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NEWS RELEASE **JULY 29, 2025**

HANNAN DEMONSTRATES SYSTEMATIC EXPANSION OF PREVISTO GOLD FOOTPRINT

Vancouver, Canada -- Hannan Metals Limited's ("Hannan" or the "Company") (TSXV: HAN) (OTCPK: HANNF) is pleased to report new high-grade gold assay results from its 100% owned alkalic epithermal gold target at the Previsto project in Peru.

Key Points:

1. **Systematic Footprint Expansion Across Multiple Directions** The new channel results demonstrate mineralization extending **30 m eastward** (CH16811), **400 m south** (CH16827), and **230 m southeast** (CH16836) from the previously announced central high-grade zone (69.1 m @ 2.4 g/t Au), systematically expanding the known mineralized footprint and proving the extensive lateral continuity of the alkaline epithermal system.
2. **Extensive Mineralized Footprint Identified Across Large-Scale System** These results validate the presence of a broad, low to moderate-grade alkaline epithermal system with excellent structural continuity across a **very large 3 km x 3 km footprint**, reinforcing the large areas of low grade with smaller pockets of high grades, typical of major alkaline gold systems and moving beyond localized high-grade targeting.
3. **Consistent Alkaline System Signature Over Extended Area** All areas display consistent alkaline gold system characteristics including K-feldspar porphyry host rocks, roscoelite phyllic alteration, and elevated vanadium signatures (0.2% to 0.4% by pXRF), confirming the systematic nature of mineralization across the expanded **3 km x 3 km** area.
4. The results demonstrate **excellent lateral continuity** with intersections from random outcrops defined below thick vegetation ranging from **11.5 m to 27 m wide**, enabling a strategic shift from grade-based targeting to understanding the fundamental structural architecture controlling this extensive alkaline gold system, indicating potential for systematic exploration across the large footprint.
5. **Belen Drilling Update**: Hannan has completed three Vista Alegre drill holes (184.6 m, 256.8 m and 347.6 m deep) testing a 2.4 km geophysical anomaly, with final assays pending. Drilling commenced at Ricardo Herrera targeting a 1,000 m x 250 m chargeability anomaly with outcropping porphyry copper-gold mineralization and strong phyllic alteration.

Michael Hudson, CEO, states: *"These latest results confirm we've systematically outlined a 3 km x 3 km alkaline epithermal gold system with exceptional lateral continuity - the hallmark of a district-scale find. The consistent gold-silver-tellurium mineralization, roscoelite alteration, elevated vanadium signatures, and K-feldspar porphyry host rocks across this expanded footprint demonstrate we're dealing with a coherent hydrothermal system, not isolated occurrences. This structural architecture and geochemical fingerprint mirrors what we see at world-class alkaline systems like Cripple Creek, with similar high-grade pockets within a 'sea of gold'. With environmental baseline work completed for Previsto drill permitting and our inaugural drilling program*

at Belen delivering three completed holes awaiting assays, we're systematically advancing multiple high-grade targets across this emerging 150 km mineral belt."

Technical Discussion

Previsto Central Gold Mineralization

As for global alkaline gold analogues like the Cripple Creek gold system in Colorado, Previsto demonstrates remarkable parallels, particularly in grade distribution characteristics. At Cripple Creek, historic high-grade telluride veins produced bonanza ores grading several hundred troy ounces per ton, with Bob Womack's initial discovery yielding 10 to 12 troy ounces per ton and the famous "Cresson Vug" containing massive concentrations of calaverite and sylvanite tellurides. While modern heap leach operations at Cripple Creek now process low-grade material averaging 0.50 g/t Au, the Previsto system exhibits encouraging similarities to Cripple Creek's original high-grade discovery phase.

Recent channel results at Previsto Central, including **69.1 m @ 2.4 g/t Au, 13 g/t Ag and 11 g/t Te** (uncut), with higher-grade intervals of **3.0 m @ 12.7 g/t Au, 49 g/t Ag, 43 g/t Te**, **3.0 m @ 11.2 g/t Au, 53 g/t Ag, 36 g/t Te** and **0.7 m @ 16.1 g/t Au, 60 g/t Ag, 48 g/t Te**, suggest Previsto may represent an alkaline gold system in its early stages of exploration. Like Cripple Creek's historic high-grade zones that were structurally controlled and persisted to depths exceeding 900 m, Previsto's roscoelite-altered zones with gold-silver-tellurium mineralization and similar alkaline igneous host rocks indicate the potential for both high-grade structural zones and extensive lower-grade disseminated mineralization that could support future exploration and development scenarios.

