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EL 2570 / 3193 / 4358 / 5520

MOUNT PARRY

FIFTH PARTIAL SURRENDER REPORT FOR THE PERIOD 4/1/1999 TO 2/6/2015

Submitted by
Perilya Limited
2015

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Government of South Australia
Department of State Development

Partial Surrender Report

for

EL5520 "Mt. Parry"

Flinders Ranges Project, South Australia

DETAILS OF LICENSES	
Licence No's:	EL5520 (formerly EL4358)
Location:	Flinders Ranges
Licence Holder:	Keleray Pty Ltd
Operator/Manager:	Perilya Limited
Reporting Period:	04 January 1999 – 02 June 2015

Author: Dean Rogers
Date: 11 December 2015

TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION

This report is the partial surrender report for portions of EL5520 recently surrendered as partial fulfilment of the terms of the 2014 Flinders Amalgamated Expenditure Agreement renewal period. The licence area is located approximately 500km north of Adelaide near the town of Leigh Creek in the North Flinders Ranges, South Australia (Fig. 1). The tenement is part of a much larger tenement package currently being explored by Perilya primarily for zinc silicate mineralization similar to the Beltana Deposit although the area is also prospective for lead-zinc sulphide and copper mineralization.

2. TENURE

Prior to the current partial surrender the Mt. Parry licence (EL5520) encompassed an area of approximately 79.9km^2. The area covered by the tenement was originally granted as EL2570 on 04 January 1999 over an extensive area of 856 km^2 and has had several replacement tenements issued including EL3193 (01 April 2004), EL4358 (04 November 2009) and the current tenement EL5520, granted on 04 November 2014. The tenement is currently registered Keleray Pty Ltd but is subject to a joint venture agreement with Perilya Limited which acts as operator of the tenement. The surrendered portions of the tenement included in this report cover approximately 53.3km^2 representing approximately 67% of the tenement area (Fig. 2). The surrender was initiated using Form 14 documentation submitted in April 2015 however the relinquishment was not officially actioned until 02 June 2015.

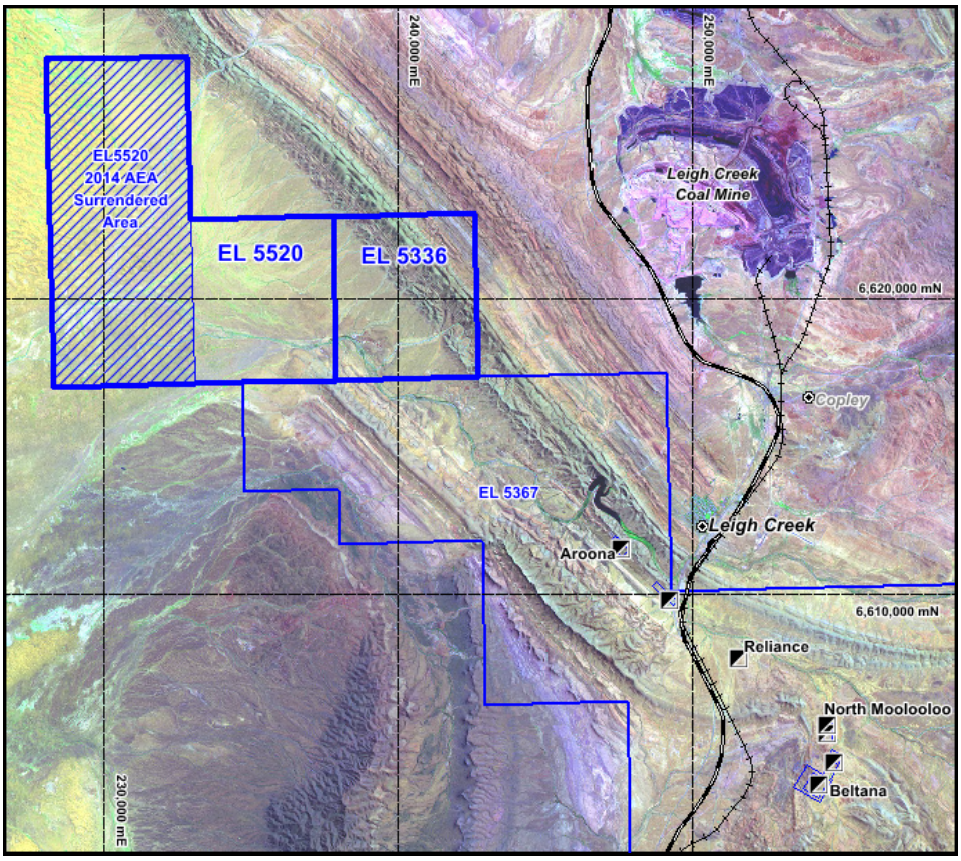

Fig. 1 : EL5520 Tenement Location (MGA94)

