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NEWS RELEASE **AUGUST 25, 2025**

HANNAN PROVIDES UPDATE ON FIRST-EVER DRILLING OF BACK-ARC PORPHYRY AND EPITHERMAL TARGETS IN PERU

Vancouver, Canada -- Hannan Metals Limited's ("Hannan" or the "Company") (TSXV: HAN) (OTCPK: HANNF) is pleased to report new drilling results from its 100% owned epithermal gold target at the Belen project, contained within the permitted Valiente Declaracion de Impacto Ambiental ("DIA") area, in Peru.

Key Points:

1. Vista Alegre - Peripheral to Main System

Three completed holes tested IP chargeability/geochemical anomalies but intercepted only leakage/peripheral structures, not the main mineralized zone. Drill holes returned up to 0.4 g/t Au, interpreted as surficial enrichment restricted to the upper 90 m regolith profile. The main mineralized structure has not yet been intercepted, with holes hitting only peripheral/leakage zones. Short wave infrared ("SWIR") spectral data shows increasing fluid temperature at depth (higher temperature micas) with elevated Cu (250 ppm) and As (850 ppm) in holes HDDVA001 and HDDVA002 (Figure 4), suggesting proximity to a hotter core system.

The source of 21 mineralized boulders (0.15 g/t to 2.72 g/t Au, up to 1,475 ppm As) located 300 m to 500 m east of drilling remains undiscovered (Figure 3). Boulders display silica groundmass with pyrite veins/stockworks/breccias (up to 8% pyrite), indicating a significant mineralized source nearby. Extensive resistivity anomalies immediately east and west of these boulder trains remain to be targeted and will be the focus for follow up drilling (Figures 2 and 3).

2. Ricardo Herrera - Calc-Alkaline Porphyry Cu-Mo System Drilled

The first drill hole at Ricardo Herrera, HDDRH001, has drilled up to 610 m with an estimated total depth of 700 m. The drill hole has intercepted a Cu-Mo porphyry system with various vein types. Chalcopyrite has been logged, dominantly on veinlet fractures that range in density of up to 10 per m but in general much less. Molybdenite has also been sporadically logged particularly below 248 m down hole. Drilling continues to test deeper extensions of the system. A second hole is planned 350 m south at Riccardo Herrera.

3. Next Steps - High Priority Targets Remain

Following a second hole at Ricardo Herrera, the 1.2 km long Sortilegio chargeability anomaly within an alkalic porphyry system will be drill tested. As well, Vista Alegre has multiple untested high-resistivity targets scheduled for Stage 2 drilling (Figures 2 and 3).

Michael Hudson, CEO, states: *"We are pleased to report results from our pioneering drill program, representing the first-ever drill testing of these back-arc porphyry and epithermal systems, with the nearest historical drilling located over 50 km away. This virgin territory is already demonstrating why it deserved testing. While our three holes at Vista Alegre have not yet intersected the main mineralized structure, they've discovered clear evidence of a robust hydrothermal system and anomalous gold, copper and arsenic values. The source of the high-grade gold boulders, with values up to 2.72 g/t Au located just 300 m to 500 m from our drilling, remains an exciting untested target.*

"At Ricardo Herrera, HDDRH001 is making history as the first hole to test this porphyry system, currently advancing through copper-molybdenum mineralization dominantly recorded on veinlets in classic porphyry-style veining and alteration. Minor recorded disseminated Cu and Mo in the drill hole is encouraging.

"As first-movers in this underexplored district, we're just scratching the surface. Our key focus remains on advancing Previsto, our flagship alkaline epithermal gold target with its established 3 km x 3 km footprint and recent high-grade channel results of 69.1 m @ 2.4 g/t Au, where we anticipate drill permit approval in Q3 2026. The combination of untested geophysical anomalies, unexplained high-grade boulder fields, and the visual mineralization we're seeing at Belen validates our strategy of being the first to systematically explore these back-arc systems. This is frontier exploration at its best, and we're excited to continue unlocking the potential of this virgin territory."

