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Report for March 2005 Quarter

29 April 2005

ASX Code : HEG  
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**HIGHLIGHTS**

- *Reward area drilling program commenced this month to investigate shallow gold mineralisation and to extend deeper diamond drilling intersections along strike. Assays pending.*
- *Database compilation and validation of data for entire Hill End area progresses well.*
- *Additional high grade intersections at Reward from relogging and resampling of previous drill core.*
- *Improved understanding of the mineralisation controls indicates the potential for high grade gold mineralisation to repeat at depth.*
- *Discussions with development contractors continues for proposed Hawkins Hill – Reward underground development and drilling of down plunge extensions to Hawkins Hill.*
- *Negotiations progress for further funding arrangements.*
- *Appointment of Mr Bruce Thomas to the Board.*

## **CORPORATE**

The appointment of Mr. Bruce Thomas as a Non Executive Director to the Board was announced during the quarter. Mr. Thomas, a Chartered Accountant, a Chartered Secretary and an Associate of the Securities Institute of Australia has over 30 years experience in capital markets and funds management and is a director of a number of public companies, including GRD Limited. He has extensive skills in resource company investment, strategic planning and company management.

## **HAWKINS HILL – REWARD GOLD PROJECT**

### ***Reward drilling***

A combined reverse circulation and diamond drilling program has commenced at the Reward area during April 2005. Drilling reported to date has intersected multiple quartz veins and some old stopes. Samples for the reverse circulation drilling have been sent to the ALS Chemex laboratory in Orange for preliminary fire assay.

Reward is located 500 metres north of the very high grade Hawkins Hill deposit, which produced a reported 400,000 ounces at a grade of approximately 300g/tAu during the nineteenth century. The Reward area is geologically similar to the Hawkins Hill and Tambaroora - Red Hill deposits at Hill End which are estimated to have contained ~one million ounces prior to mining during the nineteenth century.

The program of twelve reverse circulation drill holes with four diamond tails will improve understanding of the Reward area and provide an initial test of the open pit potential for the area between Patriarch and Exhibition Shafts. The drilling has the potential to extend the mineralised zone in the Reward area to 200 metres strike length.

The shallow reverse circulation drilling program over the Reward area will test for mineable near surface mineralisation to the depth of weathering of approximately 70 metres. No systematic shallow drilling has yet been undertaken over the Reward area and, if successful, this initial program will be followed by resource delineation drilling.

Previous drilling at Reward has intersected high grade gold up to 208g/tAu over 0.9 metres however the drilling was too shallow to test the full width of the structural corridor which hosts much of the high grade gold mineralisation in the Hill End area. It is also believed that assaying of some previous drill holes has grossly under reported the gold present due to the use of conventional fire assay instead of screen fire assay and the use of 0.5 metre sample intervals that are not constrained by geology. It has also been noted that several holes pass through the structural corridor with visible gold reported in the logs yet return grades of less than 1g/tAu.

In addition to the Reward area there are further areas to be tested within the eastern structural corridor and the West Limb project areas. These highly mineralised corridors have extensive, continuous surface workings up to 100 metres wide and parallel to the Hill End Anticline for a strike length of over 20 kilometres in which virtually no modern exploration has been done.

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Re-examination of all available diamond drilling data has been completed. This included inspection of drillcore in the Reward area by Northern Gold NL from holes numbered DDHR03 and DDHR09 which are located at the N.S.W. Department of Primary Industries archive and a comprehensive assessment of the drillcore by Nugget Resources Inc. NRI01 to NRI13 (3,471 metres) stored on site at Hill End.

The core from these drill holes has been marked up, assay intervals confirmed, magnetic susceptibility recorded, digitally photographed, geotechnically and structurally logged and additional intervals assayed. Significant results from this additional sampling are shown in the table below.

Hole Number	Depth From (m)	Depth To (m)	Down hole Interval (m)	g/tAu*	Comments
NRI06	159.10	159.30	0.20	2.69	Quartz – calcite vein
NRI09	247.00	247.40	0.40	14.70	Quartz – calcite – pyrite – galena - pyrrhotite – chalcopyrite – visible gold vein

\* Gold values determined by screen fire assay

### ***Database compilation***

Compilation of the historical exploration and mining data continued during the quarter. Partial databases from previous operators have been recovered and incorporated into a more comprehensive database structure to create a complete and validated drillhole database.

Existing mine and exploration plans have been scanned as the basis for ongoing digital plans. Ongoing database compilation includes construction of geological databases for the surface and underground and the underground sample database, the refinement and addition to underground mine plans, validation and input of mine geology data, exploration drillhole data, surface rock chip sample data, and exploration data from the numerous mining areas in the Hill End goldfield.

