.002	5.70
			Mean	100.82	0.73	0.05	271.67	11.49	0.0036	1.37	0.75	0.05	5.80	0.0027	6.21
			Max	329.00	2.17	0.22	736.00	29.90	0.0130	4.14	1.78	0.08	21.20	0.0100	13.50
			Min	29.00	0.21	0.004	69.20	5.24	0.0020	0.36	0.35	0.02	1.79	0.0020	2.27
			SD	74.43	0.51	0.05	174.04	6.03	0.0031	0.90	0.32	0.02	3.93	0.0017	3.33
			CV (%)	73.82	69.34	115.73	64.06	52.46	85.49	65.88	43.12	40.44	67.79	65.11	53.71

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Iron ² (mg/kg) (0.006) ⁵	Lead ² (mg/kg) (0.004) ⁵	Lithium ² (mg/kg) (0.002) ⁵	Magnesium ² (mg/kg) (0.1) ⁵	Manganese ² (mg/kg) (0.0004) ⁵	Molybdenum ² (mg/kg) (0.002) ⁵	Nickel ² (mg/kg) (0.002) ⁵	Phosphorus ² (mg/kg) (0.06) ⁵	Selenium ² (mg/kg) (0.008) ⁵	Silicon ² (mg/kg) (0.008) ⁵	Silver ² (mg/kg) (0.002) ⁵	Strontium ² (mg/kg) (0.0002) ⁵
727	AP	U	15-30	127.0	7.110	0.115	494.0	35.40	0.018	3.24	3.09	0.040	16.90	0.010	9.04
727	AP	M	15-30	185.0	1.420	0.165	442.0	32.60	0.008	3.43	2.89	0.074	14.90	0.004	7.86
727	AP	L	15-30	344.0	1.720	0.093	258.0	52.00	0.012	5.08	2.72	0.140	14.30	0.004	5.66
728	AP	U	15-30	53.5	0.332	0.033	333.0	5.75	0.017	0.54	0.34	0.056	3.91	0.010	3.50
728	AP	M	15-30	53.1	0.464	0.068	199.0	15.60	0.004	1.31	0.63	0.084	11.50	0.004	4.94
728	AP	L	15-30	125.0	3.200	0.028	179.0	18.50	0.010	1.54	3.35	0.072	15.40	0.010	5.64
730	AP	U	15-30	16.3	0.347	0.020	268.0	5.74	0.004	1.26	0.28	0.056	7.90	0.004	2.61
730	AP	M	15-30	44.2	0.467	0.010	355.0	5.08	0.014	0.68	0.46	0.110	3.80	0.010	3.35
730	AP	L	15-30	48.7	0.484	0.076	355.0	11.30	0.002	1.43	0.37	0.053	7.22	0.002	2.67
738	AP	U	15-30	39.8	0.452	0.045	297.0	35.80	0.004	1.96	0.33	0.064	4.25	0.004	6.44
738	AP	M	15-30	60.4	0.716	0.006	170.0	13.10	0.013	1.20	0.25	0.037	3.00	0.004	4.11
738	AP	L	15-30	79.2	0.452	0.014	171.0	26.60	0.010	1.69	0.30	0.040	3.58	0.010	3.99
739	AP	U	15-30	13.9	0.294	0.041	250.0	6.77	0.004	2.23	0.27	0.054	13.10	0.004	5.20
739	AP	M	15-30	18.2	0.287	0.038	166.0	7.32	0.002	1.21	0.34	0.034	6.96	0.002	3.86
739	AP	L	15-30	19.8	0.270	0.018	162.0	10.80	0.004	1.00	0.24	0.020	4.49	0.004	4.31
740	AP	U	15-30	31.0	0.565	0.031	404.0	13.00	0.007	2.11	0.26	0.036	3.99	0.004	6.68
740	AP	M	15-30	50.6	0.576	0.013	216.0	23.50	0.004	1.85	0.41	0.037	5.08	0.004	4.96
740	AP	L	15-30	51.5	1.180	0.521	609.0	9.36	0.030	1.91	1.36	0.061	28.00	0.004	10.60
743	AP	U	15-30	8.2	0.378	0.086	611.0	7.07	0.004	1.04	0.18	0.020	11.50	0.004	7.48
743	AP	M	15-30	38.3	0.438	0.056	566.0	21.00	0.004	2.74	0.30	0.054	7.94	0.004	7.17
743	AP	L	15-30	59.4	0.545	0.011	340.0	28.70	0.005	1.79	0.31	0.031	3.38	0.004	5.04
744	AP	U	15-30	76.0	0.718	0.020	229.0	13.40	0.004	1.86	0.84	0.020	5.64	0.004	5.13
744	AP	M	15-30	101.0	0.894	0.021	142.0	15.90	0.002	2.79	0.88	0.028	7.66	0.002	5.14
744	AP	L	15-30	222.0	0.838	0.031	162.0	18.90	0.007	4.22	1.10	0.110	8.59	0.004	4.66
746	AP	U	15-30	39.0	0.514	0.037	177.0	16.70	0.004	1.64	1.10	0.050	12.60	0.004	3.05
746	AP	M	15-30	68.9	0.648	0.013	183.0	14.60	0.004	1.54	0.60	0.059	8.56	0.004	3.31
746	AP	L	15-30	130.0	1.130	0.015	166.0	26.50	0.004	2.12	0.79	0.077	9.65	0.004	3.01
			Mean	77.93	0.98	0.06	292.74	18.18	0.0076	1.98	0.89	0.06	9.03	0.0049	5.16
			Max	344.00	7.11	0.52	611.00	52.00	0.0300	5.08	3.35	0.14	28.00	0.0100	10.60
			Min	8.21	0.27	0.01	142.00	5.08	0.0020	0.54	0.18	0.02	3.00	0.0020	2.61
			SD	74.09	1.37	0.10	144.44	11.40	0.0064	1.05	0.96	0.03	5.64	0.0026	1.98
			CV (%)	95.08	139.61	165.05	49.34	62.71	83.96	52.83	107.77	52.08	62.43	52.41	38.41

