

ELLIOTT PROJECT

(GR527)

EL32581

FINAL SURRENDER REPORT 26 August 2022 to 04 August 2024

1:250,000 SHEETS: Newcastle Waters, South Lake Woods

Title Holder: Baudin Resources Pty Ltd

(100% owned subsidiary of Encounter Resources Ltd)

Target Commodities: Copper, Zinc, Lead

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Date: October 2024



Abstract / Summary

This report is the final surrender report for Exploration Licences EL32581.

The EL32581 is located in the Barkly Tablelands, approximately 200km north of Tennant Creek. The EL has a total area of 493.6 km². EL32581 was granted to Baudin Resources Pty Ltd (a fully owned subsidiary of Encounter Resources Ltd – "Encounter") and formed part of a large Farm-in and Joint Venture Agreement with BHP (Elliott Project) exploring for sedimentary hosted copper mineral systems.

Exploration activity carried out on the tenement consisted of review of historic data and open file information. The review did not indicate any significant prospective structures and/or notable alterations and mineralisation in the tenement.

In August 2024 Encounter made a decision to fully surrender the tenement EL32581.



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1. Introduction

EL32581 is located in the Barkly Tablelands, approximately 200km north of Tennant Creek. The project area captures the southwestern margin of the Beetaloo Sub-basin sedimentary rocks. The project is on the Newcastle Waters and South Lake Woods 1:250,000 scale NTGS geological maps at the intersection of three interpreted cratonic scale structures. The EL has a total area of 493.6 km2. These were granted to Baudin Resources Pty Ltd (a fully owned subsidiary of Encounter Resources Ltd – "Encounter"). The tenure is considered prospective for sedimentary hosted copper mineral systems.

This report is the final surrender report for Exploration Licences EL32581. Review of historic data and open file information was carried out on the surrendered tenement. The review determined lower prospectivity in EL32581, and a decision was made to surrender the tenement.

2. Location, physiography and access

The project is located in the Barkly Tablelands, approximately 200km north of Tennant Creek. Access is from Tennant Creek via the Stuart Highway (**Figure 1**), which runs along the eastern boundary of the tenement. Pre-existing station tracks and grid lines are utilised within the tenure. The Lake Woods National Park lies to the northeast of the tenement. EL32581 is located approximately 30km west of the Stuart Hwy, and accessed via unsealed station tracks The Elliott Project tenure covers the Powel Creek Pastoral Lease. The Barkly tablelands region is typified by black soil seasonally grassy plains and low rocky outcrops. The area is inaccessible during the wet season with travel during the wet only possible by helicopter.

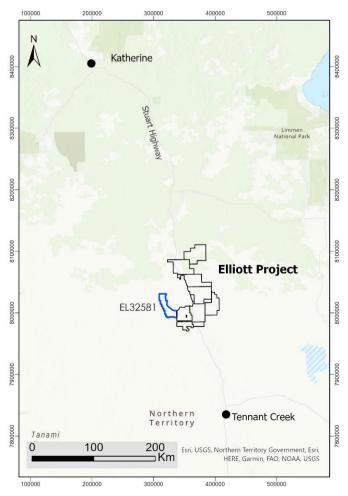


Figure 1: Location map and access to EL32581 and the Elliott project.

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3. Leasing Summary

EL32581 was applied for by Baudin Resources Pty Ltd. The tenement was granted on the 26th August 2022 comprising of 167 blocks for 493.6 km2. The project sits entirely within the bounds of the Powell Creek Pastoral Lease, which has a native title determined claim covering it (Figure 3). All native title discussions and negotiation are managed by the Northern Lands Council (NLC).

In September 2020, BHP (ASX:BHP) and Encounter Resources signed a farm-in and joint venture agreement for the Elliott Project which comprised tenements EL32156, EL32157, EL32158, EL32159, EL32226, EL32329, EL32437. BHP exercised its option to negotiate and enter into a formal Farm-in and Joint Venture Agreement in May 2021 with BHP being the Operator. In October 2021 four additional tenements (EL32581, EL32703, EL32729, EL32730) were added into the formal Farm-in and Joint Venture Agreement. This increased the area of the earn-in from 4,500km² to 7,200km² and the earn-in amount for BHP to earn a 75% interest was increased from A\$22 million to A\$25 million.

In October 2023 Encounter regained 100% ownership and operatorship over the entire Elliott project tenure including EL32581.

