

# **Au79 Mining Pty Ltd**

## **ACN: 626 471 332**

### **GROUP TECHNICAL REPORT**

#### **GROUP REPORT 384**

**1 JANUARY 2018 – 31 DECEMBER 2018**

<b>Titleholder</b>	Montfall Pty Ltd
<b>Project Operator</b>	Au79 Mining Pty Ltd
<b>Titles/Tenements</b>	MLs 30717 & 30718
<b>Tenement Manager/Agent</b>	AMETS Pty Ltd
<b>Mine/Project Name</b>	Mt Ringwood Project
<b>Personal author(s)</b>	Holly Edgar, BAppSc
<b>Company reference number</b>	N/A
<b>Target Commodity or Commodities</b>	Gold
<b>Date of report</b>	17 April 2019
<b>Datum/Zone</b>	GDA94/Zone 52
<b>250 000 K Mapsheet</b>	Pine Creek SD5208
<b>100 000 K Mapsheet</b>	McKinlay River 5271
<b>Contact details</b>	Ben Duffy - Au79 Mining Pty Ltd ben@bussolacivil.com.au

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## **1. Abstract**

The Mt Ringwood Project comprises of Mineral Leases 30717 and 30718 (the licences). These licences are located approximately 115km South East of Darwin and have a combined area of 80 hectares.

The licences sit within the highly prospective Pine Creek Orogen. The area is known to host various commodities, which includes gold, uranium, base metals, PGE, iron ore, manganese, magnesite, phosphate and diamonds.

During the reporting period, Au79 Mining Pty Ltd (Au79) did not conduct any on ground works.

## 2. Copyright

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## 3. Location and Access

The Mt Ringwood Project licences are located approximately 115 kilometres south east of Darwin.

Access to the licences from Darwin is via sealed roads to Adelaide River and thence via unsealed roads and tracks.