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Iron ² (mg/kg) (0.006) ⁵	Lead ² (mg/kg) (0.004) ⁵	Lithium ² (mg/kg) (0.002) ⁵	Magnesium ² (mg/kg) (0.1) ⁵	Manganese ² (mg/kg) (0.0004) ⁵	Molybdenum ² (mg/kg) (0.002) ⁵	Nickel ² (mg/kg) (0.002) ⁵	Phosphorus ² (mg/kg) (0.06) ⁵	Selenium ² (mg/kg) (0.008) ⁵	Silicon ² (mg/kg) (0.008) ⁵	Silver ² (mg/kg) (0.002) ⁵	Strontium ² (mg/kg) (0.0002) ⁵
769	MM	U	15-30	60.7	0.493	0.119	327.0	19.50	0.005	1.16	0.81	0.050	6.40	0.002	5.36
769	MM	M	15-30	121.0	0.490	0.049	115.0	30.70	0.005	1.58	1.19	0.076	11.00	0.002	3.61
769	MM	L	15-30	127.0	0.722	0.047	128.0	21.20	0.010	1.17	1.50	0.098	8.74	0.010	3.60
781	MM	U	15-30	91.4	1.140	0.049	305.0	32.10	0.012	1.44	0.90	0.072	9.21	0.008	5.41
781	MM	M	15-30	99.9	1.060	0.054	305.0	32.90	0.010	2.15	0.79	0.130	9.14	0.010	5.46
781	MM	L	15-30	130.0	1.400	0.047	349.0	43.20	0.011	2.05	1.10	0.130	10.10	0.004	4.45
786	MM	U	15-30	21.5	0.371	0.028	191.0	5.17	0.002	1.88	0.60	0.030	10.40	0.002	4.16
786	MM	M	15-30	24.3	0.324	0.023	144.0	6.15	0.002	1.20	0.62	0.038	10.10	0.002	4.39
786	MM	L	15-30	130.0	0.725	0.010	58.1	5.37	0.010	0.57	0.88	0.210	2.94	0.010	2.07
791	MM	U	15-30	31.8	0.555	0.079	172.0	14.70	0.002	2.00	0.50	0.037	9.22	0.002	3.91
791	MM	M	15-30	26.6	0.559	0.049	186.0	6.99	0.002	1.54	0.26	0.040	10.90	0.002	5.55
791	MM	L	15-30	220.0	1.220	0.030	109.0	36.80	0.003	2.97	0.52	0.127	4.87	0.002	2.82
793	MM	U	15-30	19.7	0.473	0.044	154.0	10.30	0.002	0.89	0.38	0.069	13.40	0.002	3.09
793	MM	M	15-30	16.7	0.393	0.037	144.0	6.07	0.002	0.88	0.31	0.062	8.54	0.002	2.69
793	MM	L	15-30	31.7	0.451	0.032	147.0	13.60	0.002	1.18	0.54	0.056	7.06	0.002	2.21
			Mean	76.82	0.69	0.05	188.94	18.98	0.0053	1.51	0.73	0.08	8.80	0.0041	3.92
			Max	220.00	1.40	0.12	349.00	43.20	0.0120	2.97	1.50	0.21	13.40	0.0100	5.55
			Min	16.70	0.32	0.01	58.10	5.17	0.0020	0.57	0.26	0.03	2.94	0.0020	2.07
			SD	60.30	0.35	0.03	89.29	13.06	0.0040	0.62	0.35	0.05	2.61	0.0034	1.19
			CV (%)	78.50	49.91	55.15	47.26	68.77	75.22	40.81	47.74	60.44	29.67	82.74	30.38
798	FG	U	15-30	57.1	0.618	0.020	131.0	16.70	0.002	1.39	0.60	0.071	7.61	0.002	2.97
798	FG	M	15-30	41.9	0.555	0.024	138.0	15.10	0.002	1.33	0.56	0.082	8.47	0.002	3.17
798	FG	L	15-30	83.1	0.888	0.010	161.0	17.00	0.012	1.05	0.80	0.170	3.74	0.010	3.24
800	FG	U	15-30	93.6	1.270	0.083	243.0	45.30	0.012	3.72	0.69	0.088	8.01	0.010	3.91
800	FG	M	15-30	102.0	1.360	0.107	379.0	47.50	0.019	4.05	0.74	0.230	7.93	0.010	4.86
800	FG	L	15-30	97.7	1.300	0.103	315.0	38.50	0.010	3.88	0.81	0.110	8.71	0.010	5.12
			Mean	79.23	1.00	0.06	227.83	30.02	0.0095	2.57	0.70	0.13	7.41	0.0073	3.88
			Max	102.00	1.36	0.11	379.00	47.50	0.0190	4.05	0.81	0.23	8.71	0.0100	5.12
			Min	41.90	0.56	0.01	131.00	15.10	0.0020	1.05	0.56	0.07	3.74	0.0020	2.97
			SD	24.35	0.36	0.04	102.56	15.37	0.0066	1.45	0.10	0.06	1.84	0.0041	0.92
			CV (%)	30.73	36.08	77.15	45.02	51.19	69.11	56.30	14.76	49.78	24.84	56.33	23.75

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Iron ² (mg/kg) (0.006) ⁵	Lead ² (mg/kg) (0.004) ⁵	Lithium ² (mg/kg) (0.002) ⁵	Magnesium ² (mg/kg) (0.1) ⁵	Manganese ² (mg/kg) (0.0004) ⁵	Molybdenum ² (mg/kg) (0.002) ⁵	Nickel ² (mg/kg) (0.002) ⁵	Phosphorus ² (mg/kg) (0.06) ⁵	Selenium ² (mg/kg) (0.008) ⁵	Silicon ² (mg/kg) (0.008) ⁵	Silver ² (mg/kg) (0.002) ⁵	Strontium ² (mg/kg) (0.0002) ⁵
804	MG	U	15-30	37.8	0.347	0.106	174.0	9.20	0.002	1.55	0.52	0.080	7.67	0.002	4.32
804	MG	M	15-30	25.3	0.302	0.143	211.0	9.02	0.003	1.15	0.49	0.072	11.80	0.002	5.00
804	MG	L	15-30	66.7	0.446	0.176	284.0	11.50	0.004	1.72	0.71	0.079	6.42	0.002	4.71
806	MG	U	15-30	31.6	0.398	0.142	358.0	6.66	0.004	1.30	0.28	0.071	9.02	0.002	5.38
806	MG	M	15-30	52.5	0.360	0.131	255.0	12.00	0.002	1.41	0.46	0.085	5.51	0.002	4.17
806	MG	L	15-30	76.6	0.541	0.089	223.0	15.10	0.002	1.46	0.59	0.047	4.34	0.002	4.74
809	MG	U	15-30	13.7	0.413	0.047	288.0	9.92	0.002	0.97	0.30	0.034	17.20	0.002	2.98
809	MG	M	15-30	22.3	0.466	0.066	352.0	12.60	0.002	1.82	0.37	0.035	9.88	0.002	3.45
809	MG	L	15-30	36.8	0.297	0.055	217.0	12.30	0.002	1.24	0.48	0.039	10.60	0.002	3.48
812	MG	U	15-30	18.5	0.779	0.214	384.0	10.20	0.003	1.28	0.14	0.036	14.90	0.002	10.10
812	MG	M	15-30	21.0	0.674	0.248	479.0	10.40	0.005	1.27	0.20	0.036	13.90	0.002	8.86
812	MG	L	15-30	30.7	0.880	0.255	665.0	12.50	0.008	1.51	0.32	0.045	17.90	0.002	8.56
815	MG	U	15-30	8.5	0.368	0.045	178.0	4.50	0.002	0.68	0.17	0.031	13.30	0.002	3.94
815	MG	M	15-30	12.1	0.332	0.041	136.0	6.29	0.002	1.51	0.31	0.042	15.90	0.002	3.20
815	MG	L	15-30	162.0	0.872	0.056	219.0	20.50	0.009	1.55	0.64	0.086	9.91	0.002	3.50
823	MG	U	15-30	9.1	3.200	0.074	217.0	11.90	0.011	1.20	0.90	0.063	16.70	0.002	3.62
823	MG	M	15-30	19.9	0.443	0.069	244.0	23.10	0.003	1.14	0.28	0.068	19.40	0.002	3.69
823	MG	L	15-30	23.4	0.432	0.055	225.0	26.80	0.002	1.19	0.36	0.063	18.50	0.002	3.40
1828	MG	U	15-30	6.6	0.296	0.036	157.0	5.11	0.002	0.64	0.17	0.053	13.40	0.002	3.51
1828	MG	M	15-30	23.1	0.529	0.089	453.0	13.20	0.004	1.48	0.22	0.052	12.00	0.004	4.85
1828	MG	L	15-30	19.9	0.502	0.074	258.0	19.40	0.002	1.40	0.30	0.062	15.10	0.002	3.64
2828	MG	U	15-30	25.6	0.551	0.089	250.0	10.80	0.002	2.12	0.40	0.045	9.34	0.002	3.62
2828	MG	M	15-30	40.7	0.488	0.071	231.0	23.50	0.002	2.22	0.37	0.068	9.10	0.002	3.36
2828	MG	L	15-30	31.2	0.613	0.074	229.0	20.80	0.007	2.36	0.34	0.060	9.68	0.002	3.29
			Mean	33.98	0.61	0.10	278.63	13.22	0.0036	1.42	0.39	0.06	12.14	0.0021	4.56
			Max	162.00	3.20	0.26	665.00	26.80	0.0110	2.36	0.90	0.09	19.40	0.0040	10.10
			Min	6.55	0.30	0.04	136.00	4.50	0.0020	0.64	0.14	0.03	4.34	0.0020	2.98
			SD	32.26	0.58	0.06	119.49	6.07	0.0026	0.42	0.18	0.02	4.23	0.0004	1.91
			CV (%)	94.94	95.41	62.74	42.88	45.94	70.83	29.39	47.58	30.85	34.86	19.60	41.82

