

## Extensive outcropping copper at Sandover - NT

- The Sandover Copper Project (“Sandover”) is prospective for sediment hosted copper.
- Mapping and water bore sampling has confirmed outcropping and regional copper mineralisation associated with a local grey shale unit within a broader “red bed” sandstone sequence - analogous to the Zambian ore shale unit.
- Major elements of a Central African sediment-hosted copper system are present at Sandover:
  - Juxtaposition of Neoproterozoic sediments against crystalline basement
  - Evaporites
  - Reduced stratigraphic units to trap Cu brines, within a red-bed sequence
- Further on-ground mapping of Sandover is planned at the start of 2022 field season along with an airborne EM survey.
- Sandover also includes historical tantalum, tin occurrences and mapped pegmatites that will be investigated for lithium and other critical metals.

The directors of Encounter Resources Ltd (“Encounter”) are pleased to provide a geological and activities update for the large scale Sandover copper project (“Sandover”) in the Northern Territory.

### Commenting on Sandover, Managing Director, Will Robinson said:

“Our systematic appraisal of copper potential in the Northern Territory continues to yield positive results. The mapped outcropping copper mineralisation at Sandover appears focused around grey shale units which are poorly exposed at surface and sandwiched between red fine grained to coarse-pebbly sandstone. This is the classic Zambian sediment-hosted copper mineralisation setting.

Since acquiring the initial Sandover tenement in February 2020 the project area has been progressively expanded as new data was acquired including the identification of copper anomalism in multiple Government water bore cuttings analysed utilising a handheld XRF unit.

Further mapping and sampling are planned along with an airborne EM survey to map the prospective geological units and also as a potential direct detection tool.”



Photo 1 - Grey shale unit containing malachite (copper oxide)

## Background

Sandover is located 170km north of Alice Springs and covers a major structural corridor on the southern margin of the Georgina Basin. Historical exploration at Sandover has mapped copper oxides at surface in a stratiform position extending over 20km of strike.

Sandover is interpreted to represent a locally preserved Neoproterozoic depocentre, overlain by more extensive Cambrian Georgina Basin sediments. The major elements of the classic Zambian style sediment-hosted copper system are present at Sandover including:

- Juxtaposition of Neoproterozoic sediments against crystalline basement
- Evaporites
- Reduced stratigraphic units to trap copper brines, within a red-bed sequence
- Evidence of copper mineralisation event

## Exploration Activity

In March 2021, drill cuttings from Northern Territory government's water bore program were analysed by Encounter utilising a handheld XRF unit. Regional scale copper anomalism was identified in multiple water bore cuttings and consequently the Sandover project area was significantly expanded to ~4,000km<sup>2</sup>.

In October 2021, a field mapping program was completed at Sandover which confirmed outcropping copper mineralisation associated with a local grey shale reduced unit within a broader "red bed" sandstone sequence at Sandover. The setting is analogous to the Zambian ore shale in contrast to other sediment-hosted copper occurrences/deposits in Australia (Mt Isa, Nifty) where mineralisation is located in the overlying reduced shales.

During September to November 2021, historical geophysical datasets were compiled and integrated including regional gravity, magnetics, ASTER and the recent AEM lines completed as part of Geoscience Australia's Exploring for the Future Program.

Following the observations during the October 2021 field visit and the reprocessing and integration of the available geophysical packages, Sandover was further expanded in November 2021.



Photo 2



Photo 3



Photo 4



Photo 5

**Photos 2-5: Copper oxide mineralisation at surface located during reconnaissance mapping**

### Next Steps

Exploration will focus on identifying extensions to the reduced units within the basin along strike and under cover and with a particular focus on where they intersect with long-lived basin forming faults.

Further regional surface mapping and sampling of the copper mineralised shale unit will commence at the start of the 2022 field season. An airborne EM survey will also be completed over the area of the outcropping copper oxide mineralisation to map the prospective conductive host geological unit and also potentially as a direct detection tool of copper sulphide mineralisation at depth.