Latest Results

The latest channel sampling results from Previsto Central (Figures 3 and 4), collected from newly discovered outcrops in heavily vegetated steep terrain, continue to demonstrate the extensive nature of the alkaline epithermal gold system beyond previously defined high-grade zones. While this month's fieldwork returned modest grades, the results significantly expand the mineralized footprint and reinforce the "sea of gold" characteristics typical of large alkaline gold systems.

Channel CH16811 extends the known mineralization **30 m** eastward beyond the currently defined gold zone, intersecting **18 m @ 0.13 g/t Au and 2 g/t Ag**, including a higher-grade interval of **3 m @ 0.59 g/t Au and 2 g/t Ag**. The channel is hosted within K-feldspar porphyry (KFP) and breccia units, displaying low-intensity roscoelite phyllic alteration with goethite-ilmenite assemblages. Portable XRF analysis reveals elevated titanium (3.6%), lead (0.4%), and vanadium (0.2%) concentrations, consistent with the alkaline system signature.

Channel CH16827 represents the highest-grade intersection in this press release, returning **11.5 m @ 0.67 g/t Au and 6 g/t Ag**, including **1.2 m @ 2.4 g/t Au and 6 g/t Ag**. Located **400 m south** of the central high-grade zone but within the existing mineralized footprint, this channel intersected fluorite-adularia-pyrite±chalcopyrite veinlets and stockwork zones within KFP host rock displaying moderate phyllic alteration. The elevated vanadium signature (0.4% by pXRF) further supports the alkaline gold system model.

Channel CH16836 demonstrates excellent lateral continuity, intersecting **27 m @ 0.36 g/t Au and 4 g/t Ag**, including two distinct higher-grade intervals of **6 m @ 0.67 g/t Au and 6 g/t Ag** and **3 m @ 0.54 g/t Au and 3 g/t Ag**. Positioned **230 m southeast of the high-grade zone**, this intersection occurs within KFP and hornfels units exhibiting phyllic alteration and quartz-adularia-goethite vein stockworks.

These results continue to validate the presence of a broad, low to moderate-grade alkaline epithermal system with excellent structural continuity across a very large footprint (3 km x 3 km). K-feldspar porphyry remains the dominant host lithology, with variable contributions from breccia and hornfels units. Ongoing field work focuses on defining the primary structural controls governing mineralization distribution, moving beyond grade-based targeting to understand the fundamental architecture of this extensive alkaline gold system.

System Characteristics and Mineralization Style

Gold mineralization at Previsto Central displays the characteristic features of alkalic-type epithermal systems, hosted within brecciated, calcareous K-feldspar porphyry of syenitic protolith. The mineralization exhibits several key characteristics:

1. **High-grade gold zones** are associated with pervasive fine roscoelite (vanadium-rich potassic mica) and fine grey quartz veining with pyrite, occurring as both veinlets and stockwork textures.
2. **Alteration assemblages** include manganese oxides replacing vein and breccia fill, suggesting that unweathered mineralization contained rhodochrosite, a manganese carbonate mineral typically found in low-sulfidation epithermal systems.
3. **Primary mineralization** consists of 1% disseminated pyrite with trace chalcopyrite, pyrite veinlets, roscoelite veinlets, and fine jarosite veinlets (likely after pyrite).
4. **Structural controls** suggest gold deposition was focused along late strike-slip faults where horizontal movement created extensional structures within a compressional regime.

