

# Hannanmetals

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NEWS RELEASE

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## HANNAN OUTLINES A ZINC-LEAD DISCOVERY AT THE SAN MARTIN PROJECT IN PERU THAT OVERLIES COPPER-SILVER MINERALIZATION

Vancouver, Canada – Hannan Metals Limited (“Hannan” or the “Company”) (TSXV: HAN) (OTCPK: HANNF) provides new results from a zoned zinc-lead system that overlies stratabound copper-silver mineralization from the Sacanche project area. Sacanche is part of Hannan’s 100% owned San Martin basin-scale sediment-hosted copper-silver project that extends for 120 kilometres along the foreland region of the eastern Andes Mountains in Peru (Figure 1).

### Highlights:

- Mapping and sampling have defined gossanous lead-zinc mineralization within a 3 by 1 kilometre area. Individual gossanous zones up to 54 metres wide have been mapped in sandstones of the Cretaceous Cushabatay Formation (Figure 1). The zone remains open in multiple directions (Figure 2).
- Hannan’s focus remains on the copper-silver end member of the mineralized system at San Martin, however lead and zinc mineralization is [well described](#) in global sediment-hosted copper mineralized systems;
- Forty individual chip, channel and grab samples are reported and range from 4.7% zinc and 1.3% lead (over 0.6m metres width) to 354 ppm zinc and 353 ppm lead, and average 0.7% zinc and 0.3% lead (Figure 3).
  - A 54 metres wide gossanous zone with 9 non-contiguous rock panel chip samples average 1.2% zinc and 0.6% lead;
  - Individual continuous channels include 10.9 metres @ 0.4% zinc and 0.3% lead;
  - Highest zinc and lead values are associated with NNE trending extensional shear structures with individual lengths from 500-1,000 m in parallel zones (Figure 3);
  - The gossanous lead-zinc zones have been leached and therefore primary sulphide mineralization below the weathered zone is likely to be higher grade;
- The sandstone-hosted system shows a local zonation between zinc, lead, iron and managanese and is interpreted, and in part observed, to grade into a copper-silver rich system (Figure 4):
  - Copper-silver mineralized quartz sandstones from the Cushabatay Formation have been previous reported, [2 kilometres south](#) (one boulder: 3.8% copper, 10 g/t silver) and [15 kilometres north](#) (two boulders: 2.6% copper, 36 g/t silver and 2.8% copper, 50 g/t silver) from the same stratigraphic position of the new zone described here, supporting the copper/silver potential of this sandstone horizon;
  - The major redox boundary below the zinc-lead gossanous zone (Figure 4), is not exposed at current erosional level, which suggests that the copper dominant part of the system may also exist at depth;
- Multiple mineralized stratigraphic positions and styles are now been defined across the property and are described in Figure 4. The zinc-lead gossans overlie the stratabound copper silver mineralization hosted by reduced siltstone of the Sarayaquillo Formation.

Michael Hudson, CEO, states: *“Geological mapping at San Martin has revealed extensive, transgressive stratabound and structurally controlled copper+silver and zinc+lead mineralization hosted by multiple lithologies in host rocks of Jurassic and Cretaceous age. Although our focus remains on the copper-silver end member of the mineralized system at San Martin, lead and zinc mineralization is [well described](#) in global sediment-hosted copper mineralized systems, often fringing copper mineralization. Our work continues to define a system of scale and tenor.”*

Hannan's mapping from the first stage of this field season has revealed a transgressive structurally controlled copper-silver mineralization hosted by multiple lithologies in host rocks of Jurassic and Cretaceous age. A revised stratigraphy of this period is presented in Figure 4 together with a description of the different mineralized host rocks with typical grades. The zinc-lead gossans are interpreted to overlie the stratabound copper silver mineralization hosted by reduced siltstone of the Sarayaquillo Formation. Channel samples are considered representative of the in-situ mineralization samples and sample widths quoted approximate the true width of mineralization, while grab (boulder) samples are selective by nature and are unlikely to represent average grades on the property.

