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Table 1. Results of semiquantitative spectrographic analysis, partial chemical analysis, and remanent magnetism analysis of magnetite-bearing pyroxenite samples from near Frying Pan Lake Iliamna D-7 Quadrangle, Alaska

Semiquantitative Spectrographic Analysis

Results are reported in percent to the nearest number in the series 1, 0.7, 0.5, 0.2, 0.15 and 0.1, etc.; which approximate midpoints of group data on a geometric scale. The assigned group for semiquantitative results will include the quantitative value about 30% of the time. Analysis by Chris Heropoulos, U. S. Geological Survey. M = major constituent--greater than 10%. The following elements were looked for and not found: Ag, As, Au, Bi, Ge, Hf, Hg, In, Li, Mo, Nb, Pd, Pt, Re, Sb, Sn, Ta, Te, Th, Tl, U, W.

Partial Chemical Analysis

Analysis by Lois Jones, U. S. Geological Survey. Total iron reported as FeO.

Remanent Magnetization

Magnetic Susceptibility

Measurements made by William Huff, U. S. Geological Survey.

Sample	Fraction	Percent (by weight) magnetic/ non-magnetic fractions	Si	Al	Fe	Mg	Ca	Na	K	Ti	P	Mn	B	Ba	Be	Ce	Co	Cr	Cu	Ga	La	Ni	Pb	Sc	Sr	V	Y	Yb	Zn	Zr	Nd	FeO	TiO_2	P_2O_5	J x 10^3 emu/cm^3	k x 10^3 emu/cm^3
	Whole Rock		M	5.	M	7.	M	.3	0	.7	1.	.3	.0015	.003	0	0	.007	.003	.01	*	0	.005	0	.01	.07	.1	.005	*	0	.007	0	17.5	1.1	2.0	1.65	4.15
1	Magnetics	19.5	5.	1.5	M	2.	3.	.05	0	1.5	0	.3	0	.002	0	0	.007	.01	.001	*	0	.015	0	.003	.007	.2	.001	*	.15	0	0	70.6	2.6	0.34		
	Non-magnetics	80.5	M	7.	10.	7.	10.	.3	0	.7	1.	.3	.005	.005	0	0	.007	.002	.0015	.0015	.003	.005	.003	.015	.1	.07	.003	.0003	0	.007	0	9.8	0.77	2.2		
	Whole Rock		M	3.	M	7.	M	.3	.7	.7	1.	.2	0	.015	0	0	.007	.001	.03	*	0	.007	.003	.015	.07	.1	.003	*	.05	.005	0	21.2	1.2	2.5		
2	Magnetics	21.9	5.	2.	M	2.	3.	.05	0	1.5	0	.3	0	.002	0	0	.007	.0015	.01	*	0	.015	0	.003	.001	.2	.001	*	.3	0	0	75.4	3.0	0.38		
	Non-magnetics	78.1	M	5.	10.	7.	10.	.3	.7	.5	1.5	.2	0	.015	.00015	0	.007	.0005	.05	.001	.003	.007	.005	.02	.1	.07	.003	.0003	0	.005	0	9.0	0.70	3.1		
	Whole Rock		M	7.	M	7.	M	.7	1.5	.7	1.	.2	0	.03	0	0	.005	.005	.005	*	0	.005	0	.015	.1	.1	.003	*	0	.007	0	15.6	0.94	2.1		
3	Magnetics	12.9	5.	3.	M	2.	3.	.3	.7	1.5	0	.3	0	.015	0	0	.005	.02	.0015	*	0	.015	0	.003	.01	.2	.001	*	.2	0	0	67.6	2.7	0.27		
	Non-magnetics	87.1	M	7.	7.	7.	10.	1.	1.5	.5	1.	.2	.0015	.05	0	0	.005	.002	.002	.0015	.003	.005	.0015	.015	.1	.05	.003	.0003	0	.005	0	7.0	0.57	2.2		
	Whole Rock		M	7.	M	7.	M	1.	1.	.7	1.	.2	0	.015	0	0	.007	.002	.0015	*	0	.005	0	.015	.1	.1	.005	*	0	.007	0	18.0	1.1	2.0		