Drilling Program at Belen

Belen is located 23 km SW of Previsto Central and contained within the permitted Valiente DIA area. 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. The drilling program is expected to take approximately 6 months to complete:

Vista Alegre:

Three drill holes completed at Vista Alegre tested a highly chargeable IP anomaly and surface geochemical anomaly but have not yet intersected the main mineralized structure, instead intersecting leakage/peripheral structures with evidence of high-temperature hydrothermal fluids including discrete zones of potassic alteration and silicification. SWIR data indicates progressively higher temperature white micas toward the end of holes HDDVA001 and HDDVA002, correlating with increasing Cu (up to 250 ppm) and As (up to 850 ppm), suggesting the system is heating up at depth (Figure 4), while hole HDDVA003 was terminated in a late dioritic intrusive that obscured this trend. Surface gold values up to 0.4 g/t appear restricted to surficial enrichment in the upper 90 m regolith profile, and the high IP chargeability at holes HDDVA001 and HDDVA002 is explained by jarosite and clay rather than sulfide mineralization.

The source of 21 mineralized boulders (0.15 g/t to 2.72 g/t Au, up to 1,475 ppm As) located 300 m to 500 m east of drilling remains undiscovered (Figure 3). Boulders display silica groundmass with pyrite veins/stockworks/breccias (up to 8% pyrite), indicating a significant mineralized source nearby. Extensive resistivity anomalies immediately east of these boulder trains remain to be targeted and will be the focus for follow up drilling (Figures 2 and 3). These results, combined with untested high-resistivity targets identified for Stage 2 drilling, suggest the current holes are peripheral to a potentially significant epithermal system that requires additional drilling to locate the main mineralized structures.

Ricardo Herrera:

Drill hole HDDRH001 (Figure 3), planned 700 m depth, has intersected a porphyry copper-molybdenum system from surface to current depth of 610 m (as of August 24, 2025), hosted primarily in feldspar porphyry and related intrusive rocks with multiple alteration zones (phyllic, propylitic, argillic, and locally potassic). Mineralization consists of pyrite (1% to 5%, locally up to 5% in breccias), trace to minor chalcopyrite and molybdenite. Chalcopyrite has been logged throughout, dominantly on veinlet fractures that range in density of up to 10 per m but in general much less. Molybdenite has also been sporadically logged particularly below 248 m down hole. Of note is a logged interval of 2.4 m from 463.5 of disseminated chalcopyrite with biotite-K-feldspar alteration and 3.85 m of combined Cu-Mo mineralization from 467.15 m.

Drilling continues toward the 700 m target depth to test deeper extensions of the system. A second hole is planned for Ricardo Herrera.

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.

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.

