Low Impact Diamond Drilling Specialists Pty Ltd
ACN 079 634 692

EL 23/92 ALBERTON

PARTIAL RELINQUISHMENT

REPORT

2001-2002

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Copies to:

- LIDDS
- Minerals Resources Tasmania
- Hercules Resources
ABSTRACT:

Exploration Licence EL 23/92 comprising 31 square kilometres was granted on the 9th October 1992.

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

The tenement expires on the 9th October 2002. LIDDS has requested an extension to 12 km² of the licence. A 19-km² proportion of the exploration licence has been relinquished. This report documents the work completed on this relinquished section of the exploration licence.

Work in this part of the tenement has been concentrated on the Hinemoa and Una workings. A detailed mapping and sampling programme was completed in 1995. This work culminated in a diamond drilling programme in 1996 that identified a potential gold resource of 1,000 tonnes grading 12-15 g/t Au.

During 1999 three closely spaced angled holes were drilled totalling 391.7 metres under the workings of the Una #1 lode. These holes failed to intersect significant mineralisation.
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1. Introduction:

Exploration Licence EL 23/92 comprising 31 square kilometres encompasses the historical workings of the Alberton Goldfield.

The exploration licence is being explored under a joint venture agreement between 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 with EL 23/92 to earn a fifty (50%) per cent share in the exploration licence.

The tenement expires on the 9th October 2002. LIDDS has requested an extension to 12 km² of the licence. A 19 km² proportion of the exploration licence has been relinquished. Work in this part of the tenement has been concentrated on the Hinemoa and Una workings. A detailed mapping and sampling programme was completed in 1995. This work culminated in a diamond drilling programme in 1996 that identified a potential gold resource of 1,000 tonnes grading 12-15 g/t Au.

During 1999 three closely spaced angled holes were drilled totalling 391.7 metres under the workings of the Una #1 lode.

This report documents the work completed on the relinquished segment of the exploration licence.
3. 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 that would be amenable to narrow vein, underground mining.
4. Tenement:

Exploration licence EL 23/92 covers an area of 31 km$^2$. EL 23/92 is described as commencing at the southwest corner at grid coordinates 566 000 metres E, 5 421 000 metres N thence grid north to 5 426 000 metres N, then grid east to 5 47 000 metres E then grid north to 5 427 000 metres N, then grid west to 5 466 000 metres E, then North to 5 430 000 metres N then grid east to 5 70 000 metres E then grid south to 5 427 000 metres N, then west to 5 69 000 metres E then grid south to 5 423 000 metres N, then grid east to 5 70 000 metres E then grid south to 5 421 000 metres N, then grid west to the point of commencement (See Figure 1. EL 23/92 Location Plan).

At the time of granting of the exploration licence three mining leases were current. These were ML’s 44M/88, 45M/88 and 46M/88. These leases have lapsed and are now part of the exploration licence.

EL 23/92 was originally granted to Newcrest Mining Limited in 1992. The exploration licence was part of a large tenement holding. Newcrest’s target was large-scale stockwork style gold mineralisation.

During 1993 Mancala purchased The EL from Newcrest with a time limited royalty clause. This clause has now expired and Newcrest has no interest or claim on the EL.

Mancala Pty Ltd changed its name during 1997 to Hercules Resources Pty Ltd

During 1998 a joint venture agreement was signed between Hercules Resources and Low Impact Diamond Drilling Specialists (LIDDS). Under the terms of the agreement, LIDDS were required 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. This condition has now been satisfied.

The relinquished portion of EL 23/92 covers 19 km$^2$ and is described as commencing at the southwest corner at grid coordinates 566 000 metres E, 5 421 000 metres N thence grid north to 5 426 000 metres N, then grid east to 5 47 000 metres E, then South to 5 424 000 metres N then grid east to 5 68 000 metres E then grid north to 5 430 000 metres N then grid east to 5 69 000 metres E, then South to 5 423 000 metres N then grid east to 5 70 000 metres E then grid south to 5 421 000 metres N then grid west to the point of commencement (See Figure 2. EL 23/92 Relinquished ground).
5. **Location and Access:**

Exploration Licence EL 23/92 is located near the rural township of Alberton, situated in the north-eastern region of Tasmania (See Figure 1. EL 23/92 Location Plan).

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 that is generally restricted to areas to adjacent drainages.
6. Regional Geology:

The regional geology of EL 23/92 has been previously described by MRT geologists and summarised on the 1:50,000 Alberton geological map. Recent publications specific to the economic geology of the area are provided by Taheri (1992 and 1993) and Keele et.al (1994) as part of the Netgold project. The following is gleaned from this work.

The exploration Licence is located within the 70 kilometres long, 2 kilometre wide northwesterly 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 Mathinna Beds are unconformably overlain by probable Carboniferous and Permo-Triassic sedimentary sequences of the Parmeener Supergroup.

Granites and granodiorite of Devonian age have intruded the Mathinna Beds. Sporadic tin and tungsten mineralisation is associated with granitic intrusion.

Regionally the Mathinna Beds are folded about northwest trending axes to from 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. A subsequent deformation has produced regional mega kinking about steep, northeast trending kink planes, and numerous steep, northeast trending kink planes, and numerous steep dipping bands with both sinistral and dextral geometry.