Forty individual chip, channel and grab samples are reported and shown in Figure 3. Reported samples range from 4.7% zinc and 1.3% lead (over 0.6m metres width) to 354 ppm zinc and 353 ppm lead, and average 0.7% zinc and 0.3% lead. A 54 metres wide gossanous zone with 9 non-contiguous rock panel chip samples average 1.2% zinc and 0.6% lead. Individual continuous channels include 10.9 metres @ 0.4% zinc and 0.3% lead.

The mineralized stratigraphy outcrop in creeks and ridges. To the north and east it disappears under quaternary alluvial cover. The downdip position to the east remains open. The mineralization is localized to an anticline which is cut by trending NNE extensional shear zones. The shears are interpreted to be subordinate to the regional north trending inverted Sapo-Sacanhe basement fault (Figure 2). Distal to the anticline (up to 5 kilometres away) extensive zones of gossanous sandstone after pyrite (without elevated zinc and lead mineralization) have been mapped. In some area's boulders and outcrops with Rote Fäule redox style-alteration (spotted hematite) have also been observed (Figure 4e).

The sandstone-hosted system shows a local zonation between zinc, lead, iron and managanese. Importantly it is interpreted, and in part observed, to grade into a copper-silver rich system. Copper-silver mineralized quartz sandstones from the Cushabatay Formation have been previous reported, [2 kilometres south](#) (one boulder: 3.8% copper, 10 g/t silver) and [15 kilometres north](#) (two boulders: 2.6% copper, 36g/t silver and 2.8% copper, 50 g/t silver) from the same stratigraphic position of the new zone described here, supporting the copper/silver potential of this sandstone horizon. The target is partly concealed by thin quaternary cover and the major redox boundary is not exposed at current erosional level, which suggests that the copper dominated part of the system may also exist at depth.

Zonation of anomalous lead and zinc is well documented in all major producing sediment-hosted stratabound copper basins globally. For example in the [Kupferschiefer of Poland](#) it is considered as distal parts of the reduced facies sediment hosted model. In the [Spar Lake district, US](#), the mineralization grades from distal pyrite (Fe) zone to galena (lead), sphalerite (zinc) to the a copper rich zone. The [Central African Copperbelt](#) also contains significant deposits of zinc.

The San Martin project is an early stage exploration project. Previous mineral exploration in the area is limited. RTZ worked in the southern and northern areas for one year in the late 1990's and conducted reconnaissance sampling and drilled 3 diamond drillholes in the transitional lead-zinc parts of the system in the south (Figure 3). A private Canadian company completed soil sampling and some geophysics during a one year period in the southern project area. These data are not available to Hannan. Hannan's in-depth regional geological understanding has been derived from the substantial data gathered during petroleum exploration activities undertaken in the Huallaga Basin since 1989. This data, which recently has been made publicly available, includes >2,000 kilometres of 2D seismic, 618 kilometres of geological traverses, 1,600 gravity stations, 13,000 kilometres of aeromagnetic surveys and >2,000 rock samples for geochemical and petrological studies. This information has provided Hannan a tremendous amount of data to guide exploration and support geological models.

At San Martin, we believe we have identified an opportunity which could result in a significant discovery. As a project generator we continue to review new opportunities, but at same time we need to consider all options to advance a district scale opportunity at San Martin. The results from our initial work to date has attracted the interest of a number of major mining companies. While we are in the early stages of our work programs, it would remiss to not consider partnership opportunities that we believe are in the best interest of the Company. To date the Company has had numerous discussions and exchanges of information and at this time is awaiting follow up documentation from select parties.

Sedimentary-hosted stratiform copper-silver deposits are among the two most important copper sources in the world, the other being copper porphyries. They are also a major producer of silver. According to the [World Silver Survey 2020](#) KGHM Polska Miedz's ("KGHM") three copper-silver sediment-hosted mines in Poland are the leading silver producer in the world with 40.2Moz produced in 2019. This is almost twice the production of the second largest producing mine. The Polish mines are also the sixth largest global copper miner and in [2018, KGHM produced 30.3 Mt of ore at a grade of 1.49% Cu and 48.6 g/t Ag](#) from a mineralized zone that averages 0.4 to 5.5 metres thickness.