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

Further Information

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THE VALIENTE PROJECT

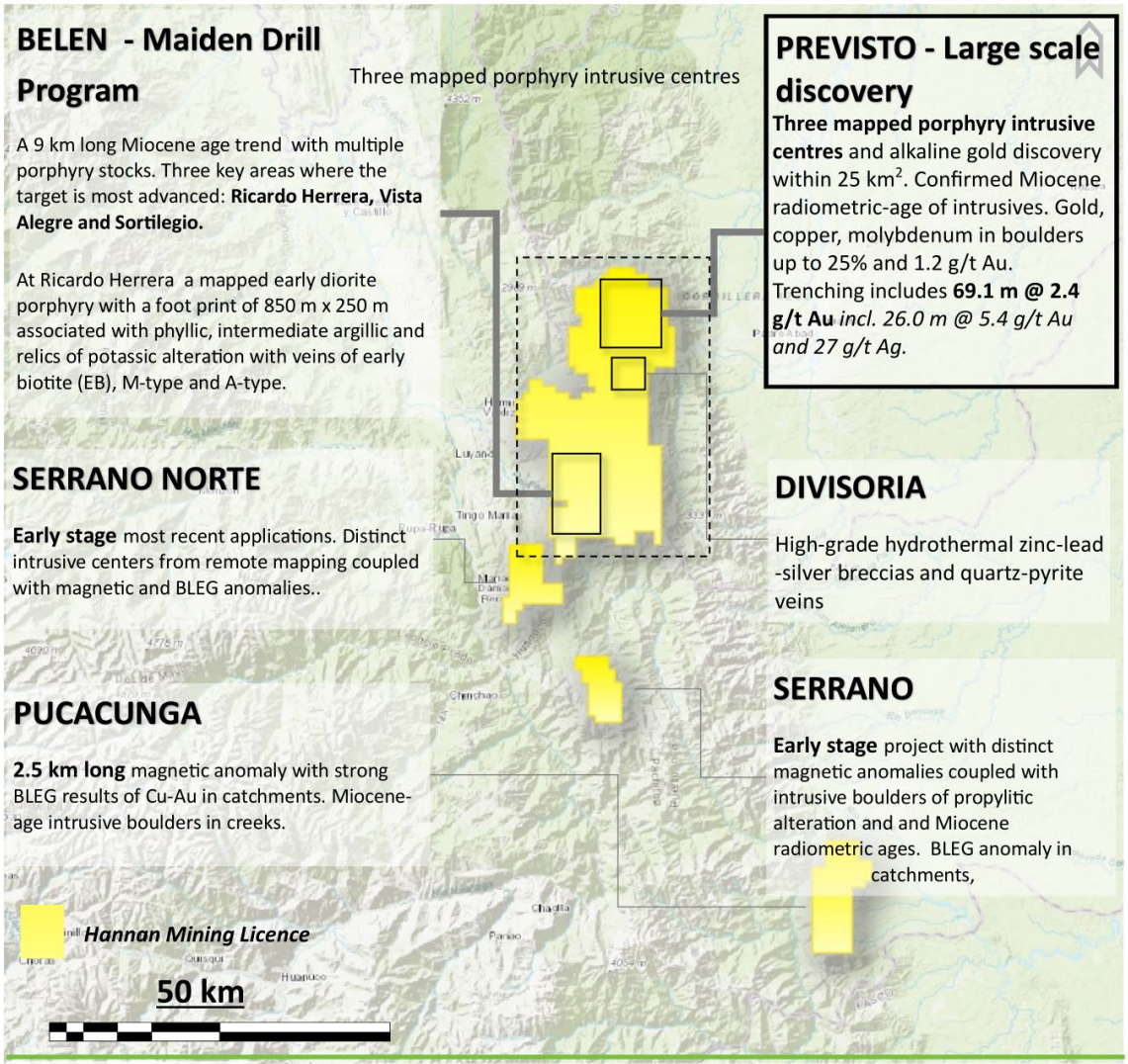

Figure 1: Overview of the 1,002 km2 Valiente project area in Peru

