## Vein Mineralization and Structural Controls at the Donlin Gold Deposit

Stephanie Mrozek, Chief Geologist; Graham Ellsworth, Project Geologist; Matt Matko, Project Geologist; Preston Weeks, Geologist; Michelle Deal, Exploration Project Manager

Donlin Gold LLC, 2525 C St, Suite 450, Anchorage AK 99503

The Donlin project in southwestern Alaska hosts one of the world's largest undeveloped gold resources, with Proven and Probable Reserves of 33.8 Moz, 504.8 Mt at 2.09 g/t Au and Measured and Indicated Resources of 39.0 Moz, 541.3 Mt at 2.24 g/t Au (100% basis, inclusive of Mineral Reserves)<sup>1</sup>. The intrusion-related gold deposit is hosted in Cretaceous rhyodacites and Kuskokwim Group sedimentary rocks. The project is jointly owned by NovaGold Resources (60%) and Paulson Advisors (40%), following a June 2025 transaction in which Barrick Gold divested its 50% interest. Since this transition, the Donlin team has accelerated technical programs, including the 2025 resource conversion drilling campaign.

Our 2025 AMA Core Shack highlights mineralized intercepts from three new drill holes – DC25-2232, DC25-2245, and DC25-2270 – selected to illustrate vein-style mineralization across multiple host lithologies.

- DC25-2232 intersects RDX (crowded porphyry) and siltstone, both cut by quartz-sulfide veins with gold up to 19.9 ppm and arsenic exceeding 1.0%.
- DC25-2245 features quartz-sulfide veins overprinting RDA (aphanitic porphyry), with gold up to 12.8 ppm and arsenic from ~3,000 ppm to more than 1.0%.
- DC25-2270 displays V3 veins of orpiment, realgar, and native arsenic overprinting earlier quartzsulfide veins.

Downhole televiewer data from DC22-2270 defines vein, fault, and contact orientations, with a display figure showing their correspondence with core observations, improving structural continuity. Na/Al molar ratios serve as proxies for clay alteration intensity and mineralogy (e.g., NH<sub>4</sub>-illite, illite, kaolinite). Higher gold grades correlate with increased veining and Na/Al <0.013, indicative of NH<sub>4</sub>-illite alteration.

Together, these results contribute to refining Donlin's geologic and structural models, advancing resource classification, and guiding future project development under the new ownership. Visitors are invited to examine representative core, review geologic and televiewer logs, and discuss integration of legacy and new data into Donlin's evolving deposit model.

## References

<sup>1</sup>NI 43-101 Technical Report on the Donlin Gold project, Alaska, USA with an effective date of June 1, 2021, S-K 1300 Technical Report Summary on the Donlin Gold Project, Alaska, USA dated November 30, 2021, https://novagold.com/donlin-gold/reserves-resources/