#### About Hannan Metals Limited (TSX.V:HAN) (OTCPK: HANNF)

[Hannan Metals Limited](#) is a natural resources and exploration company developing sustainable and ethical resources of metal needed to meet the transition to a low carbon economy. Over the last decade, the team behind Hannan has forged a long and successful record of discovering, financing and advancing mineral projects in Europe and Peru.

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

On behalf of the Board,

#### Further Information

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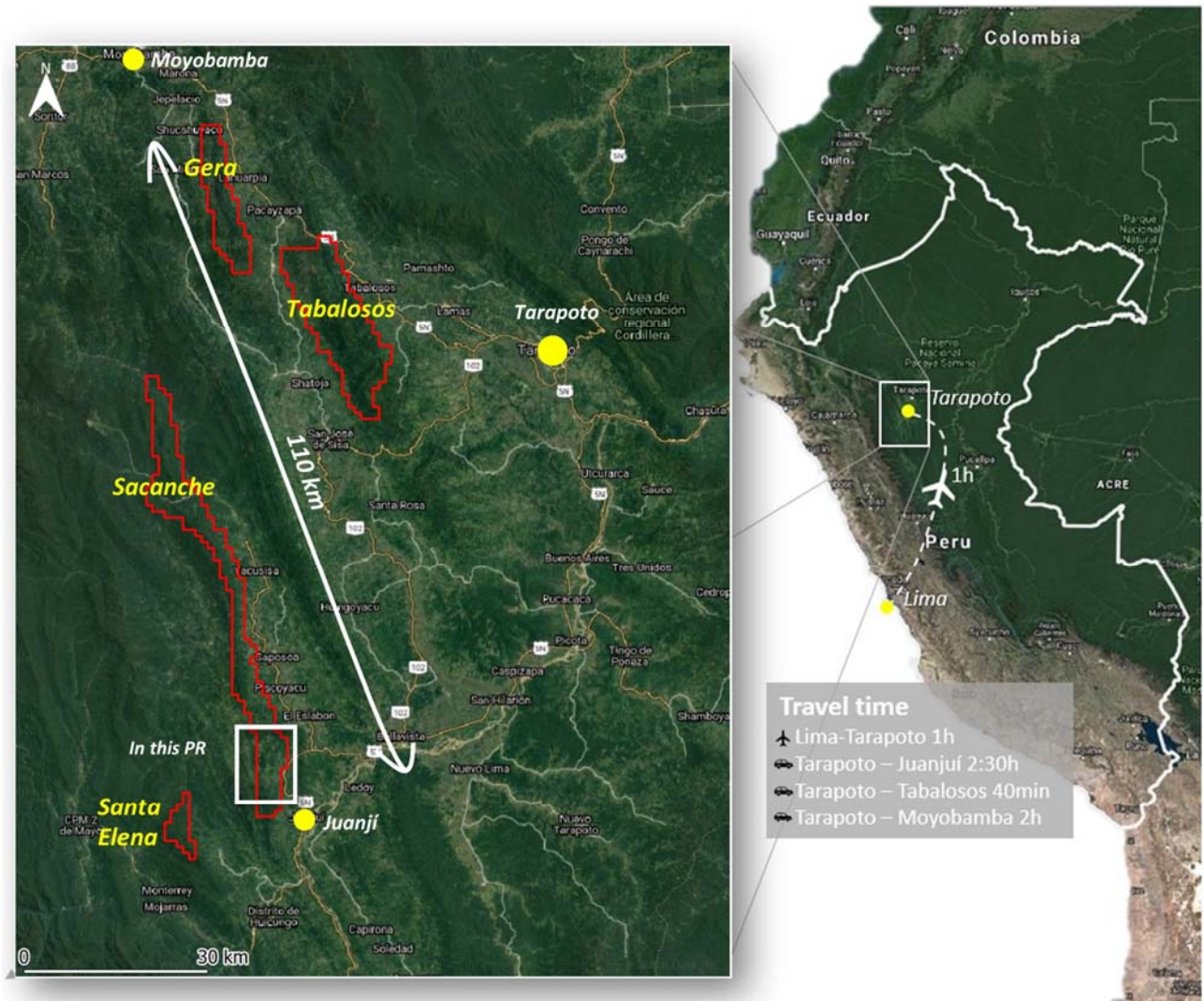
**"Michael Hudson"**

