

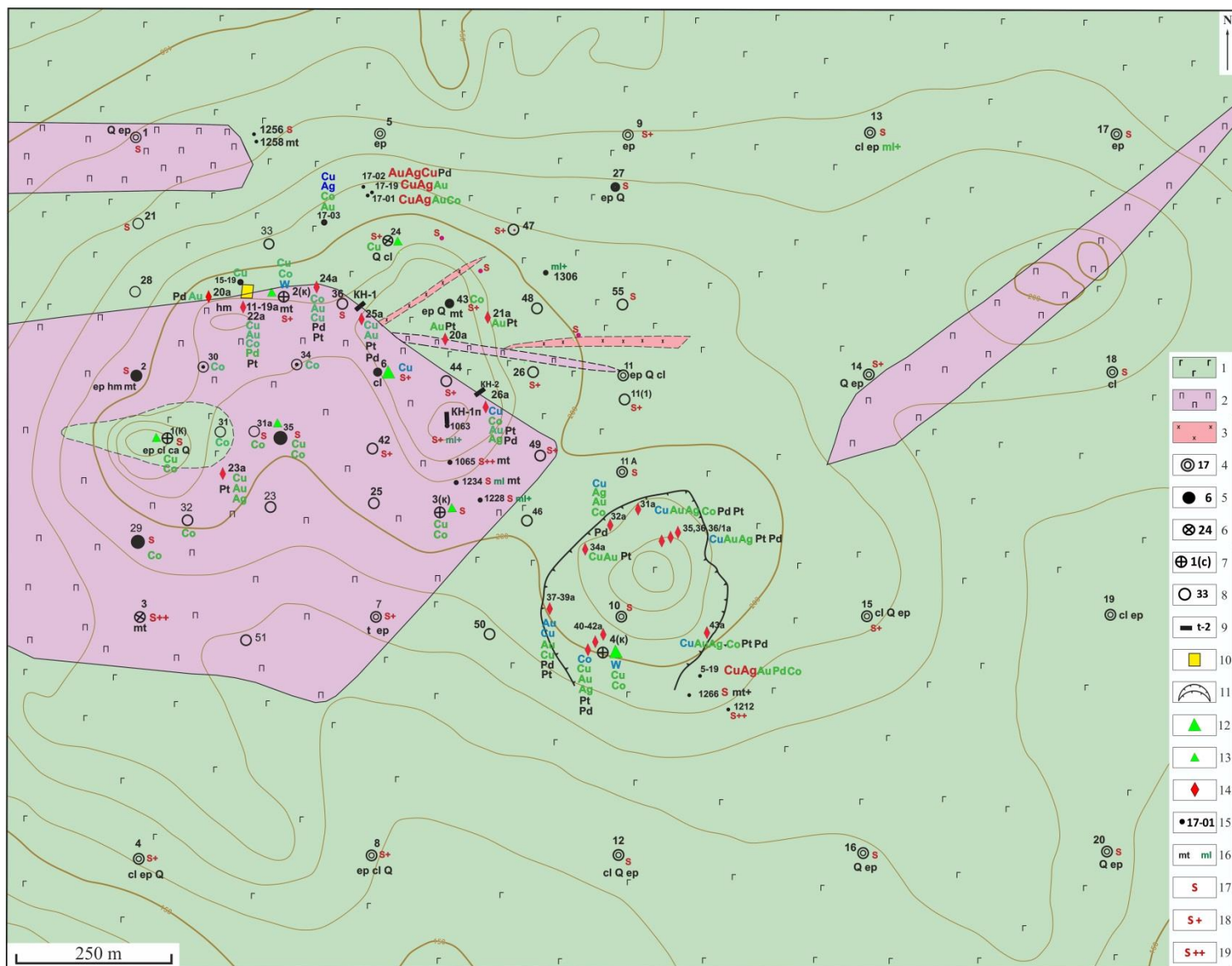


Fig. ESM 3. Vasilinovskoe ore occurrence (Amphibolite area): elements of geological structure, scheme of sampling, and mineralogical and geochemical features, according to the V.D. Mokry (2006, 2017–2022); E.E. Tyukova, Yu.N. Ivanova, I.V. Vikentyev, and I.D. Sobolev (2019, 2021) data, after (Vikentyev et al., 2024).

(1–2) Kershor dunite–clinopyroxenite–gabbro complex: (1) hornblende gabbro, gabbro–amphibolites, and amphibolites; (2) clinopyroxenites; (3) Sobsky gabbro–tonalite complex: hypabyssal dikes of quartz diorite; (4–8) drill holes: (4) preliminary exploration of 1980–1984 (up to 105 m), (5–8) detailed exploration holes of 1986–1990 and their numbers (up to 28 m), including: (6) exploration (up to 38 m), (7) exploration and technological – clusters (up to 45 m), (8) mapping and stripping (up to 27.5 m); (9) detailed exploration trenches of 1986–1990 and their numbers; (10) pilot detailed exploration quarry (150 km³); (11) Amphibolitovy building stone quarry; (12, 13) copper content in core samples of 1986–1990: (12) ore-forming level (0.2% Cu), (13) average anomalous level (0.04–0.1%); (14) piece samples of 2006 with anomalous content of Au, Cu, Co, Ag, and Pd and increased content of Pt; (15) piece samples of 2017–2022; (16) increased amounts of magnetite (mt) and malachite (ml); (17–19) levels of sulfide content in the rock: (17) poor, (18) in increased amounts, and (19) in anomalous amounts. Other mineralization and hydrothermal alteration: veinlet silicification (Q), veinlet epidotization (ep), hematitization (hm), calcite veinlets (ca), chloritization (cl), and talcification (t). Colored symbols of Au, Cu, Co, and Ag elements indicate the metal concentration levels in the samples: ore level (red font), highly anomalous (ore-forming) level (blue), medium anomalous level of copper (>0.3, >0.1, and >0.04 wt %), cobalt (>0.06, >0.02, and >0.01 wt %), gold (>1, >0.3, and >0.01 ppm), silver (>3.5, >0.7, and >0.15 ppm), and palladium (>0.1 ppm) (green). Increased palladium and platinum contents (0.03–0.1 g/t) are shown in black font.