4. Exploration history

Previous minerals exploration over this tenement area dates to the early 1980s. The target commodities were predominantly diamonds, base metals, phosphates, and minor gold.

In September 2020, BHP (ASX: BHP) and Baudin Resources Pty Ltd (100% subsidiary of Encounter Resources Pty Ltd) (ASX:ENR) entered into an Exploration farm-in and joint venture agreement that provides BHP with the right to earn up to 75% interest in the Elliott Copper Project by spending up to \$22 million over 10 years. A program of compilation, validation, interpretation and modelling of the open file data packages at Elliott was completed by Encounter under this agreement.

The validation stage included a review of geological and structural information based on open file information. A preliminary intent of defining the depth to the potential host units was completed for the Beetaloo Basin for sediment hosted copper deposits. This was followed by a target generation proposal.

During 2021, BHP signed a farm-in and joint venture agreement with Encounter Resources and Baudin Resources for the Project Elliott (prior to grant of EL32581). During the year, the main goal of the project team was to improve the understanding of the local geology and the broader basin. Integration of seismic, downhole geophysics and geology, and surface geology maps was completed by internal subject matter experts. New geology and structural interpretations were generated, creating an integrated view of the basin. A preliminary 3D geological model was created to support the drillhole design for the next exploration stage in 2022 for tenements east of EL32581.

Surface geology from several map sheets were simplified into one single geology map, with clearly defined stratigraphy. Three seismic lines (ME91-90, HAL2012-229 and MA91-103) were interpreted in detail using the two available drill holes in the Beetaloo basin (Elliott 1 and Beetaloo W1). Critical constituents from the Mineral Systems Framework for sediment-hosted copper deposits were identified during the integrated interpretation and correlated to the district stratigraphy.

5. Geological setting

The project is located on the southwestern margin of the Beetaloo Sub-basin (Figure 2). The sub-basin is one of the principles depocenters of the southern McArthur Basin. It contains an interpreted 9000 m thickness of sedimentary and minor volcanic rocks assigned to the following stratigraphic groups or their equivalents: the Paleoproterozoic Tawallah and McArthur groups, and the Mesoproterozoic



Nathan and Roper groups (Williams, 2019). The sub-basin is of considerable economic interest as a potential host for unconventional and conventional petroleum resources, particularly in the uppermost Roper Group (Williams, 2019).

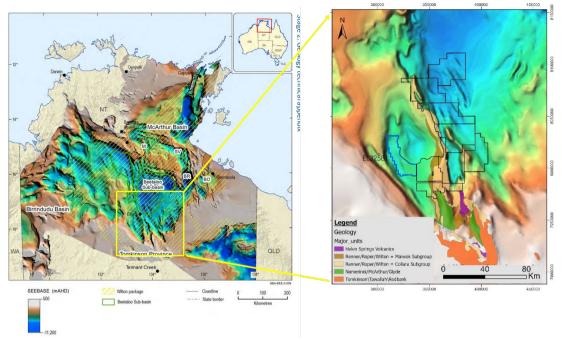


Figure 2: Beetaloo Sub-basin and location of the EL32581 and the Elliott project (modified from Williams B, 2019)

The greater McArthur Basin is a large-scale continental basin which is interpreted to be very prospective for base-metal mineralisation. The giant copper deposits of Central and Southern Africa are hosted by equivalent basins that formed on the Rodinia supercontinent. Reduced sedimentary units within the basin are considered prospective hosts for Sediment Hosted Base Metal mineralisation.

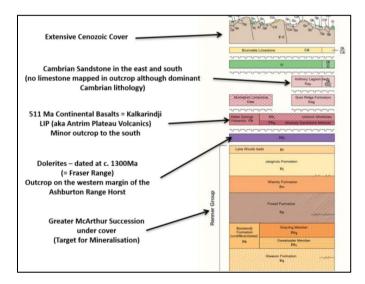


Figure 3: Surface geology and stratigraphic column at Elliott Project

The Daly Waters Fault Zone (DWFZ) forms the western boundary of the eastern Elliott Project area. The DWFZ is a structurally controlled zone that separates the Beetaloo sub-basin into two distinct compartments. Of particular interest is that the DWFZ (which defines the eastern margin of the paleogeographic high here named the Ashburton Range Horst) has a major deflection from a N-S to

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an NNW trend in the center of the Elliott project area. This deflection appears to be associated with the intersection of two major basement trends (likely inherited from the older orogenic basement). Proterozoic rocks which are well exposed within the resulting Ashburton Range Horst succession have been weakly deformed into open folds.