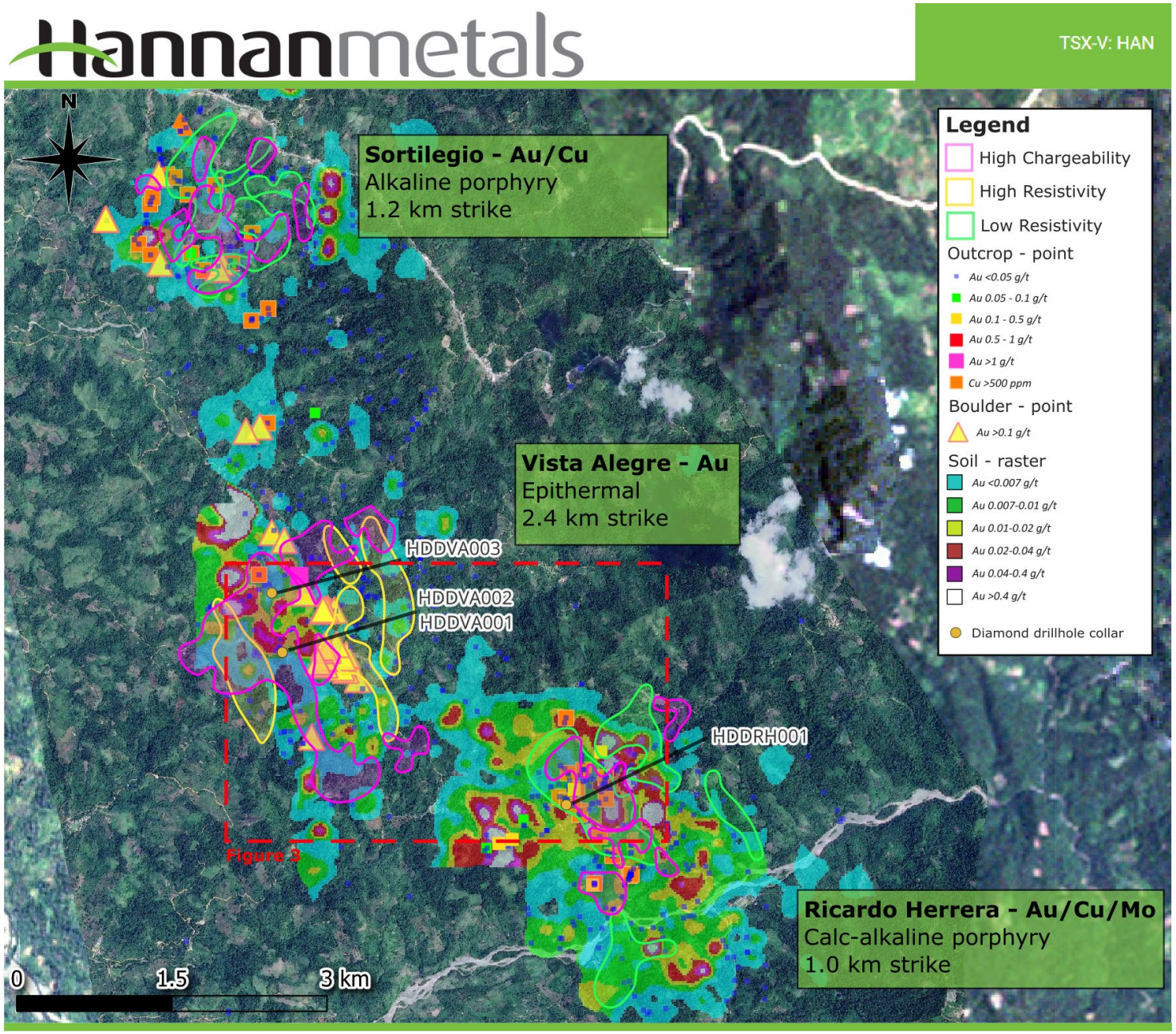

Figure 2: Overview of the Belen target area showing IP chargeability and resistivity outlined, gold in outcrop, boulder and soil and copper in outcrop.

