

(a)	Pre-ore stage	Syn-ore stage	Post-ore stage
Quartz	Major	Major	Major
Tourmaline	Major	Major	Major
K-feldspar	Major	Major	Major
Albite	Major	Major	Major
Muscovite	Minor	Major	Major
Sericite	Locally occurring	Locally occurring	Major
Fluorite	Major	Major	Major
Chlorite	Major	Locally occurring	Major
Cassiterite	Major	Major	Major
Magnetite	Major	Locally occurring	Major
Pyrite	Major	Major	Major
Arsenopyrite	Major	Major	Major
Sphalerite	Major	Locally occurring	Major
Galena	Major	Locally occurring	Major
Chalcopyrite	Major	Locally occurring	Major
Calcite	Major	Major	Major

(b)	Stage-I	Stage-II	Stage-III	Stage-IV
Garnet	Major	Major	Major	Major
Diopside	Major	Major	Major	Major
Quartz	Locally occurring	Locally occurring	Major	Major
Calcite	Locally occurring	Major	Major	Major
Vesuvianite	Major	Major	Major	Major
Apatite	Locally occurring	Locally occurring	Major	Major
Pargasite	Major	Major	Major	Major
Tremolite	Major	Major	Major	Major
Phlogopite	Major	Major	Major	Major
Sellaite	Major	Major	Major	Major
Fluorite	Major	Major	Major	Major
Magnetite	Major	Major	Major	Major
Cassiterite	Major	Major	Major	Major
Scapolite	Major	Locally occurring	Major	Major
Chlorite	Major	Locally occurring	Major	Major
Epidote	Major	Locally occurring	Major	Major
Tourmaline	Major	Locally occurring	Major	Major
Pyrite	Major	Major	Major	Major
Arsenopyrite	Major	Major	Major	Major
Chalcopyrite	Major	Major	Major	Major
Sphalerite	Major	Major	Major	Major
Galena	Major	Major	Major	Major

Major Minor ' ' ' Locally occurring

APPENDIX 1. Paragenetic sequence of alteration minerals and mineralization at the greisen-type HM zone (a) and skarn-type No. 19 orebody at the BA zone (b).