

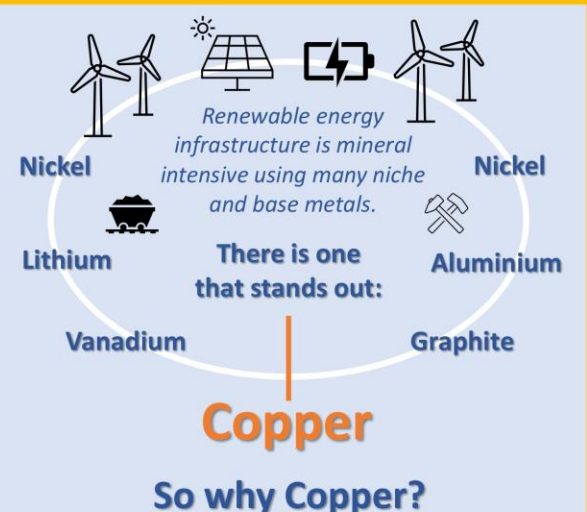


TERTIARY MINERALS PLC

PROJECT FOCUS
MUSHIMA NORTH COPPER PROJECT

June 2023

Copper - The clean energy transition metal



So why Copper?

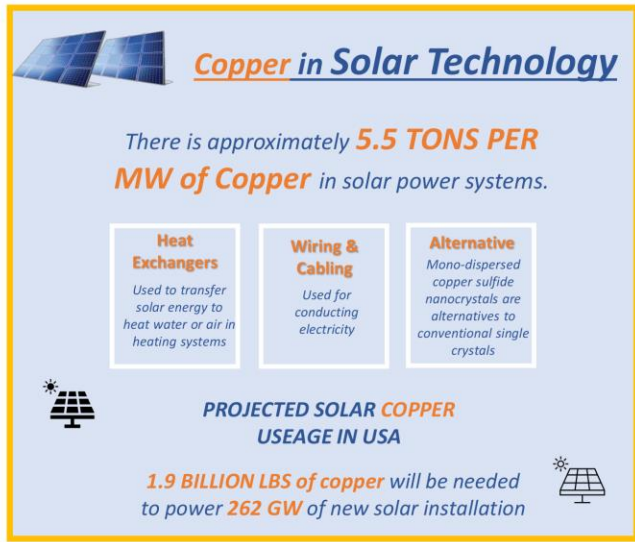
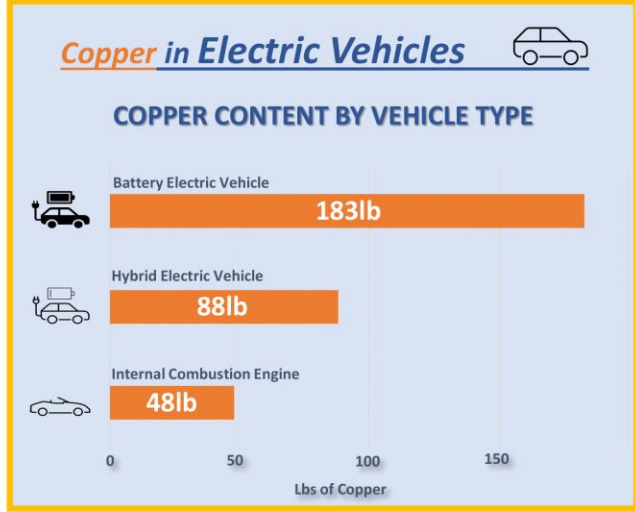
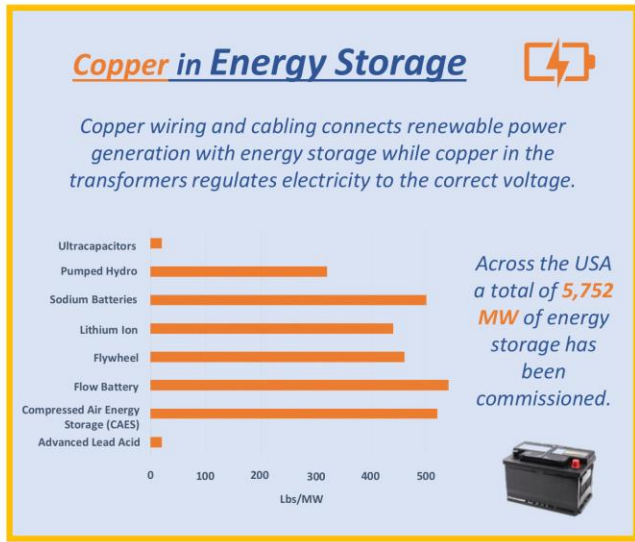
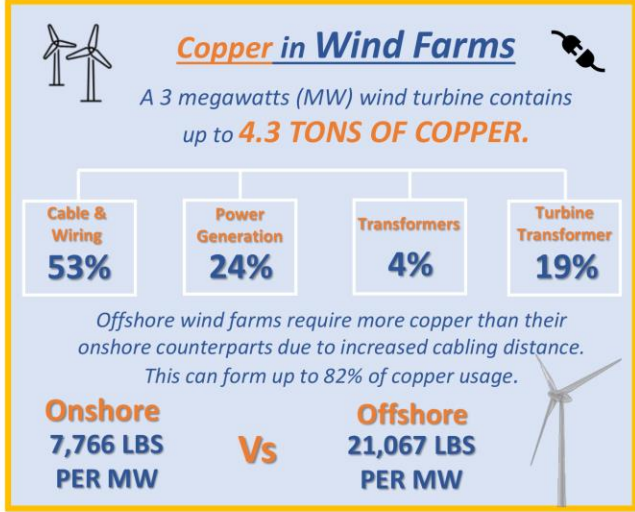
Copper has superior properties that allow it to be used in renewable energy.

- Conductivity**
Low resistance to electron flow meaning it is a good thermal and electrical conductor.
- Ductility**
Copper's high ductility allows it to be bent and stretched into wires and sheets for electrical uses.
- Efficiency**
To achieve the same equipment electrical efficiency other conductors would require 20% more materials.
- Recyclability**
Copper is 100% recyclable and easily recoverable so can be reused without losing its superior properties.

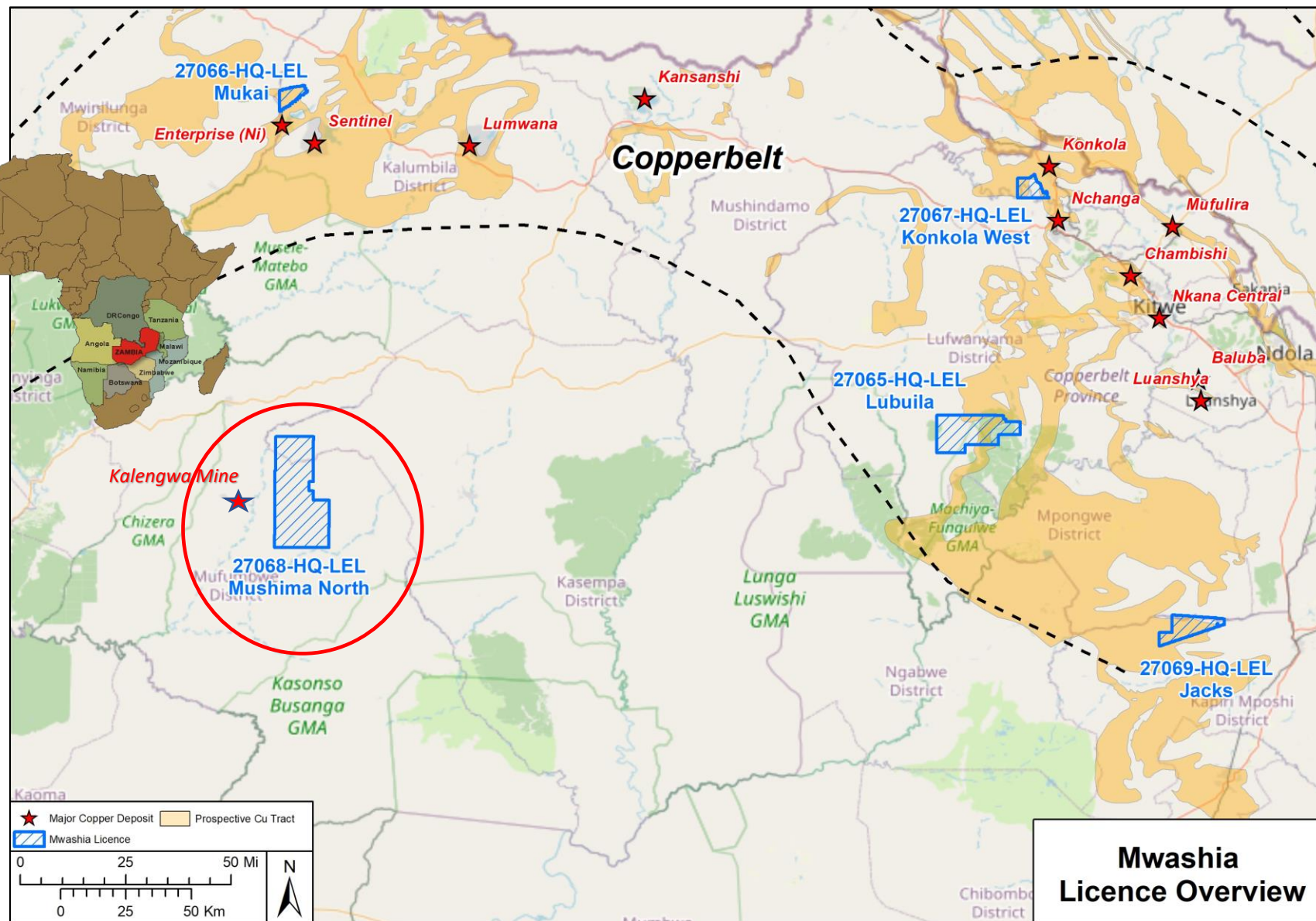
These properties make copper a critical material for the transition to a clean energy economy



The generation of clean energy from wind and solar requires 4-6 times more copper than fossil fuels.



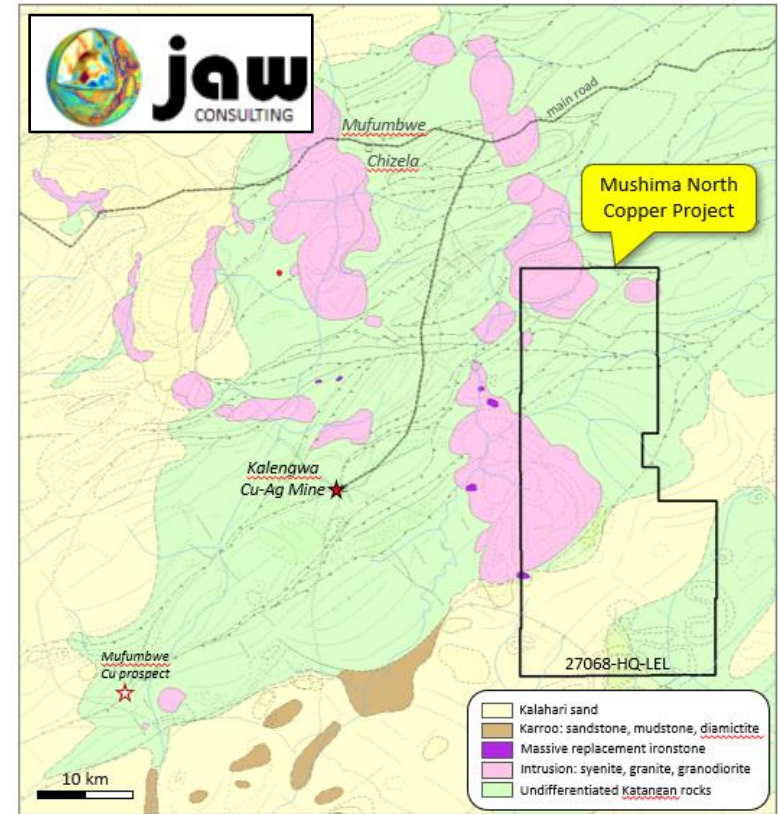
Mushima North Project - Location



Mushima North Project - Summary



- Copper is the No.1 metal needed for the clean energy transition.
- Mushima North Project is located just to the east of the Kalengwa Mine, Zambia's highest grade copper mine (pre-mining reserve 600,000 tons grading 16% copper).
- Included in Tertiary's **Data Sharing & Technical Cooperation Agreement** with **First Quantum Minerals** ("FQM"). Extensive project data now provided by FQM.
- FQM data merged with extensive historical data sets.
- Detailed Interpretation and Targeting Report now completed by JAW Consulting.
- Targets include:
 - Copper soil anomalies & electromagnetic anomalies prospective for traditional copper belt style mineralisation in reduced facies ore shales.
 - Gravity anomalies associated with anomalous copper in soils and recently assayed drill core - indicative of Iron-Oxide-Copper-Gold ("IOCG" style mineralisation).
- Environmental Project Brief approved, awaiting forest permit.
- Follow-up exploration planned for summer and autumn 2023.



Simplified regional geology of the Kalengwa region of northwestern Zambia.

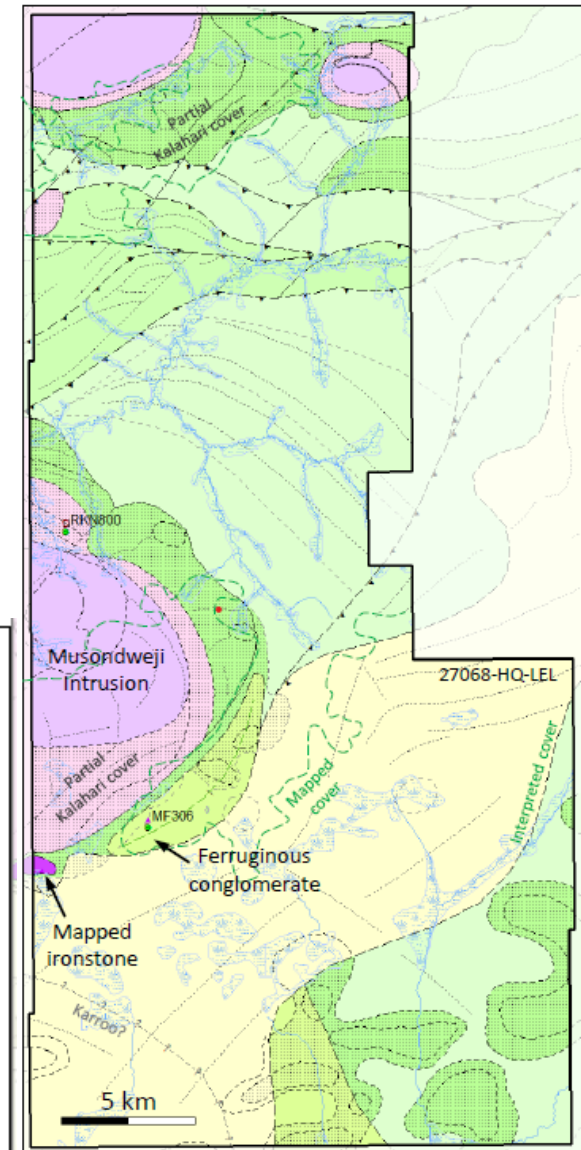
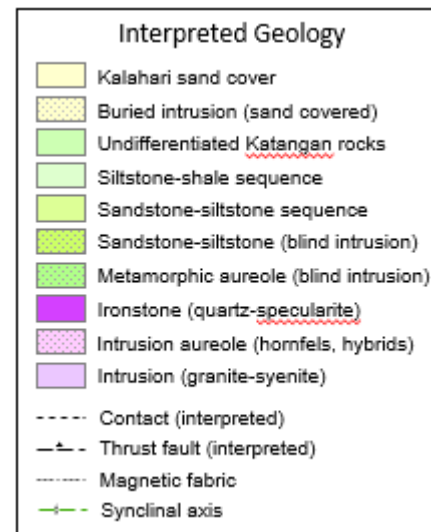


Kalengwa Mine

Mushima North Project - Geology



- The geology of the Mushima North property is interpreted from regional mapping by Roan Consolidated Mines (“RCM”) in the late-1960s and early-1970s and more recent interpretations of airborne geophysical data.
- Structural framework compiled by BHP Billiton in 2012 (map opposite).
- The property is largely underlain by a series of strongly deformed, late-Proterozoic, metasedimentary rocks of the Katanga Supergroup which are regionally intruded by a variety of syn- to post-tectonic igneous bodies correlated with the regionally extensive Hook Granite suite (e.g. Musondweji intrusion) of early Paleozoic age (~520 million years).
- The margins of the intrusive bodies are reported to include hornfelsed and brecciated metasediments associated with intense red-rock alteration and the sporadic development of massive bodies of quartz-specularite (\pm magnetite) ironstone. The latter are locally associated with Cu-Au mineralisation immediately west of the property.
- The area has low topographic relief and its southern sector is partly covered by unconsolidated Kalahari sand.



