

NORTHEASTERN GEOSCIENCE

Volume 32

C. J. Brown & M. A. Thomas - Major and Trace Element Geochemistry and Background Concentrations for Soils in Connecticut

Appendix 6. Lithologic descriptions and concentrations of selected elements in extractions for A-horizon soil samples collected at 86 sites in Connecticut, and associated mapped underlying bedrock type

Field Identifier	Latitude	Longitude	Collection		Depth, in cm	Depth, in cm										Depth, in cm										Geologic Province	Rock Group A (GPa)	Rock Group B (GpB)	Unit code ¹																						
			Date	Location		Al (%)	Ca (%)	Fe (%)	K (%)	Mg (%)	Na (%)	S (%)	Ti (%)	As	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu	Ga	Hg					In	La	Li	Mn	Mo	Nb	Ni	P	Pb	Rb	Sb	Sc	Se	Sn	Sr	Th	Ti	U	V	W	Y	Zn
99-A	41.17141	-73.32197	8/16/2007	Aspectuck Land Trust, Sturges Hwy, Westport	33 - 51	7.5	0.5	3.4	2.0	0.78	0.99	0.090	0.37	5.9	555	3.3	0.38	2	80	23.5	59	15	37	21	0.100	0.090	40	45	744	2.0	16	32.1	1,040	107	119	0.54	16	1.40	4.4	112	10.0	0.70	3.2	94	2.80	22.5	153.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Jp
62-A	41.20905	-73.28651	8/16/2007	Hemlock Reservoir, Fairfield	2 - 10	6.0	0.8	2.9	1.5	0.54	1.1	0.040	0.37	5.9	430	2.8	0.26	0.2	71	7.3	36	<5	17	15	0.160	0.060	35	27	566	1.1	15	13.7	760	40	78	0.63	12	0.60	3.2	131	9.1	0.60	2.1	72	3.00	19.2	49.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Sulfidic Schists	Zp
97-A	41.27111	-72.63704	9/21/2007	Buffalo Bay, Madison	2 - 20	5.8	0.9	2.8	1.3	0.49	1.8	0.020	0.18	2.7	308	1.9	0.36	<0.1	40	8.8	28	<5	25	12	0.030	0.040	19	20	824	0.6	4.4	13.1	440	29	60	0.18	10	0.40	1.8	99	7.6	0.40	2.2	70	0.50	13.0	51.0	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Jp
244-A	41.27675	-73.02570	7/12/2007	Meeting House Lane	0 - 8	6.8	0.3	3.9	1.8	1.2	0.81	0.040	0.39	4.2	437	2.1	0.28	0.2	70	15.8	85	<5	29	18	0.080	0.070	33	44	829	0.9	11	24.6	1,100	68	115	0.45	15	0.60	3.5	74	9.9	0.60	2.6	104	1.20	16.7	110.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Jp
11-A	41.27733	-73.00340	11/9/2007	Orange Hills Cntry Club, Orange	0 - 20	5.7	1.1	3.0	1.0	0.75	1.0	0.050	0.31	4.6	294	1.9	0.23	0.5	60	10.9	59	<5	26	13	0.140	0.050	33	23	831	1.0	8.2	24.4	600	57	62	0.67	12	0.70	3.0	90	8.4	0.30	2.0	103	9.0	26.2	70.0	Eugeosyncline Seq.	Mafic Rocks	Mafic Rocks	Ob
89-A	41.27891	-73.51938	8/28/2007	Ridgefield Cons. Com., Remington Rd, Ridgefield	0 - 25	6.8	1.4	3.4	1.5	2.3	0.96	0.030	0.39	2.4	500	2.3	0.14	0.2	76	13.3	48	<5	15	18	0.060	0.070	35	39	576	1.0	14	21.3	600	38	70	0.46	11	0.50	2.7	132	8.6	0.60	2.0	74	0.60	20.3	90.0	Grenville Shelf Seq.	Carbonate Rocks	Carbonate Rocks	Omo+Oml+Och
