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Annual Report - 1998/99 - EL23/92, Alberton

Hercules Resources Pty Ltd; Low Impact Diamond Drill
Griffith, A. EL23/92

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A GRIFFITH

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LOW IMPACT DIAMOND DRILLING SPECIALISTS PTY LTD
A.C.N. 079 634 692

PO BOX 44
ROSEBERRY
TASMANIA 7470
TELEPHONE (03) 6473 1713 FAX (03) 6473 1713

ABSTRACT

Exploration Licence EL 23/92 comprising 28 square kilometres, was granted to Hercules Resources Pty Ltd on the 9th October 1992.

The exploration licence is now being explored under a joint venture agreement between Mancala Pty Ltd (Hercules Resources) and Low Impact Diamond Drilling Specialists (LIDDS). Under the terms of the agreement, LIDDS are to complete a minimum of 800 metres of diamond drilling within EL 23/92 to earn a fifty (50%) per cent share in the exploration licence.

Three closely spaced, angled diamond drill holes totalling 391.70 metres were completed underneath the historical workings of the Una #1 Adit in the southern area of the exploration licence. Two, potentially gold bearing zones were intersected down hole, but the significance of the zones remains to be tested by assaying.

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1.0 Introduction

Exploration Licence EL 23/92 comprises an area of 28 square kilometres and encompasses the historical workings of the Alberton Goldfield. The licence currently includes 3 square kilometres of Mining Leases held by Tasmanian Tiger Mines. These mining leases are currently excluded from exploration activities within the licence.

The exploration licence is now being explored under a joint venture agreement between Mancala Pty Ltd (Hercules Resources) and Low Impact Diamond Drilling Specialists (LIDDS). Under the terms of the agreement, LIDDS are to complete a minimum of 800 metres of diamond drilling within EL 23/92 to earn a fifty (50%) per cent share in the exploration licence.

Exploration activities completed during the reporting period include reassessment of the historical gold workings and prospects contained within the lease and the commencement of diamond drilling at the Una Number 1 Adit located in the headwaters of Una Creek.

The following report summarises exploration activities and results completed within the licence during the period 1998/1999.

2.0 Exploration Philosophy and Objectives

The philosophy and objectives of the exploration undertaken by LIDDS is directed to the definition of a substantial hard rock gold resource which would be amenable to narrow vein, underground mining. An initial target resource tonnage of 5,000 ounces is sought within the exploration licence.

The geology, structure and mineralisation developed at the New Golden Gate Mine located to the south of the exploration licence is used as an exploration model for the identification of significant gold resources within the licence.

Following the completion of an initial literature review and consideration of exploration completed previously by Mancala, LIDDS decided to complete additional diamond drill testing of gold mineralisation developed beneath Adit #1 at the Una Prospect in the south of the licence area.

3.0 Location and Access

Exploration Licence EL 23/92 is located near the rural township of Alberton, situated in the north-eastern region of Tasmania.

The licence is situated within both rural and State Forest areas and is serviced by an excellent network of sealed and all weather graded roads and fire trails.

Topographic relief varies from gently undulating pasture areas to steep hills and ridges with deeply incised valleys developed in the central area of the licence. Vegetation in non-farmed areas is dominated by open eucalypt forest with dense undergrowth which is generally restricted to areas adjacent to established drainages.

4.0 Regional Geology

The regional geology of EL23/92 has been detailed by geologists of the Tasmanian Mines Department on the 1:50,000 Alberton geological map. Recent publications specific to the economic geology of the district are provided by Taheri (1992 and 1993) and Keel et. Al. (1994) as part of the Netgold project.

