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## **No. 9772**

**EL 2615**

**BITCHERA HILL**

**PARTIAL SURRENDER REPORT FOR THE  
PERIOD 8/7/96 TO FEBRUARY 2002**

Submitted by

Laura Holdings Pty Ltd  
2002

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**PRIMARY INDUSTRIES  
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# **PARTIAL SURRENDER REPORT**

**E 2615**

**ABMINGA DIAMOND PROJECT**

**LAURA HOLDINGS Pty Ltd.  
(Tenement Holder and Operator)**

**Report prepared for Laura Holdings Pty Ltd.**

**by**

**M.E. Jackson B.Sc. (Hons), M.Sc.**

**19<sup>th</sup> February 2002**

## **Summary**

The Abminga Project is located in the far north of South Australia, approximately 450 kilometres south-southeast of Alice Springs. The Project currently comprises seven Exploration Licences. The licences are in an area of Mesozoic sediments in the Eromanga Basin. Exploration has focussed on the location of kimberlite and/or lamproite diatremes.

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## **1. Introduction**

A group of exploration licences held by Caldera Resources Pty Ltd. located on the Abminga 1:250 000 map sheet were granted Project Status on 8<sup>th</sup> July 1996. E 2615 is one of these licences (figure 1). Laura Holdings Pty Ltd. is the licensed holder of E 2615. Previous Project Status Tenement Annual Reports detail exploration programs that led to the delineation of several hundred aeromagnetic anomalies and subsequent reconnaissance drilling on some of the licences.

A recent evaluation of aeromagnetic data for E 2615 has indicated that area B of E 2615 can be surrendered (see attached map).

## **2. Geology**

The regional geology of the Abminga area consists of Phanerozoic sedimentary basins onlapping and overlying Proterozoic rocks. The Proterozoic basement outcrops strongly in the northwest of the Abminga sheet where it forms the southern part of the Musgrave Block. The Musgrave Block comprises Early to Middle Proterozoic gneiss and schist intruded by a suite of granites that form a 60,000 square kilometre basement domain extending across the common borders of South Australia, Western Australia and the Northern Territory.

The Musgrave Block has a complex history that has included a series of orogenies and metamorphic episodes over the period 1,600 Ma to about 1,200 Ma. It has been stable since then and forms one of the major tectonic units of the Australian continent. On the northern part of the Abminga Sheet the Proterozoic basement is overlain by up to 3,000 m of Palaeozoic and Mesozoic sediments. Regional gravity and seismic surveys over this region indicate the presence of major northwest trending basement structures underlying the Palaeozoic Basins.

Palaeozoic sedimentary basins flank the Musgrave Block. The Warburton Basin to the east is overlain by the Permian-Carboniferous Pedirka Basin and both are overstepped

from the east by the Mesozoic Eromanga Basin which onlaps onto the eastern margin of the Musgrave Block.

On the Abminga Sheet the Mesozoic Eromanga Basin comprises flat-lying sediments with a total thickness not exceeding 500 m. A thin cover of Eromanga Basin sediments onlaps the eastern margin of the Musgrave Block. The outcropping sediments of the Eromanga Basin include claystones, sandstones and shales. The base of the Mesozoic section is the Jurassic Algebuckina Sandstone.

Much of the Mesozoic section throughout the area is covered by a series of flat-lying Cainozoic sediments. Tertiary silcrete was extensively developed across much of the region. It has been largely removed by erosion in many areas. Pleistocene red-brown sands that form extensive dune systems cover large areas.

### **3. Geophysics**

Regional aeromagnetic data has been re-processed. This recent processing has indicated targets of interest within portions A and C of E 2615. The Company intends to sample these targets. Areas that do not contain any targets of interest are being surrendered (area B).

### **4. Remote Sensing data**

No Remote Sensing data has been acquired for the area of the tenement.

### **5. Surface Geochemistry**

No geochemical sampling has been carried out in the tenement.

### **6. Drilling**

No drilling has been undertaken in the tenement.