19-A	41.29596	-72.34133	9/17/2007	Great Island Wildlife Area, Old Lyme	2 - 8	5.3	0.9	2.4	1.0	0.42	1.2	0.040	0.29	3.7	322	2.0	0.15	0.2	56	6.6	30	<5	11	13	0.070	0.050	27	19	555	1.0	10	11.9	1,490	25	47	0.38	8.5	0.70	1.9	108	7.9	0.30	1.8	59	0.70	15.1	48.0	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Dst
55-A	41.29749	-73.43050	8/22/2007	Barretts Ln, Redding	5 - 30	5.3	0.7	2.4	1.6	0.56	0.96	0.070	0.26	3.8	354	2.2	0.31	0.3	61	7.7	35	<5	16	15	0.250	0.060	29	31	659	1.7	13	15.3	1,120	84	89	1.02	8.6	0.70	5.2	114	6.9	0.40	2.8	71	1.20	12.8	74.0	Eugeosyncline Seq.	Granite	Granite, other	Dst
78-A	41.31711	-72.51766	9/21/2007	Kelseytown Rd, Clinton	5 - 20	6.1	1.4	2.4	0.9	0.39	1.9	0.030	0.20	2.6	359	2.1	0.20	0.2	39	6.9	24	<5	10	14	0.060	0.040	18	20	625	0.8	6.4	9.0	430	32	40	0.28	8.7	0.50	1.7	174	6.1	0.30	1.7	60	0.70	12.5	43.0	Bronson Hill Seq.	Granite	Granite, other	Or+OC+Ora
44-A	41.32261	-73.41804	8/27/2007	Gallows Hill Rd, Redding	0 - 15	6.4	1.1	3.5	1.7	1.7	1.2	0.030	0.42	5.1	530	2.9	0.18	0.3	67	13.2	47	<5	16	16	0.100	0.060	33	34	717	1.0	19	24.0	770	41	80	0.51	12	0.90	2.9	149	7.5	0.50	10.7	84	0.90	27.4	107.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Ygr+Yga
79-A	41.34426	-73.04897	8/7/2007	Ansonia Nature and Recreation Center, Ansonia	0 - 18	6.3	0.8	3.0	1.4	0.46	0.95	0.040	0.32	5.3	364	2.6	0.31	0.7	63	8.1	35	<5	38	15	0.100	0.060	45	34	983	1.2	11	15.3	1,750	49	92	0.51	11	1.00	3.3	104	7.3	0.50	2.5	76	1.10	32.1	104.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Jeb
32-A	41.35286	-72.73858	9/10/2007	Dudly preserve, Guilford	0 - 2	5.2	0.4	2.4	1.3	0.36	1.4	0.040	0.21	3.4	413	1.4	0.20	0.2	78	10.2	24	<5	25	12	0.090	0.040	37	27	865	0.9	5.9	13.6	510	33	59	0.46	7.7	0.70	1.9	87	17.6	0.50	2.2	76	0.70	15.5	70.0	Mesozoic Basin	Basin Sed.	Mesozoic Basin Sed.	Zp
75-A	41.37132	-73.05679	8/6/2007	Birmingham Utility Watershed, Seymour	2 - 10	6.3	0.8	2.5	1.4	0.38	1.3	0.040	0.28	6.2	318	2.6	0.42	0.3	54	5.7	26	<5	25	15	0.190	0.060	27	30	490	1.8	11	10.0	600	71	74	1.01	8.6	1.10	4.6	114	7.4	0.50	2.2	68	0.90	26.2	69.0	Eugeosyncline Seq.	Mafic Rocks	Mafic Rocks	Dst
81-A	41.40037	-73.29758	8/7/2007	Newtown Cntry Club, Newtown	0 - 25	6.1	0.9	3.4	1.2	0.62	1.2	0.080	0.43	3.8	419	2.2	0.19	0.3	76	9.4	55	<5	16	14	0.140	0.060	38	25	641	3.0	15	14.9	1,120	38	53	0.49	9.7	0.90	2.8	155	9.4	0.50	4.1	78	0.80	20.8	67.0	Eugeosyncline Seq.	Mafic Rocks	Mafic Rocks	Ob+Ohb