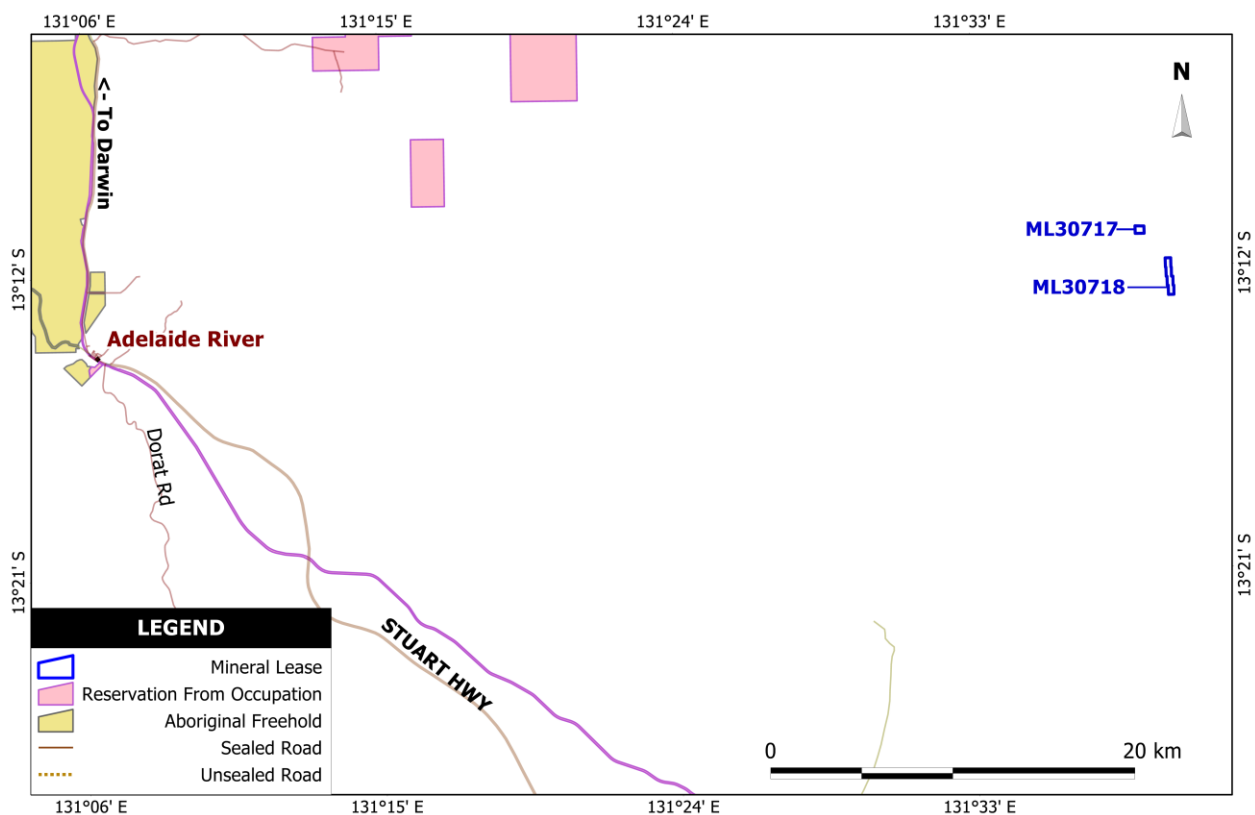


Figure 1- Location Map

#### 4. Tenure and Land Use

The licences cover a pastoral portion of land. The below table shows the details of each licence.

Licence	Titleholder	Grant Date	Area (Ha)	Cadastre
ML30717	Montfall Pty Ltd (100%)	05/03/2015	20	NT Portion 4938, Perpetual Pastoral Lease-McKinlay River Station
ML30718	Montfall Pty Ltd (100%)	05/03/2015	60	NT Portion 4938, Perpetual Pastoral Lease-McKinlay River Station

#### 5. Topography & Hydrology

The topography within the area is dominantly low, with limited outcrops. Small creeks and river branches also flow through the licence after rainfall events.

