

LYNX-LATE 82E  
 Table of Chemical Analyses of Tertiary Volcanic and Dyke Rocks from the Greenwood - Boundary Area  
 Oxides Recalculated to 100

021758

	1	2	3	4	5	6	7	8
SiO <sub>2</sub>	61.51	60.27	58.10	57.84	63.22	58.18	56.33	55.56
TiO <sub>2</sub>	0.97	1.08	1.00	0.93	0.73	0.89	0.79	0.67
Al <sub>2</sub> O <sub>3</sub>	14.33	14.70	14.77	16.06	17.96	17.52	20.78	21.83
Fe <sub>2</sub> O <sub>3</sub>	5.00	2.08	5.95	1.26	2.02	1.64	4.68	2.68
FeO		4.04		5.40	1.60	4.00	1.22	1.92
MnO	0.04	0.09	0.02	0.08	tr	0.09	tr	0.07
MgO	3.72	4.30	4.86	4.86	1.01	2.72	1.99	1.70
CaO	7.85	5.89	8.52	5.98	1.78	4.31	4.78	4.15
Na <sub>2</sub> O	3.27	3.82	3.14	2.99	4.82	4.59	6.84	5.11
K <sub>2</sub> O	3.31	3.73	3.64	4.60	6.86	6.06	2.59	6.31
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Oxides as Determined

+ H <sub>2</sub> O	1.32	2.92	0.57	1.40	1.18	0.47	4.63	2.23
- H <sub>2</sub> O		0.07	0.07	0.60	0.12	0.08	0.80	0.28
CO <sub>2</sub>	0.02	0.12	0.03	0.14	0.20	0.35	0.75	
P <sub>2</sub> O <sub>5</sub>	0.43	0.54	0.49	0.46	0.17	0.51	0.59	0.41
SrO	0.11	0.14	0.14	0.09	-	0.06	0.42	0.21
BaO	0.16	0.31	0.23	-	-	0.24	0.36	0.60

Refractive Index 1.539 1.540

Norwegian Creek area,

1. Midway (biotite) pyroxene andesite, analysis DC-2, p. 111, Church 1963  
near Mabel portal,
2. Biotite diorite, analysis No. 2, p. 419, Church 1971  
Norwegian Creek area,
3. Midway (pyroxene andesite), analysis DC-4, p. 111, Church 1963
4. Augite porphyrite (diorite dyke), Phoenix area, analysis No. I, p. 49, Le Roy 1912
5. Pulaskite dyke, near Midway, analysis No. 1, p. 419, Daly 1912
6. Pulaskite dyke, Phoenix area, analysis No. I, p. 51, Le Roy 1912
7. Midway analcitic rhomb-porphyrilava, Rock Creek area, p. 414, Daly 1912
8. Midway 'augite trachyte' lava (phonolite), Phoenix area, analysis No. I, p. 46, Le Roy 1912.

Neil Church

	①	②	③	④
Oxides Recalculated to 100-				
SiO <sub>2</sub>	62.96	59.95	56.21	53.42
TiO <sub>2</sub>	0.54	0.72	1.02	1.12
Al <sub>2</sub> O <sub>3</sub>	17.36	18.17	22.27	15.59
Fe <sub>2</sub> O <sub>3</sub>	1.51	2.11	} 5.19	3.04
FeO	2.03	1.96		5.63
MnO	tr	0.06	0.11	0.10
MgO	1.30	1.85	0.97	5.95
CaO	2.00	2.95	4.65	7.44
Na <sub>2</sub> O	5.53	6.49	6.47	3.75
K <sub>2</sub> O	6.77	5.74	3.09	3.91
	100.00	100.00	100.00	100.00
Oxides as Determined -				
SrO	-	0.13	0.40	0.15
BaO	-	0.31	0.81	0.25
H <sub>2</sub> O +	} 0.30	1.30	} 4.9	0.63
H <sub>2</sub> O -		0.01		0.21
CO <sub>2</sub>	tr	0.05	1.1	-
P <sub>2</sub> O <sub>5</sub>	0.11	0.39	-	0.75
SO <sub>3</sub>	-	0.01	-	-
Molecular Norms -				
Quartz	-	-	-	-
Orthoclase	39.2	32.8		22.9
Albite	48.8	44.8		33.1
Nepheline	-	7.2		0.2
Anorthite	2.5	3.7		14.1
Wollastonite	2.9	4.3		9.0
Enstatite	2.4	-		-
Ferrosilite	0.9	-		-
Forsterite	0.8	3.7		12.2
Fayalite	0.3	0.4		3.8
Ilmenite	0.7	1.0		1.5
Magnetite	1.5	2.1		3.2

- ① A sample of the Caryell batholith from a point north of Record Mountain near Trail; Daly 1912 p. 359.
- ② Monzonite collected at station 'B', 0.8 miles west of Allendale Lake, analysis by R.S. Young B.C. Dept. of Mines
- ③ Rhomb porphyry phonolite from the White Lake basin; analysis no. 14 GEM 1970 p. 401
- ④ Shonkanitic contact phase of the Caryell batholith from a railway cut about 2 miles southwest of Caryell; Daly 1912 p. 361.