Drilling Program at Belen

Belen is located 23 km SW of Previsto Central. The initial phase of drilling at Belen zone consists of up to 5,000 m across 18 diamond drill holes designed to test the three primary target areas at Belen:

- **Vista Alegre**: The three drill holes will test distinct sections of the 2.4 km long geophysical anomaly targeting two zones. HDDVA001 was completed at 184.6 m, HDDVA002 has been completed at 256.8 m and third hole HDDVA003 has been completed at 347.6 m. Final assays are awaited.
- **Ricardo Herrera**: The drill rig has now moved to target the core of the substantial chargeability anomaly that extends over 1,000 m by 250 m with outcropping porphyry-style copper-gold mineralization showing moderate to strong phyllic alteration, with drill pads positioned strategically to test the lateral extent of the mineralized system. HDDRH001 has commenced drilling on a combined geological, geochemical and IP chargeability anomaly with a planned depth of 500 m.
- **Sortilegio**: The final phase drilling will investigate the 1.2 km long chargeability anomaly within the alkalic porphyry system. Drillholes will target the source of extensive surface soil copper anomalies coinciding with hydrothermal gold anomalous quartz-gossan boulders with elevated Au-Mo-Te. The chargeability response consists of three alkalic Cu-Au targets identified within the 1.2 km long trend.

The drilling program is expected to take approximately 6 months to complete, with first assay results anticipated in the first part of August 2025.

Hannan Metals is committed to legal compliance, community respect, and environmental stewardship, emphasizing that all operations only proceed with proper authorization from local populations and with required environmental and archaeological certifications.

Drill Permitting in Previsto

A ten-person environmental team including professional environmental archaeological investigations, community workshops and liaison activities has now completed collecting appropriate information necessary to make the submittal for approval to the DGAAM - General Directorate of Mining Environmental Affairs - of the Ministry of Energy and Mines, Peru. The work program includes:

- Environmental baseline monitoring for the project, conducted by third party experts (now complete);
- Submission to the Peruvian Ministry of Culture the CIRA (Certificate of non-existence of archaeological remains) which declares that the project does not impact archaeological sites;
- Public participation meetings outlining Hannan's exploration plans will be held in the hamlets of Nueva Palestina, Inca Garcilazo, Chancadora and Previsto, where the communities are on record as approving the company's proposed drill program;

The DIA is the primary environmental certification required to allow low impact mineral exploration programs, that includes drilling programs, to proceed in Peru. Final DIA and other approvals are anticipated during Q3 2026.

About the Valiente Project

The 100% owned Valiente project is in central eastern Peru, east of the city of Tingo Maria (Figures 1 and 2). The area is characterized by steep topography on the eastern flank of the Central Cordillera with elevations between 800 m and 2,000 m above sea level (a.s.l.). The project was found in 2021 during an extensive greenfields prospecting program initiated by Hannan for back-arc porphyry copper-gold systems. The Company has been actively prospecting on the project since 2021 and has successfully gained social permits progressively in all areas of interest.

During 2021 Hannan staked and still holds 1,002 km^2 of 100% owned mining concessions at Valiente covering unexplored terrain for potential mineralized porphyry targets in central eastern Peru. The Valiente Project has rapidly evolved from a greenfields prospect to a multi-prospect opportunity.

Early surface prospecting identified two outcropping copper-gold porphyry targets and one epithermal target at Belen (see Press Release Feb 16, 2023). Porphyry areas quickly followed at Serrano Norte, Serrano and Pucacunga. The focus more recently has been on Previsto. At Previsto and Belen, a district-scale porphyry cluster within an area of 25 km by 10 km, with eight porphyry and/or epithermal targets now identified in more detail with up to 10 earlier stage targets awaiting further work.

The company is executing a multi-year strategy to systematically explore and drill test its extensive land package in this emerging Miocene-aged, linked porphyry-epithermal mineral belt.

Technical Background

All samples were collected by Hannan geologists. Samples were transported to ALS in Lima via third party services using trackable parcels and by company staff. At the laboratory, rock samples were prepared and analyzed by standard methods. The sample preparation involved crushing 70% to less than 2 mm, riffle split off 250 g, pulverize split to better than 85% passing 75 microns. Samples were analyzed by method ME-MS61, a four-acid digest performed on 0.25 g of the sample to quantitatively dissolve most geological materials. Analysis is via ICP-MS. Gold was analyzed in rock and soils by ALS in Lima using a standard sample preparation and 30 g fire assay sample charge. Soil samples were analyzed by a portable XRF (VANTA-VMR) using an in-house protocol which includes routine use of CRM and field duplicates as well as 10% check samples analyzed by ALS Lima.

Channel samples are considered representative of the in-situ mineralization samples. At this stage true widths of mineralization are not known. Grab or panel samples are selective by nature and are unlikely to represent average grades on the property.

