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EL 3008 AND EL 3022

BERNARD HILL AND MOUNT MOSELEY

PARTIAL SURRENDER REPORTS FOR THE PERIOD 5/9/2002 TO 31/7/2003

Submitted by
Gunson Resources Ltd
2003

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PRIMARY INDUSTRIES AND RESOURCES SA

GUNSON RESOURCES LIMITED

EL 3008 BERNARD HILL

Partial Relinquishment Report on Exploration Activities

for the period

05 September 2002 to 04 September 2003

Distribution:
1 PIRSA
2 File: PRO M1-S1 (without appendices)
3 H L Paterson (without appendices)

H L Paterson
November 2003

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1 SUMMARY

Exploration Licence 3008 (Bernard Hill) was granted to Gunson Resources Ltd ("Gunson") on 5th September, 2002. Gunson is exploring EL 3008 primarily for stratiform copper mineralisation of the various styles present in the Mount Gunson area. The Mesoproterozoic basement has significant potential for analogues of the Olympic Dam style of mineralisation, and for gold mineralisation similar to recent discoveries at Challenger and elsewhere on the Gawler Craton, but is probably too deep in the area covered by EL 3008 for such targets to represent a realistic exploration possibility.

Work completed on EL 3008 in this first year of tenure has included:

- Geological assessment of potential for stratiform mineralisation, in conjunction with similar work completed on all tenements in the Mount Gunson Project.
- Reconnaissance geochemical survey over stratiform copper target

Note that all of this work was done on the retained portion of EL 3008 – no work was undertaken on the relinquished portion.

Exploration expenditure incurred during Year 1 of EL 3008 amounted to $2,039. Under the terms of a letter dated 21st June, 2002, PIRSA approved amalgamation of expenditure for the five ELs then current in the Mount Gunson Project. This agreement stipulates a minimum combined expenditure of $450,000 in the year to 30th June, 2003. The agreement also required a net 15% area reduction of the combined tenement area to be completed on or before 30th June, 2003. A partial relinquishment of EL 3008 was effected in July 2003, in conformance with this agreement.

2 INTRODUCTION

Exploration Licence EL 3008 (Bernard Hill) was granted to Gunson on 5th September, 2002, for a period of two years.

The exploration licence originally covered some 400 square kilometres in the western part of the Torrens 1:250,000 mapsheet. A partial relinquishment was effected in July 2003, and the original area and the reduced area (236 sq kms) are shown on Figure 1. EL 3008 adjoins EL 2639, being explored by Gunson as part of the Mount Gunson project, which also includes EL 2756, EL 3022 and EL 3112.

This report documents the relinquished part of EL 3008 for the first year of tenure, from 5th September 2002 to 31st July 2003 (date of relinquishment).