The age of the gold mineralisation is uncertain, however it is probable that gold mineralisation was concurrent with folding and cleavage development prior to emplacement of the Devonian granites.
7. Mining History:

The Alberton district contains numerous gold occurrences that have been exploited to varying degrees since the late 1800’s.

Auriferous quartz veins were discovered in the Alberton goldfield prior to 1883. Over one hundred gold bearing lodes were subsequently discovered and mined between 1883 and 1939.

The majority of lodes failed to make good returns and with the exception of the Ringarooma United and Mercury Lodes the operators failed to locate significant reserves. Consequently the deposits within the district developed a reputation as being shallow and discontinuous.

The majority of the deposits occur along a major NW trend in the NW corner of the Exploration Licence. According to Alistair Reed (MRT, pers. Com) there are two orientations in this trend, a NW fault which accounts for the main NW alignment of the deposits and a second NNE trend. This NNE trend is either due to alignment along a second structure or the deposits are located adjacent to the NW trending structure in an en-echelon array. Approximately 50% of the mines occur on NW striking quartz veins and the remainder occur on NNE trends. The largest mine in the area, the Ringarooma United mine sits at or close to the junction on the two structural trends.

Stratigraphic position is also important with the deposits within the main Alberton trend occurring at the interface between sandstone and shale successions, i.e. a rheological control.

The relinquished portion of the tenement contains very few workings. The two main workings are the Hinemoa and Una Workings. Brief accounts of the Hinemoa and Una Mines are given below.

1. Hinemoa 5422150 N, 568200 E,

2. Una lodes 5426230-4040 N, 567400-450E
1. Hinemoa:

The Hinemoa workings have been explored by three adits and as series of surface trenches over a 250-metre strike length. The quartz lode is hosted within a significant north-south striking west dipping (75°) fault zone. The mine was assessed in 1980 by Mitchell (1980). Mitchell collected numerous surface, trench and underground samples and calculated two resources covering just the area of old workings of 1300 tonnes @ 11 g/t Au and 2000 tonnes @ 8.5 g/t Au.

2. Una

Five adits and a series of surface trenches have been excavated at the Una Mine, which are located just 900 north of the Hinemoa workings. The quartz lode occurs within a 75m wide shear zone, which is over 550m long. Twelvetrees (1904) reports gold grades to 83.5 g/t in surface trenches and Mitchell (1980) reports mainly low gold values with the exception of a dump sample grading 51.9 g/t Au.
8. Work Completed:

Exploration on the Hinemoa and Una workings were restricted to two main periods.

During **1994-5** (Akerman, 1995) the Una and Hinemoa mines were assessed and an exploration programme was proposed.

During **1995-6** (Akerman, 1996) an eight hole (UNA 001- Una 008), 208 metre diamond drilling was completed at the Una workings in the South of the exploration licence. The Una and Hinemoa workings were mapped and sampled in detail prior to the drilling. All of the holes were drilled below the existing workings at the UNA #1 mine. The holes were shallow (maximum depth 40.7 metres) and all holes intersected the lode in the expected position. Three holes intersected the lode with abundant visible gold. The results from these three intersections were surprisingly low. UNA 002 intersected 1m @ 13.2 g/t Au, UNA 006 intersected 0.5m @ 19.7 g/t Au and UNA 003 intersected 0.4m @ 4.55 g/t Au. An error with the assay procedure was queried but re-assay of the other half of the core resulted in even lower assay results.

This exploration programme outlined a small resource of 1,000 tonnes at 12-15 g/t Au on the narrow lode that varied between 0.5 and 1.8-metre width. The assessed grade was calculated from both surface results and drill results.

During **1998-9** (Griffith’s, 1999) LIDDS exploration concentrated on the Una workings. Three closely spaced angled holes were drilled totalling 391.7 metres under the workings of the Una #1 lode. The strategy was to significant build on the resource outlined in 1995-96 by Akerman. Unfortunately these holes failed to intersect significant mineralisation.

During 2001 a small outcropping fault related sulphide lode was tested by diamond drilling at the Una Prospect. The working is a small pit, which exposed a narrow <5cm wide zone of pyritic sericite altered sediment. The zone reportedly swells rapidly to be of the order of 1m wide at about 1metres depth. A sample of sphalerite rich material reportedly from within this pit was observed in Ringarooma.

A 47.3m deep diamond drillhole was completed using a Longyear Hydracore 28. The hole was collared at 5422550 mN, 567950 mE, and the collar was set-up at an azimuth of 055 degrees and a declination on 49 degrees. The hole failed to intersect any significant mineralisation. The hole has not been logged in any detail.
9. **Summary and Conclusions:**

Work within the relinquished portion of EL 23/92 has concentrated on the old workings at the Hinemoa and Una mines. Both were mapped in considerable detail.

The Una workings were identified as having the potential to host significant gold mineralisation and two drilling programmes were completed to test this potential. A series of shallow holes outlined a small resource of 1,000 tonnes at 12-15 g/t Au. A broader deeper drilling programme was subsequent completed to test for deeper extensions of this mineralisation to enhance the tonnage of the prospect. This drilling programme was unsuccessful.
10. References:


