Results of analyses for percentages of major elements and for parts per million (ppm) of trace elements in samples of the Greenhorn Formation in the Princeton Univ. (PU-79) core.

Sample No.	Depth (m)	% Si-xrf	% Al-xrf	% Fe-xrf	% Mg-xrf	% Ca-xrf	% Na-icp	% K-xrf	% Ti-icp	% P-icp	% Mn-icp	LOI-925	ppm Ba	ppm Co	ppm Cr	ppm Cu	ppm La	ppm Mo
GL2045.0	1.45	1.88	0.52	2.33	0.34	35.6	0.06	0.10	0.020	0.020	0.031	35.9	160	3	6	1	7	17
GL2078.0	1.78	4.95	1.59	0.67	0.53	32.0	0.18	0.39	0.080	0.040	0.020	37.9	340	5	26	17	13	<4
GL2132.0	2.32	1.56	0.35	0.22	0.34	38.2	0.07	0.09	0.020	0.020	0.050	41.8	150	1	6	11	7	<4
GL2139.5	2.39	3.66	1.16	0.59	0.49	34.1	0.12	0.27	0.020	0.026	0.015	39.1						
GL3005.0	2.55	4.76	0.93	0.49	0.43	34.4	0.10	0.21	<0.01	0.022	0.023	38.5						
GL3009.0	2.59	6.02	1.75	0.78	0.57	30.1	0.24	0.42	0.070	0.030	0.018	37.4	370	7	25	22	17	8
GL3018.0	2.68	11.53	3.86	1.33	0.81	21.4	0.38	0.95	0.180	0.050	0.012	30.7	320	8	49	31	22	12
GL3030.5	2.8	5.88	1.41	0.66	0.48	32.1	0.15	0.37	0.040	0.039	0.031	36.2						
GL3060.0	3.1	5.84	1.94	0.69	0.58	31.1	0.27	0.48	0.090	0.030	0.044	36.4	230	7	23	15	19	6
GL3075.0	3.25	4.72	1.34	0.50	0.61	32.0	0.24	0.33	0.060	0.030	0.014	39.6	170	4	20	15	11	<4
GL3112.5	3.625	6.54	2.10	0.69	0.54	29.5	0.26	0.50	0.090	0.060	0.021	36.5	120	6	26	12	15	<4
GL3122.5	3.725	13.31	4.69	1.64	0.95	17.6	0.45	1.29	0.230	0.050	0.014	28.9	210	11	70	43	18	21
GL3132.5	3.825	1.83	0.38	2.22	0.33	36.1	<0.1	0.08	0.020	0.020	0.068	35.6	87	3	5	1	5	15
GL3139.5	3.895	9.53	3.31	1.68	0.76	23.8	0.36	0.84	0.170	0.060	0.021	31.3	420	37	84	56	16	13
GL3143.0	3.93	10.27	3.66	1.36	0.76	22.3	0.37	0.90	0.170	0.050	0.015	32.3	190	11	54	28	18	12
GL3147.0	3.97	7.99	2.72	1.08	0.65	26.4	0.29	0.69	0.130	0.050	0.016	35.1	280	8	41	25	15	15
GL4006.7	4.067	8.41	3.15	0.95	0.69	25.4	0.33	0.76	0.140	0.050	0.016	34.7	160	6	49	22	16	19
GL4009.0	4.09	6.26	2.17	0.69	0.55	29.3	0.25	0.55	0.090	0.050	0.020	37.3	140	4	37	17	14	16
GL4012.0	4.12	3.75	1.01	0.45	0.39	34.3	0.15	0.27	0.050	0.040	0.023	40.2	100	2	19	1	11	11
GL4013.7	4.137	3.89	0.94	0.48	0.36	34.2	0.15	0.21	0.040	0.030	0.025	39.7	91	4	15	1	10	12
GL4015.7	4.157	4.09	0.75	0.41	0.35	35.0	0.15	0.19	0.030	0.020	0.032	39.1	170	4	14	1	10	<4
GL4019.5	4.192	3.99	0.83	0.38	0.37	35.1	0.14	0.19	0.030	0.030	0.054	38.9	290	3	11	1	10	<4