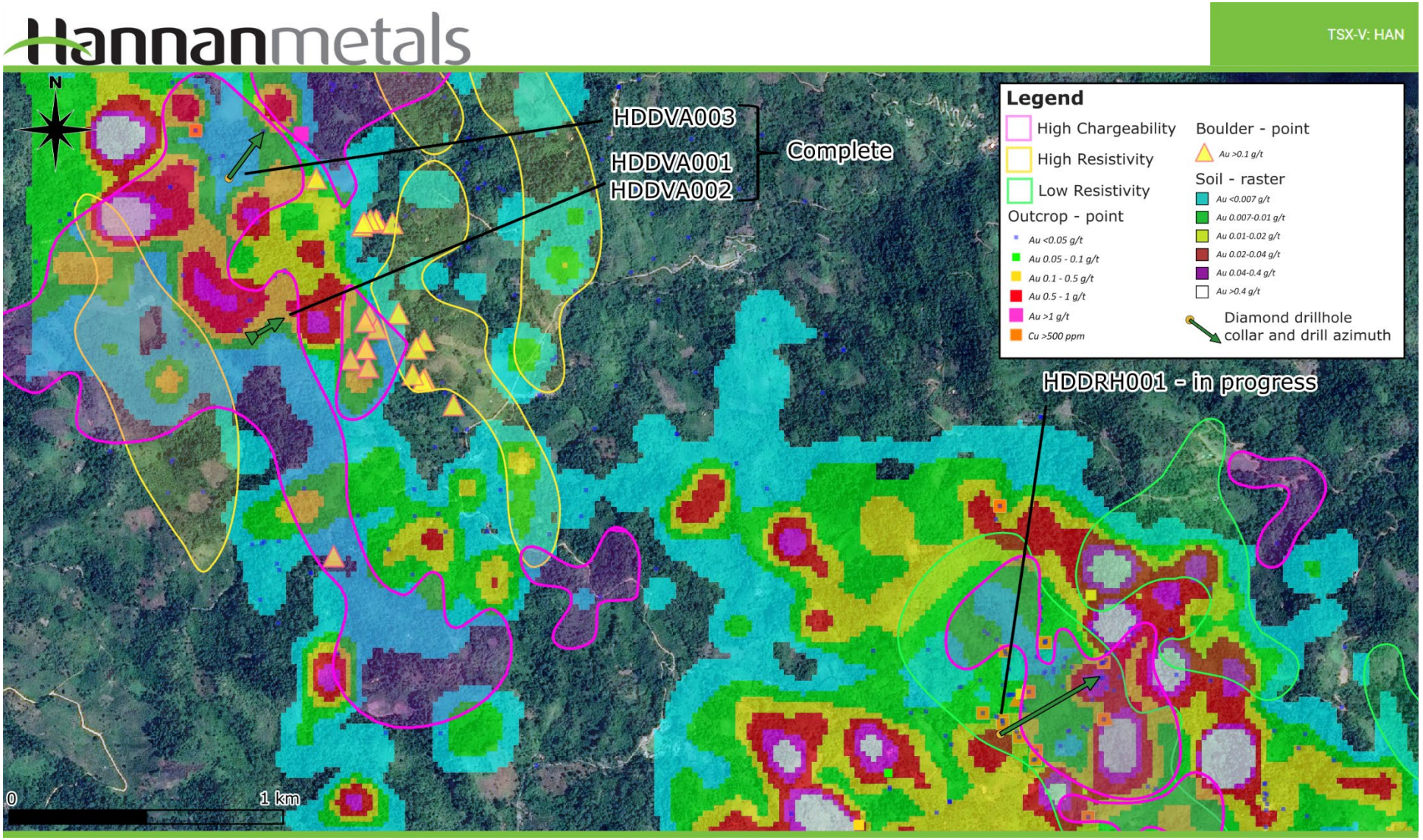

Figure 3: Inset map showing drillhole traces at Vista Alegre and Richard Herrera. Note the source of 21 mineralized boulders (0.15 g/t to 2.72 g/t Au, up to 1,475 ppm As) located 300 m to 500 m east of drilling remains undiscovered. Boulders display silica groundmass with pyrite veins/stockworks/breccias (up to 8% pyrite), indicating a significant mineralized source nearby. Extensive resistivity anomalies (yellow) immediately east of these boulder trains remain targeted and will be the focus for follow up drilling (Figure 2).