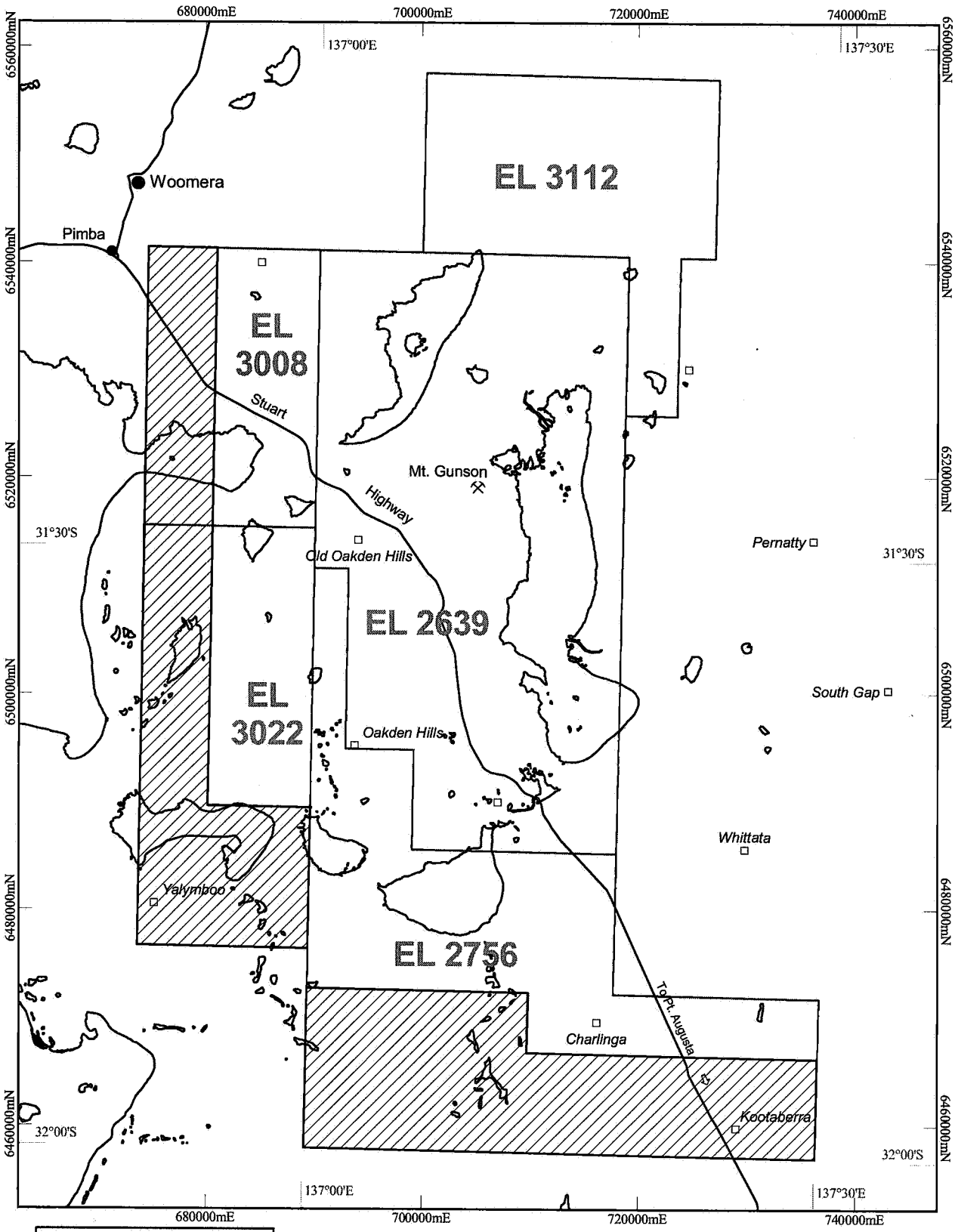
3 REGIONAL SETTING

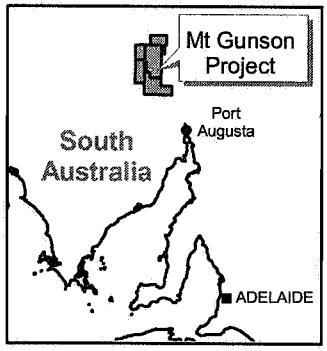
EL 3008 is located mostly on *Arcoona* Station, to the south-east of Woomera. The tenement lies within the Stuart Shelf geological province, with Mesoproterozoic and older basement lithologies covered by flat-lying shelf sediments of Neoproterozoic (Adelaidean) age. The Torrens Hinge Zone, which lies to the east of EL 3008, represents the transitional boundary between thick, folded sequences in the Adelaide Geosyncline and their thin, flat-lying platformal equivalents on the Stuart Shelf. The cover sequence is generally greater than 800 m thick within the tenement area.

The north part of the EL is characterised by gibber-plain outcrop of the siliceous Arcoona Quartzite, and in the southern part the dominant surface lithology is the Tregolana Shale or Corraberra Sandstone.

4 PREVIOUS WORK

The area now represented by EL 3008 has been explored in the past by Gunson, as part of former EL 2248.