Interpreted Geology (BHPB, 2012)

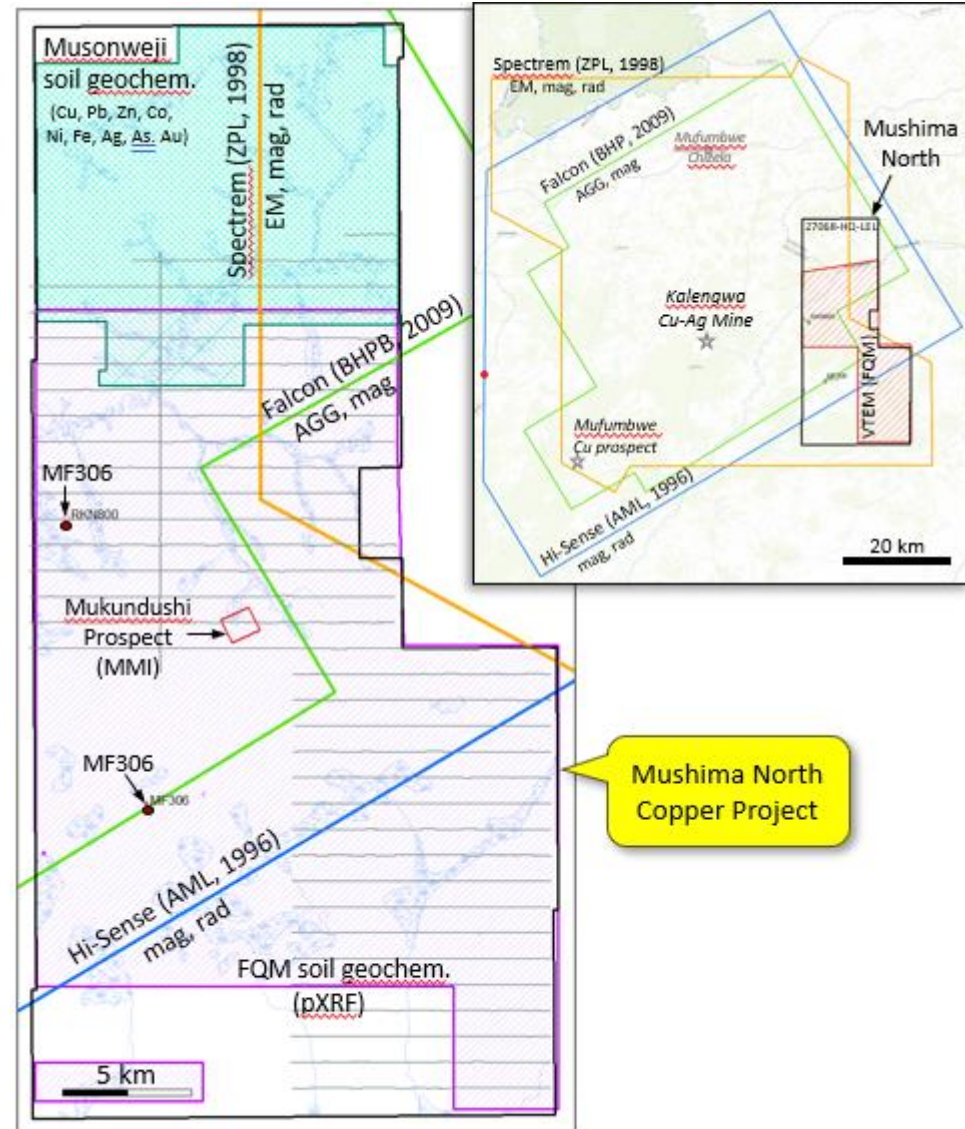
Mushima North Project - Past Exploration



Historical work focused around the small, high-grade Kalengwa copper-silver mine (4 million tons @ 5.2% Cu, 40 g/t Ag produced), located approximately 20 km to the west of the license, and which operated from 1968 to 1982.

Various exploration campaigns in the surrounding area included parts of Mushima North:

- Roan Consolidated Mines (1970s): Regional geological mapping, copper soil geochemistry and two diamond drill holes (MF306 and RKN800).
- African Minerals Limited (c. mid-1990s): Airborne magnetic-radiometric survey with regional geological interpretation and detailed regolith mapping of the Mukundushi prospect.
- Zamanglo Prospecting Limited (late-1990s): Airborne SPECTREM EM, magnetic and radiometric survey, Musonweji soil geochemical survey (Cu, Pb, Zn, Co, Ni, Fe, Ag, As, Au) and detailed Mukundushi MMI geochemical survey.
- BHP Billiton (late-2000s): Airborne Falcon gravity gradiometry (AGG) and magnetic survey.
- First Quantum Minerals (c. mid to late-2010s): Airborne VTEM – magnetic survey and regional pXRF soil geochemical survey.

