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Table 21.--Chemical analyses of the granitic rocks of the Plainfield-Danielson area.

	1	2	3	4	5	6	7	8	9	10	11
Sample	S7-97	H8-109	S8-115	S8-189	Average of 8 analyses	P1-215	P2-179	D2-277	D2-286	C250	C137
SiO ₂	69.79	70.02	71.78	72.98	71.31	74.5	75.2	77.9	75.6	76.27	74.30
Al ₂ O ₃	15.05	15.00	14.29	13.90	14.72	13.1	13.1	11.8	12.8	12.68	13.43
Fe ₂ O ₃	1.20	0.65	0.62	0.68	.69	1.1	1.4	.68	.94	.93	.95
FeO	1.70	2.61	1.79	1.15	1.90	.92	.76	.56	.60	.38	.90
MgO	1.05	1.07	0.87	0.62	.88	.40	.32	.07	.11	.10	.59
CaO	3.26	2.57	2.53	1.85	2.54	.90	.90	.75	.42	.47	1.10
Na ₂ O	3.46	4.47	3.53	3.31	3.72	3.5	4.4	3.0	3.2	3.55	3.51
K ₂ O	2.94	2.17	3.32	4.35	3.20	4.1	2.3	4.0	4.8	5.17	4.06
H ₂ O-	0.07	0.04	0.05	0.06	.04	.07	.06	.07	.11	.12	.04
H ₂ O+	0.54	0.43	0.30	0.26	.39	.53	.60	.47	.51	.06	.35
TiO ₂	0.42	0.47	0.36	0.26	.38	.22	.26	.11	.08	.09	.29
P ₂ O ₅	0.17	0.19	0.13	0.10	0.13	.13	.07	.05	.03	.04	.06
MnO	0.07	0.09	0.06	0.06	.07	.02	.02	.02	.08	.02	.08
CO ₂	0.02	0.02	0.01	0.01	.02	<.05	<.05	<.05	.12	.00	.01
TOTAL	99.74	99.80	99.64	99.59		99.	99.	99.	99.	99.88	99.67
CIPW Norm											
Q	30	28	31	32	30	36	39	44	38	35	35
C	0.7	1	0.6	0.6	0.9	2	2	1	2	0.5	2
Or	17	13	20	26	19	24	14	24	29	31	24
Ab	29	38	30	28	31	30	38	26	27	30	30
An	15	11	12	8	12	4	4	3	1	2	5
En	3	3	2	2	2	1	0.8	0.2	0.3	0.3	2
Fs	2	4	2	1	3	0.5		0.3	0.3		0.5
Mt	2	0.9	0.9	0.9	1	2	2	1	1	1	1
Il	0.8	0.9	0.7	0.5	0.7	0.4	0.5	0.2	0.1	0.2	0.6
Ap	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.1	0.07	0.1	0.1
Cc	0.05	0.05	0.02	0.02	0.04				0.3		0.02
An	34	23	28	23	27	12	10	10	3	6	14
An + Ab											
Mesonorm											
Q	29	28	31	31	30	34	36	41	35	33	34
C	1	2	1	1	1	2	2	2	2	0.6	2
Or	13	7	16	23	15	22	12	23	28	31	22
Ab	31	39	32	30	33	37	39	27	29	32	31
An	13	10	10	8	11	3	3	3	0.8	2	4
Bi	6	9	6	4	7	2	2	0.8	0.9	0.4	3
Mt	1	0.7	0.6	0.7	0.7	1	1	0.7	1	1	1
Ti	0.9	1	0.8	0.5	0.4	0.4	0.5	0.2	0.2	0.2	0.6
Ap	0.5	0.4	0.3	0.2	0.3	0.3	0.1	0.1	0.05	0.1	0.1
Cc	0.04	0.04	0.02	0.02	0.04				0.3		0.02
H ₂ O	3	3	2	2	2	3	4	3	3	0.4	2
An	30	20	25	20	25	7	7	10	3	5	12
An + Ab											

1-4: Canterbury Gneiss; for location mode and sample description see table 13. Analyst, Dorothy F. Powers.

5: Average of 8 analyses of Canterbury Gneiss; averaged analyses include 1-4 and Snyder (1964a), table 6, column 1-4.

6-9: Sterling Plutonic Group; Hope Valley Alaskite (6 and 7) and Scituate Gneiss (8 and 9); 7 and 9 are mylonite; 6 and 8 are mortar gneiss. For location, mode and sample description see table 14. Rapid rock analysis by Leonard Shapiro, Project leader. Methods used are those described in U. S. G. S. Bulletin 114-A, supplemented by Atomic Absorption.

10: Sterling Plutonic Group, alaskite gneiss; Uncasville quadrangle (29N; 8.7W), Connecticut, (Goldsmith, 1967a). Analysis made for R. Goldsmith; Analyst, Dorothy F. Powers.

11: Sterling Plutonic Group, alaskite gneiss; Uncasville quadrangle (approximately 39N; 22W), Connecticut, (Goldsmith, 1967a). Analysis made for R. Goldsmith; Analyst, M. Balazs.

Semiquantitative spectrographic analyses

(Analysts: 1-4, Nancy M. Conklin, 1959; 6-10, Joseph L. Harris, 1966; 10, Paul R. Barnett, 1957.)

Ba	.07	.03	.07	.07		.02	.05	.007	.015	.03	
Be	.00015	.0003	.0003	.0003		.0007	.0001	.0002	.0002	.0003	
Co	.0007	.0007	.0007	d		0	0	0	0	0	
Cr	.0007	.0007	.0007	.0007		0	0	0	0	.00015	
Cu	.0015	.0007	.0003	.0007		0	.0003	.0007	.0002	.0003	
Ga	.0007	.0007	.0007	.0007		.0015	.001	.0015	.0015	.0015	
La	.003	0	0	0		0	0	0	0	0	
Nb	0	d	0	d		.0015	.001	.001	.001	.003	
Ni	.0003	.0003	.0003	d		0	0	0	0	0	
Pb	.0015	.0015	.0015	.003		.005	.0007	.0007	.0007	.003	
Sc	.0015	.0015	.0007	.0007		.0003	.001	0	0	0	
Sr	.03	.015	.03	.015		.007	.01	.002	.002	.003	
V	.007	.007	.007	.003		.0015	.001	.001	.001	0	
Y	.0015	.0015	.0015	.0015		.007	.005	.003	.005	.003	
Yb	.00015	.00015	.0003	.00015		.0007	.0005	.0003	.0005	.0007	
Zr	.015	.015	.007	.015		.007	.02	.01	.01	.015	

Figures are reported to the nearest number in the series 7, 3, 1, 5, 0.7, 0.3, 0.15, etc., in percent. These numbers represent midpoints of group data on a geometric scale. "d" indicates barely detected, and concentration uncertain. Comparisons of this type of semiquantitative results with data obtained by quantitative methods, either chemical or spectrographic, show that the assigned group includes the quantitative value about 60 percent of the time.

Elements looked for but not found: Ag, As, Au, B, Bi, Cd, Ce, Eu, Ge, Hf, Hg, In, Li, Mo, Pd, Pt, Re, Sb, Sn, Ta, Te, Th, Tl, U, W, Zn; in samples S7-97, H8-109, S8-115, S8-189, P1-185 and C-250: Dy, Er, Gd, Ho, Ir, Lu, Nd, Os, Rh, Ru, Sm, Tb, Tm.