Area relinquished in June 2003

Transverse Mercator Projection, Geocentric Datum of Australia, 1994

GUNSON RESOURCES LTD

Mount Gunson Project

PROJECT LOCATION PLAN

November 12, 2002	Plan: 2003-001
Scale 1 : 500,000	**Figure:** 1

A calcrete-sampling program was completed over the area, but results were not encouraging, and with Gunson's focus on basement-hosted targets at that time the area was relinquished because of the unworkable depth to basement.

5 EXPLORATION MODELS

Current exploration in the Mount Gunson project area is based on the potential of the area for hosting three separate types of mineralisation:

- stratiform copper mineralisation similar to that of the world-class Central African Copper Belt and White Pine deposit in Michigan. This style of mineralisation would be hosted in flat-lying sedimentary units of the Adelaidean sequence, with copper metal being sourced from the underlying Pandurra Formation redbeds or even from zones of extensive alteration and leaching in the pre-Pandurra basement. The deposits at Windabout and at MG 14, hosted in dolomitic black shales of the Tapley Hill Formation in each case, have similarities to this style of mineralisation. The mineralisation mined at the Cattlegrid deposit, while differing in detail from the classic stratiform copper models, probably represents a local variant of this type of deposit, related to a redox boundary and a zone of structural preparation.
- base-metal and gold mineralisation within brecciated and altered lithologies in the pre-Pandurra basement, as seen at the world-class Olympic Dam deposit. Variants of this style of mineralisation are seen elsewhere on the Stuart Shelf, and the tectonic and structural setting of the Mount Gunson area is favourable for repetitions of the Olympic Dam setting.
- gold mineralisation of any of the types being explored in the central and western Gawler Craton.

Within the area of EL 3008, where basement is believed to lie at depths greater than 800 m, the current focus is on stratiform copper mineralisation within the Adelaidean cover sequence.

6 WORK COMPLETED THIS YEAR

6.1 Stratiform Copper Targeting

During June 2002, a group of consultants was assembled to review the potential of the Mount Gunson Project tenements for stratiform copper. The group consisted of:

Dr D W Haynes, Douglas Haynes Discovery Pty Ltd
Mr Mark Dugmore
Dr Ken Cross
Dr J E Hanneson, Adelaide Mining Geophysics Pty Ltd
Mr Hamish Paterson, Hamish Paterson & Associates Pty Ltd

The study was based on the following precepts -

- Stratiform copper mineralisation was likely to be spatially related to the distribution of the Tapley Hill Formation (THF), occurring with the THF itself or locally within porous units adjacent to the THF
- Mineralisation is likely to be strongest where the THF is thin - there are plentiful examples of anomalous but subgrade copper at the upper and lower contacts of thick THF sequences, but potentially ore-grade intersections are more common where the THF is thin. This may be related to the thinner marginal (lagoonal?) facies of the THF having better reductant properties
- Mineralisation is likely to be younger than the lithification age of the THF - possibly related to Delamerian events.
- Basement structures are likely to be important in localising the mineralisation, either by restricting fluid flow into areas where reduction and deposition is more likely, or by providing access to the THF to metal-bearing brines circulating within the basement. A

likely Delamerian age for the mineralisation would suggest that NW-trending faults are likely to have an association with copper deposits

- Structural disruption within the cover sequence can create fault traps and supratenuous anticlines, with mineralisation being related to the flanks of the anticlinal structures
- A thick substrate of hematite or magnetite-stable rocks is favourable, whether this is the arenite sequence of the Pandurra Formation or the underlying Gawler Range Volcanics.