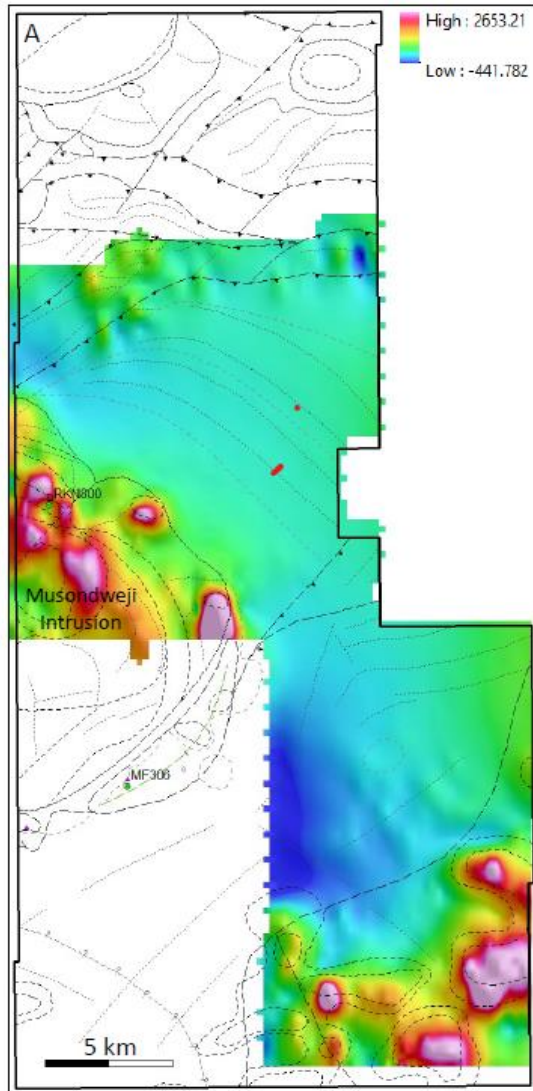


Location maps of the Mushima North property showing data sources.

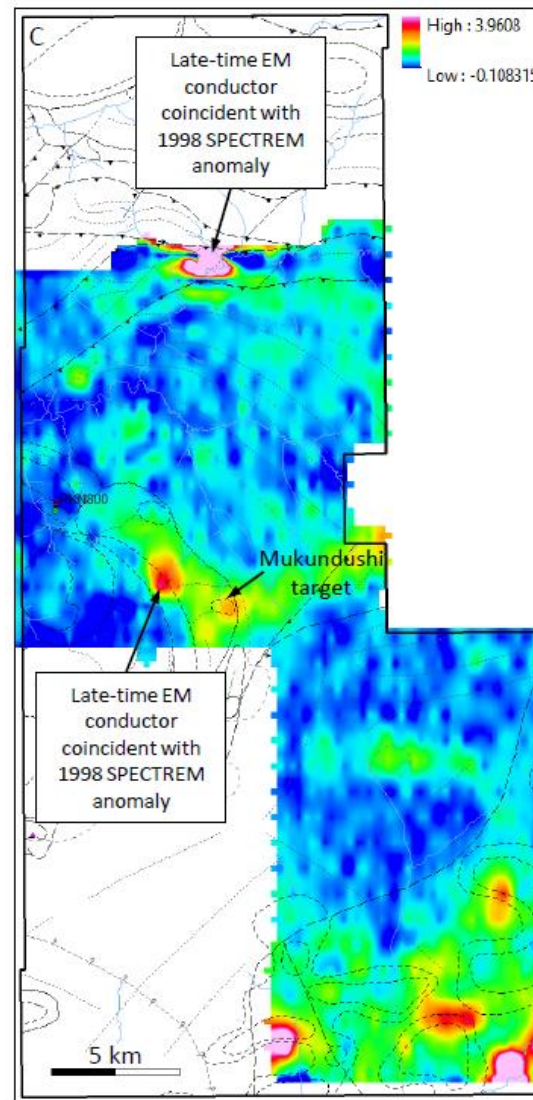
Mushima North Project - FQM Data Sets



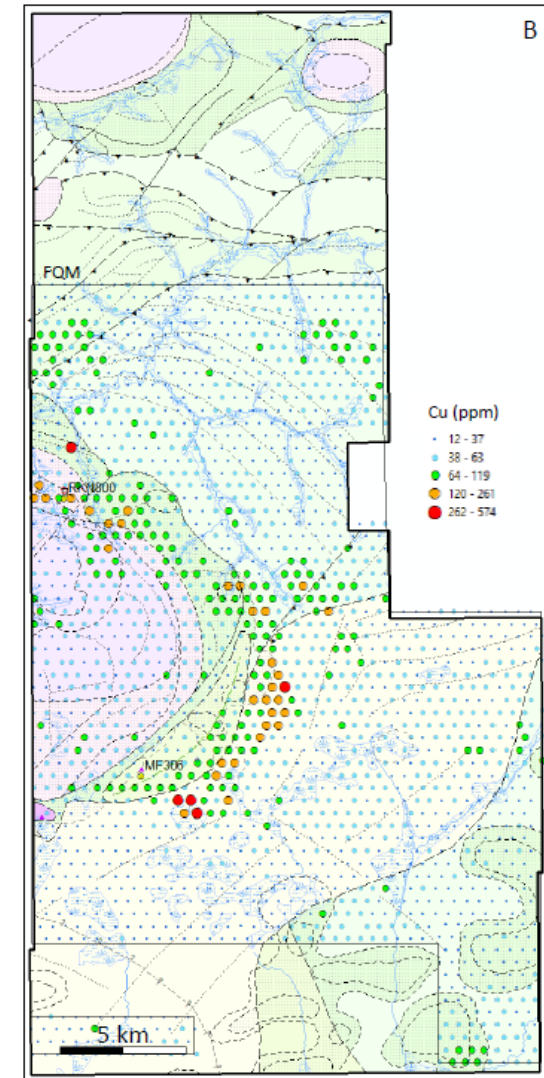
High quality data sets provided by FQM under the Data Sharing and Technical Cooperation Agreement.



Magnetics: RTP



Late-time: Z-component B-field [35]



FQM geochemical data: Copper in soils.

