

LUNSEMFWA PROJECT: Large exploration licence with known Zinc and Manganese occurrences and further discovery potential

Manajem International Ltd.

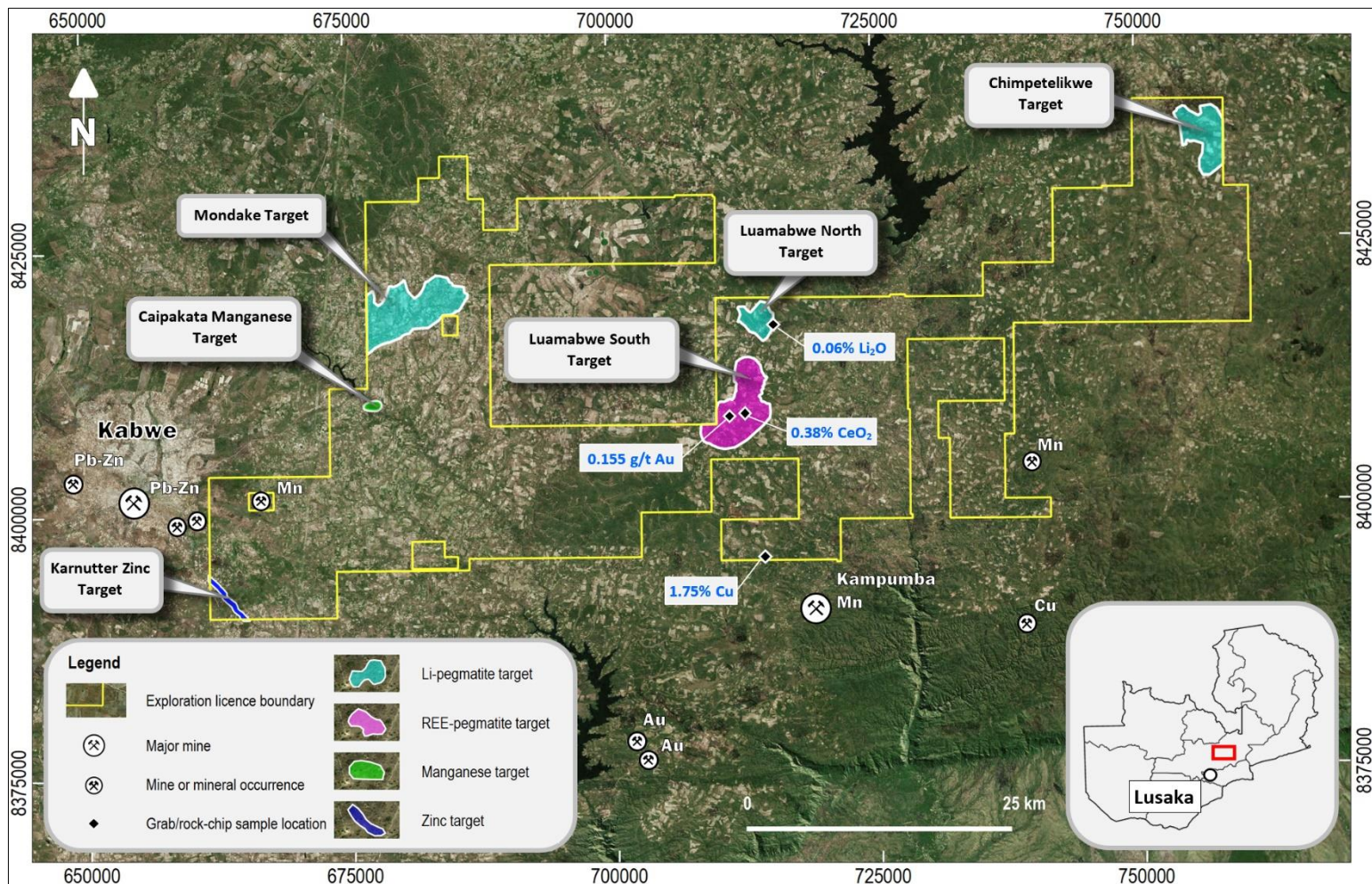
OVERVIEW

ZAMBIA

- Ranked 7th on political stability index of African countries (World Bank, 2018).
- Well-established mining industry. Produced 596,000 t copper (Cu), 120,000 t manganese (Mn) and 4.6 t gold in 2016 (Barry, 2020).
- Major mining companies active in country: e.g. Barrick, First Quantum Minerals Ltd, Glencore.