Based on this model, eleven target areas were identified. These targets were then ranked according to the following criteria:

- Presence of untested preserved depositional margin of THF around a basement high consisting of Pandurra Formation and/or Gawler Range Volcanics. The presence of Whyalla Sandstone over a thin section of THF was taken as evidence of preservation of the original THF basin margin
- Presence of preserved THF pinchout within 200m of surface (this contour is poorly constrained in several of the target areas)
- A 'Basin Amplification' factor - targets on the eastern flank of the Pernatty Culmination were potentially open to large-scale fluid migration from the main Adelaidean basin lying to the east during the Delamerian compressional event
- Presence of through-going structures, particularly in an 045° and/or 320-330° orientation
- Copper anomalism in previous drilling
- THF less than 10m in thickness
- Potential for ~250m tonnes of mineralisation: calculations of orebody area based on likely thickness and grade parameters were used to determine whether existing drilling allowed room for an orebody of this size to be undetected

Other non-technical aspects were also taken into account in the ranking process. Because of difficulty in gaining approval from Native Title claimants for access to salt lake areas, targets remote from such environments were ranked higher than ones lying under or close to salt lakes. Similarly, targets lying with the Gunson Resources tenements were given a higher ranking.

Following the target definition and ranking, it was recognised that some target areas on EL 2639 were close to the western boundary of that EL and showed signs of extending onto the open ground. To protect any possible extension of these targets, EL 3008 was applied for (with EL 3022 to the south). No targets were defined within the relinquished part of EL 3008.

When some of the target areas were followed up by a reconnaissance geochemical survey, the sampling extended onto EL 3008, but not onto the portion that was subsequently relinquished (Figure 1). The geochemistry survey is documented in the First Annual Report for EL 3008.

6.2 Review of Targets

Work completed elsewhere on the Mount Gunson Project tenements, particularly on EL 2639, has continued to add information to the knowledge of mineralised settings in the Mount Gunson area. As the understanding of mineralisation processes evolves, all parts of the combined project area are reviewed to ensure that settings of possible geological and/or geophysical interest are not overlooked. No targets were identified on the relinquished portion of EL 3008.

7 FUTURE PROGRAM

The partial relinquishment of EL 3008 took effect on 31-07-2003. Further work planned for the retained portion is documented in the First Annual Report for EL 3008.

8 EXPENDITURE TO 04/09/2003

The following expenditure relates to the retained portion of EL 3008, since no actual work was undertaken on the relinquished part.

Category	1st Half	2nd Half	TOTAL
Consulting geologist	$64	----	$886
Consultant geochemist	$500	----	$591
Analytical charges	$512	----	$2,518
Rent, rates, government charges	----	$963	$963
TOTAL FOR YEAR 1	**$1,076**	**$963**	**$2,039**

GUNSON RESOURCES LIMITED

EL 3022 MOUNT MOSELEY

Partial Relinquishment Report on Exploration Activities

for the period

10 October 2002 to 09 October 2003

Distribution:
1 PIRSA
2 File: PRO M1-S1 (without appendices)
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H L Paterson
November 2003

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1 SUMMARY

Exploration Licence 3022 (Mount Moseley) was granted to Gunson Resources Ltd ("Gunson") on 10th October, 2002. Gunson is exploring EL 3022 primarily for stratiform copper mineralisation of the various styles present in the Mount Gunson area. The Mesoproterozoic basement has significant potential for analogues of the Olympic Dam style of mineralisation, and for gold mineralisation similar to recent discoveries at Challenger and elsewhere on the Gawler Craton, but is probably too deep in the area covered by EL 3022 for such targets to represent a realistic exploration possibility.

Work completed on EL 3022 in this first year of tenure has included:

- Geological assessment of potential for stratiform mineralisation, in conjunction with similar work completed on all tenements in the Mount Gunson Project
- Reconnaissance geochemical survey over stratiform copper targets

Note that all of this work was done on the retained portion of EL 3022 – no work was undertaken on the relinquished portion.

Exploration expenditure incurred during Year 1 of EL 3022 amounted to $7,093. Under the terms of a letter dated 21st June, 2002, PIRSA approved amalgamation of expenditure for the five ELs then current in the Mount Gunson Project. This agreement stipulates a minimum combined expenditure of $450,000 in the year to 30th June, 2003. The agreement also required a net 15% area reduction of the combined tenement area to be completed on or before 30th June, 2003. A partial relinquishment of EL 3022 was effected in July 2003, in conformance with this agreement.

