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

Appendix 7. Lithologic descriptions and concentrations of selected elements in extractions for surficial soil samples collected from the upper 5 centimeters at 100 sites in Connecticut, and associated mapped underlying bedrock type.

Field Identifier	Latitude	Longitude	Date	Location	Depth	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	Se	Sn	Sr	Th	Tl	U	V	W	Y	Zn	Geologic Province	Rock Group A (GPa)	Rock Group B (GpB)	Unit code ²	
09-PH	41.067640	-73.623850	8/8/2007	Birch Lane, Greenwich	0-5 cm	5.8	1.55	3.0	1.7	1.00	1.29	0.03	0.40	9.0	648	2.7	0.16	0.3	64	11.6	71	<5	23	14.2	0.08	0.1	30.9	25.0	717	0.8	14.5	24	1,180	100	71	0.5	11.2	0.30	2.8	229	7.2	0.50	2.3	75	0.70	19.7	99	EugeoSyncline Seq.	Mafic Rocks	Mafic Rocks	Oh
99-PH	41.171410	-73.321970	8/16/2007	Aspectuk Land Trust, Sturges Hwy, Westport	0-5 cm	4.6	1.31	2.2	1.4	0.55	1.53	0.03	0.20	1.5	339	1.5	0.12	0.3	44	7.4	29	<5	18	8.9	0.01	0.0	21.5	15.0	615	0.7	5.1	12	440	51	52	0.4	8.4	0.00	1.8	145	6.4	0.20	1.3	52	0.70	15.0	64	EugeoSyncline Seq.	Metam. Rocks Undiv.	Sulfidic Schists	Or
62-PH	41.209050	-73.286510	8/16/2007	Hemlock Reservoir, Fairfield	0-5 cm	5.4	0.76	2.6	1.4	0.48	1.00	0.07	0.38	4.5	382	1.8	0.35	0.2	62	5.9	43	<5	27	12.7	0.21	0.1	32.2	26.0	452	1.4	12.2	20	920	85	61	1.2	7.3	1.10	4.7	114	9.3	0.30	2.2	89	1.60	14.2	59	EugeoSyncline Seq.	Metam. Rocks Undiv.	Mafic Rocks	Otrf
42-PH	41.249110	-73.197820	8/8/2007	Ward Place, Trumbull	0-5 cm	5.8	0.55	3.2	1.7	0.53	0.82	0.04	0.40	4.4	336	2.5	2.35	0.3	54	7.6	64	12	23	13.2	0.22	0.1	28.4	55.0	904	1.9	16.9	18	1,040	70	110	0.5	9.3	0.50	3.1	89	10.3	0.70	3.0	88	240	19.0	112	EugeoSyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Dst
97-PH	41.271110	-72.637040	9/21/2007	Buffalo Bay, Madison	0-5 cm	4.9	1.07	2.7	1.0	0.43	1.58	0.05	0.17	2.7	275	1.3	0.37	0.2	35	7.0	27	<5	20	8.8	0.09	0.0	17.0	16.0	1,150	0.6	4.0	13	670	40	43	0.4	7.9	0.30	1.4	98	7.6	0.20	2.0	71	0.80	12.5	72	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Zw
244-PH	41.276750	-73.025700	7/12/2007	Meeting House Lane	0-5 cm	6.5	0.27	3.9	1.9	1.16	0.83	0.05	0.40	5.4	432	2.2	0.25	0.3	63	15.9	83	<5	30	15.3	0.10	0.1	30.5	46.0	848	0.9	10.2	44	1,200	59	104	0.4	14.8	0.50	3.1	77	9.3	0.50	2.4	101	1.10	16.2	114	EugeoSyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	D5w
11-PH	41.277330	-73.003400	11/9/2007	Orange Hills Country Club, Orange	0-5 cm	5.5	1.14	3.0	1.1	0.69	1.01	0.05	0.32	4.7	300	1.5	0.24	0.5	54	8.8	56	<5	28	10.5	0.10	0.1	34.7	23.0	891	0.8	6.7	26	700	63	52	0.6	9.4	0.60	2.5	92	7.8	0.40	1.8	99	1.00	25.4	109	EugeoSyncline Seq.	Mafic Rocks	Mafic Rocks	Omal
