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Relinquishment Report
Tasmanian Base Metals Project

EL 42/92

Loongana

Vol 1 of 1

MINERAL RESOURCES		
EL 42/92		
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RECURS TO		

HELD BY: RENISON LIMITED

MANAGER & OPERATOR: RGC EXPLORATION

AUTHOR(s): David Gregory

7 November, 1996

PROSPECTS: West Mt Jacob, Mt Jacob, Winterbrook, Native Track Tier

MAP SHEETS: 1:50,000: St Valentines 1:25,000:

GEOGRAPHIC COORDS Min East: 410 000 Max East: 422 000
Min North: 5 406 000 Max North: 5 415 000

COMMODITY(s): Zn, Pb, Cu, Au, Ag

KEY WORDS: Volcaniclastic, Exhalitive, Sulphides

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RELINQUISHMENT REPORT
LOONGANA - EL 42/92 - RENISON LTD
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SUMMARY

E.L. 42/92 - Loongana, is an eroded window of Cambrian volcanics in the northern Mount Read Volcanic Belt approximately 30 km southeast of Burnie in northern Tasmania. RGC Exploration acquired the exploration rights in 1993 and was actively exploring up until mid 1996. It was acquired and explored for its potential to host volcanogenic massive sulphide mineralisation. Exploration efforts have focused mostly on the Winterbrook - Mt Jacob area after initial regional mapping indicated that the rocks of the Native Track Tier - Leven Canyon area displayed little evidence of hydrothermal alteration and subsequent mineralisation. This half of the EL was relinquished in September 1995.

Most of the exploration in the Winterbrook area focused on the Mount Jacob prospect after initial relogging of two diamond holes, MTJD18 & 19, identified a carbonate exhalitive horizon above galena - sphalerite stringer mineralisation. The exhalitive horizon occurs below the base of a volcanic conglomerate unit which is a correlate of the Tyndall Group, suggesting the base of the Tyndall Group in the Winterbrook area may be a significant horizon as it is south of the Henty Fault. Geological mapping, soil sampling and ground magnetics along strike of Mount Jacob to the West failed to identify any targets. A review of previous exploration indicated that a similar stratigraphic position as Mount Jacob may occur in the Winterbrook area to the north and in the Tiger Plain area. A regional field trip was conducted over Tiger Plains and failed to find any signs of mineralisation worthy of follow up exploration. Previous exploration of the Winterbrook area had shown that all anomalies were explained and adequately tested. Based on the above conclusions it is recommended that RGC Exploration relinquishes EL 42/92.

1. INTRODUCTION

E.L. 42/92 - Loongana situated approximately 30 km southeast of Burnie in northern Tasmania and includes the Native Track Tier and Winterbrook areas. It was granted on May 21, 1993 and covers 220sq km. EL 42/92 was acquired for its potential to contain volcanic hosted massive sulphide mineralisation in the northern extension of the Mount Read Volcanic Belt. Previous exploration recognised the presence of dacitic to andesitic lava flows indicating a favorable proximal volcanic environment.

2. RGC EXPLORATION HISTORY

1993 - 1994

During the period of May 1993 - April 1994 exploration completed included a literature review of previous exploration, image processing of the digital topographic data for the Loongana and Loyetee 1: 25,000 topographic sheets and 1:10,000 geological mapping and rock chip sampling of the Native Track Tier area, (Vicary, 1994).

Reconnaissance mapping indicated two distinct Cambrian lithologies in the Native Track Tier area. A sequence dominated by feldspar phyric volcanoclastic sediments and interbedded dacitic lavas, and a sequence characterised by quartz - feldspar volcanoclastic sediments and andesitic intrusives. Vicary (1994) correlated these two sequences with the Central Volcanic Complex and the Mount Charter Group. Twenty eight rock chip samples were taken from the Native Track Tier area. Concentrations of base metals were generally low and no additional sampling was warranted.

Re-examination of drill core from the Mount Jacob prospect indicated that a hematitic, chloritic limestone unit occurred stratigraphically just above sphalerite - galena veining. This limestone is very similar to carbonates associated with mineralisation at Henty and Comstock. The Mount Jacob limestone occurs just below the base of a volcanic conglomerate unit which is a correlate of the Tyndall Group, suggesting the base of the Tyndall Group in the Winterbrook area may be a significant horizon, just as it is south of the Henty Fault.

1994 - 1995

During this period exploration consisted of 1:10,000 mapping and rock chip sampling, and relogging of old CRAE drill holes from the Crosby Creek and Mount Jacob area.

