

REMINGTON RESOURCES Pty Ltd

**ANNUAL REPORT
YEAR ENDING 14 MAY 2003**

EXPLORATION LICENCE

E 45/2323

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1. Introduction

This report summarises regional geology and prospectivity of Exploration Licence 45/2323 in north central Western Australia. West Musgrave Mining Ltd. (now Australian mines Ltd.) entered into an option agreement with Remington during 2002 to explore aeromagnetic anomalies identified from a previously completed detailed airborne geophysical survey. A summary report of the work carried out by Bull's Eye Geoservices for West Musgrave Mining is attached as appendix 1.

1.1 Exploration rationale

Aeromagnetic anomalies located in a Proterozoic Mobile Belt and considered to have potential for base metal mineralization were selected for investigation.

2. Tenements

Exploration Licence 45/2323 is located on the Tabletop-3652 1:100 000 Sheet that is part of the Tabletop Sheet SH51-11. The licence was granted to Remington Resources Pty Ltd. on 15th May 2002.

2.1 Tenement details

The tenement comprises 25 graticular blocks covering an area of 70 square kilometres.

Table 1. Tenement details

TENEMENT No.	No. OF GRATICULAR BLOCKS	SURFACE AREA (sq. km)
EL 45/2323	25	70

2.2 Location and access

Exploration Licence 45/2323 is located on the western edge of the Great Sandy Desert, approximately 400 kilometers east-northeast of Newman on the Tabletop 1: 250 000 sheet (SF51-11; figure 1). North-northwesterly trending longitudinal sand dunes and rough spinifex cover much of the landscape. Access is gained by four wheel drive vehicle along graded tracks from Newman. The Canning Stock Route traverses the area and is passable by four-wheel drive vehicle for most of the year. This track provides the only established access through the area.

3. Physiography

The present erosional surface lies approximately 300 to 350 metres above mean sea level and is probably an early Palaeozoic peneplain modified by a Permian glaciation and then eroded during the late Mesozoic to recent. A few mesas and buttes of resistant sandstone remain and their summits define the original land surface at about 400 metres above mean sea level.

The area drains into Lake Auld toward the northwest. Lake Auld (and lakes George and Winifred) form an arcuate chain of salt encrusted playas that are remnants of a vast ancient drainage system preserved in the present landscape. West-northwesterly elongated dunes up to 30 metres in height are very prominent over much of the area.

4. Regional geology

The geological evolution of Western Australia is dominated by progressive cratonisation around the three ancient nuclei of the Yilgarn, Pilbara and Kimberley Blocks.

The Pilbara Block is a relatively small Archean craton situated in the northwest part of Western Australia between the Yilgarn Block to the south and the Kimberley Block to the northeast. The Pilbara Block is separated from the Kimberley Block by the

Canning Basin; an extensive northwest trending downwarping of Palaeozoic and Mesozoic sediments overlying a Precambrian basement. EL 45/2323 is located at the southwestern margin of the Canning Basin on an interpreted extension of crystalline basement rocks (Proterozoic Mobile Belt) that extends from Western Australia's east Pilbara region south-eastwards into the Musgrave Block in central Australia.

The basement to the southwestern part of the Canning Basin consists of a series of strongly folded Proterozoic sedimentary rocks, unconformably overlying a metamorphic suite intruded by acid, basic and ultrabasic intrusives. The Precambrian geology is represented by three successive unconformable sequences;

The Karara Formation (Middle to Upper Proterozoic)

The Yeneena Group (Middle Proterozoic)

The Rudall Metamorphic Complex (Archean to Lower Proterozoic)

The *Rudall Metamorphic Complex* occurs in the northwestern part of the Tabletop Sheet. It consists of two interfoliated sequences that have undergone complex deformation and metamorphism. The first sequence contains gneissic and migmatitic rocks that have been retrograded to greenschist metamorphism and intruded by large granitic bodies. The second sequence, dominantly quartzite and schist, was formed by prograde metamorphism of a sedimentary sequence younger than the gneiss.

It is postulated that an early Archean granite-greenstone terrain was subjected to high grade metamorphism to form the gneiss and migmatite complex followed by igneous intrusion. Erosion of the basement was followed by Yeneena Group sedimentation in a shelf environment marginal to the Pilbara Block.

The *Yeneena Group* unconformably overlies the Rudall Complex and comprises at least 1,000 metres of sandstone and conglomerate overlain by fine grained clastic sediments and laminated dolomite.

The *Karara Formation* unconformably overlies both the Rudall Complex and Yeneena Formation and comprises interbedded sandstone, siltstone and conglomerate.

Early Palaeozoic Ordovician and Devonian dolomites and siltstones overlie the Proterozoic basement. Basement depths have been estimated at 2,000m below the inferred top of the Ordovician (i.e. thickness of Ordovician sediments in the Canning Basin. The sediments thin gradually towards the outcrop of Precambrian rocks in the southwest.

The early Palaeozoic is unconformably overlain by the *Paterson Formation*, a Permian sequence of fluvio-glacial sediments characterised by dropstones of all the Precambrian lithologies. The glacial Paterson formation is in turn overlain by several marine Permian Formations.

