

**Table 4: Bulk chemistry results**

Oxide (wt%)	Detection Limit	Lamprophyrite (L)	Metasomatized marble (MM)	Marble (M)
SiO <sub>2</sub>	0.01	49.19	14.67	2.25
Al <sub>2</sub> O <sub>3</sub>	0.01	13.38	0.84	0.22
FeO	0.01	17.39	2.13	0.3
MnO	0.001	0.173	0.044	0.014
MgO	0.01	6.43	18.1	20.72
CaO	0.01	7.39	31.74	30.35
Na <sub>2</sub> O	0.01	2.89	0.02	0.03
K <sub>2</sub> O	0.01	1.34	0.03	0.01
TiO <sub>2</sub>	0.001	2.297	0.047	0.008
P <sub>2</sub> O <sub>5</sub>	0.01	0.21	0	0
LOI		0.05	32.88	44.87
Total	0.01	100.6	100.5	98.78

Analyte Symbol (ppm)	Detection Limit	Lamprophyrite (L)	Metasomatized marble (MM)	Marble (M)
Zr (Moderate enrichment)	1	126	9	4
V (Moderate enrichment)	5	503	16	5
Cr (Moderate enrichment)	20	70	30	20
Y (Moderate enrichment)	0.5	49	6	1.3
Ba (Moderate enrichment)	2	209	16	8
Tl (Moderate enrichment)	0.05	0.59	0.12	0.05
Th (High enrichment)	0.05	0.19	1.69	0.25
U (High enrichment)	0.01	0.23	0.93	0.23
Sr (High enrichment)	2	57	142	53

Analyte Symbol	Detection Limit	Lamprophyrite (L)	Metasomatized marble (MM)	Marble (M)
La	0.05	3.79	7.13	0.73
Ce	0.05	12.1	11.9	1.22
Pr	0.01	2.09	1.24	0.14
Nd	0.05	11.5	4.21	0.5
Sm	0.01	4.46	0.93	0.11
Eu	0.005	1.67	0.307	0.039
Gd	0.01	6.99	0.88	0.16
Tb	0.01	1.32	0.14	0.03
Dy	0.01	8.79	0.89	0.16
Ho	0.01	1.91	0.2	0.03
Er	0.01	5.68	0.58	0.09
Tm	0.005	0.83	0.089	0.012
Yb	0.01	5.39	0.62	0.08
Lu	0.002	0.828	0.104	0.012

Analyte Symbol	Detection Limit	Lamprophyrite (L)	Metasomatized marble (MM)	Marble (M)
Be	1	<1	<1	<1
Rb	1	73	1	<1
Ni	20	50	20	<20
Cu	10	10	<10	<10
Zn	30	140	30	<30
Ag	0.5	0.5	<0.5	<0.5
Nb	0.2	3	0.4	0.2
Ta	0.01	0.15	0.03	<0.01
W	0.5	1.2	<0.5	<0.5
Pb	5	<5	<5	<5
Ge	0.5	1.7	0.5	<0.5
Sc	1	50	3	<1
Co	1	50	4	<1
Ga	1	18	2	<1
Cs	0.1	16.6	0.5	0.1
Hf	0.1	3.8	0.2	<0.1