# OONAGALABI WEST PROJECT FINAL & ANNUAL TECHNICAL REPORT for the period 29 September 2021 to 14 October 2022 Exploration Licence EL 32664 Comet Resources Limited

ANNUAL REPORT		
NAME:	Oonagalabi Project – Annual and Final Report – Period ending 14 October 2022	
PREPARED BY:	Derek Foster – Bachelor of Applied Science M.AUSIMM	
DATE:	October 2022	
Report No:		
Target Commodities:	Copper (Cu) Zinc (Zn) Lead (Pb) Gold (Au) Silver (Ag)	
NT: 1:100,000 Sheet:	Riddoch 5851	
NT: 1:250,000 Sheet:	Alice Springs SF5314	

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#### Declaration

To the best of our knowledge, this document conforms to the format outline for an annual report, as shown by the Northern Territory Geological Survey – Minerals and Energy Division website.

#### **SUMMARY:**

- Location: The tenement is located south of the Plenty Highway within the Northern Territory. The turn off is approximately 132 kilometres from the Stuart Highway.
- **Geology:** The tenement is located in the Arunta Region. The north and east half [approximately] of the tenement is in the Irindina Province, and the south and west half in the Aileron Geological Province.
- **Work Done:** Tenement EL32664 is operated by Comet Resources Limited (Comet) with exploration focusing on gold, copper, zinc, lead and silver. Tenement EL32664 is 100% owned and operated by Comet.

Due to the COVID-19 pandemic, no groundwork was completed in this reporting period. Instead, a desktop study of the previous exploration results was conducted by Comet.

**Results:** There was no new ground exploration data generated during this reporting period.

The desktop review by Comet on EL32664 generated a fresh look at EL32664 via identification of a new search space to explore for gold, copper, zinc, lead and silver, utilizing mainly previous ground data, coupled with geophysics (particularly magnetics and radiometrics).

**Conclusion:** Encouragement for potential gold, copper, zinc, lead and silver mineralisation was generated since the grant of the licence with anomalous results from samples in adjoining tenements and also from a review of historical exploration results within the tenement.

The radiometrics and magnetic maps help define the Aileron Province from the Irindina Province. The radiometrics and magnetic map have been useful in understanding structure, and therefore a comprehensive assessment of all geophysical data was of benefit to the overall exploration program.

Exploration data has shown that at Oonagalabi West prospect may be influenced by structural features.

Comet Resources Limited on review of the data decided to relinquish the tenement.

# **TABLE OF CONTENTS**

1.	SUMMARY	5
2.	INTRODUCTION	5
3.	LOCATION AND ACCESS	5
4.	TENURE	5
5.	REGIONAL GEOLOGY AND MINERALISATION	5
	5.1 Local Geology	7
6.	EXPLORATION COMPLETED BY COMET RESOURCES LTD	8
	6.1 Desktop Studies	8
7.	PROPOSED EXPLORATION	8
8.	CONCLUSION AND RECOMMENDATION	8

## TABLE

Table 1: Tenement Summary

## **FIGURES**

- Figure 1: Location Map EL32664
- Figure 2: Tenement Geology EL32664
- Figure 3: Combined Radiometrics EL32664
- Figure 4: Magnetic Map EL32664
- Figure 5: Total Count Map EL32664

#### 1. SUMMARY

The Oonagalabi West Project consists of one granted Exploration Licence EL32664. The tenement is located immediately south of the Plenty Highway. The turn off is approximately 132 kilometres from the Stuart Highway and is situated approximately 125 kilometres north east of Alice Springs.

No on-ground exploration work was completed by Comet during the reporting period.

## 2. INTRODUCTION

Exploration work by Comet is focused on a review of available historical geological data and interpretation of this data covering local and exploration work done regionally.

#### 3. LOCATION AND ACCESS

The Oonagalabi Project is located approximately 125 kilometres north east of Alice Springs. Access is via the north from Alice Springs along the Stuart Highway, turning east at the Plenty Highway. Access to the south is approximately 132 kilometres from the Stuart Highway turn off, tracks approach EL32664 from the north.

## 4. TENURE

The project is comprised of one granted exploration licence (EL32664) with the tenement details summarised in Table 1 and their locations are shown in Figures 1 and 2. The tenement ceased on 14 October 2022.