89-PH	41.278910	-73.519380	8/28/2007	Ridgefield Cons. Com., Remington Rd, Ridgefield	0-5 cm	6.7	1.42	3.4	1.4	2.08	0.94	0.05	0.37	2.5	493	2.1	0.17	0.3	62	10.7	48	<5	14	15.4	0.10	<5	16	14.2	610	1.1	12.4	21	630	55	65	0.6	8.8	0.50	2.9	128	6.7	0.50	1.7	79	0.70	17.0	102	Grenville Shelf Seq.	Carbonate Rocks	Carbonate Rocks	OC's
19-PH	41.295660	-72.341330	9/17/2007	Tyler Mill, Taramac Swamp Rd, Wallingford	0-5 cm	3.5	0.70	1.7	0.8	0.28	0.79	0.12	0.20	3.8	247	0.9	0.36	0.7	32	4.3	24	<5	27	7.8	0.24	0.1	28.5	11.0	1,010	1.5	6.7	15	1,280	99	35	1.0	5.3	1.00	4.0	84	4.6	0.30	1.3	57	1.00	9.0	95	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Zp
55-PH	41.297490	-73.430500	8/22/2007	Barretts Ln, Redding	0-5 cm	5.2	0.83	2.5	1.5	0.59	0.93	0.10	0.26	3.7	403	2.1	0.30	0.4	58	7.4	35	<5	18	12.7	0.25	0.1	26.4	33.0	1,120	1.6	11.7	16	1,380	79	84	0.9	6.8	0.80	4.5	117	8.3	0.70	2.3	73	1.10	12.7	91	EugeoSyncline Seq.	Granite	Granite, other	Otrf+Och
78-PH	41.317110	-72.517660	9/21/2007	Kelseytown Rd, Clinton	0-5 cm	5.3	1.43	2.0	0.7	0.35	1.64	0.05	0.14	3.4	331	2.1	0.18	0.3	23	5.1	21	<5	13	11.1	0.08	0.0	11.3	11.0	653	0.7	4.1	8	680	46	33	0.3	6.4	0.30	1.6	169	3.5	0.20	1.2	50	0.50	10.1	63	EugeoSyncline Seq.	Granite	Granite, other	Omo+Oml+Och
44-PH	41.322610	-73.418040	8/27/2007	Gallows Hill Rd, Redding	0-5 cm	6.0	1.26	3.2	1.7	1.34	1.22	0.05	0.39	4.8	492	2.3	0.21	0.5	60	10.6	46	<5	16	14.2	0.16	0.1	34.2	32.0	787	0.8	11.2	23	950	58	70	0.6	8.9	0.50	2.7	147	7.2	0.40	1.8	83	0.90	19.5	129	EugeoSyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Or+OC+r+Ora
79-PH	41.344260	-73.048970	8/7/2007	Ansonia Nature and Rec. Center, Ansonia	0-5 cm	6.7	0.95	3.4	1.6	0.54	0.98	0.06	0.38	4.5	416	2.4	0.31	0.6	81	8.4	41	5	30	15.2	0.08	0.1	52.6	43.0	1,020	1.0	11.9	20	1,900	50	88	0.5	9.2	0.70	2.7	102	11.2	0.60	2.7	86	1.30	36.2	121	EugeoSyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	D5w
32-PH	41.352860	-72.738580	9/10/2007	Dudly preserve, Guilford	0-5 cm	5.2	0.34	2.4	1.5	0.33	1.36	0.03	0.22	3.6	389	1.2	0.19	0.1	59	8.8	24	<5	24	10.5	0.07	0.0	32.1	27.0	760	0.6	5.2	13	480	34	56	0.4	6.2	0.60	1.5	81	12.5	0.40	1.8	76	1.30	14.0	69	Mesozoic Basin	Basin Sedimentary	Mesozoic Basin Sed.	Jp
75-PH	41.371320	-73.056790	8/6/2007	Birmingham Utility Watershed, Seymour	0-5 cm	5.9	0.84	2.7	1.3	0.48	1.26	0.06	0.35	6.0	323	1.7	0.42	0.3	56	5.2	36	<5	28	12.4	0.16	0.1	29.5	35.0	557	1.6	9.5	13	850	82	59	1.0	6.0	0.90	4.0	107	9.3	0.30	2.3	88	1.10	13.0	75	EugeoSyncline Seq.	Mafic Rocks	Mafic Rocks	Ohp+Ohb