The Beetaloo Sub-basin is unconformably overlain by rocks of the Neoproterozoic to Paleozoic Georgina Basin, Mesozoic Carpentaria Basin and Cenozoic formations. Well data and seismic imagery indicates that these younger units can reach combined thicknesses of up to 1400m across some parts of the sub-basin (Figure 3).

6. Summary of exploration activity (August 2022 to August 2024)

From August 2022 to October 2023, BHP undertook reconnaissance stage geological investigations and data review. Works included: The review of historical mapping data; Historical drillhole data; Literature reviews; Geophysical datasets; and Hydrochemistry data.

A number of historical drill holes exploring for phosphate mineralisation hosted within Cambrian limestone are present within and proximal to EL32581. This drilling data was reviewed and interpreted alongside geophysical products (magnetic and gravity) to help explain the hydrogeochemical Cu anomalism apparent in the area. The extent of Kalkarindji Suite flood basalts was interpreted using magnetic geophysical products. There was a visual correlation observed between the interpreted presence of basalts and ground water hydrogeochemical copper anomalies.

Literature review of the Kalkarindji Suite highlighted widespread but economically insignificant copper shows within the uppermost zones of the basalt and directly above the basalt within Cambrian limestone close to the contact zone. Historical and recent drilling results were analysed in downhole format to investigate the origin of the Cu anomalism. Integration of geochemical and lithology dataset clearly shows that a clear correlation exists between logged basalt and Cu geochemical anomalism. As the basalt directly underlies the limestone rocks, and the limestone is the local aquifer host unit, it is highly likely the hydrogeochemical Cu anomalism seen in the borehole results can be explained by the elevated Cu values present with the upper units of the Kalkarindji Suite basalt.



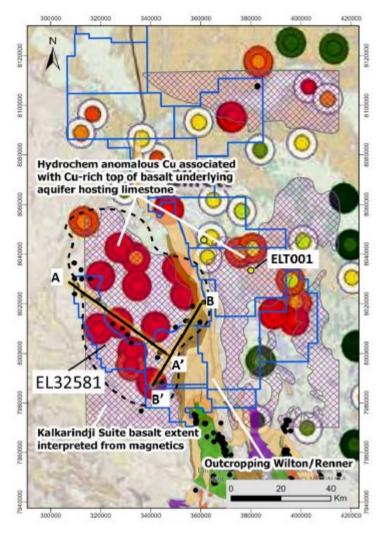
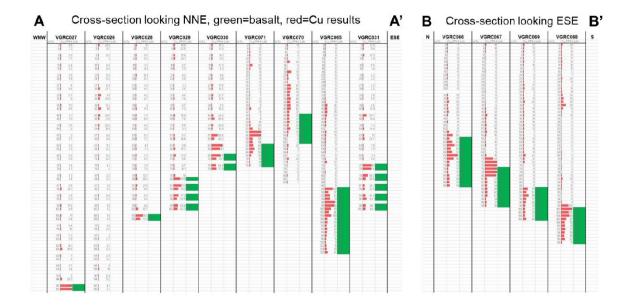


Figure 4: Borehole hydrogeochemical results (Geoscience Australia) overlain by interpreted Kalkarindji Suite basalt extents (purple hatched polygons), historical drill holes (black dots), outcropping geology (pastel polygons in central south), 2022 BHP drill hole locations (yellow dots), and Elliott project tenure (blue outlined polygons).



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Figure 5: Cross-sections A A' and B B' display downhole historical drilling depth relationships between elevated copper geochemistry (red bars) and basalt lithology intercepts (green). Cross-section and hole locations are displayed in Figure 4

Encounter completed a review of BHP work during tenement life. The review determined lower prospectivity and a decision was made by Encounter to surrender the entire tenement.

7. Conclusions

Review of historic data and open file information was carried out during tenement life. Review included compilation, validation, interpretation and modelling of the open file data packages and integration of downhole geophysics and geology from historic drillholes with surface geology maps creating an integrated view of the basin. The review determined lower prospectivity in the tenement EL32581, hence a decision was made to surrender.

8. References

Williams B, 2019. Definition of the Beetaloo Sub-basin. Northern Territory Geological Survey, Record 2019-015.

9. Copyright

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