About Hannan Metals Limited (TSXV:HAN) (OTCPK: HANNF)

Hannan Metals Limited is an exploration company focused on the discovery of large gold and copper mineralizing systems in new frontiers in Peru. Over the last decade, the team behind Hannan has forged a long and successful record of discovering, financing, and advancing mineral projects in Australia, Europe and South America.

Mr. Michael Hudson FAusIMM, Hannan's Chairman and CEO, a Qualified Person as defined in National Instrument 43-101, has prepared, reviewed, verified and approved the technical contents of this news release.

On behalf of the Board,

"Michael Hudson"

Michael Hudson, Chairman & CEO

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THE VALIENTE PROJECT

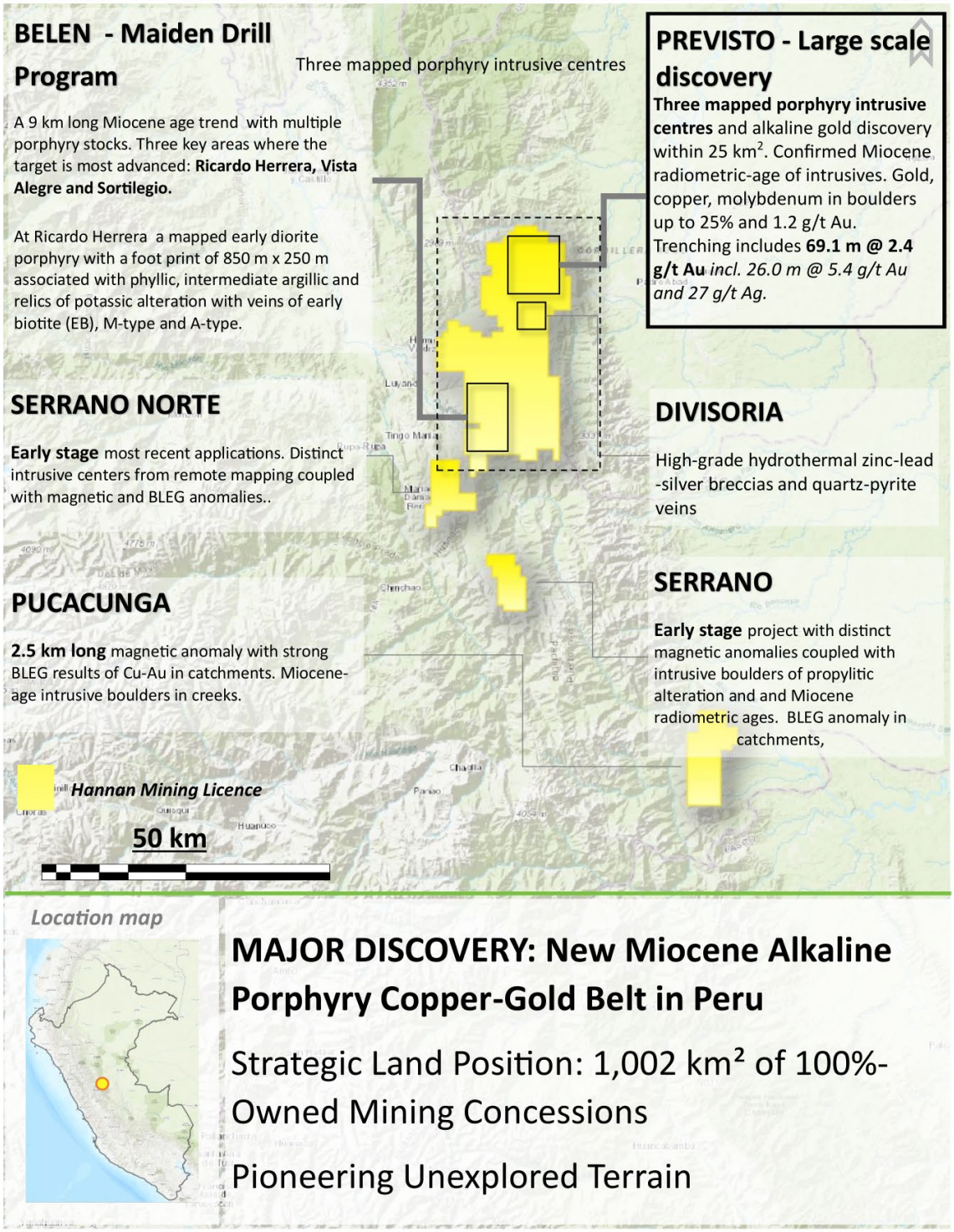


Figure 1: Overview of the 1,002 km2 Valiente project area in Peru.