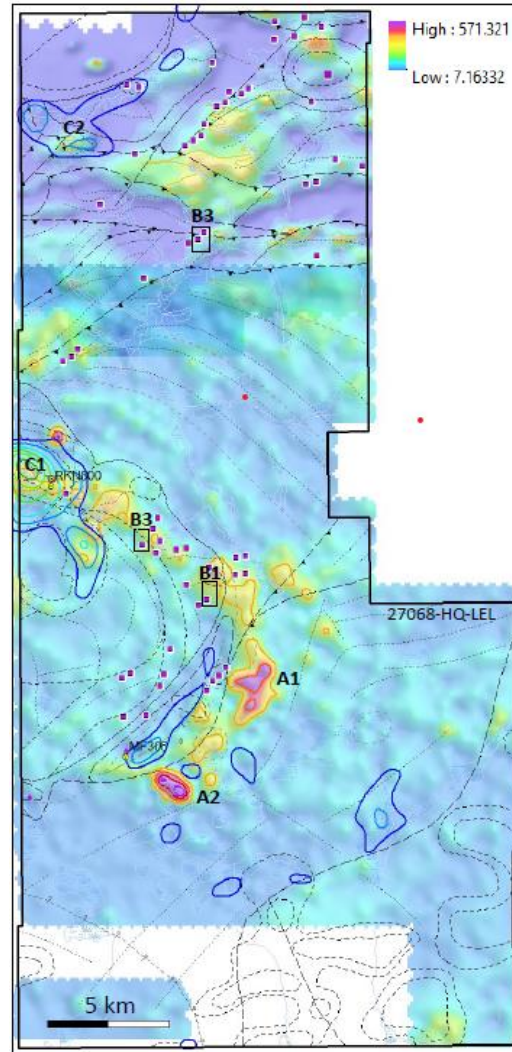
Mushima North Project - Targeting Report



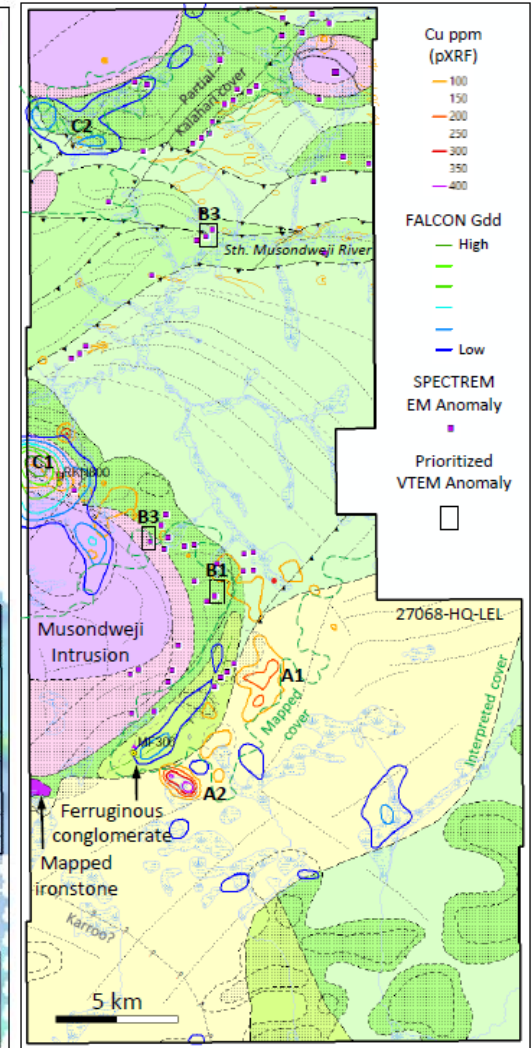
JAW Consulting LLC completed historic data compilation and targeting report.

Several key targets generated From Targeting Report (see opposite), in order of priority:

- **Target C1** (Multiple data sources) Prominent gravity high association with soil anomaly and wide low-grade intersection of copper mineralisation recently announced from resampling 1970s drill hole RKN800. This target, and a similar feature in the northwest of the property [C2], are potential IOCG systems previously targeted by BHP Billiton (2012).
- **Target A1** (FQM data) 1.7km long pXRF copper soil anomaly defined on 500m sample spacing. Enhanced by coincident arsenic and zinc anomalies.
- **Target B3** (FQM Data and SPECTREM data) Discrete strong EM conductor in favourable structural setting.
- **Target A2** (FQM data). Small high magnitude copper anomaly [A2].
- **Targets B1 and B2** (FQM data) Electromagnetic targets coincident with intrusive rocks or their margins.



Copper in soil with potential targets.