4	Magnetics	17.9	5.	3.	M	2.	5.	.3	0	1.5	0	.3	0	.007	0	0	.02	.007	.0007	*	0	.015	0	.003	.02	.3	.001	*	.1	0	0	66.6	3.4	0.43		
	Non-magnetics	82.1	M	7.	7.	7.	M	.7	1.	.5	1.	.2	.001	.015	0	0	.007	.001	.0007	.0015	.005	.005	0	.015	.1	.05	.005	.0005	0	.005	0	7.0	0.61	2.3		
	Whole Rock		M	7.	M	7.	M	1.	1.	.7	1.	.15	0	.02	0	0	.007	.0015	.005	*	0	.005	0	.015	.15	.1	.005	*	0	.007	0	17.8	1.3	2.0	2.05	18.5
5	Magnetics	20.0	5.	3.	M	1.5	2.	.5	0	1.5	0	.3	0	.015	0	0	.02	.005	.002	*	0	.015	0	.002	.03	.3	.001	*	.2	0	0	71.0	3.3	0.26		
	Non-magnetics	80.0	M	7.	7.	7.	M	1.	1.	.5	1.	.3	.001	.02	0	0	.005	.0007	.002	.0015	.003	.003	0	.015	.15	.05	.005	.0005	0	.005	0	6.9	0.64	2.3		
	Whole Rock		M	3.	M	7.	M	.3	0	.7	0	.15	0	.002	0	0	.007	.007	.005	*	0	.015	0	.02	.05	.1	.0015	*	0	.002	0	23.5	1.2	0.39	42.8	49.5
6	Magnetics	26.6	3.	2.	M	2.	3.	.05	0	1.5	0	.3	0	.002	0	0	.03	.015	.005	*	0	.005	0	.005	.007	.3	.001	*	.1	0	0	73.3	3.3	0.097		
	Non-magnetics	73.4	M	5.	7.	10.	M	.5	0	.5	0	.15	0	.005	0	0	.007	.003	.002	.001	0	.007	0	.02	.05	.03	.002	.0002	0	.003	0	7.0	0.61	0.50		
	Whole Rock		M	5.	M	7.	M	.7	0	.7	.3	.15	0	.007	0	0	.007	.01	.007	*	0	.01	0	.015	.07	.1	.003	*	0	.005	0	21.0	1.2	1.4		
7	Magnetics	22.8	3.	3.	M	2.	3.	.2	0	1.5	0	.3	0	.005	0	0	.02	.03	.005	*	0	.03	0	.003	.01	.3	.001	*	.15	0	0	71.8	3.5	0.22		
	Non-magnetics	77.2	M	5.	7.	7.	M	.7	.7	.5	.7	.15	0	.01	0	0	.007	.007	.005	.001	0	.005	0	.02	.1	.03	.003	.0003	0	.007	0	7.3	0.62	1.7		
	Whole Rock		M	5.	M	7.	M	.5	0	.7	1.	.15	0	.007	0	0	.007	.0015	.015	*	0	.007	0	.015	.1	.1	.003	*	0	.007	0	21.4	1.3	2.1		
8	Magnetics	26.5	5.	3.	M	2.	5.	.15	0	1.5	0	.3	0	.007	0	0	.03	.003	.005	*	0	.015	0	.005	.01	.3	.001	*	.2	0	0	66.9	3.3	0.55		
	Non-magnetics	73.5	M	7.	7.	10.	M	.7	.5	.7	1.	.15	0	.01	0	0	.007	.0005	.005	.0015	.003	.003	0	.015	.1	.05	.005	.0005	0	.007	0	7.6	0.71	2.3		
	Whole Rock		M	7.	M	7.	M	.7	3.	.7	1.5	.15	0	.05	0	0	.007	.0003	.1	*	.005	.0015	0	.01	.1	.1	.005	*	0	.01	0	15.8	1.4	3.2		
9	Magnetics	14.2	3.	2.	M	1.5	2.	.2	0	1.5	0	.3	0	.015	0	0	.03	0	.02	*	0	.003	0	.002	.015	.3	.001	*	.15	0	0	74.8	2.9	0.39		
	Non-magnetics	85.8	M	7.	7.	7.	M	1.	2.	1.	1.5	.15	0	.05	0	.02	.007	.0003	.07	.0015	.007	.001	0	.01	.1	.05	.007	.0007	0	.007	.01	7.8	0.96	3.8		
	Whole Rock		M	7.	M	7.	M	.5	1.5	.7	.7	.2	0	.05	0	0	.007	.01	.1	*	0	.005	0	.01	.07	.1	.003	*	0	.007	0	20.7	1.5	1.8		
10	Magnetics	21.8	5.	3.	M	3.	5.	.15	0	1.5	0	.3	0	.015	0	0	.02	.02	.05	*	0	.015	0	.005	.015	.3	.001	*	.15	0	0	63.5	2.8	0.45		
	Non-magnetics	78.2	M	7.	10.	10.	M	.5	1.	1.	1.	.2	0	.05	0	0	.01	.005	.1	.0015	0	.005	0	.015	.1	.07	.005	.0005	0	.01	.007	9.1	1.2	2.1		
	Whole Rock		M	5.	M	7.	M	.5	1.	.7	1.	.2	0	.03	0	0	.007	.0007	.03	*	0	.003	0	.01	.15	.1	.005	*	0	.01	0	22.2	1.8	2.5		
