

Hod Maden deposit, Turkey

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The Hod Maden deposit is located in Artvin Province, NE Turkey, and represents one of the highest-grade gold-copper discoveries made globally in recent years. Results from the discovery hole HTD-04 and step-out scissor hole HTD-05 included impressive intervals of 103m @ 9.0 g/t Au, 2.2% Cu (from 25m) and 82m @ 20.4 g/t Au, 1.94% Cu (from 147m) respectively. These holes were targeted on a plus 100 ppb gold soil geochemical anomaly that flanks a prominent, NNE-trending fault/alteration system known as the Hod Maden fault zone. Further drilling during[^] [a year is missing?] confirmed that HTD-04 and HTD-05 formed part of the Main Zone deposit for which an initial mineral resource estimate was reported in August 2015, and subsequently updated in May 2018. The Hod Maden project is owned by Artmin Madencilik, a 70:30 JV between Lidya Madencilik and Sandstorm Gold.

The Hod Maden gold-copper deposit lies within the Eastern Pontide (Tethyan) metallogenic belt of NE Turkey and along a NE-trending suture zone containing a Late Cretaceous island arc volcano-sedimentary sequence. This zone separates VMS deposits to the west (such as Cerattepe, Murgul and Cayeli) from porphyry and epithermal systems (Tac Corak, Ardalar-Salinbaş and Berta) within and to the east of the suture. Small scale mining of narrow polymetallic veins was also undertaken in the southern portion of the property by Russians prior to 1923.

At least two styles of gold-copper mineralization are present at Hod Maden: i) the predominant multiphase quartz-sulphide (pyrite-chalcopyrite), hematite/jasperoid breccia bodies; and ii) semi-massive to massive sulphides (pyrite-chalcopyrite with secondary chalcocite). Recent drilling suggests that the two mineralization styles relate to different mineralizing events. The highest-grade mineralization (typically >15 g/t Au but locally >100 g/t Au) at Hod Maden lies along the eastern margin of the Main Zone. Drilling is ongoing but the current dimensions of the Main Zone are a strike extent of 400m from north to south, a true width of between 50m and 70m, and a vertical extension from near surface to >400m depth. In addition, the South Zone gold-copper mineralization extends another 400m towards the south. Stratabound and disseminated Zn (-Pb) (sphalerite-galena) mineralization also flanks the gold-copper mineralization to the east and locally to the west. Hydrothermal alteration assemblages associated with gold-copper mineralization include chlorite (andesitic host) and sericite (dacitic host), with argillic and phyllic assemblages dominantly on the flanks to the gold-copper mineralization. Concentrations of both Ag and the deleterious elements – such as As, Sb, Bi, and Hg – are low.

The latest NI 43-101-compliant mineral resource estimate was released for the Hod Maden project on May 31, 2018, as part of a pre-feasibility study. This estimate was prepared by independent mining consultants AMC Consultants Pty Ltd, and was based on assay results

received for holes up to HTD-169. The mineral resource estimate for Hod Maden included contributions from both the Main and the South Zones, and comprises (on a 100% basis):

Main Zone: Measured and Indicated Category:

9.14 MT @ 9.6 g/t Au + 1.65 % Cu for 2.85 Moz Au + 159,500 t Cu (or 3.93 Moz AuEq)

South Zone: Inferred Category :

2.52 MT @ 3.5 g/t Au + 0.3% Cu for 284,000 Oz Au + 7,500 t Cu (or 341,000 Oz AuEq)

In addition to above resources, a maiden hanging-wall zinc mineral resource of 2.8MT @ 4.0% Zn was reported.

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