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Sulphur ² (mg/kg) (0.02) ⁵	Thallium ² (mg/kg) (0.008) ⁵	Tin ² (mg/kg) (0.006) ⁵	Titanium ² (mg/kg) (0.0008) ⁵	Vanadium ² (mg/kg) (0.002) ⁵	Zinc ² (mg/kg) (0.001) ⁵	Antimony ³ (mg/kg) (0.02) ⁵	Arsenic ³ (mg/kg) (0.04) ⁵	Boron ³ (mg/kg) (0.008) ⁵	Selenium ³ (mg/kg) (0.02) ⁵	Cobalt ³ (mg/kg) (0.003) ⁵	Copper ³ (mg/kg) (0.004) ⁵	Lead ³ (mg/kg) (0.008) ⁵
586	PL	U	15-30	22.90	0.016	0.042	0.0017	0.004	0.73	0.07	0.10	1.370	0.02	0.022	0.185	0.009
586	PL	M	15-30	24.50	0.008	0.033	0.0011	0.002	0.93	0.02	0.04	1.590	0.02	0.008	0.139	0.008
586	PL	L	15-30	25.50	0.008	0.042	0.0014	0.002	4.39	0.04	0.08	1.310	0.08	0.006	0.146	0.022
588	PL	U	15-30	17.50	0.008	0.041	0.0015	0.002	0.57	0.02	0.05	1.110	0.02	0.015	0.172	0.031
588	PL	M	15-30	24.90	0.008	0.043	0.0024	0.002	4.30	0.03	0.04	1.250	0.02	0.021	0.100	0.008
588	PL	L	15-30	15.90	0.008	0.055	0.0032	0.005	3.11	0.02	0.04	1.000	0.04	0.015	0.061	0.008
590	PL	U	15-30	12.20	0.008	0.042	0.0008	0.002	0.32	0.02	0.05	0.718	0.02	0.008	0.066	0.008
590	PL	M	15-30	11.60	0.008	0.046	0.0008	0.002	0.71	0.02	0.04	0.719	0.02	0.004	0.072	0.014
590	PL	L	15-30	10.40	0.008	0.041	0.0026	0.002	0.75	0.02	0.04	0.783	0.02	0.012	0.100	0.010
591	PL	U	15-30	10.00	0.008	0.033	0.0011	0.002	0.23	0.02	0.04	0.704	0.02	0.008	0.094	0.008
591	PL	M	15-30	11.20	0.008	0.032	0.0008	0.002	0.88	0.02	0.05	0.708	0.02	0.010	0.084	0.019
591	PL	L	15-30	24.70	0.016	0.010	0.0028	0.004	16.60	0.02	0.06	2.160	0.02	0.038	0.106	0.008
592	PL	U	15-30	17.60	0.008	0.022	0.0008	0.002	1.34	0.02	0.05	0.119	0.03	0.003	0.156	0.008
592	PL	M	15-30	18.60	0.008	0.035	0.0008	0.002	1.67	0.02	0.04	0.181	0.05	0.005	0.167	0.008
592	PL	L	15-30	26.70	0.016	0.039	0.0022	0.010	15.40	0.02	0.04	0.497	0.05	0.009	0.082	0.008
593	PL	U	15-30	16.20	0.008	0.028	0.0063	0.002	1.00	0.08	0.19	2.880	0.02	0.068	0.454	0.008
593	PL	M	15-30	12.80	0.008	0.036	0.0028	0.002	2.36	0.04	0.08	1.720	0.03	0.007	0.193	0.016
593	PL	L	15-30	20.00	0.016	0.053	0.0029	0.004	1.37	0.05	0.17	1.750	0.04	0.027	0.256	0.016
594	PL	U	15-30	24.20	0.008	0.057	0.0104	0.002	0.79	0.04	0.08	0.631	0.03	0.008	0.031	0.058
594	PL	M	15-30	21.10	0.008	0.045	0.0037	0.002	0.60	0.04	0.08	0.552	0.06	0.008	0.034	0.040
594	PL	L	15-30	24.90	0.008	0.049	0.0017	0.002	0.99	0.04	0.08	0.498	0.04	0.008	0.052	0.037
595	PL	U	15-30	31.60	0.016	0.053	0.0046	0.004	1.38	0.10	0.20	2.070	0.08	0.010	0.252	0.150
595	PL	M	15-30	35.10	0.008	0.031	0.0096	0.002	3.03	0.08	0.10	1.610	0.04	0.022	0.149	0.020
595	PL	L	15-30	40.60	0.016	0.026	0.0038	0.004	1.28	0.04	0.08	1.010	0.07	0.007	0.125	0.110
599	PL	U	15-30	14.80	0.016	0.033	0.0038	0.004	2.02	0.09	0.13	2.380	0.02	0.045	0.293	0.008
599	PL	M	15-30	15.10	0.016	0.032	0.0025	0.004	2.04	0.15	0.08	2.270	0.06	0.048	0.338	0.020
599	PL	L	15-30	15.90	0.016	0.055	0.0036	0.004	2.23	0.15	0.11	2.430	0.03	0.025	0.247	0.016
			Mean	20.24	0.0107	0.04	0.0030	0.0030	2.63	0.05	0.08	1.26	0.04	0.02	0.15	0.03
			Max	40.60	0.0160	0.06	0.0104	0.0100	16.60	0.15	0.20	2.88	0.08	0.07	0.45	0.15
			Min	10.00	0.0080	0.01	0.0008	0.0020	0.23	0.02	0.04	0.12	0.02	0.00	0.03	0.01
			SD	7.71	0.0038	0.01	0.0024	0.0017	4.01	0.04	0.05	0.75	0.02	0.02	0.10	0.03
			CV (%)	38.07	36.03	28.33	82.71	57.74	152.43	80.56	58.34	59.35	54.18	91.59	65.10	132.15

