

TITLE HOLDER: MANGROVE RESOURCES PTY LTD

OPERATOR: RESOLUTION MINERALS LTD



EL 31547 Annual and Final Report for the period
01/03/2019 to 20/12/2019

February 2020

Target Commodities: Co, Ni, Cu, Zn, Pb, Ag, P, U, REE
Mapsheets 100K: Calvert River 6465
Mapsheets 250K: Robinson River SE5304

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Abstract

EL 31547 was surrendered by Mangrove Resources Pty. Ltd., a subsidiary company of RESOLUTION MINERALS Limited in January 2020. Although no on-ground work was completed on EL 31547, a desktop review indicated the tenement was low priority relative to adjacent tenure and for this reason Resolution Minerals Ltd could not justify any further work on the tenement.

Table of Contents

Copyright	2
Abstract	2
1 Introduction	4
1.1 Location & Access	4
1.2 Regional Geology	5
1.3 Local Geology	5
1.4 Previous Exploration	6
2 Work Completed	6
2.1 Geological Activities & Office Studies	6
3 Conclusion & Recommendations	6
4 References	6

Figures

Figure 1: Location map for EL 31547	4
Figure 2: Project location, geology, prospects and targets over regional geology	5

1 Introduction

EL 31547 was surrendered by Mangrove Resources Pty. Ltd., a subsidiary company of Resolution Minerals Ltd in January 2020, based on recommendations from a tenement consolidation review. No on-ground work was completed during the reporting period.

1.1 Location & Access

EL 31547 is located in the north-east corner of the Northern Territory and adjacent to the Queensland border approximately 500km north-east of Tenant Creek and 500km north-west of Mt Isa. Access was achieved with two 4WD vehicles via Alice Springs commencing in Adelaide and took ~4.5 days each way. Alternative methods of egress are possible albeit all are time consuming. Other smaller service centres are Borroloola and Burketown, 150 km to the west and east respectively. Access is via all-weather gravel roads and station tracks. Beyond this, access within the tenements is via cross-country 4WD vehicle. The area is seasonally inaccessible due to rain and wet ground, with work possible between May and November in most years (Schwartz, 2017).

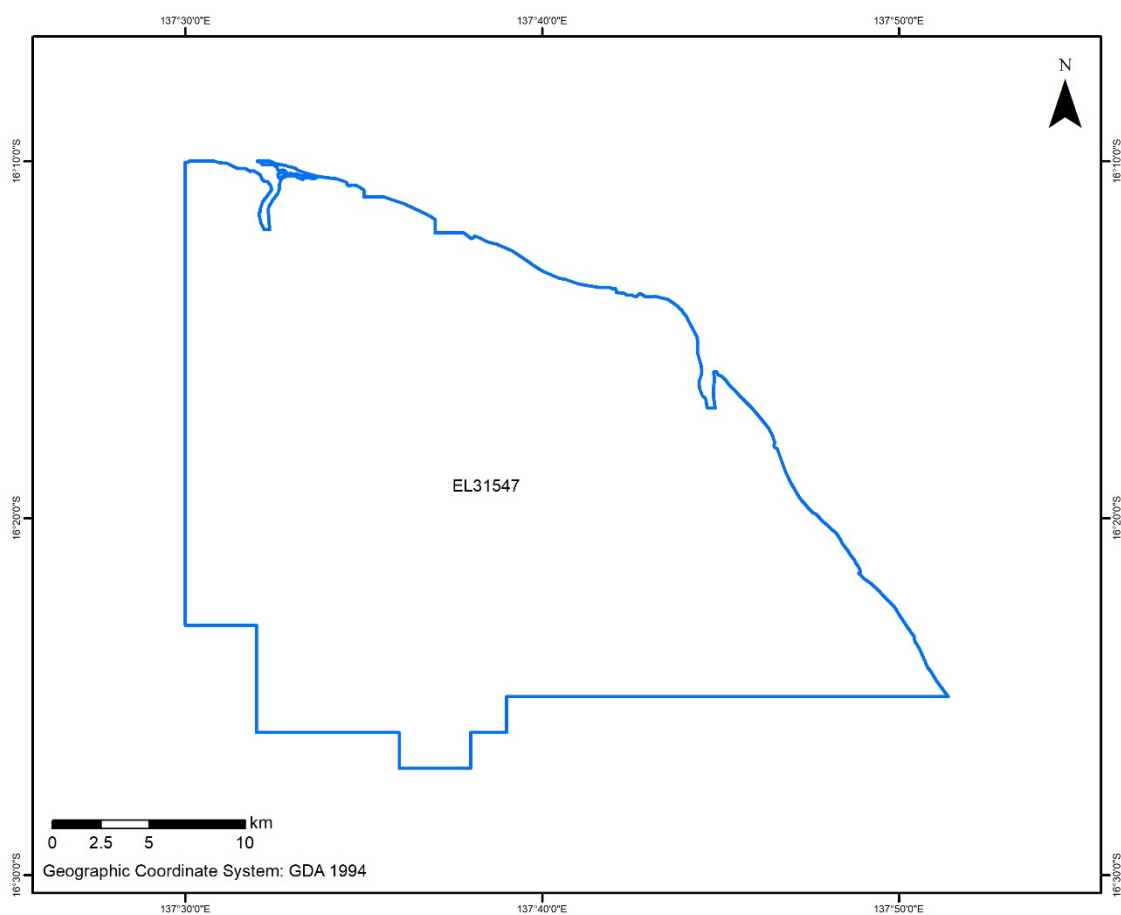


Figure 1: Location map for EL 31547

1.2 Regional Geology

The Wollgorang Project occurs on the “Wearyan Shelf” of the Proterozoic McArthur Basin, a 12km thick unmetamorphosed sedimentary succession containing dolostone, sandstone and shale units with minor felsic and mafic volcanics. The McArthur Basin unconformably overlies various Palaeoproterozoic terrains, such as the Pine Creek Orogen, and as outlined above, is highly endowed with world-class mineral deposits and is now the subject of exploration for hydrocarbons. The main geological units of interest in the project area are the Wollgorang Formation (carbonaceous shales and dolomite) and Gold Creek Volcanics (interlayered basalt lavas and sediments) (Schwartz, 2017).