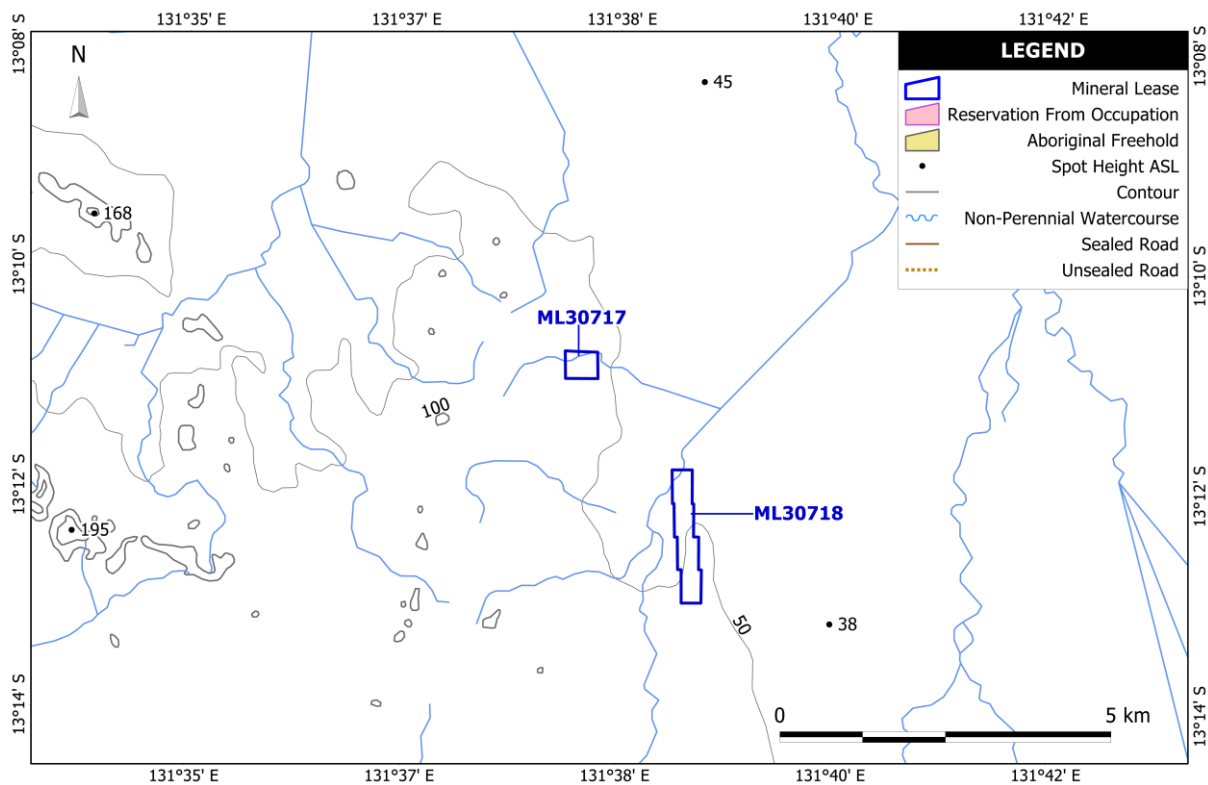
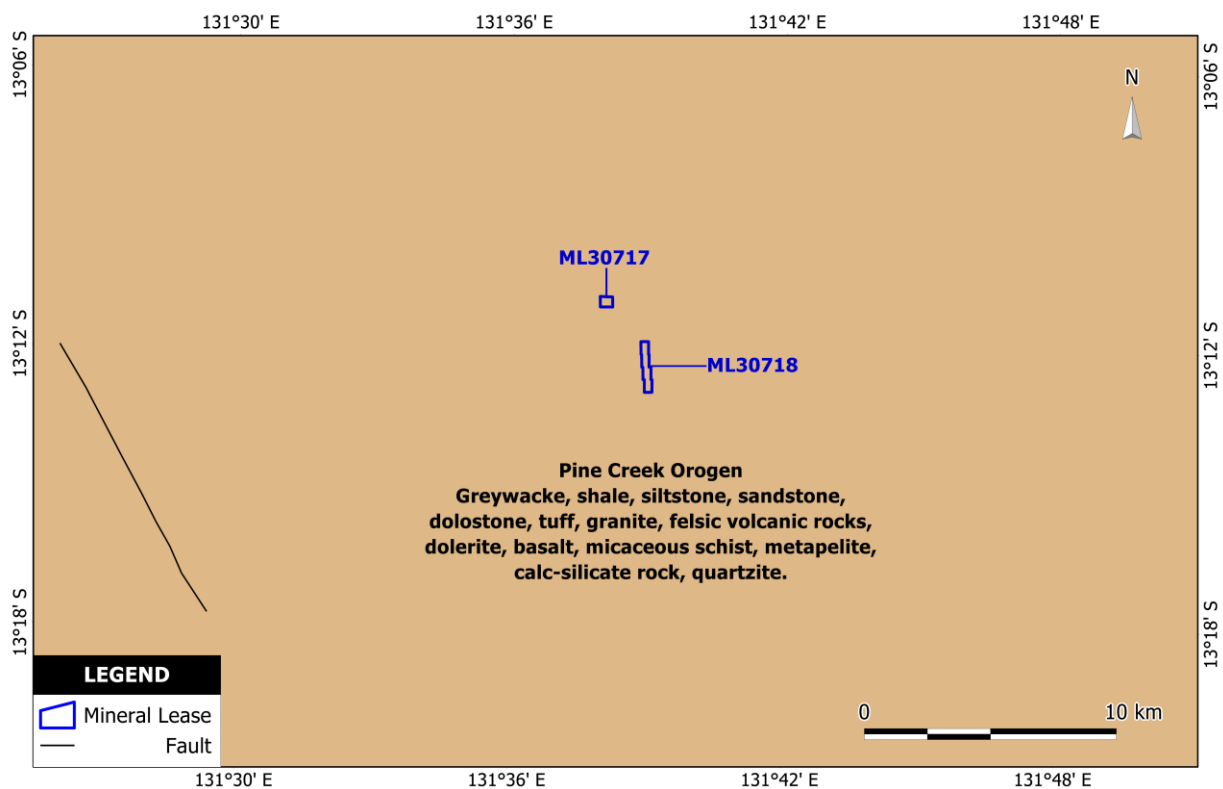