13-PH	41.372300	-73.191180	8/8/2007	Monroe Tpke, Monroe	0-5 cm	4.8	0.42	2.0	1.4	0.26	0.66	0.14	0.28	6.4	342	1.8	0.46	0.6	68	8.0	35	<5	39	14.9	0.30	0.1	42.3	22.0	1,330	2.0	9.6	16	2,350	127	89	1.6	6.6	1.30	7.3	7.5	10.5	0.70	2.9	67	2.40	16.2	168	EugeoSyncline Seq.	Metam. Rocks Undiv.	Pelitic Rocks	Dst
81-PH	41.400370	-73.297580	8/7/2007	Newtown Country Club, Newtown	0-5 cm	5.5	1.15	3.0	1.2	0.62	1.31	0.05	0.35	3.4	442	1.9	0.18	0.2	54	8.7	42	<5	16	11.1	0.11	0.0	28.1	20.0	803	1.3	9.6	15	920	54	42	0.4	7.0	0.50	2.0	188	6.6	0.40	2.0	71	0.80	15.2	58	EugeoSyncline Seq.	Mafic Rocks	Mafic Rocks	Ob
12212-PH	41.405790	-72.179690	7/13/2007	Lake Konomic, Waterford	0-5 cm	3.8	0.65	1.7	1.5	0.24	0.87	0.04	0.19	3.3	359	1.1	0.12	<0.1	27	2.7	20	<5	5	7.4	0.07	0.0	13.4	10.0	355	0.8	5.6	8	420	31	47	0.4	4.7	0.50	1.9	98	4.6	0.30	0.8	44	0.50	8.6	27	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Zp
51-PH	41.410500	-72.238380	9/16/2007	Nehantic State Forest, Walnut Hill, E. Lyme	0-5 cm	3.8	0.72	1.5	1.4	0.25	0.73	0.07	0.20	2.7	400	1.0	0.14	0.3	41	3.4	24	<5	8	8.3	0.08	0.0	20.2	14.0	575	0.8	6.1	8	720	47	56	0.3	4.2	0.30	2.2	99	6.9	0.30	1.2	40	0.90	10.1	56	Avalon Belt	Metam. Rocks Undiv.	Metam. Rocks, other	Zp
1524-PH	41.425770	-73.500910	7/12/2007	King St. school, Danbury	0-5 cm	4.6	1.28	2.6	1.0	0.59	1.02	0.09	0.38	5.1	324	1.1	0.25	0.3	27	6.0	37	<5	16	11.6	0.39	0.1	17.2	22.0	419	1.7	8.0	12	840	69	33	1.3	8.3	1.30	3.9	162	3.0	0.40	0.9	86	0.60	11.1	62	Grenville Shelf Seq.	Granite	Grenville Granite	Ygr+Yga
67-PH	41.428700	-72.787300	9/19/2007	Tyler Mill, Taramac Swamp Rd, Wallingford	0-5 cm	5.1	0.42	1.8	1.4	0.38	1.66	0.03	0.18	2.3	361	1.4	0.15	0.1	27	5.7	25	<5	13	9.8	0.03	0.0	19.0	18.0	492	0.4	5.7	10	760	25	63	0.3	5.8	0.20	1.6	69	7.7	0.40	1.7	52	0.60	10.7	52	EugeoSyncline Seq.	Basin Sedimentary	Mesozoic Basin Sed.	Trnh
21-PH	41.435690	-72.697330	9/21/2007	Rt 77, Durham	0-5 cm	6.0	0.50	4.5	0.8	0.41	1.26	0.04	0.40	5.6	285	1.4	0.30	0.3	52	18.5	94	6	119	13.1	0.11	0.1	25.2	31.0	1,420	0.8	7.3	38	740	45	39	1.0	16.2	0.80	2.6	73	7.3	0.30	3.1	161	1.70	18.3	165	Mesozoic Basin	Mafic Rocks	Mafic Rocks	Jta
53-PH	41.438783	-72.759167	9/19/2007	Scard Rd, Town of Wallingford Prop.	0-5 cm	5.3	0.41	2.0	1.5	0.29	1.46	0.06	0.19	2.5	404	1.2	0.22	0.2	58	6.8	27	<5	18	10.7	0.05	0.0	31.9	19.0	384	0.5	5.6	11	850	30	63	0.3	5.6	0.40	1.7	74	12.5	0.30	1.9	60	1.00	9.5	80	Mesozoic Basin	Basin Sedimentary	Mesozoic Basin Sed.	Tr