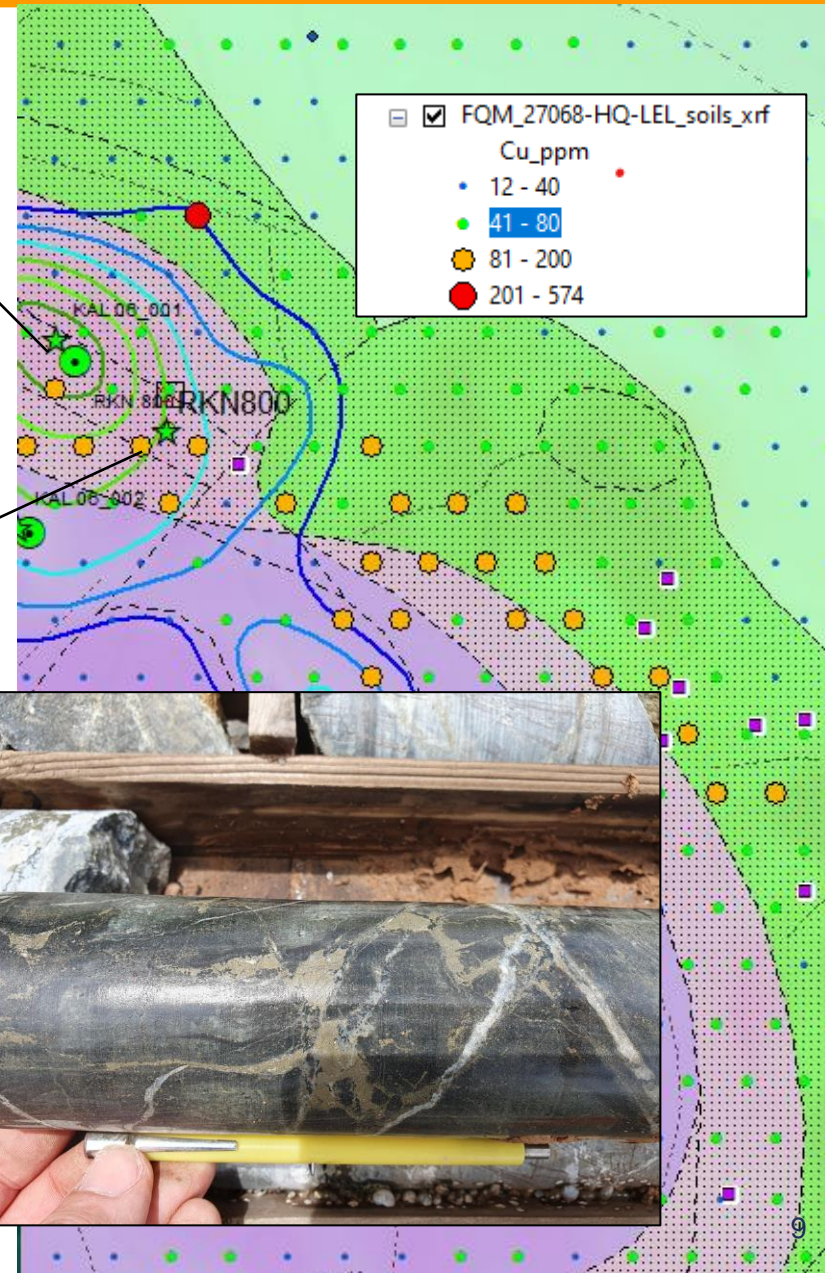


Interpreted geology with potential targets.

Mushima North Project - Target C1



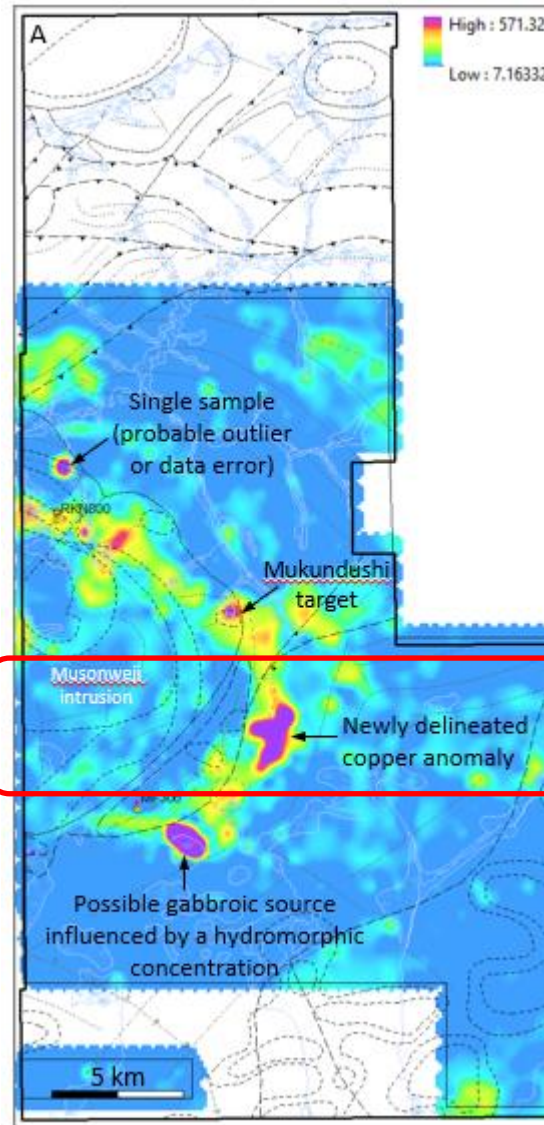
- FALCON gravity anomaly - defined as drill target by BHP Billiton in 2000s (shown as contours) but not tested. Due to hematite and/or magnetite mineralisation +/- copper-gold?
- Broadly coincident with a high-amplitude magnetic response interpreted to reflect the marginal zone of an underlying intrusion.
- FQM copper soil anomaly coincident with gravity anomaly.
- 1970s drill hole RKN800 on margin of the gravity anomaly recently resampled:
 - 33m grading 0.24% copper from 122m-155m downhole.
 - Hole ended in mineralisation grading 0.19% copper from 154-155m (EOH).
 - Copper mineralisation associated with pyrite and calcite veining (photo).
- Target is for iron-oxide-copper-gold (“IOCG”) style mineralisation that includes a number of major copper-gold deposits globally.
- Planned exploration includes detailed magnetic and gravity surveys and infill soil sampling.