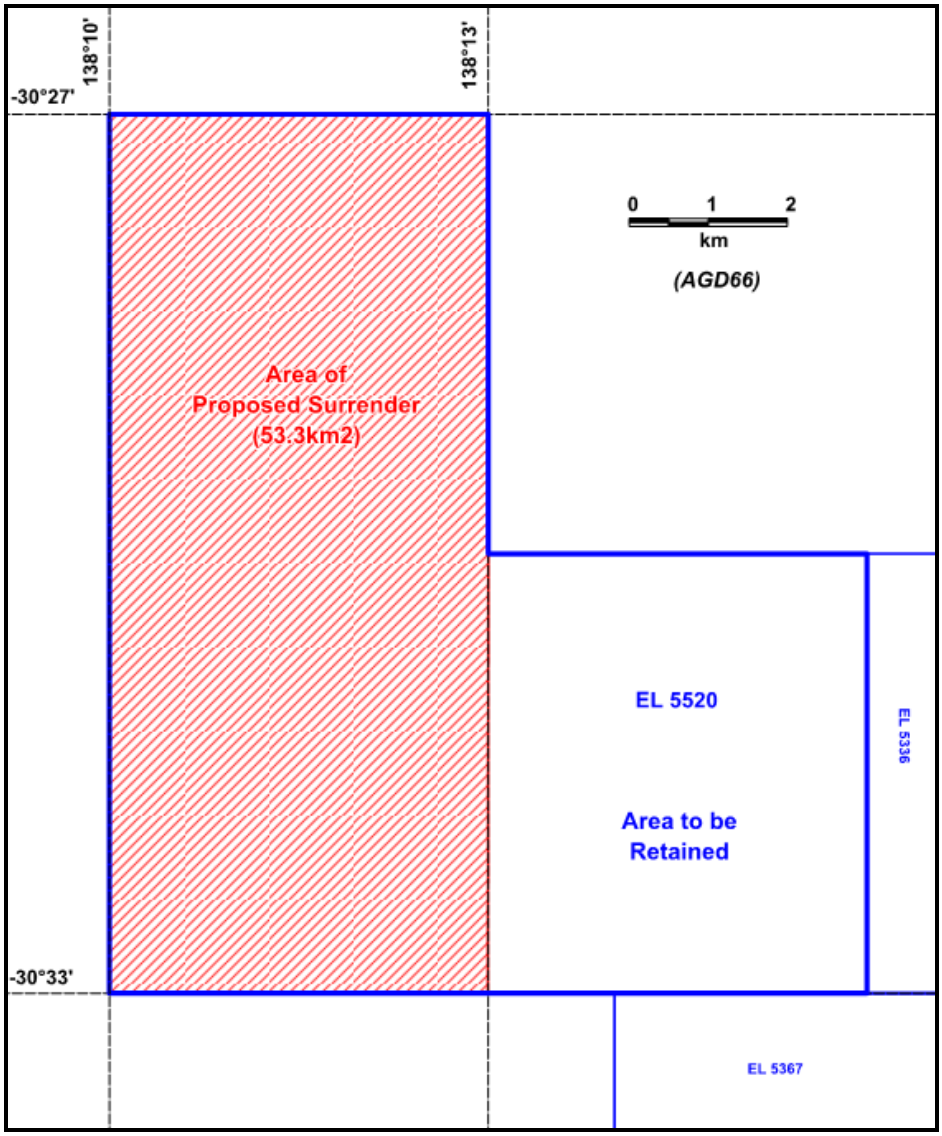

Fig. 2 : EL5520 2015 Surrendered Area Details (AGD66)

3. GEOLOGY AND MINERALISATION

The tenement package is located within the Arrowie Basin, Flinders Ranges. The Arrowie Basin consists of an Early to Middle Cambrian succession overlying Neoproterozoic rocks of the northern Adelaide Geosyncline. The sequence of the Adelaide Geosyncline is exposed in the Adelaide Fold Thrust Belt, is bound to the west by the Torrens Hinge Zone, and extending north–south for 600 km to the Fleurieu Peninsula south of Adelaide.

The Arrowie Basin margins are defined by regional northwest and northeast basement structures. These structures were present at the onset of Neoproterozoic sedimentation and controlled the sedimentation thickness distribution within the basin. During the Delamerian Orogeny (~500 ma) these northwest and northeast structures were reactivated as thrust faults during regional north–

south shortening. The shortening caused zones of extension along existing north–south structures close to the basin margin providing a locus for mineralisation.

Significant zinc mineralisation exists within the carbonate sequences of the Early Cambrian Hawker Group, most notably the fossil-rich Wilkawillina Limestone. Mineralisation is most pronounced on the margins of the basin where the stratigraphy thins near major regional structures (i.e. the Norwest Fault). The Beltana–Aroona trend is located in such a setting and is characterised by complexly deformed carbonate sequences hosting zinc silicate mineralisation.

The large majority of EL5520 is covered by recent soils and alluvial gravel deposits. Only minor exposures of Proterozoic rocks occur in the northernmost portions of the tenement and Cambrian rocks in the southernmost portion (Fig. 3). No recorded mineral prospects occur within the tenement largely owing to the significant overburden cover.