### ***New geological understanding***

Examination of drill core and underground exposures has led to an improved understanding of aspects of deposit geology. It has been clearly demonstrated that the mineralisation at Hawkins Hill is related to a shear event that post-dates folding in the area. It is thought that this event is related to the Late Devonian Kanimblan Orogeny, which places the time of the mineralising event between folding of the sediments and intrusion of the Bathurst Batholith.

It has been observed that mineralisation jumps between bedded veins and is imposed on these veins. At both Hawkins Hill and Red Hill, which are located on the east flank of the Hill End Anticline, the structural corridor contains the bulk of the mineralisation.

The structural corridor is not simply a linear narrow zone. It is apparent that the structural corridor widens and narrows in a similar manner to the mineralisation in the individual veins. The wide parts of the structural corridor are at the highly mineralised areas of Hawkins Hill, Germantown, Golden Gully and Red Hill. As with most natural systems a fractal arrangement is present. At the one metre scale, features such as boudinage of veins are seen in mineralised areas. These boudins are part of individual ore shoots on a 10 metre to

20 metre scale. The ore shoots are part of richer zones on a 300 metre to 500 metre scale. The richer zones are contained within wider parts of the structural zone on 1000 metre to 3000 metre spacings.

In the Hawkins Hill to Reward area an outcropping stratigraphic horizon approximately 120 metres thick, comprised of alternating bands of greywacke and slate, contains extensive mineralised quartz veins. The stratigraphic horizon dips at approximately 65° to the east and is well mineralised where it intersects the sub-vertical structural corridor which is parallel to the cleavage direction of the axial plane of the Hill End Anticline. Mineralised quartz veins can be parallel to either the bedding or cleavage direction.

This is an important relationship in that, while the mineralisation is largely contained within the envelope of the north plunging intersection of the stratigraphy with the structural corridor, the individual high grade gold shoots can be dipping east in bedding veins though repeating in parallel shoots aligned vertically. Previous drilling to test downdip vein extensions has not tested the potential for the parallel shoots below.

It is currently thought that the structural corridor is a diffuse northern continuation of the Hill End Fault which has been mapped by the Geological Survey of New South Wales to the south of the Bruinbun Granite. This would place Hill End in a group of Late Devonian age fault related deposits including, Bodangora, Lucknow, Confidence, Bright Star and Last Chance which are located in the vicinity.

### ***Underground activities***

Rising on the north splay of the Holtermanns crosscourse was stopped during the quarter at 33 metres above the Amalgamated level. The rise tested for enriched gold mineralisation along the intersection of the Star of Peace vein and the crosscourse structure. Sublevels were driven at ten metre intervals along the Star of Peace vein and a cross cut to the west at 30 metres was made to test the Mica vein. Two samples of the Star of Peace Vein from the 30m sublevel were mineralised to 4.8g/tAu with a single sample of the horizontal fault material on the sublevel being weakly anomalous in gold (0.11g/tAu) but strongly anomalous in indicator elements such as As (3,840ppm), Pb, S, Sb, and Zn. This chemical pattern is consistent with the accessory elements in the Holtermann 'Nugget' and supports the view that the development is in a similar environment.

The Holtermann's 'Nugget' is the world's largest specimen of gold, hoisted from underground. It contained approximately 3,100 ounces and stood 1.3 metres high and was mined from a very high grade zone associated with quartz, slate and arsenopyrite within the Hawkins Hill deposit approximately 130 metres above the present Amalgamated level.

## **HILL END EXPLORATION**

### ***Geophysics***

During the quarter further geophysical analysis of the Hill End Gold tenements was undertaken by Mr. Steve Webster.

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Magnetic and radiometric data from Mineral Resources NSW were extracted in order to identify similar structural and stratigraphic positions to those seen in the well mineralised areas of the Hill End goldfield.

The following features were noted :-

- Distinct radiometric mapping of anticlines;
- Distinct magnetic signatures for volcanoclastic units;
- Cross-structures (NE-SW and NW-SE) are evident in magnetic data with some offsets of linear features;
- Changed radiometric response (higher potassic alteration) and reduced magnetic grain in vicinity of historic mines (Red Hill and Hawkins Hill) near NE-SW linears;
- Distinct magnetic lows in vicinity of Hawkins Hill – Golden Gully mineralisation;
- Magnetic highs in vicinity of an embayment in the Ulamarra Anticline;
- Core of anticlines devoid of magnetic grain and exhibit low radiometric response;
- Cross structures interpreted where magnetic grain has been attenuated, perhaps due to circulating fluids;
- Zones within the Ulamarra Anticline with depletion in magnetic grain and altered radiometric response in vicinity of cross structures;
- Potassic zone in crest of Hill End Anticline (in vicinity of mineralisation) continues along western limb of structure;
- Nose of unnamed structure between Dun Dun Mine and Pyramul Anticline exhibits enhanced magnetic and radiometric response.