12212-A	41.40579	-72.17969	7/13/2007	Lake Konomo, Waterford	2.5 - 8	5.6	1.1	2.6	2.0	0.34	1.2	0.070	0.26	1.5	322	1.0	0.19	0.2	23	3.2	18	<5	18	8.0	0.100	0.030	11	13	671	0.8	6.4	12.6	570	32	51	0.44	5.4	0.50	2.0	143	3.6	0.30	0.8	37	0.60	10.5	30.0	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Ygn
51-A	41.41500	-72.23838	9/16/2007	Nehantic State Forest, Walnut Hill, E. Lyme	2.5 - 8	4.3	0.5	1.5	1.4	0.28	0.72	0.030	0.20	3.2	399	1.5	0.30	0.1	47	4.1	22	<5	5.8	10	0.060	0.040	23	17	293	0.8	8.1	7.0	490	34	61	0.24	5.5	0.40	2.4	88	8.7	0.40	1.3	35	0.70	11.3	38.0	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Or
1524-A	41.42577	-73.50091	7/12/2007	King St. school, Danbury	0 - 5	4.5	1.4	2.5	1.0	0.59	0.96	0.110	0.35	3.2	329	1.0	0.28	0.4	29	6.6	35	<5	15	14	0.380	0.050	15	19	435	1.8	8.6	12.8	970	87	40	1.39	8.6	1.10	4.4	156	5.3	0.40	1.1	80	0.80	11.7	74.0	Grenville Belt	Granite	Grenville Granite	Dng
67-A	41.42870	-72.78730	9/19/2007	Tyler Mill, Taramac Swamp Rd, Wallingford	8 - 15	5.4	0.4	2.0	1.4	0.45	1.7	0.030	0.23	3.0	384	1.3	0.14	0.2	54	6.1	30	<5	18	10	0.040	0.040	24	21	577	0.5	6.7	12.5	790	31	61	0.26	5.1	0.40	1.9	73	9.4	0.40	2.1	58	0.60	12.1	61.0	Mesozoic Basin	Basin Sed.	Mesozoic Basin Sed.	Zp
21-A	41.43569	-72.69733	9/21/2007	Rt 77, Durham	2.5 - 8	6.4	0.5	4.4	0.7	0.38	1.4	0.040	0.33	4.1	285	1.4	0.23	0.4	54	16.8	81	5	94	13	0.110	0.060	26	26	2,140	0.9	6.3	34.0	670	36	41	0.54	13	1.00	2.1	90	6.4	0.30	2.8	141	1.00	24.1	156.0	Mesozoic Basin	Mafic Rocks	Basalt	Dsw
53-A	41.43878	-72.75917	9/19/2007	Scard rd., Town of Wallingford Prop.	5 - 20	5.2	0.3	1.8	1.5	0.28	1.4	0.040	0.17	2.1	404	1.3	0.18	0.1	48	7.0	25	<5	16	11	0.050	0.040	22	18	290	0.6	5.3	10.4	620	29	66	0.24	6.0	0.40	1.8	71	8.3	0.50	1.6	52	0.60	8.1	59.0	Mesozoic Basin	Basin Sed.	Mesozoic Basin Sed.	Ota+SOH
41-A	41.45998	-72.33636	10/1/2007	Devils Hopyard State Park, E. Haddam	2.5 - 13	5.9	0.8	3.4	1.1	0.50	0.98	0.040	0.31	5.0	350	2.1	0.25	0.1	53	6.1	41	<5	13	14	0.070	0.050	26	27	1,020	1.6	11	13.1	590	39	66	0.48	12	1.20	2.8	100	8.6	0.40	2.7	80	1.00	21.6	47.0	NH - ME Seq.	Granite	Granite, other	Dst
38-A	41.46243	-72.99877	10/19/2007	Naugatuck State Forest, Rt 85, Salem	2.5 - 13	6.7	0.4	3.2	1.6	0.43	0.92	0.050	0.32	6.9	424	2.2	0.61	0.5	68	10.7	50	7	33	18	0.170	0.070	32	54	586	1.3	10	19.7	750	97	100	1.21	10	1.30	5.2	89	10.5	0.60	2.7	104	1.30	13.0	73.0	Eugeosyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Trnh+Jsm+Jta
50-A	41.46360	-72.25302	11/9/2007	Nehantic State Forest, Rt 85, Salem	2.5 - 8	5.5	0.8	2.1	1.2	0.42	0.90	0.040	0.23	2.4	371	4.5	0.25	0.3	63	6.7	32	<5	17	13	0.090	0.050	54	22	672	2.2	10	11.8	610	43	61	0.44	7.9	1.00	2.6	110	5.4	0.30	5.1	5							