LUNSEMFWA PROJECT

- Large exploration licence (1,831 km²), easy access; situated 120 km NE from Lusaka.
- Directly east of the Kabwe lead-zinc (Zn) mine and north of the Kampumba Mn mine.
- Exploration to date includes remote sensing, stream-sediment and soil sampling, geological mapping and pitting.
- Early exploration indicates potential for Zn, Mn, lithium (Li) and rare earth elements (REE).
- Environmental Project Brief for licence approved by Zambia Environmental Management Agency.



Licence map with targets, mines, and mineral occurrences.

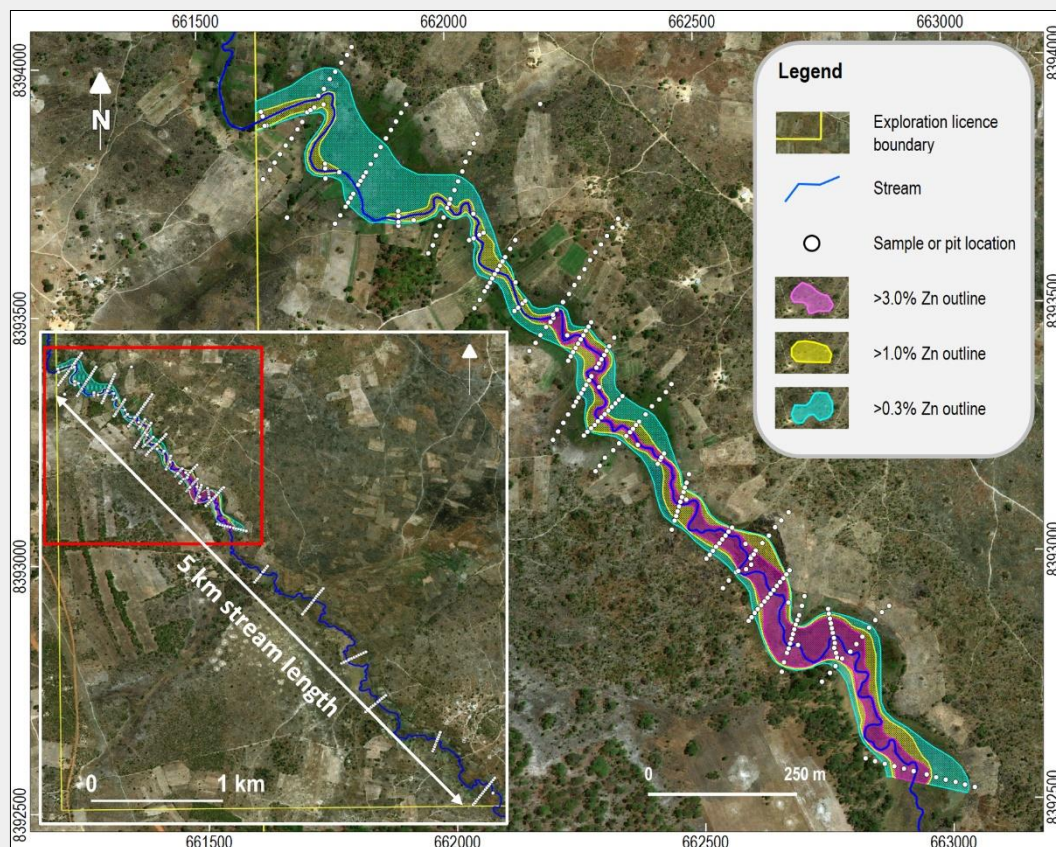
KARNUTTER ALLUVIAL ZINC TARGET

ALLUVIAL ZINC TARGET DETAILS

- High-grade surficial alluvial Zn deposit, approximately 0.2 m thick.
- 359 stream-sediment and soil samples; 43 pits, 281 pit-samples.
- Alluvial Zn identified along 5 km section of stream channel, deposit width ranges from 30–120 m.
- Zinc grades ranging from 0.3–13%.
- Alluvial Zn target potential from 32–72 kt at a grade of 2–5% Zn.
- Nearby processing options: Cu refinery operational in Kabwe; Zn processing circuit in development (Jubilee Metals Group, 2020).