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Sulphur ² (mg/kg) (0.02) ⁵	Thallium ² (mg/kg) (0.008) ⁵	Tin ² (mg/kg) (0.006) ⁵	Titanium ² (mg/kg) (0.0008) ⁵	Vanadium ² (mg/kg) (0.002) ⁵	Zinc ² (mg/kg) (0.001) ⁵	Antimony ³ (mg/kg) (0.02) ⁵	Arsenic ³ (mg/kg) (0.04) ⁵	Boron ³ (mg/kg) (0.008) ⁵	Selenium ³ (mg/kg) (0.02) ⁵	Cobalt ³ (mg/kg) (0.003) ⁵	Copper ³ (mg/kg) (0.004) ⁵	Lead ³ (mg/kg) (0.008) ⁵
615	MB	U	15-30	25.70	0.008	0.058	0.0127	0.007	14.50	0.05	0.08	1.460	0.05	0.021	0.145	0.024
615	MB	M	15-30	19.60	0.008	0.059	0.0045	0.002	7.07	0.05	0.04	0.856	0.02	0.036	0.085	0.008
615	MB	L	15-30	43.60	0.008	0.065	0.0071	0.009	4.99	0.04	0.08	1.760	0.13	0.010	0.099	0.016
			Mean	29.63	0.0080	0.06	0.0081	0.0060	8.85	0.05	0.07	1.36	0.07	0.02	0.11	0.02
			Max	43.60	0.0080	0.07	0.0127	0.0090	14.50	0.05	0.08	1.76	0.13	0.04	0.15	0.02
			Min	19.60	0.0080	0.06	0.0045	0.0020	4.99	0.04	0.04	0.86	0.02	0.01	0.09	0.01
			SD	12.47	0.00	0.004	0.0042	0.0036	5.00	0.01	0.02	0.46	0.06	0.01	0.03	0.01
			CV (%)	42.09	0.00	6.24	51.73	60.09	56.47	12.37	34.64	33.89	85.29	58.44	28.62	50.00
678	BT	U	15-30	20.80	0.008	0.057	0.0060	0.002	1.170	0.02	0.04	0.958	0.02	0.014	0.039	0.008
678	BT	M	15-30	31.00	0.008	0.062	0.0084	0.002	4.830	0.02	0.04	0.794	0.05	0.014	0.034	0.008
678	BT	L	15-30	23.20	0.008	0.038	0.0021	0.002	5.910	0.02	0.04	1.460	0.02	0.008	0.045	0.008
680	BT	U	15-30	12.00	0.008	0.060	0.0042	0.002	0.286	0.05	0.04	0.679	0.02	0.028	0.088	0.008
680	BT	M	15-30	12.10	0.008	0.087	0.0042	0.002	1.300	0.02	0.04	0.787	0.02	0.016	0.046	0.008
680	BT	L	15-30	13.00	0.008	0.070	0.0038	0.004	2.440	0.02	0.04	0.927	0.02	0.018	0.035	0.008
681	BT	U	15-30	10.80	0.008	0.075	0.0027	0.002	1.010	0.02	0.04	0.514	0.02	0.008	0.034	0.008
681	BT	M	15-30	11.40	0.008	0.074	0.0024	0.002	0.463	0.02	0.04	0.417	0.02	0.010	0.043	0.008
681	BT	L	15-30	11.80	0.008	0.075	0.0015	0.002	1.25	0.02	0.04	0.643	0.06	0.009	0.032	0.012
684	BT	U	15-30	16.30	0.008	0.066	0.0011	0.002	0.24	0.07	0.25	0.696	0.02	0.076	0.304	0.027
684	BT	M	15-30	14.40	0.008	0.062	0.0020	0.002	0.54	0.03	0.04	0.421	0.02	0.025	0.050	0.015
684	BT	L	15-30	17.00	0.008	0.054	0.0085	0.005	5.67	0.02	0.08	0.691	0.02	0.013	0.054	0.008
687	BT	U	15-30	11.90	0.008	0.080	0.0034	0.003	0.22	0.02	0.06	0.315	0.02	0.007	0.041	0.008
687	BT	M	15-30	13.30	0.008	0.075	0.0037	0.002	0.29	0.02	0.05	0.382	0.02	0.008	0.054	0.008
687	BT	L	15-30	28.10	0.008	0.086	0.0013	0.006	1.85	0.02	0.05	0.874	0.02	0.009	0.043	0.008
688	BT	U	15-30	15.30	0.008	0.066	0.0034	0.002	0.92	0.02	0.07	0.954	0.02	0.005	0.056	0.008
688	BT	M	15-30	18.50	0.008	0.061	0.0045	0.002	1.40	0.02	0.05	0.915	0.02	0.007	0.052	0.013
688	BT	L	15-30	14.40	0.008	0.060	0.0058	0.002	10.80	0.02	0.04	1.130	0.02	0.010	0.046	0.008
692	BT	U	15-30	19.60	0.095	0.060	0.0094	0.010	2.56	0.04	0.13	1.470	0.03	0.007	0.106	0.020
692	BT	M	15-30	26.20	0.016	0.033	0.0064	0.004	1.92	0.04	0.09	1.080	0.06	0.006	0.088	0.020
692	BT	L	15-30	25.00	0.016	0.047	0.0058	0.004	0.52	0.04	0.08	0.803	0.03	0.010	0.034	0.020
703	BT	U	15-30	13.90	0.016	0.076	0.0042	0.004	0.00	0.02	0.07	0.320	0.02	0.011	0.059	0.008
703	BT	M	15-30	12.60	0.016	0.100	0.0064	0.004	0.00	0.02	0.04	0.271	0.02	0.008	0.059	0.011
703	BT	L	15-30	27.90	0.008	0.058	0.0040	0.046	2.53	0.02	0.04	0.524	0.02	0.003	0.070	0.008
			Mean	17.52	0.0130	0.07	0.0044	0.0049	2.01	0.03	0.06	0.75	0.03	0.01	0.06	0.01
			Max	31.00	0.0950	0.10	0.0094	0.0460	10.80	0.07	0.25	1.47	0.06	0.08	0.30	0.03
			Min	10.80	0.0080	0.03	0.0011	0.0020	0.00	0.02	0.04	0.27	0.02	0.003	0.03	0.01
			SD	6.22	0.0177	0.02	0.0023	0.0089	2.52	0.01	0.05	0.33	0.01	0.01	0.05	0.01
			CV (%)	35.49	136.87	23.04	52.60	182.01	125.63	48.72	73.28	44.15	49.19	105.55	86.81	48.47