Several anomalous geophysical zones have been identified for follow-up field exploration and further analysis and refinement of the geophysical interpretation to be commenced during the coming quarter.

### ***Attribution***

Exploration comment and data herein are based on information provided by Mr Ian Cooper of Southern Cross Technical and Field Services. Mr Cooper is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient relevant experience in the styles of mineralisation being reported on to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves".

Yours faithfully

Philip Bruce  
Managing Director

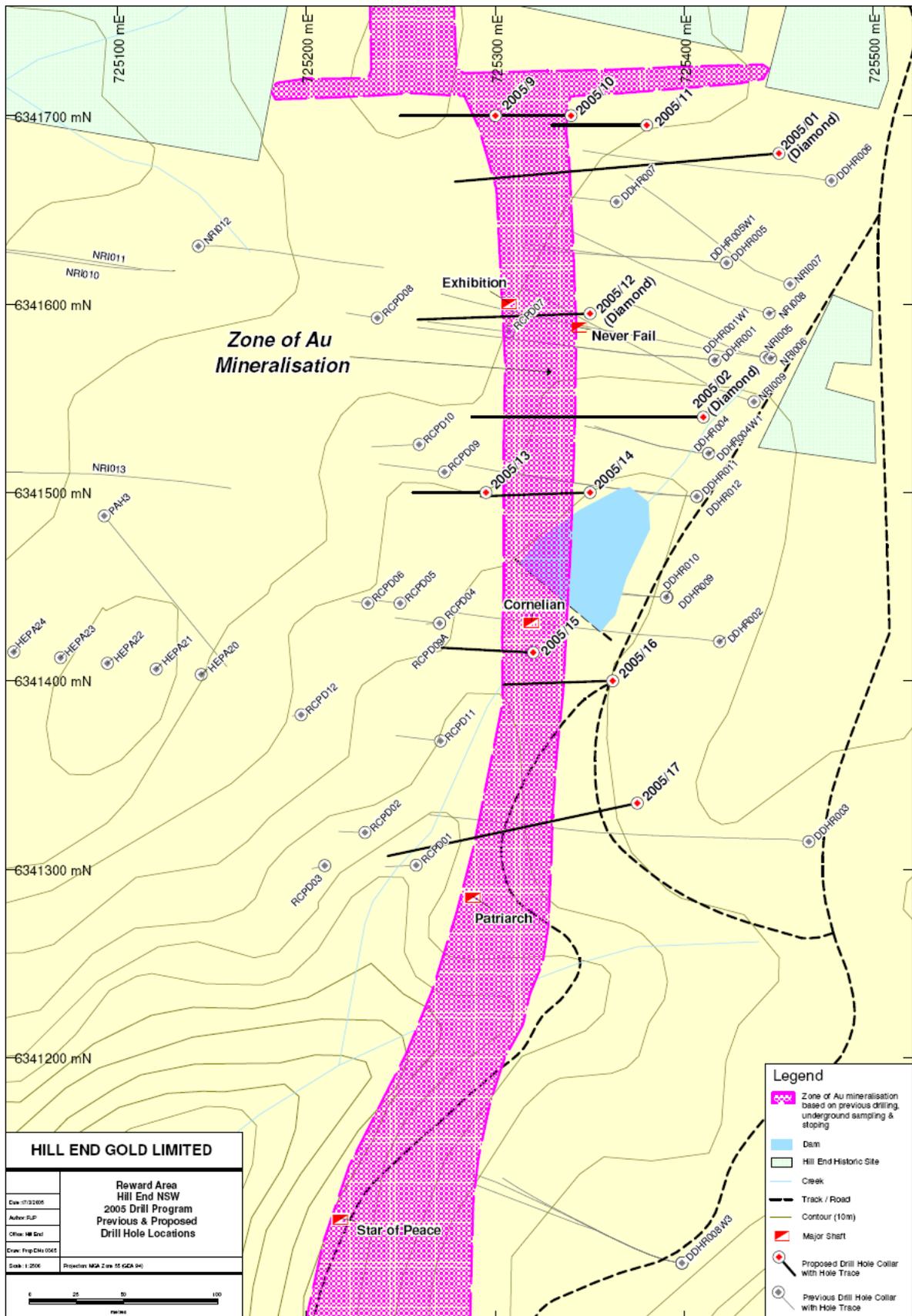
Attached: Reward Area Drilling Program

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