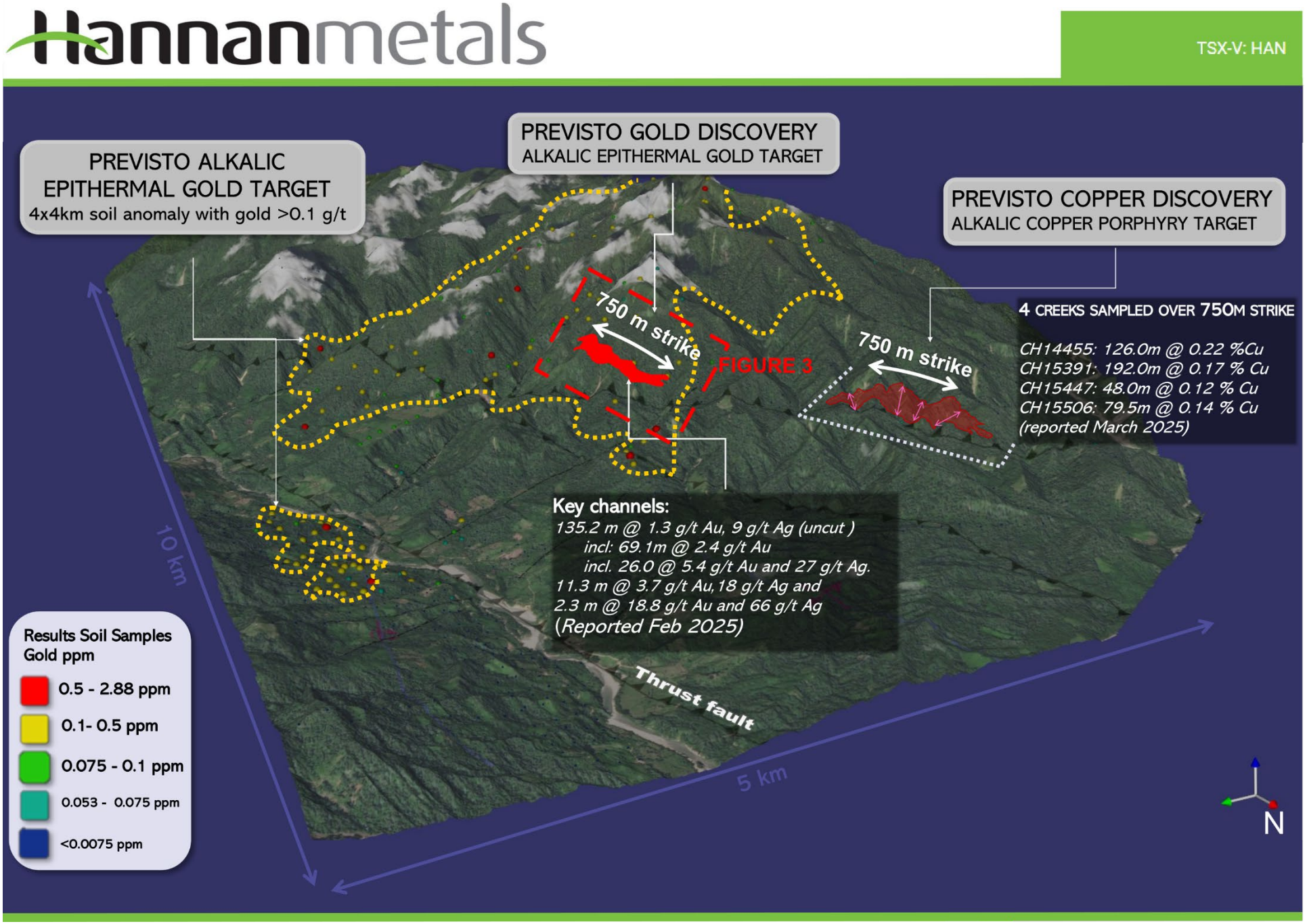


Figure 2: Map showing the vast 4x4 km gold anomaly at Previsto and the location of the expanding gold find.

