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Geochemistry of trace elements and uranium in Devonian shales
of the Appalachian Basin

by

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This report is preliminary and has not
been edited or reviewed for conformity
with U.S. Geological Survey standards
and nomenclature

Table 15.--Chemical data for Livingston Co., NY.

Stewart 6701, Livingston County, N. Y.
 [C, greater than 10%; N, below detection (usually 5 ppm); L, at detection limit; --, not analyzed]

depth ft	Semi-quantitative <i>Ammonium Spectrometry</i>															Quantitative					
	percent															ppm					
	Fe	Ca	K	Al	Mg	Ti	Mn	Ba	Co	Cr	Cu	Mo	Ni	Pb	V	Zr	U	Th	Org C	S	CO ₂ C
77.7	3.	3.	3	10	1.5	.3	150	300	15	100	15	N	70	N	150	100	3.4	10.1	.42	.39	.92
80.8	3.	1.5	3	6	1.5	.3	150	300	15	100	20	N	70	N	150	150	2.7	11.1	.28	.36	.48
100	3.	3.	3	10	1.5	.15	150	300	15	100	20	N	70	N	150	70	3.9	10	.32	.17	.83
120.3	3.	2.	3	6	1.5	.3	150	300	15	100	30	N	70	N	150	150	3.1	10.4	.32	.12	.72
139.7	3.	3.	3	10	1.5	.3	150	300	15	70	30	N	70	N	150	150	2.7	9.6	.19	.12	1.29
153.9	1.5	6	3	3	.7	1.5	1000	150	5	30	7	N	30	N	30	30	1.2	4.9	<.01	.22	6.72
160	1.5	7.	3	3	.7	1.5	300	150	7	30	20	N	30	10	70	70	1.3	6.4	.05	.36	4.26
179	1.5	7.	3	10	1.5	.3	300	300	15	70	15	N	30	N	150	70	2.8	10.5	.01	.27	2.06
201.4	1.5	3.	5	7	1.	1.5	150	300	3	50	30	N	15	N	70	30	3.3	10.9	.64	.38	1.33
215.8	.7	7.	3	3	1.	.07	700	150	N	30	15	N	7	N	15	30	2.3	6.7	.18	.49	5.51
229	1.5	7.	3	7	1.5	.15	300	300	3	50	30	N	30	10	50	30	3.8	8.9	.71	.49	2.35
235.8	3.	7.	3	10	1.5	.3	200	300	20	100	50	7	70	30	150	150	4.0	9.7	2.01	.84	1.99
260.7	3.	1.5	3	7	1.5	.3	150	300	20	100	30	N	70	30	150	150	3.7	12.8	.81	2.00	.44
269.8	3.	2.	3	10	1.5	.3	150	300	15	100	50	N	70	L	150	100	3.2	12.0	.60	.74	.66
288	1.5	7.	3	7	.7	.15	150	300	15	70	15	N	30	N	150	70	2.6	9.2	.26	.61	3.91
300	.7	7.	3	3	1.5	.07	300	200	3	30	50	N	15	15	30	30	3.6	8.1	1.91	.73	3.50
318.1	3.	10.	3	7	1.5	.3	300	200	10	70	30	3	70	10	70	70	4.3	6.6	1.72	.43	3.25
333.6	3.	7.	3	7	1.5	.3	300	200	20	70	70	N	70	15	70	70	3.0	9.9	1.06	.36	2.75
348	3.	7.	5	7	1.	.3	200	200	15	70	70	3	70	10	150	70	2.8	7.9	1.14	.40	2.13
368	3.	7.	5	7	1.	.3	150	300	10	70	50	N	70	15	150	70	2.8	10.9	.92	.59	2.31
384	3.	10.	3	7	1.	.3	300	200	10	70	30	N	50	10	150	70	2.7	7.5	.64	.40	3.98
398	3.	7.	3	7	1.5	.3	200	200	10	70	30	N	50	N	150	70	2.7	8.6	.82	.44	2.87
409	3.	10.	3	7	1.5	.3	150	200	15	70	30	N	30	N	150	70	1.9	8.4	.12	.41	5.13
425	3.	10.	3	7	1.5	.3	200	200	10	70	30	N	50	15	150	70	2.4	7.3	.48	.50	4.28
442	3.	10.	3	7	1.	.3	300	300	15	70	70	7	70	10	150	70	3.6	8.7	1.31	.57	4.06
455	3.	7.	3	7	1.	.3	300	200	10	70	70	7	70	N	150	70	3.7	6.7	1.46	.50	4.52
469	1.5	6	3	5	1.	.2	500	300	5	70	70	N	30	N	100	70	2.3	6.2	.77	.46	6.55
491	.3	7.	3	3	1.	.07	300	150	N	15	50	N	7	N	15	30	2.4	8.6	1.00	.40	3.36
506	1.	7.	3	3	1.	.15	200	300	3	30	50	N	15	N	30	30	2.9	9.4	1.59	.41	3.42
511	2.	6	3	3	1.	.2	300	700	10	70	30	3	30	N	70	70	2.3	5.8	1.10	.38	5.65
530	1.5	7.	3	7	1.	.2	150	300	7	70	100	15	70	30	150	70	7.3	10.4	2.96	1.24	2.29
543	3.	.5	3	7	1.	.3	100	300	30	70	150	50	150	30	150	70	19.9	6.3	6.25	2.99	.11
543.5	3.	.5	5	7	1.	.3	100	300	20	100	150	70	150	30	300	100	16.6	6.3	5.16	2.43	.11
564*	3.	.3	3	7	.7	.3	100	200	30	70	300	150	300	30	300	150	83.7	17.	12.00	6.27	.06
576*	2.	7.	3	3	.7	.15	150	150	20	30	300	100	300	30	300	70	53.8	13.	14.14	5.90	2.07

* Zn: 700 ppm at 564 ft and 576 ft; Ag: 0.7 ppm at 564 ft; 2 ppm at 576 ft

83.7 ppm U = 59.4 µg/g

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