The EL is located within the 70km long, 2km wide north-westerly trending Mangana to Lyndhurst gold lineament. Gold mineralisation contained within the lineament is hosted by the Silurian to Devonian Mathinna Beds. The Mathinna Beds comprise an alternating sequence of bedded quartzites, sandstones, siltstones and slates. The quartzites have a lithic component and display graded structures locally. The sequence has been interpreted to represent turbidites from previous studies. The Mathinna Beds are unconformably overlain by probable Carboniferous and Permo-Triassic sedimentary sequences of the Parmeener Supergroup.

The Mathinna Beds have been intruded by granites and granodiorites of Devonian age. Thermal alteration of the surrounding sediments has produced an alteration halo containing sporadic tin and tungsten mineralisation. The age of the gold mineralisation is uncertain, although it is probable that deposition occurred concurrently with folding and cleavage development prior to emplacement of the Devonian granite intrusives.

Regionally, the Mathinna Beds are folded about northwest trending axes to form small scale and kilometre scale wavelength, tight to moderate folds. Axial plane cleavage development takes the form of a slaty cleavage in the pelitic units (Taheri, 1993). Folding is asymmetric, with local steep overturning to the west in some cases (Pearson, 1993). A subsequent deformation has produced regional mega kinking about steep, northeast trending kink planes, and numerous steep dipping kink bands with both sinistral and dextral geometry (Goscombe and Findlay, 1989, in Taheri, 1993).

The origin of the gold mineralisation and its relation to the structure of the goldfield is uncertain, with a number of theories having been forwarded. Hill (1923), Powell (1991) and Keele et. Al. (1994) have all invoked deep seated thrust models. Taheri (1993) has modelled a pre-Permian extensional dextral jog with dextral transcurrent faulting (Figure 1).

At present, little field evidence is available to support or disprove the models.

