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BURMINE LIMITED

EL 3298

FINAL REPORT

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NORTHERN TERRITORY
GEOLOGICAL SURVEY
CR87/274

CONTENTS

SUMMARY

An initial, thorough, helicopter supported rock chip geochemical sampling programme was completed on EL 3298. Three zones were highlighted. All were gridded, soil and rock sampled and, in two cases, drilled. Rare, high grade intercepts were made in the drilling programme, these showed strike lengths of up to 100m and limited thicknesses. Almost all the mineralised veins are folded, and the fold noses provide possible areas where additional tonnage could be found.

1. INTRODUCTION

Exploration Licence 3298 was granted to Euralba Mining Limited on 10 November 1981, for a period of six years. In June 1987, a joint venture was formed between Euralba and Burmine Limited, with Burmine assuming management.

EL 3298 has expired. During the period of the tenement, four major annual reports have been submitted, three by Euralba and one by Burmine. This present report is the final one on EL 3298 and summarises the work completed during the period of the licence. All these exploration activities are referred to in the four reports, all of which have previously been submitted to the Department.

The reports are:

- "Report on the Exploration Programme Completed in November, 1981."
- "Annual Report on 1983 Exploration Programme"
- "ELs 3298, 4165; Year 5 EL 3298 and Year 4 EL 4165; Annual Report on Exploration Programme"
- "EL 3298 - Annual Report, 1987"

2. REGIONAL GEOLOGY

The EL is underlain by sediments of the Lower Proterozoic, Burrell Creek Formation. The sediments consist of shales and laminated siltstones with minor quartzose and feldspathic greywacke and calcarenite. Underlying volcanosediments of the Gerowie Tuff and Koolpin Formation crop out to the west.

The sequence is folded along north to northwest axes, with a number of east-west orientated tensional(?) features.

Gold mineralisation is associated with quartz reefs which appear to be pre the final phase of folding in the region. The mineralised veins are often banded either alone or in coarsely crystalline quartz in fold noses. The later cross cutting quartz and the coarsely crystalline quartz in unfolded veins, are essentially barren.

3. WORK COMPLETED

3.1 1981 - 82

Rock sampling : 179 rock samples, each of 2 kgms, were collected in a helicopter supported programme. Most samples were analysed for Au, Cu, Pb, Zn, Ag and Hg.

3.2 1982 - 83

Reconnaissance : anomalous areas outlined from 1981 -2 survey. Limited ground magnetic surveys done. Preparation for grid controlled sampling of anomalies.

3.3 1984 - 86

Target Assessment: Three areas gridded. Programme of rock chip and soil sampling, limited ground magnetics, and geological mapping completed.

3.4 1986 - 87

Drilling: 25 RC holes were completed at the Joseph and William Prospects. Minor infill soil and rock chip sampling was completed.

4. RESULTS

The results of the exploration programmes are best described in:

"ELs 3298, 4165; Year 5 EL 3298 and Year 4 El 4165; Annual Report on Exploration Programme" by WJ Fisher and "EL 3298, Annual Report, 1987" by DN Carter and RG Bluck.

Three main targets were outlined from the rock chip sampling exercise in William (Grid 1), Joseph (Grid 2) and Eleanor (Grid 3).

At William, relatively fresh greywackes are intruded by gossanous and some prominent white, coarsely crystalline quartz veins. Strong silicification and sericitisation is associated with the mineralising event.

The main zone of gold bearing, banded quartz veins and intense sericitisation, occupies an area of about 120 x 140m. Within this zone, a thin (<1m) vein, carrying over 20 g/t Au, crops out over a strike length of 760m.

Two of 19 holes intersected the vein. Holes 14 and 3 intersected 1m at 17.7 g/t and 1m at 10.3 g/t Au respectively. Both intercepts are less than 20m from the surface.

Further south in hole 11, a 1.0 m intercept of 17.3 g/t Au may represent the strike extension of the same vein, although a fence of holes between 3 and 11, failed to intersect mineralisation.

Few additional, significant intercepts were noted.

Six holes were drilled at Joseph where the folded quartz veins have intruded a variable sequence of sericitised greywackes. Limonite box-works, after sulphide and carbonate(?), occur in fine veinlets, disseminations and in coarse grained blebs.

Patchy gold was recorded in all holes with the most significant values being 14m @ 1.25 g/t Au in hole 1. This intercept includes 1m at 4.1 g/t Au and several intercepts of 1-2 g/t Au. Little was noted in the other 5 holes although hole 4 intersected 2m of 1.86 g/t Au. The quartz veins plunge south in the vicinity of hole 1 and no drilling has been completed to the south of this hole.

Soil sampling results at Eleanor (Grid 3) indicate slightly elevated gold values are associated with a N-S trending fracture zone. This has subsequently been sheared with a major E-W trending fault structure along which barren quartz veins have been intruded. A series of en echelon E-W striking quartz lodes, aligned in a thin N-S trending corridor, carry minor gold. An area of 100 x 100m of + 0.1 ppm Au in soil has been outlined but this anomaly was not drill tested.

5. CONCLUSIONS

Rock chip geochemistry has highlighted two areas where drilling was considered necessary in the valuation of the property. Gold grades in excess of 15 g/t Au were regularly intersected in a small, <1m wide, vein at William's. At Joseph a broad, low grade intercept was made in one hole. The areas have not been exhaustively evaluated and some additional work (costeaning, structural mapping etc) can be justified.

BIBLIOGRAPHY

Carter D.N. and Bluck R.G., 1987, EL 3298, Annual Report, Burmine Report.

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