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Sulphur ² (mg/kg) (0.02) ⁵	Thallium ² (mg/kg) (0.008) ⁵	Tin ² (mg/kg) (0.006) ⁵	Titanium ² (mg/kg) (0.0008) ⁵	Vanadium ² (mg/kg) (0.002) ⁵	Zinc ² (mg/kg) (0.001) ⁵	Antimony ³ (mg/kg) (0.02) ⁵	Arsenic ³ (mg/kg) (0.04) ⁵	Boron ³ (mg/kg) (0.008) ⁵	Selenium ³ (mg/kg) (0.02) ⁵	Cobalt ³ (mg/kg) (0.003) ⁵	Copper ³ (mg/kg) (0.004) ⁵	Lead ³ (mg/kg) (0.008) ⁵
727	AP	U	15-30	41.40	0.110	0.059	0.0072	0.010	12.10	0.04	0.08	1.330	0.03	0.006	0.067	0.020
727	AP	M	15-30	36.50	0.016	0.088	0.0170	0.008	6.07	0.02	0.04	1.420	0.02	0.004	0.056	0.008
727	AP	L	15-30	48.40	0.016	0.046	0.0215	0.006	10.20	0.04	0.08	1.310	0.03	0.013	0.069	0.020
728	AP	U	15-30	15.80	0.040	0.100	0.0057	0.010	0.70	0.02	0.04	0.922	0.04	0.007	0.071	0.012
728	AP	M	15-30	20.00	0.016	0.060	0.0028	0.004	2.74	0.02	0.06	1.900	0.02	0.004	0.067	0.015
728	AP	L	15-30	27.80	0.040	0.067	0.0350	0.016	23.30	0.04	0.08	3.220	0.03	0.007	0.107	0.020
730	AP	U	15-30	17.50	0.016	0.088	0.0020	0.007	0.23	0.02	0.04	0.322	0.02	0.003	0.130	0.008
730	AP	M	15-30	16.90	0.040	0.063	0.0057	0.010	0.46	0.02	0.04	0.566	0.02	0.004	0.072	0.008
730	AP	L	15-30	12.10	0.008	0.072	0.0008	0.002	0.56	0.02	0.11	0.778	0.03	0.015	0.071	0.020
738	AP	U	15-30	20.10	0.016	0.045	0.0017	0.004	1.34	0.02	0.06	0.845	0.02	0.008	0.080	0.008
738	AP	M	15-30	21.10	0.016	0.097	0.0082	0.004	1.88	0.02	0.06	0.475	0.03	0.008	0.046	0.014
738	AP	L	15-30	21.00	0.040	0.065	0.0100	0.010	3.68	0.02	0.05	0.657	0.02	0.007	0.056	0.008
739	AP	U	15-30	13.40	0.016	0.065	0.0020	0.004	0.47	0.02	0.05	0.401	0.02	0.005	0.071	0.008
739	AP	M	15-30	10.80	0.008	0.068	0.0012	0.003	0.32	0.02	0.05	0.517	0.03	0.003	0.037	0.008
739	AP	L	15-30	12.30	0.016	0.079	0.0020	0.004	0.38	0.02	0.13	0.427	0.03	0.014	0.054	0.027
740	AP	U	15-30	20.00	0.016	0.085	0.0034	0.004	0.39	0.02	0.07	0.599	0.02	0.009	0.083	0.008
740	AP	M	15-30	20.70	0.016	0.051	0.0030	0.004	3.06	0.02	0.04	1.420	0.02	0.005	0.054	0.008
740	AP	L	15-30	1150.00	0.016	0.078	0.0051	0.098	6.63	0.02	0.13	1.630	0.02	0.011	0.122	0.008
743	AP	U	15-30	14.20	0.016	0.044	0.0020	0.004	0.26	0.02	0.04	0.483	0.02	0.005	0.094	0.008
743	AP	M	15-30	18.50	0.016	0.072	0.0018	0.004	0.85	0.02	0.04	0.344	0.02	0.005	0.120	0.008
743	AP	L	15-30	15.80	0.016	0.073	0.0088	0.004	2.15	0.02	0.06	0.541	0.03	0.007	0.044	0.008
744	AP	U	15-30	17.00	0.016	0.050	0.0019	0.004	0.86	0.02	0.05	0.765	0.04	0.006	0.047	0.008
744	AP	M	15-30	16.60	0.008	0.045	0.0038	0.002	1.94	0.02	0.06	0.933	0.02	0.005	0.048	0.008
744	AP	L	15-30	21.80	0.016	0.029	0.0061	0.004	6.91	0.02	0.07	1.110	0.02	0.008	0.064	0.008
746	AP	U	15-30	15.70	0.016	0.073	0.0023	0.004	1.19	0.02	0.06	0.550	0.02	0.005	0.079	0.008
746	AP	M	15-30	14.50	0.016	0.055	0.0052	0.004	1.56	0.02	0.07	1.010	0.02	0.003	0.060	0.008
746	AP	L	15-30	17.30	0.016	0.041	0.0160	0.004	2.45	0.02	0.06	1.090	0.02	0.007	0.039	0.008
			Mean	62.12	0.0221	0.07	0.0067	0.0090	3.43	0.02	0.06	0.95	0.02	0.01	0.07	0.01
			Max	1150.00	0.1100	0.10	0.0350	0.0980	23.30	0.04	0.13	3.22	0.04	0.02	0.13	0.03
			Min	10.80	0.0080	0.03	0.0008	0.0020	0.23	0.02	0.04	0.32	0.02	0.003	0.04	0.01
			SD	217.59	0.0199	0.02	0.0077	0.0181	5.04	0.01	0.03	0.62	0.01	0.003	0.03	0.01
			CV (%)	350.29	89.92	27.56	113.69	201.69	146.94	28.82	39.70	65.53	26.20	47.47	35.61	49.19