Geological mapping in the Leven Canyon - Watts Lookout area (Vicary, 1995a) defined a sequence of interbedded feldspar phyric volcanoclastic sandstones and well rounded granule - pebble volcanoclastic conglomerates, and a hematitic dacite lava which can be directly correlated with the Cambrian volcanics in the Native Track Tier area.

The middle and southern part of the Canyon is dominated by feldspar - (quartz) phyric volcanoclastic sandstones and interbedded ashy siltstones, with minor siliclastic pebble - granule conglomerate. A large intrusive body of medium grained andesite / microdiorite crops out in the Tulip Tree Creek area.

Ashy siltstones with minor feldspar - quartz phyric volcanoclastic sandstones, and a andesitic/microdiorite intrusive logged in drillholes in the Crosby Creek - Watts Lookout area can be correlated with the quartz phyric sequence present in the south of the Leven Canyon. Nine rock chips were sampled from the Leven Canyon area which contained only low level base metals.

In the Native Track Tier - Crosby Creek area two mappable Cambrian sequences were identified (Vicary, 1995a). One of these sequences contains numerous intrusive bodies of andesite/microdiorite. Previous exploration by CRAE at Crosby Creek drilled three soil anomalies adjacent to the contact of one such intrusion. The results were unencouraging.

Mapping has shown that the sequence of volcanics extends westward into the Native Track Tier area. The lack of hydrothermal alteration and the paucity of untested anomalies by previous exploration groups resulted in the relinquishment of the Native Track Tier / Leven Canyon area on September 29, 1995 (Vicary, 1995b).

Reconnaissance mapping over the Mount Jacob prospect identified four main rock types. Sericitic feldspar phyric lava, interpreted to represent the Central Volcanic Complex, and Dacite lavas, volcanoclastics and rhyolitic volcanoclastics interpreted as Tyndall group correlates. Twenty five rock chips from the Mount Jacob Prospect returned only low level base metals. As part of the initial phase of exploration two diamond drill holes from Mount Jacob (MTJD 18&19) were relogged as part of the initial exploration phase. MTJD18 hosts a galena - sphalerite stockwork which assayed 16.5m @ 1.3% Pb, 1.0% Zn, 30g/t Ag and a massive carbonate interpreted to be an exhalative horizon. A Pb isotope analysis of a galena vein from MTJD 18 plotted outside the best ellipsoid for Tasmanian Cambrian VHMS mineralisation and was correlatable with Devonian mineralisation. It was concluded that the true isotopic signature may have been altered from Devonian fluids being deposited close to the northern part of the Bismuth Creek Fault. The presence of a Pb - Zn stockwork and carbonate exhalative horizons in MTJD18 provided good evidence that Cambrian Mineralisation may exist in the Mount Jacob area. Mapping indicated that the sequence of Cambrian rocks exposed on the northern slopes of Mount Jacob can be traced westward for about 3 km (Vicary, 1995a).

1995 - 1996

Exploration during this period focused on the western extension of the Mount Jacob Prospect - Mount Jacob West. Exploration consisted of detailed 1:2500 mapping, collection and assaying of twelve rock chips and three hundred and sixty five soil samples and a ground magnetic survey (Gregory, 1996).

Mapping identified the same sequence of rocks seen at Mount Jacob with the exception of a quartz phyric rhyolitic intrusion within dacitic volcanics.

Multi - element chemistry of the soil and rock chip samples revealed only low level base metals.

A ground magnetic survey failed to delineate any targets but was useful in the final interpretation. Dacitic volcanics were quite magnetic and the CVC rocks were defined by a broad magnetic low.

The absence of hydrothermal alteration, poor base metal results in soils and generally uninteresting magnetic response severely down grades the potential of Mount Jacob West to host any significant base metal mineralisation.

A regional field trip to assess the potential of the same sequence in the Tiger Plains area failed to define any hydrothermal alteration. A review of the previous exploration indicated that the same sequence in the Winterbrook area had been adequately explored and all the anomalies had been sufficiently tested.

3. CONCLUSION

The Winterbrook and Mt Jacob area has a long exploration history. The area has been mapped in detail, soil, stream, and rock chip sampled and has been covered by numerous geophysical surveys. A number of drillholes have targeted coincident soil and geophysical anomalies and have intersected either insignificant or no base metal mineralisation.

Based on the exploration coverage by previous companies and RGC Exploration efforts, RGC wishes to relinquish EL 42/92.

4. REFERENCES

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