Sandover also includes historical tantalum, tin occurrences and multiple mapped pegmatites that will also be investigated for lithium and other critical metals in conjunction with the copper exploration activities. Mapping of the known pegmatite occurrences using ASTER satellite data could provide a rapid assessment tool to identify new pegmatite occurrences in this emerging pegmatite province. The sampling of existing and new pegmatite occurrences will be completed in parallel with a planned regional field mapping program.

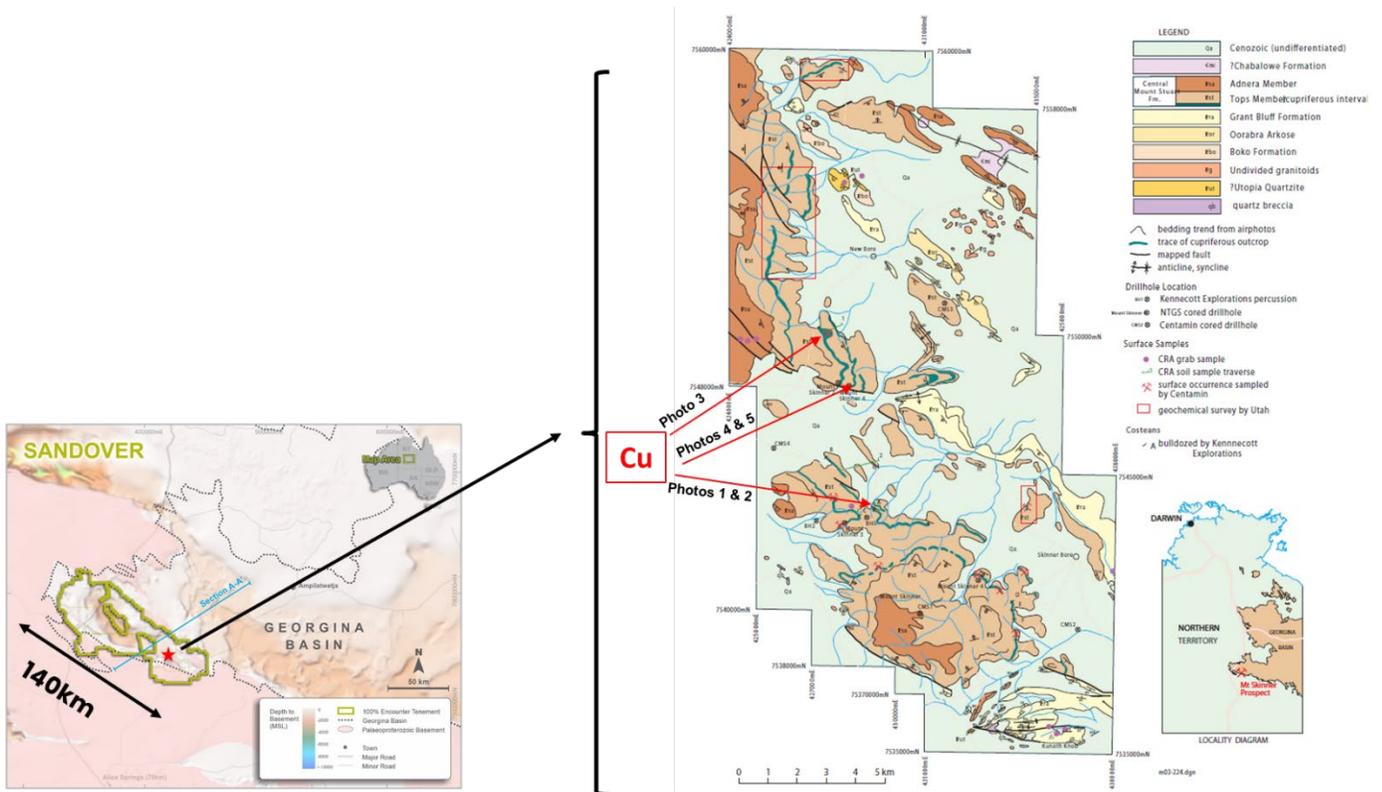


Figure 1 – Geology plan showing mapped cupriferos outcrop at Sandover (NTGS Kruse et al, 2013)