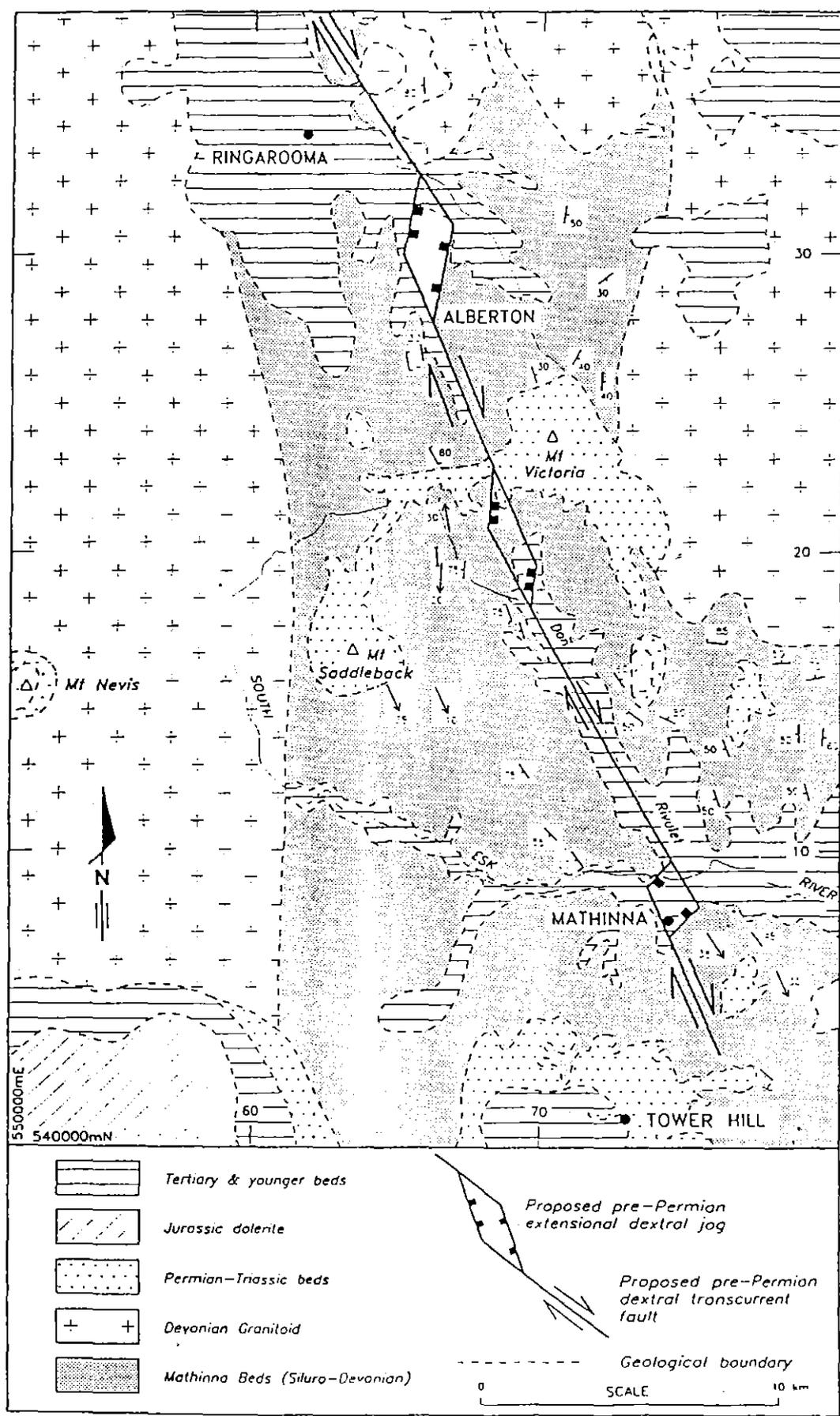


Figure 1

Simplified geology of Tower Hill - Ringarooma area, showing proposed pre-Permian extensional jog and dextral transcurrent fault. (Alter Taheri, 1993)

5.0 Previous Work

5.1 Mining History

The Alberton district contains numerous gold occurrences which have been subjected to varying degrees of exploration and development since the turn of the century.

Auriferous quartz veins were first discovered in the Alberton goldfield prior to 1883 (Thureau, 1883). Over one hundred gold bearing lodes were worked intermittently between 1883 to 1939. Most of the gold discoveries, prospecting and mining activities occurred prior to 1900.

The discovery of the hard rock deposits and to a lesser extent the alluvial workings, resulted in numerous no liability companies and mining syndicates being formed to prospect and develop the gold deposits in the district.

With the exception of the Ringarooma United Company, most of the syndicates were poorly organised and under capitalised and failed to define sufficient gold resources to provide a satisfactory return on capital. The development of long term mining operations were further interrupted and hampered by both World Wars.

The failure of the mining syndicates and no liability companies to locate substantial gold resources, lessened the appeal of the district to host substantial gold resources. Consequently, the gold deposits contained within the district developed an unfavourable reputation of being shallow and discontinuous despite never having been adequately tested by diamond drilling.

Development at both the Ringarooma United and the Mercury Operations has shown that significant gold mineralisation continues at depth at both these operations. Gold bearing quartz lodes has been exposed in the base of the internal winzes developed within the deepest sections of the mines.

The strike and depth continuity of the mineralisation exposed within the winzes remains to be adequately tested by diamond drilling.

5.2 Previous Exploration

A number of exploration companies including Stanton Engineering Company (EL6/76), Amdex Mining Ltd (EL7/80), Goldfields Exploration Pty Ltd (EL 26/85 and 17/86), Oceania Pty Ltd (EL 23/82), Billiton, Newcrest Mining and Mancafa have conducted exploration to varying degrees within the exploration licence area.

Exploration work completed previously includes geochemical, ground and airborne magnetic geophysical surveys, mapping, trenching, costeaning, and diamond drilling employed at many of the prospects contained within the exploration licence.

To date, no economically viable project has been developed within the licence despite the high level of exploration undertaken within the district.