GL4022.7	4.227	5.42	1.49	0.72	0.48	31.8	0.22	0.41	0.080	0.040	0.040	36.9	290	9	25	13	12	<4
GL4024.7	4.237	6.44	1.98	1.01	0.56	29.6	0.27	0.55	0.100	0.050	0.034	35.7	320	10	34	21	13	<4
GL4025.5	4.255	6.21	2.15	0.89	0.54	29.7	0.27	0.51	0.100	0.060	0.025	35.9	1200	9	33	22	14	<4
GL4028.0	4.28	7.57	2.58	1.06	0.63	27.1	0.30	0.66	0.130	0.060	0.019	34.9	370	8	43	25	17	4
GL4042.5	4.425	4.90	1.22	0.52	0.45	33.3	0.20	0.31	0.050	0.030	0.040	37.9	120	4	18	1	13	<4
GL4044.5	4.445	5.42	1.37	0.42	0.49	32.2	0.16	0.25	0.030	0.050	0.050	38.8	220	4	13	1	10	<4
GL4063.0	4.63	3.78	0.54	0.31	0.32	35.8	<0.1	0.12	0.020	0.020	0.050	39.8	57	1	10	1	8	<4
GL4076.0	4.76	3.10	0.54	0.57	0.33	36.2	<0.1	0.12	<0.01	0.020	0.031	39.2						
GL4103.8	5.038	7.71	2.64	1.11	0.70	26.5	0.33	0.65	0.110	0.040	0.016	35.5	150	7	35	23	17	11
GL4118.5	5.185	1.59	0.47	0.19	0.32	38.0	<0.1	0.07	0.020	0.020	0.069	41.7	78	1	4	1	9	<4
GL4124.5	5.245	2.00	0.50	0.14	0.33	37.4	<0.1	0.09	0.010	0.020	0.069	41.3	1300	3	4	1	15	<4
GL4129.5	5.295	3.64	1.35	0.39	0.45	34.6	0.21	0.23	0.030	0.020	0.065	39.2	63	2	7	1	25	<4
GL4144.1	5.441	8.73	2.91	1.15	0.58	25.1	0.43	0.62	0.120	0.040	0.015	34.6	150	7	36	28	19	7
GL5021.0	5.71	3.11	0.72	1.72	0.34	34.9	0.16	0.14	0.030	0.020	0.067	35.9	47	3	5	1	8	<4
GL5026.0	5.76	3.79	0.55	0.38	0.31	35.9	<0.1	0.11	<0.01	0.035	0.046	39.4						
GL5043.5	5.935	8.22	1.72	0.61	0.59	29.7	0.33	0.46	0.080	0.040	0.036	34.2	1000	5	19	1	22	<4
GL5079.0	6.29	8.64	2.25	1.03	0.70	28.3	0.46	0.56	0.100	0.060	0.035	32.1	800	9	19	11	22	<4
GL5094.0	6.44	5.42	1.63	0.73	0.48	31.7	0.29	0.34	0.080	0.020	0.027	36.9	110	7	20	17	10	<4
GL5097.2	6.472	5.00	1.28	0.52	0.42	33.1	0.27	0.27	0.070	0.030	0.037	37.8	100	5	20	13	9	<4
GL5101.5	6.51	5.18	0.90	0.42	0.36	33.8	0.20	0.18	0.040	0.030	0.046	37.7	78	4	11	1	7	<4
GL5110.7	6.607	3.78	0.52	0.24	0.30	35.9	0.13	0.11	0.030	0.020	0.063	39.4	74	3	12	1	5	<4
GL5115.5	6.655	3.46	0.43	0.21	0.30	36.5	0.10	0.10	0.020	0.020	0.062	39.9	62	2	16	1	6	<4
GL5121.7	6.717	5.04	0.85	0.32	0.35	34.3	0.21	0.19	0.040	0.040	0.052	37.9	160	2	16	1	9	<4
GL5125.2	6.752	4.23	1.18	0.79	0.42	33.2	0.26	0.25	0.070	0.040	0.026	38	660	7	21	19	11	<4
GL5127.7	6.777	5.74	1.94	1.08	0.51	30.1	0.34	0.41	0.100	0.050	0.022	36.2	1100	8	31	29	13	7