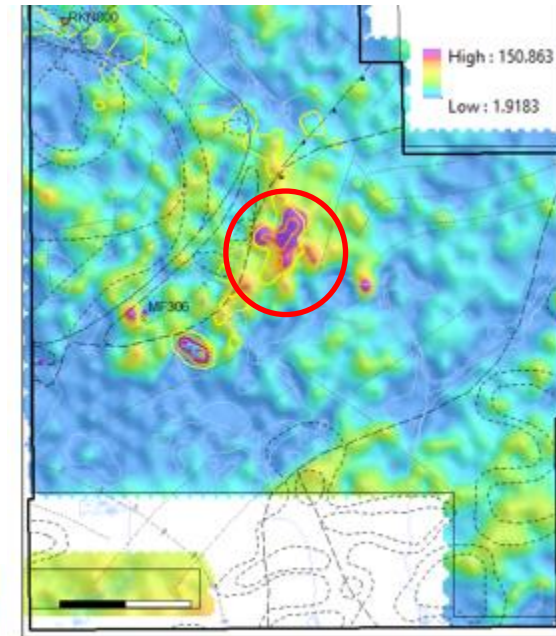
Mushima North Project - Target A1 & A2



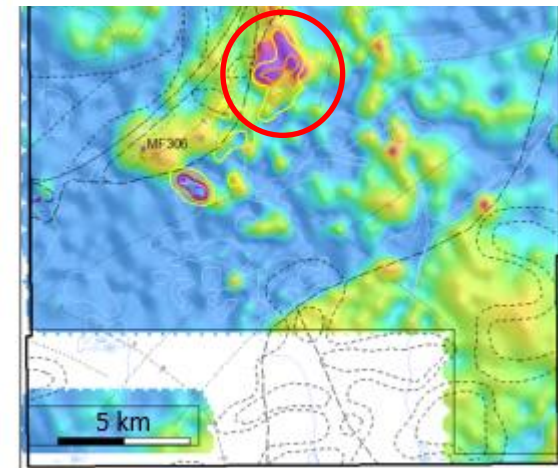
- Target A1 is a high priority copper soil anomaly defined by pXRF analysis of 500m spaced soil samples.
- **Contains copper values in excess of 100 ppm over a strike length of 3km, with a peak 350 ppm copper.**
- Elements associated with this newly identified copper anomaly include arsenic and zinc.
- Target A2 is a strong discrete copper in soil anomaly but is elevated in nickel, chromium and vanadium which can suggest a gabbroic source and a common cause of “false” copper anomalies in the region.
- Follow up work will include detailed infill soil sampling and geochemical evaluation prior to drill testing.



Copper in soil (pXRF).



Zn in soils with Cu contours

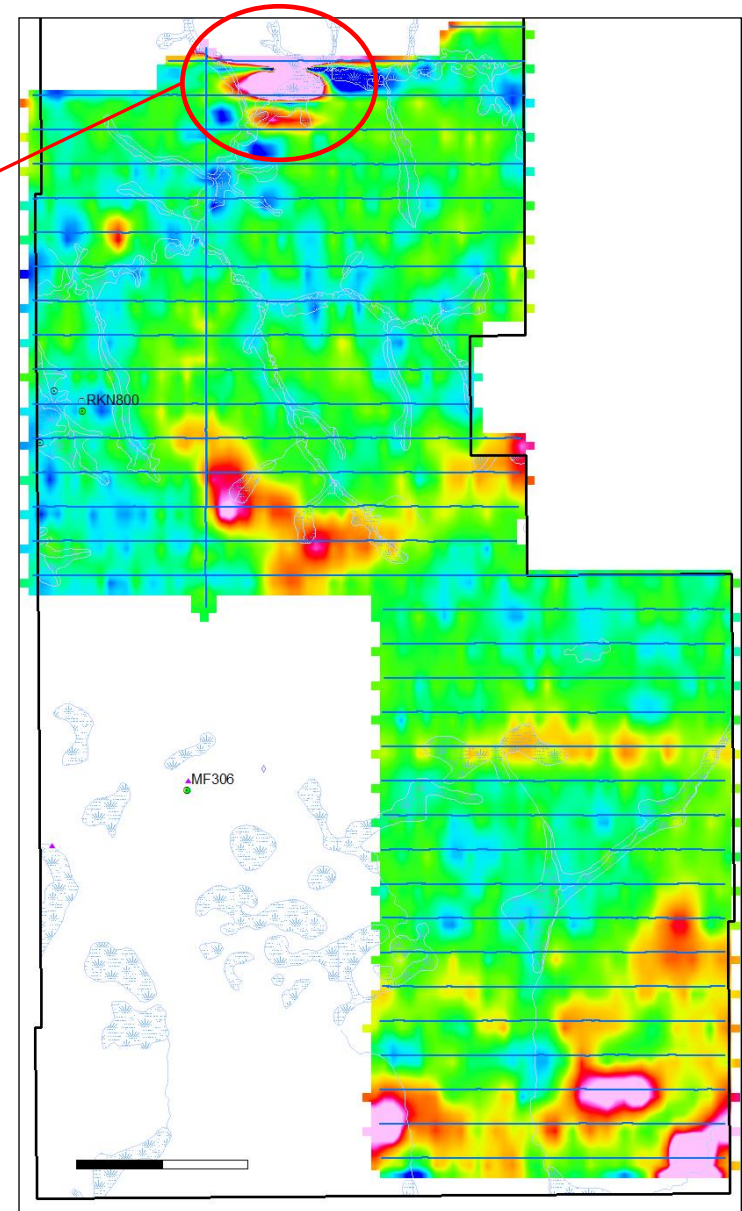


As in soils with Cu contours

Mushima North Project - Target B3



- A strong discrete electromagnetic conductor defined in the FQM electromagnetic survey data.
- Lies in interpreted major thrust zone.
- Coincident with 1990 SPECTREM anomaly.
- Follow up exploration to include mapping and field evaluation and ground geophysics.





TERTIARY MINERALS PLC



Company Presentation
20 April 2023

Further details of the Company's wider portfolio of copper exploration projects in Zambia and Nevada USA can be found in the April 2023 Investor Presentation at:

<https://www.tertiaryminerals.com/presentations>

Drilling at Jacks Project, Zambia, 2022