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Sulphur ² (mg/kg) (0.02) ⁵	Thallium ² (mg/kg) (0.008) ⁵	Tin ² (mg/kg) (0.006) ⁵	Titanium ² (mg/kg) (0.0008) ⁵	Vanadium ² (mg/kg) (0.002) ⁵	Zinc ² (mg/kg) (0.001) ⁵	Antimony ³ (mg/kg) (0.02) ⁵	Arsenic ³ (mg/kg) (0.04) ⁵	Boron ³ (mg/kg) (0.008) ⁵	Selenium ³ (mg/kg) (0.02) ⁵	Cobalt ³ (mg/kg) (0.003) ⁵	Copper ³ (mg/kg) (0.004) ⁵	Lead ³ (mg/kg) (0.008) ⁵
769	MM	U	15-30	25.00	0.008	0.056	0.0047	0.002	1.11	0.02	0.06	0.776	0.04	0.012	0.044	0.008
769	MM	M	15-30	23.80	0.008	0.055	0.0307	0.009	4.88	0.02	0.13	0.791	0.03	0.023	0.062	0.018
769	MM	L	15-30	29.70	0.040	0.100	0.0501	0.010	2.33	0.02	0.06	0.715	0.02	0.019	0.061	0.008
781	MM	U	15-30	25.20	0.032	0.100	0.0150	0.008	1.89	0.04	0.12	1.010	0.03	0.022	0.067	0.020
781	MM	M	15-30	26.20	0.040	0.099	0.0110	0.010	1.95	0.04	0.12	0.947	0.04	0.014	0.063	0.020
781	MM	L	15-30	26.90	0.016	0.076	0.0247	0.008	2.36	0.04	0.08	1.010	0.04	0.020	0.088	0.020
786	MM	U	15-30	10.90	0.008	0.079	0.0008	0.003	0.78	0.02	0.06	0.396	0.02	0.012	0.119	0.010
786	MM	M	15-30	8.73	0.008	0.082	0.0015	0.006	0.58	0.02	0.15	0.568	0.02	0.018	0.080	0.028
786	MM	L	15-30	14.70	0.040	0.110	0.0370	0.010	1.01	0.02	0.06	0.361	0.02	0.016	0.048	0.008
791	MM	U	15-30	8.35	0.008	0.056	0.0008	0.002	0.33	0.02	0.08	0.559	0.02	0.006	0.084	0.010
791	MM	M	15-30	8.22	0.008	0.057	0.0008	0.009	0.36	0.02	0.04	0.563	0.02	0.007	0.142	0.008
791	MM	L	15-30	10.60	0.008	0.038	0.0037	0.002	4.54	0.02	0.19	0.618	0.02	0.037	0.123	0.036
793	MM	U	15-30	9.62	0.008	0.056	0.0008	0.016	0.76	0.04	0.08	0.530	0.03	0.006	0.108	0.016
793	MM	M	15-30	8.12	0.008	0.064	0.0008	0.013	0.29	0.02	0.04	0.440	0.02	0.009	0.090	0.008
793	MM	L	15-30	9.34	0.008	0.054	0.0008	0.004	0.54	0.02	0.17	0.699	0.03	0.019	0.087	0.040
			Mean	16.36	0.0165	0.07	0.0122	0.0075	1.58	0.03	0.10	0.67	0.03	0.02	0.08	0.02
			Max	29.70	0.0400	0.11	0.0501	0.0160	4.88	0.04	0.19	1.01	0.04	0.04	0.14	0.04
			Min	8.12	0.0080	0.04	0.0008	0.0020	0.29	0.02	0.04	0.36	0.02	0.01	0.04	0.01
			SD	8.50	0.0137	0.02	0.0160	0.0042	1.46	0.01	0.05	0.21	0.01	0.01	0.03	0.01
			CV (%)	51.95	82.74	30.40	130.97	56.79	92.16	36.14	49.61	31.53	30.62	50.94	33.81	61.02
798	FG	U	15-30	12.30	0.008	0.071	0.0054	0.004	1.09	0.02	0.06	1.450	0.02	0.006	0.081	0.011
798	FG	M	15-30	10.50	0.008	0.053	0.0027	0.006	1.03	0.02	0.11	1.610	0.05	0.007	0.063	0.023
798	FG	L	15-30	13.80	0.040	0.030	0.0040	0.010	1.75	0.02	0.12	0.933	0.04	0.017	0.088	0.019
800	FG	U	15-30	10.00	0.040	0.039	0.0040	0.010	1.47	0.02	0.05	1.160	0.03	0.003	0.044	0.016
800	FG	M	15-30	10.70	0.040	0.076	0.0040	0.010	1.59	0.02	0.09	1.090	0.05	0.003	0.036	0.008
800	FG	L	15-30	10.50	0.091	0.030	0.0040	0.010	1.93	0.02	0.07	0.985	0.04	0.003	0.059	0.012
			Mean	11.30	0.0378	0.05	0.0040	0.0083	1.48	0.02	0.08	1.20	0.04	0.01	0.06	0.01
			Max	13.80	0.0910	0.08	0.0054	0.0100	1.93	0.02	0.12	1.61	0.05	0.02	0.09	0.02
			Min	10.00	0.0080	0.03	0.0027	0.0040	1.03	0.02	0.05	0.93	0.02	0.00	0.04	0.01
			SD	1.45	0.0304	0.02	0.0009	0.0027	0.36	0.00	0.03	0.27	0.01	0.01	0.02	0.01
			CV (%)	12.87	80.35	40.60	21.27	31.90	24.27	0.00	33.66	22.33	30.50	83.56	32.72	37.52

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Sulphur ² (mg/kg) (0.02) ⁵	Thallium ² (mg/kg) (0.008) ⁵	Tin ² (mg/kg) (0.006) ⁵	Titanium ² (mg/kg) (0.0008) ⁵	Vanadium ² (mg/kg) (0.002) ⁵	Zinc ² (mg/kg) (0.001) ⁵	Antimony ³ (mg/kg) (0.02) ⁵	Arsenic ³ (mg/kg) (0.04) ⁵	Boron ³ (mg/kg) (0.008) ⁵	Selenium ³ (mg/kg) (0.02) ⁵	Cobalt ³ (mg/kg) (0.003) ⁵	Copper ³ (mg/kg) (0.004) ⁵	Lead ³ (mg/kg) (0.008) ⁵
804	MG	U	15-30	9.03	0.008	0.059	0.0008	0.002	0.55	0.02	0.10	0.778	0.05	0.007	0.088	0.023
804	MG	M	15-30	10.50	0.008	0.075	0.0008	0.003	0.42	0.02	0.09	0.675	0.05	0.010	0.108	0.021
804	MG	L	15-30	14.30	0.008	0.061	0.0026	0.004	1.35	0.02	0.07	0.829	0.07	0.016	0.179	0.008
806	MG	U	15-30	14.80	0.008	0.050	0.0008	0.003	0.44	0.02	0.07	0.773	0.03	0.009	0.151	0.008
806	MG	M	15-30	13.70	0.008	0.063	0.0011	0.002	0.78	0.02	0.19	0.680	0.05	0.029	0.105	0.033
806	MG	L	15-30	18.60	0.008	0.049	0.0053	0.002	1.28	0.02	0.16	0.793	0.02	0.023	0.080	0.039
809	MG	U	15-30	10.20	0.008	0.061	0.0009	0.053	0.50	0.02	0.06	0.756	0.02	0.010	0.156	0.008
809	MG	M	15-30	9.39	0.008	0.054	0.0008	0.013	0.49	0.02	0.05	0.682	0.02	0.003	0.152	0.008
809	MG	L	15-30	10.10	0.008	0.062	0.0050	0.003	0.58	0.02	0.11	0.628	0.05	0.004	0.080	0.037
812	MG	U	15-30	61.40	0.008	0.048	0.0008	0.002	0.39	0.02	0.04	0.713	0.02	0.008	0.177	0.010
812	MG	M	15-30	122.00	0.008	0.049	0.0008	0.003	0.41	0.02	0.04	0.657	0.05	0.006	0.156	0.008
812	MG	L	15-30	70.20	0.008	0.055	0.0008	0.023	0.68	0.02	0.04	0.788	0.03	0.009	0.211	0.008
815	MG	U	15-30	8.61	0.008	0.058	0.0008	0.013	0.22	0.02	0.05	0.628	0.03	0.003	0.126	0.015
815	MG	M	15-30	9.27	0.008	0.064	0.0008	0.030	0.28	0.02	0.04	0.571	0.04	0.003	0.161	0.009
815	MG	L	15-30	13.10	0.008	0.052	0.0030	0.009	1.60	0.02	0.12	0.727	0.07	0.018	0.151	0.020
823	MG	U	15-30	30.80	0.008	0.051	0.0085	0.023	0.51	0.02	0.04	0.559	0.04	0.010	0.184	0.017
823	MG	M	15-30	20.70	0.008	0.059	0.0039	0.019	0.96	0.02	0.15	0.770	0.07	0.038	0.132	0.031
823	MG	L	15-30	28.60	0.008	0.062	0.0037	0.018	1.31	0.02	0.05	0.822	0.05	0.005	0.215	0.023
1828	MG	U	15-30	6.87	0.008	0.063	0.0016	0.016	0.10	0.02	0.05	0.502	0.02	0.003	0.098	0.013
1828	MG	M	15-30	8.41	0.016	0.052	0.0041	0.004	0.27	0.02	0.07	0.811	0.05	0.005	0.124	0.030
1828	MG	L	15-30	8.27	0.008	0.061	0.0040	0.009	0.27	0.02	0.07	0.702	0.04	0.003	0.114	0.013
2828	MG	U	15-30	11.70	0.008	0.048	0.0009	0.005	0.22	0.02	0.04	0.347	0.02	0.003	0.132	0.008
2828	MG	M	15-30	12.60	0.008	0.048	0.0026	0.003	0.39	0.02	0.06	0.495	0.05	0.006	0.107	0.018
2828	MG	L	15-30	13.60	0.008	0.050	0.0030	0.004	0.28	0.02	0.04	0.235	0.03	0.003	0.157	0.010
			Mean	22.36	0.0083	0.06	0.0024	0.0111	0.59	0.02	0.08	0.66	0.04	0.01	0.14	0.02
			Max	122.00	0.0160	0.08	0.0085	0.0530	1.60	0.02	0.19	0.83	0.07	0.04	0.22	0.04
			Min	6.87	0.0080	0.05	0.0008	0.0020	0.10	0.02	0.04	0.24	0.02	0.00	0.08	0.01
			SD	26.55	0.0016	0.01	0.0020	0.0121	0.41	0.00	0.04	0.15	0.02	0.01	0.04	0.01
			CV (%)	118.72	19.60	12.32	83.82	109.60	69.20	0.00	56.84	22.68	40.94	92.94	27.34	58.21