PU-79 geochem.xls

Results of analyses for percentages of major elements and for parts per million (ppm) of trace elements in samples of the Greenhorn Formation in the Princeton Univ. (PU-79) core.

Sample No.	Depth (m)	% Si-xrf	% Al-xrf	% Fe-xrf	% Mg-xrf	% Ca-xrf	% Na-icp	% K-xrf	% Ti-icp	% P-icp	% Mn-icp	LOI-925	ppm Ba	ppm Co	ppm Cr	ppm Cu	ppm La	ppm Mo
GL6007.0	7.07	6.91	1.93	0.67	0.53	30.5	0.30	0.46	0.090	0.050	0.041	34.8	120	4	20	11	15	<4
GL6023.2	7.232	5.84	1.78	0.75	0.50	30.4	0.26	0.42	0.090	0.040	0.023	37.8	130	6	27	17	13	<4
GL6023.7	7.237	5.56	1.79	0.73	0.46	30.6	0.28	0.38	0.080	0.040	0.021	38.1	110	6	28	16	13	<4
GL6024.5	7.245	6.82	2.84	0.85	0.65	27.8	0.29	0.50	0.100	0.050	0.015	36.3	130	6	31	19	13	<4
GL6027.5	7.275	6.54	2.23	1.05	0.52	28.3	0.28	0.48	0.090	0.040	0.021	36.8	120	7	29	20	15	<4
GL6036.0	7.36	6.63	0.66	0.34	0.29	33.2	0.13	0.13	0.030	0.030	0.045	36.5	84	4	7	1	10	<4
GL6041.0	7.41	7.05	0.67	0.28	0.28	32.9	0.12	0.13	0.020	0.020	0.045	36.5	73	3	7	1	10	<4
GL6047.0	7.47	7.71	0.89	0.50	0.32	31.6	0.17	0.20	0.040	0.020	0.027	35.3	110	4	14	1	10	<4
GL6055.0	7.55	7.89	2.54	0.99	0.57	27.3	0.33	0.53	0.120	0.030	0.018	34.7	230	7	32	21	14	<4
GL6058.5	7.585	4.90	1.44	0.98	0.43	31.1	0.26	0.24	0.050	0.030	0.023	38.2	97	5	17	17	15	5
GL6059.5	7.595	5.51	1.63	0.68	0.46	30.5	0.21	0.31	0.030	0.031	0.015	38.7						
GL6060.5	7.605	4.95	1.57	0.70	0.43	31.3	0.30	0.25	0.060	0.040	0.023	39.3	98	8	16	18	17	<4
GL6063.5	7.635	8.27	2.43	1.37	0.55	26.9	0.30	0.48	0.080	0.039	0.015	33.1						
GL6065.0	7.65	9.48	2.30	0.93	0.57	27.5	0.40	0.54	0.120	0.040	0.026	31.9	140	12	25	19	19	<4
GL6070.2	7.702	7.19	1.86	0.79	0.52	30.5	0.32	0.46	0.080	0.030	0.044	34.5	100	6	18	1	18	<4
GL6080.0	7.8	3.41	0.81	0.52	0.38	35.6	0.29	0.19	0.050	0.030	0.022	37.7	100	4	15	1	18	<4
GL6122.0	8.22	7.33	0.88	0.27	0.30	32.2	0.16	0.12	0.030	0.020	0.044	35.9	74	1	7	1	35	<4
GL6128.0	8.28	10.37	0.52	0.26	0.26	30.2	0.11	0.10	0.020	0.020	0.048	33.4	81	1	8	1	20	<4
GL6134.0	8.34	8.78	0.75	0.30	0.31	31.3	0.15	0.14	0.040	0.020	0.037	34.9	100	3	13	1	18	<4
GL7018.0	8.68	8.73	2.05	2.40	0.59	27.3	0.33	0.57	0.120	0.050	0.052	29.1	200	4	39	1	19	<4
GL7033.0	8.83	9.90	1.43	0.46	0.45	29.1	0.26	0.32	0.070	0.030	0.049	33.1	150	5	22	1	14	<4
GL7037.4	8.874	7.29	2.38	2.56	0.60	27.1	0.43	0.45	0.170	0.050	0.020	30.6	160	20	70	38	11	<4
GL7039.5	8.895	7.75	1.48	2.81	0.45	28.1	0.28	0.30	0.080	0.050	0.023	29.8	130	12	29	19	11	<4
GL7053.0	9.03	1.81	0.63	0.36	0.39	37.3	0.13	0.09	0.040	0.020	0.130	41.4	40	3	15	1	6	5
GL7092.5	9.425	4.72	1.24	0.35	0.39	33.8	0.21	0.17	0.080	0.030	0.087	38.3	45	4	56	16	16	<4

[-xrf, X-ray flourescence spectrometry; -icp, inductively coupled, argon plasma emission spectrometry (some major elements and all trace elements); LOI-925, loss on ignition

Results of analyses for percentages of major elements and for parts per million (ppm) of trace elements in samples of the Greenhorn Formation in the Princeton Univ. (PU-79) core.

