

**Supplementary Table 3.** C and O isotope compositions (CO<sub>3</sub>)-group of meionite from scapolite rocks as well as calcite from garnet marbles (skarn?) and recrystallized marly limestones.

Sample	Mineral	Mineral content in bulk sample (wt%, XRD data)	$\delta^{13}\text{C}_{\text{V-PDB}}$ , ‰	$\delta^{18}\text{O}_{\text{V-SMOW}}$ , ‰
Recrystallized marly limestones				
PK-3-7A	Calcite	63	- 5.3	+ 19.3
PK-14-2	Calcite	30	- 1.9	+ 18.9
PK-18-1	Calcite	86	- 1.2	+ 20.4
PK-18-1	Calcite	100	- 1.6	+ 20.6
Scapolite rocks				
PK-8-1	Meionite	100	- 0.9	+ 17.2
PK-8-1	Meionite <sup>1</sup>	100	- 1.2	+ 17.0
PK-10-2	Meionite	100	- 0.4	+ 17.3
PK-10-2	Meionite <sup>1</sup>	100	- 0.5	+ 17.0
Garnet marbles (skarn?)				
PT-111	Calcite	80	- 0.7	+ 23.6
PT-111	Calcite	100	- 0.6	+ 23.7
PT-112	Calcite	73	- 0.7	+ 23.5
PT-112	Calcite	100	- 2.8	+ 22.0

*Note.* <sup>1</sup>, average by 4 analyses. Analyses were carried out at the Analytical Center for multi-elemental and isotope research SB RAS.