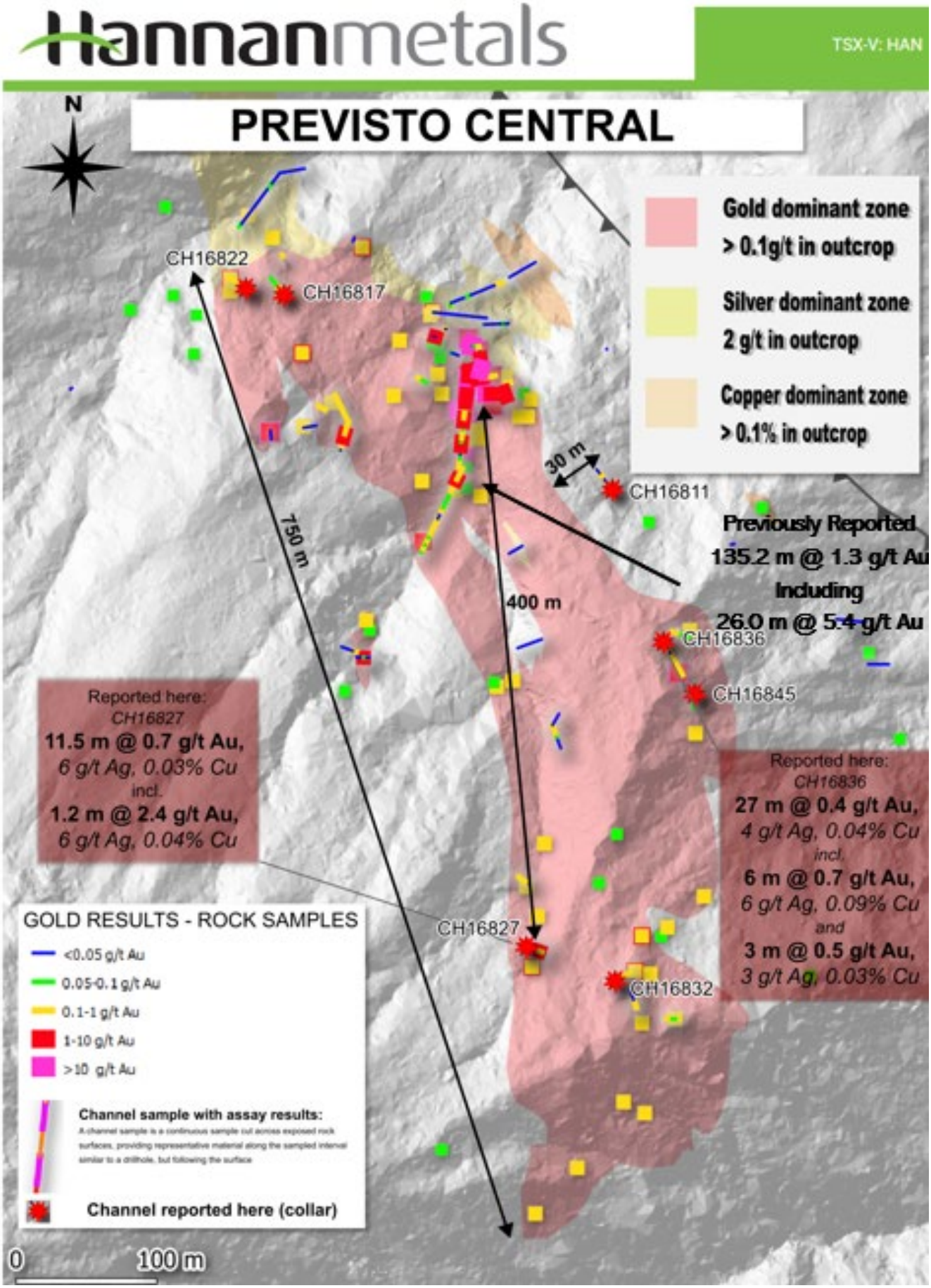
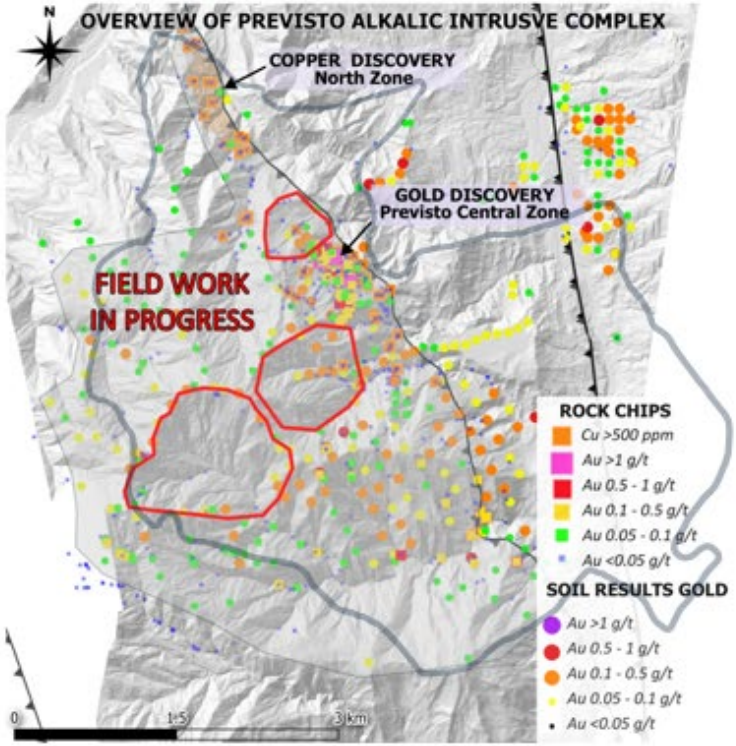