Table 1: Tenement Summary

Tenement	Status	Grant Date	Expiry Date	Area	Holder
EL32664	Ceased	29/09/2021	14/10/2022	38 BL	Comet Resources Ltd

## 5. REGIONAL GEOLOGY AND MINERALISATION

The Oonagalabi West Project is situated in the Arunta Region of the Northern Territory. The Arunta Region has been sub divided into three provinces with distinct protolithic ages and histories. The 1860-1700 Ma Aileron Province, the 1690-1600 Ma Warumpi Province and the Neoproterozoic to Cambrian Irindina Province (Scrimgeour 2003). The Oonagalabi Project covers part of the Aileron Province and part of the Irindina Province. The contact is a faulted contact.

The Aileron rock types are varied and include granite, meta-sedimentary units and mafic rock.

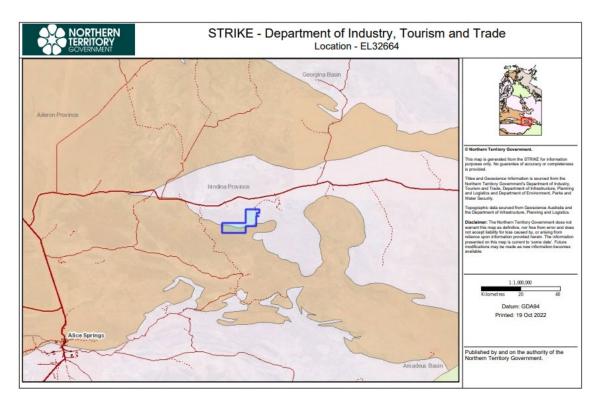


Figure 1: Location Map EL32664

The Irindina rock type include granitoids, gneiss, amphibolites and calcareous rock and is generally highly meta-morphosed.

A seismic reflection crosses the Irindina Province showing that the province is 10 km thick and occurs above a mid-crustal detachment that separates it from the structurally underlying Aileron Province. The sedimentary precursors to the Irindina Province have been interpreted to have been deposited in an east to south east trending Cambrian fault founded extensional basin (Birch etal 2005).

Mineralisation reported in the Irindina Province, particularly in poorly outcropping areas comes from small scale mining such as small pegmatites hosting mica deposits which produced 1660t of muscovite between 1926 and 1952.

The Irindina Province is considered to have potential for a range of commodities that include nickel-copper and PGE, copper and polymetallic base metals rare-earth elements, uranium and gold-tungsten. The level of exploration in the Irindina Province is considered low (NTGS Special Publication 5).

The Aileron Province has base metal, gold, REE (Nolans Bore) and significant granite related molybdenum, tungsten, tin-tantalum and wide spread uraniferous granites which may be a source within the basin and overlying sandstones. Potential exists in under explored mafics vanadium – magnetite and nickel-copper sulphide mineralisation. Wygralak and Bajwch (1998).

Lead zinc-copper (-silver-gold) at the Strangways Range, three types although most are associated with marble leases, they were divided into Utnalanama type interpreted as VMS, Johnnies type interpreted as IOCG and Oonagalabi type, interpreted as either carbonate – replacement or VMS deposits.

Tenement EL32664 has approximately 50% of its area in the meta-sedimentary units to the south west of the Oonagalabi prospect with the Irindina to the north and north east. The Florence-Muller Shear Zone is present in the south east corner.

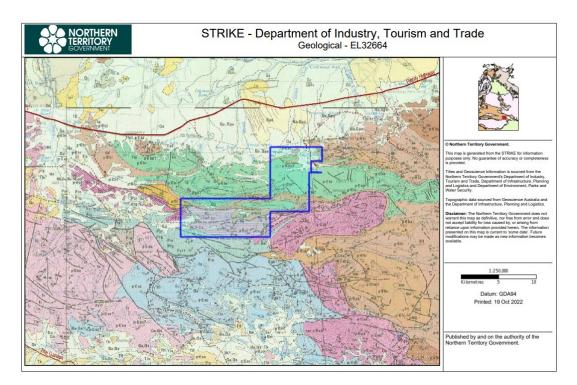


Figure 2: Tenement Geology EL32664

## 5.1 Local Geology

The local geology on EL32664 consists of the Aileron Province intruding from the south to the north into the Irindina Province. The major geological unit of the Aileron on EL32664 is the Bungatina Metamorphies which is a division of the 1770-1750 Ma Meta-sedimentary units constitute the western portion of the Oonagalabi Tongue. Outcropping rock is generally dominated garnetiferous, quartzofelsphathic biotite gneiss, which is interpreted as metamorphosed pelitic and psammo pelitic meta-sedimentary rock, (Hussey etal 2006) massive gedrite-anthophylite and garnet quartz rock occurs at Oonagalabi prospect (Hussey etal 2006).