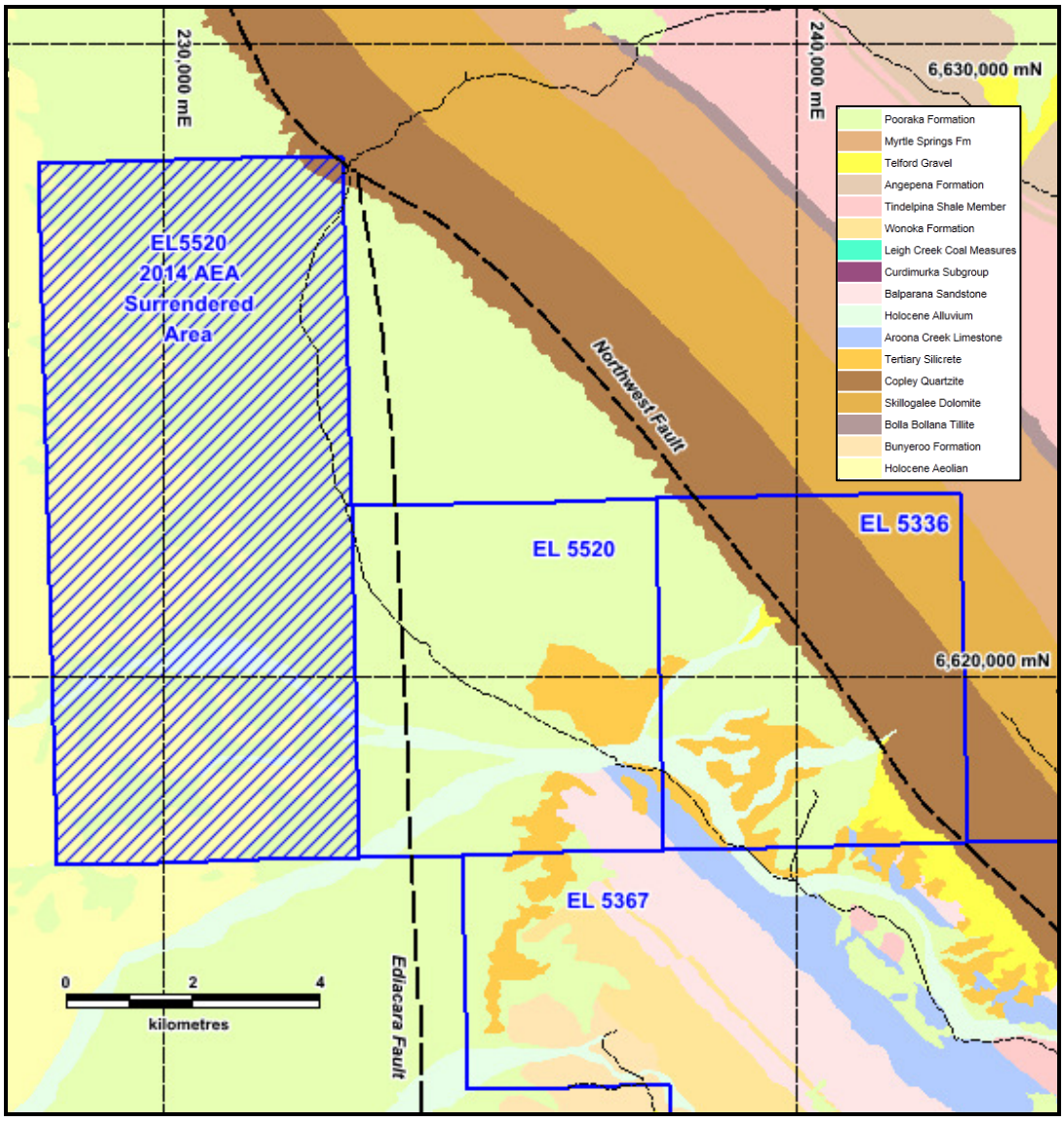

Fig. 3 : EL5520 Regional Geology (MGA94)

4. WORK COMPLETED

The only exploration data collected over the portions of EL5520 subject to this partial surrender report was Aster multispectral data purchased over the entirety of Perilya's tenement holdings in the area in late 2011. The data has been primarily used to identify potential carbonate stratigraphy using quartz index ratios and potential hematite alteration using iron index ratios. No additional targets were generated from the multispectral data within the areas proposed for surrender. Digital data for the Aster multispectral data has been previously forwarded to the Department its entirety and has not been included with this report.

No field work was completed by Perilya over the surrendered portions of EL5520, nor any of its predecessor tenements. No environmental liabilities are known to exist.

5. CONCLUSIONS AND RECOMMENDATIONS

The area in question is covered exclusively by Aeolian and alluvial Quaternary sediments and cover rocks. No historic drilling is known to have been completed in the area to estimate the depth of cover however drilling by BHP and Electricity Trust on the tenement to the southeast suggests depths to be upwards of 195m to bedrock. Similarly, no surface geochemistry is available. Furthermore, little information could be extracted from Aster multispectral data purchased in late 2011 due to the presence of Quaternary cover.

Given the depth of cover and lack of historic exploration information, conventional exploration techniques are difficult to apply in the area. Given the nature of the zinc silicate deposits in the region, the only potential program available would be wide spaced reconnaissance RC drilling which is considered to be too costly and inefficient an option. It is therefore recommended that the proposed area be surrendered.