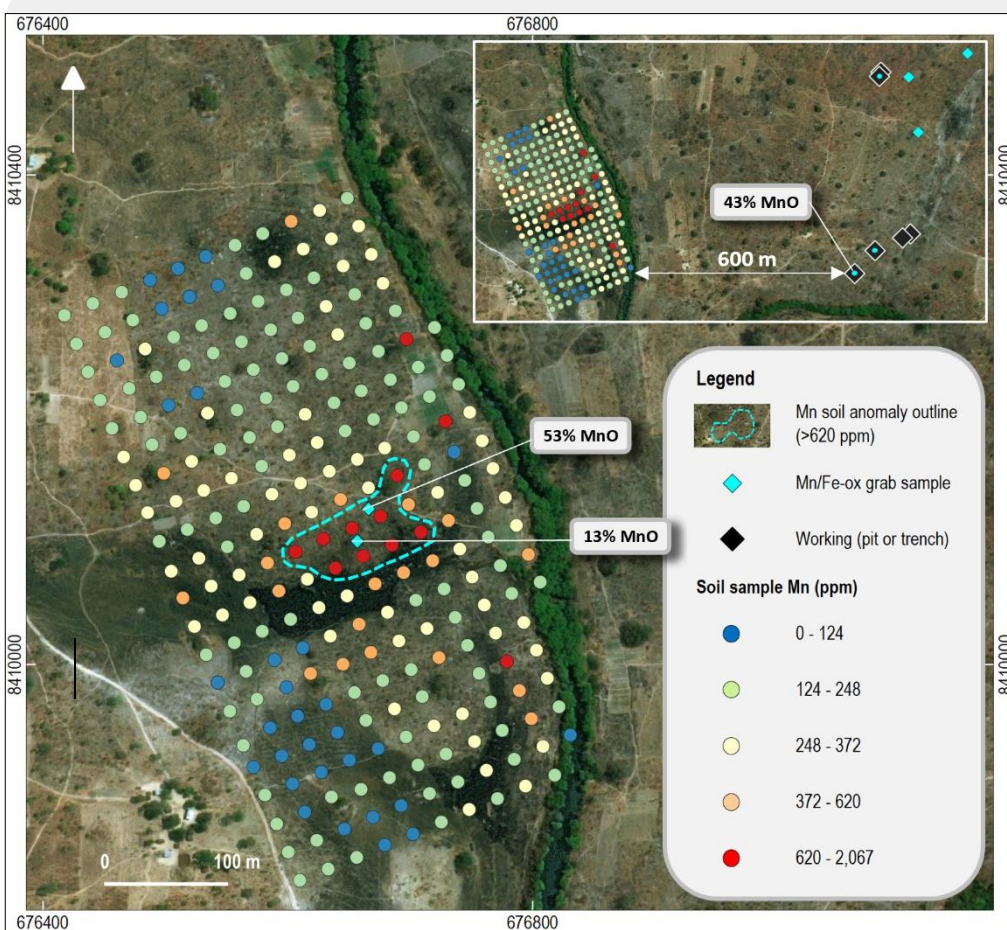
References:

- Barry, J.J., 2020, 2016 Minerals Yearbook Zambia [advance release], USGS.
- Jubilee Metals Group, accessed 22/07/2020, <https://jubileemetalsgroup.com/investors/rns/six-month-operations-update>.
- World Bank, accessed 22/07/2020, <https://info.worldbank.org/governance/wgi/Home/Reports>



Karnutter Zn target outlines with 0.3, 1.0 and 3.0% Zn cut-off. The red rectangle in the inset map outlines the extent of the main map.

MANGANESE TARGET AND OTHER POTENTIAL



Thematic map of Mn (ppm) soil samples results outlining the Mn soil anomaly.

MANGANESE TARGET

- Grab samples with up to 53% MnO collected from shallow artisanal workings.
- 50 m x 100 m Mn-in-soil anomaly.
- Additional Mn-Fe-oxide rich grab samples with up to 43% MnO collected 600 m east of target.

OTHER POTENTIAL

- Additional 1,293 soil samples, 183 stream-sediment samples and 98 rock-chip and grab samples collected and analysed.
- Stream-sediment sample results indicate potential for Li and REE bearing pegmatites.
- Grab and rock chip sample results include: 1.75% Cu, 0.155 ppm Au, 0.38% CeO₂ and 0.06% Li₂O.

DATA

- Sentinel II imagery and processed ASTER data set covering entire licence available.
- Surface geochemistry (soils and stream sediments).
- Exploration reports and fully validated MS Access exploration database available.