

EL33/2008 – UNA PLAINS

TASMANIA

ANNUAL TECHNICAL REPORT

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VERIFICATION LISTING

Exploration Work	File_name	Type	Format	Description
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Office Studies

Report	EL332008_201011_01_report	pdf		Report Body
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Drilling

Drilling_All	EL332008_201011_02_dhlocation	txt		Drill hole collar locations
Drilling_All	EL332008_201011_03_dhassay	txt		Drill hole assay data
Drilling_All	EL332008_201011_04_dhsurvey	txt		Down hole survey
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TENEMENT DETAILS

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ABSTRACT

Exploration Licence 33/2008 comprises 48 square kilometres located midway between Ringarooma and Mathinna in the states north-east. The licence was granted on 5th November 2008 to Geological, Educational and Mining Services Pty Ltd (GEMS).

During the period 2009 – 2010 work has been restricted to predominantly literature and data review. Work has been restricted to the re-establishment of the Hinemoa access track. No on-site work was undertaken and vehicular activity has been restricted on the newly re-established Hinemoa track in order to minimise damage during the winter period. It is anticipated that drilling will commence in the spring.

KEY WORDS

Location Name:	Una, Dans Rivelet, Hinemoa
Earth Science Related Terms:	Sinstral fault, dextral fault, pre-mineralisation shear, post mineralisation shear, brittle offset.
Environment of Mineralisation:	shear hosted mineralisation, brittle host, quartz vein stockwork.
Commodities:	gold, silver
Exploration Methods:	Historical research, 3D geological modelling, drill testing based on model, rock chip sampling/field mapping, underground mapping.
Mine / prospect name:	Una Reef, Hinemoa Reef.
Stratigraphic Name:	Mathinna Supergroup.
Geological province name:	Lachlan Fold Belt.
Geological age:	Devonian

1.0 Introduction.

Exploration Licence 33/2008 comprises 48 square kilometres located midway between Ringarooma and Mathinna in the states north-east. The licence was granted on 5th November 2008 to geological, Educational and Mining Services Pty Ltd (GEMS).

During the period 2009 – 2010 work was undertaken to review all available data and literature pertaining to the Una and Dan's Rivulet mining area. Site visits were undertaken and ground proofing performed on historic documents. A Work Plan was lodged and approved on 21st April 2009 to undertake drilling on only the Una and line of mineralisation. Approval for work on the Hinemoa line was finally granted on 21st April 2010.

2.0 Exploration Objectives.

The philosophy and objectives of the Exploration undertaken by GEMS is directed to the definition of a significant hard rock gold resource that would be amenable to economic extraction.

Primary exploration has focussed on testing discrete anomalies as defined by independent re-interpretation of historic data.

- Confirm the veracity and extent of previous mapping and anomalous gold mineralisation.
- Inspect and sample any available underground openings
- Drill test below historic underground workings at depth to determine structural controls and geometry of primary source.

Una

The presence of historic mining along several structures was investigated. Surface pitting of high grade gold veining indicates that the licence has proven potential.

The initial exploration target is to test mineralisation to the south of the Una No.1 Adit along the postulated hangingwall shear that controls overall mineralisation.

Five adits and a series of surface trenches have been excavated at the Una Mine, which are located approximately 900 metres north of the Hinemoa workings.

The workings were assessed in 1980 by Mitchell (1980) and by Akerman (1995), with drilling ultimately being undertaken on the northern most workings. All drilling to date has been focused on and under the northern most Adit (No.1). It is proposed that the mineralisation extending to the south be tested

Hinemoa:

The Hinemoa workings have been explored previously 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 structure had previously been tested by two adits only one of which (the most northerly) is still accessible. The southern access (Rayner's Tunnel) has been buried by scree material resultant for the clear-felling of the coupe immediately above the Adit.

Alberton Goldfield.

The Exploration Licence extends to the north of the Hinemoa and Una Prospects and surrounds the majority of the Alberton Goldfield. The northern portion of the Licence is prospective for both hard-rock and potentially alluvial gold deposits.