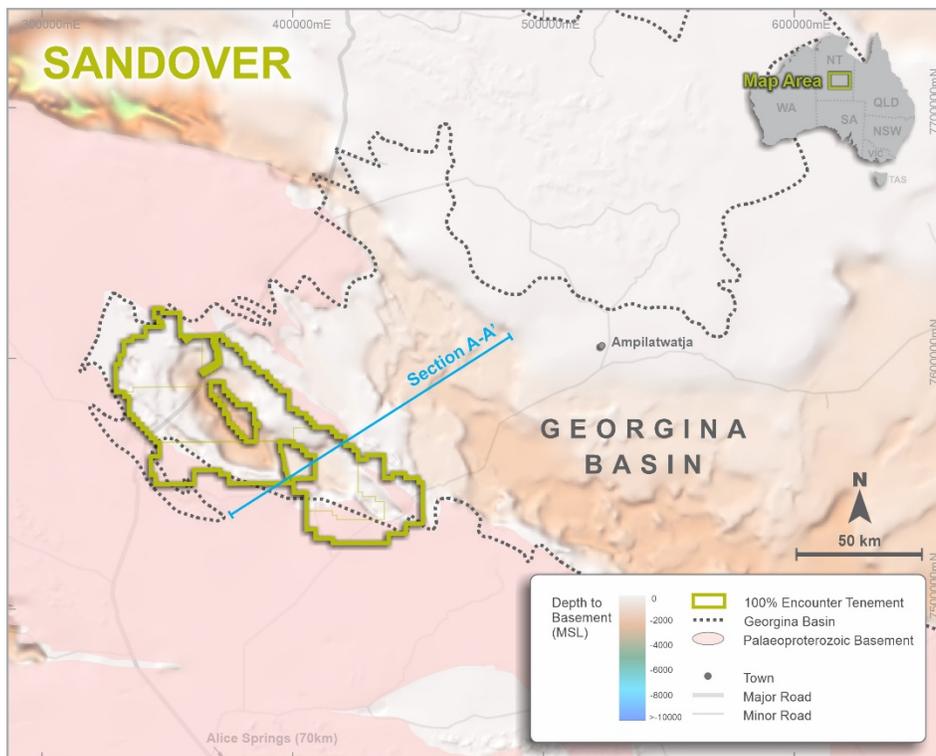


Figure 2 – Sandover Project Location Plan

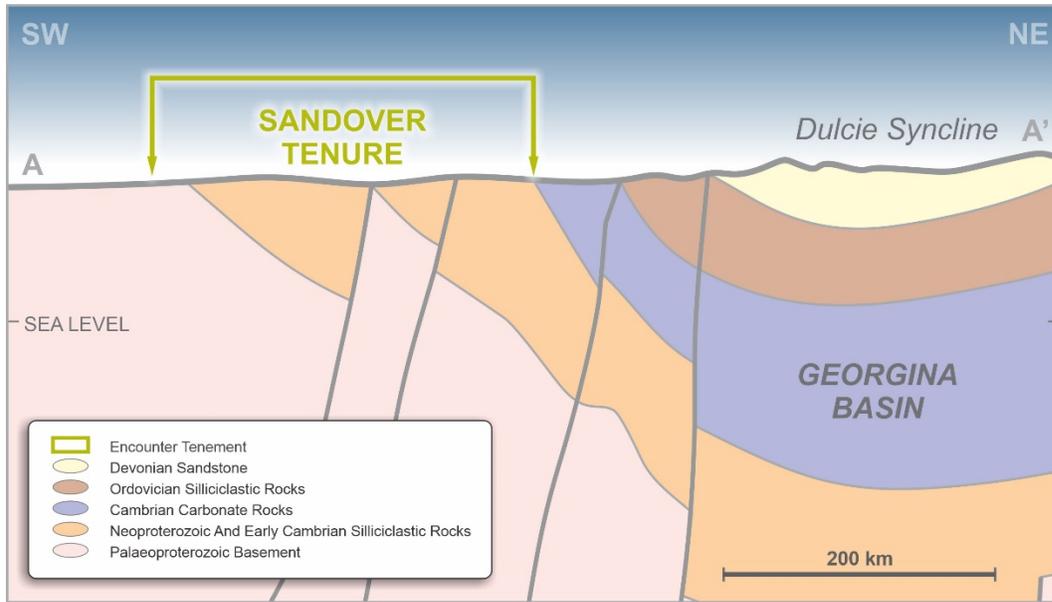


Figure 3 – Sandover Schematic Cross Section A-A'

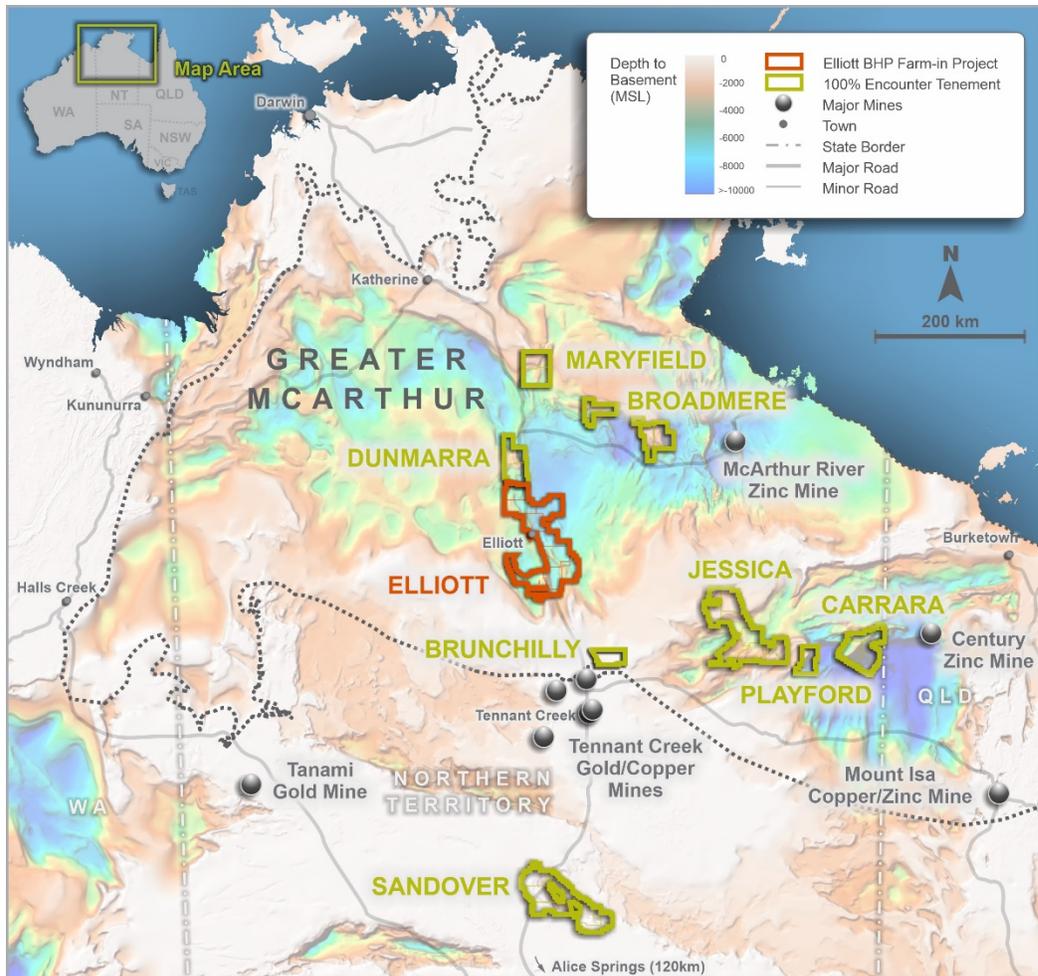
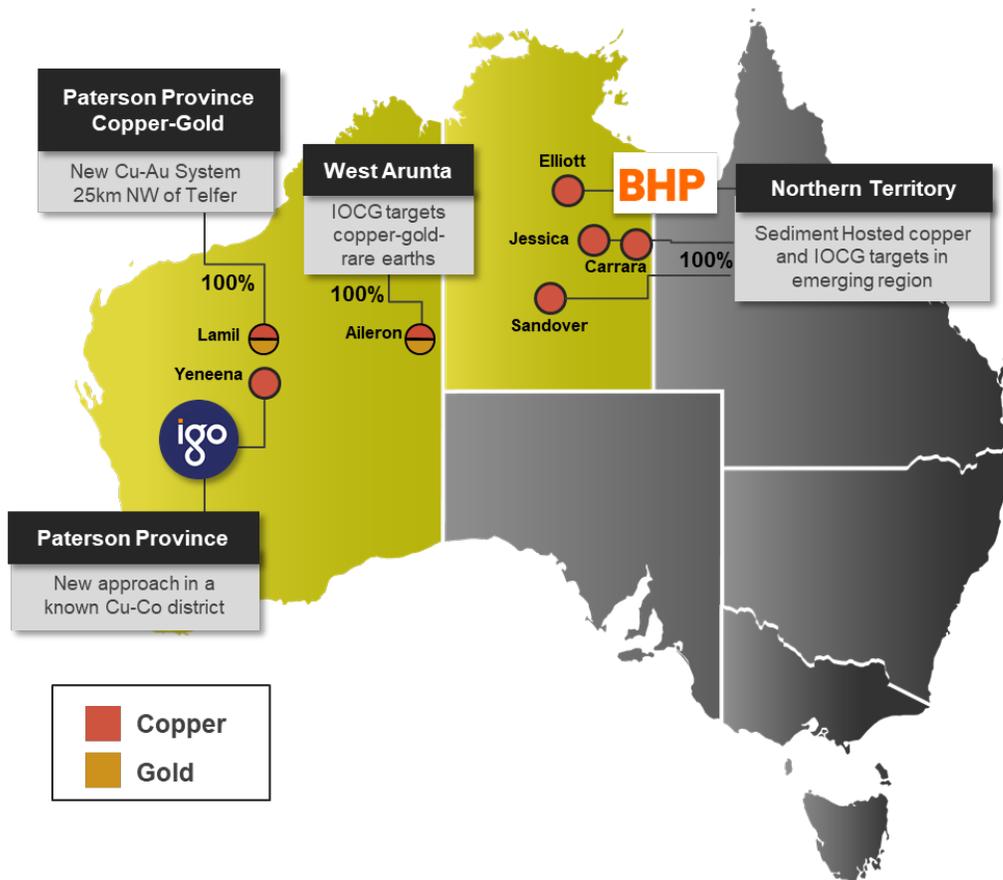


Figure 4 – Encounter Copper in the Northern Territory - Project Location Plan



## About Encounter

Encounter is one of Australia's leading mineral exploration companies listed on the ASX. Encounter's primary focus is on discovering major gold and copper deposits in Australia. Encounter's assets include:

- A large project portfolio in the Paterson Province of WA where it is exploring for copper-gold deposits at its 100% owned Lamil Project and for copper-cobalt deposits at the Yeneena project with IGO Limited (ASX:IGO);
- A series of camp scale, first mover copper opportunities in the Northern Territory. This includes the Elliott copper project which is being advanced in partnership with BHP via a \$25m earn-in and joint venture; and
- The Aileron IOCG project in the West Arunta region of WA.

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*The information in this report that relates to Exploration Results is based on information compiled by Mr. Peter Bewick who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Bewick holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bewick consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.*

*The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and the form and context of the announcement has not materially changed. This announcement has been authorised for release by the Board of Encounter Resources Limited.*