Michael Hudson, Chairman & CEO

#### Forward Looking Statements

Certain information set forth in this news release contains "forward-looking statements", and "forward- looking information" under applicable securities laws. Except for statements of historical fact, certain information contained herein constitutes forward-looking statements, which include the Company's expectations regarding future performance based on current results, expected cash costs based on the Company's current internal expectations, estimates, projections, assumptions and beliefs, which may prove to be incorrect. These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause the Company's actual performance and financial results in future periods to differ materially from any projects of future performance or results expressed or implied by such forward-looking statement. These risks and uncertainties include, but are not limited to: The Company's expectations regarding timing to complete field work and outcome of results, the granting of the claim applications in Peru, the potential impact of epidemics, pandemics or other public health crises, including the current outbreak of the novel coronavirus known as COVID-19 on the Company's business, community relations, liabilities inherent in mine development and production, geological risks, the financial markets generally, and the ability of the Company to raise additional capital to fund future operations. There can be no assurance that forward-looking statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.

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**Figure 1.** Overview of the San Martín sediment-hosted copper-silver project, Peru. The four project areas now cover 65,600 hectares of the prospective host horizon within a 110 kilometre long trend. The location of the zinc-lead gossanous zone is shown in the white box.

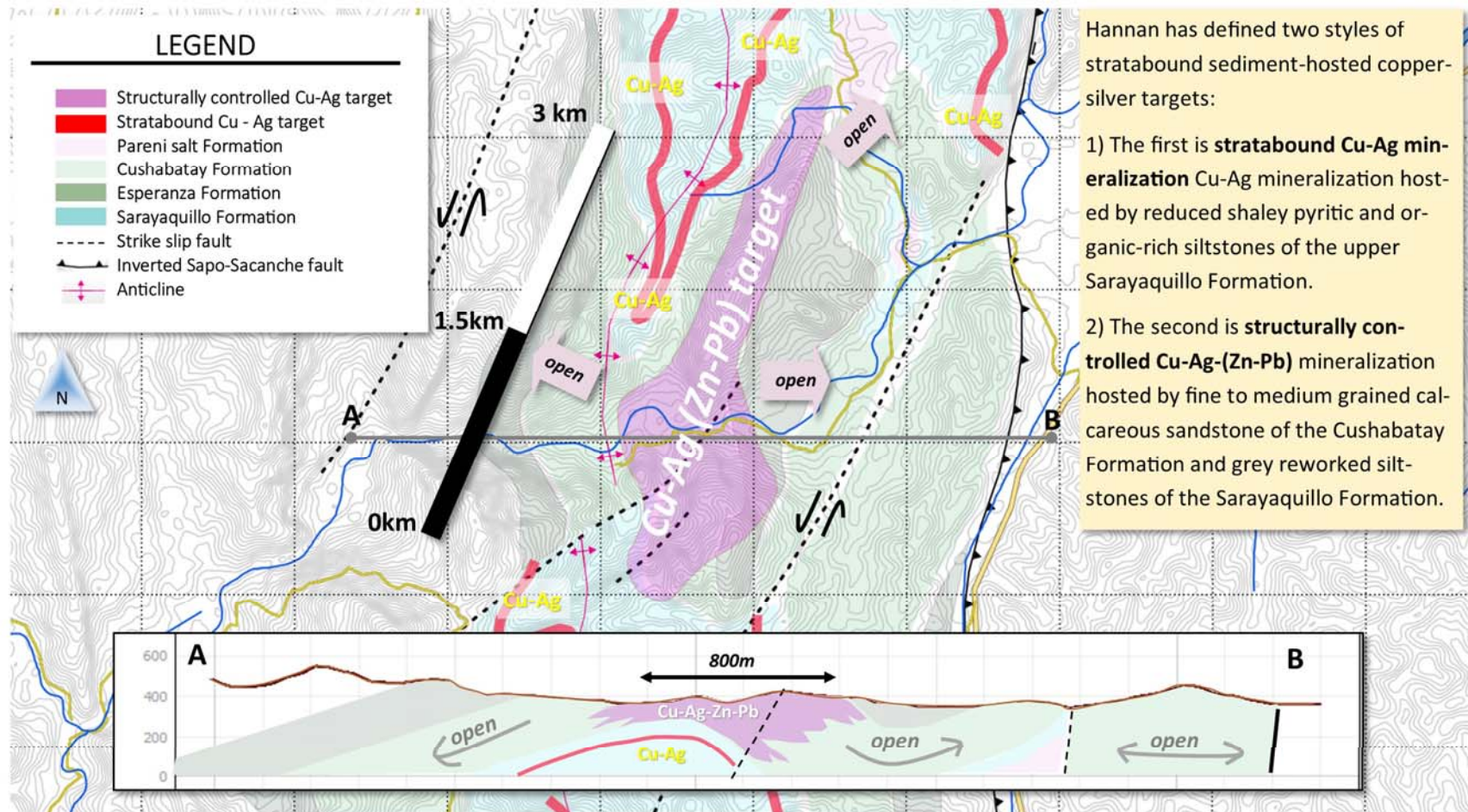


Figure 2. South Sacanche Concession area: Overview view and geological interpretation of the structurally controlled Cu-Ag (Zn-Pb) target and the stratabound Cu-Ag target.