The actual Oonagalabi deposit which is hosted by a metsomatised carbonate lens that is traceable over 4 km along strike is east of the tenement. The area was explored by Russgar Minerals NL in the 1970's, who reported assays on a gossanous rock contained 31.25% Cu, 915 ppm Pb, 4.75% Zn, 2.7 ppm Au, 750 ppm W and 220 ppm Ag, however overall at the time grades were considered uneconomic (Nielsen 1973).

Historical drilling include 36.6m at 1.0% copper and 1.7% zinc from 1.5m, 5m @ 1.26% copper and 1.22% zinc from 70m, 6m at 0.9% copper from 102m and 14m at 0.7% copper from 148m<sup>1</sup>.

## 6. EXPLORATION COMPLETED BY COMET RESOURCES LTD

There was no new ground exploration output produced by Comet during this reporting period, primarily due to periodic COVID related travel restrictions which prevented the geological team from travelling to the Northern Territory.

This has provided Comet time for a more thorough review of the exploration data generated thus far, information generated from this including previous gold exploration in the Aileron and Irindina Provinces.

## 6.1 Desktop Study

The major prospect at the Oonagalabi prospect appears to have a related structural feature.

In 2021/2022, a review of exploration work was centred on the following details, namely:

- a. Geological mapping;
- b. Linear magnetic features;
- c. Assessment of all historical geophysical data.

# 7. PROPOSED EXPLORATION

There is no exploration proposed, as the tenement EL32664 was surrendered on 14 October 2022.

## 8. CONCLUSION AND RECOMMENDATION

The COVID-19 pandemic caused Comet to use a conservative approach to 2022 exploration program, but it provided the opportunity to review all the exploration data obtained to date.

The radiometrics and magnetic maps help define the Aileron Province from the Irindina Province. The radiometrics and magnetic map have been useful in understanding structure,

and therefore a comprehensive assessment of all geophysical data was of benefit to the overall exploration program.

Exploration data has shown that at Oonagalabi West prospect may be influenced by structural features.

Comet Resources Limited on review of the data decided to relinquish the tenement. This report is the final technical report as the tenement has now ceased.

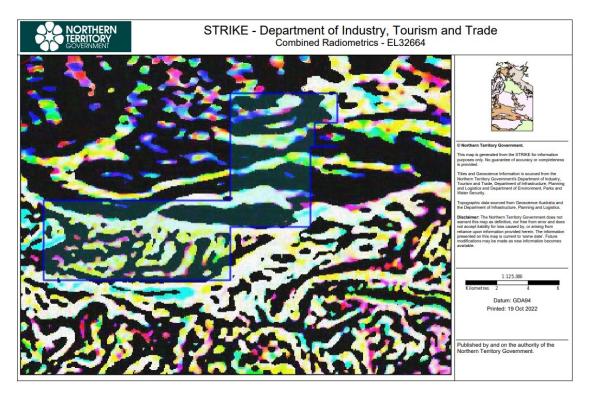


Figure 3: Combined Radiometrics EL32664

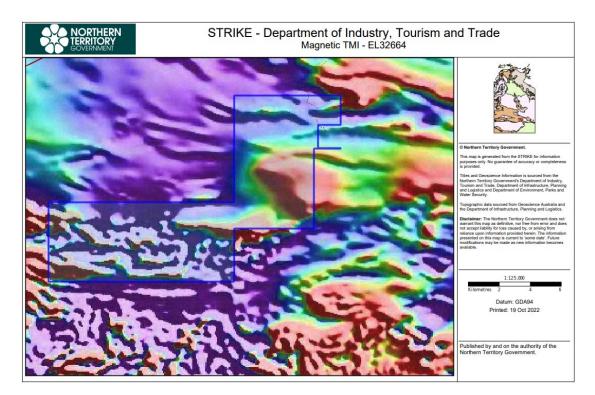


Figure 4: Magnetic TMI Map EL32664

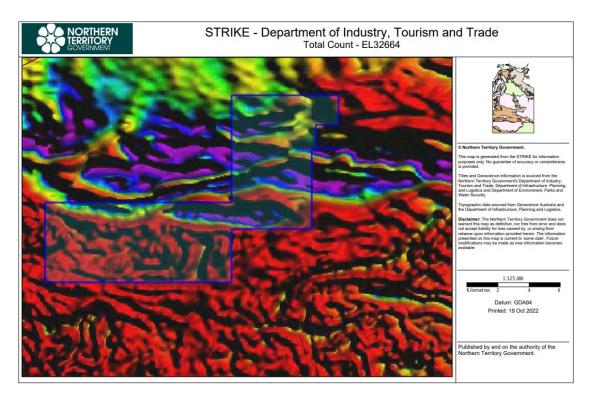


Figure 5: Total Count Map EL32664