2 INTRODUCTION

Exploration Licence EL 3022 (Mount Moseley) was granted to Gunson on 10th October, 2002, for a period of two years.

The exploration licence originally covered some 613 square kilometres in the western part of the Torrens 1:250,000 mapsheet. A partial relinquishment of 60% of the original area was effected in July 2003, and the original area and the reduced area (245 sq kms) are shown on Figure 1. EL 3022 adjoins EL 2756, being explored by Gunson as part of the Mount Gunson project, which also includes EL 2639, EL 3022 and EL 3112.

This report documents the relinquished part of EL 3022 for the first year of tenure, from 10th October 2002 to 31st July 2003 (date of relinquishment).

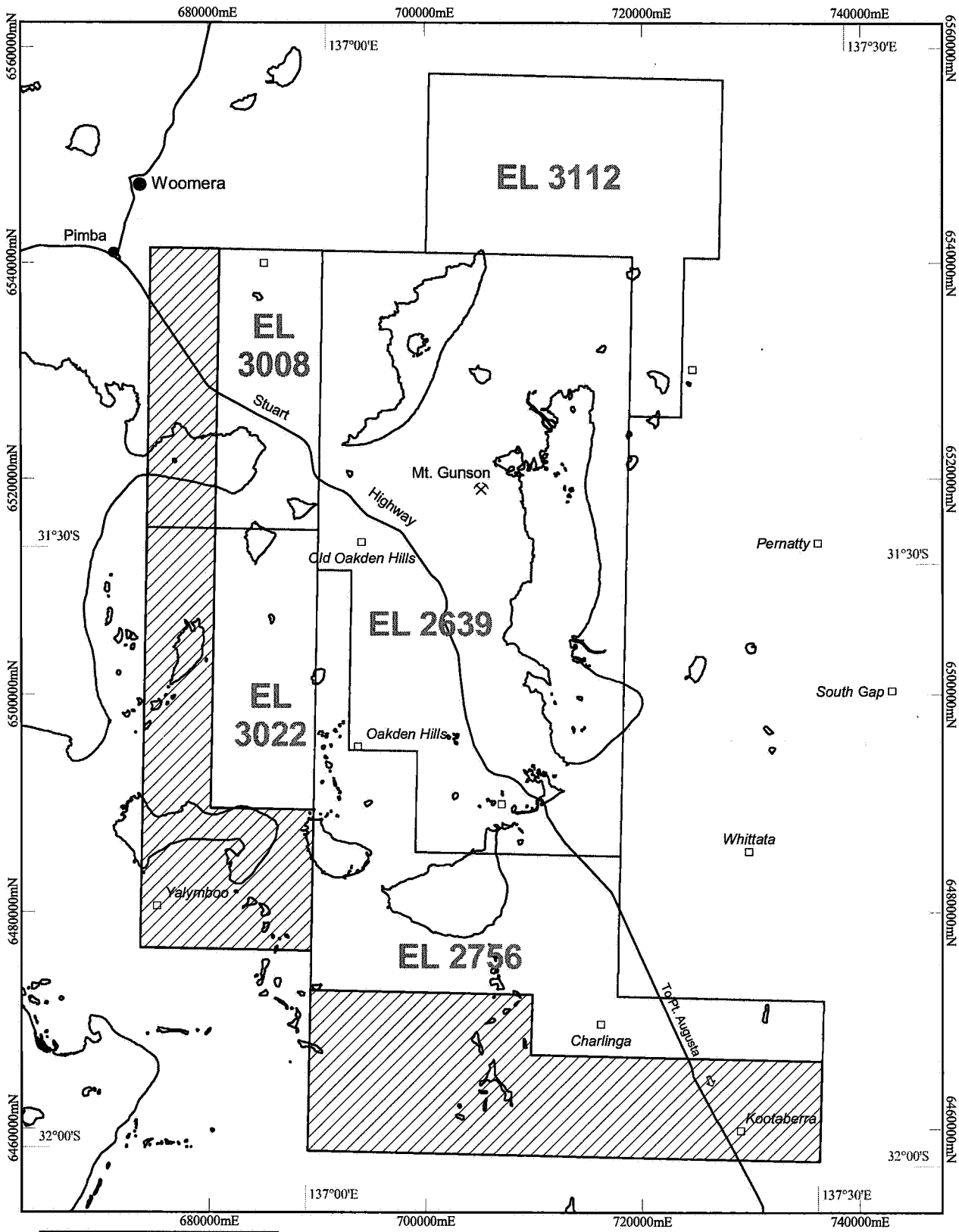
3 REGIONAL SETTING

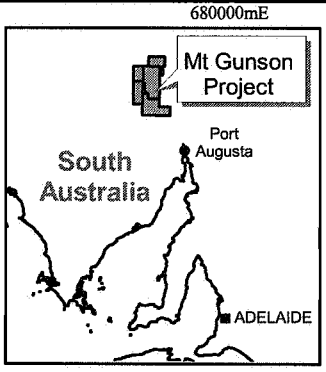
EL 3022 is located mostly on *Oakden Hills* Station, to the south-east of Woomera. The tenement lies within the Stuart Shelf geological province, with Mesoproterozoic and older basement lithologies covered by flat-lying shelf sediments of Neoproterozoic (Adelaidean) age. The Torrens Hinge Zone, which lies to the east of EL 3022, represents the transitional boundary between thick, folded sequences in the Adelaide Geosyncline and their thin, flat-lying platformal equivalents on the Stuart Shelf. The cover sequence is generally greater than 800 m thick within the tenement area.

The EL is characterised by peneplain surface of Tregolana Shale, with local windows into the underlying Whyalla Sandstone. Occasional erosional remnants form prominent hills (such as the North and South Oakden Hills) and these consist mainly of Tregolana Shale with a thin capping of Corraberra Sandstone or Arcoona Quartzite.

4 PREVIOUS WORK

The area now represented by the northern part of EL 3022 has been explored in the past by Gunson, as part of former EL 2248.





Area relinquished in June 2003

Transverse Mercator Projection, Geocentric Datum of Australia, 1994

GUNSON RESOURCES LTD

Mount Gunson Project

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November 12, 2002	Plan: 2003-001