Sample No.	ppm Ni	ppm Pb	ppm Sr	ppm V	ppm Y	ppm Zn	ppm Ce	ppm Li
GL2045.0	5	<8	720	10	4	30	7	3
GL2078.0	21	<8	1100	45	8	30	13	10
GL2132.0	3	<8	710	32	4	30	7	3
GL2139.5								
GL3005.0								
GL3009.0	34	<8	1100	68	10	30	26	11
GL3018.0	55	12	930	150	12	120	32	22
GL3030.5								
GL3060.0	21	<8	890	65	12	50	22	7
GL3075.0	18	<8	1100	50	8	30	13	9
GL3112.5	17	<8	1200	60	11	30	20	12
GL3122.5	55	12	840	140	10	80	20	28
GL3132.5	7	<8	710	14	4	30	7	3
GL3139.5	75	110	890	190	9	180	21	12
GL3143.0	65	11	880	170	10	190	24	13
GL3147.0	50	<8	1100	130	10	50	25	12
GL4006.7	55	10	1100	150	9	70	14	12
GL4009.0	43	<8	1200	110	9	50	15	8
GL4012.0	25	<8	1500	62	7	30	11	4
GL4013.7	24	<8	1500	53	6	30	13	4
GL4015.7	15	<8	1300	46	6	30	7	3
GL4019.5	6	<8	1100	49	6	30	7	5
GL4022.7	26	<8	1200	66	8	30	18	6
GL4024.7	36	<8	1300	87	8	50	17	14
GL4025.5	32	<8	1200	85	8	290	17	12
GL4028.0	41	9	1100	100	10	60	20	9
GL4042.5	11	<8	1000	53	10	30	18	5
GL4044.5	9	<8	1200	46	6	30	11	5
GL4063.0	5	<8	900	37	5	30	7	3
GL4076.0								
GL4103.8	42	10	1000	100	11	60	21	8
GL4118.5	3	<8	530	18	5	30	7	3
GL4124.5	3	<8	620	7	9	30	20	3
GL4129.5	7	<8	650	16	15	30	36	5
GL4144.1	51	11	1000	100	12	120	36	12
GL5021.0	4	<8	680	17	5	40	7	3
GL5026.0								
GL5043.5	7	8	900	32	15	30	35	11
GL5079.0	13	8	850	36	19	30	37	7
GL5094.0	12	8	920	26	5	30	7	4
GL5097.2	6	8	900	23	5	30	7	4
GL5101.5	5	8	830	16	4	30	7	3
GL5110.7	3	8	730	11	4	30	7	3
GL5115.5	3	8	770	11	4	30	7	3
GL5121.7	3	8	1100	19	6	30	7	6
GL5125.2	15	8	1000	25	7	30	8	3
GL5127.7	23	8	1200	39	9	30	18	9

Results of analyses for percentages of major elements and for parts per million (ppm) of trace elements in samples of the Greenhorn Formation in the Princeton Univ. (PU-79) core.

Sample No.	ppm Ni	ppm Pb	ppm Sr	ppm V	ppm Y	ppm Zn	ppm Ce	ppm Li
GL6007.0	5	8	1100	31	10	30	15	7
GL6023.2	15	8	1200	35	7	30	8	5
GL6023.7	14	8	1300	32	8	30	16	7
GL6024.5	17	8	1000	45	7	30	19	8
GL6027.5	18	9	1400	40	9	40	19	6
GL6036.0	3	9	1000	15	6	30	7	5
GL6041.0	3	8	1200	14	6	30	7	7
GL6047.0	5	8	1400	15	7	30	7	5
GL6055.0	14	8	1200	41	9	40	24	8
GL6058.5	14	10	1600	22	14	30	21	5
GL6059.5								
GL6060.5	10	8	1500	22	15	30	17	4
GL6063.5								
GL6065.0	7	8	1300	35	13	30	18	13
GL6070.2	6	8	1100	31	14	30	23	7
GL6080.0	4	8	1200	18	17	30	24	6
GL6122.0	3	8	1100	8	39	30	51	3
GL6128.0	3	8	1500	8	25	30	17	8
GL6134.0	3	8	1800	9	16	30	21	8
GL7018.0	8	8	830	37	15	30	19	10
GL7033.0	5	8	1100	32	12	30	13	12
GL7037.4	42	8	1000	57	9	50	13	11
GL7039.5	31	8	970	26	10	30	13	9
GL7053.0	4	8	360	20	9	30	7	3
GL7092.5	12	8	450	34	24	30	14	3

[-xrf, X-ray at 925 degrees C]