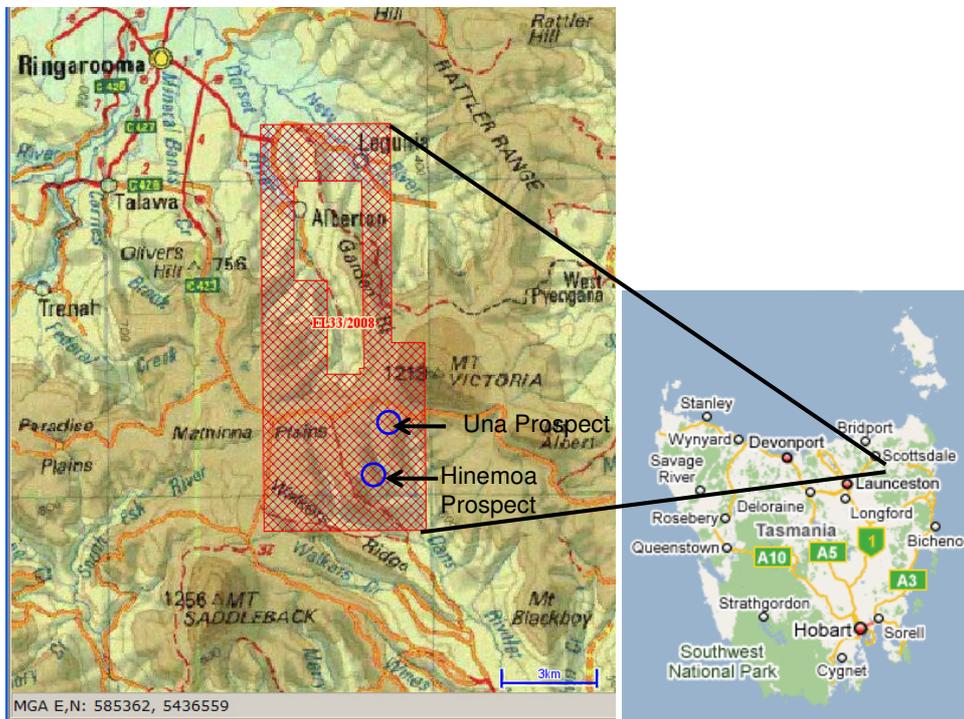
The focus in the second year has not been directed to the northern potential of the Licence but on the mineralisation located at the Hinemoa prospect.

3.0 Location and Access.

Una Plains Licence EL332008 is located in North East Tasmania, the licence covers 48km² commencing approximately 2 kilometres south-east of Ringarooma and extending south for 13 kilometres. Access to the northern portion of the lease is via numerous Crown roads and Forestry Tasmania tracks. .

A Government 'C' class road (C423) bisects the Lease along the Una Plains immediately south of Mont Victoria allowing access to the central portion of the Licence. Access to the southern portion is either via Forestry Tasmania tracks off the C423 or by using additional Forestry Tasmania tracks coming up from Dan's Rivulet.

Figure 1: Location of EL33/2008 – Una Plains.



4.0 Regional Geology.

The regional geology of EL 33/2008 has been extremely well 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.

5.0 Previous Work.

Small scale mining of narrow but high grade quartz structures have been reported as early as 1890's. The quartz lodes occurs within a 75m wide shear zone, which is over 550m long extending from Hinemoa in the south of the Licence to the Una Workings in the north. Twelvetrees (1904) reports gold grades to 83.5 g/t in surface trenches.

Mapping of the major producers was undertaken in detail on behalf of Sturt Meadows Prospecting Syndicate NL on EL31/76 (Mitchell 1980) during the period 1979-80. Detailed feature mapping and sampling was undertaken over a large area including the workings located on what is now EL33/2008.

During the period 1994-5 EL1/92 covering the area of Dan's Rivulet and extending to within 50 metres of the Hinemoa workings was subject to exploration by Cuttack Mining and Exploration Pty Ltd under a Joint Venture with Goldstream Mining NL. (Anon 1996). Due to surveying errors Cuttack erroneously sampled the Hinemoa No.1 Adit and proceeded to extract a bulk sample of unknown tonnage estimated to be approximately 31 g/t.

EL23/92 covering the Una section of workings (and extending northward to the Alberton Goldfield) 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.

During 1994-5 EL23/92 was held by Mancala Pty Ltd (Akerman, 1995) the Una and Hinemoa mines were assessed and exploration programmes proposed.

During 1995-6 (Akerman, 1996) the Una and Hinemoa workings were mapped and sampled in detail. An eight hole (UNA001 - UNA008), 208 metre diamond drilling was completed at the Una No.1 Adit workings only.

All of the holes were drilled below the existing workings at the Una No. 1 Adit. 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 (non-JORC compliant) 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 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.