Figure 2 - Topography Map

## 6. Geology

The project area is situated within the Pine Creek Orogen. The Pine Creek Orogen consists of variably deformed and metamorphosed Palaeoproterozoic metasedimentary and intrusive rocks forming part of the North Australian Craton. The geology of this area largely consists of greywacke, shale, siltstone, sandstone, dolostone, tuff, granite, basalt, micaceous schist, quartzite and felsic volcanics.

Nil known significant faults intersect the licences, however known significant faults are present within the region.



**Figure 3- Geology Map**

## **7. Exploration Rationale**

The licence areas are within the highly prospective Pine Creek Orogen which is a known region to host significant gold deposits and base metal deposits.

Au79 plans to extract alluvial gold within the project area.

## **8. Previous Exploration**

The project area has been actively explored by previous titleholders. Recent titleholders of the area were Michael Teelow, Geoffrey Orridge and Gary Clark (TOC). TOC held Exploration Licence 23532 over the area and focused on gold exploration. "Gold mineralization, associated with minor sulphides (pyrite, arsenopyrite, galena), is found within systems of generally small quartz veins having a variety of relationships to the metasediments, including bedding-parallel veins, saddle reefs (eg. North Ringwood workings), cross-cutting veins, and lenticular reefs along strike-parallel shears eg. South Ringwood workings. These gold-quartz veins were mined to shallow depths in the late nineteenth century for a recorded production of approximately 2,800 ounces of gold at recovered grades of about one ounce to the ton. Alluvial gold concentrations were also worked on a small scale." (Orridge, 2014)

Another previous titleholder of the area was AngloGold Australia Limited (AngloGold). AngloGold considered the area to be a gold prospect. "Known gold mineralisation is hosted by numerous parallel quartz veins, saddle reefs and stockworks. These quartz veins often occur within axial planar shears and fractures, or along lithological contacts. Individual veins can measure from 0.02 to 1.0 metre wide and may extend for over 50 metres in length. Veins are highly variable in grade and tend to pinch and swell unpredictably both along strike and down dip." (Large, 2002) AngloGold failed to meet expenditure commitments, partly due to the closure of the Brocks Creek mine and the change in their exploration focus away from the Brocks Creek area, therefore the licence was relinquished.

## **9. Exploration During Reporting Period**

During the reporting term, Au79 did not conduct any on ground works. Au79 has arranged for a transfer of the licences from Montfall Pty Ltd (Montfall) to Au79. Au79 has also engaged an environmental consultant to prepare a mining management plan, with associated environmental studies, so Au79 can commence mining works once authorised by the Department.

## **10. Conclusions and Recommendations**

During the next reporting period (1 January 2019 to 31 December 2019), a transfer of the licences from Montfall to Au79 should be completed. Au79 has engaged environmental consultants to prepare a mining management plan for mining within the project area. Works on the mining management plan will continue. Mining works will not commence until Au79 receives an Authorisation from the Department.

## **11. References**

Large, P. Substitution Exploration Licence 22183, Final Report on Exploration for the period 22<sup>nd</sup> October 1999- 7 January 2002. AngloGold Australia Limited. 2002

Orridge, GR. Exploration Licence 23532 North Ringwood Annual and Final Report. Teelow M, Orridge G and Clarke G. 2014