The Mesozoic stratigraphy unconformably overlies the Permian and in the area of the Licence it comprises Jurassic Callawa Formation and Cretaceous Anketell Sandstone.

5. Exploration

West Musgrave Mining carried out ground gravity surveys at three discrete, high amplitude aeromagnetic anomalies considered to have potential for base and precious metal mineralization. Geophysical modelling of magnetic and gravity data suggests depths of the source anomalies to be 400 – 800 metres. Co-ordinates for the three anomalies are listed below:

Tabletop 1 593250 E 7479500 N

Tabletop 2 601750 E 7471250 N

Tabletop 3 577500 E 7490500 N

(GDA 94)

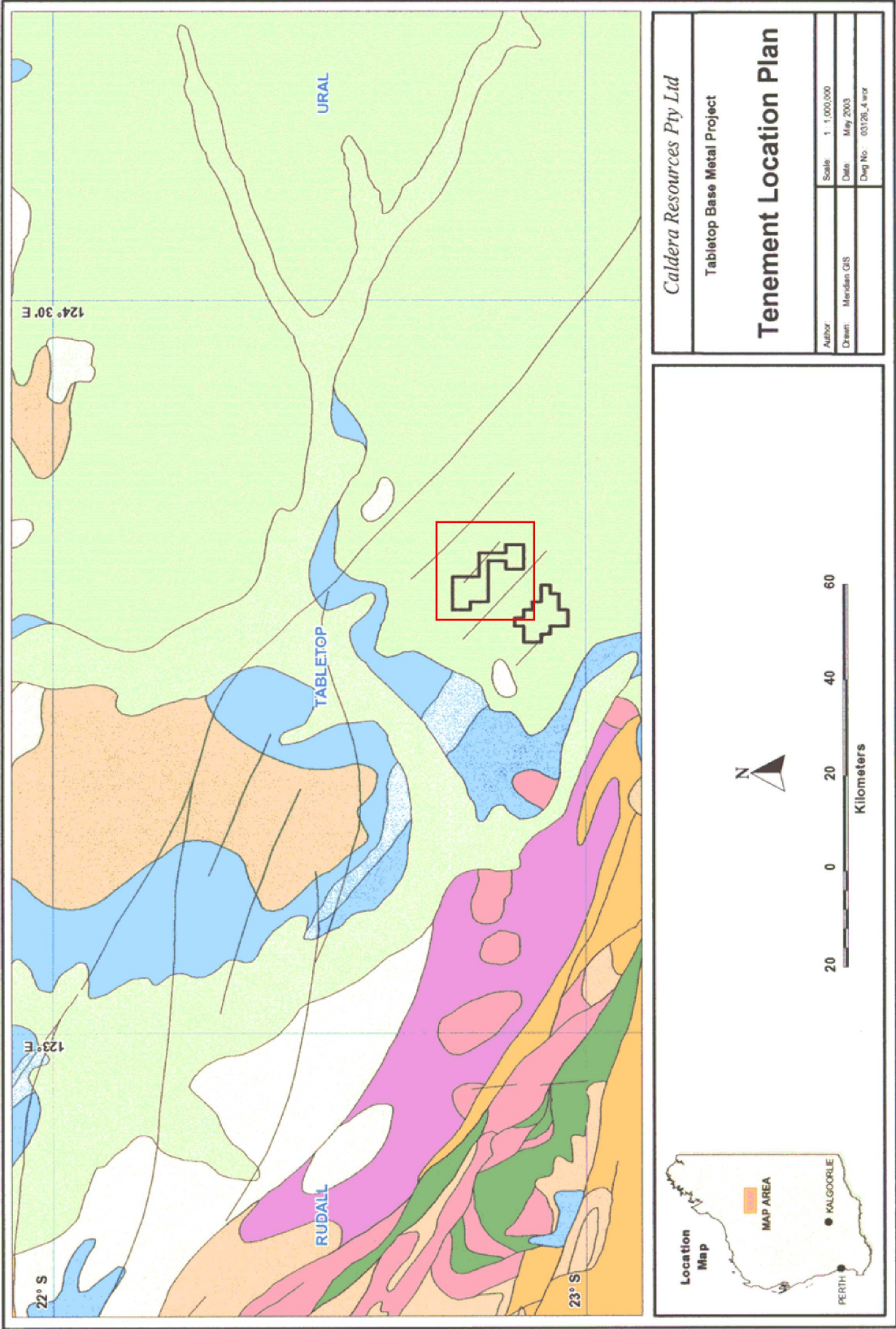
Results

An interpretation summary of the ground gravity surveys carried out in EL 45/2323 is presented in appendix 1.

6. Conclusions and recommendations

The source of the Tabletop 1 gravity anomaly in EL 45/2323 is considered to have potential for Olympic Dam-style copper-gold mineralization and/or possibly Telfer style gold mineralization. Drilling is required to evaluate these targets further.

Figure 1. Location Map – Exploration Licence 45/2323 (in red)



APPENDIX 1

EXPLORATION LICENCE 45/2323

Summary Interpretation: Bull's Eye Geoservices