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 No.1 lode below the holes previously drilled by Mancala Pty Ltd. 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 (Denwar, K., 2001) a small outcropping fault related sulphide lode was tested by diamond drilling at the Una Prospect. The workings present as a small pit, exposed a narrow <5cm wide zone of pyritic sericite altered sediment containing a massive sulphide matrix. The zone reportedly swells rapidly to be of the order of 1m wide at about 1metres depth. A sample of sphalerite rich material was obtained.

A 47.3m deep diamond drill hole was completed by LIDDS 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 was not logged in any detail.

During 2008 – 09 (de Vries, 2009) two Diamond Drill Holes (UDH001 and UDH002) were drilled into a proposed parallel mineralised structure. UDH001 intersected a broad zone of shearing, alteration and anomalous gold. The best interval in UDH001 was from 40.60 metre to 41.00 metres a distance of 0.40 metres grading 0.34 g/t Au (Table 1). The drilling of UDH002, while intersecting altered and veined material failed to generate any significant results.

Table 1. Significant Assay Results – Diamond Drilling 2008 - 2009

HOLE ID	FROM (m)	TO (m)	INTERVAL (m)	AU (g/t)	AG (g/t)	AS (ppm)	COMMENTS
UDH001	40.6	41.6	1.0	0.26	<1.0	1,190	Lode / Shear

The results of both holes indicate the presence of a structural control that is interpreted as being the westerly margin of the controlling structural corridor at the Una Prospect. The bulk of historic production has come from the Una Mine located on the footwall of the structural corridor.

6.0 Exploration Completed During the Reporting Period

The primary focus of filed work for the period 2009/10 was to be focused on undertaking diamond drilling on the Hinemoa line of workings.

Site inspections of Forestry Tasmania log landings and bulldozer tracks located on the top of the Hinemoa Ridge has shown the presence of minor quartz veining which appears to plot along strike of the Hinemoa workings located at the base of the ridge

A previously submitted Work Plan (submitted October 2008) was separated into two parts.

- i) Approval to re-establish access to the Una line of workings and undertake diamond Drilling.
- ii) Approval to re-establish access to the Hinemoa line of workings and undertake diamond Drilling.

Approval for part 1 was duly received from the MRT and the works contained within the approval undertaken during the 2008 - 2009 reporting period.

Approval for part 2 was finally received from MRT on 21st April 2010; a nineteen (19) month approval period.

Part 2 of the 2008 Work Plan submitted to the MRT in October 2008 was to undertake the re-establishment of the previous access track; severely damaged by the actions of Forestry Tasmania's clear-felling of the coupe located over the Hinemoa Mineralisation, and to undertake diamond drilling.

Approval to undertake remedial track work and drilling was formally received from MRT on 21st April 2010; a nineteen (19) month after initial lodgement. As a result of the delay in receiving approval previously available earthmoving contractors (who had been utilised to re-establish the Una access track) were not longer available to undertake the required track work.

The contract for the re-establishment of the track was finally awarded to **AW Harvey Transport and Excavations Pty Ltd** of Branxholm. Equipment was mobilised to site

on 24th May 2010. Track work was undertaken between 24th and 28th May 2010 with the equipment demobilised on 28th May. Due to the high degree of damaged sustained to the track the contractors were required to utilise both 22 tonne and 13 tonne excavators to remove fallen trees and limbs.

Due to the early onset of winter conditions, the proposed drilling has not eventuated in order to minimise any potential track damage. It is planned that drilling will now occur in the spring period after the track is again re-assessed and any additional remedial work on performed.

Time Line.

Work Plan Submitted	27 th October 2008
Work Plan Approval	24 th May 2010
Track re-established	24-28 th June 2010

7.0 Discussion and Conclusions.

Due to the delay in receiving formal Work Plan Approval for the Hinemoa Prospect work on the Licence has been restricted to minor literature review.

Site inspections of the Hinemoa workings appears to confirm assumptions by authors such as Mitchell (1980) that the main Hinemoa Vein is not restricted only to the area of historic prospecting and may possibly extend several hundred metres further south-west to at least the crest of the Hinemoa Ridge.

It is planned that drill immediately below the main Hinemoa Adit down plunge from a high grade shoot previously delineated in the adit.

8.0 Expenditure.

Geoscientific Costs

- Geology \$ 13,500
- Geochemistry
- Geophysics
- Remote Sensing

Drilling & Gridding Costs

- Gridding
- Drilling

Land Access Costs

Rehabilitation Costs

Feasibility Study Costs

Other Items \$ 5,492

Administration Costs \$ 820

Total Costs \$ 19,795

9.0 References

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