6.0 Exploration Completed During the Period

6.1 Una Prospect Diamond Drilling

Three angled, closely spaced diamond drill holes, UNA010-UNA012, totalling 391.70 metres were drilled at the Una Prospect during the period. The drill holes were designed to test the thickness and grade of the gold mineralisation developed at a depth of approximately seventy metres below the Una #1 Adit.

Diamond drilling was completed by Low Impact Diamond Drilling Services of Rosebery, Tasmania, utilising a Gopher 28 rig producing NTW56mm diameter core. The drill hole collar positions and alignment pegs were surveyed by East Coast Surveying Pty Ltd of St Helen's. The drill hole collar was surveyed both prior to and at the completion of diamond drilling. Two down-hole survey shots were completed using an Eastman single shot camera.

Due to the commencement of diamond drilling near the submission date of the annual report, only limited information can be presented at this time.

Two main zones of potential gold mineralisation were intersected during diamond drilling. Diamond drill holes UNA010 and UNA011 intersected a strongly sheared fault zone up to several metres in width at approximately seventy metres below the workings of the Una #1 adit. The zone contains strongly sheared and weakly silicified, fine grained black slates with up to 20% boudinaged white, massive quartz.

The second intersection containing a broad, twenty metre down hole zone of strong, white, massive quartz veinlets up to 3cm in width which are locally stock worked, are developed in the first thirty metres of drill holes UNA09 and UNA010.

The diamond drill core will be logged for lithology, mineralisation, and alteration prior to sampling. Each core tray is to be photographed and core recoveries calculated for each core run. The assigned core sample intervals will be half cut with a diamond saw, bagged and assigned a unique sample number for assaying. The remaining half core will be stored for future reference.

It is intended to submit the core samples to Genalysis Laboratories, 15-17 Davison Road, Maddington, Western Australia for chemical analysis. Each sample was assayed for gold, silver, iron and arsenic. A specific gravity determination by water displacement will be calculated for a selected suite of samples.

Copies of the analytical reports, drill logs and core photographs are to be included in the next annual report.

7.0 Conclusions

Based on the results of the exploration completed during year one the following conclusions are drawn:

- The potential of the strongly sheared fault zone encountered at depth beneath the existing workings of the Una #1 Adit to host significant gold mineralisation remains to be tested by assaying.
- Likewise, the potential of the broad zone of near surface quartz veining encountered in drill holes UNA09 and UNA010 to host significant gold mineralisation encountered remains to be tested by assaying.

In the event that significant gold values are returned from assaying, additional diamond drilling would be undertaken at the Una Prospect. Alternatively, if the assay results were to prove disappointing, exploration would focus on the re-assessment of other gold prospects contained within the lease to host significant mineralisation.

8.0 Environment

All exploration activities completed during the year were conducted in accordance with the Exploration Code of Practice issued by the Mineral Resources of Tasmania.

Diamond drilling at the Una Prospect utilised an existing access track for site access, which was also served to provide suitable pads for drilling. Minimal track clearing was required to access the drill sites and the drill hole collar was cased and plugged at the completion of each drill hole.

A previously damaged section of the access track near the Mount Victoria road was repaired prior to the commencement of diamond drilling.

No environmental rehabilitation was required at the completion of the drilling program.

9.0 Expenditure Statement

The total expenditure for EL 23/92 Alberton as at 9 September 1999 is \$331,994.00.

Total expenditure incurred during the September 1999 quarter for the completion of diamond drilling at the Una Prospect is currently estimated at \$73,626.00.

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11.0 Key Words

Alberton, Una, Ringarooma United, Mercury, Gold.

12.0 Acknowledgments

I would like to thank the following people from a number of organisations for their contributions to the success of the exploration activities during the year. In particular,

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The State Forestry Commission, Alberton-Ringarooma District.

Mr Andrew McGregor, East Coast Surveying, St Helens.

The people of the Ringarooma District for their assistance in piecing together the colourful past of the gold field and access onto their private land to inspect the old workings.