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Molybdenum ³ (mg/kg) (0.004) ⁵	Nickel ³ (mg/kg) (0.004) ⁵	Silicon ³ (mg/kg) (0.02) ⁵	Zinc ³ (mg/kg) (0.002) ⁵	Selenium ⁴ (mg/kg) (0.1) ⁵
586	PL	U	15-30	0.016	0.066	584.0	0.506	1.1
586	PL	M	15-30	0.018	0.151	51.4	0.053	0.7
586	PL	L	15-30	0.020	0.090	68.5	0.062	0.9
588	PL	U	15-30	0.016	0.038	30.3	0.155	0.3
588	PL	M	15-30	0.015	0.110	94.8	0.069	0.3
588	PL	L	15-30	0.004	0.093	70.4	0.132	0.3
590	PL	U	15-30	0.023	0.056	35.5	0.077	0.3
590	PL	M	15-30	0.004	0.054	62.2	0.104	0.3
590	PL	L	15-30	0.004	0.059	162.0	0.172	0.3
591	PL	U	15-30	0.004	0.067	203.0	0.096	0.5
591	PL	M	15-30	0.046	0.059	28.3	0.033	0.3
591	PL	L	15-30	0.004	0.240	196.0	0.193	1.1
592	PL	U	15-30	0.045	0.070	46.8	0.017	0.3
592	PL	M	15-30	0.038	0.089	158.0	0.061	0.3
592	PL	L	15-30	0.100	0.075	104.0	0.061	1.0
593	PL	U	15-30	0.013	0.259	1970.0	1.430	1.5
593	PL	M	15-30	0.008	0.127	903.0	0.573	0.7
593	PL	L	15-30	0.008	0.018	1390.0	0.705	0.6
594	PL	U	15-30	0.008	0.019	80.9	0.011	0.4
594	PL	M	15-30	0.008	0.015	91.5	0.008	0.6
594	PL	L	15-30	0.008	0.045	144.0	0.024	0.3
595	PL	U	15-30	0.020	0.374	81.1	0.078	2.3
595	PL	M	15-30	0.008	0.072	729.0	0.508	0.9
595	PL	L	15-30	0.008	0.025	228.0	0.078	0.7
599	PL	U	15-30	0.011	0.269	1750.0	1.300	1.0
599	PL	M	15-30	0.374	0.262	953.0	1.230	1.3
599	PL	L	15-30	0.008	0.314	934.0	0.783	1.4
			Mean	0.03	0.12	412.95	0.32	0.73
			Max	0.37	0.37	1970	1.43	2.30
			Min	0.00	0.02	28.30	0.01	0.30
			SD	0.07	0.10	554.90	0.42	0.49
			CV (%)	229.87	87.12	134.37	134.46	67.77

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Molybdenum ³ (mg/kg) (0.004) ⁵	Nickel ³ (mg/kg) (0.004) ⁵	Silicon ³ (mg/kg) (0.02) ⁵	Zinc ³ (mg/kg) (0.002) ⁵	Selenium ⁴ (mg/kg) (0.1) ⁵
615	MB	U	15-30	0.110	0.072	53.2	0.162	0.4
615	MB	M	15-30	0.011	0.028	546.0	0.591	0.4
615	MB	L	15-30	0.046	0.092	47.0	0.078	0.7
			Mean	0.06	0.06	215.40	0.28	0.50
			Max	0.11	0.09	546.00	0.59	0.70
			Min	0.01	0.03	47.00	0.08	0.40
			SD	0.05	0.03	286.32	0.28	0.17
			CV (%)	90.18	51.16	132.93	99.33	34.64
678	BT	U	15-30	0.004	0.036	93.0	0.076	1.4
678	BT	M	15-30	0.004	0.048	65.4	0.066	1.2
678	BT	L	15-30	0.005	0.090	67.1	0.058	0.6
680	BT	U	15-30	0.004	0.023	596.0	0.368	0.3
680	BT	M	15-30	0.004	0.039	210.0	0.124	0.5
680	BT	L	15-30	0.004	0.038	207.0	0.133	0.5
681	BT	U	15-30	0.004	0.048	50.7	0.028	0.1
681	BT	M	15-30	0.006	0.048	51.2	0.063	0.1
681	BT	L	15-30	0.004	0.046	48.7	0.052	0.2
684	BT	U	15-30	0.014	0.152	891.0	1.270	0.2
684	BT	M	15-30	0.004	0.053	306.0	0.265	0.2
684	BT	L	15-30	0.020	0.066	45.0	0.058	0.1
687	BT	U	15-30	0.014	0.056	38.9	0.035	0.1
687	BT	M	15-30	0.013	0.045	38.9	0.044	0.1
687	BT	L	15-30	0.034	0.049	41.6	0.023	0.4
688	BT	U	15-30	0.010	0.074	36.3	0.034	0.4
688	BT	M	15-30	0.010	0.095	88.5	0.094	0.4
688	BT	L	15-30	0.016	0.057	66.5	0.080	0.2
692	BT	U	15-30	0.015	0.070	113.0	0.146	0.3
692	BT	M	15-30	0.014	0.041	86.2	0.082	0.7
692	BT	L	15-30	0.008	0.058	104.0	0.062	0.5
703	BT	U	15-30	0.012	0.062	75.4	0.078	0.3
703	BT	M	15-30	0.010	0.038	47.2	0.046	0.2
703	BT	L	15-30	0.038	0.064	23.1	0.028	0.3
			Mean	0.01	0.06	141.28	0.14	0.39
			Max	0.04	0.15	891.00	1.27	1.40
			Min	0.00	0.02	23.10	0.02	0.10
			SD	0.01	0.03	201.67	0.25	0.33
			CV (%)	79.96	44.81	142.75	183.73	84.85