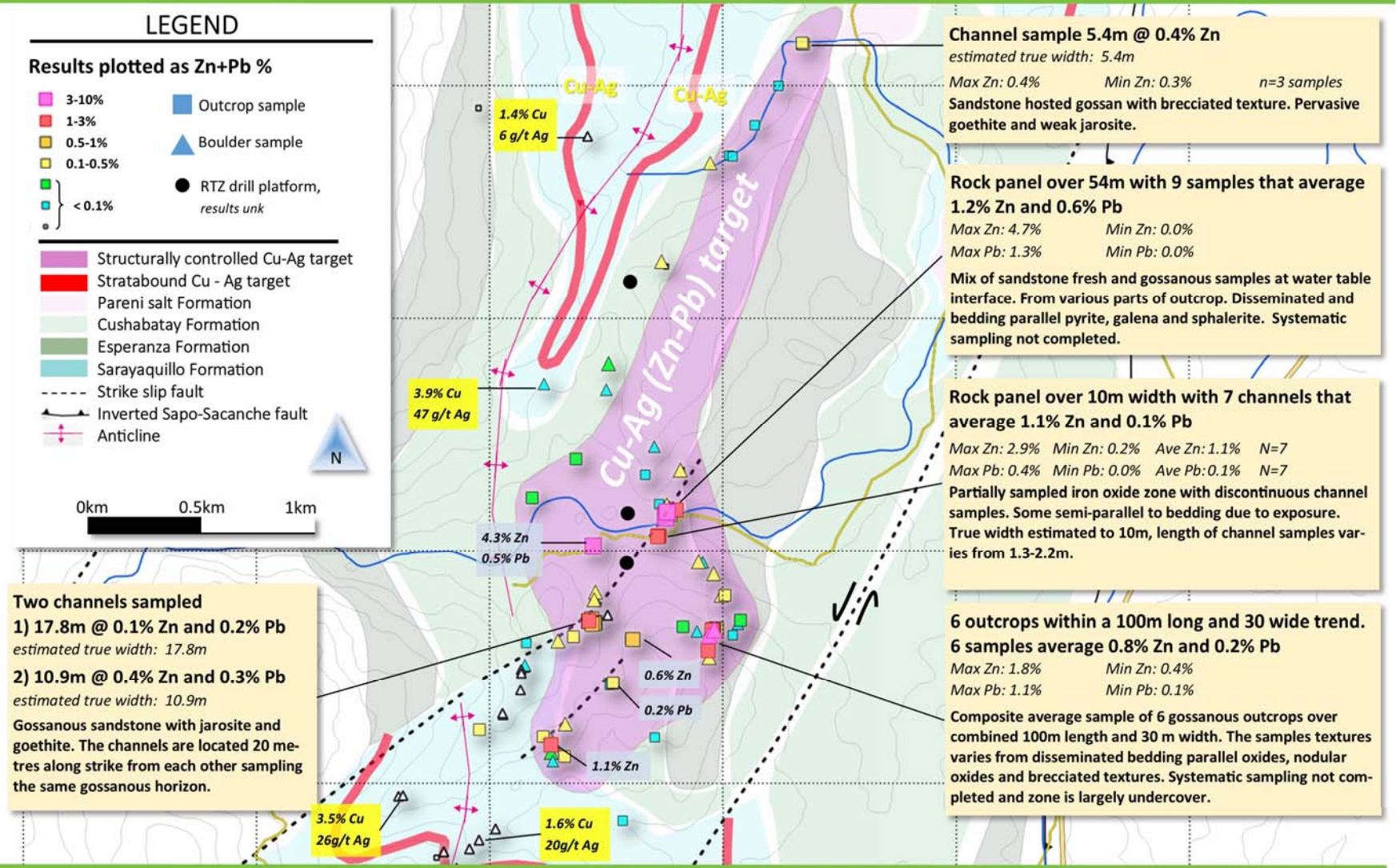
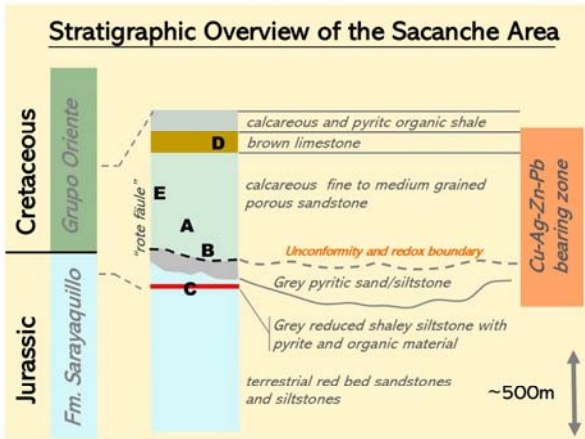


Figure 3. Summary of zinc-lead results from South Sacanche (stratabound reduced facies Cu-Ag samples in yellow). RTZ drill platforms have been located and GPS measured by Hannan in the field.



Shows transgressive stratabound and structurally controlled copper+silver and zinc+lead mineralization within multiple lithologies



A) Typical leached gossanous sandstone outcrop anomalous in Zn and Pb. These zones typically contain 0.1-2% Zn+Pb.



B) Cretaceous Cushabatay Formation fine sandstone with secondary copper mineralization. This sample assayed 2.5% Cu and 36 g/t Ag.



C) Upper Jurassic Sarayaquillo Formation, laminated siltstone to shale with chalcocite replacing pyrite and organic material. Typically contains 2-6% Cu and 15-60 g/t Ag and averages 0.5-5 metres thickness when exposed within 110km strike



D) Cretaceous Esperanza Formation fossiliferous shaley limestone with secondary copper with 3.4% Cu and 26 g/t Ag



E) Siltstone boulder with Rote Fäule (spotted hematite) style redox alteration.

**Figure 4.** Overview of the variety of mineralizing styles from the San Martin project and their stratigraphic position.