1.3 Local Geology

EL 31547 is the northernmost tenement of the Wollgorang Project. Surface geology is predominantly overbank and channel deposits on alluvial plains, floodplains, fans and swamps. The north-east margin of tenure straddles the coastline, which includes beach and estuarine deposits on tidal flats, chenier and coastal plains including aeolian deposits. The south-west portion of tenure includes minor in-situ regolith of variably weathered bedrock on erosional plains, rises, low hills, hills, mountains and plateau surfaces (Strike, 2020).

Basement geology beneath extensive Cainozoic cover is interpreted to be predominantly comprised of Tawallah Group Sediments (Figure 2), with the stratigraphically overlying Gold Creek Volcanics and Karns Dolomite being absent within tenure.

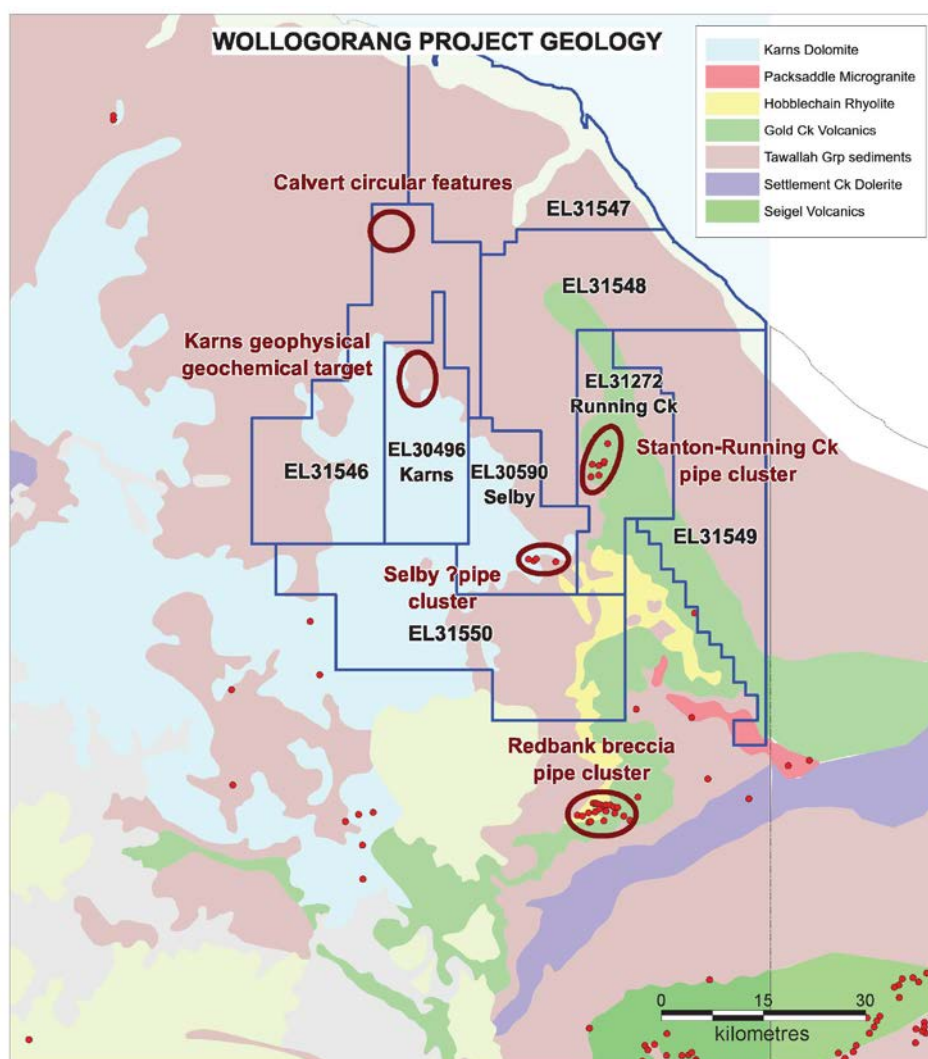


Figure 2: Project location, geology, prospects and targets over regional geology.

1.4 Previous Exploration

Given the remote location, historic exploration has been extremely limited on EL31547. According to strike only 15 stream sediment sampling have been collected by CRAE in the mid 1990s, which coincide with the south-west corner of tenure (i.e. close proximity to the limited Tawallah Group outcrop). In addition to this only two diamond exploration samples were collected by Carnegie Minerals in 1997 along the coastline.

Both Carnegie Minerals and CRAE flew 400m spaced airborne magnetic/radiometric surveys in the late 1990s. There are no recorded mineral drillholes or prospects within tenure.

2 Work Completed

2.1 Geological Activities & Office Studies

A desktop review on tenure was completed during the reporting period. This enabled an assessment and planning for future exploration activities across the entire Wologorang Project.

3 Conclusion & Recommendations

No on-ground work was completed on EL 31547, due to exploration being focused on adjacent higher priority tenements. After completing a tenement consolidation review across all the Wologorang Project tenements, Resolution Minerals opted to relinquish EL 31547.

4 References

Schwartz, M., 2017. #GR390 - Combined Annual Technical Report Wologorang Project April 2017.