Table S1. Chemical composition of mineral phases measured with SEM-EDS method and presented in oxides wt% normalized.

Mineral	Sample	Na_2O	MgO	Al_2O_3	SiO_2	S	K2O	CaO	MnO	Fe_2O_3	CuO	ZnO	ZrO_2	HfO_2	PbO	Bi_2O_3	Total	Spectrum Label
Native Bismuth	T1.5									1.16					0	98.84	100	Spectrum 18
Quartz	T1.4				100.00												100	Spectrum 59
Hematite	T1.4				3.30	9.63		1.28		84		1.78					100	Spectrum 61
Cerrusite	T1.4							0.81		1.52					97.67		100	Spectrum 85
Ca-clinopyroxene (Diopside-Hedenbergite)	T1.4		13.99		52.65			25.01	1.58	6.77							100	Spectrum 87
Ca-garnet (Andradite-Grossular series)	T1.4			25.73	37.15			23.02		12.69		1.41					100	Spectrum 93
Native Copper	T2.10		1.64		12.37			5.45		4.08	76.46						100	Spectrum 120
Malachite	T2.10				0.42			46.86	1.36	1.38	49.98						100	Spectrum 124
Zircon	T2.10				36.84					0.41			60.89	1.87			100	Spectrum 136
Orthoclase	T2.10	0.58		19.58	63.39		16.45										100	Spectrum 145
Ca-garnet (Andradite)	T2.10				34.63			33.22		32.15							100	Spectrum 149

Table S2. Chemical composition of mineral phases measured with SEM-EDS method in wt% normalized.

Mineral	Sample	O	F	Na	Mg	Si	P	S	Ca	Mn	Fe	Ni	Cu	Zn	As	Br	Cd	Pb	Bi	Total	Spectrum Label
Pyrite	T1.5							39.05			60.95									100	Spectrum 1
Chalcopyrite	T1.5							34.92			31.08		34.00							100	Spectrum 10
Galena	T1.5							15.01			2.09		2.94					79.95		100	Spectrum 11
Sphalerite	T1.5			5.55				31.72		0.22	10.50			51.67			0.34			100	Spectrum 32
Bismite	T1.5	9.23	5.09								0.39								85.29	100	Spectrum 40
Bismite	T1.5	9.51	4.54								0.53								85.42	100	Spectrum 43
Apatite	T1.4	39.2	4.29				17.83		38.30		0.37									100	Spectrum 58
Pentlandite	T1.4	0.99						15.48	0.47		26.44	55.92		0.71						100	Spectrum 74
Arsenopyrite	T2.9							21.02			38.47				40.51					100	Spectrum 98
Pyrrhotite	T2.10	22.61			0.66	1.83		22.75	0.50		50.72					0.93				100	Spectrum 127