Figure 3: Overview of the gold discovery at Previsto Central.

PREVISTO DISTRICT COMPARED TO THE CRIPPLE CREEK DISTRICT COLORADO, USA



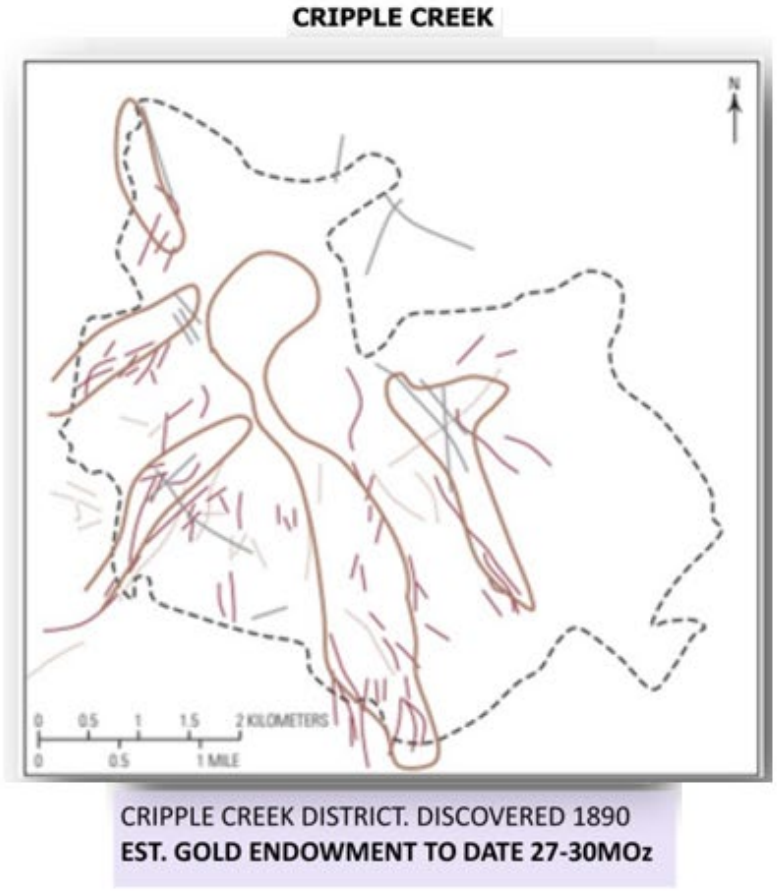


Figure 4: The Previsto Project, analogous to the giant Cripple Creek gold district. Widespread gold in soil and rock chips extend this known mineralization into a vast 3km x 3km area, indicating significant potential to expand the mineralized footprint.