STable 3. The phases of quartz-selenide ceramic that form gold localization areas have a specific chemical composition (wt.%, EDS data).

Region number scanning		Si	O	Fe	Cu	Au	Se
1 Fig.9c	**1**	1.4	4.4	1.6	3.1	89.2	0.4
	2	1.6	6.5	2.0	3.8	85.3	0.9
	3	**0.6**	**1.6**	**20.0**	**23.0**	**0.0**	**54.8**
	4	0.5	0.0	20.2	23.3	0.0	56.0
	5	48.2	50.8	0.3	0.5	0.0	0.2
	6	48.7	50.2	0.3	0.6	0.0	0.2
	7	0.3	0.0	20.1	23.5	0.0	56.0
	8	1.6	3.8	18.2	21.0	0.0	55.4
	9	43.2	54.7	0.5	0.7	0.0	0.9
	10	0.0	0.0	20.4	23.5	0.0	56.1
2 Fig.9d	1	0.0	3.7	2.4	3.6	88.2	2.1
	2	0.7	4.2	2.7	4.2	85.2	3.1
	3	**0.5**	**1.9**	**19.4**	**22.9**	**0.0**	**55.2**
	4	**0.5**	**1.9**	**19.4**	**22.6**	**0.0**	**55.5**
	5	37.6	47.8	3.9	3.9	0.0	6.7
	6	0.5	1.9	19.2	22.2	0.0	56.2
	7	0.5	1.8	18.7	21.8	0.0	57.3
	8	45.3	52.9	0.6	0.6	0.0	0.6
	9	48.1	50.6	0.4	0.6	0.0	0.3
	10	0.8	3.5	18.0	21.6	0.0	56.0
3 Fig.9e	**1**	**0.4**	**0.0**	**20.3**	**23.4**	**0.0**	**55.9**
	2	**0.4**	**0.0**	**20.0**	**23.4**	**0.0**	**56.2**
	3	**0.4**	**0.0**	**20.4**	**23.3**	**0.0**	**55.9**
	4	**0.4**	**0.0**	**19.5**	**22.8**	**0.0**	**57.3**
	5	47.7	51.7	0.3	0.4	0.0	0.0
	6	48.2	51.0	0.3	0.4	0.0	0.0
	7	48.1	51.0	0.3	0.4	0.0	0.2
	8	43.2	55.0	0.5	0.7	0.0	0.5

Note: Ceramic samples were analyzed using EDS analysis, which involved placing them in a polished epoxy resin mold. The composition of eskebornite is highlighted in bold. The serial numbers of the EDS analysis points correspond to the marks in Figure 9.