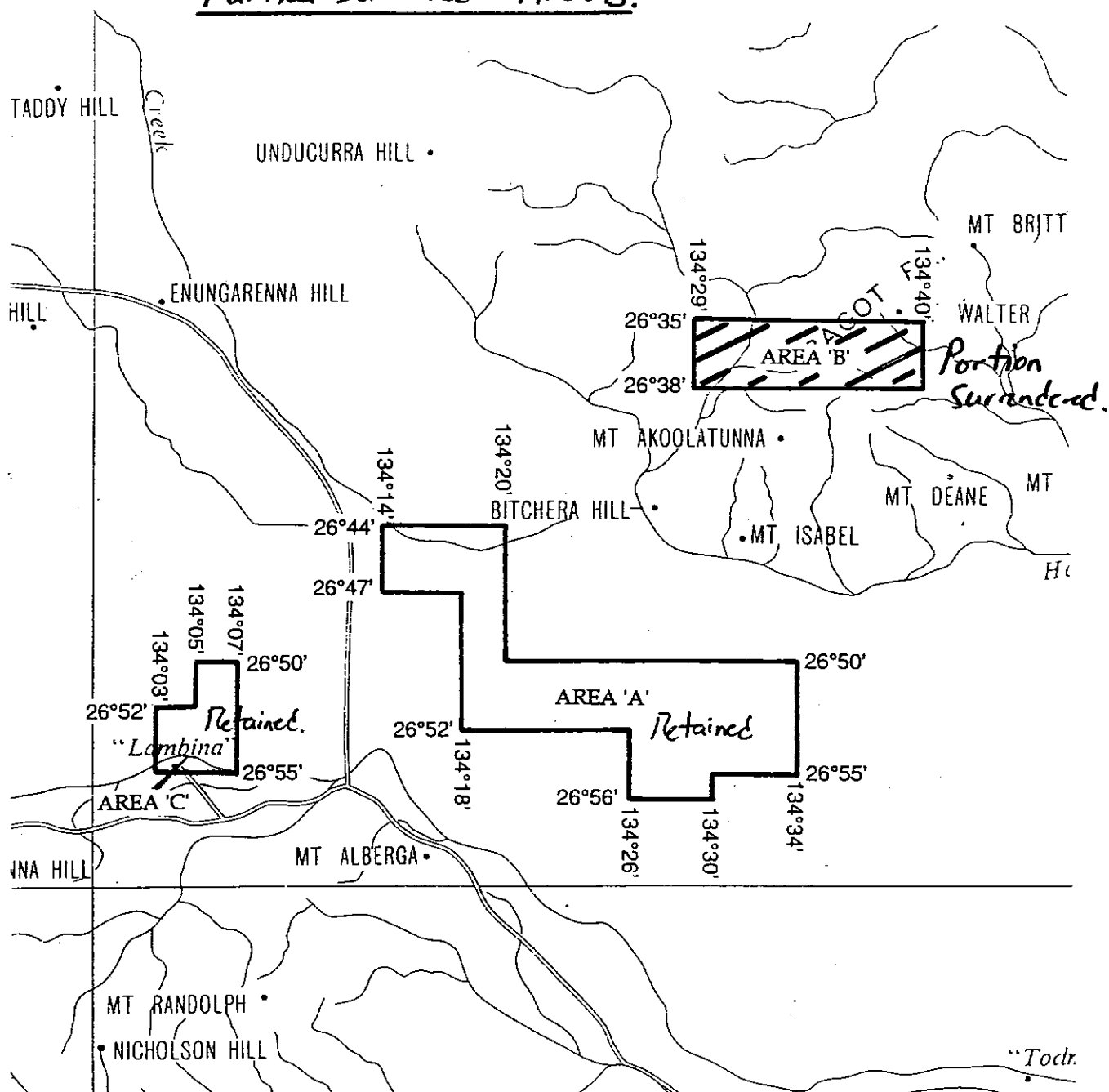
## **7. Conclusions**

A partial surrender of E 2615 has been made due to no magnetic features of interest being present. The area to be surrendered is indicated on the attached map.

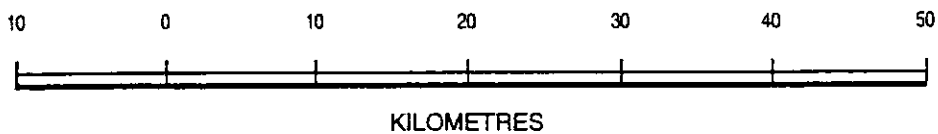
# SCHEDULE A

E.L. 2615

Partial Surrender - Area 'B'



SCALE 1 : 500 000



NOTE: There is no warranty that the boundary of this Exploration Licence is correct in relation to the other features on the map. The boundary is to be ascertained by reference to the Australian Geodetic Datum.