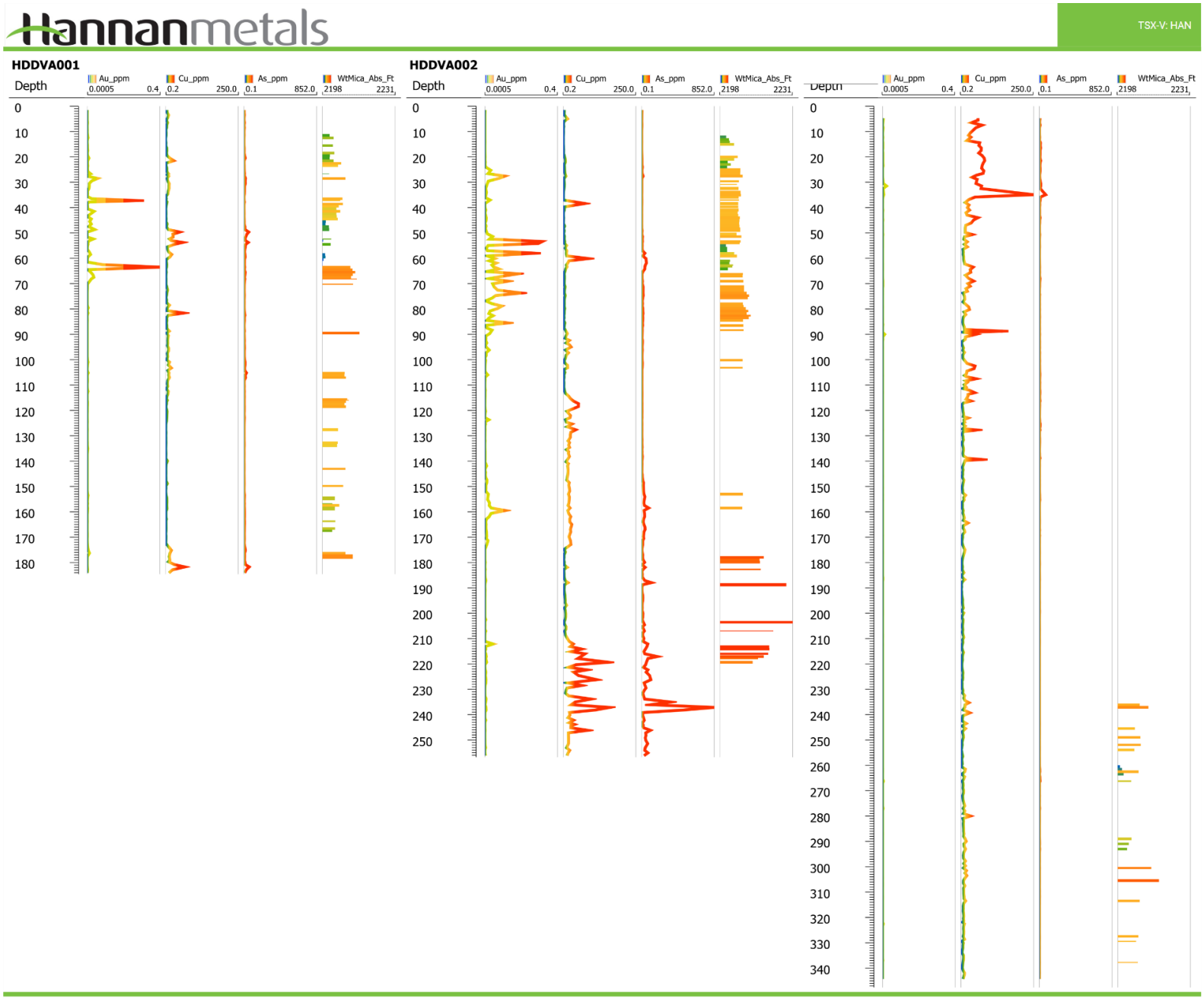

Figure 4: strip log comparing Au, Cu, As and white mica absorption feature (SWIR data) in holes HDDVA001, 002, 003.