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Molybdenum ³ (mg/kg) (0.004) ⁵	Nickel ³ (mg/kg) (0.004) ⁵	Silicon ³ (mg/kg) (0.02) ⁵	Zinc ³ (mg/kg) (0.002) ⁵	Selenium ⁴ (mg/kg) (0.1) ⁵
727	AP	U	15-30	0.034	0.093	81.0	0.055	0.7
727	AP	M	15-30	0.010	0.048	86.1	0.124	0.8
727	AP	L	15-30	0.010	0.086	81.7	0.206	0.6
728	AP	U	15-30	0.022	0.053	47.9	0.120	0.5
728	AP	M	15-30	0.028	0.049	69.6	0.058	0.5
728	AP	L	15-30	0.070	0.071	78.0	0.217	0.4
730	AP	U	15-30	0.020	0.076	18.5	0.032	0.2
730	AP	M	15-30	0.011	0.051	41.7	0.131	0.5
730	AP	L	15-30	0.024	0.084	235.0	0.203	0.2
738	AP	U	15-30	0.013	0.076	64.8	0.058	0.4
738	AP	M	15-30	0.013	0.040	74.2	0.115	0.5
738	AP	L	15-30	0.010	0.041	81.5	0.138	0.4
739	AP	U	15-30	0.030	0.108	26.5	0.027	0.2
739	AP	M	15-30	0.014	0.066	52.9	0.041	0.1
739	AP	L	15-30	0.014	0.104	235.0	0.284	0.2
740	AP	U	15-30	0.014	0.132	45.7	0.172	0.4
740	AP	M	15-30	0.015	0.050	39.5	0.128	0.5
740	AP	L	15-30	0.147	0.086	65.3	0.066	0.7
743	AP	U	15-30	0.027	0.044	19.0	0.045	0.3
743	AP	M	15-30	0.043	0.089	14.6	0.015	0.5
743	AP	L	15-30	0.007	0.045	53.7	0.101	0.6
744	AP	U	15-30	0.010	0.061	70.3	0.077	0.4
744	AP	M	15-30	0.014	0.054	65.4	0.082	0.4
744	AP	L	15-30	0.014	0.074	83.9	0.092	0.5
746	AP	U	15-30	0.036	0.058	61.9	0.065	0.4
746	AP	M	15-30	0.014	0.051	90.9	0.046	0.5
746	AP	L	15-30	0.010	0.052	91.4	0.059	0.5
			Mean	0.02	0.07	73.19	0.10	0.44
			Max	0.15	0.13	235.00	0.28	0.80
			Min	0.01	0.04	14.60	0.02	0.10
			SD	0.03	0.02	51.78	0.07	0.17
			CV (%)	111.84	34.31	70.75	65.41	37.89

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Molybdenum ³ (mg/kg) (0.004) ⁵	Nickel ³ (mg/kg) (0.004) ⁵	Silicon ³ (mg/kg) (0.02) ⁵	Zinc ³ (mg/kg) (0.002) ⁵	Selenium ⁴ (mg/kg) (0.1) ⁵
769	MM	U	15-30	0.008	0.086	92.7	0.069	0.5
769	MM	M	15-30	0.011	0.065	282.0	0.331	0.4
769	MM	L	15-30	0.008	0.054	90.0	0.102	0.3
781	MM	U	15-30	0.014	0.078	109.0	0.097	0.8
781	MM	M	15-30	0.009	0.076	146.0	0.161	0.9
781	MM	L	15-30	0.008	0.102	89.0	0.110	1.5
786	MM	U	15-30	0.046	0.187	62.7	0.031	0.3
786	MM	M	15-30	0.032	0.138	294.0	0.257	0.2
786	MM	L	15-30	0.008	0.034	53.8	0.050	0.1
791	MM	U	15-30	0.016	0.096	130.0	0.085	0.1
791	MM	M	15-30	0.039	0.084	31.6	0.015	0.2
791	MM	L	15-30	0.024	0.129	526.0	0.719	0.3
793	MM	U	15-30	0.058	0.046	39.9	0.020	0.3
793	MM	M	15-30	0.032	0.056	30.3	0.020	0.3
793	MM	L	15-30	0.018	0.105	362.0	0.345	0.3
			Mean	0.02	0.09	155.93	0.16	0.43
			Max	0.06	0.19	526.00	0.72	1.50
			Min	0.01	0.03	30.30	0.02	0.10
			SD	0.02	0.04	144.91	0.19	0.37
			CV (%)	72.21	44.68	92.93	117.30	85.76
798	FG	U	15-30	0.029	0.060	83.8	0.032	0.5
798	FG	M	15-30	0.031	0.072	146.0	0.100	0.3
798	FG	L	15-30	0.016	0.073	246.0	0.221	0.5
800	FG	U	15-30	0.014	0.058	77.8	0.025	0.5
800	FG	M	15-30	0.014	0.058	104.0	0.024	0.6
800	FG	L	15-30	0.031	0.077	59.1	0.036	0.6
			Mean	0.02	0.07	119.45	0.07	0.50
			Max	0.03	0.08	246.00	0.22	0.60
			Min	0.01	0.06	59.10	0.02	0.30
			SD	0.01	0.01	68.71	0.08	0.11
			CV (%)	38.41	12.96	57.52	106.79	21.91

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

Appendix 4. Results of micronutrient analysis from 42 benchmark sites across Alberta (15-30 cm depth) continued.

Site #	Eco-region	Slope Position	Depth (cm)	Molybdenum ³ (mg/kg) (0.004) ⁵	Nickel ³ (mg/kg) (0.004) ⁵	Silicon ³ (mg/kg) (0.02) ⁵	Zinc ³ (mg/kg) (0.002) ⁵	Selenium ⁴ (mg/kg) (0.1) ⁵
804	MG	U	15-30	0.017	0.146	215.0	0.151	0.3
804	MG	M	15-30	0.059	0.111	124.0	0.090	0.4
804	MG	L	15-30	0.096	0.173	43.4	0.034	0.6
806	MG	U	15-30	0.083	0.132	33.1	0.036	0.5
806	MG	M	15-30	0.029	0.161	359.0	0.328	0.5
806	MG	L	15-30	0.013	0.107	338.0	0.265	0.5
809	MG	U	15-30	0.076	0.067	66.6	0.024	0.3
809	MG	M	15-30	0.056	0.117	34.9	0.014	0.3
809	MG	L	15-30	0.019	0.091	198.0	0.162	0.3
812	MG	U	15-30	0.125	0.119	50.3	0.011	0.3
812	MG	M	15-30	0.106	0.093	37.4	0.013	0.3
812	MG	L	15-30	0.117	0.134	45.9	0.010	0.3
815	MG	U	15-30	0.036	0.047	44.5	0.018	0.3
815	MG	M	15-30	0.035	0.081	49.2	0.008	0.3
815	MG	L	15-30	0.038	0.136	282.0	0.230	0.4
823	MG	U	15-30	0.078	0.095	67.2	0.008	0.3
823	MG	M	15-30	0.064	0.129	245.0	0.192	0.2
823	MG	L	15-30	0.059	0.109	137.0	0.046	0.3
1828	MG	U	15-30	0.039	0.039	41.2	0.010	0.2
1828	MG	M	15-30	0.026	0.111	147.0	0.106	0.3
1828	MG	L	15-30	0.026	0.084	150.0	0.075	0.3
2828	MG	U	15-30	0.029	0.065	26.2	0.013	0.3
2828	MG	M	15-30	0.022	0.101	124.0	0.094	0.4
2828	MG	L	15-30	0.031	0.073	24.6	0.047	0.3
			Mean	0.05	0.11	120.15	0.08	0.34
			Max	0.13	0.17	359.00	0.33	0.60
			Min	0.01	0.04	24.60	0.01	0.20
			SD	0.03	0.03	102.55	0.09	0.10
			CV (%)	62.28	32.16	85.35	111.30	28.52

¹ 0.01 M Ca(NO₃)₂ extractable

² DTPA extractable

³ Hot water extractable

⁴ Total

⁵ Detection limit (mg/kg)