Scale 1 : 500,000	**Figure:** 1

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- gold mineralisation of any of the types being explored in the central and western Gawler Craton.

Within the area of EL 3022, where basement is believed to lie at depths greater than 800 m, the current focus is on stratiform copper mineralisation within the Adelaidean cover sequence.

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Following the target definition and ranking, it was recognised that some targets (target areas 9 and 10) lay on open ground close to the western boundary of EL 2639 and EL 2756. To protect these targets on open ground, EL 3022 was applied for (with EL 3008 to the north). No targets were defined within the relinquished part of EL 3022.

When some of the target areas were followed up by a reconnaissance geochemical survey, the program covered part of the retained section of EL 3022 but no sampling was undertaken on the relinquished portion. The geochemistry survey is documented in the First Annual Report for EL 3022.

6.2 Review of Targets

Work completed elsewhere on the Mount Gunson Project tenements, particularly on EL 2639, has continued to add information to the knowledge of mineralised settings in the Mount Gunson area. As the understanding of mineralisation processes evolves, all parts of the combined project area are reviewed to ensure that settings of possible geological and/or geophysical interest are not overlooked. No targets were identified on the relinquished portion of EL 3022.

7 FUTURE PROGRAM

The partial relinquishment of EL 3022 took effect on 31-07-2003. Further work planned for the retained portion is documented in the First Annual Report for EL 3022.

8 EXPENDITURE TO 09/10/2003

The following expenditure relates to the retained portion of EI 3022, since no actual work was undertaken on the relinquished part.

Category	1st Half	2nd Half	TOTAL
Consulting geochemist	$110	----	$110
Geochemical sampling	$2,128	----	$2,128
Analytical charges	$4,791	----	$4,791
Rent, rates, government charges	$9	$55	$$64
TOTAL FOR YEAR 1	**$7,038**	**$55**	**$7,093**