11	Magnetics	24.8	5.	3.	M	2.	3.	.1	0	1.5	0	.5	0	.01	0	0	.02	.002	.02	*	0	.007	0	.003	.02	.3	.001	*	.2	0	0	66.7	3.5	0.51		
	Non-magnetics	75.2	M	7.	10.	10.	M	.5	.5	1.	1.5	.2	0	.03	0	0	.007	.0005	.02	.0015	.005	.002	0	.015	.1	.07	.007	.0007	0	.01	0	8.7	1.3	2.8		
	Whole Rock		M	5.	M	10.	M	.7	.7	.7	0	.2	0	.02	0	0	.007	.005	.07	*	0	.01	0	.015	.07	.1	.002	*	0	.005	0	19.8	1.2	0.11		
12	Magnetics	20.0	3.	2.	M	1.5	3.	.15	0	1.5	0	.3	0	.01	0	0	.02	.02	.03	*	0	.03	0	.003	.007	.2	.001	*	.3	0	0	74.8	3.0	0.036		
	Non-magnetics	80.0	M	7.	10.	10.	M	.7	.7	.7	0	.2	.001	.02	0	0	.007	.002	.07	.0015	0	.007	0	.02	.07	.05	.003	.0003	0	.007	0	8.3	0.69	0.12		
	Whole Rock		M	5.	M	7.	M	.5	.7	.7	.5	.2	0	.015	0	0	.007	.01	.015	*	0	.007	0	.01	.1	.15	.005	*	0	.007	0	20.7	1.4	1.7	31.7	37.8
13	Magnetics	22.3	5.	2.	M	2.	5.	.1	0	1.5	0	.3	0	.007	0	0	.02	.015	.01	*	0	.015	0	.003	.01	.2	.001	*	.2	0	0	68.8	3.1	0.64		
	Non-magnetics	77.7	M	5.	10.	10.	M	.5	.5	1.	1.	.2	0	.015	0	0	.007	.003	.007	.0015	0	.005	0	.015	.07	.07	.005	.0005	0	.007	0	8.5	0.94	1.9		
	Whole Rock		M	3.	M	7.	M	.3	0	.7	1.	.15	0	.001	0	0	.007	.0007	.003	*	0	.005	0	.01	.07	.1	.003	*	.05	.003	0	23.9	1.5	2.7	32.7	47.3
14	Magnetics	29.9	5.	3.	M	2.	5.	.1	0	1.5	0	.3	0	.001	0	0	.03	.002	.003	*	0	.015	0	.005	.03	.2	.001	*	.1	0	0	64.7	3.5	0.97		
	Non-magnetics	70.1	M	5.	7.	10.	M	.3	0	.7	1.5	.2	.0007	.003	0	0	.005	.0007	.0015	.001	0	.003	0	.015	.07	.05	.003	.0003	0	.005	0	7.2	0.70	3.9		
	Whole Rock		M	5.	M	7.	M	.7	0	.7	0	.2	0	.003	0	0	.007	.003	.005	*	0	.007	0	.015	.07	.1	.003	*	0	.005	0	20.6	1.3	0.47		
15	Magnetics	21.3	2.	2.	M	1.	2.	.1	0	1.5	0	.3	0	.01	0	0	.03	.01	.003	*	0	.02	0	.002	.007	.2	.001	*	.15	0	0	79.6	3.8	0.061		
	Non-magnetics	78.8	M	5.	7.	10.	M	.7	0	.5	0	.2	.0007	.005	0	0	.007	.0007	.002	.001	0	.005	0	.02	.05	.03	.003	.0003	0	.007	0	7.6	0.62	0.66		
	Whole Rock		M	7.	M	7.	M	1.	1.	.7	0	.15	0	.03	0	0	.007	.005	.005	*	0	.007	0	.015	.15	.1	.003	*	0	.005	0	19.3	1.2	0.63	19.2	28.8
16	Magnetics	23.4	10.	5.	M	3.	7.	.5	.5	1.	0	.3	0	.015	0	0	.02	.015	.003	*	0	.02	0	.005	.07	.2	.001	*	.15	0	0	55.9	2.3	0.42		
	Non-magnetics	73.6	M	7.	10.	10.	M	1.	1.	.7	0	.2	.0007	.02	0	0	.01	.002	.005	0	0	.007	0	.015	.1	.07	.003	.0003	0	.007	0	9.2	0.82	0.56		

* When the concentration of Fe is very high, the most sensitive lines of Ga and Yb cannot be used. Ga, if present, would be <.002%. From the concentration of Y it can be assumed that Yb, if present, would be in the order of .0003 to .0005% for the whole rock analyses, and in the order of .0001% for the magnetic fraction analyses.

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